

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

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CLIMATOLOGICAL DATA

VIRGINIA SECTION

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RICHMOND, VA., YEAR 1930

No. 13

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	7	7
March	44.0	78	2	2.09	4.00	1.0	7	15	8	8
April	54.6	97	16	2.19	2.17	T.	7	14	7	9
May	66.8	98	28	2.42	6.51	0.0	7	15	9	7
June	72.0	103	26	3.26	3.63	0.0	8	16	6	5
July	78.2	109	40	1.72	2.05	0.0	6	16	11	4
August	74.1	107	36	1.71	2.00	0.0	6	16	9	6
September	74.1	102	32	1.84	2.31	0.0	6	14	10	6
October	54.9	89	10	1.22	1.26	T.	6	17	7	7
November	45.5	86	-1	1.80	2.28	0.9	8	11	6	13
December	34.8	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
		Highest	Lowest	Average	Lowest						
1892	54.8	106	-8	40.01	23.1	95	163	101	102		
1893	55.1	104	-26	46.83	107	103	156	100	109		
1894	57.0	106	-11	35.97	17.0	88	166	104	95		
1895	54.6	107	-18	38.09	38.8	94	174	103	88		
1896	56.4	105	-10	42.89	12.8	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	43.18	36.7	98	176	95	94		
1900	57.0	107	-8	39.38	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	90		
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	39.8	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	41.68	7.4	102	161	99	105		
1920	54.8	99	-9	46.30	7.1	106	162	89	115		
1921	56.4	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		

