Gazing in the Grass
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The sun angle has shifted $15^\circ$ from its peak in late June and this marks a shift in mindset for many turfgrass managers from maintaining quality, safety and performance to recovery and rejuvenation of thin, weedy, poor turfgrass conditions. Growing conditions have been excellent with adequate moisture (some excessive wet/dry spots) and cooler evening temperatures. Soils have cooled quickly into the low-mid 60’s north and low 70’s south in response to moisture and lower temperatures. Dry conditions are prevalent in Western NY, especially Rochester and much of Nassau and Suffolk counties. Massachusetts, especially the Cape are close to drought monitoring conditions. In fact, 70% of topsoil is low or very low soil moisture, when the 10 yr average is only 30% at this time of year. All of this data is visible at our Cornell Turfgrass FORECAST website (http://turf.eas.cornell.edu/app)

Diagnostic labs are reporting a variety of disorders associated with grass under persistent stress from pests, mechanical wear, temperature and moisture. Anthracnose is still dominating the sample count as many continue to maintain low N that consistently leads to increased incidence and severity of the disease. Many times this is not obvious UNTIL conditions become adequate for growth and plants are unable to access available N and begin the decline to basal rot. The favorable weather conditions expected should allow for recovery, however many will still need preventative control based on stress level. The next few pests on the horizon include Fall dollar spot pressure that appears high this week and beginning phases of white grub feeding. Time to scout areas and consider alternative curative controls available for small instar grubs.
Scholastic sports fields heading into Fall seasons of soccer and American football and the perennial golfing season will continue to require high levels of maintenance. Cool-night conditions will allow for excellent rooting if soils are functioning properly. Plants will respond well to additions of Nitrogen as conditions for growth continue to improve. Good dense turf is more wear tolerant, insect and disease resistant and capable of competing successfully with weeds.

The last two months of the growing season, often referred to as the shoulders of the season, present unique challenges. Any excessive rainfall alters soil conditions and as growth slows traffic persists and the turf thins. Be prepared for turf thinning by starting now with good initial turf density. An adequate topdressing layer would be ideal for maintaining safe and playable surfaces well into November.

In comparison, damaged turfgrass areas at this time require recovery-rest from excessive wear or thinning from pests/stress. This should also include some form of rejuvenation, i.e., soil modification and drainage, re-establishment to improved species and varieties, or tree removal to improve light and air flow.

Similar to 2018, crabgrass populations have challenged pre-emergence herbicide efficacy. Widespread failures reported from areas treated early and the herbicide concentration remaining in the soil is unable to provide control for the length of crabgrass germination. These germination periods are extended due to the warming climate to as many as 18-20 weeks in NYC Metro area. Most pre's won't last that long in a single application. Furthermore, widespread germination throughout the landscape from the last 12 months of plentiful rainfall, if allowed to go to seed, assures more pressure for the years to come. It would be wise to consider some means of preventing crabgrass from producing viable seed in managed areas. Scalping, selective and non-selective herbicide options (even OMRI certified options) can all aid in reducing annual weed seed rain.

As society continues to grow uneasy with widespread chemical use, pressure to explore non-chemical options will increase. Our research at Cornell on non-chemical weed control has found that weed seed bank and annual weed seed rain management is critical to both chemical and non-chemical strategies. Now is the time to consider these strategies.

A more ecological approach will be required as emerging weed problems such as goosegrass, false-green kyllinga and Japanese stilt grass quietly invade Northeastern managed landscapes further north. In the case of goosegrass, it is a story of our pre-emergence herbicide preferences in this area of the country over a long period of time. The southeast US turfgrass industry relies heavily on oxadiazon (Ronstar-goodgoosegrass/not crabgrass) for pre-emergence control while the Northeast uses primarily dithiopyr (Dimension-no good goosegrass/good crabgrass), some dintroaniline materials like pendimethalin and prodiamine are only slightly better on goosegrass. The introduction of topramazone (Pylex) will aid in post-emergence population-based approach and offer some pre-emergence control. Turfgrass Weed Science Professor Matt Elmore at Rutgers University has two excellent resources on these weed issues at https://njaes.rutgers.edu/fs1309/ and https://njaes.rutgers.edu/fs1290/.