

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU,

CO-OPERATING WITH THE

MARYLAND STATE WEATHER SERVICE

Established by an Act of the General Assembly of the State of Maryland, 1892,
and Maintained in Connection with



The Johns Hopkins University and the Maryland Agricultural College.
CENTRAL OFFICE, JOHNS HOPKINS UNIVERSITY, BALTIMORE, MD.

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JOHNS HOPKINS UNIVERSITY,
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VOL. IV, No. 3.

MONTHLY REPORT.

JULY, 1894.

State Weather Service Stations in Southern Maryland.

A number of stations were established during the past month. Marshall Hall, the beautiful resort on the Potomac in Charles county, was visited by an observer of the central office, June 25th, and a station established, with Mr. F. H. Deal, postmaster and superintendent of the resort, as observer. Col. McKibbon, formerly of the U. S. army and ex-member of Congress, is one of the owners of the Hall and resides there. He has not only benefited the Company by making the resort the most beautiful and popular on the Potomac, but he has also added to the prosperity of the country round about, as many of his visitors have remained to take up a permanent residence in the vicinity.

The meteorological station at Upper Marlboro, Prince George county, was visited on the 28th. The observer, Mr. J. Benson Perrie, Register of Wills for Prince George county, has made the station a very useful one to the State Weather Service on account of the excellence of his observations and the unbroken record he has kept.

A meteorological observing station was established at Pope's Creek, Charles county, June 29th, and Mr. George Dent, postmaster of the place, was appointed observer. Pope's Creek is situated on the Potomac river, at the terminus of the Pope's Creek branch of the Baltimore & Potomac Railroad, and is a very desirable point from which to obtain meteorological observations. The same day La Plata was made an observing and display station, with Mr. J. S.

Turner as observer and displayman. La Plata shows the mark of rapid enlargement in the number of new buildings that have been constructed; and the general business activity of the place gives evidence that the improvement will continue uninterruptedly.

Arrangements were also completed with Mr. Walter Cox for the establishment of an observing station at Bel Alton, a thriving village situated between Pope's Creek and La Plata.

The counties of Prince George and Charles occupy a portion of the country scarcely equaled by any other section as regards nearness to great markets and convenience of transportation. The District of Columbia is bounded to a greater extent by Prince George than by any other county, and as for Charles county, it is scarcely 12 miles from the national capital. Baltimore is about 15 miles from the nearest portion of Prince George and less than 50 from Charles. The counties are bisected by a branch of the Northern Central Railroad, and passenger trains run twice daily both ways between the terminus and both Baltimore and Washington. Freight trains, also, are numerous.

The soil of this section—consisting generally of an easily worked loam—is suited to early truck and fruit raising, and, considering the nearness of Washington and Baltimore and their excellence as truck markets, this land should become exceedingly valuable. It is a matter of surprise that so much of it remains uncultivated and that there is so much room for settlers. Doubtless the land that can be purchased now for five and ten dollars per acre will bring fifty and sixty a few years hence.

Stock raising must necessarily constitute an important division of the future Southern Maryland farming. The climate cannot be improved upon for the raising of cattle, sheep and hogs; the soil will be benefited by the cropping with clover for the cattle and sheep, while the waste of fruit and truck will fatten the swine. The live stock and the products of the dairy may be speedily transported to the markets of Baltimore and Washington; but perhaps the greatest improvement will be in the resulting enrichment of the soil from the proper and generous application of compost.

Southern Maryland is justly noted for its mild, equable climate, due in part to its latitude and in part to the large bodies of water—the Chesapeake bay and the Potomac river—by which it is embraced, the proximity of the section to the Atlantic ocean, and the sheltering influence of the mountain ranges to the westward. The usefulness of these inclosing waters as a means of transportation must not be overlooked; few, if any, of the other States can vie with Maryland in this natural advantage.

The new stations recently established, with those already in operation, will render possible the making of correct statements relative to the fine climate of this section of the country. It is proposed, also, to establish stations at Annapolis and Prince Fredericktown, and to have observations resumed at Leonardtown and Jewell. When this plan has been fully carried out, Southern Maryland will have no need to complain of a lack of weather records; and as no section of the country has less cause to be ashamed of its climate, it is hoped that extensive use will be made of them.

A THRIVING COLONY.

GERMAN SETTLERS IN DORCHESTER COUNTY VISITED BY BALTIMOREANS.

