

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

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In Cooperation with Maryland State Weather Service

CLIMATOLOGICAL DATA

15 MARYLAND AND DELAWARE SECTION
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VOL. XXXVIII BALTIMORE, MD., JUNE, 1933 No. 6

GENERAL SUMMARY

June was warm and sunshiny, with deficient rainfall. This was the first warm June since 1930 and the first dry June since 1926. Monthly sunshine was 10 per cent above normal, as in June, 1930, both being the greatest in June since 1923. Relative humidity averaged 8 per cent below normal. The 1st-2d and 13-15th were cool. The hot wave from 3d to 12th, for duration and intensity in June, ranked next to hot wave of June 1-10, 1925. The 19-30th was warm. Rainfall was of the thundershower type, but occurred mostly at night. At Keedysville, 1.85 inches fell in one hour on 12th. Thundergusts of 7th and 17th caused some damage locally.

On 15th, frost and freezing temperature in the Allegheny Mountain region damaged wheat and rye and killed most of the growing crops.

Monthly rainfall was under 2 inches in the southern portion of the section; elsewhere it was mostly 2 to 3 inches, except slightly below 2 inches and around 4 or 5 inches in some localities.

Growing crops, grasses, and pastures were mostly good to excellent. The warm, sunshiny weather advanced maturing and ripening and was very favorable for outdoor work. Planting of corn was finished during the first half of the month. Planting of late potatoes and other crops and setting out tomato, tobacco, and sweet potato plants were also finished. Peas and strawberries were harvested; barley was harvested and threshed; yields of these crops were good. Haying was in progress. Tree fruit sized nicely, but the June drop was fairly heavy. At the close of the month: wheat and rye was harvested, except ripening in the Allegheny Mountain region; wheat and rye was being threshed, oats were ripening, and early potatoes were being dug on the Eastern Shore and in southern Maryland; early corn was tasseling on the Eastern Shore; late potatoes and late corn were being cultivated; early tomatoes were fruiting and maturing; late tomatoes were blooming; and sweet potatoes were vining heavily. The growing season was backward.

HAILSTORM.—June 17, 1933. About 4 p. m., during a thunderstorm moving from northwest to southeast, a heavy fall of hail, one-half inch in diameter to size of hen eggs, ruined crops within an area about 12 miles long and five miles wide, embracing Oakland, Hanover, Jessups, Dorsey, Annapolis Junction, Harmans, Severn, Meade, Admiral, Odenton, and Gambrells, in southeastern Howard and northwestern Anne Arundel Counties. Loss of crops estimated at \$200,000. Hail also broke many window panes, damaged roofs, and scarred buildings; damage estimated at \$10,000.—*J. B., Jr.*

TEMPERATURE

The monthly mean for the section, 72.5°, is 1.7° above normal. The highest monthly mean was 76.0° at Baltimore; the lowest, 63.6°, at Sines. The highest temperature, 102°, occurred at Cumberland on the 8th and 9th; the lowest, 28°, at Oakland on the 15th. The greatest local monthly range was 68° at Hancock; the least, 45°, at Coleman. The greatest daily range was 47° at Hancock on the 3d.

PRECIPITATION

The monthly average for the section, 2.73 inches, is 1.22 inches below normal. The greatest monthly amount was 5.13 inches at Westminster; the least, 0.58 inch, at Crisfield. The greatest 24-hour amount was 3.00 inches at Maryland Line on the 12-13th.

The average number of days with 0.01 inch or more of precipitation, 8, is 2 below normal.

MISCELLANEOUS PHENOMENA (WITH DATES)

Fogs, light.—7, 9, 11, 12, 13, 17, 21, 25, 26, 27, 28, 29, 30.
Fogs, dense.—7, 9, 21, 27, 29, 30.
Frost, killing.—Allegheny Mountain region, 15.
Hail, heavy.—Bell and Sines, 6. **Light.**—Baltimore, 5; La Plata, 6; Picardy, 7; Solomons, 17; Westminster, 12.
Hailstorm.—See General Summary.
Locust, first heard.—Princess Anne, 27.
Rainbows.—5, 7, 10, 17, 22.
Thunderstorms.—3 to 10, 12, 13, 16, 17, 22, 25 to 28, 30.
Winds, high.—Northerly, 1. **Thundergusts.**—Southwest, 5, 16, 25; northwest, 3, 7, 9, 10, 12, 17, 22, 30.

PRESSURE, HUMIDITY, SUNSHINE AND WIND

Stations	Atmospheric pressure reduced to sea level				Wind†			Mean relative humidity		Percentage of sunshine		
	Average	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date		8 a. m.	Local n'n
Aberdeen, Md.	29.94	30.23	15	29.70	12	5.5	40	n.	7	74	54	68
Baltimore Md.	29.94	30.25	15	29.67	12	9.8	41	nw.	7	62	47	60
Elkins, W. Va.	30.02	30.38	15	29.78	12	4.8	36	nw.	3	82	51	71
Harrisburg, Pa.	29.93	30.23	15	29.68	30	6.8	37	w.	25	71	51	66
Norfolk, Va.	29.96	30.23	15	29.72	13	10.3	34	w.	7	68	48	62
Philadelphia, Pa.	29.95	30.22	15	29.70	3	11.8	36	nw.	3	68	48	57
Pittsburgh, Pa.	29.98	30.32	15	29.73	30	8.8	38	nw.	3	69	47	50
Washington, D. C.	29.94	30.26	15	29.68	12	6.0	30	nw.	22	70	49	61

† Velocity of wind in miles per hour by 4-cup anemometer.

