
From: K-State turf information [K-STATE_TURF@LISTSERV.KSU.EDU] on behalf of Megan Kennelly [kennelly@KSU.EDU]
Sent: Thursday, June 25, 2009 5:39 PM
To: K-STATE_TURF@LISTSERV.KSU.EDU
Subject: [K-STATE_TURF] K-state turf: more brown patch, too much water, warm soils, syringing&handwatering
Attachments: June_25.pdf

Hello,

Attached is a newsletter with some information related to our beloved Kansas weather and its effects on plants.

-brown patch

-waterlogged soil

-warm soils

-hot spots/syringing/handwatering

At least our highways aren't buckling in the heat, like in my home state of Wisconsin. People are inadvertently playing "Dukes of Hazzard" with their cars up there.

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Megan Kennelly
Assistant Professor
Extension and Research: horticultural crops

4603 Throckmorton PSC
Dept of Plant Pathology
Kansas State University
Manhattan, KS 66506

phone: 785-532-1387



K-State turf: June 25th 2009

Rain, brown patch, waterlogged soil

Splish, splash, just about everybody has gotten some rain this week. Rain, humidity, and nighttime lows in the upper 60's and 70's = more brown patch conditions. As is typical, the nighttime lows are a bit lower in western Kansas, so disease pressure is somewhat less extreme in those regions.

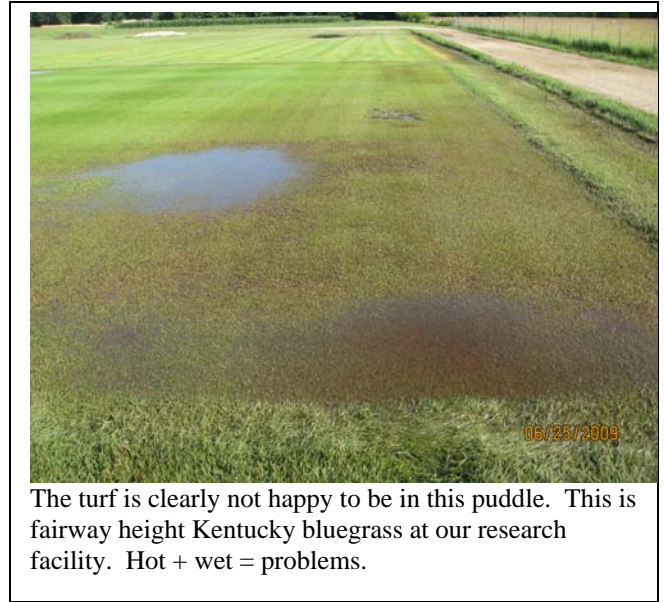
Slime molds will probably be crawling in, too. Though harmless, they can have a big freak-out factor.

Oh, after 1.5 inches poured down in about an hour last night, I took a stroll around the neighborhood. And, guess what, there were some sprinkler systems running. *Sigh...*

Summer stress

Summer stress is ALWAYS a problem for cool-season turf here in Kansas, and it's even more of a problem when spring root growth has been compromised, such as when conditions were overly wet and/or cool. Too much water = lack of oxygen = unhealthy roots which cannot function properly.

In the heat of summer, waterlogged soils are particularly damaging because water holds heat and then soil temps can surge. Studies have been conducted here at KSU and elsewhere to show that overly wet soils absorb and retain heat which can then damage roots of cool-season grasses.



The turf is clearly not happy to be in this puddle. This is fairway height Kentucky bluegrass at our research facility. Hot + wet = problems.



Water piles up in this backyard, which is a low spot. Clay soils don't help the situation.



Same yard, different view. The drainage needs to be addressed before a healthy stand of turf can grow. (By the way, this is MY backyard. Luckily the front does *not* turn into a pond during heavy rains).

This issue extends to other plants, too. I've been getting a lot of questions, samples, and phone calls ranging from turf to tomatoes to shrubs where wet spring soils led to root decline, and now that the heat is here, the plants just can't take it.

Soil temps at 4-inches are hovering around 80, which means roots of cool-season grasses won't grow (tends to cease > 77 degrees). The warm-season grasses love soil temps of 75-85, for root growth.

