

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

# CLIMATOLOGICAL DATA

15 MARYLAND AND DELAWARE SECTION

G. N. BRANCATO

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VOL. LI BALTIMORE, MD., MAY 1947 No. 5

## GENERAL SUMMARY

Except for a few local areas in western counties of Maryland and the lower Eastern Shore, the dry weather which had persisted for several months ended and most areas received considerably more than the normal amount of rainfall for the month. The average precipitation for Delaware, 6.63 inches, was almost twice the amount normally received. In Maryland the average precipitation was 5.17 inches, or about 145 percent of normal. Heaviest amounts occurred generally during the periods April 30th-May 1st, May 17th-19th, 21st-22d, and 24th-25th. Many stations reported total amounts for the month in excess of 6 inches.

The average temperature for the month was within 0.2 degree of normal for the section but was not indicative of the abnormal conditions which prevailed during the month. The period from the 8th to the 11th was the coldest on record for this season of the year. Minimum temperatures in western Maryland were in the low-20's for 3 successive days. On the 10th, Oakland and Sines, Maryland, reported 18 degrees and 20 degrees, respectively. The amount of damage to fruits, grains and crops due to the freezing weather varied considerably over the section depending on the protection afforded by local topography or large bodies of water. A few local areas, especially in central and northern counties, reported damage of approximately 100 percent to apples, peaches and strawberries. Truck garden crops, such as early tomatoes and beans, were a complete loss over much of the section. Indications were that damage to fruits in general would likely average less than 30 percent over most of the section.

In contrast to the record cold periods from the 8th to the 11th were several periods with temperatures considerably above normal. The outstanding warm periods occurred on the 1st, 13th, 19th-21st and the 28th-29th. Temperatures on these days were generally in the middle-80's or low 90's.

By the end of the month truck crops and gardens damaged by the freeze were being replanted or were recovering rapidly. In many areas the heavy rains during the month prevented planting of crops and delayed other farm operations. Pastures and hays were in good to excellent condition and grains were making good progress. However, reports from some areas on the Del-Mar Peninsula indicated that 50 to 70 percent of the rye, wheat and barley had been damaged by the freezing temperatures.

## TEMPERATURE

The monthly mean temperature for the section was 62.7 degrees, or 0.2 degree below normal. The highest monthly mean temperature, 67.8 degrees, was reported at Crisfield, Maryland, and the lowest, 55.1 degrees at Sines, Maryland. The highest temperature, 95 degrees, occurred at Cumberland, Maryland, on the 28th; the lowest, 18 degrees, at Oakland, Maryland, on the 10th. The greatest local monthly range was 71 degrees at Western Port, Maryland, where a maximum of 93 degrees was reported on the 28th, and 22 degrees on the 10th. The least monthly range was 47 degrees at Annapolis, Maryland. Annapolis had extreme maximum and minimum temperatures of 85 and 38 degrees on the 20th, and 9th and 10th respectively.

## PRECIPITATION

The monthly average for the section was 5.38 inches, which was 1.79 inches above normal. The greatest amount of precipitation for the month was 10.16 inches at Newark, Delaware. Millsboro, Delaware, reported the least amount for the month with 2.31 inches. The greatest 24-hour rainfall was 4.20 inches and was recorded at Newark, Delaware, on April

30th and May 1st. The average monthly snowfall for the section was a trace and was 0.1 inch below normal. The greatest 24-hour and monthly snowfall was a trace recorded at Frostburg, Oakland, and Sines, Maryland, on the 7-8th.

**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, 6.73; evaporation, 6.470; average daily wind movement, 81.9.

## 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.		
Aberdeen, Md.	30.36	11	29.55	5	9.5	44	sw.	29	82	62	70	56	190
Annapolis, Md.	30.44	11	29.63	5	10.2	39	sw.	29	82	67	70	56	189
Baltimore, Md.	30.42	11	29.62	5	10.2	39	sw.	29	75	53	62	40	265
Elkins, W. Va.	30.52	11	29.60	5	8.1	29	nw.	21	96	82	40	44	265
Harrisburg, Pa.	30.44	11	28.58	5	8.1	29	nw.	21	79	57	66	58	187
Norfolk, Va.	30.46	11	29.63	5	10.1	27	n.	7	77	51	66	68	60
Philadelphia, Pa.	30.41	11	29.60	7	7.7	24	sw.	29	88	58	66	58	165
Pittsburgh, Pa.	30.45	11	29.55	1	10.2	37	nw.	29	73	54	62	44	188
Washington, D. C.	30.45	11	29.63	2	7.3	31	nw.	7	76	51	62	75	121

