

# Climatography of the United States No. 20

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

Station: GRAND LAKE STREAM, ME

1971-2000

COOP ID: 173261

Climate Division: ME 2

NWS Call Sign:

Elevation: 290 Feet

Lat: 45° 11N

Lon: 67° 47W

Temperature (°F)																					
Mean (1)				Extremes										Degree Days (1) Base Temp 65		Mean Number of Days (3)					
Month	Daily Max	Daily Min	Mean	Highest Daily(2)	Year	Day	Highest Month(1) Mean	Year	Lowest Daily(2)	Year	Day	Lowest Month(1) Mean	Year	Heating	Cooling	Max >= 100	Max >= 90	Max >= 50	Max <= 32	Min <= 32	Min <= 0
Jan	27.1	3.4	15.3	58	1995	16	22.6	1990	-28+	1982	19	7.0	1994	1542	0	.0	.0	.9	20.9	30.6	13.8
Feb	30.5	5.8	18.2	68	1994	21	27.5	1981	-32	1962	2	9.0	1993	1312	0	.0	.0	.8	16.6	27.7	10.0
Mar	39.4	16.8	28.1	72	1986	31	34.2+	1979	-22	2001	2	22.0	1972	1144	0	.0	.0	4.2	7.4	29.4	2.8
Apr	50.9	29.1	40.0	80+	1998	1	44.1+	1987	3+	1995	6	35.5	1995	750	0	.0	.0	16.1	.6	21.8	.0
May	64.3	39.8	52.1	95	1992	23	56.8	1998	21	1966	8	47.2	1974	401	1	.0	.3	28.8	.0	4.6	.0
Jun	73.6	49.5	61.6	96	1988	16	65.6	1976	30	2000	6	58.2	1977	123	21	.0	.8	30.0	.0	.1	.0
Jul	79.3	55.2	67.3	96+	1963	27	70.2	1994	38	2001	27	63.3	1992	29	100	.0	1.3	31.0	.0	.0	.0
Aug	78.1	53.7	65.9	101	1975	3	69.3	1984	36+	2001	30	63.0	1982	45	73	@	1.1	31.0	.0	.0	.0
Sep	69.2	44.5	56.9	94	1999	4	62.1	1999	22+	2000	30	53.5	1995	248	4	.0	.1	29.9	.0	1.7	.0
Oct	57.3	33.9	45.6	84	1990	8	50.2	1971	14+	2001	31	41.2	1993	602	0	.0	.0	24.5	.0	15.2	.0
Nov	44.8	25.1	35.0	73	1989	1	39.7	1979	-2	1989	30	31.4	1986	902	0	.0	.0	8.5	3.0	24.5	.1
Dec	32.5	11.5	22.0	62	1982	5	31.0	1973	-27	1989	31	5.6	1989	1333	0	.0	.0	1.7	15.3	30.3	6.8
Ann	53.9	30.7	42.3	101	Aug 1975	3	70.2	Jul 1994	-32	Feb 1962	2	5.6	Dec 1989	8431	199	@	3.6	207.4	63.8	185.9	33.5

+ Also occurred on an earlier date(s)

@ Denotes mean number of days greater than 0 but less than .05

Complete documentation available from: [www.ncdc.noaa.gov/oa/climate/normal/usnormals.html](http://www.ncdc.noaa.gov/oa/climate/normal/usnormals.html)

