## MONTHLY CLIMATE SUMMARY, JULY 2011 NIU WEATHER SERVICE: DE KALB, ILL.

|  | Record | Record | Average | Average | Obs. | Obs. | Obs. |  |  |  | Precip. | Snowfall |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Day | HI | LO | HI | LO | HI | LO | Avg. | GDD | CDD | HDD | (in) | (in) |
| 1 | 101 | 43 | 82 | 60 | 88 | 68 | 78 | 28 | 13 | 0 | 0.00 | 0.0 |
| 2 | 104 | 45 | 81 | 60 | 85 | 75 | 80 | 30 | 15 | 0 | 0.00 | 0.0 |
| 3 | 102 | 41 | 82 | 61 | 90 | 67 | 78.5 | 28.5 | 13.5 | 0 | 0.00 | 0.0 |
| 4 | 106 | 43 | 83 | 64 | 82 | 66 | 74 | 24 | 9 | 0 | 0.00 | 0.0 |
| 5 | 104 | 45 | 84 | 63 | 86 | 66 | 76 | 26 | 11 | 0 | 0.00 | 0.0 |
| 6 | 105 | 43 | 84 | 63 | 89 | 69 | 79 | 29 | 14 | 0 | 0.00 | 0.0 |
| 7 | 103 | 46 | 84 | 62 | 87 | 62 | 74.5 | 24.5 | 9.5 | 0 | 0.16 | 0.0 |
| 8 | 105 | 41 | 83 | 63 | 82 | 60 | 71 | 21 | 6 | 0 | 0.00 | 0.0 |
| 9 | 101 | 47 | 85 | 64 | 86 | 62 | 74 | 24 | 9 | 0 | 0.00 | 0.0 |
| 10 | 105 | 46 | 84 | 63 | 88 | 68 | 78 | 28 | 13 | 0 | 0.00 | 0.0 |
| 11 | 107 | 42 | 83 | 61 | 89 | 72 | 80.5 | 30.5 | 15.5 | 0 | 0.09 | 0.0 |
| 12 | 106 | 45 | 83 | 63 | 86 | 67 | 76.5 | 26.5 | 11.5 | 0 | 0.48 | 0.0 |
| 13 | 106 | 44 | 83 | 63 | 86 | 68 | 77 | 27 | 12 | 0 | 0.05 | 0.0 |
| 14 | 109 | 45 | 84 | 64 | 75 | 59 | 67 | 17 | 2 | 0 | 0.00 | 0.0 |
| 15 | 98 | 42 | 84 | 63 | 82 | 59 | 70.5 | 20.5 | 5.5 | 0 | 0.00 | 0.0 |
| 16 | 100 | 40 | 85 | 64 | 83 | 69 | 76 | 26 | 11 | 0 | T | 0.0 |
| 17 | 100 | 43 | 86 | 65 | 86 | 70 | 78 | 28 | 13 | 0 | 0.00 | 0.0 |
| 18 | 100 | 44 | 85 | 66 | 93 | 74 | 83.5 | 33.5 | 18.5 | 0 | 0.01 | 0.0 |
| 19 | 100 | 45 | 85 | 65 | 90 | 78 | 84 | 34 | 19 | 0 | T | 0.0 |
| 20 | 102 | 47 | 85 | 64 | 95 | 77 | 86 | 36 | 21 | 0 | 0.00 | 0.0 |
| 21 | 106 | 46 | 84 | 65 | 97 | 76 | 86.5 | 36.5 | 21.5 | 0 | 0.00 | 0.0 |
| 22 | 103 | 43 | 83 | 63 | 94 | 71 | 82.5 | 32.5 | 17.5 | 0 | 0.35 | 0.0 |
| 23 | 106 | 45 | 82 | 62 | 88 | 69 | 78.5 | 28.5 | 13.5 | 0 | 0.82 | 0.0 |
| 24 | 106 | 48 | 82 | 61 | 85 | 69 | 77 | 27 | 12 | 0 | 1.47 | 0.0 |
| 25 | 104 | 41 | 84 | 63 | 82 | 68 | 75 | 25 | 10 | 0 | 0.15 | 0.0 |
| 26 | 105 | 46 | 83 | 63 | 86 | 69 | 77.5 | 27.5 | 12.5 | 0 | 0.00 | 0.0 |
| 27 | 102 | 46 | 83 | 63 | 86 | 62 | 74 | 24 | 9 | 0 | 0.00 | 0.0 |
| 28 | 103 | 48 | 83 | 63 | 89 | 66 | 77.5 | 27.5 | 12.5 | 0 | 0.98 | 0.0 |
| 29 | 104 | 46 | 83 | 62 | 85 | 72 | 78.5 | 28.5 | 13.5 | 0 | 0.72 | 0.0 |
| 30 | 104 | 45 | 83 | 63 | 86 | 69 | 77.5 | 27.5 | 12.5 | 0 | T | 0.0 |
| 31 | 104 | 44 | 83 | 63 | 88 | 68 | 78 | 28 | 13 | 0 | 0.00 | 0.0 |
| Temperature |  |  |  | Precipitation |  |  |  |  | Degree Days |  |  |  |
| 1981-2010 AVG. HI: 82.2(F) |  |  |  | July 2011 TOTAL: 5.28 in. |  |  |  |  | COOLING: |  |  | 7/11:376.5 |
| 1981-2010 AVG. LOW: 62.9(F) |  |  |  | July AVG.: 4.32 in. |  |  |  |  |  |  |  | 1/11-Now: 615.5 |
| 1981-2010 AVG. TEMP.: 73.2(F) |  |  |  | July 2011 SNOW: 0 |  |  |  |  | HEATING: |  |  | 7/11: 0 |
| July 2011 AVG. HI: 86.9(F) |  |  |  | July SNOW AVG: 0 |  |  |  |  |  |  |  | 7/11-Now: 0 |
| July 2011 AVG. LO: 68.2(F) |  |  |  | 2011 liquid-eq. YEAR TO DATE: 25.65 in . |  |  |  |  |  | WING: |  | 7/11: 826.5 |
| July 2011 AVG. TEMP.: 77.6(F) |  |  |  | liquid-eq. YEAR TO DATE AVG.: 21.59 in . | EAR T | DATE | G.: 21 ATE: G.: 0 |  |  |  |  | 1/11-Now: 1674 |

