

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

CLIMATOLOGICAL DATA

15 MARYLAND AND DELAWARE SECTION

J. R. WEEKS

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VOL. XLVII BALTIMORE, MD., NOVEMBER 1943 No. 11

GENERAL SUMMARY

This was the first cool November since 1939. Monthly precipitation averaged 1.2 times the normal. Monthly snowfall was very light, except it averaged normal in the Allegheny Mountain region. Monthly sunshine was 10% above normal. The first decade was mild and wet. The second and third decades were cool, dry, and sunny. There were 2 small tornadoes on the 8th.

Rains of the 2-3d and 8-9th were beneficial. The rain of the 8-9th was heavy in north-central Maryland with falls of 2 to 3 inches, except 3 to 4 inches in the extreme northern portions of Baltimore and Frederick Counties, in Montgomery and extreme northwestern Prince Georges Counties, and in the District of Columbia.

Snow flurries occurred on the 17th, 21st, 27th, and 30th and light snow fell on the 9th, 10th, 11th, 13th, and 16th in the Allegheny Mountain region. Snow flurries occurred in the other divisions on the 11th and 13th, except light snow fell in the eastern portion of north-central Maryland and at Millington on the 11th. Snow flurries occurred in western and north-central Maryland on the 15th, in the Piedmont Plateau on the 17th, and over the southern third of the Eastern Shore on the 30th.

Grains and pastures improved, made growth, and were nicely green. Digging sweet potatoes on the Eastern Shore ended during the second week. Digging late potatoes ended in western and north-central Maryland during the second week and in southern Maryland and on the Eastern Shore during the fourth week. Late tobacco cured nicely. Husking and cribbing corn, plowing, sowing grains, harvesting late truck crops, combining soybeans, cutting wood, tending livestock, pruning fruit trees, and butchering were in progress. — J. B., jr.

SMALL TORNADOES OF NOVEMBER 8, 1943

The first tornado struck the Lawson King farmstead, 20 miles northwest of downtown Washington, at 5:53 p. m., E. W. T., and then moved north more than a mile to Washington Grove, Md. It demolished 3 garages, a tool shed, and 4 chicken houses; damage estimated at \$6,000. The width of the storm path varied from 75 to 150 feet. The tornado cloud was seen by Mr. Ralph Howard, a Montgomery County Highway Patrolman.

The second tornado struck first 10 miles southeast of downtown Washington, near Clinton, Md., where it ripped off the corner of a house and demolished a barn and a garage. It then moved a distance of 8 miles north-northeast, to 2 miles beyond Forestville, Md.; the width of the storm path varied from 75 to 200 feet. It passed through the grounds of the Army's Camp Springs Air Base, leveling some trees and some old shacks. Emerging from the Air Base grounds it demolished 2 houses. The tornado was seen passing through Forestville at 9:02 p. m., E. W. T., by Mr. Thomas F. Heide, where it destroyed a well constructed filling station building. Some damage occurred within the 2 miles beyond Forestville. Total damage estimated at \$12,000 to \$15,000. — J. R. Lloyd, Principal Meteorologist.

TEMPERATURE

The monthly mean for the section, 44.1°, is 1.1° below normal. The highest monthly mean was 51.2° at Crisfield; the lowest, 33.8°, at Mt. Savage Summit. The highest temperature, 76°, occurred at Friendsville on the 1st; the lowest, 10°, at Oakland on the 29th. The greatest local monthly range was 65° at Friendsville; the least, 37°, at Annapolis.

PRECIPITATION

The monthly average for the section, 3.02 inches, is 0.47 inch above normal. The greatest monthly rainfall was 5.16 inches at Takoma; the least, 1.25 inches at Solomons. The greatest 24-hour rainfall was 3.92 inches at Takoma on the 8-9th. The average monthly snowfall for the section, 0.4 inch, is 0.7 inch below normal. The greatest 24-hour snowfall was 3.0 inches at Oakland and Sines on the 11th.

Errata: October, 1943. — Aberdeen, mean temperature should be 52.6° and departure from normal should be -3.3°. Dundalk, date of highest temperature should be 18.

MISCELLANEOUS PHENOMENA (WITH DATES)

Fogs, light.—1, 2, 3, 5 to 9, 11, 16 to 21, 26, 27, 29. Fogs, dense.—3, 5 to 8, 16, 20, 21, 27.

Frosts, killing, first general in central and eastern divisions.—12. Hail, light.—Crisfield, 8. Sleet, light.—11, 13, 15. Thunderstorms.—1, 2, 5, 8, 21. Tornadoes, small.—8. Winds, high.—3, 5, 8, 11, 13, 21, 22, 23, 24, 27. Glaze.—12 miles north of Sines, 27.

