

## CLIMATOLOGICAL DATA

38

## VIRGINIA SECTION

F. N. HIBBARD

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No. 13

## GENERAL SUMMARY

For the State as a whole the weather for 1938 was practically normal in precipitation and slightly higher than normal in temperature; precipitation lacked about a quarter of an inch of equalling the average for the last 48 years, and temperature exceeded the usual figure by 1.2°.

Average departures in temperature for the year were almost identical in each of the three sections; but for individual stations, the readings at Christchurch and Stuart were under normal by 0.2°, and at all other stations, above normal, with the greatest plus departure, +2.9° at Lincoln. The yearly average temperatures for individual stations ranged from 48.4° at Big Meadows on Skyline Drive to 61.5° on the coast. February, March, April and November were much warmer than usual: February ranking sixth warmest of record; March, fourth; April, seventh; and November, ninth. The only noticeably cool months were June and September, but readings in those two months were not greatly below normal. The combination of the warm winter and spring and the cool summer produced a year of general mildness.

In precipitation the wet months were June, July and November, but excessive amounts in these months were offset by marked deficiencies in February, August and October. February was fifth driest in 48 years; and July, the wettest of record, and ninth wettest of any month. Distribution over the State was uneven, amounts ranging from an excess of seven inches in Tidewater to a deficiency of nearly six inches in Middle Virginia; and from a deficiency of approximately eleven inches at Fredericksburg and Mount Weather to an excess of more than twelve inches at Hopewell. Actual amounts ranged from approximately 28 inches at Winchester and Staunton to 57 inches at Williamsburg. An unusual feature of the precipitation was the excessive rainfall in southeastern counties on July 23d-26th, the four-day amount totalling 5.67 inches at Richmond; 6.56 inches at Hopewell; 6.60 inches at Halifax; 6.65 inches at Onley; 9.42 inches at Christchurch; and 11.20 inches at Williamsburg. Snowfall was roughly half the usual amount, notwithstanding the record breaking snow of November.

Excepting incipient drought conditions during the latter part of April and the first part of May, and wet weather in June and July, the weather was generally favorable for crop development and farm work. The average killing frost in Spring ranged from March 11th in Tidewater to April 13th in the Great Valley; and the first in Autumn, from November 17th in Tidewater to October 12th in the Great Valley. The growing season likewise ranged from 252 days in Tidewater to 183 days in the Great Valley. Alternate freezing and thawing in January was unfavorable for winter grains, but by May wheat and oats were heading and filling; and were mostly harvested in June. Considerable sprouting in the shock occurred in June and July. Fruit tree buds swelled abnormally early in February, but were retarded favorably by the latter part of the month. The fruit crop was generally good, but during the wet weather of July peaches cracked somewhat. Tobacco beds were prepared in

January, and by April the plants were ready for transplanting. Light colored tobacco matured much earlier than usual. The planting of corn was started early in April and stalks had advanced to good size by June. During July however, fields became weedy and much corn became rank and coarse. South-eastern truck was damaged somewhat by dry weather during April and May, and the strawberry season was considerably shortened. Truck crops as a whole however, averaged good to excellent. Early peanuts averaged fair, but the planting of the later crop was delayed or prevented entirely by wet weather. The year was especially unfavorable for cotton, and about half the fields were plowed up and planted to other crops.

The dry fall weather of October was conducive to forest fires. An area of about 3,000 acres was burned over, and the counties most affected were Wise, Lee and Dickenson. Considerable hail damage occurred during the year: \$2,000 in March; \$10,000 in June; \$12,500 in July; and \$2,000 in August. Small tornadoes in May caused damage of approximately \$7,000; and in December a slight loss of about \$500. Winds along the coast in January entailed a loss of about \$2,000 in boats; and winds accompanying thunderstorms in Richmond during May damaged real property to the extent of about \$8,000.—L.L.K.

## COMPARATIVE ANNUAL DATA FOR THE STATE

Year	Mean temperature	Highest	Lowest	Average precipitation	Average snow-fall	No. of days 0.01 inch or more of precipitation	No. of clear days	No. of partly cloudy days	No. of cloudy days
NORMALS OR EXTREMES....	55.8	109	-29	41.97	16.9	104	162	101	102
1891.....	55.6	106	-8	47.94	.....	95	163	101	102
1892.....	54.6	106	-8	39.45	.....	95	163	101	102
1893.....	54.7	104	-26	46.22	23.1	103	166	100	109
1894.....	56.8	106	-11	35.76	17.0	88	166	104	95
1895.....	54.4	107	-18	38.23	38.8	94	174	103	88
1896.....	56.6	105	-10	42.64	12.3	93	163	106	97
1897.....	56.0	103	-15	39.19	11.8	92	171	99	95
1898.....	56.6	105	-9	44.71	8.7	108	162	101	102
1899.....	55.4	106	-29	42.20	36.7	98	176	95	94
1900.....	57.1	107	-8	39.52	18.6	86	181	91	93
1901.....	54.5	106	-14	49.99	9.5	100	167	94	104
1902.....	55.6	108	0	40.67	14.9	95	170	97	98
1903.....	54.9	105	-13	44.09	8.4	95	172	89	104
1904.....	53.7	100	-14	36.11	24.9	95	170	101	95
1905.....	54.9	98	-15	43.27	18.5	111	155	112	98
1906.....	56.2	102	-2	50.03	15.2	124	143	120	102
1907.....	54.5	97	-16	44.41	17.4	115	139	115	91
1908.....	55.5	102	-5	46.17	30.0	110	162	103	95
1909.....	55.6	102	-9	38.02	12.9	101	171	104	90
1910.....	54.8	102	-9	41.97	20.3	112	151	116	98
1911.....	56.8	104	0	41.00	9.2	115	149	110	106
1912.....	54.9	100	-25	40.88	24.6	103	165	106	95
1913.....	57.2	102	-3	42.33	4.0	100	178	98	89
1914.....	55.1	103	-17	36.66	39.8	101	163	100	97
1915.....	55.6	101	-5	40.03	13.5	97	160	116	89
1916.....	55.6	102	-11	38.94	18.6	103	165	106	95
1917.....	53.3	103	-27	40.11	23.7	114	158	97	100
1918.....	55.5	108	-22	43.48	24.7	105	159	97	109
1919.....	56.8	103	-16	41.65	7.4	102	161	99	105
1920.....	54.8	99	-9	45.91	7.1	106	162	89	115
1921.....	58.4	104	-12	34.94	13.8	97	161	102	102
1922.....	56.9	100	-13	45.15	24.8	110	145	107	113
1923.....	56.1	103	-1	40.90	10.3	104	168	96	101
1924.....	54.4	107	-12	47.34	12.8	105	165	90	111
1925.....	56.6	103	-14	32.53	9.5	98	160	99	106
1926.....	55.5	107	-6	41.41	16.5	112	157	97	111
1927.....	56.5	104	-7	41.64	10.4	113	148	103	114
1928.....	55.7	103	-5	43.07	9.2	110	151	112	103
1929.....	56.2	99	-8	46.31	16.7	115	155	97	113
1930.....	56.9	109	-13	24.99	23.4	88	165	99	101
1931.....	57.8	104	-2	38.00	3.7	105	163	106	96
1932.....	57.5	108	-9	44.68	13.1	102	169	90	107
1933.....	57.6	104	-7	39.46	8.2	105	163	101	101
1934.....	56.2	107	-16	45.73	21.6	113	157	104	104
1935.....	56.4	101	-16	46.63	21.9	119	150	103	112
1936.....	56.0	109	-17	45.30	25.1	103	169	95	102
1937.....	55.7	102	-3	53.20	14.7	126	155	99	111
1938.....	57.0	101	-3	42.21	9.1	113	169	89	107

