

Climatology of the United States

No. 20

1971-2000

Station: MILFORD, NH

COOP ID: 275412

Climate Division: NH 2

NWS Call Sign:

Elevation: 300 Feet

Lat: 42°49N

Lon: 71°39W

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	.0	.0	.0	68	1950	6	.0	0	-21	1994	27	.0	0	0	0	.0	.0	1.3	17.5	30.2	6.6
Feb	.0	.0	.0	68	1997	22	.0	0	-16	1996	5	.0	0	0	0	.0	.0	2.0	11.6	26.7	3.2
Mar	.0	.0	.0	88	1998	31	.0	0	-5	1996	10	.0	0	0	0	.0	.0	7.0	5.0	25.7	.6
Apr	.0	.0	.0	90	2001	25	.0	0	11	1995	5	.0	0	0	0	.0	.2	23.0	.2	13.9	.0
May	.0	.0	.0	93+	2001	3	.0	0	26	2000	1	.0	0	0	0	.0	.7	30.3	.0	2.6	.0
Jun	.0	.0	.0	96+	1995	19	.0	0	34	1980	12	.0	0	0	0	.0	2.2	30.0	.0	.2	.0
Jul	.0	.0	.0	100	1995	14	.0	0	45+	2000	21	.0	0	0	0	@	3.3	31.0	.0	.0	.0
Aug	.0	.0	.0	100	2001	10	.0	0	41+	2000	18	.0	0	0	0	@	1.6	31.0	.0	.0	.0
Sep	.0	.0	.0	94+	1971	4	.0	0	25+	2000	30	.0	0	0	0	.0	.3	30.0	.0	1.0	.0
Oct	.0	.0	.0	83	2001	5	.0	0	20+	1999	28	.0	0	0	0	.0	.0	26.7	.0	11.0	.0
Nov	.0	.0	.0	76	1994	5	.0	0	7	2000	24	.0	0	0	0	.0	.0	9.9	1.6	20.3	.1
Dec	.0	.0	.0	71+	2001	7	.0	0	-6	1967	31	.0	0	0	0	.0	.0	2.2	11.7	29.3	2.6
Ann	.0	.0	.0	100+	Aug 2001	10	-99.9	0	-21	Jan 1994	27	99.9	0	0	0	.0	8.3	224.4	47.6	160.9	13.1

+ 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/normals/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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**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: MILFORD, NH

COOP ID: 275412

Climate Division: NH 2

NWS Call Sign:

Elevation: 300 Feet Lat: 42°49N

Lon: 71°39W

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	3.92	4.02	2.59	1979	21	10.57	1979	.61	1980	10.8	7.3	2.7	.9	.98	1.35	1.92	2.42	2.92	3.45	4.04	4.73	5.65	7.09	8.44
Feb	3.06	2.89	2.08	1981	25	8.26	1981	.04	1987	9.1	5.5	2.4	.8	.68	.97	1.41	1.82	2.22	2.65	3.13	3.71	4.47	5.68	6.82
Mar	3.94	3.78	2.60	1983	19	10.04	1983	.56	1981	11.0	6.9	2.9	1.0	1.39	1.76	2.30	2.75	3.18	3.63	4.11	4.67	5.40	6.51	7.53
Apr	4.11	3.62	3.28	1987	5	9.71	1987	.54	1999	11.8	6.9	2.9	1.0	1.25	1.64	2.23	2.73	3.21	3.72	4.27	4.93	5.77	7.09	8.30
May	3.93	3.69	2.52	1984	29	10.11	1984	.85	1993	13.3	7.8	2.6	1.0	1.27	1.64	2.19	2.66	3.12	3.58	4.10	4.70	5.47	6.67	7.78
Jun	4.09	3.49	3.47	1982	2	9.78	1998	.91	1997	11.8	6.8	2.5	1.3	1.19	1.58	2.16	2.67	3.16	3.67	4.24	4.91	5.78	7.14	8.40
Jul	3.98	3.37	4.03	1996	13	10.64	1986	.92	1998	11.0	6.5	2.6	.9	1.24	1.61	2.17	2.66	3.12	3.61	4.14	4.76	5.56	6.82	7.98
Aug	3.86	3.54	4.84	1991	19	8.91	1991	.44	1996	11.5	6.6	2.6	.9	1.10	1.47	2.02	2.50	2.97	3.46	4.01	4.65	5.48	6.78	7.99
Sep	3.68	2.70	4.03	1960	12	9.17	1999	.49	1984	10.4	5.7	2.4	1.0	.71	1.04	1.58	2.08	2.59	3.13	3.74	4.48	5.46	7.04	8.53
Oct	4.07	3.72	4.44	1962	6	8.95	1996	.61	1994	9.9	5.7	2.4	1.3	1.33	1.72	2.29	2.77	3.24	3.72	4.25	4.86	5.65	6.88	8.02
Nov	4.41	4.11	2.89	1985	5	8.65	1983	.84	1976	10.9	7.0	3.1	1.3	1.62	2.03	2.63	3.13	3.60	4.09	4.61	5.23	6.01	7.21	8.32
Dec	3.99	3.68	2.91	1994	24	8.94	1973	.92	1980	11.1	6.8	2.6	1.3	.93	1.30	1.88	2.41	2.93	3.48	4.10	4.84	5.81	7.35	8.80
Ann	47.04	45.86	4.84	Aug 1991	19	10.64	Jul 1986	.04	Feb 1987	132.6	79.5	31.7	12.7	36.83	38.88	41.47	43.40	45.10	46.73	48.40	50.23	52.42	55.57	58.27

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

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No. 20 1971-2000

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151 Patton Avenue
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Station: MILFORD, NH

COOP ID: 275412

Climate Division: NH 2

NWS Call Sign:

Elevation: 300 Feet

Lat: 42°49N

Lon: 71°39W

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	17.4	16.3	13	9	17.6	1977	7	49.9	1987	48	1996	13	37	1976	6.9	4.5	2.2	1.1	.1	24.4	21.7	19.6	13.3
Feb	12.0	8.8	16	13	20.0	1978	7	38.7	1972	52	1978	9	41	1978	5.8	3.1	1.1	.6	.2	24.4	21.9	19.6	15.0
Mar	10.7	6.2	10	6	13.8	1972	15	38.2	1993	47	1993	24	35	1971	4.5	2.8	1.3	.7	.1	18.1	15.3	13.3	9.1
Apr	2.6	.1	1	#	12.8	1982	6	16.5	1982	25	1993	2	7	1993	.9	.7	.4	.2	.1	3.1	2.6	2.0	1.0
May	.0	.0	#	0	.3	1977	9	.3	1977	#+	1987	1	#+	1987	@	.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	1.0	1979	10	1.3	1979	1	1979	10	#	1979	.1	@	.0	.0	.0	@	.0	.0	.0
Nov	3.6	1.9	1	#	12.7	1971	25	20.0	1971	14	1971	26	3	1997	1.7	1.1	.5	.1	@	4.0	2.2	1.0	.2
Dec	11.5	10.0	4	3	16.2	1997	23	31.7	1975	30	1975	31	16	1995	5.5	3.5	1.1	.7	.1	17.5	12.0	8.1	3.9
Ann	57.8	43.3	N/A	N/A	20.0	Feb 1978	7	49.9	Jan 1987	52	Feb 1978	9	41	Feb 1978	25.4	15.7	6.6	3.4	.6	91.5	75.7	63.6	42.5

+ 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:

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

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Climate Division: NH 2

NWS Call Sign:

Elevation: 300 Feet

Lat: 42° 49N

Lon: 71° 39W

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	6/11	6/05	6/01	5/29	5/25	5/22	5/19	5/15	5/09
32	5/31	5/25	5/21	5/17	5/14	5/10	5/06	5/02	4/26
28	5/12	5/08	5/05	5/02	4/30	4/28	4/25	4/22	4/18
24	4/26	4/21	4/17	4/13	4/10	4/07	4/03	3/30	3/25
20	4/16	4/10	4/06	4/03	3/31	3/28	3/25	3/21	3/16
16	4/07	4/02	3/30	3/27	3/24	3/22	3/19	3/15	3/11
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	8/28	9/03	9/07	9/10	9/14	9/17	9/20	9/25	9/30
32	9/19	9/23	9/26	9/28	9/30	10/02	10/05	10/07	10/11
28	9/27	10/01	10/04	10/06	10/09	10/11	10/14	10/17	10/21
24	10/06	10/12	10/16	10/20	10/23	10/26	10/30	11/03	11/09
20	10/21	10/27	11/01	11/04	11/08	11/11	11/15	11/20	11/26
16	11/01	11/07	11/11	11/15	11/19	11/22	11/26	11/30	12/07
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	138	128	122	116	110	105	99	93	83
32	160	153	148	143	139	135	130	125	117
28	181	174	169	165	161	157	153	148	141
24	220	211	205	200	195	191	185	179	171
20	250	240	233	227	221	215	209	202	192
16	265	256	249	244	239	233	228	222	213

* 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

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NWS Call Sign:

Elevation: 300 Feet Lat: 42°49N Lon: 71°39W

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	0	0	0	0	0	0	0	0	0	0	0	0	0
60	0	0	0	0	0	0	0	0	0	0	0	0	0
57	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0	0

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0
57	0	0	0	0	0	0	0	0	0	0	0	0	0
60	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0
70	0	0	0	0	0	0	0	0	0	0	0	0	0

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	1	6	33	202	515	772	937	867	588	261	75	6	1	7	40	242	757	1529	2466	3333	3921	4182	4257	4263
45	0	0	9	109	361	622	782	712	438	146	35	1	0	0	9	118	479	1101	1883	2595	3033	3179	3214	3215
50	0	0	4	52	219	472	627	557	298	65	11	0	0	0	4	56	275	747	1374	1931	2229	2294	2305	2305
55	0	0	1	24	119	329	473	403	175	24	1	0	0	0	1	25	144	473	946	1349	1524	1548	1549	1549
60	0	0	1	8	53	196	319	258	86	5	0	0	0	0	1	9	62	258	577	835	921	926	926	926
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	0	2	27	141	317	493	623	564	359	160	45	4	0	2	29	170	487	980	1603	2167	2526	2686	2731	2735

(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.
Complete documentation for the 1971-2000 Normals is available on the internet from:
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">a. Temperature/ Precipitation Tables<ol style="list-style-type: none">1. 1971-2000 Monthly Normals2. Cooperative Summary of the Day3. National Weather Service station records4. 1971-2000 serially complete daily datab. Degree Day Table<ol style="list-style-type: none">1. Monthly and Annual Heating and Cooling Degree Days Normals to Selected Bases derived from 1971-2000 Monthly Normals2. Daily Normal Growing Degree Units to Selected Base Temperatures derived from 1971-2000 serially complete daily data | <ol style="list-style-type: none">c. Snow Tables<ol style="list-style-type: none">1. Snow Climatology2. Cooperative Summary of the Dayd. Freeze Data Table
1971-2000 serially complete daily data |
|---|---|

References

U.S. Climate Normals 1971-2000, www.ncdc.noaa.gov/normal.html
U.S. Climate Normals 1971-2000-Products Clim20, www.ncdc.noaa.gov/oa/climate/normal/usnormalsprods.html
Snow Climatology Project Description, 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