



August 12, 2011 Scouting Report – August Continues to Cool: Rootless Turf is Weak, Summer Patch Hurts, Hot Temperature Diseases Halt, Dollar Spot Returns, and Tim is Stressed?

Chicago/Northern Illinois Update: Derek Settle - e DSettle@cdga.org Blog www.cdगतurf.org

It happened. It seems we have survived another difficult summer. Can I really say that? I think I can. We are now almost looking mid-August square in the face and the extended forecast is without 90s for highs and now we can reflect. From the very beginning this growing season was trouble. A very wet spring interfered with our attempts to ‘green-up’ turfgrass. Then it got really hot during June’s first week and that lasted (on and off) until August 2nd. Severe thunderstorms with high winds repeatedly dropped huge trees and we would lose power again. July was intense and it turned out the average dewpoint hadn’t been at a higher level since 1980.

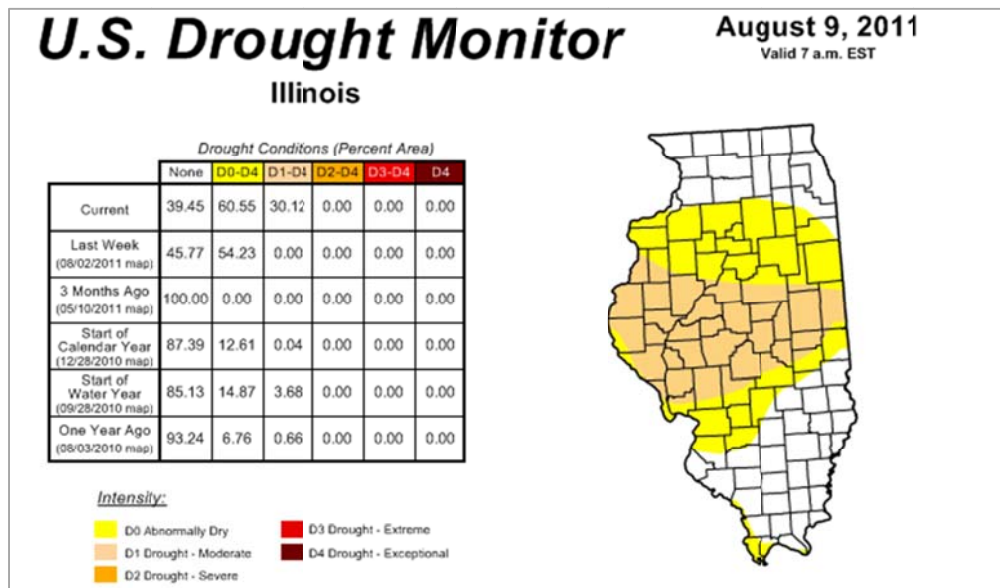
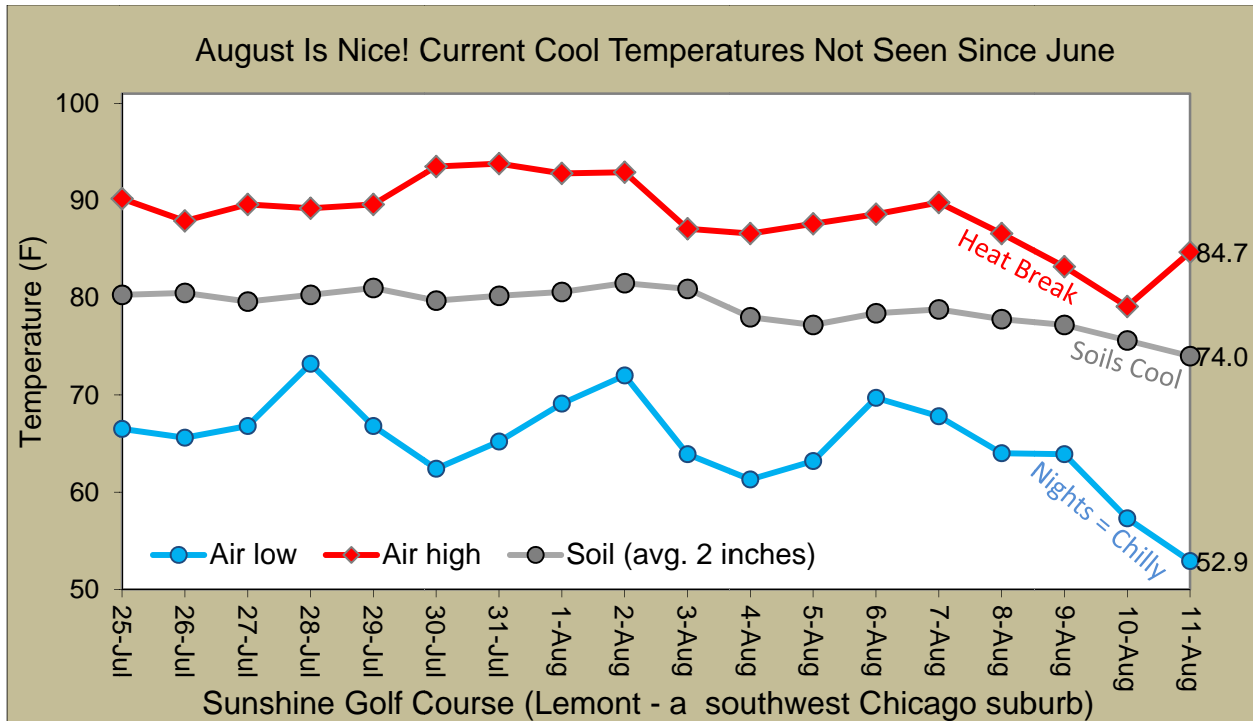


