

# Climatology of the United States

No. 20

1971-2000

Station: GARDINER, ME

COOP ID: 173046

Climate Division: ME 2

NWS Call Sign:

Elevation: 140 Feet Lat: 44° 13N Lon: 69° 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	28.7	6.8	17.8	59+	1974	27	26.1	1990	-34	1981	4	8.8	1994	1464	0	.0	.0	1.0	18.6	30.6	10.7
Feb	31.7	9.7	20.7	62	1984	26	29.7	1981	-32+	1971	4	11.3	1993	1240	0	.0	.0	1.2	13.5	27.3	7.5
Mar	40.6	21.8	31.2	76	1977	30	36.8	1977	-22	1950	3	23.8	1984	1048	0	.0	.0	5.7	5.2	26.9	1.6
Apr	52.4	32.8	42.6	90	1990	28	46.6	1986	5+	1969	1	39.3	1975	673	0	.0	@	19.0	.3	15.9	.0
May	65.1	43.3	54.2	94	1992	23	59.1	1998	23	1961	6	49.3	1974	338	4	.0	.3	30.0	.0	2.1	.0
Jun	74.0	52.3	63.2	96	1995	20	68.3	1999	30	1967	1	58.9	1985	102	47	.0	.9	30.0	.0	.0	.0
Jul	79.6	57.9	68.8	98	1949	30	72.7	1994	36	1969	8	65.1	1992	16	131	.0	2.0	31.0	.0	.0	.0
Aug	78.2	56.3	67.3	103	1975	2	70.0	1973	32	1965	31	63.4	1982	32	102	@	1.3	31.0	.0	.0	.0
Sep	69.7	47.4	58.6	95	1999	5	63.9	1999	22	1955	27	55.1	1986	202	9	.0	.1	30.0	.0	.6	.0
Oct	58.1	36.6	47.4	84+	1968	2	52.8	1995	15	1951	21	43.4	1974	547	0	.0	.0	26.6	.0	10.3	.0
Nov	45.8	28.1	37.0	77	1974	1	41.5	1979	-1	1989	24	32.9	1976	842	0	.0	.0	10.2	1.6	21.2	.1
Dec	34.3	15.2	24.8	67+	1982	6	32.9	1996	-24	1980	26	8.4	1989	1247	0	.0	.0	2.2	12.0	29.7	4.0
Ann	54.9	34.0	44.5	103	Aug 1975	2	72.7	Jul 1994	-34	Jan 1981	4	8.4	Dec 1989	7751	293	@	4.6	217.9	51.2	164.6	23.9

+ 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

014-A

# 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

**Station: GARDINER, ME**

**COOP ID: 173046**

**Climate Division: ME 2**

**NWS Call Sign:**

**Elevation: 140 Feet Lat: 44°13N**

**Lon: 69°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	3.70	3.46	2.40	1986	27	10.07	1979	.88	1980	8.9	7.0	2.6	.9	1.06	1.41	1.94	2.40	2.85	3.32	3.83	4.45	5.24	6.48	7.64
Feb	2.73	2.87	2.52	1967	24	5.44	1984	.36	1987	7.5	5.5	1.8	.5	.80	1.06	1.45	1.79	2.11	2.45	2.83	3.27	3.84	4.74	5.57
Mar	4.02	3.89	3.48	1994	23	7.06	1999	.76	1981	9.2	6.8	3.0	1.0	1.55	1.92	2.46	2.90	3.32	3.75	4.21	4.75	5.43	6.48	7.43
Apr	4.04	3.52	4.11	1983	25	9.37	1983	.80	1985	9.8	7.3	2.7	1.0	1.34	1.72	2.28	2.76	3.22	3.70	4.21	4.82	5.60	6.81	7.92
May	3.81	3.69	3.05	1984	30	9.31	1989	.69	1992	10.6	7.0	2.4	1.0	1.03	1.39	1.94	2.43	2.90	3.39	3.94	4.59	5.43	6.76	8.00
Jun	3.74	3.52	3.62	1974	17	10.98	1998	.69	1979	10.4	7.3	2.4	.9	1.00	1.35	1.89	2.37	2.83	3.32	3.86	4.51	5.35	6.66	7.89
Jul	3.28	3.06	4.15	1996	14	7.60	2000	.40	1989	9.7	6.7	2.0	.7	.92	1.23	1.70	2.11	2.51	2.93	3.40	3.95	4.66	5.78	6.82
Aug	3.25	2.92	5.96	1991	20	11.95	1991	.88	1995	8.8	6.0	1.9	.7	.93	1.24	1.71	2.11	2.51	2.92	3.37	3.91	4.60	5.69	6.70
Sep	3.61	3.16	5.76	1954	11	11.16	1999	.71	1978	9.2	6.2	2.5	.8	.94	1.28	1.80	2.26	2.72	3.20	3.73	4.36	5.18	6.48	7.69
Oct	3.92	3.58	3.36	1998	11	8.48	1998	.90	1997	8.8	6.2	2.7	1.0	1.14	1.52	2.08	2.56	3.03	3.53	4.07	4.71	5.54	6.84	8.05
Nov	4.19	4.06	4.22	1966	3	12.88	1983	1.05	1976	9.9	6.8	2.6	1.2	1.51	1.90	2.47	2.95	3.40	3.87	4.38	4.97	5.72	6.89	7.95
Dec	3.68	3.28	4.30	1969	27	8.45	1996	.70	1985	9.2	6.5	2.7	.9	.95	1.30	1.83	2.30	2.77	3.26	3.80	4.45	5.29	6.62	7.87
Ann	43.97	43.90	5.96	Aug 1991	20	12.88	Nov 1983	.36	Feb 1987	112.0	79.3	29.3	10.6	31.46	33.88	36.99	39.34	41.43	43.45	45.54	47.84	50.63	54.68	58.17

