WISCONSIN turfgrass news

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This One from Donald Ross is Awaiting Your Game

WTA GOLF FUNDRAISER AT OCONOMOWOC GOLF CLUB

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

The WTA would be extremely pleased to have you attend this year's golf fundraiser scheduled for Monday, October 3rd at the classic Oconomowoc Golf Club. This club is all about golf — no tennis, no pool, just fine golf at the historically renovated OGC. This will be just what your soul needs after surviving the brutal summer of 2011. Please invite anyone to join you who would also enjoy a nice autumn round of golf on a memorable course.

Golf course superintendent Dustin Riley, his staff and the members of Oconomowoc GC would be pleased to show you their recently renovated gem of golfing history. OGC was designed by the famous Scottish golf course architect Donald Ross in 1915. Eventually, the effects of the Great Depression, World War II and other fiscal strains on the small club membership resulted in the loss of the Donald Ross factor until the discovery of the original course blueprint in the late 1970s. Upon this discovery, the membership promoted restoration of the original design and started construction in 1995 under the direction of golf course builder Craig Schreiner. The renovation involved the restoring of all greens, tees, fairways and sand bunkers.

This is your chance to join other turfgrass industry enthusiasts on October 3rd to play this restored golf course and to help promote golf turf research at your Land Grant University. Proceeds from the golf outing will be used by UW-Madison scientists to develop new techniques for managing turfgrass for the most environmental, aesthetic, and economic results.

The registration fee is $125. For this you will be treated to a delicious lunch, practice range, and golf with a cart. After golf you'll enjoy hors d'oeuvres and hopefully go home with one of the valuable door prizes and/or golf awards. Many door prices are worth more than the cost of registration. You may register as a foursome or by yourself. The event is a four-person best ball format. A registration form, which is included with this newsletter, is also on www.wisconsinturfgrassassociation.org. You may pay online on the website or mail in your registration.

Your fee not only provides for a fun day of golf, but also supports the Wisconsin Turfgrass Research Sustainability Fund at the University of Wisconsin-Madison. Over the WTA Golf Fundraiser's long history, proceeds have gone directly to research projects and more recently have helped fund the Wisconsin Distinguished Graduate Fellowships in Turfgrass Research. Your participation will allow the WTA to add to the new Research Sustainability Fund at the UW Foundation. The difficult fiscal times have only amplified the need for quality research, and your presence at OGC will help meet that need.

The golf outing isn't all about funding research, though. It is also about spending time with friends to enjoy a round of golf near the end of the season, and this golf course will not disappoint! I hope that you are able to attend the WTA Golf Fundraiser and play this truly outstanding course. You may contact Audra Anderson at 608-845-6536 or ajander2@wisc.edu if you have any questions. Whether it is your first WTA Golf Fundraiser or you have attended them all, we hope you won't miss this one. ■

Hole 13 challenges you with a tight landing zone, raised green and misleading false front

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.

PRESIDENT'S MESSAGE

She Is Your Seed

By Dan Biddick

I picked a grape tomato and showed it to her. She looked at the tomato and then she looked up at me and said, "Grandpa Dan, pick only the red ones."

Harvest —- my favorite time of year. Granddaughters —- the best!

We plant millions and millions and millions of seeds and a few months later harvest billions and billions and billions of fruit and seeds that feed millions and millions and millions of people.

We plant one apple seed and it grows into a tree that creates hundreds and hundreds and hundreds of apples for years and years and years.

A seed coat, a cotyledon, an epicotyl, a hypocotyl, an endosperm, a radicle. Something so small, yet so powerful, enduring, and essential to our lives. The seed is simply one of the most amazing miracles of nature.

Someone once told me, "Humanity needs seed."

I grew up in a world of seed. Seed is in my blood.

I read somewhere that a long time ago we were removed from the Garden. When I look around, I am not so sure.

Next time you are in your portion of the Garden, think of your granddaughter. She is your seed. ■

WTA Winter Turfgrass and Greenscape EXPO

Mark your Calendars for a Great Educational Day

Kalahari Resort, Wisconsin Dells

Tuesday, January 24, 2012

PCNB Returns, But Questions Remain

By Paul Koch, Turfgrass Diagnostic Lab Manager, University of Wisconsin-Madison

It's been a rocky several years for the popular, cost-effective fungicide pentachloronitrobenzene (PCNB). First, while up for review in 2006 the Environmental Protection Agency decided to remove all turfgrass uses from the PCNB label. This would have effectively ended the use of PCNB in turfgrass. The open comment period for this decision was extended several times, until finally a new, amended decision was released on July 15th, 2009. This amended decision removed PCNB usage from any residential sites, athletic fields (with the exception of professional and college athletic fields), and golf course roughs. The removal from golf course roughs was significant because many courses that experience heavy snow mold pressure would apply a single 'ring' of PCNB around the fairways and green complexes to control at least some of the snow mold infection. Though removal from these sites was significant, it was considered a significant victory for the turfgrass industry that PCNB applications remained allowable on golf course tees, fairways, and putting greens.

