

U. S. DEPARTMENT OF COMMERCE  
FREDERICK H. MUELLER, Secretary  
WEATHER BUREAU  
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# STORM DATA

NOVEMBER 1960

Volume 2 No. 11



ASHEVILLE: 1960

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

NOVEMBER 1960

PLACE	DATE	TIME	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	
<u>ALABAMA</u>			None	Reported					
<u>ALASKA</u>			None	Reported					
<u>ARIZONA</u>			None	Reported					
<u>ARKANSAS</u> Black Fork Community, Scott County	15	Evening			0	0			Tornado
									Two houses destroyed and two damaged. Several farm buildings destroyed and damaged.
<u>CALIFORNIA</u> Merced, Lake, and Sonoma Counties	3				1	0	4	0	Wind
									Winds damaged farm buildings, utility lines, and plate glass windows. Many orchard trees were broken or blown over. One man was killed when a tree was blown onto his pickup truck. Lightning and hail were reported from some points, but no damage resulted.
Butte County	3	4 a.m.			0	0	3	0	Wind
									Wind blew down trees, damaging houses and utility lines. An open nursery building was blown over.
Santa Barbara County to Orange County	5				1	2	4	4	Rain
									Heavy rain damaged homes and eroded hillsides and streets. One boy drowned when trapped by rising waters while playing in drainage canal. Two men injured when truck overturned as a result of boulders rolling down hillside. Damage to houses and utility lines by lightning.
Long Beach	6	1210-1315							Funnels aloft
									Several funnels aloft reported in vicinity of Long Beach; none reached the ground.
San Joaquin Valley	7						2	4	Rain
									Rain caused some damage to unharvested cotton, grapes, and maize.
San Mateo and Santa Cruz Counties	12						4	0	Wind
									Wind blew down trees, damaged homes, destroyed parked aircraft, ruined nursery glasshouses, and disrupted power.
<u>COLORADO</u> Eastern Colorado	15 16				0	0	4		Wind
									Strong gusty wind on the 16th and again during the early hours of the 16th, caused considerable damage to telephone and power lines, signs and trees. Gusts exceeding 40MPH were observed in Denver and Pueblo. Gusts were estimated as high as 70MPH along the foothills, east of the Continental Divide. A new school building at Boulder was damaged to the extent of \$2000.
<u>CONNECTICUT</u>									None Reported
<u>DELAWARE</u>									No report received by printing deadline.
<u>FLORIDA</u> Cantonment Escambia Co.	28	6:30 p.m.	3 1/2	50	0	0	3	-	Tornado
									Tornado moved north northeastward lifting and lowering along path.
<u>GEORGIA</u>									None Reported
<u>HAWAII</u>									None Reported
<u>IDAHO</u> Canas Prairie, Clearwater Valley	24-26						4		Wind and snow
									Strong winds began late on the 24th, continuing for about 30 hours. Temperatures dropped 20° or more between 24th and 25th and precipitation turned to snow, continuing for about 48 hours. Depths of 7 to 12 inches were reported on Canas Prairie on the 26th. Wind and wet snow combined to break power and telephone lines, resulting in loss of service ranging from a few minutes to several hours in 21 communities on Canas Prairie and in the Clearwater Valley. More than 1500 customers were affected by power outages and some 300 temporarily lost telephone service. At Grangeville, metal siding was torn from a warehouse and several plate glass windows were blown in at a restaurant during the evening of the 24th.
Gooding	29	11:45 a.			1	2			Wind
									Strong wind blew three large sheets of plywood from a pickup truck into path of oncoming car 2 miles north of Gooding. Car rolled down 12-foot embankment seriously injuring driver and badly damaging the vehicle.
<u>ILLINOIS</u> Sterling-Rock Falls	15	7:15 a			0	0	3	0	Hail, rain
									Hailstones approximately one inch in diameter shattered about 500 panes of glass in Sterling greenhouse. Heavy rains flooded intersections as leaves blocked drains.
Prophetstown	15	7:45 a			0	0	3	0	Electrical
									Lightning struck radio and television repair shop causing fire resulting in several thousand dollars damage.
Rockford	15	Afternoon			0	0	4	0	Rain
									Heavy rains flooded streets and basements in all sections of city
Fox Lake, Grays Lake	15	Evening			0	0	3	0	Wind
									Heavy winds blew part of roof off lumber company, toppled many TV antennae, also blew down 2,400 volt powerline
Springfield	15	Afternoon			0	1	3	0	Rain, wind
									Extremely heavy rains reduced visibility to such extent that driver ran off road into a 20 foot ditch. Driver suffered minor injuries.
<u>INDIANA</u> Tell City, Perry County	28	late afternoon			0	0	4	0	Lightning
									Lightning and resulting fire destroyed a large barn and contents valued at \$15,000.
<u>IOWA</u> Manchester	15	3:20 p.	7	70	0	0	5	0	Tornado
									Tornado moved across SW corner of town northeastward to northeast Manchester. Over 30 homes damaged, losses estimated near \$350,000.
Belleuve	15	4:04 p.	1	50	0	0	3	0	Tornado
									Moved northeastward between Belleuve and LaMotte.
SW Clarinda	27	11:15 p.	5	100	0	0	4	0	Tornado
<u>KENTUCKY</u>									None Reported
<u>LOUISIANA</u>									None Reported
<u>MAINE</u> Lubec	2	3 A.M.			0	1	3	0	Electrical
									A woman suffered burns from lightning. Lightning damaged three homes and the fire alarm system.
Presque Isle	23	Midday			0	0	0	0	Glass
									Light glazing from freezing rain.
Southwestern portion	28				0	0	0	0	Glass
									Very light freezing rain caused glazing in parts of the southwestern portion.
Most of State	29				0	0	3	0	Glass
									Ice from freezing precipitation covered most of State except the eastern and central coastal portions in the forenoon and in some areas in the afternoon. Many minor skidding accidents with highway traffic hazardous. Two-tenths (0.2) inch ice accumulation reported at Presque Isle.
<u>MARYLAND</u>									No report received by printing deadline.
<u>MASSACHUSETTS</u> Extreme northeastern portion	28- 29	Near midnight			0	0	0	0	Glass
									Light glazing from freezing precipitation for short period near midnight in parts of extreme northeastern portion of State.
<u>Michigan</u> East Central	15	2 a - 5 a					5		Thunderstorms with hail, lightning, heavy rains and high winds
									Hailstones up to 1 1/2 in diameter broke most of the glass in several greenhouses and heavy rains semi-flooded the city streets in Vassar, Michigan. Lightning induced fire destroyed a large barn and contents on a farm 8 miles east of Cass City. Power failure blackouts due to lightning hitting transformers were reported at St. Louis, Alma and Caro, Michigan
Hesperia	15	noon					4		Electrical
									Lightning caused fire which destroyed a large barn and contents on a farm 4 miles northwest of Hesperia.

