

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

CHARLES F. MARVIN, Chief

In Cooperation with Maryland State Weather Service

CLIMATOLOGICAL DATA

15 MARYLAND AND DELAWARE SECTION

JOHN R. WEEKS, Meteorologist and Section Director

PRICE: 5 CENTS A COPY; 50 CENTS A YEAR

VOL. XXXVI BALTIMORE, MD., AUGUST, 1931 No. 8

GENERAL SUMMARY

The mean temperature of this month was slightly above normal, and was the same as in 1930. Monthly rainfall was fairly abundant over the western half of the section, except somewhat deficient in Washington County, and unusually heavy over the eastern half. Thunderstorms were not as frequent nor as damaging as in June and July. Monthly sunshine was the least in August since 1920. Relative humidity averaged normal. The second and third decades were marked by much cloudiness and but few days without rain.

The first decade was very warm and sunny. Under north-east winds, very cool weather prevailed on the 11-12th and 21st-23d; the 20th and 24th were cool, the 15-19th was warm, and the 25th-31st moderately warm.

Monthly rainfall averaged one and four-fifths times the normal. Totals were 3 to 4 inches in Washington County and 4 to 7 inches over the remainder of the western half of the section; with an average of 5.01 inches for the area. Over the eastern half of the section totals ranged from 7 to 15 inches, with an average of 7.32 inches in the eastern half of north-central Maryland, of 9.10 inches in southern Maryland, and of 10.00 inches on the Eastern Shore; for the entire area the average was 9.11 inches.

Thundershowers were heavy locally or in some portion of the section at night of 3d-4th, 4-5th, and 18-19th; also on the 9th, 10th, 15th, 20th, 25th, 26th, 27th, and 28th. Northeast rain was heavy over the eastern half of the section on the 11-12th, with totals of 1 to 3 inches, and on the 21st-24th, with totals of 3 to 8 inches.

A northeast storm, with heavy rain and high wind (reaching gale force on Chesapeake Bay and the Eastern Shore), prevailed at night of the 22d and on the 23d. On the Eastern Shore much corn was flattened, some fruit was blown down, some communication wires were broken, and tomatoes were damaged. Three power boats were driven ashore near the mouth of the Severn River and one of them was wrecked; a schooner was driven ashore off Bodkin Point.

Crops, grasses, and pastures were good to excellent, except crops were fair to good and grasses and pastures poor to fair in eastern and central divisions during the first decade. Threshing of wheat, rye, and oats and digging of early potatoes were finished on the Eastern Shore during the first decade and in southern Maryland during the second, but continued in north-central and western Maryland at the close of the month. Harvesting tomatoes, sugar corn, truck, tobacco, cantaloupes, watermelons, apples, peaches, and pears, and haying and fall plowing, were in progress. Canneries were operating. Late potatoes were planted and came into bloom. Cowpeas and soy beans did well. During the closing week early corn was maturing and late corn was filling out; silos were being filled; sweet potatoes, heavily vined, were making or maturing; and the early

tomato crop was about harvested, while the late crop was ripening. Crop yields were good. The peach crop on the Eastern Shore was very heavy. Wells and springs were low in eastern and central divisions.—J. B., jr.

PRESSURE

The monthly mean sea-level pressure at Washington, D. C., and at Baltimore, was 30.01; at Aberdeen, 30.02 inches. The highest at Washington, D. C., Baltimore, and Aberdeen was 30.37 inches—all on the 15th. The lowest at Washington, D. C., was 29.49; at Baltimore and Aberdeen, 29.52 inches—all on the 10th.

TEMPERATURE

The monthly mean for the section, 73.8°, is 0.6° above normal. The highest monthly mean was 77.2° at Solomons; the lowest, 64.8°, at Sines. The highest temperature, 101°, occurred at Lutherville, Milford, and Millsboro on the 3d; the lowest, 40°, at Sines on the 30th. The greatest local monthly range was 51° at Oakland and Western Port; the least, 34°, at Annapolis. The greatest daily range was 40° at Lutherville on the 8th.

PRECIPITATION

The monthly average for the section, 7.70 inches, is 3.39 inches above normal. The greatest monthly amount was 14.49 inches at Cambridge; the least, 3.04 inches, at Hancock (City). The greatest 24-hour amount was 5.50 inches at Cambridge on the 22-23d. The number of days with 0.01 inch or more, 15, is 5 above normal.

