CLIMATOLOGICAL

VIRGINIA SECTION

F. N. HIBBARD

Vol. LIV RICHMOND, VA., YEAR 1944

38

No. 13

GENERAL SUMMARY

Temperatures in Virginia in 1944 averaged only 0.1° above the 54-year mean, and the annual precipitation showed an excess of 3.07 inches. The average snowfall and the number of days with precipitation and the clear, partly cloudy, and cloudy days were all approximately normal.

There were five months with average temperatures above normal and seven that were subnormal. May was the warmest of record. December was the coldest month of the year and was also the month with the greatest minus departure. In extremes, June 19 was the hottest day of the year at most stations, and 106° at Diamond Springs was only one degree below the highest ever recorded in the month. The lowest temperature for the year, -2°, at Burkes Garden on February 13, did not closely approach the record low reading.

Following a January which was drier than usual, and February and March which were comparatively wet, dry weather prevailed until September. The average precipitation for September exceeded the greatest of record by more than one inch. At 22 stations the rainfall was greater than any previous September and at 8 of these, it was the greatest for any month of record.

The growing season was only fairly favorable. Early Spring truck plantings were delayed by the heavy March rains. In May, a disastrous drought began in the Eastern third of Virginia. This drought spread westward during June and July, and caused great damage to pastures and hay crops and to apples and peaches to a less degree. Corn was badly damaged in some sections. Cotton, peanuts and tobacco survived the drought in fair to good condition.

On March 4, tornadoes in Lee and Washington counties caused injury to 36 people and did an estimated damage of \$650,000 to property. On April 24, a small tornado near South Hill caused the deaths of three persons. Property damage from this storm was only \$5,000. On May 14 and 23 hail at several points in the state did an estimated damage of \$120,000, chiefly to crops. A series of wind and hail storms on June 19 to 23 caused about \$700,000 damage to crops and property in the extreme Northern counties.

On September 14 a severe hurricane lashed the coastal area of Virginia. On September 14 a severe nurricane asned the coastal area of Virginia. Several people were drowned in vessels offshore. Property damage in Virginia was estimated at one million dollars, and crop damage at \$1,500,000. Torrential rains along the Eastern slope of the Blue Ridge on Setpember 18 and 19 resulted in severe floods in the Roanoke and James River basins. At Cartersville, Columbia, and Bremo Bluff, the James River reached stages higher than had ever been known before. Two lives were lost in the floods and the combined damage to highways and bridges, property and crops was at least \$1,225,000. On December 27 and 29 glaze storms made highways dangerous and caused the death of one person, and minor injuries to a dozen others.

S. B. T.

MONTHLY STATE DATA 1944

		Tempe	rature			Precipit	ation		Number of days						
Month	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 February March April May June July August September October November December	39.7 43.8 54.0 69.3 74.1 75.8 73.8 68.7	+1.0 +2.5 -1.9 -0.5 +5.0 +2.2 -0.1 -0.3 +0.1 -1.0 -0.8 -4.3	79 82 86 89 96 106 102 102 100 91 79 69	$\begin{array}{c} 0 \\ -2 \\ -1 \\ 11 \\ 29 \\ 34 \\ 40 \\ 35 \\ 32 \\ 20 \\ 9 \\ 0 \end{array}$	2. 62 4. 92 5. 57 8. 05 3. 02 2. 35 3. 51 3. 52 7. 81 8. 28 2. 67	-0. 64 +1. 85 +1. 87 -0. 24 -0. 66 -1. 82 -1. 11 -0. 93 +4. 66 +0. 27 +0. 20 -0. 38	3.00 3.06 2.80 2.55 3.80 3.10 5.22 6.15 8.88 4.44 4.68 1.71	3.0 2.3 1.5 0.3 T. 0.0 0.0 0.0 0.0 T. 0.6 5.0	6 12 13 10 8 7 9 9 11 7 8 8	14 10 13 12 18 15 15 15 11 18	8 7 6 9 9 10 10 10 9 7 8 7	9 12 12 9 4 5 6 6 10 6 11			

Stations	Last in	First in	Stations	Lastin	First in
	spring	autumn		spring	autumn
ļ					
Tidewater Virginia			Charlottesville	Apr. 6	Nov. 24
Assateague Beach	Apr. 5	Oct. 21	Chatham		Oct. 16
Cape Henry		Nov. 13	Clarendon	Apr. 7	Oct. 16
Capron	Apr. 6	Oct. 16	Clarksville	Apr. 6	Oct. 16
Cheriton	Apr. 6	Nov. 13	Columbia		
Dahlgren	Apr. 4 Apr. 6	Nov. 13	Crozet	Apr. 6	Oct. 23
Diamond Springs	Apr. 6	Nov. 8	Culpeper	Apr. 6	Oct. 16
Deiros	Apr. 6	Nov. 26	Danville		Oct. 28
Driver Emporia		Oct. 16	Elkwood	Apr. 6 Apr. 29	Oct. 26
		7.00	Farmville		Oct. 16
Hog Island		Nov. 6	Fredericksburg		
Hopewell	Apr. 6		Helifon		
nopewen	Apr. 6		Halifax		
Langley Field	Apr. 6	Nov. 12 Oct. 23	Kenbridge	Apr. 6	
New Church	Apr. 4		Lincoln		
Norfolk	Apr. 6	Nov. 13	Louisa	Apr. 6	Oct. 16
Onley	Mar. 22	Oct. 23	Lynchburg	Apr. 5	Nov. 16
Princess Anne		Nov. 8	Manassas	Apr. 5	Oct. 16
Richmond	Apr. 6	Nov. 7	Martinsville	Apr. 6	Oct. 16
Saluda	Apr. 6	Oct. 23	Mount Weather	Apr. 30	Oct. 24
Smithfield	Apr. 6	Oct. 23	New Canton	Apr. 6	Oct. 16
Surry	Apr. 6	Oct. 16	Orange	Apr. 6	Oct. 16
Urbanna	Apr. 6	Nov. 13	Pinnacles	Apr. 30	Oct. 16
Walkerton	Apr. 6	Oct. 16	Quantico	Apr. 6	Oct. 23
Wallaceton	Apr. 4	Oct. 23	Randolph	Apr. 29	Oct. 28
Warsaw	Apr. 6	Oct. 16	Rockymount	Apr. 14	Oct. 17
Williamsburg	Apr. 6	Oct. 16	State Farm	Apr. 6	Oct. 16
Middle Virginia	l	l	Stuart	Apr. 6	Oct. 23
Bedford	Apr. 6	Oct. 16	Vienna	Apr. 5	Oct. 16
Callaville	Apr. 6	Oct. 23	Washington, D. C	Apr. 4	Oct. 23
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KILLING FROSTS 1944

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(Killing Frost Data Continued on Page 52)

