

North Dakota Monthly Climate Summary

August 2014

Precipitation:

After a very dry July, August 2014 was the exact opposite and was exceptionally wet for a majority of North Dakota (Figure 1). The only exceptions were in some parts of the Red River Valley and the area around Devils Lake. Using data from the North Dakota Agricultural Weather Network (NDAWN), the statewide average precipitation for August 2014 was 3.90 inches. That is well above the 30 year average of 2.09 inches. That will likely place the month in the top 10 wettest Augusts on record. With all that moisture it is no surprise that the U.S. Drought Monitor had 0% of North Dakota in drought conditions as of August 26, 2014.

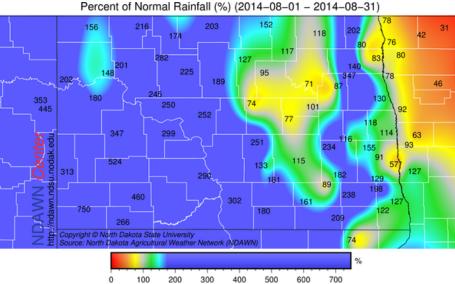


Figure 1. Precipitation Percent of Normal in August 2014 for North Dakota (North Dakota Agricultural Weather Network, NDAWN)

Temperature:

August 2014 was the 11th straight month with below average temperatures in North Dakota. With the exception of a few areas near the Canadian border the colder than average temperatures were fairly uniformed in the 1 to 2 degrees below normal range across the state (Figure 2). The NDAWN stations recorded an overall average temperature of 67.0 degrees which is 0.6 degrees below the 30 year average of 67.6 degrees. That would rank the month as tied for the 59th coldest August since such records began in 1895.



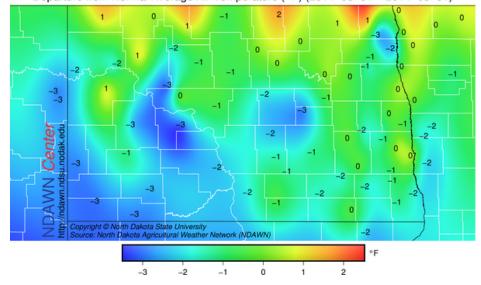


Figure 2. Temperature Departure from Normal in August 2014 for North Dakota (North Dakota Agricultural Weather Network, NDAWN)

Notable Weather:

The abundant rain in August was particularly felt in the southwestern portion of North Dakota. The Theodore Roosevelt Airport located in Dickinson recorded 6.79 inches of rain during the month. That was the highest rain total for August on record (Figure 3). The records at that location go back to 1948. Even more impressive is preliminary data from the Dickinson Experiment Station (DES) where 8.45 inches of rain was recorded in August surpassing the previous record of 6.82 inches set in 1954. The DES has records dating back to 1893. Sometimes rainfall records can be very localized based on an individual thunderstorm, but record rainfall was also observed in Bowman (and probably other locations as well). Bowman recorded 6.40 inches of rain during the month which is 2.39 inches above the previous record set back in 1941 (Figure 4). Records in Bowman date back to 1915.

Year	Aug
2014	6.79
1954	5.55
1982	4.22
1968	3.97
1999	3.87
1995	3.81
1998	3.75
1951	3.70
1981	3.51
1984	2.85
1964	2.80
1980	2.67
1952	2.50
1987	2.40
1979	2.23

Figure 3. Top 15 August Rainfall Totals for Theodore Roosevelt Airport Dickinson, North Dakota

Year	Aug
2014	6.40
1941	4.01
2011	3.69
1930	3.49
1968	3.30
1960	3.03
1970	2.98
1954	2.97
1962	2.96
1932	2.87
1926	2.81
1951	2.78
1943	2.68
1964	2.59
1956	2.58

Figure 4. Top 15 August Rainfall Totals for Bowman, North Dakota