Climatography of the United States No. 20

National Climatic Data Center Federal Building 151 Patton Avenue Asheville, North Carolina 28801 www.ncdc.noaa.gov

COOP ID: 335041

Station: MC CONNELSVILLE LOCK 7, OH

1971-2000

Climate Division: OH10 NWS Call Sign: Elevation: 760 Feet Lat: 39°39N Lon: 81°51W

									ŗ	Гетр	eratui	re (°F)										
	Mea	n (1)						Extr	emes						Days (1) emp 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	37.6	18.9	28.3	77	1950	26	37.6	1990	-32	1994	19	14.7	1977	1141	0	.0	.0	5.5	10.4	27.8	3.1	
Feb	41.6	20.9	31.3	76+	2000	27	39.6	1976	-15+	1981	12	19.2	1978	944	0	.0	.0	7.3	6.2	24.1	2.9	
Mar	52.6	28.9	40.8	88	1929	25	49.5	1976	-11	1980	2	33.8	1996	752	0	.0	.0	18.2	1.4	21.4	.3	
Apr	64.1	37.7	50.9	92	1960	25	56.0	1977	8	1923	1	46.2	1997	424	2	.0	.1	26.6	.0	11.3	.0	
May	73.4	48.0	60.7	95	1962	19	68.0	1991	23	1966	10	54.7	1997	191	57	.0	.5	31.0	.0	1.5	.0	
Jun	80.8	57.4	69.1	99+	1988	26	73.2	1971	32	1972	11	65.1	1992	24	147	.0	2.7	30.0	.0	@	.0	
Jul	84.3	62.2	73.3	105+	1934	21	76.8	1983	40	1988	3	69.1	2000	2	257	@	6.8	31.0	.0	.0	.0	
Aug	82.9	60.8	71.9	104	1930	4	76.1	1983	39+	1986	29	67.5	1992	12	225	.0	4.4	31.0	.0	.0	.0	
Sep	76.5	53.1	64.8	104	1953	3	69.2	1977	28	1942	29	61.6	1975	77	71	.0	1.4	30.0	.0	.1	.0	
Oct	65.3	40.2	52.8	98	1953	1	60.1	1971	17+	1962	27	45.6	1988	388	9	.0	.0	29.6	.0	7.4	.0	
Nov	53.3	32.4	42.9	85	1950	1	49.5	1985	-5	1958	30	36.2	1996	665	0	.0	.0	17.9	.4	18.0	.0	
Dec	42.2	24.2	33.2	77	1982	4	41.2	1982	-18	1917	11	19.6	1989	986	0	.0	.0	8.3	5.6	25.2	.9	
Ann	62.9	40.4	51.7	105+	Jul 1934	21	76.8	Jul 1983	-32	Jan 1994	19	14.7	Jan 1977	5606	768	@	15.9	266.4	24.0	136.8	7.2	

⁺ Also occurred on an earlier date(s)

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

Issue Date: February 2004 052-A

[@] Denotes mean number of days greater than 0 but less than .05

⁽¹⁾ From the 1971-2000 Monthly Normals

⁽²⁾ Derived from station's available digital record: 1900-2001

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

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: 335041

Station: MC CONNELSVILLE LOCK 7, OH

Climate Division: OH10 NWS Call Sign: Elevation: 760 Feet Lat: 39°39N Lon: 81°51W

