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The 6th Hole at Trappers Turn Arbor 9. 441 yard Par 4. Trappers Turn will host the May 14 WGCSA Meeting

Ladders in bunkers and Stimpeters are the two worst inventions in golf
By Peter Jacobsen at the GCSAA Educational Conference and Show.
Jacobsen said this as part of his acceptance speech for the Old Tom Morris Award.

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THE GRASS ROOTS

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New Season = New Opportunities

By Jeff Millies, Certified Golf Course Superintendent, Edgwood Golf Course

Winter never really showed up for most of us this year. It was the second warmest on record. With the above normal temperatures and lack of snow, it allowed many of us to stay busy outside. There were even a few courses that were open every month this winter. Most of us utilize winter as a time to re-charge and prepare for the upcoming season, but with the lack of winter, many have been busier than normal. Let's hope this trend follows into the rest of the season.

I was able to attend the GIS and Wisconsin/Milorganite Room in Las Vegas. I would like to thank all of our vendor sponsors that assisted in the success of our event. It was well attended and enjoyed by everyone. This year a 50/50 raffle took place during the Wisconsin/Milorganite Room to raise money for the TDL. Congratulations to Randy Dupont from North Hills Country Club who won \$565. He then graciously donated all of the money back to the TDL. In this issue of Grass Roots there is a list of those who helped sponsor this year's room. Please thank those industry partners for their support. Their support is vital to the success of the WGCSA events.

GIS seemed bigger and the attendance was better than the last few years. There was without a doubt plenty to see as well as educational opportunities. It is definitely one event I wish everyone could attend. One of the biggest benefits is having the opportunity to look for new trends in the industry as well looking for ways to become a more effective leader. Remember that the 6 most expensive words in business are; we've always done it that way. Just because it has worked in the past doesn't mean it can't be improved. I hope you were able to come away with some new ideas or products that

“Remember that the 6 most expensive words in business are; we've always done it that way.”


would benefit you and your course. If you were unable to attend the GIS this year or missed some of the speakers, take a few moments and check out the recap of the shows events by going to www.gcsaa.tv.

Many times we are so focused on the cost of products/services we forget about the

other bottom line referred to as corporate culture. It is reflected in the methods we use to get the work done, the norms that are established, the leadership tone that is set, and the words and behavior that spread through the work place. Superintendents need to realize they are architects of this culture within their facility. By what they say (and don't say) and do (and don't do), they are shaping the corporate culture of the organization.

As we start the 2012 season, remember that we will probably face new challenges, but this also brings new opportunities to change. Embrace these opportunities and be thankful for the problems associated with these challenges. Remember, if they were less difficult, someone else with less ability might have your job.

Upcoming events include: April 23 – Geneva National GC in Lake Geneva, May 14th – Trappers Turn GC in Wisconsin Dells, May 30th – Super/Pro at Nakoma Golf Club in Madison, and June 25th – WGCSA Tournament at Oshkosh CC. Please make an effort to attend these events.

I look forward to a great golf season and hope to see you out on the course. 

WGCSA MISSION STATEMENT

The Wisconsin Golf Course Superintendents Association is committed to serve each member by promoting the profession and enhancing the growth of the game of golf through education, communication and research.

WGCSA VISION STATEMENT

The Wisconsin Golf Course Superintendents Association is dedicated to increase the value provided to its members and to the profession by:

- Enhancing the professionalism of its members by strengthening our role as a leading golf organization in the state.
- Growing and recognizing the benefits of a diverse membership throughout Wisconsin.
- Educating and promoting our members as leaders in environmental stewardship.
- Offering affordable, high value educational programs at the forefront of technology and service.
- Being key to enjoyment and the economic success of the game of golf.

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Winter Activities

By **Brett Grams**, Chapter Manager, Wisconsin Golf Course Superintendents Association

What a winter, or a lack thereof! Here in central Wisconsin we had a truly low snow winter. Unlike the past 3 or so winters where if there was a concentration of snow it seemed to fall on the center part of the state this year was an exact opposite. The few storms that did track into our great state seemed to veer north or south of us. I believe we had only three snow events that totaled more than 2 inches and one of those was in early November. Hopefully the winter weather at your location was helpful to getting your outdoor projects accomplished and that Mother Nature provides for a healthy and consistent start to the 2012 season.

Since the middle part of January I have been very busy with the very important administrative type tasks that are a part of serving our membership. Dues renewal, industry partnerships, budgeting, updating and maintaining the WGCSA website, building the PAR4 Research Website, and attending the GIS where we host the annual WI Room all make for a busy schedule in the winter months. This is my peak season and I am happy to report that somehow, somehow it will all get done. The success the WGCSA has with renewing memberships, and securing advertisers and sponsors at this time of year will dictate the financial success and amount of funding toward our efforts the rest of the year. The economic challenges we all face are also a reality for the WGCSA but

thanks to many businesses and members who continue to support our association we will overcome these challenges in 2012 like we have in the past.

