

U. S. DEPARTMENT OF AGRICULTURE.

REPORT FOR AUGUST, 1897.

MARYLAND AND DELAWARE SECTION

OF THE

CLIMATE AND CROP SERVICE

OF THE

WEATHER BUREAU.

IN COOPERATION WITH THE

MARYLAND STATE WEATHER SERVICE.

PREPARED UNDER THE DIRECTION OF

WILLIS L. MOORE,

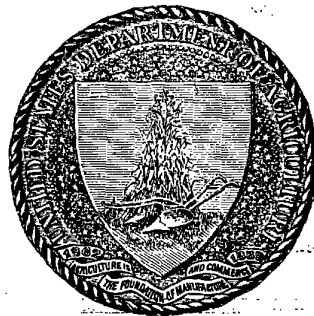
CHIEF OF BUREAU.

BY

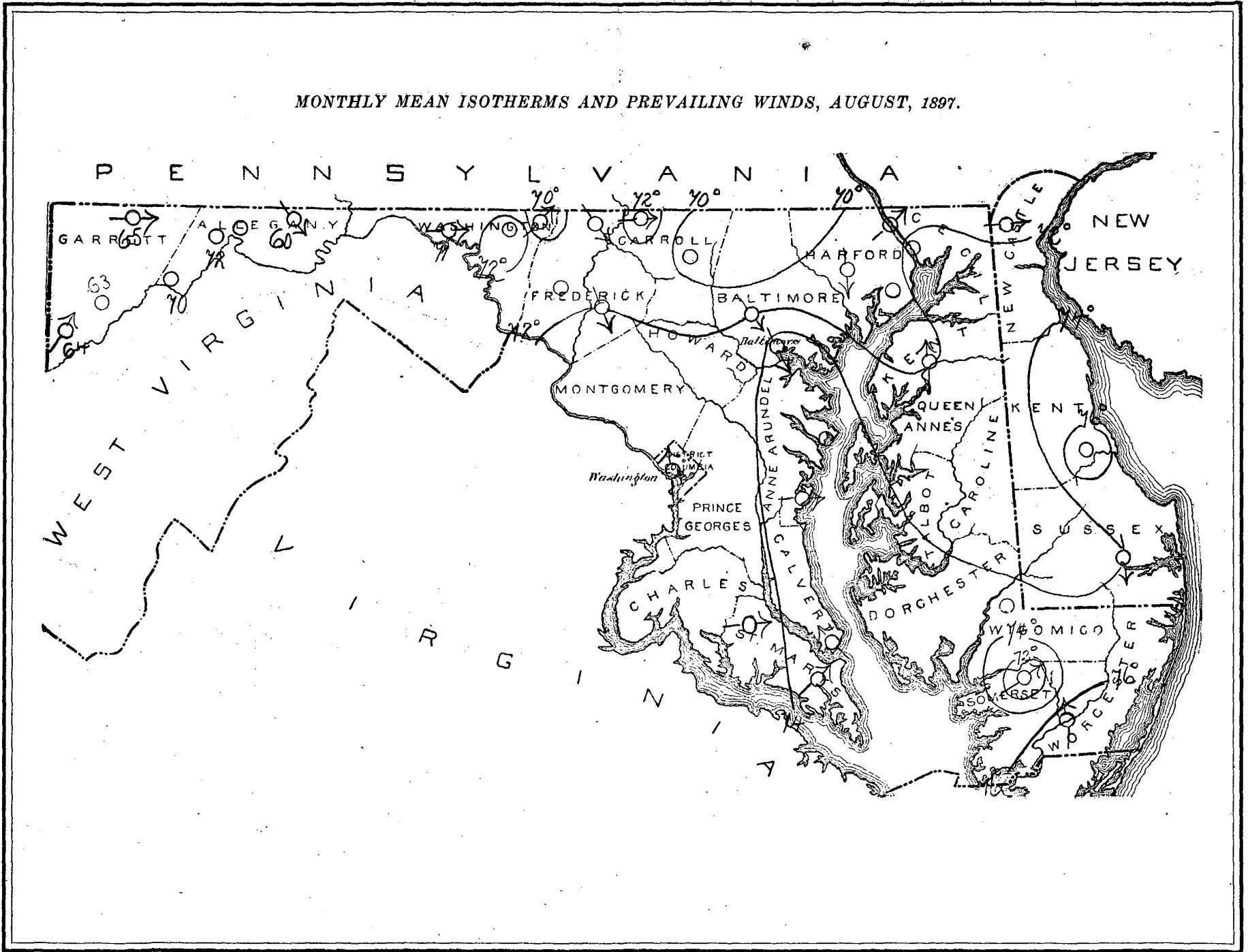
F. J. WALZ,

LOCAL FORECAST OFFICIAL AND SECTION DIRECTOR,

JOHNS HOPKINS UNIVERSITY, BALTIMORE, MD.



MONTHLY MEAN ISOTHERMS AND PREVAILING WINDS, AUGUST, 1897.



U. S. DEPARTMENT OF AGRICULTURE,
CLIMATE AND CROP SERVICE
 OF THE
WEATHER BUREAU.

Central Office,
 WASHINGTON, D. C. }

WILLIS L. MOORE,
 Chief. }

IN COOPERATION WITH THE
 MARYLAND STATE WEATHER SERVICE.

MARYLAND AND DELAWARE SECTION,

F. J. WALZ, Section Director,
 BALTIMORE, MD.

VOL. II.

BALTIMORE, MD.

No. 8.

REVIEW OF THE CROP CONDITIONS.

WEEK ENDING, *August 9, 1897.*

The past week in the Maryland and Delaware Section has been about seasonable with respect to temperature. The days have been warm and nights cool, with abundant sunshine in most districts. Rainfall has been deficient for the most part, scarcely any having fallen in Delaware and the southern and eastern counties of Maryland. In the western and northern-central districts heavy showers, accompanied in many instances by thunder and hail, were fairly general on the 4th. Wheat threshing is rapidly nearing completion, with exceptionally fine yields in all portions of the section. In a few places where this work has not been attended to the shocks have been damaged and blackened by too much moisture, but the bulk of the crop is safe. Corn is in fine condition nearly everywhere. Early potatoes have yielded well. Tomatoes suffering from blight in certain localities. Plowing for fall seeding well under way and making rapid