

Gazing in the Grass

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The season continues to surge back with consistent above normal temperatures and from a Growing Degree Day (GDD) perspective is now AHEAD of last year and the 30 yr. average. This obviously has wreaked havoc in attempting to predict our usual Spring pest management practices, notably ABW and root pathogens governed by soil temperature. There is no substitute for vigilant monitoring of populations, temperature and moisture data. However, phenological indicators are also an important tool, as are soap and salt flushes.

In spite of the torrential rains that have been relentlessly dropping over a foot of moisture in the Mid-Atlantic and north to Central NJ, there is a very wide gradient of moisture stress setting up in the Northeast. The majority of the soils in the interior North and West from Pittsburgh, PA through North Jersey to the Cape have begun are dry. While there is rain expected this week for most, it is not

expected to be significant (<0.5"). Coupled with the sun at its' Astronomical Peak, expect EvapoTranspiration (ET) rates to be 0.25" per day. Any compromised root growth from soil borne pathogens might begin to show stress in these dry areas. Interestingly the typical arrival of Take-All patch samples on bentgrass in Diagnostic Labs has begun, Summer patch on AB expected in the next few weeks depending on stress; More stress = more pressure on rooting = more weak and thinning turf.

Turfgrass top growth began to surge in the last few weeks and keeping up with mowing has been a challenge. Urban landscapes dominated by impervious surface create an additional challenge as it is easy to simply discharge the excess clippings into the street and drive away. I am not persuaded by the landscape industry that claims the banning of powered blowers makes cleaning up more difficult. First, work to bag clippings along pavement, discharge into lawn, and if discharged to pavement then work to sweep and remove the clippings to prevent release into water bodies. Studies show that 10 percent of **all** non-point source pollution comes from impervious surfaces less than single digits from lawns. To those that continue to perform this *irresponsible* practice, you have just discharged hundred of pounds of a 3-1-2 fertilizer on the street. As an industry when we stand to argue against N fertilizer restrictions designed to protect water quality, it is vital we are also working to prevent discharge of clippings, landscape debris, and applied fertilizers and pesticides to impervious surfaces. Its not an easy job but someone has to do it!

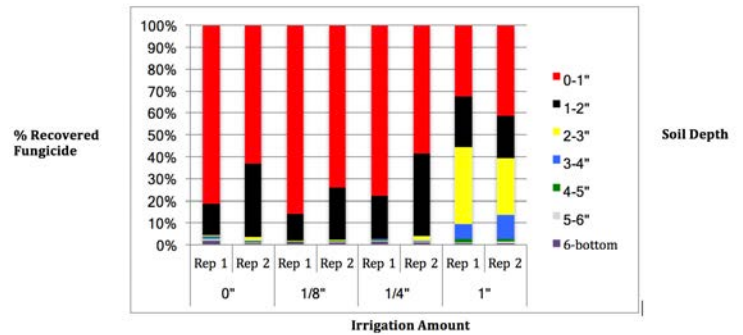


Frequently Asked Questions (FAQ):

I'm concerned about some summer patch break through in my control program. Should I reapply fungicide?

The annual arrival of turfgrass samples infected with soil borne pathogens has begun in most of the Diagnostic Labs in the Northeast. The first to arrive are the Take-All samples on bentgrass that is beginning to show the presence of ectotrophic hyphae on the roots, root rot and vascular discoloration of those roots, with clear infection sites. These symptoms are similar when annual bluegrass plants arrive to labs infected with summer patch. Summer patch samples will begin to arrive as more persistent heat stress arrives in late June/early July.

By every measure plants showing infection at this point likely were not treated at the proper time nor in the proper manner. From Rich Buckley, *To control active summer patch on a high value turfgrass, make an application of a thiophanate-methyl containing fungicide or azoxystrobin. Continue to repeat the treatments at two week intervals. Use the highest label rates and a 3 to- 5 gallon dilution or enough water to move the product into the root zone. To prevent Summer Patch in susceptible turfgrasses apply fungicides in late-May when the soil temperature stabilizes around 65F. Repeat the treatment at 28 day intervals in late-June, late-July, and late-August. For optimum control, apply the materials in 3 to- 5 gallons of water per 1000 square feet. If that is not possible, use the closest dilution to the target and gently water the material in immediately after application. To understand how vital it is to apply enough water to provide effective control of the pathogen, consider some recent work in Professor Jim Kerns lab at NC State. His data show clearly that to get 40% of a soil applied fungicide to a 1-2" depth in the soil 0.25" of water must be applied. To get 40% to a 2-3" depth then almost 1" of water.*



Note of Passing; Emeritus Professor Noel Jackson

A personal note for my old mentor Dr. Noel Jackson from the University of Rhode Island who passed away at the age of 86. It is hard to measure the impact Dr. Jackson had, when you consider his students Drs. Peter Dernoeden and Peter Landschoot that toiled directly under Dr. Jackson's tutelage. In my time as an undergraduate then graduate student at URI, that I spent with fellow ShortCUTT Contributor Victoria Wallace, Dr. Jackson allowed me to work in his lab on a new issue in turf during the early 1980's-Endophytes! From his obituary, "Dr. Jackson was a natural teacher, with a passion, enthusiasm and curiosity for learning that inspired a generation of students to pursue careers in the turf industry, golf course management and academia. He was well known for his booming voice, hearty laugh, broad Yorkshire accent and his keen, sometimes blunt, sense of humor." I can say I was on the receiving end of his bluntness on more than one occasion and I am a better scientist for it. He challenged those around him and asked for more, or why, or how we thought something might work. Then, while I squirmed trying to find an answer he would smile and hand me the reference to review. His lasting legacy is the Dollar Spot organism that has been reclassified from *Sclerotinia homeocarpa* to *Clarireedia jacksonii*. A final tribute to a man that gave so much.

