

## U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

## WISCONSIN SECTION.

H. B. HERSEY, Section Director.

VOL. XX. MILWAUKEE, WIS., SEPTEMBER, 1915. No. 9.

## GENERAL SUMMARY.

The month was unusually cloudy with heavy rainfall, except in a few northern localities where at some stations it was considerably below normal. The temperature was about normal for the month as a whole, but the sunshine was decidedly deficient.

The principal feature of the weather was the exceptionally heavy local showers which occurred at many stations. Madison recorded 5.20 inches in 12 hours on the 12-13th, which exceeded all previous daily records of rainfall for that station. Dodgeville, in Iowa County, recorded 7.38 inches in 12 hours on the same days, and several other stations reported a 24-hour rainfall of three to five inches during the month. The excessive rainfall in southwestern Wisconsin caused a marked rise and flood stages in the small streams in those counties, but it resulted in only a small rise in the principal rivers of the State. The greatest total monthly rainfall, 11.88 inches, occurred at Dodgeville, which is the largest amount on record in this State for October. Several other stations in southern Wisconsin also reported monthly amounts of ten inches or more.

A few stations reported their first killing frost of the season this month, but the damage was small, and those crops which were not destroyed by the frosts of the latter part of August were generally uninjured during this month. Corn ripened slowly during the month and the frequent rains caused considerable rotting of potatoes. The rains interfered with the harvesting of the later small grains, but they were generally secured without serious losses.

## PRESSURE.

The mean sea-level pressure for the Section, determined from the records of the regular Weather Bureau stations at Milwaukee, Madison, La Crosse and Green Bay, Wis., was 30.03 inches. The highest was 30.35 inches, at Madison and Milwaukee on the 2d; the lowest 29.56 inches, at La Crosse on the 14th.

## TEMPERATURE.

The monthly mean temperature was near normal at all stations, the departures varying between  $-3.8^{\circ}$  for Ashland and  $+2.7^{\circ}$  for Downing. The first half of the month was moderately warm, while the last half was generally cool. The monthly maximum temperature at nearly all stations occurred on the 4th, 5th and 12th and the minimum temperature generally on 15th, 21st, 22d, or during the period of 27th to 30th.

## HUMIDITY.

The average relative humidity for the Section at 7:00 A.M., determined from the records of the regular Weather Bureau stations at Milwaukee, Madison, La Crosse and Green Bay, Wis., was 88 per cent; at 7:00 P.M., the average for Milwaukee, Madison and Green Bay was 75 per cent.

## PRECIPITATION.

The precipitation for the month averaged considerably above normal for the State as a whole. The distribution over the State was decidedly uneven, heavy local showers being reported at many stations. The largest monthly amounts were reported generally from stations in the Middle and Southern divisions, although several stations in the Northern Division had over five inches. There was practically no rainfall during the first four days, but the daily amounts were fairly well distributed during the remainder of the month.

## WIND.

The prevailing direction was from the southwest. The average hourly velocity, determined from the records of the regular Weather Bureau stations at Milwaukee, Madison, La Crosse and Green Bay, Wis., was 7.8 miles. The maximum velocities at these stations were as follows: Milwaukee, 34 miles an hour from the northeast; Madison, 30 miles an hour from the south; La Crosse, 17 miles an hour from the south; Green Bay, 54 miles an hour from the southwest.

## SUNSHINE AND CLOUDINESS.

The actual sunshine in percentage of the possible, at each of the regular Weather Bureau stations in the Section, was as follows: Milwaukee 56, Madison 44, La Crosse 37, Green Bay 57.

## MISCELLANEOUS PHENOMENA.

*Fog* prevailed at several stations on the 2d, 3d, 4th, 5th, 7th, 8th, 10th, 12th, 13th, 16th, 17th, 18th, 19th, 22d, 23d, 24th, 29th and 30th.

