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°33'N.
LONGITUDE 87°49'W.
ELEV. (GROUND) 594 Feet

CLIMATOLOGICAL SUMMARY

MEANS AND EXTREMES FOR PERIOD--1945-1959

STATION: KENOSHA, 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.	31.4	14.9	23.2	64	1950	-24	1951	1300	1.56	1.33	1950	10.2	20.3	1947	10.0	1947	4	0	14	30	5	Jan.
Feb.	34.2	18.0	26.2	64	1954	-16	1951	1090	1.08	1.05	1948	4.5	10.0	1950	6.0	1950	3	0	12	26	3	Feb.
Mar.	42.8	26.6	34.7	82	1945	- 6	1950	940	2.29	1.87	1948	5.4	12.3	1948	6.0	1946	6	0	5	23	*	Mar.
Apr.	55.7	36.8	46.2	87	1951	14	1954	560	3.19	2.05	1956	0.2	1.6	1950	1.4	1959	7	0	*	8	0	Apr.
May	66.4	45.1	55.8	94	1950	29	1947	310	3.49	2.02	1948	T	T	1957+	T	1957+	7	1	0	1	0	May
June	77.1	55.7	66.4	102	1953	33	1945	90	4.05	3.55	1954	0	0		0		7	2	0	0	0	June
July	81.9	62.3	72.1	100	1955	46	1945	10	3.23	2.79	1952	0	0		0		5	5	0	0	0	July
Aug.	81.5	62.3	71.9	102	1947	45	1958+	20	3.08	2.58	1957	0	0		0		6	4	0	0	0	Aug.
Sept.	74.0	53.8	63.9	100	1953	31	1956	110	2.19	3.48	1947	0	0		0		4	2	0	*	0	Sept.
Oct.	64.2	44.2	54.2	88	1950	23	1959+	350	1.85	1.33	1958	T	0.4	1957	0.4	1957	4	0	0	2	0	Oct.
Nov.	47.3	30.2	38.8	81	1944	- 3	1950+	790	1.96	2.39	1951	2.7	8.9	1951	3.8	1959	6	0	3	18	*	Nov.
Dec.	35.6	19.5	27.6	66	1946	-12	1958	1160	1.89	1.35	1949	7.7	15.4	1950	8.6	1959	5	0	10	28	2	Dec.
Year	57.7	39.1	48.4	102	June 1953	-24	Jan. 1951	6730	29.86	3.55	June 1954	30.7	20.3	1947	10.0	Jan. 1947	64	14	44	136	10	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 KENOSHA, WISCONSIN

Kenosha, the county seat of Kenosha County, is located on the shores of Lake Michigan in the southeast corner of Wisconsin. The terrain is level to slightly rolling with soils that are brown to black silt loams. An oak forest with numerous openings and prairie grassland to the west originally covered the area.

Temperatures were read from instruments exposed on a roof until 1955. Undoubtedly, both higher and lower temperatures would have been reported from a ground exposure. Greatest differences would have been on days with strong radiational cooling.

The climate of Kenosha is modified continental. The weather is materially effected by Lake Michigan; this is particularly true during the spring, summer, and fall. Lag in lake water temperatures delays spring and prolongs fall. Summers are warm while winters are relatively cold with moderate snow. All seasons are characterized by frequent day-to-day changes as cyclonic systems move eastward across the country.

The number of days in a year with 90 degrees or more has varied from 31 in 1955 to 5 in 1958. The number of days with zero or below has varied from 21 in 1958 to 2 in 1953.

Precipitation for the 5-month period of May through September has approximated 55 per cent of the yearly normal. The likelihood of an inch or more of rain in a 7-day period during the summer is greatest the first part of June and August when the chance is nearly 4 in 10 years. The likelihood of a 7-day dry period, trace or less, during the summer is greatest the last week of August when the chance is more than 2 in 10 years. Intensities of about 1.35 inches in one hour, 2.10 inches in six hours, and 2.70 inches in 24 hours can be expected about once in two years.

