

U. S. DEPARTMENT OF COMMERCE

Luther H. Hodges, Secretary

WEATHER BUREAU

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STORM DATA

JULY 1963

Volume 5 No. 7



ASHEVILLE: 1963

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 1963

PLACE	DATE	TIME	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	
ALABAMA									
Verbena, Chilton County	2	Day			1				Electrical
Talladega, Talladega County	7	6:00 p				2			Electrical
Limestone & Madison Counties	20	5:00-6:00 p			0	0	5	4	Thunderstorms
									High winds and lightning from a line of thunderstorms caused scattered damage to property and crops. Most property damage occurred in Huntsville area where winds exceeded 70 mph. All crop damage due to high winds. 90% of property damage due to wind and 10% to lightning.
Mobile County	21	2:00-3:00 p			1	0	4	0	Thunderstorm
									Scattered property damage as thunderstorm moved from northwest to southeast across county and then into Mobile Bay. One person and cow killed in barn hit by lightning. Golf ball size hail damaged automobiles and high winds blew down trees and power lines. Several boats anchored in Mobile Bay swamped. High winds caused 70% damage, hail 20% and lightning 10%.
Madison, Morgan and Cullman Counties	23-	Night			0	0	6	5	Thunderstorms
									Hail, high winds and torrential rains associated with severe thunderstorms caused scattered damage. Most of Hartselle business district flooded as an estimated 6 inches of rain fell in less than 2 hours. Hailstorm with hail stones up to golf ball size damaged crops in eastern portions of Cullman and Morgan Counties and southern portion of Madison County. Scattered damage to property, utility lines and trees from high winds. All crop damage due to hail. 75% of property damage due to rain, 20% to wind and 5% to hail.
ALASKA									
									No report received by printing deadline
ARIZONA									
Bisbee	10	1:20 p.			0	0	0	0	Tornado
									Funnel cloud touched ground in open desert just south of Bisbee
Tucson	21	2:45 p.			0	0	4		Wind
									Strong winds associated with a thunderstorm severely damaged an apartment house under construction.
Tucson	22	5:00 p.			0	1	5		Wind, rain, lightning.
									Strong winds caused considerable damage to planes and hangars at Freeway Airport where flying debris injured a boy. Flooding damaged automobiles, homes, and county roads. A lightning fire caused extensive damage to a drug store.
Agua	23	Afternoon			0	0	5		Wind
									Wind, accompanied by rain and hail, damaged property and utilities. Nearly all damage by wind.
Benson	24	5:00 p.			0	0	4		Wind and rain
									Strong winds damaged roofs and overturned house trailer. Water damaged streets and town property.
ARKANSAS									
Rison, Cleveland County	18	7:30 p. to 8:00 p.	?	?	0	0	4	0	Electrical
									Thunderstorm moved in southwesterly direction destroying a house and truck.
Hot Springs, Garland County	17	1:00 a. to 11:00 a.	2	880	1	0	6	0	Flash-flood
									Thunderstorms remained over City of Hot Springs with rains of approximately 5 to 7 inches within a short period of time before sunrise. Rainfall over the area totaled 8 to 10 inches. Business establishments along Central Avenue were damaged extensively as were numerous roads and bridges in Garland County. A child drowned in a creek the following day.
Horsfork Dam, Baxter County	17	6:00 p. to 8:00 p.	?	?	0	0	0	0	Wind and rain
									Local storm struck Henderson and Robinson Points. Wind shifted from south to north, pulling up tents, tables and uprooting several trees. Two persons received minor injuries. One woman, more seriously injured, fell on a metal packing case in a falling tent.
Helena, Phillips County	20	9:30 p. to 10:00 p.	11	* 5	1	0	0	0	Wind and electrical
									Report of one person being killed by a fallen power-line.
ARKANSAS (Cont'd)									
Pine Bluff, Jefferson County	22	2:30 p. to 3:30 p.	40	* 40	2	0	0	0	Wind and electrical
									Squall line passed over State. Man at Tucker Farm killed by lightning. Another man struck by a falling tree limb, eventually died.
Crawfordsville, Crittenden County	25	6:30 p.	?	?	0	0	0	0	Funnel cloud
									Thunderstorms moved southwesterly.
CALIFORNIA									
COLORADO									
Larimer and Boulder Counties	7	6:50PM	1/2		0	0	5		Tornado
									A funnel cloud passed over Longmont and later touched ground near the Harmony Community, 6 miles southeast of Fort Collins, blowing down trees, fences and telephone poles. A few hours earlier, farm buildings were damaged east of Boulder by wind, possibly a small tornado, as there were unconfirmed reports of a funnel cloud in the area.
Kit Carson County	11	Afternoon			0	0	5		Tornado
									A small tornado damaged farm buildings and power poles in the vicinity of Stratton.
Sedgwick County	12	Night			0	0		4	Hail & heavy rain
									Hail and heavy rain damaged over 6,000 acres of sugar beets and other crops in the Ovid-Sedgwick area.
Pueblo County	13	Evening			1	0			Heavy rain
									A cloudburst in the vicinity of Boone, resulted in the death of a youth when a flash flood swept the car in which he was riding off the highway. His body was found several days later in the Arkansas River.
Denver	16	Night			0	1			Lightning
									A man received severe burns when struck by lightning while he was painting a building in South Denver.
Phillips and Sedgwick Counties	16	Afternoon			0	0	*3	C	Wind, hail & rain
									Hail and rain damaged sugar beets and other crops in the Ovid-Sedgwick and Paoli areas. Near Paoli, the hail piled up to several inches and stones up to 1 inch in diameter were reported. Wind accompanying the storm, damaged farm buildings and vegetation.
Weld County	17	5:30PM			1	0			Lightning
									Lightning struck and killed a man while he was irrigating on his farm about 10 miles southeast of La Salle.
El Paso County	20	1:46PM			0	0	3		Hail & Lightning
									Hailstones up to 1 1/2 inch in diameter accompanied by 3/4 inch of rain fell in Manitou Springs. Lightning damaged a house in Colorado Springs.
Delta and Montrose Counties	22	Evening			0	0	*4	C	Heavy rain & hail
									Heavy rain and marble-sized hail damaged barley and bean crops in the Montrose area. A cloudburst washed out roads northwest of Delta.
Morgan, Logan and Phillips Counties	26	Afternoon Evening			0	0	4	6	Hail, rain and lightning
									Lightning, wind, rain and some hail did heavy damage in the Fort Morgan-Brush area in the late afternoon. Wind damaged a plane and a hangar at an airport near Ft. Morgan. Crops were damaged by hail and flooding. Over 5 inches of rain fell in the Holyoke area. Lightning put phones out of order. Later in the evening, heavy rain caused flooding in Sterling where 2.46 inches of rain fell in less than an hour. Basements in business and residential districts were flooded. Lightning damaged power and telephone lines and set fire to several haystacks and a barn.
Pueblo, Crowley, Otero Bent & Baca Counties	27	4:30PM-7:30PM			0	0	4	5	Hail, rain & wind
									A heavy rainstorm accompanied by scattered hail and winds estimated at up to 60MPH caused damage along the Arkansas Valley from northwestern Pueblo County to Las Animas and southeast through Baca County. Damage was severe in the Sugar City-Cheraw area, where large hail and heavy rain driven by high winds destroyed or damaged crops, buildings and roads and killed farm stock. Hail piled up to five inches in this area. Five to six inches of rainfall was reported some places along the path of the storm, causing extensive local flooding. A cloudburst 15 miles south of Pueblo flooded an 8 mile stretch of Highway 88-87.
El Paso County	27	Afternoon			0	0	*5	C	Hail
									Hailstones ranging from 3/4 inch up to 2 inches in diameter fell at scattered spots in the Manitou Springs area and from North Colorado Springs to the south entrance of the Air Force Academy. Roofs, trees and gardens were damaged.
CONNECTICUT									
Chester, Deep River, Killingworth, Middlesex County and Naugatuck, Wallingford; New Haven County	5	3:00P - 6:00P			0	0	0	4	Hail
									Hail up to 1 inch in diameter accompanied severe thunderstorms with moderate damage to fruit and vegetable crops especially in Wallingford.

See reference notes at end of table.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 1963

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					KILLED	INJURED	PROPERTY	CROPS	
CONNECTICUT (Cont'd)									
Bridgeport, Fairfield County	5	2:45p			0	0	0	0	Waterspout
			Small waterspout in Long Island Sound off Bridgeport.						
Haddam, East Haddam, Middlesex County	19	5:20p	12	Narrow	0	0	3	4	Tornado
			Small funnel cloud observed by several witnesses followed a path toward the E and then ENE from 2 miles ESE of Black Shop Pond to Mopus Reservoir, moving about 10 mph. Intermittent contact with the surface twisted off a 110 foot steel meteorological tower at mid-height, ripped power lines, damaged the roofs of several structures and downed several large trees. Storm accompanied by intense roar and heavy rain. Waves on Connecticut River observed to be at least 3 feet high.						
Windsor, Hartford Co.	19	PM			0	1	0	0	Thunderstorm
			Man injured by falling tree limb.						
Fairfield, New Haven, southern Litchfield and southwestern Hartford Counties	20-21	10:00p-20th-4:00p 21st			0	0	5	4	Thunderstorm
			Following showers which yielded 1 to 2 inches between the evening of July 19 and the morning of July 20, especially heavy rains occurred on the morning of July 21 with extensive short period precipitation of 1-2 inches along and 15 miles on either side of a line from Canton to Westport and with 3-5 inches from Woodbury to Wolcott. Bridgeport recorded 2.2 inches in 60 minutes and Waterbury over 4 inches in 3 hours. While street floodings, lightning strikes and power outages were common in many sections, greatest damage occurred in Watertown and Oakville due to flash floods, especially on Steele Brook which caused the evacuation of over 50 families and severe water damage to homes, factories and roads.						
DELAWARE									
State-wide	28	Early Morning & Evening			0	0	4	0	Lightning
			Fires caused by lightning, damaged at least four homes.						
Northeastern	29	7:20p - 8:20p			0	3	5	0	Thunderstorm with high winds, and lightning
			Violent storm, with gusts up to 59mph at Wilmington WBAS, caused widespread damage, especially in northeast part of Wilmington. Four 60-foot steel lattice-type towers, built to withstand hurricane force winds, were toppled or tilted. Store windows in most stores of one shopping center shattered. Store or more trees were uprooted and power failures were reported in at least two dozen scattered areas. Damage by lightning was also reported. Three men overcome by smoke in fire caused by lightning.						
FLORIDA									
Ft. Myers Lee Co.	1	Afternoon			0	0			Funnel Cloud
Tampa Hillsborough Co.	1	5:15 pm			2	1			Lightning
New Smyrna Beach Volusia Co.	3	4:00 pm			0	1			Lightning
West Palm Beach Palm Beach Co.	4	Afternoon			0	0			Funnel Cloud
Lake Monroe Volusia Co.	7	2:30 pm	short narrow		0	0	3		Tornado
			Small tornado struck boat marina on N.W. end of Lake Monroe						
Samoset Manatee Co.	10	3:00 am			0	0	5		Lightning
			Lightning struck bulk gasoline storage, igniting 4 storage tanks						
West Palm Beach Palm Beach Co.	11	Afternoon	short narrow		0	0	3		Tornado
Courtenay Brevard Co.	11	7:00 pm	short narrow		0	0	3		Tornado
			Funnel cloud dipped to ground briefly and caused slight damage to Mobile home trailer park						
Ft. Myers Lee Co.	12	Afternoon			0	0			Funnel Cloud
West Palm Beach Palm Beach Co.	14	Afternoon			0	0			Funnel Cloud
New Harmony Walton Co.	17	Afternoon			1	0			Lightning
			Lightning struck and killed farm tractor operator						
Jacksonville Duval Co.	24	1:15 pm	1	300	0	0	3		Tornado
Pensacola Escambia Co.	26	12:30 pm	2	?	0	0	5		Tornado
			Two large waterspouts moved northeastward, converged, and then moved eastward along shoreline of big lagoon about 10 miles west of Pensacola. Storm affected 3 fish camps, numerous boats, fishing and boat sheds and some piers damaged.						
FLORIDA (Cont'd)									
Ft. Myers Lee Co.	25	Afternoon			0	0			Waterspout
Sarasota Sarasota Co.	25	4:00 pm			0	0	3		Wind
			Strong winds accompanying thunderstorm downed a restaurant and damaged other nearby buildings						
Titusville Brevard Co.	28	11:00 am			0	0			Waterspout
West Palm Beach Palm Beach Co.	28				0	0			Funnel Cloud
Tampa Hillsborough Co.	28	6:00 pm	3/4	100	0	0	3		Tornado
			Storm moved west to east, caused minor damage to several buildings						
Mt. Dora Lake Co.	29	6:00 pm	short narrow		0	0	3		Tornado
			Funnel cloud touched down on Lake Gertrude, then moved ashore causing minor damage to several residences before dissipating						
GEORGIA									
South	7	pm			2	1	4	4	Wind, hail, rain and electrical
			Severe thunderstorms during afternoon and evening caused damage in several south Georgia counties. Barns were unroofed and hail damaged crops in Irwin and Berrien Counties. The Omega area of Fife County suffered wind and hail damage to buildings and crops and a lightning started fire destroyed a tobacco barn. Wind and lightning damaged power and telephone lines and a house was heavily damaged by an uprooted tree in Savannah. Two women were killed and a man injured by a bolt of lightning near Thomasville.						
Southeast	11	pm			0	0	3	3	Hail and wind
			Golf ball size hail fell briefly in parts of Camden, Glynn, Liberty and McIntosh Counties. Light wind damage also reported in Camden County.						
Gainesville, Hall County	28	4:30 p			0	0	4	0	Wind and hail
			Wind damaged an air conditioning building and ripped the roof from a storage and loading shed at the Gainesville Mall. Trees were uprooted and other small buildings damaged. Hail caused minor property damage. Some wind damage was reported in Murray County earlier in the afternoon.						
HAWAII									
IDAHO Kellogg	3	8:00 p					?		Hail
			Hailstones as big as golf balls in area immediately east of Kellogg did extensive damage to roofs, gardens, buildings, windows and automobiles.						
Nez Perce and Latah Counties	7	Afternoon & evening					6		Hail and wind
			Area about 1 mile wide and 10 miles long near Genesee hit by hail during afternoon with moderate to heavy damage to peas, variable damage to grains. Same evening another storm entered Nez Perce County near Waha and traveled north-northeast several miles, causing extensive damage to some 50,000 acres of cropland. Where pea fields were hit damage was nearly total while on wheat and barley fields damage ran from 10 to 90%.						
Cambridge	17	4:45 p					4		Lightning
			Building and farm machinery destroyed in fire set by lightning.						
Clark County	24	Early morning					1		Lightning
			Man partially paralyzed and hospitalized as result of lightning. Date not certain, but 24th most likely.						
ILLINOIS									
East St. Louis	2	5:40p			0	1	5	0	High wind, lightning
			High winds damaged rooftops and uprooted and broke trees to damage windows, parked cars, and utility lines. Lightning caused minor damage. One man injured when struck on head by falling plaster.						
Rock Island County	18-19	11p-5a			0	0	?	?	Heavy rain, wind, local flooding
			High wind broke trees, damaged buildings and utility lines. Most of damage caused by falling limbs or trees. Peak of activity was between 11pm and midnight on 18th and between 4 am and 5am on 19th. Wind gusts of 70 mph about 4 am at Moline WBAS before power failure placed instruments out of operation. More than 5 inches of rain fell at Moline WBAS in less than 6 hours. Streets were flooded with damage to cars and buildings.						
Lake and Cook Counties	19	5-7p			0	0	?	?	Funnel aloft, wind, hail, heavy rain
			Wind damage was mostly from broken trees falling on buildings and utility lines. Hail of 1 to 2 inches in diameter fell near Antioch where residents also reported a funnel cloud aloft. Hail 1 1/2 inch in diameter fell at Park Forest. 1 inch of rain in about 20 minutes was measured in Chicago area with considerable local flooding. A seiche was reported on Lake Michigan.						
Chicago and vicinity	21	5-8p			0	0	?	?	Heavy rain, wind, hail
			Wind damage mostly from falling trees and limbs. Approximately 3 1/2 inches of rain fell in 2 1/2 hours at one location. Hail 1 inch in diameter at Midway WBAS about 6 pm.						