Then on August 12th, 2010 the EPA caused a stir by issuing a stop sale, use, or removal order to American Vanguard Corporation (AMVAC), the sole producer of PCNB fungicide. This order came just as snow mold orders were about to be made, and many superintendents found themselves scrambling to adjust. The EPA order was issued because EPA analysis found significant levels of a particular, toxic compound called hexachlorobenzene (HCB) in PCNB that was not being reported by AMVAC. HCB is a byproduct of PCNB production, and is also found in the production of chlorothalonil. On August 27th, 2010 AMVAC sued the EPA to lift the stop sale order on the grounds that the EPA knew of these impurities for decades and never before required their reporting.

Little public information was released for months after that, and many people, myself included, doubted that PCNB would ever be allowed on turfgrass again. But on August 19th 2011, AMVAC issued a release that stated a Chief Judge for the US District Court for the District of Columbia granted AMVAC's request and vacated the stop sale order, effective immediately. The decision from the Chief Judge found that the EPA official who issued the order did not have the authority to issue such an order. This is undoubtedly good news for many in the turfgrass industry, but many questions remain.

The US District Court Order came as suddenly as the EPA stop sale order did last August, so the primary question on many superintendents' minds is whether PCNB will be produced and distributed in time to be applied for the 2011-2012 snow mold season. As of this writing I have not heard how quickly PCNB will be distributed to customers. The second question on many minds is how the recent turbulence will affect the price of PCNB. PCNB is a good snow mold product, but many active ingredients are more effective at controlling snow mold. The main attribute of PCNB is its price, and if lower supply leads to a spike in prices its main utility to golf course superintendents is gone.

Other longer term questions also remain. Will the legal wrangling between the EPA and AMVAC continue, with rapid decisions that leave superintendents unable to plan ahead? Since the court vacated the order because the official who issued the order did not have such authority, will the EPA find an official who does have the authority and reissue the stop sale? Again, as of this writing there has been no public release of a response by the EPA. But in my own opinion, planning for the use of PCNB for years to come is foolish. Its toxicological profile is unacceptable when compared to most modern fungicides, it is only commonly used across a small slice of the country, and beyond that it can cause significant phytotoxicological damage to bentgrass turf under certain conditions. On top of that, it's not even that effective on its own when compared to many other products. But in today's world of golf course management, every dollar counts, and PCNB can certainly help squeeze a few more dollars out of the chemical budget.

For more information regarding PCNB decisions, as well as recommended snow mold programs that do not contain PCNB, visit the Turfgrass Diagnostic Lab's PCNB Information page (www.tdl.wisc.edu/PCNB.php). ■

Table 1: A timeline of PCNB decisions since 2005.

Year	Event
2006	The EPA removes all turfgrass uses from the PCNB label, effectively banning it from turfgrass, open comment period supposed to last 60 days.
2009	Over 1300 days after the open comment period was supposed to have ended, the EPA decides to remove home lawn, most athletic field, and golf course rough use from the PCNB label **BUT** keeps golf course tee, fairway, and putting green use.
2010	On August 12th, the EPA issues a Stop Sale, Use, or Removal order to AMVAC for PCNB, citing unreported toxic impurities. On August 27th, AMVAC sues the EPA to lift the stop sale order, countering that the EPA knew of these impurities for years.
2011	On August 19th, a US District Court from the District of Columbia vacated the stop sale order, citing the EPA official who made the order lacked the authority to do so. PCNB is back on the market.

WSPA Summer Picnic & Farm Field Day

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

The Wisconsin Sod Producers Association held a fun and educational day-on-the-farm on August 16th. There were nearly 50 individuals in attendance including growers, UW researchers, industry representatives, and other interested parties. The event was hosted by Paul Huggett, owner of Paul's Turf and Tree Nursery in Marshall.

The focus of the day, other than having an enjoyable picnic with friends, was to learn about Dr. Doug Soldat's research on using biosolids for sod production. Doug is conducting the research with graduate student Shane Griffith, and Paul Huggett is cooperating in the research by generously donating land, equipment and labor. The work is in its second year and is starting to yield some interesting results.

