## Climatography of the United States No. 20 1971-2000

National Climatic Data Center Federal Building 151 Patton Avenue Asheville, North Carolina 28801 www.ncdc.noaa.gov

COOP ID: 116661

Lon: 89°00W

Station: PAW PAW 2 NW, IL

Climate Division: IL 1 NWS Call Sign:

Temperature (°F) Degree Days (1) Mean (1) Mean Number of Days (3) **Extremes** Base Temp 65 Max Max Max Max Min Min Highest Lowest Daily Daily Highest Lowest Month(1) Month(1) Cooling >= >= >= <= <= <= Month Mean Year Day Year Year Day Year Heating Max Min Daily(2) Daily(2) Mean Mean 100 90 50 32 32 0 25.3 7.7 16.5 64 1967 25 29.1 1990 -25+ 1999 5 4.3 1977 1503 0 .0 .0 .7 21.3 30.5 8.5 Jan 30.9 13.3 22.1 68 1976 28 34.5 1998 -33+1996 4 8.9 1979 1202 0 .0 .0 2.0 14.8 26.4 4.9 Feb Mar 43.2 24.6 33.9 83 1986 30 41.8 2000 **-9**+ 1996 26.0 1996 964 0 .0 .0 9.1 5.3 24.4 .3 27 1977 9 7 1975 Apr 57.4 35.8 46.6 90+1986 53.9 1982 40.8 553 .0 .1 22.3 .3 9.9 0. May 69.7 47.2 58.5 94 1975 20 66.9 1977 26+ 1980 10 52.7 1997 254 50 .0 .4 30.3 .0 1.1 .0 1971 36 10 63.2 @ 2.7 79.2 56.4 67.8 101 1988 26 71.5 1972 1982 42 125 30.0 .0 .0 .0 Jun Jul 82.1 60.4 71.3 11 75.5 1983 41 2000 23 66.3 2000 12 204 3.9 31.0 0. .0 101 1966 .1 .0 1992 41 79.8 58.0 68.9 99 1988 18 75.3 1995 37 1986 28 63.7 162 .0 2.2 31.0 .0 .0 .0 Aug 29 147 .3 Sep 73.3 49.5 61.4 93 1978 9 66.4 1978 1995 23 56.6 1975 39 .0 .6 29.9 .0 .0 26 43.3 1987 Oct 61.3 37.7 49.5 88+ 1976 3 58.3 1971 16 1962 483 3 .0 .0 26.9 .0 7.0 .0 44.7 26.2 35.5 1 42.4 1999 -7 1976 29 26.7 1995 887 0 .0 .0 10.5 .2 Nov 76 1968 4.2 20.6 Dec 30.8 14.0 22.4 65+ 2001 6 31.5 1982 -23+1983 25 9.1 2000 1320 0 .0 .0 2.1 15.8 29.5 4.6 Jun Jul Feb Jan 56.5 35.9 46.2 101 +1988 26 75.5 1983 -33+ 1996 4 4.3 1977 7408 584 9.9 225.8 149.7 18.5 .1 61.7 Ann

Complete documentation available from: www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

Issue Date: February 2004 064-A

(1) From the 1971-2000 Monthly Normals

Elevation: 950 Feet Lat: 41°43N

- (2) Derived from station's available digital record: 1948-2001
- (3) Derived from 1971-2000 serially complete daily data

<sup>+</sup> Also occurred on an earlier date(s)

