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 OF THE
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GENERAL SUMMARY FOR THE YEAR 1896.

The meteorological conditions prevailing over Virginia during the year 1896, while, on the whole, normal, presented some features which may be considered worthy of mention.

They are the heavy precipitation occurring in March, July and September, the heated periods of April and August, and the great hurricane of Sept. 29th.

Aside from these phenomena, the year gave nearly average conditions. The following gives the more important conditions observed in each month.

JANUARY was rather colder than usual in all portions of the State, especially during the first decade which was marked by the prevalence of a decided cold wave. Minimum temperatures ranging from zero to 4 degrees below zero were recorded before a turn towards warmer set in. The month averaged 1.6 degrees below the normal. Precipitation was very deficient, the average being 2.18 inches less than the normal amount deposited. Snow fell in all sections of the State, but was light and did not remain.

FEBRUARY gave variable conditions in temperature. It opened and closed with cold weather prevailing and on the 20th and 21st the coldest weather of the year occurred. Normal weather obtained from the 7th to 19th. The lowest temperature reported was 10 degrees below zero, and the month averaged 3.3 degrees below the normal. Precipitation was abundant and quite decidedly in excess of the normal. It was heaviest in the Tidewater section and slightly deficient in the Great Valley section. But little of this was deposited as snow.

MARCH also was colder than usual. From the 11th to the 15th and the 24th to 26th the temperatures were quite low, a minimum of one degree below zero being recorded in the Great Valley section. With these exceptions the month presented no noteworthy features. Heavy rainfalls in the western portions of the State occurred, Big Stone Gap, Wise County, reporting the phenomenal fall of 12.73 inches, of which nearly seven inches fell on the last three days of the month. In the Middle and Tidewater sections, the rainfall was normal and slightly below, respectively. High water prevailed in the James River at the close of the month doing considerable damage.

APRIL temperatures were, on the whole, decidedly higher than the average. From the 12th to the 22d the weather was the warmest on record for the season. Maximum readings between 90 and 100 degrees were noted on the 18th and 19th. This condition caused premature growth of vegetation, foliage and fruit trees, and to the latter, some damage was done to blooms by subsequent frosts. The month was droughty, the precipitation being deficient in all portions of the state.

MAY thermal conditions averaged about four degrees in excess of the normal for the month. For twenty-three consecutive days from the 9th the temperature was from two to twelve degrees above the normal. There were, however, no periods of extreme heat. Precipitation was nearly normal and crops made rapid growth.

JUNE weather was well within the record for the month. There were no decided or abnormal changes, but a uniform, slight deficiency in temperature, and a general and marked excess in precipitation. Crops progressed rapidly.

JULY was characterized by temperatures very near the normal during the entire month, and a remarkable excess in rainfall, particularly in the Tidewater section where it was from 2.82 inches to 7.62 inches above the normal. For the State the excess was 3.38 above the normal. Corn and tobacco made luxuriant growth. Rising water occurred in all the rivers of the state, and much damage resulted in rural districts from washing out cultivated land and crops.

AUGUST gave abnormally high temperatures, accentuated by a most oppressive sultriness, lack of rainfall and burning southerly winds. Sunstrokes and heat prostrations were numerous, and crops of all kinds suffered severely. During the prevalence of this hot weather maximum temperatures varying from 100 to 105 were recorded. The month closed with light frosts in the mountainous portions of the State.

SEPTEMBER. The predominant feature of this month was the West India hurricane which swept over the State on the night of the 29th. It broke all known records for severity and destruction both to life and property. Damage aggregating about \$1,000,000 was reported. Excessive rains attended the progress of the storm doing great injury in the agricultural districts, and causing freshets of alarming proportions in many of the rivers of the State. The temperatures were nearly normal during the entire month.

OCTOBER presented no marked departures in temperature, but was largely below normal in respect to precipitation. Heavy and killing frosts were general over the state on the 19th. The month was generally bright and pleasant, but too dry for fall sown grain.

NOVEMBER was marked by many days of mild, spring-like weather. The temperature average for the month was 4.0 degrees above the normal, and the weather was unusually genial until the end of the month, when a sudden and decided drop in temperature occurred, producing snow over the Middle and Valley portions of the state. The precipitation was above the normal also, and fall grain made good progress.

DECEMBER was generally cool, freezes occurring on various days during the month. The coldest period was from the 25th to the 28th, when ice, sufficient for skating, was formed. Precipitation was deficient. Snow occurred early in the month.

REVIEW OF THE CROP SEASON.