## Climatological Data for the Year 1938

Stations	Counties	Elevation, feet	Temperature, degrees Fahrenheit						Precipitation						Number of rainy days	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 clear days	Number of partly cloudy days		Number of cloudy days
Tidewater Virginia																				
Cape Henry	Princess Anne	16	65	60.2	94	June 12 <sup>a</sup>	20	Jan. 29	65	49.07	8.38	Sept.	1.56	Feb.	T.	121	112	121	132	sw.
Cheriton	Northampton	11	2	60.0	95	Aug. 11 <sup>a</sup>	21	Jan. 27	2	48.71	8.85	July	0.15	Aug.	0.0	86	109	83	83	sw.
Christ Church	Middlesex	107	14	58.4	95	Aug. 15	15	Jan. 27	15	55.54	15.09	July	1.62	Dec.	3.8	109	199	83	83	sw.
Dahlgren	King George	18	19	58.2	95	Aug. 16	17	Jan. 27	19	39.06	6.75	July	0.40	Aug.	12.1	122	90	103	172	n.
Diamond Springs II	Princess Anne	25	30	61.3	98	July 18 <sup>a</sup>	18	Jan. 27	30	51.16	7.94	Sept.	1.52	Feb.	1.4	90	157	141	67	sw.
Emporia	Greensville	80							8	50.68	11.62	June	1.25	Feb.	4.7	99	223	73	69	w.
Holland	Nansemond	80	6	59.3	96	Aug. 16	14	Jan. 27	6	46.66	7.79	Sept.	1.31	Dec.	1.2	82	207	56	102	sw.
Hopewell	Prince George	40	47	59.7	94	Aug. 15	16	Jan. 27	51	54.78	12.09	June	1.68	Feb.	4.1	118	74	179	112	sw.
Langley Field	Elizabeth City	9	54	60.0	96	Aug. 15	18	Jan. 27	102	51.15	9.75	Sept.	1.67	Feb.	T.	113	105	103	167	n.
Norfolk	Norfolk	11	68	61.5	97	Aug. 15	20	Jan. 27	68	49.27	7.76	Sept.	1.10	Feb.	1.1	132	96	91	178	sw.
Onley	Accomac	40	20	58.2	95	Aug. 4 <sup>a</sup>	19	Jan. 29	21	53.00	9.91	June	0.46	Aug.	4.0	109	111	167	87	sw.
Richmond	Henrico	162	59	59.2	95	Aug. 15	17	Jan. 27	67	48.96	9.71	July	1.58	Oct.	9.7	125	145	102	118	sw.
Tappahannock	Essex	25	8	58.9	97	Aug. 15 <sup>a</sup>	12	Jan. 28	8	45.28	7.63	June	0.96	Aug.	3.7	98	246	63	56	s.
Walkerton	King and Queen	35	5	58.7	97	Aug. 16	12	Jan. 28	6	47.40	9.69	July	0.45	Aug.	7.5	131	165	117	83	sw.
Wallaceon	Norfolk	25							13	50.95	8.50	Sept.	0.61	Aug.	2.1	108	216	76	73	sw.
Williamsburg	James City	70	44	60.8	97	Aug. 16	16	Jan. 29	38	57.14	13.72	July	1.85	Oct.	3.0	117	186	84	95	sw.
Means and extremes				59.6	98	July 18 <sup>a</sup>	12	Jan. 28		42.21	15.09	July	0.15	Aug.	3.6	110	155	104	106	sw.
Middle Virginia																				
Bedford	Bedford	950							25	48.98	10.32	June	0.70	Oct.	9.3	121	144	131	90	w.
Callaville	Brunswick	250	44	59.4	98	Aug. 17	12	Jan. 27 <sup>a</sup>	44	51.69	10.18	June	1.05	Aug.	6.5	90	225	68	72	w.
Charlottesville (near)	Albemarle	854	46	57.4	95	Aug. 15 <sup>a</sup>	13	Jan. 27 <sup>a</sup>	63	43.57	10.52	July	1.29	Oct.	8.0	103	145	97	123	n.
Chatham	Pittsylvania	852	16	58.7	98	Aug. 15 <sup>a</sup>	10	Dec. 29	17	37.20	6.16	June	0.84	Oct.	5.3	99	231	5	129	w.
Clarendon	Arlington	225							14	33.96	5.10	July	0.99	Apr.	16.6	124	192	52	121	s.
Clarksville	Mecklenburg	286	20	59.5	100	Aug. 15 <sup>a</sup>	11	Jan. 28	48	51.73	11.96	June	1.58	Aug.	2.7	107	213	87	65	sw.
Columbia	Fluvanna	220	37	58.0	98	Aug. 15 <sup>a</sup>	8	Jan. 28	41	40.40	9.60	July	1.05	Oct.	3.0	103	177	51	137	s.
Culpeper	Culpeper	475	30	57.7	100	Aug. 15 <sup>a</sup>	6	Nov. 26	32	33.82	5.36	July	1.09	Oct.	8.3		259	38	68	s.
Danville	Pittsylvania	564	22	60.2	99	Aug. 15	12	Jan. 28	48	40.62	7.16	July	0.91	Oct.	2.7	118	137	96	132	w.
Farmville	Prince Edward	450	17	58.5	97	Aug. 15	10	Dec. 29	19	46.50	11.53	June	0.98	Oct.	1.2	111	148	85	132	sw.
Fredericksburg (near)	Spottsylvania	75	45	57.4	98	Aug. 15	7	Nov. 26	47	31.14	5.61	Sept.	0.99	Apr.	9.8	120	173	97	95	s.
Halifax	Halifax	425							8	51.99	13.61	June	1.07	Oct.	2.0	106	170	92	103	w.
Kenbridge	Lunenburg	500	7	58.5	97	Aug. 15 <sup>a</sup>	12	Jan. 28 <sup>a</sup>	7	48.36	12.16	July	0.68	Aug.	5.5	92	175	87	103	sw.
Lincoln II	Loudoun	500	37	57.6	101	July 10 <sup>a</sup>	10	Nov. 20 <sup>a</sup>	38	34.59	3.80	Aug.	1.60	Oct.	16.0	101	190	66	109	s.
Lynchburg	Campbell	631	67	59.0	96	Aug. 16	13	Jan. 28	67	39.78	8.25	June	0.77	Oct.	5.2	116	113	98	154	sw.
Manassas (near)	Prince William	176							22	32.19	4.62	July	0.99	Apr.	12.9	121	162	73	130	sw.
Martinsville	Henry	1,014	1	58.5	96	Aug. 16	11	Jan. 28	8	41.94	7.88	July	0.87	Feb.	5.0	122	180	127	68	sw.
Mineral (near)	Louisa	250	23	57.0	97	Aug. 15	6	Nov. 26	23	33.78	5.59	July	1.21	Apr.	4.5	92	173	81	111	s.
Mount Weather II	Loudoun	1,735	34	52.1	91	July 17	8	Jan. 28	35	30.18	4.35	Dec.	1.17	Jan.		116	174	84	107	sw.
New Canton	Buckingham	300	43	57.7	98	Aug. 15 <sup>a</sup>	8	Jan. 28	45	40.41	6.72	June	1.01	Oct.	4.5	116	174	84	107	sw.
Orange	Orange	514							32	35.31	5.72	July	1.02	Aug.	9.0	99	218	67	80	w.
Pinnacles	Patrick	2,820							6	61.06	14.06	July	0.90	Oct.	15.2	116	188	49	128	nw.
Powhatan	Powhatan	390							16	45.64	7.55	July	1.66	Oct.	5.2	108	229	52	84	nw.
Quantico	Prince William	22	38	57.0	95	June 12	13	Jan. 28	34	35.37	5.85	July	1.24	Aug.	9.6	126	84	144	137	nw.
Randolph	Charlotte	334							34	44.59	9.36	June	1.08	Aug.	1.5	110	172	67	126	sw.
Rocky Mount	Franklin	1,132	42	57.5	95	Aug. 16	9	Jan. 28	45	42.73	8.61	June	0.82	Oct.						se.
Stuart	Patrick	1,500	16	57.3	93	Aug. 16	7	Jan. 28	16	45.80	10.00	June	1.02	Oct.	7.3	119	173	97	95	sw.
Washington, D. C.	Patrick	72	68	57.6	96	July 10 <sup>a</sup>	14	Nov. 27	68	35.09	5.06	July	1.15	Oct.	12.4	132	112	111	142	nw.
Means and extremes				57.8	101	July 10 <sup>a</sup>	6	Nov. 26		41.57	14.06	July	0.68	Aug.	7.3	110	175	81	109	sw.
The Great Valley																				
Afton	Nelson	1,750							8	38.65	7.10	July	1.23	Aug.		94				
Balcony Falls	Rockbridge	725							8	31.43	6.44	June	0.98	Oct.	4.0	73	273	6	86	w.
Big Meadows	Madison	3,600	4	48.4	88	June 12	3	Nov. 28	4	49.73	7.49	July	1.95	Oct.	26.6	111	135	7	159	nw.
Blacksburg	Montgomery	2,100	47	54.5	89	Aug. 10 <sup>a</sup>	8	Jan. 27	47	35.91	8.42	July	0.41	Oct.	8.9	130	145	75	145	w.
Buchanan	Botetourt	875	21	57.3	96	July 11 <sup>a</sup>	7	Nov. 26 <sup>a</sup>	38	40.56	8.09	June	0.90	Feb.	10.8	113	137	145	83	w.
Burkes Garden	Tazewell	3,250	42	50.9	86	Aug. 16 <sup>a</sup>	2	Jan. 27	44	43.00	7.41	July	0.57	Oct.	18.5	125	197	82	86	w.
Catawba Sanatorium	Roanoke	2,100	28	55.4	92	Aug. 15	8	Jan. 28	28	37.26	7.72	July	0.52	Oct.	8.7	132	177	121	67	nw.
Clifton Forge	Alleghany	1,055							15	42.81	7.66	July	0.91	Oct.	9.0	106	195	89	81	w.
Clinchport	Scott	1,300							41	47.69	6.88	May	0.32	Oct.	4.5	142				
Dale Enterprise	Rockingham	1,350	57	54.5	92	July 11	2	Nov. 26 <sup>a</sup>	59	30.65	6.08	July	0.56	Oct.	13.0	115	190	101	74	s.
Dante	Russell	2,000	21	54.8	89	July 7	4	Jan. 28	22	54.25	11.61	July	0.38	Oct.	19.5	141	149	100	116	w.
Deerfield	Augusta	1,630							12	31.54	5.73	July	0.85	Oct.	10.8	99	96	199	70	sw.
Emory	Washington	2,112	13	54.9	91	Aug. 15	6	Jan. 28	14	46.22	6.53	July	0.45	Oct.	16.6	144	154	134	77	w.
Floyd	Floyd	2,600	6	54.4	92	July 18 <sup>a</sup>	5	Jan. 27	6	40.41	8.39	Nov.	0.55	Oct.	7.0	122	235	61	69	w.
Glen Lyn	Giles	1,524	7	56.0	95	Aug. 15 <sup>a</sup>	8	Jan. 27	25	35.60	5.62	July	0.48	Oct.	5.5	130	128	50	187	w.
Hot Springs	Bath	2,195	45	51.4	89	July 10	0	Nov. 27	47	32.57	5.72	June	0.42	Oct.	18.8	134	204	31	130	sw.
Ivanhoe	Wythe	2,100							32	39.71	8.55	July	0.44	Oct.	6.0	88				
Lexington	Rockbridge	1,060	61	55.2	94	Aug. 15	6	Nov. 28	67	37.80	6.27	July	0.83	Oct.	9.8	103	200	72	93	
Mendota	Washington	1,350							34	43.30	7.75	July	0.44	Oct.	7.0	148				

