U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU
IN COOPERATION WITH MARION CHAMBER OF COMMERCE
CLIMATOGRAPHY OF THE UNITED STATES NO. 20 — 12

LATITUDE 40° 34' N.
LONGITUDE 85° 40' W.
ELEV. (GROUND) 791 Ft.

# CLIMATOLOGICAL SUMMARY

STATION MARION, INDIANA

MEANS AND EXTREMES FOR PERIOD 1927-1956

| 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 | |
| Jan. | 36.3 | 19.9 | 28.1 | 69 | 1950 | -20 | 1930 | 1140 | 2.82 | 2.95 | 1950 | 5.6 | 18.5 | 1927 | 12.0 | 1927 | 6 | 0 | 10 | 27 | 3 | Jan. |
| Feb. | 39.1 | 21.5 | 30.3 | 70 | 1954+ | -15 | 1933 | 970 | 2.01 | 1.84 | 1936 | 4.3 | 10.0 | 1936 | 5.0 | 1954 | 5 | 0 | 8 | 24 | 2 | Feb. |
| Mar. | 48.7 | 28.9 | 38.8 | 82 | 1939 | - 8 | 1948 | 810 | 3.32 | 2.63 | 1955 | 3.7 | 12.3 | 1952 | 10.0 | 1952 | 7 | 0 | 3 | 21 | * | Mar. |
| Apr. | 61.1 | 38.5 | 49.8 | 90 | 1930 | 16 | 1940 | 460 | 3.67 | 1.85 | 1948 | 0.4 | 4.0 | 1940 | 4.0 | 1940 | 8 | * | * | 8 | 0 | Apr. |
| May | 72.4 | 49.1 | 60.8 | 96 | 1934 | 27 | 1947 | 190 | 4.28 | 2.98 | 1944 | T | T | 1947+ | T | 1947+ | 8 | 1 | 0 | 1 | 0 | May |
| June | 82.2 | 58.9 | 70.6 | 103 | 1934 | 37 | 1945+ | 40 | 3.63 | 2.81 | 1933 | 0 | 0 | | 0 | | 7 | 5 | 0 | 0 | 0 | June |
| July | 86.9 | 62.5 | 74.7 | 108 | 1936 | 44 | 1937+ | 0 | 3.32 | 3.90 | 1955 | 0 | 0 | | 0 | | 6 | 10 | 0 | 0 | 0 | July |
| Aug. | 84.7 | 60.5 | 72.6 | 102 | 1942+ | 39 | 1946 | 10 | 3.16 | 2.68 | 1944 | 0 | 0 | | 0 | | 6 | 8 | 0 | 0 | 0 | Aug. |
| Sept. | 78.3 | 53.1 | 65.7 | 102 | 1951 | 28 | 1942+ | 100 | 3.25 | 4.54 | 1933 | 0 | 0 | | 0 | | 5 | 3 | 0 | * | 0 | Sept. |
| Oct. | 67.0 | 42.9 | 55.0 | 92 | 1946 | 19 | 1930 | 340 | 2.53 | 2.69 | 1949 | T | 0.2 | 1954 | 0.2 | 1954 | 4 | * | 0 | 4 | 0 | Oct. |
| Nov. | 49.9 | 31.8 | 40.9 | 84 | 1950 | - 5 | 1950 | 720 | 2.84 | 2.50 | 1927 | 2.3 | 13.0 | 1932 | 13.0 | 1932 | 6 | 0 | 2 | 17 | * | Nov. |
| Dec. | 38.2 | 22.5 | 30.4 | 68 | 1933+ | -12 | 1932 | 1070 | 2.24 | 2.00 | 1927 | 5.3 | 16.0 | 1929 | 6.5 | 1956 | 5 | 0 | 9 | 25 | 1 | Dec. |
| Year | 62.7 | 40.8 | 51.8 | 108 | 1936 | -20 | 1930 | 5850 | 37.07 | 4.54 | 1933 | 21.6 | 18.5 | 1927 | 1.3 | 1932 | 73 | 27 | 32 | 127 | 6 | Year |

(a) Average length of record, years.

