

U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU
IN COOPERATION WITH MARYLAND STATE WEATHER SERVICE

CLIMATOLOGICAL DATA

15

MARYLAND AND DELAWARE SECTION

J. BILY, jr.

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VOL. XLVIII BALTIMORE, MD., AUGUST 1944 No. 8

GENERAL SUMMARY

This August was sunny and moderately warm. Monthly rainfall was deficient, except above normal in south-central Maryland. The bulk of the monthly rainfall fell during the northeast wind and rain storm of the 2-3d, except in western Maryland. The second decade was dry and hot. Temperatures were warm or very warm, except cool on the 2d-9th, 19-20th, 22d, and 24-29th. The 4th and 5th were hot days. The 11-17th was the hottest week of this summer. Monthly sunshine was 10% above normal. There were no damaging winds.

The rainfall distribution of the 2-3d was unique. Totals were trace to 0.4 inch in western Maryland; between 1 inch and 2 inches over the southern Eastern Shore and in northern north-central Maryland, except between 0.4 and 1 inch in northern Frederick County; between 2 and 3.5 inches over the northern Eastern Shore; between 2 and 4 inches in southern north-central Maryland; and between 4 and 6 inches in southern Maryland, except between 1 inch and 4 inches over the extreme southern portion thereof and above 6 inches in the District of Columbia and Prince Georges County with a maximum of 7.72 inches at Cheltenham.

Monthly rainfall totals ranged from between 1 inch and 2 inches in eastern Garrett, Allegany, Washington, Frederick, and Carroll Counties and in Dorchester, extreme southern Calvert and southeastern St. Mary's Counties to above 6 inches in northern Calvert, Charles, and Montgomery Counties and the District of Columbia with a maximum of 9.32 inches at Cheltenham.

Vegetation in the central and eastern divisions was benefited greatly and improved by the heavy rain of the 2-3d and by showers of the 6-7th, but was affected adversely by the hot dry weather of the second decade. Grasses and pastures were poor in western Maryland throughout the month; they declined to poor during the third decade in the central and eastern divisions. Growing crops continued ahead of normal and were mostly fair to good, except poor to fair in western Maryland. Late potato plants declined to poor or fair during the second decade.

Cutting oats ended the first decade in northern counties, except the second decade in the Allegheny Mountain region. Cutting early tobacco began the second decade. During the third decade: digging early potatoes, a poor crop, ended, except not yet begun in the Allegheny Mountain region; cutting field corn began in some localities of the eastern and central divisions; sweet potatoes were making and were developing; and cutting buckwheat began. Threshing grains, haying, picking tomatoes, pulling sweet corn, harvesting truck crops, cantaloupes, and watermelons, and picking apples, peaches, and pears were in progress.

TEMPERATURE

The monthly mean for the section, 74.2°, is 0.7° above normal. The highest monthly mean was 78.5° at Solomons; the lowest, 66.2°, at Sines. The highest temperature, 102°, occurred at Clear Spring on the 11th, at Cumberland on the 12th, and at Keedysville on the 12th and 13th; the lowest, 34°, at Oakland on the 25th and 27th. The greatest local monthly range was 62° at Clear Spring; the least, 34°, at Annapolis.

PRECIPITATION

The monthly average for the section, 3.46 inches, is 1.05 inches below normal. The greatest monthly rainfall was 9.32 inches at Cheltenham; the least, 1.03 inches at Luke. The greatest 24-hour rainfall was 7.72 inches at Cheltenham on the 2-3d.

ERRATA

July 1944. —Page 25: Severe thundergusts, "loss \$7,500; many trees uprooted." should appear after "were wrecked," in fourth line.

Miscellaneous Phenomena. Hail, heavy. —Longwoods, 7:00 p. m., E. S. T., to Easton, 7:30 p. m., E. S. T., 16th; from north to south; path 5 miles wide and 10 miles long; loss of corn, tomatoes, and other crops, estimated at \$200,000. Trappe district, 8:15 p. m., E. S. T. 16th; from north to south; path 1 to 2 miles wide and 6 miles long; hailstones were very large; a hailstone 3 inches thick was found by Mr. Harvey R. Munshaw of Trappe; many window panes were broken at Trappe; loss of corn, tomatoes, and other crops estimated at \$50,000.

Beltsville, evaporation should be 8.631.

Page 26: Chestertown, greatest precipitation in 24 hours should be 1.76 on 27. Elkton, number of days with 0.01 inch or more should be 7.