COMPARATIVE ANNUAL DATA FOR THE STATE

Year	Mean tempera- ture	ghest	west	Average pre- cipitation	verage snow- fall	No. of days 0.01 inch or more of precipitation	o. of clear days	o of partly cloudy days	of cloudy
891 892 893 894 895 895 896 897 896 897 900 900 901 902 903 904 996 996 996 997 1910 1911 1911 1911 1912 1913 1914 1915 1916 1917 1918 1919 1919 1919 1919 1919 1919	55. 6 54. 7 55. 6 6 55. 5 56. 7 7 56. 2 55. 4 8 8 66. 9 57. 5 57. 6 55. 6 6 55. 5 56. 6 6 55. 5 56. 6 6 55. 5 56. 6 6 55. 5 56. 6 6 55. 5 56. 6 6 55. 5 56. 6 6 55. 5 56. 6 6 55. 5 56. 6 6 55. 5 56. 6 6 55. 5 56. 6 6 55. 5 56. 6 6 55. 5 56. 6 6 55. 6 6 55. 6 6 6 55. 6 6 6 55. 6 6 6 55. 6 6 6 55. 6 6 6 55. 6 6 6 55. 6 7 7 5 5 6 6 6 6 5 5 5 6 6 6 6 5 5 6 6 6 6	## 106 107 106 107 107 107 108 108 109 109 108 108 109	tsamol 1	47. 94 47. 94 48. 22 48. 23 42. 64 42. 23 48. 19 44. 71 48. 02 44. 99 40. 67 44. 99 40. 67 41. 00 44. 41 41. 00 44. 42 43. 23 46. 62 40. 03 48. 94 46. 91 48. 11 48. 67 47. 34 48. 68 48. 30 49. 46. 80 49. 46. 81 49. 46. 80 49. 46. 81 49. 46. 80 49. 46. 80 49. 46. 80 49. 46. 80 49. 46. 80 49. 46. 80 49. 46. 80 49. 46. 80 49. 46. 80 49. 46. 80 49. 46. 80 49. 46. 80 49. 46. 80 49. 41. 81 49. 81	23.1 17.0 8 8 12.8 11.8 8 7 36.7 6 9.5 9 15.2 1 11.2 9 20.3 9 20.3 8 4 12.8 5 11.2 24.6 6 23.7 7 7.4 13.8 24.8 3.7 12.8 24.8 12.8 5 11.2 8 12.8 12.8 12.8 12.8 12.8 12.8 12	95. 103 88 894 108 995 995 111 124 115 110 101 101 102 106 102 106 105 100 101 115 116 116 117 118 119 119 108 119 108 112 118 118 119 108 119 108 112 118 118 119 108 112 118 119 108 112 118 119 108 112 118 119 108 112 118 119 108 112 118 119 108 112 118 119 108 112 118 119 108 111 118 119 108 111 118 118 119 108 118 119 108 118 119 108 118 119 108 118 119 108 118 119 108 118 119 108 118 119 108 118 119 108 118 119 108 118 119 108 118 119 108 118 119 108 118 119 108 118 118 118 118 118 118 118 118 118	163 164 166 166 167 163 171 162 176 170 172 170 172 170 172 171 151 149 165 178 168 169 161 161 161 163 163 164 165 168 169 169 169 169 169 169 169 169 169 169	100 104 103 106 106 107 106 106 106 106 106 106 107 107 108 109 109 109 109 109 109 109 109 109 109	102 98 89 95 100 109 98 81 104 102 111 1106 111 114 103 111 104 112 102 111 107 98 81 111 107 98 81 107 89 81 107 89
1944 1945 Normals or Extremes	56.0 55.9	110	- 2 29	44.94	12. 3	104	165	97 101	104