One of the nice things about this time of year is getting to see many of you at your slower times. Conversations with many of you whether they are on the phone, in person at meetings, or even email are a little longer and a little more personal at this time of the year. No matter how busy I am I strive to make the time to work with all your concerns and needs one on one. I realize how busy most of you soon will be as you prepare and open your great facilities so making time for you in your off season will always continue to be a priority.

I hope that many of you that attended the GIS had a worthwhile trip. My trip was short but productive. I was again able to attend a daylong session of meetings with fellow chapter executives and also sat in on the editor session with our David Brandenburg. Other than a terrible head cold I had that particular day it was a great experience. In my conversations with the staffers that I have gotten to know at the GCSAA all seem to report an increase in participation. The tradeshow appeared busy and many vendors and attendees reported they found it productive. The show was once far bigger but those that want to showcase products and meet one on one with decision makers is still the same. Perhaps the current quality is better than

the higher quantity of the past GIS show floors. Las Vegas seemed to be a polarizing location as well. People seem to love the excitement and night life or find it a distraction. I heard plenty of both comments during the three days I was in town.

During my trip I was able to talk to other leaders in our industry and a general theme seems to be emerging. Given the stagnation or lack of growth of participation in our great game some are beginning to question if the role of the superintendent associations might need to shift.

The GCSAA and WGCSA have similar missions with growing the professionalism and providing educational opportunities that increase the value of the superintendent. Overall I think most will agree that this has been successful as the vast majority of the superintendents today are very educated and very good at what they do.

Even with large budget restraints today's courses are in fantastic condition compared to even a few years ago. Turf maintenance has never been higher but golf is flat. Some think we as an industry should now be considering a change in our efforts. Rather than growing the profession we should be thinking about the big picture and focusing more (most likely with others) on growing the game.

After all as one person I talked to said does it really matter if we have all these great golf course superintendents who have the ability to maintain and manage great facilities but we do not have enough golfers to sustain the facilities? Some may view this idea as new. Others of you have been discussing this for a few years. Other chapters are joining forces with the PGA Sections, GC Owners, in promoting state-wide golf days, and turning resources and efforts at grass root campaigns to help grow new golfers and increase participation. What do you think? I would enjoy hearing your thoughts on this subject. Please send me an email or give me a call. No matter how busy we all are we must make time to plan for the future!

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Annual Bluegrass Weevil: Not on Your Radar Yet, But Be Aware!

By Dr. R. Chris Williamson, Department of Entomology, University of Wisconsin-Madison

Although most likely not currently anywhere near Wisconsin, the annual bluegrass weevil (ABW), *Listronotus maculicollis*, may be one of the most troublesome insect pests of golf courses in the northeastern United States. Formerly referred to as the *Hyperodes* weevil, ABW was originally identified as a serious insect pest of highly maintained annual bluegrass (*Poa annua*) in the metropolitan New York region. Although annual bluegrass is its primary host, ABW has also been reported to lay eggs on, feed and damage creeping bentgrass and perennial ryegrass (*Lolium perenne*). ABW is now damaging turf in all of the Northeastern states as far south as Virginia, as far west as eastern Ohio and as far north as southern Ontario and Quebec provinces in Canada. Most recently, damaging populations of ABW were reported in the mountains of North Carolina.

ABW adults spend the winter in protected sites near fairways, putting greens and tees. In the spring as early as late March, typically when Forsythia is in mid- to full bloom, ABW adults will move to shorter-cut turf including fairways, putting greens, tee boxes and surrounds from adjacent overwintering sites. Adult female




Bluegrass Weevil Damage. Photo Courtesy of Gregory Byrne, Golf Course Superintendent at Chambersburg Country Club, PA.

ABW will begin laying eggs in the inside of leaf sheaths of individual grass plants from mid-April through May. The tiny legless larvae hatch after about a week and spend five larval stages feeding and growing. Smaller (younger) larvae feed inside the leaf sheath, and larger larvae migrate (chew their way down) the plant downward to feed on the crown, feeding damage from larger larvae becomes very apparent. The larvae pupate in the soil for about a week before emerging as adults in June and July, and this cycle is repeated for a second (summer) generation. Larvae typically develop more quickly in the summer compared to the spring. This is one of the reasons that it is so difficult to track the development of ABW populations in the summer months because of the overlap between insect stages. Thus, it is not uncommon to find small larvae, medium larvae, large larvae, pupae

and adults all in the summer.