*Solar Halos* were observed on the 10th, 15th, 17th, 19th, 22d, 29th and 30th.

*Thunder* occurred on the 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th, 13th, 14th, 15th, 16th, 18th, 19th, 20th, 23d, 25th, 26th and 27th.

*Auroras* were observed on the 11th, 16th and 28th.

*Parhelia* occurred on the 30th.

*Hail* occurred on the 10th, 13th, 15th, 19th and 27th.

## COMPARATIVE DATA FOR THE STATE, SEPTEMBER.

| YEAR.     | Temperature. |          |         | Precipitation. |           |        | Average number of days- |                          |        |                |         |
|-----------|--------------|----------|---------|----------------|-----------|--------|-------------------------|--------------------------|--------|----------------|---------|
|           | Mean.        | Highest. | Lowest. | Average.       | Greatest. | Least. | Average snowfall.       | Precipitation minor over | Clear. | Partly cloudy. | Cloudy. |
| 1891..... | 65.0         | 98       | 27      | 1.21           | 2.91      | 0.18   | 0.0                     | 4                        | 17     | 10             | 3       |
| 1892..... | 60.6         | 95       | 29      | 2.40           | 4.26      | 0.32   | 0.0                     | 5                        | 15     | 9              | 6       |
| 1893..... | 59.1         | 98       | 12      | 2.32           | 3.85      | 1.09   | 0.0                     | 5                        | 15     | 10             | 5       |
| 1894..... | 61.9         | 99       | 15      | 3.03           | 9.03      | 1.52   | 0.0                     | 8                        | 13     | 10             | 7       |
| 1895..... | 64.7         | 100      | 23      | 2.99           | 10.21     | 0.67   | 0.0                     | 7                        | 12     | 12             | 6       |
| 1896..... | 55.9         | 90       | 19      | 4.34           | 9.58      | 1.00   | T.                      | 10                       | 8      | 10             | 12      |
| 1897..... | 65.5         | 97       | 22      | 2.28           | 6.58      | 0.72   | 0.0                     | 5                        | 17     | 8              | 5       |
| 1898..... | 62.4         | 99       | 23      | 2.00           | 3.70      | 0.37   | 0.0                     | 6                        | 14     | 10             | 6       |
| 1899..... | 57.3         | 97       | 11      | 2.57           | 5.92      | 0.20   | 0.1                     | 7                        | 12     | 10             | 8       |
| 1900..... | 61.1         | 97       | 28      | 5.20           | 9.46      | 1.51   | T.                      | 10                       | 11     | 0              | 19      |
| 1901..... | 59.4         | 97       | 26      | 4.23           | 10.04     | 1.75   | 0.0                     | 9                        | 11     | 8              | 11      |
| 1902..... | 57.0         | 89       | 21      | 3.38           | 6.80      | 1.39   | 0.0                     | 8                        | 10     | 9              | 11      |
| 1903..... | 58.7         | 90       | 20      | 5.14           | 11.48     | 2.46   | 0.0                     | 10                       | 12     | 9              | 9       |
| 1904..... | 59.9         | 92       | 18      | 4.89           | 9.20      | 1.90   | 0.0                     | 9                        | 11     | 9              | 10      |
| 1905..... | 62.0         | 91       | 27      | 3.19           | 7.73      | 0.58   | 0.0                     | 7                        | 14     | 7              | 9       |
| 1906..... | 64.3         | 96       | 26      | 3.57           | 7.30      | 1.57   | 0.0                     | 8                        | 16     | 6              | 8       |
| 1907..... | 59.1         | 96       | 20      | 4.88           | 9.38      | 2.45   | T.                      | 10                       | 10     | 9              | 11      |
| 1908..... | 65.5         | 104      | 24      | 2.24           | 4.47      | 0.55   | 0.1                     | 5                        | 19     | 6              | 5       |
| 1909..... | 58.0         | 90       | 20      | 3.02           | 6.98      | 0.63   | 0.0                     | 8                        | 14     | 8              | 8       |
| 1910..... | 58.6         | 90       | 26      | 3.44           | 7.13      | 1.41   | 0.0                     | 7                        | 15     | 7              | 8       |
| 1911..... | 59.0         | 93       | 18      | 5.24           | 9.12      | 2.37   | 0.0                     | 12                       | 11     | 8              | 11      |
| 1912..... | 60.2         | 98       | 20      | 3.96           | 8.52      | 1.00   | T.                      | 10                       | 14     | 8              | 8       |
| 1913..... | 59.3         | 101      | 19      | 3.60           | 6.57      | 1.20   | 0.1                     | 8                        | 15     | 6              | 9       |
| 1914..... | 59.9         | 90       | 25      | 3.97           | 9.95      | 1.27   | 0.0                     | 8                        | 15     | 7              | 8       |
| 1915..... | 59.9         | 93       | 25      | 5.53           | 11.88     | 1.62   | 0.0                     | 11                       | 11     | 9              | 10      |

