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# Storm Data

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# STORM DATA AND UNUSUAL WEATHER PHENOMENA

JANUARY 1971

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	
Alabama Greeneham County	h	12 noon	10	500-1500	0	0	h	2	Wind
					Scattered damage began near Black Rock Community extended about 10 miles east northeast to near Highway 33L. Pitches of 3 houses demolished, a barn and garage destroyed, several barns and out-buildings damaged and numerous trees uprooted or broken off.				
Pineapple Community, Wilcox County	h	Afternoon					h		Lightning
					Lightning caused fire which destroyed house.				
Southeast Alabama	15	9:00 - 11:30 a.m.			0	0	h	0	Wind
					Wind gusts over 60 mph occurred with line of thunderstorms that moved eastward about 60 mph. Damage to trees and utility lines in many areas. In Dothan several plate glass windows demolished and concrete block wall blown down.				
Blount County	25	3:00 p.m.	2	Narrow	0	0	h	0	Tornado
					One house unroofed, 2 others damaged, several farm buildings demolished or damaged and trees uprooted. All damage near road from Cleveland to Hector.				
Effila, Cleburne County	25	4:15 p.m.	1	Narrow	0	0	h	0	Tornado
					Tornado funnel skipped along touching down in spots. Path cut through woods, school bus garage damaged, frame house moved 12 feet off foundation and unroofed, automobiles turned around, and overturned grave markers.				
Alaska Juneau	8-17				0	0	4	0	Windstorm
					Severe winds reportedly gusting to 100 miles per hour caused scattered damage throughout the Gastineau Channel area. The blistering winds overturned at least two trailers, dumped a shipping van off a dock, tore off roofing, broke windows and caused power failures. The state ferry Wickersham was moved to the more sheltered waters of Auke Bay after a lifeboat was crushed when wind and waves pushed the big vessel against the dock.				
Anchorage	15				0	?	5	0	Windstorm
					Hurricane force winds gusting to 74 mph (unofficially 104 mph), tore off roofings, aluminum siding, broke glass doors and windows. Ten small planes were flipped and partially destroyed. Several telephone and power lines were downed. A number of chimneys were swept from rooftops. Several camper tops slithered from truck bodies.				
Arizona					None reported				
Arkansas Hollywood - Clark County	3	3:30 p.	12	100 - 300	10	4	0	0	Tornado
					Tornado touched down vicinity of Smyrna Church on county road about 3 miles southwest of Hollywood and continued on ground northward crossing Highway 26 about 2-1/2 miles west of Arkadelphia where it demolished the home of James Baker, Baker family, 8 children and parents, only slightly injured. Tornado continued on ground damaging timber and crossing Highway 53, 1-3/4 miles north of Hollywood and lifted into the air just before reaching Highway 8 about 7 miles northwest of Arkadelphia.				
Perla - Hot Spring County	3	About 4:00 p.					4		Lightning
					Mt. Willow Baptist Church at Perla, east side of Malvern, one of the oldest churches in the area, was destroyed by fire when struck by lightning Sunday afternoon.				
California Santa Rosa	12								Funnel cloud
					Airport tower personnel report observing a funnel aloft. No further details available.				
Colorado Custer County	15	9-10PM					h		Wind
					Winds estimated at around 90mph tore off the roof of a school building at Westcliffe, and caused other scattered damage in the Wet Mountain Valley area.				
Connecticut					None reported				
Delaware Most of State	Dec 31- Jan 1	Evening- Afternoon							Snow
					Snow totals reached four to seven inches except in the extreme southern portion where rain with some snow was reported. Maximum official total was seven inches at Newark (University Farm). Many minor traffic accidents were reported to the state and city police. No serious injuries were noted.				
State	26	Afternoon			0	4	5	0	Wind
					A cold front, associated with an intense low pressure system, crossed the state and was accompanied by thunderstorms, extremely high winds, marble-sized hail and sharply dropping temperatures; also, rain, sleet and snow were reported. Peak winds at Dover Air Force Base and the Greater Wilmington Airport reached 58 mph. About 2 p.m., four mobile homes at Willow Grove near Dover were demolished				
Delaware (continued)					and Four persons received minor injuries. Near Rehoboth cars were literally blown off the highway; at the airport a small airplane was flipped over and extensively damaged. There were other reports of wind damage across the state.				
Florida 10 S Key West	08	1:06p							Funnel aloft (3)
Chipley Washington Co.	15	12:05p	1/4	10	0	0	2	0	Tornado
					A small tornado touched down near Chipley blowing roof off concession stand and knocking a few signs down. Damage about \$300.00.				
Monticello Jefferson Co.	15	3:30p					3		Wind Damage
					High winds accompanying a thunderstorm and funnel cloud caused \$1,000 damage in vicinity of Monticello including \$2,000 damage in Jefferson County Kennel Club. Loud roaring noise heard but damage attributed solely to high wind.				
5 West Palm Beach	24	7:33a							Funnel aloft
Georgia Rome	4	1:15 p	1/2	Narrow	0	0	3	0	Tornado
					What was described as a very brief and small tornado moved in a narrow path through a residential section of Rome. TV Antennas were ripped from houses and trees were bent over. Some houses were shaken. Animals were frightened and acted very strangely just before the storm hit. It became very still and quiet immediately after storm passed.				
Douglas	5	2:30 a	4	75	0	1	4	0	Tornado
					One residence was heavily damaged and several other buildings, including at least 2 large chicken houses, were demolished. Several large trees were uprooted and a number of mobile homes damaged.				
North	8-9				0	0	4	0	Ice Storm
					Freezing rain and drizzle caused icing on trees, shrubbery and utility lines over parts of north Georgia. Damage was relatively light and consisted mainly of broken tree branches which pulled down numerous electric and telephone lines. Electrical service was put for several hours in some areas, with Athens among the hardest hit places.				
Southern half	15	11:30 a - 2:30 p			0	3	5	0	Tornadoes, wind and hail
					A squall line and cold front moved very rapidly across the State, causing widespread wind damage over south Georgia. The first damage was reported in the extreme west central section shortly before noon and by 3 PM the front had cleared the State. Wind damage occurred in at least 35 counties and hail from 3/4 to 1 inch in diameter was reported in some areas. Several small tornadoes were observed. These are listed below in chronological order.				
Americus, 10 miles east	15	12:30 p	2	100	1	1	4	0	Tornado
					A mobile home that was being towed was blown on top of the truck cab, killing the driver. Trees were downed and a boat house was destroyed. Storm moved eastward.				
Cochran	15	pm	Short	Narrow	0	0	4	0	Tornado
					Roof of high school gym damaged. Car wash roof blown off and other buildings damaged. At least 35 trees down in Cochran. Several people reported seeing tornado cloud.				
Vidalia	15	1:20 p	Short	Narrow	0	1	4	0	Tornado
					Several mobile homes overturned and demolished. Electric and telephone lines down. One person injured by flying glass. Golf ball size hail occurred and temperature reported to have dropped 18° in 2 minutes.				
Fitzgerald	15	pm	Short	Narrow	0	0	4	0	Tornado
					Trees uprooted, roofs ripped from houses and electric and telephone lines down. A lumber shed was flattened. Witnesses reported whirling cloud on ground.				
Cairo	15	1:40 p	1/2	50	0	0	4	0	Tornado
					Radio tower blown over and small building demolished. Small funnel cloud observed.				
Collins, Tattall County	15	pm	Short	Narrow	0	0	4	0	Tornado
					Unoccupied mobile home lifted over fence, carried 100 to 150 feet and demolished. Buildings damaged.				
Glenville	15	1:40 p	1	100	0	0	4	0	Tornado
					A mobile home was overturned and the roof of a nursing home was damaged. Tobacco barns and several large chicken houses demolished. Many trees down.				
Alma, near	15	2:00 p	Short	Narrow	0	0	4	0	Tornado

See reference notes at end of table.

