

saved housed and cured, wheat threshed and fodder secured. Dry weather retarded plowing and seeding in many counties in the northern part of the State, until the 22d and 23d when ample general rains occurred, which softened the soil and enabled this work to be prosecuted.

The last issue of the Weekly Crop Bulletin was published on October 27th.

GENERAL SUMMARY FOR THE YEAR 1898.

JANUARY was milder than usual, though the forepart of the month was cold. The average daily excess in temperature was about 2°. Precipitation was below the normal, the deficiency for the month being 1.76 inches. Most of this precipitation came in the form of rain, the only general snow storm reported being on the 30th and 31st. Fogs prevailed on a number of days in the valleys and along river courses. Thunderstorms were reported at various points in Valley counties on the 25th. Prevailing winds W., and NW.

FEBRUARY, on the whole, was rather cold, and, like January, deficient in precipitation. There were many bright, genial days, but several sharp falls in temperature served to bring the average below the normal. Temperature departure about 5°, and precipitation 3.05 inches, below the normal. Snow occurred early in the month. Notwithstanding the diminished precipitation the flow of springs and wells was unabated and the height of rivers normal for the season. Earthquakes reported in the Valley section on the 5th, and distant thunder on the 20th. Prevailing wind direction W.

MARCH gave unusually mild weather with many clear, balmy days. It was more like April in respect to temperature and wind travel than the average March. The excess in temperature averaged 6°, but the precipitation continued deficient, though much nearer normal than the two preceding months. Snowfall light and scattered except in the Valley counties where the ground was quite well covered early in the month. Fogs occurred in the headwaters of the various river systems and thunderstorms in various portions of the State. Prevailing wind direction, W.

APRIL temperature was below the normal. Coldest day was the 6th. Killing frosts damaged fruit bloom and vines early in the month. Precipitation about one-half an inch above the normal. Month chiefly remarkable from the fact that it gave a greater amount of snow in portions of the State than had occurred in the winter months. Slight earthquake shock reported from Buckingham county. Prevailing wind direction, W.

MAY gave temperatures slightly higher than the normal, but was cool during the first and second weeks retarding vegetation to some extent. Frosts occurred on the 8th and 9th in various localities; damage slight. Precipitation nearly an inch above the normal; well distributed, as a rule, though Middle Virginia received a much larger quantity than any other part of the State. Rising water occurred in all the rivers. Prevailing wind directions, W., SW.

JUNE, in respect to temperature, was nearly normal, while as to rainfall it was deficient slightly over three quarters of an inch. Some cool weather obtained during the first decade in the coast counties, and generally over the State from the 20th to 23d. The hottest weather of the month occurred on the 30th. Thunderstorms were frequent; hail fell in scattered localities on the 11th, 12th and 26th. Prevailing wind direction, W.

JULY averaged slightly above the normal in temperature; gave wide extremes, the maximum being 105° and the minimum 44°. The precipitation ranged from 1.39 inches in the Tidewater section, to 2.10 inches in the Valley section, above normal. Phenomenal rains occurred in the southwest corner of the State, stations in Wise and Dickenson counties reporting from 10 to over 13 inches for the month. Fogs occurred on various dates. Prevailing wind direction, SW.

AUGUST weather was warm and sultry, and while in no case did the temperature reach as high a point as in the preceding month, yet it remained quite uniformly above the normal, the daily excess being from 1 to 5°. Precipitation continued above the average, coming mainly in the form of heavy thunderstorms. Twenty-four rainfalls from 2.50 inches to 5.00 inches were recorded, and monthly amounts from 9 to 10.61 inches occurred in the Piedmont and Valley sections. Freshet water occurred in some of the rivers of the State and damage was reported locally to lowland crops. In some instances large areas of cultivated soil was washed into neighboring streams. In the James river the rise was unimportant. Dense fogs were frequent. Prevailing wind direction, SW.

SEPTEMBER opened with a heated spell during which maximum temperatures of 99° were reported. Generally, however, this was counterbalanced by reactions to cooler weather, and the month, on the whole, was near normal. Precipitation was deficient, the amount deposited being about half the average. As a result, conditions were somewhat droughty and crops suffered, though no material damage was done. Light frosts were reported on the 8th, 11th and 12th at various places. Prevailing wind direction, W.

OCTOBER temperature departures were slight. Generally, the month was a wet one, though there were many bright, crisp days. Normal values in temperature were the rule throughout each decade except from the 3d to the 9th when maximums of 80 and 90° were noted. The first killing frosts of the autumn occurred between the 20th and 31st, but no special damage done as the bulk of the crops were secured prior to this time. Heavy monthly precipitation again occurred, particularly in the western portion of the State, where it ranged from 5 inches in Middle and Southside counties to 9 and 12 inches in the central Piedmont region. The first snowfall of the season occurred in the Valley section towards the close of the month. Rising water occurred in all the streams of the State, and flood water in the James, which did some small damage in the agricultural districts, and covered the wharves of various water transportation companies in the city of Richmond. Damage prevented by prior warning. Prevailing wind direction, W.

NOVEMBER closely approached the normal conditions both in temperature and precipitation. There were no unusual extremes. Considerable cloudiness was prevalent after the 10th, and fogs were frequent. A slight seismic disturbance was reported on the 25th occurring over the major portion of the State. Thunderstorms prevailed on the 15th, 19th and 29th. Snow occurred on the 24th and 25th. Prevailing wind direction, NW.

DECEMBER gave a deficiency in temperature of 1.7° as compared with the normal. Several cold waves of minor energy passed over the State, and ice of sufficient thickness to harvest was made. In respect to precipitation practically normal conditions obtained. Fogs were frequent during the last half of the month. Some damage to fall sown grain was caused by freezing and thawing of the ground without adequate snow protection. Prevailing wind direction, W.