## Monthly and Annual Precipitation for the Year 1938 with Departures from the Normal

	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
Stations	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure
Tideewater																										
Cape Henry	2.50	-0.65	1.56	-1.67	3.71	-0.16	5.00	+1.70	5.45	+1.88	6.23	+2.27	5.97	+0.60	2.23	-2.63	8.38	+5.52	2.79	-0.22	2.86	+0.50	2.39	-1.05	49.07	+6.09
Cheriton	3.27	2.42	2.42	2.42	4.19	4.19	4.67	4.67	3.98	3.98	6.58	6.58	8.85	8.85	0.15	0.15	8.80	8.80	2.16	2.16	1.27	1.27	2.37	2.37	48.71	48.71
Christchurch	3.93	+0.16	2.33	-0.87	3.82	+0.46	3.14	-1.00	3.69	-0.04	7.00	+2.95	15.09	+10.71	3.54	-0.82	6.92	+3.06	1.74	-1.66	2.72	+0.68	1.62	-1.77	55.54	+11.86
Dahlgren	2.43	-0.42	2.31	-0.18	3.16	-0.19	1.53	-1.88	4.42	+1.29	6.04	+2.17	6.75	+2.51	4.00	-4.74	5.97	+3.28	1.46	-0.93	2.51	+0.56	2.08	-1.01	39.06	+0.46
Diamond Springs	2.85	-0.69	1.52	-1.82	4.38	+0.76	7.15	+3.88	6.11	+1.96	6.02	+0.91	4.49	-1.05	3.00	-1.28	7.94	+4.23	2.03	-0.91	3.34	+0.98	2.33	-1.82	51.16	+5.15
Emporia	2.67	1.25	4.07	4.07	3.36	3.36	4.39	4.39	11.62	11.62	8.50	8.50	1.26	1.26	5.80	5.80	2.16	2.16	3.27	3.27	2.36	2.36	50.68	50.68		
Holland	2.87	1.33	3.75	3.75	4.98	4.98	4.66	4.66	7.37	7.37	5.76	5.76	7.37	7.37	1.79	1.79	7.79	7.79	2.13	2.13	2.29	2.29	1.31	1.31	46.66	46.66
Hopewell	2.92	-0.06	1.68	-1.33	3.19	-0.71	2.80	-0.60	4.44	+0.77	12.09	+7.27	11.62	+7.30	2.18	-2.60	6.59	+3.20	2.08	-0.58	3.32	+1.20	1.87	-1.65	54.78	+12.31
Langley Field	2.62	-0.35	1.67	-1.67	3.79	+0.22	4.70	+1.72	4.69	+1.30	8.43	+4.16	6.30	+1.22	2.20	-2.33	9.75	+6.98	2.80	+0.30	2.41	+0.28	1.79	-1.26	51.15	+10.57
Norfolk	2.80	-0.30	1.10	-2.12	3.73	-0.04	5.78	+2.55	5.06	+1.25	7.25	+3.08	5.28	-0.47	2.78	-2.44	7.76	+4.53	2.09	-0.95	3.19	+1.03	2.45	-0.89	49.27	+5.18
Onley	3.21	+0.19	2.50	-1.16	4.41	+0.44	3.56	+0.30	2.55	-0.67	9.91	+6.57	9.36	+5.08	0.46	-4.60	9.82	+6.71	2.52	-0.78	2.10	-0.66	2.60	-0.68	48.96	+6.94
Richmond	2.96	-0.25	1.89	-1.28	3.57	-0.11	2.80	-0.69	4.66	+0.87	9.28	+6.38	9.71	+4.98	2.44	-1.98	3.85	+0.60	1.59	-1.30	3.61	+1.40	2.61	-0.68	48.96	+6.94
Tappahannock	2.96	2.61	4.66	4.66	1.84	1.84	3.79	3.79	7.63	7.63	7.01	7.01	0.96	0.96	5.85	5.85	1.69	1.69	3.93	3.93	2.35	2.35	45.25	45.25		
Walkerton	2.94	2.29	4.18	4.18	2.68	2.68	3.22	3.22	8.91	8.91	9.69	9.69	0.45	0.45	5.16	5.16	1.82	1.82	3.75	3.75	2.31	2.31	47.40	47.40		
Wallaceton (near)	2.94	-0.19	0.98	-3.08	3.64	-0.73	6.88	+2.30	4.18	+0.28	7.10	+2.20	6.64	-0.74	0.61	-4.75	8.56	+8.27	3.07	+0.01	3.73	+0.45	2.68	-1.77	50.95	+2.75
Williamsburg	2.93	-0.39	1.96	-1.54	3.35	-0.75	3.33	-0.39	5.46	+1.88	6.86	+2.09	13.72	+8.00	3.79	-1.35	8.67	+6.53	1.85	-1.23	2.97	+0.86	2.25	-1.41	57.14	+11.30
Means	2.92	-0.27	1.84	-1.52	3.85	-0.07	4.01	+0.72	4.43	+0.98	7.92	+3.55	8.52	+3.47	1.76	-2.67	7.35	+4.26	2.15	-0.75	2.95	+0.72	2.21	-1.31	49.91	+7.11
Middle Virginia																										
Bedford	2.93	-0.14	1.10	-2.00	3.49	-0.03	2.49	-0.52	4.28	+1.08	10.32	+6.07	7.78	+4.03	5.50	+1.46	1.99	-1.15	0.70	-2.66	5.50	+3.12	2.90	-0.77	48.98	+8.49
Callaway	2.70	-0.85	1.09	-1.79	4.79	+0.41	3.05	-0.69	4.23	+0.25	10.18	+5.91	9.12	+3.79	1.05	-4.04	6.29	+2.72	2.14	-1.00	3.97	+1.88	2.48	-1.03	51.69	+5.36
Charlottesville (near)	2.89	-0.46	2.30	-0.50	2.33	-1.14	1.42	-2.10	2.95	-1.01	4.79	-0.50	10.52	+6.19	2.84	-2.28	3.73	+0.51	1.29	-2.34	3.26	+0.80	5.25	+1.79	43.57	+1.04
