

Severe local storms, March, 1932—Continued

Place	Date	Time	Width of path (yards)	Loss of life	Value of property destroyed	Character of storm	Remarks	Authority
Evansville, Ind.	21	6:15 p. m.			\$200,000	Tornado	Many buildings damaged; fences and insecure signs blown down.	Official, U. S. Weather Bureau.
Georgia (northern)	21	7:15-8 p. m.		28	174,000	7 tornadoes	More than 200 homes wrecked; several hundred persons injured; livestock killed; telegraph and telephone companies suffer heavy loss.	Do.
Polk County, Tenn.	21	7:22 p. m.	440-1,760	7	60,000	Tornado (entered from Georgia).	17 persons injured; character of damage not reported.	Do.
Charleston, Tenn.	21	8:50 p. m.	100	1	60,000	Tornado	21 buildings demolished or damaged; 23 persons injured.	Do.
Jefferson and Cocke Counties, Tenn.	21	10 p. m.	1.5 mi.		60,000	Wind	Heavy property damage; 20 head of cattle killed; 6 persons injured.	Do.
Alabama (northern)	21	P. m.		264	3-4,000,000	7 tornadoes	Extensive property damage; many families left homeless; hundreds injured; livestock killed.	Montgomery Advertiser (Ala.)
Strong, Rosebloom, and Goodman, Miss.	21					3 tornadoes	No details reported.	Official, U. S. Weather Bureau.
Marion County, Tenn.	21			2	15,000	Tornado (entered from Alabama)	12 houses destroyed.	Do.
Pine Bluff, Ark.	21				1,000	Wind	Buildings and homes damaged; trees uprooted.	Do.
Northern Illinois, Indiana, and Ohio.	21-22				683,150	Snow, wind, glaze, and possibly 2 tornadoes.	Public utilities suffer delay and losses. Winds of tornadic character at Hamilton and Radnor, Ohio.	Do.
Clarke to Madison County, Ga.	22	1:45 a. m.	50-300	12	60,000	Tornado	75 houses and several old churches wrecked; roofs and small buildings damaged; wires down.	Do.
Greenville, Laurens, Spartanburg, and Cherokee Counties, S. C.	22	A. m.			10,000	Wind squalls	Character of damage not reported.	Do.
Jonesville, S. C.	22	A. m.			15,000	Severe thunder-storm.	Cotton warehouse damaged by lightning.	Do.
Spartanburg County, S. C.	22	A. m.	350-400	3	100,000	Tornado	100 persons homeless; 34 persons injured. Character of damage not reported.	Do.
Parkersburg, W. Va.	22				4,000	Wind	Roofs and small buildings damaged.	Do.
Garfield and adjacent counties, Wash.	24	12:30 p. m.			6,000	Gale	Power line blown down; roofs damaged; crops hurt.	Do.
Selman City, Tex.	27	5 a. m.	100		75,000	Tornado	Oil derricks down; several farm homes demolished; 20 persons injured; path 3 miles long.	Do.
Pattison, Miss., and vicinity.	27	9:40 a. m.	25			Probably tornado.	No details of damage; path 2.5 miles long.	Do.
Box Elder (near), Tex.	27	A. m.		1		Tornado	Farms damaged; communication lines blown down; 13 persons injured.	Do.
Buchanan, Ga. (5 miles east).	27	6 p. m.		1	25,000	do	26 houses wrecked, 13 damaged.	Do.
Corinth to Newnan, Ga.	27	6:15-6.30 p. m.			35,000	do	18 houses demolished; many persons hurt.	Do.
Atlanta, Ga.	27	6:30 p. m.			1,000	Wind	Chimneys blown down; trees prostrated; transmission lines out of commission.	Do.
Albany, Ga.	27				2,000	do	Garages blown down; several homes unroofed; trees uprooted.	Do.
Bibb and Chilton Counties, Ala.	27			6		Tornado	Details not reported.	Montgomery Advertiser, (Ala.)
Elmore to Chambers Counties, Ala.	27					do	Homes and stores wrecked; 12 persons injured.	Do.
Western Maryland	27-28				500,000	Wind and snow	Chief damage to poles and overhead wires.	Official, U. S. Weather Bureau.
Amelia, Powhatan, Goochland, Hanover, Essex, and Caroline Counties, Va.	28				95,000	Severe squalls and small tornado.	Homes, barns, and mills affected. Tornado characteristics at Loretto.	Do.
Anne Arundel, Queen Annes and Kent Counties, Md.	28				13,000	Wind	Chief loses to telegraph companies; dwellings and barns damaged.	Do.
Scott City, Kans. (3 miles north).	29	5 p. m.				Tornado	No damage reported; occurred over sparsely settled area.	Do.
Coffee County, Ala.	31					do	No details reported.	Do.
Howard, Kans. (8 miles north).	31	10 a. m.				do	do	Do.

