

Weekly Weather & Crop Bulletin

U. S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
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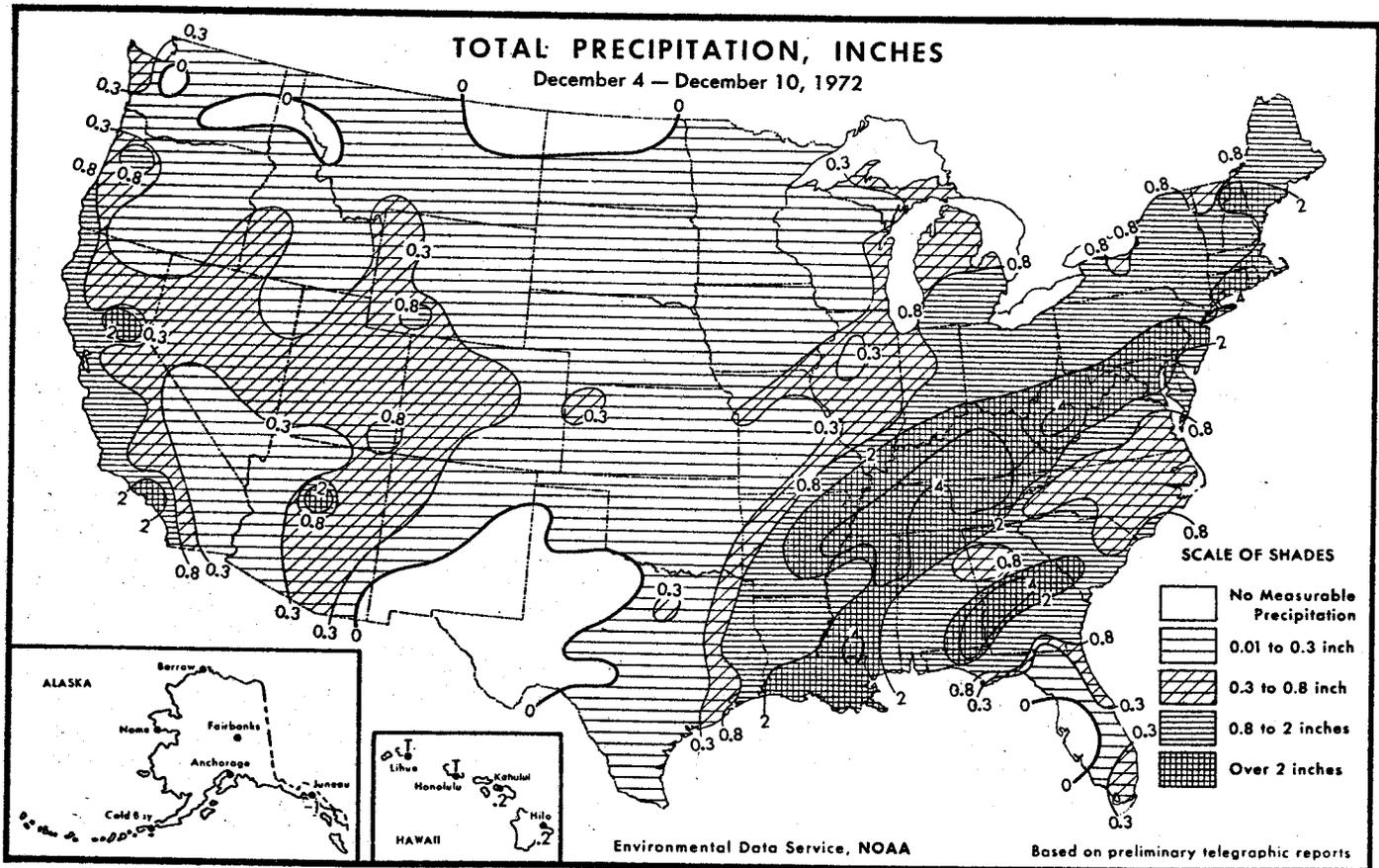
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Edited by Lucius W. Dye

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NATIONAL WEATHER SUMMARY

HIGHLIGHTS: The coldest stormiest weather in many months came to the United States last week.

PRECIPITATION: Severe weather spread over much of the Nation last week. Snow blanketed the northern states from Washington to the California Mountains, the northern and central Great Plains, the Great Lakes Region, and New England. Rain fell over the Southland and thundershowers popped up along the Gulf of Mexico Coast. Heavy fog covered the parts of the Southeast on one or two mornings. In some places a belt of freezing rain, freezing drizzle, and sleet separated the snow belt on the north from the rains over the south.

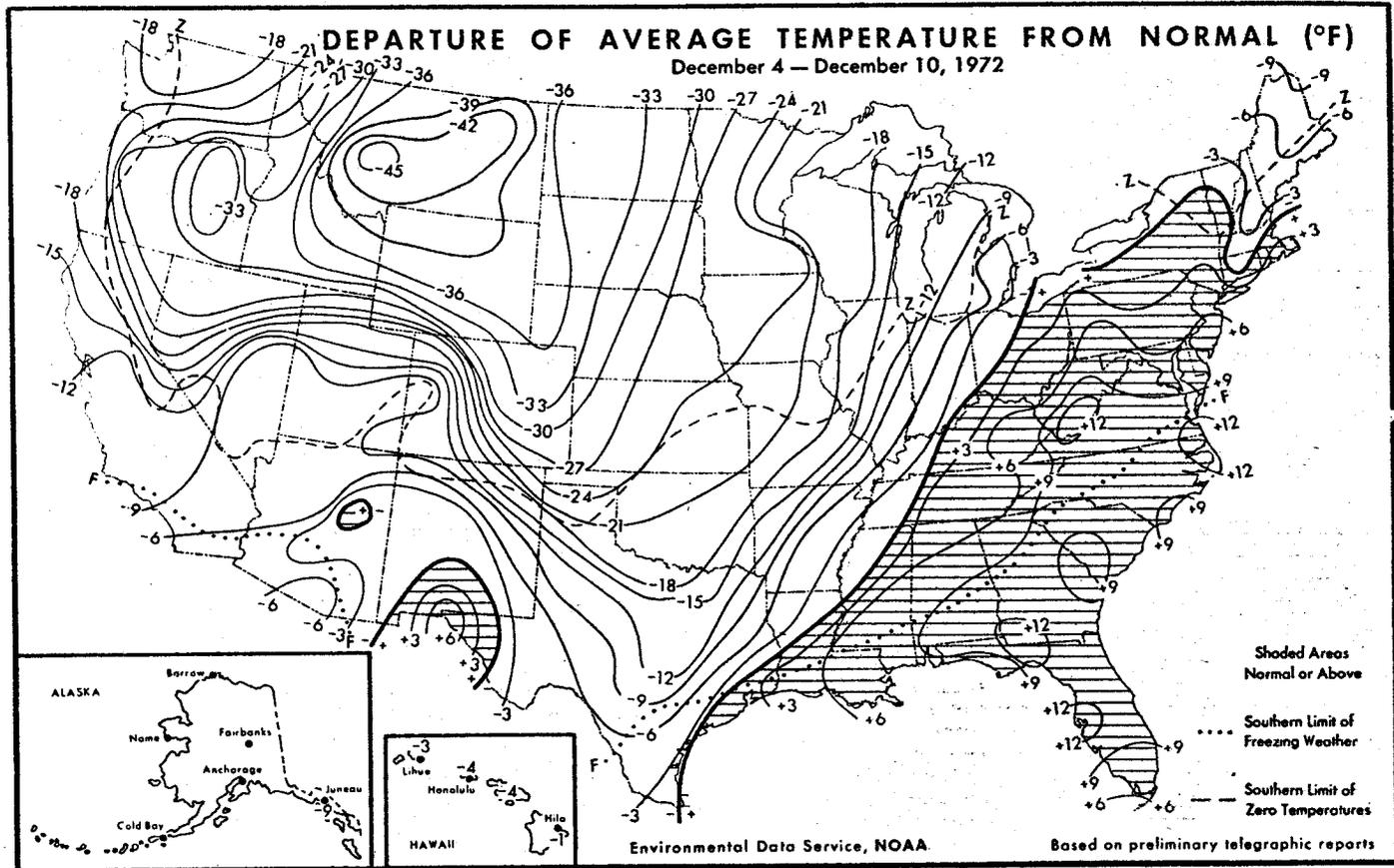
Strong winds occurred in places in connection with the massive storm. Winds gusted to 50 m.p.h. or more along portions of the Oregon Coast. Portland, Oreg., clocked gusts of 55 m.p.h. late Tuesday and gusts at Detroit, Mich., reached 61 m.p.h. early Wednesday. Snow accumulated to 4 to 11

inches in the Intermountain Region, to 12 inches in some passes in the Rocky Mountains, and up to 12 inches in spots in the northern Great Plains. Wausau, Wisc., measured 12 inches of snow on the ground Wednesday when the snow was 9 inches deep at Alexandria, Minn. The snow depth reached 19 inches at Houlton, Maine, Wednesday morning.

The deep snow, the strong winds, and the icy roads made highway travel dangerous in some places and impossible in others. A number of schools were closed because of the inclement weather.

The weekend was especially stormy.

A major storm was centered over the Great Basin. Snow fell from the coastal mountains of Oregon and California to the Great Lakes. Mixtures of snow, freezing rain, and freezing drizzle fell over the middle Mississippi River Valley, the Ohio River Valley, and northeastward to New England. Dense fog covered the western Gulf Coast. Rain fell over



the lower Mississippi River Valley. Combinations of the various elements made highway travel difficult and, in some places, dangerous. Flooding occurred in some places where the rain fell on saturated or frozen ground.

TEMPERATURE: Cold arctic air covered much of the Nation early in the week. The main exceptions were the Southwest and the Gulf of Mexico Coast. McAllen, Tex., registered 93° Tuesday afternoon. On Wednesday and Thursday afternoons, temperatures over Texas ranged mostly in the 30's and 40's. The highest temperature at Amarillo, Tex., Wednesday afternoon was 19°. The mercury at Glasgow, Mont., plunged to 40° below zero Tuesday morning and by Wednesday had warmed only to -20°.

By Thursday morning, the leading edge of the

cold air had reached the Gulf Coast States and the Carolinas. McComb, Miss., registered 33° Thursday morning. On Thursday, the temperature at Little Rock, Ark., ranged from 23° in the morning to 29° in the afternoon.

Bitter cold, continued over much of the West over the weekend. The mercury at West Yellowstone, Mont., plunged to 40° below zero Sunday morning. Weekend temperatures were seasonally mild along the Gulf and middle and southern Atlantic Coasts. Afternoon temperatures over those areas ranged from the 60's to 80's on Saturday and Sunday afternoons. The northern Rocky Mountains and the northern Great Plains averaged 30° to 40° colder than normal.

L. W. Dye

* SEASON'S GREETINGS *
and best wishes
for a HAPPY NEW YEAR



NATIONAL AGRICULTURAL SUMMARY

AGRICULTURAL HIGHLIGHTS: Bitter, cold weather helps progress of corn and soybean harvest in the Corn Belt. * Cotton harvest continues to be slowed by wet weather. * Extremely cold weather in West and Great Plains makes livestock care difficult -- increased supplemental feeding necessary.

SMALL GRAINS: Winter wheat growth was slowed by extremely cold temperatures in the Great Plains; but the crop remains in good to excellent condition with adequate moisture supplies. Most of the acreage in the northern Great Plains is dormant and covered by snow. Grazing of winter wheat is still limited in Oklahoma, Kansas and Colorado. Much of the Colorado acreage has had 6 consecutive weeks of snow cover. In Montana, where winter wheat condition is fair to good, snow cover protection is fair to good and wind damage is insignificant. In eastern Washington, many fields of small grain are without snow cover and some winterkill is likely.

Abundant rains boosted moisture supplies for small grains in the South again last week, but continued to delay farmer's full planting intentions. Warm temperatures and adequate moisture provided favorable growing conditions in the Southeast.

CORN: Corn harvesting continued to make fairly good progress during the past week in the Corn-Belt while Southern corn picking was slow. About 80 percent of the Nation's corn acreage is harvested compared to 73 percent the previous week. Corn harvesting in the North Central States advanced to 78 percent complete, an increase of 8 points over the previous week. Harvesting was more rapid and advanced in the western Corn Belt where bitter cold weather froze the ground solid enough to support equipment, but made engines difficult to start and breakdowns difficult to repair. Harvesting in the West North Central States is now 85 percent complete compared to 68 percent complete in the East North Central States. The Iowa corn harvest advanced rapidly to 86 percent, a gain of 11 points over the previous week. Nebraska combining also made excellent headway advancing to 74 percent complete compared to 60 percent the previous week. The cold weather helped Illinois farmers advance corn harvesting 8 points to 78 percent complete. In Indiana, Ohio and Michigan, the soil is still not frozen enough and continued rain and snow slowed harvesting now 55 percent complete.