Issue Date: February 2004

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1948-2001

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

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**Climate Division: ME 2**

**NWS Call Sign:**

**Elevation: 290 Feet**

**Lat: 45°11N**

**Lon: 67°47W**

Precipitation (inches)																								
	Precipitation Totals									Mean Number of Days (3)				Precipitation Probabilities (1) Probability that the monthly/annual precipitation will be equal to or less than the indicated amount										
	Means/ Medians(1)		Extremes							Daily Precipitation				Monthly/Annual Precipitation vs Probability Levels 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	4.28	3.90	2.43	1978	26	10.48	1979	.90	1985	10.3	7.3	3.1	1.1	1.52	1.92	2.50	3.00	3.47	3.95	4.47	5.09	5.87	7.08	8.19
Feb	3.14	3.11	3.05	1970	4	6.19	1984	.85	1994	8.7	5.8	2.0	.7	1.19	1.48	1.90	2.25	2.58	2.92	3.28	3.70	4.24	5.07	5.83
Mar	4.11	3.79	2.88	1979	26	7.61	1972	2.23+	1988	10.3	8.0	3.1	1.0	2.04	2.39	2.87	3.24	3.59	3.94	4.31	4.73	5.26	6.05	6.76
Apr	3.77	3.51	3.11	1973	29	8.03	1973	.64	1999	10.3	7.5	2.4	.7	1.30	1.66	2.18	2.61	3.03	3.46	3.93	4.48	5.19	6.27	7.27
May	3.51	3.11	1.84	1984	30	8.70	1989	.32	1982	10.4	7.1	2.3	.8	.83	1.16	1.67	2.13	2.59	3.07	3.60	4.25	5.09	6.42	7.67
Jun	3.39	3.22	2.98	1992	23	9.31	1977	.92	1983	11.2	7.3	2.1	.7	.87	1.19	1.68	2.11	2.54	2.99	3.49	4.09	4.87	6.10	7.25
Jul	3.37	3.22	3.00	1996	14	7.16	1996	.70	1977	10.4	6.9	2.2	.6	1.05	1.37	1.84	2.25	2.65	3.06	3.51	4.04	4.72	5.79	6.78
Aug	3.10	2.48	2.58	1981	16	7.73	1991	.21	1996	8.2	5.8	2.2	.8	.51	.78	1.23	1.66	2.09	2.57	3.12	3.78	4.67	6.11	7.48
Sep	3.82	3.36	3.40	1999	17	8.83	1999	1.58	1992	9.5	6.5	2.6	1.0	1.63	1.97	2.46	2.85	3.23	3.60	4.01	4.47	5.06	5.95	6.76
Oct	3.73	3.94	2.50	1963	30	7.49	1977	1.32	1986	9.8	7.0	2.8	.9	1.34	1.69	2.20	2.63	3.03	3.45	3.90	4.43	5.10	6.14	7.09
Nov	4.38	4.20	2.92	1995	8	8.55	1983	1.94	1976	11.0	7.9	3.1	1.1	1.84	2.24	2.79	3.25	3.68	4.12	4.59	5.13	5.81	6.85	7.80
Dec	4.18	3.47	3.00	1993	12	8.61	1993	1.49	1988	11.8	8.0	2.9	.7	1.39	1.78	2.36	2.86	3.33	3.82	4.36	4.98	5.79	7.04	8.19
Ann	44.78	43.45	3.40	Sep 1999	17	10.48	Jan 1979	.21	Aug 1996	121.9	85.1	30.8	10.1	33.74	35.92	38.69	40.78	42.62	44.39	46.21	48.21	50.62	54.10	57.08

+ Also occurred on an earlier date(s)

# Denotes amounts of a trace

@ Denotes mean number of days greater than 0 but less than .05

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

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1948-2001

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Complete documentation available from:  
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**COOP ID: 173261**