Climatological Data for the Year 1930

Stations	Counties	Elevation, feet	Temperature, degrees Fahrenheit						Precipitation						Sky				Prevailing direction of wind	
			Length of record, years	Annual mean	Highest	Date	Lowest	Date	Length of record, years	Total for the year	Greatest monthly	Month	Least monthly	Month	Total snowfall	Number of rainy days	Number of clear days	Number of partly cloudy days	Number of cloudy days	
<i>Tidewater Virginia</i>																				
Cape Henry	Princess Anne	20	57	59.6	102	July 21	20	Feb. 16	57	80.11	6.68	June	0.48	Sept.	7.2	108	144	114	107	sw.
Christ Church	Middlesex	87	7	.....	104	July 22	12	Feb. 16	7	27.23	6.36	June	0.67	Aug.	11.0	85	.....	.....	.....	sw.
Dahlgren	King George	21	11	56.8	106	July 20	4	Jan. 31	11	20.47	3.42	Jan.	0.18	Aug.	18.5	86	111	139	115	n.w.
Diamond Springs	Princess Anne	25	22	60.8	102	July 21	16	Dec. 25	22	83.96	4.82	June	1.05	Nov.	10.0	67	180	117	68	sw.
Hopewell	Prince George	40	14	60.1	104	July 21*	9	Jan. 31	14	25.81	4.91	June	0.67	Sept.	14.2	84	181	162	72	sw.
Langley Field	Elizabeth City	5	11	59.0	101	July 21	15	.....	11	24.50	4.12	June	0.90	Nov.	8.1	86	129	126	110	sw.
Norfolk	Norfolk	91	60	60.6	100	Aug. 9	15	Feb. 16	60	26.91	5.90	June	0.57	Sept.	7.8	100	135	104	126	s.
Oakley	Accomac	40	12	57.6	103	July 21	12	Feb. 17	12	29.72	4.08	Dec.	0.88	Sept.	33.5	90	133	147	85	n.w.
Richmond	Henrico	144	51	58.7	103	July 22	11	Jan. 31*	51	31.26	5.18	June	1.07	Mar.	18.1	95	154	117	94	sw.
Runnymede (near)†	Surrey	25	41	.....	.....	.....	8	Dec. 25	41	129.94	6.93	June	1.27	Sept.	19.0	.....	.....	.....	.....	.....
Wallaceburg	Richmond	160	.....	.....	.....	.....	.....	.....	4	36.02	6.61	June	1.27	Sept.	7.0	98	238	52	75	sw.
Williamsburg	James City	70	37	.....	.....	.....	.....	.....	37	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means and extremes	.....	.....	.....	59.2	106	July 20	4	Jan. 31	.....	28.54	6.98	June	0.18	Aug.	14.0	90	150	120	95	sw.
<i>Middle Virginia</i>																			.....
Callawayville	Brunswick	250	36	57.2	102	July 22	7	Jan. 21	36	29.89	4.29	June	1.00	Feb.	13.0	62	241	64	60	w.
Charlottesville (near)	Albermarle	854	39	58.5	107	July 20	8	Jan. 19	39	23.66	2.90	Apr.	0.57	Oct.	23.0	76	147	86	132	sw.
Chatham	Pittsylvania	852	8	58.6	105	Aug. 5	8	Feb. 1	8	27.78	3.57	Nov.	0.98	Sept.	21.6	79	213	87	65	s.
Clarendon	Arlington	200	.....	.....	.....	.....	.....	.....	5	22.68	3.54	July	0.24	Aug.	13.0	76	.....	.....	.....	.....
Clarksville	Mecklenburg	286	33	57.8	102	June 24*	9	Jan. 31*	33	28.63	4.51	Jan.*	0.39	Aug.	33.0	84	237	3	125	e.
Columbia	Fluvanna	246	32	57.3	105	July 20	-5	Jan. 31	32	24.24	3.62	Jan.	0.70	Sept.	19.0	67	178	81	106	s.
Culpeper	Culpeper	450	23	55.3	104	July 2	-6	Jan. 19	23	20.97	2.75	Dec.	0.19	Oct.	27.2	78	.....	.....	.....	.....
Danville	Pittsylvania	430	30	60.5	103	Aug. 5	11	Dec. 25	30	29.10	4.72	Dec.	0.72	Aug.	33.2	94	167	119	79	sw.
Fredericksburg (near)	Spotsylvania	100	40	58.4	103	July 21*	0	Jan. 31	40	22.81	4.41	June	0.65	Aug.	20.9	74	160	117	79	sw.
Lincoln ††	Loudoun	500	29	57.5	107	July 20	-1	Jan. 20	29	20.08	3.97	June	0.28	Sept.	22.0	60	180	95	90	s.
Lynchburg	Campbell	681	59	58.0	102	July 20	7	Jan. 31	59	19.83	2.80	Dec.	0.42	Aug.	20.0	90	151	127	87	w.
Mineral (near)	Louisa	300	15	56.0	108	July 20	-8	Jan. 31	15	21.55	3.88	June	0.51	Aug.	72	.....	.....	.....	.....	s.
Mount Weather ††	Loudoun	1,726	26	52.5	97	July 20	0	Jan. 19	26	22.62	3.98	Apr.	0.09	Oct.	80.5	62	83	138	144	w.
New Canton	Buckingham	300	36	56.8	103	July 29	-5	Jan. 31	36	23.91	3.34	Jan.	0.60	Sept.	19.7	96	173	117	75	sw.
