

CLIMATOLOGICAL DATA

15 MARYLAND AND DELAWARE SECTION

J. R. WEEKS

PRICE: 5 CENTS A COPY; 25 CENTS A YEAR

VOL. XLV BALTIMORE, MD., SEPTEMBER 1941 No. 9

GENERAL SUMMARY

This September was the warmest since 1933, the sunniest of record, and the driest since 1884. Monthly sunshine was 15% above normal, or nearly 80% of the possible amount. A drought prevailed after the first decade. The 1st, 5-10th, 16-17th, and 23d were very warm. Cool periods were 11-14th, 20th-21st, and 30th.

Monthly rainfall was a trace in the Millsboro district and in extreme northern Sussex, Kent (Del.), southern New Castle, southeastern Cecil, eastern Kent (Md.), eastern Queen Anne, and Caroline Counties, and between 1 inch and 2 inches in western Garrett and eastern Washington Counties, except between 2 and 3 inches in the Williamsport district; elsewhere over the section it was between a trace and 1 inch, except slightly above an inch in a few localities.

Growing crops declined from good in the first decade to poor to fair during the third decade. Pastures declined during the first decade and were poor, being mostly dry and brown, thereafter. Springs and wells were low.

Cutting corn began the first week, except the second week in Allegany and Garrett Counties. Digging early potatoes ended; yields were mostly fair to good. Late potatoes were being dug in western Maryland. Harvesting tomatoes, sugar corn, and truck crops, picking apples, peaches, and pears, digging sweet potatoes, haying, and plowing were in progress. Buckwheat was cut. Tobacco was cut and housed; it was a good crop. Tomatoes were very plentiful the first and second decades. Late potato tubers in the central and eastern divisions were stunted by the drought. Wheat came up in the Allegheny Mountain highlands. Some barley, rye, and wheat were sown in the northern and central counties. — J. B., jr.

MISCELLANEOUS PHENOMENA (WITH DATES)

Auroras: Night 17-18; brilliant, spectacular, and unusual, night 18-19.

Fogs: 3 to 5, 8 to 10, 12 to 15, 20 to 26, 28.

Lightning exploded some dynamite on a farm near Whiteford at night of 10th, injuring a man and killing ten heifers.

Thundergusts, strong: 5, 10. *Thunderstorms:* 3, 4, 5, 9, 10.

Winds, strong: Western Maryland, 25; extreme northern Delaware, 29, 30.

TEMPERATURE

The monthly mean for the section, 70.1°, is 2.4° above normal. The highest monthly mean was 75.2° at Solomons; the lowest, 60.6°, at Sines. The highest temperature, 100°, occurred at Dundalk on the 1st; the lowest, 31°, at Oakland on the 13th and 14th. The greatest local monthly range was 62° at Tonoloway; the least, 32°, at Delaware Breakwater. The greatest daily range was 52° at Keedysville on the 23d.

PRECIPITATION

The monthly average for the section, 0.52 inch, is 2.80 inches below normal. The greatest monthly amount was 2.68 inches at Williamsport; the least, a trace, over quite an area on the northern Eastern Shore. The greatest 24-hour rainfall was 1.35 inches at Ocean City on the 4th. The average number of days with 0.01 inch or more of rainfall, 3, is 4 below normal.

EVAPORATION STATION: Beltsville, Md. (Elevation, 120 feet) (Evaporation Tank: 10 inches deep, 48 inches in diameter)

Month	Temperature					Precipitation (total)	Evaporation (inches)
	Mean	High	Date	Low	Date		
August 1941.....	71.6	94	9	44	14	3.77	6.787
September 1941..	68.0	94	19	35	30	0.45	6.324