Under the above heading there appears in *The Sun* of July 19th an article which must be read with satisfaction by every one who has the interest of Maryland at heart; and it should be read with satisfaction not only by Marylanders, that the advantages of the State are being understood, appreciated, and taken advantage of, but also by those in other states and in other countries who contemplate making a change of residence. In Maryland they will find good land at very low prices (thousands of acres can be purchased at from \$5 to \$10 per acre), convenient transportation by water and by rail, good prices for farm produce, good health and a superb climate; a climate in which profit may be combined with a pleasurable existence the year round.

A portion of the article is quoted below: The colony of Germans that came from the West last autumn at the suggestion of Rev. Nicholas Burkart and settled in Dorchester county, Md., is now thriving. The sixteen original families, numbering fifty-eight persons, arrived September 28, 1893. Their settlement, which is about six miles from Vienna, is called Burkartsville, after the founder of the colony.

This is not the only colony of Germans in Dorchester. In the latter part of October, 1893, thirteen families, numbering fifty-six persons, settled three miles farther inland, and during the fall and winter others settled in the county. It is estimated that since last September fifty-two German families, numbering two hundred and twenty-five men, women and children, have made homes for themselves in that county, and have bought and in part put under cultivation six thousand acres of land.

The pioneer colony at Burkartsville has under cultivation four hundred acres and has done considerable toward clearing up six hundred acres of woodland. This tract of one thousand acres was purchased by Rev. Nicholas Burkart. Six hundred acres of woodland Mr. Burkart has sold to the colonists, and he gives each owner five years to get his land cleared and in condition for cultivation. At the end of five years payments are to begin at the rate of one-fifth of the amount of purchase money each year. The purchaser must pay the yearly interest on the price of his property until he pays the purchase price. The four hundred acres of tillable land Mr. Burkart rents to the colonists at the rate of two dollars an acre yearly.

Apple, pear and peach orchards have been planted, and vineyards, containing seven varieties of grapes, are under cultivation. The following statistics of the land tilled by the settlers are interesting and show that rapid strides have been made in a few months: 230 acres in corn, 100 acres in potatoes, 30 acres in tomatoes, 20 acres in early peas, 20 acres in oats. They have also a number of acres in cabbage and other garden vegetables, and a fine field of sweet potatoes. Fifteen horses, three cows, pigs, several wagons and the necessary farming implements are owned by them.

Eight babies have been born to the settlement since it was established, and not a single death has occurred. There is no sickness among the colonists, and they dwell together in peace and harmony.

MISCELLANEOUS NOTES.

On July 12th the central office was favored by a visit from Mr. R. M. Stevenson, observer at Pocomoke City. Mr. Stevenson is the owner of the Eagle Flouring Mills, and he said that

outside of his business it gave him greatest pleasure to devote his attention to meteorology. He has purchased an expensive set of instruments, and his reports, from the first rendered, have been wellnigh perfection. The apparatus at the central office claimed much of his attention during his call.

Reports should be forwarded immediately after the close of the month for which they are made. If the sums and means cannot be computed at once, forms should be transmitted without them.

Review of the Month—June.

WEATHER.

Temperature (degrees).—Monthly mean (for the entire territory covered), 71.9, being 0.6 below the normal; highest monthly mean, 75.6, at Benedict; lowest monthly mean, 64.0, at Oakland; highest temperature, 104, at Benedict, on the 25th; lowest temperature, 32, at Sunnyside, on the 7th; mean monthly range, 49.6; greatest local monthly range, 58, at Benedict and at Charlotte Hall; least local monthly range, 41, at Distributing Reservoir, D. C., and at Receiving Reservoir, D. C.; monthly mean maximum, 82.7; monthly mean minimum, 60.9.

Precipitation (in inches).—Average, 2.18, being 1.56 below the normal; greatest amount, 4.45, at Oakland; least amount, 0.87, at Solomon's.

Wind.—Prevailing direction, southwest. Total movement in miles, Baltimore, 4654; Norfolk, Va., 6724; Washington, D. C., 3896.

Hail.—At Baltimore, on the ; at Charlotte Hall, on the 12th; at College Park, on the 12th; at Darlington, on the 24th; at Frederick, on the 5th; at Mardela Springs, on the 12th; at Millsboro, Del., on the 24th; at Oakland, on the 30th; at Solomon's, on the 12th; at Sunnyside, on the 30th.

