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

LATITUDE 42°40'N
LONGITUDE 89°01'W
ELEV. (GROUND) 760 Feet

CLIMATOLOGICAL SUMMARY

MEANS AND EXTREMES FOR PERIOD - 1945-59

STATION: JANESVILLE, WISCONSIN

Month	Temperature (°F) Means: Daily maximum	Daily minimum	Monthly	Extremes: Record highest	Year	Record lowest	Year	** Mean degree days	Precipitation Totals (Inches): Mean	Greatest daily	Year	Snow, Sleet: Mean	Maximum monthly	Year	Greatest daily	Year	Mean number of days: Precip. .10 inch or more	Temperatures Max.: 90° and above	32° and below	Min.: 32° and below	0° and below	Month
(a)	15	15	15	15		15		15	15	15		15	15		15		15	15	15	15	15	
Jan.	29.9	12.7	21.3	55	1953	-28	1951	1350	1.35	1.28	1950	8.7	18.4	1959	10.0	1947	4	0	17	30	6	Jan.
Feb.	33.7	16.4	25.1	58	1957+	-22	1959+	1120	1.08	1.15	1948	4.2	7.4	1945	5.4	1950	3	0	11	26	4	Feb.
Mar.	44.5	25.9	35.2	81	1945	- 5	1950+	920	2.06	1.94	1948	6.6	19.6	1959	10.4	1959	5	0	4	24	*	Mar.
Apr.	60.3	37.5	48.9	87	1952	13	1954	480	3.05	1.62	1950	0.5	2.0	1951	2.0	1951	6	0	*	10	0	Apr.
May	71.0	46.9	59.0	92	1956+	28	1947+	240	3.48	3.25	1948	T	T	1945	T	1945	7	*	0	1	0	May
June	80.7	57.0	68.9	100	1953	32	1945	70	4.03	2.89	1955	0	0		0		7	4	0	*	0	June
July	85.3	61.3	73.3	101	1955	41	1950	10	3.99	2.80	1950	0	0		0		6	8	0	0	0	July
Aug.	84.1	60.2	72.2	100	1953+	41	1950	10	3.65	4.02	1952	0	0		0		6	7	0	0	0	Aug.
Sept.	75.8	51.3	63.6	101	1953	29	1956+	130	2.79	3.73	1947	0	0		0		6	2	0	*	0	Sept.
Oct.	65.4	41.2	53.3	88	1953	16	1952	380	2.34	2.20	1958	T	0.5	1959	0.5	1959	4	0	0	6	0	Oct.
Nov.	46.2	28.6	37.4	78	1950	-17	1947	830	2.21	1.62	1952	3.3	12.6	1947	5.5	1950	5	0	4	20	1	Nov.
Dec.	33.5	17.8	25.7	62	1946	-25	1950	1220	1.68	1.14	1952	9.0	18.9	1950	9.3	1959	5	0	13	29	3	Dec.
Year	59.2	38.1	48.7	101	July 1955+	-28	Jan. 1951	6760	31.71	4.02	Aug. 1952	32.3	19.6	Mar. 1959	10.4	Mar. 1959	64	21	49	146	14	Year

(a) Average length of record, years.

T Trace, an amount too small to measure.

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

+ Also on earlier dates, months, or years.

* Less than one half.

CLIMATE OF JANESVILLE, WISCONSIN

Janesville, county seat of Rock County, is located on the Rock River in south-central Wisconsin. The flat farmlands that surround the city are part of a huge outwash in front of a terminal moraine north of the city. The soils are brown to black prairie loams. This summary is representative of Janesville and the surrounding area.

The climate is classified continental. Winters are relatively long and cold with moderate snowfall. Changes in weather can be expected every few days from late fall through early spring. Overcast skies are prevalent during the winter months. Summers are warm and at times hot and humid. The transition to spring and fall is often rapid. The area is in the path of the pressure systems that move eastward across the country during all seasons. During the summer the intensities of these systems diminish.

The number of days in a year with 90 degrees or higher temperatures has varied from 43 in 1955 to 3 in 1951. The number of days with 0 degrees or less has varied from 22 in 1945 to 4 in 1952.