MISCELLANEOUS PHENOMENA (WITH DATES)

Fogs, light.—1 to 5, 7 to 9, 11 to 13, 17, 18, 22, 23, 25, 26, 28 to 31. Fogs, dense.—1, 2, 4, 7, 8, 22, 23, 28, 29, 30. Hail, light.—Bell, 23. Halos, lunar.—1, 31. Rainbow.—Clear Spring, 23. Thundergusts, high.—7, 14, 18. Thunderstorms.—5, 6, 7, 13, 14, 16, 18, 22, 23, 31. Winds, high.—Northeast, 2; northwest, 24.

EVAPORATION STATION: Beltsville, Md. (Elevation, 120 feet)

U. S. Bureau Dairying Industry, Joseph B. Shepherd, in charge
(Evaporation Tank: 10 inches deep, 48 inches in diameter)

Precipitation, 6.58; evaporation, 6.460; average daily wind movement, 56.9.

PRESSURE, HUMIDITY, SUNSHINE, WIND, DEGREE DAYS

| Stations | Atmospheric pressure reduced to sea level | | Wind | | | | Mean relative humidity | | | Percentage of sunshine | Cooling degree days (base 75°) | |
|-------------------|---|------|--------|------|-------------------------|------------------|------------------------|------|------------|------------------------|--------------------------------|------------|
| | Highest | Date | Lowest | Date | Average hourly velocity | Maximum velocity | Direction | Date | 7:30 a. m. | | | 1:30 p. m. |
| Aberdeen, Md. | 30.41 | 20 | 29.67 | 17 | 8.8 | 34 | ne. | 2 | 76 | 55 | 70 | 65 |
| Annapolis, Md. | 30.36 | 20 | 29.65 | 17 | 8.8 | 34 | ne. | 2 | 84 | 75 | 72 | 73 |
| Baltimore, Md. | 30.40 | 20 | 29.67 | 17 | 9.4 | 34 | ne. | 2 | 75 | 50 | 62 | 75 |
| Elkins, W. Va. | 30.39 | 20 | 29.77 | 17 | 4.4 | 16 | s. | 13 | 94 | 56 | 75 | 58 |
| Harrisburg, Pa. | 30.39 | 20 | 29.65 | 17 | 9.2 | 27 | e. | 21 | 80 | 80 | 59 | 77 |
| Norfolk, Va. | 30.37 | 20 | 29.75 | 17 | 9.2 | 27 | e. | 2 | 82 | 57 | 72 | 78 |
| Philadelphia, Pa. | 30.39 | 20 | 29.64 | 17 | 8.2 | 24 | e. | 2 | 79 | 47 | 60 | 64 |
| Pittsburgh, Pa. | 30.33 | 27 | 29.75 | 17 | 8.3 | 45 | s. | 13 | 83 | 53 | 63 | 57 |
| Washington, D. C. | 30.39 | 20 | 29.70 | 17 | 6.1 | 23 | ne. | 2 | 80 | 49 | 65 | 70 |

