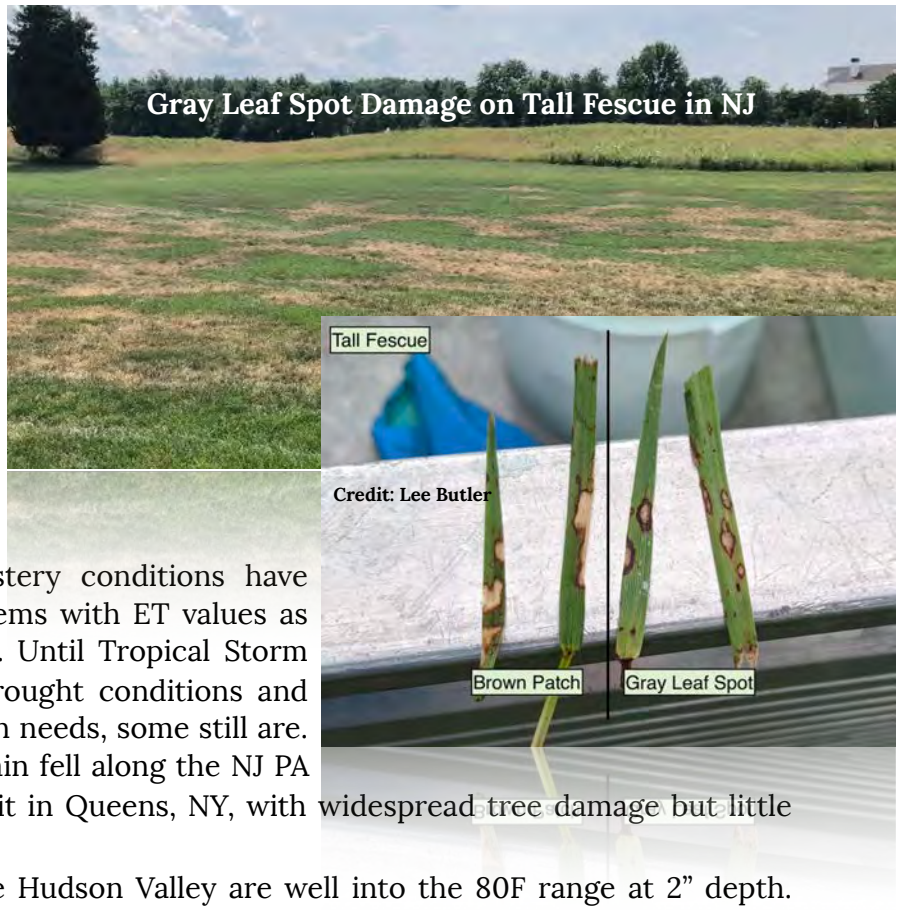
Cornell TURFGRASS Short CUTT

YOUR WEEKLY LINK TO TURFGRASS INFORMATION!

August 3, 2020 Volume 21:10

Gazing in the Grass

Frank S. Rossi, Ph.D.



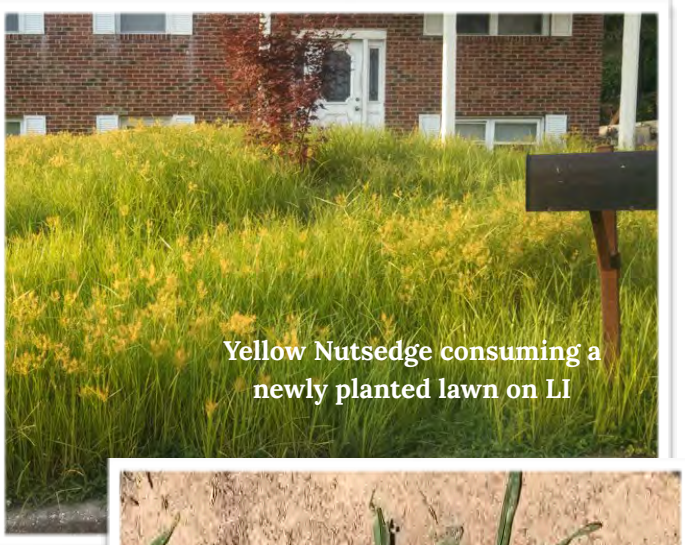
Cool season grasses are showing the wear in many areas across the Northeast with persistent above normal temperatures. Climate data are starting to reveal record warm conditions prevalent since June 1. For example, in Albany, NY from June 1 to July 31, there were *only* eight days of below normal temperature. Areas as far north as Burlington, VT have experienced over 15 days with temperature greater than 90 F.