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<b>Georgia (continued)</b>									
Hinesville	15	2:15 p.	100	4	0	4	0	0	Tornado
Stephens County	30	5:35 p.	Short	Narrow	0	6	4	0	Tornado
Hawaii	4	8:27 a., 8:35 a., and 8:49 a., 9:04 a.							Funnel Cloud
All Major Islands	5	Morning			0	0	4	3	Wind
Keauhou, Kona, Island of Hawaii; and Pōkai Bay, Oahu	6	Morning			0	0	4	0	High Surf, Waves
South of Ewa Beach, Oahu	6	2:06 p., 2:26 p.							Funnel Cloud
South of Waikiki, Oahu	6	3:25 p., 3:30 p.							Funnel Cloud
All Islands	15	Morning			0	3	5	3	Winds, Rain
Whitmore Village, Wahiawa, Oahu	27	11:55 p.	1-3/4	15-70	0	0	5	0	Probable Tornado
Mauī	28	Morning			0	0	6	4	Rain and Flood
Honolulu Farms, South Kona, Hawaii Island	28	5:15 a.	1/5	150	0	0	3	5	Possible Tornado
<b>Hawaii (continued)</b>									
Kainaliu, Kona, Hawaii Island	28	Morning	2	100	0	0	3	0	Possible tornado
Kailua-Kona, Hawaii Island	28	10:50 a.	1	100	0	4	6	0	Waterspout-Tornado
<b>Idaho</b>									
Bear Lake, Butte, Clark and Fremont Counties	10	Afternoon and Evening	--	--	0	1	4	0	Blizzard
Sandpoint, Bonner County	14	PM	area	area	0	0	3	0	Heavy Snow
Grangeville, Idaho County	15	3:00 a.	area	area	0	0	3	0	Windstorm
McCall, Valley County	16	7:00 p.	--	--	0	0	4	0	Snow load damage
Hailey, Blaine County	17	PM	--	--	0	0	4	0	Snow load damage
Coeur d'Alene, Kootenai County	21	AM	--	--	0	0	3	0	Blizzard
Benevah, Latah, Nez Perce, Lewis and NW Idaho Counties	21	PM	area	area	0	0	4	0	Windstorm
<b>Illinois</b>									
Data not received by publication deadline.									
<b>Indiana</b>									
North Western Counties	26-27	?	?	?	0	0	4	0	Wind, snow
The northern border counties from Lake eastward to Lagrange and also from Pulaski eastward through Kosciusko were hit by near blizzard conditions. Wind of 20 to 30 miles per hour, with gusts to 50 miles per hour, resulted in poor visibility as four inches of new snow fell in the South Bend area. Drifts up to 10 feet were reported on some roads in northeastern St. Joseph County. Some roads were also blocked in LaPorte, Elkhart and Kosciusko Counties causing many schools to close. High wind was reported throughout the state. Window breakage occurred in Michigan City and South Bend. Other areas reporting damage were: Portland (Jay County), plate glass windows blown from two buildings and telephone lines damaged; Sarasota (Randolph County), power lines damaged; Richmond (Wayne County), roof of Municipal building damaged an estimated \$10,000; Centerville (Wayne County), power and telephone lines downed; Dublin (Wayne County), one dwelling and another building damaged; Liberty (Union County), house-trailer was demolished.									
<b>Iowa</b>									
Statewide	3-4						6		Heavy snow-storm and blizzard
Heavy snowfalls of 10-15 inches, locally to 20 inches were measured in all but the NW counties where amounts were less. The snowstorm reached blizzard proportions on the 4th as winds reached 35 to 40 mph. with gusts exceeding 50 mph. and temperatures dropped into the subzero range. Highways were closed, thousands of motorists were stranded and activities associated with travel ceased. 27 deaths were indirectly linked to the storm, mostly due to over-exertion.									

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Kansas Northern one-third, western two-thirds	2-3				2	0	4	4	Blizzard, ice
		This was one of the most severe winter storms in years. A blizzard raged over much of the area as snow, blowing snow, winds 30 to 50 mph with strong gusts, and temperatures in the teens or 20's occurred. Three to 15 inches of badly drifted snow made most roads impassable. Worst blizzard conditions were probably in the area from Ellis and Russell Counties northeast to Republic and Washington Counties; very severe weather was also reported in southwestern Kansas from Ford County southwestward into Meade and Seward Counties. Agenda, in north central Kansas, received 15 inches of snow; drifts 15 to 20 feet were reported in the Belleville area. About 1500 motorists were stranded at Russell; travelers were also snow-bound at Hays, Liberal, Osborne, Sabetha, and at scattered other locations. Many schools were closed January 4, and it was several days before all roads and schools were open. One woman froze to death 17 miles southeast of Russell while seeking shelter; a man died of exposure 5 miles southwest of Larned. Ice accumulated on utility lines from Jefferson County southwestward into McPherson County, downing poles and causing some line breaks. Scattered, light cattle losses occurred as a result of the storm; hog losses in Washington, Rush, and Ellis Counties totalled several hundred.							
Kentucky State	26				0	2	7	0	High winds
		Winds were strong Statewide, reports coming from many points, especially from the north central, Blue Grass, and northeast areas. Gusts of from 40 to 60 m.p.h. were reported by news and other sources. In Mason County in northeast Kentucky, two persons were injured on the morning of the 26th when a school bus was demolished. Strong winds rocked the bus, caused the driver to be thrown from the driver's seat. This was followed by the overturning of the bus. A review of the news reports indicated a preliminary conclusion that most of the damage was relatively minor in scope. However there were reports of several mobile homes overturned; damage to roofs of buildings; damage to dars, houses and utility lines by falling trees; miscellaneous damage over the State.							
Washington County	30	a.m.			0	2	4	0	Lightning
		Between midnight and 1 a.m. lightning struck a home near Kirkland. News reports stated that the building was shattered by the lightning and that the occupants narrowly escaped when flames enveloped the structure within minutes. The two persons in the house were hospitalized due to burns and injuries from falling debris. The house and a smokehouse nearby were destroyed by fire.							
Estill County	30	12:40 a.			0	0	3	0	Lightning
		In the area of Irvine and Ravenna, lightning struck electric and telephone lines and cables and homes centered mostly in the Grand Avenue area of Irvine. In several adjacent homes windows were shattered with glass flying in all directions, with damage also to doors, TV sets and telephones. Preliminary damage estimates totalled several thousands of dollars.							
Louisiana		Data Delayed							
Maine State	4-5				0	0	4	0	Glaze, wind
		Freezing rain widespread in evening of 4th to morning of 5th. Accumulations of ice reported 1/2 inch at Clayton Lake and 0.4 inch at Springfield. Roads extremely slippery with many accidents. Many activities cancelled and some schools closed on 5th. Ice loading combined with wind to break tree limbs, etc. Gusts to 30 mph reported at Rumford.							
Maryland State and Washington, D. C. area, except southeast portion	Dec 31- Jan 1	Late afternoon to early afternoon							Snow
		A massive snowstorm, the winter's first major snowstorm, gave totals as much as two feet in western areas in less than 24 hours. Heaviest totals generally extended along the northern tier of counties from Frederick and Montgomery Counties westward; totals, 20 inches and more were quite common in Allegany and Garrett Counties. The following are extreme totals for the storm as recorded at Weather Service stations: 24.5 inches at Picardy; 22.5 inches at Cumberland; and 22.0 inches at Savage River Dam. This was the heaviest snowfall in western Maryland since the storm of December 28, 1967 when totals, 10 inches to 23 inches, were reported. In southeast Maryland most precipitation was in the form of rain. Although warnings were timely, some travelers and motorists were delayed by the heavy snow; however, the number of accidents and the number of deaths and injuries were much smaller than would have been expected. In Harford County, heavy snow may have been responsible for the death of a woman who was ill; the ambulance was delayed in reaching her home.							
Northern half	4	Morning							Rain, glaze
		Rain coming at a time when there was still considerable snowcover, and freezing rain coated streets and highways with glaze, forcing the closing of schools and delaying school openings. Many persons were late to work as traffic was slowed by ice conditions and by many minor accidents. Some minor flooding was reported in Allegany County.							
Maryland (continued) Northern half, including Washington, D. C. area	13-14	Late afternoon- afternoon			0	300+	5	0	Freezing rain, glaze
		A thick coating of ice on streets and highways, as a result of freezing rain, brought a marked slow-down in normal activities. Some measurements gave coating as 1/4-inch thick. Uncounted hundreds of traffic accidents resulted and more than 300 persons were injured. Schools were closed on the 14th in 10 counties and opened one hour late in two other counties. The U. S. Post Office cancelled mail deliveries in cities such as Baltimore and Frederick. The estimated cost of melt operations by salt in Baltimore was more than \$35,000 in salaries alone; at the height of the ice storm about 120 trucks, manned by about 300 men, were active in the city. Little or no trouble was reported with ice formation on wires and trees.							
State, including Washington, D. C. area	26	Afternoon			0	4	5	0	Wind, hail
		A cold front, associated with an intense low pressure system, crossed the state and was accompanied by thunderstorms, extremely high winds, hail and sharply dropping temperatures; also, rain, snow and sleet were reported. Winds were reported in many places to have reached and exceeded 70 mph. Peak winds at the area's first-order Weather Service stations were: 71 mph at Washington D. C. National Airport and 58 mph at Baltimore Friendship International Airport. Extensive, mostly minor damage was reported. Many buildings were damaged; trees, telephone and power lines downed; vehicles and trailers, including tractor trailers were overturned. The Port Authority officials at Dundalk Marine Terminal described the storm damage as the "worst in 10 years." A 60-foot mobile home was lifted from its foundation near Sharptown and deposited 15 feet away upside down and its sole occupant was injured. At Burkittsville, a 12-year old girl was blown into the path of a car. In Washington, D. C. area, a 13-year old girl was injured by a falling tree and a woman received minor injuries when her car was struck by a falling tree. Hail to golf-ball size was reported in the Laurel area. Very high winds continued into the following day.							
Massachusetts Northern and western	4-5				0	0	0	0	Glaze
		Freezing rain caused very slippery conditions in many areas.							
State	14	mid-day			0	0	0	0	Glaze
		Many areas slippery from freezing rain.							
State	27				0	0	4	0	Wind
		Scattered wind damage to trees and utility lines and minor damage to buildings. Gusts to 74 mph reported at Chester.							
Michigan State-wide	3-4				0	1	0	0	Wind, Heavy Snow
		Freezing rain, with 3 to 4 inches of snow, fell in central Michigan. Marquette had their second largest 23-hour snowfall of 13.3 inches. Many highways and schools in Upper Peninsula and northeast Michigan were closed and some power failures occurred. A woman injured her shoulder as wind blew her against a parked car in Monroe County.							
Lower Peninsula	13				0	?	0	0	Ice Storm
		Ice, 1/4-1/8 inch thick and 1 inch on streets, glazed roads causing at least 32 persons to be injured in falls on the ice. Many schools were closed.							
State-wide	26-27				1	?	4	0	Wind, Snow (Blizzard)
		Snow, driven by gale-like winds reported as high as 80 mph at Monroe, closed all major highways, schools, stores, and factories over the state. Heavy snow was reported in the Upper Peninsula with 12" at Ironwood, 14" at Pellston, and 15" at Ishpeming. Strong winds damaged roofs, power lines, trees, and plate glass windows. Near Detroit, a 90-foot police department communications antenna fell on the Police Chief's car; a small plane was flipped upside down by the wind as it taxied across a runway. The wind blew the water in the Detroit River upstream causing a drop of a foot in the water level. Numerous plate glass windows and store fronts were blown out by winds in western Michigan and the Detroit area. Thousands of customers in Cadillac area were without power. Part of one wall was blown over of Haslett Baptist Church, under construction, resulting in \$10,000 damage. Hundreds of motorists were stranded in the 8 to 12 foot drifts. A Kalamazoo man was found frozen to death. He apparently tried walking home after his automobile became stuck. At least 4 deaths occurred in storm-related auto accidents. Marquette was only airport to remain open in the Upper Peninsula. Excessive snow closed Timberlee Ski Lodge and caused the Snowmobile 500 International to be called off.							
State-wide	29-30				1	?	5	0	Wind, Snow

