

between 50 and 65°F. Colonized roots and crowns appear dark brown to black in color and microscopic examination of affected tissue reveals dark brown runner hyphae of the pathogen (Figure 1). Vegetative movement of the fungus through thatch and root zone is very slow (up to six inches per year), whereas movement on soil cores and infested equipment is much more rapid. In the fall *G. g. var. avenae* may produce perithecia (fruiting structures) on the base of colonized plants that release windblown ascospores for long distance dispersal of the fungus (Couch, 1995).

Early symptoms of the disease are first noticed as circular patches of off-white or bronze turfgrasses that are a few inches in diameter. These patches often appear sunken and may expand up to a foot or more in diameter. Often times, more tolerant species of grass such as annual bluegrass or weeds will repopulate the center of the patch producing a frog-eye pattern. Patches increase in size over consecutive years and may reach several feet in diameter. Typical symptoms of the disease are circular patches; however, affected regions will sometimes be irregular in shape and often conform to the shape of low, wet areas or areas with poor drainage (Figure 2). Symptoms of take-all patch are usually not noticed until the warmer and drier weather of late spring and summer. At this time, affected bentgrass plants wilt and turn bronze to brown in color because of the inability of their damaged root systems to translocate water and nutrients. These plants are easily pulled free from the soil. Unfortunately, by the time symptoms of the disease are evident in summer, the pathogen is usually no longer active (soil temperatures of 70°F or higher), and fungicide treatment will not be effective.

Effective management of take-



Figure 1. Colonized creeping bentgrass root with the characteristic dark brown runner hyphae.

all patch requires preventive measures. Cultural techniques that promote root growth such as proper irrigation, topdressing, and core aeration help reduced the severity of disease. Alteration of the root zone pH so that it is between 5.5 and 6.5 is also key in areas where the soil is alkaline. This can be achieved by using ammonium based fertilizers such as ammonium sulfate and ammonium chloride that are acidic. Products such as sulfur or spray tank acidifiers can also be used to modify the pH of the root zone (Dernoeden, 1987). Fertilization should be balanced as phosphorus and potassium are needed for healthy root growth and are essential in the recovery of damaged root systems. Preventive fungicide applications for take-all patch can be applied in the fall when the soil temperature of the root zone drops below 70°F and in the spring when the root zone temperature reaches 50°F. The fungicides should be drenched in with 1/4 to 1/2 inch of water to reach the root zone (Couch 1995). Fungicides recommended for the control of take-all patch include azoxystrobin (Heritage®) and triadimefon (Bayleton®).

What do you do if you do not see damage from take-all patch until the heat of the summer, and your plants are starting to wilt? As mentioned above, once the soil tem-



Figure 2. Irregular pattern of take-all patch in an area of poor drainage. Note the weeds and annual bluegrass growing in the affected areas.

perature nears 70°F, the fungus is no longer active, and fungicide applications will not be effective. If you are in this situation, the best thing that you can do is to maintain a balanced fertilizer regime, adequate soil moisture and syringe the plants regularly. Recovery from this disease is very slow, and hopefully these tips will help your greens make it through the heat of summer. Due to the similarities of the symptoms of take-all patch to other summer patch diseases, an accurate diagnosis is recommended for successful control of the disease. Diagnosis using a microscope is the best way to verify the presence of the pathogen.

If you have any questions about take-all patch or any other disease related problems, please do not hesitate to call or submit a sample to the Turfgrass Diagnostic Lab.

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- Dernoeden, P.H. 1987. Management of take-all patch of creeping bentgrass with nitrogen, sulfur, and phenyl mercury acetate. *Plant Disease* 71:226-229.
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North Brook Country Club - June's WGCSA Meeting

By **Dustin Riley**, Golf Course Superintendent, Oconomowoc Golf Club

Mother Nature produced an absolutely gorgeous day on June 28th as more than 80 golf course superintendents, affiliates and guests gathered in northern Wisconsin at the North Brook Country Club. Many of the attendees traveled for hours to the city of Luxemburg, located on the Lake Michigan peninsula, to pay homage to Tom Schaller, golf course superintendent, and his efforts. Tom's quiet modesty could not conceal the respect showed by fellow superintendents as they boasted about the condition of the semi-private golf course and country club.