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)

Month	Temperature					Precipitation (total)	Evaporation (inches)
	Mean	High	Date	Low	Date		
November 1943..	43.0	72	8	17	29	3.72	2.173

PRESSURE, HUMIDITY, SUNSHINE, WIND, DEGREE DAYS

Stations	Atmospheric pressure reduced to sea level				Wind			Mean relative humidity			Percentage of sunshine	Heating degree days (base 65°)	
	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7:30 a. m.	1:30 p. m.			7:30 p. m.
Annapolis, Md.	30.42	14	29.71	8	9.3	75	58	62	580	
Baltimore, Md.	30.46	14	29.71	8	9.8	34	nw.	23	71	48	59	67	536
Elkins, W. Va.	30.56	24	29.79	8	6.2	21	sw.	15	85	56	72	47	770
Harrisburg, Pa.	30.44	14	29.68	8	7.9	29	nw.	13	76	53	62	43	700
Norfolk, Va.	30.50	14	29.81	9	10.2	31	nw.	11	81	51	71	81	402
Philadelphia, Pa.	30.42	7	29.68	9	9.1	34	nw.	22	80	50	65	53	674
Pittsburgh, Pa.	30.48	25	29.79	8	10.8	32	nw.	13	79	56	63	36	597
Washington, D. C.	30.47	14	29.71	8	7.7	29	w.	13	71	44	54	60	551

COMPARATIVE DATA FOR NOVEMBER

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.....	45.6	86	0	1.64	0.1	7	47.9	78	24	1.94	T.	8
1896.....	49.1	78	12	3.07	2.2	7	51.6	78	35	3.18	1.7	10
1897.....	45.0	78	5	4.76	0.2	12	46.6	72	21	3.78	T.	13
1898.....	42.8	78	6	3.82	5.5	11	44.2	73	22	4.58	5.5	12
1899.....	44.9	73	12	2.02	T.	6	45.0	66	22	2.15	0.0	6
1900.....	47.5	81	4	3.00	1.0	8	49.9	76	22	2.59	T.	6
1901.....	39.1	74	4	2.72	2.3	5	40.6	76	17	2.20	1.2	4
1902.....	50.8	80	11	3.12	0.3	8	52.2	80	27	3.06	0.0	7
1903.....	40.9	82	1	1.17	0.8	5	42.5	79	12	1.36	0.1	5
1904.....	41.9	72	11	1.62	2.2	4	42.2	67	18	2.17	0.1	6
1905.....	43.2	77	10	1.30	0.1	6	44.8	73	14	1.09	T.	5
1906.....	45.2	78	15	1.43	1.0	5	46.0	75	22	1.99	0.4	6
1907.....	42.8	70	10	5.27	1.0	11	45.2	70	22	5.78	0.1	12
1908.....	44.5	76	3	0.95	4.2	3	45.9	76	20	1.31	0.1	3
1909.....	49.1	85	13	1.16	1.0	6	49.7	79	23	2.12	1.2	7
1910.....	40.9	76	2	2.08	3.5	8	42.1	74	18	2.44	0.2	6
1911.....	42.3	82	6	3.99	0.5	10	44.7	72	20	5.31	0.0	11
1912.....	46.1	79	10	2.04	1.2	5	47.8	78	14	2.74	3.0	5
1913.....	47.0	87	10	2.19	1.2	7	48.8	79	27	1.54	T.	6
1914.....	44.2	82	0	2.04	0.1	3	46.8	80	15	1.96	T.	3
1915.....	44.8	79	14	1.46	T.	7	46.6	76	19	0.92	T.	4
1916.....	44.9	83	9	2.18	0.1	8	45.4	74	15	2.28	T.	3
1917.....	41.2	76	1	0.60	1.9	4	41.5	70	15	0.49	1.6	3
1918.....	44.9	74	13	1.47	0.1	5	45.4	71	17	1.27	0.0	4
1919.....	45.5	81	11	3.29	0.1	11	46.6	78	20	3.35	0.0	10
1920.....	44.4	76	3	3.82	0.8	10	46.3	75	16	5.88	0.0	10
1921.....	46.7	82	15	4.34	0.1	13	48.4	81	25	3.98	T.	13
1922.....	46.2	75	14	0.65	0.5	5	47.0	74	23	0.82	T.	3
1923.....	43.9	68	12	2.60	0.8	9	45.0	67	21	2.85	0.0	7
1924.....	44.4	79	10	1.79	1.8	5	46.2	79	16	2.13	0.3	6
1925.....	42.9	74	6	3.11	0.3	10	45.0	70	20	3.04	0.2	9
1926.....	43.0	78	7	4.45	0.1	8	44.9	75	19	3.70	T.	8
1927.....	49.7	79	9	2.78	0.3	9	51.2	79	22	3.44	T.	10
1928.....	47.0	80	13	1.89	1.3	8	48.3	79	21	1.72	T.	9
1929.....	45.8	85	7	2.62	1.8	11	48.0	82	11	2.62	1.4	12
1930.....	44.6	75	-16	1.19	0.8	9	46.8	74	8	2.04	T.	9
1931.....	51.6	80	16	0.95	0.9	6	52.9	79	23	0.86	0.1	5
1932.....	43.2	72	2	5.22	T.	9	45.7	70	18	5.50	T.	9
1933.....	42.5	81	8	1.38	2.0	7	44.2	75	10	1.63	0.2	5
1934.....	47.8	80	10	3.56	0.2	10	49.1	76	20	3.65	T.	9
1935.....	48.4	85	9	4.32	0.8	12	50.4	80	23	5.34	1.1	15
1936.....	43.0	82	4	1.02	0.7	6	44.8	80	15	0.93	T.	8
1937.....	44.2	79	3	3.43	0.6	7	46.2	71	19	3.61	T.	8
1938.....	47.7	85	8	2.77	8.6	10	49.8	81	8	2.95	6.3	11
1939.....	43.4	75	12	1.33	1.4	5	43.9	71	23	1.86	T.	6
1940.....	45.4	77	14	5.14	1.1	10	46.5	75	20	4.66	T.	9
1941.....	47.8	78	11	1.77	T.	5	49.0	76	20	2.23	T.	5
1942.....	46.7	81	11	2.34	0.1	10	48.2	77	16	2.84	T.	9
1943.....	44.0	76	10	3.03	0.4	6	45.1	75	19	2.96	T.	5
Period.....	45.1	87	-16	2.53	1.1	8	46.6	82	8	2.70	0.5	8