THE TORNADOES OF THE LATTER PART OF MARCH, 1932

By H. C. HUNTER

[Weather Bureau, Washington, May 2, 1932]

During the final fortnight of March, 1932, tornadoes were much more numerous and destructive than they had been at any time previously since 1927. The region of occurrence was wholly within the southeastern quarter of the country.

Practically all of the tornadoes occurred within two periods of time, which were not quite a week apart. By far the more important group came during the latter part of Monday, the 21st, and the very first few hours of the 22d. The other period marked by several tornadoes embraced the 27th and the first hours of the 28th. The group of the 21st-22d was apparently the most destructive tornado group experienced in the section to southward of the Ohio River since February 19, 1884.

In fact, the State of Alabama, which suffered most severely, has probably never known another visitation ranking with this one in 1932.<sup>1</sup>

The regular observations of the Weather Bureau, taken at each hour of 7, ninetieth meridian time, locate the center of the large low-pressure area connected with the first group of tornadoes as follows: Forenoon of 21st, near Fort Smith, Ark.; evening of 21st, Louisville, Ky.; forenoon of 22d, Buffalo, N. Y. The area connected with the second group was located as follows: Evening of 26th, near Abilene, Tex.; forenoon of 27th, Vicksburg, Miss.; evening of 27th, Knoxville, Tenn.; forenoon of 28th, Philadelphia, Pa.

Table 1 summarizes the information so far obtained, arranged by the individual States. The total number of tornadoes in the first group is thought to be three less than the sum of the State numbers, since two of the Tennessee tornadoes apparently entered from other

<sup>1</sup> Cf. Stevens, W. R., Tornadoes in Alabama. MO. WEATHER REV., 53: 437-443.

States, one from Alabama and one from Georgia, while the Kentucky and Indiana storms seem to have been the same storm.

TABLE 1.—Preliminary synopsis of tornadoes during latter part of March, 1932

[Times herein all 90th meridian]  
GROUP OF MARCH 21 AND 22

State	Day and hour	Number	Loss of life
Mississippi	21st	3	0
Alabama	21st, p. m.	7	264
Georgia	21st, 7.15 p. m., to 22d, 12.45 a. m.	8	40
South Carolina	22d, very early	1	3
Tennessee	21st, 5 to 10 p. m.	5	22
Kentucky	21st, p. m.	1	2
Indiana	21st, 6.15 to 7 p. m.	1	0
Illinois	21st, 3 p. m.	1	0

GROUP OF MARCH 27 AND 28

State	Day and hour	Number	Loss of life
Texas	27th, 5 a. m.	2	1
Mississippi	27th, 9.40 a. m.	1	0
Alabama	27th	2	7
Georgia	27th, 6 to 6.30 p. m.	2	1
Virginia	28th, 1 a. m.	1	0

RIVERS AND FLOODS

By RICHMOND T. ZOCH

[River and Flood Division, Montrose W. Hayes in charge]

Floods in North Carolina and Oregon were the only important ones in March, except those that continued from preceding months. Minor freshets occurred in Virginia, South Carolina, Alabama, the Ohio basin, Illinois, Iowa, and Texas. In the Yellowstone River there was some local flooding caused by ice gorges. A gorge above Miles City was successfully dynamited before it had impounded enough water to cause any damage of consequence.

Estimates of losses caused by floods, collected from all available sources considered reliable, have been segregated and are given in the following table.