Chatham	3.47	-0.01	1.51	-1.67	2.32	-1.43	2.04	-1.31	3.01	+0.21	6.16	+2.39	5.34	+1.11	1.84	-2.81	1.63	-1.79	0.84	-2.08	4.79	+2.26	3.75	+0.28	37.20	-4.85
Chatham	2.50	-0.43	2.16	-0.44	2.00	-0.83	0.99	-2.79	3.80	+0.34	2.95	-0.66	5.10	+1.57	4.12	-1.13	3.60	+0.59	1.46	-2.45	2.80	+0.55	2.48	-0.00	33.96	-6.18
Clarksville	3.85	+0.56	1.63	-1.74	3.82	+0.16	2.55	-0.85	3.73	-0.11	11.96	+7.73	8.20	+4.00	1.58	-3.05	4.09	+1.01	1.87	-0.94	4.95	+2.74	3.50	+0.00	61.73	+9.48
Columbia	2.40	-0.95	2.24	-0.50	3.25	-0.34	1.36	-2.11	3.21	-0.41	6.24	+2.30	9.60	+5.34	1.97	-2.56	2.67	-0.30	1.05	-2.24	2.65	+0.32	3.76	+0.61	40.40	-0.84
Culpeper	2.42	-0.57	2.14	-0.26	1.69	-1.21	1.68	-1.68	3.44	-0.58	2.80	-2.17	5.36	+1.54	1.88	-2.92	4.50	+1.26	1.09	-2.02	2.93	+0.44	3.89	+0.77	33.82	-7.45
Danville	3.11	-0.26	1.12	-2.07	1.71	-2.01	2.41	-0.97	4.52	+0.94	5.96	+1.92	7.10	-2.97	2.31	-2.13	3.24	+0.13	0.91	-2.01	5.03	+2.80	3.14	-0.44	40.62	-1.13
Farmville	3.88	+1.04	1.29	-1.46	4.32	+0.26	2.16	-0.89	3.49	-0.38	11.53	+6.95	7.29	+3.10	0.67	-3.36	4.70	+1.97	0.98	-2.30	2.97	+0.63	3.22	+0.06	46.50	+5.62
Fredericksburg (near)	2.17	-1.17	1.92	-0.80	1.96	-1.62	0.99	-2.51	2.95	-0.79	3.47	-0.74	3.89	-0.43	1.34	-3.64	5.61	+2.45	1.83	-1.88	2.97	+0.76	2.60	-0.54	31.14	-10.91
Halifax	3.49	1.21	3.86	3.86	1.71	1.71	4.31	4.31	13.61	13.61	10.09	10.09	1.64	1.64	2.96	2.96	1.07	1.07	4.68	4.68	3.36	3.36	51.99	51.99		
Kenbridge	3.25	1.09	3.61	3.61	2.37	2.37	3.73	3.73	10.59	10.59	12.16	12.16	0.68	0.68	2.89	2.89	1.87	1.87	4.24	4.24	2.38	2.38	48.36	48.36		
Lincoln	2.32	-0.68	2.19	-0.42	3.31	+0.23	2.57	-0.74	3.74	+0.14	2.16	-2.57	2.94	-0.50	3.80	-0.46	3.61	+0.97	1.60	-1.41	2.89	+0.54	3.46	+0.72	34.59	-4.18
Lynchburg	2.99	-0.44	1.16	-1.99	3.16	-0.38	1.60	-1.35	4.13	+0.50	8.25	+4.46	5.72	+1.52	3.24	-0.54	1.87	-1.44	0.70	-2.38	2.70	+0.37	1.48	-0.92	39.78	-0.75
Manassas (near)	2.07	-1.05	1.87	-1.22	1.58	-1.48	0.99	-2.06	3.33	-0.31	4.04	+0.44	4.62	+0.81	2.03	-2.89	4.08	+1.50	1.29	-2.12	3.06	+0.69	3.28	+0.35	32.19	-6.44
Martinsville	2.98	0.87	2.05	2.05	2.38	2.38	4.00	4.00	7.80	7.80	7.88	7.88	2.76	2.76	1.82	1.82	1.09	1.09	4.78	4.78	3.53	3.53	41.94	41.94		
Mineral (near)	3.16	+0.04	2.90	+0.26	2.83	-0.55	1.21	-1.98	2.94	-0.88	2.91	-1.23	5.69	+1.19	1.77	-2.73	3.11	+0.84	1.27	-2.01	2.66	+0.40	4.35	+0.35	33.78	-7.05
Mount Weather	1.17	-1.73	1.70	-0.80	2.09	-0.84	1.75	-1.81	2.11	+0.27	1.46	-3.24	1.96	-1.84	1.84	-2.68	3.71	+0.03	1.95	-1.92	4.09	+1.59	4.35	+1.69	30.18	-10.48
New Canton	2.58	-0.97	1.93	-0.96	3.93	+0.10	1.49	-1.83	3.41	-0.01	6.72	+2.99	6.51	+2.62	2.48	-2.45	3.33	+0.90	1.01	-2.17	3.29	+0.94	3.67	+0.37	40.41	-1.07
Orange	3.09	+0.06	2.16	-0.44	2.27	-0.92	1.38	-1.96	4.06	+0.40	4.08	-0.68	5.72	+1.12	1.02	-3.60	3.68	+0.42	1.25	-1.83	2.65	+0.21	3.95	+0.74	35.31	-6.48
Pinnacles	3.65	1.50	2.07	2.07	2.98	2.98	5.47	5.47	11.49	11.49	14.06	14.06	4.88	4.88	2.79	2.79	0.90	0.90	8.84	8.84	2.73	2.73	61.06	61.06		
Powhatan	3.27	+0.34	2.19	-0.19	4.05	+1.10	2.36	-1.40	3.82	+0.52	6.53	+3.52	7.85	+4.16	2.32	-2.08	3.72	+0.71	1.86	-0.99	4.34	+2.20	3.62	+0.63	35.64	+8.52
Quantico	2.36	-0.72	2.89	+0.25	1.93	-1.39	1.36	-1.89	3.76	+0.63	4.53	+0.71	5.85	+1.88	1.24	-3.22	4.42	+1.42	1.27	-1.69	3.01	+0.91	2.75	-0.08	35.37	-3.19
Randolph	3.32	-0.24	1.36	-2.04	3.07	-0.59	1.85	-1.27	4.08	-0.31	9.36	+5.62	8.20	+3.99	1.08	-3.81	2.99	+0.23	1.63	-1.32	4.59	+2.35	3.12	-0.29	44.59	+3.35
Rocky Mount	3.14	-0.22	1.10	-2.11</																						

