

River and station	Flood stage	Above flood stages—dates		Crest	
		From—	To—	Stage	Date
ATLANTIC DRAINAGE					
Cape Fear: Elizabethtown, N. C.	Feet 22	5	6	Feet 22.7	6
MISSISSIPPI DRAINAGE					
Mississippi:					
Quincy, Ill.	14	26	27	14.1	26
Hannibal, Mo.	13	24	29	14.3	27
Louisiana, Mo.	12	25	29	13.2	12
Illinois:					
Morris, Ill.	13	9	13	18.2	10
Peru, Ill.	14	8	(¹)	19.8	11
Henry, Ill.	7	8	(¹)	13.7	23-24
Peoria, Ill.	16	10	(¹)	21.0	24
Havana, Ill.	14	12	(¹)	19.0	25
Beardstown, Ill.	12	(²)	(¹)	19.1	28-29
Pearl, Ill.	12	24	(¹)	15.7	30
Neosho:					
Oswego, Kans.	17	7	7	17.3	7
North Canadian:					
Woodward, Okla.	4	14	14	4.5	14

¹ Continued at end of month.
² Continued from last month.

MEAN LAKE LEVELS DURING AUGUST, 1924

By UNITED STATES LAKE SURVEY

(Detroit, Mich., Sept. 4, 1924)

The following data are reported in the "Notice to Mariners" of the above date:

Data	Lakes ¹			
	Superior	Michigan and Huron	Erie	Ontario
Mean level during August, 1924:				
Above mean sea level at New York.....	Feet 601.65	Feet 579.62	Feet 572.16	Feet 246.04
Above or below—				
Mean stage of July, 1924.....	+0.26	+0.10	-0.29	-0.17
Mean stage of August, 1923.....	-0.34	-0.13	+0.47	+0.63
Average stage for August last 10 years.....	-1.00	-1.19	-0.46	-0.34
Highest recorded August stage.....	-2.28	-3.89	-1.95	-2.22
Lowest recorded August stage.....	+0.05	-0.13	+0.78	+1.69
Average relation of the August level to—				
July level.....		-0.1	-0.2	-0.3
September level.....		+0.2	+0.2	+0.4

¹ Lake St. Clair's level: In August, 1924, 574.83 feet.

EFFECT OF WEATHER ON CROPS AND FARMING OPERATIONS—AUGUST, 1924

551.5:633(73) By J. B. KINCHER

General summary.—The first 10 days of August were on the whole, rather favorable for farm interests in Central and Northern States east of the Rocky Mountains. There was considerable rainfall in some sections where drought had prevailed, especially in the western Great Plains, parts of the Ohio Valley, and middle Atlantic area, and the increased moisture was beneficial for growing crops. It continued too cool for warm-weather crops, however, in the Central-Northern States, while frequent rainfall in that area caused considerable interruption to farm work. It had become dry in the south Atlantic districts, and drought continued in the central and west Gulf areas, where all crops suffered severely. Fine growing weather prevailed in the lower Missouri Valley and in the southern Great Plains.

The second decade of the month was too cool for best growth in the interior States; decidedly so in most of the Ohio Valley. Crops made fairly good growth, however, in the central Great Plains and lower Missouri Valley, where there was sufficient moisture and an abundance of sunshine. They showed material improvement dur-

ing this period in the Middle and North Atlantic States, by reason of the increased soil moisture, but at the same time it continued generally dry in the South.

The last decade of the month brought much warmer weather to the interior valleys and Northern States, which was very beneficial to growing crops, though more moisture was needed locally. Late vegetation showed continued improvement in the Northwestern States as a result of better growing conditions, but at the close of the month it was again getting dry. Severe drought persisted in the Great Basin, and droughty conditions in the South were intensified by the continued absence of moisture. Most crops suffered, especially gardens, truck, and late corn.

Wheat.—Spring wheat matured rapidly during the first few days of the month under generally favorable weather conditions. There was considerable infection of wheat by black stem rust in North Dakota, but the bulk of the crop was too near maturity for material damage. Harvest made good progress and was rushed in North Dakota to avoid rust damage. Fairly good advance was made in threshing winter wheat during the first half of the month, although there was some delay by frequent rains in the upper Mississippi Valley. The last half was rather unfavorable for threshing in the western Lake region, the upper Mississippi Valley, and northern Great Plains, because of frequent rainfall, with considerable damage reported to grain in shock.

Corn.—Conditions, in general, were rather unfavorable for corn during the first three weeks of the month, because of persistently cool weather from the central valley States northward. Growth was good, however, in the Plains States and fairly satisfactory in the lower Missouri Valley. In the South, late corn suffered severely from the dry weather. Corn was 10 days to as much as 3 weeks late in most of the principal producing area, and warm weather was badly needed to hasten maturity. The last 10 days of the month, however, had generally warmer weather throughout the central and northern portions of the country, and the corn crop responded nicely to the improved temperature conditions. Splendid progress toward maturity was reported in the central Great Plains States. There was some deterioration in Ohio and parts of Kentucky because of insufficient moisture.

Cotton.—There was considerable rainfall the first part of the month in the northern portions of the Cotton Belt, including northern and northwestern Texas, and progress of the crop was mostly fair to very good in those regions. Moisture was needed in other portions of the belt where the advance was less satisfactory. During the second decade rainfall was of a local character, and moisture continued insufficient in many sections, though there were beneficial rains in parts of the Mississippi Valley States, and good local showers in the western portion of the belt.

The progress and condition of cotton continued very good in the extreme western and northwestern portions of Texas, but were generally poor elsewhere because of the drought, with bolls small in the dry areas and opening prematurely. There were sufficient showers to be beneficial in Oklahoma the latter part of the month, but rain was generally needed, with progress of cotton ranging from fair in the north to poor in the south. Dryness prevented satisfactory growth in the central States of the belt, with some deterioration reported. The drought was partially relieved by irregular showers in Georgia the latter part of the month, but most sections continued dry and cotton showed further deterioration, while the drought