Busy place! Cog Hill Golf & Country Club, site of the 2011 BMW Championship. *Settle 8-11-11*

I visited more golf courses this week than I would have expected – mainly documentation of July’s after-effects. It turns out we experienced the Kitchen Sink – in a matter of words. We again saw what midsummer environmental extremes do to plant health and summer 2011 took our ability to manage plant health to the very edge. “...Another week of consistently warm days in the 90s and things would have gotten interesting.” In the end we made it through and that’s a good thing. We can write another volume or two in Encyclopedia of a Difficult Growing Season. Mine begins, “It began innocently enough after the snow melt when blades of grass...”

Weather Report: August Continues to Cool. Moderate drought begins in Central Illinois.

Mild temperatures continue. Friday August, 12: Wow, at 5 am we saw an air temp reading of 52.9° F last night on Sunshine Course. Low humidity readings complicate things in an otherwise beautiful turn of events. Midday wilt stress is still a pretty big deal on sand-based greens. Yesterday on Sunshine our hourly relative humidity (%) from 10a to 5p would make it one of our driest days of the summer (43, 38, 40, 39, 35, 34, 38, 42). With current shallow roots all area courses probably are seeing wilt stress on Poa/bent greens. However, life is otherwise fantastic in the rootzone – it’s cooling. In Lemont soil T continues to drop from a high of 85.5° F on 21 July. We are now at 74° F at 2 inches and you have to go back to 26 June to find soil that cool.



Issues of August's Second Week – 'Weak Turf' and Bentgrass Scalp Injury of Greens

A couple of notes as we've begun recovery. Several golf courses this week were dealing with abiotic issues which followed the harse month of July. Not a primary fungal disease, but just as striking.. One example is a fairway that seems to have lost it's roots. The yellowing that was seen is relatively uniform and not related to an aboveground pathogen. Below ground, the roots are severely damaged (hello microscope) though it is difficult to know the exact cause. A month of supraoptimal soil temperatures combined with repeat flood events resulted in this 'weak' turf.



