

U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU
IN COOPERATION WITH THE WISCONSIN CROP REPORTING SERVICE
CLIMATOGRAPHY OF THE UNITED STATES NO. 20-47

LATITUDE 46°01'N
LONGITUDE 92°22'W
ELEV. (GROUND) 950 Feet

CLIMATOLOGICAL SUMMARY

STATION:
DANBURY, WISCONSIN

MEANS AND EXTREMES FOR PERIOD -1930-59

Month	Temperature (°F)								** Mean degree days	Precipitation Totals (Inches)							Mean number of days						Month		
	Means			Extremes						Mean	Greatest daily	Year	Snow, Sleet				Precip. .10 inch or more	Temperatures							
	Daily maximum	Daily minimum	Monthly	Record highest	Year	Record lowest	Year	Mean					Maximum monthly	Year	Greatest daily	Year		90° and above	32° and below	32° and below	0° and below				
(a)	30	30	30	30		30		30	30	30		30	30		30	30	30	30	30						
Jan.	22.2	-2.5	9.9	54	1944	-46	1950	1710	0.98	1.05	1953	10.7	23.0	1938	7.0	1936	3	0	25	31	17	Jan.			
Feb.	27.2	0.1	13.6	62	1930	-45	1936	1440	0.94	1.02	1940	12.8	29.3	1940	12.0	1940+	3	0	19	28	14	Feb.			
Mar.	37.7	13.2	25.5	81	1946	-34	1948	1220	1.50	1.84	1948	11.0	37.5	1951	12.0	1940+	4	0	9	29	6	Mar.			
Apr.	55.0	28.5	41.8	91	1952	-3	1954	700	2.21	3.07	1954	3.4	16.8	1950	7.5	1950	5	*	1	20	*	Apr.			
May	68.9	39.7	54.3	106	1934	14	1953	330	3.68	3.08	1953	0.2	4.0	1954	3.0	1954	7	*	0	7	0	May			
June	77.8	50.7	64.3	99	1933	26	1956	100	5.04	4.25	1946	T	T	1945	T	1945	8	3	0	1	0	June			
July	83.6	55.7	69.7	108	1936	34	1930	30	3.57	2.60	1952	0	0		0		6	7	0	0	0	July			
Aug.	80.9	53.1	67.0	107	1947	30	1950+	50	4.36	5.18	1953	0	0		0		7	5	0	*	0	Aug.			
Sept.	71.4	44.0	57.7	101	1931	18	1947+	240	3.25	2.71	1934	T	T	1942	T	1942	6	1	0	5	0	Sept.			
Oct.	59.8	33.4	46.6	88	1953	4	1952	570	2.11	2.20	1933	1.1	8.0	1933	6.0	1933	4	0	*	15	0	Oct.			
Nov.	39.8	19.3	29.6	81	1950	-21	1956	1060	1.77	1.73	1953	7.7	22.0	1940	14.0	1957	4	0	8	26	3	Nov.			
Dec.	26.9	5.0	16.0	57	1939	-44	1955	1520	0.97	1.07	1959	8.5	22.0	1933	8.0	1933	3	0	21	31	12	Dec.			
Year	54.3	28.4	41.4	108	July 1936	-46	Jan. 1950	8970	30.38	5.18	Aug. 1953	55.4	37.5	Mar. 1951	14.0	Nov. 1957	60	16	83	193	52	Year			

(a) Average length of record, years.

+ Also on earlier dates, months, or years.

T Trace, an amount too small to measure.

* Less than one half.

** Base 65°F. -H. C. S. Thom, Monthly Weather Review, January 1954.

CLIMATE OF DANBURY, WISCONSIN

Danbury is located near the junction of the Yellow and St. Croix Rivers in Burnett County in northwestern Wisconsin. The area is rolling with numerous small lakes and is largely covered with second growth and brush. Originally, a forest of jack pine and Norway pine, lightly mixed with hardwoods, covered the county. Soils are mainly gray sands. This summary is representative of both Danbury and the general area.

The climate is classified as continental. Winters are long, cold, and snowy; summers are relatively short and warm with but brief periods of hot, humid weather. Springs and falls are often short with sharp day-to-day temperature changes. All seasons have frequent weather changes as weather systems move across the country from west to east.