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Michigan (continued)									
									Major highways again were blocked with snow, stranding hundreds of motorists. A Romulus man was found frozen to death several days after leaving his stuck car and walking nearly 5 miles. Winds, caused power failures, damage to roofs, trees, and plate glass windows, were reported up to 61 mph at Detroit Metropolitan Airport. Snowdrifts, up to 12 feet, caused damage to road equipment bucking the packed snowbanks.
Minnesota Southeast and the Southeastern Part of South Central District	3-4	12:00 p to 12:00 p			0	0	5	0	Blizzard
									Strong winds with very heavy snows of 18 inches in Houston County that gradually decreased to the northwest to less than 4 inches on a Fairmont-Fairbault-Red Wing line. This caused blizzard conditions across the above area. The snowfall began near noon on Sunday the 3rd and continued until about noon the 4th. Most all roads and streets were blocked generally from late afternoon on the 3rd into the 5th. All schools and most businesses were closed on the 4th and many on the 5th. Thousands of motorists were stranded through all parts of the area effected by the storm. Maximum winds recorded were: 53 mph at Fairmont, 40 mph at Austin and 42 mph at Rochester. Temperatures were generally in lower 20's and upper teens on the 3rd and gradually lowered to zero late on the 4th. One taxicab driver died due to a heart attack. Snow removal costs were high.
Northwest and Southeast Districts	29-30	Forenoon to Early Morning			2	0	0	0	Blizzard
									Strong winds with 2-4 inches of snowfall added to the heavy snow cover caused blizzard conditions in northwestern and southeastern part of the State. Maximum winds recorded were: 45 mph at Fargo, 55 mph at Rochester, 55 mph at Fairmont and 50 mph at Fairbault. Many roads were blocked and most schools closed during the day. During the early morning hours on the 30th a man and his wife in their 60's died from exposure about 1/4 mile from their stalled auto as they tried to walk to their farm home near Frazee. The wind chill at Fargo averaged -40° to -45°F during the early morning on the 30th.
Mississippi Northern Two-Thirds of State	7-8				0	0	?	0	Freezing Rain, Sleet and Snow
									Freezing rain, sleet and snow on the 7th. This moved from Louisiana and at 9 a.m. extended E to Jackson and N to Greenwood; roads and bridges had begun to freeze over. By noon it reached east central Mississippi and later entered northern Mississippi. Snow depths of one or more inches extended in a band from the southern part of the Lower Delta Division east-northeast across the northern part of the East Central Division. Snow accumulated to over four inches in the Greenwood area. As the hazardous driving conditions spread, many schools and businesses closed and most activities were brought to a standstill. On the 8th there was some freezing rain, sleet and snow. Primarily due to hazardous driving conditions, most schools remained closed, the state offices and many businesses were closed.
Mississippi	10-12				0	0	?	0	Fog
									Dense fog developed in many parts of the state. At times visibility was reduced making highway travel especially hazardous.
Warren County	24	5:10 p. - 6:15 p.	?	?	0	0	?	0	Hail
									Thunderstorm moved from NW towards ESE. Hail about 5:10 p.m. - 5:25 p.m. in several subdivisions S and SW of Vicksburg (lat. 32.3° N, long. 90.0° W). Hail covered ground to a depth of 1 inch; stones averaged 1/4 inch, largest 3/4 inch. Accumulations of hail were first reported in a band across Cain Ridge Road, Hamilton Heights and E towards Bovina. Minor damage to trees and shrubbery noted, property damages estimated \$300-500. Later, a similar storm struck in the Jeff Davis community (S of Vicksburg) where the heaviest concentrations of hail in the county were reported, 1 1/2 inches to 3 inches on ground; hail golf ball size was reported at 5:55 p.m. and some "almost as big as hen eggs" fell 6:00 p.m. - 6:15 p.m. No reports of major damage, some to auto glass and paint. Accompanying winds toppled two trees on Cain Ridge Road; some wind damage reported in Jeff Davis community.
Hinds County	24	6:30 p.							Funnel Cloud Aloft
									While thunderstorms were moving eastward about 10-15 m.p.h., police received public report at 6:30 p.m. of a funnel cloud between Raymond and Terry (lat. 32.1° N, long. 90.4° W). No damage reported and none attributable to rotary winds located.
Hinds County	24	6:30 p. - 6:45 p.	3	25	0	0	4	0	Wind
									Storm moved from W towards E. Civil Defense noted straight line wind damage in area on Kintel Road near Midway (lat. 32.0° N, long. 89.9° W), about 22 SW Jackson. Entire roof lifted off small building housing a beagle training club; timber scattered over road. High wind blew mobile home over, no injuries reported to 3 occupants of mobile home; a few trees blown over. Two sheds destroyed. Property damages estimated \$10,000.
Missouri Northern third of State	2-3				1	10	4		Snow
									Snowfall totals of over 12 inches were accompanied by cold temperatures and strong winds which created near-blizzard conditions for much of the area. Numerous holiday travellers were stranded. A man was reported killed when he lost control of his car on an icy road.
St. Louis	12				2	250	5		Glaze
									A light freezing rain was blamed for a rash of accidents which left two dead and more than 250 injured. The deaths and the majority of the injured were the result of traffic accidents.
Montana Powell County	3	4:30 p.m.				2	4		Fog, ice
									An estimated 20 to 30 motor vehicles were involved in chain reaction accidents while driving in dense fog on snow covered Highway 200 near Ovando.
Flathead, Lincoln, Sanders, Lake Counties	9-12								Blizzard
									Approximately 12-20 inches of snow accompanied by strong winds, drifting and zero temperatures caused road closures and temporary isolation of communities.
Liberty County	6				1				Cold
									A 53-year old man was found frozen to death in an unheated farm house seven miles south of Joplin.
Park County	21						4		Strong winds
									A mobile home was blown off the road and demolished by wind gusts to 50 m.p.h. while traveling along Interstate 90 near Livingston.
Glacier County	28	Night					4		Strong winds
									A mobile home was blown 20 feet and demolished by wind gusts estimated to 100 m.p.h. while parked off the highway near East Glacier.
Nebraska Southeastern Nebraska	3-4	--	--	--	1	?	5	0	Blizzard
									Snowfall over entire State but blizzard conditions were confined to area southeast of Superior-Decatur line. Visibility was extremely low over an extended period due to high winds and heavy snow that was susceptible to blowing and drifting. Thousands of motorists stranded, rescue units were active. Large buildings in Omaha and Humphrey collapsed under combined effects of heavy snow and high wind. One man died as a direct result of the storm from exhaustion and exposure. Ten others died from indirect causes including monoxide poisoning, heart attacks, etc. Un-countable cases of frostbite and minor injuries.
Nevada Northwest, Northeast Divisions	13-14	AM-PM			0	0	?	0	Snowstorm, Wind
									A major snowstorm swept through northern Nevada with snow amounts to 40 inches in the mountains with lesser amounts in the valleys. Gusty surface winds, up to 55 miles per hour brought snowdrifts, some 3 feet deep, which made clearing difficult. Schools and major highways through the mountains were closed. Reno airport was temporarily closed. Long-time residents describe the storm as being the "worst in 10 years."
New Hampshire State	4-5				0	0	0	0	Glaze
									Freezing rain began in evening of 4th and continued into the 5th, causing very slippery conditions. Schools closed in some areas on 5th due to the icy roads.
Southern	14	mid-day			0	0	0	0	Glaze
									Freezing rain caused slippery conditions in many areas.
New Jersey Statewide	1						4		Heavy snow
									Heavy snow, especially over the northern third of the State, disrupted transportation and caused damage to trees and utility lines. Storm totals from 6 to 12 inches were common over northern counties, while from 2 to 4 inches fell near the Delaware Bay.
New Mexico Statewide	3-9				0	0	0	0	Extreme cold
									Extreme cold spell over the state from the 3rd to 9th, with lowest temperatures mostly on 6th and 7th. Record minimum temperatures at many central and northern mountain stations. Damage from frozen water pipes and systems in central New Mexico from Belen to Colorado border totalled an estimated \$2 million. More than 3000 locations had frozen pipes in Albuquerque. Many schools and offices were closed to conserve gas, and some communities in vicinity of Santa Fe