The average date of the first 1 inch or greater snowfall is December 5; the chance of this fall by November 9 is 1 in 10 years and by December 31 is 9 in 10 years.

Thunderstorms have averaged occurrences on 36 days a year with individual years ranging 51 to 24 days. Hail has fallen on an average of two days a year with extreme years of 5 and 0 days. Thunderstorms are sometimes severe and accompanied by hail, heavy rain, and strong winds. Since 1916, only 2 tornadoes have been confirmed in Kenosha County.

Wind, sunshine, and relative humidity records are not available, but the following data from Milwaukee should approximate conditions in Kenosha County.

Prevailing winds are from the northwest in winter, northeast in spring and early summer, and southwest in summer and fall. March, April, and November are the windiest months with averages of 14 miles per hour; July and August are least windy with averages of 10 miles per hour. Speeds have averaged less than 4 miles per hour 10 per cent, 4 to 12 miles per hour 50 per cent, 13 to 31 miles per hour 40 per cent and greater than 31 miles per hour less than 1 per cent of the time. The strongest winds are usually from the west or southwest.

The percentage of possible sunshine has averaged from 55 per cent to 70 per cent for May through October, near 40 per cent for November through January, and 40 per cent to 55 per cent from February through April.

Relative humidity has approximated:

Threshold	Winter	Spring	Summer	Fall
Less than 50%	5%	15%	10%	15%
50% to 79%	55%	55%	50%	55%
Greater than 79%	40%	30%	40%	30%

The average date of the last 32-degree freeze in the spring is April 28, and the first in the fall is October 18. 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 173 days. The following table gives the likelihood of critical temperatures occurring.

Temperature	20%	40%	60%	80%
AFTER DATE IN SPRING				
32° or below	May 8	May 1	Apr. 25	Apr. 18
28° or below	Apr. 24	Apr. 17	Apr. 11	Apr. 4
24° or below	Apr. 13	Apr. 5	Mar. 30	Mar. 23
20° or below	Apr. 4	Mar. 28	Mar. 21	Mar. 13
16° or below	Mar. 24	Mar. 16	Mar. 10	Mar. 3
BEFORE DATE IN FALL				
32° or below	Oct. 8	Oct. 15	Oct. 21	Oct. 28
28° or below	Oct. 22	Oct. 30	Nov. 5	Nov. 13
24° or below	Oct. 28	Nov. 5	Nov. 11	Nov. 19
20° or below	Nov. 6	Nov. 14	Nov. 20	Nov. 28
16° or below	Nov. 11	Nov. 19	Nov. 25	Dec. 3

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

KENOSHA, WISCONSIN

Average Temperature (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1944			32.8	42.6	60.2	71.7	73.3	73.7	67.6	54.8	43.6	20.5	
1945	17.4	24.9	46.3	47.6	51.5	62.2	69.6	70.6	63.2	51.1	40.8	21.6	47.2
1946	25.0	26.5	44.5	48.3	54.4	65.8	72.8	69.3	64.2	58.0	41.8	30.4	50.1
1947	26.7	18.2	31.6	44.6	51.9	61.8	68.7	77.7	66.6	61.4	34.1	28.5	47.6
1948	16.2	25.6	33.2	50.9	54.6	66.1	74.5	73.0	66.4	52.5	43.5	27.6	48.7
1949	25.0	26.2	34.5	45.1	58.5	71.3	77.8	74.3	61.6	56.8	40.9	31.0	50.3
1950	28.4	26.5	30.9	42.0	56.2	65.9	71.7	69.4	64.8	58.8	36.8	19.3	47.6
1951	21.0	26.0	33.4	44.5	58.8	62.6	71.3	69.3	62.1	53.2	32.0	28.0	46.8
1952	27.0	30.4	32.6	49.2	56.0	71.1	75.8	71.4	64.4	49.3	42.9	31.8	50.2
1953	28.6	31.7	36.6	44.3	58.4	70.6	74.3	74.0	66.1	58.4	43.9	30.2	51.4
1954	24.7	35.5	33.0	51.0	53.6	71.4	73.3	70.4	67.2	53.4	41.1	29.1	50.3
1955	23.0	26.2	34.9	52.2	59.3	65.0	76.8	76.5	65.0	53.9	34.6	24.0	49.3
1956	26.2	25.7	32.2	42.5	53.3	66.7	67.8	59.6	59.0	54.2	36.0	28.2	46.8
1957	15.5	29.2	33.3	43.9	53.5	64.0	70.4	69.6	61.3	49.4	37.2	31.4	46.6
1958	21.9	18.0	33.5	45.9	54.9	59.6	67.4	69.7	61.9	53.2	39.8	19.5	45.5
1959	15.6	22.0	32.4	45.2	57.2	64.7	68.1	72.3	63.9	48.6	31.5	33.2	46.2