See reference notes at end of table.

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					KILLED	INJURED	PROPERTY	CROPS	
<b>MINNESOTA</b>									
Western, northern and northeastern	28	a.			0	0	5		Ice storm, heavy snow
Ice storm about 40 miles either side of a line from Pipestone to Brainerd downed power and communication lines leaving at least 22 communities isolated until repairs could be made. Ice coating reported 1/2 to 3/4 inch at Lake Benton. Over 40 consecutive telephone poles were toppled by the ice deposits in the Litchfield area. In western, northwestern and northeastern Minnesota snow from 3 to 12 inches, whipped by strong and gusty winds, blocked roads and caused schools to close. Drifts up to 6 feet in depth reported near Halstad. Greatest snowfall, 12 inches, at Duluth. Highway between Duluth and Grand Marais closed to traffic for a time. As is common with all snow storms numerous traffic accidents occurred with many injuries and several fatalities reported. No injuries or deaths were attributed directly to the storm itself. Accompanying the falling snow at times was lightning and thunder. Lightning struck one building at St. Paul at 3 A.M. with light damage resulting.									
North Shore of Lake Superior	28	All day			0	0	5		Wind
Northeastern winds averaging near 40-50 mph and reaching a peak gust of 73 mph at Duluth Weather Bureau Airport Station and 60 mph at Grand Marais battered property adjacent to Lake along its north shore. Waves on Lake Superior reached 20 to 40 feet in height. Water reported in many business places and homes near Lake shore at Grand Marais, Tofta, Schroeder, Little Marais and Duluth. Waterfront motels, hotels and businesses from Duluth to Grand Marais suffered property and structural damage. At Grand Marais water 1 to 3 feet deep poured over its main street flooding everything in its path. Thousands of cords of stockpiled pulpwood were washed into Lake Superior. At the Duluth Weather Bureau Airport Station a new record for the fastest mile of wind in November, 68 miles per hour, was established. According to life long residents at Grand Marais "this Northeaster was reminiscent of the New Years' Eve storm of 1937 only this one was worse." A similar storm of recent years was that of November 17-18, 1958.									
<b>MISSISSIPPI</b>									
Citeno, northwest Jones County	23	6:25 pm	Short	Narrow	0	0	4	0	Tornado
Small, short-lived tornado unroofed schoolhouse and nearby building, uprooted trees and blew down sheds and barns.									
<b>MISSOURI</b>									
Belle (5 Southwest), Maries County	15	2:00 p.- 2:10 p.	3	200			4		Tornado
Two farms suffered damage to buildings. Witness saw funnel on ground.									
Lebanon (6 South), Laclede County	15	3:30 p.	5-6	200	3	4			Tornado
Storm first hit near Phillipsburg, then skipped along touching ground several times, doing the most damage to two farm homes 6 south of Lebanon on Route 5. Injuries were from flying debris. Several cars blown off the highway. Witnesses reported sighting the funnel and hearing a roaring noise.									
Franklin-St. Charles Counties	15	4:00 p.- 4:30 p.			6	4			Thunderstorm
Fifteen trailer houses upset north of St. Charles. Several homes and farm buildings damaged east of Washington.									
Montreal, Camden County	15	4:07 p.							Funnel cloud
Maries, Pulaski, and Phelps Counties	15	Late Afternoon					4		Tornadoes
Several farm homes destroyed. House trailers overturned. Damage at 2 west of Rolla near St. James, 7 south of Meta, 2 north of Rolla, and near Fort Leonard Wood. This situation was related to the weather pattern which set off the tornado at Lebanon. There were at least two, and possibly more, funnels. On Weather Bureau radar at Columbia, Mo., the echoes connected with this series of tornadoes assumed a wave-like shape, with the most severe weather in the "warm sector", just southeast of the peak of the wave.									
<b>MONTANA</b>									
			None	Reported					
<b>NEBRASKA</b>									
Pawnee, Nemaha and Richardson Counties	27	9:30-10:30 pm	50	* 30	0	0	4	0	Destructive winds.
Many local spots in 3-county area reported building damage. High winds were of very short duration and on occasion accompanied by "raring noise". Cloud observed by one person and reported as not funnel shaped.									