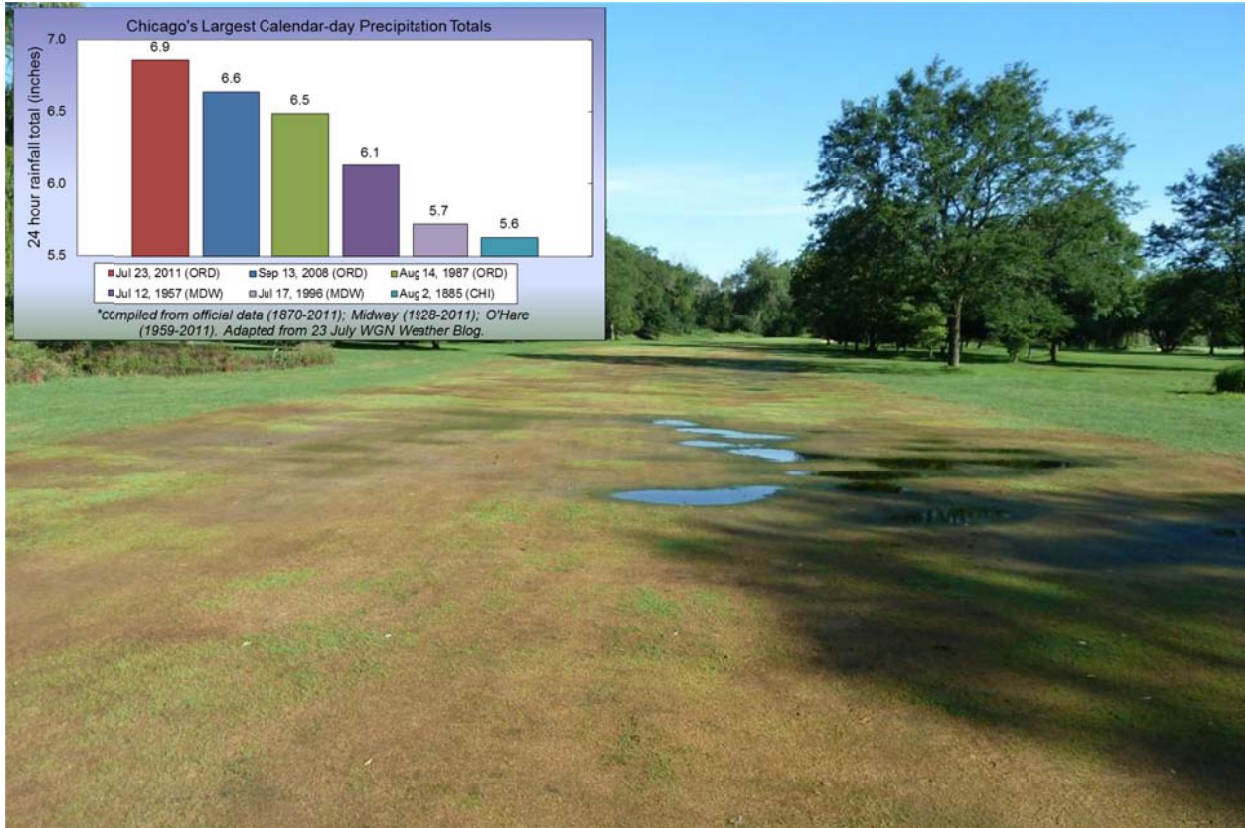
A strangely offcolor fairway with warm soils. This fairway was flooded in July. *Settle 8-8-11*



Scalp injury of a golf green. Certain bentgrass varieties are more prone and so the effect can be very patchy like a disease. Instead, elevated tan to reddish stolons are exposed. *Settle 8-10-11*

Issues of August – Residual Damage of July’s Record Flood Event

A worst-case scenario of flood injury to a Chicago golf course occurred. In July 2011, a thunderstorm delivered more rain in a single day than had ever been recorded before. Two days earlier Chicago had experienced its hottest day of summer with 101° F at Midway and in Lemont soils peaked at 85.5° F at a 2 inch depth. Superintendent, Henry Michna, documented the event well at Winnetka Golf Club. “On Saturday July 23rd we had, 1 inch in 10 minutes, 3.5 inches in one hour, 5+ inches in the first three hours and 7 inches for 24 hrs! Of fairway acres, 24 of the 25 were submerged for 2 days, 20-22 acres for 3 days and about 6-8 acres for 4 days.” Check out Henry’s Blog complete with videos at <http://wgcsuperintendent.blogspot.com/>.

