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

LATITUDE 44°52'N
LONGITUDE 92°37'W
ELEV. (GROUND) 900 Feet

CLIMATOLOGICAL SUMMARY

MEANS AND EXTREMES FOR PERIOD - 1930 - 1959

STATION: RIVER FALLS, 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	Max. 32° and below	Min. 32° and below	Min. 0° and below	Month
(a)	30	30	30	30		30		30	30	30		30	30		30		30	30	30	30	30	
Jan.	23.1	2.8	13.0	57	1944	-42	1951	1610	0.92	0.95	1933	7.6	24.8	1950	8.0	1932	3	0	24	31	14	Jan.
Feb.	27.1	5.7	16.4	60	1931	-47	1936	1360	0.85	1.17	1948	6.6	16.0	1939	9.5	1948	3	0	18	28	11	Feb.
Mar.	37.5	18.6	28.1	79	1946	-38	1948	1140	1.74	1.95	1956	8.5	35.1	1951	17.0	1940	5	0	9	28	3	Mar.
Apr.	55.6	33.6	44.6	90	1934	7	1933	610	2.36	2.37	1944	2.0	11.7	1936	6.0	1957	5	*	1	14	0	Apr.
May	68.7	45.9	57.3	106	1934	22	1945	280	3.78	4.28	1938	0.2	2.5	1946	2.5	1946	7	*	0	3	0	May
June	77.9	55.9	66.9	103	1931	30	1945	80	4.85	4.30	1951	0	0		0		8	3	0	*	0	June
July	83.6	60.3	72.0	109	1936	40	1930	30	3.88	4.01	1949	0	0		0		6	6	0	0	0	July
Aug.	81.2	58.4	69.8	103	1947	32	1931	30	3.39	2.38	1957	0	0		0		6	5	0	*	0	Aug.
Sept.	71.7	49.2	60.5	103	1931	22	1942	190	3.15	4.30	1942	T	0.4	1945	0.4	1945	5	1	0	1	0	Sept.
Oct.	60.1	38.3	49.2	86	1953+	9	1952	490	1.95	3.22	1946	0.6	4.5	1959	2.5	1959+	4	0	*	9	0	Oct.
Nov.	40.7	23.4	32.1	78	1933	-19	1952	990	1.63	1.70	1940	4.9	18.5	1957	10.0	1957	4	0	8	24	1	Nov.
Dec.	28.2	10.2	19.2	58	1951	-36	1946	1420	1.07	1.30	1940	8.0	27.3	1950	12.0	1940	4	0	19	30	8	Dec.
Year	54.6	33.5	44.1	109	July 1936	-47	Feb. 1936	8230	29.57	4.30	June 1951+	38.4	35.1	Mar. 1951	17.0	Mar. 1940	60	15	79	168	37	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 RIVER FALLS, WISCONSIN

River Falls is located on the Kinnikinnic River on the border of Pierce and St. Croix Counties in west-central Wisconsin. The city is surrounded by gently rolling farmland with deep dark loam and silt loam soils. The original vegetation of the area was prairie with a mixed forest of oak, basswood, and sugar maple to the east. This summary is representative of River Falls and the surrounding area.

The climate is classified as continental. Winters are cold with moderate snow; summers are fully developed and warm. Springs and falls are often short. Changes in weather can be expected every few days during the winter and spring. The succession of high and low pressure systems moving from west to east brings a variety of weather throughout the year. There is a tendency to extremes in all climatic features. During the period of this summary, the number of days with 90 degrees or higher in a year has ranged from 34 in 1936 to 0 in 1951. The number of days with 0 degrees or lower has ranged from 58 in 1936 to 8 in 1931.

Precipitation for the 5-month period May through September has approximated 65 per cent of the annual normal. The possibility of 1 inch or more rain in a 7-day period during the summer is greatest the last three weeks of June when the chance is 4 in 10 years. The possibility of a 7-day dry period, trace or less, during the summer is greatest the last part of July when the chance approaches 2 in 10 years. Intensities of about 1.25 inches in 1 hour, 1.90 inches in 6 hours, and 2.50 inches in 24 hours can be expected about once in 2 years. The greatest amount of precipitation in 24 hours was 4.30 inches on September 1, 1942, and June 24, 1951.

The amount of snowfall in a year has varied from 80 inches in 1951 to 15 inches in 1931 and 1958. The average date of the first 1 inch or greater snowfall is November 15. The chance of this fall by October 24 is 1 in 10 years and by December 7 is 9 in 10 years.

Thunderstorms have occurred on an average of 40 days a year with individual years ranging from 58 to 23 days. Hail has fallen on an average of 2 days a year with extreme years of 7 and 0 days. Since 1916, five tornadoes have been confirmed in Pierce County and seven in St. Croix County.

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

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 has averaged less than 4 miles per hour about 10 per cent, 4 to 12 miles per hour about 55 per cent, 13 to 31 miles per hour about 35 per cent, and greater than 31 miles per hour less than 1 per cent of the time. The highest wind speeds are usually from the northwest, west, or southwest.

