It is spring break time on the Mizzou campus, but very, very far from the time to take a break for turf managers in Missouri. I did a quick check of the weather in Cancun for our spring breakers, and they are not all that warmer than we are with Cancun highs in the mid 80’s and lows in the mid 70’s. Our lows are a bit cooler in the mid 50’s, but are still an unheard of consistent 10-20 degrees above normal for this time of year. Pat Guinan, our state climatologist, has added the forecast in for this month and anticipates March temperatures will be ~ 15 degrees above normal, which would put our average at 59.1°F, crushing the previous 1974 record of 53.7°F.

While March certainly made us busier than ever it may not be all bad. One silver lining of all this extra work should be extra revenue particularly in the lawn care and golf sectors. This should help ease the sting of a dismally slow snow removal business this year. From a plant health standpoint, perhaps we will see an extended set of spring temperatures that allow for a few extra weeks of cool season root growth before the summer stress season hits.

The bad news is that the high temperatures and ample moisture (rainfall over the past two weeks shown above) has caused many diseases to pop in the last few days on creeping bentgrass, zoysiagrass, and even tall fescue!! The first date for this much activity in 2011 was in early May rather than late March, so a conservative estimate of 4 weeks ahead of schedule is about right for 2012. Therefore targeted preventive fungicide applications for historically prevalent diseases at a site should be made now. As you can see below the Quick Hits section below is loaded with activity.
(Not-so) Quick Hits:

- Is it time for fungicide programs to start on bentgrass putting greens?
  Yes. Soil temperatures are still nearly 10 degrees above normal and are holding steady in the 55-65°F range. If dollar spot prevention is a goal (see below) it may be best to go with an early shot of watered-in Honor (very good in preventive dollar spot trials) or Bayleton (best dollar spot DMI that I've tested). We are also in the window for fairy ring prevention at sites with a history, (see report from last year). Fungicides in the DMI class including Bayleton, Triton, Trinity, Torque or Tourney have performed well in previous trials. Remember do not apply with a wetting agent, do not tank-mix Trimmit (DMIs are a plant growth regulator too!), and make sure to water the fungicide in with 1/8 – 1/4” of irrigation.
- **Dollar Spot:** Our good friend is about a month early to join the party this year. Initial dollar spot symptoms have been observed on bentgrass in Kansas City, at the turf farm, and even in Chicago over the past week. For our trials at the farm, we have had to spray an early knockdown of Daconil to suppress it for a few weeks and allow time for our materials to be shipped in. For your golf course, it’s time to hit it quite a bit harder with a DMI fungicide or boscalid (Emerald or Honor).
- **Large Patch:** Large patch symptoms arrived loud and angry last week on golf fairways and home lawns throughout Missouri. This is the **perfect** weather for large patch - a high amount of moisture, high temperatures in the 70s. This could be a very long year where this disease is concerned. If you have preventive fungicide applications from last fall down, they will have to be monitored closely of the next two months, and a curative spring application may be necessary. The reason for this is very similar to the reason crabgrass pre-emergent failures can occur in August... this large patch season is just going to be so darn long. We are doing several tests throughout St. Louis, Kansas City, and Columbia evaluating large patch control with fall and spring applied control measures.

A few “don’t” items of warning to keep your large patch outbreaks to a minimum.

- Do not aerify zoysiagrass in the next two months. This will weaken the plant and spread the pathogen.
- Absolutely do not fertilize zoysia until May. Like brown patch, the large patch pathogen loves to infect a fat, bloated fescue cell.
- If this wet weather holds don’t put a drop of irrigation water. If you have areas that don’t drain well, be especially vigilant with monitoring and control practices.

If you do any of the preceding items, large patch can flare up like a 'Hunger Games' costume.
Brown Patch: One to put in the “really?” file. Early this week I visited a sod farm that had mycelium and a general yellow to orange-tinged blight throughout a young (~ 6 month old) tall fescue field. After microscopic observation, it turns out *Rhizoctonia solani*, the causal agent of brown patch, is the culprit. There were no characteristic brown patch lesions (tan with a dark margin) that we normally encounter with a summer infection. Perhaps the pathogen shot out of dormancy so quickly that it skipped the niceties of making a lesion and just got right to the business of blighting tall fescue leaves.

In this case, the turf was being pushed to grow-in with a large amount of nitrogen (3 lbs N/1000 sq ft since seeding). As we know with other *Rhizoctonia* diseases (see Large Patch above), severity can be much greater with high amounts of nitrogen fertilization, which I suspect along with the high rainfall is the major driver of the epidemic observed here.

This is a true tale of how extraordinary this summer month of March has been. Due to the rapid ascendancy to a conducive environment of late spring/early summer diseases, various outbreaks that would normally be separated by months can be infecting turf now. In this unusual time, it is important if a disease is suspected to properly identify the problem so time and money isn’t wasted on an incorrect solution.

**Keep It Green Field Day**

Just a quick note and reminder to the folks in St. Louis about the Keep It Green Field Day to be held tomorrow from 9 am – 3 pm at the Old Warson Country
Not an April Fool's Joke

Club. The event is being sponsored by the Mississippi Valley Golf Course Superintendent Association (MVGCSA) and will highlight the turf research going on in St. Louis by the University of Missouri turf team. Daniel Earlywine and I will be on hand from 11 am – 2 pm to talk about the research we are conducting on large patch in St. Louis that will apply to both the golf and lawn markets. Dan Lloyd and Xi Xiong will be also be on-site to present their research involving weed control practices.

The MVGCSA is embarking on a fundraising effort for the Mizzou turf program which involves selling "Keep It Green" wristbands. While raising funds $1 at a time, the value of our turf research is entered into the minds of the end beneficiary: the homeowner, sports fan, or golfer. I'd like to personally thank the MVGCSA for this effort, as the funding will assist our turf program in discovering and delivering the research-based solutions that will help managers provide aesthetic and functional turf areas for Missouri. Please read more below and stop by if this crazy weather allows a break in your schedule.

Lee Miller
Follow on Twitter! @muturfpath
Extension Turfgrass Pathologist
University of Missouri