Climatological Data for November 1943

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. Includes data for Maryland and Delaware stations.

The departures from normal temperatures are computed from the averages of the entire period for stations having 10 or more years of record. Departures of precipitation with 15 years or more of record are computed from a normal or "standard mean", adjusted to a uniform 35-year period...

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 Pleasant Hill, Owings Mills; 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.

Figures and letters following station indicate distance and direction of the observation point from the city. Elevations are of ground above mean sea level. §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; other stations, except Blackwater, Cheltenham, Chestertown, Conowingo Dam, Cumberland, and Pocomoke City, are for 24-hour period ending late in afternoon, near sunset. §Thermometers are read at 9 p. m.

Daily Precipitation for November 1943

Stations	Drainage basin	Day of month																															Total			
		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				
<i>Maryland</i>																																				
Aberdeen ¹	Atlantic	.47	1.79		.04			1.09	.38		.04		T		T		T					T	.20	.01											3.97	
Annapolis ²	do	.77	.26		T			.61	.09		.03		T		T		T					T	.05	T											1.71	
Baltimore ¹	do	.68	.24		.02			1.34	.23		.07		T		T		T					T	.19												2.77	
Bell	do	T	.96			.04		.08	1.51		.04		T		T		T																		2.83	
Beltsville ⁴	do		.86			.02		.01	2.65		.03		T		T		T							.20											1.70	
Blackwater ⁴	do		.89			.02			.70			.08													.15										3.72	
Charlotte Hall	do		1.21			T		T	.72		T														.06										1.99	
Cheltenham ⁴	do		1.66			T		T	1.34		T														.04										3.04	
Chestertown ³	do	.02	1.20			.02		*	1.66		.15		T		T		T																		3.05	
Cheswille	do	.36	.13			T		T	.62	.70		T		T		T		T							.26										2.07	
Coleman	do	*	1.42			.04		.27	1.40		.18														.18										3.49	
College Park	do	.02	.84			.04		.20	2.68		.03			.02											.19										4.02	
Conowingo Dam ⁴	do		1.31			.05		.02	2.05		T	.13		T		T		T							.34										3.93	
Crisfield	do		.67			T	.40																												1.31	
Cumberland	do	.14	.41			T		.62	.40		T			.07		T		T							.15										1.79	
Dundalk ³	do	.75	.13			.04		T	1.11	.11		.06		T		T		T					T	.18											2.33	
Easton	do		1.63			T		T	.65		.05		T		T		T								.12										2.45	
Edgemont ⁴	do	T	.56			T		.10	1.70		T	.20		T		T		T							.30										2.60	
Elkton	do	*	1.66			.03		.42	1.18		T														.23										5.72	
Emmitsburg	do	*	.78			T		*	3.89		T															.21									4.41	
Fallston	do	.14	1.98			.06		.42	1.57		.03															.21									4.41	
Ferry Landing	do		2.06			T		T	1.00		T																								3.06	
Fort George G. Meade	do	.02	.92			.04		.08	1.84		.02														.20										3.12	
Frederick	do	.08	.88			T		1.29	.71		.01														.24										3.21	
Friendsville	Ohio	1.16	.15			T		.48	T	.05	.25		.10										T	.18										2.57		
Frostburg	Atlantic	.42	.27			T		.90	.30	T	.04														.20										2.13	
