U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: NEWCASTLE, ME **COOP ID: 175675**

Climate Division: ME 3 **NWS Call Sign:** **Elevation: 190 Feet** **Lat: 44˚03N** **Lon: 69˚32W**

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	29.7	12.4	21.1	56	1974	27	28.7	1990	-20	1981	4	13.3	1994	1361	0	.0	.0	.7	18.0	29.7	5.2
Feb	33.1	15.4	24.3	60	1981	18	32.4	1981	-18	1993	7	16.1	1993	1140	0	.0	.0	.8	13.7	25.8	2.9
Mar	41.5	24.5	33.0	85	1998	31	38.2	1977	-9	1982	1	27.3	1984	992	0	.0	.0	4.9	4.5	24.8	.3
Apr	53.2	34.0	43.6	86	1976	18	46.8	1976	12	1995	5	40.5	1972	642	0	.0	.0	19.0	.2	13.0	.0
May	65.3	44.0	54.7	94	1992	22	58.2	1998	27+	1986	4	50.4	1974	325	2	.0	.1	30.2	.0	.7	.0
Jun	73.2	52.5	62.9	93+	1988	15	67.0	1976	36	1986	3	59.0	1982	98	35	.0	.3	30.0	.0	.0	.0
Jul	78.6	58.3	68.5	98	1977	22	72.0	1999	44	1965	7	64.4	1992	18	123	.0	1.1	31.0	.0	.0	.0
Aug	76.9	57.3	67.1	101	1975	2	69.8	1973	36	1965	31	63.7	1982	26	92	@	.4	31.0	.0	.0	.0
Sep	67.8	49.5	58.7	92	1999	3	64.1	1999	27	1965	28	55.7	1986	198	8	.0	.1	30.0	.0	.2	.0
Oct	56.8	39.4	48.1	82+	1968	16	52.8	1971	21+	1972	21	43.5	1974	524	0	.0	.0	25.8	.0	6.1	.0
Nov	45.3	30.5	37.9	71+	1990	4	42.6	1999	3	1989	24	34.4	1972	815	0	.0	.0	9.5	2.0	17.2	.0
Dec	34.4	18.5	26.5	64	1982	4	33.0	1996	-20	1980	26	12.1	1989	1195	0	.0	.0	2.3	12.5	28.3	1.7
Ann	54.7	36.4	45.5	101	Aug 1975	2	72.0	Jul 1999	-20+	Jan 1981	4	12.1	Dec 1989	7334	260	@	2.0	215.2	50.9	145.8	10.1

\+ 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

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1965-2001

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

Issue Date: February 2004

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: NEWCASTLE, ME **COOP ID: 175675**

Climate Division: ME 3 **NWS Call Sign:** **Elevation: 190 Feet** **Lat: 44°03N** **Lon: 69°32W**

Precipitation (inches)

Precipitation Totals

Month	Means/ Medians(1) Mean	Means/ Medians(1) Median	Extremes Highest Daily(2)	Year	Day	Highest Monthly(1)	Year	Lowest Monthly(1)	Year
Jan	4.35	4.59	2.59	1979	21	10.84	1979	.88	1980
Feb	3.22	3.35	2.21	1999	3	6.26	1984	.28	1987
Mar	4.42	4.01	3.93	1977	14	9.13	1983	1.35	1981
Apr	4.24	4.07	3.70	1983	25	9.99	1983	.56	1999
May	4.00	4.11	2.33	1989	12	8.87	1984	.91	1992
Jun	3.58	3.39	3.30	1967	21	8.61	1998	.20	1979
Jul	3.11	2.79	3.05	1996	14	6.76	1996	.74	1978
Aug	2.75	2.59	3.21	1990	11	9.00	1991	.32	1995
Sep	3.83	3.13	4.55	1994	24	9.41	1999	.98	1978
Oct	4.10	3.91	3.08	1998	10	7.91	1979	1.16	1997
Nov	4.70	4.43	4.27	1983	25	14.35	1983	1.52	1976
Dec	4.63	3.84	4.02	1969	27	11.38	1973	1.30	1988
Ann	46.93	46.99	4.55	Sep 1994	24	14.35	Nov 1983	.20	Jun 1979

Mean Number of Days (3)

Month	Daily Precipitation >= 0.01	>= 0.10	>= 0.50	>= 1.00
Jan	11.9	7.7	3.2	1.1
Feb	9.5	5.7	2.2	.8
Mar	11.1	7.3	2.9	1.2
Apr	11.6	7.3	2.9	1.1
May	13.2	7.7	2.9	.9
Jun	11.4	6.8	2.2	.8
Jul	11.4	6.0	2.1	.6
Aug	9.5	5.2	1.6	.7
Sep	10.3	5.9	2.5	1.0
Oct	10.6	6.8	2.6	1.1
Nov	11.6	7.6	2.9	1.2
Dec	11.6	7.8	3.1	1.2
Ann	133.7	81.8	31.1	11.7

