

# Pest & Crop newsletter

**Purdue Cooperative Extension Service and USDA-NIFA Extension IPM Grant**

This work is supported in part by Extension Implementation Grant 2017-70006-27140/ IND011460G4-1013877 from the USDA National Institute of Food and Agriculture.

## In This Issue

- [September 1 Forage Training Will Be Participant Active](#)
- [Arrival Of Cooler Temperatures And Variable Precipitation](#)

## September 1 Forage Training Will Be Participant Active

(Keith Johnson)

The Purdue University Crop Diagnostic Training and Research Center is offering a daylong program at the Feldun-Purdue Agricultural Center located just west of Bedford on Thursday September 1. Complete details about this training is at the "Upcoming Events" tab at the Indiana Forage Council website ([www.indianaforage.org](http://www.indianaforage.org)).



Participants at the Forage Management Day will experience active learning. (Photo Credit: Keith Johnson)

The training will be an active experience; so active, that participants will leave the training with grass stains, soil smudges, and hay/silage smells on their clothes! The training emphasizes practical information that will be used on the farm, or will be a valuable resource as agribusiness personnel and educators interact with forage-livestock producers. Certification credits/points are available. Leave the day with a better understanding as to how to calibrate a sprayer, set the gap on a mower-conditioner, sample hay for forage testing analysis, use a sweep net to evaluate presence of insects, calibrate a seeding drill, and determine forage moisture content before baling/chopping occurs. Other take-home information presented will be the use of Unmanned Aerial Vehicles in forage management practices, making best decisions about

weed control, and corn silage and forage-sorghum silage management comparisons.

Certification credits/points are available.

Preregistration is required. Cost to attend the day-long training is \$110.

## Arrival Of Cooler Temperatures And Variable Precipitation

(Austin Pearson)

Cooler weather has arrived as all of the Indiana climate divisions average temperatures were 1-1.8°F above normal, compared to the 4-6°F above normal temperature departures from a week ago. As of August 16, the statewide August average temperature was 74.2°F (1.3°F above normal) (Figure 1). Dips in the minimum temperatures were most notable as many stations recorded temperatures in the upper 40s to mid-50s throughout the week. Tipton County recorded a minimum temperature of 49°F on August 14, which also coincided with a heavy dew event. Prolonged leaf wetness could lead to the onset of agricultural crop disease development across the state. Overall, though, average minimum temperatures ran 1-2°F above normal for central and northern Indiana. Southern Indiana has experienced 2-4°F above normal minimum temperatures so far for the month. Maximum temperatures have been normal for central and northern Indiana; whereas, southern Indiana maximum temperatures were 1-2°F below normal. Modified Growing Degree Days (MGDDs) continued to run near normal to 104 percent of normal in south-central Indiana since April 1, 2022 (Figure 2).

Indiana 8/ 1/2022 to 8/16/2022								
cd	Temperature			prcp	Precipitation			percent
	temp	norm	dev		norm	dev		
1	73.0	71.8	1.2	1.63	2.08	-0.45		78
2	72.7	71.3	1.4	1.71	2.03	-0.32		84
3	72.3	71.1	1.3	2.28	1.96	0.24		112
4	74.0	73.0	1.0	2.66	2.16	0.51		123
5	73.6	72.5	1.1	2.24	1.98	0.26		113
6	73.4	71.8	1.7	1.55	1.83	-0.28		85
7	76.8	75.3	1.5	2.35	2.01	0.34		117
8	76.5	74.7	1.8	1.99	2.19	-0.20		91
9	75.4	74.1	1.4	3.00	2.12	0.88		142
State	74.2	72.9	1.3	2.15	2.04	0.11		106

Midwestern Regional Climate Center  
MRCC Applied Climate System  
Generated at:  
Wed Aug 17 11:20:38 CDT 2022



Figure 1. August 1-16, 2022 climate division and state average temperatures, normal temperatures, and temperature deviations, average precipitation, normal precipitation, precipitation deviations, and percent of normal precipitation compared to the 1991-2020 climatological averages.

