# Nebraska Ag Climate Update



This May found winter not quite ready to release its frosty grip on the Midwest. After highs in the 80s and 90s during the first week of May, the second week saw a blast of cold air that brought snow in western Nebraska and tornadoes in eastern Nebraska, as well as some widespread frost. Some areas received significant moisture, while others continued to stay dry. The precipitation amounts for the last 60 days, have left most of Nebraska 1-3 inches below normal, so we are behind heading into the growing season (*Figure 1*).

Looking back at last month, precipitation amounts for the state were below normal for the southwest and northeast quadrants and near to above normal for the northwest and southeast quadrants (*Table 1*). Some locations in east central NE received over 4 inches



Figure 1. Departure from Normal Precipitation for the last 60 day (3/23/14-5/21/14) period for Nebraska. Map from the High Plains Regional Climate Center.

of liquid precipitation and some locations in west central NE received less than a tenth of an inch. Temperatures were near to above normal for the month with daily average temperatures in the low 40s in the northwest and low 50s in the southeast.

The precipitation received so far in May made an impact on the drought monitor. Over the last couple weeks, portions of eastern Nebraska saw a decrease of one to two intensity categories in the drought monitor, all while the drought coverage and intensity increased in western and central portions of the state (*Figure 2*). Many areas of the state are still lacking adequate soil moisture due to the long-term drought conditions. The precipitation in the upcoming weeks will be very critical for wheat yields and early season irrigation.

		Tempera	Precipitation (inches)				
Sites (West to East)	Average Daily High	Departure from Normal	Average Daily Low	Departure from Normal	Total Precipitation	Departure from Normal	
Scottsbluff	63.8	2.8*	32.5	1.1	0.60	-1.19	
Benkelman	67.2	2.2	36.4	2.4	0.40	-1.47	
North Platte	63.2	0.5	32.8	-0.6	0.64	-1.33	
Valentine	61.6	1.8	32.9	0.5	3.05	1.08	
Holdrege	61.8	0.3	35.7	-0.3	4.05	1.77	
Grand Island	64.2	2.3	39.0	1.2	2.91	0.30	
Geneva	65.2	2.6	39.8	-0.2	3.70	0.83	
West Point	62.0	1.8	35.5	-1.5	2.56	-0.45	
Ashland	64.6	2.7	37.6	-0.2	3.46	0.49	

### April 2014 Temperature and Precipitation



*Figure 2. Degrees of drought reported in the May 20, 2014 Drought Monitor from the National Drought Mitigation Center.* 

 Table 1. Temperature and precipitation data from nine Nebraska NWS Coop stations for April 2014

\* Red indicates above normal temperatures and blue indicates below normal temperatures

\*\* Green indicates above normal precipitation and brown indicates below normal precipitation

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May 23, 2014

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#### Looking Ahead

The forecast for the next couple weeks looks to be fairly seasonable. High temperatures will be in the upper 70s to low 80s with decent chances of precipitation through Memorial Day. A cut-off low will move out of the Desert Southwest, but the timing, strength, and location of this low is uncertain. The position and strength of this low could alter the precipitation and temperature forecast for next week. The Climate Prediction Center forecast from May 30 to June 5 has increased odds of above normal temperatures for most of the continental U.S and increased odds for above normal precipitation from the Northern Plains and the southeast U.S.

wemorial Day (way 26) Climatology								
	Precipitation							
<u>Site</u> (West to East)	<u>Avg.</u> <u>Daily</u> High (°F)	<u>Avg.</u> Daily Low (°F)	<u>Record</u> High (°F)	<u>Record</u> Low (°F)	<u>Avg. Daily</u> <u>Precip.</u> <u>(in)</u>	Percent of Years with Precip. (%)		
Alliance (1895-2013)	72	45	94	32	.08	32		
North Platte (1948-2013)	74	48	97	30	.19	45		
Culbertson (1905-2013)	78	49	99	29	.12	37		
Ainsworth (1906-2013)	74	49	95	32	.22	40		
Broken Bow (1895-2013)	74	49	94	32	.13	31		
Hastings (1907-2013)	76	53	98	38	.17	36		
West Point (1897-2013)	77	53	97	35	.21	32		
Pawnee City (1904-2013)	79	55	96	35	.16	32		

marial Day (May 20) Climatalary

Table 2. Long-term May 26 temperature and precipitation averages and records for eightNebraska NWS Coop stations.

Looking further out, the One-Month Outlook for June from the CPC (Figure 3) shows increased odds for above

normal temperatures over the Central Plains and the West Coast and below normal temperatures for the Northern Plains and Great Lakes region. There are enhanced odds for above normal precipitation in between the two temperature zones extending from Wyoming to Florida, which includes the entire state of Nebraska.

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June Climatology										
	Temperature (°F)						Precipitation (inches)			
	<u>Avg.</u>	<u>Avg.</u>	Avg.	Record	Record	Moon	Record	Record		
<u>Sites</u>	Max	Min	<u>Temp</u>	<u>High</u>	Low	Iviean	Max	Min		
Holdrege	84	58	71	110	37	3.94	11.83	0.24		
Broken Bow	81	55	68	107	30	4.01	10.33	0.64		
Imperial	83	55	69	108	29	3.54	13.73	0.07		
Kimball	80	50	65	108	28	2.72	6.96	0.23		
Chadron	80	53	67	107	26	2.10	5.53	0.09		
Ainsworth	81	56	69	109	32	3.71	8.63	0.57		
Wayne	80	58	69	100	39	4.29	11.56	0.34		
Grand Island	84	59	72	108	36	3.95	13.96	0.43		
Beatrice	84	61	72	107	38	4.22	6.51	0.30		
Ashland	84	60	72	109	35	4.43	13.29	0.54		

Table 3. Long-term (1894-2013) averages and records for temperature and precipitation for ten Nebraska NWS Coop stations.



*Figure 3. June temperature (top) and precipitation (bottom) outlooks from the Climate Prediction Center.* 

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