COTTON: For the sixth consecutive week, rain and wet fields further delayed the cotton harvest in the South. About 67 percent of the Southern cotton acreage is harvested compared to 63 percent for the previous week. In the Delta area quality of unharvested cotton continues to deteriorate and losses are increasing.

Texas cotton farmers managed to make fair harvesting progress at 49 percent completion compared to 44 percent last week. Some limited harvesting occurred early in the week in Arkansas where cotton harvesting is 90 percent complete and also in Mississippi and Alabama, both 86 percent complete. The Louisiana cotton harvest is lagging at 88 percent complete. Cotton harvesting continued to lag further behind in Oklahoma and Tennessee. Wet weather virtually stopped cotton harvesting in California, but progress was normal in Arizona and New Mexico.

SOYBEANS: The slow pace of harvesting progress for the Nation's soybean crop increased slightly for the first time since October. About 78 percent of the total acreage is harvested, an increase of 5 points over the previous week. Extremely cold temperatures, predominately in the West North Central States, enabled farmers to continue harvesting on frozen ground most of the week. About 81 percent of the soybean acreage in the North Central States is harvested compared to 76 percent last week. Harvesting is further along in the West North Central States at 87 percent complete than in the East North Central States where conditions remain wet and harvesting is only 74 percent complete. Some progress was made in Illinois as harvest advanced 4 points to 86 percent complete. Soybean harvesting increased to 60 percent complete in Indiana and to 65 percent in Ohio. Good progress was made in Iowa where harvesting is 94 percent complete compared to 87 percent last week. The Missouri soybean harvest advanced to 67 percent complete.

The Southern soybean harvest at 71 percent complete was again slowed by wet weather. Some limited harvesting occurred in Arkansas now 70 percent complete and in Mississippi which is 64 percent done, but progress is slow.

OTHER CROPS: Harvesting of sorghum grain increased in the Great Plains. Many Texas Plains farmers combined at night on frozen ground and made good headway with harvest 98 percent complete compared to 89 percent last week. Harvesting advanced in Kansas to 66 percent complete and in Nebraska to 76 percent complete in spite of the bitter cold. Progress was made in Oklahoma at 67 percent complete and in Missouri at 73 percent complete. In Tennessee, 90 percent of the 1972 burley tobacco crop was sold by December 7; stripping is virtually complete. Harvesting of peanuts is 98 percent complete in Texas and 90 percent complete in Oklahoma.

Fruits and Nuts: The condition of Florida citrus trees remains excellent. In Texas, citrus fruit gift volume is rapidly increasing. Citrus fruit harvesting continues in Arizona. Rains benefitted citrus in California where picking of excellent quality navel oranges is increasing with sizes larger than normal. Pecan harvesting in the South was delayed for another week by wet weather.

Vegetables: In Florida tomatoes are increasing to full volume and many other vegetables are in good supply. Cold weather continued to hamper vegetable harvesting and growth in the Lower Rio Grande Valley of Texas while cold, wet weather in California caused damage to artichoke, broccoli and cauliflower crops.

PASTURES AND LIVESTOCK: Early winter storms with unusually cold temperatures throughout most of the West and Great Plains have made livestock care difficult and increased the need for supplemental feeding. Grazing of ranges and pastures has been limited because of snow cover in northern areas and slow growth or wet conditions in southern areas. Hay and other feed supplies are being consumed faster than normal. In the southern Great Plains the continued cold weather has been hard on livestock, causing respiratory problems, weight losses and increased deaths.

Arlon M. Scott
Agricultural Statistician

Temperature and Precipitation Data for the Week Ending Midnight, L.s.t., December 10, 1972

States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches	
	Average	Departure*	Total	Departure*		Average	Departure*	Total	Departure*		Average	Departure*	Total	Departure*
ALA. Birmingham . . .	56	+ 8	1.6	+ .5	New Orleans . . .	63	+ 7	3.4	+2.5	OKLA. Okla. City . .	22	-20	T	- .3
Mobile . . .	64	+ 9	1.4	+ .1	Shreveport . . .	45	- 6	1.1	0	Tulsa . . .	21	-20	.1	- .3
Montgomery . . .	60	+11	1.3	+ .2	MAINE. Caribou . .	10	- 9	1.2	+ .6	OREG. Astoria . . .	23	-21	.1	-3.1
ALASKA. Anchorage .	---	---	---	---	Portland . . .	26	- 3	2.4	+1.5	Burns . . .	2	-33	.3	- .1
Barrow . . .	---	---	---	---	MD. Baltimore . .	43	- 6	2.3	+1.7	Medford . . .	17	-21	.3	- .5
Fairbanks . . .	---	---	---	---	MASS. Boston . . .	37	- 1	2.8	+2.0	Pendleton . . .	3	-34	.2	- .2
Juneau . . .	21	- 9	.1	- .8	Chatham . . .	43	- 9	2.4	---	Portland . . .	22	-21	.1	-1.4
Nome . . .	---	---	---	---	MICH. Alpena . . .	18	- 9	.5	+ .1	Salem . . .	15	-28	.9	- .8
ARIZ. Flagstaff . .	21	-10	2.4	+2.0	Detroit . . .	25	- 6	1.1	+ .6	PA. Allentown . . .	37	+ 4	2.2	+1.4
Phoenix . . .	51	- 2	.4	+ .2	Flint . . .	24	- 4	.8	+ .4	Erie . . .	34	+ 3	1.5	+ .9
Tucson . . .	47	- 6	.3	+ .1	Grand Rapids . .	21	- 9	1.1	+ .6	Harrisburg . . .	38	+ 4	2.2	+1.6
Winslow . . .	35	+ 1	.3	+ .2	Houghton Lake . .	16	-10	.5	+ .1	Philadelphia . . .	43	+ 7	2.7	+2.0
Yuma . . .	52	- 5	.3	- .1	Lansing . . .	21	- 9	.9	+ .4	Pittsburgh . . .	39	+ 7	1.3	+ .7
ARK. Fort Smith . .	30	-14	T	- .3	Marquette . . .	11	-16	.6	+ .1	Scranton . . .	34	+ 3	1.4	+ .8
Little Rock . . .	39	- 4	2.9	+2.0	Muskegon . . .	21	-11	.7	+ .2	R. I. Providence . .	40	+ 5	3.2	+2.4
CALIF. Bakersfield .	40	-10	.6	+ .4	S. Ste. Marie . . .	12	-12	.1	- .4	S. C. Charleston . .	61	+10	1.9	+1.2
Eureka . . .	35	-15	1.2	- .3	MINN. Duluth . . .	- 3	-20	.2	- .1	Columbia . . .	57	+ 9	1.2	+ .5
Fresno . . .	37	-11	.8	+ .4	Internatl Falls . .	-11	-24	T	- .2	Greenville . . .	54	+ 9	1.3	+ .6
Los Angeles . . .	50	- 9	2.4	+1.9	Minneapolis . . .	- 3	-24	.2	0	S. DAK. Aberdeen . .	10	-32	.3	+ .1
Red Bluff . . .	32	-17	.5	- .5	Rochester . . .	- 5	-26	.2	0	Huron . . .	- 3	-24	.2	0
San Diego . . .	54	- 4	1.6	+1.2	St. Cloud . . .	- 2	-21	.2	0	Rapid City . . .	8	-37	.2	+ .1
San Francisco . . .	39	-12	1.1	+ .2	MISS. Jackson . . .	61	+11	2.3	+1.1	Sioux Falls . . .	3	-26	.1	0
Stockton . . .	36	-11	.7	+ .1	Meridian . . .	60	+ 3	1.5	+ .3	TENN. Chattanooga .	48	+ 4	3.0	+1.8
COLO. Denver . . .	0	-33	.4	+ .3	MO. Columbia . . .	15	-20	.2	- .3	Knoxville . . .	49	+ 6	4.3	+3.4
Grand Junction . .	24	- 7	.4	+ .2	Kansas City . . .	11	-27	.7	- .1	Memphis . . .	42	- 2	6.5	+5.4
Pueblo . . .	6	-29	.2	+ .1	St. Louis . . .	21	-16	.7	+ .2	Nashville . . .	47	+ 5	3.8	+2.9
CONN. Bridgeport . .	39	+ 3	4.3	+3.5	Springfield . . .	20	-18	.2	- .3	TEX. Abilene . . .	35	-12	T	- .3
Hartford . . .	32	- 1	2.5	+1.8	MONT. Billings . .	-12	-42	.2	+ .1	Amarillo . . .	21	-19	T	- .2
D. C. Washington . .	47	+ 8	2.0	+1.3	Glasgow . . .	-23	-43	T	- .1	Austin . . .	42	-12	.2	- .4
FLA. Apalachicola .	65	+ 8	T	- .6	Great Falls . . .	-12	-41	.1	- .1	Beaumont . . .	68	+12	1.5	+ .4
Ft. Myers . . .	76	+10	0	- .3	Havre . . .	-16	-38	T	- .1	Brownsville . . .	54	0	T	- .4
Jacksonville . . .	67	+10	.4	- .1	Helena . . .	- 4	-40	T	- .3	Dallas . . .	34	-15	.2	- .4
Key West . . .	75	+ 4	.1	- .3	Kalispell . . .	-14	-39	.1	0	Del Rio . . .	48	- 6	T	- .1
Lakeland . . .	73	+10	.8	+ .4	Miles City . . .	- 8	-33	T	- .3	El Paso . . .	54	+ 8	T	- .1
Miami . . .	77	+ 8	.7	+ .3	Missoula . . .	- 5	-24	T	- .1	Fort Worth . . .	35	-14	.3	- .2
Orlando . . .	73	+11	.1	- .3	NEBR. Grand Island	6	-27	T	- .2	Galveston . . .	59	+ 1	1.8	+ .8
Tallahassee . . .	68	+13	1.0	+ .4	Lincoln . . .	1	-26	T	- .2	Houston . . .	56	+ 1	.4	- .1
Tampa . . .	75	+12	0	- .3	Norfolk . . .	- 1	-30	T	- .1	Lubbock . . .	31	-11	T	- .1
GA. Atlanta . . .	54	+ 9	.7	- .3	North Platte . . .	- 1	-30	T	- .1	Midland . . .	41	- 6	T	- .1
Augusta . . .	57	+ 8	2.2	+1.4	Omaha . . .	- 4	-31	.1	0	San Angelo . . .	42	- 7	T	- .2
Macon . . .	60	+10	4.5	+3.6	Valentine . . .	21	- 7	.4	+ .3	San Antonio . . .	47	- 8	.3	- .1
Savannah . . .	62	+ 9	1.9	+1.3	NEV. Ely . . .	38	- 8	.2	+ .1	San Antonio . . .	53	- 5	.2	- .4
HAWAII. Hilo . . .	71	- 1	.2	-3.2	Las Vegas . . .	9	-24	.4	+ .2	Victoria . . .	38	-14	.1	- .5
Honolulu . . .	70	- 4	T	- .7	Reno . . .	9	-29	.4	+ .2	Waco . . .	27	-19	T	- .3
Kahului . . .	69	- 4	.2	-1.7	Winneucca . . .	2	-29	.4	+ .2	Wichita Falls . . .	21	-11	1.0	+ .7
Lihue . . .	70	- 3	T	-1.2	N. H. Concord . . .	24	+ 4	1.8	+1.0	UTAH. Blanding . . .	27	-11	.8	+ .5
IDAHO. Boise . . .	2	-32	.3	0	N. J. Atlantic City	47	+ 8	1.5	+ .8	Salt Lake City . . .	14	-17	.8	+ .1
Lewiston . . .	8	-28	.1	- .2	Trenton . . .	43	+ 6	2.4	+1.7	VT. Burlington . . .	25	0	.6	+ .1
Pocatello . . .	- 5	-34	.3	+ .1	N. MEX. Albuquerque	38	- 1	T	- .1	VA. Lynchburg . . .	48	+ 9	1.5	+ .8
ILL. Cairo . . .	---	---	---	---	Roswell . . .	29	0	1.5	+ .9	Norfolk . . .	56	+12	.1	- .5
Chicago . . .	18	-13	.5	0	N. Y. Albany . . .	31	+ 2	1.3	+ .7	Richmond . . .	51	+10	.4	- .3
Moline . . .	12	-17	.4	0	Binghamton . . .	29	- 1	1.1	+ .4	Roanoke . . .	50	+11	1.4	+ .7
Peoria . . .	15	-16	.2	- .3	Buffalo . . .	42	+ 3	1.8	+1.0	WASH. Colville . . .	9	-20	T	- .4
Rockford . . .	13	-15	.4	0	New York . . .	31	0	.8	+ .2	Omak . . .	11	-17	T	- .4
Springfield . . .	18	-15	.7	+ .3	Rochester . . .	32	+ 1	1.1	+ .4	Quillayute . . .	24	-19	.4	-3.2
IND. Evansville . .	32	- 5	2.6	+1.9	Syracuse . . .	51	+10	.6	0	Seattle-Tacoma . .	25	-16	T	-1.5
Fort Wayne . . .	26	- 4	.1	- .4	N. C. Asheville . .	53	+ 9	1.0	+ .2	Spokane . . .	6	-26	T	- .5
Indianapolis . . .	29	- 4	1.0	+ .4	Charlotte . . .	50	+ 9	.7	0	Walla Walla . . .	9	-30	T	- .2
South Bend . . .	23	- 8	1.3	+ .8	Greensboro . . .	62	+12	.7	- .3	Yakima . . .	11	-22	.2	- .2
IOWA. Burlington . .	11	-19	.4	0	Hatteras . . .	54	+11	.2	- .5	W. VA. Beckley . . .	47	+12	2.0	+1.2
Des Moines . . .	5	-23	.1	- .2	Raleigh . . .	58	+ 8	1.1	+ .4	Charleston . . .	47	+ 9	4.4	+3.7
Dubuque . . .	6	-20	.1	- .3	Wilmington . . .	54	+ 8	1.1	+ .4	Huntington . . .	43	+ 5	3.7	+3.0
Sioux City . . .	2	-25	.1	- .1	N. DAK. Bismarck .	-15	-35	.1	0	Parkersburg . . .	42	+ 5	2.9	+2.2
KANS. Concordia . .	10	-24	T	- .2	Fargo . . .	-12	-29	.1	0	WIS. Green Bay . . .	7	-17	.4	+ .1
Dodge City . . .	11	-25	.1	0	Williston . . .	-18	-36	T	- .1	La Crosse . . .	3	-21	.2	0
Goodland . . .	2	-30	.4	+ .3	OHIO. Akron-Canton	35	+ 3	1.4	+ .9	Madison . . .	6	-19	.3	0
Topeka . . .	12	-23	.2	- .1	Cincinnati . . .	36	+ 1	2.1	+1.4	Milwaukee . . .	12	-15	.4	0
Wichita . . .	15	-22	T	- .2	Cleveland . . .	34	+ 2	1.2	+ .6	WYO. Casper . . .	- 9	-38	.1	0
KY. Lexington . . .	43	+ 6	4.5	+3.8	Columbus . . .	36	+ 3	1.8	+1.3	Cheyenne . . .	- 2	-33	.3	+ .2
Louisville . . .	40	+ 2	3.1	-2.4	Dayton . . .	33	0	1.3	+ .7	Lander . . .	-13	-38	T	- .1
LA. Baton Rouge . .	63	+ 8	4.0	+2.9	Toledo . . .	28	- 2	1.2	+ .8	Sheridan . . .	-14	-41	.3	+ .2
Lake Charles . . .	60	+ 5	4.0	+2.7	Youngstown . . .	34	+ 3	1.0	+ .3	P. R. San Juan . . .	80	+ 2	3.3	+2.1

