

CLIMATOLOGICAL DATA

VIRGINIA SECTION

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GENERAL SUMMARY

The year was warmer and much drier than usual, not only for the State, as a whole, but for each of its divisions. Temperatures were not continuously high, the average for the State being below the normal in 5 of the 12 months; December averaged 3.1° below normal. On the other hand, it was the warmest September of record, and February was much milder than usual. All high temperature records in Virginia were broken on July 20th when 109° was recorded at Woodstock, Shenandoah County.

The outstanding feature of the year's weather was the drought, which, for severity and duration, was unprecedented. This was by far the driest year in the climatological history of Virginia. Also, low precipitation records were established for the periods December to August, March to August, June to August, July, August, and July and August combined. Only 35 per cent of the normal rainfall occurred in August, and only 38 per cent in July. Every station in Virginia received less than the usual annual precipitation, the departures ranging from -5.54 inches at Dante, Russell County, to -25.05 inches at Catawba Sanatorium, Roanoke County. The average departure for the State was -17.42 inches. The deficiency in precipitation began in December, 1929, and continued throughout 1930. The deficiency was largest in the Great Valley, where the average departure for the year was -18.03 inches; in Middle Virginia it was -17.86 inches; and in Tidewater Virginia, -15.30 inches. The Tidewater division received a small excess in January and a somewhat larger excess in June. Aside from these, none of the divisions reported an excess for any month.

In the early spring the light rainfall was favorable for agricultural operations, but by the end of April moisture was needed in most localities. Crops were beginning to show the effects of the drought, and the planting of cotton and corn was delayed by dry ground. Copious showers revived all vegetation in the latter half of May, but the relief was temporary. These conditions continued all summer, infrequent showers reviving crops, but never enough moisture to be of lasting benefit, except in a few localities. The dry weather was favorable for the harvesting of grain in midsummer. By the middle of July the drought was felt in all sections, including the coast counties. In the valley and southwestern sections pastures had dried up, and by the end of July many water courses had failed. The high temperatures, especially in July and September, intensified the effects of the drought. In August plowing was greatly delayed by dry ground, pastures were brown, corn was drying up, and tobacco firing. Over more than one-half of Virginia little or no fall plowing was done until after the middle of September. By mid-August water was being carried to many orchards in an effort to save the fruit. By the middle of September there was a shortage of water for all purposes in about one-half of the counties in Virginia, and it was difficult to obtain water for stock in about half of the remainder. Most streams were the lowest of record, and hydroelectric plants were depending upon steam.

While the drought in most localities remained unbroken at the end of the year, streamflow had increased slightly as autumn advanced because of decreased evaporation as temperatures be-

came lower. The flow in deep wells and of some springs, however, had not improved at the end of the year, the ground having dried to so great a depth.

Over much of Virginia there was a briefer span between killing frosts in spring and fall than in 1929, yet in most localities the length of the growing season did not differ greatly from the average, and the heat and dryness of the summer months tended to hasten the maturity of crops that withstood the drought.

Notes on severe windstorms, hail, and heavy snow appeared in the June, July, and December issues of this publication.

MONTHLY STATE DATA, 1930

Month	Temperature			Precipitation			Number of days			
	Mean	Highest	Lowest	Average	Greatest 24-hour	Average snow-fall	Rainy	Clear	Partly cloudy	Cloudy
January	38.4	79	-13	2.66	1.40	11.1	10	10	7	14
February	43.6	86	-7	1.46	1.33	1.3	5	15	5	7
March	44.6	78	2	2.09	4.00	1.0	5	15	5	8
April	54.6	97	16	2.19	2.17	T.	7	14	7	9
May	66.3	98	29	2.42	6.51	0.0	7	15	5	7
June	72.0	103	26	3.26	3.63	0.0	7	15	5	6
July	78.2	109	40	1.72	2.05	0.0	5	16	11	4
August	74.1	107	36	1.71	2.05	0.0	5	16	10	6
September	74.1	102	32	1.34	2.31	0.0	5	17	10	6
October	54.9	89	10	1.22	1.26	T.	5	17	7	8
November	45.5	86	-1	1.80	2.28	0.9	5	17	6	13
December	34.3	74	-7	2.99	2.60	10.3	8	11	8	12