See reference notes at end of table.

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

JANUARY 1971

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM	
					KILLED	INJURED	PROPERTY	CROPS		
New Mexico (continued)										
									were without gas. Some deciduous fruit trees were damaged by cold. Losses to zoo and other animals. In Carlsbad area, potash mines were closed because of frozen fuel supply.	
New York Extreme southeast	1	a.m. to p.m.							Snow	
									Coastal disturbances produced 6 to 9 inches of heavy wet snow in greater New York City area and Long Island and 8 to 12 inches in the lower Hudson Valley and Catskill region. Streets and highways rendered slippery and hazardous, although lack of serious drifting aided removal by highway crews. Airports closed for about eight hours in New York City area.	
Lake Ontario (eastern lee)	6-7								Snow	
									Heavy lake-effect snowfall of 8 to 18 inches fell in the eastern lee of Lake Ontario from Oswego and southern Jefferson Counties across Tug Hill to western Adirondacks. Widespread school closures in Lewis and Jefferson Counties. Winds of 20 to 30 miles per hour accompanying snowfall resulted in considerable drifting and near zero visibility along highways. Numerous cars stalled and abandoned on Interstate Route 81.	
State	26-28								Snow, wind, rain, lightning	
									Preceded by mild temperatures near 40° F, light rain and some lightning earlier in the day, a very intense storm center brought bitter cold Arctic air, snow and gale-force winds to all sections by mid afternoon of the 26th. Temperatures dropped to the mid teens or colder by midnight and to near 5° by sunrise on 27th. Winds gusting variously between 50 and 70 mph. as accompanying snowfall of 6 to 18 inches brought severe weather to western, central and northern sections. Blizzard conditions prevailed across the Lake Ontario plain to the St. Lawrence and central Mohawk Valleys through the 27th and until early on 28th. Heavy snowfall of up to 20 inches continued in the Oswego area on the 28th, however. Blowing snow, zero visibility and drifting kept most major and secondary roads closed for most of the days in all sections except southeastern New York where conditions were somewhat less severe. The N. Y. Thruway was closed from Schenectady west to the Penn. border in Chautauque County. Hundreds of cars were stalled and motorists sought shelter in western and central sections, especially from Wyoming and Benesse Counties east to Herkimer County in the Mohawk Valley. Auto accidents very numerous, some of which caused fatalities. Schools, most industries and business establishments were closed at least through 27th in more than one-half of the up-state Counties. In Hamburg some 20 cars were damaged by large roof blown off nearby building. Winds demolished large sign at Wellsville, overturned cinder block wall in Buffalo and collapsed lumber storage shed in Medina. Large 40-ft. window smashed in motel at Syracuse. Many communities reported power and telephone outages. Snowfall totals 3 inches or less Hudson Valley and Catskills south to Long Island but winds gusting to 55 mph. caused scattered tree and property damage as well as power failures. Wind chill index on 27th near -30 in New York City and -45 or lower up-state produced much discomfort outdoors as conditions generally moderated on 28th. Lightning reported in many areas from Buffalo to Albany on 26th as three radio stations in Finger Lakes and Syracuse area were knocked out of operation. Notably low barometric pressure observed during storm passages on 26th or early 27th with minimum pressures (corrected to sea level) in the range of 976 to 982 mbs.	
State, except extreme southeast	29-	a.m. to 30th a.m.			1				Snow, wind	
									Lake-effect snowfall early on 29th followed by fast moving, intense storm from west by evening resulted in second period of severe weather in five days. Mostly Great Lakes snowbelt and adjacent areas of western, central and northern New York were affected by moderate to heavy snowfalls, winds of 40 to 55 mph., and blowing snow. N. Y. Thruway closed from Penn. border east to Utica area late 29th to morning of 30th as other roads rendered hazardous, if not impassable, by drifting and frequent zero visibility. County authorities closed roads to travel from Chautauque, Cattaraugus and Erie Counties east to Jefferson, Oswego, Oneida, Herkimer and Cortland. One man perished from carbon monoxide when car stalled on drifted road in Cattaraugus County. Wind damage included small plane and part of hangar roof at Watertown Airport plus widely scattered power lines. Snowfall of 12 to more than 20 inches from Lake Ontario east to western Adirondacks forced school closings in several affected counties. Snowfall totals of 6 to 10 inches occurred in southwestern counties, eastern lee of Lake Erie and in east central highlands and Mohawk Valley but amounts decreased to 5 inches or less in Hudson Valley and northeastern sections. Low barometric pressure accompanied storm passage on 30th with minimum readings 978 to 985 mbs. (sea level) at several reporting stations, including New York City.	
North Carolina Harnett County	5	3:30am	1 1/2	150	0	0	5	0	Tornado	
									Two buildings of Anderson Creek School severely damaged. Two barns destroyed, farm home and several outbuildings damaged. Moved from southwest to northeast.	
Durham, Lee, Montgomery, Transylvania and Wilson Counties	5	morning					4	0	Rain	
									Flash flooding in several areas damaged streets, basements and homes in low places.	
North Carolina (continued)										
Statewide	8-9				1	0	5	0	Glazing	
									Freezing rain along with some snow and sleet affected nearly all of North Carolina on both days. One man died in Duplin County as a result of exposure. Two others killed in weather-related traffic accidents, and 100 or more injured in traffic accidents and falls on ice. Trees and limbs broken over a wide area; many power and telephone outages of a few hours to a few days when lines were broken. Cost of cleanup considerable in nearly every county. Heaviest damage in south and central interior Coastal Plain, and in Sandhills area.	
Forsyth County	25	3a-noon			0	?	4	0	Smog, glaze	
									Heavy fog in a polluted atmosphere caused "an unusually high number" of patients with respiratory ailments at Winston-Salem hospitals. Several weather-related accidents caused an undetermined number of injuries.	
Statewide	26-30							5	0	Winds
									Very windy weather reaching highest speeds from northwesterly directions west portion of 26th and east portion 27th. Highest winds reported just under hurricane force, but Grandfather Mountain reported gusts to 120 miles per hour. Rather windy conditions continued through the 30th, as a series of low pressure storms moved through the northeastern United States while pressure remained high over the Southeast. Trees and limbs weakened by previous glazing fell by the thousands, causing damage to power and telephone lines, roofs and buildings. Mobile homes and aircraft overturned, walls and plate glass blown down. Fire control hampered. Damage usually small in any one area, but very widespread.	
Cumberland, Johnston, Macon and Wake Counties	30	4-9pm						4	0	Hail, wind, electrical
									Thunderstorms scattered over a wide area caused minor wind damage in a few places. Lightning disabled a radio station in Macon County. Hail 1 to 1/2 inch in diameter reported in Cumberland, Johnston and Wake Counties.	
Scotland County	31	3 am						4	0	Electrical
									Home burned by lightning in Laurel Hill.	
North Dakota									None reported	
Ohio Northern Half	13-14	2:00a-1:00a			3	270	5		Freezing rain	
									Most areas north of a Dayton to Columbus to Youngstown line were covered with a layer of ice. The freezing rain began early on the 13th and fell intermittently throughout the day. In the Toledo area the intensity of the freezing rain picked up during the evening hours and by midnight more than a quarter inch of ice covered the ground. The ice storm resulted in 3 deaths (two in accidents and one due to a fall) and more than 850 traffic accidents. Cleveland police reported 400 traffic accidents, 260 of them between 4 PM and 9 PM. Some accidents tied up traffic for a half hour or more. Most schools were closed.	
Entire State	26	Most of day			0	73	6		Wind and snow	
									High winds with general gusts of 45 to 70 miles per hour (A peak gust of 98 mph was reported by a freighter off Ashtabula.) caused widespread damage. The strong winds followed a cold front which passed thru the State during the morning hours. Temperatures dropped from about 40°F to near 20° in about 2-hours. Snow and wind were blamed for a 17 car-truck pileup near Lima. Thirteen persons were injured in this chain accident. Most northern areas received only 1 to 3 inches of snow but up to 12 inches fell in the northeast. Drifts as high as 15 feet caused 71 persons to spend the night in an Ashtabula County School. The high winds blew down a building under construction in Columbus causing \$75,000 damage. Thousands of homes and buildings were damaged to some extent by the strong winds. One example of the wind's force occurred in Toledo where a garbage can lid was blown through a car windshield. Utility lines, trees, and windows were common victims of the strong winds.	
Scattered Areas	28-30	After-noon-morning					6	5	Wind and snow	
									High winds lifted trailers, downed trees and utility lines, and caused miscellaneous property damage over much of State. Damage was most common in the northern third of Ohio. The Akron-Canton Airport reported winds of 69 miles per hour. Snow accompanied the gusty winds in many areas.	
Oklahoma Panhandle and Extreme Northwest area	2-4	p.m., 2nd - p.m., 4th			0	0	0	0	Snow	