Sealous Counties 2		Climatological Data for the Year 1944											1944								
Tribute Virginia (Capped, Fillish September) 10			<u> </u>	Ŀ		eratur	e, degrees	Fahre	nheit	7.	1 .	Pr	ecipitat	ion					Sky		5
Cape Herry Herry			feet	Length of record,	Annual mean	Highest	Date	Lowest	Date	Length of record,	Total for the year	Greatest monthly	Month	Least monthly	Month	·Total snowfall	of rai	Number of clear days	Number of partly cloudy days		Prevailing directi of wind
Calpeper	Cape Henry Capron, 3 miles west. Cheriton. Dahlgren, (Prov. grds.) Diamond Springstf. Emporia, 1 mile WNW. Holland, 1 mile east. Hopewell Langley Field. Norfolk Onley, 1 mile south. Richmond Saluda. Walkerton. Wallaceton, 3 miles west. Warsaw. Williamsburg, 2 mi. NW. Means and extremes. Middle Virginia. Bedford. Callaville. Charlottesville, 2 mi. W. Chatham, 4 miles north. Clarendon. Clarksville. Columbia	Southampton Northampton King George Princess Anne Greensville Nansemond Prince George Elizabeth City Norfolk Accomac Henrico Middlesex King and Queen Norfolk Richmond James City Bedford Brunswick Albemarle Pittsylvania Arlington Mecklenburg Fluvanna	100 111 188 255 800 90 111 400 162 107 35 25 143 70 950 854 862 225 286 220	8 25 36 60 74 26 65 20 11 14 50 26 22 22 26 43	58.3 60.0 57.5 61.1 58.8 60.0 59.4 60.4 58.9 58.5 57.9 57.6 58.3 56.3 57.9 57.0 58.3 56.3 57.9	102 100 98 106 99 104 102 101 100 103 102 102 106 100 101 100 100 101 100 101 100 101 100 100 101 100 10	June 19 June 18 June 18 June 18	4 15 18 13 0 9 15 18 12 13 4 6 12 8 0 9 2 13 14 	Jan. 10 Jan. 20 Jan. 39 Jan. 10	5 8 8 25 36 14 12 57 108 74 27 73 21 12 19 14 44 44 44 44 44 44 44 44 44 44 44 44	45. 58 47. 89 40. 02 50. 63 46. 18 45. 86 49. 25 40. 16 41. 78 49. 96 45. 46 54. 51 42. 43 41. 92 45. 82 53. 99 64. 79 64. 70 64. 70 64	6. 85 6. 29 9. 84 7. 63 8. 31 6 22 9. 61 5. 67 6. 93 6. 45 6. 15 9. 80 10. 65 6. 84 16. 96 19. 63 19. 63 19	Mar. Mar. July Sept. Sept. Aug. Mar. Sept. Mar. Mar. Mar. Mar. July Mar. Jan. Sept.	1. 23 1. 07 0. 59 0. 81 1. 38 1. 35 0. 85 0. 67 1. 12 0. 73 0. 54 2. 0. 77 0. 13 2. 32 2. 05 1. 80 0. 90 1. 11 0. 68	Aug. May June May June May June Apr. May	4.0 4.0 3.5 5.0 4.2 3.5 1.9 5.4 6.0 6.8 5.4 6.8 5.4 6.8 6.8 6.8 6.8 6.8 6.8 6.8 6.8	98 83 106 88 102 91 101 111 108 93 107 103 123 98 86 100 118 84 99 112 106 108	199 218 107 172 227 227 229 119 109 213 125 205 157 179 182 213 169 153 183 124 153 193	82 33 134 106 73 31 77 130 124 126 124 68 124 110 52 72 93 135 108 113 113 113 113 113 77	85 115 88 66 110 197 117 133 85 77 132 81 104 78 75 128 109 119 115	nw. nw. ne. w. ne. nw. sw. sw. sw. n. sw. nw.
## Afton.1 mile east. ## Afton.1 mile east. ## Afton.2 mile east. ## Afton.3 mile east.	Crozet. 2 miles north. Culpeper. Danville, 2 miles south Elkwood, 7 miles south Frarnville. Fredericksburg, 4 mi. SW Halifax. Kenbridge, 1 mile SE. Lincoin II. Louisa I. Lynchburg Manassas, 4 miles south Martinsville. Mount Weather II. New Canton Orange, 1 mile SW Pinnacles Quantico(USMC), 1 mi. S. Randolph Rockymount I. Stuart Washington, D. C.	Albemarle Culveper Pitkylvania Culveper Pitkylvania Culpeper Prince Edward Spottsylvania Halifax Lunenburg Loudoun Louisa Campbell Prince William Henry Loudoun Buckingham Orange Patrick Prince William Charlotte Franklin Patrick	475 564 250 450 75 425 500 500 487 929 176 1,014 1,725 300 514 2,820 22 334 1,132 1,500	3 36 28 4 23 51 13 43 29 78 49 44 28 274	57. 0 56. 8 59. 1 57. 4 56. 2 56. 2 56. 2 56. 4 57. 4 58. 3 50. 0 56. 7 55. 5 57. 2 56. 9	100 100 102 99 102 101 101 101 101 102 92 99 104 97 97	June 18t June 18t June 18t June 18t June 29 June 29 June 19 June 19 June 19 June 19 June 27 June 19 June 27 June 19 June 27 June 19 June 18t June 18t June 18t	10 12 4 10 11 8 11 8 16 	Jan. 10† Feb. 13 Jan. 10 Feb. 13 Jan. 10 Jan. 10 Feb. 13 Jan. 10 Feb. 13 Jan. 10	3 38 54 25 53 14 29 73 28 14 41 51 83 11 40 40 51 22 74	45. 43 48. 22 38. 73 51. 83 39. 01 57. 09 52. 42 41. 34 44. 64 43. 27 41. 03 44. 05 44. 05 45. 05 46. 05 47. 05 48. 81 49. 05 49. 05 49	16. 01 11. 04 9. 83 9. 04 9. 82 6. 08 15. 26 9. 72 5. 69 6. 25 10. 85 6. 94 6. 32 12. 02 10. 52 9. 00 6. 17 19. 46 12. 59 9. 24 6. 49	Sept. Aug.	1.15 1.06 0.77 0.91 0.72 1.88 1.96 1.89 1.91 1.13 0.78 0.59 1.44 2.01 1.14 2.02 2.55 1.02	July May Aug. May June Dec. June May May Aug. June June June June July June Aug. Aug. Aug. Aug. Aug.	7.5 7.3 8.6 6.4 3.9 4.7 19.0 5.8 10.4 9.5 24.7 22.5 12.9 9.5	106 88 109 97 103 114 100 84 119 111 123 78 104 74 88 110 81	138 269 119 247, 196 187 159 192 190 159 121 161 183 56 168 240 189 100 224 192 153 105	96 42 155 49 66 105 116 - 87 70 133 122 91 124 134 102 56 78 139 43 100 125 139	132 55 92 70 104 74 91 87 106 74 123 114 59 176 96 70 99 127 99 74 88 122	W. S. S. W. SW. SW. SW. SW. SW. SW. SW.
State means and extremes	The Great Valley Afton.1 mile east Balcony Falls Big Meadows Blacksburg Buchanan Burkes Garden Catawba Sanatorium Clifton Forge Clinchport Dale Enterprise Damascus Dante Deerfield Emory Floyd Glen Lyn Hot Springs Ivanhoe Lexington Luray Mendota Monterey Moores Creek Dam Mountain Lake, nw end. North River Dam Pennington Gap, 1 mi. W Radford Riverton Roanoke Saltville Staunton Timberville Winchester Woodstock Wytheville Means and extremes.	Nelson. Rockbridge Madison Montgomery Botetourt. Tazewell Roanoke Alleghany. Scott Rockingham Washington Russell Augusta. Washington Floyd Giles Bath Wythe Rockbridge Page Washington Highland Rockbridge Giles Augusta. Lee Montgomery Warren Roanoke Smyth Augusta Rockingham Frederick Shenandoah Wythe	1, 750 3, 500 2, 083 875 3, 250 2, 1050 1, 055 1, 300 1, 928 2, 060 1, 1524 2, 195 2, 100 1, 120 1, 303 1, 780 4, 000 1, 918 1, 386 1, 386 1, 780 4, 000 1, 120 1, 305 1, 305 1, 120 1, 305 1, 120 1, 305 1, 120 1, 305 1, 120 1, 305 1, 120 1, 305 1, 120 1, 305 1,	100 63 27 48 34 27 20 12 13 51 67 3 3 10 11 13	48.5 53.1 56.7 55.3 53.8 53.6 54.4 4 55.5 54.2 55.4 8 49.9 55.7 55.1 2 54.8 55.4 55.1 55.2 54.0 55.7 55.1 55.2 55.2 55.2 55.2 55.2 55.2 55.2	990 933 1000 92 94 95 95 95 96 96 89 97 97 97 97 97 97 97 97 96	July 16† June 18 Sept. 3 June 18 June 18 July 25† June 18	0 2 10 -2 7 7 0 6 6 2 2 2 1 12 6 10 16 9 7 5	Feb. 13 Feb. 13 Feb. 13 Feb. 13 Feb. 13 Feb. 13 Dec. 15 Feb. 13 Dec. 18 Jan. 10 Feb. 13 Feb. 1	14 10 50 44 50 44 21 47 65 18 21 21 21 31 38 40 20 9 10 14 13 39 44 14 15 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	48. 26 47. 31 49. 24 48. 81 48. 81 48. 83 36. 17 37. 14 33. 21 52. 93 49. 70 50. 23 51. 87 36. 40 52. 77 46. 41 52. 77 46. 40 50. 23 50. 23	13. 07 12. 94 9. 08 11. 18 6. 83 8. 13. 18 6. 83 8. 15. 14 8. 15. 14 8. 15. 14 8. 15. 16 8. 16 16. 16 17. 16 18. 16 18. 16 18. 16 19. 16 16 16	Sept. Feb. Aug. Sept. Feb. Aug. Sept. Feb. Mar. Sept. Feb. Mart. Sept. Feb. Sept. Feb. Sept. Sep	0. 46 1. 100 1. 160 1. 173 2. 100 0. 23 1. 100 0. 23 1. 100 1. 36 1. 100 1. 24 1. 25 1. 100 1. 44 1. 55 1. 100 1.	Nov. June Dec. Aug. Aug. Aug. Jule July Jan. June July Aug. Jan. Junov. Junov. Jan. Aug. Aug. Aug. Aug. Aug. Aug. Aug. Aug	10.3 5.5 17.0 20.8 13.5 15.5 13.5 13.5 13.5 13.5 13.5 13.5	80 110 109 126 110 128 117 128 117 198 142 113 137 141 114 133 137 1114 188 180 100 167 114 114 114 114 114 115 116 117 118 118 119 119 119 119 119 119 119 119	173 139 176 187 187 186 176 187 186 196 199 121 121 121 121 118 189 90 90 1241 118 118 124 118 124 118 124 118 124 118 124 118 124 125 126 127 127 128 128 128 128 128 128 128 128 128 128	77 115 189 80 80 136 126 120 116 112 118 87 79 111 887 82 148 87 168 119 110 110 117 122 110	116 112 106 73 101 199 91 135 152 122 122 122 123 136 119 100 111 161 161 195 128 128 128 128 128 128 128 128 128 128	W. W

Section and State averages are computed from monthly means.

Section and State averages are computed from monthly means.