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
These values were determined from the incomplete gamma distribution

Month	.05	.10	.20	.30	.40	.50	.60	.70	.80	.90	.95
Jan	1.31	1.72	2.34	2.87	3.39	3.93	4.52	5.22	6.12	7.53	8.83
Feb	.98	1.28	1.74	2.13	2.52	2.91	3.35	3.86	4.53	5.57	6.53
Mar	1.70	2.11	2.70	3.19	3.65	4.12	4.63	5.22	5.97	7.12	8.17
Apr	1.50	1.90	2.48	2.96	3.43	3.91	4.43	5.04	5.81	7.01	8.11
May	1.24	1.62	2.19	2.67	3.14	3.63	4.16	4.79	5.60	6.86	8.03
Jun	.79	1.12	1.65	2.12	2.60	3.10	3.67	4.35	5.25	6.67	8.02
Jul	1.01	1.30	1.74	2.11	2.47	2.83	3.24	3.71	4.32	5.27	6.14
Aug	.71	.97	1.37	1.72	2.07	2.43	2.84	3.32	3.95	4.95	5.88
Sep	.93	1.29	1.84	2.34	2.83	3.36	3.94	4.63	5.54	6.98	8.33
Oct	1.34	1.73	2.30	2.79	3.26	3.74	4.27	4.89	5.69	6.93	8.07
Nov	1.64	2.08	2.73	3.27	3.79	4.32	4.91	5.59	6.46	7.80	9.04
Dec	1.38	1.82	2.48	3.04	3.60	4.17	4.81	5.55	6.52	8.02	9.42
Ann	35.11	37.45	40.41	42.64	44.61	46.51	48.46	50.61	53.20	56.93	60.14

\+ 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: 1965-2001
(3) Derived from 1971-2000 serially complete daily data

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

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Services

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: NEWCASTLE, ME **COOP ID: 175675**

Climate Division: ME 3 **NWS Call Sign:** **Elevation: 190 Feet** **Lat: 44°03N** **Lon: 69°32W**

Snow (inches)

Snow Totals

Means/Medians (1)

Month	Snow Fall Mean	Snow Fall Median	Snow Depth Mean	Snow Depth Median
Jan	20.4	18.5	8	7
Feb	14.8	13.1	9	7
Mar	13.5	12.2	6	3
Apr	4.4	2.7	#	#
May	.0	.0	0	0
Jun	.0	.0	0	0
Jul	.0	.0	0	0
Aug	.0	.0	0	0
Sep	.0	.0	0	0
Oct	.3	.0	#	0
Nov	3.8	2.1	#	#
Dec	13.8	12.0	3	2
Ann	71.0	60.6	N/A	N/A

Extremes (2)

Month	Highest Daily Snow Fall	Year	Day	Highest Monthly Snow Fall	Year	Highest Daily Snow Depth	Year	Day	Highest Monthly Mean Snow Depth	Year
Jan	14.0	1987	11	56.7	1987	32	1987	31	25	1971
Feb	10.0	1972	24	37.5	1972	37	1971	8	28	1987
Mar	11.5	1984	14	33.7	1993	34	1971	11	25	1971
Apr	11.3	1982	7	19.8	1996	13	1971	1	2	1993
May	.6	1977	10	.6	1977	0	0	0	0	0
Jun	.0	0	0	.0	0	0	0	0	0	0
Jul	.0	0	0	.0	0	0	0	0	0	0
Aug	.0	0	0	.0	0	0	0	0	0	0
Sep	.0	0	0	.0	0	0	0	0	0	0
Oct	3.4	1988	9	3.4	1988	#+	2000	29	#+	2000
Nov	10.5	1980	18	18.6	1997	11	1997	16	3	1997
Dec	11.5	1989	3	28.5	1975	19	1995	21	13	1989
Ann	14.0	Jan 1987	11	56.7	Jan 1987	37	Feb 1971	8	28	Feb 1987

Mean Number of Days (1)

Snow Fall >= Thresholds

Month	0.1	1.0	3.0	5.0	10.0
Jan	9.3	5.0	2.6	1.4	.2
Feb	7.1	4.0	1.6	1.0	.1
Mar	6.0	3.5	1.8	.9	@
Apr	2.1	1.2	.6	.3	@
May	@	.0	.0	.0	.0
Jun	.0	.0	.0	.0	.0
Jul	.0	.0	.0	.0	.0
Aug	.0	.0	.0	.0	.0
Sep	.0	.0	.0	.0	.0
Oct	.1	.1	@	.0	.0
Nov	2.2	.9	.3	.3	@
Dec	7.1	4.1	1.8	.9	.1
Ann	33.9	18.8	8.7	4.8	.4