Total Precipitation (Inches)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1944			3.04	3.55	1.59	4.75	2.27	2.82	2.03	0.18	0.87	0.89	
1945	0.54	0.90	0.91	3.43	7.10	5.18	0.91	3.70	4.10	1.41	2.93	1.35	32.46
1946	2.89	0.76	2.90	0.66	3.42	3.37	0.66	1.26	0.69	1.97	1.14	1.63	21.35
1947	1.96	T	1.61	3.14	4.81	3.98	1.95	1.12	4.76	1.57	3.17	1.62	29.69
1948	0.70	1.35	4.45	2.63	4.15	2.55	0.83	0.67	2.27	0.79	2.24	3.31	25.94
1949	2.66	1.75	1.53	1.68	1.55	4.83	4.02	0.77	2.00	1.42	0.77	3.75	26.73
1950	3.26	1.32	2.35	5.26	1.21	6.57	3.23	4.86	2.81	0.36	1.54	1.52	34.29
1951	1.48	1.46	3.31	3.67	3.81	3.64	3.27	4.00	3.15	3.73	4.03	1.70	37.25
1952	1.65	0.71	3.37	3.58	3.65	3.90	6.78	2.72	0.45	0.09	2.09	1.85	30.84
1953	0.77	1.41	1.45	2.56	3.04	2.28	4.87	3.11	2.66	0.82	0.55	2.24	25.76
1954	1.01	1.48	2.70	4.06	2.34	9.11	5.52	4.77	1.72	4.80	1.29	3.04	41.84
1955	1.13	1.28	1.07	3.53	3.16	4.68	3.60	1.61	2.17	2.73	1.30	0.72	26.98
1956	0.41	0.93	1.66	4.23	3.55	2.38	3.82	3.58	0.30	0.08	1.30	1.01	23.25
1957	1.80	1.31	2.44	2.60	6.76	3.32	3.35	5.76	1.40	2.01	3.20	2.58	36.53
1958	1.51	0.19	0.79	2.02	2.17	2.58	1.86	0.99	1.80	2.76	1.58	0.43	18.68
1959	1.65	1.41	3.47	4.36	3.54	1.66	4.77	7.51	2.70	4.84	3.35	2.49	41.75

STATION HISTORY

The first climatological station in Kenosha was supervised by the Smithsonian Institute. Temperature records were kept from 1850 to 1863 and precipitation records from March 1858 to June 1863.

The Weather Bureau opened a climatological station on the roof of the Nash-Kelvinator power plant February 14, 1944. The station was moved to the city Sewage Treatment Plant November 2, 1955. The instruments are on the ground over sod.

The observers have been:

Reverend J. Gridley.....1850 to June, 1863
Doctor G. Gridley.....1850 to June, 1863
Nash-Kelvinator Corp. Employees.....Feb. 2, 1944 to Nov. 1, 1955
Kenosha City Employees.....Nov. 2, 1955 to present.