

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

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In Cooperation with Maryland State Weather Service

CLIMATOLOGICAL DATA

MARYLAND AND DELAWARE SECTION

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VOL. XXXIII BALTIMORE, MD., MARCH, 1928 No. 3

GENERAL SUMMARY

March was moderately cold, with a mean temperature 0.8° below normal and 3.6° lower than in 1927. It was the fourth consecutive March with deficiency in precipitation. Monthly snowfall was the greatest in March since 1924. Monthly sunshine was well above normal, while monthly relative humidity was about normal. There were no cold waves. Most of the precipitation occurred during the second decade. There were two windstorms, 27th and night 30th.

Moderately cold periods were 2d-6th, 9-11th, 16th-21st, and 28th-31st, except 29-30th was warm on the extreme southern Eastern Shore. The 1st, 7-8th, and 12-15th were mild. The 22d-27th was notably mild, with a very warm spell during the 24-26th.

Monthly precipitation was well below normal in the eastern and central divisions. In western Maryland it was above normal in the Allegheny and Blue Ridge Mountain districts and slightly below normal between these regions. Monthly amounts were generally between 2 and 3 inches, except between 3 and 4 inches in the Blue Ridge Mountain region and between 4 and 5 inches in the Allegheny Mountain region.

Precipitation was moderate to heavy over the section on the 9th, heavy in the western and central divisions and moderate on the Eastern Shore on the 18th, and moderate to heavy in the Allegheny Mountain region on the 30th.

Monthly snowfall was unevenly distributed over the section. Monthly amounts increased from a trace in southern Maryland and the central Eastern Shore to 2 inches in extreme northern New Castle County and to 22 inches in extreme northern Frederick County. In western Maryland totals increased from about 15 inches in eastern Washington County to 29 inches in the northern Allegheny Mountain highlands.

Snowfall was heavy in extreme northern Frederick County on the 9th, and in western Maryland, with an average depth of about 11 inches, on the 18th.

Wheat, rye, and grasses greened considerably, and were in fairly good condition at the close of the month. Planting early potatoes, peas, and onions, sowing oats, setting strawberry plants, bedding sweet potatoes, and making tobacco beds were in progress during the last week of the month in the southern portion of the section.—*J. B., jr.*

PRESSURE

The monthly mean sea-level pressure at Washington, Baltimore, and Aberdeen was 29.94 inches. The highest at Washington, Baltimore, and Aberdeen was 30.54 inches on the 6th. The lowest at Washington was 29.25; at Baltimore, 29.26; at Aberdeen, 29.28 inches—all on the 27th.

TEMPERATURE

The monthly mean for the section, 41.8°, is 0.8° below normal. The highest monthly mean was 45.7° at Newburg; the

lowest, 34.3°, at Grantsville. The highest temperature, 83°, occurred at Boyds and Great Falls on the 24th; the lowest, 7°, at Oakland on the 6th. The greatest local monthly range was 69° at Boyds and Great Falls; the least, 39°, at Stevensville. The greatest daily range was 53° at Bell on the 24th.

PRECIPITATION

The monthly average for the section, 2.95 inches, is 0.71 inch below normal. The greatest monthly amount was 4.99 inches at Frostburg; the least, 1.82 inches, at Great Falls. The greatest 24-hour amount was 2.05 inches at Frostburg on the 17-18th. The monthly average snowfall for the section, 6.3 inches, is 1.7 inches above normal. The greatest monthly snowfall was 29 inches at Grantsville. No snowfall was recorded in Somerset, Wicomico, and Worcester Counties. The number of days with 0.01 inch or more of precipitation, 10, is normal.

RELATIVE HUMIDITY

The average percentages were: Washington, D. C., 8 a. m., 74; 12 noon, 55; 8 p. m., 54. Baltimore, Md., 8 a. m., 72; 12 noon, 59; 8 p. m., 59. Aberdeen, Md., 8 a. m., 78; 4 p. m., 63. Philadelphia, Pa., 8 a. m., 72; 12 noon, 62; 8 p. m., 62.

WIND

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

The prevailing wind direction for the section was northwest. The total movement at Washington was 5,791; at Baltimore, 8,125; at Aberdeen, 6,630 miles. The maximum velocity at Washington was 32 miles from the northwest on the 30th; at Baltimore, 44 miles from the west on the 30th; at Aberdeen, 36 miles from the west on the 27th.

SUNSHINE AND CLOUDINESS

At Washington 60 per cent of the possible sunshine was recorded; at Baltimore, 63 per cent; at Aberdeen, 62 per cent. For the whole section the average number of clear days was 13; partly cloudy, 10; cloudy, 8.

