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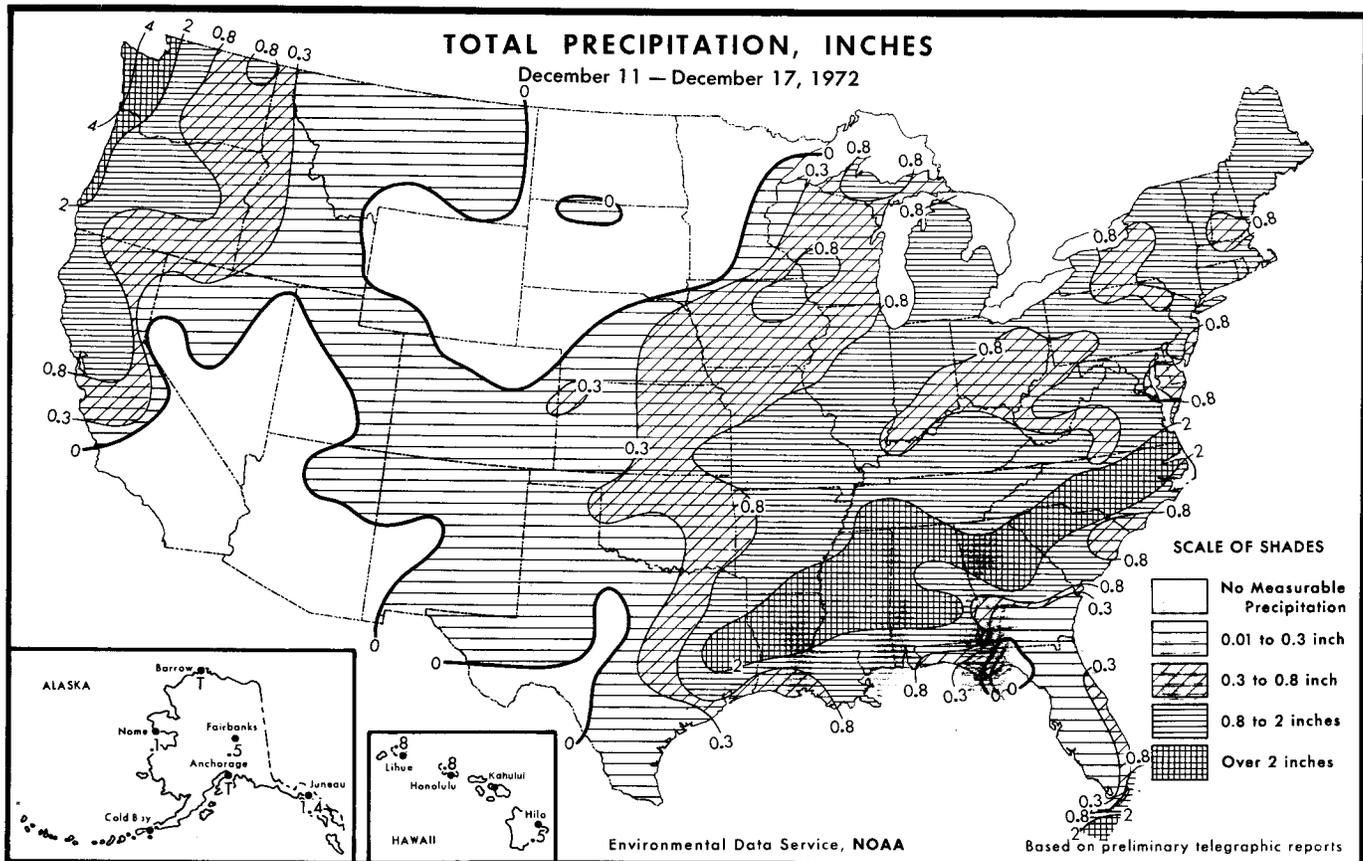
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NATIONAL WEATHER SUMMARY

