## 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: NEW HOLLAND, NC 1971-2000 COOP ID: 316135

Climate Division: NC 7 NWS Call Sign: Elevation: 2 Feet Lat: 35°27N Lon: 76°13W

									r	Гетр	eratur	re (°F)										
	Mea	<b>n</b> (1)						Extr	emes					Degree Base To	Days (1) emp 65		Mean	an 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	53.0	32.7	42.9	80+	1950	16	53.4	1974	-12	1985	21	31.7	1977	687	0	.0	.0	21.5	.6	13.4	@	
Feb	55.1	33.5	44.3	84	1962	28	51.0	1990	10	1958	18	33.2	1978	580	0	.0	.0	21.1	.3	10.3	.0	
Mar	63.0	40.4	51.7	86+	1990	13	58.0	1997	17	1978	1	47.6	1981	414	1	.0	.0	29.1	@	4.1	.0	
Apr	70.7	47.7	59.2	93	1990	27	63.6	1977	28+	1976	13	55.1	1975	193	18	.0	.3	30.0	.0	.6	.0	
May	77.9	58.2	68.1	96+	1996	20	73.2	1991	34+	1950	9	64.7	1992	33	128	.0	1.1	31.0	.0	.0	.0	
Jun	84.4	65.4	74.9	99+	1952	27	78.8	1981	42	1947	5	70.8	1972	2	299	.0	6.6	30.0	.0	.0	.0	
Jul	88.2	70.5	79.4	100+	1977	20	82.0	1991	40	1947	23	76.6	2000	0	445	@	14.3	31.0	.0	.0	.0	
Aug	87.0	69.2	78.1	98+	1979	10	80.3	1998	43	1981	25	73.3	1976	0	407	@	10.2	31.0	.0	.0	.0	
Sep	82.9	64.1	73.5	97+	1983	7	76.5	1998	40	1983	23	69.6	1976	3	257	.0	2.7	30.0	.0	.0	.0	
Oct	73.7	53.0	63.4	93+	1986	2	68.7	1971	23	1976	29	56.8	1976	132	80	.0	.2	31.0	.0	.2	.0	
Nov	65.1	43.7	54.4	85	1974	3	63.0	1985	15	1950	26	45.0	1976	333	15	.0	.0	29.0	.0	2.8	.0	
Dec	57.5	36.5	47.0	78+	2001	2	54.2	1971	6	1989	25	36.8	1989	560	2	.0	.0	25.3	.1	9.6	.0	
Ann	71.5	51.2	61.4	100+	Jul 1977	20	82.0	Jul 1991	-12	Jan 1985	21	31.7	Jan 1977	2937	1652	.0	35.4	340.0	1.0	41.0	@	

<sup>+</sup> Also occurred on an earlier date(s)

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

Issue Date: February 2004 070-A

- (1) From the 1971-2000 Monthly Normals
- (2) Derived from station's available digital record: 1933-2001
- (3) Derived from 1971-2000 serially complete daily data