See reference notes at end of table.

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					KILLED	INJURED	PROPERTY	CROPS							KILLED	INJURED	PROPERTY	CROPS													
ILLINOIS (Cont'd)										KANSAS (Cont'd)																					
Pike County	28	afternoon			0	0	?	?	Heavy rain	Osage County	12	Late evening				2			Heavy rain												
	Streets were flooded in Pleasant Hill and fields of corn and beans flooded in southern Pike County. Five inches of rain at Pleasant Hill and eight inches at Rebo in six to eight hour period.										13	4:00 p.								Violent wind, hail and heavy rain											
INDIANA										Greeley, Wichita, Kearny, and Hamilton Counties																					
Northern Indiana	19	evening			3	1	4	3	Lightning, hail, rain		14	Evening								Many acres of maize in these counties were damaged. One hail strip in southwest Wichita County was 7 miles long and 3 miles wide. Additional strips were in evidence from eastern Greeley County southward across northern Kearny County. Stones were as large as baseballs in some areas but most damage was from the myriads of small wind-driven stones. Heavy rain made the ground soft and allowed the maize to readily blow over in the high wind. South of Syracuse the hills were white with pea- to golf ball-sized hail. Some stones were odd shaped, flat and about the size of saucers.											
	Scattered severe thunderstorms struck such communities as Michigan City, LaPorte, South Bend, Elkhart, Goshen, and Fort Wayne. People were killed by lightning near Rochester, Muncie, and Argos. Power and telephone services were broken for several hours at some places. Many roads and streets were blocked by toppled trees or flooded by the compound. Winds at the South Bend Weather Bureau were NNW at 40 m.p.h. with gusts to 54 m.p.h. at 6:56 p.m. C.S.T. Area damage was estimated at \$100,000. At the Michigan City Airport several airplanes were overturned by the high winds.																														
Oxford, Benton County	22	6:15 p.							Funnel cloud	Northwest Counties										Hail, 2 funnel clouds, high wind											
Lake County	22	6:15 p.							Funnel cloud											Local hail damages of varying extent and severity were reported over a number of localities from Rawlins County east to Smith County and as far south as Ness County. Especially severe damage to crops was done in eastern Norton, southern Smith, eastern Hooker and north central Ness counties. Stones varied in size from large marbles near Osborne and Denmore, peas to small oranges near Hamsan, some of golf ball size east of Osborne, and some about 4 inches in diameter in Ness County. The storm hit Downs about 6:00 p. and Ness County about 10:00 p. Storms generally came from a northerly direction. High winds increased the damage. Very dusty conditions prevailed just prior to the hail. Ness County damage was estimated at about \$175,000, mostly to crops. Two funnel clouds sighted about 15 miles northwest of Norton.											
	Between Schneider and Hebron.																														
IOWA																															
SE Tipton	1	7:00 p.	1	300				4	4	Windstorm	Seward and Meade Counties	15	6:30 p.-7:15 p.							Funnel cloud, severe wind, hail											
Lenox	2	4:30 p.																		A thunderstorm across these two counties resulted in a funnel cloud about 6 miles east of Liberal; a hail-damaged path in eastern Seward County 4 miles long and 1/2 mile wide, from northeast to southwest; and considerable wind damage in and around Meade from a sudden gust.											
Traer	4	4:30 a.						4		Lightning	Barton and Saline Counties	16-17	Near midnight			4				Small tornado and hail											
West Central Division	16	5:00 p.						5	5	Windstorm										A small tornado struck in Grant County, damaging a single residence. About the same time hail the size of hen eggs fell in Salina. Stones were not numerous but caused some automobile and siding damage.											
	Scattered hail.																														
Rock Rapids	16	8:15 p.	3	200				4	4	Tornado	Thomas County	18	6:30 p.							Severe wind											
Lyon & Sioux Counties eastward to Emmet & Palo Alto Counties	16	9:00 p.						5	5	Windstorm										A sudden but very severe gust of wind damaged buildings, fences and trees from Colby north for several miles. A concrete block wall was blown over.											
Taylor & Ringgold Counties	17	2:30 a.						4	4	Windstorm	Osborne and Russell Counties	27	Late afternoon								Hail, two funnel clouds and torrential rain										
Southern half Northwest Division & northern half West Central Division	18	10:15 p.			1	6	6			Windstorm										Two funnel clouds were sighted five or six miles north of Paradise at 3:22 p. and 3:50 p. Torrential rains struck Russell at 5:30 p. About 4 inches of rain fell at Lurey in 2 hours. Hail up to golf ball size fell over much of northern Russell County damaging roofs, windows and automobiles.											
	30% damage due to hail, 5% damage lightning.																				Stanton and Grant Counties	27	6:00 p.-midnight								Hail and heavy rain
Winnebago-Hancock through Mitchell-Floyd Counties	18	11:00 p.						6	6	Windstorm										Many acres of truck and field crops were damaged by hail in a northwest-southeast path across northern Stanton and southern Grant counties. The wind-driven hail cut crops to the ground. Rabbits and pheasants were found dead after the storm. Heavy rain caused much flooding.											
	40% damage due to hail.																														
East Central Division and Washington & Louisa Counties	18-19	11:00 p.-4:00 a.						6	6	Windstorm	Sherman County	29	Afternoon								Hail and high wind										
	Greatest damage in eastern counties where winds to 70 mph. occurred, rains exceeded 5 inches and scattered hail fell. Damage 20% due to hail to crops, rain 10%.																				Considerable damage was done to crops and buildings over an area 15 miles square northeast of Goodland. A sudden dust storm caused by 75 mph wind was followed by rain and hail. Crops, roofs, trees, and windows were damaged.										
Malvern	22	2:30 a.						4	4	Hail	Wichita County	31	4:00 a.-4:45 a.								Hail, severe wind, electrical										
Sioux Center	29	4:00 p.						4	5	Hail											A severe thunderstorm moved from Nebraska into northeastern Kansas and centered over Brown County with most severe damage from Morrill through Hiawatha and to Everest. The severe wind broke tree limbs, uprooted others. Roofs were torn from numerous buildings and some buildings blown over. Crops were flattened. Hail stripped crops and leaves from trees and broke windows. Trees were exploded by lightning bolts. Signs were damaged by both wind and hail. Transmission lines suffered from lightning, hail, and wind. Hail stones up to golf ball size were reported in several areas. There was some indication of tornadoic winds. Lightning caused some damage as far south as Ottawa in Franklin County.										
	2 inch diameter.																														
KANSAS																															
Johnson County	3	Afternoon			1	1				Electrical	Northwest Kansas	31	6:00 p.-7:00 p.								Hail and damaging winds										
	One girl was killed and another injured by lightning in Olathe.																					Several localities in Cheyenne, Sherman and Sheridan Counties reported damage from 75 mph winds and from marble-sized hail.									
Shawnee County	3	Evening						1	4	Severe wind																					
	A house trailer was overturned 4 miles south of Topeka by a severe gust of wind. One woman was injured.																														
Morris County	6	4:30 p.								Severe wind																					
	A roof was blown from a large outbuilding several miles west of Council Grove. No funnel cloud was sighted but a narrow path was observed across an alfalfa field where round bales had been carried away by what may have been an incipient tornado.																														
Wichita County	11	10:00 p.								Heavy rain, high wind, hail and electrical																					
	A severe thunderstorm over the southern part of the county resulted in the loss of 600 turkeys, several buildings, some crops and outages of utilities.																														
Barton County	12	5:30 p.								Tornado																					
	A small tornado touched ground momentarily a few miles northeast of Ellinwood.																														
Harvey County	12	8:25 p.						1		Tornado and funnel cloud																					
	Two funnel clouds were sighted northwest of Newton. As they moved southeast, one lowered over the Newton East View area, damaging a number of roofs, garages, trees and breaking communication lines. Broken flying glass put a woman's arm.																														

See reference notes at end of table.