During the period of this summary, the number of days in a year with temperatures 90 degrees or higher has varied from 47 in 1933 to 2 in 1954. The number of days in a year with 0 degrees or lower has varied from 73 in 1955 to 13 in 1931.

Precipitation for the 5-month period May through September has averaged about 65 per cent of the annual normal. The likelihood of 1 inch or more of rain in a 7-day period during the summer is greatest the last part of June when the chance is 4 in 10 years. The likelihood of a dry 7-day period, trace or less, during the summer is greatest the second week of July and the second and third weeks of August when the chance is more than 1 in 10 years. Intensities of about 1.25 inches in 1 hour, 1.85 inches in 6 hours, and 2.40 inches in 24 hours can be expected about once in two years. The number of days in a year with 0.01 inch or more precipitation has been between 108 and 130 in 2 of 3 years and has averaged 119 days.

Snowfall has varied from 94 inches during the winter of 1935-36 to 15 inches during the winter of 1958-59. The average date of the first 1 inch or greater snowfall is November 17. The chance of this fall by October 19 is 1 in 10 years, and by December 17 is 9 in 10 years.

Thunderstorms have occurred on an average of 35 days a year with extreme years of 45 and 21 days. Hail has fallen on an average of 2 days a year with extreme years of 6 and 0 days. Since 1916, there have been 3 tornadoes confirmed in Burnett County.

Wind, sunshine, and relative humidity records are not available but the following data from Minneapolis should roughly approximate conditions of the area.

Prevailing winds are from the northwest from November through April and from the southeast for the remaining months. April is the windiest month with an average of 13 miles per hour, and July and August are least windy with averages of about 9 miles per hour. The wind speed per hour has averaged less than 4 miles about 10 per cent of the time, 4 to 12 miles about 55 per cent, 13 to 31 miles about 35 per cent, and greater than 31 miles per hour less than 1 per cent. The highest wind speeds are usually from the northwest, west, or southwest.

The percentage of possible sunshine has averaged between 60 and 70 for June through September, near 40 for November and December, and between 50 and 60 per cent for the remaining months.

Relative humidity has approximated:

Threshold	Winter	Spring	Summer	Fall
Less than 50%	5%	20%	20%	15%
50% to 79%	55%	50%	50%	55%
Greater than 79%	40%	30%	30%	30%

The average date of the last 32-degree freeze in the spring is May 31, and the first in the fall is September 12. The growing season, defined as the number of days between the last 32-degree freeze in the spring and the first in the fall, averages 104 days. The following table gives the likelihood of critical temperatures occurring:

AFTER DATE IN SPRING

Temperature	20%	40%	60%	80%
32° or below	June 9	June 2	May 27	May 20
28° or below	May 28	May 21	May 15	May 8
24° or below	May 16	May 8	May 2	Apr. 25
20° or below	May 6	Apr. 28	Apr. 22	Apr. 14
16° or below	Apr. 24	Apr. 16	Apr. 10	Apr. 2

BEFORE DATE IN FALL

32° or below	Sept. 2	Sept. 9	Sept. 15	Sept. 22
28° or below	Sept. 14	Sept. 22	Sept. 29	Oct. 6
24° or below	Sept. 27	Oct. 5	Oct. 12	Oct. 19
20° or below	Oct. 5	Oct. 13	Oct. 19	Oct. 27
16° or below	Oct. 18	Oct. 26	Nov. 1	Nov. 9

Marvin W. Burley
Weather Bureau State Climatologist
Weather Bureau Office
Madison, Wisconsin