## COMPARATIVE DATA FOR MAY

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	61.7	101	20	3.27	0.3	12	61.7	98	37	3.65	0.0	12
1896	67.5	96	31	3.13	0.0	10	67.3	96	35	3.78	0.0	10
1897	61.1	86	27	5.16	0.1	11	62.2	85	40	4.01	0.0	10
1898	63.0	96	25	4.50	0.0	13	61.7	96	37	4.40	0.0	14
1899	63.6	96	31	3.72	0.0	10	63.2	96	38	2.47	0.0	8
1900	63.1	99	23	2.40	0.0	6	64.0	96	31	3.10	0.0	6
1901	61.3	95	25	4.55	0.0	12	61.2	86	38	3.65	0.0	11
1902	63.9	98	22	2.10	0.0	8	63.8	94	37	1.88	0.0	7
1903	64.0	95	24	2.64	T.	7	64.1	95	31	2.03	0.0	6
1904	64.2	102	26	2.61	T.	7	64.3	95	39	1.90	0.0	5
1905	64.7	97	25	2.97	0.0	7	64.4	92	35	3.13	0.0	8
1906	63.3	96	22	2.64	0.0	7	64.0	97	30	3.29	0.0	8
1907	58.1	91	23	4.54	T.	13	58.1	87	32	6.39	0.0	14
1908	63.4	95	23	6.13	0.1	14	65.0	94	36	6.64	0.0	12
1909	62.2	98	22	3.56	T.	9	63.4	93	34	3.96	0.0	8
1910	60.0	90	16	2.99	T.	12	62.0	90	35	2.30	0.0	13
1911	67.6	100	19	1.11	T.	4	67.2	96	33	0.69	0.0	3
1912	64.1	92	29	4.12	T.	10	64.7	91	38	4.27	0.0	8
1913	62.6	94	16	4.31	0.0	10	63.8	93	32	4.42	0.0	5
1914	65.1	100	18	2.06	0.0	6	65.8	98	31	2.00	0.0	8
1915	60.7	90	25	3.82	0.0	13	62.3	88	37	3.90	0.0	12
1916	64.6	97	30	3.61	T.	10	65.2	94	39	4.33	0.0	11
1917	57.3	93	27	3.02	0.1	10	56.9	92	34	3.10	0.0	10
1918	57.7	98	27	3.79	T.	9	67.4	95	38	3.43	0.0	6
1919	62.8	97	31	5.33	0.0	13	63.9	91	38	5.92	0.0	12
1920	58.5	91	22	1.94	T.	7	58.5	87	30	2.30	0.0	8
1921	61.3	93	27	5.47	T.	13	61.7	90	33	3.74	0.0	12
1922	64.7	98	25	3.21	0.0	10	65.0	88	32	2.09	0.0	3
1923	61.1	94	23	1.95	0.2	7	61.8	91	32	1.32	0.0	5
1924	58.7	94	26	6.60	0.0	17	59.5	88	37	5.26	0.0	16
1925	58.8	100	25	1.93	0.1	9	59.9	100	32	1.20	0.0	7
1926	62.0	94	25	1.98	0.0	8	62.0	91	33	2.84	0.0	9
1927	61.7	95	23	3.00	T.	14	61.6	88	38	3.39	0.0	12
1928	60.5	96	23	2.48	0.0	12	61.0	91	32	2.17	0.0	11
1929	62.0	96	26	3.21	T.	13	62.6	93	35	1.98	0.0	11
1930	64.8	96	27	2.11	0.0	9	65.6	95	40	3.16	0.0	9
1931	62.2	95	23	4.54	T.	13	62.8	92	33	4.24	0.0	12
1932	61.9	94	25	5.30	0.0	10	62.9	90	37	5.33	0.0	10
1933	64.8	94	34	5.45	0.0	16	65.2	93	37	5.33	0.0	16
1934	63.9	97	28	4.64	0.0	10	64.6	95	38	6.74	0.0	10
1935	59.4	92	28	3.64	T.	11	60.0	87	37	3.60	0.0	11
1936	64.9	95	27	2.17	0.0	6	65.5	94	33	1.62	0.0	4
1937	63.1	95	27	3.42	0.0	11	63.9	92	32	3.61	0.0	11
1938	61.3	96	23	4.34	0.0	15	61.4	85	37	4.28	0.0	16
1939	65.0	98	25	1.14	T.	5	64.8	96	32	0.58	0.0	4
1940	62.1	93	23	4.45	0.0	13	61.7	91	33	5.44	0.0	14
1941	64.2	100	20	2.39	0.0	8	65.1	99	32	1.52	0.0	9
1942	66.2	97	33	4.17	0.0	8	66.6	98	40	2.21	0.0	7
1943	64.6	95	17	4.65	T.	14	64.9	94	26	4.84	0.0	14
1944	68.4	96	30	2.32	0.0	8	67.7	92	40	2.18	0.0	7
1945	60.2	95	21	4.38	0.1	13	60.7	88	34	4.66	0.0	14
1946	63.1	91	32	6.44	0.0	16	63.0	89	33	6.11	0.0	15
1947	62.7	95	18	5.17	T.	14	62.8	92	26	6.63	0.0	12
Period ...	62.8	102	16	3.60	0.1	10	63.2	100	26	3.53	0.0	10