PRESSURE, HUMIDITY, SUNSHINE, WIND, DEGREE DAYS

Stations	Atmospheric pressure reduced to sea level			Wind			Mean relative humidity			Percentage of sunshine	Heating degree days (base 60°)	
	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7:30 a. m.			1:30 p. m.
Aberdeen, Md.....	30.40	14	29.73	5	8.4	20	n.	11	75	72	66	45
Annapolis, Md.....	30.42	14	29.74	25	9.5	37	sw.	5	72	70	70	45
Baltimore, Md.....	30.42	14	29.74	5	9.9	32	sw.	5	74	74	63	50
Elkins, W. Va.....	30.41	14	29.74	25	4.6	37	w.	10	72	72	57	54
Harrisburg, Pa.....	30.40	14	29.69	5	6.6	26	s.	19	83	58	79	6
Norfolk, Va.....	30.42	14	29.82	6	9.5	24	s.	10	79	44	63	12
Philadelphia, Pa.....	30.44	14	29.73	5	11.9	39	s.	25	81	47	60	32
Pittsburgh, Pa.....	30.40	20	29.62	25	9.3	33	sw.	5	78	47	60	32
Washington, D.C.....	30.42	14	29.77	25	5.7	25	nw.	5	78	47	60	32

COMPARATIVE DATA FOR SEPTEMBER

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
1885.....	70.4	101	27	2.08	T.	4	71.2	99	39	1.92	0.0	4
1886.....	66.3	94	25	4.39	0.0	8	67.1	82	36	3.96	0.0	3
1887.....	66.7	100	21	1.67	0.0	9	67.9	97	40	1.35	0.0	2
1888.....	69.3	100	21	1.80	0.0	5	70.3	97	44	3.55	0.0	6
1889.....	65.3	99	25	4.85	0.0	7	66.4	92	39	2.81	0.0	8
1890.....	72.0	103	29	3.47	0.0	6	71.6	95	43	2.75	0.0	6
1901.....	66.4	94	29	3.08	0.0	8	68.1	94	42	2.45	0.0	6
1902.....	66.0	101	25	6.19	0.0	10	67.4	92	42	6.14	0.0	10
1903.....	66.0	98	24	1.97	0.0	5	67.2	90	36	3.29	0.0	6
1904.....	67.1	99	27	3.66	0.0	5	67.5	95	33	3.21	0.0	5
1905.....	67.0	94	24	2.68	0.0	6	67.8	91	38	4.51	0.0	6
1906.....	70.6	94	36	1.25	0.0	6	72.2	98	47	1.51	0.0	6
1907.....	68.2	95	30	6.21	0.0	12	69.6	93	35	6.39	0.0	11
1908.....	65.9	94	24	2.39	0.0	3	66.3	90	40	2.87	0.0	6
1909.....	65.4	92	23	3.35	0.0	5	65.5	87	39	2.94	0.0	5
1910.....	69.4	98	32	1.30	0.0	6	69.9	96	46	0.76	0.0	4
1911.....	69.2	95	30	2.80	0.0	8	69.6	91	41	2.00	0.0	6
1912.....	69.1	102	30	5.93	0.0	10	70.2	102	39	4.65	0.0	10
1913.....	66.5	102	22	2.65	T.	7	68.1	91	41	3.92	0.0	8
1914.....	64.6	98	21	1.20	0.0	4	66.5	97	34	0.68	0.0	3
1915.....	69.2	98	31	2.26	0.0	6	71.1	99	36	0.90	0.0	4
1916.....	65.1	98	26	3.39	0.0	7	66.5	94	38	6.04	0.0	6
1917.....	62.5	93	27	2.62	0.0	7	63.5	91	37	3.35	0.0	6
1918.....	63.2	88	27	3.73	0.0	8	64.2	87	37	3.92	0.0	8
1919.....	68.1	100	31	2.34	0.0	4	68.3	94	40	2.23	0.0	4
1920.....	67.7	92	35	3.11	0.0	6	68.4	89	40	2.87	0.0	4
1921.....	72.5	99	37	3.48	0.0	9	73.4	95	45	2.15	0.0	4
1922.....	68.6	100	27	2.61	0.0	4	68.0	93	39	2.26	0.0	4
1923.....	68.2	92	28	2.45	0.0	9	68.3	88	39	3.93	0.0	6
1924.....	62.9	101	30	6.06	0.0	12	64.8	88	40	5.68	0.0	11
1925.....	71.4	100	35	1.78	0.0	7	72.3	94	39	1.06	0.0	4
1926.....	67.8	93	35	5.15	0.0	11	68.6	93	44	3.81	0.0	5
1927.....	67.8	99	26	1.36	0.0	4	68.0	96	38	2.04	0.0	5
1928.....	63.1	92	28	4.45	0.0	10	64.9	93	34	6.57	0.0	12
1929.....	68.2	100	25	3.58	0.0	5	69.4	95	40	3.99	0.0	8
1930.....	72.9	102	33	1.31	0.0	6	73.8	100	42	2.50	0.0	5
1931.....	72.0	100	30	2.61	0.0	8	73.5	98	43	2.80	0.0	5
1932.....	67.9	106	25	2.20	0.0	6	69.3	97	37	3.20	0.0	6
1933.....	70.0	94	37	4.20	0.0	11	71.6	94	46	3.44	0.0	10
1934.....	68.5	92	36	3.36	0.0	14	70.0	90	46	9.12	0.0	13
1935.....	63.0	92	28	7.40	0.0	8	66.2	87	38	10.97	0.0	6
1936.....	63.3	97	29	2.14	0.0	7	69.5	92	42	4.79	0.0	9
1937.....	64.1	96	26	1.75	0.0	6	65.4	93	38	1.48	0.0	6
1938.....	65.6	92	32	5.80	0.0	13	67.3	90	39	8.36	0.0	12
1939.....	68.7	100	31	3.25	0.0	7	69.5	95	44	1.97	0.0	7
1940.....	64.4	95	25	3.35	0.0	6	65.6	91	32	3.20	0.0	6
1941.....	70.0	100	31	0.57	0.0	3	71.0	97	38	0.24	0.0	2
Period.....	67.6	106	21	3.32	T.	7	68.6	102	32	3.42	0.0	7