* Departures are from 30-year means (1931-60). Based on preliminary reports

CONDENSED STATE SUMMARIES

These summaries provide brief descriptions of condition and activities important on a national scale. Detailed reports of crop and weather conditions during the growing season are contained in State issues of Weekly Weather and Crop Bulletins published by field office of the Statistical Reporting Service, U.S.D.A. in cooperation with NOAA Climatologists.

ALABAMA: Extensive clouds, exceptionally warm, and very rainy. Sharp change to colder Tuesday night with Thursday morning low of 21° at Muscle Shoals. However, cold air was quickly replaced by more abnormal warmth and temperatures statewide for week averaged 11° above normal and as much as 21° above normal weekend. Sunday high of 83° at Selma and Luverne. Several periods of moderate to heavy showers. Torrential rains southeast Tuesday night, nearly 7.00 inches at Troy and Eufaula. Another week of rain further delayed efforts to complete harvest of cotton, corn, and soybeans. Production of low-lying fields may be lost if open weather does not prevail. Less than 1/10th of cotton production still in fields, mostly in north. Corn harvest neared completion with about 92% harvested. Combining soybeans about 84% completed compared with 88% last year. Warm temperatures and adequate moisture provided for favorable growing conditions for small grains and other winter grazing crops. These crops afford only limited grazing because many fields too wet to support livestock. Stockmen fed hay in increasing amounts but supplies of stored feed were adequate in most northern counties but short in many southern counties.

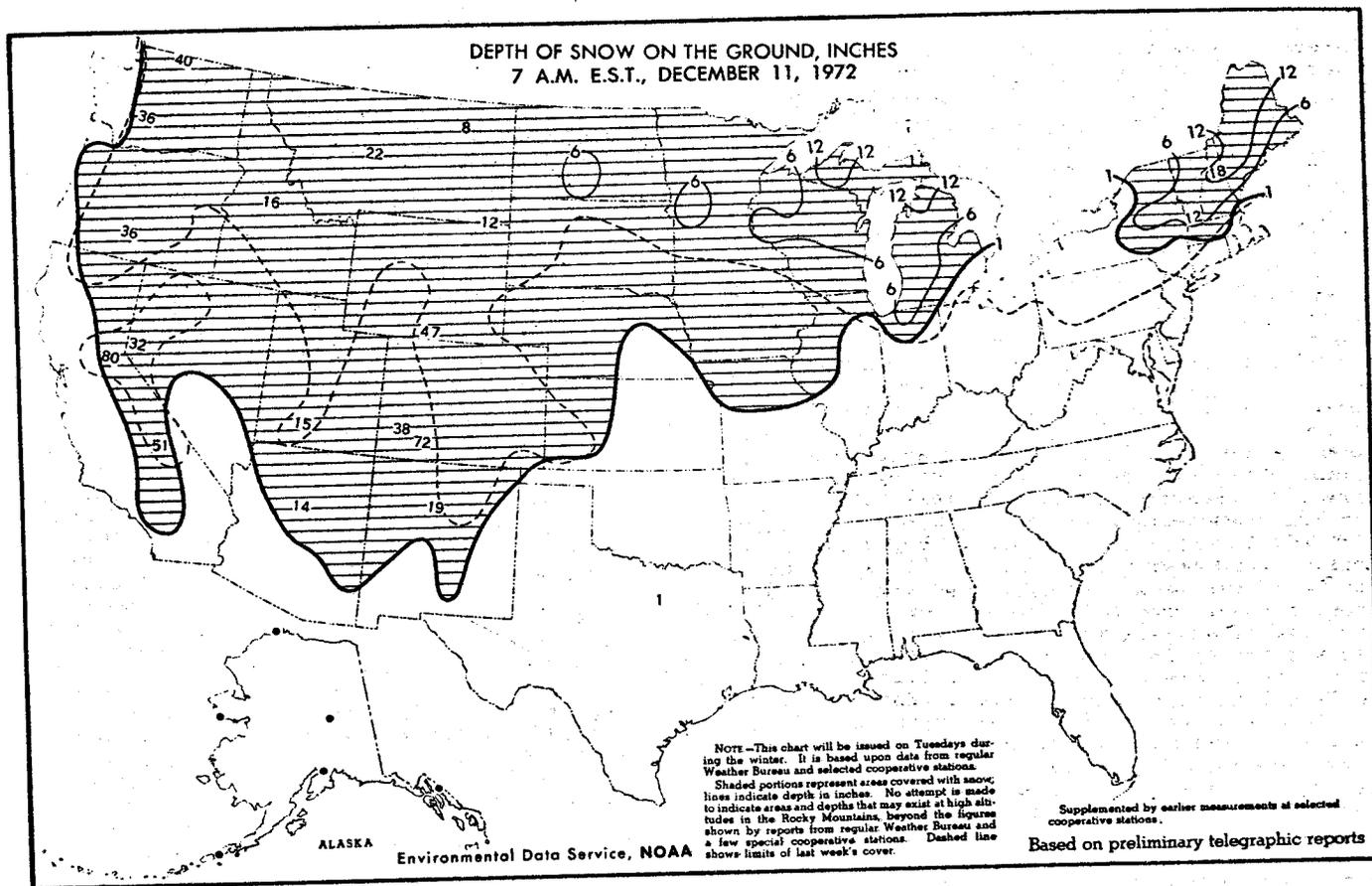
ALASKA: During November, temperatures across the Alaska mainland averaged from 1° to 3° above seasonal normals. The only exceptions to this pattern were the Matanuska and Susitna Valleys where they were slightly below normal. Precipitation over extreme western Alaska averaged above normal, but it was below normal elsewhere. The greatest deficit occurred over the Cook Inlet-Susitna Valley area, with Talkeetna receiving only 0.57 inch for the whole month, less than 30% of its usual total. A generally uniform snow cover of from 6 to 8 inches prevailed over south-central Alaska, including the Tanana Valley, at the end of the month. Along the north Gulf Coast, Southeast Alaska, and over Kodiak Island, however, the ground for the most part remained devoid of any snow cover. Livestock in generally good condition with minimum winter losses reported. Supply of forage feed is best in recent years. Grazing is possible in most lower valleys with minimal amount of snow received to date.

ARIZONA: Temperatures much below normal over State with freezing temperatures in colder sections of Salt River Valley on 2 nights and Yuma on 1 night. Showers were widespread over State with largest water totals on 4th and 8th. Snow fell in mountains above about 4,500 feet with about a foot of snow on ground in parts of San Francisco Mountains north of Flagstaff and also in White Mountains following storm on 8th. Cotton harvest continues, residue disposal normal Yuma, limited activity south-central area. Sugar beet harvest continues, residue disposal normal Yuma. Wet Pima County. Grain sorghum harvest near completion Yuma, limited activity south-central area. Sugar beet harvest continues. Small grain plantings and stands normal progress. Harvest alfalfa hay seasonally slow. New renovated plantings making progress. Lettuce harvest continued Yuma, Salt River Valley. Early morning harvest in Yuma area delayed due to

icing. Harvest Pima, Pinal Counties virtually complete. Harvest other vegetables continued as conditions permitted Yuma, Salt River Valley. Later plantings making good progress. Navel oranges, early tangerines, few grapefruit being harvested Yuma, Salt River Valley. Groves all areas good to excellent condition. Stockwater adequate. Supplemental feeding for winter maintenance. Cattle, calves fair to good. Sheep, lambs good.

ARKANSAS: Weekly mean temperatures 10° to 16° below normal northwestern 1/4 of State and 4° to 10° below normal elsewhere. Warming early in week followed by sharp drop in temperature late in week and continued cold through the weekend. Highest 71° at Texarkana on 5th. Lowest 8° at Fayetteville on 6th. Precipitation in excess of 2.00 inches over southeastern half of State with amounts of 4.00 to over 6.00 inches in south-central, southeast, and east-central sections. Elsewhere precipitation less than 2.00 inches with least in northwest where amounts averaged less than 0.25 inch. Occasional light freezing rain and sleet northwest during week with major occurrence of freezing rain and sleet central 1/3 of State and northeast section of weekend. All but northwest section received largest precipitation amounts late in week and on weekend. Harvest conditions continue very poor. Limited harvest some areas early in period, but fieldwork halted no later than midweek all areas. Cotton picking now about 90% complete and combining soybeans around 70% finished. Progress much less advanced northeast especially soybeans. Harvesting losses heavy both cotton and soybeans. Boggling of harvest equipment serious problem even when crop dry enough for harvest. Small grains good condition. Full acreage intentions not planted due to prolonged wet fall. Livestock situation normal. Increased feeding with snow and ice many areas.

CALIFORNIA: Near record cold spell north of Tehachapis from 5th through 11th and continuing. Many alltime December low temperature records equalled or exceeded on 9th. Average temperatures this area 6° to 12° below normal; southland and desert 2° to 6° below normal. Moderate precipitation, very strong winds several days, with light snow to low elevations 7th and 8th. Blizzard conditions mountains. Fog, rain, snow holding back fieldwork except desert areas. Planting of small grains and harvesting of cotton, milo, rice, corn, sugarbeets virtually stopped due wet fields. About 10% 1st pick cotton and up to 50% 2d pick still out San Joaquin Valley. First pick desert virtually complete. Picking navel oranges increases; quality excellent, size larger normal, brown rot reported. Harvest tangerines, grapefruit, dates continue. Lemons, avocados active. Recent rains benefitted citrus; cold weather slowed growth, caused damage. Cold temperatures, central valley, and central coast, some loss and harvest interruptions. Desert area no damage. Artichokes extensive damage. Broccoli and cauliflower were hampered Salinas and Ventura; Fremont-Newark area 400 acres lost. Carrots moderate volume Coachella, light Imperial Val-



ley. Celery slowed harvest. Lettuce past peak Palo Verde, increasing Imperial. Potatoes, processing moved from storage, wet fields. Bakersfield winter and Stockton seed continues, hampered cold temperatures. Tomatoes San Diego continue another week, lower quality rain damage. Rangeland grass growth almost at halt due cold weather. Feedlots having some problems due recent rains. Supplemental feeding being done, water supplies excellent. Calving, lambing active. Bees overwintered stage; some being placed in almond orchards and shipped out of State. Turkey pens being cleaned for next year's flocks.