## Monthly and Annual Mean Temperatures for the Year 1938 with Departures from the Normal

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure
Tidewater																										
Cape Henry	40.0	-0.2	46.2	+5.0	52.8	+6.2	58.8	+4.2	65.2	+1.0	72.6	-0.3	77.6	+0.1	78.4	+1.5	71.6	-0.2	60.0	-2.1	55.0	+2.9	44.6	+0.9	60.2	+1.5
Cheriton	38.8	-0.7	46.4	+1.0	52.5	+6.2	60.3	+3.9	65.6	+1.5	72.1	-0.3	77.6	+0.1	78.6	+1.5	70.6	-0.2	59.4	-1.8	54.8	+2.8	42.8	+0.9	60.0	+1.5
Christchurch	38.4	-2.7	43.6	+1.0	51.0	+4.4	59.5	+3.9	64.0	-0.6	71.2	-2.8	76.8	-1.0	76.9	+0.4	68.8	-3.4	58.0	-1.8	52.0	+1.1	40.4	-1.9	58.4	-0.2
Dahlgren	36.6	+0.3	42.3	+3.7	50.6	+5.2	57.7	+3.6	64.0	+1.5	72.0	-0.4	77.4	+0.7	79.1	+4.7	68.3	-1.8	59.4	+1.6	51.1	+3.8	40.2	+1.4	58.2	+2.0
Diamond Springs	41.0	-2.3	46.0	+2.3	54.5	+4.7	60.4	+2.6	66.2	+0.4	73.2	-0.5	78.6	+1.0	80.0	+3.4	72.2	-0.2	61.5	-1.2	56.2	+4.0	45.6	+1.3	61.3	+1.2
Holland	39.5	-0.7	46.8	+5.4	53.0	+4.9	61.0	+3.7	66.2	+1.4	72.2	-2.5	78.4	-2.3	78.0	+1.1	70.3	-1.8	57.8	-2.1	52.5	+3.0	41.4	+0.5	59.7	+0.7
Hopewell	39.2	-1.5	45.4	+4.4	53.4	+5.7	59.8	+3.7	65.2	+0.1	73.0	-1.2	78.0	-0.4	78.0	+1.6	70.5	-1.3	59.4	-2.1	53.4	+3.1	43.2	+1.0	60.0	+1.0
Langley Field	39.4	-1.5	45.4	+4.4	53.4	+5.7	59.8	+3.7	65.2	+0.1	73.0	-1.2	78.0	-0.4	78.0	+1.6	70.5	-1.3	59.4	-2.1	53.4	+3.1	43.2	+1.0	60.0	+1.0
Norfolk	41.2	+0.6	46.8	+4.1	54.6	+6.4	60.8	+4.0	67.2	+1.0	74.5	+1.0	79.0	+0.3	80.4	+3.0	71.8	+0.2	61.2	+1.3	55.6	+4.2	45.2	+2.1	61.5	+2.0
Onley	38.7	-0.6	44.4	+3.7	51.0	+5.4	58.2	+3.8	63.2	0.0	71.0	-1.7	76.2	-1.6	77.8	+2.2	67.6	-3.3	57.3	-3.1	51.6	+1.0	41.0	-0.8	58.2	+0.5
Richmond	38.2	+0.3	44.8	+5.2	52.2	+6.0	59.7	+3.1	65.6	-0.9	72.0	-1.7	77.1	-1.4	79.0	+2.5	69.0	-1.5	59.2	-0.4	52.0	+3.7	40.8	+1.0	59.2	+1.3
Tappahannock	35.8	-0.7	42.7	+1.8	51.8	+5.9	59.8	+3.1	63.2	+0.9	72.2	-0.4	78.6	+1.0	78.8	+2.2	70.4	-0.2	58.8	-1.2	52.2	+4.0	40.0	+1.0	58.9	+1.3
Walkerton	37.8	-0.3	43.6	+5.8	52.5	+6.7	59.8	+3.1	65.1	+0.9	72.2	-0.4	77.4	+1.0	78.2	+2.2	69.2	-1.5	58.0	-0.5	50.5	+3.9	39.9	+0.5	58.7	+1.3
Williamsburg	40.1	-0.3	47.2	+6.1	55.2	+6.7	61.1	+4.1	67.2	+2.0	73.6	+0.8	77.9	+0.9	79.0	+3.3	70.6	+0.7	60.0	-0.2	54.4	+5.4	43.8	+2.6	60.8	+2.6
Means	38.9	-0.7	45.1	+4.1	52.9	+5.6	59.5	+3.7	65.3	+0.3	72.5	-1.0	77.5	-0.4	78.7	+2.4	70.1	-1.3	59.2	-1.3	53.2	+3.2	42.3	+0.8	59.6	+1.3
Middle Virginia																										
Callaville	38.8	-0.2	45.4	+5.9	53.8	+5.7	60.1	+4.0	65.9	+0.4	72.0	-1.0	76.6	-0.5	78.4	+2.7	70.0	-0.3	58.4	-0.8	52.5	+4.1	40.8	+0.5	59.4	+1.7
Charlottesville (near)	35.6	-0.8	41.4	+4.0	50.9	+4.6	57.6	+1.7	64.5	-1.2	70.7	-1.9	76.4	-0.1	77.8	+3.0	67.0	-2.5	59.7	+1.1	49.2	+1.3	37.5	-0.8	57.4	+0.8
Chatham	38.4	-1.6	46.1	+2.0	53.2	+6.2	59.2	+2.9	65.6	-0.1	70.4	-3.7	76.2	-1.8	77.7	+2.1	69.6	-1.6	58.0	+0.2	51.4	+3.6	39.2	-2.7	58.7	+0.5
Clarksville	38.4	+0.8	46.1	+5.1	54.0	+6.4	60.9	+4.4	66.8	+1.5	72.6	-0.9	77.8	+0.8	79.6	+4.4	70.5	+0.2	57.6	-0.7	50.2	+3.2	39.7	+0.5	59.5	+2.1
Columbia	37.2	+0.2	44.0	+6.4	52.4	+5.9	58.8	+3.7	65.6	+0.9	71.6	-0.4	76.3	+0.4	77.2	+2.7	69.1	+0.4	56.2	-1.2	49.5	+3.0	38.0	0.0	58.0	+1.8
Culpeper	35.0	+0.5	40.6	+4.0	61.8	+6.9	57.9	+3.5	65.8	+2.0	72.4	+1.0	78.2	+2.9	78.5	+5.2	68.2	+0.4	57.3	+1.2	48.8	+4.1	37.5	+1.7	57.7	+2.8
Danville	39.6	-0.5	46.7	+3.2	55.6	+5.6	60.4	+1.7	67.5	+0.2	72.6	-3.4	76.9	-2.6	79.4	+1.7	70.7	-2.2	59.8	-1.2	52.4	+2.6	41.4	-0.5	60.2	+0.3
Farmville	38.0	-0.9	45.4	+7.9	53.4	+7.2	58.0	+2.8	65.1	-1.5	71.1	-3.5	76.3	-3.2	77.6	+0.6	68.8	-2.6	57.4	-1.6	51.1	+4.1	39.4	+0.6	58.5	+0.9