The percentage of possible sunshine has averaged between 60 and 70 per cent for June through September, near 40 per cent 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% or 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 14, and the first in the fall is September 26. 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 135 days. The following table gives the likelihood of critical temperatures occurring.

AFTER DATE IN SPRING

Temperature	20%	40%	60%	80%
32° or below	May 24	May 17	May 11	May 5
28° or below	May 15	May 8	May 1	Apr. 24
24° or below	May 1	Apr. 23	Apr. 17	Apr. 10
20° or below	Apr. 22	Apr. 14	Apr. 7	Mar. 31
16° or below	Apr. 6	Mar. 29	Mar. 23	Mar. 15

BEFORE DATE IN FALL

32° or below	Sept. 16	Sept. 23	Sept. 29	Oct. 5
28° or below	Sept. 27	Oct. 5	Oct. 11	Oct. 19
24° or below	Oct. 7	Oct. 14	Oct. 21	Oct. 29
20° or below	Oct. 19	Oct. 27	Nov. 2	Nov. 10
16° or below	Oct. 28	Nov. 5	Nov. 11	Nov. 18

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

RIVER FALLS, WISCONSIN

Average Temperature (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1930	1.4	23.3	28.8	45.6	56.8	65.8	72.0	71.2	59.0	45.6	34.8	18.4	43.6
1931	22.2	28.0	28.6	46.4	52.6	71.6	74.0	68.4	66.6	52.2	38.2	28.1	48.1
1932	17.0	15.8	19.2	44.1	57.6	69.8	72.4	66.9	58.8	44.2	29.4	12.8	42.3
1933	19.8	9.6	29.2	43.4	57.9	74.8	75.4	67.9	64.4	44.4	29.0	16.0	44.3
1934	18.2	15.0	26.2	43.4	66.2	70.7	73.2	68.4	56.0	51.2	36.8	11.4	44.7
1935	7.2	21.4	30.8	43.6	52.8	62.5	77.0	69.0	60.3	47.2	27.2	16.0	42.9
1936	0.7	- 4.0	26.9	38.2	62.2	65.7	79.2	73.6	64.1	43.6	28.6	19.8	41.6
1937	3.6	10.2	24.6	42.8	58.7	64.8	74.0	75.0	62.0	45.8	30.5	16.0	42.3
1938	11.8	21.2	37.5	46.2	56.1	66.4	71.8	72.4	60.9	54.2	32.0	18.6	45.8
1939	20.0	11.4	28.4	42.8	63.0	67.4	72.5	69.4	63.0	47.8	36.0	27.2	45.7
1940	5.2	18.0	21.8	43.1	54.4	65.8	72.8	67.6	63.8	52.0	28.1	20.9	42.8
1941	16.8	14.5	25.4	52.0	62.3	67.3	72.4	70.9	62.6	50.1	36.2	26.4	46.4
1942	19.0	19.7	35.6	51.5	55.2	65.8	69.4	69.0	57.0	48.3	32.8	14.9	44.9
1943	7.6	16.6	22.6	43.5	54.4	68.6	72.2	70.2	56.6	47.4	28.2	23.9	42.7
1944	25.6	20.5	26.2	41.4	61.3	68.4	68.8	71.6	60.9	50.0	38.6	20.0	46.1
1945	11.4	17.6	38.8	44.2	52.0	60.2	67.9	68.5	59.0	47.2	31.8	13.8	42.7
1946	15.9	17.0	41.8	48.9	54.5	68.2	71.4	66.7	59.2	51.5	33.1	20.8	45.8
1947	20.4	14.4	28.0	41.0	51.6	62.3	70.0	76.2	61.6	57.9	26.0	16.4	43.8
1948	7.4	14.4	25.6	49.0	55.8	65.0	72.7	70.3	65.2	49.1	34.8	18.2	44.0
1949	14.9	13.7	29.5	45.4	60.6	70.1	75.0	71.7	56.2	51.7	35.4	19.6	45.3
1950	7.6	13.0	21.7	36.2	54.2	63.7	66.8	63.5	59.0	52.0	27.1	10.9	39.6
1951	7.7	16.1	20.5	40.9	59.8	62.4	68.4	65.7	56.3	48.6	24.9	16.2	40.6
1952	13.3	21.7	24.7	47.9	56.6	67.5	70.6	67.1	61.4	42.3	34.2	22.1	44.1
1953	16.7	16.8	29.8	39.9	57.2	68.3	69.3	70.7	60.1	55.6	37.4	21.2	45.3
1954	10.7	30.9	27.1	45.2	51.8	69.0	71.6	67.9	59.0	46.4	36.9	21.4	44.9
1955	12.2	13.0	25.4	52.3	61.4	67.3	76.7	73.8	61.2	49.9	26.9	12.8	44.4
1956	12.8	13.3	24.3	40.3	56.8	70.8	67.6	68.6	57.9	56.6	33.2	22.9	43.8
1957	9.1	19.9	30.0	45.6	56.5	66.2	74.4	68.9	58.1	46.7	32.7	24.3	44.3
1958	21.4	14.1	31.6	46.6	58.9	60.9	68.3	69.4	61.7	52.3	35.1	14.7	44.6
1959	9.3	15.5	31.9	46.1	60.5	68.8	71.3	73.3	61.6	43.5	25.2	29.0	44.7