Panhandle & North-Central Nebraska	27-28	Sun. after-noon to Mon. night	--	--	1	1	4	0	Snow & strong winds
Snow (4 to 10 inches) and winds of 40-60 miles per hour. Much blowing and drifting. Drifts reported to 6 feet deep. Freezing rain preceded the snow from Custer County northeastward. One person lost his way due to poor visibility and froze to death. Livestock loss was generally light but reports did include 8 calves, 21 ewes, 10 cattle and "many" turkeys. Strong gusty winds continued further southeastward and minor property damage was reported in an area from south-central to northeastern Nebraska.									
<b>NEVADA</b>									
Moapa Valley, Clark County	5-6						5	4	Rain - flood
Heavy rains on 5th and 6th caused severe flooding of the Muddy River in the Glendale-Moapa-Logandale-Overton area. Homes, roads, crops, a water system, and 500 feet of railroad tracks were damaged by the high water.									
<b>NEW HAMPSHIRE</b>									
Most of State	28-29				0	0	2	0	Glaze
Light freezing precipitation spread over much of State during afternoon of 28th and continued in the morning of the 29th and in some areas most of the day.									
<b>NEW JERSEY</b>									
Somerset County	29	6 p.m.	2	30	0	0	4	0	Suspected tornado
A suspected tornado passed through Branchburg Township, with considerable damage reported from two farms. On one farm a dairy barn was destroyed and farmhouse was unroofed. Barn on the other farm was badly damaged. One cow was killed in collapse of barn. Windows blown outward from houses.									
<b>NEW MEXICO</b>									
Entire State	27	All day					7	0	High winds
Strong winds swept the entire State with gusts of 50 to 80 miles per hour reported. Reports from many localities of buildings unroofed, signs blown down, store windows blown in and trees uprooted. Blowing dust in many areas made highway travel hazardous. Fences blown down as tumble weeds lodged against the fences and formed a barrier for the wind.									
<b>NEW YORK</b>									
Buffalo area, northern Erie and southern Niagara counties	29-30	late p.m. 29th and 30th					5		Heavy snow, strong winds
Localized heavy snow off the Great Lakes in the usual "Lake Heavy Snow Belts". Strong winds and very cold air resulted in heavy snow squalls, blizzard conditions and severe drifting. Snowfalls up to 18 inches with drifts of 3 and 4 feet made transportation and travel practically impossible. Most schools and businesses closed on the 30th in the heavy snowfalls in and around Buffalo. Storm spread to central counties of State during December 1 but with reduced intensity. Eight heart attack deaths resulting from snow removal exertion.									
<b>NORTH CAROLINA</b>									
			None	Reported					
<b>NORTH DAKOTA</b>									
	28				2	2	5	0	Blizzard covered all of state but heaviest snow fell in eastern half of state.
<b>OHIO</b>									
			None	Reported					
<b>OKLAHOMA</b>									
Tahlequah, 11 miles southeast, Cherokee County	15	2:20 p.	1	50	0	0	4	0	Tornado
Tornado moved across part of Lake Tenkiller into the Pettit Bay Reser. area. Two boat docks, eleven boats, a car and a house trailer were destroyed. Trees and utilities were blown down and a concession store was damaged. Storm moved northeastward.									
Idabel, McCurtain County	15	p.m.			0	2	0	0	Electrical
Lightning struck two men. One was knocked unconscious and the other was injured seriously.									
Waynoka to Alva, Woods County	27	6:05 p.	?	?	1	0	4	0	Funnel aloft, hail, wind
Funnel aloft was sighted and a loud roar was heard at Waynoka. An unconfirmed tornado was reported just north of Alva and a loud roar was heard there also, however, there was no evidence of damage so the funnel probably remained aloft. It is believed that this tornado touched down near Anthony, Kansas. Hail up to 1-3/4 inches in diameter caused roof and window damage in Waynoka and 1/2 inch hail with a few 1-inch stones fell in Alva. Winds of up to 70 miles per hour accompanied the squall line of severe thunderstorms. A man was electrocuted at Dacoma when the wind broke an electric line and blew it against the man.									
Hooker, 3 miles north-northwest, Texas County	27	p.m.			1	0	4	0	Wind
Strong winds blew down an oil derrick. Man working on derrick was killed.									

