GAZING IN THE GRASS

putting greens, however, even though I've seen supina bluegrass as putting green turf in its native habitat of the sub-alpine regions of Germany and Austria. One of the things we're exploring at the O.J. Noer Facility currently is the potential for velvet bentgrass to provide better shaded putting green turf than creeping bentgrass. We'll finish our first year of data collection this autumn, and begin to present results this winter. Information published in trade journals indicates it is more shade tolerant than creeping bentgrass (Brilman and Meyer, 2000), but at UW we'll need verification before we start recommending it.

References

- Bell, G.E., and Danneberger, T.K. 1999. Temporal shade on creeping bentgrass turf. Crop Sci. 39:1142-1146.
- Brilman, L.A., and W.A. Meyer. 2000. Velvet bentgrass: Rediscovering a misunderstood turfgrass. Golf Course Manage. 68:70-75.
- Bunnell, B.T. L.B. McCarty, J.E. Faust, W.C. Bridges, Jr., and N.C. Rajapakse. 2005.
- Quantifying a daily light integral requirement of a 'Tifeagle' bermudagrass golf green. Crop Sci. 45:569-574.
- Goss, R.M., J.H. Baird, S.L. Kelm, and R.N. Calhoun. 2002. Trinexapac-ethyl and nitrogen effects on

creeping bentgrass grown under reduced light conditions. Crop Sci. 42:472-479.

- Rogers, J.N., III, J.C. Stier, J.R. Crum, T.M. Krick, and J.T. Vanini. 1996. The sports turf management research program at Michigan State University. p. 132-144. *In* Earl F. Hoerner (ed.) Safety in American Football. ASTM 1305. ASTM, Conshohockan, PA.
- Steinke, K., and J.C. Stier. 2003. Nitrogen selection and growth regulator applications for improving shaded turf performance. Crop Sci. 43:1399-1406.
- Steinke, K., and J.C. Stier. 2004. Influence of trinexapac-ethyl on cold tolerance and nonstructural carbohydrates of shaded supina bluegrass. Acta Hort. (ISIS) 661:207-215.
- Stier, J.C., and D.S. Gardner. 2008. Shade stress and management. pp. 447-472. In M.
- Pessarakli (ed.) Handbook of turfgrass physiology and management. CRC Press, Taylor & Francis Group, Boca Raton, FL.
- Stier, J.C., and J.N. Rogers, III. 2001. Trinexapac-ethyl and iron effects on supina and Kentucky bluegrasses under low irradiance. Crop Sci. 41:457-465.
- Stier, J.C., J.N. Rogers, III, J.R. Crum, and P.E. Rieke. 1999. Flurprimidol effects on Kentucky bluegrass in reduced light conditions. Crop Sci. 39(5):1423-1430.



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Super Pro at Brown County

By Scott Bushman, Golf Course Superintendent, Fox Valley Golf Club

Brown County Golf Course, Superintendent Scott Anthes and PGA Golf Professional Jim Ostrowski were the hosts for the 2009 Super/Pro on Wednesday, Sept. 3rd. The sunny skies and nice temperatures made up for the original date of May 27 when rain and flooding were the rule of the day.

This years event was sponsored by Club Car's Tiziani Golf Cars and Cleveland Golf / Srixon. The day started with a lunchtime sandwich buffet with soup and salad and warming up to start the 1:00 p.m. thirty four teams Modified Chapman (Net) format. After golf we gathered in the clubhouse for drinks, a fantastic buffet style dinner and awards.

Winners were as follows: Division 1— 1st Place Tom Dolby(Pro) and Jeff Pritzl (Supt.) from Timber Ridge CC with a score of 63.50. They are now the two time defending champions. 2nd Place Wes Warren(Pro) and Garrett Luck (Supt.) from North Shore CC with a score of 65.10. 3rd Place David Bobber(Pro) and Jake Renner (Supt.) from The Legend at Brandybrook with a score of 66.20.

Division 2— 1st Place Mark Voeller and Mark Lochart from Golf Galaxy with a score of 65.00. 2nd Place Curt Smits and Dave Busse from Rock River CC with a score of 66.00. 3rd Place Jeff Bisbee and Peter Meyer from Bisbee's Golf and National Golf Graphics with a score of 66.70.