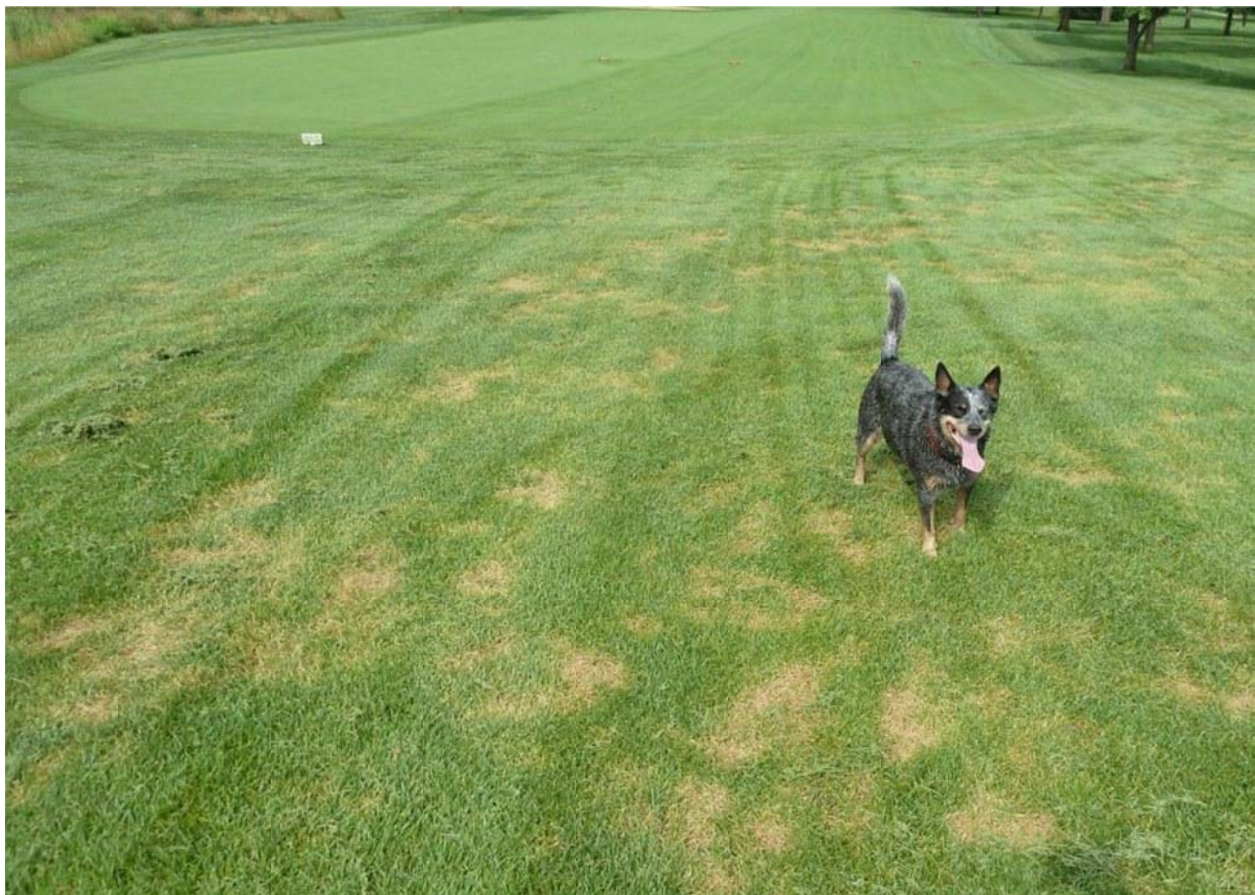


July’s flood caused extensive injury of the lowest fairways at Winnetka Golf Club. This week we found evidence of recovery. Slit seeding of ‘PenlinksII’ bentgrass has begun. *Settle 8-10-11*