Precipitation during the 5-month period May through September has approximated 55 per cent of the annual normal. The likelihood of an inch or more of rain in a 7-day period during the summer is greatest the first half of June when the chance is more than 4 years in 10. The likelihood of a 7-day dry period, trace or less, during the summer is greatest the last part of August when the chance is 3 years in 10. Intensities of about 1.40 inches in 1 hour, 2.35 inches in 6 hours, and 2.90 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 averaged 115 and has been between 104 and 126 days in 2 years of 3.

Snowfall has varied from 58 inches during the winter 1950-51 to 13 inches during the winter 1955-56. The average date of the first 1 inch or greater snowfall is November 29. The chance of this fall by November 5 is 1 year in 10 and by December 21 is 9 years in 10.

Thunderstorms have occurred on an average of 42 days a year with extreme years of 58 and 30 days. Hail has fallen on an average of 2 days a year with extreme years of 6 and 0 days. Since 1916, a total of 3 tornadoes have been confirmed in Rock County.

Wind, sunshine, and relative humidity records are not available but the following data from Madison should approximate conditions at Janesville.

Prevailing winds are westerly in winter and southerly in summer. March, April, and November are the windiest months with averages of 12 miles per hour. July and August are the least windy with averages of 9 miles per hour. The wind speed per hour has averaged less than 4 miles about 10 per cent, 4 to 12 miles about 50 per cent, 13 to 31 miles about 40 per cent, and greater than 31 miles per hour less than 1 per cent of the time. The highest speeds are usually from the west or southwest.

The percentage of possible sunshine has averaged about 40 for November and December, 60 or greater for May through October, and 50 to 60 per cent for the remaining months.

Relative humidity has approximated:

Threshold	Winter	Spring	Summer	Fall
Less than 50%	5%	20%	15%	20%
50% to 79%	55%	50%	45%	50%
Greater than 79%	40%	30%	40%	30%

The average date of the last 32-degree freeze in the spring is April 29 and the first in the fall is October 6. 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 160 days. The following table gives the likelihood of critical temperatures occurring:

Temperature:	20%	40%	60%	80%
AFTER DATE IN SPRING				
32° or below	May 9	May 2	Apr. 26	Apr. 19
28° or below	Apr. 30	Apr. 23	Apr. 17	Apr. 10
24° or below	Apr. 15	Apr. 7	Apr. 1	Mar. 25
20° or below	Apr. 3	Mar. 26	Mar. 20	Mar. 12
16° or below	Mar. 27	Mar. 19	Mar. 13	Mar. 6
BEFORE DATE IN FALL				
32° or below	Sept. 26	Oct. 3	Oct. 9	Oct. 16
28° or below	Oct. 10	Oct. 18	Oct. 24	Nov. 1
24° or below	Oct. 22	Oct. 30	Nov. 5	Nov. 13
20° or below	Oct. 31	Nov. 8	Nov. 14	Nov. 22
16° or below	Nov. 9	Nov. 16	Nov. 23	Dec. 1

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

JANESVILLE, WISCONSIN

Average Temperature (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1944									65.8	52.5	42.6	20.6	
1945	17.6	25.8	48.3	50.4	55.0	64.1	71.3	71.6	62.5	49.8	39.0	20.4	48.0
1946	25.8	27.0	44.3	52.2	57.4	68.8	73.4	69.2	64.0	56.4	39.9	29.6	50.7
1947	25.8	18.4	31.9	47.5	54.2	65.8	71.1	78.4	65.6	59.8	31.6	27.6	48.1
1948	16.2	22.4	33.8	53.6	56.4	67.4	74.4	72.1	66.8	49.8	41.6	27.0	48.5
1949	23.7	23.5	35.6	47.0	60.8	72.2	75.7	72.4	58.2	55.0	38.8	27.8	49.2
1950	25.2	24.0	30.0	41.6	59.1	67.8	69.2	67.3	61.9	56.5	33.0	16.0	46.0
1951	17.2	23.1	31.5	45.5	62.1	65.3	71.4	68.6	60.3	52.9	29.6	22.2	45.8
1952	22.6	29.9	31.9	50.0	59.0	72.3	75.5	70.6	63.5	46.6	40.0	28.7	49.2
1953	25.5	28.6	36.3	44.6	60.2	72.4	74.8	72.7	64.1	56.3	42.0	28.8	50.5
1954	22.6	35.3	33.3	52.1	55.0	73.0	74.3	70.5	66.1	51.9	39.3	28.1	50.1
1955	21.4	24.2	34.0	55.1	62.9	66.1	79.0	76.0	64.7	53.5	33.6	22.2	49.4
1956	24.6	25.8	33.5	46.8	59.1	72.8	71.7	71.6	61.5	57.8	38.8	28.6	49.4
1957	15.6	29.9	35.5	49.7	57.6	69.7	74.9	72.1	61.8	49.7	38.0	30.5	48.7
1958	21.7	18.1	35.3	48.9	61.4	64.0	71.2	73.2	64.1	55.4	40.5	19.7	47.8
1959	14.2	20.0	33.4	48.5	64.7	70.8	71.7	76.1	66.5	48.7	30.5	33.0	48.2