COLORADO: Extreme cold eastern plains, seasonably cold in mountains. Average temperatures on plains 12° to 15° below normal extreme south portion, 15° to 25° below normal elsewhere. No above freezing temperatures in Denver or most of plains entire week. In downtown Denver, 82 hours of below-zero readings. Record daily low temperatures established at several locations on a number of days. Many in -25° to -30° range. Lowest -32° at Fort Luton on 6th. Much of State entering the 7th week of uninterrupted snow cover. Some additional snow entire State this week. Harvest of corn and sorghum limited. Very little forage available to grazing livestock, only 2% winter wheat acreage being pastured. Condition winter wheat and barley excellent. Corn harvest nearly 3/4 complete. Sorghum for grain nearly 3/4 harvested. Sugar beet harvest 96% complete, remaining acreage probably lost to frozen ground. Livestock under stress from continued cold; weight losses evident many areas, also death loss of young calves. Supplemental feeding required with problem of decreasing supplies.

FLORIDA: Very warm and dry. Some record high temperatures equaled or exceeded in north and central Florida. Tallahassee on December 10 recorded 81° for record high, Tampa tied or exceeded record highs 6 consecutive days. Temperatures for week averaged 5° to 10° above normal. Rainfall generally ranged from less than 0.50 inch south and central to 1.00 to 1.50 inches in the Panhandle, mostly at midweek. Rainless at number of locations. Improved soil moisture helped small grain growth. Soybean and cotton harvest nearing end. Sugarcane harvest in full swing. Livestock and pastures fair to good. Supplemental feeding increasing as calving becomes more active. Citrus tree and fruit condition excellent. Light rain beneficial, soil moisture adequate, no irrigation. Daytime temperature high, nights cool. Above normal temperatures not favorable for tomato sizing and optimum growth of harderier crops. Tomatoes increasing to full volume. Cucumbers in good supply, but declining into January. Snap beans, sweet corn, eggplant, radishes, squash, in steady volume. Endive, escarole, Chinese cabbage, parsley, watercress, other green leafy commodities in good supply. Lettuce increasing gradually with most types available, romaine steady, iceberg increasing in Everglades. Cabbage cutting increasing weekly toward good January volume. Potato planting active in Dade County. First light strawberry picking expected this week.

GEORGIA: Cloudy most of week with rain on 3 to 5 days. Rains heavy to excessive central and southwest and moderate to locally heavy most other areas. Totals ranged from over 5.00 inches parts of south-

west to about 0.50 inch lower coast. Unusually warm beginning and end of period, cool briefly at mid-week. Highs reached 70's and low 80's Sunday as several places reported new records for date. Averages ranged from 10° to 14° above normal. Soil moisture mostly adequate. Condition of small grains and pastures mostly fair to good. Harvest corn, cotton, pecans and soybeans nearing completion. Tobacco bed preparation active. Livestock condition fair to good.

HAWAII: Cool, dry weather with light mountain showers. Crop growth and maturity slowed by low temperatures. Irrigation heavy in dry areas. Harvesting of local vegetables and fruits about normal. Sugarcane harvesting about over many plantations. Plantings continued active on pineapple plantations. Picking of coffee and macadamia nuts active. Pasture and cattle condition fair to good. Most pastures reporting adequate soil moisture.

IDAHO: A very cold airmass spread over all of Idaho beginning on 3d accompanied by snow. Consequently, temperatures fell rapidly to average 10° to 20° below normal for week. New record December low temperatures established in Upper Snake River Plains and eastern highlands on 5th when Idaho Falls reported -31° and Pocatello reported -25° for the new records. New low temperatures for given days were set generally and continued very cold. Precipitation was greatest east and south-central where precipitation amounted to 0.25 to nearly 1.00 inch. All was in form of snow. Snow accumulations in mountains did not increase appreciably. Valley stations report 3 to 7 inches on ground. Extreme cold made livestock care difficult. Ample hay stocks on hand and no unusual death losses expected. Farm to packer potato and onion movement practically zero.

ILLINOIS: Temperatures averaged from 8° to 18° below normal as northern Illinois experienced its first subzero temperatures. The incoming cold air was accompanied by mixtures of rain, sleet, and snow with a few thunderstorms thrown in. Heaviest precipitation occurred in southern half of State where amounts ranged from 1.00 to 2.00 inches. Weekly totals in northern Illinois averaged 0.25 inch or less. Cold week helped farmers. Ground frozen enough most areas for harvesting to continue. Corn harvest 78% complete, normally finished at this time. Soybeans made some progress 1st time in weeks, combining 86% finished. Grain sorghum harvest 70% complete. Plowing very little progress. Pasture mostly fair to good, supplying considerable roughage requirements. Soil moisture: short 1%, adequate 28%, surplus 71%. Averaged nearly 3 days suitable limited fieldwork.

INDIANA: Rain or snow every day most of State. Freezing rain on 7th to 8th and severe cold 10th to 11th. Some schools closed Friday as result of slippery roads. Highway accidents numerous. Temperatures averaged 5° below normal and ranged from 9° below zero at Ft. Wayne on 11th to 62° at Evansville on 6th. Snowcover trace to 1 inch central and north. Two days suitable for fieldwork. Soils still not frozen enough to support harvesting equipment. Topsoil and subsoil moisture adequate to mostly surplus. Corn 55% harvested, 24 days behind average and 5 weeks behind 1971. Soybeans 60% combined, 7 weeks behind last year and average. Intended acreage of 1973 planted crops 25% plowed, much behind 1971 progress.

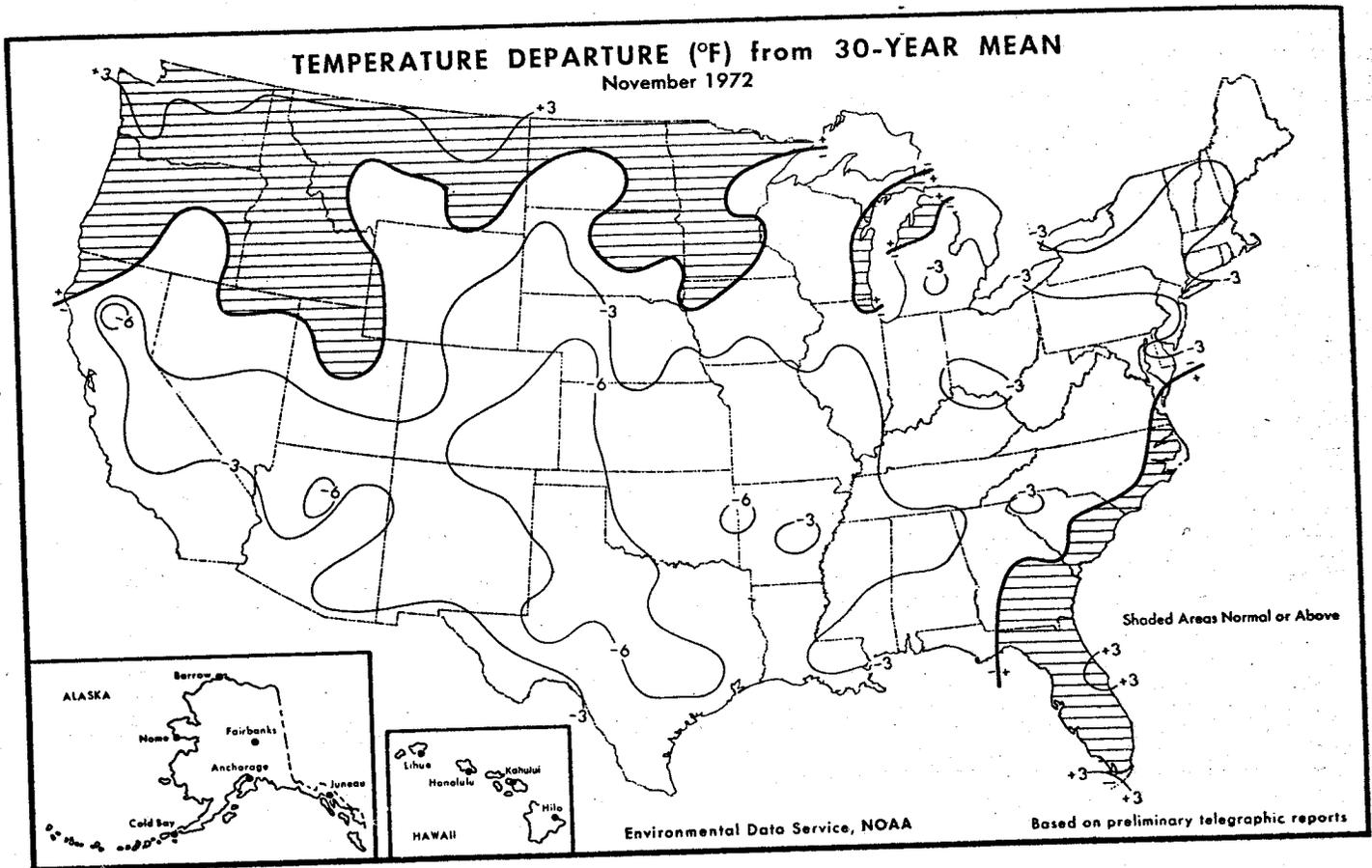
IOWA: An extremely cold week with occasional light snow. Weekly average temperatures were 20° to 26° subnormal. One to 5 inches snow covers State. Rapid progress continues in harvesting on frozen ground. More than 5 days suitable for fieldwork. Almost all fieldwork is harvesting as fall plowing and other activities stopped by freeze. Corn harvest progressed to 86% complete, behind near completion for 1977 and 1966-1970 average. Harvest ranges from 97% complete in northwest to 67% in southwest. Soybean harvest advanced to 94% complete, as compared with 100% completion for 1971 and 1966-1970 average. Approximately 90% of popcorn and 83% of grain sorghum harvested.

KANSAS: Cloudy and bitter cold. Weekly mean temperatures averaged 20° to 30° below seasonal. No maxima above freezing entire week. Minima below zero several days northern and western portions; lowest 14° below zero locally northwest 6th. Light to locally moderate snow several days. Weekly precipitation totals generally under 0.10 inch. Two to 4 inches snow on ground most northwest Kansas at end of period. Sorghum grain, corn soybean harvests progressed some on frozen fields last week, but much more than usual grain still in the field. Sorghum grain 66% harvested, compared with 55% week earlier and usual near completion by this date. Corn 80% harvested, 74% week earlier, average about 95%. Soybeans 78% harvested, 75% week ago, usual virtual completion this date. Wheat made little growth due to cold weather. Moisture adequate to surplus statewide. Cold weather and storms hard on livestock. Stress and sickness reported for shipped-in calves; pneumonia and foot rot bothered feedlot cattle. Feed supplies adequate, but consumption quite heavy during week.

KENTUCKY: Weekly rainfall totals from about 2.00 inches extreme north to 5.00 to 6.00 inches portions of south-central and southeast. Daily rains, heaviest 8th to 10th. Upper Cumberland River in southeast and Lower Green River in south-central near to several feet above flood stage at weekend. Many streams over State near banfull. Temperatures averaged 4° to 8° below normal in west, near normal central, and 3° to 10° above normal most of balance. Unseasonably mild early in week, on chilly side most of balance of week except for unseasonably mild in southeast over weekend. Maxima in 60's to low 70's on 5th. Minima on 7th in the mid-teens to mid-20's. Wet conditions continue hamper harvesting progress soybeans and corn. Limited combining soybeans possible as fields partially dried or frozen. Cold temperatures end of week beneficial. Farmers report some soybean acreage will be lost and some intended wheat acres will not be seeded. Burley prices about steady on a declining volume. Livestock mostly good, continued damp weather caused some respiratory ailments.