T Trace, an amount too small to measure.

** Base 65°F. and computed from monthly mean temperatures.

+ Also on earlier dates, months, or years.

* Less than one half.

## CLIMATE OF MARION, INDIANA

Marion has an invigorating climate because of its location in the middle latitudes and away from the influence of oceans. The zone of conflict between polar air and tropical air moves back and forth across the locality resulting in rainfall and frequent changes of temperatures and humidity. Marion is on the warm side of this undulating boundary in the summer and on the cold side in the winter most of the time. Surges of polar air toward the south and tropical air toward the north cause low pressure centers to form and move across the plains, up the Ohio River Valley and St. Lawrence River Valley to the Atlantic. Most of Marion's rainfall comes from these storms.

Thunderstorms accompany most of the summer rainfall and occur when potential energy aloft is triggered by a change in moisture and temperature conditions. This phenomenon is related to hot humid days and night time cooling. Days with thunderstorms average about seven a month in the summer and about two a year occur during the winter months.

Relative humidity data are not available but estimates are possible. Relative humidity varies on an average summer day from the 40's during a typical summer afternoon to 90 and higher just before dawn. Relative humidity rises and falls much as temperature does during a 24-hour period but the highest percent usually occurs with the minimum temperature and the lowest percent with the maximum temperature. In the winter the most probable range of humidity from afternoon to night is from the 60's to the 90's. Fog is a visible indicator of humidities near 100 percent.

An average day has a greater range of temperature in the summer than in the winter. The table shows that winter days have a daily temperature range of 16 degrees while in the summer the range is 24 degrees. Temperatures in January varied 89 degrees; the range in July was 64 degrees.

Winds blow out of the southwest quadrant, however, northerly directions are nearly as frequent in the winter.

The record of a continuous recording raingage has been analyzed for rainfall intensity during the period of 1940-1950. In a rain storm of September 21, 1950 rainfall was 2.23 inches in one hour, 2.48 inches in 2 hours and 2.50 inches in 3 hours. On July 31, 1942 rainfall was 3.80 inches in 24 hours.

Precipitation is greatest in May and least in February. The most rain comes in late spring and early summer. The winter months are the driest. July is the warmest month of the year. An average July has 10 days of temperatures reaching 90 degrees or higher. January is the coldest. The winter season averages 6 days with minimum temperatures below zero.

Snowfall has occurred as early as October and as late as May. The most snow comes in January, however, the greatest snowfall of any one day occurred November 16, 1932 when 13 inches were recorded.

Degree day data are provided as an index of heating requirements for dwellings. Fuel consumption for heating is proportional to degree day summations. A month with twice the heating degree days of another month would require twice as much fuel for heating. Degree days for a single day are obtained by subtracting the mean temperature from 65. The need for the heating of buildings is considered none or slight if a day has an average temperature of 65 or higher.

A river gauge on Highland Avenue Bridge has recorded the following four highest stages of record on the Mississinewa River: 16.07 feet on March 21, 1927, 15.13 feet on May 18, 1943, 14.7 feet on June 30, 1957, and 13.2 feet on January 4, 1950. The zero of the river gauge is 774.56 feet above m.s.l.

Marion is fortunate in having a weather record dating from November 1885. A card has been punched for every daily observation and high speed computations of almost infinite variety are obtainable at Purdue University or the National Weather Records Center. Record amounts of precipitation and extremes of temperature from the entire record are shown in a table on the back side of this summary.