Golf Course: Syringing vs. handwatering? What's the difference?

Got hot spots?

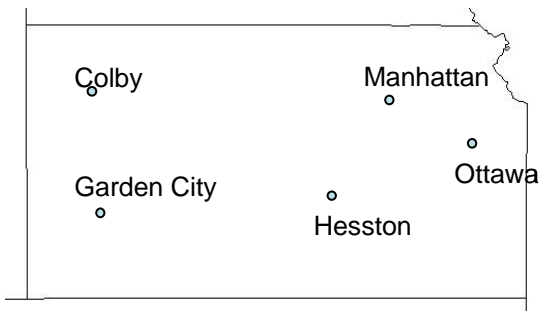
Below are links to two short articles on syringing and handwatering. The first is from Karl Dannenberger (Ohio State University) showing the impact of syringing, the second from David Kopec (University of Arizona) discussing syringing vs. handwatering.

<http://www.turfgrasstrends.com/turfgrasstrends/article/articleDetail.jsp?id=99488>

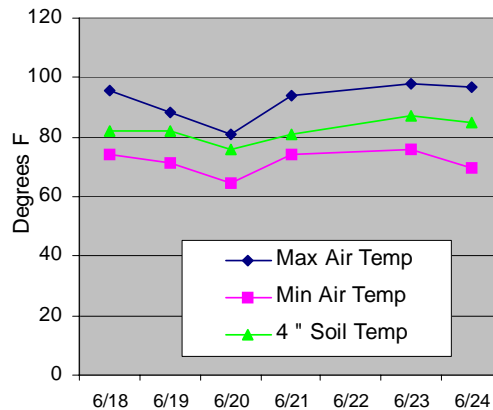
<http://ag.arizona.edu/turf/ccps699.htm>

Weather summary for June 18-24:

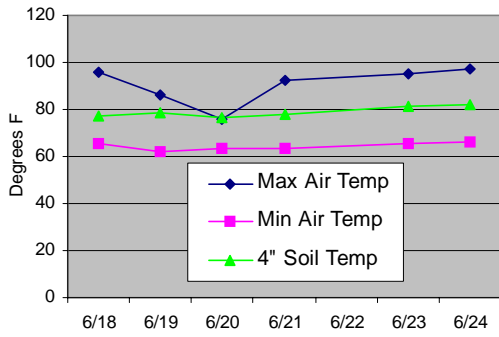
Information from Kansas Weather Data Library, <http://av.vet.ksu.edu/webwx/>



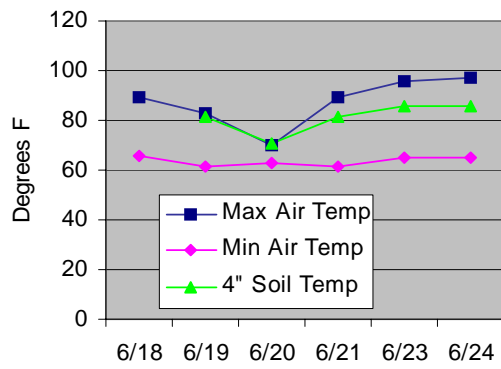
Manhattan. June 18-24 total precip = 3.2 inch



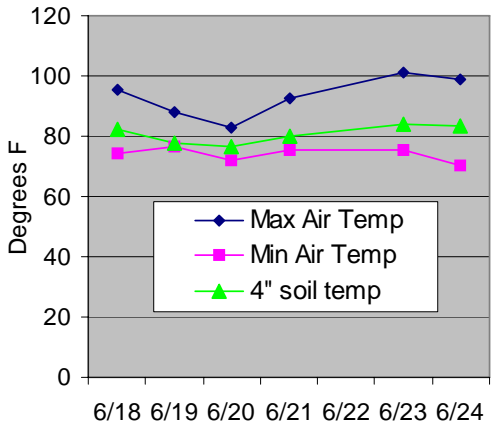
Garden City : total precip = 0.84 inch



Colby June 18-24. Total precip = 0.2 in.



Ottawa: total precip = 1 in



Hesston: total precip = 1.16 in