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					KILLED	INJURED	PROPERTY	CROPS			
KENTUCKY Webster County	1	10-11 a					4		Rain, wind, hail		
									Locally heavy damage to corn and tobacco in the Onton Spur-Sassafras Grove community.		
Calloway County, Murray Area	13	5:10 - 5:11 p	1	300 - 500			4	3	Tornado		
									High winds damaged farmhouses and buildings on seven farms along a southwest-northeast line. Damage to houses was mostly roof damage on the south side. Several farm buildings were either damaged, shifted off foundations, or blown down. Nearly all trees in the path were blown down or damaged, and eight dwarf apple trees were never found. One large tree was blown a quarter of a mile into a tobacco patch. All corn or tobacco on south edge of path was picked up or lying flat in a northeast direction. An acre of tobacco on the north edge of path was flat on the ground and lying toward the south. Clouds were low and no one saw any unusual cloud formation.		
Central Kentucky	22 23						4	6	Hail		
									Hailstorms caused locally heavy damage in a number of areas. Principal damage was to tobacco, corn and garden crops. Reports of hailstone size varied from pea-size to pigeon egg to marble to golf ball to hen egg. Preliminary reports indicate heaviest damage in the following counties -- Todd, Hardin, Green, Shelby, Spencer, Scott, and Fayette.		
Knox County, Woodbine Area	29	afternoon				1			Lightning		
									Lightning struck a 10-year old boy who was under a table in the kitchen of his home, causing two deep gashes in the left arm and rendering him unconscious.		
LOUISIANA Tangipahoa Parish	2		?	?	0	0	?	?	Tornado		
									Funnel seen by newspaper route manager between Hillsdale and Amite, near Tangipahoa-St. Helena Parish line, dry shed destroyed. Nearby dairy barn and residence left intact.		
Allen Parish	4	2:00 p.- 3:00 p.					0	0	4	0	Lightning
										Lightning near Oakdale hit several places about two miles apart, and started fires which destroyed a brick house, a barn, a frame house, and a family car.	
Lafourche Parish	11				1	1	2	0		Lightning	
										Lightning struck 16-ft. outboard motor boat on Little Lake, east of Golden Meadow. Boat's steering gear fused and cushions charred; one occupant killed instantly, other knocked unconscious.	
State	22	p.m.			0	0	5	4		Wind, hail, Lightning	
										Thunderstorms, mostly small hail; gusty winds felled many trees and lifted roofs in parts (mostly north) of state. Winds up to 36 m.p.h. at Monroe pushed freight car 4 miles down track before workmen caught it. On top of Sunshine Bridge (8 S Donaldsonville), wind bent steel rods more than an inch thick on one pillar; other pillar had code which prevented bending. Many power and telephone outages. In some areas, the heavy winds and hail ripped leaves from whole fields of row (including cotton) plants.	
State	23	p.m.			0	0	5	4		Heavy rain, wind, Lightning	
										Thunderstorms hit parts of Louisiana with gusty winds and heavy rains. Many trees felled, some damage to buildings. Flash floods in some local areas. Lightning hit Chatham School Gymnasium about 2:10 pm, and ensuing fire destroyed building. Many power and telephone outages. The combination of high winds and heavy rains downed considerable rice in some areas with damage ranging from moderate to heavy in scattered parts.	
State	25				1	0	4	4		Lightning, wind	
										Scattered thunderstorms felled some trees and damaged some buildings. In Shreveport, lightning killed boy under pine tree, stunned woman in nearby yard, and knocked woman to floor in nearby house. In Vermilion Parish, lightning killed some cows. The cumulated but erratic effect of several days with thunderstorms, wind and rain downed 10 to 90 percent of rice in various fields in SW Division.	
Plaquemine Parish	28	About 2:00 p.								Waterspout	
										Waterspout 3 S Port Sulphur.	
Jefferson Parish	29	11:01 a.- 11:07 a.								Funnel clouds aloft	
										Two funnel clouds aloft 7 S observed from 14th floor New Orleans building; also by pilot.	
MAINE Concord	1	Afternoon	1	1000	0	0	5	0		Tornado	
										Tornado moving eastward cut through wooded area of Fletcher Mountain, ripping trees and a few power lines.	
Mayfield Township	1	3:45 p.	200%	50	0	0	3	0		Tornado	
										Tornado moved eastward through wooded area south of Palmer Pond. Path of damage ended in a swamp area. Many trees downed.	
Waterville	1	4:10 p.	2	20	0	0	3	0		Tornado	
										Tornado, unusually narrow, moved eastward from vicinity of Colby College toward Winslow. Trees were twisted and felled. Garage was completely lifted and dropped into a truck.	

PLACE	DATE	TIME	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM	
					KILLED	INJURED	PROPERTY	CROPS		
MAINE (Cont'd) Southern and coastal areas	1	Afternoon			0	1	4	0	Electrical	
										The area was swept by thundersqualls of rather brief duration. Numerous lightning strikes caused widespread but mostly minor damage. A youth in Manchester was injured when lightning struck the metal swing-couch on which he was seated. Power and phone services were disrupted in many communities. Hailstones fell along Rte. 501 near Manchester.
Caribou to Limestone - Pt. Fairfield area	3	Evening			0	0	3	3	Wind, electrical	
										Severe thundersqualls ripped through area spreading devastation in its path, particularly in the tall timber sections. Dozens of those trees were felled by lightning strikes and gusts which reportedly exceeded 60 mph. A number of fruit trees were torn apart by the winds.
Madawaska	8	Evening			0	0	4	0	Electrical	
										An electrical storm is believed to have caused the deaths of 36 cows and 1 horse in a pasture.
St. Albans	15	6 p.	3	25	0	0	2	0	Tornado, water-spout	
										Funnel cloud touched down in field near west shore of Big Indian Lake, crossed field and roared onto lake where it raised column of water 100 to 150 feet high. With a roar like a jet plane, waterspout crossed half the 5-mile length of the lake and disappeared on reaching the north shore. Tornado ripped tree limbs and damaged a number of camps.
Farmington area	29	2:15 p. to 2:45p.			0	0	4	3	Wind, electrical	
										Violent thundersqualls felled trees and damaged homes and gardens. Lightning strikes started a number of fires.
MARYLAND Ocean City, Worcester County	8	Afternoon				2			Lightning	
										18-year girl was struck and injured by lightning while seeking shelter from sudden thunderstorm at beach. Her companion was thrown 50 feet but suffered only minor injuries.
Frederick and Carroll Counties	19	4:05p	5	600	0	0	4	0	Tornado	
										Storm roared over a 2 to 4-mile path beginning between Libertytown and Unionville and moving on a line NW-ENE to Marston. Several farms reported extensive damage to property. Many reports of downed trees, telephone lines and utility poles, also roof tops blown off. Weather Bureau cooperative observer in area reported that several persons had seen the funnel cloud.
Croom, Prince Georges County	19	7:00p	1	50	0	0	4	0	Tornado	
										Small tornado dipping to the ground several times lifted and collapsed a large 96-foot barn 30 feet from its foundation. Some trees were snapped off and power lines downed. Great roaring noise was heard. Rain driven through tobacco leaves with enough force to simulate a small hailstorm.
State-wide	28	Afternoon and Evening			0	0	4	0	Thunderstorms	
										Thunderstorm activity was widespread over state. Many homes and buildings struck and damaged by lightning. Lightning strikes disrupted power service in several communities. Hail stones measuring one-inch were reported in braddock heights with little damage indicated. Fires caused by lightning at Barclay were the worst of the storm casualties with total loss estimated at \$10,000. One man stunned and knocked to ground at Gracetown.
Washington and Harford Counties	29	Evening			0	1	?	0	Lightning	
										Minor injuries to a girl struck by lightning while talking over telephone at Pinesburg. Some lightning damage reported in Harford County.
MASSACHUSETTS Eastern counties	8	Early evening			0	1	5	0	Rain, electrical	
										Torrential showers and severe thunderstorms struck many sections of extreme eastern areas. Heaviest damage resulted from flooded streets, cellars and basements throughout the area. Low sections of roads and underpasses were also flooded and traffic was halted and re-routed in many cases. Lightning strikes were numerous with many fires resulting. Steeple of the Amisquam Village Church was struck by lightning, setting a fire that caused heavy damage. The dragger ANELA W was struck and damaged by lightning at sea, 30 miles southeast of Nonesuch. A man in Tewksbury was injured while sweeping out water from his cellar when he was either struck by lightning or received a strong electrical shock.
Statewide	14	Afternoon			0	2	5	0	Wind	
										Brief but severe thundersqualls ripped across the state causing widespread wind damage. Major storm casualties were trees and branches, utility lines, and power and phone services. In Marblehead Harbor the sudden squall capsized 18 sailboats during a race, tossing 45 persons into the water. All were rescued. In Springfield, a mother and young daughter were injured while walking when they were momentarily buried under an avalanche of falling tree limbs. Brief heavy showers attending the wind squalls caused some minor flooding of streets and cellars in Chelsea. Other property damage occurred in some communities when houses and other buildings were struck by falling trees.

See reference notes at end of table.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 1963