Climatological Data for September 1941

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 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; for stations of 10 to 14 years the means for the period of record are used.

Post addresses of these stations are as follows: Of Bell, Glendale; of Blackwater, Cambridge; of Coleman, Worton; of Falston, Bagley; of Ferry Landing, Owings; of Great Falls, Bethesda; of Mt. Savage Summit, Frostburg; of Odessa, Middletown; 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. ‡2 miles north-west of Frostburg. §Municipal Building. ¶Porter Reservoir. //Water Pumping Station. |||University Farm.

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, Chestertown, Conowingo Dam, Sines, and Washington are from midnight to midnight; at Dundalk, Mt. Savage Summit, Ocean City, and Delaware Breakwater the thermometers are read at 1:30 a. m., the extremes are charged to the preceding day; other stations, except Blackwater, Cheltenham, Cumberland, and Pocomoke City, are for 24-hour period ending late in afternoon, near sunset, except 9:30 p. m. at Princess Anne.

Daily Precipitation for September 1941

Stations (Maryland)	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			
Aberdeen†	Atlantic.				.09	T.					T.																								0.09
Annapolis†	do.	.02		.05	T.	.01					T.																							0.08	
Baltimore†	do.			T.	.36	.14					T.																							0.50	
Bell.	do.		T.	T.	.01	.06	.09																											0.21	
Beltsville*	do.		.07	T.	T.	.16	.21					.05																						0.45	
Blackwater*	do.			T.	.16							.01																						0.16	
Cambridge(near)	do.				.15	.79																												0.88	
Charlotte Hall	do.																																	0.21	
Cheltenham*	do.				.20	.12						.06	.03	.02																				0.55	
Chestertown	do.				.02	T.	T.				T.																							0.02	
Chevsville..	do.				1.20	.01	.25				T.	.40																						1.86	
Coleman.	do.				.05	T.	.22																											0.27	
College Park	do.		T.		T.	.01	.14	.09				T.																						0.24	
Conowingo Dam†	do.				T.	T.	.48						.72																					1.20	
Crisfield	do.				T.	.41						T.																						0.41	
Cumberland*	do.					T.	.10	.12				T.																						0.22	
Darlington	do.					T.	T.	.29				.32	T.																					0.61	
Easton	do.				T.	.15	T.																											0.15	
Edgemont*	do.						.50	.30					.40																					1.20	
Elkton	do.					T.	.18	.07					.18																					0.38	
Emmitsburg (near)	do.					T.	.02	.23					.20																					0.45	
Fallston	do.					T.	.01	.09	.09				.27																					0.46	
Ferry Landing	do.					.14	.09																											1.08	
Frederick	do.					T.	.45	.41					.22																					1.08	
Friendsville	do.					T.	.43	*.71					.14																					1.28	
Frostburg	Ohio.					T.	T.	.32					T.																					0.35	
Georgetown	Atlantic.					T.	T.	T.					T.																					T.	
Germantown	do.		T.	T.	T.	.58	.04						.83																					0.95	
Great Falls*	do.		T.	T.	T.	.04	.16	.26					.12																					0.58	