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Purdue University, Agronomy Department
Lafayette, Indiana

| Year | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Ann'l |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1927 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 1928 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 1929 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 1930 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 1931 | 31.4 | 36.0 | 35.0 | 50.8 | 57.9 | 72.6 | 77.0 | 72.6 | 70.1 | 57.6 | 50.0 | 38.6 | 54.1 |
| 1932 | 36.7 | 37.4 | 31.7 | 49.7 | 61.2 | 71.3 | 74.8 | 72.7 | 64.3 | 53.4 | 36.2 | 29.7 | 51.6 |
| 1933 | 36.6 | 29.6 | 37.0 | 50.1 | 63.7 | 76.2 | 75.5 | 70.8 | 71.8 | 53.6 | 41.2 | 35.1 | 53.4 |
| 1934 | 34.2 | 23.0 | 35.9 | 51.4 | 65.8 | 76.8 | 79.8 | 73.2 | 65.8 | 55.2 | 45.8 | 27.4 | 52.9 |
| 1935 | 29.5 | 31.5 | 46.2 | 47.4 | 55.6 | 67.4 | 77.0 | 75.0 | 66.0 | 54.6 | 40.8 | 24.2 | 51.2 |
| 1936 | 20.0 | 19.9 | 43.2 | 46.7 | 64.0 | 70.2 | 80.2 | 77.5 | 69.3 | 53.8 | 37.2 | 33.4 | 51.3 |
| 1937 | 30.8 | 28.4 | 34.0 | 48.7 | 60.7 | 69.3 | 73.8 | 74.9 | 63.8 | 51.6 | 37.9 | 27.6 | 50.2 |
| 1938 | 27.8 | 37.4 | 45.8 | 52.6 | 61.8 | 68.9 | 74.2 | 75.2 | 67.0 | 57.6 | 43.8 | 31.6 | 53.6 |
| 1939 | 33.1 | 31.8 | 41.5 | 47.4 | 65.0 | 73.4 | 74.4 | 72.5 | 70.7 | 56.2 | 40.2 | 34.1 | 53.4 |
| 1940 | 14.2 | 29.5 | 35.0 | 46.4 | 57.4 | 71.0 | 74.6 | 74.3 | 63.8 | 57.8 | 38.7 | 36.0 | 49.9 |
| 1941 | 28.2 | 25.4 | 33.6 | 55.6 | 63.2 | 70.2 | 74.4 | 73.3 | 69.0 | 57.5 | 42.8 | 36.2 | 52.4 |
| 1942 | 27.0 | 25.6 | 41.0 | 55.1 | 62.4 | 71.0 | 74.8 | 70.8 | 63.2 | 54.4 | 44.0 | 26.3 | 51.3 |
| 1943 | 26.8 | 30.8 | 36.0 | 47.6 | 61.1 | 74.5 | 74.7 | 72.6 | 61.6 | 53.7 | 38.1 | 28.0 | 50.4 |
| 1944 | 32.2 | 32.6 | 36.0 | 48.2 | 66.6 | 74.3 | 74.8 | 74.2 | 66.4 | 53.8 | 43.0 | 25.0 | 52.2 |
| 1945 | 21.6 | 31.2 | 50.9 | 53.0 | 55.2 | 67.7 | 71.8 | 72.4 | 67.4 | 52.7 | 42.8 | 23.8 | 50.8 |
| 1946 | 28.8 | 32.4 | 52.2 | 52.6 | 59.2 | 70.2 | 74.6 | 69.0 | 67.2 | 58.9 | 45.8 | 32.2 | 53.6 |
| 1947 | 32.0 | 22.5 | 33.0 | 49.8 | 58.0 | 68.3 | 71.4 | 79.8 | 67.0 | 61.8 | 37.4 | 30.0 | 50.9 |
| 1948 | 20.7 | 29.6 | 40.0 | 54.4 | 60.3 | 71.3 | 74.8 | 73.0 | 67.5 | 50.8 | 45.7 | 33.6 | 51.8 |
| 1949 | 33.5 | 32.6 | 39.1 | 48.3 | 62.5 | 73.5 | 78.1 | 73.5 | 59.2 | 57.7 | 40.7 | 33.8 | 52.6 |
| 1950 | 34.0 | 27.8 | 33.1 | 43.4 | 62.2 | 68.5 | 71.8 | 70.5 | 63.9 | 57.2 | 35.2 | 21.9 | 49.1 |
| 1951 | 28.4 | 27.1 | 36.6 | 46.4 | 62.9 | 69.6 | 73.5 | 71.1 | 63.1 | 55.9 | 33.3 | 28.3 | 49.7 |
| 1952 | 30.9 | 32.6 | 36.2 | 49.9 | 59.7 | 75.7 | 77.3 | 71.5 | 64.6 | 47.9 | 42.3 | 33.3 | 51.8 |
| 1953 | 30.9 | 32.3 | 39.8 | 45.6 | 62.4 | - | 74.0 | 71.7 | 64.2 | 55.5 | 41.8 | 31.7 | - |
| 1954 | 28.4 | 35.9 | 34.8 | 52.3 | 54.6 | 72.8 | 72.5 | 71.1 | 66.7 | 54.4 | 39.6 | 29.4 | 51.1 |
| 1955 | 25.2 | 27.8 | 37.5 | 54.3 | 61.4 | 65.6 | 77.5 | 74.0 | 65.2 | 53.1 | 36.2 | 25.3 | 50.3 |
| 1956 | 24.4 | 28.4 | 36.0 | 45.2 | 59.2 | 69.9 | 71.1 | 70.4 | 61.2 | 56.7 | 40.1 | 37.4 | 49.8 |
| 1957 | 19.4 | 33.3 | 36.5 | 48.9 | 58.6 | 69.1 | 72.4 | | | | | | |