PLACE	DATE	TIME	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM	
					KILLED	INJURED	PROPERTY	CROPS		
MASSACHUSETTS (Cont'd)										
Dunstable	18	2:20 p.	1	1200	0	0	4	3	Tornado, hail	
Tornado moved from northeast toward the southwest, swinging toward the south and southeast near the end of its path. Position of many felled trees and debris evidenced rotary motion of storm. Homes were damaged; a shed was demolished. Hail up to 5/4 inch diameter covered more than a square mile and embraced all of Dunstable except the extreme southern part. Gardens were hard hit, windows and windshields were broken or pitted, and automobile hoods and roofs were dented. Trees and damaged gardens were major casualties of the storm.										
Statewide	18				0	5	5	0	Electrical, rain, hail	
Locally severe thundershowers battered many areas of the state. They were especially severe in the northeast and in southern Berkshire County. A woman was injured by lightning in Sturbridge and 2 boys in Lawrence were stung when lightning struck the metal fence on which they were leaning. Lightning strikes started many fires, one of which destroyed a large 1-story vehicle maintenance shop at Otis AF Base. Trees and large branches were felled and power and phone services were disrupted in many communities. Hailstones up to 2 inches diameter in Worcester, Middlesex and Essex Counties damaged gardens, pitted windshields and dented automobile hoods. Locally heavy showers caused washouts and flooded streets and basements.										
Westfield	21	5 p.	500**	75	0	0	3	0	Tornado	
Eye-witnesses reported that funnel cloud dipped to ground and ripped off a strip of tobacco netting 330 ft. by 550 ft. without damaging the tobacco.										
Bradford	24				0	0	0	0	Dust devil	
Whirlwind of moderate size and intensity observed on golf course of Bradford Country Club.										
Essex County	29	Afternoon			0	5	4	0	Electrical	
Storm affected extreme northeast portion of county from Amesbury to Newburyport and Plum Island. Three men were injured at Plum Island when lightning ripped through a cottage on which they were working. Numerous lightning strikes started a number of fires. Most damaging fire occurred in Amesbury where a large barn with valuable stored equipment was destroyed.										
MICHIGAN										
St Joseph County	1	5:45 p.					4		Electrical	
Lightning induced fire destroyed large barn, milk house, grainary, and tool shed with damage to all contents in Mendon township.										
Benton Harbor	11	Noon					3		Dust Devil	
Dust devil lifted roof off pickle plant shed.										
Jackson	17	Afternoon			1		3		High winds	
Man from Dexter killed when high winds toppled tree on his moving small pick up truck on rural county road near Jackson.										
Kalamazoo County	17	Early morning					4		Electrical	
Lightning caused several fires with 2 homes and contents suffering heavy damage in the Kalamazoo area and one home and contents heavily damaged at Galesburg. Lightning strikes disrupted power service to 250 homes throughout the area.										
Central Upper Peninsula and all of Lower Michigan	19	5:00 p., 11:00 p.					5	C	Thunderstorms with high winds, heavy rains and lightning	
High winds estimated up to 70 miles per hour spread heavy damage. Hundreds of trees toppled resulting in heavy damage to homes, buildings and cars due to flying debris, limbs, and falling trees. Numerous TV antennas blown down, house trailers over turned due to high winds plus many plate glass windows broken. Huge circus tent blown down at Iron River with heavy damage reported. Numerous buildings and barns demolished plus heavy wind damage reported to roofs, buildings and homes. Lightning induced fires damaged nearly a score of homes and buildings. Power service disrupted to hundreds of homes in the area due to lightning strikes. Heavy rains flooded roads, streets, and basements with heavy damage reported. Southwestern lower and central upper Michigan areas suffered the heaviest damage.										
Port Sheldon	19	8:30 p							Seiche	
County Sheriff observed 6 foot seiche on Lake Michigan.										
Grass Lake	21	Afternoon			2	4			Electrical	
Family of 6 on a picnic struck by lightning when they sought refuge under a tree from a thunderstorm. Mother and young daughter died in nearby hospital shortly after from injuries. Remaining 4 family members were treated for injuries and later released from the hospital.										
Nadeau	21	6:30 p.					4		High winds	
Large modern farm barn demolished by high winds. Herd of 30 head of cattle killed when the barn collapsed. Damage estimated at 35 thousand dollars.										
Calhoun, Oakland, Macon and Wayne Counties	22	3:00 p., 8:00 p.			1	4			Electrical, high winds, and heavy rains	
Woman in St Clair Shores struck by lightning while closing window in her home was treated for shock. Lightning induced fires caused severe damage to approximately 10 homes and buildings in the area. Power service disrupted to about 1000 homes in the Battle Creek area due to lightning strikes. High winds damaged a few homes and buildings.										
MICHIGAN (Cont'd)										
Southwestern and Central Lower Michigan	31	5:00 p., 11:00 p.						5	5	Thunderstorms with high winds, hail, lightning and heavy rains
High winds overturned 2 truck trailers and knocked down a wall of the Gibson Refrigerator Company at Greenville. Numerous trees toppled due to high winds with resultant damage to homes, buildings and cars. Lightning induced fires damaged several buildings and homes in the area. Lightning strikes cut power service to hundreds of homes. One inch hail reported at Newegg with lesser size reported elsewhere. Hailstorm damage to cherry crop in Mason County estimated at 250 thousand dollars.										
Cadillac and Wexford County area	31	6:40 p.	20	Narrow	0	0	5	C	Tornado	
Tornado first sighted moving eastward across Highway 131 north of Cadillac by the County Sheriff. It struck the north side of Cadillac first hitting the State Highway Department sign shop where it tore off the steel corrugated walls and portions of the roof and then lifted a panel truck 20 feet into the air which was demolished. Nearby Behrens Lumber Company building and Garn Glass Company show room were destroyed. Two other buildings in the adjacent area were demolished and a house trailer was overturned. The tornado then travelled and skipped along south eastward touching down momentarily then would recede into the clouds again. Two Michigan State Police troopers followed it for 20 miles as it moved at estimated 20 to 25 miles per hour south eastward and then finally disappeared into the clouds. It also struck and destroyed a small sawmill at Lucas which is about 10 miles southeast of Cadillac.										
Marion	31	8:06 p.							Funnel aloft	
Funnel aloft observed 1 mile southeast of Marion.										
Clare	31	8:43 p.							Funnel aloft	
Funnel aloft observed.										
MINNESOTA										
Polk County	16	4:20 p	6	*1					4	Hail
Hail damaged crops in a three township area.										
Southeastern Minnesota (Linsted, Wabasha, Winona Counties)	16	6:00 p-11:45 p					4	5	Heavy rain, hail, wind, flood, funnel clouds aloft	
Hail, up to 1 1/2 inches in diameter, accompanied by strong winds damaged crops in scattered locations in the three county area. Heavy rainfall, up to 6 inches in places, over the Whitewater River Basin caused the river to flash flood. Based on Weather Bureau warnings 250 campers were evacuated from danger areas in the Whitewater State Park thereby averting a possible disaster. Park installations and roads damaged by flood waters. Two funnel clouds aloft moving from southwest to northeast observed at St. Charles, Winona County.										
Southwestern Minnesota (Yellow Medicine, Lincoln, Lyon, Redwood, Brown, Pipestone, Murray, Cottonwood, Nobles and Jackson Counties)	16	6:45 p					5	5	Hail, wind and heavy rain	
Hail, up to 3 inches in diameter accompanied by winds clocked at 70 mph flattened and riddled crops in parts of these counties. Many barns and outbuildings damaged, trees uprooted and power lines downed. One 15,000 gallon storage tank rolled several hundred yards. Windows, signs and TV antennas broken or damaged. Rains up to 2 1/2 inches added to crop losses.										
Dafur 3E, Watonwan County	16	7:10 p	6	*1				5	5	Tornado
A tornado, moving east, damaged or destroyed barns, silos, out-buildings and machinery on seven farms. Numerous animals were killed by collapsing barns. Many trees were uprooted or had tops twisted off.										
Southwestern Minnesota	18	2:30 p						5	6	Hail, wind, heavy rain, funnel cloud aloft
Hail up to 3 1/2 inches in diameter battered crops, broke windows, damaged roofs and injured livestock in scattered locations in the 15 counties south of the Minnesota River and west of Mankato. Strong winds accompanying the hail added to the damage. Storm moved southeast. A funnel cloud aloft was observed by a highway patrolman near Lake Crystal. Hardest hit area by hail was that bounded by South Dakota line southeast to Ivanhoe to Tyler to Slayton then northwestward to Rithdon to Lake Benton. Village of Lake Benton suffered hail damage to west and north sides of most buildings and homes. Injured cattle Ivanhoe area had to be slaughtered.										
Martin, Faribault, Freeborn and Mower Counties	18	5:00P						5	5	Wind, heavy rain, funnel clouds aloft
Twelve-hour rainfall of 4 to 5 1/2 inches caused the Blue Earth River upstream from Winnebago to overflow its banks and flood many acres of cropland. Heaviest rainfall 5.30 inches at Blue Earth. Winds clocked at 80 mph ripped through parts of Freeborn and Mower Counties with greatest damage occurring at Albert Lea starting at 5 p. For 45 minutes rapidly shifting winds downed scores of trees and smashed windows. Considerable loss due to trees falling on buildings and utility lines. Wind damage also reported at Austin. Funnel clouds aloft were reported near Owatonna, Steele County; Hartland, Glenville and Oakland, Freeborn County and near Mapleview, Mower County.										
Canby, Yellow Medicine County	26	6:30 p-12:00 p					2	5	4	Heavy rain
Torrential rains, 5 inches in 2-hour period from 8-10 p, fall at										

See reference notes at end of table.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 1963

PLACE	DATE	TIME	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM	
					KILLED	INJURED	PROPERTY	CROPS		
MINNESOTA (Cont'd)										
Canby resulting in damage to homes, business establishments, roads, bridges and crops throughout Canby and vicinity. Total Canby rain-fall 5.23 inches. One farmer lost 365 milk valued at \$17,000 by drowning. Two people injured when their car dropped into a washed out bridge approach.										
St. Cloud, Stearns County	29	p							Dust devil A dust devil picked up a 6 year old boy and deposited him 20 feet away uninjured. Garbage cans and other loose items were tossed about in circles one hundred feet in diameter.	
Lyon, Redwood, Ren-ville Counties	29	8:30 p							Hail Hail caused scattered crop damage in a three county area.	
MISSISSIPPI										
Forrest County, Hattiesburg Municipal Airport	1	After-noon			0	0	3	0	Thunderstorm	
Washington County	5				1	0	0	0	Lightning Wind over 80 m.p.h. (for perhaps 2 minutes), snapped moorings of 5 light planes; several unmanned planes flew up to 200 yards before crashing. Some damage to buildings. Man killed by lightning, two others shaken up but not badly injured, while chopping cotton in field near Glen Allan.	
Hinds and Madison Counties	8								Heavy rain Some streets flooded in Canton and Jackson. The 3.39 inches in Canton was the heaviest one-day rain since April 12, 1962, and its heaviest one-day July rain since 1959. Unofficial reports of over 5 inches in area.	
Northern Mississippi	13-17				0	0	0	?	Heavy rain Scattered thunderstorms produced locally heavy rain. Some creeks overflowed, flooding acres of croplands; streets flooded. In some places, the 24-hour precipitation was near 5 inches, with un-official reports as much as 10 inches.	
Lower Delta Division to Coastal Division	22	p.m.			0	0	?	?	Wind, hail, lightning Thunderstorm, gusty winds, occasional heavy hail, and severe lightning moved across area. Many power and telephone outages. Many tree limbs and trees felled. Hailstones, up to nearly 3/4 inch in diameter in Raymond-Clinton area shortly before 8 pm. Lightning damaged houses, trailers, and decommissioned a 1,000 pound, 50-horsepower motor in the city of Bay St. Louis.	
MISSOURI										
Boonville Cooper County	2	mid-afternoon							Thunderstorm Wind damage to stores, homes and a drive-in-theatre.	
Southern Cooper County	6	Afternoon & evening							Thunderstorm Flash flooding on the Petite Saline river in and near the town of Speed.	
Princeton Mercer County	17	4:30-5:15 pm							Thunderstorm Most extensive damage to phone and power lines "in years".	
Southern Calloway County	23	early morning							Funnel Aloft	
MONTANA										
Flowerlee (about 15 miles west) Chouteau County	3	8:45 p.			0	0	0	0	Tornado A funnel cloud sighted to the west. Photographs indicate that it touched ground briefly. There were severe thunderstorms and high winds in the area.	
North-Central Montana	3-4	evening through early AM	220	*50	0	0	4	5	Thunderstorms, wind, hail The storms covered an area from Eastern Teton, Eastern Pondera, Western Chouteau, through Hill, Blaine, Phillips, and Valley Counties. They were first reported early evening and lasted until early morning hours of the 4th. Damage was heavy some areas, very light others. The storms were rather spotted. Thunderstorms, wind and hail were reported the afternoon of the 4th in Valley and Western Roosevelt Counties.	
North-Central Montana	5	Afternoon and evening	300	*100	2	5	4	5	Thunderstorms, high wind, hail, heavy rain Severe thunderstorms, heavy rain, high wind, and hail were reported in a number of sections from Toole County eastward to Roosevelt County during the afternoon and evening. Unofficial reports indicate as much as three inches of rain fell in some areas. At Hinsdale, Valley County, it was estimated that wind speeds were 90 mph. Hailstones the size of walnuts fell near Conrad, Pondera County. Heavy rains 8 miles east of Dodson, Phillips County, washed out and softened the road bed on the Great Northern Railway. Fifty-three cars on a passing freight train were derailed and heavily damaged. Two transients were killed and five injured. There was also some hail damage reported in Cascade County. About \$40,000 property damage due to rain.	
MONTANA (Cont'd)										
Southern Pondera and Eastern Teton Counties	8	evening	20	*10	0	0	4	5	Hail Hail damage was spotty. Hailstones were 1/2 to 1 1/2 inches in diameter.	
Dillon, Beaverhead County	9	3:02 p.	30	*5	0	0	5	5	Thunderstorm, high wind, hail, rain Considerable damage was done to residential property and heavy damage to crops outside of Dillon. Hailstones up to the size of baseballs were reported. Winds were up to 65 mph.	
Fairfield, Teton County	10	1:00 p.							Funnel Cloud A funnel cloud was sighted west of town. It was in sight from 1:00 P.M. to 1:30 P.M., but it did not touch ground.	
Eastern Garfield, Southern Valley and Southwest Roosevelt Counties	10	Afternoon			0	3	5	6	Thunderstorm, rain, hail Thunderstorms were rather general from Jordan, Garfield County, to Wolf Point and Poplar, Roosevelt County. Heaviest damage was reported at Nashua, Valley County, from hail. Hailstones were up to 2 inches in diameter near Poplar and Wolf Point. Some of the larger stones weighed over 1 ounce. Unofficial reports of over 5 inches of rain near Poplar. High winds near Jordan forced a car off the highway injuring 3 people. There was \$10,000 damage to buildings in Nashua from heavy rain.	
Eastern Judith Basin and Fergus Counties	15	Afternoon			0	0	0	4	Hail Scattered hail throughout the area caused some crop damage. Largest hailstones were about 3/4 inch in diameter.	
Southeastern Carter County	17	Evening	150	*5	0	0	3	4	Hail Some hailstones up to an inch in diameter.	
Wibaux (near), Wibaux County	18	4:00 p.	50	*2	0	0	4	5	Hail Hailstones up to one inch in diameter.	
Great Falls, Cascade County	24	3:35 p.			30	0	0	0	Tornado A small tornado in the city of Great Falls did some damage to trees. Light rain and 1/2 to 3/4 inch hail fell just ahead of tornado in a dead calm.	
Northeastern Montana	24	Afternoon and Evening			0	0	4	5	Thunderstorms, hail, rain There were scattered thunder and hail storms throughout the area. The most severe one was at Culbertson, Roosevelt County at 1:30 P.M. An unofficial measurement of 2.5 inches of rain in about 1 1/2 hours. There was considerable rain and wind damage to property.	
McCone, Dawson and Fallon Counties	30	Evening			0	0	0	5	Thunder and hail storms There were several thunder and hail storms in the three counties. Heaviest damage was reported around Brockway.	
NEBRASKA										
Near Elgin	12	10:00 p.	10	*4	0	0	3	4	Hail Hailstones up to 1 1/2 in diameter in an area from 4 miles west-northwest of Elgin to about 6 miles east-southeast of Elgin.	
Boyd & Holt Counties	12	6:00 p.	35	*3	0	0	4	5	Hail Hail up to 2" in diameter from near Naper to Red-bird was accompanied by considerable wind. Some hail and heavy rain was also reported in Antelope County.	
Dawes & Sheridan Counties	13	1:00 a.	20	*8	0	0	6	5	Hail Hail up to 3 1/4" diameter destroyed most vegetation in Mirage Flats.	
South-central Nebraska	14	4-7 p.	50	30*	0	0	4	6	Hail Hail up to 2" diameter was scattered through Custer, Sherman, Buffalo, Hall, Kearney, Adams and Webster Counties with heavy damage sustained north of Blue Hill, near Alda, Sargent, Wood River and Covels.	
Buffalo County	14	7:30 p.			1/2	Narrow	0	3	0	Tornado Losses resulted when the tornado went through edge of a farmstead about 5 miles south of Sweetwater.
Southeast Nebraska	16	Evening	50	50*	0	0	4	5	Wind & Hail High winds caused scattered utility lines damage from York to Beatrice. Building damage was reported in Chester and Grafton. Hail up to 2" deep caused crop damage to a 4-square mile area south of York.	