MISCELLANEOUS PHENOMENA (WITH DATES)

Fogs, dense.—Southern Maryland, Chesapeake Bay, and Eastern Shore, 12; entire section, 13, 14; Chesapeake Bay region, 26; upper Chesapeake Bay, 30.

Hail, light.—Northern third of Eastern Shore, 22.

Sleet, light.—Northern portion of section, 9; Baltimore, 11; entire section, 16; central and eastern divisions, night 17, morning 18; Chewsville, 22.

Thunderstorms.—Garrett County and Eastern Shore, 22; Annapolis and Clear Spring, 25; western Maryland, 26; Garrett and Allegany Counties, southern Maryland, and Eastern Shore, 30.

Winds, high.—On the coast: Northeast, 18. Entire section: Westerly, 22, 27, night 30, 31.

NOTES

Blackbird, first seen.—Frederick, 20.

Frogs, first heard.—College Park, Millington, and Solomons, 12.

Plum trees in bloom.—Princess Anne, 31.

Robins, first seen.—Frederick, 8; Grantsville, 13; Princess Anne, 30.

Newburg.—Wild geese flying north, 13; first phoebe seen, 17th; first fish-hawk seen, 21.

ERRATA

February, 1928.—Page 6: Millington, mean temperature and departure from normal, published 36.6 and +3.3, should read 35.6 and +2.3. Princess Anne, mean temperature and departure, published 38.0 and +1.1, should read 37.8 and +0.9.