COMPARATIVE DATA FOR AUGUST

| Year | FOR MARYLAND | | | | | | FOR DELAWARE | | | | | |
|--------|--------------|---------|--------|---------------|------------------|----------------------------------|--------------|---------|--------|---------------|------------------|----------------------------------|
| | Temperature | | | Precipitation | | | Temperature | | | Precipitation | | |
| | Mean | Highest | Lowest | Average | Average snowfall | No. of days with .01 in. or more | Mean | Highest | Lowest | Average | Average snowfall | No. of days with .01 in. or more |
| 1895 | 75.2 | 102 | 31 | 1.90 | 0.0 | 7 | 77.1 | 103 | 49 | 2.73 | 0.0 | 7 |
| 1896 | 74.2 | 100 | 34 | 1.77 | 0.0 | 6 | 75.8 | 100 | 50 | 1.57 | 0.0 | 7 |
| 1897 | 71.6 | 95 | 39 | 3.53 | 0.0 | 8 | 73.5 | 93 | 54 | 3.33 | 0.0 | 7 |
| 1898 | 75.3 | 98 | 46 | 6.42 | 0.0 | 9 | 76.7 | 95 | 53 | 5.07 | 0.0 | 7 |
| 1899 | 74.1 | 102 | 41 | 4.09 | 0.0 | 9 | 74.4 | 96 | 52 | 4.91 | 0.0 | 8 |
| 1900 | 78.8 | 103 | 41 | 3.04 | 0.0 | 9 | 78.7 | 104 | 52 | 2.79 | 0.0 | 8 |
| 1901 | 74.9 | 98 | 42 | 5.72 | 0.0 | 10 | 76.7 | 95 | 57 | 7.13 | 0.0 | 9 |
| 1902 | 71.6 | 100 | 33 | 2.11 | 0.0 | 7 | 73.1 | 96 | 45 | 1.62 | 0.0 | 9 |
| 1903 | 71.0 | 100 | 37 | 5.25 | 0.0 | 13 | 72.4 | 99 | 49 | 4.58 | 0.0 | 9 |
| 1904 | 71.8 | 97 | 31 | 2.96 | 0.0 | 8 | 72.8 | 94 | 48 | 2.42 | 0.0 | 6 |
| 1905 | 72.9 | 104 | 38 | 5.19 | 0.0 | 9 | 73.3 | 93 | 51 | 6.49 | 0.0 | 10 |
| 1906 | 75.6 | 96 | 47 | 8.32 | 0.0 | 16 | 76.9 | 97 | 59 | 9.25 | 0.0 | 14 |
| 1907 | 71.3 | 95 | 39 | 4.40 | 0.0 | 11 | 72.8 | 95 | 51 | 3.29 | 0.0 | 9 |
| 1908 | 71.7 | 101 | 34 | 4.98 | 0.0 | 9 | 72.1 | 97 | 48 | 5.06 | 0.0 | 11 |
| 1909 | 71.7 | 99 | 33 | 3.11 | 0.0 | 7 | 72.3 | 95 | 48 | 2.97 | 0.0 | 4 |
| 1910 | 72.3 | 95 | 34 | 2.79 | 0.0 | 9 | 72.9 | 92 | 51 | 3.32 | 0.0 | 11 |
| 1911 | 74.7 | 104 | 37 | 9.95 | 0.0 | 15 | 75.4 | 99 | 51 | 9.87 | 0.0 | 13 |
| 1912 | 71.5 | 99 | 36 | 2.93 | 0.0 | 9 | 73.8 | 97 | 49 | 1.87 | 0.0 | 7 |
| 1913 | 73.0 | 101 | 38 | 3.90 | 0.0 | 9 | 74.0 | 99 | 52 | 3.00 | 0.0 | 8 |
| 1914 | 74.4 | 102 | 38 | 4.84 | 0.0 | 9 | 76.5 | 100 | 55 | 3.94 | 0.0 | 8 |
| 1915 | 72.4 | 102 | 38 | 8.22 | 0.0 | 15 | 74.5 | 101 | 49 | 8.05 | 0.0 | 12 |
| 1916 | 74.1 | 101 | 38 | 2.42 | 0.0 | 7 | 74.9 | 99 | 49 | 1.14 | 0.0 | 5 |
| 1917 | 73.3 | 100 | 40 | 3.15 | 0.0 | 8 | 75.0 | 98 | 51 | 3.54 | 0.0 | 9 |
| 1918 | 76.0 | 109 | 40 | 3.19 | 0.0 | 9 | 76.7 | 107 | 48 | 1.55 | 0.0 | 5 |
| 1919 | 71.9 | 96 | 37 | 6.37 | 0.0 | 11 | 72.5 | 94 | 51 | 9.54 | 0.0 | 11 |
| 1920 | 73.4 | 95 | 42 | 6.86 | 0.0 | 16 | 74.5 | 91 | 52 | 8.13 | 0.0 | 18 |
| 1921 | 71.2 | 97 | 37 | 3.70 | 0.0 | 8 | 72.3 | 98 | 49 | 3.82 | 0.0 | 9 |
| 1922 | 71.6 | 98 | 31 | 3.19 | 0.0 | 10 | 72.9 | 91 | 51 | 4.79 | 0.0 | 11 |
| 1923 | 72.7 | 98 | 34 | 3.12 | 0.0 | 11 | 73.0 | 96 | 45 | 2.78 | 0.0 | 10 |
| 1924 | 73.3 | 103 | 35 | 4.00 | 0.0 | 8 | 74.2 | 100 | 49 | 4.57 | 0.0 | 7 |
| 1925 | 71.6 | 98 | 35 | 2.38 | 0.0 | 8 | 72.4 | 95 | 45 | 3.39 | 0.0 | 8 |
| 1926 | 74.8 | 104 | 42 | 6.54 | 0.0 | 14 | 76.1 | 101 | 55 | 5.66 | 0.0 | 11 |
| 1927 | 68.4 | 92 | 36 | 3.97 | 0.0 | 13 | 69.6 | 91 | 47 | 4.98 | 0.0 | 13 |
| 1928 | 75.5 | 99 | 41 | 9.09 | 0.0 | 12 | 77.0 | 100 | 55 | 10.00 | 0.0 | 12 |
| 1929 | 71.3 | 99 | 35 | 2.69 | 0.0 | 7 | 72.7 | 97 | 45 | 2.84 | 0.0 | 8 |
| 1930 | 73.7 | 103 | 30 | 1.06 | 0.0 | 5 | 74.4 | 102 | 46 | 1.59 | 0.0 | 4 |
| 1931 | 73.6 | 101 | 40 | 7.44 | 0.0 | 15 | 75.8 | 101 | 56 | 9.88 | 0.0 | 13 |
| 1932 | 74.6 | 104 | 38 | 2.55 | 0.0 | 7 | 75.7 | 100 | 50 | 2.12 | 0.0 | 6 |
| 1933 | 73.8 | 100 | 40 | 10.00 | 0.0 | 12 | 75.6 | 98 | 56 | 12.73 | 0.0 | 13 |
| 1934 | 72.0 | 97 | 32 | 4.94 | 0.0 | 10 | 72.9 | 94 | 44 | 5.40 | 0.0 | 10 |
| 1935 | 74.1 | 100 | 36 | 3.22 | 0.0 | 9 | 74.6 | 99 | 49 | 3.66 | 0.0 | 10 |
| 1936 | 75.8 | 101 | 39 | 4.11 | 0.0 | 10 | 76.4 | 100 | 50 | 6.08 | 0.0 | 8 |
| 1937 | 75.5 | 100 | 44 | 6.87 | 0.0 | 13 | 76.1 | 95 | 55 | 8.29 | 0.0 | 15 |
| 1938 | 76.2 | 100 | 38 | 2.61 | 0.0 | 6 | 76.8 | 98 | 49 | 3.40 | 0.0 | 7 |
| 1939 | 76.1 | 99 | 44 | 4.20 | 0.0 | 8 | 76.8 | 97 | 54 | 9.50 | 0.0 | 11 |
| 1940 | 71.3 | 97 | 38 | 5.29 | 0.0 | 13 | 72.3 | 95 | 45 | 5.69 | 0.0 | 12 |
| 1941 | 72.9 | 100 | 36 | 3.14 | 0.0 | 7 | 73.6 | 97 | 44 | 3.14 | 0.0 | 7 |
| 1942 | 72.6 | 97 | 35 | 7.30 | 0.0 | 13 | 73.4 | 96 | 45 | 7.63 | 0.0 | 12 |
| 1943 | 75.5 | 102 | 38 | 1.42 | 0.0 | 6 | 75.8 | 100 | 47 | 1.30 | 0.0 | 6 |
| 1944 | 74.2 | 102 | 34 | 3.46 | 0.0 | 7 | 75.0 | 98 | 43 | 3.50 | 0.0 | 6 |
| 1945 | | | | | | | | | | | | |
| Period | 73.4 | 109 | 30 | 4.46 | 0.0 | 10 | 74.5 | 107 | 43 | 4.89 | 0.0 | 9 |

