Warm and Dry...

Weather

Despite yesterday and today’s cool down, the unprecedented warmth of the winter and spring of 2012 will continue later this week. “The period from January 1 – May 20, 2012 is the warmest ever for the state of Missouri,” states state climatologist Pat Guinan. Forecasted temperatures for the remainder of the week will continue this trend, with lower to mid 90’s expected for highs and lows near 70°F. This should be kick-start the summer stress season for cool season turf, and deliver the warmest January – May on record for the state. This warmth has sparked earlier than normal emergence of warm season annual weeds (i.e. crabgrass), insects (i.e. chinch bugs), and diseases (i.e. brown patch).

A heaping dose of dry air has accompanied the record warmth, and non-irrigated cool season grasses are feeling the pinch. Most of the state is currently an inch to 2 inches below normal for the first two weeks of May, and very little if any rain relief is forecasted. The U.S. Drought Monitor only has the Bootheel identified in a drought situation (low), however, this is quite a change from the river flooding of yesteryear.

Cool season grasses will start their (hopefully) slow decline now that the summer heat is upon us. As I noted earlier, do not fertilize cool season turf now (excluding spoon feeding on greens). On the flip side, the window for fertilizing warm season grasses is upon us.
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Quick Hits

- **Brown patch** is starting to damage tall fescue lawns in the state. For areas with a prior history of the disease, preventive control may be necessary.
- **Ascochyta blight** was observed on a Kentucky bluegrass lawn in Dent county, MO. In most cases, this disease needs no treatment. For more information on this disease, click here.

Zoysiagrass Lawn Issues – Chinch Bugs

**Chinch bugs are early and feeding on Zoysia lawns**

A) An example of chinch bug damage on a zoysia lawn. The areas seem to be affected by drought, and no defined or patchy margins are visible.
B) Chinch bug adults feeding at the base of a leaf sheath. Chinch bugs have a plant toxin in their saliva which causes considerable damage. *Source: Brad Fresenburg*
C) A collection of chinch bug adults and nymphs (indicated by yellow arrows). Several chinch bug nymphs were noted in a sample taken from the lawn in photo A. *Source: Drees, Texas A&M University*
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As reported last week, many, many problems have been reported in St. Louis this spring on zoysia lawns. More samples have arrived in the past two weeks, and unfortunately chinch bug nymphs are prevalent in the samples. Chinch bugs (*Blissus* spp.) are the most damaging insect pests on zoysiagrass in this region. Affected areas appear droughty, solid not patchy, and often start on one side of the lawn and progress throughout as the population builds and moves. Areas around driveways and sidewalks normally have more damage because the chinch bug population “runs” into it and builds there. For diagnosis, these areas are the easiest to scout. Pull the turf back (which will be easy) and look for the small (⅛-⅕ inch) black bugs to scatter – see photo above. Because incidence is sporadic, a targeted preventive insecticide for chinch bug control has not been recommended in Missouri, but this may need to be reconsidered. In areas with a history of chinch bug damage, applications should be made now. Homeowner products include Ortho Bug-B-Gon (bifenthrin) and Bayer Advanced (cyfluthrin & imidacloprid). For professional lawn care companies, imidacloprid (Merit) and Acelepryn work well.

Localized Dry Spot

![Localized Dry Spot on Putting Greens](image)

A) Localized dry spot has been prevalent in the last two weeks during this dry spell.

B) Symptoms appear as wilted, mottled areas. Dew is normally absent from these areas in the morning as the plant has no water to transpire and expel through the hydathodes.

C) Soil microbes, such as basidiomycete fungi and bacteria, break down thatch/OM into water repellant organic acids which coat sand particles. Water goes laterally until it finds a non-hydrophobic channel through the profile. Water is lost quickly and is unavailable to the roots.

Localized dry spot (LDS) has occurred en masse on putting greens during this extended dry spell. As with everything else this year, early warm temperatures got the soil microbial population going. These microbes have been busy breaking down thatch and organic matter, and leaving behind hydrophobic organic acid residue to
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crushed soil particles. The result is a water repellant soil profile that will not let water infiltrate to the roots. LDS can occur in all soil types, but sand is particularly susceptible because the large pore spaces in the soil profile allow water to channel through quickly and the large surface area of the sand particle allows for greater organic acid accumulation. Various wetting agents are on the market to reduce LDS and aid in water penetration, infiltration, and retention.

No “Way”-tea Patch

Early last week, “weird yellow rings” were noticed in mid-Missouri on greens in areas with high Poa infestation, and another sample is in my lab with similar symptoms today. If a plug is cut out from the arc and placed in a plastic bag for 24-48 hours, the plug will be covered by mycelium of the pathogen (referred to as a "Don King" haircut by Dr. Wong). In my previous days in Chicago, I had noticed these same symptoms on Poa greens, tees, and fairways. Back then, we called the pathogen Rhizoctonia zeae, but through research in Japan and Dr. Frank Wong at UC Riverside the pathogen was more accurately described as Waitea circinata var. circinata. Since then the disease (termed Waitea patch or brown ring patch) has been observed throughout the Poa growing regions of California, the northeast, the upper Midwest, and now in Missouri. I had previously thought we were too far south for occurrence of this disease, but now I’ve got to say yes “way”-tea to this disease in Missouri. The disease appears as yellow rings or semi-arcs, affecting Poa annua but leaving creeping bentgrass unharmed. Many superintendents would find Poa removal from bent a blessing in this region and would probably do nothing for control. However, this disease is very conspicuous and can cause uneven playing
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surfaces in severe epidemics. If curative control is necessary, most fungicides effective on brown patch will also suppress brown ring patch, except for iprodione, which provides no control of this disease. Wong's research noted the best recovery fungicides were Headway and Endorse. The disease is also most severe on under-fertilized turf, so throwing some N at it will also help suppress the disease.

For more information on management of brown ring patch, click here.

Save the Date: Missouri Turf & Ornamental Field Day – July 10th
Whether you are going to the All Star game or not, stop first thing at the University of Missouri turf and ornamental research farm on July 10th. We will have an outstanding lineup of presentations and displays chock full of tidbits and lessons on how to keep turf at its healthiest. Registration is now open and the full schedule will be released next week. Hope to see you there!

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