**Climate Division: ME 2**

**NWS Call Sign:**

**Elevation: 290 Feet**

**Lat: 45° 11N**

**Lon: 67° 47W**

Snow (inches)																							
Snow Totals															Mean Number of Days (1)								
Means/Medians (1)					Extremes (2)										Snow Fall >= Thresholds					Snow Depth >= Thresholds			
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	22.0	20.5	4	#	16.0	2000	18	38.0	1987	30	1996	9	28	1996	3.9	3.6	2.5	1.5	.4	-9.9	-9.9	-9.9	-9.9
Feb	5.3	-99.9	1	#	13.0	1995	5	26.3	1993	8	1986	22	2	1986	3.1	2.5	1.7	.7	.1	-9.9	-9.9	-9.9	-9.9
Mar	4.7	-99.9	1	#	18.0	1976	17	23.5	1987	17	1984	15	8	1984	3.0	2.6	1.6	.9	.1	-9.9	-9.9	-9.9	-9.9
Apr	1.5	.0	#	0	11.0	1975	4	11.0	1975	11	1975	4	3	1975	.6	.5	.2	.1	.1	-9.9	-9.9	-9.9	-9.9
May	.0	.0	#	0	.0	0	0	.0	0	1	1990	22	#	1990	.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	#	.0	0	0	#	1976	29	#	1976	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Nov	.6	.0	#	0	6.0	1997	28	6.0	1997	3	1997	15	#+	1999	.4	.4	.2	.1	.0	-9.9	-9.9	-9.9	-9.9
Dec	11.6	13.0	1	0	13.0	1995	21	17.8	1982	17	1995	27	10	1995	3.7	3.2	1.9	.7	.1	-9.9	-9.9	-9.9	-9.9
Ann	45.7	-9.9	N/A	N/A	18.0	Mar 1976	17	38.0	Jan 1987	30	Jan 1996	9	28	Jan 1996	14.7	12.8	8.1	4.0	.8	-9.9	-9.9	-9.9	-9.9

+ Also occurred on an earlier date(s) #Denotes trace amounts

@ Denotes mean number of days greater than 0 but less than .05

-9/-9.9 represents missing values

Annual statistics for Mean/Median snow depths are not appropriate

(1) Derived from Snow Climatology and 1971-2000 daily data

(2) Derived from 1971-2000 daily data

Complete documentation available from:

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Freeze Data									
Spring Freeze Dates (Month/Day)									
Temp (F)	Probability of later date in spring (thru Jul 31) than indicated(*)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	6/09	6/04	6/01	5/30	5/27	5/25	5/22	5/19	5/15
32	5/29	5/25	5/21	5/19	5/16	5/13	5/11	5/07	5/03
28	5/19	5/14	5/10	5/07	5/05	5/02	4/29	4/26	4/21
24	5/04	4/29	4/26	4/23	4/20	4/18	4/15	4/11	4/07
20	4/17	4/14	4/11	4/08	4/06	4/04	4/02	3/30	3/26
16	4/13	4/09	4/06	4/04	4/01	3/30	3/28	3/25	3/21
Fall Freeze Dates (Month/Day)									
Temp (F)	Probability of earlier date in fall (beginning Aug 1) than indicated(*)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	9/11	9/13	9/15	9/17	9/19	9/21	9/22	9/24	9/27
32	9/19	9/22	9/24	9/27	9/28	9/30	10/02	10/05	10/08
28	9/29	10/03	10/05	10/07	10/09	10/11	10/13	10/16	10/19
24	10/09	10/14	10/17	10/21	10/23	10/26	10/29	11/02	11/07
20	10/20	10/25	10/29	11/01	11/04	11/07	11/10	11/14	11/19
16	11/08	11/12	11/14	11/16	11/18	11/20	11/23	11/25	11/29
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	128	123	120	117	114	111	108	105	100
32	148	144	140	137	135	132	129	126	121
28	176	170	165	161	157	153	149	144	137
24	206	199	194	190	185	181	177	172	164
20	229	223	218	215	211	207	204	199	193
16	246	240	237	233	230	227	224	220	215

\* 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.

Derived from 1971-2000 serially complete daily data

Complete documentation available from:

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**Degree Days to Selected Base Temperatures (°F)**

<b>Base</b>	<b>Heating Degree Days (1)</b>												
<b>Below</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Ann</b>
<b>65</b>	1542	1312	1144	750	401	123	29	45	248	602	902	1333	8431
<b>60</b>	1387	1172	989	600	255	39	3	6	124	447	752	1178	6952
<b>57</b>	1294	1088	896	510	178	14	0	1	70	356	662	1085	6154
<b>55</b>	1232	1032	834	450	134	6	0	0	45	298	602	1023	5656
<b>50</b>	1077	892	679	304	53	0	0	0	10	167	452	868	4502
<b>32</b>	524	397	178	11	0	0	0	0	0	0	53	370	1533

