

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. XXXVI BALTIMORE, MD., MAY, 1931 No. 5

GENERAL SUMMARY

This was the second month of the year with abundant precipitation and the first wet May since 1924. Monthly mean temperatures departed slightly above or below the normal. The mean temperature for the section was 0.1° below normal. Most of the rainfall occurred during the first half of the month. The 7th to the 14th was a wet period, with much cloudiness and high humidity. The 27th to the 30th was the only prolonged period of clear sky and bright sunshine. Monthly sunshine was about 5 per cent less than normal, while relative humidity averaged slightly above normal. Damaging hail occurred on the 10th in northeastern Cecil County, on the 11th in Kent (Md.) County, on the 19th in west-central Garrett County, and on the 30th in extreme southwestern Allegany County. Thundergusts were not strong enough to be damaging.

The cool periods were 1st-5th, 12-14th, and 22d-25th, while mild spells were 6-11th, 15th-21st, and 26-28th; the 29th-31st was warm, numerous stations reporting 90° to 95°.

Freezing temperatures occurred on the 1st and 4th in western Maryland; on the 1st, 4th, and 5th in the valley districts of north-central Maryland; on the 4th and 5th in low places in the interior of the Eastern Shore; and on the 5th in the Allegheny Mountain highlands.

Monthly rainfall averaged 34 per cent greater than normal. The monthly amounts were mostly between 4 and 5 inches, except 6 to 8 inches in the Allegheny Mountain region, 3 to 4 inches in Carroll, Howard, and southern Frederick Counties, and 2 to 3 inches in Montgomery County.

Rainfall was heavy on the 7-8th, except moderate in the southern portion of north-central Maryland and the western portion of southern Maryland; also heavy on 12-13th in the Allegheny Mountain region; on the 21st in western Maryland, southern Maryland, upper Chesapeake Bay region, and Delaware; on the 22d in the Allegheny Mountain region and at night of the 22-23d over most of the remainder of the section; on the 30th in extreme southwestern Allegany County; and on the 31st in north-central Maryland and at night of the 31st in southern Maryland and the northern and central portions of the Eastern Shore.

Snow flurries occurred on the 23d in the Allegheny Mountain region.

The month was favorable for plant growth. Vegetation made substantial progress, though crops were somewhat backward for the season. The abundant moisture caused some interference with field work. Wheat, rye, barley, grasses, and pastures improved markedly. Oats were a good stand and corn came up to a good stand. Setting out of sweet potato, tomato, and tobacco plants was in progress during the second half of the month. During the third decade corn planting began in the Allegheny Mountain region, but had been completed generally elsewhere. Harvesting of strawberries began in southern and central counties of the Eastern Shore during the last week.—J.B., jr.

PRESSURE

The monthly mean sea-level pressure at Washington, D. C., and Aberdeen was 29.94; at Baltimore, 29.93 inches. The highest at Washington, D. C., was 30.29 on the 28th; at Baltimore, 30.28 on the 1st; at Aberdeen, 30.35 inches on the 4th. The lowest at Washington, D. C., was 29.62; at Baltimore and Aberdeen, 29.63 inches—all on the 10th.

TEMPERATURE

The monthly mean for the section, 62.3°, is 0.1° below normal. The highest monthly mean was 65.2° at Baltimore and Crisfield; the lowest, 54.2°, at Sines. The highest temperature, 95°, occurred at Cumberland, Frederick, and Keedysville on the 29th and at Lutherville on the 30th; the lowest, 23°, at Oakland on the 1st and 4th. The greatest local monthly range was 65° at Hancock; the least, 43°, at Baltimore and Crisfield. The greatest daily range was 47° at Hancock on the 28th.

PRECIPITATION

The monthly average for the section, 4.50 inches, is 1.13 inches above normal. The greatest monthly amount was 7.64 inches at Western Port; the least, 2.20 inches, at Great Falls. The greatest 24-hour amount was 2.31 inches at Baltimore on May 31st-June 1. The average monthly snowfall for the section was a trace in the Allegheny Mountain region. The average number of days with 0.01 inch or more, 13, is 3 above normal.

RELATIVE HUMIDITY

The average percentages were: Washington, D. C., 8 a. m., 71; 12 noon, 53; 8 p. m., 58. Baltimore, Md., 8 a. m., 71; 12 noon, 56; 8 p. m., 62. Aberdeen, Md., 8 a. m., 79; 4 p. m., 56. Philadelphia, Pa., 8 a. m., 70; 12 noon, 52; 8 p. m., 62.

WIND

(By 3-cup anemometer, except 4-cup at Aberdeen, Md.)