The mean departures from normal temperature and precipitation are based only on records from days, etc. T. Precipitation is less than 0.005 inch rain or snow. †Also on other dates. *Interpolated. †Partially interpolated. †Post-office addresses of these stations are as follows: Diamond Springs, Norfolk; Lincoln, Purcellyille: Mount Weather, Bluemont; Wallaceton, Hickory; Pinnacles, Meadows of Dan: Balcony Falls, Glasgow: Big Meadows, Luray; Moores Creek Dam, Lexington; North River Dam, Staunton.

Figures and letters following station name indicate distance and direction of station from the city Post Office.

Stations		pril May June J	1 i		
Cape Henry			uly August September	October November Decembe	Annual
Cape Henry 3. 68 + 0.58 5. Capron Capron 8. 50 5. 5 Capron 4. 80 + 0.99 6. 5 Cheriton 4. 80 + 0.99 6. 5 Diamond Springs 4. 23 + 0.69 5. 6 Emporia 3. 10 - 0.72 5. 6 Holland 3. 88 - 0.02 5. 8 Hopewell 2. 60 - 0.38 5. 6 Langley Field 4. 83 4. 83 4. 80 + 1.57 5. 6 Norfolk 4. 47 + 1. 37 5. 5 6 6. 6 8. 8 5. 6 6. 6 9. 8 5. 6 6. 6 9. 8 5. 6 6. 6 9. 9 5. 7 5. 7 7. 7 5. 7 6. 6 9. 9 9. 8 5. 6 6. 6 9. 9	Precipitation Departure Precipitation Departure Precipitation	Departure Precipitation Departure Precipitation Departure Precipitation	Departure Precipitation Departure Precipitation Departure	Precipitation Departure Precipitation Departure Precipitation Departure	Precipitation Departure
Means			1 1	1 1 1 1	
Means 2.59 - 0.70 4.3 Great Valley Afton 2.21 - 1.65 3.5 Balcony Falls 2.56 - 1.85 4.6 8.6 8.6 8.6 8.6 8.6 8.6 8.6 8.6 8.6 8.6 8.6 9.6 <td>.44 5.34 1.99 6.29 +2.46 3.43 -1 .75 5.07 +1.97 6.39 +2.87 3.02 +1 .74 5.78 +2.30 5.78 +1.40 3.44 -1 .63 5.44 +2.26 7.09 +3.34 4.43 +1 -1 -2.99 -1</td> <td>$\begin{array}{cccccccccccccccccccccccccccccccccccc$</td> <td>$\begin{array}{cccccccccccccccccccccccccccccccccccc$</td> <td>$\begin{array}{c} 3.84 + 0.48 & 2.50 + 0.12 & 2.42 - 1.\\ 2.38 - 0.76 & 3.60 + 1.31 & 2.77 - 0.\\ 3.10 - 0.53 & 1.95 - 0.51 & 2.84 - 2.\\ 2.94 + 0.02 & 2.50 - 0.03 & 2.53 - 0.\\ 2.94 + 0.02 & 2.50 - 0.03 & 2.53 - 0.\\ 2.94 + 0.02 & 2.50 - 0.03 & 2.53 - 0.\\ 3.32 + 0.27 & 3.20 + 0.91 & 3.49 + 0.\\ 1.56 - 1.25 & 2.90 + 0.69 & 2.22 - 1.\\ 2.51 - 0.78 & 2.17 - 0.16 & 2.47 - 0.\\ 3.97 \dots & 1.65 & 1.88 \dots$</td> <td>14 45. 82 +1.61 25 53. 39 +13. 56 24 66 60 +0.27 25 14 46 60 +0.27 26 14 46 60 +0.27 27 14 46 60 +0.27 28 55 58 58 13. 33 28 14 1.0 -0 11 28 14 3.9 2 +2.66 28 16 38 -0.3 29 16 38 -0.3 20 18 18 10. 39 20 18 18 10. 39 20 18 18 10. 39 20 18 18 30 20 18 18 10. 39 20 18 18 10. 39 20 18 18 10. 39 20 18 18 10. 39 20 18 18 10. 39 20 18 18 18 18 20 18 18 18 18 20 18 18 18 18 20 18 18 18 18 20 18 18 18 18 20 18 18 20 18 1</td>	.44 5.34 1.99 6.29 +2.46 3.43 -1 .75 5.07 +1.97 6.39 +2.87 3.02 +1 .74 5.78 +2.30 5.78 +1.40 3.44 -1 .63 5.44 +2.26 7.09 +3.34 4.43 +1 -1 -2.99 -1	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 3.84 + 0.48 & 2.50 + 0.12 & 2.42 - 1.\\ 2.38 - 0.76 & 3.60 + 1.31 & 2.77 - 0.\\ 3.10 - 0.53 & 1.95 - 0.51 & 2.84 - 2.\\ 2.94 + 0.02 & 2.50 - 0.03 & 2.53 - 0.\\ 2.94 + 0.02 & 2.50 - 0.03 & 2.53 - 0.\\ 2.94 + 0.02 & 2.50 - 0.03 & 2.53 - 0.\\ 3.32 + 0.27 & 3.20 + 0.91 & 3.49 + 0.\\ 1.56 - 1.25 & 2.90 + 0.69 & 2.22 - 1.\\ 2.51 - 0.78 & 2.17 - 0.16 & 2.47 - 0.\\ 3.97 \dots & 1.65 & 1.88 \dots $	14 45. 82 +1.61 25 53. 39 +13. 56 24 66 60 +0.27 25 14 46 60 +0.27 26 14 46 60 +0.27 27 14 46 60 +0.27 28 55 58 58 13. 33 28 14 1.0 -0 11 28 14 3.9 2 +2.66 28 16 38 -0.3 29 16 38 -0.3 20 18 18 10. 39 20 18 18 10. 39 20 18 18 10. 39 20 18 18 30 20 18 18 10. 39 20 18 18 10. 39 20 18 18 10. 39 20 18 18 10. 39 20 18 18 10. 39 20 18 18 18 18 20 18 18 18 18 20 18 18 18 18 20 18 18 18 18 20 18 18 18 18 20 18 18 20 18 1
Mendota 2, 54 - 1, 84 8, 7	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-0.29	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	18 47. 70 +5. 7

Note.—In this publication, annual means are computed from data for all stations: except those in supplemental table; 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. All means include the interpolated values. *Interpolated.

Monthly and Annual Mean	Mammanatures for the Va	on 1044 with Departures	from the Mormel
monthly and Annual mean	Temperatures for the Te	WI IGES MITH Departmen	Trom one normar