See reference notes at end of table.

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

JANUARY 1971

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS				ESTIMATED DAMAGE	CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS		
Oklahoma (continued)										
Near Hennessey, Kingfisher County	3	Early a.m.	7	1	0	1	4	0	Wind	An intense winter storm moved into the area during the night of the 2nd, and by the evening of the 3rd an official 3 to 6 inches of snow had fallen in the Panhandle. In Ellis, Harper, and western Woodward Counties to the east, snowfall averaged around 1 inch. Unofficial measurements up to 12 inches were reported near the Kansas line in the central Panhandle. Snow drifts up to 8 feet made roads impassable and stranded several hundred travelers. Skies cleared on the 4th, allowing roads to thaw enough for travel to resume.
35W Marietta, Love County	3	7:05 a.	**150	50	0	0	4	0	Wind	Strong, straight wind overturned and destroyed one mobile home and damaged three others. One man was injured.
Northeast Half of State	13	a.m.		2	0	1	0	0	Ice	A strong, straight wind estimated at 80 to 100 MPH overturned a mobile home and a feed house. There was minor damage to a nearby home. A grain binder was also overturned and three turnips were pulled from the ground. Civil Defense said there was no funnel involved.
Oregon Western Third of State	11-14	All days			0	1	5	0	Snow	Freezing rain and drizzle caused hazardous driving conditions over the northeast half of the State for several hours on the morning of the 13th. Property damage was confined to a number of multi-vehicle accidents. Two large semi-trailer trucks overturned on the Turner Turnpike. One driver was killed. Another driver was killed in a two-truck collision on 140, near Shawnee.
Umatilla County	15	2:00am-4:00pm	40	*10	0	0	4	5	Wind	Snow showers and periods of continuous snowfall provided daily totals of snow for most communities of the western one-third of Oregon. Increasing snow depth through the morning hours of the 14th provided depths of generally 5 to 10 inches in the Willamette and southwestern valleys, up to 3 inches along the south coast and 5 to 12 inches along the north coast. Such locations as the West Hills of Portland, Astoria Experiment Station and other lower hill areas had a maximum depth of 12 to 15 inches while the Coast Range gained an increase of 24 to 36 inches. Snowfall turned to rain late on the 14th as temperatures warmed 10 to 15 degrees and brisk southerly winds returned. Trees loaded with snow produced numerous broken branches and severed power and telephone lines which caused scattered service outages. A collapsed barn at McMinnville caused the loss of 4 cows and wet snow at Corvallis collapsed a nursery shadehouse. At Salem a 50 by 200-foot quonset storage building collapsed and damaged 12 boats and a camper in storage. Five lanes at a Forest Grove bowling alley were damaged by a collapsed section of roof. Greatest loss occurred at Salem where a 50 by 180-foot section of flat roof collapsed at a large shopping center at Mission and 25th Street, SE. Only one sales lady received minor injury. Highways were very hazardous as traffic inched along. Most sanding of city streets and highways near the cities helped very little due to continuous snowfall, thus rush-hour traffic moved at a snail's pace where possible. Extensive delays resulted from numerous trucks and automobile accidents. An airliner 747 landing at Portland International Airport became mired in mud and snow after it missed a taxiway while turning off a runway during snow showers on the evening of the 12th.
La Grande, Union County	15	Morning			0	0	4	0	Wind	Brisk southerly winds were experienced along a 10-mile wide belt area extending from Pilot Rock to the Spout Springs area. Scattered wind damage was greatest in the Pilot Rock area where seven ranches lost fences, trees, 7 hay sheds, one barn, one machine shop, a radio tower, one airplane hangar and one plane was damaged. One rancher at Pilot Rock observed unofficial gusts of 90 mph at about 2:00am when his anemometer hit its maximum speed. Some \$75,000 damage was reported from downed trees in the Blue Mountains. The high wind also ripped a 10-foot microwave dish from its 25-foot tower at Spout Springs. Maximum wind recorded at Pendleton airport showed a peak gust of 46 mph from the south at 12:48pm.
Malheur County	16-20	All days	100	*50	0	0	3	0	Rain	Gusty wind is believed to have been the cause of a collapsing third-floor wall of a previously burned out building. One man walking along the sidewalk escaped injury by pressing himself against the side of the building as tons of brick and stone fell to the sidewalk and curb area crushing five cars parked at the curb.
Joseph 55W, Wallowa County	16	Late pm			0	0	3	0	Rain	Snowmelt on the Owyhee Mountains was accelerated by mild temperatures and more than an inch of rain during the period. The 35-year-old Owyhee reservoir was filled for the first time during January. Flooding of low ranch land below Owyhee Dam caused several ranchers to leave their homes during high water. High water of Jordan River washed out a temporary bridge at Arock, thus isolating most of the community from Highway 95, four miles to the south. See January 1971 issue of <u>Climatologica</u> Data National Summary for details on flooding.
Steens Mountains, Harney County	16	Afternoon			0	0	2	0	Wind and Ice	Moderate rain on mountain snowpack caused a huge snow slide in Hurricane Creek Canyon in the vicinity of Little Granite Creek. The slide which blocked the road in the canyon floor was 50-60 feet deep and about 500 feet across.
The Dalles area, Wasco County	21	9:58am-12:58pm	6	*2	1	2	4	0	Wind	A period of high wind and freezing moisture conditions atop Steens Mountain caused a 4-inch buildup of rime ice on a 30 by 30-foot radio-telephone reflector. The loss in telephone service was felt by 63 farm families in southern Harney County. This was the first such icing problem in the 4 years the reflector had been in use. The repair crew estimated winds up to 100 mph during their visit.
Coastal Area West of Coast Range	14-15	10pm, 14th-5:30am, 15th	300	*10	0	0	6	6	Wind	Strong gusty northwest winds prevailed in The Dalles area along the Columbia River. After the passage of a storm front through the area, wind observations from the Dallesport, Washington FAA Flight Service Station (located 1.3 miles north-northeast of The Dalles Post Office) were recorded as follows:

See reference notes at end of table.