COMPARATIVE DATA FOR MARYLAND AND DELAWARE FOR JUNE

Year	Temperature			Precipitation			Number of days						
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest	Least	Average snowfall	With .01 in. or more precipitation	Clear	Partly cly	Cloudy
1895...	73.2	+2.4	102	37	3.92	-0.03	7.86	0.75	0.0	8	16	10	4
1896...	70.4	-0.4	96	31	3.20	-0.75	6.44	0.87	0.0	10	10	12	8
1897...	68.6	-2.2	97	29	2.82	-1.13	6.47	0.82	0.0	9	11	13	6
1898...	71.9	+1.1	100	35	1.74	-2.21	3.99	0.54	0.0	6	16	10	4
1899...	73.5	+2.7	102	36	2.90	-1.05	6.24	1.05	0.0	7	17	7	6
1900...	71.5	+0.7	100	34	4.69	+0.74	10.94	1.48	0.0	9	14	9	7
1901...	71.1	+0.3	102	32	3.08	-0.87	6.72	0.90	0.0	8	18	7	5
1902...	70.1	-0.7	104	31	4.91	+0.96	9.00	1.89	T.	9	14	11	5
1903...	66.3	-4.5	96	35	5.48	+1.53	13.87	2.10	0.0	13	6	11	13
1904...	70.2	-0.6	99	30	4.63	+0.58	9.94	2.02	0.0	12	12	10	8
1905...	71.2	+0.4	102	25	4.44	+0.49	7.61	1.80	0.0	10	13	11	6
1906...	72.0	+1.2	101	31	6.12	+2.17	12.30	3.05	0.0	15	9	14	7
1907...	64.9	-5.9	96	32	5.71	+1.76	8.40	3.49	0.0	12	11	10	9
1908...	70.6	-0.2	99	39	2.12	-1.83	4.00	1.06	0.0	5	18	9	8
1909...	71.8	+1.0	98	32	5.04	+1.09	10.45	2.72	0.0	14	12	9	9
1910...	67.9	-2.9	99	30	5.81	+1.86	8.08	3.55	T.	14	11	10	9
1911...	71.6	+0.8	103	39	4.08	+0.13	7.65	1.67	0.0	12	13	11	6
1912...	69.4	-1.4	99	25	3.80	-0.45	7.35	1.71	0.0	10	13	10	7
1913...	71.2	+0.4	100	27	2.27	-1.68	5.06	0.78	0.0	7	16	9	5
1914...	72.3	+1.5	101	25	3.32	-0.13	10.60	1.27	0.0	10	16	10	4
1915...	68.5	-2.3	98	31	5.07	+1.12	7.97	1.53	0.0	10	13	12	5
1916...	67.2	-3.6	95	33	5.91	+1.96	11.74	2.46	0.0	12	13	10	7
1917...	70.3	-0.5	97	32	4.12	+0.17	6.36	1.51	0.0	10	16	10	4
1918...	68.8	-2.0	99	34	2.40	-1.65	4.37	1.28	0.0	8	15	9	6
1919...	72.1	+1.3	98	40	3.11	-0.84	5.47	0.84	0.0	8	15	9	6
1920...	70.2	-0.6	98	34	5.37	+1.42	8.27	2.86	0.0	11	13	11	6
1921...	72.4	+1.6	102	34	2.50	-1.45	6.49	0.10	0.0	7	18	9	8
1922...	72.9	+2.1	97	38	5.14	+1.19	9.25	2.05	0.0	12	12	10	8
1923...	73.7	+2.9	102	34	2.97	-0.98	7.63	1.15	0.0	9	19	7	8
1924...	69.3	-1.5	99	33	5.27	+1.32	8.35	2.74	0.0	14	12	10	7
1925...	75.6	+4.8	104	36	2.30	-1.05	8.27	0.39	0.0	7	16	11	8
1926...	67.6	-3.2	98	35	2.65	-1.30	4.89	1.45	0.0	12	12	10	8
1927...	66.8	-4.0	98	31	3.54	-0.41	5.12	1.97	0.0	9	15	9	6
1928...	69.1	-1.7	94	34	5.78	+1.83	11.57	2.45	0.0	16	7	12	11
1929...	70.4	-0.4	98	31	4.83	+0.88	8.48	1.89	0.0	10	16	10	4
1930...	72.2	+1.4	99	25	3.27	-0.68	5.95	1.36	0.0	9	18	8	4
1931...	70.8	0.0	102	35	3.43	-0.52	5.93	1.37	0.0	8	15	10	5
1932...	70.8	0.0	95	30	3.81	-0.14	6.80	1.24	0.0	10	13	10	7
1933...	72.5	+1.7	102	28	2.73	-1.22	5.13	0.58	0.0	8	15	12	3
Period.	70.8	104	25	3.95	13.87	0.10	T.	10	14	10	6

Climatological Data, June, 1933

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

The departures from normal temperature and precipitation are computed only for such stations as have 10 or more years of record, but all complete reports are used in determining section or division means. Data in italics determined from surrounding stations. T. Precipitation is less than 0.01 inch rain or melted snow. Post addresses of these stations are as follows: Of Bell, Glendale; of Coleman, Worton; of Fallston, Bagley; of Ferry Landing, Owings; of Great Falls, Bethesda; of Pleasant Hill, Owings Mills. Also on other dates. *Custom House, Gay and Water Sts. **Weather Bureau Building, 24th and M Sts. Prettyboy Dam. Drum Point Light Station. Municipal Building. Porter Reservoir.

Daily Temperatures for June, 1933

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

*) Instruments are read in morning; maximum temperature then read is charged to preceding day, on which it almost always occurs. Temperatures at Aberdeen, Baltimore, Sines, and Washington are from midnight to midnight; other stations, except Cumberland, are for 24-hour period ending late in afternoon, near sunset. (W. B. Richmond, Va. - 7-23 33-930)