Division 1 consisted of teams made up of PGA members, Apprentices, and Pre-Apprentices and GCSAA members from the same facility.

Division 2 consisted of all other teams, including teams that have a member without a handicap. Amateurs in both divisions play for merchandise credit while the professionals play for points and cash payout.

Brown County Golf Course Host Superintendent, Scott Anthes





Representatives for Tizianni Golf Cars Steve Fisher (Left) and Darrin DiChristopher (Right) congratulate Superintendent Jeff Pritzel and Golf Professional Tom Dolby on their winning score of 63.50.



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FROM THE GOLF SHOP

'I'imes

By Jeremiah Hoffmann, PGA Professional, Rolling Meadows Golf Course

Editor's note: We are joined by Jeremiah Hoffmann the PGA Golf Professional at Rolling Meadows Golf Course who will offer a perspective from the other side of the golf shop counter.

As much as superintendents wish members and customers will come to us with questions and comments, reality proves it is the guy or gal behind the golf shop counter who gets cornered by that member. We can use Jeremiah's perspectives to better our relationship with the clubhouse staff and golfers!

When David took over as editor of "The Grass Roots," I offered to write an article if he ever needed one. Little did I know he would cash in on that offer! At the time I had lots of ideas on what to write about, yet they all escape me now. David's advice was simple enough: "Write about what you think superintendents should know." That sounds simple, but it proved to be difficult to put on paper. After a lot of bad ideas, I finally settled on two reminders: Communication is always very important and people will always fight change. These have been very important to us as a staff at Rolling Meadows this year. We are reorganizing the management of our golf course. In theory it seems like that wouldn't be an earth moving ordeal. When it starts to become a reality, things change fast. Employees, members, regulars, family members and people off the street all have an opinion on how to do things. Unfortunately, they don't all agree. This is where the communication becomes so important. We are constantly discussing options and what the best way is to move forward. For whatever reason, golf clubs are a lot like high schools; rumors start, spread and grow in a matter of hours. Constant communication between supers, golf pros and GMs is imperative.

The other reminder we've gotten this year is the fight people will put up against change, even when it has a chance to be very positive. Golfers get very used to a routine at their favorite facility. Rattle that cage and they will voice their opinion. That's not to say you shouldn't make changes you feel will improve your facility, just proceed with caution. Do your research and be prepared to answer every question in the book. Sit down with your management team and play the "devil's advocate." Try and approach it from every angle, because the more scenarios you've thought of before hand, the easier it will be to address them when they actually come up!

I'm sure I won't win a Nobel Peace Prize for the concepts covered, but hopefully they are some friendly, helpful reminders. Even if you don't intend to make major changes at your club, take a little extra time to talk to your golf pro. The more we know and understand what you are doing, the more we can become your advocate with the customer. And you never know, we might even tell you what we are up to! \checkmark

Why is Change Difficult?

- Fear of the unknown.
- Comfort and investment with status quo.
- Tradition.
- Don't see the need to change.

Why Does Change Fail?

- Delegating to outsiders to sell the change.
- Leadership does not walk the talk.
- Leaders do not realize that people react differently to change.
- Leaders treating change as a event rather than a mental, physical and most of all emotional process.

Keys to Success

- Plan your communications.
- Communicate why and how.
- Ask advice from veteran employees and customers.
- Expect some chaos, allow for mistakes.
- Look for opportunities to sell the change to customers and employees.





What's in a Spot?

By Dr. Jim Kerns Department of Pathology and Paul Koch, Turfgrass Diagnostic Lab Manager, University of Wisconsin - Madison

probably do not need to remind Leveryone of the extremely cool spring we experienced, but some interesting samples came through the TDL last week, that are noteworthy. This spring was difficult with respect to timing fungicide and growth regulator applications. The temperatures slowly warmed up, but not enough to really stimulate grass growth. As a result, we saw a lot of diseases of senescent tissue. Diseases that Houston Couch called senectopathic disorders, or diseases that only develop on senescent tissue. Interestingly enough, anthracnose was placed in this category by Couch. I know many of you struggle with anthracnose and probably strongly disagree with Couch's assessment. Yet, there is validity to this placement. Colletotrichum species are exceptional saprophytes, which mean they live on dead tissue. If you think about when we see anthracnose, even basal rot anthracnose, it is when *Poa annua* or creeping bentgrass is under severe stress.