<sup>@</sup> Denotes mean number of days greater than 0 but less than .05

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Station: NEW HOLLAND, NC

COOP ID: 316135

Climate Division: NC 7 NWS Call Sign: Elevation: 2 Feet Lat: 35°27N Lon: 76°13W

										Pı	recipi	tation	(incl	nes)										
	Me	ans/	P	recip	itatio	on Total					ean N of D	ays (3	5)	Proba	ability th		nonthly/	annual j	precipita ated an	babilit ation wi nount vs Proba	ll be equ		less tha	an the
	Medi	ans(1)				Extremes	•			L	any Fre	стриацо	11		Th	ese value	s were de	ermined	from the	incomplet	e gamma	distribut	ion	
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	4.87	4.25	3.90	1960	31	9.16	1978	2.08	1984	11.3	7.8	3.3	1.2	1.97	2.41	3.05	3.57	4.06	4.56	5.11	5.73	6.52	7.73	8.83
Feb	3.29	3.29	5.30	1970	3	6.70	1998	.49	1991	8.2	5.3	2.0	.7	1.18	1.49	1.93	2.31	2.67	3.04	3.44	3.90	4.50	5.42	6.26
Mar	4.11	3.67	3.00	1962	12	8.38	1994	.67	1998	9.6	6.3	2.8	.8	1.33	1.72	2.29	2.78	3.26	3.75	4.28	4.91	5.72	6.98	8.15
Apr	3.24	2.84	4.70	1978	26	7.80	1978	.40	1995	7.4	4.7	1.9	.7	.77	1.07	1.54	1.96	2.38	2.83	3.33	3.92	4.70	5.94	7.10
May	4.16	3.67	3.96	1934	2	9.14	1984	.44	1986	9.3	6.0	2.4	1.0	.78	1.15	1.76	2.32	2.90	3.52	4.22	5.07	6.21	8.03	9.76
Jun	4.46	4.21	14.92	1949	30	8.07	1981	.93	1990	8.1	6.1	2.7	1.2	1.73	2.14	2.73	3.22	3.69	4.16	4.67	5.26	6.01	7.16	8.21
Jul	5.04	4.82	5.65	1962	4	9.78	1986	1.15	1991	10.7	7.0	2.9	1.3	1.86	2.34	3.02	3.58	4.12	4.67	5.27	5.97	6.86	8.22	9.47
Aug	6.50	6.26	8.55	1986	19	15.74	1986	1.05	1997	10.3	7.4	3.4	1.9	1.52	2.12	3.07	3.93	4.77	5.67	6.68	7.88	9.46	11.97	14.33
Sep	5.39	4.35	10.70	1979	5	17.89	1979	.39	1978	8.3	6.0	2.8	1.6	.56	.95	1.70	2.45	3.26	4.17	5.24	6.58	8.41	11.45	14.41
Oct	4.34	3.35	6.55	1942	14	14.48	1971	.00	2000	5.8	3.8	2.1	1.2	.46	.97	1.70	2.32	2.96	3.65	4.42	5.36	6.60	8.60	10.50
Nov	3.47	3.05	4.97	1985	4	9.32	1972	.56	1973	7.0	5.0	2.2	.8	.90	1.22	1.73	2.17	2.61	3.07	3.58	4.19	4.98	6.23	7.40
Dec	3.63	3.56	3.22	1941	24	7.71	1981	.66	1985	8.4	5.8	2.4	.9	1.14	1.48	1.99	2.43	2.86	3.30	3.78	4.35	5.08	6.22	7.27
Ann	52.50	51.11	14.92	Jun 1949	30	17.89	Sep 1979	.00	Oct 2000	104.4	71.2	30.9	13.3	40.38	42.80	45.86	48.16	50.18	52.13	54.12	56.30	58.93	62.71	65.96

<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: 1933-2001

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**COOP ID: 316135** 

Station: NEW HOLLAND, NC

Climate Division: NC 7 NWS Call Sign: Elevation: 2 Feet Lat: 35°27N Lon: 76°13W

		Il Fall Depth Depth Snow Snow Fall Day Monthly Snow Fall Day Depth Snow Fall Day Depth Snow Snow Snow Snow Snow Snow Snow Snow																						
		Extremes (2)     Extremes (2)   Extremes (															Mea	ın Nu	mber	of Day	<b>ys</b> (1)			
	Mean	s/Medi	ians (1)	1					Extre	mes (2)							ow Fa				Snow Depth >= Thresholds			
Month	Snow Fall Mean	Fall	Depth	Depth	Daily Snow	Year	Day	Monthly Snow	Year	Daily Snow	Year	Day	Monthly Mean Snow	Year	0.1	1.0	3.0	5.0	10.0	1	3	5	10	
Jan	.4	.0	#	0	4.0	1973	8	4.0	1973	4	1976	17	#+	1976	.1	.1	.1	.0	.0	.1	@	.0	.0	
Feb	.2	.0	#	0	3.0	1978	22	3.0	1978	10	1973	11	2	1973	.1	.1	.1	.0	.0	@	@	.0	.0	
Mar	.1	.0	0	0	1.0	1971	26	1.0	1971	0	0	0	0	0	.1	.1	.0	.0	.0	.0	.0	.0	.0	
Apr	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.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	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
Dec	#	.0	0	0	#	1993	22	#	1993	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
Ann	.7	.0	N/A	N/A	4.0	Jan 1973	8	4.0	Jan 1973	10	Feb 1973	11	2	Feb 1973	.3	.3	.2	.0	.0	.1	@	.0	.0	

<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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**Station: NEW HOLLAND, NC** 

Climate Division: NC 7 NWS Call Sign:

Elevation: 2 Feet Lat: 35°27N Lon: 76°13W

				Freez	e Data									
			Spri	ng Freeze D	ates (Month	/Day)								
Probability of later date in spring (thru Jul 31) than indicated(*)   10   20   30   40   50   60   70   80   90     36   4/26   4/19   4/14   4/10   4/06   4/02   3/29   3/24   3/18     32   4/15   4/08   4/02   3/28   3/24   3/20   3/15   3/09   3/02     28   4/02   3/24   3/17   3/12   3/06   3/01   2/24   2/17   2/08     24   3/14   3/05   2/27   2/22   2/17   2/12   2/07   1/31   1/21     20   3/03   2/22   2/16   2/11   2/05   1/31   1/24   1/16   0/00     16   2/10   2/02   1/27   1/21   1/14   1/05   0/00   0/00   0/00     Temp (F)														
icinp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90					
36	4/26	4/19	4/14	4/10	4/06	4/02	3/29	3/24	3/18					
32	4/15	4/08	4/02	3/28	3/24	3/20	3/15	3/09	3/02					
28	4/02	3/24	3/17	3/12	3/06	3/01	2/24	2/17	2/08					
24	3/14	3/05	2/27	2/22	2/17	2/12	2/07	1/31	1/21					
20	3/03	2/22	2/16	2/11	2/05	1/31	1/24	1/16	0/00					
16	2/10	2/02	1/27	1/21	1/14	1/05	0/00	0/00	0/00					
			Fa	ll Freeze Da	tes (Month/I	Day)								
Tomp (F)		Pro	bability of e	arlier date i	n fall (beginr	ning Aug 1) t	han indicate	ed(*)						
remp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90					
36	10/16	10/23	10/29	11/02	11/06	11/10	11/15	11/20	11/27					
32	11/01	11/08	11/13	11/17	11/21	11/25	11/29	12/04	12/11					
28	11/14	11/22	11/28	12/03	12/07	12/12	12/17	12/22	12/30					
24	11/25	12/06	12/14	12/20	12/27	1/02	1/09	1/18	1/31					
20	12/04	12/16	12/25	1/02	1/10	1/18	1/28	2/11	0/00					
16	12/24	1/03	1/11	1/18	1/27	2/11	0/00	0/00	0/00					
		•		Freeze F	ree Period	•		•						
Temp (F)			Probability	of longer th	an indicated	freeze free p	eriod (Days)							
Temp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90					
36	244	234	226	219	213	207	201	193	182					
32	275	263	255	248	241	235	227	219	207					
28	314	301	291	283	275	267	259	250	236					
24	>365	343	328	318	309	301	293	283	270					
20	>365	>365	>365	350	334	322	312	301	287					
16	>365	>365	>365	>365	>365	365	350	340	329					

<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.

Complete documentation available from:

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COOP ID: 316135

Climate Division: NC 7 NWS Call Sign: Elevation: 2 Feet Lat: 35°27N Lon: 76°13W

				Deg	ree Days to	o Selected	Base Tem	peratures	(°F)				
Base						Heatin	g Degree l	Days (1)					
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	687	580	414	193	33	2	0	0	3	132	333	560	2937
60	545	446	271	92	5	0	0	0	0	62	212	418	2051
57	460	367	196	51	1	0	0	0	0	35	154	336	1600
55	407	317	153	31	0	0	0	0	0	23	121	286	1338
50	287	206	71	6	0	0	0	0	0	6	56	183	815
32	37	14	0	0	0	0	0	0	0	0	0	10	61

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	373	358	610	815	1118	1288	1468	1430	1244	971	672	475	10822
55	30	17	50	156	405	598	755	717	554	281	102	38	3703
57	22	11	31	115	344	538	693	655	494	232	75	26	3236
60	13	6	14	66	256	448	600	562	404	166	44	14	2593
65	0	0	1	18	128	299	445	407	257	80	15	2	1652
70	0	0	0	2	45	164	290	252	126	28	3	0	910

										Base Growing Degree Units (Monthly) Growing Degree Units (Accumulated Monthly)														
Base					Growin	g Degree	Units (M	Ionthly)					Growing Degree Units (Accumulated Monthly)											
	Jan   Feb   Mar   Apr   May   Jun   Jul   Aug   Sep   Oct   Nov   Dec													Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
40	211	251	433	639	901	1074	1237	1201	1031	758	489	282	211	462	895	1534	2435	3509	4746	5947	6978	7736	8225	8507
45	5         116         152         292         490         746         924         1082         1046         881         603         352											167	116	268	560	1050	1796	2720	3802	4848	5729	6332	6684	6851
50	58 77 173 345 591 774 927 891 731 452 231											85	58	135	308	653	1244	2018	2945	3836	4567	5019	5250	5335
55	26	31	87	214	438	624	772	736	581	304	127	42	26	57	144	358	796	1420	2192	2928	3509	3813	3940	3982
60	2	7	35	112	286	474	617	581	431	176	57	12	2	9	44	156	442	916	1533	2114	2545	2721	2778	2790
Base	Growing Degree Units for Corn (Monthly)													Gr	owing D	egree Un	its for C	orn (Acc	umulate	d Month	ly)	•		
50/86	<b>0/86</b> 123 146 257 393 593 745 874 848 716 478 291 16												123	269	526	919	1512	2257	3131	3979	4695	5173	5464	5624

(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

#### 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