Tom Schaller began his golf course career early as he was born and raised on the Illinois golf course, Old Orchard CC. Tom eventually bounced around a bit before settling in at North Brook CC. Tom has been the golf course superintendent at North Brook CC since its conception in 1970. Designed and built his father and brother, Tom eventually took over the grow-in and development of the golf course. Although Tom has been at the helm for 33 years, retirement is just a thought in the back of his mind. "I wouldn't know what to do!" Tom states. "I'll see how I feel in a couple of years."

The North Brook CC maintenance department consists of 12 individuals. Under Tom's supervision, his staff readies the golf course for the membership and many outside golf outings, which total 35,000 golf rounds annually. North Brook Country Club is a semi-private golf course totaling between 6,000 and 6,200 yards, depending on which tee marker is played. Over years, Tom and the North Brook CC have overcome



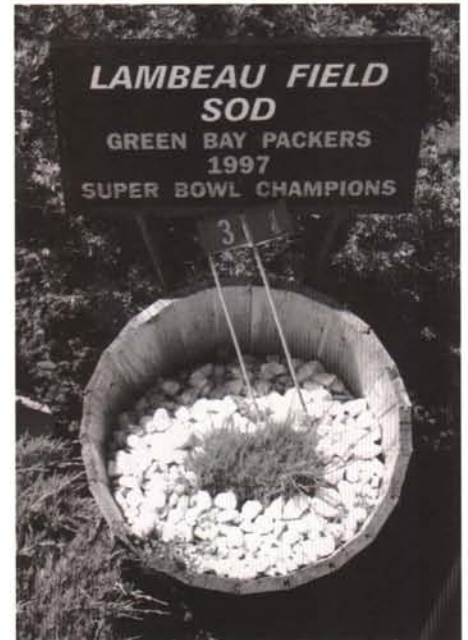
One of Wisconsin's best — North Brook golf course superintendent Tom Schaller.



Roy Zehren and Dave Brandenburg enjoying the gorgeous June day at NBCC.

many challenges. His proudest moments involve standing back and realizing the maturation of the golf course and the trees, which were planted over the last 30 years. It is also scary to realize the change in maintenance equipment, from the old large fairway tractors to the finer detail mowers used today.

June 28th saw a two-man best ball format yield many exciting scores and shots. Since many of the participants see limited playing time during the golf season, the USGA handicap system provided some additional comfort to some high golf scores.



The sign says it all — it could only be Wisconsin.



Camelot's Lee Merkel and his boss, Pat Zurawski. They teamed up for 1st place in the two-man best ball event.

The results are as follows:

- 1st, 59: Lee Merkel, The Country Club at Camelot; Pat Zurawski, The Country Club at Camelot
- 2nd, 60: Bill Knight, Ozaukee County Parks; Bob Emmerich, T. J. Emmerich Assoc.
- 3rd, 61: Mark Hjortness, H&H Fairway Enterprise; Chad Ball Conway Farms GC



Another rough day at the office for the Noer Facility's Tom Schwab!



WGCSA veterans Steve Schmidt and Mark Hjortness.



Steve Abler, the new director of the UW-Madison's TDL, clearly is happy to be back in Wisconsin.



Taehyun Chang and John Stier came from the UW-Madison to North Brook for golf and conversation.

4th, 61: Dan Quast, DHD Products;
Mark Kienert Bulls Eye CC
Last but Not Least, 77: Steve
Abler, UW-Madison/TDDL; John
Stier, UW-Madison

Hole Events

- #4 Closest to Pin: Gregg Verbeten,
Mystery Hill GC
- #8 Closest to Pin (Lesco):
Tom Schwab, UW-Madison
- #9 Longest Putt: James Johnson
- #11 Closest to Pin: J.D. HuseBoe,
John Deere
- #13 Closest to Pin: Robert
Gosewehr, Mee-Kwon Park
- #15 Closest to Pin in Two: Mark
Hjortness, H&H Fairway
Enterprise
- #16 Longest Drive: Bruce Worzella,
West Bend CC
- #17 Shortest Drive: Brandon Nebhl

I would like to thank all for the great attendance. Tom Schaller and PGA Head Professional, Fred Nadeau, provided first class service and a very enjoyable day for golf. August 12th will be the Field Days at the OJ Noer Turfgrass research center in Verona. Nakoma GC will host the Superintendent Tournament on