On the moisture front, warm, blustery conditions have maxed out water loss from turf systems with ET values as high 1.25" per week for last 7 weeks. Until Tropical Storm Isaias many were in the midst of drought conditions and struggling to keep pace with irrigation needs, some still are. A swath of rainfall from 2.5 to 7" of rain fell along the NJ PA border. Wind and possible tornado hit in Queens, NY, with widespread tree damage but little rainfall for East of NYC.

Soil temperatures as far north as the Hudson Valley are well into the 80F range at 2" depth. Warm, dry soils have contributed to the overall decline in growth of most cool season grasses. Persistently dry areas that have not been fully protected from root pathogens will likely see the symptoms of summer patch and take-all begin to expand. And for those recipients of the heavy rainfall, its a pretty sure thing Pythium root issues are expected to rise in areas that remain saturated. As my colleague from Missouri, Professor Lee Miller often says, "Pythium is just looking for a pool of water to swim in!"

Stressful summer conditions, combined with several Tropical Storms coming up the East coast, have raised concerns regarding Gray Leaf Spot (http://plantclinic.cornell.edu/factsheets/grayleafspot.pdf). High value perennial ryegrass and tall fescue should be protected with fungicides if not planted to known resistant varieties. Avoid seeding areas with these grasses as well since seedling turf is HIGHLY susceptible even if planted to resistant varieties. There is great concern among diagnosticians and academic pathologists that GLS is becoming a more serious issues, especially in tall fescue and that existing resistance in varieties maybe failing.

Weeds of Concern


Yellow Nutsedge consuming a newly planted lawn on LI


Healthy goosegrass unscathed by most preemergence herbicides used in the Northeast US.

Persistent summer stress conditions combined with herbicide use patterns have begun to create increasingly difficult to control perennial and annual grass weeds in cool-season turfgrass systems. Two examples of this are obvious at this time of year, Yellow Nutsedge (https://blogs.cornell.edu/weedid/yellow-nutsedge/) and Goosegrass (http://turfweeds.cals.cornell.edu/plant/identify/267).

Yellow nutsedge has been a chronic problem for turfgrass managers for decades, however, increased movement of soil with nutlets, the loss of post-emergence chemical options, poor timing of application, lack of crop oil concentrate used at application, and potential resistance of nutsedge to existing chemicals all have contributed to the increase in populations.

Nutsedge produces perennial storage organs (nutlets) on ends of rhizomes that if not controlled will regrow where the leaves may have been killed. The key to getting the leaves killed and killing the nutlets, sort of a post plus pre control strategy is to apply in mid to late June when the plant is shuttling energy produced in leaves to the nutlets and the herbicide can move with the energy, thereby killing the nutlet. The chemical aspect of control with Sedgehammer (halosufuron-formerly Manage) must be applied with a non-ionic surfactant (AKA surface-active-agent), In fact the label states clearly; **Use 0.25-0.5 percent v/v of a nonionic surfactant (1-2 quarts per 100 gallons of spray solution) for broadcast applications. For high volume applications, DO NOT exceed 1 quart of surfactant per acre. Use only nonionic surfactants that contain at least 80 percent active material.** Outside of NY multiple applications of Dismiss (Sulfentrazone) have been shown to be effective in Rutgers research.

Goosegrass, a summer annual weed similar to, but not exactly like, crabgrass, is quietly becoming a problem for turfgrass managers in the Northeast as a result of longer, warmer growing seasons and the persistent use of mitotic-inhibiting herbicides (prodiamine, pendimethalin, dithipyr, etc.). Professor Matt Elmore at Rutgers University has developed an excellent fact sheet on crabgrass and goosegrass that is worth a look (https://njaes.rutgers.edu/fs1309/). There are excellent post emergence control options in Pylex and Speedzone but use caution during stressful periods as herbicides can cause greater phytotoxicity to sensitive plants.

Traffic Jam

Anecdotal data from the golf industry in Northern climates suggest that Post-COVID19 lockdown play has been at record levels! Extended tee time intervals seems to be leading to an increased pace of play, longer days and happy golfers. All this, while welcome, creates unique and often unseen problems since few have experienced this level of play in many years due to declining interest in golf and poor weather. Now there are visible signs of increased cart traffic and even walking only courses such as The Bethpage State Park Black Course are showing wear from focused traffic at pinch points (like a soccer goal mouth), low spots with poor drainage, and compacted native soils in rough. Not much to do now, but identify these areas in need of better drainage, soil compaction relief, better grasses, and adjustments to N and pest management if plagued by summer patch.