See reference notes at end of table.

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					KILLED	INJURED	PROPERTY	CROPS	
<b>OREGON</b> Northwest Oregon and coastal area	16-17	Most of both days			0	0	4	2	Wind, Rain High Water
									High winds along most of Oregon coast and locally in Willamette Valley caused considerable wind-wave damage to beach homes, roads, parks; considerable number power, telephone service interruptions throughout storm area. Rain, melting snow caused several thousand dollars damage to construction project near Portland. Wind damage to roofs, windows, fairly heavy.
West of Cascades, Klamath Falls and northern half of State	19-20	Most of both days			0	Sev-eral	4	3	Wind, Rain, Flooding
									High winds, generally accompanied by heavy rains caused extensive damage along coast, to homes, stores, schools. Large number power, telephone service interruptions throughout storm area lasting from few minutes to several hours, particularly along coast and Redmond-Prineville area. A large mill badly damaged by winds at Prineville. Rains exceeded capacity of storm sewers in Salem, Portland, and some smaller towns to flood basements, some homes. Slides closed numerous highways and a railway at one point. Several automobile accidents resulting dozen or more injuries partially due to winds, rains. Falling trees damaged cars, other property.
West of Cascades and northern half Oregon	22-24	Through most of period			1	Sev-eral	6	4	Wind, Rain, Flooding
									This followed much same pattern as two preceding storms but caused heavier damage. New 24-hour record rainfall observed at Bend. Willamette tributaries heading in Cascades experienced severe flooding with new record high stages observed 2 or 3 points. Between 20-30 families were evacuated, large number more remained in readiness for evacuation. Most severe flooding along Clackamas, Molalla, Santiam and Pudding Rivers and in Johnson Creek near Portland and Mill Creek at Turner. Hundreds homes, number stores, lumber yards and at least one mill flooded to varying depths. Hundreds power lines down over State with many thousands customers without service for from few minutes to 48 hours. Considerable erosion farm land, damage to perennial crops, fences, farm buildings, but timely flood warning permitted movement of livestock, farm equipment from lowlands greatly minimizing losses. Slides closed highways at scores of points. One man drowned on coastal bay when small boat overturned by rough water, high wind.
<b>PENNSYLVANIA</b> Lancaster County	29	4:30 PM					4		Thunderstorm
									Strong winds accompanying the storm partially unroofed 3 buildings. A downed railroad power line halted traffic on one track of the Pennsylvania Railroad mainline for 4 hours.
<b>PUERTO RICO</b>									None Reported
<b>RHODE ISLAND</b>									None Reported
<b>SOUTH CAROLINA</b>									None Reported
<b>SOUTH DAKOTA</b> Central and East	27-28	Early p.m. to late p.m. of 28th			1	3	5		Blizzard, Freezing Rain
									Storm, which began as freezing rain on 27th and remained largely as such in the southeast quarter, turned into blizzard conditions in the central and remainder of the eastern third on 28th. From 5 to 10 inches of snow was whipped by winds of 30 to 60 miles per hour and caused extensive closing of schools and businesses, blocking of highways, and disruption of telephone and power services. Some loss of livestock was reported, such as 1,000 turkeys at Gettysburg, Potter County, but losses apparently were lighter than in other similar storms. Pheasant losses considered moderate, but heavier than usual because previous mild week had caused birds to stray away from shelter belts and other protection. Storm effects mainly from freezing rain in southeast quarter. Ice and high winds caused extensive breakage of utility poles and lines, with more than 5,000 farm customers without service in Madison and Brookings areas alone. Numerous trees broken or downed but without serious damage to property. Slippery highways caused many auto accidents, in one of which near Brookings one child was killed and three others injured. Restoration of telephone service alone was estimated to have cost \$210,000 and required up to three days after storm.