Climatological Data for August 1944

Table with columns: STATIONS, COUNTIES, Elevation, Length of record, Temperature (Mean, Departure from normal, Highest, Date, Lowest, Date), Precipitation (Total, Departure from normal, Greatest in 24 hours, Date), Number of days (With precip., Clear, Partly cloudy, Cloudy), Prevailing direction of wind, OBSERVERS.

All departures from normal are computed from the averages of the entire period for stations having 10 or more years of record, except that for First-Order Weather Bureau Stations they are based on adopted normals. The normal may be found by adding the departures when minus (-) or subtracting when plus (+). T. Trace or 0.005 inch or less rain or melted snow. 1 Recording gage. Italics, Data interpolated. Elevations are of ground above mean sea level.

†Post addresses of these stations are as follows: Of Bell, Glendale, of Blackwater, Cambridge, of Coleman, Worton; of Edgemont, Smithsburg; of Fallston, Bagley; of Ferry Landing, Owings; of Great Falls, Bethesda; of Mt. Savage Summit, Frostburg; of Picardy, Paw Paw, W. Va.; of Prettyboy Dam, Parkton; of Sines, Oakland; of Tonoloway, Hancock. *Custom House, Gay and Water Sts. **Weather Bureau Building, 24th and M Sts. †Also on other dates. ‡On mountain top, 2 1/2 miles northwest of Frostburg. §Municipal Building. ¶Porter Reservoir. ¶Water Pumping Station. ¶University Farm. ¶1 mile west. ¶1.8 miles west. Figures and letters following station indicate distance and direction of the observation point from the City Postoffice.

Thermometers are read in morning; maximum temperature then read is charged to preceding day, on which it almost always occurs. Temperatures at Aberdeen, Annapolis, Baltimore, Sines, and Washington are from midnight to midnight; at Dundalk, Mt. Savage Summit, Ocean City, and Snow Hill the thermometers are read at 1:30 a. m., the extremes are charged to the preceding day; at other stations temperatures are for a 24-hour period ending in late afternoon or near sunset, except 9 p. m. at Chestertown. Italics, Data interpolated.

Daily Temperatures for August 1944-Continued

Table with columns for Stations (Maryland), days 1-31, and Mean. Rows list various Maryland locations such as Aberdeen, Annapolis, Baltimore, etc., with their respective temperature data for each day.

See page 30 for explanation of reference marks.