## 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: 287936** 

Lon: 75°14W

**Station: SEABROOK FARMS, NJ** 

Climate Division: NJ 2 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 40.3 24.2 32.3 70+ 1967 25 40.6 1998 -13 1985 21 20.9 1977 1016 0 .0 .0 6.2 7.2 25.4 .6 Jan .2 42.7 25.4 34.1 74+ 1985 25 41.2 1990 -4 1967 9 21.9 1979 867 0 .0 .0 7.6 5.6 21.4 Feb Mar 51.8 33.6 42.7 86 1998 31 48.1 2000 9 1978 6 36.8 1984 693 0 .0 .0 17.7 .8 15.2 0. 92 27 22 +1975 Apr 62.3 41.9 52.1 1990 56.6 1994 1965 1 46.5 388 .0 .2 27.1 .0 3.8 0. May 72.4 51.9 62.2 95 1991 31 68.4 1991 30 1966 11 58.9 1997 133 45 .0 .9 30.9 .0 .0 .0 23 74.9 41 67.8 @ 3.9 Jun 81.3 61.3 71.3 100 1988 1994 1972 11 1979 11 199 30.0 .0 .0 .0 Jul 85.7 76.3 5 79.4 49 1971 5 72.9 2000 349 8.6 31.0 0. 66.8 101 1966 1987 0 .1 .0 .0 1992 84.1 65.4 74.8 100 1988 16 78.2 1980 44+ 1976 31 71.1 0 302 @ 5.0 31.0 .0 .0 .0 Aug 31 Sep 77.6 57.6 67.6 98 1973 1 71.1 1998 36+ 1974 24 64.4 1984 108 .0 1.6 30.0 .0 .0 .0 45.7 4 62.1 23 24 Oct 66.5 56.1 88+ 1968 1971 1969 51.5 1988 291 14 .0 .0 30.6 .0 1.6 .0 55.4 37.5 46.5 80+ 1974 2 51.4 1994 15 1976 30 39.9 1976 556 0 .0 .0 21.4 9.2 .0 Nov .1 Dec 45.2 29.2 37.2 74 1998 8 42.7 1982 3 1967 2 24.1 1989 863 0 .0 .0 10.3 3.7 21.1 .0 Jul Jul Jan Jan 63.8 45.0 54.4 101 1966 5 79.4 1987 -13 1985 21 20.9 1977 4849 1018 20.2 273.8 17.4 97.7 .8 .1 Ann

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

Issue Date: February 2004 027-A

(1) From the 1971-2000 Monthly Normals

Elevation: 90 Feet Lat: 39°30N

- (2) Derived from station's available digital record: 1949-2001
- (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: 287936** 

