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

LATITUDE 45°57'N
LONGITUDE 88°13'W
ELEV. (GROUND) 1250 Feet

CLIMATOLOGICAL SUMMARY

MEANS AND EXTREMES FOR PERIOD 1930-1959***

STATION:
BRULE ISLAND, 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)	23	23	23	23		23		23	30	30		30	30		30		30	23	23	23	23	
Jan.	24.6	1.7	13.2	56	1944	-39	1948	1610	1.28	1.67	1939	13.0	25.0	1950	8.0	1930	4	0	25	31	14	Jan.
Feb.	28.7	2.7	15.7	58	1943	-39	1951+	1380	1.18	1.38	1937	12.0	26.0	1953+	13.0	1937	4	0	18	28	13	Feb.
Mar.	38.5	11.5	25.0	81	1946	-36	1948	1240	1.56	1.38	1938	9.4	25.0	1955	10.0	1955	5	0	9	30	7	Mar.
Apr.	54.3	26.2	40.3	90	1952	- 6	1954	740	2.15	1.73	1948	3.7	16.7	1957	10.0	1948	5	0	1	23	*	Apr.
May.	67.6	36.6	52.1	95	1939	17	1947	400	3.27	2.78	1942	0.1	2.0	1940	2.0	1940	7	*	0	11	0	May.
June.	75.7	46.7	61.2	98	1949+	24	1949	160	4.44	3.16	1953	T	T	1945	T	1945	8	1	0	2	0	June.
July.	80.3	50.9	65.6	100	1941+	33	1939	70	3.57	4.56	1942	0	0		0		7	2	0	0	0	July.
Aug.	78.4	49.8	64.1	100	1947	28	1950	100	3.37	3.77	1941	0	0		0		6	3	0	*	0	Aug.
Sept.	69.0	41.6	55.3	98	1939	18	1947	290	3.35	2.94	1949	T	T	1956+	T	1956+	7	1	0	5	0	Sept.
Oct.	58.6	32.6	45.6	87	1947	6	1936	600	2.06	1.87	1937	0.6	6.5	1933	6.0	1938	5	0	*	16	0	Oct.
Nov.	39.9	21.1	30.5	73	1944	-13	1950	1040	2.30	1.68	1948	7.0	19.5	1948	9.5	1942	5		8	27	2	Nov.
Dec.	28.6	9.3	19.0	54	1941	-35	1958	1430	1.26	1.35	1959	11.5	30.0	1938	12.0	1946	4	0	21	31	9	Dec.
Year	53.7	27.6	40.7	100	Aug. 1947+	-39	Feb. 1951+	9060	29.79	4.56	July 1942	57.3	30.0	Dec. 1938	13.0	Feb. 1937	67	7	82	204	45	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.

*** Temperature data for period May 1936-1959.

+ Also on earlier dates, months, or years.

* Less than one half.

CLIMATE OF BRULE ISLAND, WISCONSIN

Brule Island is located on the Brule River in northeastern Wisconsin. The area is wooded and rolling to hilly with numerous small lakes and swamps. The greater part of the county was originally covered with a mixed forest of white pine, jack pine, hemlock, sugar maple, and birch. Soils are mostly grayish silt loams and gray acid sands. This summary is representative of Brule Island and the surrounding area.

The climate of the area is classified continental. Winters are long, cold, and snowy while summers are relatively short and warm. Springs and falls are often short and mixtures of both summer and winter. Changes in weather can be expected every few days from late fall through spring. The climate is influenced by the general storms which move eastward along the northern border of the United States, and those which move northeastward from the southwestern states.

The number of days in a year with 90 degrees or higher temperatures has varied from 32 in 1937 to 0 in 1950 and 1951; and 1 in 3 years has had fewer than 4 days with 90 degrees or higher temperatures. The number of days with 0 degrees or lower has varied from 66 in 1950 to 28 in 1941.

Precipitation for the 5-month period May through September has approximated 60 per cent of the annual normal. The probability of 1 inch or more of rain in a 7-day period during the summer is greatest the last half of June and the third week of July when the chance is nearly 4 in 10 years. The probability of a 7-day dry period, trace or less, during the summer is greatest the second week of August when the chance is 2 in 10 years. Intensities of about 1.20 inches in 1 hour, 1.80 inches in 6 hours, and 2.25 inches in 24 hours can be expected about once in 2 years. The number of days in a year with 0.01 inch or more precipitation has been between 113 and 135 in 2 of 3 years with an average of 124 days.

Snowfall varies considerably from year to year, amounts having ranged from 88 inches in 1950 to 32 inches in 1941. The average date of the first 1 inch or greater snowfall is November 16. The chance of this fall by October 25 is 1 in 10 years, and by December 8 is 9 in 10 years.

Thunderstorms have occurred on an average of 30 days a year with individual years varying from 44 to 18 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 2 tornadoes has been confirmed in Florence County.