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					KILLED	INJURED	PROPERTY	CROPS		
NEBRASKA (Cont'd) Northeast Nebraska	18	Evening	100	30*	0	0	4	2	Wind & Lightning	
									Scattered wind damage was reported from Boyd to Madison Counties. Lightning killed 10 cattle southwest of Pierce.	
5 North of Palmer	18	10:00 p.	Spot		1	0	0	0	Lightning	
									Lightning death occurred while victim was opening a fence gate.	
11 E of Niobrara	26	9:00 p.	Spot		0	0	4	0	Lightning	
									Home and contents destroyed by fire.	
Hayes & Hitchcock Counties	28	6 - 8 p.	15	4*	0	0		4	Hail	
									Hail up to 2" diameter from near Rupert to around Thornburg.	
Dundy County	29	3:00 p.	12	2*	0	0	4	4	Hail	
									Hall damage to property and crops in Benkelman vicinity.	
Eastern Sandhills	29	9 - 10 p.	80	50*	0	0	4	4	Wind	
									Utility lines, buildings, and haystacks were damaged. Newly-cut hay was destroyed.	
Southeastern Nebraska	30	6 - 10 p.	120	50*	1	0	5	4	Hail, Wind, & Funnel Clouds	
									High winds caused considerable property damage around Alexandria and Gladstone. Hail caused widely scattered damage from eastern York County to Chee County and southward to Jefferson County. Funnel clouds were sighted near Gladstone and York.	
Near Daykin	31	5:15 a.	Spot		1	0	0	0	Lightning	
									Man struck by lightning while walking in pasture-land.	
NEVADA			None reported							
NEW HAMPSHIRE Concord to Derry	8	Afternoon			0	0	4	0	Rain	
									Torrential rain fell for more than half an hour in parts of this area, flooding streets and basements. A number of road washouts were also reported.	
West Plymouth	14	2:50 p.	250**	75	0	0	3	0	Tornado, waterspout	
									Tornado struck suddenly and was observed by several witnesses. Moving from south to north, it ripped, split and downed about 35 tall pine trees and damaged a shed, then raised a waterspout as it advanced half-way across Loan Lake before it disappeared.	
Durham	18	3:45 p. to 4:15p.			0	0	3	3	Hail, wind	
									Storm was generally confined to residential and business sections of the city. Hailstones were described "as big as ice-cubes." Window panes were broken and automobile windshields and hoods were pitted and dented. Trees and branches were downed. Some gardens were ruined.	
North Charlestown	18	7 p.	1	200	0	0	4	0	Tornado	
									Heading northeastward, storm tore a path through the southern end of town, falling trees, wires and outbuildings and lifting roofs. In one case, the storm tore the roof off a barn and deposited it in a field 400 feet away. Heaviest damage occurred on Unity Road and Burroughs Road.	
Wolfeboro	18	8:55 a.	500**	200	0	2	4	5	Tornado	
									Tornado tore through a boys' camp on Rust Pond, uprooting trees, blowing down tents, and tossing boats and pances around. Major damage was the loss of tall pine trees, three of which nearly completely wrecked three automobiles lying in their paths. Two youths received minor injuries from flying debris.	
Lake Ossipee	21	Afternoon			0	0	0	0	Waterspout	
									"Good sized" waterspout, reaching high into the air and moving at a good pace, observed by several witnesses.	
NEW JERSEY										
Pennsauken, Camden Co.	20	Late Aftn.			2	0			Electrical	
									Two physicians were killed when struck by lightning while playing golf at a country club.	
Ocean Gate, Ocean Co.	29	Late Aftn.			1	1			Electrical	
									One boy was killed and another injured when struck by lightning while returning from a fishing trip on one bicycle.	
Allentown, Monmouth Co.	29	5:59 p.m.			1	1			Electrical	
									A farmer driving a tractor was killed when struck by lightning. The farmer's son received a spinal injury as the lightning bolt traveled along the tractor and knocked him from a haywagon being pulled by the tractor.	
NEW MEXICO Gallup, McKinley County	8	Noon					2		Lightning	
									Lightning struck near bulldozer operating on golf course construction. Two men stumped; one of them was hospitalized.	
NEW MEXICO (Cont'd) Roosevelt County	d	11 Afternoon	Short	Narrow				3	Tornado, wind	
									Roof torn off hay barn, two grainaries damaged, cotton trailer wrecked, and four poles downed with cross arm twisted off pole one mile north of Rogers. Roof twisted off small metal building and house trailer turned around 1/2 miles south of Floyd.	
Tucumcari, Quay County	12	3:00 p.m.	Short	Narrow				4	Tornado, wind	
									Two homes on opposite sides of Highway 104, 5 miles north Tucumcari, leveled. Roof of 4 room cinderblock home blown 100 yards north. Wind towards south; and then towards north. Roof blown off barn, one sheep killed, and cowshed roof sheared off and scattered several hundred feet 3 miles north Tucumcari.	
Jal, Lea County	12	Afternoon						3	Lightning	
									Lightning struck tree, 10 miles north Jal, knocking down two boys a few yards away and stunning a third boy.	
Artesia, Eddy County	12	3:00 p.m.						1	Lightning	
									One man, at Cottonwood, struck by lightning while chopping cotton received burns on head and feet.	
Roosevelt and Lea Counties	15	4:00 p.m. to 8:00 p.m.					2	0	Wind, Lightning	
									Lightning knocked one man unconscious at the front door of his home in Kenna, 35 miles southwest of Portales, and another bolt felled a 70-foot tree in Portales. Windmill and tower blown over, telephone poles downed, and outbuildings and garage damaged by wind, in Milnesand-Built area. 123-foot oil derrick, about 16 miles northwest of Tatum, Lea County, blown over at 5:30 p.m. by wind estimated at 80 m.p.h., causing \$50,000 damage and injuring one man. Winds moved southward and at Lovington toppled television antennae, broke tree limbs, knocked out windows, damaged roofs, overturned trailers, and laid over some corn. Between Lovington and Hobbs, an empty oil tank was struck by lightning at 6:00 p.m.; igniting vapors and causing \$1,000 damage. Winds of 68 m.p.h. struck Hobbs between 6:00 p.m. and 8:00 p.m. blowing over signs, sheds, and shifting some trailer houses off their foundations, broke windows and disrupted electric service, with damage to hundreds of thousands.	
NEW YORK										
Statewide	2	Afternoon & early evening					1	6	Thunderstorms, high winds, hail, heavy rain	
									Cold front passed across the State breaking up severe heat wave. Severe thunderstorms in many sections resulted in heavy damage due to locally high winds, severe lightning, some areas of hail and heavy short downpours of rain. Storms were unusually severe in Chenango, Herkimer, Otsego, Erie, Orleans, Steuben, Wyoming, Genesee, Oswego, Montgomery, Orange, Chautauque counties and the upper Hudson Valley region. Trees were blown down disrupting power and telephone services. Many lightning-caused fires and some near tornado winds with resultant damage to structures. One man was killed by lightning at Oneonta.	
Ashville, Chautauque County	2	12:20 p.m.	3	3	0	0	0	3	Tornado	
									Small tornado moved west to east - small black swirling funnel cloud touching ground. Accompanied by hail and rain. Blew down farm buildings and trees.	
Syracuse area	7	Mid-afternoon					1	5	Thunderstorm	
									ERRATA: June 2nd data should have been entered under July 2nd	
									Violent thunderstorm about mid-afternoon killed a water skier by a lightning strike. Many other lightning strikes to homes and buildings. Power out to some 10,000 buildings and hospital. Some wind damage.	
Scattered areas of the State	19	Afternoon			1	1		4	Thunderstorms, high winds	
									Severe thunderstorms, particularly at Ithaca and Monticello, with severe lightning and high winds and brief heavy torrents of rain. At Ithaca a man was electrocuted by fallen wires when he jumped from his car threatened by a falling tree. Wind and lightning damage quite severe in this area. The Monticello area suffered damage from high winds and heavy rain. A trailer, silo and trees were blown over by high winds.	
New York City area, Buffalo area	29						2	19	6	Thunderstorms, wind, heavy rain
									One girl was killed by lightning at Coney Island and two people were injured. At New Rochelle in Westchester County, 16 were injured by falling buildings and trees, where the wind damage was severe. At Buffalo a severe thunderstorm terminated a heat wave. Torrential rainfall occurred with 3.37 inches in the official gage. There was widespread flooding, with foundations weakened and some collapsed. Widespread cellar flooding occurred. Extensive flooding in streets and highways, where water "pooled" in low areas to a depth of 5 feet or more. Many cars were flooded and damaged. Near state of emergency existed for many hours. Reported to be the worst storm in 18 years causing mammoth traffic jams and disruption of business. One woman was electrocuted while attempting to unplug a lamp in a flooded basement. A boy was injured by a falling wall due to rain-soaked and weakened earth.	

See reference notes at end of table.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 1963