Pedlar Dam ††	Anherst	4	.....	.....	.....	July 22	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Powhatan	Powhatan	.....	.....	.....	.....	.....	.....	7	21.99	3.36	Apr.	0.80	Mar.	13.0	79	126	65	174	sw.	
Quantico	Prince William	17	30	55.4	105	July 20	5	Jan. 31	30	18.96	3.11	June	0.19	Aug.	.....	80	105	156	104	n.w.
Randolph	Charlotte	344	.....	.....	.....	.....	.....	26	25.18	3.30	June	0.15	Aug.	63	243	29	93	93	sw.	
Rocky Mount	Franklin	1,150	35	57.8	103	July 28	5	Jan. 31	35	29.09	4.42	Mar.	0.59	Feb.	25.3	73	197	6	162	n.w.
Stuart	Patrick	1,188	8	58.0	102	July 20	10	Jan. 19	8	27.69	4.43	Dec.	0.95	Feb.	25.0	65	157	153	55	sw.
Washington, D. C.	District of Columbia	112	60	57.5	106	July 20	6	Jan. 31	60	21.66	3.19	June	0.28	Oct.	18.0	86	145	113	107	n.w.
Means and extremes	.....	.....	.....	57.2	108	July 20	-8	Jan. 31	.....	24.20	4.72	Dec.	0.09	Oct.	22.2	76	171	92	102	sw.
<i>The Great Valley</i>																			.....
Blacksburg	Montgomery	2,170	39	53.4	99	July 28	-6	Dec. 25	39	21.09	3.95	Dec.	0.88	July	32.0	104	203	41	121	d.w.
Buchanan	Botetourt	820	29	56.5	107	July 28	0	Dec. 25	29	22.27	4.33	June	0.55	July	26.5	57	178	48	139	w.
Burkes Garden	Tazewell	3,250	35	.....	97	July 28	-7	Feb. 16*	35	27.61	3.49	Aug.	0.27	June	36.0	53	182	53	130	w.
Catawba Sanatorium	Roanoke	2,100	20	55.4	102	July 29	7	Jan. 19*	20	17.53	3.69	Dec.	0.41	Sept.	37.0	58	229	96	40	.....
Dale Enterprise	Rockingham	1,350	51	54.5	104	Aug. 4	-13	Jan. 20	51	17.60	3.95	June	0.08	July	26.3	92	148	119	98	s.
Damascus	Washington	1,900	.....	.....	.....	.....	.....	4	29.42	4.38	Aug.	1.49	June	38.7	108	181	150	84	sw.	
Dante	Russell	2,000	13	54.3	98	July 28	0	Jan. 19	13	41.47	12.53	May	1.65	Jan.	25.4	126	183	127	105	.....
Deerfield	Augusta	1,740	.....	.....	.....	.....	.....	4	17.93	3.28	Sept.	0.15	July	32.0	68	.....	.....	.....	w.	
Emory	Washington	2,100	4	58.0	97	Aug. 5	-7	Jan. 19	4	29.76	4.18	Aug.	0.81	July	34.0	131	149	143	73	w.
Glenlyn	Giles	1,530	.....	.....	.....	.....	.....	16	21.98	2.58	Dec.	0.20	Sept.	25.1	105	.....	.....	.....	.....
Hot Springs	Bath	2,195	38	51.2	95	July 20*	-5	Feb. 16	98	21.38	3.83	Dec.	0.33	July	29.7	97	159	133	73	.....
Ivanhoe	Wythe	2,028	.....	.....	.....	.....	.....	24	23.03	3.74	Dec.	0.89	Feb.	30	81	.....	.....	.....	.....
Lexington	Rockbridge	1,060	62	54.9	105	July 22	-5	Jan. 19	62	20.85	3.99	Dec.	0.70	July	30	81	.....	.....	.....	.....
McMordena	Washington	1,350	.....	.....	.....	.....	.....	25	34.95	6.04	Aug.	1.31	Sept.	115	.....	.....	.....	.....	.....
Radford	Montgomery	1,773	26	58.2	104	July 20*	5	Jan. 21	26	23.17	4.15	Dec.	0.80	Feb.	34.0	78	.....	.....	.....	.....
Roanoke	Roanoke	907	26	58.2	104	July 20*	5	Jan. 18	11	30.86	3.68	Aug.	1.63	June	28.2	133	191	48	126	w.
Saltville	Smyth	1,739	11	55.0	99	July 28	1	Jan. 18	11	34	32.22	4.62	July	0.70	Jan.	93	204	49	112	sw.
Spears Ferry	Scott	1,221	.....	.....	.....	.....	.....	35	18.79	3.31	Dec.	0.80	Feb.	34.0	81	184	131	50	sw.	
Staunton	Augusta	1,380	39	.....	.....	.....	0	Feb. 16	39	11.76	3.29	June	0.22	.....	28.6	.....	.....	.....	.....
Winchester	Frederick	717	26	.....	107	Aug. 4	1	Jan. 19*	26	11.79	3.28	Dec.	0.22	Oct.	15.5	94	113	71	181	n.w.
Woodstock	Shenandoah	927	39	57.3	109	July 20	-10	Jan. 19	39	16.44	2.53	Dec.	0.12	Oct.	15.5	94	113	71	181	w.
Wytheville	Wythe	2,304	36	52.5	95	July 28	1	Dec. 25	36	21.36	2.83	Dec.	0.88	Feb.	39.6	113	141	116	108	w.
Means and extremes	.....	.....	.....	64.5	109	July 20	-13	Jan. 20	.....	23.67	12.53	May	0.08	July	30.7	93	167	95	103	w.
State means and extremes	.....	.....	.....	56.8	109	July 20	-13	Jan. 20	.....	24.86	12.53	May	0.08	July	23.4	86	165	99	101	sw.