LOUISIANA: Warm early in week with locally excessive rains central and south. Colder midweek with subfreezing north and central Thursday. Lowest 27° Ashland and Minden. Continued cold north with locally heavy rain but marked warming south until Sunday when cold front moved back off shore. Week's high temperature 81° Baton Rouge Saturday and New Orleans Saturday and Sunday. Weekly rain totals 1.50 inches northwest, 2.50 to 3.50 inches central and south with local totals more than 4.00 inches. Greatest 1-day total 3.05 inches measured at Simmerport Wednesday morning. Harvest of cotton and

(Continued on page 11)



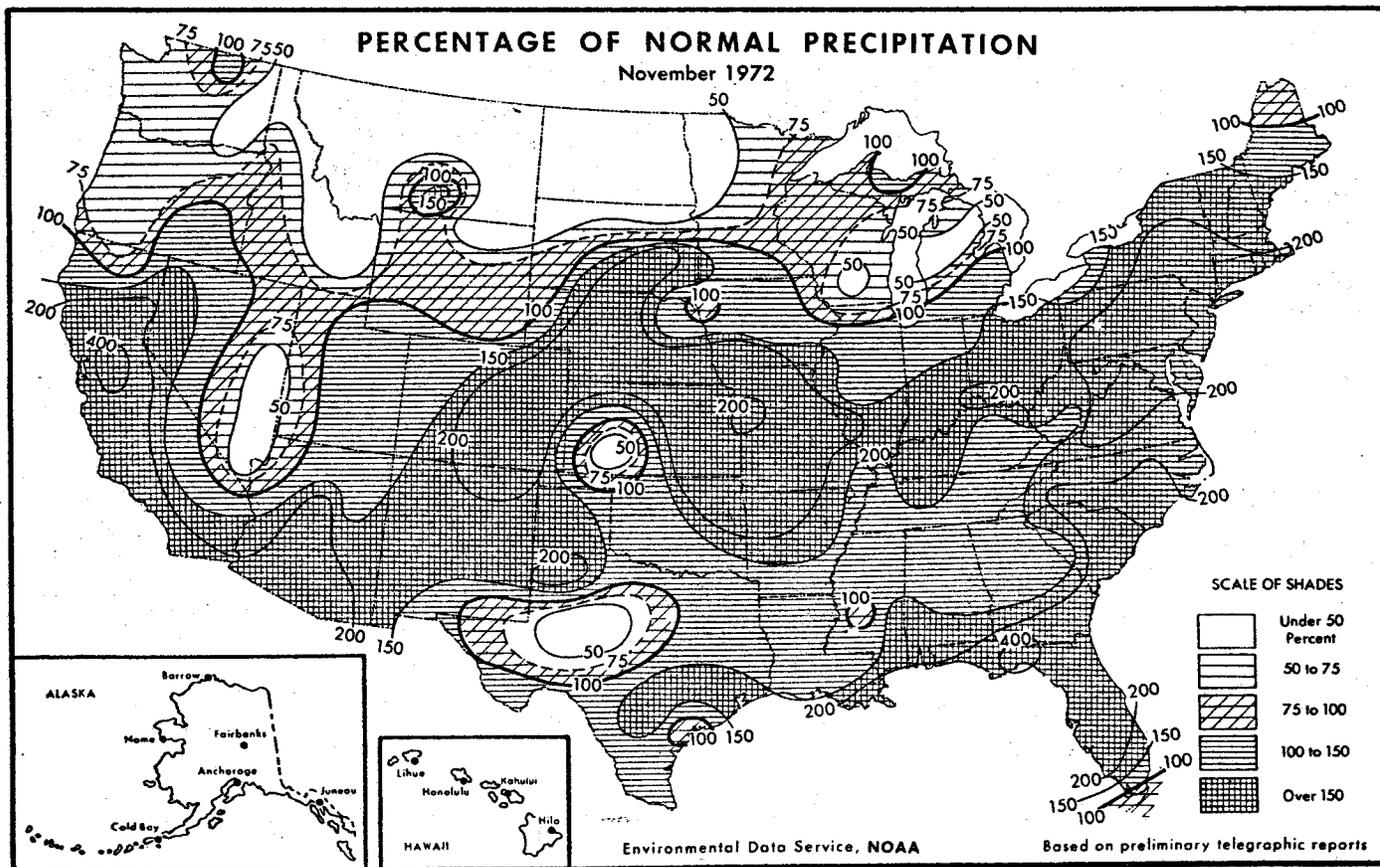
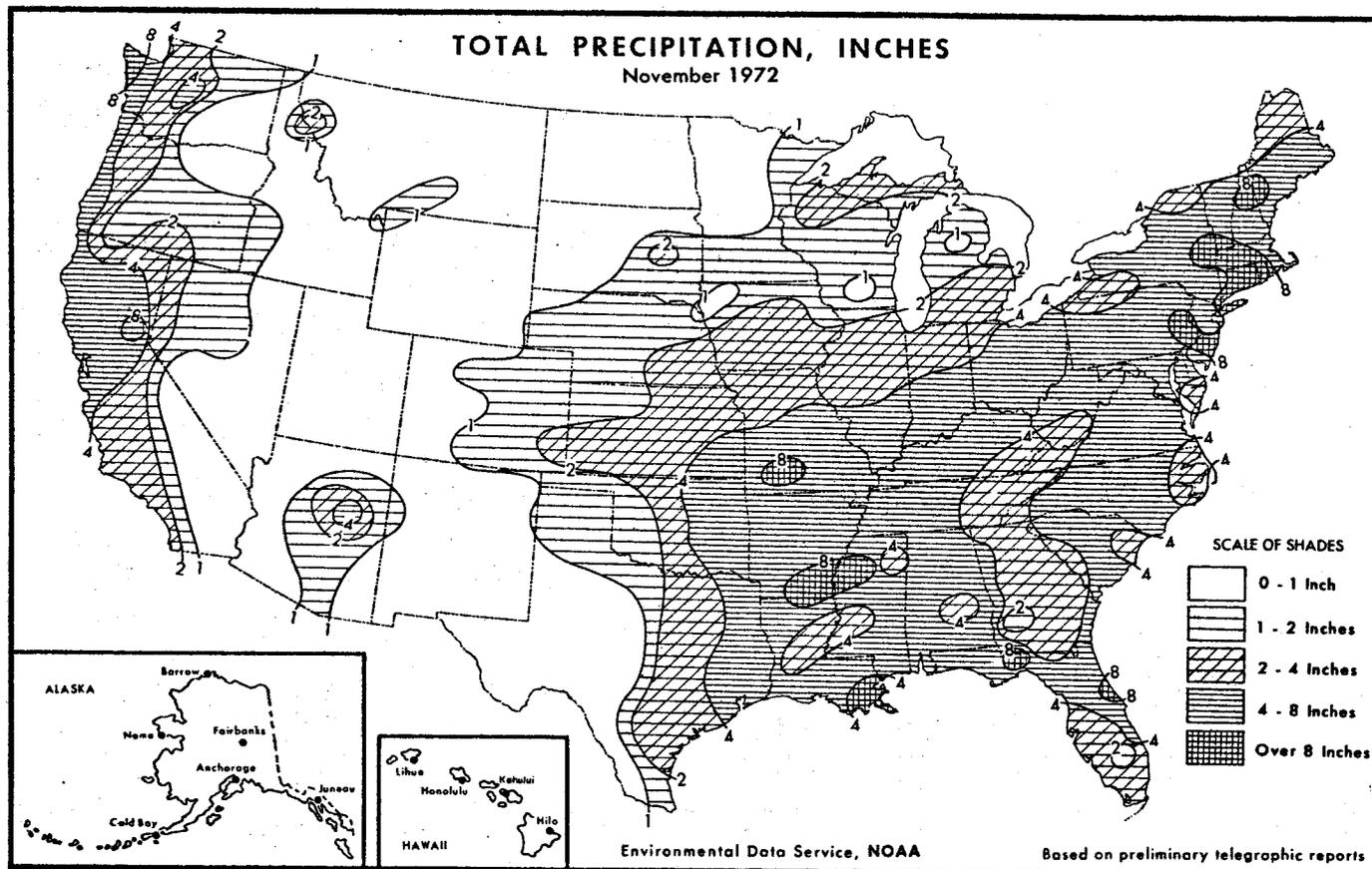
WEATHER - NOVEMBER 1972

TEMPERATURE: November temperatures averaged slightly above normal along the Canadian Border from Washington to Minnesota and along the Atlantic Coast from Norfolk, Va., to Key West, Fla. The rest of the Nation was colder than normal in November. A large area from the central and southern Rocky Mountains to the Mississippi River averaged 4° to 9° colder than normal. Cold weather prevailed over the Rocky Mountains and Great Plains throughout the month except for brief warming over the Great Plains shortly before midmonth and over the northern Border States in the 4th week. Subzero weather occurred over the northern Rockies and northern Great Plains late in November and temperatures over the Gulf States dropped to near or below freezing.

PRECIPITATION: November, in general, was a stormy month. Most of the Nation received above-normal precipitation. The main exception was the Northwest. Severe thunderstorms occurred over the middle and lower Mississippi River Valley early in the month. Several storms were in progress at mid-month. One whitened the central Great Plains and the Great Lakes Region before continuing to New England. The second lashed the Pacific Coast be-

fore crossing the Rocky Mountains, the Great Plains and the middle Mississippi River Valley. The third brought rain to central California, heavy snow from central New Mexico to the central Great Plains, freezing drizzle or sleet from the central Great Plains to the Lower Mississippi River Valley, and scattered thunderstorms over the southern Great Plains. Later in the month, a vigorous storm centered off the northern Atlantic Coast produced heavy rain along the Coast and snow in northeastern New York and northern New England. A storm in the Southwest crossed the central and southern Rocky Mountains and dumped heavy snow on the eastern slopes of the Rockies. More snow fell from the Great Lakes to Tennessee and spread eastward to the northern Appalachians. A variety of precipitation fell from the Mississippi River to the Atlantic Ocean in the last weekend in November. The last few days of the month brought rain and drizzle to the Pacific Coast, snow from the Upper Mississippi River Valley to the northern Appalachians, and rain or drizzle along the Gulf and southern Atlantic Coasts.