The focus of the research is to see if sod farming can use recycled biosolids from wastewater treatment plants instead of synthetic fertilizers. This could make sod production more sustainable by adding key plant nutrients to the soil while replacing soil that is being harvested when sod is removed. Several rates of two biosolids materials are being investigated to see if they can improve overall sod quality, sod strength, and sod rooting. Preliminary results suggest that biosolids have the potential to produce high quality turfgrass sod without the need of any additional fertilization. Other

Graduate student Shane Griffith explains his and Dr. Soldat's sod production research

Marv, Dave, and Randy preparing a delicious lunch

We all proceeded out to the fields to see the ongoing research

issues being researched include changes in soil phosphorus, biological contaminants, and heavy metals.

One last and very important aspect being considered in this research is whether biosolids would increase or decrease a sod farmer's bottom line. Dr. Paul Mitchell, UW-Madison professor in the department of agricultural economics, and Dave Taylor, special projects director for Madison Metropolitan Sewage District (MMSD), led the discussion. According to Dave, MMSD is interested in providing biosolids to sod producers in the future at little to no cost, likely making sod production more profitable. Dr. Rick Brooks, a UW-Madison sociologist interested in the topic, led a discussion centered on whether biosolids produced sod could be marketed as "Greener" and therefore sold at a higher price.

Lots of great discussion and education occurred throughout the day, making everyone excited to be part of this relevant research conducted at the University of Wisconsin-Madison. This illustrates the partnership between turf industry professionals and UW researchers, and shows just how fortunate we are to have UW-Madison conducting important turfgrass research. Hopefully, other institutions will look to Doug and Shane's work, adopt it, add to it, and help create a more sustainable environment.

Field day host and research cooperator Paul Huggett explains growth aspects on his sod

Shane shows demonstration of different low maintenance sod mixtures

Shane and Doug demonstrate a research tool used to differentiate rooting strength between different sod samples

If Soil Test Interpretations Sound Like Rocket Science, Buyer Beware

By Dr. Doug Soldat, Department of Soil Science, University of Wisconsin-Madison & University of Wisconsin-Extension

While flipping through the June 2010 issue of *SportsTurf* magazine one summer day during a lunch break at the O.J. Noer, I nearly choked on my sandwich. There on page 22 was an analysis of a soil and water test report that made my head spin. Unfortunately, it is the sort of thing I see all too often these days. Here's the scenario: a turfgrass manager is having a problem with a field. They send in for a soil test or contact a consultant to do this for them. The chemical soil and water tests reports come back with a lot of numbers (ppm, meq/L, lbs/acre, etc) but very few recommendations, or clear interpretation of which number is good and which number is bad. Make no mistake about it, reading a soil or water test report can be an intimidating and humbling experience. This creates a need for someone like a consultant, sales person, or university scientist to interpret the numbers. However, sometimes bad recommendations are made. Unfortunately, sometimes the bad recommendations can cost you a lot of money, and make a lot of money for the person making the recommendations.

Usually, the first red flag when someone is making bad recommendations is when the suggested course of action is very complicated and requires application of expensive materials and/or labor intensive practices, re-testing the soil, application of more materials, more re-testing, ad *infinitum*. All this adds up to a lot of dough, but usually is a load of even more baloney. These are generalities, of course there are many very good consultants who follow science-based principles and do not take liberties with soil and water test interpretation at the expense of others. Specifically, I have had zero experiences like this with consultants based in Wisconsin. But let's take a look at this high profile example in the June issue of *SportsTurf*.

The article uses the newly constructed Red Bull Arena in New Jersey as a case study. We're told it's a sand-based root zone (10% peat). The author notes that the stadium's overhang creates problems including poor light penetration, minimal air movement, and limited rainfall for flushing the root zone. The first two sound like obvious and serious issues (which are reinforced by the image of the stadium), but I'm skeptical about the flushing thing. It's true, flushing may be required for areas with limited rainfall and very poor irrigation water, but how bad can the irrigation water quality be? Very bad, according to the author who tells us sodium and bicarbonates will be deposited every time the irrigation is run. He tells us the water is "rich" in sodium, and then attempts to overwhelm the reader with scientific lingo to highlight his superior knowledge of water chemistry. For those keeping score, we have a sports field with a potential problem, a complicated water test report, a complicated interpretation, and guess what comes next? A complicated and expensive solution: a flushing program that includes soluble forms of calcium and a good liquid calcium product along with a good penetrating wetting agent, and possibly a rich humic-acid soil conditioner. But wait, there's more: sul-po-mag, potassium sulfate, and a small amount of either high calcium or dolomitic limestone, and a dash of monoammonium phosphate with some rock phosphate for good measure.