PLACE	DATE	TIME	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED ¹ DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	
NORTH CAROLINA Hertford, New Hanover, Pender, Stokes, Surry, Wake Counties	1	Aftn & evng			0	0	4	5	Electrical, Hail, Wind
									Lightning set fire to several dwellings and business buildings. Several trees blown down on power lines and buildings. Hail damaged crops in several areas.
Catawba, Durham, Franklin, Hertford, Madison, New Hanover, Person, Pitt, Vance, Wake, Wayne Counties	2	Aftn			See remarks		4	5	Electrical, Hail, Rain, Wind
									Several buildings struck by lightning. One house burned down, power and telephone service disrupted. Flash floods in several areas. Hail and wind damaged tobacco crop.
									A train wreck in Wake County caused by a burning trestle which "may have been set fire by lightning" killed 3 crewmen and injured another.
Bladen, Moore, Wake Counties	8	Aftn & evng			0	0	4	0	Electrical
									One barn with farm machinery and supplies burned down and several minor fires were caused by lightning.
Carteret County	9	3-5 pm			0	0	4	0	Rain
									Heavy rain caused flooding of drainage facilities in Morehead City, with damage to merchandise and equipment.
Surry County	11	7:10 pm			0	0	0	5	Hail
									One to two square miles damaged, mostly tobacco in fields.
Alamance, Caswell, Cleveland, Vance, Warren, Yadkin Counties	12	Aftn & evng			0	0	4	5	Electrical, Hail
									Four buildings damaged by lightning. Crops damaged by hail in numerous areas, with heaviest damage to tobacco in Warren and Vance Counties.
Fasquotank County	14	4 pm	1/2	30	0	0	5	0	Tornado
									Tracked by FAA radar, Norfolk, moving NE 46 miles per hour. Brick home demolished, several other buildings destroyed or damaged, about five miles northeast of Elizabeth City. Funnel seen, roaring sound heard.
Pitt County	15	aftn			0	0	0	4	Hail
									20 acres tobacco damaged by marble size hail.
Beaufort, Columbus, Craven, Robeson, Wayne, Wilson Counties	16	4-6 pm			0	0	4	5	Electrical, Hail, Rain, Wind
									Several areas hit by severe thunderstorms, causing damage to crops by high winds, flash floods and hail. Storm sewers flooded in Goldsboro, Lumberton and New Bern.
Columbus, Onslow Counties	17	5-7 pm			0	0	0	5	Hail
									Six square miles damaged, mostly tobacco in fields.
Onslow County	18	2 pm			0	0	0	4	Hail
									Tobacco and corn damaged over a three square mile area.
Robeson County	19	6 pm	Short	25	0	0	4	0	Small tornado
									Steel posts twisted, trees broken off, by small funnel cloud observed near Lumberton. Small buildings unroofed, one carried away. Moved southwest to northeast.
Cleveland, Hertford, Stanly Counties	19	4-6 pm			0	0	4	0	Electrical
									Power disrupted, several fires started in scattered localities by lightning.
Cherokee, Haywood Counties	20	4-6 pm			0	0	4	0	Electrical, Wind
									Trees and power lines blown down in several small areas. One house partially burned when struck by lightning.
Greene, Harnett, Onslow, Pasquotank, Rockingham, Rowan, Stanly, Surry, Vance, Wayne, Yadkin Counties	22	aftn			0	1	4	5	Electrical, Hail
									Man injured when struck by lightning while sitting under tree. Several buildings hit, one house burned. Tobacco crop damaged several areas by hail.
Anson, Carteret, Caswell, Columbus, Cumberland, Davidson, Duplin, Forsyth, Guilford, Henderson, Hoke, Iredell, Jones, Pender, Richmond, Rockingham, Ruther- ford, Yadkin, Brunswick Counties	23	3-5 pm			1	1	4	6	Electrical, Hail
									One girl killed, another injured when lightning struck nearby clothesline. Several fires damaged homes and other buildings. Hail caused great damage to fruit crop in Henderson County and to tobacco crop in many areas scattered over the State. Heaviest damage to tobacco was in Columbus County.
Forsyth, Gaston, Montgomery, Moore, Wayne Counties	25	4-8 pm			0	0	4	5	Electrical, Hail, Wind, Rain
									Several scattered cases of minor damage from lightning, wind and flash floods. Crops damaged several areas by hail.
NORTH CAROLINA (Cont'd) Yadkin County	26	3:30 pm			0	0	0	5	Hail
									Tobacco damaged over seven square mile area.
Bladen, Brunswick, Cumberland, Duplin, Edgecombe, Franklin, Lenoir, Pender, Pitt, Stokes, Wake, Warren Counties	27	aftn			0	0	5	6	Electrical, Hail, Wind
									Widespread damage to tobacco and other crops by hail, with scattered instances of property damage by lightning and strong winds.
Brunswick, Runcombe, Caswell, Cumberland, Davidson, Davis, Duplin, Edgecombe, Forsyth, Franklin, Graham, Harnett, Iredell, Johnston, Montgomery, Moore, Nash, Northampton, Pender, Randolph, Rowan, Sampson, Stokes, Surry, Wake, Warren, Wilson, Yadkin Counties	28	aftn & evng			1	1	6	6	Electrical, Hail, Rain, Wind
									Violent thunderstorms struck in many areas scattered throughout the State. Man electrocuted at Lexington when lightning struck power line, dropping live wire on his head. Woman injured by tree blown down. Wind damage considerable at WMS, Wilmington; wind gusts to 60 miles per hour recorded. Flash floods overtaxed storm drains, damaging basements several areas. Widespread severe damage to tobacco and other crops by hail.
Forsyth, Guilford, Pender, Rockingham Counties	29	1-3 pm			0	0	4	4	Electrical, Hail
									Scattered minor damage to power and telephone lines caused by lightning. Hail damaged tobacco crop several areas.
Hyde County	30	3 pm	Unk	Unk	0	0	3	0	Waterspout
									Funnel moved off Lake Mattamuskeet and broke off several utility poles. Direction of movement unknown.
Harnett, Pitt., Wake Counties	31	3-4 pm			0	4	3	3	Electrical, Rain
									Four persons injured by lightning while riding on tobacco harvester in Harnett County. Lightning disrupted power facilities, and heavy rain flooded fields and storm sewers.
NORTH DAKOTA									No report received by printing deadline
OHIO									
North Ridgeville	1	7 PM	Short	Narrow	0	0	3	0	Tornado
									A small, short-lived funnel cloud dipped to roof level on Woodlawn Street removing half of a house roof, and scattering the debris around the house. A neighbor reported seeing the funnel recede to the cloud base shortly thereafter.
Columbus	2	5 PM			2	1	3	0	Thunderstorm & Lightning
									A woman seeking shelter from the storm under a tree was struck by lightning and killed. Two companions escaped serious injury. During the same storm a large limb crashed onto a garage crushing a small boy inside and severely injuring his mother.
									Scattered damage by wind and lightning was reported this afternoon from other parts of the state, especially in the northeast.
Dayton	19	10:47 AM	Short	Narrow	0	0	3	0	Tornado
									A small funnel cloud dipped to earth momentarily tearing out large plate-glass windows of a service station on Main Street, and scattering contents of the station. A few nearby trees were also damaged, but destruction was confined to this one spot.
OKLAHOMA									
Lawton SE, Comanche County	10	3:00p.- 4:00p.			0	0	3	0	Rain and wind
									A twenty-minute torrential thundershower produced an official measurement of 3.1 inches in the local area. Straight winds estimated near 100 MPH accompanied the storm for a few minutes and demolished a cement block two-car garage, knocked down nine telephone poles, and damaged a barn and steel granary.
Haurika, Jefferson County	10	4:45p.	3	*2	0	0	4	0	Wind
									High winds estimated at 80 MPH hit the city, knocking down five power poles causing extensive line damage and power outages. One trailer home was demolished and a second seriously damaged. A barn and dairy shed were blown down, while two other barns were heavily damaged. A fairgrounds building and drive-in were also heavily damaged with over 30 insurance claims being filed for damage in the residential section.
Blaine, Kingfisher, Major, Garfield, Grant, Noble, and Kay Counties	10- 11	8:00p., 10th- 10:00a., 11th	100	*30	0	0	5	4	Rain, wind, and hail
									Heavy thunderstorms working eastward across area produced a heavy band of rain from just east of Okemee and extending northeast through Enid, Fairmont, Deer Creek, Red Rock, and Blackwell to Newkirk. Rainfall totals ranged from 3.50 to 7.50 inches, while high winds and some large hail also pelted area. Heavy damage occurred from straight winds which hit 14 farmsteads in a 8-by

See reference notes at end of table.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 1963

PLACE	DATE	TIME	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INURED	PROPERTY	CROPS	
OKLAHOMA (Cont'd)									
									12-mile area just east-northeast of Okene. Many buildings, barns, sheds, and chicken houses were either blown down or damaged, along with two tractors and two cars that were damaged. One farmer also lost 2620 five-pound turkeys when his pens and houses were flash flooded by rains unofficially measured as 6 inches. Torrential rains of 6.52 inches fell in Enid mostly during the morning hours with flash flooding submerging 10 cars in a low parking lot of a motel, and floating two others in a flooded underpass. Twelve families were evacuated while backed-up sewers flooded 120 basements. High winds uprooted many trees across the city and demolished one trailer home at a court, while five others were blown unshored from their foundations. Large hail reportedly fell on the west side of the City where one greenhouse lost 300 glass panes and several homes had paint badly chipped. Other heavy rainfall was 6.00 inches received at Red Rock and 7.46 inches at Blackwell. Damage of wind 65 percent of \$215,600 total, rain 30 percent, and hail 5 percent.
Tipton 5NE, Tillman County	10	After 9:00p.			0	0	?	?	Rain, wind, and hail
									Hard rains with unofficial amounts up to five inches provided by local storm. High winds unroofed sheds and buildings on at least five farms with accompanying hail damaging crops.
Southern Okfuskee and Hughes, and northern Coal Counties	10-11	11:00p., 10th-5:00p., 11th	55	*15	0	0	?	?	Rain
									Heavy rains over area eased near drought conditions with amounts ranging from 1.03 inches near Parker to 6.51 inches at Okemah.
Gould 3 1/2 NW, Harmon County	11	8:15p.-8:45p.	3	*2	0	0	4	5	Hail, rain, wind, and funnel aloft
									Hail ranging from 1/2 to 1-3/8 inches in diameter covered up to three-fourths of ground along path that crossed more than six farms. Over 100 acres of cotton and 30 acres of watermelons were totally destroyed. Winds estimated up to 75 MPH accompanied hail and damaged five homes and destroyed four chicken houses. Up to seven inches of rain measured unofficially after storm. One funnel aloft was sighted for a few minutes as it moved east-northeast at 8:25 PM.
Texas County	12	4:00p.-7:30p.			0	0	4	4	Rain, wind, and hail
									Heavy rains of one to 4-1/2 inches were reported over most of the County as the storm moved east-southeast. Heaviest total of 3.64 inches was reported at Guyton where streets were filled and basements flooded, while unofficial amounts of near 4-1/2 inches were reported to northwest of the City. Panhandle A & M Agronomy Department reported severe damage to washed out experimental plots. Strong gusty winds were estimated at 65 to 85 MPH and demolished a new 52-foot trailer house at Guyton along with damaging two hangar roofs and airplanes at the municipal airport. Wind damage at Goodwell was limited to several roofs and isolated instances of severe damage to barns and storage bins. Hail up to 7/8-inch size covered nearly 85 percent of the ground along a 1/2- to 1-1/2-mile wide path from 10.5 miles west-northwest of Goodwell to 1.5 miles east-southeast. About 2000 acres of grain sorghum received 25 percent damage, and 600 acres of corn in tassal stage was damaged 40 percent. Damage from rain 20 percent of \$44,000 total, wind 20 percent, and hail 60 percent.
May 35, Ellis County	12	About 9:00p.			0	0	4	0	Electrical
									Lightning struck rural home with resulting fire destroying the house and most of the contents.
Oklahoma County	13	2:50p.-5:00p.	20	*15	0	0	5	0	Heavy rain
									Torrential rains ranged from 2.06 to 2.56 inches across southern two-thirds of Oklahoma City with unofficial 3.5 inches received at the downtown fire station (#1) within one hour. Extensive street damage was caused by asphalt surfacing being washed away from concrete base. Many downtown stores received damaged stock when flash flooding raised water above the curbs into stores, and backed up sewers flooded basements. Several cars were trapped in underpasses and intersections where water raised to a depth of four feet. Some communication circuits were interrupted when several underground cable tunnels were flooded.
Lake Lawtonka, Comanche County	13	About 4:00p.			2	0	0	0	Wind
									Two adults drowned when their fishing boat was capsized by waves kicked up by winds estimated at 40 MPH which accompanied a small squall line eastward through the area.
Walters, Cotton County	13	About 6:00p.			0	1	2	0	Electrical
									A lady received minor injury when lightning struck her home. The bolt knocked her unconscious after passing through the television set and through a wall to the stove where she stood preparing dinner.
Beaver 6SW, Beaver County	15	8:00p.-8:30p.	4	*1	0	0	4	0	2 Tornadoes and high winds
									Severe thunderstorm moved southeastward through area and was accompanied by blinding dust and damaging straight winds along the major path. Tornado number 1 was small and hit a farm six miles
OKLAHOMA (Cont'd)									
									west-southwest of Beaver, demolishing a garage and heavily damaging a truck, car and roof of a home. Two windmills were also destroyed and a barn moved to the foundation. Tornado number 2 was also small and hit seven miles southwest of Beaver where a steel machine barn was demolished. Five other farmsteads in the area received wind damage from hopped haystacks, demolished windmills, granaries, and outbuildings. Numerous trees were uprooted and highlines were downed between Scrgan and Turpin. Tornado damage 25 percent of total and wind 75 percent.
Alex 5WSW, Grady County	25	4:45p.-5:45p.	2	*1	0	0	4	3	Hail, wind, and rain
									Locally severe thunderstorm moved east-southeast across area as hail up to one-inch size covered the ground in areas and caused extensive cotton and crop damage. High winds damaged the roof of one home and several barns, and caused telephone outages up to two days. Hard rains were unofficially measured up to five inches from the storm. Wind and hail each totaled 50 percent of damage.
Central Payne County	27	5:00a.-2:30p.			0	0	?	?	Rain
									Heavy rains fell over area south and east of Stillwater with unofficial measurements of 5 to 8 inches reported. Heaviest amount occurred in the Mehan area with 24 county bridges washed out by flash flooding.
Tulsa, Tulsa County	27	9:15a.-2:15p.	10	*10	0	0	5	0	Heavy rain and electrical
									Severe localized thunderstorms over City totaled 7.54 inches at Tulsa Weather Bureau Airport Station for new 24-hour precipitation record. The sudden downpour was confined to the northern part of City with an unofficial amount of 8.05 inches reported at the Weather Bureau River Forecast Center. Tulsa City gages averaged 4.28 inches from their five locations over the City with the greatest total of 8.10 inches received at their downtown gage. Extensive lightning required 50 fire runs that resulted in \$20,000 damage along with \$20,000 damage to electric lines and 50 transformers. Some 200 trouble spots resulted in over 500 telephone outages. Flash flooding covered numerous automobiles trapped at intersections and underpasses, while several homes and businesses were inundated in the area running from downtown to about the 4600 block north. This resulted in evacuation of over 200 people mostly in the vicinity of Florida Avenue and Mohawk Blvd. Street damage totaling \$20,000 was due to washed out asphalt and one bridge. Damage by rain 60 percent of total, and electrical 40 percent.
South-Central Texas County	27	6:30p.-9:30p.	20	*10	0	0	4	4	Electrical and hail
									Severe hailstorm moved northeastward from 10 miles southwest of Texhoma on toward Goodwell. Hail up to 3/4-inch size beat a few crops into the ground where it reached a depth of 4 inches in places. Lightning killed one saddle horse and caused three grass fires. It also destroyed a barn and its contents which included a truck loaded with seed wheat.
Gashion, Kingfisher County	28	2:30p.-2:45p.	1/2	400	0	0	4	0	Tornado
									A small tornado skimmed at roof-top level across Gashion, moving southeast. Two buildings were destroyed and two homes lost their front porches and windows were blown out. Two garages and a home were twisted on their foundations, while a short-wave radio tower designed to withstand 110 MPH winds lost its top section.
Poteau, LeFlore County	29	Early Afternoon			0	2	0	0	Electrical
									Two boys were knocked to the ground by lightning while standing in their back yard. Both were stunned for a while, and required several hours to regain circulation in their left legs which were paralyzed.
Loyal, near, Kingfisher County	29	Afternoon	8	*3	0	0	0	?	Rain
									Hard rains were reported by farmers just to the northwest of Loyal where unofficial measurements of 6 to 8.75 inches were observed. Some crop wash-out was reported.
Oklahoma and North-eastern Cleveland Counties	29	5:15p.-7:50p.			0	0	4	0	Tornado, rain, and lightning
									Heavy thunderstorms moved eastward across Oklahoma City with totals ranging from 1.63 inches at Lake Overholser to 3.70 inches at Finker Air Force Base with most of this falling prior to 6 PM. Blinding rain was accompanied by a small tornado in the 3800 block of N. W. 58th Street. Several persons say one home half unroofed and two others lose roofing which was carried spiraling aloft. Flash-flooding of several homes occurred at two locations in the northwest part of the City, while an underpass flooded on I. H. 35 at S. E. 29th Street, as did numerous other intersections and underpasses. Extensive lightning burned up five transformers and damaged 12 others.
OREGON									None reported

