

## Summer's Revenge... A 2010 TDL Year in Review

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ooking back I suppose we were due. The summers of 2006-2009 all had their hot and dry spells, flooding rains and humid days. But it had been a while since a seasonlong onslaught of heat, humidity, and moisture made managing turf in Wisconsin this miserable. The collective thoughts on most minds come July 1st was, "Its only July 1st?" Echoing this difficult summer was the record traffic experienced at the Turfgrass Diagnostic Lab in 2010. In my 5 years at the helm of the TDL the most samples diagnosed in a single year had been 196 in 2006, but only 73 of those were professional samples. In 2010 we received 247 samples, with 123 of them professional samples (Table 1). Needless to say, it was a trying summer for all in the turfgrass business. Now that we've had a chance to exhale as we welcome the first snows of winter, let's take a quick moment to review the year that was through the somewhat distorted lens of the TDL.

The spring of 2010 started off well enough, with no inkling of the difficulties to come. Significant snow mold pressure was apparent in only a few isolated areas, and minor ice damage was observed in the southeastern corner of the state. The discussion though quickly turned to early opening dates and making sure the irrigation systems were ready to run before it seemed the frost was out of the ground. An incredibly warm April brought golfers out to the courses in numbers rarely seen so early in Wisconsin, and hopes of increased revenue streams to make up for past years shortfalls had people in the industry genuinely excited. Then

Table 1. \*Numbers in parentheses are diagnoses in 2009

2010 TDL Diagnoses				
Diagnosis	Professional*		Homeowner	
Take-All Patch	6	(11)	0	(0)
Abiotic	53	(11)	34	(22)
Nicrodochium Patch	1	(6)	1	(0)
_eaf Spots	10	(24)	15	(7)
nsects	0	(0)	7	(0)
Anthracnose (Foliar and Basal Rot)	9	(8)	0	(0)
Fairy Rings	7	(3)	1	(0)
Vecrotic Ring Spot	1	(0)	3	(8)
Summer Patch	13	(1)	15	(0)
Brown Patch	2	(6)	13	(1)
Brown Ring Patch	3	(3)	0	(0)
Rough Bluegrass (Poa trivialis)	0	(0)	5	(3)
Γyphula Blight	4	(4)	2	(3)
Snow Scald	0	(2)	0	0
Weed ID	0	(2)	19	(24)
Dollar Spot	3	(3)	1	(0)
Pythium foliar blight or root rot	7	(5)	1	(1)
Fungicide Resistance Assays	3	(1)	0	(0)
Other	1	(1)	7	(0)
TOTAL	123	(80)	124	(85)

came May. Brutal cold and heavy snows for northern Wisconsin pushed people back inside as quickly as the warm April sun brought them out and thoughts of churning cash registers had to be put on hold.

As the calendar turned from May to June it seems comical now to think just how dry the state and region were as a whole. But the first warnings of what was to come began in June as heavy rains pounded most of the state and region. Along with it came near oppressive humidity that relentlessly persisted until September. Warm, wet, and humid is often a perfect recipe for fungal infection of turfgrass plants and the soft goods sales representatives were not disappointed. Leaf spots of many different types were the first to show, but were quickly followed by brown patch and even some minor Pythium blight outbreaks. As the heat and humidity persisted, brown patch and Pythium blight spread to courses that haven't seen these diseases in years. Banol®, known for its excellent curative activity against Pythium blight, became a hot commodity in Wisconsin for the first time in years.

In what has become a predictable



Figure 1: Even on fairway height turf, it's tough to keep annual bluegrass alive with roots less than a half inch in depth



Figure 2: Heat, humidity, and heavy rains led to thinning turf and thinning patience for many superintendents in 2010.

event, the rush of samples to the TDL usually lags 1-2 weeks behind especially hot and humid weather. The rush this year hit in mid-July with furious force, and didn't let up until the end of August. On July 14th the 93rd sample was received at the lab, and on September 1st the 214th sample was received. Summer patch was the main culprit in a majority of these samples.