<sup>@</sup> Denotes mean number of days greater than 0 but less than .05

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**COOP ID: 116661** 

Station: PAW PAW 2 NW, IL

**Climate Division: IL 1** 

NWS Call Sign: Elevation: 950 Feet Lat: 41°43N Lon: 89°00W

										Pı	recipi	tation	(incl	nes)										
	Mea	ans/	P	recipi	itatio	on Total					ean N of D	ays (3	5)	Precipitation Probabilities (1)  Probability that the monthly/annual precipitation will be equal to or less than the indicated amount  Monthly/Annual Precipitation vs Probability Levels										
	Medi	ans(1)				Latt cine	•				uny 110	cipitatio	••	These values were determined from the incomplete gamma distribution										
Month	Mean	Med- ian	Highest Daily(2)	Year	Day	Highest Monthly(1)	Year	Lowest Monthly(1)	Year	>= 0.01	>= 0.10	>= 0.50	>= 1.00	.05	.10	.20	.30	.40	.50	.60	.70	.80	.90	.95
Jan	1.39	.89	2.20	1960	12	4.19	1974	.05	1981	7.5	3.8	.7	.1	.19	.30	.50	.70	.90	1.12	1.38	1.70	2.13	2.83	3.51
Feb	1.26	1.08	2.95	1997	21	5.46	1997	.00	1987	6.1	3.1	.7	.1	.14	.30	.51	.69	.87	1.07	1.29	1.56	1.91	2.47	3.01
Mar	2.34	2.07	3.35	1954	25	5.52	1976	.53	1978	9.2	6.1	1.2	.3	.62	.84	1.18	1.48	1.77	2.07	2.41	2.82	3.34	4.17	4.95
Apr	3.47	3.48	2.97	1959	28	6.71	1975	1.15	1997	10.8	7.3	2.2	.7	1.15	1.48	1.96	2.37	2.77	3.17	3.62	4.13	4.80	5.83	6.79
May	4.23	4.03	3.88	1951	10	8.47	1974	.67	1992	10.7	7.8	3.1	1.2	1.29	1.69	2.29	2.81	3.31	3.83	4.40	5.06	5.93	7.28	8.53
Jun	4.40	4.03	6.92	1994	24	11.46	1993	.24	1988	9.8	7.1	2.6	1.0	.96	1.36	2.01	2.59	3.17	3.80	4.50	5.34	6.45	8.21	9.88
Jul	3.77	3.30	5.46	2000	10	10.50	1982	.54	1976	9.2	6.2	2.2	1.0	.79	1.13	1.69	2.19	2.70	3.24	3.85	4.58	5.55	7.10	8.56
Aug	4.17	3.34	4.55	1965	27	12.58	1987	.46	1976	9.4	6.4	2.6	1.0	.82	1.20	1.81	2.37	2.94	3.55	4.25	5.08	6.18	7.95	9.63
Sep	3.81	3.31	5.24	1992	10	9.08	1978	.86	1979	8.8	6.0	2.5	1.0	1.01	1.37	1.92	2.40	2.88	3.38	3.93	4.59	5.45	6.80	8.07
Oct	2.76	2.62	4.06	1954	11	6.54	1998	.60	1992	8.4	5.3	1.8	.6	.61	.87	1.28	1.64	2.01	2.40	2.83	3.36	4.04	5.14	6.18
Nov	3.00	2.36	2.55	1995	11	9.02	1985	.23	1976	8.9	6.1	1.8	.7	.43	.67	1.10	1.52	1.95	2.43	2.98	3.66	4.57	6.06	7.49
Dec	2.16	1.84	3.77	1982	3	6.79	1982	.30	1989	8.4	5.1	1.1	.4	.47	.67	.99	1.27	1.56	1.86	2.21	2.62	3.16	4.03	4.84
Ann	36.76	36.92	6.92	Jun 1994	24	12.58	Aug 1987	.00	Feb 1987	107.2	70.3	22.5	8.1	27.27	29.14	31.51	33.30	34.88	36.40	37.97	39.69	41.78	44.79	47.37

<sup>+</sup> Also occurred on an earlier date(s)

Complete documentation available from:

www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

<sup>#</sup> Denotes amounts of a trace

<sup>@</sup> Denotes mean number of days greater than 0 but less than .05

<sup>\*\*</sup> Statistics not computed because less than six years out of thirty had measurable precipitation

<sup>(1)</sup> From the 1971-2000 Monthly Normals

<sup>(2)</sup> Derived from station's available digital record: 1948-2001

<sup>(3)</sup> Derived from 1971-2000 serially complete daily data

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**COOP ID: 116661** 

Station: PAW PAW 2 NW, IL

Climate Division: IL 1 NWS Call Sign: Elevation: 950 Feet Lat: 41°43N Lon: 89°00W