DANBURY, WISCONSIN

Average Temperature (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1930	3.2	22.2	28.8	45.8	55.8	65.8	69.9	70.5	58.0	46.2	33.6	19.2	43.2
1931	21.4	26.9	29.4	45.7	55.8	68.8	72.6	66.2	63.5	53.6	37.3	27.9	47.0
1932	17.8	15.4	17.9	41.7	55.4	68.1	71.0	68.9	56.6	43.4	27.2	12.3	41.3
1933	18.8	6.2	25.8	40.3	57.2	72.1	73.2	67.4	61.3	48.3	27.5	10.5	42.2
1934	17.8	11.6	22.4	40.3	61.2	68.9	70.1	61.5	51.0	47.6	34.2	6.6	41.5
1935	14.4	20.6	25.8	37.4	49.6	61.6	74.8	66.8	55.8	44.4	23.6	11.8	41.8
1936	2.0	-3.4	25.7	35.3	57.4	61.6	74.9	67.6	61.0	41.0	25.8	16.4	38.8
1937	0.8	11.8	22.1	39.4	55.0	68.1	70.7	66.9	56.0	40.9	28.4	12.0	38.9
1938	8.0	14.8	31.2	41.6	58.4	61.8	66.4	66.9	56.3	50.6	29.7	15.6	41.4
1939	14.4	4.4	24.0	38.0	58.6	61.1	71.6	67.2	59.2	45.4	33.4	25.6	42.2
1940	6.2	16.1	23.6	38.9	51.4	61.9	69.7	65.5	62.6	49.8	25.8	19.1	40.6
1941	13.0	13.4	20.3	49.1	59.6	64.9	71.4	67.0	61.0	48.6	28.7	10.8	40.2
1942	4.4	13.5	18.4	49.2	53.3	65.5	67.1	66.5	51.6	45.6	28.7	19.0	40.2
1943	4.4	16.6	25.2	39.7	53.2	65.0	72.0	68.0	46.6	40.6	36.2	15.4	43.2
1944	23.4	16.6	25.2	39.9	59.0	63.8	67.6	68.1	50.0	45.8	36.2	15.4	43.2
1945	8.4	13.2	34.8	39.9	48.8	59.0	66.1	66.5	56.0	43.2	28.6	10.8	39.6
1946	12.8	10.8	26.0	45.8	51.6	63.0	69.0	65.2	58.8	48.0	29.7	15.3	42.2
1947	13.8	13.0	26.0	39.7	50.8	61.8	70.2	75.0	58.7	56.6	26.2	16.8	42.4
1948	3.6	11.1	24.2	47.0	55.8	68.4	71.0	68.4	47.8	47.8	34.0	15.1	42.1
1949	12.5	11.6	25.1	44.4	57.9	68.3	72.2	69.8	56.4	50.2	34.4	16.7	43.3
1950	2.7	13.1	19.9	34.6	52.0	64.7	62.0	62.0	57.6	49.3	25.8	9.8	40.0
1951	6.8	16.5	20.5	40.5	57.8	69.1	66.8	63.3	53.6	45.5	22.3	13.8	38.8
1952	8.6	19.7	22.7	45.4	59.9	65.5	69.2	64.1	57.9	49.2	30.8	17.4	41.5
1953	11.5	11.6	27.3	38.1	53.2	65.9	66.3	67.7	57.3	51.9	33.8	21.0	40.0
1954	4.3	24.9	23.8	41.4	47.5	65.7	67.8	63.2	55.7	43.0	33.4	19.2	40.8
1955	0.1	9.1	20.6	48.7	57.7	63.4	72.7	69.4	56.9	46.6	23.4	7.8	40.4
1956	11.2	9.9	21.8	38.0	58.3	63.4	63.3	64.3	54.3	51.4	30.1	17.1	40.0
1957	2.9	13.5	23.9	41.4	58.1	61.2	70.6	65.8	54.3	47.2	30.8	20.0	40.6
1958	16.8	10.4	28.4	43.2	53.3	61.0	61.0	61.0	58.4	47.2	32.9	10.5	40.6
1959	5.7	13.0	30.2	43.2	57.8	66.2	69.4	70.6	59.1	42.6	21.9	25.9	42.1