September 22nd. Please plan accordingly as any support is appreciated. If any golf course superintendent or golf course would be interested in hosting a future WGCSA monthly meeting, please contact me at 262 567-6212, as the 2004 sites are beginning to fill. ♣

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A Report From Autumn

By **Monroe S. Miller**, Golf Course Superintendent, Blackhawk Country Club

This has to be every golf course superintendent's favorite time of the year. The air is crisp and cool and in the evening it is filled with the aroma of wood smoke. The leaves have turned from green to gold and red and yellow and maroon. Play has subsided, the pressure is fading and a normal life is returning to us.

This is a good time to review and record the activities, successes, failures and fun experienced by colleagues since we reported to you last fall.

The normally even-tempered Tom Morris had his fill of Bogey Calhoun's practical jokes early in the spring and plotted retaliation.

He knew of a weekend Bogey and his wife were out of town for a family wedding. Tom drove to their home, unloaded his favorite fertilizer spreader and proceeded to feed Bogey's lawn. Maybe overfeed would be a more apt description.

He spread urea first, at a pound of N/M rate. Then, at a right angle to the application he put down another pound of N/M of a premium plant food with extended feeding. Finally, he put a third pound of nitrogen on the lawn with a generous topdressing of Milorganite.

It was a superb practical joke. Before Bogey got home, we received an inch and a half of rain. The grass exploded and Bogey mowed his lawn off all summer. Now he's plotting revenge.

Ed Birge, the very able superintendent at the Spring Prairie Golf Club, had an "interesting" experience at the course one evening this past summer.

A call from the dialer in the pump station required his attention, so he shot over to the course, retrieved a golf car from the shop and headed out to restart a pump.

On the way to the pump house, which is in the middle of the golf course, he saw a couple make a mad dash for a wooded area. There was enough moonlight for Eddie to tell they were, ah, unclothed. And they were hurrying, carrying blankets and clothes and shoes into cover.

Ed seldom passed on a chance for a little fun, so he swung by and as he did the headlights flashed on two bare behinds. The man turned his head to look, giving Ed the opportunity to see it was the green committee chairman. He hoped he was with his wife.

A couple of day later the boss stopped in at the

shop, grinned sheepishly and asked if the pump station was working.

Nothing more was ever said, but Ed is expecting a nice raise for next year.

Ray Welch, veteran superintendent at the beautiful Old York Golf Club, was at the September WGCSA meeting and telling the guys about the new house he and Mary had built in the country.

"Boys," Ray said with great pride, "the best thing about it is I don't have a single tree in my yard. No leaves for me to deal with after work."

Old York has a LOT of trees, many of them in the 100 - 200 years old range. He spends considerable budget resources handling the leaves. It detracts from his enjoyment of fall.



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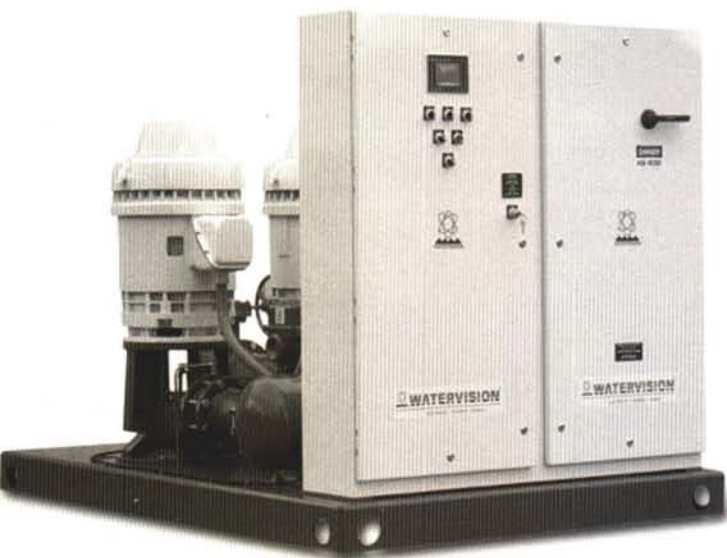
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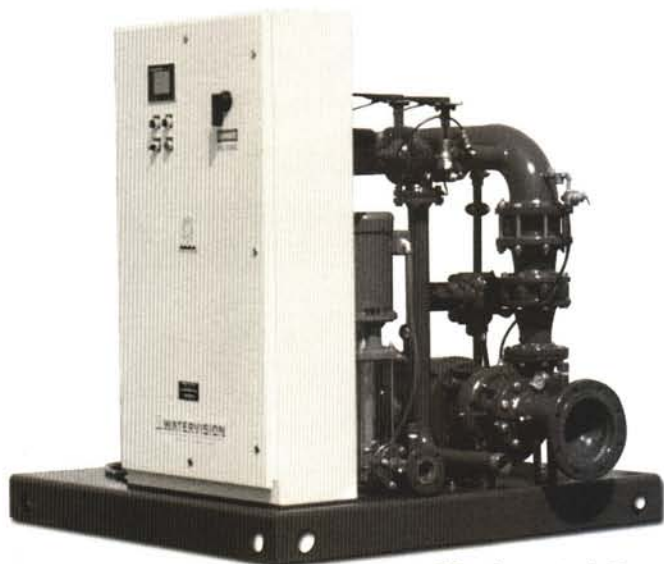
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But he never should have bragged about no trees at home when he was within earshot of Bogey Calhoun.