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

JANUARY 1971

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					KILLED	INJURED	PROPERTY	CROPS		
Oregon (continued)										
		Time	Wind Direction	Wind Speed (mph)						
		9:58am	290	17						
		10:44am	290	peak gust						
		10:58am	300	30						
		11:40am	290	peak gust						
		11:58am	310	29						
		12:58pm	310	23						
		A mobile home being towed in the eastbound lane of Interstate 80N about 1 mile northwest of The Dalles was reported blown over the median barrier and into the westbound lanes. The mobile home crashed head-on into a truck van killing a passenger in the cab and injuring the driver. The tow truck landed on its side injuring its driver. Signs and roofs were damaged and a few trees blown down at The Dalles. Winds tore a small plane loose from its moorings and overturned it at Dallesport airport.								
Northern Coast of State	22-25	All days	140	*40	0	0	6	0		Rain
		Daily rains of 1 to 3 inches continued along the northern coast of Oregon providing 4-day totals of 7.00 to 11.50 inches. Previous heavy rains in this area during December 1970 and the early part of this month provided saturated ground conditions. Numerous locations in Lincoln, Tillamook, Clatsop and Columbia counties reported mud slides covering roads, rail tracks and moving homes from their foundations or demolishing them. Nine homes were demolished or heavily damaged in Astoria where streets, sewers and water mains were also ruptured by sliding soils.								
Pacific		None reported								
Pennsylvania Western Pennsylvania	26				2	11	5	5		Blizzard, wind, lightning
		Half of the screen of a drive-in theater was blown down near Beaver Falls, Beaver County. In the same area damage to a shopping center sign was estimated at \$800. Several large plate glass windows and a roof were destroyed. Power lines were down throughout the county and trees uprooted in several places. At Erie International Airport, Allegheny Airlines canceled all its flights on the evening of the 26th. Many county schools were closed in Erie County. Icy streets and county roads in northwestern Pennsylvania caused a rash of accidents. Some roads were drifted shut and broken windows and downed power lines were general. About 3 miles west of Conneautville on Route 420 a woman died in her car as it became stuck in a snowdrift. Another death occurred in a head-on collision during a snowdrift. Just east of Kinzua Dam in Warren County on Route 59, estimated wind damage to the screen of a drive-in theater on Route 6 was \$15,000. In Franklin a mobile home suffered heavy damage when a gust of wind turned it over. Lightning was the cause of a fire which heavily damaged the sanctuary of a church in Lucinda, Venango County. At Allegheny County Airport winds overturned a private plane and damaged a hangar and 2 other buildings at the Greater Pittsburgh Airport. At least 11 persons were injured by flying debris in the Pittsburgh area. In McKeesport residents faced the falling temperatures without heat and light; a large plate glass window was knocked out at a downtown store, and a restaurant sign along Route 30 was toppled. Large plate glass windows were also destroyed in Pittsburgh and Lower Burrell. In Kittanning, Armstrong County, a mobile home was completely demolished by winds. The roof of a double house in Waynesburg, Greene County, was blown off. Power disruptions were reported in the Latrobe area of Westmoreland County. A heavy gust of wind blew out the glass on the front door of a laundromat in Brownsville, Fayette County. In the Dry Tavern area a power failure occurred when the roof of a trailer was blown off.								
Central Pennsylvania	26				0	3	6	5		Blizzard, wind
		In Centre County blizzard conditions existed as temperatures dropped below 15 degrees and snow whipped across the ground. A house trailer was blown over onto its roof in a parking lot near Port Matilda. Two new mobile homes parked on lots in Buffalo Run Valley were destroyed. A four-bay concrete block garage under construction along old Route 220 about one-half mile east of Milesburg was damaged by wind early in the afternoon. Minor accidents occurred because of road conditions. Power interruptions were spotty with the Millbrook-Lemont and Bald Eagle Valley areas hardest hit. Windows were broken in Milesburg, Bellefonte, and Pine Glen. A nearly new mobile home was demolished at Reed's Gap on Route 35 in Juniata County, and in the same area a portion of the roof was blown off a small barn and dropped on a car. A food market located just east of Mifflintown suffered damage when the wind blew in 2 large plate glass windows. Windows were also blown in at Lewistown and Monument Square. At Belleville in Mifflin County the roof of the New Holland manufacturing plant was damaged. A pipe in the sprinkler system was broken resulting in water damage inside the plant. Winds gusting to 61 mph were reported at the Harrisburg Airport. In Bedford County homes in the Everett to Breezewood area were without power for about an hour. The Bedford hospital operated with emergency power for nearly 2 hours. The front wall of a trucking garage along Mile Level was toppled by high winds at 4:30 PM and a large section of the roof was blown off 20 minutes later. Sections of the Everett Sportsmen's clubhouse roof were dislodged and carried some distance by tornado-like winds. In Adams County a new trailer was destroyed off Route 16, near Zora. The loss of the trailer was estimated at \$10,000. Winds blew half of a steel roof off a large barn between Arendtsville and McKnightstown with an estimated damage of \$1,000. Wind damage								
Pennsylvania (continued)										
Eastern Pennsylvania	26				0	15	5	5		Wind, lightning, snow
		In Myerstown, Lebanon County, the steel roof of a welding shop was ripped off by winds. The overhead garage door and part of the front cement block wall collapsed into the building. Damages of accidents due to icy spots on roads in Chester County were estimated at \$8,000. As a result of these accidents which occurred late afternoon and at dusk 7 persons had to be treated at hospitals. 2 Chester women were hurt when opening their front doors and the wind pulled them to the ground. A man was injured in Chester when a car door slammed into him. Trees were uprooted, one damaged a car and blocked traffic in Chester. Another one fell onto several cars in the courtyard of an Upper Darby apartment building. In Tinicum the winds whisked a car from the street to a sidewalk. On Route 41 a trailer loaded with mobile home steel frames was caught by winds and blown into the opposite lane. A semi-oil tank trailer was forced off the highway as a result of this roadblock. Two large plate glass showroom windows in Boyertown, Berks County were blown in and shattered. A number of trees were felled in Bloomsburg, Columbia County, and throughout the area, and a mobile home was blown over while in transit. 3 persons were injured in an eight-vehicle pileup on Route 15 one-half mile west of West Milton during a blinding snowstorm. Another person was injured in a three-car crash just north of the first mishap. Damages were estimated at over \$4,000. During a thunder-lightning and snow storm which occurred simultaneously in Luzerne County, lightning struck a power line in Hazleton at 12:45 PM causing minor damage. High winds destroyed a display window at a drugstore and overturned a plate at the Hazleton Municipal Airport. The roof of a feed mill in Williamsport was lifted off by high winds. 2 cars were blown off the road on the bypass near Lancaster. A tree fell on a Columbia home and another was uprooted snapping off telephone wires in its fall while a large plate glass window was shattered by the wind at an auto supply store. In Hazleton a woman suffered a fracture of the left shoulder and laceration of the forehead when a strong wind caused her to lose her balance on the slippery sidewalk and hurled her to the ground.								
Statewide	27				0	5	5	0		Snowstorm, winds
		Peak winds of 60 mph were reported at the Erie Airport. Schools were closed in Elk, Cameron, Erie, Warren, Jefferson, Clearfield, Bradford, and Potter counties. A small plane was ripped from its mooring lines and toppled into a creek near Emporium in Cameron County. In eastern Pennsylvania similar winds were reported. A school bus loaded with children skidded on icy pavement near Mambocoke, Luzerne County and slammed into a pole. 5 children required hospitalization. In Centre County about one-half mile from the intersection of Routes 144 and 45 a wind-blown piece of tin caused a 2-car collision during the evening hours. Damages were set at \$1,400. A house-trailer was demolished in Alexandria in Huntingdon County at 11:30 AM with an estimated loss of \$4,500.								
Centre County	29				0	3	4	0		Snowstorm
		A snowstorm in State College caused 10 traffic accidents resulting in injury to 3 women and total damage of \$5,350.								
Puerto Rico		None reported								
Rhode Island		None reported								
South Carolina Northwest part of state	8-9	Late afternoon to early morning.			0	0	4	4		Freezing rain
		All counties northwest of a line from Aiken to Lancaster experienced moderate icing due to freezing rain. A few minor auto accidents resulted but in general most roads were not covered with ice. Damage was mostly to trees and other vegetation which had thick ice coatings. Trees and branches falling on utility lines did considerable damage in many areas.								
Anderson County	30	6:00 p.			0	4	4	0		Thunderstorms, high winds, hail.
		High winds unroofed one house and some outbuildings, knocked down trees, demolished two house trailers and unroofed another small dwelling place about 8 miles WNW of Anderson. One trailer rolled over several times with three people in it. A young wife was								

See reference notes at end of table.