L. W. Dye



Temperature and Precipitation Data for NOVEMBER 1972

States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches	
	Average	Departure*	Total	Departure*		Average	Departure*	Total	Departure*		Average	Departure*	Total	Departure*
ALA. Birmingham . . .	49	- 4	4.5	+1.0	New Orleans . . .	57	- 3	8.5	+5.2	OKLA. Okla. City . . .	43	- 5	2.3	+ .7
ALA. Mobile . . .	57	- 2	5.7	+2.3	Shreveport . . .	51	- 5	5.3	+1.1	Tulsa . . .	44	- 4	5.0	+2.7
ALA. Montgomery . . .	53	- 1	3.7	+ .7	MAINE. Caribou . . .	27	- 3	2.8	- .2	OREG. Astoria . . .	47	+ 1	6.9	-4.3
ALASKA. Anchorage . . .	---	---	---	---	Portland . . .	35	- 3	7.9	+3.7	Burns . . .	35	- 1	1.3	+ .1
BARROW. Barrow . . .	---	---	---	---	MD. Baltimore . . .	43	- 3	7.1	+4.0	Medford . . .	45	+ 3	1.5	-1.1
FAIRBANKS. Fairbanks . . .	---	---	---	---	MASS. Boston . . .	42	- 3	7.0	+3.1	Pendleton . . .	43	+ 2	.7	- .7
JUNEAU. Juneau . . .	---	---	---	---	Chatham . . .	43	- 3	5.0	---	Portland . . .	48	+ 3	3.8	-1.5
NOME. Nome . . .	---	---	---	---	MICH. Alpena . . .	34	- 1	1.1	-1.3	Salem . . .	46	+ 1	3.8	-1.9
ARIZ. Flagstaff . . .	30	- 6	2.3	+1.3	Detroit . . .	37	- 2	3.2	+ .9	PA. Allentown . . .	40	- 2	9.7	+6.4
PHOENIX. Phoenix . . .	58	- 0	1.0	+ .5	Flint . . .	37	- 0	2.3	+ .1	Erie . . .	37	- 4	3.4	0
TUCSON. Tucson . . .	53	- 5	1.3	+ .7	Grand Rapids . . .	36	- 2	2.1	- .4	Harrisburg . . .	42	- 1	7.2	+4.2
WINSTON. Winslow . . .	42	+ 1	.6	+ .2	Houghton Lake . . .	34	- 0	1.0	-1.4	Philadelphia . . .	42	- 2	9.1	+5.7
YUMA. Yuma . . .	60	- 2	.2	+ .1	Lansing . . .	35	- 3	2.7	+ .5	Pittsburgh . . .	39	- 2	4.7	+2.5
ARK. Fort Smith . . .	43	- 7	6.6	+3.4	Marquette . . .	33	- 1	3.4	+ .1	Scranton . . .	36	- 4	7.7	+4.8
LITTLE ROCK. Little Rock . . .	48	- 2	7.4	+3.3	Muskegon . . .	38	- 2	1.3	-1.6	R.I. Providence . . .	41	- 2	8.5	+4.4
CALIF. Bakersfield . . .	53	- 3	1.6	+1.1	S. Ste. Marie . . .	33	- 0	3.0	- .3	S.C. Charleston . . .	57	+ 1	7.4	+5.3
EUREKA. Eureka . . .	52	+ 1	5.4	+ .8	MINN. Duluth . . .	26	- 1	1.4	- .4	Columbia . . .	54	- 0	5.6	+3.2
FRESNO. Fresno . . .	50	- 4	3.5	+2.5	Internatl Falls . . .	26	+ 2	.9	- .6	Greenville . . .	49	- 3	5.3	+2.5
LOS ANGELES. Los Angeles . . .	62	- 1	3.3	+2.2	Minneapolis . . .	32	+ 1	1.1	- .3	S. DAK. Aberdeen . . .	30	- 0	.3	- .4
RED BLUFF. Red Bluff . . .	49	- 6	5.2	+2.9	St. Cloud . . .	31	- 1	1.6	0	Huron . . .	32	+ 1	2.4	+1.7
SAN DIEGO. San Diego . . .	60	- 2	3.2	+2.3	MISS. Jackson . . .	52	- 3	8.5	- .2	Rapid City . . .	31	- 4	1.9	+ .9
SAN FRANCISCO. San Francisco . . .	53	- 2	5.2	+3.6	Meridian . . .	52	- 2	4.9	+1.8	Sioux Falls . . .	46	- 3	3.8	+ .1
STOCKTON. Stockton . . .	50	- 3	6.2	+5.0	MO. Columbia . . .	40	- 3	5.3	+3.0	TENN. Chattanooga . . .	47	- 2	3.4	+ .2
COLO. Denver . . .	37	- 5	1.7	+1.0	Kansas City . . .	40	- 5	3.0	+1.2	Knoxville . . .	47	- 2	5.1	+ .7
GRAND JUNCTION. Grand Junction . . .	33	- 2	.7	+ .1	St. Louis . . .	40	- 4	5.6	+3.0	Memphis . . .	46	- 4	5.1	+1.9
PUEBLO. Pueblo . . .	32	- 8	1.5	+1.0	Springfield . . .	41	- 4	8.1	+5.3	Nashville . . .	47	- 2	5.2	+1.9
CONN. Bridgeport . . .	42	- 3	10.2	+6.2	MONT. Billings . . .	34	- 1	1.0	+ .4	TEX. Abilene . . .	46	- 7	.4	- .7
HARTFORD. Hartford . . .	39	- 2	8.5	+4.7	Glasgow . . .	33	+ 5	.2	- .3	Amarillo . . .	37	- 9	1.2	+ .5
D.C. Washington . . .	47	- 1	6.1	+3.3	Great Falls . . .	36	+ 2	.2	- .6	Austin . . .	53	- 6	2.6	+ .4
FLA. Apalachicola . . .	71	+ 2	3.8	+2.6	Havre . . .	33	+ 3	T	- .5	Beaumont . . .	63	- 5	1.3	0
FT. MYERS. Ft. Myers . . .	62	- 0	4.2	+2.5	Helena . . .	31	- 1	.3	- .3	Brownsville . . .	61	- 3	2.5	+ .8
JACKSONVILLE. Jacksonville . . .	78	+ 4	2.0	- .8	Kalspell . . .	33	+ 2	.6	- .8	Corpus Christi . . .	51	- 4	3.2	+ .5
KEY WEST. Key West . . .	68	+ 1	3.5	+1.9	Miles City . . .	33	+ 0	.2	- .2	Dallas . . .	56	- 3	.7	+ .1
LAKELAND. Lakeland . . .	73	+ 1	2.8	0	Missoula . . .	34	+ 3	.4	- .5	Del Rio . . .	49	- 2	.3	0
MIAMI. Miami . . .	69	+ 3	4.1	+2.5	NEBR. Grand Island . . .	35	- 2	2.4	+1.6	El Paso . . .	50	- 5	2.4	- .1
ORLANDO. Orlando . . .	59	- 0	9.9	+7.5	Lincoln . . .	36	- 5	3.6	+2.3	Fort Worth . . .	59	- 4	6.3	+2.7
TALLAHASSEE. Tallahassee . . .	68	+ 2	3.5	+2.0	Norfolk . . .	35	- 1	1.0	+ .1	Galveston . . .	55	- 6	6.5	+2.6
TAMPA. Tampa . . .	59	- 0	4.0	+1.0	North Platte . . .	30	- 6	1.1	+ .6	Houston . . .	42	- 6	1.0	+ .5
GA. Atlanta . . .	50	- 1	2.8	+ .6	Omaha . . .	36	- 1	3.2	+1.9	Lubbock . . .	46	- 7	.2	- .3
AUGUSTA. Augusta . . .	53	- 1	2.8	+ .6	Valentine . . .	30	- 4	1.4	+ .9	Midland . . .	50	- 5	.1	- .7
MACON. Macon . . .	55	- 0	3.7	+1.2	NEV. Ely . . .	31	- 3	1.1	+ .5	San Angelo . . .	54	- 6	2.4	+1.0
SAVANNAH. Savannah . . .	58	+ 1	4.9	+2.8	Las Vegas . . .	50	- 3	1.1	+ .8	San Antonio . . .	57	- 5	2.2	- .2
HAWAII. Hilo . . .	---	---	---	---	Reno . . .	38	- 0	1.0	+ .4	Victoria . . .	51	- 6	2.9	+ .7
HONOLULU. Honolulu . . .	---	---	---	---	Winnemucca . . .	36	- 0	6.1	+ .3	Waco . . .	46	- 7	1.9	+ .5
KAHULUI. Kahului . . .	---	---	---	---	N.H. Concord . . .	31	- 7	1.6	+2.9	Wichita Falls . . .	46	- 7	1.9	+ .5
LIHUE. Lihue . . .	---	---	---	---	N.J. Atlantic City . . .	44	- 3	9.7	+6.0	UTAH. Blanding . . .	39	+ 2	1.4	+ .1
IDAHO. Boise . . .	41	+ 2	1.1	- .1	Trenton . . .	44	- 2	7.7	+4.5	VT. Burlington . . .	32	- 3	4.1	+1.5
LEWISTON. Lewiston . . .	41	+ 1	.9	- .3	N. MEX. Albuquerque . . .	40	- 4	.7	+ .3	VA. Lynchburg . . .	45	- 2	5.8	+3.2
POCATELLO. Pocatello . . .	36	+ 1	.4	- .6	Roswell . . .	35	- 4	8.1	+5.4	Norfolk . . .	52	+ 1	5.4	+2.3
ILL. Cairo . . .	45	- 3	5.1	+1.2	N.Y. Albany . . .	34	- 4	7.5	+5.0	Richmond . . .	48	- 1	5.8	+2.8
CHICAGO. Chicago . . .	37	- 2	2.8	+ .8	Binghamton . . .	34	- 3	4.3	+ .7	Roanoke . . .	45	- 2	5.6	+2.9
MOLINE. Moline . . .	37	- 2	2.6	+ .5	Buffalo . . .	36	- 3	4.8	+ .7	WASH. Colville . . .	37	- 2	1.7	---
PEORIA. Peoria . . .	36	- 4	2.6	+ .5	New York . . .	43	- 4	9.9	+6.3	Omak . . .	38	+ 4	1.6	+ .2
ROCKFORD. Rockford . . .	38	- 4	3.3	+ .9	Rochester . . .	37	- 3	4.8	+2.3	Quillayute . . .	47	+ 3	3.4	-2.0
SPRINGFIELD. Springfield . . .	42	- 3	5.5	+2.3	Syracuse . . .	37	- 3	6.8	+3.9	Seattle-Tacoma . . .	47	+ 3	3.4	-2.0
IND. Evansville . . .	42	- 3	5.5	+2.3	N.C. Asheville . . .	46	- 1	4.4	+2.2	Spokane . . .	38	+ 2	.9	-1.3
FORT WAYNE. Fort Wayne . . .	38	- 1	3.6	+1.0	Charlotte . . .	49	- 1	5.4	+2.9	Walla Walla . . .	43	+ 1	.8	- .9
INDIANAPOLIS. Indianapolis . . .	40	- 1	5.7	+2.6	Hatteras . . .	46	- 2	4.9	+2.2	Yakima . . .	40	- 2	3.9	+ .9
SOUTH BEND. South Bend . . .	38	- 1	2.9	+ .2	Greensboro . . .	57	+ 1	7.3	+3.2	W.VA. Beckley . . .	43	- 2	5.3	+2.5
IOWA. Burlington . . .	37	- 2	3.0	+1.1	Raleigh . . .	48	- 2	6.0	+3.2	Charleston . . .	43	- 3	4.4	+1.9
DES MOINES. Des Moines . . .	54	- 3	2.4	+ .8	Wilmington . . .	55	- 0	7.9	+4.8	Huntington . . .	38	- 7	3.9	+1.5
DUBUQUE. Dubuque . . .	33	- 2	1.8	- .8	N. DAK. Bismarck . . .	28	- 1	.1	- .5	Parkersburg . . .	38	- 7	3.9	+1.5
SIoux CITY. Sioux City . . .	36	- 0	1.0	- .2	Fargo . . .	29	+ 1	.2	- .6	WIS. Green Bay . . .	35	+ 1	1.2	- .7
KANS. Concordia . . .	38	- 4	3.5	+2.5	Williston . . .	29	+ 1	.2	- .4	La Crosse . . .	35	- 1	.9	-1.2
DODGE CITY. Dodge City . . .	37	- 6	2.3	+1.7	OHIO. Akron-Canton . . .	40	- 1	4.3	+2.0	Madison . . .	36	+ 2	1.3	- .9
GOODLAND. Goodland . . .	32	- 6	1.6	+1.1	Cincinnati . . .	40	- 5	6.3	+3.3	Milwaukee . . .	31	- 3	.7	0
TOPEKA. Topeka . . .	39	- 4	4.0	+2.5	Cleveland . . .	41	- 0	4.4	+1.9	WYO. Casper . . .	30	- 5	.6	0
WICHITA. Wichita . . .	40	- 4	3.1	+1.6	Columbus . . .	41	- 0	4.4	+1.9	Cheyenne . . .	30	- 3	.9	0
KY. Lexington . . .	44	- 1	4.2	+ .9	Dayton . . .	39	- 3	5.0	+2.3	Lander . . .	28	- 3	.9	0
LOUISVILLE. Louisville . . .	44	- 1	6.3	+3.1	Toledo . . .	38	- 1	3.6	+3.6	Sheridan . . .	33	- 0	.3	- .5
LA. Baton Rouge . . .	58	- 1	4.8	+ .7	Youngstown . . .	37	- 2	4.3	+1.5	P.R. San Juan . . .	---	---	---	---
LAKE CHARLES. Lake Charles . . .	55	- 5	4.3	+ .1										

* Departures are from 30-year means (1931-60). Based on preliminary reports

(Louisiana continued from page 7)

soybeans at near standstill because of wet fields. Quality and yield continue to deteriorate with additional rains. Cotton about 88% harvested. Soybeans 87% harvested. Sugarcane harvest active, but slowed by wet fields and trash; about 70% of crop harvested. Tonnage good, sugar content high. Fair grazing obtained from rye grass and small grains; many fields too wet to graze. Supplemental feeding increased. Livestock continued good condition.

MARYLAND AND DELAWARE: Very mild but continued wet for 5th straight week. Precipitation mostly as rain totaled 1.00 to 3.50 inches. Heaviest in northern areas, least in southern Eastern Shore. Temperatures averaged 6° to 8° above normal except 9° to 13° above normal in south. Extremes mostly 60's, low 20's to low 30's. Some progress in soybean combining early in week. Farmers working around low spots in many fields. Harvest of few remaining cornfields nearly done. Warmer temperatures favored tobacco stripping. Fall seeding delayed by late harvest, but early-seeded grains still green and growing.

