**July 2009** 

## **Precipitation**:

Most of the July precipitation fell in the first half of the month. The North Dakota Agricultural Weather Network (NDAWN) total July rainfall ranged from 4.59 inches at the northwestern Hofflund station to 0.40 inches at the eastern located Galesburg station. The percent of normal July total rainfall was generally above normal in a stretch from the northwest to south central area with a range from roughly 100% to 200% (Figure 1. High Plains Regional Climate Center). The north central, southwest corner, and eastern regions had below normal precipitation with the eastern region

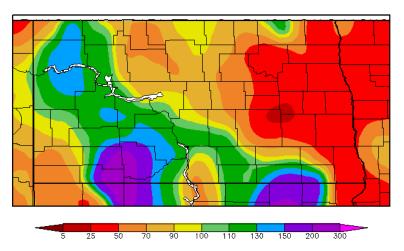


Figure 1. Precipitation Percent of Normal in July 2009 for North Dakota (High Plains Regional Climate Center)

having the lowest amounts with 50% or less percent of normal precipitation. A major storm event occurred on the 8<sup>th</sup> in the western part of the State. The National Weather Service (NWS) Storm Prediction Center reported tornadoes on the 8<sup>th</sup> in Golden Valley, Burke, Billings, Stark, and Renville Counties. A tornado touched down in Dickinson on the evening of the 8<sup>th</sup>. The tornado was classified an EF3 with winds speeds of 150 mph and a path length of nearly 2 miles long and one tenth of a mile wide.

## **Temperature**:

July was a cool month. The departure from normal monthly average air temperatures were below normal across the state and ranged from roughly 3 to 6 degrees below normal (Figure 2. North Dakota State Climate Office). The average monthly air temperatures recorded from NDAWN ranged from 62°F to 68°F with the cooler temperatures in the north and warmest temperatures in the southeast corner and central western edge. The NWS reported breaking the low maximum daily temperature at the Grand Forks Airport with 69°F on the 16<sup>th</sup>. The NWS also

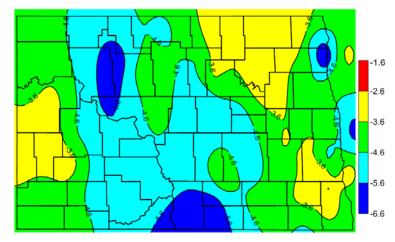


Figure 2. Temperature Departure from Normal in July 2009 for North Dakota (North Dakota State Climate Office)

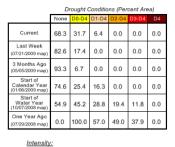
recorded a record low daily temperature at Williston of 42°F on the 17<sup>th</sup>. The monthly average air temperature for July at Bismarck was 66.9°F which ranked the 11<sup>th</sup> coolest of records going back to 1875. Similarly, the monthly average air temperature for July at Fargo was 66.5°F which ranked 12<sup>th</sup> coolest of records going back to 1881.

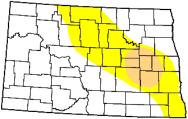
## **Drought Monitor:**

Statewide drought conditions worsened compared to previous month. Conditions were elevated from abnormally dry to moderate drought in east central portions of the state occupying southwestern Barns and Nelson Counties, southeastern Eddy, eastern Foster, Northeastern Stutsman, northern Barnes, western Steele and entire Griggs counties. The state was drought free prior to the end of July since February 2009. Currently, agricultural impacts are negligible.

## U.S. Drought Monitor North Dakota

July 28, 2009





D2 Drought - Severe

The Drought Monitor focuses on broad-scale conditions.
Local conditions may vary. See accompanying text summary

D3 Drought - Extreme
D4 Drought - Exceptional

Nadan V Drought Nitigation Center





http://drought.unl.edu/dm

for forecast statements

D1 Drought - Moderate

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