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					KILLED	INJURED	PROPERTY	CROPS	PROPERTY	CROPS	
South Carolina (continued)											
											seriously injured but her husband and baby were unurt except for scratches and bruises. The other trailer also had three persons in it and they were injured slightly as it was toppled over. The same group of storms dropped large hail at Sandy Springs about 3 miles, northeast of the wind damage. Hail sizes exceeded 1 1/2 inches in some cases but the largest ones were 10 to 12 small ones fused together. There was another area of wind damage about 3 miles northwest of Anderson where the side of a building was blown in, a drive-in movie screen was filled with holes and signs and awnings were blown down or damaged. This was also some scattered light structural damage due to winds within the Anderson City limits.
Lee County	30	8:15 p.			0	0	2	0			Thunderstorms, hail.
											Gusty winds, rain and hail occurred in and near Bishopville. Damage was light although hail fell over a fairly large area. Some of the hailstones were golf ball size.
Chester County	30	7:30 p.			0	0	5	0			Thunderstorms, high winds.
											High winds accompanied by rain and hail did scattered damage throughout Chester County but the major damage was to an industrial plant in the city of Chester. A 40 x 60 foot section of roof was ripped off by winds and rain damaged the interior.
South Dakota											None reported
Tennessee State	8-9	Afternoon to early a.m.			0	0	0	0			Glaze, snow
											Freezing drizzle, sleet and snow, occurring separately or together resulted in many accidents on glazed roads and highways except parts of western Tennessee where precipitation fell mostly as rain. Snowfall totals ranged from 1 to 3 inches with greatest amounts in higher elevations and more eastern locales. Numerous highway skidding accidents occurred and a Vanderbilt University student was struck and killed by a car.
East State	18-19				0	0	0	0			Glaze and fog
											Glaze reported from many parts of the east-state area. Numerous highway accidents resulted from skidding or poor visibility.
Manchester, Coffee County	22	8:45 p.m.			0	0	4	0			Wind
											High winds destroyed garage, damaged house and large barn, broke power lines and uprooted several large trees.
10 NW Chattanooga, Hamilton County	25	1:20 p.m.			0	0	0	0			Hail
											Mostly pea-size hail but some to 3/4 inch.
Johnson County	26				0	0	5	0			High wind
											Strong gusty winds caused widespread property damage to trees and power lines. Heaviest damage occurred in Mountain City where high winds completely demolished the Rainbow Prizery Tobacco Packing House on Highway 42. Property loss was estimated at \$75,000; apparently occurred when the high winds raised the roof from the building. Mobile home overturned and another smashed into a second trailer at Mountain City Trailer Sales.
Kingsport, Sullivan	26				0	2	5	0			Wind
											Trees uprooted and limbs broken. Winds were unofficially reported at 60 mph. Two motorists were injured by falling trees.
Chattanooga, Hamilton County	30	2:45 p.m.			0	0	?	0			Hail
											Hail 1 3/4 inch in diameter reported 6 miles north of Chattanooga Airport and golf ball-size hailstones reported 9 miles northwest of Airport.
Texas Texas Panhandle	3	9:35 a-11:40 p			0	0	5	0			Blizzard
											Blizzard conditions paralyzed travel and caused considerable suffering of livestock in the Texas Panhandle. Worst conditions were north of the Canadian River. A wind speed of 37 miles per hour was recorded at the National Weather Service at Amarillo before the anemometer became coated with ice and therefore inoperative. Although cattle losses were not extreme, ranchers had trouble rounding up strays which followed the storm south. Total losses of cattle and hogs due to suffocation or freezing was estimated at \$36,000. Between 2 and 4 inches of snow fell during the blizzard. Lowest temperatures during the cold spell occurred on the 5th and 6th, with -11°F at Dumas on the 5th, and -12°F at Sunray on the 6th. An estimated 1,500 motorists were stranded in Delhart for a brief period.
Southeast Texas	7				0	0	?	0			Ice storm
											Light freezing rain fell throughout southeastern Texas, icing roads, bridges and utility lines. Areas most affected were Houston and the Beaumont-Orange-Port Arthur triangle. Damage was minor. Parts of Houston and Harris County were forced to go without heat, lights and water for about seven hours due to power failures. At the National Weather Service Office at Jefferson County Airport temperatures ranged from 30° to 33°F most of the day.
Utah	3-7				0	0	5	0			Sub-Zero temperatures
											Salt Lake, Davis, Weber, Cache and Piute Counties
											Several days of sub-zero temperatures froze watermains, overhead fire protection sprinkler pipes in Salt Lake City, Ogden and Logan. Damage estimates exceeded \$0,000 dollars. In addition at Kingston in Piute County a community of 35 families the sub-zero temperatures froze and broke a mile and a half of their community water-line. Replacement costs are estimated at 10 to 15 thousand dollars.
Logan Canyon and Wasatch mountains	13-14				0	0	5	0			Snow slides
											Heavy accumulation of snow in the northern Wasatch mountains combined with unusually warm weather to produce snow slides or avalanches in many areas. Heaviest hit was Logan canyon where 22 slides occurred in a two-day period. Besides blocking the main highway in several areas one destroyed protecting sheds of the Logan City Water Department and another demolished several summer homes in an adjacent canyon. Total damage was estimated in excess of \$0,000 dollars.
Salt Lake, Davis and Weber Counties					0	?	5	0			Fog and black ice
											Dense fog and a coating of black ice on the freeways produced a series of automobile accidents which involved 50 to 75 cars. Several injured were sent to the hospital but no fatalities were reported. Damage estimates were in the order of 60,000 dollars.
Vermont Central and southern	4-5				0	0	0	0			Glaze
											Freezing rain from evening of 4th to forenoon of 5th caused very slippery conditions in many areas. Some schools closed on 5th due to icy roads.
Virgin Islands											None reported
Virginia South	8,9				0	0	0	0			Glaze
											Freezing rain was observed at many locations south of a Richmond-Lynchburg line.
North	13,14				0	0	0	0			Glaze
											Freezing rain was observed at many locations north of a Richmond-Charlottesville line.
State	26	All Day			0	23	5	0			Wind
											High gusty winds prevailed over the state with peak gusts ranging from 60 to 100 miles per hour. Damage was widespread with hundreds of trees downed and thousands with branches and tops broken. In many cases the trees fell on utility lines causing innumerable interruptions of service although most of a minor nature. Electric service was also interrupted by the wind blowing the wires together thus shorting out and occasionally causing small fires. Numerous vehicles were damaged by trees and other flying debris. Many buildings were damaged mainly by losing their roofs and several mobile homes were damaged or destroyed. Plate glass windows and signs were damaged or destroyed almost everywhere in the state. No fatalities occurred although the wind was a factor in many injuries. Damage to sheds and outbuildings, roofing, fences, trees and shrubbery, trash cans, TV antennas and small windows although not documented or publicized would amount to many thousands of dollars. A more detailed description of the major damage by areas follows.
											Tidewater Area - Several large windows in Norfolk, Williamsburg, Newport News, and Hampton were cracked and broken. A few cars in Norfolk had trees on them and many more were damaged by debris. A number of cars at Newlightfoot north of Williamsburg had damage due to roofing from a commercial building. The George P. Coleman Bridge at Yorktown was shut down for two hours as the wind prevented closure. An ambulance on Interstate 64 was hit by a falling tree and the two occupants injured slightly. One person in Suffolk was injured by flying glass. Two TV stations were off the air for more than two hours due to power failure. A man experimenting with a parachute in Norfolk had to be rescued from the roof of a house with a broken leg. Several barges and other ships broke loose or dragged their anchors and had to be aided by the Coast Guard. The decommissioned aircraft carrier Leyte on the Rappahannock River was turned around by the wind and partially grounded. One wall of a garage collapsed in Norfolk. The roof decking from the Williamsburg Pottery Shop was picked up by the wind and dented cars and broke windshields.
											Richmond, Petersburg, Hopewell Area - Thousands were without electric service for various periods of time. Six injuries occurred in Richmond and two in the Petersburg area. A woman and son from Colonial Heights were injured slightly when a tree fell on their car. A wall of a car wash company in Richmond collapsed injuring a man and demolishing two vehicles. A woman in Richmond was injured by flying glass from a vacant building. Hundreds of trees were down blocking highways, damaging cars and houses, and interrupting utility service. Many buildings lost roofing

See reference notes at end of table.

