

# Climatography of the United States No. 20

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

Station: BOISE LUCKY PEAK DAM, ID

1971-2000

COOP ID: 101018

Climate Division: ID 5

NWS Call Sign:

Elevation: 2,840 Feet Lat: 43° 32N

Lon: 116° 03W

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	38.6	21.7	30.2	67	1953	9	37.5	1998	-16	1962	22	17.5	1979	1081	0	.0	.0	2.2	8.7	27.0	1.2
Feb	45.4	26.4	35.9	72	1977	20	43.0	1992	-17	1989	5	20.7	1989	814	0	.0	.0	8.8	2.7	21.7	.6
Mar	54.4	31.1	42.8	80	1978	29	49.9	1986	7	1971	1	36.6	1976	691	0	.0	.0	22.1	.2	17.0	.0
Apr	62.9	37.1	50.0	93	1987	28	56.9	1987	17	1975	1	41.8	1975	452	3	.0	.1	28.0	.0	8.6	.0
May	72.1	43.8	58.0	100	2001	25	65.0	1992	22	1954	1	52.6	1977	239	20	.0	1.5	30.7	.0	1.6	.0
Jun	81.4	49.9	65.7	106+	1961	20	71.9	1986	32	1962	4	60.5	1991	90	109	.9	6.9	30.0	.0	.0	.0
Jul	90.2	55.6	72.9	112	1960	19	77.9	1985	40+	1999	5	63.1	1993	18	263	2.8	18.2	31.0	.0	.0	.0
Aug	90.0	55.5	72.8	109	1983	8	78.0	1971	35	1960	27	68.1	1976	19	258	2.3	17.6	31.0	.0	.0	.0
Sep	79.5	47.3	63.4	104	1998	4	70.0	1998	27+	1999	27	56.8	1985	135	87	.1	4.6	30.0	.0	.4	.0
Oct	66.8	39.3	53.1	95	1992	1	59.4	1988	10	1971	29	48.6	1971	374	3	.0	.2	29.8	.0	5.9	.0
Nov	49.3	30.4	39.9	80+	1999	8	46.1	1999	-3	1993	24	28.3	1985	755	0	.0	.0	13.9	1.5	18.5	@
Dec	39.1	22.4	30.8	65	1987	7	36.8	1977	-17	1990	21	14.9	1985	1062	0	.0	.0	3.2	7.2	26.6	1.7
Ann	64.1	38.4	51.3	112	Jul 1960	19	78.0	Aug 1971	-17+	Dec 1990	21	14.9	Dec 1985	5730	743	6.1	49.1	260.7	20.3	127.3	3.5

+ 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/normal/usnormals.html](http://www.ncdc.noaa.gov/oa/climate/normal/usnormals.html)