MICHIGAN: Intermittent freezing rain and snow, sharply colder at midweek with record lows southern Michigan, moderating temperatures late in week but colder as period ended. Lowest temperatures, 10° to 15° below normal Upper Peninsula and 5° to 10° below normal southern Lower Peninsula. Temperature averages: 11° below normal east to 17° below normal west Upper Peninsula; 4° below normal southeast to 12° below normal northwestern Lower Peninsula. Precipitation totals 0.50 to 1.00 inch except 0.25 to 0.50 inch vicinity Traverse City. Snow cover has increased rapidly north with 25 inches at Calumet, 2 to 6 inches common in southern Lower Peninsula. Corn and soybean harvest seriously delayed by wet, muddy fields, snow, and ice. May not be possible to harvest some fields until next spring. Considerable mold in unharvested corn and soybeans. Wet snow and strong winds caused additional lodging of both corn and soybeans in many fields making harvest more difficult. Grain corn acreage 55% harvested. Soybeans 56% harvested. Less than 50% grain corn harvested in south-central and southeast. Dry beans 95% harvested, most remaining fields not harvested expected to be total loss.

MINNESOTA: Record-breaking bitter cold week. Temperatures averaged 29° below normal in west to 24° below normal in east. Extremes: 19°, -29°. Coldest first 10 days of December on record across Minnesota. Minneapolis-St. Paul average mean temperature was 1.7° and Duluth was -3.7°. Prior coldest year for same period was 1919 with mean temperatures for Minneapolis-St. Paul of 2.2° and Duluth 3.0°. Light snowfall in northern and southern districts, generally less than 0.10 inch water content. Central districts varied from 0.30 to 0.60 inch water content. Snow cover averaged 2 to 4 inches across southern and northern districts and 5 to 8 inches across central districts. Frost depth on December 11 at University of Minnesota Weather Station 20 under a 3-inch snow cover.

MISSISSIPPI: Weekly temperatures averaged 2° to 10° above normal across State. On Monday afternoon and Tuesday, many stations reported highs in upper 70's. One to 4 days of precipitation and weekly totals varied from under 1.00 inch in northern 2/3 to over 4.00 inches in southern 1/2 with 1-day amount of 3.91 inches measured at Wiggins on Wednesday morning. Over weekend: cooling trend in extreme north on Friday with accompanying rains; this traveled southward and reached the coastal area this Monday

morning. Rainfall totals were 1.00 to 3.00 inches, mostly northern parts. Elsewhere amounts were under 1.00 inch. In the warm air ahead of this cooling trend, maximums were up to 80°. Seven weeks of rain continue to limit harvesting operations. Soil moisture surplus to excessive all parts of State. Days suitable for fieldwork averaged 1.2, previous week 2.0, 1/2 day a year ago. Cotton 86% harvested 84% last week, 98% a year ago. Soybeans 64% harvested, 55% last week, 98% a year ago. Corn harvest 92% completed. Pecans 85% harvested, 72% last week, 80% a year ago. Hay, roughage and feed grain supplies on farm short to adequate throughout State. Wheat crop in fair to good condition, oats fair to good. Pasture condition fair to good. Livestock mostly good.

MISSOURI: Cold arctic air covered all of State past week. Temperatures remained below the freezing mark entire week in northern half of State. Temperatures averaged from 3° below normal in Bootheel to 12° to 18° below normal elsewhere. Sub-zero temperatures some northern stations. Frequent light precipitation, mostly in form of snow or freezing rain, with amounts mostly less than 0.25 inch, the only exception being Bootheel where rainfall amounts in excess of 2.00 inches late in week. Harvest continued on frozen ground. Two days suitable for fieldwork. Corn 70% harvested, 88% 2 years ago. Soybeans 67% harvested, 89% in 1970 at this time. Grain sorghum 73% harvested, 91% 2 years earlier. Cotton 54% picked, 87% in 1970. Wheat mostly good condition. Topsoil condition 36% adequate, 64% surplus.

MONTANA: Arctic air held a tight grip over State past week with temperatures averaging from 30° below normal in western portion to 40° or more below normal all other sections. Temperatures failed to climb above zero in valleys of east. Winds along eastern slopes of mountains over weekend brought higher temperature readings to some areas. Light snow fell over most of State with precipitation amounts generally less than 0.10 inch. Winter wheat good condition eastern 1/3 fair to good elsewhere. Wind damage insignificant, snow cover protection fair to good. Stockwater supply adequate. About 85% range livestock receiving supplemental feed. Calves held over same as normal northwest and southeast, varying widely elsewhere. Condition winter ranges and pastures fair to good. Grazing difficult, scattered areas open.

NEBRASKA: An incredibly cold spell has held sway statewide since afternoon of 2d. Average temperatures for week ending 10th ranged from 25° below normal in southeast, 35° subnormal in extreme north west. Only once or twice every 100 years does a cold period achieve such severity at this time of year as this one has. Agate registered a -32° on 6th for lowest reported temperature. Precipitation amounts were small statewide. Measurable snowfall occurred in west and north on 4th, 7th, and 9th. Farmers able to harvest most of week despite cold. Ground frozen solid enough to support harvesting equipment, but motors difficult to start. Breakdowns difficult to repair. Grain harvested still too wet to store safely and requires drying, which is hampered by fuel shortages. Corn harvest advanced sharply for 2d week, now 74% complete with 60% last week and 97% normal. Moldy conditions reported, but not serious enough to cause dockage. Grain moisture over 20% in all areas, averaged 22%. Sorghum harvest 76% complete compared with 72% last week and 99% normal. Harvesting success in sorghum dependent upon type of equipment used.

Very good recovery being made with special pick-up attachment. Moisture content 20%. Nearly 35 million bushels of sorghum remain to be harvested. Soybean harvest advanced slowly, now 94% complete; slightly over 1.5 million bushels now unharvested. Unharvested sugar beets in western areas frozen in soil and may be lost. Winter wheat in good condition. All areas report adequate surface and subsoil moisture, and about 20% with surplus moisture supplies. Livestock in good condition, but under severe stress from cold. Last week hard on hay supplies, but most areas entering winter with adequate roughage feeds.

NEVADA: Very cold week. Temperatures averaged 22° below normal in north; 14° below normal in south-central, and 9° below normal extreme south. Record low minimum temperatures for December at numerous locations: -16° at Reno; -34° at Winnemucca; -28° at Ely. General precipitation as snow, 0.10 to 0.50 inch water equivalent. Snow ground cover, trace in south-central areas to 20 inches at Virginia City. Higher amounts in mountains. Early-winter storms coupled with much below-normal temperatures have created problems for stockmen in caring for livestock. Hay supplies being utilized faster than normal due to extreme cold and poor winter range feed conditions. Vegetable harvest in Moapa Valley complete. Cotton harvest in Pahrump Valley about 2/3 complete compared with 3/4 a year earlier.

NEW ENGLAND: Very wet week with precipitation almost daily. Temperatures averaged seasonal except 2° to 5° above normal extreme south and 2° to 8° below normal in Maine. Coldest extreme north. Unseasonably warm with heavy fog 6th. Highs in 50's and 60's southern 3 States but mid-30's northern Maine. Precipitation frequently as rain with totals 1.00 to 3.00 inches. Storm of 4th and 5th brought heavy snow north and inland south. Up to 19 inches locally in north. Considerable glazing from freezing rain in intermediate areas southern half. Springfield, Mass., area hit hard by icing, with deposits 1/2 inch thick breaking tree limbs and interrupting utility service to thousands of homes. Some snow and glazing again December 8.

NEW JERSEY: Wet and mild. Rain somewhere in State every day except Thursday. Temperatures averaged from 2° to 9° above normal with greatest departures near coast. Rainfall averaged 1.90 inches over north, 2.30 inches over south, and 1.70 inches along coast. Heaviest amounts Wednesday and Friday.

NEW MEXICO: Light precipitation most of State mainly on Tuesday and weekend. Nearly 0.50 inch extreme northwest. Temperatures averaged above normal over most of State but below normal extreme north and mostly on eastern Plains. 17° below normal at Clayton. Warmest on Monday cooling to lowest on Wednesday and then warming. Fall small grains good; providing excellent grazing; 72% total acreage carrying livestock. Some snow damage sustained by cotton northeastern areas; harvest still very slow. Livestock, ranges good; supplemental feeding gradually increasing.

NEW YORK: Considerable variation of temperature with precipitation widespread daily except on 5th and 7th. Maximums warmed from 20's on 4th to 50's on 6th and returned to 20's and low 30's on 7th. Syracuse reported 60° Wednesday. Cold midweek as minimums near zero north and 5° to 15° southern Upstate on 8th. Cloudy and moderate temperatures on weekend. Snowfall 2 to 6 inches mixed with sleet interior sections on 4th followed by general moderate to heavy rain on 6th. Addi-

tional rain on 8th with heaviest 0.80 inch in south-east. Weekly precipitation totals through Friday, 0.60 to 0.90 inch northern valleys to Lake Ontario increasing to 1.00 to 2.00 inches southern Upstate and Long Island. Ground mostly bare southern half by 10th but snow cover 4 to 12 inches deep in Northern Plateau.

NORTH CAROLINA: Temperatures above normal. Much of coastal plain and southern Piedmont above freezing throughout period. Some highs to middle 70's. Rain most areas 6th and 9th, some showers other dates. Totals mostly 1.00 inch or less, but scattered heavier amounts. Weather more favorable to harvesting operations. Good progress made in soybean and cotton harvest in spite of wet fields. Soybean harvest 75% complete, cotton 85% - both behind normal. Corn, sorghum grain and lespe-deza seed harvest nearly complete. Growing small grains good shape, planting intentions not realized. Pastures generally good.

NORTH DAKOTA: Continuous subzero temperatures except highs above zero in east first of week and in west Sunday. Longest period of continuous below zero temperatures so early in season ever recorded in North Dakota. Temperatures averaged 25° to 35° below normal. Sunny except for a few periods of light snow. Snow cover 2 to 6 inches at end of week. Cold temperatures and snow-covered pastures requiring heavy livestock feeding. Roads and yards remain open. Feed supply adequate. Marketing of calves and cull cattle normal for season.

OHIO: Minimum temperatures past week ranged from near 0° to lower 50's. The coldest morning 7th. Toledo had a low of 4°. Maximum temperatures on 5th and 6th reached upper 60's. Actually these high temperatures were reached near midnight 5th. Temperatures on 6th dropped rapidly to teens. Rain, snow, freezing rain, and sleet all occurred in Ohio past week. Cleveland had 2.9 inches of snow. Oberlin had 2.5 inches, and Astabula had 2.0 inches. The greatest 24-hour total precipitation amounts occurred near Chesapeake which had 2.15 inches. Crop harvest still plagued with continued rain and snow. Freezing temperatures enabled farmers to make progress during week, while ground was still frozen. Nighttime and early morning harvesting are becoming common in several areas. About 2 days favorable for fieldwork during week. Soil moisture supplies surplus 98% adequate 2%. Nearly 55% corn for grain harvested; during late harvest of 1967, 60% harvested by this date. Soybean harvest less than 65% complete. Sugar beet lifting 70% complete while 55% popcorn harvested.

OKLAHOMA: Temperatures continued cold; 7° to 16° below normal. Precipitation averaged from a trace southwest to 0.46 inch southeast, mostly in form of freezing rain, sleet, or light snow. Farmers made some headway harvesting row crops during past week, but wet fields continued to delay progress most areas. Quality of row crops standing for harvest continues to decrease. Several farmers in Panhandle harvesting corn for grain and sorghum grain at night while ground frozen enough to support equipment. Nearly 2/3 sorghum grain crop combined, and almost 9/10 corn for grain harvested. Most cotton fields too wet, but some farmers made good progress around midweek. Slightly over 2/5 cotton crop out of fields, sharply behind recent 5-year average. Around 9/10 peanut crop and 1/2 soybean crop harvested. Increased supplemental feeding necessary as below-normal temperatures have retarded growth. Small grains and native

pastures furnishing very little feed. Continued cold temperatures and lack of wheat pasture have increased demand for hay in some localities, resulting in higher feed prices. Livestock condition declined, but most remain in fair to good condition. Death losses have been quite high in a few localities.

OREGON: Sharp cooling first of week as very cold arctic air maintained subfreezing temperatures for 7 days after Monday. Weekly temperatures averaged 10° to 26° below normal. Subzero lows most of State set many new December and all-time record lows. Weekly minima -40° to -5° east. -12° to -8° western valleys, 6° to 19° on coast. Snow cover statewide 2 to 6 inches except 11 to 17 inches coast range, 12 to 36 inches Cascades. Precipitation totaled mostly 0.50 to 1.00 inch except 1.50 to 2.30 inches south coast. Snowfall and below-normal temperatures throughout State put a stop to most field activities, but forced an increase in livestock feeding. Christmas tree cutting continues for local markets. Movement of potatoes slowed by cold weather. Many farmers are attending commodity meetings.