Section and State averages are computed from monthly means. Estimated and incomplete data not considered in means.

All other records are used in determining section and division means, but the mean departures from normal temperature and precipitation are based only on records from stations that have 10 or more years of observation.

Reference letters, *, †, ‡, appearing in the tables indicate number of days missing: for example, † represents two days, etc.

*Also on other dates. †Interpolated. ‡Partially interpolated. §Received too late to be included in means and extremes.

†Post-office addresses of these stations are as follows: Diamond Springs, Norfolk; Runnymede, Elberon; Lincoln, Purcellville; Mount Weather, Bluemont; Pedlar Dam, Pleasant View.

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

Stations	January	February	March	April	May	June	July	August	September	October	November	December	Annual														
	Precipitation	Departure																									
<i>Tidewater</i>																											
Cape Henry	4.48	+1.33	1.84	-1.39	2.26	-1.61	1.73	-1.57	2.88	-0.69	6.68	+2.72	2.03	-3.34	1.68	-2.98	0.48	-2.38	1.59	-1.42	0.87	-1.49	3.39	-0.05	30.11	-12.87	
Christchurch	3.18	.....	1.82	.....	1.47	.....	2.80	.....	2.34	.....	6.36	.....	2.62	.....	0.67	.....	0.79	.....	1.87	.....	0.99	.....	2.32	.....	27.23	.....
Dahlgren	3.42	+0.56	1.31	-1.36	0.79	-2.41	2.61	-1.21	2.99	+0.27	2.95	-0.64	0.89	-3.37	0.18	-5.80	1.28	-1.72	0.75	-1.57	0.98	-1.58	2.32	-0.30	20.47	-19.18	
Diamond Springs	4.15	+1.68	2.30	-1.00	2.60	-0.97	2.95	-0.39	2.13	-1.91	4.82	-0.49	2.70	-3.01	1.69	-2.57	2.30	-1.15	2.40	-0.29	1.05	-1.14	4.54	+0.75	33.66	-10.50	
Hopewell	2.69	-0.28	0.97	-2.58	0.74	-3.61	3.22	-2.27	3.60	-0.56	4.91	+0.50	2.60	-2.07	0.94	-3.52	0.67	-3.05	1.67	-1.18	1.41	-0.92	2.39	-0.88	25.81	-18.42	
Langley Field	3.51	-0.22	1.34	-2.32	1.21	-2.68	1.70	-1.51	1.53	-2.11	4.12	+0.06	1.82	-3.08	1.88	-2.92	3.01	+0.14	1.51	-1.31	0.90	-1.67	1.97	-1.03	24.50	-17.68	
Norfolk	4.09	+0.99	1.24	-1.98	1.68	-2.09	2.38	-0.85	1.68	-2.18	5.90	+1.68	2.50	-3.25	0.64	-4.58	0.57	-2.66	2.00	-1.04	1.20	-0.90	3.02	-0.32	26.91	-17.18	
Onley	3.29	+0.36	3.17	-0.71	1.44	-2.44	1.62	-1.80	2.79	-0.28	3.63	+0.45	2.39	-2.14	2.46	-2.30	0.88	-1.69	2.54	-0.01	1.43	-1.00	4.08	+0.30	29.72	-11.36	
Richmond	4.25	+1.04	1.21	-1.96	1.07	-2.61	3.19	-0.30	2.71	-1.08	5.18	+1.28	4.51	-0.22	2.35	-2.07	1.37	-1.58	1.31	-1.57	1.63	-0.58	2.48	-0.81	31.26	-10.76	
Rumymede (near)	3.75	+0.35	0.77	-3.22	1.18	-3.46	72.92	-1.00	12.39	-1.83	6.93	+2.00	2.60	-3.46	1.50	-3.38	1.16	-2.27	2.46	-1.08	1.47	-1.13	2.81	-0.56	29.94	-19.04	