What became apparent by late July, though, was that many of these samples weren't affected by disease at all, but rather poor root development of the annual bluegrass plants (Figure 1). This had been observed in previous years on a smaller scale when periods of heavy rainfall were followed by hot and humid conditions. But 2010 left few superintendents unscathed, as annual bluegrass vacated area putting greens and fairways faster than attendees vacate the educational portion for the lunch line at monthly meetings. What became a frustrating summer for many turned to near desperation as mowing heights were raised and "hot spots" syringed in a last ditch effort to save as much grass as possible (Figure 2). Unfortunately, many operations turned from search and rescue to reseeding, resodding, or massive "cupping out" procedures.

As the calendar pushed forward out of a miserable August, the turfgrass carnage brought about by heat and humidity for much of the summer disappeared as quickly as it came. September brought markedly lower humidity, more moderate temperatures, and few but timely rains. Most of the samples submitted in September were from homeowners who could now brave going outside with the cooler conditions to do something about their lawn that died in July. This shift in the weather pattern brought about an excellent time to reseed the many affected areas on the golf course, encourage recovery through aerification and fertilization, and hopefully take a breath after what was certainly a long and unpleasant summer on the course for most.



Taking a closer look at the sample submissions in Table 1 makes it very clear where the record number of submissions came from. Abiotic diagnoses went from 11 for professional submissions and 22 for homeowners in 2009 to 53 and 34, respectively, in 2010. The other big shift came with the number of summer patch diagnoses, as diagnoses rose from 1 professional and 0 homeowner in 2009 to 13 and 15, respectively, in 2010. Just these two categories increased over their 2009 levels by an incredible 81 samples!

## Thanks to our 2010 contract members

As most of you know, the TDL doesn't receive a single penny of support from the University or State of Wisconsin. Industry support is therefore critical to the success of the lab in maintaining the level of service that the industry deserves. Much of this industry support comes in the form of contract memberships with the lab, and the vast majority of contract memberships come from the golf course industry. In an era of shrinking budgets when even \$100 can aid in balancing out other areas of the budget I am deeply grateful to the 72 contract members from

2010 shown in Table 2. If you are not currently a contract member with the TDL I urge you to consider joining this year. When compared to thousands of dollars wasted in misapplied fungicide applications, a few hundred dollars for a TDL

membership can be the best money you will spend in 2010. For more information on contract memberships with the TDL, or to sign up for a new membership or renew a continuing one, visit the TDL's website at www.tdl.wisc.edu.

## Thank you to the 2010 TDL contract members!!! Names in bold are \$1000 contract members

Abbey Springs CC Blackhawk CC **Blackwolf Run** Chenequa CC Edgewood GC Green Bay Packers **Horst Distributing** La Crosse CC Lawsonia GC Maple Bluff CC Minocqua CC North Hills CC Oconomowoc CC Oshkosh CC Portage CC Reinders SAS Management South Hills CC Stano Landscaping The Bruce Company Tuckaway CC University Ridge GC Weed Man Lawn Care Whispering Pines GC The Wisconsin Club

Agrium Advanced Blue Mounds CC Brown County GC Eagle River GC Fox Valley GC Greenwood Hills CC House on the Rock Resort Lake Arrowhead GC Long Sod Farms Milwaukee Brewers New Berlin Hills North Shore CC Olds Seed Solutions Paul's Turf and Tree Nursery Pine Hills CC Racine CC Rhinelander CC Sentryworld GC Spring Valley Turf Summit Seed The Legend at Bristlecone Twin River Turf Volkening Consulting West Bend CC Whistling Straits GC Wistl Sod Farm

Antigo Bass Lake Bristlecone Pines GC Bulls Eye CC Eau Claire CC Frontier FS Coop Hayward Golf & Tennis Koshkonong Mounds GC Lake Geneva CC Lurvey Farms Milwaukee CC New Richmond GC North Shore GC Oneida Golf & CC Reedsburg CC Rolling Meadows GC Silver Bay CC St. Germain GC Syngenta Tripoli CC Two Oaks North GC Watertown CC Westmoor CC Windy Acres GC Zimmerman Kettle Hills