										Snov	w (inc	hes)												
						Sno	ow To	tals							Mean Number of Days (1)									
	Means/Medians (1)					Extremes (2)									Snow Fall >= Thresholds							Depth esholo		
Month	Snow Fall Mean	Snow Fall Median	Snow Depth Mean	Snow Depth Median	Highest Daily Snow Fall	Year	Day	Highest Monthly Snow Fall	Year	Highest Daily Snow Depth	Year	Day	Highest Monthly Mean Snow Depth	Year	0.1	1.0	3.0	5.0	10.0	1	3	5	10	
Jan	8.5	7.4	4	3	8.0	1979	14	31.5	1979	29	1979	19	21	1979	4.9	3.3	.7	.2	.0	15.9	10.1	5.9	.4	
Feb	4.7	3.7	3	2	7.1	1990	15	12.5	1980	23	1979	20	19	1979	3.0	1.9	.6	.1	.0	10.9	6.7	3.4	.5	
Mar	3.8	2.0	1	#	8.0	1972	14	20.3	1972	17	1979	1	7	1979	2.0	1.3	.4	.2	.0	3.6	1.2	.5	.0	
Apr	1.1	.0	#	#	10.0	1975	3	11.0	1975	10	1975	3	1	1975	.4	.3	.1	.1	@	.4	.2	.2	@	
May	#	.0	#	0	#	1994	1	#+	1994	#	1997	19	#	1997	.0	.0	.0	.0	.0	.0	.0	.0	.0	
Jun	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
Jul	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
Aug	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
Sep	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
Oct	.1	.0	#	0	1.5	1997	27	1.5	1997	3	1989	20	#+	1989	.1	.1	.0	.0	.0	@	.0	.0	.0	
Nov	2.6	1.8	#	#	5.4	1971	27	11.0	1971	6	1977	29	1	1978	1.2	.9	.3	.1	.0	2.0	.8	.1	.0	
Dec	7.7	6.0	2	1	10.0	1987	15	26.0	1978	24	2000	31	12	2000	4.0	2.9	.9	.3	@	10.2	5.5	2.4	.1	
Ann	28.5	20.9	N/A	N/A	10.0+	Dec 1987	15	31.5	Jan 1979	29	Jan 1979	19	21	Jan 1979	15.6	10.7	3.0	1.0	@	43.0	24.5	12.5	1.0	

<sup>+</sup> Also occurred on an earlier date(s) #Denotes trace amounts

Complete documentation available from: www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

<sup>@</sup> Denotes mean number of days greater than 0 but less than .05

<sup>-9/-9.9</sup> represents missing values Annual statistics for Mean/Median snow depths are not appropriate

<sup>(1)</sup> Derived from Snow Climatology and 1971-2000 daily data

<sup>(2)</sup> Derived from 1971-2000 daily data

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**COOP ID: 116661** 

Station: PAW PAW 2 NW, IL

Climate Division: IL 1 NWS Call Sign:

Elevation: 950 Feet Lat: 41°43N Lon: 89°00W

10					Freez	e Data											
10				Spri	ng Freeze D	ates (Month/	Day)										
10	Tomp (F)		P	robability of	later date i	n spring (thr	u Jul 31) tha	n indicated(	(*)								
32   5/14   5/08   5/04   5/01   4/27   4/24   4/21   4/17   4/11     28	32 28 24 20 16 Temp (F) 36 32 28 24 20 16 32 28 24 20 20 28 24 20 20 20 20 20 20 20 20 20 20 20 20 20	.10	.20	.30	.40	.50	.60	.70	.80	.90							
28	36	5/29	5/23	5/18	5/14	5/11	5/07	5/03	4/29	4/22							
24	32	5/14	5/08	5/04	5/01	4/27	4/24	4/21	4/17	4/11							
20	28	4/30	4/25	4/21	4/18	4/15	4/12	4/08	4/05	3/30							
Fall Freeze Dates (Month/Day)   Probability of earlier date in fall (beginning Aug 1) than indicated(*)	24	4/17	4/13	4/10	4/07	4/05	4/03	4/01	3/29	3/25							
Fall Freeze Dates (Month/Day)	20	4/07	4/02	3/30	3/27	3/25	3/22	3/19	3/16	3/11							
Probability of earlier date in fall (beginning Aug 1) than indicated (*)    10   20   30   40   50   60   70   80   90     36   9/21   9/24   9/27   9/29   10/01   10/03   10/05   10/08   10/11     32   9/26   10/01   10/04   10/07   10/10   10/13   10/15   10/19   10/23     28   10/05   10/11   10/15   10/18   10/21   10/24   10/28   11/01   11/06     24   10/16   10/22   10/25   10/29   11/01   11/04   11/07   11/11   11/12     20   10/27   11/01   11/05   11/08   11/11   11/14   11/17   11/21   11/26     16   11/05   11/11   11/15   11/18   11/22   11/25   11/28   12/02   12/08     Freeze Free Period	16	4/04	3/29	3/24	3/21	3/17	3/14	3/10	3/06	2/28							
10   20   30   40   .50   .60   .70   .80   .90			•	Fal	l Freeze Da	tes (Month/D	ay)										
10   20   30   40   50   60   70   80   90	Tomp (F)																
32   9/26   10/01   10/04   10/07   10/10   10/13   10/15   10/19   10/23	Temp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90							
28	36	9/21	9/24	9/27	9/29	10/01	10/03	10/05	10/08	10/11							
24	32	9/26	10/01	10/04	10/07	10/10	10/13	10/15	10/19	10/23							
20   10/27   11/01   11/05   11/08   11/11   11/14   11/17   11/21   11/26     16   11/05   11/11   11/15   11/18   11/22   11/25   11/28   12/02   12/08	28	10/05	10/11	10/15	10/18	10/21	10/24	10/28	11/01	11/06							
Temp (F)	24	10/16	10/22	10/25	10/29	11/01	11/04	11/07	11/11	11/16							
Freeze Free Period  Probability of longer than indicated freeze free period (Days)    10   20   30   40   50   60   70   80   90     36   162   155   150   146   142   139   134   130   123     32   186   178   173   169   165   161   156   151   144     28   213   205   199   194   189   184   179   173   165     24   229   222   217   213   209   205   201   196   189     20   253   245   240   235   231   226   222   216   209	20	10/27	11/01	11/05	11/08	11/11	11/14	11/17	11/21	11/26							
Probability of longer than indicated freeze free period (Days)           .10         .20         .30         .40         .50         .60         .70         .80         .90           36         162         155         150         146         142         139         134         130         123           32         186         178         173         169         165         161         156         151         144           28         213         205         199         194         189         184         179         173         165           24         229         222         217         213         209         205         201         196         189           20         253         245         240         235         231         226         222         216         209	16	11/05	11/11	11/15	11/18	11/22	11/25	11/28	12/02	12/08							
Cemp (F)         .10         .20         .30         .40         .50         .60         .70         .80         .90           36         162         155         150         146         142         139         134         130         123           32         186         178         173         169         165         161         156         151         144           28         213         205         199         194         189         184         179         173         165           24         229         222         217         213         209         205         201         196         189           20         253         245         240         235         231         226         222         216         209			•	•	Freeze F	ree Period											
10         .20         .30         .40         .50         .60         .70         .80         .90           36         162         155         150         146         142         139         134         130         123           32         186         178         173         169         165         161         156         151         144           28         213         205         199         194         189         184         179         173         165           24         229         222         217         213         209         205         201         196         189           20         253         245         240         235         231         226         222         216         209	Tomp (F)			Probability	of longer th	an indicated	freeze free p	eriod (Days)									
32         186         178         173         169         165         161         156         151         144           28         213         205         199         194         189         184         179         173         165           24         229         222         217         213         209         205         201         196         189           20         253         245         240         235         231         226         222         216         209	Temp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90							
28         213         205         199         194         189         184         179         173         165           24         229         222         217         213         209         205         201         196         189           20         253         245         240         235         231         226         222         216         209	36	162	155	150	146	142	139	134	130	123							
24         229         222         217         213         209         205         201         196         189           20         253         245         240         235         231         226         222         216         209	32	186	178	173	169	165	161	156	151	144							
<b>20</b> 253 245 240 235 231 226 222 216 209	28	213	205	199	194	189	184	179	173	165							
	24	229	222	217	213	209	205	201	196	189							
<b>16</b> 275 266 259 254 249 244 238 232 223	20	253	245	240	235	231	226	222	216	209							
	16	275	266	259	254	249	244	238	232	223							

<sup>\*</sup> Probability of observing a temperature as cold, or colder, later in the spring or earlier in the fall than the indicated date.

**0/00** Indicates that the probability of occurrence of threshold temperature is less than the indicated probability.

Complete documentation available from:

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Station: PAW PAW 2 NW, IL COOP ID: 116661

Climate Division: IL 1 NWS Call Sign: Elevation: 950 Feet Lat: 41°43N Lon: 89°00W

	Degree Days to Selected Base Temperatures (°F)														
Base						Heatin	g Degree l	Days (1)							
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann		
65	1503	1202	964	553	254	42	12	41	147	483	887	1320	7408		
60	1348	1062	809	409	156	11	0	11	63	339	737	1165	6110		
57	1255	978	716	327	110	4	0	3	33	262	647	1072	5407		
55	1193	922	654	277	84	2	0	1	20	216	588	1010	4967		
50	1038	785	510	166	37	0	0	0	4	120	446	860	3966		
32	517	346	121	4	0	0	0	0	0	2	84	378	1452		

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	38	68	180	442	819	1073	1216	1144	883	545	188	81	6677
55	0	0	0	25	190	385	503	432	212	46	1	0	1794
57	0	0	0	15	154	327	441	372	166	30	0	0	1505
60	0	0	0	7	107	244	348	287	106	14	0	0	1113
65	0	0	0	1	50	125	204	162	39	3	0	0	584
70	0	0	0	0	18	45	94	76	9	0	0	0	242