Station: SEABROOK FARMS, NJ

Climate Division: NJ 2 NWS Call Sign: Elevation: 90 Feet Lat: 39°30N Lon: 75°14W

										Pı	recipi	tation	(incl	nes)										
	Mea	ans/	P	recipi	itatio	on Total						ays (3	)	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)				Extremes	,			Daily Precipitation				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	3.96	3.48	2.22	1986	26	7.33	1979	.62	1981	10.8	7.2	2.6	.8	1.29	1.67	2.22	2.69	3.14	3.61	4.12	4.72	5.49	6.69	7.79
Feb	2.94	2.96	2.27	1988	12	6.61	1971	.22	1978	9.8	5.4	1.6	.6	.74	1.01	1.44	1.82	2.19	2.59	3.03	3.55	4.23	5.31	6.32
Mar	4.33	3.98	4.75	2000	22	8.06	1993	1.41	1976	10.9	7.0	3.1	1.2	1.45	1.86	2.46	2.97	3.46	3.96	4.51	5.16	5.99	7.28	8.46
Apr	3.58	3.26	2.58	1970	15	7.89	1983	1.45	1985	10.9	6.9	2.7	.7	1.58	1.90	2.35	2.71	3.05	3.39	3.76	4.17	4.70	5.50	6.23
May	4.07	3.73	3.06	1990	11	8.10	1978	1.19	1986	11.6	7.6	2.7	.8	1.34	1.73	2.29	2.78	3.24	3.72	4.25	4.86	5.65	6.88	8.01
Jun	3.37	2.85	4.07	1968	13	8.79	1989	.72	1988	10.0	6.2	1.8	.8	.89	1.21	1.70	2.13	2.55	2.99	3.48	4.06	4.82	6.02	7.13
Jul	4.30	4.29	5.27	1975	14	11.95	1975	1.36	1983	10.2	6.6	2.7	.9	1.47	1.87	2.47	2.97	3.45	3.95	4.49	5.12	5.93	7.19	8.34
Aug	4.18	4.10	5.72	1967	4	9.82	1971	1.13	1973	8.9	6.0	2.7	1.1	1.20	1.60	2.19	2.71	3.22	3.75	4.33	5.02	5.92	7.32	8.62
Sep	3.83	3.44	6.22	1950	11	10.01	1999	1.01	1998	9.3	5.8	2.4	1.1	1.22	1.59	2.12	2.58	3.03	3.48	3.98	4.57	5.33	6.51	7.59
Oct	3.36	3.20	2.64	1970	23	6.59	1976	.24	2000	8.2	5.2	2.2	.9	.85	1.17	1.66	2.09	2.52	2.97	3.47	4.06	4.84	6.07	7.22
Nov	3.19	2.80	6.57	1950	25	7.71	1972	.50	1976	9.6	5.7	2.5	.8	.72	1.01	1.48	1.90	2.32	2.76	3.27	3.87	4.65	5.91	7.09
Dec	3.76	2.91	3.45	1986	25	8.91	1996	.75	1980	10.0	6.3	2.4	.9	.83	1.17	1.73	2.22	2.72	3.25	3.85	4.57	5.51	7.01	8.42
Ann	44.87	42.24	6.57	Nov 1950	25	11.95	Jul 1975	.22	Feb 1978	120.2	75.9	29.4	10.6	33.77	35.97	38.75	40.84	42.69	44.47	46.30	48.31	50.73	54.22	57.22

<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: 1949-2001

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

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**COOP ID: 287936** 

Station: SEABROOK FARMS, NJ

Climate Division: NJ 2 NWS Call Sign: Elevation: 90 Feet Lat: 39°30N Lon: 75°14W

										Snov	w (incl	hes)												
						Sno	ow To	tals							Mean Number of Days (1)									
	Mean	s/Medi	ians (1)	)	Extremes (2)												Snow Fall >= Thresholds						ı İs	
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	5.0	1.5	1	#	8.5	1987	23	21.3	1987	11	1996	10	3	1996	2.2	1.6	.8	.4	.0	3.8	2.2	1.3	.2	
Feb	6.0	4.0	1	#	11.0	1987	23	23.6	1996	12	1987	23	3+	1996	2.1	1.4	.5	.2	.1	3.9	1.7	.9	.1	
Mar	.8	.0	#	0	5.0	1996	2	8.5	1996	5	1996	2	1	1996	.4	.2	.1	.1	.0	.6	.1	.1	.0	
Apr	.6	.0	#	0	3.0	1990	7	3.0+	1997	3	1997	1	#+	1997	.3	.3	.1	.0	.0	.1	@	.0	.0	
May	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.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	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
Nov	.3	.0	#	0	5.5	1989	23	5.5	1989	6	1989	23	#+	1989	.1	.1	.1	.1	.0	.1	.1	@	.0	
Dec	1.1	.0	#	#	4.5	1990	28	4.5	1990	6	1989	13	1+	2000	.6	.5	.3	.0	.0	.9	.2	.1	.0	
Ann	13.8	5.5	N/A	N/A	11.0	Feb 1987	23	23.6	Feb 1996	12	Feb 1987	23	3+	Feb 1996	5.7	4.1	1.9	.8	.1	9.4	4.3	2.4	.3	

<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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**Elevation:** 

90 Feet

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**COOP ID: 287936** 

Lon: 75°14W

Lat: 39°30N

Station: SEABROOK FARMS, NJ

Climate Division: NJ 2 NWS Call Sign:

				Freez	e Data						
			Spri		ates (Month/	Day)					
Temp (F)		P	robability of	later date i	n spring (thr	u Jul 31) tha	n indicated(	*)			
Temp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90		
36	5/06	5/02	4/29	4/26	4/24	4/21	4/19	4/15	4/11		
32	4/23	4/19	4/16	4/14	4/11	4/09	4/07	4/04	3/31		
28	4/12	4/08	4/04	4/01	3/30	3/27	3/24	3/20	3/16		
24	4/01	3/27	3/24	3/21	3/19	3/16	3/14	3/10	3/06		
20	3/24	3/18	3/14	3/10	3/07	3/04	2/28	2/24	2/18		
16	3/13	3/05	2/28	2/23	2/19	2/15	2/10	2/05	1/28		
			Fal	l Freeze Da	tes (Month/D	ay)	•	•			
Probability of earlier date in fall (beginning Aug 1) than indicated(*)											
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90		
36	9/28	10/03	10/07	10/10	10/13	10/16	10/20	10/23	10/29		
32	10/14	10/19	10/22	10/25	10/28	10/31	11/03	11/07	11/12		
28	10/27	11/01	11/05	11/08	11/11	11/14	11/17	11/21	11/26		
24	11/09	11/15	11/20	11/23	11/27	12/01	12/04	12/09	12/15		
20	11/26	12/02	12/06	12/10	12/13	12/16	12/20	12/24	12/29		
16	12/07	12/13	12/17	12/21	12/25	12/28	1/01	1/05	1/12		
1		•	•	Freeze F	ree Period				•		
Tomp (E)			Probability	of longer th	an indicated	freeze free p	eriod (Days)				
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90		
36	194	187	181	176	172	168	163	157	150		
32	220	213	208	203	199	195	191	185	178		
28	250	242	236	231	226	221	216	210	201		
24	271	264	260	256	252	249	245	240	234		
20	306	297	291	285	280	275	269	263	254		
16	335	326	319	313	308	303	297	290	281		

<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. Derived from 1971-2000 serially complete daily data

Complete do

Complete documentation available from:

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Station: SEABROOK FARMS, NJ

Climate Division: NJ 2 NWS Call Sign: Elevation: 90 Feet Lat: 39°30N Lon: 75°14W

	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	1016	867	693	388	133	11	0	0	31	291	556	863	4849		
60	861	727	538	245	53	1	0	0	6	171	407	708	3717		
57	768	643	445	170	25	0	0	0	2	115	322	615	3105		
55	706	587	388	126	13	0	0	0	1	85	269	559	2734		
50	562	458	250	48	2	0	0	0	0	33	152	416	1921		
32	151	107	14	0	0	0	0	0	0	0	2	74	348		

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	158	163	345	603	935	1179	1372	1325	1067	747	437	235	8566
55	0	0	6	39	235	489	659	612	377	119	13	6	2555
57	0	0	1	22	185	429	597	550	319	87	6	0	2196
60	0	0	0	8	119	340	504	457	233	50	2	0	1713
65	0	0	0	1	45	199	349	302	108	14	0	0	1018
70	0	0	0	0	10	89	200	158	29	2	0	0	488

										Gro	wing ]	Degre	e Uni	ts (2)										
Base	Growing Degree Units (Monthly)											Growing Degree Units (Accumulated Monthly)												
Jan         Feb         Mar         Apr         May         Jun         Jul         Aug         Sep         Oct         Nov         Dec         Jan         H											Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
40	37	57	163	373	691	943	1128	1076	824	500	238	74	37	94	257	630	1321	2264	3392	4468	5292	5792	6030	6104
45	16	20	80	241	536	793	973	921	674	351	135	34	16	36	116	357	893	1686	2659	3580	4254	4605	4740	4774
50	3	8	37	130	383	643	818	766	524	220	66	7	3	11	48	178	561	1204	2022	2788	3312	3532	3598	3605
55	0	0	14	65	243	493	663	611	376	116	26	1	0	0	14	79	322	815	1478	2089	2465	2581	2607	2608
60	0	0	3	24	131	345	508	456	240	52	8	0	0	0	3	27	158	503	1011	1467	1707	1759	1767	1767
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	26	33	87	206	415	632	784	742	531	290	125	37	26	59	146	352	767	1399	2183	2925	3456	3746	3871	3908

(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

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