Climatological Data for May 1947

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees, Fahr.					Precipitation, in inches					Number of days				Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Total	Departure from the normal	Greatest in 24 hours	Date	Total snowfall (Unmelted)	With precip. 0.01 inch or more	Clear	Partly cloudy	
<i>Maryland</i>																		
Aberdeen, 4 miles SE.	Harford	57	29	60.8	-1.7	85	13†	31	9	3.67	+0.36	1.04	19	0	14			U. S. Army
Annapolis	Anne Arundel	40	82	62.8	-1.8	85	20	38	9†	4.00	+0.02	1.07	22	0	13			U. S. Navy
Baltimore* (central)	Baltimore	14	77	64.5	+0.1	80	13	37	9	3.95	+0.41	1.08	21-22	0	13			U. S. Weather Bureau
Baltimore Airport	Baltimore	16	13	64.0	+0.1	88	13	37	9	3.29	-0.31	1.18	21-22	0	13			U. S. Airport Station
Bell II	Prince Georges	151	27	63.6	+0.5	88	13†	24	10	6.02	+2.35	2.02	30-1	0	14			Bureau Plant Industry
Beltsville, 1 mi. ESE	do.	120	10	62.2		88	13†	26	10	6.73		1.82	30-1	0	16			J. B. Shepherd
Blackwater II	Dorchester	5	7	65.3		87	20	26	11	4.85		2.75	25	0	6			National Wildlife Refuge
Cambridge	do.	17	53	64.6	-0.6	88	13	31	9	4.98	+1.49	1.80	25	0	8			D'Arcy Harding
Charlotte Hall, 2 1/2 mi. E	St. Marys	167	26	64.6	-0.5	88	13†	29	9	3.62	+0.26	1.31	21	0	9			J. Burch Tamnyson
Cheltenham, 1 1/2 mi. NW	Prince Georges	230	47	63.4	-0.3	89	13	27	9†	4.22	+0.69	1.29	21-22	0	12			U. S. Magnetic Obs'y.
Chestertown	Kent	35	42	63.2	-0.3	87	13†	32	10	5.46	+1.86	1.46	1	0	15			Thomas W. Eliason, Jr.
Chewsville, 7 1/2 miles SE	Washington	630	50	60.0	-1.0	87	24†	23	10	5.52	+2.09	1.27	19-20	0	14			D. Paul Oswald
Clear Spring, 1 1/2 mi. NE	do.	560	48	61.6	-0.1	97	29	30	10	4.54	+0.76	0.68	19-20	0	17			Mrs. Leo A. Cohill
Coleman†, 3 miles NW	Kent	80	50	64.2	+0.4	90	13	35	10	7.96	+4.59	2.25	21-22	0	13			Walter B. Harris
College Park	Prince Georges	95	61	64.6	+1.4	89	20†	26	10	7.70	+3.93	2.62	30-1	0	14			Russell G. Brown
Conowingo Dam	Harford	40	12	60.8	-2.0	86	13†	30	9	3.48	+3.98	2.73	30-1	0	16			Susquehanna Electric Co
Crisfield	Somerset	5	28	67.8	+2.3	87	19†	38	9	2.39	-0.74	2.11	21-22	0	8			Grover C. Adams, Sr.
Cumberland	Allegany	623	77	62.6	-0.6	95	28	27	10	3.09	-0.80	0.66	25	0	13			W. H. Shockley
Edgemo†, 1 mile SW	Talbot	35	57	63.9	+0.1	85	13†	29	10	5.37	+2.02	1.58	21-22	0	10			Clement E. Bray
Elkton	Washington	920	9							6.88		2.00	19	0	12			Lee G. Harne
Emmitsburg, 2 1/2 mi. SW	Cecil	28	21	62.4	-0.9	89	29	29	9†	9.36	+5.47	3.26	30-1	0	12			H. W. Bouchelle