Physiological stress can occur under a wide variety of conditions, yet most people tend to think about diseases being most severe under heat stress especially for coolseason turfgrasses. Turfgrass plants are also stressed under low light conditions and in cool, wet conditions. Do these conditions sound like this past spring? Our spring was cool, cloudy and wet; then the temperatures skyrocketed quickly. These conditions were perfect for leaf spots and senectopathic pathogens were observed in samples submitted to the TDL. The most common problems we saw were red leaf spot, bipolaris leaf spot and foliar anthracnose.



Figure 1. Plant symptoms of red leaf spot of creeping bentgrass caused by Drechslera erythrospila. (Courtesy of APS Press).

Red Leaf Spot:

Red leaf spot is a disease of *Agrostis* species and is caused by *Drechslera erythrospila*. Symptoms are small reddish-brown to brown circular or oval spots (Figure 1). The inner portion of the spot may or may not be straw-colored or tan. Stand symptoms appear as irregular shaped patches that are randomly distributed. Typically the affected turf has a reddish-brown color (Figure 2). As the affected area progressively gets worse, the patch may have a blue cast and may resemble drought stress.

Red leaf spot is described as a warm, wet weather disease of Agrostis species, but many of my turfgrass pathology colleagues, including myself, typically see this disease in cooler, wet weather. The fundamental problem with the description of red leaf spot is the lack of specific conditions conducive for disease development. The words "warm" and "cool" are all relative. In South Carolina, cool is considered 75°F, whereas we consider 65°F and above warm. We typically see red leaf spot in mid to late spring when daytime temperatures are above 60°F.

The best recipe to control red

Figure 2. Stand symptoms of red leaf spot on a creeping bentgrass putting green (Courtesy of APS Press).

leaf spot is good growing conditions, which is easy for me to say sitting in my ivory tower. Sometimes patience is a virtue in leaf spot control, however if conditions are favorable for an extended period of time red leaf spot can cause enough damage to warrant a fungicide application. If a fungicide application is required, a tank mixture of iprodione and chlorothalonil usually does the trick.

Bipolaris leaf spot:

Most diseases incited by *Bipolaris* species occur on warmseason grasses, except for *Bipolaris* sorokiniana. This particular fungus has a huge host range and has been very damaging to mature creeping bentgrass stands throughout the Upper Midwest. The fungus causes diseases of foliar, crown and root tissue, which upon expression can look very similar to those of red leaf spot (Figure 3).

This particular disease has been most problematic on older fairways where the original species has segregated. Usually the fungus only attacks one or two of the segregates at a time. We do not have data to support this; this has been our observation in the field. The question that remains is how do we

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Figure 3. Bipolaris leaf spot of a creeping bentgrass fairway in Wisconsin caused by Bipolaris sorokiniana. Although these symptoms are more severe in this picture, the symptoms do resemble red leaf spot initially.



Figure 4. Spores of Bipolaris species. The top is Bipolaris cynodontis, which infects warmseason grasses, and the bottom pictures are Bipolaris sorokiniana. The key with identification at the spore level is the shape and size

(Courtesy of APS Press).

distinguish between red leaf spot and bipolaris leaf spot? A microscope is needed to observe sporulation of the causal fungi. Bipolaris fungi are prolific spore producers and make a spore that is tapered and usually smaller than the red leaf spot pathogen (Figure 4). Species of Drechslera do not sporulate as readily as *Bipolaris* species. You are probably thinking, who the hell cares, we can control both diseases with chlorothalonil! This may not be true. Although we do not have the data to support the following statement, it appears that products that contain a QoI (azoxystrobin, pyraclostrobin, trifloxystrobin, fluoxastrobin, etc.) seem to provide the best suppression of bipolaris leaf spot. We do not know if a QoI will work on its own, but we are planning on conducting laboratory sensitivity assays to determine the sensitivity of *Bipolaris sorokiniana* to the various QoI's.