PENNSYLVANIA: Continued wet cloudy weather. Some stations approaching record annual rainfall totals. Precipitation every day somewhere in State. Heaviest midweek ahead of cold front and again Friday with Ohio Valley low. Friday storm began as snow, sleet, freezing rain, becoming all rain late in day. Weekly totals 0.50 to 1.00 inch upper Susquehanna, 1.00 to 2.00 inches west of north and west, 2.00 to over 3.00 inches south. Snow cover nil. Generally mild, coldest midweek. Weekly means 2° to 4° above normal north and central, 4° to 8° above southwest and southeast. Routine winter farm chores.

PUERTO RICO: Rainfall averaged 1.10 inches or about 0.05 inch below normal. Highest weekly totals centered in eastern portion of Island with 3.68 inches on northeast coast. Rest of Island generally less than 0.50 inch except for small area of rainfall up to 2.15 inches on extreme west coast and little or no rain south coast. Crop moisture conditions generally near normal except for parts of south coast too dry for normal growth and parts of extreme eastern coast too wet for general fieldwork. Temperatures averaged 79° on coast and 73° interior divisions with a mean departure of 0.7° below normal. Highest maximum 92°, lowest minimum 57°. Sugar cane crop continued developing well, but heavy rains some zones retarded maturity. Harvest preparations begun in most plantations. Coffee harvesting season ending and general fieldwork now underway including pruning and fertilizing activities. Tobacco crops developing well and sowing operations are underway most zones. Pastures generally good to excellent, but some development retarded due shorter days and cooler temperatures. Some fields in eastern sections too wet and received some damage from cattle trampling. More rain needed in southwest for optimum development. Minor food crops report good development most zones except some farms report maturing slowed by lower temperatures. Cabbage planting underway in central-interior with good harvest of pigeon peas, pumpkins, and eggplants in southern zones.

SOUTH CAROLINA: Rain on 5th and 6th measured less than 1.00 inch in parts of north and north-east. Amounts increased toward the southwest and measured more than 2.00 inches in an area between Augusta, Orangeburg, and Savannah. Considerable

cloudiness, light rain, and fog accompanied by small temperature ranges and above-average values. Weekly average temperatures about 6° above normal all sections. Rain further delayed harvesting and planting. Cotton 90% complete compared with 89% last year. Soybeans 68% harvested compared with 55% last year. Pastures generally good condition. Wheat, oats good condition. Wheat 78% planted compared with 68% last year, 69% emerged. Oats 82% planted compared with 85% last year, 72% emerged. Sorghum grain 92% harvested. Fall vegetables fair to good condition.

SOUTH DAKOTA: Extremely cold temperatures dominated weather. Weekly temperatures averaged from 25° below normal portions of east to 39° below normal parts of west. Extremes ranged from 36° below zero at Conde on 6th to 15° at Rapid City on 10th. Numerous stations reported record-low temperatures for so early in season on 6th. Some of these are Aberdeen -29°, Brookings -22°, Rapid City -21°, and Vermillion -18°. Maximum temperatures remained below zero during daytime over much of State on several days. Precipitation fell mostly as light snow scattered through week with amounts ranging from about 0.05 to 0.35 inch. Snow cover end of week ranged mostly from 1 to 6 inches with isolated amounts up to 9 inches. Although snow was not deep enough to prohibit harvesting, extreme cold made it difficult to operate farm equipment. Some progress in harvesting row crops toward end of week. Livestock in good condition, but additional supplemental feeding required due to unseasonably cold weather.

TENNESSEE: Heavy rains dominated weather over State. Rainfall totals ranged from just under 3.00 inches extreme southeast to over 5.00 inches much of west and parts of Cumberland Plateau. Portions of rivers near to several feet above flood stage on 9th and 10th. Temperatures averaged below normal west and 5° to 12° above normal central and east. Fall harvest continues to lag farther behind normal. Only 1.1 days suitable for fieldwork. Harvest of all fall crops over 3 weeks behind normal. Crop losses continue for grain and cotton farmers. Burley tobacco growers are in a much better position. By December 7 over 90% of the estimated 1972 burley crop has been sold. Stripping of burley virtually complete. Livestock farmers continue to be pleased with current pasture conditions.

TEXAS: Cloudy, wet weather prevailed throughout week. Unseasonably cold and freezing rain blanketed north-central and south-central Texas in a sheath of ice Sunday and Monday. Temperatures dipped to 0° at Amarillo, 30° at San Antonio, and 34° at Raymondville. Precipitation light except heavy in East Texas. Harvest of sorghum grain and cotton made fair progress during week. Night combining common some plains areas as frozen ground allowed equipment to operate. Other plains areas operated night and day in an effort to complete grain harvest. Cotton strippers operated most of week. Fall-sown grains showed slow development, but generally providing good pasture. Soil moisture supplies above average. Cold weather causing some death loss among newly-arrived stockers and feeders. Some supplemental feeding necessary. Major crops percent harvested: cotton 49, last year 41; sorghum 98, last year 98; peanuts 98, last year 97; soybeans 85, last year 90; sugarbeets 61, last year 56. In the Lower Rio Grande Valley cold weather hampering vegetable harvest and growth. Tomato and pepper supplies beginning to decline. Cabbage harvest slow due

poor market. Onions and carrots showing good growth. At Laredo picking of peppers and tomatoes beginning seasonal decline. Carrots and cabbage making excellent growth. In San Antonio area most activity centered around cabbage and carrot harvest. Winter Garden cabbage and carrot harvest remains active. On High Plains light supplies of carrots remain available. Irish potato harvest continues in Gaines County. Pecan harvest continued to be delayed by wet and cold weather in north and north-central Texas. Citrus supplies should increase as holiday season nears; gift fruit volume rapidly increasing.

UTAH: Recurring periods of snow with near record outbreak of cold air over weekend. Most areas received measurable precipitation. Accumulation ranged from a few hundredths inch to well over 1.00 inch. Average temperatures generally below normal. Near record minimums some localities Sunday and Monday morning. Below zero temperatures combined with snow and ice added to hardships of wintertime farming activities. Frozen water lines, frozen feed and stockwater, blocked and icy roads made care and feeding of cattle and sheep in feedlots and valley farms, pick up of milk and eggs, marketing of potatoes and onions from storage, plus other routine farming chores more difficult. Processing of 2d largest ever turkey crop in final count down. Should be virtually completed by December 23. Sugar processing at peak.

VIRGINIA: Temperatures above normal except normal Thursday and Friday. Around 5 days with rain or showers. Only 2.5 days suitable for fieldwork. Surplus moisture contained by 70% of topsoil. Harvested corn, soybeans, and other crops and planted small grain as field conditions permitted. Considerable progress made. Pastures excellent for this date. Calving and lambing increased seasonally. Butchered hogs, ground feed, marketed tobacco, and cut wood.

WASHINGTON: Western Washington: Some light snow with subfreezing temperatures. Farm activity restricted. Christmas tree and greens harvesting continued. Livestock condition satisfactory. Heavy feeding demands beginning to strain feed supplies. Eastern Washington: Very cold temperatures averaging 14° below normal. Light snow in mountains. Limited grain corn harvest. Pruning fruit curtailed. Many small grain fields bare, some winterkill likely. Livestock good shape on winter rations.

WEST VIRGINIA: Mild and rainy almost every day until colder air from the northwest moved across State December 11. Heaviest rain December 8 totaled near 2 inches and caused local flooding many areas. Harvest of remaining corn delayed because of wet fields. Care of livestock and general maintenance main farm activities. Apple harvest complete.

WISCONSIN: Cold wintry weather with frequent light snows continued. Temperatures first 10 days of December have averaged between 15° and 20° subnormal with no above freezing readings except locally in southeast. Minima at 30° below zero across north Thursday morning for some of coldest early-December weather of record. Three to 6 inches of dry fluffy snow fell in central and north Tuesday. Also similar amounts of dry snow fell in extreme south and southeast over weekend. Snow depths range between 3 inches in northwest and southwest and 10 inches in some central and northeastern counties. Frost penetration in the ground averages 4 inches. Corn and soybean harvests progressed well south and east where most of remaining acreage located. About 85% of corn harvested; moisture content high for this time of year at 25% average. Some backup problems also reported at dryers with local fuel shortages and lack of railroad cars. Yields are good though weights are lighter than anticipated earlier. Soybeans 80% combined, most remaining beans found in southeast. Good frost depths most helpful in speeding harvest operations. Fall plowing over for season.

WYOMING: Snow and very cold covered State. Moran reported most moisture with 1.15 inches. Temperatures averaged 6° to 10° below normal west of Divide, 20° to 36° below normal east of Divide. Maxima early in week were 40's to mid 50's. Minima were mostly -13° to -32° west of Divide and Upper Platte Drainage, -22° to -41° elsewhere. Temperature extremes were 58° at Sheridan and La Grange and -49° at Dubois, it's all time minimum temperature. Forage supplies generally adequate. Grazing of rangeland limited many areas because of snow cover.

Harvest Weather Over the Northern and
Central Great Plains
L. A. Joos, Regional Climatologist
Kansas City, Missouri

One of the most difficult and dismal harvest weather seasons in many years is still a huge problem to midwest farmers. The following paragraphs summarize the harvest situation over 14 States from the Dakotas to Colorado and Kansas and eastward to Michigan, Indiana, and Kentucky.

At the end of November, farmers in most of the Central Region were greatly concerned over fields unharvested and crops deteriorating either in the field or in the bin. A region-wide survey showed the worst conditions were generally east and south-east of a line from about Dubuque, Iowa, to Dodge City, Kansas. In the heart of the Corn Belt, corn and soybean harvests were 2 to 5 weeks late. In the Plains area, grain sorghums were only half to two-thirds harvested at a time when the job is normally finished. Corn harvest is only about half completed in southwestern Iowa. In Illinois the soybean harvest is 80% complete due to a brief dry period in October; in Indiana and western Kentucky the completion figure is 50%.

The principal unfavorable weather factors were a two- to three-month period of wet and cloudy weather and a great scarcity of drying conditions. Iowa reports the cloudiest, wettest, and coolest summer and fall since 1951. Kansas experienced the cloudiest October-November period in 20 years. Eastern Nebraska records show the second cloudiest November in the historical records. Early heavy snows in Nebraska, Kansas, Iowa, and Missouri added to the problem. Temperatures averaged only 2° to 6° below normal but persistent cloud decks kept the sun out and the soil wet.

Oddly enough, harvests in Minnesota and most of the Dakotas are about on schedule. Unseasonable cold weather in November froze the soil to allow harvesting to catch up. On the other hand, Wisconsin and Michigan experienced hard freezes in June and July and in October; both states lost heavily in apples and potatoes as severely cold air moved far southward. Parts of Wisconsin and Michigan had persistent dry spots in early summer only to receive more than enough rain but too late to be of much help to crop yields.

Actual losses are difficult to estimate but will be heavy. In some areas, corn and soybeans can stand for months with minor deterioration. In others, wind and snow have driven sorghum stalks into wet ground that is now frozen so that machinery can move but recovery of the grain is poor. Mold spoilage occurs in storage bins and occasionally in the field. Drying equipment is being used day and night. A week or two of dry weather would solve most of the remaining problems but a continuation of recent weather will only add to an already bad situation.



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NATIONAL FLOOD SUMMARY -- DECEMBER 11, 1972

Numerous small streams overflowed during the past weekend as a result of general heavy rainfall in portions of the lower Mississippi Valley, Tennessee Valley, Ohio Valley, and middle east coast drainage. Many roads across central and western West Virginia were reported closed by high water or rock slides early Saturday morning December 9. Earlier on 9th, some 50 families were reported being evacuated at Salt Lick, Kentucky in the Licking River Drainage of northeast Kentucky due to high water.

Many of the larger rivers in the heavy rain area have experienced major rises. Several feet of overflow has occurred or is forecast in a number of areas. The Upper Cumberland River was near crest this morning at Barbourville, Kentucky at stage 37.2 feet; flood stage is 27 feet. Other streams that reached 4 to 6 feet or more above flood level in some areas include the Harpeth River in Tennessee, the Little Kanawha River in West Virginia, the Monongahela River in Pennsylvania, Lower Scioto River in Ohio. Green River in Kentucky will crest up to 7 feet over flood stage.

The main stem of the Ohio River crest was 2.4 feet below the 25-foot flood stage at Pittsburgh, Pennsylvania late Saturday, December 9. The Charles River is a little above flood stage at Charles River Village, Massachusetts.

The most significant precipitation during the past weekend occurred during the first 48-hour period. During this time heavy amounts occurred from northern Louisiana and Arkansas northeastward through the Tennessee Valley and southern and eastern portions of the Ohio Valley and on through to the Delmarva Peninsula and southern New Jersey. Some locally heavy amounts occurred from eastern Pennsylvania to New England.

Hydrologic Services Division
National Weather Service