Kitchen Sink - Summer Patch or *Magnaporthe poae*

Thursday, August 11, 2011 Diagnostic Blog <http://cdgaturf.org/blogs.asp?blogid=3&id=29&pid=4>
Wet, saturated soils during a hot summer brings on summer patch disease...hello summer 2011! This week, the root rot fungal pathogen *Magnaporthe poae*, common name summer patch, seemed everywhere. Summer patch shows us just how damaging it can be when you have to live your life without roots. I'm not turf, and at night I don't even dream I can do photosynthesis – I'm not that weird yet. I do not have a long middle name like Autotroph, instead my middle name is Martin. Still, I have enough empathy for plants to tell you that on any day of the week during summer it's hard if you are without roots or are with compromised roots. It means you are without your natural ability to tolerate midday wilt stress (not to even mention drought). A root-rotting fungus is to blame.

The fungus *Magnaporthe poae* is soilborne and often is a perennial/recurring issue where it exists. Midsummer, symptoms are circular patches of 4 to 8 inches which are often associated with newly sodded Kentucky bluegrass. Roots just don't seem to have a natural establishment until a few years pass. It means any root dysfunction becomes painfully obvious midsummer especially if you began your life perfectly perfect (a green carpet of sod). For some reason summer patch eventually goes away on its own. Or does it? Antagonistic factors in the soil (microbes) may also be involved in a natural suppression of summer patch but more research is needed. Compaction is another contributing factor because soils are unable to have normal characteristics - soil pores become so tiny that they cling to water and do not drain. What can you do? (see complete blog)



This week I saw summer patch over and over in Kentucky bluegrass areas. Each was similar in that it tended to remain compacted and wet –rough that adorns the front edge of a fairway. *Settle 8-8-11*

Tim Sibicky, MS – TSibicky@cdga.org Manager of Turfgrass Research

Dollar Spot Control and Stress Relief

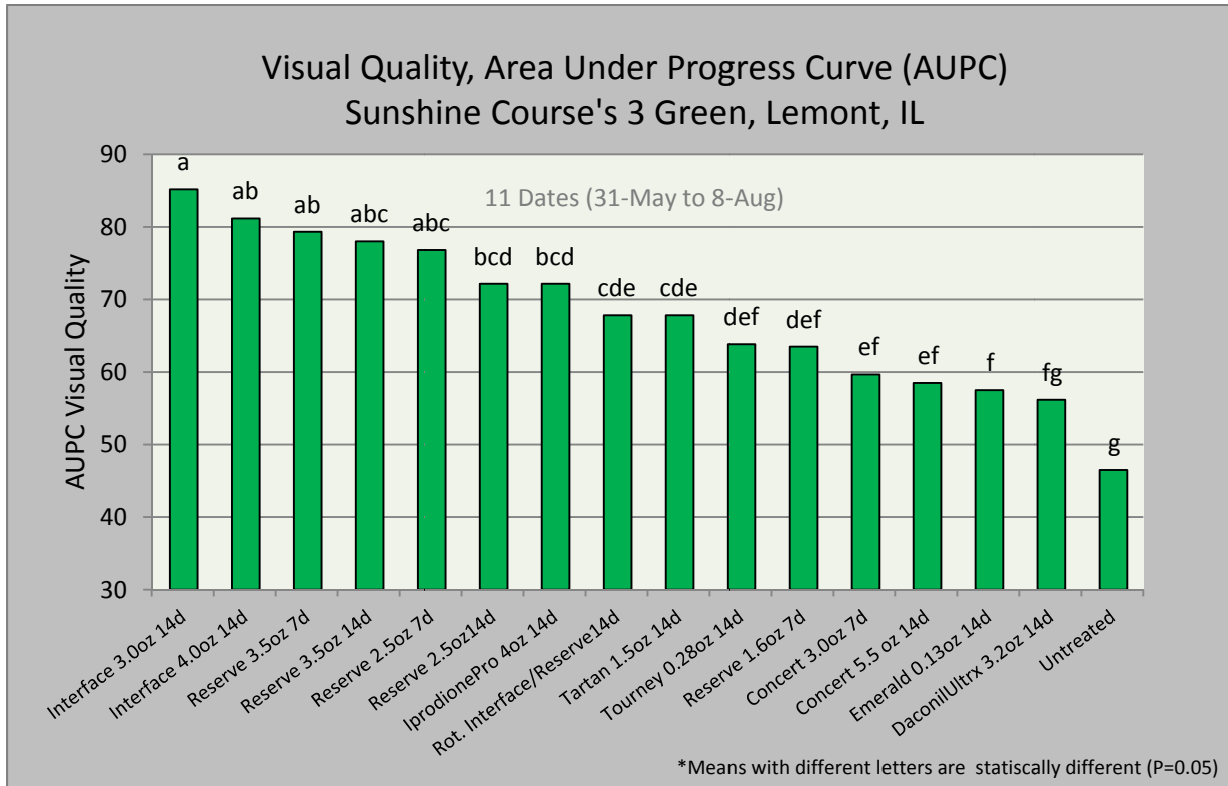
Golf course superintendents set out to deliver the best possible playing conditions throughout the growing season. Often to achieve these expected conditions, superintendents are forced into situations where they have to sacrifice plant health. This means additional inputs of cultural practices, i.e. lowering the mowing heights and increasing rolling frequency and/or additional chemical inputs. Chemical fungicides are preventively used under peak stress conditions to fight the development of diseases like dollar spot (*Sclerotinia homoeocarpa*) and brown patch (*Rhizoctonia solani*). Within the last few years several companies have even begun to market products that fit into a category of disease control that may also improve turf health. For example, BASF has marketed the product Insignia (pyraclostrobin, QoI family) as an *Intrinsic brand* fungicide to fight disease and encourage plant health. Bayer has also made strides in their products by formulating pigment/colorant fungicide products for plant health called *StressGard™*.