		Monthly and Annual Me			1									110	1 1			1								
	Jan	uary	Febr	uary	Ma	rch	Ap	ril	Ma	у	Ju	ne	Ju	ly	Aug	rust	Septe	mber	Octo	ber	Nove	mber	Dece	mber	Ann	ual
Stations	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 Capron Capron Cheriton Dahlgren Diamond Springs Holland Hopewell Langley Field Norfolk Onley Richmond Saluda Walkerton Warsaw Williamsburg Means	39. 8 40. 9 38. 7 41. 8 39. 9 40. 6 40. 4 41. 7 41. 0 39. 8 39. 8 38. 0 39. 9	+2.2 -1.9 -1.0 +0.7 -0.1 +1.1 +1.9 +1.9 -1.8	41. 2 42. 3 39. 0 43. 8 42. 5 43. 6 42. 2 43. 4 41. 2 40. 9 40. 0 40. 4	+1.3 +0.1 +2.2 +2.8 +1.2 +0.7 +1.4 +1.5 -0.1 +2.8 +3.6 +1.2	46. 7 47. 0 43. 6 49. 0 47. 4 47. 1 47. 9 46. 6 45. 5 45. 4 46. 2 46. 2	-2.0 -1.3 -2.1 -1.7 -0.7 -0.3 +1.0 -1.7 -1.5 -1.0 +0.1 -2.4	56. 8 57. 4 54. 4 59. 0 57. 5 59. 2 56. 4 57. 8 56. 4 56. 8 56. 8 56. 6 57. 8	+0.4 +1.2 +0.2 +1.7 +1.6 +1.0 +2.0 +0.1 +1.4 +1.9 +1.1	71. 2 71. 6 71. 5 74. 0 71. 2 78. 0 71. 4 70. 4 71. 8 71. 8 71. 2 72. 2 71. 3	+7.9 +7.7 +4.33 +5.4 +6.2 +6.4 +5.3 +7.5 +7.5 +7.5	77. 4 77. 2 74. 9 78. 4 75. 7 78. 4 76. 8 77. 6 76. 0 77. 0 77. 0	+1.8 +4.3 +0.5 +3.1 +2.5 +3.0 +2.7 +2.0 +2.4 +2.4	77. 2 78. 3 77. 6 80. 0 76. 6 79. 1 79. 2 77. 8 78. 4 77. 8 78. 4 77. 5	+0.7 +2.3 -1.0 +0.1 +0.7 +0.5 +1.1 -0.1 +0.3 +1.3 +1.7	75. 8 77. 0 76. 3 77. 8 74. 2 77. 0 77. 2 77. 4 75. 8 75. 3 75. 8	+1.1 +0.8 -2.6 -0.3 -0.2 0.0 -0.1 -0.8 -1.1 -0.3 +0.3	72.6 75.2 71.4 74.0 72.4 73.7 73.5 74.0 72.3 71.8 71.2 71.4 72.2 72.1	+1.5 +1.4 +1.0 +1.9 +1.6 +2.4 +1.3 0 +1.7 +3.3 +1.2	58.3 63.5 58.2 63.0 59.9 60.0 62.4 60.0 58.8 57.4 57.8 59.3 58.5	+0.3 +0.4 -0.5 +0.1 -0.3 -0.1 +0.7 -0.8 -2.1 -1.9	47. 8 50. 6 47. 6 52. 0 49. 2 50. 0 49. 6 51. 1 50. 6 48. 9 46. 5 48. 0 49. 3	-0.1 -0.5 -1.5 +0.4 -0.8 +0.9 +0.6 -3.9 +0.4 +2.2 -1.8	39.5 36.6 40.2 39.2 38.6 38.4 39.8 39.4 37.0 35.4 35.2 36.6	-2. 4 -4. 3 -3. 0 -2. 4 -3. 8 -3. 3 -2. 1 -2. 8 -6. 2 -1. 3 -4. 4	61.1 58.8 60.0 59.4 60.4 58.9 58.5 57.9 57.8 58.7	+0.8 -0.3 +1.0 +0.5 +0.9 +1.5 +0.9 +2.3 -0.2 +0.7
	40.1	+0.5	41.7	+1.5	46.6	-1.1	51.0	+1.1	71. 7	+6.1	76.7	+2.7	78. 3	+0.7	16.2	-0.3	72.8	+1.0	60.0	-0.3	49.3	-0.4	37.8	-0.4	33.0	+0.7
Middle Virginia Bedford Callaville Charlottesville, 2 miles W. Chatham Clarksville Columbia Crozet Culpeper Danville Elkwood Farmville Fredericksburg,4 miles SW Kenbridge Lincoln Louisa Lynchburg Martinsville Mount Weather New Canton Quantico Rockymount Stuart Washington, D. C. Means	39. 4 37. 8 39. 4 40. 0 37. 8 40. 0 37. 0 41. 0 35. 6 39. 0 37. 0 38. 9 36. 4 37. 9 40. 8 39. 8 39. 8 39. 8 37. 0 40. 8 37. 9 40. 8 37. 9 40. 8	+0.4 +1.4 +0.1 +2.5 +0.8 -1.1 +0.7 +0.5 -1.1 +3.0 +2.3 +3.3 -0.2 +0.8 +0.8 +0.8 +0.8	42. 8 37. 7 42. 8 43. 8 40. 5 39. 1 43. 9 37. 0 41. 3 38. 2 41. 6 36. 8 40. 4 43. 3 38. 2	+3.3 +0.3 +1.2 +3.5 +2.3 -2.8 +1.2 +1.2 +1.2 +1.2 +1.2 +1.2 +1.5 +1.5 +2.8 +1.5 +2.8 +1.5 +1.5 +1.5 +1.5 +1.5 +1.5 +1.5 +1.5	46. 3 41. 4 46. 6 45. 6 44. 1 43. 8 44. 4 47. 7 43. 8 43. 4 41. 8 42. 2 47. 0 34. 2 46. 4 46. 9 43. 0	-1.8 -5.0 -1.1 -2.7 -2.5 -0.9 -2.6 -2.6 -2.1 -5.2 -0.4 -0.4	57. 4 54. 0 57. 1 56. 0 55. 4 54. 4 54. 6 58. 3 52. 6 56. 8 52. 4 55. 2 56. 3 57. 4 43. 2 55. 3 55. 3	+1.4 -1.7 +1.0 -0.5 +0.1 -0.2 +0.2 -0.8 +1.5 -0.8 +1.5 -0.2 -0.2 +0.5	71. 0 71. 1 71. 0 71. 1 70. 6 70. 2 71. 4 72. 2 69. 8 69. 8 71. 6 72. 0 66. 8 70. 5 69. 2 69. 6 71. 6	+5.3 +5.5 +7.3 +4.7 +4.9 +4.9 +4.3 +7.2 +4.3 +4.3 +7.2 +4.3 +7.9	76. 8 74. 6 76. 2 76. 6 75. 0 75. 8 77. 7 78. 0 75. 6 75. 2 76. 4 77. 2 76. 4 77. 2 74. 8 74. 8	+3.4 +1.7 +2.12 +3.6 +3.8 +1.7 +3.8 +3.0 +4.2 +1.8 +2.5 +1.81 +0.5 +2.1 +2.6	76. 6 77. 7 75. 8 77. 4 77. 6 77. 8 77. 9 77. 4 77. 0 • 76. 9 77. 4 78. 8 77. 1 73. 8 75. 5 78. 5 79. 2	-0.4 +1.0 -1.6 -0.4 +1.1 -1.9 -0.8 +0.8 +1.7 -0.8 +1.7 -1.2 -1.2 -1.2 -1.2 -1.2	75. 4 74. 9 74. 8 74. 4 74. 3 75. 2 76. 6 74. 0 78. 6 76. 9 74. 5 70. 8 70. 8 70. 8 70. 8 73. 3	-0.5 -0.2 -0.9 -1.5 -0.5 -1.3 -1.2 -1.8 -1.1 +2.0 +0.7 -1.0 -1.1 +2.0 -1.3 +1.2	68.8 70.6 70.1 69.0 69.6 71.9 69.7 69.8 70.0 69.2 69.8 69.8 70.4 67.5 69.2 70.5	-0.8 +0.2 -0.3 -0.2 +1.5 -0.6 -0.5 +0.1 -0.6 +1.3 +1.3 +1.6 2 -0.8 -1.2 -0.6 +2.4	58. 2 56. 6 57. 2 55. 7 56. 7 56. 4 56. 4 56. 2 56. 2 56. 2 56. 2 56. 2 56. 2 56. 2 56. 2 56. 3 56. 2 56. 3 56. 3 56	-0.9 -2.1 -0.8 -2.6 -1.8 -2.1 -2.1 -2.1 -2.1 -2.1 -2.2 -0.7 -2.4 -2.0 -1.0	48.0 47.2 47.5 45.6 45.8 46.5 48.0 44.7 47.5 46.8 46.4 47.2 39.4 46.0 45.5 47.2	-0.5 -0.8 -0.8 -1.8 -1.8 -1.8 -1.8 -1.8 -1.8 -1.8 -1	33.8 34.9 34.3 34.3 34.3 35.3 36.4 37.3 36.4 37.3 37.3 38.3 38.7 38.3 38.7 38.3	-3.64 -4.54 -3.75 -3.92 -3.92 -5.4 -6.07 -8.13 -2.22 -6.07 -8.13 -2.22	58. 3 56. 3 57. 9 57. 6 56. 7 57. 0 56. 8 59. 1 55. 1 57. 4 58. 2 56. 2 56. 6 57. 4 58. 3 50. 0 56. 7 57. 4 57. 6 58. 2 56. 6 59. 56. 6 59. 57. 6 56. 6 59.	+1.4 -0.2 -0.9 -0.3 +1.1 -0.9 -0.2
Great Valley Big Meadows					35.2		46.2		63.2		66. 4		69.8		66.0		59.7		50.2		36.7		26. 2			
Blacksburg Buchanan Burkes Garden Catawba Sanatorium Dale Enterprise Dante Emory Floyd Glen Lyn Hot Springs Lexington Luray Monterey Mountain Lake, NW, end. Pennington Gap. Roanoke Saltville Saltville Staunton Timberville Winchester Woodstock Wytheville	35. 6 38. 4 36. 2 34. 7 37. 6 37. 1 37. 8 36. 0 30. 2	+1.7 +1.2 +1.3 +1.5 -0.8 +3.4 -1.6 +2.5	38. 2 41. 6 37. 5 37. 7 41. 0 40. 5 39. 4 38. 4 40. 2	+3.6 +1.7 +5.1 -0.4 +2.8 +2.2 +2.4 +5.4 +2.1 +0.8 +4.8	42.3 45.8 40.8 42.1 41.0 45.0 44.1 43.5 42.2 37.4	-0.6 -1.5 +0.4 -3.1 -1.9 -0.8 +1.0 -2.8 -4.8 +0.5	51. 2 55. 2 48. 1 51. 8 51. 8 52. 4 52. 9 52. 0 54. 4	+0. 1 -0. 2 0. 0 -2. 1 -0. 2 -0. 8 0. 0 +0. 4 -1. 9 -1. 8 +1. 3	65. 8 69. 6 62. 0 67. 3 67. 0 66. 8 65. 9 66. 8 67. 2 68. 2	+5.3 +4.8 +4.9 +4.5 +5.1 +4.5 +2.6 +3.3 +5.4	71. 4 74. 2 66. 5 71. 5 71. 4 70. 6 70. 9 71. 4 72. 7 67. 6	+3.3 +1.7 +2.4 +1.8 +1.4 +1.4 +1.7 +1.7 +0.5 +0.9 +3.3	70.6 75.2 66.8 72.2 73.6 70.2 71.8 71.0 69.2 74.3	-0.7 -0.4 -0.5 -0.2 -1.9 -1.3 -2.8 -0.3	70.2 74.8 66.3 71.8 71.6 72.0 70.3 71.4 68.0 73.5	0.0 +0.2 +0.2 +0.2 -1.0 +0.3 +0.3 -0.6 -2.5 -0.3 +0.5	65. 6 68. 9 61. 8 65. 6 65. 8 65. 6 66. 8 65. 0 62. 2 68. 0	+0.7 -0.8 +1.2 -1.0 -1.4 -0.8 +2.0 -2.6 -0.5 +1.2	53. 3 56. 7 50. 8 54. 3 54. 2 54. 8 55. 6 55. 0 51. 0 55. 2	-0.3 -1.4 +0.6 -2.3 -1.1 +0.3 +0.4 -0.5 +0.4	42. 4 46. 0 40. 0 43. 4 43. 7 44. 4 43. 9 43. 4 40. 8 45. 2	-0. -0. -0. -2. -0. -1. +0. -1. +0. -1. +1.	4 31.0 5 34.0 2 29.6 3 1.6 2 31.0 4 32.1 3 1.4 2 31.8 6 30.4 1 28.0 4 33.5	-4.1 -4.5 -3.3 -6.8 -5.9 -5.6 -3.8 -6.3 -5.4 -2.4	56.7 50.8 53.8 53.6 54.4 54.2 54.2 54.2 54.2 54.2 55.8 49.9 49.9	+0.7 0.0 +1.0 -1.0 0.0 -0.1 +0.1 +1.0 -1.2 -1.0 +1.5
Means State	35. 3 37. 5	+1.5 +1.6	38. 0 39. 7	+3.0 +2.5	41.7 43.8	-1.2 -1.9	51. 4 54. 0	-0.6 -0.5	66.7 69.8	+4.9 +5.0	71.1 74.1	$+2.0 \\ +2.2$	72.0 75.8	-0. 7 -0. 1	71.1 73.8	-0.1 -0.3	65. 4 68. 7	-0.2 +0.1	53.9 56.4	-0.3 -1.0	43. (45. 8	$\begin{vmatrix} -0 \\ -0 \end{vmatrix}$	5 30. 9 8 33. 8	-4.6 -4:	53.4 56.0	+0.2 +0.1