Discussion
July 2011 temperatures were much warmer than the historical (30-year, 1981-2010) averages. With a mean temperature of 77.6 degrees, this July was the sixth warmest on record since 1896. Only July 1901, 1955, 1916, 1936, 1983, and 1921 (in this order) were warmer by this measure. Although the average high temperature for the month was 86.9 degrees, some 4.7 degrees above the historical average of 82.2 degrees, it was elevated low (nighttime) temperatures that were particularly anomalous. The monthly average low temperature of 68.2 degrees represented the highest such value on record for any month. The next highest such value for July was 67.2 degrees in July 1999; the next highest for any month was 67.8 degrees in August 1995. The warmest temperatures occurred between the $18^{\text {th }}$ and $22^{\text {nd }}$. During this period, on the $19^{\text {th }}$, a low temperature of 78 degrees was recorded, the warmest low temperature since 21 July 2002 , when 78 degrees was recorded, and one of only nine instances on record of a low temperature as high or higher.

Total liquid-equivalent precipitation for July 2011 was 5.28 in ., some 122 percent of the historical average total of 4.32 in. Although monthly rainfall was above the historical average, the rainfall was not evenly distributed temporally. Eighty-five percent of the total liquid-equivalent was recorded on or after the $22^{\text {nd }}$. In fact, the 21 July US Drought Monitor labeled much of northern Illinois as "abnormally dry"; this label no longer applies in DeKalb County. Year-to-date liquid-equivalent totaled 25.65 in . as of the end of the month, some 119 percent of the historical average value of 21.59 in .

[^0]July 2011 Daily Highs and Lows with 1981-2010 Average Highs and Lows Prepared by Daniel J. Brouillette, NIU Weather Director


Day


[^0]:    A. Dawson, D. Dziubla, B. Heartcell, T. Herman, R. Niesen, A. Osborne, L. Schutte, and S. Strader - Cooperative Observers; D.J. Brouillette-Weather Director Special acknowledgment is given to Laura Schutte for serving as Summertime Observer-Director Liaison.
    This summary was prepared by Daniel J. Brouillette, 01 August 2011. Forecast information (updated once daily at approx. 7:30 am): (815) 753-1623. Climate Website: http://climate.niu.edu
    The Climate Summary is supported by the Department of Geography, the College of Liberal Arts and Sciences, and the Department of Operations.