Hancock*	do.						.76	.06					.02	.12																				0.96	
Huntingtown	do.				.10	.12																												0.22	
Keedysville	do.					.48	T.	.21	T.				.70																					1.39	
Laurel	do.		T.		T.	.01	.20	.13					T.																					0.34	
Leonardtown	do.				T.	.01																												0.01	
Luke*	do.						.25	.14					.02																					0.41	
Maryland Line	do.					.13	.12	.27					.20																					0.72	
Milington	do.				T.	T.	T.						T.																					T.	
Mt. Savage Summit§	do.					.01	.38					T.	.03																					T.	
Oakland	Ohio.		.08			.54	.31	.34					.17																					0.45	
Ocean City*	Atlantic.		T.			.35	T.																											1.44	
Oxford.	do.					.49																												1.35	
Perry Point.	do.				.04								.03																					0.53	
Picardy.	do.					.14	.10	.11					.08																					0.16	
Pleasant Hill.	do.					.01	.30	.03					.14																					0.43	
Pocomoke City*	do.					T.	T.																											0.48	
Prettyboy Dam	do.					T.	.37	T.					.62	.19																				0.06	
Princess Anne*	do.					.11	.27						.11																					1.18	
Ridgely	do.					T.	T.						T.																					0.49	
Rock Hall	do.					T.	.03	T.	T.				T.																					T.	
Silver Spring	do.		T.		T.	T.	.14	.36					.03																					0.09	
Sines*†	Ohio.		.03		.03	.70	.88	.36					.10																					1.77	
Snow Hill.	Atlantic.				.10	.39							T.																					0.50	
Solomons	do.					T.	.02																											0.02	
State Sanatorium	do.					.05	.20	.31					.30																					0.86	
Stevensville	do.					.04	.17	T.																										0.21	
Takoma.	do.					T.	T.	.26	.26				.02																					0.54	
Tonoloway	do.					T.	.12	T.	.04																									0.20	
Towson*	do.					T.	.18	.10					.04																					0.30	
Unionville	do.					T.	.45	.21	T.				.24																					0.90	
Western Port.	do.					T.	.30	.16					.05																					0.51	
Westminster†	do.					T.	.32	.30					.20																					0.82	
Williamsport*	do.						.75	.60					.75	.58																				2.68	
Woodstock	do.					.02	.33	.10					.24																					0.69	
Washington, D. C.†	do.		.01		.04	.22	.25						.01	T.																				0.53	
Delaware																																			
Bridgeville.	Atlantic.					.13																												0.13	
Delaware Breakwater*	do.					.20																												0.22	
Delaware City	do.					T.	.02	.03					T.	.05																				0.10	
Dover.	do.					T.	T.																											T.	
Milford.	do.					T.	T.																											T.	
Millsboro.	do.					T.	T.																											T.	
Newark*	do.					T.	T.	.10					.44																					0.54	
Newark	do.					T.	T.	.11					.40																					0.51	
Odessa	do.					T.	T.	T.																											

Daily Temperatures for September 1941-Continued

Table with columns for Stations (Maryland), days 1-31, and Mean. Rows list various stations like Aberdeen, Annapolis, Baltimore, etc., with their daily maximum and minimum temperatures.

See page 34 for explanation of reference marks.

(W.B. Richmond, Va., 11-12-41-1,200)