Wind and sunshine data are not available, but the following wind data from Iron Mountain, Michigan, and sunshine data from Wausau should approximate conditions at Brule Island.

Prevailing winds are from the west and northwest from late fall through early spring and from the southwest the remaining part of the year. The average annual wind speed is 6 miles per hour. The windiest months are April and May with averages of 8 miles per hour, and the least windy months are July and August with averages of 5 miles per hour. The highest speeds are usually from one of the westerly directions.

Possible sunshine has averaged about one-third for October, November and December, two-thirds from June through September, and about one-half during the remainder of the year.

The average date of the last 32-degree freeze in the spring is June 5, and the first in the fall is September 8. 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 95 days. The following table gives the likelihood of critical temperatures occurring:

Temperature	20%	40%	60%	80%
AFTER DATE IN SPRING				
32° or below	June 15	June 8	June 2	May 26
28° or below	May 31	May 24	May 18	May 11
24° or below	May 24	May 16	May 10	May 2
20° or below	May 7	Apr. 30	Apr. 23	Apr. 15
16° or below	Apr. 26	Apr. 18	Apr. 12	Apr. 5
BEFORE DATE IN FALL				
32° or below	Aug. 29	Sept. 5	Sept. 11	Sept. 18
28° or below	Sept. 9	Sept. 17	Sept. 24	Oct. 1
24° or below	Sept. 21	Sept. 29	Oct. 5	Oct. 13
20° or below	Oct. 9	Oct. 17	Oct. 23	Oct. 31
16° or below	Oct. 23	Oct. 31	Nov. 6	Nov. 14

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

BRULE ISLAND, WISCONSIN

Average Temperature (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1936						59.0		64.5	59.0	41.2	27.1	22.1	
1937	11.0	17.0	22.2	38.0	52.8	61.5	68.1	70.1	56.2	41.0	30.2	16.1	40.4
1938	12.4	19.1	31.2	41.2	52.6	60.6	66.7	67.2	55.4	51.5	34.6	22.2	42.9
1939	17.5	11.1	24.0	38.8	56.9	63.6	67.0	64.6	57.8	44.1	33.4	26.6	42.1
1940	11.0	19.3	20.8	36.7	50.2	61.2	65.9	63.6	58.6	46.8	31.2	21.8	40.6
1941	16.6	17.4	21.8	47.3	57.8	64.2	67.4	63.5	59.2	45.8	34.5	26.3	43.5
1942	17.8	16.8	31.2	48.0	52.5	62.2	65.5	64.3	55.3	46.6	31.8	16.6	42.4
1943	11.8	17.3	20.9	37.9	52.6	65.4	69.0	65.8	53.0	47.0	29.7	21.4	41.0
1944	25.0	20.2	23.6	37.8	57.4	64.0	66.0	65.4	57.3	46.9	36.2	17.8	43.1
1945	10.0	16.8	36.2	43.8	51.0	58.9	64.1	65.2	56.0	44.2	33.0	16.1	41.3
1946	17.2	15.8	39.0	45.0	52.6	62.1	66.6	62.4	56.0	50.1	33.8	21.0	43.5
1947	17.6	17.5		38.6	48.8	58.4	65.2	69.4	56.2	53.1	27.4	17.8	
1948	5.0	12.5	22.5	41.4	50.2	59.2	65.4	64.5	58.3	43.5	34.4	18.6	39.7
1949	17.8	14.3	24.6	43.4	52.3	65.1	66.3	65.1	51.8	46.7	30.0	18.5	41.3
1950	9.4	12.4	20.3	29.8	49.5	60.0	61.9	57.0	54.0	47.6	25.2	12.5	36.6
1951	9.3	14.1	23.9	38.6	55.3	57.5	64.1	59.6	51.7	43.2	23.1	16.4	38.1
1952	13.5	17.7	22.3	42.7	50.7	61.1	66.2	61.4	55.0	37.9	31.4	23.9	40.3
1953	17.3	15.6	27.3	36.2	51.6	61.5	64.6	65.0	55.2	48.7	35.1	21.1	41.6
1954	10.3	23.3	21.4	38.9	45.8	62.8	63.3	60.7	51.7	43.6	32.7	17.5	39.3
1955	11.1	12.3	20.5	44.9	53.9	61.1	69.1	65.9	53.8	46.2	25.8	13.0	39.8
1956	15.5	15.6	20.3	36.0	49.7	62.2	61.0	62.6	51.5	48.9	29.6	18.6	39.3
1957	5.3	15.2	24.6	40.6	50.0	60.0	66.2	61.7	52.3	43.7	29.2	18.2	38.9
1958	16.8	11.9	27.6	40.9	49.3	54.9	64.2	62.8	54.8	46.2	31.6	6.7	39.0
1959	3.5	8.0	22.8	39.0	54.9	62.9	65.2	67.2	56.4	40.5	20.9	23.3	38.7