For explanation of reference marks, see page 50.

KILLING	FROSTS	1944-Continued
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						o to 11 Continuou					
Stations	. Last in spring	First in autumn	Stations	Last in spring	First in autumn	Stations	Last in First in autumn		Stations	Last in spring	First in autumn
The Great Valley Afton Balcony Falls Berryville Big Meadows Blacksburg Buchanan Burkes Garden Catawba Sanatorium Clitton Forge.	Apr. 6 Apr. 6 Apr. 27 May 8 Apr. 29 May 8 Apr. 18	Oct. 11 Oct. 16	Dale Enterprise. Damascus Dante Deerfield Emory Floyd. Glen Lyn. Hot Springs Ivanhoe	Apr. 29 Apr. 13 Apr. 29 Apr. 29 Apr. 29 Apr. 29 May 8	Oct. 27 Oct. 16 Oct. 11 Oct. 16 Oct. 23 Oct. 16	Luray Mendota Monterey Moores Creek Dam Mountain Lake North River Dam Pennington Gap	Apr. 5 Apr. 6 May 8 Apr. 9 May 8 Apr. 28 Apr. 5	Oct. 28 Oct. 16 Oct. 16 Oct. 11 Oct. 16 Oct. 23	Roanoke Saltville Staunton Timberville Verona Winchester Woodstock	Apr. 29 Apr. 14 Apr. 29 Apr. 29 Apr. 6 Apr. 6 Apr. 14	Oct. 16 Oct. 16 Oct. 16 Oct. 16 Oct. 16 Oct. 16 Oct. 16