Total Precipitation (Inches)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug	Sept.	Oct.	Nov.	Dec.	Ann'l
1930	1.21	0.98	1.52	1.11	3.84	5.50	1.79	0.97	3.77	2.34	1.67	0.32	25.02
1931	0.15	0.72	1.36	2.03	1.38	3.02	0.42	3.70	3.67	3.08	3.76	0.84	24.13
1932	1.76	0.93	1.12	3.00	2.37	2.86	2.56	2.99	1.22	0.94	2.58	1.99	24.32
1933	1.48	1.16	2.21	1.53	5.11	2.14	2.56	1.89	7.75	1.28	0.95	0.68	28.74
1934	0.99	0.23	0.84	2.82	0.62	2.96	2.59	1.50	6.46	3.63	1.98	1.76	26.38
1935	1.74	0.12	1.23	2.74	4.16	3.71	3.39	3.48	1.60	2.52	1.67	0.87	27.23
1936	0.65	1.55	2.12	1.02	3.27	1.95	0.03	2.92	0.82	0.58	0.76	2.15	17.82
1937	1.44	0.82	0.67	2.31	4.29	2.66	2.61	3.94	3.18	1.71	0.99	0.93	25.25
1938	0.75	0.68	2.03	3.98	11.89	5.43	3.51	3.54	5.18	1.11	2.27	0.88	41.25
1939	1.56	1.80	0.88	2.14	3.18	5.34	3.64	6.56	3.64	2.52	0.17	1.42	32.85
1940	0.42	1.09	3.13	1.90	2.89	8.30	5.52	4.92	0.25	2.68	3.95	1.73	36.78
1941	1.08	1.15	1.77	1.26	4.14	3.61	3.02	3.40	3.85	4.97	0.91	1.31	30.47
1942	0.20	0.30	2.07	3.49	10.16	4.96	6.14	2.44	10.50	1.26	0.79	1.55	43.86
1943	1.52	0.54	1.32	1.97	5.76	4.48	3.74	2.88	2.11	1.18	1.15	T	26.65
1944	0.51	0.93	1.84	1.85	5.14	5.54	2.20	3.19	1.40	0.50	2.19	0.41	25.70
1945	0.67	1.46	3.07	4.09	2.80	6.27	4.93	3.43	1.93	0.48	1.45	1.28	31.86
1946	1.74	1.34	1.92	0.76	3.15	8.44	3.44	0.74	6.72	5.92	1.31	0.72	36.20
1947	0.78	0.27	0.85	4.08	2.64	5.46	1.32	3.18	4.35	1.05	2.25	0.74	26.97
1948	0.21	1.83	0.69	1.88	1.45	3.25	3.98	4.16	1.09	0.82	2.53	0.81	22.70
1949	1.43	0.16	3.92	1.61	2.09	4.68	10.84	1.25	2.68	2.05	0.58	1.39	32.68
1950	2.34	0.66	2.59	2.71	2.20	2.73	3.89	2.54	2.14	2.77	0.94	2.51	28.02
1951	0.71	1.56	2.92	3.30	3.33	9.21	5.42	3.09	4.97	1.01	2.31	1.49	39.33
1952	1.06	0.84	2.26	1.17	3.86	4.30	2.94	4.61	0.72	0.02	1.15	0.58	23.51
1953	0.65	1.27	1.38	2.50	3.17	6.63	4.92	3.68	0.78	0.05	1.79	1.33	28.15
1954	0.26	0.54	2.22	7.20	5.55	5.65	4.10	3.24	4.41	2.15	0.93	0.79	36.95
1955	0.83	1.03	0.61	2.14	1.70	3.63	4.93	2.81	0.96	3.32	1.39	1.13	24.48
1956	0.49	0.19	3.39	0.92	3.23	8.56	4.47	5.12	0.91	1.47	1.66	0.26	30.67
1957	0.54	0.70	1.24	1.56	4.23	7.92	7.17	6.03	1.96	1.66	3.15	0.50	36.66
1958	0.40	0.04	0.39	2.82	1.35	2.61	6.38	2.88	1.61	1.61	1.03	0.25	21.37
1959	0.13	0.48	0.64	0.93	4.30	3.79	3.97	6.49	4.00	3.77	0.68	1.49	30.67

STATION HISTORY

A climatological station was established on the campus of the Wisconsin State College at River Falls on May 1, 1918. The station was later moved to the yard of the observer at 328 North Fourth Street. On June 23, 1960 the station was moved to 127 North Fourth Street.

Instruments have been exposed over sod under excellent conditions. The observers have been:

C. G. Stratton. . . . .May 1, 1918 to January 2, 1960;
John G. Mosher, Jr. . . . .January 3, 1960 to present.