progress. Peaches are good in quality and fairly plentiful in western and portions of northern-central Maryland, but thence eastward the prospective yield undergoes a steady decrease, and for the entire section the crop will be decidedly short. Tobacco is reported in good condition, and in portions of Charles County cutting and housing has begun. Apples are plentiful and grapes are promising; the young clover is coming into bloom and promises a good yield of seed. The yield of oats is light.

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WEEK ENDING, *August 16, 1897.*

The past week in the Maryland and Delaware Section has given a continuation of warm days and cool nights, with a resultant temperature for the period that very nearly coincided with the normal. The opening and closing days were marked by heavy rains and general thunderstorms, making the week's precipitation appreciably in excess of the amount usually received within that length of time. Wheat threshing is almost over, with reports of large yields still coming in. The oats are about all threshed out, and the yields continue light. Corn is tasseled, and its condition variously

reported from fine in some sections to average and ordinary in others, although it has been generally benefited by the moisture received. Tobacco and tomatoes have suffered some damage from the rains, which caused blight and rot in the tomatoes, and hurt tobacco on thin or sandy soil. Both crops are, however, in good condition in most districts, and cutting and housing of tobacco has begun. Peaches are plentiful in the western counties of Maryland, but very short elsewhere in the two States. Grapes are favorably reported for the most part, although rotting considerably in some localities. Pears, apples, and plums give fair promise, and truck generally is doing well.