<b>Base</b>	<b>Cooling Degree Days (1)</b>												
<b>Above</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Ann</b>
<b>32</b>	4	9	57	250	623	887	1093	1051	746	422	142	60	5344
<b>55</b>	0	0	0	0	43	203	380	338	101	6	0	0	1071
<b>57</b>	0	0	0	0	25	151	318	277	67	3	0	0	841
<b>60</b>	0	0	0	0	9	86	228	189	30	0	0	0	542
<b>65</b>	0	0	0	0	1	21	100	73	4	0	0	0	199
<b>70</b>	0	0	0	0	0	2	25	14	0	0	0	0	41

**Growing Degree Units (2)**

<b>Base</b>	<b>Growing Degree Units (Monthly)</b>												<b>Growing Degree Units (Accumulated Monthly)</b>											
	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
<b>40</b>	0	0	9	81	380	644	842	796	497	189	45	1	0	0	9	90	470	1114	1956	2752	3249	3438	3483	3484
<b>45</b>	0	0	2	29	239	495	687	641	349	93	15	0	0	0	2	31	270	765	1452	2093	2442	2535	2550	2550
<b>50</b>	0	0	0	8	121	346	532	486	213	34	1	0	0	0	0	8	129	475	1007	1493	1706	1740	1741	1741
<b>55</b>	0	0	0	1	54	211	377	334	104	8	0	0	0	0	0	1	55	266	643	977	1081	1089	1089	1089
<b>60</b>	0	0	0	0	18	104	226	189	40	0	0	0	0	0	0	0	18	122	348	537	577	577	577	577
<b>Base</b>	<b>Growing Degree Units for Corn (Monthly)</b>												<b>Growing Degree Units for Corn (Accumulated Monthly)</b>											
<b>50/86</b>	0	0	11	67	229	386	535	497	296	127	28	1	0	0	11	78	307	693	1228	1725	2021	2148	2176	2177

(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](http://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.  
Complete documentation for the 1971-2000 Normals is available on the internet from:  
[www.ncdc.noaa.gov/oa/climate/normal/usnormals.html](http://www.ncdc.noaa.gov/oa/climate/normal/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 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.

- |   |   |
|---|---|
| <ol style="list-style-type: none"><li>a. Temperature/ Precipitation Tables<ol style="list-style-type: none"><li>1. 1971-2000 Monthly Normals</li><li>2. Cooperative Summary of the Day</li><li>3. National Weather Service station records</li><li>4. 1971-2000 serially complete daily data</li></ol></li><li>b. Degree Day Table<ol style="list-style-type: none"><li>1. Monthly and Annual Heating and Cooling Degree Days Normals to Selected Bases derived from 1971-2000 Monthly Normals</li><li>2. Daily Normal Growing Degree Units to Selected Base Temperatures derived from 1971-2000 serially complete daily data</li></ol></li></ol> | <ol style="list-style-type: none"><li>c. Snow Tables<ol style="list-style-type: none"><li>1. Snow Climatology</li><li>2. Cooperative Summary of the Day</li></ol></li><li>d. Freeze Data Table<br/>1971-2000 serially complete daily data</li></ol> |
|---|---|

## References

U.S. Climate Normals 1971-2000, [www.ncdc.noaa.gov/normal.html](http://www.ncdc.noaa.gov/normal.html)  
U.S. Climate Normals 1971-2000-Products Clim20, [www.ncdc.noaa.gov/oa/climate/normal/usnormalsprods.html](http://www.ncdc.noaa.gov/oa/climate/normal/usnormalsprods.html)  
Snow Climatology Project Description, [www.ncdc.noaa.gov/oa/climate/monitoring/snowclim/mainpage.html](http://www.ncdc.noaa.gov/oa/climate/monitoring/snowclim/mainpage.html)  
Eischeid, J. K., P. Pasteris, H. F. Diaz, M. Plantico, and N. Lott, 2000: Creating a serially complete, national daily time series of temperature and precipitation for the Western United States. J. Appl. Meteorol., 39, 1580-1591,  
[www1.ncdc.noaa.gov/pub/data/special/serialcomplete\\_jam\\_0900.pdf](http://www1.ncdc.noaa.gov/pub/data/special/serialcomplete_jam_0900.pdf)