Monitoring for ABW is fairly easy and yet very important for making appropriate management decisions. Adults can be readily observed moving on the surface of putting greens, collars, tee boxes and fairways on sunny days throughout the summer. ABW adults can also be easily brought to the turf surface by using a soap disclosing solution (one or two tablespoons of lemon-scented dishwashing detergent in two gallons of water). Larvae and pupae can be easily sampled by cutting a wedge in the turf or pulling a core out of the turf, ABW larvae look like grains of rice with a brown head, and pupae are all white with a diamond shape.

Again, ABW is currently not known to be in Wisconsin! But, because of the destructive nature of this important turfgrass pest, it is certainly an insect that we must have awareness and an understanding of its biology (behavior, life-cycle, etc.) and management. 



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Soil Test Phosphorus Requirements for Sand Greens

By **Dr. Doug Soldat**, Department of Soil Science, University of Wisconsin - Madison & **Bill Kreuser**, Ph.D. Candidate, Cornell University

What does a putting green soil test phosphorus (STP) value of 25 ppm mean anyway? According to Wisconsin regulations it means P fertilizer can't be applied legally, but is 25 ppm STP enough to sustain healthy turfgrass?

Soil test calibration studies are necessary to provide context to soil test results. During a calibration study, various plant responses are assessed across a broad range of soil nutrient levels. Responses such as clipping yield, visual quality rating, deficiency symptoms, and stand density are commonly used to determine the soil test critical point; where plant demand for the nutrient is met by the soil supply. Turfgrass visual quality, clipping yield, and stand density are reduced when the soil test level is less than the critical point and application of fertilizer is recommended. Fertilization when the STP level exceeds the critical point is not recommended because additional nutrients are not likely to stimulate a turf response.

It's important to pay attention to the soil testing method used by your favorite lab. For golf course turf, especially putting greens and tees, the Mehlich-3 soil test has fallen into favor by many labs nationally because it is less sensitive to soil pH as other test methods. It is the method used at the UW-Soil and Plant Analysis

Lab (UW-SPAL) for golf course soil analysis. Despite its widespread use, there was not Mehlich-3 soil test calibration data for creeping bentgrass putting greens or tees published in the scientific journals. In 2008, we began a study to determine the STP requirements of creeping bentgrass putting greens. Additionally we were interested to see if Primo Maxx™ (trinexapac-ethyl) had an effect on putting green P requirements.

Basic Research Methodology

To create a broad range in STP levels, a new putting green was constructed at the O.J. Noer Turfgrass Research Center with non-amended calcareous sand conforming to USGA particle size specifications. The green was seeded in June, 2008 with 'Penn A4' creeping bentgrass and established during that growing season. Various amounts of phosphorus fertilizer (monopotassium phosphate) were incorporated into the 32 research plots prior to seeding with a rototiller (Figure 1). Periodically that summer, six three-inch deep soil samples from each plot were pooled together and sent to UW-SPAL for Mehlich-3 ICP-OES phosphorus determination. Additional monopotassium phosphate was applied during 2008 broaden the range in STP values.

The actual data collection began in May

2009 and continued until October 2010. The green was fertilized twice a month with 0.2 lbs N/M, irrigated daily to 80% of ET, and mowed 6 days a week at 0.125 inches. Sixteen of the 32 plots were sprayed with Primo Maxx™ every 200-GDD (base 0°C) at the rate of 0.25 oz/M (11 oz/acre). Six soil samples to three inches, clipping yield, and visual quality ratings were taken during each month of the growing seasons. Turfgrass quality was rated on a one to nine scale where one represents dead, six minimally acceptable, and nine perfect putting green visual quality rating. After clippings were dried and weighed, they were sent to the UW-SPAL for mineral P determination. Regression was then used to create calibration curves for each month with or without TE.

Turfgrass Mehlich-3 Soil P Requirements

The fertilizer treatments succeeded in creating a broad range of STP levels and deficiency symptoms at the start of the study in May 2009. Soil test values ranged from 3 to 55 ppm phosphorus. This resulted in a broad range of turfgrass visual quality ratings. Plots that did not receive P fertilization during construction or establishment consistently had the lowest quality ratings (2 to 3). These plots were blue to purple in color, slowly growing, with thin/spindly leaves, and limited thatch or

SOIL DEPTH Inches from surface	MEHLICH-3 SOIL TEST NUTRIENT LEVEL	
	PHOSPHORUS	POTASSIUM
	-----ppm-----	
0 to 1	15.5	93.9
1 to 2	14.1	20.9
2 to 3	16.1	21.7
3 to 4	11.0	20.0
4 to 5	5.5	13.2

Table 1. The distribution soil nutrients with soil profile depth. Plant roots redistribute nutrients towards the top of the soil profile. Consistency of soil sampling depth is very important because shallow cores will have higher soil nutrient values than deeper cores.