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WEEK ENDING, *August 23, 1897.*

The weather during the past week has, in the main, been fine and all crops not yet harvested made splendid progress. The temperature was slightly below the normal, no very warm days, but plenty of sunshine. The rainfall was light and scattering, but there is sufficient moisture in the soil for maturing nearly all crops. The thunderstorm of Sunday (15th) was heavy and quite general, and considerable damage was done to corn by the rain and wind and also hail (especially in Howard and Harford counties) which accompanied it. Corn is looking well and has made fine advancement during the past week and from all parts of the Section the reports are favorable for a good crop. Tomatoes are ripening slowly but the prospects are good; the peach crop is reported fine from the northern and central counties, and even in the southern counties and eastern shore the crop is turning out better than was anticipated, a great many have already been shipped. Potatoes are fine and yielding about 100 to 150 bushels to the acre. Considerable tobacco is being cut and housed, and the crop is splendid; late tobacco is also improving. Sweet corn promises a fine yield; sweet potatoes and turnips are looking well; apples and grapes will be a good crop; celery is coming up finely. Clover for seed is about ready to cut and is very promising; oats threshing is nearly over, and the yield is very good. Pastures are excellent; truckers have good crops generally. Fall plowing is well advanced.

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WEEK ENDING, *August 30, 1897.*

Heavy rains during the early part of the past week gave an excess of moisture in Maryland and Delaware, and favored the development of the corn crop to such an extent as to insure good yields generally throughout the section, at the same time providing fine pasturage and stimulating the growth of gardens and all small products. A contrary effect, though not so decided, has resulted with respect to tobacco, which has been somewhat damaged in localities by the wet weather, and also to potatoes, causing the tubers to rot in the ground in some sections. Tomatoes are generally reported inferior in quality, a condition doubtless caused by the superabundance of moisture. Fruit for the most part will be scarce except in the western counties, where all varieties have yielded fairly well. Sweet potatoes have done well, and good yields

are promised. Fall plowing is well under way in the two States, and is nearing completion in some districts. Buckwheat cutting and wheat seeding will shortly begin, in fact some wheat has already been sown. Cantaloupes and watermelons are scarce in some sections, and generally inferior in quality. The second growth of clover is reported fine. Grapes are ripening, with some reports of rot. Cutting and housing of early tobacco is in progress, and the crop is excellent; the late tobacco, though uneven in growth, is improving rapidly. On the whole, the week has been an excellent one for agriculture, barring minor damage resulting from too much rain.

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CLIMATOLOGY OF THE MONTH.

ATMOSPHERIC PRESSURE—IN INCHES AND HUNDREDTHS.

Monthly mean at Washington, D. C., 30.00; at Baltimore, 29.99; average, 30.00; highest, 30.22 at Washington, on the 6th; lowest, 29.68 at Baltimore, on the 11th.

TEMPERATURE—IN DEGREES FAHRENHEIT.

The monthly mean (entire territory), 71.8, is 1.7 below the normal.

The highest monthly mean was 77.7, at Pocomoke City.

The lowest monthly mean was 62.7, at Deer Park.

The highest temperature recorded during the month was 95, at Westernport, on the 4th, and at Pocomoke City, on the 16th.

The lowest temperature recorded during the month was 39, at Sunnyside, on the 27th, and at Deer Park, on the 26th.

The greatest local monthly range was 50, at Flintstone and Grantsville.

The least local monthly range was 25, at Annapolis.

The greatest daily range was 43, at Sunnyside, on the 27th.

The least daily range was 0, at Annapolis, on the 18th.

PRECIPITATION—IN INCHES AND HUNDREDTHS.

The monthly average (entire territory) 3.51, was 0.17 below the normal.

The greatest amount was 5.62, at Bachman's Valley.

The least amount was 1.48, at Port Deposit.

The greatest amount in twenty-four hours was 3.23, at Fallston, on the 10th.

The average number of rainy days, 8.

WIND.

The prevailing direction was from the northwest.

The total movement was 2,908 miles, at Baltimore, and 3,435 miles, at Washington, D. C.

The maximum wind velocity was 30 miles per hour from the northwest, at Washington, D. C., on the 11th.

MISCELLANEOUS.