RELATIVE HUMIDITY

The average percentages were: Washington, D. C., 8 a. m., 80; 12 noon, 58; 8 p. m., 72. Baltimore, Md., 8 a. m., 74; 12 noon, 58; 8 p. m., 67. Aberdeen, Md., 8 a. m., 86; 4 p. m., 61. Philadelphia, Pa., 8 a. m., 75; 12 noon, 56; 8 p. m., 66.

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 3,295; at Baltimore, 5,703; at Aberdeen, 4,108 miles. The maximum velocity at Washington, D. C., was 30 miles from the southwest on the 18th; at Baltimore, 30 miles from the southwest on the 3d; at Aberdeen, 40 miles from the northeast on the 23d.

SUNSHINE AND CLOUDINESS

At Washington, D. C., 55 per cent of the possible sunshine was recorded; at Baltimore, 52 per cent; at Aberdeen, 51 per cent. For the whole section the average number of clear days was 10; partly cloudy, 11; cloudy, 10.

MISCELLANEOUS PHENOMENA (WITH DATES)

Hail, heavy.—On 25th: New Midway to Libertytown, from northwest, hail fell for 20 minutes; stalks stripped of blades and ears of corn; greatest damage over an area 1 mile long and ½ mile wide between New Midway and Pleasant Hill. Poplar Springs to Lisbon. Between Funkstown and Benevola, over area 1 mile long and ¼ mile wide, size of marbles.

Lightning, damage by.—On 4th: Large barn and contents destroyed 8 miles from Cambridge. On 9th: Barn and contents destroyed and several persons stunned near Kemptown; two horses killed near Mount Airy. On 10th: Large barn and contents destroyed on Woodfield-Etchison road, Montgomery County,

(Continued on page 30)

Climatological Data for August, 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), Number of days (Clear, Partly cloudy, Cloudy), 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. † Prettyboy Dam. †† 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.

(Continued from page 29)

loss \$5,000; large barn and contents destroyed near Cambridge; home wrecked on State road near Crisfield. On 25th: Large barn destroyed near Libertytown; four trainmen, man and wife, and a woman injured near Wye Mills. On 26th: Girl killed near Cape May Beach, Middle River. On 27th: Church fired at Baltimore. Thunderstorms.—2, 9, 10, 20, 21, 22, 25, 26, 27, 28; nights of 3-4, 4-5, 18-19.

Winds, high.—From northeast: Eastern half of section, night 22, and on 23d; on coast, 11-12, 21-23 (gale, night 22, and on 23d). Thundergusts: 3, 9, 10, 18, 25, 26, 27. Winds, high (thundergusts), damage by.—On 4th: Large electric sign overturned at Jacktown, 3 miles from Cambridge. On 25th: Some trees blown down at Frederick and in east-central Frederick and northwestern Howard Counties.—J. B., jr.