Fallston	Frederick	720	81							9.36		3.26	30-1	0	12			Mt. St. Mary's Seminary
Ferry Landing†, 1 1/2 mi S	Harford	450	78	61.6	-0.1	87	18	28	9	9.06	+5.41	2.82	30-1	0	15			Miss Dora Curtiss
Fort George G. Meade	Calvert	120	31	64.0	-0.1	89	13	30	9	4.18	+0.55	1.13	17-18	0	12			Thos. J. Bourne
Frederick	Anne Arundel	195	6	64.6		80	13†	30	9	5.98		1.86	30-1	0	14			U. S. Army
Frederick Airport I	Frederick	237	78	61.6	-2.2	90	24	24	10	5.42	+1.76	2.05	21-22	0	16			D. J. Markey, jr.
Frostburg	do.	371	4	61.6		86	28†	29	10	4.86		1.73	21	0	17			U. S. Weather Bureau
Friendlyville	Garrett	1,980	29															
Germantown	Allegany	2,005	46	57.6	-2.5	86	24†	22		4.53	+0.49	1.13	30-1	T	18			S. Graff Havenstick
Great Falls II	Montgomery	460	7	62.6		87	29	29	10	5.27		2.03	30-1	0	13			Ralph F. Staley
Hancock, No. 1	do.	200	59	64.2	+0.4	93	29	28	10	5.12	+1.73	1.37	30-1	0	14			John E. Bissett
Hancock, No. 2	Washington	428	38							3.80	+0.42	1.03	24-25	0	19			H. E. Kershner
Huntingtown	do.	428	14	60.4	-2.7	91	29	21	10	4.05	+0.67	0.87	30-1	0	20			Charles O. Dunbar
Keedysville	Calvert	160	12	64.2	-0.4	88	13	28	9	4.58	+1.06	1.15	17-18	0	12			Elmer O. Bowen
La Plata	Washington	420	44	62.6	-0.8	90	24	21	10	3.93	+0.58	0.93	21-22	0	15			Travis D. Knode
Luke	Charles	190	38	65.1	+1.2	91	13	27	9†	4.40	+0.78	1.60	16-17	0	10			Wallace S. Barnes
Maryland Line	Allegany	950	10							3.48	-0.47	1.35	3	0	17			J. G. Patrick
Millington	Baltimore	840	23	61.3	-0.7	86	28	27	9	6.55	+3.06	1.86	21-22	0	14			Chester L. Fulton
Oakland, 1 mile SE	Kent	2,420	50	68.4	-0.1	89	13†	28	10	5.44	+2.23	1.64	30-1	0	14			Henry L. Higman
Ocean City	do.	10	9	55.4	-0.6	84	28	18	10	4.26	-0.14	0.82	25	T	17			R. E. Weber
Oxford	Worcester	10	11	65.3	-1.3	84	19	41	8†	4.88	+1.12	1.86	21-22	0	11			U. S. Airway Station
Ferry Point	Cecil	40	7							7.86		3.20	30-1	0	14			Henry Wilcox
																		Veterans Administration
Picardy II, 3 miles NE	Allegany	1,030	21	61.7	-0.7	91	24†	25	10	3.00	-0.42	1.15	24-25	0	14			Oscar R. Day
Prettyboy Dam II	Baltimore	780	17	60.6	-2.0	86	24†	27	9	6.64	+2.55	1.47	30-1	0	13			C. W. Hendrix
Ridgely	Caroline	67	57	64.0	+0.2	89	13	29	9	6.88	+3.33	2.02	21-22	0	12			William Vernon Blades
Rock Hall	Kent	20	34	64.5	+0.8	87	13†	37	9†	5.52	+2.40	1.41	30-1	0	11			Geo. C. Simms
Salisbury	Wicomico	10	41	66.4	+2.2	90	21	29	9	2.71	-0.76	0.75	25-26	0	10			City of Salisbury
Sines† (Deep Creek) II	Garrett	2,080	23	55.1	-0.9	84	28	20	10	4.42	+0.04	0.75	25	T	17			C. E. MacMurray
