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Gazing in the Grass

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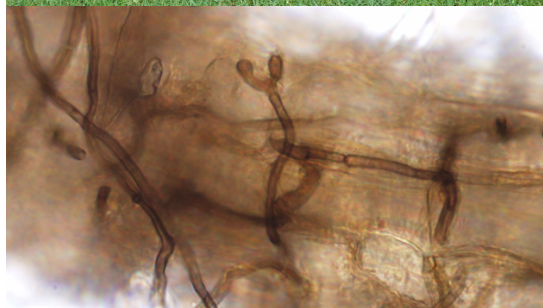
The transition to summer conditions has begun across the Northeast with the Sun approaching its highest point in the sky. Clear, dry days have been few and far between this year, forcing plants to adapt to cloudy wet weather. These low light, wet conditions have taken a toll on plants from Sycamore to Bluegrasses. The current snap of dry weather is beginning to impose biotic and abiotic stress that will quickly expose weaknesses, especially on notoriously shallow rooted grasses such as Kentucky and Annual bluegrass. Last week brought the regions first few days of consecutive heat stress into the NY Metro area. Heat stress is monitored on our FORECAST website and defined as a nighttime (8:00 pm through 8:00 am) hour when the sum of the temperature (°F) and Relative Humidity (%) exceeds 150. On a daily basis, high risk corresponds to five or more heat stress hours. Furthermore, the dollar spot risk models have begun to indicate higher risk the last few weeks. The coming week suggests that risk will be low except for the furthest south. If you have not experienced symptoms to date, have resistant turfgrass varieties that resist low to moderate pressure, or have instituted a comprehensive cultural program of rolling, dew removal and consistent growth, hold that spray-especially for large acreage.

The early signs of Annual Bluegrass Weevil damage are evident in areas with historical damage and via samples submitted to the regions diagnostic labs. Images above from Professor Ben McGraw suggests insect pressure is high and annual bluegrass turf is weak. Scouting for this pest is essential for effective control whether the adult or larval stages are the target. Now that the first generation is well into the larval stage throughout the Northeast, it makes sense to scout for larvae. An excellent video by Steve McDonald or Turfgrass Disease Solutions is available at <https://www.youtube.com/watch?v=4MlrEMYP388>.



Credits: Ben McGraw

As soil temperatures continue to warm, more N will be released from soil organic matter. This is a sign of a healthy soil and typical of most soils that have maintained grass cover for more than 10 years. However, newly established turf areas, especially those established on subsoil that is often labelled “topsoil”. These subsoils lack good structure, aggregation and are prone to compaction and poor nutrient and water holding capacity. The inset image is an unfortunate example of misapplication of fertilizer to newly established lawn with a drop spreader. Besides the humorous design reminiscent of the “artist formerly known as Prince” symbol, this demonstrates the lack of surface movement of N when applied. Clearly when the material was applied in the last few weeks in Central NY, there was adequate rainfall that could have resulted in movement, however it seems to have remained in the exact location it was dropped on the surface. A good point to keep in mind when discussing N fertilizer use with an often ill-informed public.



Golf course turf is entering the critical period for fungal diseases where root and foliar pathogens begin to exhibit signs and symptoms. Diagnostic labs are beginning to see samples of take-all patch on bentgrasses, dollar spot, leaf spot on KBG, and anthracnose basal crown rot on annual bluegrass putting surfaces. What has not started to arrive into labs yet is summer patch (root pathogen of annual bluegrass -inset image). The persistent wet weather and very low abiotic stress levels to date will allow **currently** summer patch infected plants to maintain active growth. Preventative applications should be made to areas with history of summer patch symptoms. The initial applications are recommended to be most effective if applied when soil temperature is 65F at 2” depth for 5 days. These are DRENCH applications and must be applied with enough water or irrigated to penetrate to the depth of the root system

for complete protection. In addition to fungicide use, reducing compacted soils that further limit rooting has been shown to reduce symptoms. Finally, the use of acidifying fertilizer such as ammoniacal sources of N have been shown to reduce symptoms, even on high pH soils. The regular use of acidifying fertilizers over time appears to alter the soil chemical properties sufficiently to provide suppression. In the last few years there has been an increase the amount of fine fescue turf, particularly hard fescue, that is infected with summer patch organism. The issues on fescue have been associated with higher N rates and on irrigated stands. The transition to summer stress is underway, be mindful of abiotic and biotic stress levels and moderate management to reduce stress on plants showing symptoms.