See reference notes at end of table.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 1963

PLACE	DATE	TIME	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM	PLACE	DATE	TIME	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM	
					KILLED	INURED	PROPERTY	CROPS							KILLED	INURED	PROPERTY	CROPS		
PACIFIC AREA Guam	10-11						4	5	Typhoon	SOUTH CAROLINA Palmetto, High Hill, and Quistude Communities, Darlington County	2	1:30 p-4:30 p	4	1700-1800	0	0	4	4	Wind and hail	
	Typhoon WKNDY affected the southern portion of the Island of Guam, causing damage to crops, temporary housing, power facilities, telephone lines, water systems, and miscellaneous other damage. This was the third typhoon to affect the island in 8 months. NOTE: A more complete and detailed description of this typhoon will be found in <u>Climatological Data, National Summary Annual 1963</u> , and the <u>Mariners Weather Log</u> for May 1964.										Accompanied by lightning and heavy rain. Hail from 1/2" to 3/4" in diameter. Hail fell over area 3 square miles with ground 50% covered.									
PENNSYLVANIA	Western Counties	2	Afternoon & Evening				4		Thunderstorms	Anderson County	7	6:00 p-7:00 p			0	0	4	0	Thunderstorm	
		Property damage estimated at up to \$50,000, resulted from lightning-induced fires in a number of homes and barns. Lightning also burned out many power transformers. Small hail occurred, but little or no damage was reported.									Fire by lightning in Williamston; also damaging winds and rain in Iva and portions of the city of Anderson.									
	Lanedale	5	Afternoon			1		4		Wind	Myrtle Beach, Horry County	12	Noon			1	0	0	0	Lightning
		A workman was crushed to death when a brick and cinder block wall of partially-completed new school building was blown down by a freak windstorm.									Palzer, Anderson County									
	Carlisle and Philadelphia	8	Early Morning					5		Thunderstorm	Bonneau Beach, Berkeley County	18	About noon	about 1/5	less than 20	0	0	3	0	Tornado
		Lightning fired a barn near Carlisle and a home in Penn Valley, with total damage set at \$88,000.									Highway Department confirmed small tornado, touched down briefly and moved northward over Lake Moultrie.									
	Near Coudersport	9	Evening			1	1			Thunderstorm	Pickens, Pickens County	20	Late afternoon			0	2	0	0	Lightning
		One man was killed and another injured by lightning which struck a shelter under which the two men were standing.									Mount Pisgah section, Horry County									
	Dillsburg	12	7 P. M.			1				Lightning	Sumter, Southern Florence and West Williamsburg Counties	23	Late afternoon & eve.			0	0	3	4	Thunderstorms
		A baseball pitcher was struck and killed by lightning while he was standing on the pitcher's mound, just prior to the storm.									The storms were accompanied by considerable rain, as well as strong winds and light hail locally.									
	Southeastern Counties	19	Evening					5		Thunderstorm	Florence, 4 miles NE, Florence County	28	2:50 p	1 1/2	150	0	0	3	0	Tornado
		Strong winds from thunderstorms unroofed several barns and knocked down 2 silos near Lepton. Winds toppled many trees and utility wires in the Pottstown and Kennett Square areas. In Allentown an overhead crane was blown from its tracks.									Accompanied by marble-sized hail and lightning. Funnel observed moving from southwest to northeast.									
Beaver County	20	1 P. M.			1				Thunderstorm	Charleston, Charleston County	30	3:00 p			0	0	4	0	Thunderstorm	
	A fisherman was struck and killed by lightning during a severe electrical storm.									Accompanied by hail and damaging winds.										
Montgomery, Carbon & Northampton Counties	20	Afternoon					5	4	Thunderstorms	North Charleston, Charleston County	31	3:30 p			1	0	0	0	Lightning	
	Strong winds unroofed several homes, collapsed 2 garages, bent an 100-lb. cross on a church and downed many trees and utility lines throughout the area. One orchard in the Mahoning valley was completely wiped out by hail. Lightning fired an apartment building in Norristown with damage estimated at \$25,000.									SOUTH DAKOTA Mitchell 8 W, 1 1/2 E										
Beaver & Westmoreland Counties	22	Afternoon					5		Thunderstorm	Mount Rushmore-Keystone area	6	2:15 - 3:20 p.	3	*2	0	0	4		Hail	
	Rainfall in excess of 2.35 inches in less than 1 hour swamped downtown Midland with damage due to water, exceeding \$250,000. Two 9-foot cement block walls collapsed as a result of strong, rushing waters which were 3 feet deep on the main street. Near Latrobe lightning destroyed a garage, with damage estimated at \$15,000.									Average hail 1 1/2 inches with largest 4 inches caused extensive damage to buildings and automobiles. Damaged autos were in parking lot of Mount Rushmore.										
Lancaster County	22	8-11 A.M.					3	2	Thunderstorm	Buffalo Gap	6	3:00-5:00 p.	5	*5	0	0	2	5	Strong wind and hail	
	Eight heifers were killed by lightning near Littleton, with loss placed at \$2,000. Hail damaged corn and tobacco in the Mt. Joy area.									Winds estimated to 100 mph and hail marble size and larger caused extensive damage to crops. Storm moved from N to S.										
Sunbury area	22	6 P. M.					3		Hail	Waubay-Watertown-Arlington area	6	6:30-9:00 p.	70-80	*1-3	1	7	5	5	Strong wind and hail	
	Several miles south and east of Sunbury hail to golf ball size ruined a number of fields of corn, oats, and wheat. Hail was still a foot deep in some fields the next morning.									Farmer fatally injured near Waubay when barn was destroyed while he was inside milking. Wind of 110 mph recorded at Watertown FAA station before roof and wind instruments blown away. Hail which averaged 3/4 inch and strong winds caused extensive damage to buildings and crops. Storm moved from N to S.										
Southern Counties	28	Afternoon			2	1	4		Thunderstorm	Cresbard	7	7:30-8:30 p.	5	*2	0	7	4	4	Hail and strong wind	
	A 15 year old girl was killed by lightning while walking across a field near Bedford. A man was struck and killed by lightning near Myerstown while riding in a golf cart. A Bellingsrove R.D. woman remained in critical condition for a time after being struck by lightning. Lightning fired a Johnstown lumber yard which resulted in \$50,000 loss. Several barns, homes, and a store were fired by lightning.									Hail averaged 1 inch in diameter with largest stones 2 inches and covered the ground to a depth of 2 inches. The hail damaged crops and buildings. Storm moved from NE to SW.										
PUERTO RICO	None reported									Dallas-Faxton-Colome area	7	11:00-12:00 p.	20	*1-2	0	7	4	4	Hail and wind	
											Croton-Vardon area									
RHODE ISLAND Quonset Point, Washington County and Portsmouth, Newport County	30	AM			0	2	0	0	Lightning	Near McIntosh	9	night			0	0	4		Lightning	
	Two men injured by lightning strikes									Near Hot Springs										
										13	12:30-1:00 a.	8	*2	0	7	7	7		Hail	
										Hail up to 3 inches in diameter covered ground up to 4 inches deep. Area is mostly ranchland.										

See reference notes at end of table.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 1963