## Climatological Data for September, 1915.

| Stations.                     | Counties.             | Temperature, in degrees Fahr. |                         |       |                            |          |       |         |       |                       |        | Precipitation, in inches   |                       |                          |                                 | No. of days |                |         | Prevailing direction of wind. | Observers.               |
|-------------------------------|-----------------------|-------------------------------|-------------------------|-------|----------------------------|----------|-------|---------|-------|-----------------------|--------|----------------------------|-----------------------|--------------------------|---------------------------------|-------------|----------------|---------|-------------------------------|--------------------------|
|                               |                       | Elevation, feet.              | Length of record, years | Mean. | Departure from the normal. | Highest. | Date. | Lowest. | Date. | Greatest daily range. | Total. | Departure from the normal. | Greatest in 24 hours. | Total snowfall, unmeted. | Precipitation 0.01 in. or more. | Clear.      | Partly cloudy. | Cloudy. |                               |                          |
| <i>Northern Division.</i>     |                       |                               |                         |       |                            |          |       |         |       |                       |        |                            |                       |                          |                                 |             |                |         |                               |                          |
| Antigo . . . . .              | Langlade . . . . .    | 1,489                         | 22                      | 58.8  | +1.0                       | 84       | 4     | 31      | 29    | 36                    | 2.97   | -0.65                      | 1.28                  | 0.0                      | 8                               | 10          | 4              | 16      | se.                           | E.C. Larzelere.          |
| Ashland (near) . . . . .      | Bayfield . . . . .    | 615                           | 25                      | 56.6  | -3.8                       | 87       | 4+    | 27      | 28    | 43                    | 3.16   | -0.92                      | 1.30                  | 0.0                      | 6                               | 13          | 2              | 11      | ne.                           | Agricul. Experiment Sta. |
| Barron . . . . .              | Barron . . . . .      | 1,115                         | 25                      | 57.8  | -0.5                       | 83       | 6     | 32      | 32    | 38                    | 2.36   | -0.92                      | 0.55                  | 0.0                      | 10                              | 13          | 10             | 7       | s.                            | William A. Kent.         |
| Big St. Germain Dam . . . . . | Vilas . . . . .       | 1,590                         | 6                       | 56.1  | .....                      | 88       | 5     | 27      | 29    | 46                    | 7.19   | .....                      | 3.89                  | 0.0                      | 10                              | 11          | 9              | w.      | Wis. Val. Imp. Co.            |                          |
| Cornucopia . . . . .          | Bayfield . . . . .    | 640                           | 4                       | 58.2  | .....                      | 85       | 4     | 37      | 28    | 31                    | 2.85   | .....                      | 0.79                  | 0.0                      | 14                              | 10          | 6              | 14      | sw.                           | H. Bryan Reed.           |
| Crandon . . . . .             | Forest . . . . .      | 1,060                         | 21                      | 57.2  | -0.6                       | *83      | 4+    | 34      | 21    | *37                   | 1.99   | -1.45                      | 0.57                  | 0.0                      | 11                              | 10          | *5             | 10      | sw.                           | John Swenbeck, Jr.       |
| Deerskin Dam . . . . .        | Vilas . . . . .       | 1,683                         | 6                       | 55.2  | .....                      | *84      | 4     | *28     | 30    | *44                   | 5.96   | .....                      | 2.45                  | 0.0                      | 7                               | 16          | 2              | 12      | w.                            | Wis. Val. Imp. Co.       |
| Douglas . . . . .             | Dunn . . . . .        | 983                           | 14                      | 58.4  | +2.7                       | *85      | 4     | *34     | 23    | *40                   | 2.63   | -1.14                      | 0.95                  | 0.0                      | 6                               | 8           | *4             | 13      | sc.                           | Eugene F. Stoddard.      |
| Florence . . . . .            | Florence . . . . .    | 1,293                         | 25                      | 56.8  | +0.4                       | 84       | 5     | 25      | 29    | 37                    | 3.10   | -0.02                      | 0.73                  | 0.0                      | 6                               | 13          | 3              | 9       | ne.                           | Fred S. Evans.           |