Thunderstorms.—At Baltimore, on the 4th, 12th, 13th, 16th, 17th, 24th, 26th, 30th; at Boettcherville, on the 4th, 12th, 16th, 17th, 18th, 22nd, 24th, 25th, 26th; at Charlotte Hall, on the 12th, 27th; at Cumberland, on the 4th, 16th, 17th, 18th, 22nd, 24th, 25th, 26th; at Dover, Del., on the 24th; at Fallston, on the 4th, 7th, 12th, 20th, 24th, 30th; at Mardela Springs, on the 3rd, 5th, 20th, 24th, 26th, 27th, 29th, 30th; at Millsboro, Del., on the 3rd, 5th, 12th, 13th, 19th, 21st, 22nd, 24th, 25th, 27th, 28th, 29th, 30th; at Newark, Del., on the 20th, 24th; at Oakland, on the 4th, 12th, 17th, 18th, 22nd, 23rd, 24th, 25th, 30th; at Pocomoke City, on the 3rd, 28th; at Seaford, Del., on the 5th, 12th, 21st, 24th; at Solomon's, on the 3rd, 5th, 6th, 7th, 12th, 17th, 20th, 21st,

24th, 26th, 27th, 29th, 30th; at Sunnyside, on the 4th, 5th, 12th, 17th, 18th, 22nd, 23rd, 24th, 25th, 30th; at Taneytown, on the 5th, 6th, 12th, 16th, 18th, 25th; at Wilmington, Del., on the 4th, 11th, 20th, 21st, 24th, 26th; at Woodstock, on the 4th, 12th, 17th, 24th.

Corona.—Solar, at Wilmington, Del., on the 9th, 11th. Lunar, at Wilmington, Del., on the 17th, 18th.

Parhelia.—At Mardela Springs, on the 26th; at Pocomoke City, on the 26th.

Halo, solar.—At Fenby, on the 8th.

CROPS.

Week ending June 4th, 1894.

Farm work has been delayed on account of wet weather. Wheat is filling nicely, and indications point to an early harvest and a heavy yield. Corn is making slow growth, is being injured by worms, and needs work. Oats are looking better in western section than elsewhere. Winter barley is ready to cut. Hay-making will begin this week; in southern Maryland some has already been made. Potatoes look well and the early crop is being marketed; peas, also, are in market. Tomato plants are being set out. The apple crop will be light and cherries few. Late strawberries are at their best.