On Sunshine Course's 3 green this season, we are conducting a 17-treatment study with Bayer to research newer StressGard™ (pigmented) products. A range of green colors exists. 7-25-11 Sibicky

Last season, we also worked with several of their newer products. This year we are testing lower rates at more frequent intervals, specifically with Reserve fungicide (a new combo product of triticonazole DMI and chlorothalonil) every 7 days using a 1.6, 2.5 or 3.5 fl oz per 1000 ft². Reserve at a 7 day, 3.5 fl oz rate has provided some of the best visual quality ratings throughout the season. However, both visual quality and dollar spot disease were not significantly different from the 14 day interval. The same held true for the 2.5 fl oz rate of Reserve. The lowest 1.6 fl oz rate of Reserve was able to provide control of dollar spot disease on a limited basis. By allowing some infection, the disease outbreak was held to borderline acceptable levels for much of the season. Interestingly, when we compared brown patch disease, all 7 day treatments were without disease, but the low 2.5 fl oz rate of Reserve every 14 days was significantly different on July 11th with 7% blight per plot.

In the study we are also comparing several fungicides and combos in the demethylase inhibitor (DMI) family. In addition to Reserve they include, Tartan (triadimefon DMI and trifloxystrobin), Concert (propiconazole DMI and chlorothalonil) and Tourney (metconazole DMI). The product called Interface is a combination of iprodione (dicarboximide) and trifloxystrobin (QoI). For visual quality, the Interface treatments every 14 days at 3.0 fl oz and 4.0 fl oz provided the best results out of the 17 treatments tested and provided good control of both brown patch and dollar spot diseases.



Using a CO₂-powered backpack sprayer, Tim Sibicky applies fungicides in water equivalent to 2 gallons per 1000 ft² at 40 psi. Individual plots that measure 4 ft by 6 ft and are arranged in a completely randomized block experimental design. The research site is a PennG-2 plus L-93 creeping bentgrass golf green, Sunshine Course, Lemont, IL. *Settle 8-8-11*

Final Images – Flowers



The superintendent could only watch as I carefully jumped into a bed of Dahlias! *Settle 8-10-11*



On Sunshine Course, the Begonia flower trial near the greenhouse has looked great all summer regardless of Lemont's weather that has included heat, humidity, wind and flood. *Settle 8-11-11*

Website weekly blogs: Weather, Research, Diagnostics – www.cdgaturf.org
Derek, Tim, and Nick plus Chris and Niki, The CDGA Turfgrass Program