| Glen Flora . . . . .          | Rush . . . . .        | 1,475                         | 4                       | 56.3  | .....                      | 85       | 4     | 29      | 22    | 42                    | 4.04   | .....                      | 2.24                  | 0.0                      | 6                               | 19          | 3              | 8       | sw.                           | G. A. Durgin.            |
| Grantsburg . . . . .          | Burnett . . . . .     | 1,096                         | 25                      | 59.3  | +0.5                       | 90       | 5     | 34      | 15    | 39                    | 1.90   | -2.12                      | 0.50                  | 0.0                      | 9                               | 15          | 3              | 12      | s.                            | Chester Ahlstrom.        |
| Hayward . . . . .             | Sawyer . . . . .      | 1,197                         | 25                      | 56.3  | -1.1                       | 87       | 5     | 31      | 21+   | 40                    | 1.62   | -2.25                      | 0.67                  | 0.0                      | 8                               | 10          | 13             | 7       | nw.                           | O. B. Berkness.          |
| High Falls . . . . .          | Marinette . . . . .   | 1,124                         | 4                       | 58.8  | .....                      | 86       | 4     | 31      | 29    | 41                    | 2.77   | .....                      | 1.05                  | 0.0                      | 9                               | 16          | 10             | 4       | sw.                           | Wis. Public Service Co.  |
| Iron River (near) . . . . .   | Bayfield . . . . .    | 1,052                         | 6                       | ..... | .....                      | .....    | ..... | .....   | ..... | .....                 | .....  | .....                      | .....                 | .....                    | .....                           | .....       | .....          | .....   | .....                         |                          |
| Koepenick . . . . .           | Langlade . . . . .    | 1,683                         | 25                      | 55.6  | -2.9                       | 91       | 4     | 29      | 10    | 53                    | 3.88   | -0.37                      | 1.00                  | 0.0                      | 10                              | 12          | 6              | 12      | sw.                           | E. R. Koepenick.         |
| Long Lake . . . . .           | Oneida . . . . .      | 1,592                         | 8                       | 55.4  | -1.9                       | 88       | 5     | 26      | 28†   | 46                    | 4.27   | -2.03                      | 1.69                  | 0.0                      | 12                              | 11          | 9              | 10      | se.                           | Louie Frank.             |
| Medford . . . . .             | Taylor . . . . .      | 1,420                         | 27                      | 57.5  | -1.9                       | 82       | 5     | 30      | 21    | 48                    | 2.10   | .....                      | 0.63                  | 0.0                      | 8                               | 18          | 3              | 9       | s.                            | William Zeit.            |
| Merrill . . . . .             | Lincoln . . . . .     | 1,267                         | 10                      | 58.6  | .....                      | 88       | 4+    | 31      | 29    | 52                    | 1.64   | .....                      | 0.46                  | 0.0                      | 9                               | 9           | 2              | 19      | nw.                           | Otto F. Luck.            |
| Minoqua . . . . .             | Oneida . . . . .      | 1,604                         | 12                      | 58.0  | .....                      | 88       | 4     | 34      | 28    | 35                    | 7.37   | .....                      | 4.55                  | 0.0                      | 11                              | 6           | 16             | 8       | sw.                           | Benjamin W. Applebee.    |
| New Richmond . . . . .        | St. Croix . . . . .   | 990                           | 11                      | 59.5  | .....                      | 88       | 4     | 37      | 27    | 37                    | 2.72   | .....                      | 1.37                  | 0.0                      | 7                               | 13          | 10             | 7       | sw.                           | Franc A.R. VanMeter.     |
| Oconto . . . . .              | Oconto . . . . .      | 590                           | 25                      | 60.8  | +0.2                       | 84       | 15    | 34      | 29    | 36                    | 5.76   | +2.45                      | 1.20                  | 0.0                      | 11                              | 13          | 10             | 7       | e.                            | Harry M. Lord.           |
| Osecola . . . . .             | Polk . . . . .        | 806                           | 25                      | 60.9  | +1.1                       | 98       | 5     | 35      | 21    | 44                    | 3.21   | -0.78                      | 1.42                  | 0.0                      | 12                              | 6           | 5              | 16      | s.                            | Charles W. Staples.      |