Now for the simple version: there are two potential problems[1] with irrigation water: 1) salinity and 2) sodicity. Salinity is the total level of salts in the soil (not just sodium). Salinity is estimated by measuring the electrical conductivity of the water. If the electrical conductivity of the water is too high, salts can slowly build up in the soil eventually leading to a condition called wet wilt where the turf is unable to absorb the salty water in the soil. Sodicity, the second problem, is caused by having sodium in too high of a concentration relative to the other salts. When this occurs, clay particles swell and clog soil pore spaces leading to poor water infiltration and decreased gas exchange. I like to call this chemical compaction. In Wisconsin, both problems are exceedingly rare.

With this in mind, let's take a look at the facts: the Red Bull Arena water test had a sodium adsorption ratio (the term was misspelled in the article) of 1.28[2]. This result is considered "low" by all irrigation water classification schemes known to man (USDA, Australian, and FAO). I wonder how the author sleeps at night after calling this "rich" in sodium, or stating that the sodium will "deposit" in the soil, which implies it will form solid crystals in the soil.

A second glaring issue is that excess sodium is only a problem in fine-textured soils (soils dominated by silt and clay), where it can cause clay particles to swell, which shrinks pores spaces. Without clay particles to swell, where's the problem? A conservative guideline for fine-textured soils is to keep exchangeable sodium percentage below 5%. This sandy soil has an exchangeable sodium percentage of 4.2%. That tells me we want to keep an eye on it, but recognizing that there is almost no clay in this soil, I'm

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[1] **A third might be toxic levels of individual nutrients, like boron – but it is too rare to merit mention in this article.**

[2] **Given the data on calcium, magnesium, and sodium provided in the report, the SAR should have been reported to be 1.64. Is this an innocent istake, or is something less than transparent going on?**

very comfortable with levels greater than 5%. I'm in the midst of a USGA-funded research project to develop some more accurate guidelines for sodium levels in sandy soils. **Bottom line: The irrigation water quality is normal, no complicated management "solutions" required.**

The author goes on to talk about cation balance – a long debunked theory (Kopittke and Menzies, 2007) about supposed interrelations among nutrients in the soil. The theory is complicated, requires many expensive inputs, testing and re-testing; and therefore, it plays right into the hands of consultants looking to take advantage of turf managers and make a buck. Furthermore, the very same author wrote the following in the July 2006 edition of *TurfNet Monthly* about using the cation balance approach on sands: "The base saturation balance is not as powerful a tool on silica or calcareous sand based soil mixtures. On silica sand mixes… CEC levels are very low and the "ideal" base saturation percentages listed earlier are not as meaningful." It's interesting that he has no qualms about using the base saturation approach on Red Bull Arena's sand-based root zone. **Bottom line: base saturation approach doesn't work for sands or any other type of soils. Following simple, straightforward soil test recommendations like those from any university or state soil testing laboratory will indicate in plain language if the turf is receiving sufficient nutrients, or if fertilizer additions are required.**

In the same vein, the author attempts to overwhelm the reader with the results of a saturated paste analysis, which has no meaning whatsoever because the results have never been calibrated with field data. All soil tests are meaningless unless calibrated by research. Again, saturated paste extractions sound like a good idea, they are certainly complicated, and running these tests almost always seem to result in several supposed nutrient deficiencies and recommendations for correcting those deficiencies. I could go on and on, but I hope the point has been made clear, most over-complicated interpretations are an attempt, veiled in pseudo-science, to part your employer with their money. Don't get me wrong, there will be many challenges to growing healthy turf at Red Bull Arena. The turf management team needs to focus on the issues created by reduced light penetration, limited air movement, and intense traffic. Every minute and penny spent on correcting phantom fertility and soil chemistry problems is a minute and penny wasted that could have been directed towards addressing real challenges.

I want to reinforce that I have no experience with this type of behavior from Wisconsin-based consultants, but it definitely occurs on a regional and national scale. If you have questions about soil or water testing and want a second opinion; feel free to contact me anytime at 608-263-3631 or djsoldat@wisc.edu.

References

Kopittke, P.M., and N.W. Menzies. 2007. A review of the use of the basic cation saturation ratio and the "ideal" soil. Soil Sci. Soc. Am. J. 71:259-265.

Simmons, J. 2010. A soil profile: Red Bull Areana. *SportsTurf*. 26(6):22-24

Simmons, J., and M.Woods. 2006. Point/Counterpoint: Base saturation vs. sufficiency. TurfNet Monthly. 13(7):1-7

New Pesticide Building at OJ Noer

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

The Noer Facility opened the doors to its brand new pesticide management building on May 1, 2011. We've needed this building since the facility opened in 1992 even though there were only about 25 studies ongoing at that time. Today there are 80 to 90 different studies being conducted, with over half of those needing some level of pesticide application. You can imagine our current need.