Fredericksburg (near)	36.2	-0.5	42.7	+5.4	50.9	+4.3	57.5	+2.1	63.6	-1.3	71.6	-0.6	77.2	+0.6	77.4	+2.6	67.4	-2.1	56.8	-1.2	50.1	+2.8	37.5	-0.4	57.4	+1.0
Kenbridge	38.3	-0.8	44.8	+4.8	53.0	+5.8	58.8	+3.2	65.2	+0.5	71.0	-0.6	77.4	+0.7	77.5	+2.6	69.1	-0.8	59.6	-1.2	51.9	+4.0	40.1	+0.5	58.6	+1.9
Lincoln	34.4	+1.4	41.8	+7.8	49.0	+5.2	56.4	+3.0	64.4	+0.5	72.8	+1.2	79.0	+2.5	79.4	+5.2	68.0	-0.8	59.6	+2.5	49.8	+4.4	36.1	+1.5	57.6	+2.9
Lynchburg	38.1	+0.6	45.2	+4.9	53.6	+6.3	58.6	+3.1	66.0	+1.3	71.3	-3.3	77.3	-0.2	78.3	+2.7	68.9	-0.1	59.5	+1.0	50.6	+3.4	40.0	+0.5	59.0	+1.4
Martinsville	38.0	-0.8	45.4	+5.0	54.0	+5.8	58.0	+3.0	66.0	+0.5	70.6	-0.6	76.2	+0.7	77.8	+2.6	69.2	-0.5	59.0	-0.3	50.6	+3.0	36.5	-0.4	58.5	+1.9
Mineral (near)	36.6	+1.4	42.8	+4.6	52.0	+7.0	58.0	+4.4	63.6	+1.2	70.6	+0.4	76.0	+1.2	76.0	+2.6	67.4	-0.5	55.4	-0.3	46.4	+2.9	36.8	-0.4	57.0	+2.1
Mount Weather	29.4	-1.2	37.0	+6.1	43.6	+4.4	52.0	+2.8	59.1	-0.2	67.0	-0.1	73.6	+2.4	74.0	+4.6	61.4	-3.3	54.5	+0.8	44.0	+1.9	30.1	-2.4	52.1	+1.3
New Canton	37.6	+0.3	43.9	+5.8	52.8	+5.8	57.9	+2.7	64.8	+0.2	70.2	-1.7	75.6	-0.5	75.8	+2.0	68.4	-0.6	56.4	-1.0	49.8	+3.1	38.8	+0.5	57.7	+1.4
Quantico	35.4	+0.4	40.9	+5.8	49.8	+4.7	56.9	+2.8	63.2	-0.8	72.3	+0.2	76.6	-0.4	77.4	+3.2	67.3	-1.4	57.4	0.0	49.2	+3.9	37.3	-1.0	57.0	+1.6
Rocky Mount	37.0	-0.7	43.1	+4.3	51.8	+4.9	56.2	+0.5	65.6	+0.9	73.8	+1.9	73.5	-1.5	75.0	+1.4	68.6	-0.1	59.4	+2.5	49.5	+2.1	36.6	-2.1	57.5	+1.2
Stuart	35.5	-4.9	44.4	+2.5	52.6	+6.2	57.6	+1.5	64.0	-1.0	68.8	-3.5	73.6	-2.4	75.8	+1.7	67.8	-2.4	58.0	0.0	50.4	+2.4	39.1	-3.0	57.3	+0.2
Washington, D. C.	35.7	+2.3	40.9	+5.6	49.8	+7.2	57.1	+3.8	63.4	-0.3	72.8	+0.6	78.4	+1.6	78.6	+3.6	67.4	-0.7	58.8	+1.4	49.8	+4.6	38.4	+1.8	57.6	+2.6
Means	36.7	-0.2	43.4	+5.1	51.9	+5.8	57.9	+2.8	64.8	0.0	71.3	-1.0	76.4	0.0	77.5	+2.9	68.2	-1.1	57.8	+0.2	50.0	+3.2	38.0	-0.2	57.8	+1.5
Great Valley																										
Big Meadows	30.2	+3.0	36.8	+8.5	42.0	+7.6	47.6	+5.3	53.6	+6.0	60.6	+6.5	65.7	+6.6	66.6	+5.1	57.0	+5.0	50.6	+4.1	41.0	+2.9	29.0	+4.8	48.4	+1.0
Blacksburg	36.0	+2.7	42.7	+8.5	49.6	+6.9	52.8	+2.0	61.6	+1.8	66.6	-1.0	72.0	+1.0	72.3	+2.4	65.1	+0.5	54.1	+0.7	46.8	+3.2	35.3	+0.7	54.5	+2.5
Buchanan	37.2	+0.8	44.6	+4.0	52.0	+4.7	56.6	+0.8	64.8	+0.2	69.9	-2.3	75.8	-0.2	76.1	+1.8	68.0	-1.9	58.2	-0.2	47.6	+1.0	36.8	-1.8	57.8	+0.6
Burkes Garden	31.4	-0.6	39.6	+7.4	46.8	+6.6	50.4	+2.4	57.9	+1.0	62.8	-0.9	67.9	+1.0	67.8	+2.0	61.5	+1.0	50.4	+0.1	42.0	+1.8	32.3	-0.4	50.9	+1.8
Catawba Sanatorium	35.6	-0.8	41.2	+2.3	49.6	+4.7	55.2	+1.1	61.6	-0.8	67.5	-2.1	72.3	-0.4	73.8	+2.2	65.9	-0.8	57.2	+0.5	47.8	+2.0	36.8	-1.0	55.4	+0.6
Dale Enterprise	33.8	+0.6	41.0	+6.4	48.4	+5.7	54.0	+1.9	61.6	-0.7	67.7	-2.1	73.6	-0.1	73.2	+1.2	65.4	-1.6	55.8	+0.3	44.5	+0.6	35.2	0.0	54.5	+1.0
Dante	35.8	+0.1	44.2	+4.8	50.5	+5.4	55.7	+1.6	62.2	+1.1	65.5	-3.4	71.4	-0.4	71.7	+0.7	63.4	-1.8	55.1	-1.0	44.4	+0.7	36.2	-2.1	54.8	+0.3
Emory	36.0	-1.4	43.4	+6.0	50.2	+7.4	54.0	+1.6	61.9	+0.5	66.7	-2.2	72.8	-0.3	73.0	+1.6	66.6	0.0	54.6	-0.8	45.5	+0.5	34.5	-2.8	54.9	+0.8
Floyd	33.3	-0.3	39.6	+4.9	49.0	+5.7	53.7	+0.6	60.6	+0.7	67.1	-0.3	73.6	+0.7	75.7	+2.6	65.3	-0.8	54.0	+0.4	44.8	+3.5	35.8	-0.5	54.4	+1.0
Glen Lyn	34.4	-0.2	42.2	+5.0	50.2	+5.6	56.6	+0.4	64.0	+0.6	70.6	-0.7	74.7	+0.7	74.5	+2.6	67.6	-0.6	55.4	+0.4	46.4	+3.2	35.2	-0.5	56.0	+1.0
Hot Springs	30.0	-1.9	37.5	+5.0	45.6	+3.8	51.7	+1.8	59.0	-0.7	64.8	-1.8</														