ATLANTIC SLOPE DRAINAGE

Tangible property totally or partially destroyed:	
Roanoke River (N. C.)	\$1, 000
Neuse River (N. C.)	500
Cape Fear River (N. C.)	1, 000
<b>Total</b>	<b>2, 500</b>

Suspension of business, including wages of employees:	
Roanoke River (N. C.)	1, 000
Neuse River (N. C.)	500
Cape Fear River (N. C.)	500
Peedee River (S. C.)	6, 265
<b>Total</b>	<b>8, 265</b>

MISSISSIPPI SYSTEM

Upper Mississippi Basin

Tangible property totally or partially destroyed:	
Raccoon River (Iowa)	2, 000
Des Moines River (Iowa)	5, 800
<b>Total</b>	<b>7, 800</b>

Missouri Basin

Tangible property totally or partially destroyed:	
Yellowstone River (Mont.)	1, 000
Missouri River (S. Dak.-Nebr.)	5, 100
<b>Total</b>	<b>6, 100</b>
Matured crops: Missouri River	
	2, 000

Arkansas Basin

Tangible property totally or partially destroyed: Arkansas River (Ark.)		\$2, 000
Prospective crops: Petit Jean River (Ark.)		3, 000

PACIFIC SLOPE DRAINAGE

Columbia Basin

Tangible property, totally or partially destroyed: Willamette River (Oreg.)		69, 000
Prospective crops: Willamette River		10, 090
Livestock and other movable property: Willamette River		800
Suspension of business, including wages of employees: Willamette River		53, 300

The following is a statement of the estimated value of property saved by warnings.

ATLANTIC SLOPE DRAINAGE

Roanoke River	\$12, 000
Neuse River	2, 000
Cape Fear River	3, 500
Peedee River	10, 750
Santee River	3, 900
Savannah River	500
<b>Total</b>	<b>32, 650</b>

MISSISSIPPI SYSTEM

Missouri Basin

Missouri River	5, 000
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Ohio Basin

Green River	100
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Arkansas Basin

Arkansas River	3, 500
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PACIFIC SLOPE DRAINAGE

Columbia Basin

Willamette River	119, 000
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A report of losses caused by floods which prevailed in the Tallahatchie, Yazoo, lower Mississippi, and Atchafalaya Rivers during the greater part of January, February, and March will appear in a later issue of the REVIEW.

A tabular statement of flood stages that occurred during March is given below.

River and station	Flood stage	Above flood stages—dates		Crest	
		From—	To—	Stage	Date
ST. LAWRENCE DRAINAGE					
St. Joseph: Montpelier, Ohio	Feet 10	Mar. 27	Mar. 28	Feet 10.3	Mar. 28.
ATLANTIC SLOPE DRAINAGE					
James: Columbia, Va.	10	Mar. 7	Mar. 9	21.0	Mar. 7.
		Mar. 20	Mar. 20	11.1	Mar. 20.
		Mar. 23	Mar. 23	10.7	Mar. 23.
		Mar. 28	( <sup>1</sup> )	16.6	Mar. 30.
Richmond, Va.	8	Mar. 8	Mar. 8	9.6	Mar. 8.
Dan: Danville, Va.	8	Mar. 7	Mar. 7	8.2	Mar. 7.
Clarksville, Va.	12	Mar. 8	Mar. 8	12.4	Mar. 8.
Roanoke: Randolph, Va.	21	Mar. 7	do	24.2	Do.
Weldon, N. C.	31	do	Mar. 11	40.3	Mar. 9.
Scotland Neck, N. C.	23	Mar. 8	do	29.9	Mar. 10.
Williamston, N. C.	9	Mar. 9	Mar. 20	12.7	Mar. 14.
Fishing Creek: Enfield, N. C.	14	do	Mar. 9	14.6	Mar. 9.
Tar: Rocky Mount, N. C.	9	Mar. 10	Mar. 11	9.5	Mar. 11.
Tarboro, N. C.	18	Mar. 12	Mar. 13	18.9	Mar. 12.
Greenville, N. C.	14	Mar. 13	Mar. 14	14.7	Mar. 14.
Neuse: Neuse, N. C.	15	Mar. 7	Mar. 11	17.9	Mar. 9.
Smithfield, N. C.	14	do	Mar. 12	18.4	Do.

<sup>1</sup> Continued into April.