| Park Falls . . . . .          | Price . . . . .       | 1,492                         | 25                      | 55.6  | .....                      | *88      | 5     | *31     | 21    | *38                   | 4.16   | .....                      | 1.58                  | 0.0                      | 12                              | 11          | 5              | 14      | s.                            | Flambeau Paper Co.       |
| Plum Island . . . . .         | Door . . . . .        | 588                           | 8                       | 61.0  | .....                      | 81       | 5     | 42      | 27    | 26                    | 1.62   | .....                      | 0.80                  | 0                        | 7                               | 5           | 7              | 18      | se.                           | John Chrestensen.        |
| Prentice . . . . .            | Price . . . . .       | 1,551                         | 18                      | 56.7  | +0.2                       | 86       | 5     | 28      | 21    | 42                    | 5.00   | +1.21                      | 1.65                  | 0.0                      | 12                              | 14          | 10             | 6       | nw.                           | Joseph G. Lash.          |
| Rest Lake . . . . .           | Vilas . . . . .       | 1,600                         | 3                       | 56.0  | .....                      | 85       | 5     | 32      | 21+   | 39                    | 5.78   | .....                      | 1.49                  | 0.0                      | 8                               | 11          | 1              | 18      | s.                            | A. F. Miller.            |
| Rhinelander . . . . .         | Oneida . . . . .      | 1,550                         | 10                      | 57.3  | .....                      | 88       | 5     | 30      | 28†   | 40                    | 3.06   | .....                      | 1.70                  | 0.0                      | 12                              | 10          | 5              | 15      | sw.                           | Rhinelander Power Co.    |
| Solon Springs . . . . .       | Douglas . . . . .     | 1,083                         | 10                      | 55.7  | .....                      | 89       | 5     | 28      | 22    | 43                    | 3.80   | .....                      | 1.40                  | 0.0                      | 12                              | 12          | 3              | 15      | sw.                           | John M. Sayles.          |
| Spooner . . . . .             | Washburn . . . . .    | 1,104                         | 22                      | 58.2  | -1.1                       | 84       | 5     | 37      | 21+   | 29                    | 2.72   | -0.40                      | 0.77                  | 0.0                      | 11                              | 15          | 5              | 10      | se.                           | Horace A. Bresce.        |
| Stanley . . . . .             | Chippewa . . . . .    | 1,082                         | 12                      | 59.4  | .....                      | 86       | 8     | 34      | 21+   | 35                    | 2.81   | .....                      | 0.90                  | 0.0                      | 10                              | 8           | 10             | 12      | sw.                           | W. Humphrey Scott.       |
| Sturgeon Bay . . . . .        | Rusk . . . . .        | 621                           | 17                      | 58.8  | -0.7                       | 82       | 4     | 34      | 30    | 33                    | 4.55   | .....                      | 1.57                  | 0.0                      | 12                              | 14          | 10             | 6       | se.                           | E. W. Long.              |
| Sugar Camp Dam . . . . .      | Oneida . . . . .      | 1,582                         | 6                       | ..... | .....                      | .....    | ..... | .....   | ..... | .....                 | .....  | .....                      | .....                 | .....                    | .....                           | .....       | .....          | .....   | .....                         |                          |
| Superior . . . . .            | Douglas . . . . .     | 701                           | 7                       | 56.0  | .....                      | 83       | 3     | 36      | 15    | 34                    | 2.87   | .....                      | 1.70                  | 0.0                      | 11                              | 12          | 6              | 12      | sw.                           | Edward B. Banks.         |
| Tomahawk . . . . .            | Lincoln . . . . .     | 1,450                         | 1                       | 59.6  | .....                      | 89       | 5     | 31      | 29    | 39                    | 1.82   | .....                      | 0.67                  | 0.0                      | 8                               | 14          | 4              | 12      | s.                            | Victor Extrom.           |
| Twin Lakes Dam . . . . .      | Vilas . . . . .       | 1,625                         | 6                       | ..... | .....                      | .....    | ..... | .....   | ..... | .....                 | 5.48   | .....                      | 0.0                   | 0                        | 6                               | 13          | 8              | 9       | sw.                           | Wis. Val. Imp. Co.       |