Climate Division Data by State between Two Dates  
From Midwestern Regional Climate Center

Indiana  
4/ 1/2022 to 8/16/2022  
Modified Growing Degree Days, Base 50 - Ceiling 86

cd	DD	Normal	Departure	Percent
1	2251	2234	17	101
2	2216	2191	25	101
3	2216	2177	39	102
4	2454	2395	59	102
5	2417	2358	59	102
6	2365	2295	70	103
7	2767	2684	83	103
8	2706	2610	96	104
9	2587	2529	58	102
State	2450	2393	57	102

Midwestern Regional Climate Center  
MRCC Applied Climate System  
Generated at:  
Wed Aug 17 11:21:40 CDT 2022



Figure 2. April 1 – August 16, 2022 climate division and state average MGDDs (Base 50°F, Ceiling 86°F), normal MGDDs, MGDDs departure from normal, and percent of normal MGDDs using the 1991-2020 climatological averages.

Regional differences in rainfall occurred across the state as northwestern and east-central Indiana received shy of 2 inches (Figure 1) through August 16, which was less than 80 percent of the 1991-2020 climatological average. Other locations in Indiana were 125-175 percent of normal (Figure 3). Extreme southeastern Indiana received in excess of 175 percent of normal rainfall. Patoka Lake (Dubois County) is still at the top of the list for total precipitation with 6.13 inches of rain, where 3.82 inches fell on August 6. Huntington County received the least amount of rainfall as 0.63 inches fell, which was 1.11 inches below normal. Many of the central Indiana USGS stream gauges continued to run below normal through much of the north-central and western parts of the state (Figure 4). Despite these measurements, the August 16 US Drought Monitor (Figure 5) saw removal of the Moderate Drought (D1) category and reduced area in the Abnormally Dry (D0) category.

Accumulated Precipitation: Percent of Mean  
August 1, 2022 to August 17, 2022

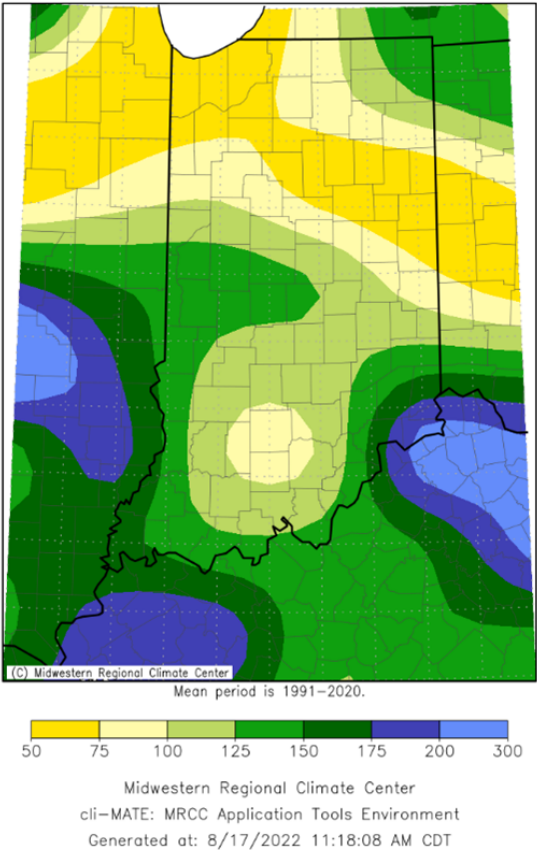


Figure 3. Accumulated precipitation from August 1-17, represented as the percent of the 1991-2020 normal precipitation that fell during that period.

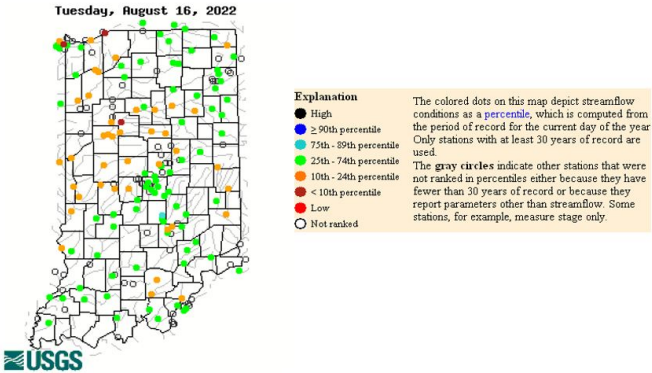


Figure 4. Seven-day average stream flows across Indiana as of Tuesday, August 16, 2022 using data from the USGS Water Watch.