STATION HISTORY

Weather data was first recorded at Marion in November, 1885. A long list of men interested in serving the public make up the roster of observers. S. R. Fankboner served to August 31, 1890 and J. L. Massena to January 31, 1894. Instruments were apparently at the homes of these observers and latitude was published as 40° 34' N. and longitude as 85° 21' W.

The man with the longest record of observing, James F. Hood, 120 N.E. Street, recorded data from February 1, 1894 to June 30, 1918. Elevation of this station was 814 feet above m.s.l., latitude was 40° 29' N. and longitude 85° 44' W. In June of 1918 the instruments were moved to the National Soldiers Home, 3 miles southeast of the court house and Will C. Sturgis was the observer until March 21, 1921. The station was moved one mile west in March, 1921 to the college campus and Professor A. Jones became the observer. At this site the published elevation was 850 feet, latitude 40° 33' N. and longitude 85° 41' W. Subsequent observers were: S. H. Kershner from April 1, 1933 to April 9, 1939; Earl E. Barrett to August 31, 1946; Charles W. Taylor to August 31, 1948 and James W. Elliott to June 13, 1953. Growing trees began to crowd the instruments in the latter years of the 1921-53 period. On June 14, 1953 it was moved to the disposal plant, 1.5 miles north of the post office where Raymond H. Strickland has been the observer to the present time. At the disposal plant a recording raingage has been in operation since May 2, 1946 and a standard raingage since May 6, 1940. Also in operation is a recording river gauge. Elevation is 791 feet above m.s.l. latitude 40° 34' N. and longitude 85° 40' W.

EXTREMES AND DATE OF OCCURRENCE FOR PERIOD OF 1886-1956

| Month | Record Daily Temperature Highest | | Record Daily Temperature Lowest | | Precipitation Greatest Daily | | Snowfall Greatest Monthly | |
|---|---|---|---|---|---|---|---|---|
| Jan. | 69 | 26/1950 | -25 | -/1887 | 3.20 | 1/1890 | 23.0 | 1893 |
| Feb. | 76 | 22/1922 | -20 | 14/1905 | 2.00 | 2/1893 | 16.6 | 1912 |
| Mar. | 86 | 24/1910 | - 8 | 12/1948 | 3.43 | 26/1904 | 19.0 | 1899 |
| Apr. | 91 | 26/1915 | 15 | 1/1923+ | 3.21 | 12/1903 | 5.3 | 1907 |
| May | 100 | 27/1911 | 26 | 4/1903 | 3.29 | 19/1898 | 2.0 | 1923+ |
| June | 103 | 28+/1934 | 35 | 7/1894 | 3.38 | 22/1900 | | |
| July | 108 | 14/1936 | 37 | 1/1892 | 3.90 | 15/1955 | | |
| Aug. | 103 | 6/1918 | 38 | 31/1915 | 4.64 | 7/1906 | | |
| Sept. | 102 | 1/1951 | 28 | 28/1942+ | 4.54 | 27/1933 | | |
| Oct. | 92 | 6/1946 | 15 | 30/1895+ | 3.56 | 12/1901 | 2.0 | 1925 |
| Nov. | 84 | 1/1950 | - 5 | 25/1950 | 2.50 | 30/1927 | 13.0 | 1932 |
| Dec. | 68 | 15/1933+ | -22 | 28/1924 | 2.00 | 1/1927 | 19.7 | 1909 |