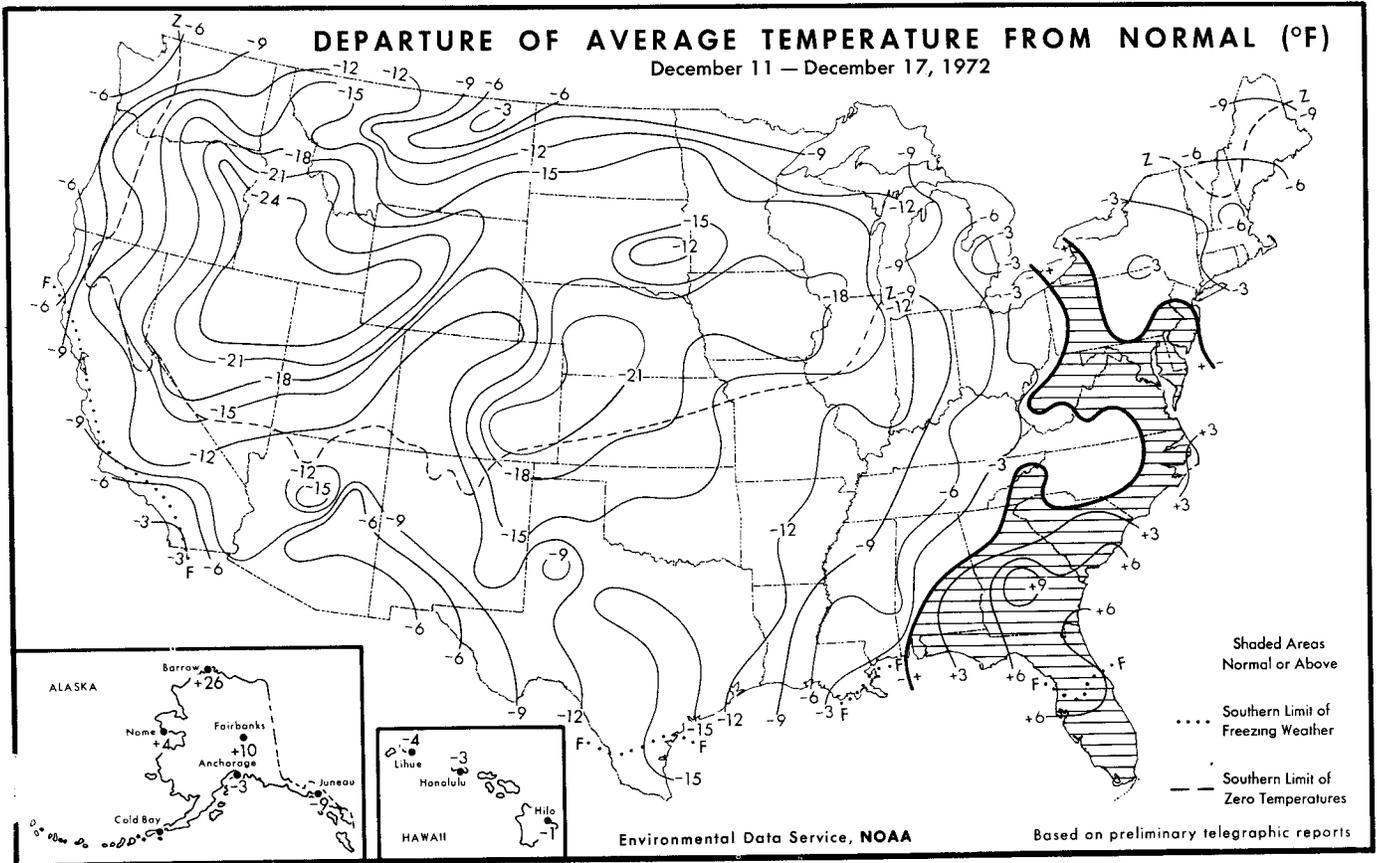
HIGHLIGHTS: "Old man Winter" did his "thing" this past week. Cold temperatures, high winds, and ice and snow highlighted this past week's weather story. Record warmth in Florida was broken by freezing temperatures.

PRECIPITATION: Freezing rain and snow pelted an area from the southern Great Plains up through the Midwest to New England. Very heavy rains fell over the southeast and eastern seaboard, and also along the Pacific Coast.

On Monday freezing rain glazed portions of the southern Plains into the Lower Mississippi and Tennessee Valleys. As the storm system moved northeastward, freezing rain fell over parts of Illinois, Ohio and Michigan. By Wednesday the freezing rain, combined with snow in some areas, extended well up into New England.

On Thursday an intense low pressure system began developing over the northern Gulf. As this Low developed, it moved northward dropping large amounts of rain over the Gulf States. Weekly totals at several stations in Mississippi, Alabama, Georgia and the Carolinas exceeded 2.00 inches. Athens, Georgia received 4.25 inches during the 24-hour period ending Friday afternoon. As the Low moved northward, it dumped heavy rains all along the Atlantic seaboard.

The low pressure system combined with a second Low over Ontario to drop considerable snow over New England during the weekend. The heaviest snowfall occurred over northern New York, Vermont, and the northern portions of New Hampshire and Maine. Six to 12 inches fell in many areas. The pressure differences between this storm system and the High located over the Great Plains resulted in gale



force winds and blowing snow, making travel very treacherous.

In the northwest, the weather was being dominated by a complex low pressure system over the Gulf of Alaska. Gale force winds were felt along the Washington and Oregon coast. Rain fell along the coastal region from northern California to Washington. The storm pushed moisture well into the interior sections of the northwest, much of it falling as freezing rain. Freezing rain fell as far eastward as western Montana, Idaho and Utah.

TEMPERATURE: Cold was the word this week. Early in the week the entire Nation was cold except for the Atlantic seaboard and the southeastern U.S.. Record warm temperatures occurred in many portions of Florida before frigid temperatures moved into the area over the weekend. The entire Nation was experiencing below normal temperatures at the week's end.