To make a long story short, Bogey made connections with Ray's brother-in-law who is the public works director in York. On an October Saturday afternoon when Ray and Mary were at the Wisconsin/Iowa football game at Camp Randall in Madison, Bogey had a crew from York hauling several big truckloads of leaves to Ray's yard. They spread them around the yard both with the blade on a garden tractor and with hand rakes.

When they were done there was about a foot of pulverized leaves spread over the entire lot.

"That should keep him busy for a couple of weeks," Calhoun said with great satisfaction.

Ray, who was madder than a wet hen, still doesn't know who did the deed.

Although he is an excellent golf course superintendent, there are those in the WGCSA who believe Bogey Calhoun should have pursued a career as a professional troublemaker.

He heard Bernie Darwin of the Broadstone Golf Club, bragging about his melon patch late last summer - how he had it hid, how the great sandy loam soil of the patch would produce championship melons for sale and for friends, and how he was sure to win blue ribbons at the county fair for them.

Of course, through thorough detective work and a whole lot of luck, Calhoun found out where the melon patch was located. Bogey always said no summer was complete "without stealing some melons."

He assembled a good-sized crew, well equipped with empty burlap bags, and they parked along a gravel back road. They approached the melon patch through a corn field, quietly and single-filed between corn rows.

The guys were surprisingly determined as they filled their burlap bags with ripe muskmelons. It took several trips in and out to harvest the biggest and the ripest. They put them in Bogey's truck and by the time they wrapped the operation up, the box was half full!

The collaborators were all in attendance at the September WGCSA meeting and derived tremendous enjoyment from their secret as they listened to Bernie gripe about the melon patch vandalism.

Calhoun started planning for next year's caper immediately.

Tom Morris had an embarrassing incident at his course early in the summer.

He was so busy smiling and waving at a shapely new member while operating their new batwing rough

mower that he hit a tree squarely with the right outside deck. The deck was nearly torn off! At nearly 50 grand, he knows he shouldn't have been showing off, even if she was wearing a snug fitting golf shirt.

Tom was nearly knocked off the machine, and his face was so red it almost matched the red paint color of the rough mower. Adding insult to injury was the woman running over to ask him if he was okay.

"Good grief, Tom," Scottie Fennimore chided, "she's younger than your youngest daughter. What were you thinking? You are too gray in the temple and long in the tooth to be watching young ladies play golf."

Tom hasn't cracked a smile yet and is maintaining a very low profile, especially at the club.

Skinny Muller, veteran superintendent at The Highlands Golf Club in southwest Wisconsin (near Highland) likes to attend household auctions and an occasional farm auction. He was at one last July in



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Blue River, bid \$2 on a box of junk and got it.

When he got home he was sorting through it and found an original copy of the book GOFF. He'd never sell it, but figures it must be worth a couple thousand bucks.

Mutt Lange suggested he should sell it and take a trip to Scotland. Skinny said if he did sell it he would use the money to buy an old Ford Golden Jubilee tractor.