Daily Precipitation for August, 1931

Stations	Watersheds	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**	Atlantic			.90						15	19	50	15	T	T	.42				T	.01	.13	.24	.95	2.0	.10	.01	.16	.51	.29	.11	T	.08	7.95		
Annapolis	do				T	.09				58	1.77	.83	T	T	.75					T	.10	.45	1.10	2.67	.42		.50	.50	.20	*	T	.08	9.61			
Baltimore***	do			T	.06	.28	.08			.04	1.21	.50	.22	T	T	.75					.15	.27	.09	.45	2.08	1.00	.13	.29	.04	.16	.18	T	.08	7.98		
Bell	do				.30	.22	.40			1.17	1.68	.40	T	T	.39						.17	.51	.75	2.33	.07		.48	.62	T	.24	.03	T	.08	9.36		
Boyd's	do			.08	T	1.24				.34	.49	.41	.15	T	T	.75					.19	.02	1.03	.51	.08	.02	.09	.04	.04	T	.26	T	.08	4.99		
Cambridge (near)	do									1.15	2.40	.28	T	T	.75						.76	.76	2.05	5.50	1.27		.19	.25	.14	T	.26	T	.08	14.49		
Cecilton	do				.75	T				T	.40	1.75	.14	T	.05	.95					T	.35	T	2.95	.45		.42	.45	.15	T	.08	T	.08	8.81		
Cheltenham	do				.01	1.47				.11	.63	.48	.01	T		.95					.26	T	.82	1.07	.53	.24		1.23	1.21	.20	.10	T	.08	8.37		
Chewsville	do				.01	.02				.33	.59	.14	.14	.01	T						T	.02	.07	.35	.20	.05		.16	.05	.10	.70	.28	T	.08	3.22	
Clear Spring	do																																			
Coleman	do				.28	.06				.25	.78	1.50	.39	T	T	1.90					1.95	.37	*	.70	2.50	.15	T	.17	.91	.32	T	.08	13.23			
College Park	do				.08	.08				1.07	1.82	.58	T	T	.68						.38	.77	.87	.80	.04		.08	.27	.18	.16	.01	T	.08	7.87		
Crisfield	do			.02		1.70				.46	.55	.51	T	T	.02						1.18	1.60	1.19	.56	1.87	.50								9.16		
Cumberland	do				.38	.21	.02			.21	.20	.02	.01	T		.24					1.32	.31	.52	.17	.13		T	.17	.41	.10	.25	.06	T	.08	4.49	
Darlington	do				1.16	T				2.2	1.00	1.60	*	.42	T	.24					T	.37	1.3	1.00	1.70	T	T	.27	T	.94	T	.08	9.05			
Easton	do				T	.68				.78	2.02	.32	T	.35	T	.75					.84	T	.48	.43	5.50	.60		.19	.05	.17	.78	T	.08	12.99		
Elkton	do				.71	T				1.05	.40	.15	T	T	.75						T	.54	.04	2.29	.42		.70	.70	.70	.90	T	.08	8.63			
Fallston	do				.01	T				.03	.91	.42	.30	.02	T	.27					.22	.02	.57	.82	2.40	.42	T	.10	.26	.04	.13	T	.08	6.04		
Ferry Landing	do				T	1.47				.89	1.43	.26	.20	T	T	.02					T	.36	.35	.13	.20	1.02	.66	.12	.29	.53	T	.08	10.69			
Frederick	do									.60	.32	T	T	*	T						.30	1.00	.60	.20	.56	.07	.16	.35	.50	.16	.55	.20	T	.08	5.25	
Friendsville	Ohio				* 1.90					.31	*	T	*	.11							.21	.40	.73	.07	.16		T	.04	.93	.23	.35	.12	T	.08	4.34	
Frostburg	Atlantic				.58		.10			.28	.40	*	T	*	.11						.27	1.02	.88	.07	.05	T	.01	.03	.35	.51	.12	.15	.08	5.13		
Grantsville	Ohio	T	T	.54	.36					.31	T	.01	T								.27	1.02	.88	.07	.05	T	.01	.03	.35	.51	.12	.15	.08	5.13		
Great Falls	Atlantic					.30				.04	.83	.87	T	T							.12	T	.62	.64	.60	.15		.23	.12	.20	.11	T	.08	4.88		
Hancock (Donoloway)	do			.02	.02	.02				.76	.25	.02	.02	T	T						.43	.10	.92	.11	.13		.45	.14	.52	T	.17	T	.08	4.08		
Hancock (City)	do			T	T	T				.17	.07	.07	T								*	.10	.28	.49	.22	*	.99	.50	.01	.15				3.04		
Keedysville	do			T	T	T				1.0	1.40	.16	.13	T							.03	.04	.33	.33	.03		.14	.04	.01	.02	.29	T	.08	3.05		
La Plata	do					.38				.25	.80	.59	.02	.03	.02						.08	.02	.65	1.49	.02	.26		.69	.75	.08	.03	.02		6.18		
Laurel	do			.39	.02	.01				.54	1.06	.40	.45	T	.69						T	.81	1.04	.57	2.30	.58	T	.01	.59	.01	.34			9.31		