Tappahannock	4.67	.....	2.26	.....	2.29	.....	2.95	.....	1.53	.....	6.61	.....	2.92	.....	1.98	.....	1.27	.....	2.13	.....	2.75	.....	4.66	.....	36.02	.....
Wallacetown (near)	4.67	.....	2.26	.....	2.29	.....	2.95	.....	1.53	.....	6.61	.....	2.92	.....	1.98	.....	1.27	.....	2.13	.....	2.75	.....	4.66	.....	36.02	.....
Williamsburg	4.09	.....	1.13	-2.86	2.58	-1.15	2.02	-1.64	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	3.77	+0.65	1.66	-1.84	1.49	-2.47	2.56	-1.01	2.88	-1.20	5.28	+0.84	2.51	-2.66	1.47	-3.35	1.25	-1.85	1.83	-1.07	1.34	-1.10	3.05	-0.30	28.54	-15.30	
<i>Middle Virginia</i>																											
Calleville	3.44	-0.10	1.00	-2.62	2.60	-1.85	2.73	-0.09	2.72	-1.34	4.29	+0.18	2.40	-3.47	2.00	-2.86	1.78	-1.76	1.56	-1.26	3.26	+1.21	2.11	-1.19	29.89	-15.96	
Charlottesville (near)	2.62	-0.80	1.24	-1.70	2.72	-0.77	2.90	-0.48	1.66	-2.79	2.89	-2.51	0.78	-3.83	2.30	-2.59	1.76	-1.93	0.57	-2.79	1.81	-0.69	2.41	-0.84	23.66	-21.72	
Chatham	3.30	.....	1.42	.....	2.14	.....	1.66	.....	3.38	.....	3.48	.....	1.65	.....	1.67	.....	0.98	.....	1.31	.....	3.57	.....	3.22	.....	27.78	.....
Clarendon	2.75	.....	1.57	.....	2.16	.....	2.81	.....	1.89	.....	3.26	.....	3.54	.....	0.24	.....	1.00	.....	0.31	.....	0.81	.....	2.32	.....	22.66	.....
Clarksburg	4.51	+0.90	0.98	-2.26	1.36	-2.43	2.24	-1.07	3.18	-1.02	4.51	+0.24	2.43	-1.99	0.39	-4.26	1.50	-1.55	1.61	-1.94	2.19	-0.20	3.73	+0.37	28.63	-14.91	
Columbia	3.62	-0.15	1.25	-2.26	1.91	-2.43	3.38	-0.07	2.88	-0.95	2.30	-0.98	3.93	-0.56	2.29	-2.16	0.70	-2.44	1.03	-1.92	1.52	-0.72	2.50	-0.84	24.24	-18.19	
Culpeper	2.70	-0.74	1.65	-0.83	2.45	-0.34	2.40	-0.81	2.72	-1.42	2.40	-2.72	0.92	-2.80	0.41	-3.52	1.04	-2.06	0.19	-2.28	1.34	-1.06	2.75	-0.34	20.97	-18.92	
Dauville	3.56	+0.13	0.99	-2.28	2.60	-0.93	1.81	-1.46	2.93	-0.98	3.48	-0.62	2.71	-1.47	0.72	-3.86	1.02	-2.15	1.57	-1.30	2.99	+0.81	4.72	+1.46	29.10	-12.52	
Farmville	4.09	.....	1.13	-2.86	2.58	-1.15	2.02	-1.64	2.40	-1.20	5.28	+0.84	2.51	-2.66	1.47	-3.35	1.25	-1.85	1.83	-1.07	1.34	-1.10	3.05	-0.30	28.54	-15.30
Fredericksburg (near)	2.83	-0.57	2.82	-0.08	1.28	-2.33	2.37	-1.18	1.59	-2.43	4.41	-0.16	2.24	-2.12	0.65	-4.06	0.90	-2.38	0.68	-2.38	0.66	-1.62	2.38	-0.76	22.81	-20.08	
Halifax	2.39	-0.72	1.87	-0.52	2.40	-0.65	2.71	-0.56	1.38	-2.15	3.97	-1.06	0.39	-3.09	0.49	-3.80	0.28	-2.41	0.39	-2.56	1.24	-0.90	2.63	-0.27	20.08	-18.69	
Lincoln	2.77	-0.66	0.98	-2.20	2.26	-1.23	1.45	-1.50	1.75	-1.88	2.57	-1.22	0.90	-3.31	0.42	-3.36	0.90	-2.41	0.62	-2.53	2.44	+0.11	2.80	-0.46	19.83	-20.70	