On account of the mildness of the winter, grain sown during the previous fall entered the year 1896 in an unfavorable condition, considerable of the winter wheat and oats being reported "winter killed." Throughout January the weather was more or less unfavorable, but February was more promising, much plowing and spring seeding being done, and some burning of tobacco plant beds. This class of work was also carried on through March and the end of the month found farmers up with their work and abreast of the season. Frequent rains and cool weather during April checked growth and prevented farm work until the last decade when it became unusually warm and forced vegetation to its normal development for the season. In May some light frosts occurred, causing slight damage to fruit buds, but, on the whole, the month was one of fair growth, especially for winter wheat and oats. Considerable tobacco was set out and the bulk of the corn planted. June, as regards temperature was seasonable, but in respect to precipitation it was decidedly too wet. Corn, tobacco and trucks grew well, but cotton and peanuts were damaged. Wheat headed and some was harvested, also oats, and haymaking was begun. Excessive local rains occurred in July which greatly damaged standing crops, especially cotton, corn and Irish potatoes. Drying winds prevailed during the last decade, during which there was an improvement in crops. Harvesting of wheat and winter and spring oats was pushed and threshing begun.

August was essentially hot and droughty. Corn and tobacco suffered from this and pasturage was cut very short. During the latter part of the month cutting and curing of tobacco was begun, fodder pulling was general, fall plowing pushed where the ground was moist enough, and some little turnip seeding done. Showery, but rather dry weather obtained in September. Tobacco was cured and housed, fodder saved, and a great deal of plowing and turnip seeding done. Corn was cut and peanuts dug. By the middle of October farm work was quite generally finished. A very good yield of corn, tobacco and sweet potatoes was realized, but winter wheat, winter and spring oats, clover, cotton, and fruits were rather below the average.

TEMPERATURE (DEG. F)

TIDEWATER VIRGINIA.—Highest yearly mean, 60.2, at Birdsnest; lowest yearly mean, 58.3, at Sunbeam; maximum temperature for the year, 101, at Petersburg, on July 28th; minimum temperature for the year, 4, at Ashland, on February 21st; annual range of temperature, 97.

MIDDLE VIRGINIA.—Highest yearly mean, 61.4, at Maidens; lowest yearly mean, 46.7, at Charlottesville; maximum temperature for the year, 105, at Nottoway C. H., on August

10th; minimum temperature for the year, zero, at Buckingham, on February 20th; annual range of temperature, 105.

THE GREAT VALLEY.—Highest yearly mean, 58.3, at Salem; lowest yearly mean, 50.1, at Dale Enterprise; maximum temperature for the year, 99, at Staunton, on August 9th, and Goshen, on August 11th; minimum temperature for the year, -10, at Big Stone Gap, on February 21st; annual range of temperature, 109.

PRECIPITATION.

TIDEWATER VIRGINIA.—Greatest yearly precipitation, 60.36 inches, at Sunbeam; least yearly precipitation, 30.29 inches, at Birdsnest; greatest monthly fall during the year, 11.23 inches, at Spottsville, in July; least monthly fall during the year, 0.10 of an inch, at Birdsnest, in February.

MIDDLE VIRGINIA.—Greatest yearly precipitation, 48.43 inches, at Rocky Mount; least yearly precipitation, 35.48 inches, at Fredericksburg; greatest monthly fall during the year, 10.23 inches, at Callaville, in July; least monthly fall during the year, trace, at Guinea, in October, and Buckingham, Charlottesville, and Stanardsville, in December.

THE GREAT VALLEY.—Greatest yearly precipitation, 53.92 inches, at Big Stone Gap; least yearly precipitation, 36.74 inches, at Dale Enterprise; greatest monthly fall during the year, 12.73 inches, at Big Stone Gap, in March; least monthly fall during the year, trace, at Dale Enterprise and Staunton, in December.

Comparative Table Showing Monthly Mean Temperature and Total Precipitation for Virginia for 1896, and Normal for Same Based on Eleven Years' Record.

Months.	Temperature (in degrees Fahr.)		Precipitation (Inches and hundredths.)	
	1896.	11 year normal.	1896.	11 year normal.
January	35.3	36.9	3.20	4.38
February	38.1	41.4	4.26	3.99
March	47.6	44.3	4.44	4.15
April	58.6	55.9	1.01	3.03
May	68.7	65.5	4.56	4.44
June	71.4	71.7	5.37	3.68
July	76.3	76.3	6.99	3.61
August	75.7	75.0	3.76	3.59
September	67.9	67.8	4.94	4.47
October	54.7	57.4	6.05	3.17
November	56.3	47.3	3.84	2.48
December	36.9	40.0	1.05	3.08
Annual	56.4	56.8	3.57	3.67

NOTES AND COMMENTS.

During 1896 there were seventeen voluntary observation stations established, and three discontinued.

On page 9, table of "Monthly and Annual Precipitation" etc., only stations having full year's data are considered in computing the total precipitation for the year.

ERRATA, PAGE 9.—Annual precipitation should be: Norfolk, 44.60; Buckingham, 39.84; Fredericksburg, 34.43; Manassas, 35.27; Bristol, 44.26; Dale Enterprise, 37.75; Lexington, 48.52; Salem, 41.15.

RECEIVED TOO LATE FOR CLASSIFICATION.—Number of forecast cards mailed daily: Lynchburg, 98; Norfolk, 25.