Weather is Mild, $ Spot Running Wild

Weather

Temperatures have finally resumed to below or even below normal levels over the last 10 days. Fifty degree lows and eighty degree highs have been a nice “natural fungicide” for warm season, summer stress type diseases. This has provided a much needed break for cool season turfgrasses that were taking a heavy hit due to the one-two high temperature/low rainfall punch of this summer’s pressure cooker. Forecasted temperatures look to break back into the low 90’s later this week, but thankfully don’t look to get back into the low 100’s that seemed to be the norm for much of July and early August. Unfortunately, turf and ornamental recovery will need water supplied by human intervention, as our 10 day forecast doesn’t show any chance for precipitation to break our current drought situation. According to the drought monitor released 8/16, 35% of the state’s area is in an “exceptional” drought, (highest level), and 95% of the state is in at least an “extreme” drought (2nd highest). Kansas, Oklahoma, and Nebraska join Missouri in having near or over 90% of their land area in these top two highest drought categories (Arkansas is close). In Columbia, Missouri, we are in the driest May 1 – Aug 19 period ever since 1890, with only 4.71” recorded at the airport (previous driest: 1911 5.12”). This is 12.38” in the hole, or 336,167 gallons of missing precipitation over an acre of land.
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**Drought remains.**

A. Despite some spotty showers over the last two weeks, the drought has not released its hold on most of the state. Mid-Missouri is still well within drought’s grip, with over a 12” deficit since May 1.

B. A “burning” burning bush in my backyard feeling the impact of the current drought.

**Quick Hits**

**Renovation:** Not many turf samples have come into the diagnostic lab over the past two weeks as most non-irrigated lawns are brown and dormant, and irrigated cool-season turf areas have caught a break with the cooler temperatures. We have been getting questions from homeowners itching to reseed their lawns, and we are getting close to the time to think about renovating drought damaged lawns. Reseeding should be done after drought damage has been thoroughly assessed as turf may simply be dormant. If a rain storm does happen to come through, drought damage can be easily assessed, but a better idea may be not to wait and check now by irrigating some areas to estimate how much may recover. Turfgrass seed supplies may be low this year, and purchasing a few weeks early may save some money and heartache if a shortage occurs. For lawn renovation tips go to [Cool-Season Grasses: Lawn Establishment and Renovation](#). If converting to a warm season lawn, it is advisable to sod or sprig during the spring to allow for maximum establishment during the warm summe months.
Fairy Ring Outbreak at MU Turf Farm
A. In early August, a significant outbreak of fairy ring occurred on our “Penn A4” turf research green.
B. Note the distinct orange discoloration associated with the thatch layer of fairy ring affected soils. Inset: After 7 days of incubation, abundant mycelium is observed in the top 1” of the thatch layer.

- **Fairy Ring**: The first large outbreak of fairy ring on our “new” (6 year old) “Penn A4” bentgrass research green occurred in the last two weeks. The disease is occurring in several areas throughout the green, including areas utilized for a curative dollar spot trial and a brown patch trial. Symptoms include very noticeable Type II (or lush green) rings but very little turf loss. The thatch layers of infected soils have a distinct mushroom smell (like a musty old tent) and orange discoloration. We will do nothing to treat these areas now in hopes the disease will proliferate and allow for control evaluation trials in the future. Curative fairy ring management recommendations include watering the areas heavily, aerifying, and using a wetting agent. If fungicides are necessary, flutolanil, azoxystrobin, or pyraclostrobin are recommended curatively, keeping in mind they must be tank-mixed with a wetting agent and watered-in to be effective.
Admittedly, summer is not over despite the title's suggestion, but dollar spot is beginning to ramp up in our research plots again as mild temperatures occur. The disease has been noticeable on our creeping bentgrass putting green plots since last spring, but symptoms are just starting to show up on our <1 year old Kentucky bluegrass and fairway height creeping bentgrass as well. Tall fescue is not susceptible to dollar spot, so it is important to know which turf species is being managed. Most creeping bentgrass putting greens are well protected at this point by fungicide applications, but irrigated Kentucky bluegrass sports fields and lawns may be vulnerable. Dollar spot is a low N disease, meaning the disease is not as severe on adequately fertilized turf. With a few weeks of summer temperatures still potentially ahead of us, it is not advisable to put down excess nitrogen now to grow out of this disease, as it may still incite brown patch or Pythium. If dollar spot is a problem, however, a very small shot of nitrogen (i.e. 1/8 lb N/1000 ft2), or an organic/slow release form may encourage recovery. If a fungicide is necessary, several granular formulations are on the market which can suppress the disease. Remember, though, that in a curative, (and drought), situation it is critical to irrigate after application to release the active ingredient from the granule. For this reason, sprayable formulations are normally recommended for curative disease control.
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