Lutherville	do					T	*			.23	.60	1.39	.46	T	.26						T	.78	.27	2.30	.05	.03	.16	.21	.02	.05				6.81		
Maryland Line	do				1.31	T				* 1.25	.28	.47	T	T	.04						T	.04	.30	*	2.15	T	.10	.05	.14	T	1.25	T	.08	7.38		
Mechanicsville	do					1.19				*	.65	1.81	T	T	.09	.35					*	*	.58	1.58	*	.94		.90	.58	.27	.13	T	.08	8.63		
Millington	do				.08	.18				.65	1.70	.16	T	.09	.35						.96	.10	.36	1.14	4.72	.36		.58	.08	.14	T	.08	10.62			
Oakland	Ohio	T	.02		.32					.89	1.12	.02	.04	T							.20	.91	1.29	.50	.03		T	.24	.38	.41	.19	.05	.14	5.66		
Parkton	Atlantic				.80	T				.07	2.97	.24	.53	.04	T	.01					T	.39	.24	1.90	T	.13	.04	T	.10	.15	.24	T	.08	8.47		
Picardy	do			.04		.32	.30			T	.10	T	T	T	T						1.07	.17	.98	.12	T	*	1.10	.10	.80	.15	.24	T	.08	5.49		
Pleasant Hill	do					T				T	1.40	.40	.35	T	T	T					.02	.05	.35	.95	2.05		*	.22	T	.05	T	.08	5.84			
Pocomoke City	do					1.84				.88	.10	.50	T	T	T						2.40	.12	T	1.05	1.36	.35	.35							8.95		
Princess Anne	do					1.60				1.60	.10	.66	.22	T	T	.10	.08				.07	T	.80	2.00	1.35	.92	.35							8.78		
Ridgeley	do					1.16				.02	1.00	.56	.02	T	T	.10					.02	T	.36	.42	.36	.57		.02	.32	.25	T	.18		9.01		
Rock Hall	do					T	.03			.02	1.00	.56	.02	T	T	.10					.02	T	.36	.42	.36	.57		.02	.32	.25	T	.18		9.01		
Salisbury	do						.25			1.42	.97	.63	T	T	T						T	2.75	1.10	1.10	.58		.55							10.45		
Sines**	Ohio	.02	.69	.32						1.14	.05	T	.02	T							.04	.40	.50	1.24	.07	*	.01	.33	.22	.22	.18	.22		5.69		
Solomons	Atlantic					.10				1.02	.40	.60	T	.15	T						.05	T	.95	2.00	2.00	*	*	.95	1.00	.50	.30	T	.08	11.10		
State Sanatorium	do					T	.10			1.63	1.02	.10	.20	.03	T	T					T	.05	.45	*	*	.80	*	.25	T	1.30	T	.08	5.28			
Stevensville	do					T	.10			T	.55	.80	.68	.03	T	T					T	.02	.03	4.05	.05	.05	.70	.90	.06	.15	.73			8.85		
Takomall	do					*	.15			.45	1.33	.89	T	.20	T						.60	T	.32	.43	.45	.22		.36	* 1.10	.13	.01	T	.08	6.44		
Towson	do					T	.01			T	1.01	.72	.66	T	.32						.01	.02	.72	*	* 2.50	*	.20	.28	.10	.30				6.94		
Western Port	do			.10		.35	.20			T	.22	T	.05	.01							.20	.50	1.12	.28	.18		T	.05	1.02	.15	.18	.04	.08	4.73		
Westminster	do					.01	T			.08	1.45	.35	.20	T	.03	.03					T	.02	.49	.40	1.47	.05	.12	.04	T	1.28	T	.08	6.02			
Woodstock	do					T	.41			.08	*	2.01	.43	T	T	.05					*	*	.84	.20	2.26	.07	T	.21	.10	T	.09		.01	6.76		
<i>District of Columbia</i>																																				
Washington***	Atlantic			T	.02	.09	.03			.03	1.03	.50	.45		T	.49					.58	T	.02	1.08	.60	.29	.01	.14	.30	.11	T	.15	T	.08	5.92	
<i>Delaware</i>																																				
Bridgeville	Atlantic					.46				.32	1.24	.38	T	.42	.16						T	T	1.26	1.22	2.60	1.03		.04	.04	.30	T	.08	8.37			
Delaware City	do				.20	T				.25	T	1.50	.05	T	T	2.20					T	T	.55	.60	1.60	2.00			.10	.90	.35	T	.08	10.20		
Dover	do					T	.11			1.23	.62	.37	T	.42	.21						T	T	1.44	2.54	5.51	1.02		T	.17	.11	.01			11.51		
Millford	do					T	1.05			1.10																										

Daily Temperatures for August, 1931

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

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-12-17-31-930)