Georgetown	do	T	1.95			.01		.30	1.40		.15														.20										4.01	
Germanstown	do	.15	.75			T		1.80	1.90		T														.22										4.82	
Great Falls ⁴	do		.84			T		.04	2.98		T														.30										4.16	
Hancock ⁴	do	.16	.66			T		.50	.56		T	.08		T		T		T							.22										2.13	
Huntingtown	do	.14	.40			T	.01	T	1.07		T														.03										2.51	
Keadysville	do	.27	.64			T		.80	.50		.01														.25										2.47	
La Plata	do		1.70			T		T	1.10		T														.05										4.30	
Laurel	do	*	.86			T		.33	3.00		T														.05										2.85	
Luke ⁴	do	.20	.33			.01		.48	.44	T	.03	T	.06	T	T	T	T								.15										1.70	
Maryland Line	do	.10	.73			T		.80	2.45		.05														.23										4.36	
Millington	do	T	1.27			T		.03	.88		.16														.15										2.49	
Mt. Savage Summit ⁶	do	.12	.41			T	.28	.88		T	.12		.04											.34											2.29	
Oakland	Ohio	.66	.50			.03		.66	.10	.08	.26		.06												.18										2.78	
Ocean City ⁵	Atlantic	.03	.56			1.17		.10	.11		T													.03											2.00	
Oxford	do		1.23			T		.01	.49		T														.12										1.91	
Perry Point	do	.09	2.00			.06		.48	1.46		.14														.30										4.53	
Picardy	do	.30	.32			T		.46	.85		.05														.23										2.21	
Pleasant Hill ⁴	do		1.09			.01		.05	2.80		.06	T													.24										4.25	
Pocomoke City ⁴	do	*	.98			T	.52		.40																.01										1.71	
Prettyboy Dam	do		.98			T		.50	2.30		.05														.25										4.08	
Princess Anne	do		.58			.10		.50	2.30		.05															.25										4.08
Ridgely	do		1.76			T	.50		1.74		.03																								1.32	
Rock Hall	do	.03	1.34			T		.20	1.26		.14														.14										3.10	
Salisbury	do		.72			T	.38		1.14		T														.05										1.29	
Silver Spring	do	.03	.85			.03		.47	3.11		.03														.24										4.76	
Sines ²	Ohio	.39	1.01	.01		T	.03	.47	.06	.11	.16		.18																						2.98	
Snow Hill ⁶	Atlantic	.12	.74			.93		.20	.23		T																								2.22	
Solomons	do		.75			T	.01	T	.43		T														.06											1.25
State Sanatorium	do	.43	.48			T		2.28	.97		T														.53										4.69	
Takoma	do	.05	.87			.03		.27	3.65		.03														.26										5.16	
Tonoloway	do	.60	.15			T		.75	1.11		T														.24										1.85	
Towson ⁴	do		1.42			.05		T	2.12		.07														.30										3.96	
Unionville	do	.26	.96			T		1.97	.95		.02														.23										4.38	
Western Port	do		.25			T		.85	.07		.05		.10												.20										1.78	
Westminster	do	T	1.05			T		.05	2.37		.02														.30										2.00	
Williamsport ⁴	do		1.63			.01		.36	.70		T														.30										3.89	
Woodstock	do	.08	.98			.04		*	2.46		.04														.25										3.89	
Washington, D. C. ¹	do	.67	.22			.02		2.95	.25	</																										

Daily Temperatures for November 1943-Continued

Table with columns for Stations (Maryland), days 1-31, and Mean. Rows list various stations like Aberdeen, Annapolis, Baltimore, etc., with their respective temperature readings.

See page 42 for explanation of reference marks.

(WBO, Richmond, Va., 1-20-44-1,200)