Supplemental Table of Monthly and Annual Precipitation for the Year 1938

Stations	Counties	Drainage-basin	Elevation, feet	Length of record, years	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Appomattox	Appomattox	Appomattox	825	1	2.95	1.88	3.75	1.46	3.68	10.08	6.97	1.08	1.97	1.76	3.04	3.61	42.23
Arlington	Arlington	Potomac	10	2	2.23	2.79	1.98	1.47	4.00	3.32	5.31	3.97	3.65	1.40	2.02	2.58	34.72
Big Knob	Scott	Tennessee	3,200	4	3.60	1.86	4.28	3.64	5.07	2.59	9.89	2.19	3.13	0.33	3.93	2.16	42.67
Buckingham	Buckingham	James	550	2	2.32	1.89	3.06	1.39	3.37		6.20	4.01	2.88	1.71	2.15	8.87	
Buena Vista	Rockbridge	do	835	2	1.98	1.22	2.49	1.55	3.37	5.21	5.19	4.35	1.53	1.05	4.91	2.91	35.76
CCC Camp No. 1	Madison	Shenandoah	3,400	4	2.82	2.38	3.03	2.43	4.39	4.14	6.46	4.53	3.04	1.79	6.71	6.16	47.88
Cleveland	Russell	do	1,525	3	3.67	1.65	4.61	3.65	6.29	3.87	10.16	6.92	5.67	6.06	4.25	2.69	54.09
Covington	Allegheny	James	1,245	2	1.77	1.04	2.64	1.54	4.03	4.25	5.85	3.20	1.86	0.60	3.25	2.47	32.50
Damascus	Washington	Tennessee	1,930	6	3.82	2.58	3.81	3.65	7.19	5.74	10.83	3.69	2.74	0.21	3.30	1.42	48.98
Dunbar	Wise	do	2,000	4	3.62	3.18	2.55	4.25	6.58	5.94	6.15	5.94	3.36	0.23	4.34	2.96	49.10
Dungannon	Scott	do	2,500	4	3.75	1.80	4.34	3.76	6.27	4.93	9.25	3.52	3.15	0.49	4.43	1.93	47.62
Gordonsville	Orange	York	442	1				0.92	3.72	2.96	6.22	2.01	1.12	1.23	2.48	3.38	
High Knob	Wise	Tennessee	4,600	4	4.47	4.50	5.01	4.25			6.39	7.44	4.85	0.69			
Holston	Washington	do	3,400	4	3.44	2.15	4.46	3.98	5.86	4.96	8.51	3.84	4.11	0.77	4.17	2.39	48.64
Honaker	Russell	do	2,400	4	3.61	4.09	4.77	4.38	6.64	3.43	7.49	4.16	4.79	0.47	3.81	2.30	49.94
Jewell Ridge	Tazewell	do	2,700	3	3.81	2.81	4.55	2.81	4.53	6.64	7.04	6.37	3.68	0.56	3.57	1.94	47.38
Jonesville	Lee	do	1,400	4	4.67	2.85	4.56	5.74	5.65	6.37	9.44	2.08	3.05	0.35	3.97	3.64	52.37
Loves Mill	Washington	do	2,040	4	3.37	2.22	3.79	3.64	5.90	5.44	10.71	3.69	3.39	0.39	3.44	1.38	47.36
Lynchburg (Airport)	Campbell	James		2	2.95	1.17	3.67	1.31	3.26	7.43	6.21	1.57	1.25	1.59			
Marion	Smyth	Tennessee	2,150	4	2.94	1.68	3.06	3.16	6.57	5.35	7.24	5.07	5.07	0.43	3.22	1.06	44.85
Montebello	Nelson	James	2,500	2	3.36	1.08	2.58	1.62	3.81	5.42	6.12	2.92	1.45	2.25	6.24	3.76	40.61
Mount Jackson	Shenandoah	Shenandoah	900	2	1.07	0.93	1.86	1.10	4.94	2.98	7.56	2.31	2.18	1.49	3.34	4.03	33.79
Mount Solon	Augusta	do	1,400	2	1.64	0.95	2.30	1.60	4.54	6.10	5.56	2.53	2.05	4.00	2.30		
Mutters Gap	Russell	Tennessee	3,925	4	4.15	2.64	4.55	4.13	5.84	6.17	8.62	2.94	4.65	0.83	4.32	2.49	51.33
Nebo	Smyth	do	2,425	4	3.33	2.26	3.94	3.31	5.34	5.19	5.06	3.50	3.44	0.25	4.13	1.74	41.49
New Castle	Craig	James	1,300	2							7.54	4.25	1.35	0.44	2.88	2.36	
North Garden	Albermarle	do	700	1	2.74	1.50	3.45	1.55	3.53	7.16	7.69	5.07	3.63	1.56	3.13	5.16	46.17
Olinger	Lee	Tennessee	1,400	4	4.42	2.22	4.69	5.50	6.95	5.43	4.84	4.34	2.85	0.30	4.04	2.91	48.49
Panorama	Rappahannock	Rappahannock	2,304	4	2.72	1.95	2.27	1.96	5.27	5.64	5.67	4.26	2.43	1.30	5.62	5.12	44.21
Pedlar Dam	Amherst	James	800	5	3.25	1.37	2.62	2.16	4.91	8.62	11.27	7.27	0.88	1.06	6.06	3.98	53.45
Rattlesnake Point	Rappahannock	Rappahannock	3,100	4	2.59	1.95	0.92	2.19	4.85	5.46	5.97	2.58	3.65	2.93	4.59	5.52	43.20
Richmond (Byrd Airport)	Henrico	James	160	2	4.03	1.99	3.64	3.30	4.88	9.24	11.73	1.42	3.94	1.57	2.74	2.74	51.22
Roanoke (Airways)	Roanoke	Roanoke	907	1											4.77	1.76	
Rockfish	Nelson	James	500	2	2.76	1.35	3.33	1.56	3.20	9.83	8.27	5.64	4.06	1.34	3.06	4.87	49.27
Rose Hill	Lee	Tennessee	1,600	3	5.63	2.39		5.89	8.64	7.25	5.39	2.27	0.25	3.93	3.93	2.74	
Spring Creek	Tazewell	do	3,150	4	2.83	2.24	3.16	2.15	5.57	6.20	6.98	1.20	6.97	0.53	2.40	2.07	42.30
Swords Creek	Russell	do	2,000	3	3.41	2.84	4.30	3.62	6.21	8.23	8.97	4.06	5.53	0.30	3.48	2.69	50.64
Tazewell	Tazewell	do	2,450	4	1.36	2.42	4.60	3.11	6.54	4.52	7.29	3.20	4.33	0.59	2.57	1.83	42.56
Troutdale	Grayson	do	3,450	4	3.64	2.43	4.43	3.29	6.95	3.98	9.96	4.04	3.82	0.21	4.82	0.96	45.83
Tye River	Nelson	James	551	1	3.63	1.19	2.64	1.29	8.87	11.24	6.71	8.81	2.00	1.28	4.00	4.27	49.83
Urbana	Middlesex	Chesapeake Bay	20	2	2.85	2.62	3.67	2.45	3.91	6.06	14.74	2.72	7.07	2.35	2.87	2.39	53.70
Wallace	Washington	Tennessee	1,875	4	4.10	2.02	4.55	3.94	5.34	4.78	6.79	3.82	4.40	0.36	3.46	2.08	45.64