Issue Date: February 2004

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1951-2001

(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

**Station: BOISE LUCKY PEAK DAM, ID**

**COOP ID: 101018**

**Climate Division: ID 5**

**NWS Call Sign:**

**Elevation: 2,840 Feet Lat: 43°32N**

**Lon: 116°03W**

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	1.78	1.72	1.33	1979	11	3.85	1998	.26	1985	8.7	4.5	.6	.1	.51	.68	.93	1.16	1.37	1.60	1.85	2.14	2.52	3.11	3.67
Feb	1.49	1.36	.90+	2000	14	4.54	1986	.44	1973	7.4	3.5	.2	.0	.39	.53	.74	.93	1.12	1.32	1.54	1.80	2.13	2.67	3.17
Mar	1.71	1.79	1.17	1983	13	3.66+	1989	.09	1994	8.8	4.5	.4	@	.33	.48	.73	.96	1.20	1.45	1.74	2.08	2.54	3.28	3.98
Apr	1.49	1.38	1.58	1969	7	3.12	1978	.21	1987	8.7	4.0	.4	.1	.46	.61	.82	1.00	1.17	1.35	1.55	1.79	2.09	2.56	2.99
May	1.50	1.26	1.87	1958	12	5.04	1998	.00	1992	7.6	3.9	.6	@	.16	.34	.59	.81	1.03	1.26	1.53	1.85	2.28	2.96	3.61
Jun	.93	.71	1.47	1976	11	2.72	1993	.05	1996	5.3	2.8	.5	.1	.09	.15	.28	.41	.55	.71	.90	1.14	1.46	2.01	2.55
Jul	.39	.25	1.11	1960	31	1.52	1982	.00+	1999	2.9	1.2	.1	.0	.00	.00	.05	.10	.17	.25	.35	.47	.65	.95	1.26
Aug	.33	.11	1.81	1968	10	2.02	1976	.00+	1996	2.6	1.1	.1	.0	.00	.00	.00	.03	.07	.13	.22	.35	.55	.92	1.31
Sep	.82	.59	1.56	1976	12	3.83	1986	.00+	1999	4.0	2.1	.4	.1	.00	.00	.07	.24	.40	.58	.78	1.04	1.39	1.96	2.55
Oct	.90	.75	.73	1982	30	2.76	2000	.00+	1988	5.2	2.8	.3	.0	.00	.09	.25	.40	.54	.71	.90	1.12	1.44	1.95	2.45
Nov	1.83	1.79	1.05	1957	14	4.31	1988	.06	1976	7.0	3.8	.3	@	.40	.57	.83	1.08	1.32	1.58	1.87	2.22	2.69	3.42	4.12
Dec	1.79	1.58	1.40	1996	26	4.99	1996	.14	1986	7.9	4.1	.4	@	.27	.43	.69	.93	1.19	1.47	1.80	2.19	2.72	3.58	4.41
Ann	14.96	14.16	1.87	May 1958	12	5.04	May 1998	.00+	Sep 1999	76.1	38.3	4.3	.4	10.05	10.98	12.18	13.10	13.92	14.72	15.55	16.48	17.60	19.24	20.67

+ 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: 1951-2001

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

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

# 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](http://www.ncdc.noaa.gov)

**Station: BOISE LUCKY PEAK DAM, ID**

**COOP ID: 101018**

**Climate Division: ID 5**

**NWS Call Sign:**

**Elevation: 2,840 Feet**

**Lat: 43°32N**

**Lon: 116°03W**

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	1.8	-99.9	#	0	9.0	1982	23	9.0	1982	#	2000	31	#	2000	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9
Feb	1.7	.0	#	0	2.0	1978	15	4.5	1985	#	2000	24	#	2000	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9
Mar	.1	.0	#	0	1.0	1971	1	1.0	1971	1+	2000	9	1	1982	.1	.1	.0	.0	.0	.2	.0	.0	.0
Apr	.1	.0	0	0	1.0	1982	6	1.0	1982	0	0	0	0	0	.1	.1	.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	#	2000	1	#	2000	.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	.5	.0	#	0	5.0	1974	28	5.0	1974	1	1980	23	#+	2000	.1	.1	.1	.1	.0	.0	.0	.0	.0
Dec	1.4	1.5	#	0	4.0	1981	30	4.0	1981	6	1972	12	3	1972	.9	.8	.2	.0	.0	-9.9	-9.9	-9.9	-9.9
Ann	5.6	-9.9	N/A	N/A	9.0	Jan 1982	23	9.0	Jan 1982	6	Dec 1972	12	3	Dec 1972	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9

+ 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](http://www.ncdc.noaa.gov/oa/climate/normals/usnormals.html)

**Climatography  
of the United States  
No. 20  
1971-2000**

**Station: BOISE LUCKY PEAK DAM, ID**

**COOP ID: 101018**

**Climate Division: ID 5**

**NWS Call Sign:**

**Elevation: 2,840 Feet**

**Lat: 43° 32N**

**Lon: 116° 03W**

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	6/13	6/07	6/03	5/30	5/27	5/24	5/20	5/16	5/10
32	5/22	5/16	5/12	5/08	5/05	5/01	4/28	4/23	4/17
28	4/30	4/24	4/19	4/16	4/12	4/09	4/05	4/01	3/26
24	4/22	4/12	4/04	3/29	3/23	3/18	3/12	3/04	2/22
20	3/24	3/16	3/09	3/04	2/27	2/23	2/17	2/11	2/03
16	3/03	2/23	2/17	2/12	2/08	2/03	1/29	1/23	1/15
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	9/10	9/15	9/19	9/22	9/26	9/29	10/02	10/06	10/11
32	9/23	9/28	10/02	10/05	10/08	10/11	10/14	10/18	10/23
28	10/08	10/14	10/18	10/21	10/24	10/28	10/31	11/04	11/10
24	10/15	10/22	10/27	10/31	11/04	11/08	11/12	11/16	11/23
20	10/21	10/29	11/04	11/09	11/14	11/19	11/24	11/30	12/09
16	11/07	11/15	11/21	11/26	11/30	12/05	12/10	12/16	12/24
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	144	136	130	125	121	116	111	106	98
32	179	171	165	160	155	151	146	140	132
28	220	212	205	200	194	189	184	177	168
24	262	249	240	232	224	217	209	200	187
20	298	285	275	267	259	251	243	233	220
16	332	319	310	302	295	288	280	271	258