Thunderstorms.—Bachman's Valley, 4, 14, 15, 21; Baltimore, 10, 15, 23, 25; Charlotte Hall, 5, 10, 16, 23, 29; Cherryfields, 10, 15, 20, 23, 30; Chestertown, 9, 10, 15, 23, 25; Fallston, 11, 15, 21, 23, 25, 30; Frederick, 4, 10, 11, 24, 25; Grantsville, 3, 4, 9, 10, 19, 23; Green Spring Furnace, 15, 21; Jewell, 4, 10, 15, 16, 23, 25, 30; Laurel, 10, 15; Mardela

Springs, 4, 9, 10, 14, 15, 16, 18, 21, 22, 23, 30; Millsboro, Del., 10; Mt. St. Mary's, 4, 10, 15, 16, 23, 25; Newark, Del., 15, 21, 26; Port Deposit, 10, 15; Princess Anne, 1, 10, 11, 21; Sharpsburg, 15, 21; Smithsburg, 4, 9, 15, 21, 30; Solomon's, 4, 10, 16, 21, 23, 25, 30; Sunnyside, 4, 9, 10, 11, 15, 16, 19, 21, 23, 30; Taneytown, 4, 10, 15, 21, 24; Woodstock, 10, 15, 21, 23, 25, 30.

Lightning, distant.—Cherryfields, 4, 15, 16, 31; Millsboro, Del., 15; Smithsburg, 25; Solomon's, 15; Taneytown, 14, 30.

Fogs.—Green Spring Furnace, 15, 25; Mardela Springs, 9, 12, 14, 18, 19, 27; Millsboro, Del., 27; Mt. St. Mary's, 22; Princess Anne, 14, 27; Sunnyside, 12, 22, 26, 31; Taneytown, 11.

Hail.—Fallston, 11; Jewell, 15; Mardela Springs, 14; Emmittsburg, 16; Frederick, 15, 25; Sharpsburg, 15; Solomon's, 23; near Taneytown, 24.

Coronæ, lunar.—Millsboro, Del., 4, 5, 8, 11.

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REMARKS BY OBSERVERS.

Three horses were killed by lightning on a farm near Jewell during a thunderstorm on the 10th.—J. P. PLUMMER.

A house was set on fire by lightning during the night of the 23d, near Mt. St. Mary's.—DR. J. A. MITCHELL.

The thunderstorm on the afternoon of the 23d at Solomon's was accompanied with a wind of hurricane force, which blew down quite a number of trees.—DR. W. H. MARSH.

During the storm of the afternoon of the 4th lightning struck and destroyed a barn one mile south of Taneytown. A barn was struck by lightning during the thunderstorm which occurred early in the morning of the 24th.—PROF. H. MEIER.

A severe wind storm accompanied the rain which occurred at Westernport on the 3d.—PROF. O. H. BRUCE.

The Central Office had the pleasure of a visit from Prof. Henry Meier, the voluntary observer at Taneytown, at the close of the month.

Thunderstorms were general throughout the Atlantic Coast States on the 15th. Baltimore was visited by three such storms during the course of the day, all moving from the southwest to the northeast; one between 8.34 a. m. and 8.43 a. m., with 0.11 inch of rainfall; the second between 4.20 p. m. and 7.14 p. m., with 0.57 inch of rainfall; the third between 8.45 p. m. and 9.40 p. m., with only a trace of rain. The second storm was marked by an unusually vivid display of lightning, resulting in considerable damage to property along the water front in the harbor. The lightning set fire to a planing mill and box factory belonging to the Tunis Lumber Company, causing the loss of the entire plant. The fire spread to a neighboring drydock and to some small vessels in the harbor. The total loss was estimated at about \$160,000. The bolt of lightning which set fire to the mill entered by means of a large sheet-iron pipe which projected about 15 feet above the roof of the building. The night watchman, who was in the building at the time, was severely stunned and thrown against a neighboring wall. Several flashes of lightning were seen to strike into the huge column of dense smoke arising from the burning building.

TOTAL PRECIPITATION, AUGUST, 1897.