| Vudesare . . . . .            | Vilas . . . . .       | 1,700                         | 8                       | 53.2  | .....                      | *84      | 3     | 29      | 22†   | 38                    | 5.67   | .....                      | 1.10                  | 0.0                      | 14                              | *9          | *14            | *5      | sw.                           | Louis L. Thomas.         |
| Weyerhaeuser . . . . .        | Rusk . . . . .        | 1,297                         | 14                      | 56.2  | -1.2                       | *84      | 6     | *31     | 15    | *42                   | 3.32   | .....                      | 1.12                  | 0.0                      | 7                               | *10         | *11            | *8      | se.                           | Miss Etta Stiles.        |
| Winter (near) . . . . .       | Sawyer . . . . .      | 1,365                         | 1                       | 56.7  | .....                      | 86       | 5     | 32      | 15†   | 43                    | 3.32   | .....                      | 1.24                  | 0.0                      | 10                              | 5           | 11             | 14      | s.                            | John Edberg.             |
| <i>Middle Division.</i>       |                       |                               |                         |       |                            |          |       |         |       |                       |        |                            |                       |                          |                                 |             |                |         |                               |                          |
| Appleton . . . . .            | Outagamie . . . . .   | 795                           | 15                      | 61.4  | .....                      | 85       | 4     | 35      | 29    | 35                    | 7.77   | +4.50                      | 1.75                  | 0.0                      | 11                              | 12          | 12             | 6       | se.                           | Wm. O. Thiede.           |
| Cecil . . . . .               | Shawano . . . . .     | 804                           | 18                      | 59.2  | -0.1                       | 84       | 5†    | 32      | 29    | 34                    | 3.29   | +0.65                      | 1.16                  | 0.0                      | 6                               | 10          | 17             | 3       | sw.                           | Louis W. Schmidt.        |
| Eau Claire . . . . .          | Eau Claire . . . . .  | 800                           | 25                      | 60.5  | -0.5                       | 85       | 5     | 37      | 21†   | 34                    | 3.04   | -0.88                      | 1.53                  | 0.0                      | 11                              | 10          | 13             | 7       | sw.                           | Robert D. Whitford.      |
| Fond du Lac . . . . .         | Fond du Lac . . . . . | 800                           | 30                      | 61.4  | +0.2                       | 88       | 13    | 35      | 29†   | 43                    | 7.77   | +4.86                      | 2.02                  | 0.0                      | 14                              | 19          | 5              | 6       | s.                            | E. A. Seeley.            |
| Grand Rapids . . . . .        | Wood . . . . .        | 980                           | 17                      | 61.8  | +1.2                       | 86       | 4†    | 34      | 21†   | 35                    | 4.94   | +1.69                      | 0.80                  | 0.0                      | 16                              | 7           | 9              | 14      | se.                           | Geo. T. Nixon.           |
| Grand River Locks . . . . .   | Marquette . . . . .   | 770                           | 8                       | 62.2  | .....                      | 86       | 13    | 38      | 29    | 41                    | 8.21   | -4.17                      | 2.25                  | 0.0                      | 13                              | 17          | 5              | 8       | s.                            | Jerry Parkinson.         |
| Green Bay . . . . .           | Brown . . . . .       | 617                           | 30                      | 61.2  | +2.1                       | 84       | 8     | 39      | 29    | 30                    | 5.10   | -1.98                      | 1.43                  | 0.0                      | 13                              | 2           | 16             | 12      | sw.                           | U. S. Weather Bureau.    |
| Hancock . . . . .             | Waushara . . . . .    | 1,091                         | 24                      | 62.5  | +1.5                       | 86       | 13    | 36      | 21    | 35                    | 7.51   | -4.25                      | 2.20                  | 0.0                      | 9                               | 8           | 10             | 12      | sw.                           | Frederick B. Hamilton.   |
| Hatfield . . . . .            | Jackson . . . . .     | 973                           | 22                      | 60.4  | -0.1                       | 87       | 6     | 32      | 22    | 45                    | 3.80   | -0.14                      | 0.90                  | 0.0                      | 9                               | 11          | 11             | 8       | ne.                           | Emil V. Wernick.         |