										Pı	recipi	tation	(incl	hes)													
	Me	ans/	P	recip	itatio	on Total					ean N of D	ays (3	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	•			D	any Fre	стриацо	11	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	3.12	2.97	2.36	1998	8	6.63	1999	.74	1981	11.9	7.8	1.9	.3	1.00	1.29	1.73	2.11	2.47	2.84	3.25	3.73	4.35	5.31	6.20			
Feb	2.59	2.35	2.30	1988	2	5.05	2000	.45	1978	10.1	6.9	1.7	.3	.64	.88	1.26	1.59	1.92	2.27	2.67	3.13	3.74	4.70	5.61			
Mar	3.47	3.22	3.07	1945	6	7.10	1997	1.57	1979	11.2	8.3	2.5	.5	1.53	1.84	2.27	2.62	2.95	3.29	3.64	4.05	4.57	5.35	6.06			
Apr	3.62	3.45	2.75	1989	26	6.71	1983	.83	1971	11.9	8.3	2.5	.5	1.28	1.62	2.11	2.53	2.93	3.34	3.78	4.30	4.97	6.00	6.94			
May	4.51	4.20	2.55	1968	24	8.72	1995	.98	1991	11.5	9.0	3.3	.8	1.48	1.91	2.54	3.07	3.59	4.12	4.70	5.38	6.26	7.62	8.87			
Jun	4.39	4.29	5.00	2000	17	12.02	1998	.82	1984	9.8	7.3	3.1	1.1	1.24	1.66	2.29	2.84	3.37	3.93	4.55	5.28	6.23	7.72	9.11			
Jul	4.81	4.61	4.68	1985	15	12.58	1992	1.80	1995	10.2	8.1	3.6	1.3	1.89	2.33	2.97	3.49	3.99	4.49	5.04	5.67	6.47	7.70	8.82			
Aug	4.25	3.83	3.94	1970	10	11.33	1974	1.19	1981	9.2	7.1	3.2	1.1	1.36	1.77	2.36	2.87	3.37	3.87	4.43	5.09	5.93	7.24	8.45			
Sep	3.21	2.91	3.58	1948	19	8.72	1996	.70	1984	7.8	5.7	2.1	.9	.82	1.12	1.59	2.00	2.41	2.84	3.31	3.88	4.62	5.79	6.88			
Oct	2.72	2.41	3.39	1911	7	7.70	1983	.45	1994	8.6	5.8	1.7	.5	.70	.96	1.35	1.70	2.04	2.41	2.81	3.29	3.91	4.89	5.81			
Nov	3.37	3.07	3.65	1989	23	11.05	1985	.59	1976	11.0	7.3	2.1	.7	.97	1.29	1.77	2.19	2.60	3.03	3.50	4.05	4.77	5.90	6.95			
Dec	3.17	2.79	1.97	1901	14	7.13	1990	1.43	1976	11.5	7.4	2.0	.5	1.32	1.60	2.01	2.34	2.66	2.97	3.32	3.71	4.21	4.97	5.66			
Ann	43.23	42.22	5.00	Jun 2000	17	12.58	Jul 1992	.45+	Oct 1994	124.7	89.0	29.7	8.5	32.56	34.68	37.36	39.38	41.16	42.87	44.63	46.57	48.90	52.27	55.16			

⁺ Also occurred on an earlier date(s)

Complete documentation available from:

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

[#] 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: 1900-2001

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

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: 335041

Station: MC CONNELSVILLE LOCK 7, OH

Climate Division: OH10 NWS Call Sign:

Elevation: 760 Feet Lat: 39°39N Lon: 81°51W

										Snov	v (incl	hes)											
						Sno	ow To	tals									Mea	n Nu	mber	of Day	ys (1)		
	Mean	s/Medi	ans (1)						Extre	mes (2)							ow Fa		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	9.1	7.0	2	#	8.0	1978	20	35.0	1978	18	1978	20	8+	1978	4.2	3.1	1.0	.3	.0	7.3	4.4	3.2	1.0
Feb	6.0	4.5	1	#	10.0	1979	19	27.0	1979	20	1979	19	10	1979	3.1	1.9	.5	.2	@	6.7	4.7	3.7	1.0
Mar	3.4	1.8	#	0	16.0	1993	14	16.0	1993	10	1978	3	3	1978	1.4	.9	.4	.1	@	2.0	1.0	.8	.1
Apr	.4	.0	#	0	9.5	1987	4	9.5	1987	4	1973	12	#+	1977	.3	.2	.1	.1	.0	.2	.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	.7	.0	#	0	3.0	1971	25	4.5	1977	3	1977	28	#+	1991	.6	.3	.1	.0	.0	.5	.2	.0	.0
Dec	2.5	1.0	#	#	7.0	1984	7	10.5	1989	3	1976	3	1	1976	1.8	1.1	.2	@	.0	2.2	.2	.0	.0
Ann	22.1	14.3	N/A	N/A	16.0	Mar 1993	14	35.0	Jan 1978	20	Feb 1979	19	10	Feb 1979	11.4	7.5	2.3	.7	@	18.9	10.6	7.7	2.1

⁺ Also occurred on an earlier date(s) #Denotes trace amounts

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

[@] 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

Climatography of the United States No. 20

1971-2000

Elevation: 760 Feet

National Climatic Data Center Federal Building 151 Patton Avenue Asheville, North Carolina 28801 www.ncdc.noaa.gov