Lynchburg	2.91	-0.81	1.20	-1.90	1.50	-2.22	2.78	-0.18	3.26	-0.81	3.80	-0.42	0.92	-3.73	0.15	-3.62	1.04	-1.84	1.48	-1.34	2.13	-0.04	3.09	-0.12	25.18	-15.38	
Manassas (near)	2.52	-0.59	0.59	-2.77	4.42	-0.41	1.55	-1.88	3.26	-0.72	4.41	-0.24	1.19	-3.71	1.37	-2.81	1.33	-2.21	1.20	-2.40	3.62	+1.09	3.63	+0.10	29.09	-16.03	
Martinsville	3.71	+0.14	1.59	-0.72	0.68	-3.43	2.97	-0.58	1.71	-1.97	3.85	-0.32	1.00	-4.22	0.54	-3.66	1.68	-0.96	1.92	-1.01	0.70	-1.40	2.17	-0.60	21.55	-18.73	
Mineral (near)	0.99	-0.23	1.23	2.51	+0.44	3.52	+0.88	3.98	+0.71	1.74	2.09	3.80	-1.18	0.37	-3.90	0.43	-4.53	0.65	-2.46	0.09	-3.24	1.83	-0.84	2.71	-0.06	22.62	-17.90
Mount Weather	3.34	-0.28	1.14	-1.92	3.08	-1.00	2.76	-0.41	2.34	-1.20	1.37	-2.38	2.26	-1.64	1.67	-2.99	0.60	-2.79	1.17	-1.78	1.79	-0.53	2.44	-0.65	23.91	-17.57	
New Canton	2.56	.....	1.27	.....	0.80	.....	3.36	.....	1.77	.....	1.70	.....	2.08	.....	1.61	.....	1.59	.....	1.48	.....	1.73	.....	2.00	.....	21.99	.....
Pedlar Dam	2.57	.....	1.27	.....	0.80	.....	3.36	.....	1.77	.....	1.70	.....	2.08	.....	1.61	.....	1.59	.....	1.48	.....	1.73	.....	2.00	.....	21.99	.....
Powhatan	2.29	-0.86	1.74	-0.82	0.99	-2.46	2.47	-0.45	2.52	-0.79	3.11	-1.02	1.55	-2.46	0.19	-4.22	1.02	-1.89	0.65	-2.24	1.02	-0.87	1.41	-1.48	18.96	-19.50	
Quantico	2.91	-0.81	1.20	-1.90	1.50	-2.22	2.78	-0.18	3.26	-0.81	3.80	-0.42	0.92	-3.73	0.15	-3.62	1.04	-1.84	1.48	-1.34	2.13	-0.04	3.09	-0.12	25.18	-15.38	
Randolph	2.52	-0.59	0.59	-2.77	4.42	-0.41	1.55	-1.88	3.26	-0.72	4.41	-0.24	1.19	-3.71	1.37	-2.81	1.33	-2.21	1.20	-2.40	3.62	+1.09	4.43	-0.24	27.69	.....
Rocky Mount	1.61	.....	0.95	.....	3.19	.....	1.01	.....	2.47	.....	3.65	.....	1.17	.....	1.30	.....	2.67	.....	2.00	.....	3.24	.....	2.35	.....	27.69	.....
Stuart	2.85	-0.70	1.64	-1.63	2.26	-1.49	3.12	-0.15	1.81	-1.89	3.19	-0.94	2.30	-2.41	0.62	-3.39	0.76	-2.48	0.28	-2.56	0.79	-1.58	2.04	-1.28	21.66	-20.50	
Washington, D.C.	2.86	-0.62	1.42	-1.50	2.21	-1.39	2.52	-0.64	2.35	-1.52	3.30	-0.93	1.53	-2.98	1.01	-3.48	1.20	-2.00	0.96	-2.04	1.99	-0.42	2.83	-0.44	24.20	-17.86	
Means	2.86	-0.62	1.42	-1.50	2.21	-1.39	2.52	-0.64	2.35	-1.52	3.30	-0.93	1.53	-2.98	1.01	-3.48	1.20	-2.00	0.96	-2.04	1.99	-0.42	2.83	-0.44	24.20	-17.86	
<i>Great Valley</i>																											
Balcony Falls	1.78	-1.56	1.25	-1.92	1.02	-2.60	1.54	-1.49	1.79	-2.07	1.37	-3.11	0.93	-4.30	1.08	-2.85	2.09	-1.10	1.33	-1.61	2.96	+0.69	3.95	+0.89	21.09	-21.03	
Blacksburg	2.46	-1.23	0.91	-1.78	2.87	-0.05	1.28	-0.32	0.88	-2.89	4.33	+0.23	0.55	-3.41	0.91	-3.19	1.04	-2.48	0.								