Our opportunity for building this structure occurred in midsummer 2010 after the UW-Madison College of Agricultural and Life Sciences acquired funds from a federal research grant program to construct 6 new pesticide buildings on half of its 12 agricultural research stations located throughout Wisconsin. Each station was budgeted $60,000 - $65,000 for a building and OJ Noer was able to up our budget to $75,000 because our professors wanted more of a research lab, with fume hood, climate control, insulated rooms, rinsate handling, and miscellaneous sprayer equipment storage to be part of our building. Luckily we were able to convince the University of our need.

We still had a lot to accomplish with $75,000. We stayed within this new budget by serving as our own general contractor and doing some of the work ourselves. A spreadsheet of our expenses is on page 10.

Many meetings were held with the professors to discuss their needs before coming up with a workable building layout. The most fortunate guidance in designing the building came from Dr. David Kammel from UW-Madison Department of Biological Systems Engineering. Dr. Kammel literally wrote the book on design of pesticide management buildings. He would be willing to help you if you ever need his expertise. Contact me if you need his contact information.

Some general ideas that Dr. Kammel and I discussed included:

- Stabilize the concrete slab with steel rerod
- Apply epoxy paint to the concrete to seal spills from seeping into floor
- Add rough texturing to the epoxy coat to deter slipping
- Curb the floor to contain potential spills
- Slope the concrete slab, in mixing room, to contain more than 125% of sprayer capacity
- Place impermeable sheeting on walls of mixing room
- Use secondary chemical containment trays in storage room
- Place shelving no higher than eye level in storage room
- Size and locate ventilation in storage room for rapid removal of any potentially hazardous vapors
- Install ventilation in storage room with a timer for automatic vapor removal and include manual override
- Install an eye wash and shower station in mixing room
- Discharge fume hood above roof line
- Include a wall air conditioning/heater unit for research/weighing room
- Separate the water source for building from our research field irrigation well
- Design a reservoir system for easy rinsate storage and handling
- Include a safety light on exterior wall

Continued on page 9

Building site before construction

36 x 36 foot building pad site

All the materials for pole building minus the interior walls

Start of building assembly

These general ideas led to more detailed specifications which are detailed below:

Specs for pesticide management building at OJ Noer Turfgrass Research:

Agricultural post frame type building - 36' x 36'
11' Ceiling
18" Overhangs
Ridge ventilation
2" x 6" exterior nailers
Steel Wainscoting
4 insulated walkdoors - galvanized steel, prepainted frame and door slab, lockset, closure
2 x 3'x4' insulated self flashing sliding windows
Steel ceiling with vapor barrier
72 lf of R-19 insulation floor to ceiling w/ nailers 16" o.c.
Blown ceiling with R-38 fiberglass insulation
Install trim at column cavity where walls are not insulated to finish space between ceiling and exterior wall
40# total truss load
Laminated non-spliced structural columns
All lumber in contact with soil to be treated
Prepainted steel panels with warranty of 35 year against fade and chalk, 15 year edge rust and 25 year non-perforation warranty
1 x 12' x 9' overhead door with 1 1/2" sandwich panel door, prepainted 26 gauge galvanized steel
1 x 10' x 9' overhead door with 1 1/2" sandwich panel door, prepainted 26 gauge galvanized steel

Continued on page 10

Pouring the floor

Fred Turner building interior walls

All this work was completed in one day

Vapor barrier laid and steel tied awaiting concrete pour

Specs for walls:
1/2 inch sheetrock on walls of research area and pesticide room
1/2 inch OSB sheet on walls of fertilizer/general storage area and sprayer parking/sink area
Fiberglass reinforced panel sheeting on wall containing sink, shower/eyewash, rinsate tank

Concrete specs:
36' x 36' 4" floor
Vapor barrier
6 bag mix
Expansion and control joints sealed
#4 rebar tied at 12" centers placed with 2" chairs
Curbing formed per plan
Concrete sloped for spill containment per plan

Specs for epoxy coating of concrete slab:
Shot blast or diamond grind the substrate to prepare surface for coating
Install primer, intermediate broadcast, and Novolac chemical resistant finish. Total thickness 40-45 mils
Broadcast sand in first coat for slide resistance
Seal joints with two part chemical resistant caulk

Specs for fume hood ventilation:
Blower motor with capacity of 580 cfm
Blower motor mounted on building exterior
Vent stack to exhaust above roof line