+ 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

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

Complete documentation available from:  
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**Station: GARDINER, ME**

**COOP ID: 173046**

**Climate Division: ME 2**

**NWS Call Sign:**

**Elevation: 140 Feet**

**Lat: 44° 13N**

**Lon: 69° 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	14.5	14.0	8	6	14.0	1994	18	24.5	1971	33	1996	13	17+	1982	4.6	4.1	2.2	1.2	.2	19.2	15.2	11.2	4.8
Feb	13.3	10.4	8	6	14.0	1988	13	30.0	1972	27	1977	25	24	1977	4.2	3.6	1.7	.8	.1	23.8	20.8	15.2	7.0
Mar	10.0	9.1	4	3	13.5	1984	14	25.5	1971	27	1993	14	19	1993	3.2	2.8	1.6	.9	.3	11.9	9.5	6.4	3.8
Apr	3.7	1.0	#	#	11.0	1972	3	20.0	1972	10	1975	6	2	1982	1.0	.9	.5	.2	@	2.0	1.0	.5	.1
May	#	.0	#	0	#	1997	7	#+	1997	#	1997	7	#	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	1.0	2000	29	2.0	2000	2	2000	30	#+	2000	.1	.1	.0	.0	.0	.1	.0	.0	.0
Nov	2.1	.0	#	#	10.0	1980	18	10.0	1980	10	1980	19	2	1980	.8	.8	.4	@	@	2.4	1.3	.4	.1
Dec	7.9	5.3	4	2	9.0	1975	18	16.4	1978	24	1995	21	12	1995	3.8	3.1	1.7	.9	.0	6.7	3.5	2.4	.0
Ann	51.6	39.8	N/A	N/A	14.0+	Jan 1994	18	30.0	Feb 1972	33	Jan 1996	13	24	Feb 1977	17.7	15.4	8.1	4.0	.6	66.1	51.3	36.1	15.8

+ 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

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**Elevation: 140 Feet**

**Lat: 44° 13N**

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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	5/31	5/27	5/25	5/22	5/20	5/18	5/16	5/13	5/09
32	5/18	5/15	5/12	5/10	5/08	5/06	5/04	5/01	4/28
28	5/02	4/28	4/26	4/24	4/22	4/20	4/18	4/16	4/12
24	4/22	4/17	4/14	4/12	4/09	4/07	4/04	4/01	3/27
20	4/13	4/09	4/06	4/04	4/01	3/30	3/28	3/25	3/21
16	4/05	4/01	3/29	3/27	3/24	3/22	3/19	3/16	3/12
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	9/14	9/17	9/20	9/22	9/24	9/26	9/29	10/01	10/05
32	9/26	9/29	10/01	10/03	10/05	10/07	10/09	10/11	10/14
28	10/03	10/08	10/11	10/14	10/16	10/19	10/21	10/25	10/29
24	10/13	10/18	10/22	10/25	10/28	10/31	11/03	11/07	11/12
20	10/26	11/01	11/05	11/08	11/12	11/15	11/19	11/23	11/28
16	11/09	11/14	11/18	11/21	11/24	11/27	11/30	12/04	12/09
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	142	137	133	130	127	123	120	116	111
32	164	159	155	152	149	146	143	140	135
28	193	187	183	180	176	173	170	166	160
24	221	214	209	205	201	197	193	188	181
20	245	238	233	228	224	219	215	210	202
16	265	258	252	248	244	240	235	230	223

\* 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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**Elevation: 140 Feet    Lat: 44°13N    Lon: 69°47W**

Degree Days to Selected Base Temperatures (°F)													
Base	Heating Degree Days (1)												
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	1464	1240	1048	673	338	102	16	32	202	547	842	1247	7751
60	1309	1100	893	523	200	34	1	4	91	394	692	1092	6333
57	1216	1016	800	433	132	14	0	0	48	306	602	999	5566
55	1154	960	738	373	94	7	0	0	29	251	542	937	5085
50	999	820	583	230	31	0	0	0	5	135	392	782	3977
32	462	334	122	3	0	0	0	0	0	0	35	297	1253

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	21	18	96	320	689	935	1138	1093	797	476	183	73	5839
55	0	0	0	1	70	252	425	380	135	14	0	0	1277
57	0	0	0	0	46	199	363	318	94	7	0	0	1027
60	0	0	0	0	21	129	271	229	48	2	0	0	700
65	0	0	0	0	4	47	131	102	9	0	0	0	293
70	0	0	0	0	0	9	39	27	0	0	0	0	75

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	1	23	134	458	715	907	859	573	253	65	4	0	1	24	158	616	1331	2238	3097	3670	3923	3988	3992
45	0	0	6	57	308	565	752	704	423	140	22	0	0	0	6	63	371	936	1688	2392	2815	2955	2977	2977
50	0	0	2	21	172	415	597	549	277	62	6	0	0	0	2	23	195	610	1207	1756	2033	2095	2101	2101
55	0	0	0	8	79	268	443	394	153	17	0	0	0	0	0	8	87	355	798	1192	1345	1362	1362	1362
60	0	0	0	0	30	145	288	246	68	1	0	0	0	0	0	0	30	175	463	709	777	778	778	778
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	0	0	13	87	261	435	594	553	337	149	39	2	0	0	13	100	361	796	1390	1943	2280	2429	2468	2470

(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> |
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## 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)