COOP ID: 335041

Lat: 39°39N

Lon: 81°51W

Station: MC CONNELSVILLE LOCK 7, OH

Climate Division: OH10 NWS Call Sign:

Freeze Data Spring Freeze Dates (Month/Day) Probability of later date in spring (thru Jul 31) than indicated(*) Temp (F) .10 .20 .30 .40 .60 .70 .80 .90 36 5/29 5/23 5/19 5/15 5/12 5/09 5/05 5/01 4/25 32 5/20 5/15 5/11 5/07 5/04 5/01 4/28 4/24 4/18 28 5/06 4/30 4/26 4/23 4/20 4/17 4/13 4/09 4/04 4/14 3/27 24 4/21 4/17 4/11 4/09 4/06 4/03 3/31 20 4/13 4/08 4/04 4/01 3/29 3/26 3/23 3/19 3/14 3/24 16 3/31 3/19 3/15 3/11 3/07 3/03 2/26 2/19 Fall Freeze Dates (Month/Day) Probability of earlier date in fall (beginning Aug 1) than indicated(*) Temp (F) .20 .30 .40 .50 .70 .10 .60 .80 .90 9/30 36 9/23 9/27 10/02 10/04 10/06 10/08 10/11 10/15 32 10/02 10/07 10/10 10/13 10/15 10/17 10/20 10/23 10/28 28 10/11 10/17 10/21 10/24 10/27 10/30 11/03 11/07 11/12 24 10/20 10/26 10/30 11/03 11/06 11/09 11/13 11/17 11/22 20 10/29 11/04 11/08 11/12 11/15 11/18 11/22 11/26 12/02 11/23 11/27 12/01 12/05 12/21 16 11/11 11/18 12/09 12/14 Freeze Free Period **Probability of longer than indicated freeze free period (Days)** Temp (F) .10 .20 .30 .40 .50 .60 .70 .80 .90 159 153 149 144 140 135 130 122 36 166 32 182 176 171 167 163 159 155 151 144 28 214 206 200 190 174 165 195 185 180 24 235 227 221 215 210 206 200 194 186 254 235 230 225 214 20 246 240 220 206

269

0/00 Indicates that the probability of occurrence of threshold temperature is less than the indicated probability.

274

Complete documentation available from:

254

279

287

16

249

241

264

259

^{*} Probability of observing a temperature as cold, or colder, later in the spring or earlier in the fall than the indicated date.

Climate Division: OH10

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: 335041

Station: MC CONNELSVILLE LOCK 7, OH

NWS Call Sign:

Elevation: 760 Feet Lat: 39°39N Lon: 81°51W

				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	1141	944	752	424	191	24	2	12	77	388	665	986	5606
60	986	804	600	284	103	5	0	0	25	256	516	831	4410
57	893	720	513	209	65	1	0	0	10	190	429	738	3768
55	831	664	456	164	45	1	0	0	5	151	375	682	3374
50	684	533	323	78	15	0	0	0	1	77	246	538	2495
32	235	152	45	0	0	0	0	0	0	0	16	151	599

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	117	132	316	568	889	1113	1278	1236	984	644	341	187	7805
55	0	0	14	42	221	424	565	523	299	82	10	6	2186
57	0	0	9	26	179	365	503	461	244	58	4	0	1849
60	0	0	3	12	125	278	410	368	169	32	1	0	1398
65	0	0	0	2	57	147	257	225	71	9	0	0	768
70	0	0	0	0	20	53	122	110	19	1	0	0	325

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 Ja												Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec					
40	28	42	147	339	637	867	1032	991	749	410	167	51	28	70	217	556	1193	2060	3092	4083	4832	5242	5409	5460					
45	6	16	80	222	484	717	877	836	599	273	92	25	6	22	102	324	808	1525	2402	3238	3837	4110	4202	4227					
50	3	1	39	124	337	567	722	681	451	156	45	6	3	4	43	167	504	1071	1793	2474	2925	3081	3126	3132					
55	0	0	18	68	210	419	567	526	311	80	18	0	0	0	18	86	296	715	1282	1808	2119	2199	2217	2217					
60	0	0	3	29	107	280	412	372	183	29	5	0	0	0	3	32	139	419	831	1203	1386	1415	1420	1420					
Base		Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)															
50/86	23	34	115	236	412	572	694	666	483	270	111	35	23	57	172	408	820	1392	2086	2752	3235	3505	3616	3651					

(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