The prevailing direction for the section was southwest. The total movement at Washington, D. C., was 3,951; at Baltimore, 6,960; at Aberdeen, 5,029 miles. The maximum velocity at Washington, D. C., was 24 miles from the southwest on the 22d and from the northwest on the 23d and 24th; at Baltimore, 36 miles, and at Aberdeen, 30 miles—both from the southwest on the 16th.

SUNSHINE AND CLOUDINESS

At Washington, D. C., 60 per cent of the possible sunshine was recorded; at Baltimore, 55 per cent; at Aberdeen, 49 per cent. For the whole section the average number of clear days was 10; partly cloudy, 12; cloudy, 9.

MISCELLANEOUS PHENOMENA (WITH DATES)

Fogs, dense.—Aberdeen and Cecilton, 6, 9; Baltimore, Chesapeake Bay, and Wilmington, 9; La Plata, 6, 7, 9; on the coast, 6, 8, 22; Princess Anne, 2; Westminster, 6, 9, 12, 13.

Frost, light.—Southern Maryland, 1, 4, 5.

Frost, light and heavy.—North-central Maryland and Eastern Shore, 1, 4, 5; western Maryland, 5.

Frost, killing.—Western Maryland, 1, 4.

Hail, moderate.—On 9th: Sines (near), 6 p. m., from southwest. On 10th: Frederick County, from Feagaville northeastward to Woodsboro, 1:30 p. m., from southwest; light damage.

Hail, heavy.—On 10th: Cecil County, 5 miles north to 7 miles southeast of Elkton, 6 p. m., from the northwest; path 3 to 12 miles wide; hail the size of pea to pigeon egg; some hot-house glass broken 3 miles north of Elkton. On 11th: Kent

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Climatological Data for May, 1931

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, With precip., Clear, Partly cloudy, Cloudy), Number of days, 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 sections. T. Precipitation is less than 0.01 inch rain or melted snow. Reference letters, a, b, c, appearing in the table indicate number of days missing: For example, b represents two days, etc. Post office 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; of Public Landing, Snow Hill. *Also on other dates: *Custom House, Gay and Water Streets. **Weather Bureau Building, 24th and M Streets.

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(Md.) County, Chesapeake Bay shore eastward through Worton, Lynch, Still Pond, and Kennedyville to Blacks; 5 p. m. to 5:30 p. m., from west; path 2 miles wide; hail size of pea and moth ball to small hen eggs; damage to wheat, tree fruit, gardens, early tomatoes, roofs, and window glass estimated at \$50,000. On 19th: Sines, 5:30 p. m., from west-southwest; path about 3 miles wide; hailstones 1/2 to 1 1/4 inches in diameter; damage moderate; some window and hotbed glass broken. On 30th: Western Port, 2 p. m., from southeast; path 1 mile wide; hail 1/4 to 1/2 inch in diameter; damage severe to fruit and gardens.

Lightning, damage by.—Home damaged at Chestertown and woman rendered unconscious at Rock Hall, 11. Thunderstorms.—Entire section, night 7-8, night 9-10, 10, 11, 12, 13, 14, 22; also Baltimore and Grantsville, 2; locally, 17; western half of section, 19; eastern half of section, night 19-20; Maryland Line and Allegheny Mountain region, 25; western Maryland and southern Baltimore County, 30; western, north-central, and southern Maryland, 31; Eastern Shore, night 31. Winds, high.—Southerly, night 7-8; southwest, 16, 20, 23, 24, 25 (Eastern Shore). On coast: Southwest, night 10-11, 16, 25; northeast, 13. Garrett County, thundergust, 19.

Daily Precipitation for May, 1931

Table with columns for Stations, Watersheds, Day of month (1-31), and Total. Rows list various locations in Maryland and Delaware with their respective precipitation amounts for each day.

Except as otherwise indicated, observations are generally made late in afternoon, near sunset, and precipitation recorded is for the 24 hours ending at time of observation.
***Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.
|||Precipitation measured in the morning; amount then recorded is for the preceding 24 hours.
T, Trace, or less than 0.01 inch. Data in italics determined from surrounding stations.

COMPARATIVE DATA FOR MARYLAND AND DELAWARE FOR MAY

Table comparing climate data for Maryland and Delaware for May across various years (1895-1931). Columns include Temperature (Mean, Departure from normal, Highest, Lowest, Average) and Precipitation (Departure from normal, Greatest local, Least local, Greatest in 24 hours, Snowfall, Number of days with 0.01 inch or more).

Daily Temperatures for May, 1931

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

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from record. § Instruments are read in morning; maximum temperature then read is charged to preceding day. In which it almost always occurs. Temperatures at Aberdeen, Baltimore, Sines, and Washington are from midnight to midnight; other stations, except Cumberland and Takoma, are for 24-hour period ending late in afternoon, near sunset. Data in italics determined from surrounding stations. (WB-3-21-31-930)