Climatological Data for March, 1928

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr						Precipitation, in inches				Number of days				Prevailing direction of wind	Observers	
				Mean	Departure from normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from normal	Greatest in 24 hours	Total snowfall (unmelted)	With a precip. of 0.01 inch or more	Clear	Partly cloudy			Cloudy
<i>Maryland</i>																				
Aberdeen	Harford	80	10	40.4		75	25	19	4	37	2.45		1.01	1.5	7	9	14	8	w.	U. S. Army.
Annapolis	Anne Arundel	45	63	42.4	-1.0	68	25	18	6	32	3.13	-0.84	1.20	1.0	11	11	12	8	w.	Louis E. Foster.
Baltimore*		115	58	43.8	+1.5	75	25	24	4	31	3.12	-0.59	1.32	3.3	8	11	10	10	sw.	U. S. Weather Bureau.
Bell II	Prince Georges	151	8	41.0		81	24	12	4	53	2.72		1.00	2.0	11	14	10	7	nw.	Bureau Plant Industry.
Boyd's	Montgomery	424	9	42.5		83	24	14	4	52	2.23		0.95	8.0	9	13	10	8	w.	James L. Higgins.
Cambridge (near)	Dorchester	25	35	44.3	-0.8	75	25	21	4	33	2.26	-1.85	0.60	T	9	16	8	7	nw.	Matt Harding.
Cecilton	Cecil	85	10	42.2		78	25	20	6	43	3.18		1.11	1.0	12	12	11	8	nw.	Wm. F. Coale.
Cheltenham	Prince Georges	230	28	43.6	-1.5	82	24	15	6	49	2.63	-1.27	1.13	1.0	8	14	10	7	nw.	Geo. Hartnell.
Chewsville	Washington	530	31	39.8	-1.6	78	24	16	6	46	3.49	+0.51	1.95	18.0	8	14	11	6	nw.	D. Paul Oswald.
Clear Spring	do	600	31	41.6	+1.5	79	24	16	4	43	2.15	-1.33	0.70	15.0	6	16	9	6	nw.	Mrs. Leo A. Cohill.
Coleman II	Kent	80	31	42.5	-1.4	75	24	21	4	39	2.86	-0.78	0.96	1.5	10	15	8	8	nw.	Walter B. Harris.
College Park	Prince Georges	87	42	43.1	-0.6	82	24	15	4	52	2.76	-0.87	1.04	2.0	10	15	9	7	nw.	Prof. Thos. H. White.
Crisfield	Somerset	5	9	45.4		74	29	21	6	30	3.28		1.20	0.0	10	9	15	7	nw.	A. B. Cochran.
Cumberland	Alegany	623	56	41.0	+1.0	80	26	12	4	46	2.94	-0.12	0.90	17.1	13	13	11	7	w.	Harvey H. Weiss.
Darlington	Harford	300	38	39.8	-1.6	76	25	13	4	45	2.68	-0.75	0.73	3.7	10	13	9	9	w.	Fred. C. Jones.
Easton	Talbot	35	38	43.1	-1.2	76	21	20	4	36	2.62	-1.04	0.76	T	9	14	9	8	nw.	Clement E. Bray.
Elkton	Cecil	28	2	41.2		80	25	16	4	43	2.60		0.95	1.5	9	15	9	7	w.	H. W. Bouchelle.
Emmitsburg	Frederick	720	60	40.4	0.0	75	26	18	4	34	4.11	+0.01	1.70	21.9	11	15	8	8	w.	Mt. St. Mary's College.
Fallston II	Harford	450	59	40.2	+0.3	74	25	17	4	36	2.55	-1.46	1.02	4.0	8	13	12	6	nw.	Miss Dora Curtiss.
Ferry Landing II	Calvert	110	12	43.2	-3.2	80	24	18	6	45	2.95	-0.65	1.10	T	8	14	12	6	nw.	Thos. J. Bourne.
Frederick	Frederick	275	54	43.0	+0.7	81	24	20	4	47	3.08	-0.24	1.20	11.0	10	13	9	9	nw.	Chas. S. Birely.
Friendsville	Garrett	1,501	10	37.3		68	13	8	5	37	4.41		1.20	26.0	10	9	9	13	nw.	Joab J. Friend.
Frostburg	Alegany	1,929	27	38.2	-1.1	76	26	12	5	50	4.99	+1.20	2.05	26.0	11	13	12	6	w.	T. F. Lewis.
Grantsville	Garrett	2,351	35	34.3	-2.5	70	26	8	6	43	4.81	+0.86	1.40	29.0	15	8	10	13	w.	C. S. Zeller.
Great Falls II	Montgomery	200	39	43.2	-0.4	83	24	14	6	49	1.82	-1.49	0.64	2.0	9	12	12	7	w.	Chas. E. Sullivan.
Hancock (Tonoloway)	Washington	455	18	41.7	-0.6	80	24	14	5	40	3.09	-0.18	0.91	15.3	9	16	9	6	nw.	American Fruit Growers.
Keedysville	do	400	24	42.2	-1.0	82	24	16	6	43	3.38	+0.44	1.50	11.5	9	16	9	6	nw.	J. A. Miller.
Laurel	Prince Georges	320	34	42.3	-0.8	77	23	17	4	42	2.16	-1.59	0.87	3.0	9	14	10	7	nw.	Evan G. Chaney.
Lutherville	Baltimore	340	2	41.2		78	24	13	4	50	2.73		1.06	4.0	8	15	7	9	w.	August W. Clark, P. M.
Maryland Line	do	840	4	39.0		77	24	16	4	42	2.25		0.70	7.0	8	14	11	6	w.	Chester L. Fulton.
Mechanicsville	St. Marys	165	2							3.10			1.20	T	8	18	10	8	nw.	Zach. S. Graves.
Millington	Kent	27	31	42.3	-1.7	78	24	17	4	46	3.21	-0.83	1.11	0.5	10	13	10	8	w.	Henry L. Higman.
Newburg	Charles	110	3	45.7		80	24	20	6	39	2.76		1.17	T	8	13	11	7	nw.	John P. Burdette.
Oakland	Garrett	2,461	29	35.6	-1.3	72	28	7	6	47	4.34	+0.53	1.00	23.5	15	6	12	13	w.	R. E. Weber.
Picardy	Alegany	900	2	40.4		79	26	12	5	39	2.65		1.07	14.5	8	16	9	6	w.	D. E. Catlett.
Pleasant Hill II	Baltimore	660	4							2.71			0.98	6.0	9	15	9	7	nw.	J. E. Henry.
Pocomoke City	Worcester	37	23																	
Princess Anne	Somerset	17	53	43.8	-1.9	79	30	17	6	42	2.59	-1.31	1.00	0.0	7	10	14	7	nw.	James R. Stewart.
Public Landing II	Worcester	10	13	43.4	-1.6	75	30	16	6	39	2.48	-1.47	0.95	0.0	7	10	12	9	w.	Louis C. de Guibert.
Ridgely	Caroline	57	7	42.5	-1.4	76	24	19	4	38	2.74	-0.84	0.92	T	9	12	11	8	nw.	Albert White.
Rock Hall	Kent	25	14	42.8	-2.2	78	24	21	4	43	3.31	-0.23	0.97	1.0	10	14	10	7	nw.	Charles J. Judend.
Salisbury	Wicomico	23	23	44.4	-1.2	78	30	20	4	40	2.57	-1.55	0.75	0.0	8	11	13	7	w.	Homestead Dairy Farms.
Solomons	Calvert	20	37	44.6	0.0	74	24	24	6	33	2.19	-1.11	0.65	T	10	10	12	9	nw.	Dr. W. H. Marsh.
State Sanatorium	Frederick	1,460	20	38.7	-2.0	76	26	15	5	38	3.72	+0.39	1.61	21.4	11	14	8	9	nw.	Dr. V. F. Cullen.
Stevensville	Queen Anne	12	2	42.0		82	26	23	4	25	3.88		T		9	13	10	8	nw.	T. R. Price.
Takoma	Montgomery	320	30	42.8	-0.5	82	24	20	4	45	2.22	-1.50	0.95	2.0	9	10	11	10	nw.	L. M. Moores.
Towson	Baltimore	465	16							2.79		-0.33	1.12	4.0	9	11	10	10	nw.	Metropolitan District.
Western Port	Alegany	1,000	35	42.0	+0.1	82	26	14	4	45	4.31	+1.49	1.20	23.9	14				nw.	Norris Bruce.
Westminster	Carroll	770	19	40.4	-1.4	78	24	11	6	42	2.74	-0.99	1.03	12.0	10	14	9	8	nw.	Prof. S. P. Catrider.
Woodstock	Baltimore	415	58	41.2	+0.2	81	24	18	6	41	2.65	-1.06	1.03	6.0	10	13	9	9	nw.	Woodstock College.
<i>Dist. of Columbia</i>																				
Washington**		112	58	44.1	+1.5	80	24	23	6	41	2.17	-1.58	0.95	0.5	8	10	11	10	nw.	U. S. Weather Bureau.
<i>Delaware</i>																				
Bridgeville	Sussex	45	5	42.9	-1.3	77	24	17	6	41	2.68	-1.12	0.73	T	11	12	12	7	nw.	George Ray.
Delaware City	New Castle	12	42	41.8	+0.5	76	25	20	4	36	2.57	-0.69	0.96	1.0	11	12	11	8	w.	N. W. Wilkinson.
Dover	Kent	34	39	42.6	-0.2	82	24	18	4	44	3.30	-0.89	1.30	0.5	10	12	11	8	nw.	Arthur G. Livingston.
Milford	Sussex	20	46	42.5	-2.6	81	24	14	4	42	2.81	-1.34	0.75	T	12	11	12	8	w.	Chas. J. Holzmuller.
Millsboro	do	20	36	43.0	-1.2	82	24	17	4	43	2.97	-1.03	1.01	0.1	11	11	12	8	nw.	Rev. M. P. S. Huntington.
Wilmington	New Castle	86	35	40.4	-2.2	74	24	18	4	35	2.55	-0.99	0.85	2.0	12	12	10	9	nw.	Street and Water Depts.
Means and extremes:																				
For Maryland and District of Columbia				41.7	-0.8	83	24	7	6	58	2.97	-0.66	2.05	7.0	10	13	10	8	nw.	
For Delaware				42.2	-1.2	82	24	14	4	44	2.81	-1.01	1.30	0.6	11	12	11	8	nw.	
For entire section				41.8	-0.8	83	24	7	6	53	2.95	-0.71	2.05	6.3	10	13	10	8	nw.	