| Hillsboro . . . . .           | Vernon . . . . .      | 1,000                         | 25                      | 58.7  | -1.5                       | 83       | 5     | 30      | 29    | 43                    | 7.70   | +4.33                      | 1.55                  | 0.0                      | 12                              | 18          | 2              | 18      | sw.                           | Anton M. Jesson.         |
| Keweenaw . . . . .            | Keweenaw . . . . .    | 590                           | 7                       | 59.6  | .....                      | 82       | 1     | 35      | 30    | 34                    | 4.75   | .....                      | 1.22                  | 0.0                      | 12                              | 7           | 5              | 18      | s.                            | U. S. Weather Bureau.    |
| La Crosse . . . . .           | La Crosse . . . . .   | 714                           | 44                      | 61.6  | -0.1                       | 85       | 5     | 38      | 21    | 31                    | 5.55   | +1.59                      | 1.93                  | 0.0                      | 16                              | 7           | 3              | 20      | s.                            | Miss Johanna Lups.       |
| Manitowoc . . . . .           | Manitowoc . . . . .   | 616                           | 31                      | 60.4  | +0.6                       | 84       | 14    | 39      | 29    | 35                    | 7.70   | +4.58                      | 2.40                  | 0.0                      | 14                              | 7           | 11             | 12      | nw.                           | Agricul. Experiment Sta. |
| Marshfield . . . . .          | Wood . . . . .        | 1,283                         | 3                       | 58.8  | .....                      | 83       | 3†    | 32      | 29    | 38                    | 2.40   | .....                      | 0.60                  | 0.0                      | 10                              | 4           | 12             | 14      | e.                            | Frank Evans.             |
| Mather . . . . .              | Juneau . . . . .      | 962                           | 12                      | 57.9  | .....                      | 85       | 3     | 32      | 29    | 43                    | 6.39   | .....                      | 1.64                  | 0.0                      | 15                              | 13          | 1              | 16      | s.                            | Orson Wright.            |
| Meadow Valley . . . . .       | Juneau . . . . .      | 882                           | 20                      | 61.0  | 0                          | 87       | 2†    | 32      | 29    | 42                    | 8.73   | +5.16                      | 1.88                  | 0.0                      | 11                              | 10          | 6              | 18      | sw.                           | Charles H. Johnson.      |
| Menasha . . . . .             | Winnebago . . . . .   | 974                           | 25                      | 60.1  | 0                          | 87       | 2†    | 32      | 29    | 42                    | 8.83   | +5.02                      | 3.20                  | 0.0                      | 11                              | 14          | 20             | 6       | se.                           | George T. Allanson.      |
| Mondovi . . . . .             | Buffalo . . . . .     | 738                           | 8                       | ..... | .....                      | .....    | ..... | .....   | ..... | .....                 | 7.35   | +3.61                      | 1.96                  | 0.0                      | 9                               | 18          | 5              | 7       | sw.                           | Alex Lees.               |
| Neillsville . . . . .         | Clark . . . . .       | 997                           | 26                      | 58.2  | -1.3                       | 86       | 5     | 25      | 22    | 45                    | 3.43   | -0.45                      | 1.10                  | 0.0                      | 6                               | 19          | 2              | 9       | sw.                           | Erwin Moldenhauer.       |
| New London . . . . .          | Outagamie . . . . .   | 762                           | 20                      | 60.2  | -0.3                       | 87       | 4     | 33      | 29    | 40                    | 6.03   | +2.49                      | 1.55                  | 0.0                      | 9                               | 7           | 12             | 11      | w.                            | August H. Pape.          |
| Oshkosh . . . . .             | Winnebago . . . . .   | 744                           | 27                      | 61.0  | -1.3                       | 86       | 13    | 32      | 21    | 41                    | 8.81   | +5.75                      | 1.85                  | 0.0                      | 9                               | 15          | 6              | 8       | se.                           | Evan Vincent.            |
| Pine River . . . . .          | Waushara . . . . .    | 900                           |                         |       |                            |          |       |         |       |                       |        |                            |                       |                          |                                 |             |                |         |                               |                          |