COMPARATIVE ANNUAL DATA FOR THE STATE

Year	Mean temperature	Highest	Lowest	Average precipitation	Average snow-fall	No. of rainy days	No. of clear days	No. of partly cloudy days	No. of cloudy days
1892	54.8	106	-8	40.01	95	163	101	102
1893	55.1	104	-26	46.83	23.1	103	156	100	109
1894	57.0	107	-3	35.57	17.0	88	166	104	95
1895	54.6	107	-18	35.09	35.8	94	174	103	98
1896	56.4	105	-10	42.89	12.3	93	163	106	97
1897	56.0	103	-15	40.81	11.8	92	171	99	95
1898	56.5	105	-9	44.80	8.7	108	162	101	102
1899	56.4	106	-29	48.18	36.7	98	176	95	94
1900	57.0	107	-8	39.33	18.6	86	181	91	93
1901	55.3	106	-14	50.17	9.5	100	167	94	104
1902	55.6	108	0	51.42	14.9	95	170	97	98
1903	55.1	105	-13	44.85	8.4	95	172	89	104
1904	53.8	100	-14	36.18	24.9	95	170	101	95
1905	54.8	98	-15	43.58	18.5	111	155	112	98
1906	56.3	102	-2	49.56	15.2	124	143	120	102
1907	54.3	97	-16	44.19	17.4	115	159	115	91
1908	55.4	102	-20	45.21	30.0	110	162	108	96
1909	55.5	102	-5	39.81	12.9	101	171	104	90
1910	54.7	102	-9	41.37	20.3	112	151	116	98
1911	56.8	104	0	41.50	9.2	115	149	110	106
1912	54.5	100	-25	39.19	24.6	103	165	106	95
1913	57.2	102	-3	42.75	4.0	100	178	98	89
1914	55.0	103	-17	37.17	32.8	101	168	100	97
1915	55.8	101	-5	39.72	13.5	97	160	116	89
1916	55.5	102	-11	39.36	18.6	103	165	106	95
1917	53.3	103	-27	40.82	23.7	114	158	107	100
1918	55.3	108	-22	44.43	24.7	105	159	97	109
1919	56.8	103	-18	41.66	7.4	102	161	99	105
1920	54.8	99	-9	46.30	7.1	106	162	89	115
1921	58.4	104	-12	34.94	13.8	97	161	102	102
1922	57.1	100	-13	44.72	24.8	110	145	107	113
1923	56.2	103	-1	40.84	10.3	104	168	96	101
1924	54.5	107	-12	47.41	12.8	105	165	90	111
1925	56.5	103	-14	32.55	9.5	98	160	99	106
1926	55.5	107	-6	41.60	16.5	112	157	97	111
1927	56.5	104	-7	41.95	10.4	113	148	103	114
1928	55.8	103	-5	42.99	9.2	110	151	112	103
1929	56.1	99	-8	45.92	16.7	115	155	97	113
1930	56.8	109	-13	24.86	23.4	86	165	99	101
Normal and extremes	55.7	109	-29	41.77	17.3	103	162	102	101

Monthly and Annual Precipitation for the Year 1930, with Departures from the Normal

Table with 16 columns (Months: January to December, Annual) and 2 rows per station (Precipitation, Departure). Rows include Tidewater, Middle Virginia, Great Valley, and State means.

Note.—In this publication, annual means are computed from data for all stations; whereas, in monthly reports, means may not include all stations, as in some cases reports are not received in time to be used in the computations.

Monthly and Annual Mean Temperatures for the Year 1930, with Departures from the Normal

Table with columns for Stations, months (January-December), and Annual. Rows are categorized by region: Tidewater, Middle Virginia, and Great Valley. Each station entry includes temperature and departure values for each month and an annual total.

For explanation of reference marks, see page 50.

KILLING FROSTS, 1930

Table with columns for Stations, Last in spring, First in autumn. Rows are categorized by region: Tidewater Virginia, Middle Virginia, Middle Virginia—Con., and Great Valley—Con. Each entry lists the date of the last spring frost and the first autumn frost.