Total Precipitation (Inches)

| Year | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Ann'l |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1927 | 2.63 | 1.63 | 3.84 | 6.10 | 7.04 | 5.13 | 3.28 | 3.46 | 3.12 | 2.18 | 5.93 | 4.36 | 48.70 |
| 1928 | 2.58 | 2.47 | 3.44 | 2.34 | 2.19 | 7.53 | 3.72 | 3.12 | 0.57 | 1.62 | 3.19 | 1.60 | 34.37 |
| 1929 | 3.81 | 1.41 | 3.25 | 4.63 | 7.73 | 3.44 | 3.55 | 2.58 | 1.73 | 4.45 | 2.09 | 4.10 | 42.77 |
| 1930 | 6.84 | 1.78 | 2.17 | 4.14 | 1.65 | 2.37 | 2.38 | 2.88 | 2.91 | 1.25 | 2.05 | 0.59 | 31.01 |
| 1931 | 1.43 | 1.53 | 2.00 | 3.07 | 1.95 | 3.73 | 4.89 | 6.25 | 6.83 | 2.66 | 2.65 | 3.19 | 40.18 |
| 1932 | 4.87 | 1.34 | 2.22 | 3.80 | 0.89 | 2.52 | 2.61 | 2.20 | 5.74 | 3.92 | 2.76 | 4.77 | 37.64 |
| 1933 | 2.00 | 1.69 | 6.10 | 3.03 | 9.69 | 3.06 | 2.13 | 4.52 | 7.10 | 1.95 | 0.27 | 1.56 | 43.10 |
| 1934 | 1.44 | 0.46 | 3.01 | 1.42 | 0.39 | 1.88 | 2.83 | 5.12 | 4.89 | 0.55 | 3.13 | 1.13 | 26.25 |
| 1935 | 2.92 | 0.70 | 4.37 | 2.92 | 5.72 | 3.77 | 1.56 | 1.62 | 2.45 | 0.79 | 3.34 | 1.13 | 31.29 |
| 1936 | 0.99 | 3.58 | 2.21 | 2.39 | 3.96 | 2.05 | 0.21 | 3.59 | 4.52 | 3.17 | 2.19 | 3.53 | 32.39 |
| 1937 | 5.85 | 1.45 | 1.81 | 5.62 | 4.54 | 4.34 | 3.26 | 4.12 | 3.71 | 2.51 | 1.70 | 2.11 | 41.02 |
| 1938 | 1.78 | 3.25 | 7.31 | 3.04 | 5.63 | 5.19 | 3.71 | 2.87 | 4.38 | 0.55 | 1.86 | 1.64 | 41.21 |
| 1939 | 3.37 | 3.32 | 3.52 | 4.03 | 0.88 | 3.70 | 4.77 | 1.76 | 0.87 | 3.72 | 1.41 | 1.11 | 32.46 |
| 1940 | 1.76 | 1.45 | 1.91 | 3.47 | 2.53 | 2.51 | 1.41 | 1.44 | 0.90 | 4.13 | 3.09 | 2.01 | 26.61 |
| 1941 | 1.19 | 0.46 | 0.73 | 2.37 | 1.72 | 5.72 | 3.39 | 1.88 | 1.74 | 4.51 | 3.51 | 1.41 | 29.43 |