Snow Hill	do.	20	32	64.3	+1.7	90	18	28	9	3.00	+0.57	0.78	22	0	12			U. S. Airway Station
Solomons	Calvert	27	50	66.1	+0.8	87	20	39	9	5.01	+1.97	2.10	25	0	11			Chesapeake Biological L'b
State Sanatorium	Frederick	1,460	39							6.71	+1.75	1.17	22	0	15			J. E. Stout
Takoma Park, No. 1	Montgomery	320	49	64.4	+0.8	86	13†	32	10	6.71	+3.34	2.43	30-1	0	15			Guy L. Seaman
Takoma Park, No. 2 II	do.	230	8	63.0		89	29	29	9	6.33	-1.06	2.13	30-1	0	18			O. L. Harvey
Tonoloway II	Washington	550	23	60.6	-0.5	91	29	22	10	2.70	-0.84	0.85	25	0	13			American Fruit Growers
Towson	Baltimore	475	36							6.45	+3.00	2.27	30-1	0	17			S. Elmer Parks
Unionville	Frederick	450	8	58.8		89	24	21	10	6.52		2.13	21-22	0	15			G. Plitt Von Eiff, jr.
Western Port	Allegany	1,000	54	62.0	-0.2	93	28	26	10	2.58	-1.06	0.98	4	0	13			Norris Bruce
Westminster	Carroll	770	38	61.7	+0.6	89	28	27	10	4.94	+1.94	1.23	22	0	15			Harry J. Mathias
Williamsport, 2 mi. NW	Washington	360	9							6.02		1.12	29	0	20			R. C. Willson
Woodstock	Baltimore	415	78	62.5	-0.6	89	24†	27	10	5.99	+2.40	1.93	30-1	0	16			Woodstock College
<i>Dist. of Columbia</i>																		
Washington I**		72	77	65.4	+1.7	91	18	35	9	4.05	+0.85	1.51	21-22	0	14			U. S. Weather Bureau
<i>Delaware</i>																		
Bridgeville, 1 mile W	Sussex	45	57	63.2	-0.1	88	13	25	9†	5.79	+2.21	2.23	25	0	9			William M. Ray
Delaware City, 1 1/2 mi. SW	New Castle	15	61	62.8	-0.6	87	29	31	10	6.89	+3.58	1.76	30-1	0	17			James E. Maden
Dover	Kent	84	60	63.8	-0.1	87	29	32	10	6.49	+2.91	1.52	30-1	0	16			Arthur G. Livingston
Georgetown	Sussex	50	2	64.5		89	29	26	9†	3.00		0.97	17-18	0	10			E. F. Turner
Lewes	do.	10	3	61.6		87	13	27	9	4.27		2.08	17-18	0	11			E. Elwood Lynch
Millsboro	do.	20	55	66.4	+2.1	92	20	26	10	2.31	-1.16	0.50	23-30	0	8			Preston C. Townsend
Newark II	New Castle	110	16							10.14	+6.30	4.20	30-1	0	11			G. C. Price
Newark III, 1 1/2 mi. SW	do.	110	35	61.7	-0.4	87	29	29	9	10.16	+6.32	4.20	30-1	0	14			Fred. Collins
Wilmington I	do.	42	54							9.99	+6.50	3.95	30-1	0	14			Street Department
Wilmington II, 2 mi. NE	do.	260	36	60.9	-2.2	86	29	32	9	7.24	+3.77	1.74	22	0	16			Water Department
<i>Means and extremes:</i>																		
For Maryland and District of Columbia				62.7	-0.1	95	28	18	10	5.17	+1.5							



Daily Temperatures for May 1947-Continued

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

See page 18 for explanation of reference marks.