Total Precipitation (Inches)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1930	1.57	2.25	0.23	1.23	3.46	3.46	1.60	0.95	6.13	1.90	1.96	0.50	25.24
1931	0.20	0.68	1.25	0.86	2.53	4.16	1.72	2.91	2.29	3.28	2.86	0.75	27.49
1932	1.63	0.51	1.54	1.02	2.95	1.70	4.70	3.51	1.00	1.67	3.49	0.69	24.44
1933	0.93	1.30	1.30	2.31	3.22	2.90	3.57	0.63	4.37	4.95	2.29	2.08	29.53
1934	0.64	0.25	1.00	1.20	2.60	5.58	2.48	2.57	7.21	3.71	2.32	2.00	31.59
1935	1.75	0.47	1.35	1.73	2.37	6.27	5.53	7.37	1.18	3.93	0.83	1.30	34.08
1936	1.63	1.81	2.70	1.20	3.06	1.87	0.81	5.10	4.10	1.95	1.04	1.48	26.45
1937	1.20	1.60	0.50	3.27	4.43	2.64	2.46	3.66	3.03	0.92	0.99	0.57	25.47
1938	1.80	0.85	1.25	2.62	6.53	2.43	3.90	2.78	5.29	0.80	1.11	0.92	30.88
1939	1.22	1.55	0.54	1.39	4.39	5.98	1.79	5.07	1.02	2.90	T	0.70	29.95
1940	0.40	2.37	2.21	2.19	5.05	2.29	1.75	4.26	0.99	2.30	2.87	0.95	27.63
1941	1.41	1.05	2.22	2.67	3.94	5.68	2.78	6.42	6.43	3.69	1.19	0.83	39.21
1942	0.20	0.25	1.97	2.19	6.63	5.42	2.51	4.01	5.20	1.29	0.67	0.95	30.99
1943	1.00	0.54	1.54	1.62	4.70	4.23	2.11	4.42	3.92	2.30	1.06	0.12	31.64
1944	0.68	0.51	1.63	2.45	5.02	7.32	2.86	6.40	2.39	0.48	1.78	0.57	32.09
1945	1.07	1.53	3.08	3.81	1.33	7.05	4.37	6.55	2.82	0.45	1.48	1.52	35.06
1946	1.14	1.13	0.56	1.37	2.28	4.00	1.32	1.05	5.32	4.37	2.02	1.50	36.06
1947	0.40	0.22	0.49	2.86	3.33	3.15	1.17	2.96	2.38	0.84	2.91	0.18	28.89
1948	0.66	1.42	3.20	3.00	0.44	2.31	3.40	3.45	0.58	0.45	2.84	1.05	22.87
1949	1.62	0.23	2.35	1.05	6.20	3.75	5.42	2.64	2.51	2.49	1.27	1.00	30.33
1950	0.93	2.07	2.07	3.33	1.62	2.02	4.37	1.38	2.42	2.34	1.97	1.97	31.06
1951	1.32	0.50	2.49	2.06	2.73	8.42	4.42	6.78	4.58	3.62	2.69	1.97	31.06
1952	1.83	1.65	2.25	1.92	1.53	7.51	8.37	5.30	0.71	0.26	1.21	0.22	42.22
1953	1.83	1.65	1.49	4.07	5.95	5.15	1.86	11.64	1.71	0.25	2.65	1.97	34.44
1954	0.93	0.61	1.06	6.69	3.44	5.76	4.90	3.33	4.39	2.21	0.87	0.17	31.44
1955	0.56	0.87	1.15	1.80	1.90	2.97	40.27	6.49	4.65	2.25	2.22	1.03	35.56
1956	0.26	0.13	1.50	1.51	2.85	5.95	4.55	4.55	1.61	0.99	2.38	0.40	28.13
1957	0.13	0.96	1.06	1.62	5.29	5.95	4.75	4.75	2.75	0.99	2.38	0.21	31.06
1958	0.74	0.68	0.74	1.99	1.78	5.30	5.33	2.78	3.96	0.66	1.80	0.33	28.69
1959	0.36	0.43	0.37	1.19	5.76	2.36	2.10	5.93	3.65	2.95	1.80	0.57	27.84

STATION HISTORY

The first climatological observations at Danbury were taken one mile east of the post office from September 8, 1919 to October 17, 1920. The station was reopened near the post office May 1, 1921, where observations were taken until April 22, 1951 when the station was moved 0.6 mile southeast. The station was moved 0.1 mile northwest of the post office November 1, 1958.

The instruments have been exposed over sod under good standard conditions.

STATION HISTORY (Continued)

Observers at the Danbury station have been:

Richard Carrigan September 8, 1919 to October 17, 1920
 Marlon Larson May 1, 1921 to October 31, 1941
 Lila R. Baker February 1, 1942 to March 31, 1945
 Leona R. Johnson April 1, 1945 to April 21, 1951
 Elmer G. Kleckner April 22, 1951 to October 31, 1958
 Philip F. Gerber November 1, 1958 to present