	Growing Degree Units (2)																							
Base	Growing Degree Units (Monthly)											Growing Degree Units (Accumulated Monthly)												
	Jan   Feb   Mar   Apr   May   Jun   Jul   Aug   Sep   Oct   Nov   Dec											Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
40	0	9	72	258	594	863	996	930	683	352	85	7	0	9	81	339	933	1796	2792	3722	4405	4757	4842	4849
45	0	0	39	156	441	713	841	775	533	225	42	2	0	0	39	195	636	1349	2190	2965	3498	3723	3765	3767
50	0	0	17	85	303	563	686	620	387	129	18	0	0	0	17	102	405	968	1654	2274	2661	2790	2808	2808
55	0	0	4	41	183	414	531	465	256	63	4	0	0	0	4	45	228	642	1173	1638	1894	1957	1961	1961
60	0	0	0	19	100	276	376	313	149	23	0	0	0	0	0	19	119	395	771	1084	1233	1256	1256	1256
Base				Gro	wing Deg	gree Unit	s for Co	rn (Mont	thly)	•	•				Gr	owing D	egree Un	its for C	orn (Acc	umulate	d Month	ly)		
50/86	0	3	50	158	357	560	672	616	425	213	50	2	0	3	53	211	568	1128	1800	2416	2841	3054	3104	3106

(1) Derived from the 1971-2000 Monthly Normals

(2) Derived from 1971-2000 serially complete daily data

Note: For corn, temperatures below 50 are set to 50, and temperatures above 86 are set to 86

Complete documentation available from: www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

### Notes

- a. The monthly means are simple arithmetic averages computed by summing the monthly values for the period 1971-2000 and dividing by thirty. Prior to averaging, the data are adjusted if necessary to compensate for data quality issues, station moves or changes in station reporting practices. Missing months are replaced by estimates based on neighboring stations.
- b. The median is defined as the middle value in an ordered set of values. The median is being provided for the snow and precipitation elements because the mean can be a misleading value for precipitation normals.
  - c. Only observed validated values were used to select the extreme daily values.
  - d. Extreme monthly temperature/precipitation means were selected from the monthly normals data.

Monthly snow extremes were calculated from daily values quality controlled to be consistent with the Snow Climatology.

e. Degree Days were derived using the same techniques as the 1971-2000 normals.

Compete documentation for the 1971-2000 Normals is available on the internet from:

www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

f. Mean "number of days statistics" for temperature and precipitation were calculated from a serially complete daily data set .

Documentation of the serially complete data set is available from the link below:

g. Snowfall and snow depth statistics were derived from the Snow Climatology.

Documentation for the Snow Climatology project is available from the link under references.

### **Data Sources for Tables**

Several different data sources were used to create the Clim20 climate summaries. In some cases the daily extremes appear inconsistent with the monthly extremes and or the mean number of days statistics. For example, a high daily extreme value may not be reflected in the highest monthly value or the mean number of days threshold that is less than and equal to the extreme value. Some of these difference are caused by different periods of record. Daily extremes are derived from the station's entire period of record while the serial data and normals data were are for the 1971-2000 period. Therefore extremes observed before 1971 would not be included in the 1971-2000 normals or the 1971-2000 serial daily data set. Inconsistencies can also occur when monthly values are adjusted to reflect the current observing conditions or were replaced during the 1971-2000 Monthly Normals processing and are not reconciled with the Summary of the Day data.

- a. Temperature/ Precipitation Tables
  - 1. 1971-2000 Monthly Normals
  - 2. Cooperative Summary of the Day
  - 3. National Weather Service station records
  - 4. 1971-2000 serially complete daily data

- c. Snow Tables
  - 1. Snow Climatology
  - 2. Cooperative Summary of the Day
- d. Freeze Data Table

1971-2000 serially complete daily data

- b. Degree Day Table
  - 1. Monthly and Annual Heating and Cooling Degree Days Normals to Selected Bases derived from 1971-2000 Monthly Normals
  - 2. Daily Normal Growing Degree Units to Selected Base Temperatures derived from 1971-2000 serially complete daily data

### References

U.S. Climate Normals 1971-2000, www.ncdc.noaa.gov/normals.html

U.S. Climate Normals 1971-2000-Products Clim20, www.ncdc.noaa.gov/oa/climate/normals/usnormalsprods.html

Snow Climatology Project Description, www.ncdc.noaa.gov/oa/climate/monitoring/snowclim/mainpage.html

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