Total Precipitation (Inches)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1944								4.32	2.54	0.33	2.87	1.26	
1945	0.55	1.36	1.54	2.64	5.60	3.38	1.01	5.17	6.81	1.37	3.34	1.35	34.12
1946	2.79	0.59	2.60	0.76	3.02	4.46	1.49	2.02	3.36	2.20	2.56	1.64	27.49
1947	1.79	0.27	1.20	3.95	4.31	5.20	3.29	4.32	5.17	1.64	2.79	1.69	35.62
1948	0.48	1.92	3.98	2.40	6.67	3.55	0.91	1.56	3.09	1.45	1.96	2.22	30.19
1949	2.27	0.82	2.19	1.67	1.98	4.92	4.06	2.41	2.03	2.33	0.79	2.16	28.63
1950	2.73	1.16	2.27	4.35	1.79	4.97	7.29	5.09	3.24	0.58	1.89	1.88	37.24
1951	1.32	1.97	2.88	3.80	4.72	2.84	3.18	3.95	1.61	6.04	2.83	1.37	36.51
1952	2.23	0.37	2.84	2.59	3.36	5.18	4.81	8.35	1.12	0.07	3.18	2.13	36.23
1953	1.34	1.90	1.89	1.89	2.53	2.32	4.47	3.03	3.28	0.71	0.32	1.89	25.57
1954	0.74	0.59	1.45	5.63	3.25	5.20	7.50	4.35	2.71	4.94	0.96	1.88	39.20
1955	0.82	1.00	1.03	3.24	2.78	6.24	2.00	2.19	1.99	3.88	0.64	0.65	26.46
1956	0.30	0.78	1.14	4.31	2.51	3.02	4.14	3.67	0.50	0.38	2.56	1.35	24.66
1957	0.80	0.73	1.62	2.60	6.04	2.80	3.92	3.26	1.52	0.85	3.03	2.57	29.74
1958	0.85	0.09	0.27	1.98	1.20	2.66	3.91	2.28	2.99	3.60	2.94	0.38	23.15
1959	1.31	1.66	3.95	3.96	2.37	3.73	7.92	2.50	2.65	7.11	2.76	2.44	42.36

STATION HISTORY

The first climatological station in Janesville was supervised by the Smithsonian Institute. Temperature observations were taken from January 1853 to July 1862, and precipitation observations from January 1854 to December 1858.

A second series of observations were taken from January 1, 1891 to November 30, 1895.

A rain recording gauge was installed March 22, 1941, 1.2 miles west-southwest of the Janesville post office at the Wisconsin Power and Light substation. Temperature readings were added August 19, 1944.

STATION HISTORY (Continued)

Soil temperatures have been taken by Libby, McNeil, and Libby since 1950; they have also taken temperature and precipitation observations.

Observers have been:

J. F. Willard and others ..January, 1853 to July, 1862
E. B. Heimstreet .....January 1, 1891 to November 30, 1893
S. C. Burnham and Co....December 1, 1893 to November 30, 1895
Wis. Power & Light Co....April 22, 1941 to August 18, 1944
Edwin O. Goede .....August 19, 1944 to date