Foliar Anthracnose:

Foliar anthracnose can be a severe issue in stands where *Poa annua* is the dominant turfgrass species. However, Couch makes an excellent point when he placed anthracnose into the class of senectopathic disorders. Remember that anthracnose is usually only a severe problem when turfgrass plants are subjected to extreme heat and drought stress. Why? Older tissue is naturally being phased out during these stressful conditions, so *Colletotrichum* just facilitates the death of the senescent tissue. Please do not misunderstand me though, without the pathogen the death would not be as rapid nor would it develop into the symptoms we observe.

As mentioned earlier, Colletotrichum species are formidable saprophytes and commonly inhabit turfgrass plants without inducing anthracnose symptoms. fungi commonly These are observed on all parts of a turfgrass plant on samples submitted to the TDL. A word of caution for those with microscopes, you can find Colletotrichum in almost every sample you look at. The key is knowing when the natural population has gotten large enough to



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overwhelm the plant. Basically we need to see an abundance of acervuli, the appropriate environmental conditions and plant and stand symptoms typical of anthracnose before we diagnose anthracnose as a problem (Figure 5).

On creeping bentgrass, *Colletotrichum* is usually only a severe problem in very hot climates, like the Southeastern United States. However, the fungus can cause a foliar blight under low light, cool, wet conditions. Sound Figure 5. Acervuli of Colletotrichum cereale, the causal agent of turfgrass anthracnose. Note the number of acervuli present on the foliage of this plant. These structures are readily found on almost every sample that comes through the TDL.

similar to red leaf spot?? Stand symptoms of foliar anthracnose of creeping bentgrass are very similar to stand symptoms of red leaf spot. Usually foliar anthracnose will not produce a reddish brown spot on the foliage. Fortunately it is not important to defientively distinguish between foliar anthracnose and red leaf spot of creeping bentgrass because the control recommendations are the same. Applications of chlorothalonil or a tank mixture of iprodione and chlorothalonil will suppress both foliar anthracnose and red leaf spot of creeping bentgrass. I hate to repeat myself, but good growing conditions will also remedy these two diseases. That is of course, if you have the luxury of patience at your facility.

These foliar diseases can be problematic and were fairly severe this year. Fortunately they are relatively easy to control. The best procedure for controlling these three diseases is to submit a sample to the TDL to ensure the symptoms you observe are actually a disease. If it is a disease we can give you an idea of how bad the disease is and make a recommendation based on what we have observed. Hopefully this article has given you a new appreciation of leaf spots!

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Southern Hospitality at Farm Links

By David Brandenburg, Golf Course Manager, Rolling Meadows Golf Course

In August I took the opportunity to attend "The Experience at FarmLinks" set on a the 3,500 acre Pursell Family Farm a short drive from Birmingham in Sylacauga, Alabama with a group of 11 superintendents from WI, IL and Upper MI. I am not sure what I expected when we landed in Birmingham but I did not expect the beautiful modern rolling city I experienced.

The 3 day stay at FarmLinks was a perfect combination of vacation and education and was the textbook definition of southern hospitality. First class people, great accommodations, southern meals and rocking chairs on every porch to just sit relax and contemplate.

Bud the FarmLinks bus drive greeted us at the airport and took us the hour drive through the city and interesting rural countryside before reaching the farm and the Parker Lodge that would be our home for the visit. For some reason I expected Alabama to be flat,

but the Birmingham area is quite rolling and hilly with plenty of wooded areas. Even though the locals considered it a cool summer the humidity quickly grabbed your attention every time you walked outside.

We were greeted at the farm by our host Blake Garrett, Experience Manager of FarmLinks and headed off to the clubhouse to grab lunch and enjoy the Hurdzan-Fry designed links. In trying to save time and effort checking my golf clubs at the airport I decided to try a rental set rather than bring my own clubs and I was quite surprised to find name brand clubs and a golf bag full of balls and tees to use.

The course stretches to 7,444 yards from the back tees but we picked the manageable whitetail tees at 6,457 yards and slope of 129. The yardage book was not only a history guide of the facility with tips for playing the course as you would expect but also the agronomic