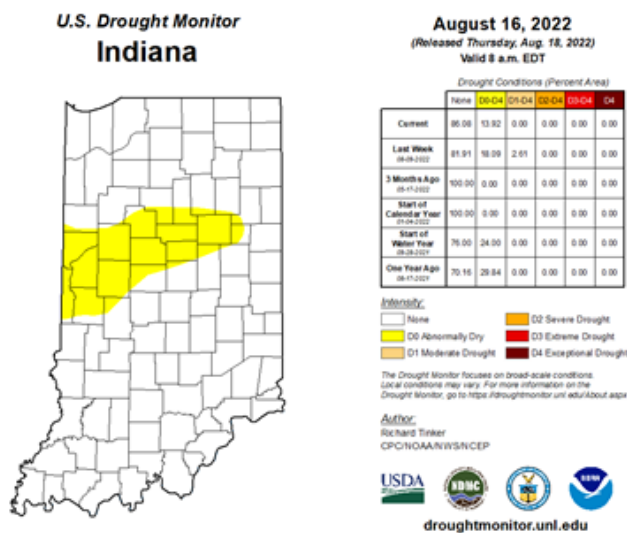


Figure 5. Indiana US Drought Monitor from August 16, 2022.

Turning attention to the Climate Prediction Center outlooks, the 6–10-day outlook (August 23–27) expects near normal temperatures to elevated chances of below normal temperatures (southwestern Indiana). There are increased chances of above normal precipitation in central and southern Indiana as well as near normal chances for the rest of the state (Figure 6). The 8–14-day outlook (August 25–31) follows

similar confidence (Figure 7).

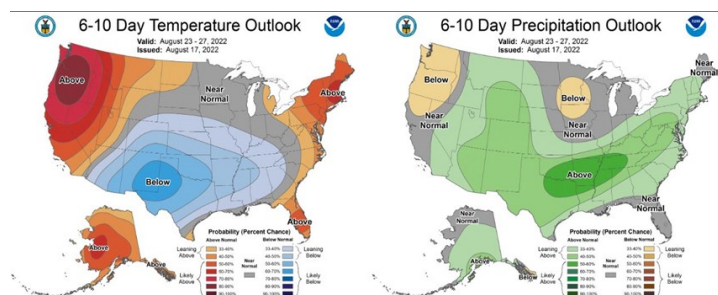


Figure 6. The CPC's 6–10-day temperature (left) and precipitation (right) outlooks for August 23–27, 2022.

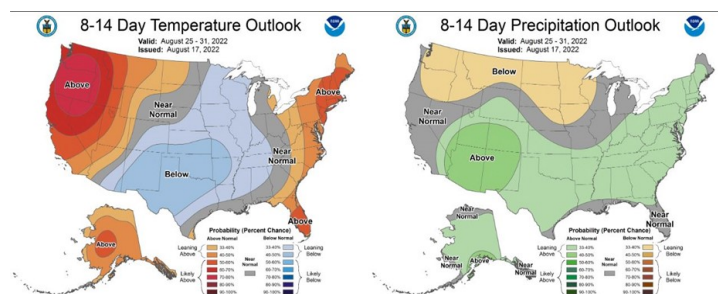


Figure 7. The CPC's 8–14-day temperature (left) and precipitation (right) outlooks for August 25–31, 2022.

It is the policy of the Purdue University that all persons have equal opportunity and access to its educational programs, services, activities, and facilities without regard to race, religion, color, sex, age, national origin or ancestry, marital status, parental status, sexual orientation, disability or status as a veteran. Purdue is an Affirmative Action Institution. This material may be available in alternative formats. 1-888-EXT-INFO Disclaimer: Reference to products in this publication is not intended to be an endorsement to the exclusion of others which may have similar uses. Any person using products listed in this publication assumes full responsibility for their use in accordance with current directions of the manufacturer.