Noer Pesticide Building Costs

Item	Costs
Site preparation: excavation, fill, sand	$ 4,650
Concrete pad	$ 4,480
Concrete rerod, chairs, ramps, labor	$ 3,484
Plumbing	$ 2,000
300' of 1.25" poly pipe for waterline	$ 360
Electrical: fixtures panel wiring, lights	$ 5,351
Fume hood ducting, heater, ventilation	$ 4,817
Trenching, breaker, panel, final connections	$ 4,865
Post frame building	$ 23,982
Overhead garage doors	$ 2,430
Epoxy coating of concrete	$ 4,998
Sink, faucet, countertops	$ 1,000
Nails and primer	$ 162
Doors and wall foam filler	$ 813
Lumber for interior walls	$ 883
Carpentry labor	$ 960
Drywall	$ 1,634
Ceiling insulation	$ 1,054
AC sleeve	$ 87
Door knobs, locks, keys	$ 598
Eye wash and Emergency shower	$ 512
Rinsate and water handling	$ 2,695
Bumper pipes	$ 516
Galvanized grate	$ 60
Paint	$ 440
Motor, mounts, and stack for fume hood	$ 1,991
Shelving	$ 641
Total Cost	**$ 75,463**

Specs for chemical room ventilation:
12" round, 600 cfm exhaust fan mounted high on NW wall with ducting built down to 12" of floor
24" x 24" air intake mounted high on opposite wall with louvered intake damper motor operator
Timer to allow 4 air changes per hour when room is not occupied
Install override switch to allow fan to run continuously when room is occupied or whenever lights in room are turned on

Our new pesticide building is available for tours if you ever need to construct a building yourself. It is such a positive addition to our operation and is used extensively by every department that does work at Noer. I wonder how we got along without it in the past!

Dry wall finishing

Noer employee Walter Thieszen helping paint interior walls

Surrounding slopes contoured, seeded, then protected from erosion with Futerra blankets

New pesticide building open for business

Wisconsin Turfgrass Association Golf Fundraiser

Benefitting the

Wisconsin Turfgrass Research Sustainability Fund

Oconomowoc Golf Club – October 3

Where: Oconomowoc Golf Club
W360 N5261 Brown Street
Oconomowoc, WI 53066
(262) 567-7721

Directions: On Back

When: Monday, October 3, 2011

9:30-11:00	Registration
9:30-11:30	Range
10:30-11:30	Lunch
11:45	4-Person Best Ball Shotgun Start
After Golf	Hors d' Oeuvres, Reception, Prizes, Cash Bar

What: Golf, Cart, Practice Range, Lunch, Door Prizes, Golf Awards, Hors d' Oeuvres

Cost: $125 per person

Questions: (608) 845-6536

Oconomowoc Golf Club

Although the famous Donald Ross designed the golf course, it was not well known among the membership until the late 1970's. The promotion of the Donald Ross design began with the discovery of an original 1915 Donald Ross blue print of the golf course design. A golf course restoration began in 1995 under the direction of Craig Schreiner. The Renovation Master Plan was an essential tool in helping restore the character of the 1916 Donald Ross design. The renovation involved the restoring of all greens, tee, fairways and sand bunkers. The renovations were designed to not only restore the original intent, but also provide the golfing challenge consistent with today's maintenance and golf equipment advancements.

You are invited to play this small piece of golf history. Course superintendent Dustin Riley, his staff, and the members of Oconomowoc GC, welcome everyone to this WTA event. Proceeds from the golf outing will be used by UW-Madison scientists to develop new techniques for managing turfgrass in the most environmental approach.

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ENTRY FORM – WTA Golf Outing Fundraiser

Name: _____ Phone: ( ) _____

Name: _____ Email: _____

Name: _____

Name: _____

# of People Attending ____ x $125 per person = _____

You May Also Sponsor A Golf Hole or Make An Additional Tax Deductible Contribution