**Daily Precipitation for September, 1915.**

Notes explanatory of symbols used in this table are printed on page 70.  
Postoffice addresses of stations bearing the symbol (†) in table are given

Postoffice addresses of stations bearing the symbol (++) in table on preceding page are as follows:—Big St. Germain Dam, Arbor Vitae; Deerskin Dam, Phelps; Grand River Locks, Montello; Hatfield, Merrillan; High Falls, Crivitz; Long Lake, Three Lakes; Mather, Valley Junction; Plum Island, Detroit Harbor; Rest Lake, Manitowish; Sugar Camp Dam, Eagle River; Twin Lakes Dam, Phelps.

Daily Temperatures for September, 1915.

**NOTES—Explanatory of Symbols used in Foregoing Tables:**

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining Section means. Reference letters, a, b, c, etc., appearing in tables indicate number of days missing; for example, <sup>b</sup> represents two days, etc. T. Precipitation is less than 0.01 inch of rain or melted snow. <sup>a</sup> Also on other dates. <sup>b</sup> Received too late to be included in means and summaries. <sup>c</sup> Except as otherwise noted.

\*\* Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight. III Precipitation measured and thermometers read in the morning; the maximum temperature then read is charged to the preceding 24 hours.

\* Precipitation included in the next following measurement. \*\* Records precipitation only. ¶ Postoffice addresses of these stations are printed on page 69.

\* Precipitation included in the next following measurement. \*\* Records precipitation only. † Postoffice addresses of these stations are printed on page 69.