| 1942 | 1.42 | 3.59 | 2.51 | 2.71 | 3.73 | 3.19 | 6.87 | 3.04 | 2.05 | 1.50 | 4.25 | 1.65 | 36.51 |
| 1943 | 1.14 | 1.10 | 2.69 | 3.13 | 11.43 | 3.60 | 5.95 | 2.95 | 4.35 | 0.70 | 2.50 | 0.61 | 40.15 |
| 1944 | 0.35 | 2.55 | 3.59 | 6.14 | 8.88 | 0.90 | 0.63 | 4.11 | 1.85 | 1.12 | 3.17 | 1.56 | 34.85 |
| 1945 | 0.48 | 1.45 | 4.95 | 2.78 | 4.43 | 4.95 | 2.76 | 4.37 | 6.50 | 3.08 | 2.62 | 2.07 | 40.44 |
| 1946 | 1.23 | 1.74 | 3.22 | 1.52 | 5.24 | 3.61 | 3.55 | 1.81 | 0.67 | 2.75 | 2.88 | 2.72 | 30.94 |
| 1947 | 3.37 | 0.40 | 2.00 | 6.60 | 5.18 | 5.04 | 1.80 | 3.33 | 4.21 | 2.34 | 1.18 | 1.78 | 37.23 |
| 1948 | 2.85 | 2.39 | 5.74 | 5.65 | 4.20 | 5.50 | 3.78 | 2.86 | 3.83 | 2.17 | 4.75 | 3.24 | 46.96 |
| 1949 | 5.84 | 2.95 | 2.21 | 2.78 | 2.86 | 3.51 | 4.15 | 4.13 | 1.33 | 6.44 | 1.41 | 3.41 | 41.02 |
| 1950 | 10.53 | 4.04 | 3.46 | 6.10 | 1.68 | 4.17 | 3.80 | 2.31 | 6.64 | 1.55 | 6.12 | 2.18 | 52.58 |
| 1951 | 1.80 | 3.09 | 3.09 | 3.65 | 5.67 | 2.48 | 3.46 | 1.14 | 2.80 | 2.71 | 3.98 | 4.28 | 38.15 |
| 1952 | 3.71 | 2.51 | 3.90 | 4.84 | 4.85 | 2.76 | 1.82 | 2.81 | 4.91 | 1.43 | 3.27 | 2.26 | 39.07 |
| 1953 | 2.67 | 1.33 | 3.90 | 3.40 | 3.58 | 2.82 | 3.21 | 3.08 | 2.64 | 1.26 | 1.51 | 1.45 | 30.85 |
| 1954 | 2.06 | 2.82 | 2.19 | 3.34 | 2.40 | 4.67 | 3.58 | 4.33 | 0.60 | 5.63 | 1.83 | 2.20 | 35.65 |
| 1955 | 1.91 | 1.51 | 5.36 | 3.06 | 2.73 | 1.97 | 7.88 | 3.89 | 3.19 | 4.20 | 3.92 | 0.54 | 40.16 |
| 1956 | 1.04 | 2.43 | 2.77 | 2.06 | 5.17 | 2.90 | 2.62 | 3.35 | 0.41 | 1.05 | 2.59 | 3.01 | 29.40 |
| 1957 | 1.74 | 1.73 | 1.62 | 8.57 | 4.60 | 5.87 | 4.44 | | | | | | |