It was a long winter for Todd Wiesenbeck, the indefatigable golf course superintendent at the famed Apple Grove Golf Club. Todd loves to hunt and that is the usual topic of conversation at his favorite (and world famous) watering hole, Smoothie's Bar and Grill.

Many months have passed since last year's deer season, yet whenever he walks into Smoothie's, someone hollers out "Bang! Bang! Wow, got another ten-point decoy!"

Seems Todd was set up by his deer hunting buddies. During their first drive through the woods early on opening day of deer hunting he came upon a big buck. He brought his 12-gauge shotgun down slowly, drew a bead on his target and pumped four slugs into the well-placed deer decoy (with a ten point rack). His pals collapsed with laughter and Todd isn't sure he's going deer hunting this fall.

WGCSA members were in for some honors this past year:

- Hermie Smith (Apple Grove CC) was elected president of the Wisconsin Horseshoe Pitchers Association.

- Mort Strong (Coon Valley CC) won the championship round in the Wisconsin Belt Sanding Races. It was the first time he entered the race.

- Van Morrison (Sugar river GC) played lead guitar in the Wisconsin Air Band Competition, country music category. They call their band The Pitch Forks, and they finished in first place. Van is quite pleased. Participation in the band gives him an excuse to wear his cowboy boots and cowboy hat.

- Romy Orth talked Oscar Bahl into competing with him in the National Mowing Contest finals, held in Ithaca, New York. They took third place in the State Team Category, a combined compilation of all events. They hauled a semi flatbed of mowing and cutting equipment, along with an 8N Ford with narrow front and rear tires (flattens less grass and results in a better product, according to Romy) to the finals.

Romy had the mowers sharp and ready to roll. He also had them adjusted to perfection, or at least to the turf conditions at the Wisconsin Golf Course Museum.

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Romy claims they would have done a lot better if the turf quality at the fields in Ithaca were as good as those in Wisconsin. "Maybe they had too much rain this summer," O.B. speculated.

Anyway, we are proud of them. Nice work, men.

•

Ronnie Burnett, the able superintendent at Cheddar Gorge Golf Course, made a mistake telling guys at the July WGCSA meeting that he'd been taking his wife's hormone pills by mistake for a couple of weeks early in the year. He has been suffering ever since.

"I thought you were getting more shapely," Joe McCrae commented, "especially on top."

"And your voice is definitely getting higher," Spooky James said while winking at Ronnie.

Many of the guys told him, "You are looking mighty fine, Ronnie." John Magnuson asked him for a date.

"I'm keeping my mouth shut from now on," Ronnie grumbled.

•

The guys who got tricked into attending last year's turkey testicle festival figured that would be the only

time Bogey Calhoun would ever attempt such a stunt. Wrong.

He managed to get roughly the same group into The Feed Lot Restaurant on the way to a turf equipment auction.

Bogey ordered first - hamburger, calf fries and a Spotted Cow tap beer. We all ordered the same.

Nobody was suspicious when the food came. Once we started eating, however, Tom Morris said, "these french fries taste weird. They are kind of chewy."

The waitress was walking by, heard Tom, and said, "What's the matter, Honey? Haven't you boys ever eaten deep fried calf testicles before?"

Tom gagged, and Steady Eddie and I were both glad we hadn't tried one yet at that point.

Bogey laughed so hard he was crying.

•

So, there you have it - the year in the lives of a few of our colleagues and friends in the Wisconsin golf course business.

Although it wasn't a remarkable year, it was a good one. We should always be so lucky. ♣

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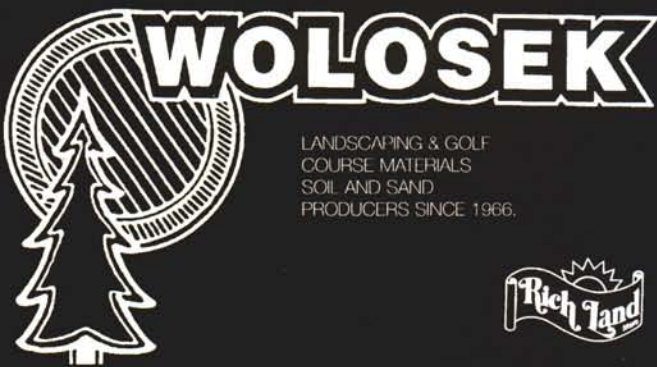
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