<b>TENNESSEE</b>									None Reported
<b>TEXAS</b> NW Grandbury Hood County	15	4:10 p.	short narrow	0	0	3	0		Tornado
									Small tornado touched ground 1.7 miles NW of Grandbury. One trailer house overturned, airplane hangar unroofed, and one airplane damaged. Minor damage to one home.
SW Corpus Christi Nueces County	20	12:49 p.-12:54 p.							Funnel aloft
10 SE Corpus Christi Nueces County	28	1:45 p.							Funnel aloft
<b>UTAH</b>									None Reported
<b>VERMONT</b> Central and Northern portions.	28				0	0	0	0	Glass in scattered areas.
									Glass from light freezing precipitation reported in scattered areas.
<b>VIRGINIA</b>									None Reported
<b>VIRGIN ISLANDS</b>									None Reported
<b>WASHINGTON</b> Coastal areas	16-17						4		Wind
									Strong wind, high tides and waves caused some damage to property along the coast.
West of Cascades	20				1	5			Snow
									An unusually heavy wet snow over all of western Washington caused the greatest damage to power and communication facilities in recent years. Snow began during the early morning hours and reached a depth of 4 to 10 inches before the snowfall changed to rain in late afternoon. Tree limbs weighted down or broken off by the snow caused several hundred breaks in power and communication lines. Some localities were without power for 2 or 3 days. The roof of a large lath nursery stockhouse and a few small buildings collapsed from the weight of the snow.
Western Washington	24					5			Heavy rain
									Rainfall amounts ranging from 2 to 4 inches in 24 hours caused rivers along the west slope of the Cascades to rise very rapidly. The greatest damage occurred along rivers in the southern area of western Washington. Several boat moorages along the Lewis River were destroyed and large log booms were broken up and many of the logs were lost. Bridges over a few of the smaller streams on secondary highways were destroyed.
<b>WEST VIRGINIA</b>									None Reported
<b>WISCONSIN</b> Belleville	15	6:15 p.m.					3		Funnel, High Winds
									Funnel dipped down and although it did not touch ground, resulting high winds damaged trees and property.
Union 1 1/2 N	15	Late Afternoon	2	Narrow			3		Tornado
									Damage to farm buildings, abandoned restaurant, school roof.
Chili 2 NW	15	2:25 p.m.	35	100	1	4			Tornado
									Tornado travelled northeast toward Wausau, touching down numerous times. Main damage on 3 farms near Chili and near town of Rib Mountain.
State	15						5		Wind, Rain, Lightning
									Squall line crossed state. Hardest hit were southern sections. Damage to trees, roofs, TV antennas, flooding basements. Heshka power plant struck by lightning and burned with damage of \$100,000.
Madison State	21	Afternoon					1		Lightning
	28-29						5		Wind, Snow
									Hardest hit was the northwest section. Heavy snow with winds up to 73 miles per hour reported in Superior. Wind damage to buildings and wave damage to docks and port installations. Damage to power lines along Lake Superior worst since sleet storm of 1936.
<b>WYOMING</b> 13 North Wheatland	15	Afternoon			0	1	4	0	Strong Wind
Gasper	24				0	0	4	0	Strong winds
Southeast Wyoming	27 & 28				0	5	3	0	Blizzard
									Cold air from the north entered the state early on the 27th with brisk winds and snow that began in mid-morning. Winds increased early in the afternoon with blowing snow accompanying falling temperatures. Condition lasted until mid-morning of the 28th. Five people were injured in car accidents due to low visibility. Light amounts of snow, from two to five inches, lessened storm's impact.

\* Miles instead of yards.  
<sup>†</sup> 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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