MEAN DAILY TEMPERATURES

| Date | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jan. | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 29 | 29 | 29 | 29 | 29 | 29 |
| Feb. | 29 | 29 | 29 | 29 | 29 | 29 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 31 | 31 | 31 | 31 | 31 | 32 | 32 | 32 | 33 | 33 | 33 | 33 | 34 | 34 | 34 | 34 | | |
| Mar. | 35 | 35 | 35 | 36 | 36 | 36 | 37 | 37 | 37 | 38 | 38 | 38 | 39 | 39 | 39 | 40 | 40 | 40 | 41 | 41 | 41 | 42 | 42 | 42 | 43 | 43 | 43 | 44 | 44 | 44 | 45 |
| Apr. | 45 | 45 | 46 | 46 | 46 | 47 | 47 | 47 | 48 | 48 | 48 | 49 | 49 | 49 | 50 | 50 | 50 | 51 | 51 | 52 | 52 | 52 | 53 | 53 | 53 | 54 | 54 | 55 | 55 | 56 | |
| May | 56 | 56 | 57 | 57 | 57 | 58 | 58 | 58 | 59 | 59 | 59 | 60 | 60 | 60 | 61 | 61 | 61 | 62 | 62 | 62 | 63 | 63 | 63 | 64 | 64 | 64 | 65 | 65 | 65 | 66 | 66 |
| June | 66 | 67 | 67 | 67 | 68 | 68 | 68 | 69 | 69 | 69 | 70 | 70 | 70 | 71 | 71 | 71 | 72 | 72 | 72 | 73 | 73 | 73 | 73 | 74 | 74 | 74 | 74 | 74 | 75 | 75 | |
| July | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 |
| Aug. | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 74 | 74 | 74 | 74 | 74 | 74 | 73 | 73 | 73 | 73 | 73 | 72 | 72 | 72 | 72 | 72 | 71 | 71 | 71 | 71 | 71 |
| Sept. | 70 | 70 | 70 | 70 | 69 | 69 | 69 | 69 | 68 | 68 | 68 | 67 | 67 | 67 | 66 | 66 | 66 | 65 | 65 | 65 | 64 | 64 | 64 | 63 | 63 | 63 | 62 | 62 | 61 | 61 | |
| Oct. | 61 | 60 | 60 | 60 | 59 | 59 | 59 | 58 | 58 | 58 | 57 | 57 | 57 | 56 | 56 | 55 | 55 | 55 | 54 | 54 | 53 | 53 | 52 | 52 | 51 | 51 | 51 | 50 | 50 | 50 | 49 |
| Nov. | 49 | 48 | 48 | 47 | 47 | 46 | 46 | 45 | 45 | 45 | 44 | 44 | 43 | 43 | 42 | 42 | 41 | 41 | 40 | 40 | 39 | 39 | 38 | 38 | 37 | 37 | 36 | 36 | 35 | 35 | |
| Dec. | 35 | 34 | 34 | 34 | 33 | 33 | 33 | 33 | 32 | 32 | 32 | 31 | 31 | 31 | 31 | 30 | 30 | 30 | 30 | 30 | 29 | 29 | 29 | 29 | 29 | 29 | 28 | 28 | 28 | 28 | 28 |

Daily mean temperatures calculated from monthly mean temperatures and adjusted to daily normal temperatures of the area.

DATES OF FREEZING TEMPERATURES IN SPRING AND FALL (1921-56)

| Minimum Temperature | Last In Spring Earliest | Last In Spring Average | Last In Spring Latest | First in Fall Earliest | First in Fall Average | First in Fall Latest |
|---|---|---|---|---|---|---|
| 32 or lower | 4/12/37 | 5/1 | 5/25/25 | 9/24/28 | 10/17 | 11/8/47 |
| 28 or lower | 3/13/45 | 4/15 | 5/10/54 | 9/26/28 | 10/27 | 11/13/46 |
| 24 or lower | 3/4/42 | 3/31 | 4/24/27 | 10/15/37 | 11/7 | 12/18/21 |
| 20 or lower | 2/19/45 | 3/17 | 4/12/40 | 10/20/30 | 11/18 | 12/24/39 |
| 16 or lower | 2/15/46 | 3/11 | 4/12/40 | 10/29/25 | 11/29 | 1/30/32 |

Use of the table: The average date of the last temperature of 32 or colder in the spring is May 1. The earliest date of this event in all springs of the 1921-1956 period was April 12 in 1937. The latest date was May 25 in 1925. In the fall, 32 or colder occurred as early as September 24 (1928) and as late as November 8 (1947). The average date is October 17.

* The average date of killing frost is a few days later in the spring and earlier in the fall because temperatures on the ground are usually colder than at the standard thermometer location of 5 feet above the ground. This difference of temperature is greatest on nights when the wind is calm and the skies are clear resulting in maximum ground radiation.