	ntal Table of Monthly	and An	nual	Prec	ipitat	ion f	or th	e Yes	r 19	44							
Stations	Counties	Drainage-basin	Elevation, feet	Length of record,	January	February	March	April	Мау	June	July	August	September	October	November	December	Annual
Abingdon Amissville Appomattox Assateague Beach Augusta Springs Bacon Big Knob	Washington Rappahannock Appomattox Accomac Augusta Fairfax Scott	Rappahannock	825 10 1,700 380	2 2 7 5 5 3 10	2 08 2.07 3.19 1.56 2.93 2.11	7. 32 5. 06 4. 25 3. 47 1. 64 7. 36	4. 11 5. 12 5. 68 4. 91 5. 28	3.06 4.52 3.80 2.24 2.94 8.15	3.80 3.56 1.89 6.97 1.44 1.94	0. 38 0. 64 1. 53 1. 50 2. 18 0. 93	1.37 2.05 1.94 2.34 2.06 0.97	3.89 4.27 1.88 1.52 1.35 3.85 2.23	4. 64 7. 98 14. 49 3. 02 5. 04 3. 92 4. 04	3.37 3.20 2.12 1.97 2.58 3.86 2.11	2. 88 1. 70 2. 40 3. 70 1. 92 2. 78 2. 86	3.01 2.71 1.92 1.60 2.16 3.35 2.43	39. 91 45. 78 34. 09 36. 04 35. 41
Big Stone Gap	Wise Nottoway Bland Fluvanna Rockbridge Carroll Augusta	Nottoway New Jamesdo	225 835	2 3 5 8 2 4	2. 74 2. 23 2. 11 2. 08 2. 61 1. 27	9.54 5.43 4.61 3.90 5.53 3.29	7. 25 6. 23 6. 05 4. 57 4. 31 4. 72	4. 64 4. 38 2. 34 2. 94 2. 68 2. 99 2. 15	3.76 2.07 3.49 4.10 5.31 3.78	2.91 0.31 0.45 1.79 2.56 1.63	1.55 5.66 3.26 3.33 3.86 1.01	5. 93 4. 11 4. 18 3. 77 1. 54 2. 37 4. 64	6. 01 3. 65 11. 34 9.12 6. 90 6. 46	2. 24 2. 31 3. 21 2. 34 3. 22 4. 47 2. 75	2. 85 3. 61 1. 78 2. 46 1. 79 2. 00 1. 26	2. 32 2. 48 2.75 2. 78 2. 17 2. 45	46. 36 45. 57 40. 90 45. 08 35. 41
Cleveland Cootes Store Copper Hill Covington Davenport Delaplane Dungar Dungar	Russell. Rockingham. Floyd. Allegheny. Buchanan Fauquier. Wise Scott.	Roanoke Jackson Ohio Potomac Tennessee	1,525 1,050 2,800 1,245 1,600 455 2,000 2,500	9 3 4 8 4 4 10 10	2. 27 1. 08 2. 27 1. 76 2. 25 2. 67 2. 13 2. 38	8. 41 5. 70 3. 64 7. 19 3. 05 8. 32 7. 88	5. 48 3. 18 5. 15 4. 47 4. 82 4. 39 6. 91 7. 06	3. 42 1. 85 2.02 1. 66 2. 75 2. 64 4. 52 2. 45	2. 12 4. 58 4. 62 4. 42 3. 31 2. 33 4. 09 2. 05	4.57 2.30 2.78 1.42 2.65 4.91 2.90 1.23	2, 41 3,26 2, 18 2, 74 1, 50 1, 72 2, 50	8. 68 2. 16 3. 93 1. 65 6. 82 3. 01 7. 28 3. 18	5.99 5.52 9.43 5.55 3.87 5.63 6.23 3.68	3. 76 3. 48 3. 92 3. 08 3. 80 4. 54 2. 83 1. 98	2. 77 0. 65 1. 69 2. 82 1. 68 3. 43 2. 16	8. 08 1.35 2. 05 2. 36 3. 19 8. 67 4. 15	52. 96 83.88 39. 54 54. 03 40. 70
Fieldale. Foraker Galax Glade Spring Gordonsville Goshen Groseclose Haysi	Henry Dickenson Grayson Washington Orange Rockbridge Smyth Dickenson	Roanoke Tennessee New Tennessee James North Tennessee Ohio	2,380 2,200 442 1,300 2,550	2 4 4 3 7 5 2	2. 65 2. 35 1. 98 2. 25 1. 64 1. 76 2. 16	4. 65 7. 15 4. 87 8. 40 8. 75 2. 56 6. 89 6. 89	6. 54 5. 05 5. 55 5. 11 4. 97 4. 26 4. 94 5. 98	3. 12 1. 98 3. 09 3. 10 1. 69 2. 92 4. 26	2. 46 2. 63 3. 67 3. 70 2. 07 4. 06 3. 04 3. 56	2. 28 4. 47 8. 93 3. 65 3. 89 1. 37 2. 85 4. 99	1.77 1.64 4.19 4.82 1.86 4.02 2.05	2.47 6.02 2.75 3.37 4.98 2.00 4.63	9. 26 6.05 7. 28 6 26 9.49 6.78 6.35 4.29	3 48 4.80 3.85 2.59 2.62 5.05 3.27	2. 41 2. 84 2. 04 0. 80 2. 31 2. 22 2. 89	2.64 2.20 2.70 2.31 4.01 3.22	43. 73 45. 61 46. 92 46. 05 48. 19
High Knob. Hillsville Hog Island Holston Honaker (near) Honaker. Hurley Independence	Wise Carroll Northampton Washington	Tennessee New Atlantic Tennessee do do Ohio	4,150 2,570 10 8,450 2,400 1,950 995	10 3 5 10 10	2. 59 1.76 4.43 2. 02 1.90 1.90 2. 25 2. 12	9.56 5.03 5.03 6.30 8.31 7.57 5.51 5.96	7.58 5.36 4.77 5.14 6.06 5.70 5.82 5.79	4. 61 2. 10 3. 33 2. 42 3. 58	4. 55 3. 89 1.58 3. 55 3. 93 *2. 73 4. 78 2. 63	4,38 1,63 2,37 2,05 3,35 2,17 2,45 0,92	2.23 4.99 3.60 0.47 1.93 1.47 1.71 5.05	5. 88 1. 45 2. 44 2. 77 5. 86	6.45 7.19 9.66 *4.36 5.73 *4.42 7.23 8.43	2. 17 4.03 3.03 3.40 5. 01 *4. 16 3. 96 4. 36	2.82 4.74 2.86 2.94 2.08 2.47 2.59	2.58 2.30 2.36 4.30 3.82 3.51 3.64 1.97	55. 40 47. 29 39. 64 52. 42 42. 95 47. 45 45. 47
