## **Dryness Creeps North In Missouri**

MU Climatologist Encourages Farmers, Residents In Drought-Stricken Areas To Share Observations And Impacts Online

## COLUMBIA, MO.

issouri's spring is on track to be the warmest on record. That's not a surprise for many in southern Missouri, where temperatures and lack of rainfall are combining to worsen droughtlike conditions.

"It's a continuation of dry conditions worsening in southern Missouri and creeping up into mid-Missouri," said Pat Guinan, state climatologist with the University of Missouri Extension Commercial Agriculture Program. "It's not encouraging to be talking about emerging drought in a month that's usually Missouri's wettest."

Temperatures in much of Missouri ran 4-6 degrees above normal and rainfall south of I-70 is well below normal for the first half of May, according to Guinan's data. The Bootheel is now experiencing a moderate to severe drought, with abnormal dryness radiating into much of southeastern Missouri, according to the National Drought Mitigation Center's May 17 report.

Guinan said the map of abnormally dry conditions needs to be expanded to include more of south-central Missouri, where the month-todate total in some locations is less than 0.25 inch.

He is encouraging Missourians to report onthe-ground dryness conditions through the Drought Impact Reporter (DIR) so everyone gets a more accurate picture of the extent of drought.

"No instrument or third party will be able to describe a drought situation as well as someone living in the area and experiencing the situation," Guinan said.

More input and participation can bring national reports in line with local observations, leading to a more accurate overall picture of drought severity.

Evapotranspiration is also much higher than normal this year. Evapotranspiration is the sum of water lost to evaporation and plants transpiring, a process similar to humans sweating.

"Moisture is being sucked out of the ground faster than it would be in a typical May, so things dry out faster and you slide quicker into a drought," Guinan said. "High evapotranspiration, windy and cloudless days with lots of solar radiation, low humidity, and higher temperatures increase the amount of moisture loss from the soil profile as well as from vegetation that transpires that moisture. It's more typical to see this in the summertime than in the first half of May."

Forecasts don't promise to improve that picture much.

"Across Missouri we're only seeing precipitation predictions of 1/4 to 1/2 inch in the fiveday forecast, which is definitely not enough to help," Guinan said.

Missourians are encouraged to go online and use the Drought Impact Reporter at droughtreporter.unl.edu.

Find Missouri climate information through the Missouri Climate Center at www.climate.missouri.edu and at www.agebb.missouri.edu/weather.  $\Delta$ 

U.S. Drought Monitor May 15, 2012 Valid 7 a.m. EST Midwest Drought Conditions (Percent Area) D1-D4 None 67.65 32.35 0.65 Current 6.91 0.00 0.00 Last Week 0.00 68.76 31.24 5.80 0.18 0.00 (05/08/2012 map 3 Months Ago 71.82 28.18 20.04 6.80 0.00 0.00 (02/14/2012 map) Start of lendar Year Cal 71.84 28.16 13.42 6.80 0.00 0.00 (12/27/2011 map Start of Water Year 58.85 41.15 14.01 5.03 0.00 0.00 27/2011 mag One Year Ago 94.80 0.00 0.00 5.20 0.00 0.00 (05/10/2011 map Intensity: D3 Drought - Extreme D0 Abnormally Dry D1 Drought - Moderate D4 Drought - Exceptiona D2 Drought - Severe The Drought Monitor focuses on broad-scale conditions. USDA Local conditions may vary. See accompanying text summary for forecast statements. Released Thursday, May 17, 2012 http://droughtmonitor.unl.edu Brad Rippey, U.S. Department of Agriculture