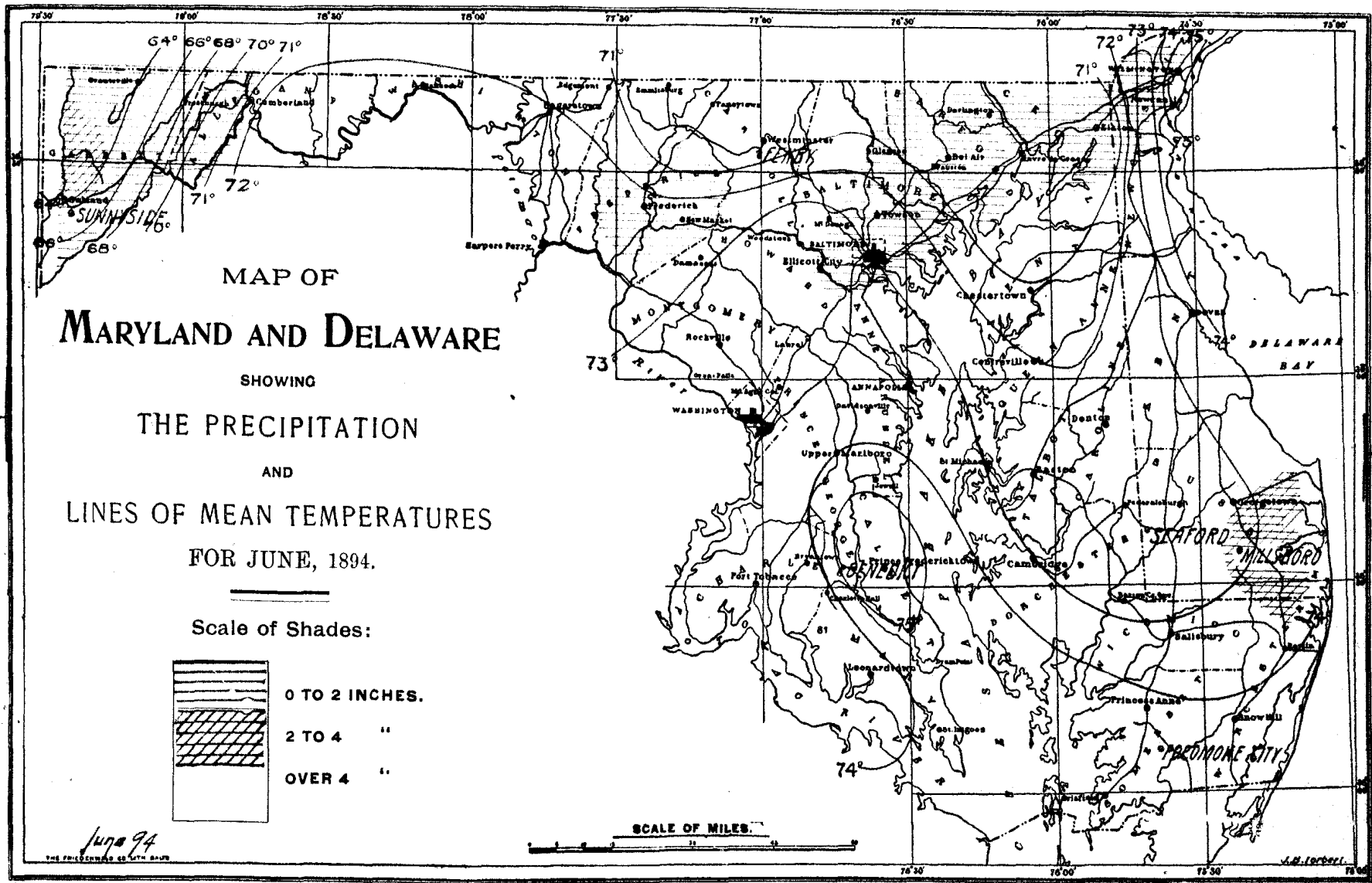
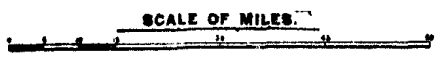
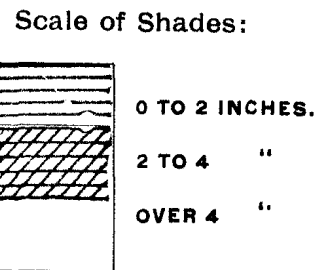
Week ending June 11th, 1894.

Delayed farm work is now being done. Wheat is beginning to change color. Corn is reported improved and of good color, but the crop needs cultivation. Reports of oats are rather unfavorable; they have improved in some sections, but are thin on the ground and yellow in others. The barley harvest has begun. Rye will soon be ready to cut. Some hay is being made. Tobacco is being planted. Sweet potatoes and tomatoes are being set out. Buckwheat will soon be sown. From present indications the early varieties of potatoes will yield heavily. Late peas promise well. Melons are growing slowly. There are very few peaches. The rose bug is injuring grapes, early cherries and peaches.

Week ending June 18th, 1894.

Crops, generally, have improved and farm work has rapidly advanced. Wheat and all grain is in good condition. Corn is over a foot high in some sections. Oats are beginning to head, but they are reported to be rusty and, in many fields, thin on the ground. Rye is fast ripening; some is being cut in Eastern Maryland. Haying is in progress, with good yields in some localities and poor in others. Clover has exceeded expectations. Potatoes are very promising. A few peaches are in market; also some late strawberries. Grapes and blackberries are abundant. Gardens look well, but would be benefited by rain.

MAP OF
MARYLAND AND DELAWARE
 SHOWING
 THE PRECIPITATION
 AND
 LINES OF MEAN TEMPERATURES
 FOR JUNE, 1894.



June 94
 THE PHOENIX CO. LITH. BOSTON

J.B. Torbert

Meteorological and Weather Signal Display Stations of the Maryland State Weather Service.