Indian Valley Jonesville (TVA) Jonesville (VPI) Jordan Mines Kerrs Creek Loves Mill Lynchburg (Airport)	Floyd Leedo. Alleghany Rockbridge Washington. Campbell.	do Tennesseedo James North Tennessee	2,700 1,400 1,530 1,350 1,400 2,040	4 10 4 4 10 8	1.80 1.89 1.94 2.22 1.57 2.12 1.88	5. 76 10, 29 9. 52 4. 12 8. 81 8. 78 5. 13	5.09 7.84 7.38 3.83 3.34 4.77 4.45	2 13 3.69 1.20 2.54 3.60 3 15	5.24 2.56 1.28 4.56 4.19 5.38 3.06	3.93 3.09 2.11 1.43 2.13 4.17 3.04	4. 28 1. 18 1. 86 1. 96 1. 13 2. 53	2.16 2.86 4.24 2.46 2.48 4.27	6. 96 6. 35 5. 61 3. 58 9. 60 8. 13 10. 87	3.65 1.61 0.92 3.75 2.19 3.16 2.01	2. 37 3. 14 1. 54 1. 15 2. 39 2. 03	2 42 3.87 3.12 2.16 3.25 1.96	45.79 48.37 33.77 51.10 42.00
Manion Marion Mc Dowell Mc Gayheysville Mc Gayheysville Meadowriew Mons Montebello	Fairfax Smyth Highland Rockingham Washington Hedford Nelson	James Shenandoah Tennessee James	2,050 1,050 1,860 2,505	3 10 5 4 2	2.82 1.14 1.50 2.46 1.75	1.87 6.92 3.18 2.38 8.05 4.42 3.89	3.85 4.79 4.18 3.95 4.63 5.59 5.49	2.24 3.30 2.38 2.64 3.01 2.53 3.74	1. 24 2. 28 5. 66 3. 72 3. 41 7. 24 5. 74	2. 74 2.79 2.96 2.83 5.25 4.64 2.23	1, 65 3, 51 1, 92 0, 83 0, 66 3, 64 4, 69	4. 11 2.80 3. 71 2. 49 *6. 87 2. 16 6. 14	4.24 6 11 4.78 7.75 5.75 12.00 12.87	3.11 2.64 2.94 4.23 2.97 4.88 4.39	2.66 1.85 1.13 1.28 3.05 2.28 2.53	2.12 2.97 3.34 3.53	40. 25 37.53 48.74 57.54
Montebello (Fish Nursery). Monterey (Hydro. Sta.). Mount Jackson. Mt. Jackson (Hydro. Sta.). Mutters Gap. Nebo. Newcastle.	Highland Shenandoah do Russell Smyth Craig	Tennesseedo	3,008 1,050 900 3,925 2,425 1,300	3 2 8 4 10 10 8	2. 79 1. 97 2. 62 0. 94 2. 11	4.59 3.40 2.66 2.59 8.43 7.29 4.65	3.77 6.19 2.53 4.07	2. 10 4.41 *2.90 1.45	4.04 3.06 1.16 3.91	1.70 3 07 1.30 2.12	5.89 3.16 2.13 2.25 1.84 4.16 1.90	3.09 2.40 4.39 2.59 1.70	3.99 4.46 3.93 4.70 *6.40 4.67	3.03 3.05 5.78 5.00 2.93	1, 29 3, 24 *2, 30 2, 02	1.10 3.48 •3.85 2.48	30.19 51.21 ,40.42 34.01
North Garden Olinger Pedlar Dam Pilot Pulaski Pulaski Pulaski (Airport) Richmond (U. S. Air Base)	Pulaskido. Henrico	Tennessee James Newdododo James	1,400 800 1,193 1,904 2,200 160	7 8 11 4 4 3 8	3. 27 2.08 2.12 1.90 2.00 1.69 2.83	4.22 10.52 4.76 6.09 6.49 5.61	5. 18 8.05 4. 92 4.87 4.85 4.34 5.85	3.08 4.19 3.15 1.83 1.85 1.88 3.59	2.61 4.48 8.75 4.50 4.25 8.26 1.41	1. 41 3.04 1. 65 3. 31 1. 76 2. 13 1. 42	3, 62 1,55 4,98 1,28 2,55 3,01 7,76	8.70 2.17 2.02 1.33 1.42 6.44	18. 81 3. 98 9. 54 10.22 5. 95 5. 07 5. 50	3. 37 1. 35 3. 39 3. 73 3. 68 3. 58 1. 79	1. 92 1. 52 1. 72 1. 21 3. 94	2.34 1.84 2.06 2.26	53. 59 55. 52 44. 84 37. 37 36. 14 48. 40
Roanoke (Airways) Rockfish	Roanoke Nelson Floyd Smythe Buchanan Wythe Tazewell	James Roanoke Tennessee Ohio New Tennessee	500 3, 100 1, 725 1, 550 2, 340 3, 150	7 8 2 -4 4 10	2. 29 2.65 3. 03 2. 13 1. 90 2. 10 1. 37	5. 43 4. 04 5. 01 8. 12 5. 30	4.51 6.05 5.05 5.32 4.60 3.97 3.24	1.45 3.51 1.98 3.34 2.42	4.17 4.47 6.01 4.02 2.10 3.58 3.52	1. 37 1.02 4.66 3.22 1.87	3.79 2.81 4.42 1.67 2 15 1.63 1.53	2.89 3.38 5.05 2.40 1.24	9.16 21.16 9.41 5.52 3.15 6.38 4.52	3.61 3.58 5.49 3.91 3.20 5.23 3.56	1.96 2.97 2.80 2.38 2.35	2. 47 3. 26 2. 52 3. 66 3. 60 1. 78 2. 27	42.15 60.02 53.27 46.67
Stat Tannery Stony Creek Sugar Grove (Fire weather) Tazewell Tazewell (near, Rec.) Troutdale (T. V. A.) Troutdale (U.S. W. B.)	Graysondo.	Nottoway. Tennesseedododododo	2, 680 2, 450 2, 250 3, 080 3, 450	10 4	2.16 2.44 *2.45 2.62	2.74 5.98 7.77 7.88 7.25 *8.43 8.03	4.65 6.74 4.87 4.83 4.58 5.23	3. 13 2. 44 3. 06 3. 39	3.79 4.57 5.87 3.21 3.17 7.08	3. 23 2. 81 1. 20 2. 60 1. 37	3. 28 4 84 2.64 2. 92 5. 32	1.91 2.99 2.79 1.82 4.19 3.94	3.84 7.31 6.57 5.33 6.11 5.77	2.44 2.03 3.65 3.69 3.77 3.16	1.16 3.39 2.43 1.98 3.41 8.15	2.25 2.50 2.35 3.87 3.17 2.87	34.34 45.36 43.96 54.09
Tye River Urbanna. Vesuvius Wallace White Gate Williamsville:	Nelson Middlesex Rockbridge Washington Giles Bath	Chesapeake Bay North Tennessee New	1,700 1,875	7 8 5 10 4 5	2.05 3.62 1.46 3.20 2.08 1.50	5. 45 4. 69 3. 51 6. 00 6. 64 4. 48	6. 30 5, 29 4.53 3. 10 3. 67 6. 82	8.16 4.91 8.25 1.92 1.85 2.67	2.07 0.60 6 27 •2.70 4.09 4.86	2.07 1.40 1.79 1.82 2.79	3.52 4.45 2.33 2.20 3.52 1.60	1. 90 3. 24 3. 56 4. 49 1.75	12.60 6.03 8.45 5.45 4.59 4.80	2.90 2.27 3.32 3.00 3.00 4.01	2.85 3.90 2.08 2.95 2.07	3.08 1.88 2.04 3.12 2.17 3.20	47, 45 42, 28 42, 59 39, 95 38, 22

^{*}Interpolated or partly interpolated.

CHART SHOWING LOCATION OF OBSERVATION STATIONS