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. *Record incomplete. † 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. *Customhouse Building, Gay and Water Streets. **Weather Bureau Building, 24th and M Streets.

Daily Precipitation for March, 1928

Table with columns for Stations, Watersheds, Day of month (1-31), and Total. Rows include Maryland (Aberdeen to Woodstock), District of Columbia (Washington), and Delaware (Bridgeville to Wilmington).

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 is for 24-hour period, midnight to midnight. |||||Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. *Precipitation included in the next following measurement. T, Trace, or less than 0.01 inch. Data in italics determined from surrounding stations.

COMPARATIVE DATA FOR MARYLAND AND DELAWARE FOR MARCH

Table with columns for Year, Temperature (Mean, Departure from normal, Highest, Lowest, Average), Precipitation (Departure from normal, Greatest local, Least local, Greatest in 24 hours, Snowfall, Number of days with .01 inch or more), and Year. Rows range from 1895 to 1928.

Daily Temperatures for March, 1928

Table with columns for Stations, days 1-31, and Mean. Rows list various Maryland and Delaware locations such as Annapolis, Baltimore, and Dover, 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, on which it almost always occurs. Temperatures at Aberdeen, Baltimore, and Washington are from midnight to midnight; other stations, except Cumberland, are for 24-hour period ending late in afternoon, near sunset. Data in italics determined from surrounding stations. (WB-4-28-28-800)