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

JANUARY 1971

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	
Virginia (continued)									
									and the roof of the new city hall in Richmond lost building materials which damaged 6 cars. Power failures out 4 TV and 2 radio stations off the air. The screen at the Plaza Drive-in was toppled. In Dinwiddie County, 3 crates of bottles fell off a truck with at least one bottle smashing the windshield of a station wagon heading in the opposite direction.
									Culpeper, Fredericksburg Area - At least 5,000 electric customers were without power in the area. Two hundred trees were downed on service roads in the national park at Fredericksburg. The plate glass window at Boone's Antique Shop was blown in. Several trees fell in Fredericksburg blocking streets, damaging cars and one house. The special non-magnetic roof of the Geomagnetic Center at Corbin was blown off. A general store at Granite Springs was destroyed by fire which was started by broken electric wires. A high metal and glass sign at Rockersville on Route 29 fell and damaged a trailer trailer parked underneath.
									Lynchburg, Danville Area - Five roads were blocked by trees in the Danville area. Large glass windows were broken, traffic lights were twisted and turned, numerous signs were destroyed and utility lines were downed. One mobile home was overturned slightly injuring the occupants. Numerous trees were downed on power lines in the Lynchburg area. Several plate glass windows and neon signs were broken. A tree fell on a car. A school teacher injured both knees when knocked to the ground by the wind. An 87 year old man received a fractured hip when a door slammed on him. In Amherst County the windows in the high school were broken. Three walls of a large building under construction in Bedford were demolished by the wind.
									Roanoke Area - A student received a severe cut on the elbow from broken window glass at Monroe Jr. High School in Roanoke. Part of a prefabricated school was blown off a truck on Interstate 581. A large truck at a warehouse was overturned. A wall toppled on a station wagon. A metal roof covered with tar and gravel of a car body shop was lifted by the wind damaging some vehicles with the debris. One glass company had 50 calls on windows. The Grand Piano Furniture store lost two large windows with damage to the furniture inside. The screen to the Lee Hi Theater in Salem was severely damaged.
									Radford, Christiansburg, Blacksburg Area - The roof of the Martin Building in Radford was blown off damaging a car. The Radford Furniture Store had a large window broken. Electric power was interrupted several times. One employee of a cable television company was blown off a pole and injured. A trailer home in Fairlawn lost its roof. One student in Blacksburg fell striking his head and was transferred to the hospital for observation. Two schools were damaged slightly. The roof of the new Holiday Inn on Route 460 south of Blacksburg was damaged. Doors, windows, and skylights at V.P.I. had some light damage. Two cars in north Blacksburg were damaged, one completely, when a burned out mobile home was blown on them. The plate glass windows at the Kroger Store in Christiansburg was broken.
									Bristol, Abingdon Area - One person was injured from a fall in Bristol. The walls of a house under construction in Abingdon were demolished and the plate glass window of the Abingdon Motor Company was broken.
									Northern Shenandoah Valley - A warehouse in Winchester and a farm equipment building near the West Virginia border lost roofs. Plate glass windows at the Winchester Evening Star and Clarke County Motors were broken. A house trailer was overturned against another trailer at Sandy's Trailer Court, and another one was overturned at Highview containing an occupant who was unhurt. A house trailer was overturned in Timberville. Some glass doors were shattered in Park View and Elkton. Three house trailers in Page County were destroyed with one in Salem containing four people who were injured slightly. Two nearly completed apartment buildings in Alma were damaged with one roof gone and the other with the walls twisted. A pickup truck was picked up and dumped on a fence in Mt. Jackson and a large barn was completely demolished with a second barn losing its roof. A house trailer was toppled onto a parked car. The porch roof of a motel in New Market was destroyed. A large poultry house was unroofed 5 miles west of Woodstock. The false front to the motor vehicle examining station in Harrisonburg was destroyed. The roof of the Front Royal town shop was ripped off and landed on the town garage. The metal roof of the World Pentecostal Church south of Woodstock was ripped off and also the roof of Fletchers Chapel Church west of Luray. At Mt. Clinton the roof was torn off a livestock shed and the walls were damaged. The screen of the North Drive-In Theater on Route 340 was damaged with sections missing. A mobile home was destroyed between Steeles Tavern and Fairfield. One traffic accident 4 miles south of Greenville was due to high winds with one occupant injured slightly. A section of a second story wall under construction at the Allegheny County High School in Covington was toppled by the wind. One plate glass window was knocked out of Maple Avenue and one house lost its chimney.
Washington									
Entire State	14-15				1		5		Wind and snow
									High winds and heavy precipitation beginning as snow and turning to rain in lowlands caused numerous power failures and damage to other property. One person killed by an avalanche in Cascades.
West of Cascades	22-26				4	6	5		Wind, rain & snow
									Strong winds on several days as weather systems moved inland caused power failures and damage to other property. Heavy rain in lowlands
Washington (continued)									
									and snow in mountains. Numerous avalanches in mountains. Four persons killed and six injured when two cabins in a ski area near Stevens Pass were destroyed by an avalanche on 24th. Flooding along several rivers in western Washington last of month.
West Virginia									
Morgantown, Monongalia County	26	3 a.m.			0	0	3	0	Lightning
									Lightning hit a special antenna atop South Park Hill and knocked out the mobile communications system of radio station WJAR. WVU-TV channel 24 also went off the air when either lightning or freezing rain damaged their tower near the Cheat River.
Statewide	26	8-12 a.m.			0	0	5	0	Windstorm
									A strong cold front packed with rare wintertime thunderstorms and lightning roared across West Virginia in the early morning hours and dropped temperatures over 50°F within 30 hours. Shortly after daybreak strong gusting winds did damage statewide estimated at \$2 million. Gusts to 73 mph were recorded at Charleston and to 75 mph at Martinsburg. Listed below are the main damage reports and latest estimates. Contractors suffered at least \$50,000 damages during construction phases of numerous jobs throughout the State. Many power and telephone lines were downed by falling trees or broken limbs. In Huntington alone, power company officials said at least 50 trees had been blown into lines, affecting 3700 customers. At least a dozen mobile homes throughout the State were toppled off their foundations. In Morgantown, at 8:30 a.m. the wind ripped 2500 square feet of roof off the tall Engineering Sciences Building on WVU's Svandale Campus, and also damaged a dairy building on the nearby University farm. Commercial greenhouses along the Monongahela River were damaged and some flowers destroyed. In Charleston, at 9 a.m. WCHS radio reported their 425-foot tower had collapsed. In Wheeling a 3-year old furniture store facade toppled into Main Street, ripped from its brick mooring. At Huntington six-foot waves on the Ohio River swamped and sank two coal barges each loaded with 900 tons. At Barboursville, near Huntington, the wind blew the 7-year old roof from an elementary school, causing \$14,000 damage. The severe windstorm ever roared across Union in the sheltered southeastern part of the State and did considerable damage. Mrs. Thelma Spangler, Union's weather woman for many years, declared this was the worst wind she experienced there, despite the fact she has no wind instruments. An apple tree in her yard was blown down, blocking her driveway.
Wisconsin									
Entire State	3-4				0	0	6	0	Snow storm, Lightning
									Heavy snowstorm with snowfall ranging from 7 inches in extreme southeast to nearly 20 inches along line from LaCrosse to Marinette then tapering off to an inch or so in extreme northwest corner of state. This snow added to December's snow still on ground caused roof damage and collapses to mount across state. Several deaths due to heart attacks while shoveling snow. St. Michael's Church at West Bend destroyed by fire as lightning accompanying storm struck at 2:10 AM on the 4th.
Entire State	25-26	Night			0	0	5	0	Blizzard
									Blizzard conditions during night across entire state. Worst in eastern Wisconsin.
Entire State	29	pm			5	15	6	0	Blizzard
									Blizzard conditions starting north early in the day and reaching a peak during late afternoon and evening hours. Thousands of cars in the ditch across state due to low visibilities. 100 cars involved in two pileups near Hudson. 4 killed in traffic mishaps directly blamed on weather. One person died from exposure.
Wyoming									None reported

- \* Miles instead of yards.
- ° Includes crop damage.
- C Crop damage.
- † 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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See reference notes at end of table.