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

Stations	January	February	March	April	May	June	July	August	September	October	November	December	Annual	
	Temperature	Departure	Temperature											
Tidewater														
Cape Henry	43.6	+3.4	46.4	+5.2	47.0	+0.4	54.6	0.0	68.6	+4.4	73.4	+0.5	78.6	+1.1
Christchurch	41.1	-2.8	45.6	+47.2	-55.0	-0.5	68.4	+2.5	80.3	+5.8	84.5	+5.4	50.0	-48.9
Dahlgren	36.2	+1.1	41.2	+3.3	44.6	-1.6	52.1	-2.1	66.8	+5.1	74.4	+2.5	80.1	+4.1
Diamond Springs	45.8	+3.4	48.8	+6.1	49.8	-0.2	58.0	0.0	68.6	+2.9	73.8	-0.2	78.9	+1.5
Hopewell	42.2	+2.8	47.4	+3.3	48.3	-0.6	57.7	+0.2	70.4	-3.1	74.5	+1.1	80.7	+4.7
Langley Field	41.8	+1.2	45.7	+5.1	46.8	-1.5	54.8	-1.4	68.3	+2.4	74.5	-0.3	78.9	+0.1
Norfolk	44.0	+3.4	48.2	+5.5	48.2	0.0	57.0	+0.2	69.0	+2.8	75.0	+0.6	78.6	+1.1
Onley	41.2	+3.2	44.3	+4.2	45.5	-0.1	53.3	-0.5	68.6	+6.3	74.4	+2.0	78.8	+1.2
Richmond	39.6	+1.7	45.3	+5.7	46.4	-0.8	55.6	-1.0	68.8	+2.3	74.2	+2.8	79.8	+1.3
Runnymede (near)	42.4	+2.7	47.8	+8.2	48.0	-0.6	57.7	-0.9	78.6	+1.4	75.3	-0.4	76.9	+7.0
Tappahannock														
Williamsburg														
Means	41.8	+2.5	46.1	+5.2	47.3	-0.6	55.5	-0.5	68.8	+3.8	74.1	+0.8	79.4	+1.8
Middle Virginia														
Callville	40.2	+1.4	44.6	+5.7	44.6	-4.2	51.0	-2.5	66.4	-0.9	71.1	-2.1	78.2	+1.3
Charlottesville (near)	37.5	+1.5	45.2	+8.6	45.8	-0.7	56.0	-0.1	68.3	+2.6	74.6	+1.9	81.2	+5.0
Chatham	40.3	-	45.2	-	46.4	-	56.8	-	68.9	-	72.8	-	80.8	-
Clarksville	39.6	+3.1	44.2	+3.4	46.9	-1.2	55.4	-1.1	70.6	+5.9	74.7	+1.5	80.2	+3.8
Columbia	37.8	+1.2	43.2	+3.4	45.7	-1.2	55.3	0.0	68.0	+3.2	72.5	+0.4	79.4	+3.8
Culpeper	35.0	+1.3	42.4	+6.9	44.9	-0.2	53.3	-1.5	65.9	+2.0	72.8	+1.0	79.4	+4.3
Danville	42.0	+3.1	47.6	+5.2	48.2	-3.0	59.4	+0.2	70.8	+3.6	78.2	+1.7	81.6	+2.4
Farmville														
Fredericksburg (near)	39.5	+3.2	43.8	+7.6	46.6	-0.1	55.6	+0.4	68.0	+3.2	73.7	+1.4	80.3	+3.9
Lincoln	35.4	+3.2	40.9	+8.2	44.3	+1.2	53.2	-0.4	67.6	+3.8	74.7	+3.2	80.0	+4.0
Lynchburg	39.2	+1.7	45.8	+5.5	45.4	-1.9	56.3	-1.1	68.4	+1.1	72.7	-1.9	80.5	+3.0
Mineral (near)	37.0	+3.6	42.0	+8.4	40.3	-6.3	53.7	-0.5	66.4	+4.5	71.0	+0.3	78.4	+4.0
Mount Weather	31.6	+1.5	41.0	+11.5	39.1	-0.2	48.2	-1.2	61.3	+2.3	65.8	+1.8	75.0	+4.8
New Canton	38.2	+1.8	44.1	+6.8	45.4	-1.8	55.2	-0.4	67.0	+2.2	71.8	-0.6	77.8	+1.6
Pedlar Dam	38.0	-												
Quantico	35.4	+0.7	39.6	+4.0	42.8	-2.8	52.0	-2.5	65.4	+1.4	72.0	-0.6	77.4	+0.1
Rocky Mount	40.0	+2.3	45.1	+7.0	*46.2	-1.2	57.2	+1.1	68.8	+4.0	72.2	-0.1	80.4	+5.4
Stuart	41.0	-												
Washington, D. C.	35.6	+2.2	41.9	+6.6	45.0	+2.4	53.2	-0.1	67.3	+3.6	75.1	+2.9	80.4	+3.7
Means	38.0	+2.1	43.7	+6.2	44.9	-1.5	54.8	-0.6	67.5	+2.8	73.0	+0.7	79.3	+3.4
Great Valley														
Blacksburg	35.3	+2.4	41.0	+7.7	41.2	-1.8	52.6	+1.9	63.0	+3.1	67.6	-0.2	75.0	+4.3
Buchanan	38.6	+3.5	43.2	+7.8	44.8	-3.5	55.9	0.0	66.8	+2.4	71.6	-0.8	79.2	+3.8
Burkes Garden	34.5	+3.0	39.0	+7.7	38.2	-2.7	50.7	+3.2	58.9	+2.2	63.9	+0.1	70.8	+4.3
Catawba Sanatorium	37.6	+1.5	43.3	+5.2	42.6	-3.2	53.4	-1.2	65.9	+3.6	70.6	+0.7	77.7	+5.7
Dale Enterprise	35.4	+2.4	41.8	+7.6	43.9	+0.9	53.4	+0.9	64.4	+2.1	69.0	-1.3	76.6	+3.0
Dante	38.0	+3.3	42.8	+3.6	42.4	-3.7	55.4	+1.1	63.0	+2.1	68.4	-0.9	73.6	+2.4
Emory	37.5	-												
Hot Springs	34.6	+8.1	38.8	+7.1	39.2	-8.1	51.0	+0.9	61.1	+1.4	65.6	-1.3	72.0	+6.7
Lexington	36.9	+2.9	40.5	+5.2	41.2	-2.9	53.6	+0.4	65.8	+3.1	70.1	-0.6	78.7	+3.8
Roanoke	40.3	+3.2	45.2	+7.4	46.0	-1.8	57.0	+0.6	68.5	+6.9	73.0	+1.2	80.6	+5.3
Saltville	36.4	-												
Staunton	39.1	+3.7	48.9	+9.0	44.2	-0.3	53.3	+1.9	66.0	+2.4	71.8	+1.3	77.6	+1.6
Winchester	33.0	+1.8	40.6	-										
Woodstock	36.4	+3.3	43.2	+10.1	46.2	+2.2	56.2	+3.6	63.9	+3.9	70.2	+2.8	78.7	+4.5
Wytheville	35.6	+2.6	41.6	+6.5	40.4	-1.9	53.2	+1.2	62.1	+0.7	66.2	-2.5	73.2	+3.1
Means	36.6	+2.8	41.9	+6.7	42.3	-1.8	53.8	+1.0	64.7	+3.4	69.6	+0.1	75.8	+3.2
State	38.4	+2.5	43.6	+6.1	44.6	-1.3	54.6	-0.5	66.8	+3.3	72.0	+0.5	78.2	+3.1

