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

			Average									
Day	Record HI	Record LO	HI	Average LO	Obs. HI	Obs. LO	Obs. Avg.	CDD	HDD	GDD	Precip. (in)	Snowfall (in)
1	65	-13	38	22	35	21	28	0	37	0	0.00`	0.0 `´
2	66	-9	41	22	44	24	34	0	31	0	0.00	0.0
3	72	-5	38	21	32	22	27	0	38	0	0.00	0.0
4	70	-3	37	21	41	27	34	0	31	0	0.06	0.0
5	71	-7	41	23	54	30	42	0	23	0	0.70	Т
6	69	-7	41	24	32	20	26	0	39	0	Т	T
7	70	-7	40	23	34	21	27.5	0	37.5	0	0.00	0.0
8	77	-13	40	23	32	26	29	0	36	0	0.00	0.0
9	73	-3	41	23	46	31	38.5	0	26.5	0	0.33	0.0
10	69	-2	40	22	39	32	35.5	0	29.5	0	0.04	T
11	69	-3	42	24	39	25	32	0	33	0	Т	Т
12	72	-6	44	24	46	26	36	0	29	0	0.00	0.0
13	77	5	45	27	37	22	29.5	0	35.5	0	0.00	0.0
14	71	5	46	28	42	22	32	0	33	0	0.00	0.0
15	74	9	47	27	46	28	37	0	28	0	0.00	0.0
16	77	-1	45	27	46	29	37.5	0	27.5	0	0.00	0.0
17	71	-2	45	28	58	32	45	0	20	0	0.00	0.0
18	79	-1	45	27	65	36	50.5	0	14.5	0.5	0.00	0.0
19	78	-8	44	28	50	30	40	0	25	0	0.00	0.0
20	77	2	46	27	55	30	42.5	0	22.5	0	0.00	0.0
21	77	4	46	28	52	40	46	0	19	0	0.52	0.0
22	78	1	46	28	57	39	48	0	17	0	0.26	0.0
23	80	0	50	29	43	36	39.5	0	25.5	0	0.28	0.0
24	84	3	51	31	43	24	33.5	0	31.5	0	0.02	T
25	81	3	52	32	35	24	29.5	0	35.5	0	0.00	0.0
26	80	7	51	33	36	21	28.5	0	36.5	0	0.00	0.0
27	82	9	53	33	32	20	26	0	39	0	0.00	0.0
28	82	8	54	34	37	19	28	0	37	0	0.00	0.0
29	84	12	53	33	39	19	29	0	36	0	0.00	0.0
30	84	5	52	34	43	26	34.5	0	30.5	0	0.00	0.0
31	81	7	55	35	48	24	36	0	29	0	0.00	0.0

**Temperature** 

1981-2010 AVG. HI: 46.8(F) 1981-2010 AVG. LOW: 27.0(F) 1981-2010 AVG. TEMP: 36.2(F) March 2011 AVG. HI: 43.2(F) March 2011 AVG. LO: 26.6(F) March 2011 AVG. TEMP: 34.9(F) **Precipitation** 

March 2011 TOTAL: 2.21 in. March AVG: 2.26 in. March 2011 SNOW: T March AVG SNOW: 4.2 in.

2011 liquid –eq. YEAR TO DATE: 5.71 in. liquid-eq. YEAR TO DATE AVG: 5.28 in. 2010-11 Seasonal SNOW TO DATE: 48.2 in. 2010-11 Seasonal SNOW AVG: 33.9 in.

Degree Days

COOLING: 3/11:0 1/11-Now: 0 HEATING: 3/11:933

7/10-Now: 6253.5

GROWING: 3/11: 0.5 1/11-Now: 0.5

## Discussion

Temperatures in March 2011 exhibited a negative anomaly overall with respect to the historical (30-year, 1981-2010) averages. The mean temperature was 34.9 degrees, 1.3 degrees below the historical average of 36.2 degrees. The negative anomaly in high (i.e., daytime) temperatures was more pronounced than that of the low (nighttime) temperatures (43.2 degrees and 3.6 degrees below historical average versus 26.6 degrees and only 0.4 degrees below) in part because of frequent cloud-cover. The month began with temperatures near historical averages before they made a brief foray above average around the 5<sup>th</sup> after which they held near to below average (especially by day) until the 16<sup>th</sup>. Seasonably mild temperatures, including the first temperature of 60 degrees or greater of the calendar year (and since November) on the afternoon of the 17<sup>th</sup>, occurred between the 16<sup>th</sup> and 22<sup>nd</sup>. Thereafter, temperatures held well below the historical averages, especially between the 25<sup>th</sup> and 29<sup>th</sup>.

Liquid-equivalent precipitation, totaling 2.21 in., was very near the historical average in March 2011. The precipitation was relatively well distributed through the month though there was no measurable precipitation during a dry spell between the 11<sup>th</sup> and the 20<sup>th</sup> and during a shorter one between the 25<sup>th</sup> and month's end. Monthly snowfall totaled a trace, well below the historical average of 4.2 in., which meant that this March was the 12<sup>th</sup> one since the beginning of the climate record in 1896 to have had no measurable snowfall. Year-to-date liquid-equivalent precipitation totaled 5.71 in., some 108 percent of the historical average of 5.28 in., as of the moming of the 31<sup>st</sup>

As the time for agricultural field work and the planting season fast approachs in northern Illinois, the 26 March Crop Moisture Report (<a href="http://www.cpc.ncep.noaa.gov/products/analysis\_monitoring/regional\_monitoring/cmi.gif">http://www.cpc.ncep.noaa.gov/products/analysis\_monitoring/regional\_monitoring/cmi.gif</a>) issued by NOAA's Climate Prediction Center indicates "abnormally moist" conditions in shallow soil in northeastern Illinois (including De Kalb County). More moist soils were noted in adjacent parts of Wisconsin, and soils more favourable to field work and crop development existed across northwestern and central Illinois. At the station on the morning of the 31 st, soil temperatures under sod were 39 degrees at the 2-in. depth, 40 at 4 in., 42 at 8 in., 41 at 20 in., 44 at 40 in., and 43 at 60 in.

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March 2011 Daily Highs and Lows with 1981-2010 Average Highs and Lows
Prepared by Daniel J. Brouillette, NIU Weather Dir.