Snow Depth >= Thresholds

Month	1	3	5	10
Jan	23.6	20.6	17.8	10.5
Feb	23.2	20.9	18.4	10.1
Mar	17.4	13.8	11.2	6.4
Apr	2.1	1.2	.7	.1
May	.0	.0	.0	.0
Jun	.0	.0	.0	.0
Jul	.0	.0	.0	.0
Aug	.0	.0	.0	.0
Sep	.0	.0	.0	.0
Oct	.0	.0	.0	.0
Nov	3.1	1.7	1.1	.1
Dec	15.7	11.8	8.4	3.4
Ann	85.1	70.0	57.6	30.6

+ 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/normals/usnormals.html

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: NEWCASTLE, ME **COOP ID: 175675**

Climate Division: ME 3 **NWS Call Sign:** **Elevation: 190 Feet** **Lat: 44˚03N** **Lon: 69˚32W**

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	5/26	5/22	5/19	5/16	5/14	5/12	5/09	5/06	5/02
32	5/11	5/07	5/05	5/02	4/30	4/28	4/25	4/23	4/19
28	4/29	4/25	4/23	4/20	4/18	4/16	4/13	4/11	4/07
24	4/15	4/11	4/08	4/06	4/04	4/01	3/30	3/27	3/23
20	4/12	4/08	4/04	4/02	3/30	3/27	3/25	3/21	3/17
16	4/03	3/30	3/27	3/24	3/22	3/19	3/17	3/14	3/10

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	9/19	9/23	9/25	9/28	9/30	10/02	10/04	10/07	10/11
32	9/27	10/01	10/04	10/06	10/09	10/11	10/14	10/17	10/21
28	10/09	10/14	10/18	10/21	10/24	10/27	10/30	11/03	11/08
24	10/26	10/31	11/03	11/06	11/09	11/12	11/15	11/18	11/23
20	11/06	11/10	11/14	11/16	11/19	11/22	11/24	11/27	12/02
16	11/15	11/20	11/23	11/26	11/29	12/02	12/05	12/08	12/13

Freeze Free Period

Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	151	147	143	141	138	135	133	129	125
32	177	171	167	164	161	158	155	151	145
28	209	202	197	192	188	184	180	175	168
24	239	232	227	223	219	215	211	206	199
20	252	246	241	237	233	229	225	221	214
16	273	266	261	256	252	247	243	238	230

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

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: NEWCASTLE, ME **COOP ID: 175675**

Climate Division: ME 3 **NWS Call Sign:** **Elevation: 190 Feet** **Lat: 44˚03N** **Lon: 69˚32W**

Degree Days to Selected Base Temperatures (˚F)

Heating Degree Days (1)

Base Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	1361	1140	992	642	325	98	18	26	198	524	815	1195	7334
60	1206	1000	837	492	186	28	1	2	87	371	665	1040	5915
57	1113	916	744	402	118	9	0	0	45	283	575	947	5152
55	1051	860	682	343	81	4	0	0	26	228	515	885	4675
50	896	720	527	203	24	0	0	0	4	114	366	730	3584
32	359	248	82	1	0	0	0	0	0	0	29	251	970

Cooling Degree Days (1)

Base Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	21	31	113	349	701	926	1129	1088	800	499	205	79	5941
55	0	0	0	1	69	240	416	375	136	14	0	0	1251
57	0	0	0	0	44	185	354	314	94	7	0	0	998
60	0	0	0	0	18	114	262	222	47	2	0	0	665
65	0	0	0	0	2	35	123	92	8	0	0	0	260
70	0	0	0	0	0	4	35	19	0	0	0	0	58

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	1	26	144	460	694	895	852	572	274	82	6	1	2	28	172	632	1326	2221	3073	3645	3919	4001	4007
45	0	0	7	64	308	544	740	697	422	156	34	1	0	0	7	71	379	923	1663	2360	2782	2938	2972	2973
50	0	0	1	19	172	394	585	542	279	69	6	0	0	0	1	20	192	586	1171	1713	1992	2061	2067	2067
55	0	0	0	5	76	251	430	387	156	20	0	0	0	0	0	5	81	332	762	1149	1305	1325	1325	1325
60	0	0	0	0	26	127	275	237	68	2	0	0	0	0	0	0	26	153	428	665	733	735	735	735
Base	**Growing Degree Units for Corn (Monthly)**												**Growing Degree Units for Corn (Accumulated Monthly)**											
50/86	0	0	12	81	248	410	581	547	319	127	29	1	0	0	12	93	341	751	1332	1879	2198	2325	2354	2355

(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

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

c. Snow Tables
   1. Snow Climatology
   2. Cooperative Summary of the Day

d. Freeze Data Table
   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
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