For explanation of reference marks, see page 50.

KILLING FROSTS, 1930

Stations	Last in spring	First in autumn	Stations	Last in spring	First in autumn	Stations	Last in spring	First in autumn	Stations	Last in spring	First in autumn
<i>Tidewater Virginia</i>											
			<i>Middle Virginia</i>			<i>Middle Virginia—Con.</i>			<i>Great Valley—Con.</i>		
Cape Henry	Mar. 16	Oct. 23	Callville	Apr. 27	Oct. 6	New Canton	Apr. 25	Oct. 6	Dale Enterprise	Apr. 26	Oct. 18
Christchurch	Mar. 30	Oct. 18	Charlottesville	Mar. 28	Oct. 22	Pedlar Dam	Oct. 2	Oct. 2	Damascus	May 31	Oct. 18
Dahlgren	Apr. 10	Oct. 21	Chatham	Apr. 27	Oct. 21	Powhatan	Apr. 24	Oct. 19	Dante	Apr. 27	Oct. 18
Diamond Springs	Mar. 28	Oct. 23	Clarendon	Oct. 17		Quantico	Apr. 9	Oct. 19	Deerfield	Apr. 24	Oct. 1
Hopewell	Apr. 26	Oct. 19	Clarksville	Apr. 25	Oct. 22	Randolph	Oct. 19	Oct. 19	Emory	June 1	Oct. 1
Langley Field	Mar. 23	Nov. 2	Columbus	Apr. 27	Oct. 5	Rocky Mount	Apr. 27	Oct. 20	Hot Springs	May 31	Oct. 1
Norfolk	Mar. 5	Oct. 23	Culpeper	Apr. 24	Oct. 19	Stuart	Apr. 27	Oct. 19	Lexington	Apr. 25	Oct. 20
Onley	Apr. 10	Oct. 21	Danville	Apr. 25	Oct. 22	Washington	Apr. 24	Oct. 21	North River Dam	Apr. 27	Oct. 1
Richmond	Mar. 5	Oct. 22	Farmville	Oct. 9					Roanoke	Apr. 27	Oct. 21
Runnymede	Mar. 23	Oct. 19	Fredericksburg	Apr. 24	Oct. 21				Saltville	Apr. 26	Oct. 18
Wallacetown	Apr. 1	Oct. 19	Lincoln	Apr. 24	Oct. 21				Staunton	Apr. 25	Oct. 20
Williamsburg	Apr. 25	Oct. 21	Lynchburg	Apr. 1	Oct. 22				Winchester	Apr. 26	Oct. 19
			Martinsville	Oct. 19					Woodstock	Apr. 27	Oct. 18
			Mineral	Apr. 27	Oct. 5				Wytheville	Apr. 27	Oct. 20
			Mount Weather	Apr. 25	Oct. 20						

(WB-4-23-31-1,450)