\* 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/normal/usnormals.html](http://www.ncdc.noaa.gov/oa/climate/normal/usnormals.html)

**Climatography  
of the United States  
No. 20  
1971-2000**

**Station: BOISE LUCKY PEAK DAM, ID**

**COOP ID: 101018**

**Climate Division: ID 5**

**NWS Call Sign:**

**Elevation: 2,840 Feet    Lat: 43° 32N    Lon: 116° 03W**

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	1081	814	691	452	239	90	18	19	135	374	755	1062	5730
60	926	674	536	313	129	34	3	4	64	233	605	907	4428
57	833	594	445	238	81	16	1	1	36	161	518	814	3738
55	774	542	388	193	55	9	0	0	23	120	462	752	3318
50	630	413	251	104	17	1	0	0	6	48	328	607	2405
32	211	93	12	0	0	0	0	0	0	0	44	180	540

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	153	203	345	541	804	1009	1268	1263	942	652	278	141	7599
55	3	8	7	44	146	328	555	550	275	59	7	0	1982
57	0	4	2	29	110	275	493	489	228	38	3	0	1671
60	0	0	0	14	65	203	403	399	166	17	0	0	1267
65	0	0	0	3	20	109	263	258	87	3	0	0	743
70	0	0	0	0	4	46	148	144	36	0	0	0	378

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	8	48	141	302	557	779	1036	1031	713	398	87	13	8	56	197	499	1056	1835	2871	3902	4615	5013	5100	5113
45	0	14	55	181	406	629	881	876	563	257	34	1	0	14	69	250	656	1285	2166	3042	3605	3862	3896	3897
50	0	1	14	93	265	479	726	721	416	146	8	0	0	1	15	108	373	852	1578	2299	2715	2861	2869	2869
55	0	0	2	42	155	342	571	566	283	70	1	0	0	0	2	44	199	541	1112	1678	1961	2031	2032	2032
60	0	0	0	13	78	216	419	413	169	19	0	0	0	0	0	13	91	307	726	1139	1308	1327	1327	1327
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	0	26	97	198	352	486	651	649	450	260	50	2	0	26	123	321	673	1159	1810	2459	2909	3169	3219	3221

(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](http://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](http://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"><li>a. Temperature/ Precipitation Tables<ol style="list-style-type: none"><li>1. 1971-2000 Monthly Normals</li><li>2. Cooperative Summary of the Day</li><li>3. National Weather Service station records</li><li>4. 1971-2000 serially complete daily data</li></ol></li><li>b. Degree Day Table<ol style="list-style-type: none"><li>1. Monthly and Annual Heating and Cooling Degree Days Normals to Selected Bases derived from 1971-2000 Monthly Normals</li><li>2. Daily Normal Growing Degree Units to Selected Base Temperatures derived from 1971-2000 serially complete daily data</li></ol></li></ol> | <ol style="list-style-type: none"><li>c. Snow Tables<ol style="list-style-type: none"><li>1. Snow Climatology</li><li>2. Cooperative Summary of the Day</li></ol></li><li>d. Freeze Data Table<br/>1971-2000 serially complete daily data</li></ol> |
|---|---|

## References

U.S. Climate Normals 1971-2000, [www.ncdc.noaa.gov/normal.html](http://www.ncdc.noaa.gov/normal.html)  
U.S. Climate Normals 1971-2000-Products Clim20, [www.ncdc.noaa.gov/oa/climate/normal/usnormalsprods.html](http://www.ncdc.noaa.gov/oa/climate/normal/usnormalsprods.html)  
Snow Climatology Project Description, [www.ncdc.noaa.gov/oa/climate/monitoring/snowclim/mainpage.html](http://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](http://www1.ncdc.noaa.gov/pub/data/special/serialcomplete_jam_0900.pdf)