Total Precipitation (Inches)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1930	1.10	1.88	0.46	2.23	3.57	5.41	1.33	1.23	2.02	1.72	0.92	0.35	22.22
1931	0.84	0.81	1.16	0.53	2.12	5.06	2.23	2.99	6.32	2.86	3.74	0.57	29.23
1932	1.95	1.59	1.13	1.21	2.44	2.94	2.12	5.49	1.31	1.26	2.57	1.30	25.31
1933	1.59	1.89	1.26	2.19	3.74	3.59	1.65	0.45	4.42	2.60	1.01	1.41	25.80
1934	1.16	0.65	2.05	2.26	1.28	3.01	1.64	2.64	6.42	2.30	4.22	1.81	29.44
1935	1.56	0.67	1.26	1.58	1.73	5.04	2.79	2.78	2.26	2.64	1.97	0.59	24.87
1936	0.92	0.82	1.63	1.36	3.94	4.09	0.60	6.02	3.24	2.28	2.43	2.01	29.34
1937	1.83	2.78	0.14	2.14	1.85	1.12	1.72	0.70	5.09	3.99	2.56	0.84	24.76
1938	1.42	1.21	4.36	3.69	7.24	3.67	7.74	5.38	3.92	2.00	1.29	2.61	44.53
1939	2.82	1.52	0.93	2.46	4.89	7.27	1.43	3.53	1.87	1.50	0.31	1.18	29.71
1940	1.13	1.84	0.77	2.31	4.18	6.79	3.08	2.69	1.69	1.88	3.40	1.45	31.21
1941	1.22	0.88	0.76	1.23	3.16	1.94	2.44	8.30	4.42	4.02	1.26	1.29	30.92
1942	0.59	0.54	2.79	0.89	7.77	2.54	7.25	2.85	4.81	2.67	2.64	1.65	36.99
1943	1.50	0.62	2.07	2.07	2.49	7.56	2.62	2.98	1.14	1.26	2.10	0.14	26.55
1944	0.93	0.78	1.73	1.66	4.05	3.47	3.50	2.81	4.41	0.67	3.19	0.54	27.74
1945	0.86	2.54	1.98	3.72	3.13	3.34	2.54	3.65	5.02	2.32	4.56	1.39	35.05
1946	1.94	0.72	0.99	0.82	2.43	8.07	1.80	2.91	3.53	2.01	2.15	1.76	29.13
1947	0.65	0.81	0.48	2.80	3.03	2.55	3.24	2.39	2.23	1.71	1.97	0.81	22.67
1948	1.24	1.67	1.54	3.06	1.34	3.33	3.58	2.09	1.50	0.73	5.85	0.65	26.58
1949	1.54	0.46	1.11	0.57	3.96	5.67	4.64	1.97	4.91	2.14	1.88	0.53	29.38
1950	3.04	1.04	2.46	2.82	4.06	2.78	4.05	2.59	1.12	1.57	1.73	2.37	29.63
1951	0.57	2.26	3.57	3.54	3.44	5.23	7.63	5.08	3.67	2.42	1.49	1.08	39.98
1952	2.21	0.82	2.13	1.59	1.84	5.62	8.82	3.29	0.57	0.22	1.22	1.09	29.42
1953	1.15	2.77	1.39	2.70	2.73	9.50	4.85	4.25	2.77	0.36	1.72	0.93	35.12
1954	1.26	1.39	2.29	4.18	2.40	4.02	2.76	2.08	6.48	2.91	1.10	0.67	31.54
1955	1.04	0.59	2.52	2.69	3.90	3.21	4.69	1.74	1.24	3.66	1.48	2.07	28.83
1956	0.60	0.35	1.06	1.64	3.52	8.25	4.60	4.33	1.58	0.55	2.39	1.25	30.12
1957	0.39	0.95	0.61	2.36	2.69	2.21	4.75	3.67	4.07	1.32	3.85	1.19	28.06
1958	0.69	0.20	0.82	2.19	2.85	3.71	3.26	2.62	2.08	2.56	2.84	0.97	24.79
1959	0.57	0.48	1.49	2.14	2.44	2.33	3.77	7.63	6.38	3.66	1.21	3.25	35.35

STATION HISTORY

Precipitation measurements have been made at Brule Island since September 1, 1922; temperature readings began May 12, 1936. The instruments were first located on a hillside about 60 to 70 feet above the river, but now are on the south end of a dam.

The Wisconsin-Michigan Power Company employees who have been the observers are:

A. E. Ebel. . . . . September 1, 1922 to March 31, 1926
Hugo Eriksson. . . . . April 1, 1926 to August 31, 1929
Henry Jacques. . . . . September 1, 1929 to December 31, 1948
Rudolph Helgren. . . . . January 1, 1949 to November 31, 1956
Raymond Noviac. . . . . December 1, 1956 to present