Optional Tee Sign Golf Hole Sponsorship x $100 = _____

Name To Be Printed on Tee Sign --- _____

or Additional Tax Deductible Contribution = _____

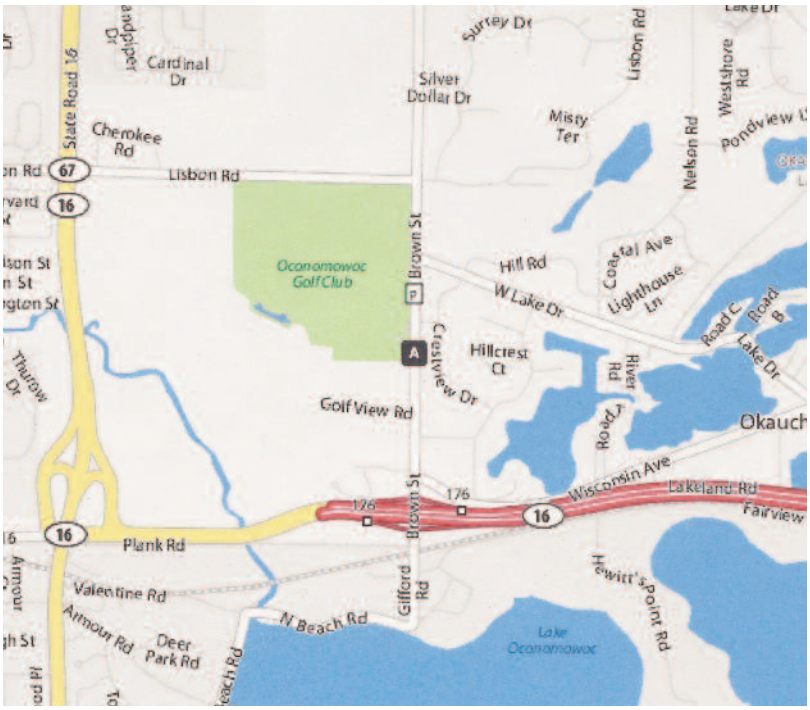
- Please make check payable to WTA and return to 2502 Highway M, Verona,WI 53593
- Refer questions about the outing to Audra Anderson at @ 608-845-6536 or ajander2@wisc.edu
- Registration deadline is Tuesday, September 27, 2011
- You may register by yourself or as a foursome

Directions from East
Proceed I94 West to SR-16. Continue to follow SR-16 west. Take Exit 176 BROWN ST/GIFFORD RD ramp toward CR-P North. Turn RIGHT onto Brown Street. At the top of the hill our property is on the left.

Directions from West
Proceed East on SR-16. Continue to follow SR-16 east. Take the BROWN ST/GIFFORD RD ramp toward CR-P North. Turn LEFT onto Brown Street. At the top of the hill our property is on the left.

Directions from North
From Mequon: Proceed I43 south to I-94W/US-41 N/Madison. Merge onto Ramp I-94 [US-41]. Take Exit 293C, take ramp right onto SR-16 (WI-16/Pewaukee). Exit 176, turn RIGHT onto Brown Street. At the top of the hill our property is on the left. From Hartford: Go west on SR-60 [W Sumner St.] Turn LEFT (South) onto CR-P. Keep STRAIGHT onto CR-P [Brown St.] past LISBON RD and entrance is on the right.

Directions from South
From Racine: Take WASHINGTON AVE./WI-230/WI-32. Continue on WASHINGTON AVE/WI-20 W. Merge onto I-94 W/US41 N toward MILWAUKEE. Take I-43 S/I894 BYP exit, EXIT 316, on the LEFT toward MADISON/FON DU LAC. Merge onto I-894 W. Merge onto I-94 W via EXIT 1B on the LEFT toward MADISON. Merge onto WI-16 W via EXIT 293C toward ALT W/PEWAUKEE. Take EXIT 176, BROWN ST/GIFFORD RD ramp toward CR-P North. Turn RIGHT onto Brown Street. At the top of the hill our property is on the left.



Wisconsin Turfgrass Association Golf Fundraiser

Benefitting the

Wisconsin Turfgrass Research Sustainability Fund

Oconomowoc Golf Club
Monday, October 3, 2011

2011 WTA Summer Field Day in Pictures

WTA administrative assistant, Audra Anderson, along with longtime helpers Sharon and Lois, greeted registrants with a smile

Bucky and Noer employee Eric Coleman assisted wherever they were needed

The crowds were smaller for 2011 but still enthusiastic

Dr. Soldat explains the new UW Extension organic turf management publication

Continued on page 14

Field Day Facts

- 164 attendees (92 less than last year's attendance)
- 30 companies in the trade show
- 67 sales people working in the trade show
- Partly cloudy, 86 degree high, 10 mph wind
- Winner of the Barenbrug/DHD Apple Ipad II raffle — Doug DeVries
- Winner of the Premier Golf & Utility Vehicles Turf II golf car use-for-one-year raffle —- Doug DeVries (Doug had a good day)
- 650 bottles of water consumed

Dr. Williamson and graduate student Glen Obear explain their research on Japanese beetles

Dr. Kerns talks about current events in the management of turfgrass

Grad student PJ Liesch gives a workshop on lawn care sprayer calibration

Tom Schwab introducing the latest and greatest addition to the Noer Facility - the new pesticide management building (more on the building is included in the newsletter)

Wisconsin Green Industry Federation executive director Brian Swingle brought his son Jack along to learn about turf research

Jerry Kershasky taking in all the research with camera in hand

Please support the Summer Field Day vendors that help bring this great event to you every year. The 2011 vendors include:

