

## MONTHLY CLIMATE SUMMARY, JULY, 2002 NIU WEATHER SERVICE, DEKALB, IL

Day	Record HI	Record LO	Average HI	Average LO	Obs. HI	Obs. LO	Obs. Avg.	CDD	HDD	Precip. (in)	Snowfall (in)
1	101	43	83	61	94	72	83	18	0	0.00	0.0
2	104	45	83	61	92	71	81.5	16.5	0	0.00	0.0
3	102	41	84	61	92	72	82	17	0	0.00	0.0
4	106	43	84	61	94	73	83.5	18.5	0	0.00	0.0
5	104	45	84	62	92	65	78.5	13.5	0	0.00	0.0
6	105	43	85	63	85	66	75.5	10.5	0	0.01	0.0
7	103	46	85	63	82	68	75	10	0	0.01	0.0
8	105	41	85	64	90	71	80.5	15.5	0	0.00	0.0
9	101	47	86	64	94	72	83	18	0	0.09	0.0
10	105	46	86	64	83	65	74	9	0	0.01	0.0
11	107	42	86	64	80	65	72.5	7.5	0	T	0.0
12	106	45	86	64	76	59	67.5	2.5	0	0.00	0.0
13	106	44	86	64	80	55	67.5	2.5	0	0.00	0.0
14	109	45	86	64	83	58	70.5	5.5	0	0.00	0.0
15	98	42	86	64	86	63	74.5	9.5	0	0.00	0.0
16	100	40	86	64	88	65	76.5	11.5	0	0.00	0.0
17	100	43	86	64	89	69	79	14	0	0.00	0.0
18	100	44	86	64	90	70	80	15	0	0.00	0.0
19	100	45	85	64	91	71	81	16	0	T	0.0
20	102	47	85	64	82	64	73	8	0	0.00	0.0
21	106	46	84	63	90	69	79.5	14.5	0	0.00	0.0
22	103	43	84	63	97	75	86	21	0	0.00	0.0
23	106	45	84	63	87	64	75.5	10.5	0	T	0.0
24	106	48	83	63	79	56	67.5	2.5	0	0.00	0.0
25	104	41	84	63	82	61	71.5	6.5	0	0.00	0.0
26	105	46	83	62	83	65	74	9	0	0.03	0.0
27	102	46	83	62	88	71	79.5	14.5	0	0.23	0.0
28	103	48	83	61	89	70	79.5	14.5	0	0.22	0.0
29	104	46	83	61	89	71	80	15	0	0.02	0.0
30	104	45	83	61	82	66	74	9	0	0.03	0.0
31	104	44	83	61	92	68	80	15	0	0.00	0.0

### Temperature

1896-1995 AVG. HI: 84.6(F)  
 1896-1995 AVG. LOW: 62.7(F)  
 1896-1995 AVG. TEMP: 73.7(F)  
 July 2002 AVG. HI: 87.1 (F)  
 July 2002 AVG. LO: 66.8(F)  
 July 2002 AVG. TEMP: 77.0(F)

### Precipitation

July TOTAL: 0.65 in  
 July AVG: 4.10 in.  
 SNOW: 0.0 in.  
 YEAR TO DATE: 18.80 in  
 YEAR TO DATE AVG: 20.90 in

### Degree Days

COOLING: 7/02: 370.5  
 1/02-Now: 660.5  
 HEATING: 7/02: 0.0  
 7/02-Now: 0.0

### Discussion:

July 2002 will be a month many in DeKalb will not soon forget, as it was the driest July since 1946. Precipitation for the month totaled only 0.65 inches, which ranks as the 8<sup>th</sup> driest July on record since 1896 and fell 3.45 inches short of the normal precipitation for the month. The average temperature for the month was 77.0°F, which ranks as the 8<sup>th</sup> warmest July on record dating back to 1896. Up until the 26<sup>th</sup> of July DeKalb was on pace for the driest July on record with only 0.15 inches recorded, but rainfall on the 26<sup>th</sup> and 27<sup>th</sup> nearly quadrupled the month to date precipitation total.

Some very warm and dry periods are characterized by dominating high pressure systems, but that was not the case this month. There were several frontal passages resulting in breaks in the heat and opportunities for precipitation in DeKalb. During the hot summer months, convection is the primary mechanism for precipitation in our region. The scattered nature of thunderstorms often results in widely varying precipitation amounts over a very small area. For example, nearby Shabbona (15 miles south of DeKalb) had 2.68 inches for the month, Rockford (25 miles NNW) had 1.75 inches for the month. Unfortunately, DeKalb was not in the right place at the right time.

For the record there were no high or low records broken, our highest temp for the month was 97°F, which is the warmest we have been in July since 1999. Also the .65" of precipitation this month dropped us 2.1" below average for the year after being more than 1.5" above average at the end of June. Also for those of you who remember, last July was also exceptionally dry, with only 0.86". The significance of this is that this is the first time since the early 1920's that two consecutive July's have had less than 1.00" of precipitation.

Needless to say, this weather has had an effect on local agriculture. With the lack of precipitation and higher than average temperatures, local farmers are feeling the heat, and with a lack of moisture at critical stages in corn development, yields in the area will be lower than normal levels.

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Forecast Information (updated once daily at approx. 7:30 am): (815) 753-1623

The Climate Summary is supported by the Department of Geography, the College of Liberal Arts and Sciences, and the Department of Operations