PLACE	DATE	TIME	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	
SOUTH DAKOTA (Cont'd) Codington and Deuel counties	16	4:00-6:30 p.	30	*2-4	0	4	4		Hail, wind and lightning
									Lightning set fire to a county highway shed at Krausburg and building plus about \$21,000 in road equipment were destroyed. Hail damage to crops mostly in area from SE Codington County into SE Deuel County with some fields suffering 100% loss.
Huron	16	2:30 p.	4	30	0	0	2	0	Tornado
									Tornado touched down briefly in SW Huron where damage was light.
Higmore and vicinity	18	12:45-1:15 a.	5	*2	0	5	4		Hail and wind
									Hail averaged 1/4 inch with largest stones 2 1/2 inches. Ground covered to depth of 1 inch. Storm moved from SW to NE.
White and vicinity	18	1:05-1:35 p.	16	*8	0	5	6		Hail and wind
									Hail averaged 3/4 inch with largest stones 2 inches. Wind estimated 60 to 80 mph. The hail driven by strong winds caused an estimated 1 1/2 million dollar damage. Many farmers suffered 100% loss of crops.
Castle Rock and vicinity	18	6:30-6:45 p.	10	*3	0	0	4	5	Tornado and hail
									Community hall destroyed by being thrown in a semi-circular area but a trailer house right next to the hall was not moved. The high wind and hail cut down crops as if they had been mowed. Hail averaged 1/2 inch with largest stones 1/2 inches. Hail covered ground up to 5 inches. Storm moved from WNW to ESE.
Raymond 4 NE	26	4:00 p.	1	1000	0	0	4		Tornado
									Tornado moved from SW to NE and destroyed one set of good farm buildings.
Near Gregory	27	3:00 a.			0	0	4		Lightning
									Lightning started fire which destroyed farm home.
Gettysburg and Lebanon area	29	3:00-3:30 p.	12	*4	0	0	4	5	Hail
									Hail averaged 1 inch with largest stones 2 1/2 inches. Storm moved from WNW to ESE.
Hovan, Tolstoy and Oaska area	29	7:00-8:00 p.	20	*4-5	0	0	4	5	Hail
									Hail averaged 1 inch with largest stones 2 1/2 inches. Storm moved from WNW to ESE.
Cottonwood and vicinity	29	3:30-4:30 p.	6	*2	0	0		4	Hail
									Hail averaging 3/4 inch covered much of ground 1 inch deep. Field crops were 25%-50% destroyed. Storm moved from NW to SE.
Clark County	29	4:45-6:15 p.	20	*10	0	0	4	5	Hail
									Hail averaged 1/2 inch with largest stones 1 inch. Ground was not completely covered but some areas hail was 2 inches deep. Storm moved from NW to SE.
Near White Lake	29	evening			0	0	4	0	Lightning
									Fire started by lightning destroyed farm home.
Campbell and Edmonds Counties	30	4:30-7:00 p.			0	0	5	6	Hail and wind
									Hail averaged 1/2 inch with largest stones 1 inch. Many areas hail was 2-3 inches deep. Area affected by storm was northern 1/2 and southeast 1/4 of Campbell County and western 1/3 of Edmonds County. Storm moved from NW to SE. Damage to crops was about 1 1/2 million dollars and to property about \$250,000.
Belle Fourche and vicinity	30	7:00-7:30 p.	7	*1/2	0	0	4	4	Hail
									Hail ranged from marble size to golf ball size. Many autos, roofs and windows damaged in Belle Fourche.
TENNESSEE Southeast Tennessee	7	Afternoon			0	0	4	2	Lightning and wind
									During heavy thunderstorms lightning caused scattered local damage to buildings and utilities. Strong winds uprooted trees and blew down corn in a few areas.
Middle and East Tennessee	8	Through-out day			0	0	4	0	Lightning, wind and rain
									Heavy thunderstorms caused scattered local damage mainly southward from the Nashville and Oak Ridge areas. Greatest damage was caused by lightning strikes to utilities and buildings. Wind caused minor damage to an airline plane at Nashville, damaged 2 houses near Columbia, Maury County, allowing rain to damage to furniture, and uprooted trees in several areas.
TENNESSEE (Cont'd) Henry, Hickman and Giles Counties	13	7:00 - 9:00 p.			0	0	4	3	Wind
									Small windstorms were reported near Whitlock and Buchanan in Henry County, near Coble in Hickman County, and the Wales and Pigeon Root Communities of Giles County. Trees were uprooted, crops blown down, and 2 or 3 small buildings damaged or destroyed in each location. Power lines were damaged in Giles County.
Nashville, Davidson County	18	Afternoon			0	0	4	0	Rain
									Heavy rains flooded numerous basements and caused roofs to cave in on two downtown stores damaging the merchandise. Rain indirectly contributed to the drowning of a 6 year old boy when water swept him through a culvert and drainage ditch into a pond.
Statewide	20	Afternoon			0	0	5	2	Wind, rain, lightning and hail
									Violent thunderstorms broke out in scattered areas over much of the state during the solar eclipse causing minor wind, lightning or flooding damage and destruction to buildings, trees, cattle, and utilities. Among areas where wind damage was severe were small areas near Fairview, Wayne County, and near Turtletown, Polk County. Hail damaged tobacco in small areas near Lafayette, Macon County, and Mooresville, Maury County. Corn and gardens received hail damage in a small area near Fredonia, Coffee County.
Chattanooga, Hamilton County	29	Afternoon			0	0	5	0	Lightning, wind and rain
									During two separate thunderstorms wind damaged trees, store windows, automobiles and utilities; rain flooded streets and indirectly contributed to automobile accidents. Greatest damage was due to lightning which did extensive damage to a power substation and other minor damage.
TEXAS Galveston County	1	5:15 p							Waterspout
									Observed off Galveston Island.
W Wimsboro	1	6:50 p-7:00 p	1/4	*100	0	0	3	0	Tornado
									A small tornado destroyed a barn and sliced the tops from six cottonwood trees on the D. P. Douglas farm, one mile west of Wimsboro. The tornado crossed Highway 11, then destroyed a garage at the J. C. Ross home, continued up a hill to a hatchery, knocked over a large galvanized feeder and killed 200 chickens. A house about 100 yards from the hatchery was untouched. Three inches of rain fell during the storm.
2 NW Brownfield Terry County	6	5:15 p			0	0	0	0	Tornado
									Tornado touched ground briefly about two miles northwest of Brownfield, then lifted without causing any damage.
2 N. Hartley Hartley County	11	9:00 p			0	0	2	0	Tornado
									A small tornado damaged a barn, utility poles, and trees. An estimated two inches of rain fell in the area.
Stratford Sherman County	12	6:00 p	2	?	0	0	2	?	Wind
									Thunderstorm winds estimated in excess of 70 miles per hour blew down a 300-foot television transmission tower on the west side of Stratford. Plate glass windows were blown out, tree limbs blown off, and television antennae damaged in Stratford.
1 1/2 S Happy Swisher County	13	8:20 p			0	0	?	?	Tornado
									Small tornado splintered several utility poles.
7 NE Fort Arthur Jefferson County	23	3:00 p			0	1	4	0	Tornado
									A small tornado touched ground in Bridge City, seven to eight miles northeast of Fort Arthur. The tornado winds caused an estimated \$6000 damage at the Marine Fueling Service Company near the Neches River Bridge. Barrels were hurled through the air, windows broken and buildings shaken. Radio equipment was damaged. One girl in Bridge City sustained cuts from flying glass when windows on the west side of her house were blown in during the strong winds.
Victoria Victoria County	24	3:00 p-4:00 p	12	*2	0	6	5	?	Wind
									Violent thunderstorm winds with gusts measured at 99 mph at the U. S. Weather Bureau Station at Foster Field, caused an estimated \$375,000 damage in Victoria and injured six persons. The damaged area extended from about six miles northeast of the city to about six miles west southwest. Winds in the north side of Victoria were estimated at 200 mph. Community television that withstood Hurricane Carla without damage were completely demolished by this storm. The damaged area apparently began at about Foster Field and arched around the northern rim of the city to Mission Valley in a belt that extended roughly from Crestwood Avenue northward for about five miles. A television microwave relay tower, located just north of the Inwood Terrace section was demolished. A few hundred yards away, in Inwood Terrace, practically no wind damage occurred but to the north and west fences were laid over, roofs damaged, power line poles snapped and windows broken. Minor damage was scattered throughout the city by lesser winds on the fringe of the main force. On North Main Street, a large section of plate glass was broken out of a supermarket and two small children hurt by flying glass. One person suffered a broken foot when his trailer house overturned. At Mission Valley, the strong winds blew off the roofs of a home and two barns. Masonry work on a new business building in Victoria was leveled by the force of the wind. A business building nearby at Navarro and Hallettsville Highway was completely demolished. Most injuries were the result of flying glass.

See reference notes at end of table.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 1963

PLACE	DATE	TIME	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	
TEXAS (Cont'd) Montgomery and Walker Counties	24	9:15 p- 10:15 p	?	?	0	0	?	?	Tornado
	A tornado cut a path of destruction along U. S. Highway 75 north of Comroe, knocking down trees and power lines, ripping and stripping roofs off houses, garages, and outbuildings. Most of the damage was in the Willis area of Montgomery County and the New Waverly area in Walker County.								
Jefferson County	25	2:15 p- 2:30 p	?	?	0	0	4	0	Wind
	A windstorm caused an estimated \$1500 damage to a home in the Palm Ridge section of Bridge City in Jefferson County. The strong thunderstorm winds tore off a patio roof, overturned a camping trailer and strewn garbage cans, lawn chairs and tables throughout the area. At 2:30 p.m., strong winds, apparently associated with the same cloud caused \$5000 damage to four airplanes at Brown Airport, approximately five miles farther east.								
20 SW Kingsville Kleburg County	25	7:50 p	2	200	0	0	?	?	Tornado
	A tornado dipped down on ranch country about 20 miles southwest of Kingsville. The tornado crossed the fence separating the King Ranch with the Gus Canales Ranch. On the latter ranch, a quonset barn was destroyed. Sitting between houses and a windmill, the barn was torn apart but the other properties were not damaged. Several utility poles were snapped off by the tornadic winds.								
Jefferson Co. Airport Jefferson County	26	3:20 a	?	?	0	0	4	0	Wind
	Violent thunderstorm winds struck the Jefferson County Airport at Nederland, Texas. Wind gusts at the U.S. Weather Bureau Station were measured at 66 mph. Approximately \$8000 damage was caused on the airport, including broken windows, damaged roofs, damaged hangar door wells, minor structural damage, wing damage to a DC-3, and miscellaneous smaller items. All broken windows indicated damage due to flying pebbles and debris.								
Van Alstyne Grayson County	29	5:30 p	1/2	100	0	0	?	?	Tornado
	A small tornado uprooted several peach trees, and blew over 100-year-old pecan trees on the Raymond Hunter farm near Van Alstyne, and twisted hackberry trees off at the ground, and flattened corn and maize on the Sheid farm nearby. The tornado did not hit any buildings. Approximately three and one-half inches of rain accompanied the storm.								
UTAH	None reported								
VERMONT Franklin and Orleans Counties	2	Afternoon and evening			0	0	4	0	Wind, electrical
	Thundersqualls raked border areas of both counties. Trees and power and phone lines were major casualties.								
Swanton	4	8:50 p.	8	500	0	0	5	0	Tornado
	Tornado moved eastward from Mesquon Shore (Lake Champlain) through Swanton Village to Highgate Falls. Damage consisted of felled trees and power lines.								
Franklin County	22	3 p.			0	0	5	0	Wind
	A small but violent wind storm struck in the area between Swanton and St. Albans. Damage was limited mostly to trees. In one case, large sections of a huge maple tree were ripped and lifted onto nearby high level power lines.								
Western counties	28	Afternoon			0	2	4	0	Wind, electrical
	Violent thundersqualls battered all western counties except Bennington County. Hardest hit section was a pebble stretch along the St. Albans shore area from Shanty Point to Sampsom's Point. Two persons were injured there by flying glass. Small boats were lifted from the water and hurled more than 100 feet. A pile of lumber was picked up and driven through a field like matchsticks. On Marquon Shore Road utility poles were blown over. Trees and branches were felled widespread through the storm area.								
U. S. VIRGIN IS. VIRGINIA Lunenburg County	22	Evening			?		4		Hail & Electrical
	A thunderstorm with large hail described as large as "hen eggs" brought extensive damage from 6 miles south of Henbridge south-eastward to the Brunswick county line. Lightning associated with this storm caused a fire which destroyed a storage building and all its contents.								
Pittsylvania, Campbell County	23	Afternoon			1	4	?		Hail & Electrical
	An intense electrical storm moved from near Danville northward to the interior of Pittsylvania County to Altavista in the extreme southwestern section of Campbell County. Lightning caused extensive fire damage to a church and home in Altavista and destroyed 2 homes near Chatham in Pittsylvania County. The home at Altavista was occupied at the time of the fire and owner hospitalized for a short time. Minor hail damage to tobacco crops.								
Hampton Roads	28	Afternoon			1	?	?		Hail & Electrical
	A man was killed instantly by lightning while fishing at Hampton Roads. Rainfall from scattered thunderstorms through the southern section of the state gave some temporary relief to the severe drought, but minor hail damage to crops was reported in some counties.								

PLACE	DATE	TIME	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	
WASHINGTON Northeastern counties Okangon & Colville National Forest	1-7								Lightning
	Scattered thunderstorms accompanied by very light or no rain resulted in several range and forest fires.								
Walla Walla County	7	night					4		Hail
	Heavy rain for a brief period and hail resulted in crop damage in a small area near Walla Walla.								
Spokane	8	early morning					4		Thunderstorm
	Power and communication facilities in a few areas of the city were damaged by lightning. Heavy rainfall for a brief period resulted in flooding in a few low areas.								
WEST VIRGINIA Ravenswood, Jackson County	19	7:45 - 8:00 PM	2	1320	0	0	5	?	Tornado
	Earlier in evening storms were forming in NW & SW with lightning, seemed to come together NW of Ravenswood and travelled toward the SE. Two funnels were observed with whistling sounds. Filling station roof removed, number of plate glass windows broken and damage to other buildings. Trees and power lines down in almost every area of town.								
Parkersburg, Wood County	28	1:30 PM					4	?	Wind
	Damage to trees and the falling on autos, wires and buildings. Damage to plate glass windows, roofing and superstructures.								
WISCONSIN Near Viroqua	17	8:00- 9:00 PM						5	Hail
	Fall east of city. Diameters of hail up to 1 inch.								
Kenosha County	19	4:00- 5:00 PM	8	30			4	4	Tornado
	Travelled from 2 miles north-northwest of intersection State Highway 50 and County B toward Antioch, Illinois. Funnel touched down several times along route.								
Southeastern Counties	19	4:00- 5:00 PM				2	5	4	Squall line
	Storm most severe in eastern Walworth County and western Racine and Kenosha Counties.								
Central Counties	19	afternoon					4	5	Hail
	Scattered hail storms with diameters 2" to 3" near Montello and Rhineland.								
Central Counties and Fox Valley area	21				1		5	5	Hail, wind, lightning
	Hail diameters up to 1 inch. Woman killed by lightning. Hardest hit were Marquette, Waushara, Columbia and Portage Counties.								
Door, Kewaunee, and Oconto Counties	31	early evening						5	Hail
	Hail diameters up to 1 inch. Damage to crops and orchards.								
WYOMING Burns 5 N	12	Afternoon			1	1	0	0	Lightning
	Lightning struck and killed one man and injured another standing along side.								
Weston County	14	6:30 p.	?	?	0	0	3	0	Tornado
	Tornado struck thirty miles southwest of Newcastle. It did minor damage to ranch outbuildings and an abandoned country school. The tornado moved north-northeast.								

- ° Includes crop damage.
- C Crop damage.
- * Miles instead of yards.
- ** Yards instead of miles.
- + Storm damages are placed in categories varying from 1 to 9 as follows:
 - 1 Less than \$50
 - 2 \$50 to \$500
 - 3 \$500 to \$5,000
 - 4 \$5,000 to \$50,000
 - 5 \$50,000 to \$500,000
 - 6 \$500,000 to \$5,000,000
 - 7 \$5,000,000 to \$50,000,000
 - 8 \$50,000,000 to \$500,000,000
 - 9 \$500,000,000 to \$5,000,000,000.

Note: This publication contains our best information on storms but, due to the difficulties inherent in collection of this type of data, it is not all-inclusive. Delayed data and corrections will be carried in the June and December issues of this publication.

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