## KILLING FROSTS 1938

Stations	Last in spring	First in autumn	Stations	Last in spring	First in autumn
<i>Tidewater Virginia</i>			Pinnacles	Apr. 24	Oct. 3
Cape Henry	Mar. 4	Nov. 25	Powhatan	Mar. 4	Oct. 2
Cheriton	Mar. 29	Nov. 1	Quantico	Mar. 12	Oct. 8
Christchurch	Mar. 11	Nov. 25	Randolph	Apr. 11	Oct. 8
Dahlgren	Feb. 17	Nov. 10	Rocky Mount	Mar. 25	Oct. 21
Diamond Springs	Mar. 29	Nov. 25	Stuart	Apr. 11	Nov. 15
Emporia	Apr. 9	Nov. 15	Washington	Mar. 11	Nov. 24
Holland	Apr. 3	Nov. 15	<i>Great Valley</i>		
Hopewell	Mar. 11	Nov. 25	Afton	Apr. 1	Nov. 10
Langley Field	Mar. 1	Nov. 25	Big Meadows	Apr. 23	Nov. 1
Norfolk	Mar. 4	Nov. 25	Blacksburg	Apr. 24	Nov. 1
Onley	Mar. 11	Nov. 16	Buchanan	Apr. 4	Nov. 2
Richmond	Mar. 11	Nov. 10	Burkes Garden	Apr. 11	Oct. 8
Tappahannock	Apr. 11	Nov. 10	Catawba Sanatorium	Mar. 25	Oct. 22
Walkerton	Apr. 11	Nov. 10	Clifton Forge	Apr. 11	Oct. 22
Wallaceton	Apr. 4	Oct. 25	Dale Enterprise	Apr. 11	Oct. 8
Williamsburg	Apr. 11	Nov. 1	Dante	Apr. 4	Nov. 1
<i>Middle Virginia</i>			Deerfield	Mar. 18	Oct. 2
Bedford	Apr. 11	Nov. 10	Emory	Apr. 11	Oct. 22
Callaville	Mar. 29	Nov. 10	Floyd	Apr. 2	Oct. 8
Charlottesville	Apr. 8	Nov. 16	Glen Lyn	Apr. 23	Oct. 8
Chatham	Apr. 11	Nov. 10	Hot Springs	Apr. 11	Oct. 8
Clarendon	Apr. 10	Nov. 1	Lexington	Apr. 11	Oct. 8
Clarksville	Feb. 28	Nov. 15	Mendota	Apr. 11	Oct. 25
Columbia	Mar. 11	Oct. 8	Monterey	Apr. 4	Oct. 3
Culpeper	Apr. 11	Oct. 8	Moore's Creek Dam	Apr. 11	Oct. 8
Danville	Apr. 11	Oct. 8	Mountain Lake	Apr. 10	Oct. 8
Farmville	Apr. 11	Oct. 8	North River Dam	Apr. 24	Oct. 1
Fredericksburg	Apr. 11	Oct. 26	Pennington Gap	Apr. 3	Oct. 21
Halifax	Mar. 25	Nov. 10	Radford	Apr. 10	Oct. 26
Kenbridge	Apr. 11	Nov. 10	Roanoke	Apr. 24	Oct. 8
Lincoln	Apr. 24	Nov. 10	Saltville	Apr. 11	Oct. 22
Lynchburg	Mar. 28	Nov. 10	Sexton Shelter	Apr. 23	Nov. 1
Manassas	Apr. 24	Oct. 8	Shen'h Camp No. 3	Apr. 23	Nov. 1
Martinsville	Mar. 12	Oct. 8	Staunton	Apr. 23	Oct. 3
Mineral	Mar. 25	Oct. 26	Timberville	Mar. 25	Oct. 7
Mount Weather	Apr. 11	Oct. 6	Winchester	Apr. 11	Nov. 1
New Canton	Apr. 11	Oct. 26	Woodstock	Apr. 3	Oct. 8
Orange	Apr. 24	Oct. 21	Wytheville	Mar. 28	Oct. 8

## MONTHLY STATE DATA 1938

Month	Temperature				Precipitation				Number of days			
	Mean	Departure from the normal	Highest	Lowest	Average	Departure from the normal	Greatest 24-hour	Average snow-fall	With 0.01 in. or more of precip.	Clear	Partly cloudy	Cloudy
January	36.3	-0.3	69	-3	2.73	-0.60	2.00	1.9	10	11	7	13
February	43.0	+5.8	79	5	1.65	-1.44	1.63	0.6	7	10	7	11
March	50.9	+5.1	89	10	3.03	-0.68	2.95	0.6	10	13	8	10
April	56.9	+2.4	92	18	2.59	-0.75	3.10	0.1	9	15	6	9
May	63.6	-0.5	96	30	4.31	+0.57	2.69	0.0	13	13	8	16
June	70.0	-1.6	95	33	6.21	+2.02	5.49	0.0	13	12	9	9
July	75.3	-0.1	101	48	7.22	+2.67	7.13	0.0	14	13	9	9
August	76.1	+2.0	101	44	2.61	-1.75	2.56	0.0	7	20	8	3
September	67.6	-1.1	95	35	3.99	+0.84	4.87	0.0	10	11	7	12
October	57.1	-0.2	92	22	1.23	-1.77	1.26	0.0	4	22	5	4
November	49.0	+2.8	84	0	3.81	+1.38	3.64	4.2	8	17	6	7
December	38.0	0.0	69	2	2.83	-0.25	2.73	1.8	8	14	7	10

\* Estimated

## ERRATA

February—Clinchport, precipitation departure published -1.09; should be -2.06.  
 April—Catawba Sanatorium, precipitation departure published +0.64; should be -0.64.

May—Catawba Sanatorium, temperature departure published +0.8; should be -0.8.  
 June—Staunton, temperature departure published +2.6; should be -2.6.

September—Clinchport, precipitation departure published -0.08; should be -0.18.

### CHART SHOWING LOCATION OF OBSERVATION STATIONS