Stations.	County.	Meteorological Observer.	Displayman.
Annapolis	Anne Arundel		W. M. Abbott.
Appleton	Cecil		W. C. Henderson.
Bachman's Valley	Carroll	J. M. Myers.	
Baltimore		G. N. Wilson. J. H. Donaldson. A. T. Brewer, <i>Ass't Editor of Monthly Report.</i> R. C. New, <i>Ass't Editor of Weekly Bulletin.</i>	
Benedict	Charles	Thomas Berry.	
Bel Air	Harford		N. N. Nock.
Boettcherville	Allegany	F. F. Brown.	
Bradshaw	Baltimore		B. F. Taylor.
Buckeystown	Frederick		A. W. Nicodemus.
Cambridge	Dorchester		Calvert Orem.
Charlotte Hall	St. Mary's	J. Francis Coad.	
Cherryfields	St. Mary's	J. Edwin Coad.	
Chestertown	Kent	Hon. M. deK. Smith.	
Cumberiand	Allegany	Howard Shriver. E. T. Shriver.	
Darlington	Harford	A. F. Galbreath.	
Delaware City, Del.	New Castle		W. E. Reybold.
Denton	Caroline	F. C. Ramsdell.	
Dickerson	Montgomery		W. H. Dickerson.
Distributing Reservoir, D. C.		Col. G. H. Elliot.	
Dover, Del.	Kent	Jno. S. Jester	Philip Burnet.
Easton	Talbot	G. W. Minnick	G. W. Minnick.
Edgemont	Washington	Chas. Feldman.	
Fallston	Harford	G. G. Curtiss, A. M.	
Fenby	Carroll	Wm. Fenby.	
Frederick	Frederick	J. H. Apple.	W. T. Delaplaine.
Frederica, Del.	Kent		Miss E. V. Newnom. Miss L. T. Frazier.
Garey P. O.	Howard		Walter Dorsey.
Glyndon	Baltimore		J. J. Dyer.
Grantsville	Garrett		T. H. Bittinger.
Great Falls	Montgomery	Col. G. H. Elliot.	
Hampstead	Carroll		H. H. Meals.
Hartly, Del.	Kent		Miss C. A. Forde.
Havre de Grace	Harford		W. S. McCombs.
Kenton, Del.	Kent		W. S. Arthurs.
Kirkwood, Del.	New Castle	J. S. Carnagy.	
Laurel, Del.	Sussex		E. D. C. Hegeman.
Lonaconing	Allegany		J. J. Robinson.
Mardela Springs	Wicomico	A. E. Acworth	L. A. Wilson.
McDonogh	Baltimore	H. Pender.	
Middletown	Frederick		G. C. Rhoderick, Jr.
Milford, Del.	Kent	J. Y. Foulk	J. Y. Foulk.
Millsboro, Del.	Sussex	Rev. L. W. Wells.	
Mt. St. Mary's	Frederick	J. A. Mitchell, A. M.	Jos. H. Martin.
Newark, Del.	New Castle	Wm. H. Bishop.	
New Market	Frederick	Miss Margaret D. Hopkins.	
Oakland	Garrett	J. Lee McComas, M. D.	J. L. McComas, M. D.
Odenton	Anne Arundel		E. B. Watts.
Pocomoke City	Worcester	R. M. Stevenson	R. M. Stevenson.
Receiving Reservoir, D. C.		Col. G. H. Elliot.	
Rising Sun	Cecil		E. A. Reynolds.
Rockville	Montgomery		Emmett Dove.
Salisbury	Wicomico		L. W. Gunby.
Seaford, Del.	Sussex	H. L. Wallace	H. L. Wallace.
Smyrna, Del.	Kent		A. D. Yocum.
Snow Hill	Worcester		Purnell & Vincent.
Solomon's	Calvert	W. H. Marsh, M. D.	
†Sparrow's Point	Baltimore		Md. Steel Co.
Sunnyside	Garrett	John G. Knauer.	
Sykesville	Carroll		J. S. Hyatt.
Upper Marlboro	Prince George's	J. B. Perrie.	
Washington, D. C.		S. W. Beall.	
West Friendship	Howard		Postmaster.
Westover	Somerset		E. D. Long.
Wilmington, Del.	New Castle	F. C. D. McKay	Wm. Lawton.
Woodsboro	Frederick		G. F. Smith.
Woodstock	Howard	T. J. A. Freeman, S. J.	
*Birdsnest, Va.	Northampton	C. R. Moore.	
*Cape Charles, Va.	Northampton	O. A. Browne.	
*Norfolk, Va.	Norfolk	Jas. J. Gray.	
*Warsaw, Va.	Richmond	C. H. Constable.	

*Stations of the Virginia State Weather Service. †Whistle signals only.