Agrium Advanced Technologies
Ariens Company
BASF
Bayer
Burris Equipment
Contree Sprayer & Equipment Company
Deer Creek Seed
DHD Turf & Tree Products
Dow AgroSciences
DryJect
Frontier F/S
Greater Earth Organics
GreenJacket
Horst Distributing
John Deere Golf
JRM Inc
Midwest Turf Products
On Course
Pendelton Turf Supply
Premier Golf & Utility Vehicles
Purple Cow Organic
Reinders
Spring Valley
Syngenta
Turfco
Valent Professional Products
Waupaca Sand & Solutions
WDATCP
Winfield Solutions
Wisconsin Turf Equipment

WTA ambassador Monroe Miller presents a recognition plaque to Dr. Birl Lowery for outstanding contributions to the UW-Madison turfgrass science undergraduate program

John Deere displaying some of their latest equipment offerings

Staff and customers of Barenbrug Seed and DHD Turf & Tree Products taking a little shade break. They also raffled an Apple Ipad II for a field day door prize. Doug Devries on the far right was the lucky winner

Club Car raffled a one-year use of a Turf II at this year's show

Horst Distributing and Burris Equipment brought a load of equipment to the show

Winfield Solutions taking a shade break from the trade show

Reinders' staff talks Toro with Jeff Millies

Spring Valley displayed their latest offerings for turf nutrition

CALENDAR OF EVENTS

Sept 19	Wee One Fundraiser	Pine Hills CC, Sheboygan
Sept 27	NGLGCSA Crew Outing	Marquette CC, Marquette, MI
Oct 3	**WTA Golf Fundraiser**	**Oconomowoc GC, Oconomowoc**
Oct 7,8	WGCSA Couples Weekend	Minocqua CC, Minocqua
Oct 26-29	PLANET Green Industry Conference	Louisville, KY
Nov 15,16	WI Golf Turf Symposium	American Club, Kohler
Dec 1	WSTMA Winter Conference	Great Wolf Lodge, WI Dells

2012

Jan 4-6	Northern Green EXPO	Minneapolis, MN
Jan 10-14	STMA Conference and Exhibition	Long Beach, CA
Jan 18-20	Mid-Am Horticultural Trade Show	Chicago, IL
Jan 23	Pesticide Applicator Training (Turf & Landscape 3.0)	Wisconsin Dells, Kalahari Resort
Jan 24	**Wisconsin Turfgrass Association Winter EXPO**	**Wisconsin Dells, Kalahari Resort**
Jan 30-Feb 3	TPI Midwinter Conference	Scottsdale, AZ
Feb 23	Pesticide Applicator Training (Turf & Landscape 3.0)	Waukesha: Carroll University
Feb 27-Mar 2	Golf Industry Show	Las Vegas, NV
Mar 1-4	PLANET Green Industry Great Escape (Executive Forum)	Bahamas
Mar 7	Pesticide Applicator Training (Turf & Landscape 3.0)	Eau Claire, America's Best Value Inn
Mar 8	Pesticide Applicator Training (Turf & Landscape 3.0)	Green Bay, Clarion Hotel
Mar 22	Pesticide Applicator Training (Turf & Landscape 3.0)	Madison American Family, Center
Mar 29	Pesticide Applicator Training (Turf & Landscape 3.0)	Waukesha: Carroll University
Apr 2	Pesticide Applicator Training (Turf & Landscape 3.0)	Waukesha: Carroll University

WTA Members — If you have an important date you'd like to share with other members,
Call 608-845-6895 or email tgschwab@wisc.edu to include it in the next calendar.

Contact Telephone Numbers

GIS	Golf Industry Show	800-472-7878
Mid-Am	Mid-America Horticultural Trade Show	www.midam.org
NGLGCSA	Northern Great Lakes Golf Course Superintendents Assoc.	www.nglturf.org
Northern	Northern Green Expo	888-886-6652
PAT	Pesticide Applicator Training (Turf and landscape 3.0)	608-262-7588
PLANET	Professional Landcare Network	www.landcarenetwork.org
STMA	Sports Turf Managers Association Conference	800-323-3875
Symposium	Wisconsin Golf Turf Symposium	800-287-9645
TPI	Turf Producers International	800-405-8873
Wee One	Wee One Foundation Golf Outing	630-457-7276
WGCSA	Wisconsin Golf Course Superintendents Association	920-643-4888
WGIF	Wisconsin Green Industry Federation Annual Convention	414-529-4705
WSTMA	Wisconsin Sports Turf Manager Association	608-845-6895
WTA	**Wisconsin Turfgrass Association**	**608-845-6536**