As the week began a large High located over Illinois was pouring cold arctic air into the Nation's midsection. Record low temperatures were recorded in several locations: Rockford, Illinois, -18°; Dubuque, Iowa, -13°; Moline, Illinois, -18°.

As the system moved up through New England during midweek, some respite from the severe cold occurred in the Northern Great Plains, but another cold front later in the week dropped temperatures there once again.

By Friday, a frigid air mass was wedged over the Nation's midsection between major storms over northeastern and northwestern portions of the country. While a large low pressure system was settled in over the Northeast, three high pressure systems over the middle U.S. poured cold air southward. One High was located just north of the North Dakota-Canada border, one over the Texas-Oklahoma Panhandle, and the third over Utah and Wyoming. A low pressure system over the Pacific battered the coasts of Washington and Oregon.

As the week ended the large High had brought clear skies and cold temperatures to much of the Nation. The cold arctic air lowered temperatures below the freezing level into the deep South. Sunday morning the only portion of the U.S. not experiencing freezing temperatures were the southern portion of Texas and the southern 2/3 of Florida. Sunday morning Gainesville, Florida reported 31°.

R. E. Felch

Season's Greetings
and Best Wishes for a
Happy New Year

NATIONAL AGRICULTURAL SUMMARY

AGRICULTURAL HIGHLIGHTS: Unfavorable weather restricted harvest progress of corn, cotton and soybeans. * Very cold weather limited winter wheat growth in the southern Great Plains.

* Record breaking cold in the West continued to make livestock care difficult.

SMALL GRAINS: Unseasonably cold weather in the southern Great Plains continued to limit winter wheat growth while fields in northern States are dormant until spring. Snow and ice covered most of the wheat crop from North Texas to Canada early last week, but winter wheat and other small grain crops remained in good to excellent condition. Grazing of wheat acreage remained limited in Texas, Oklahoma, Kansas and Colorado due to the cover of snow and ice. In Montana, the fair to good snow cover protection is receding in some areas and loss from blowing is reported in the Cascade county area. Several weeks of snow accumulation in eastern Washington have provided added protection to small grain crops. Light snow-cover has allowed sub-zero temperatures to damage some winter wheat in eastern Oregon. Small grain pastures in coastal States from Louisiana to Delaware are in good condition but many fields are too wet to graze.

CORN: Snow and freezing rain limited corn harvesting progress in the North Central States while heavy rains and emphasis on soybean harvesting held corn picking in the South at a standstill. The Nation's corn acreage is now about 83 percent harvested, an increase of only 3 percentage points from the previous week and the smallest weekly progress since the week ending November 5. Corn harvesting in the North Central States proceeded at a slow pace on frozen ground reaching 82 percent complete compared to 78 percent a week earlier--harvesting completion in the South remained unchanged at 91 percent complete. Slightly more headway was made in the East North Central States at 73 percent complete than in the West North Central where harvesting is 89 percent complete. Heavy snow in Iowa slowed corn harvesting at 88 percent complete to a gain of only 2 points from the previous week. Illinois farmers advanced corn picking 4 points to 82 percent complete. Corn harvesting in both Indiana and Ohio increased 5 points to 60 percent complete. Nebraska farmers made good progress with 84 percent of the corn harvested compared to 74 percent a week earlier, but grain drying at elevators was hampered because of fuel shortages.

COTTON: Heavy rains from the lower Mississippi River Valley to the Carolinas held cotton harvesting at a standstill while ice and snow kept Texas cotton farmers out of their fields early last week. Some progress was made in harvesting Texas cotton later in the week with 56 percent of the acreage now harvested compared to 49 percent a week earlier. This is the seventh consecutive week of harvesting delays due to wet weather. Most cotton-growing States east of Oklahoma and Texas have from 10 to 15 percent of the cotton acreage remaining to be harvested except in Missouri where cotton harvesting is 60 percent complete. Quality of the unharvested cotton continues to deteriorate and farmers are hoping for some clear weather soon in order to finish harvesting. In California cold, wet weather hampered cotton harvesting while normal progress continued in Arizona with picking completed in some areas.

SOYBEANS: Snow and freezing rain virtually stopped soybean combining in the North Central States while heavy rains and wet fields continued to hamper soybean harvesting in the Southern States. The Nation's soybean harvest at 79 percent complete gained only 1 percentage point from the previous week. The North Central States soybean acreage is 82% harvested, 1 percent more than a week earlier while combining in the Southern States increased 4 points to 75 percent complete. Snow and icy conditions limited soybean harvesting in Illinois to 87 percent complete, a 1 point increase from the previous week. Harvesting completion remains unchanged in Indiana at 60 percent and in Ohio at 65 percent -- about 8 weeks behind the normal schedule. Heavy snow stopped the Iowa soybean harvest progress which remains 94 percent complete. Many Southern States made some limited harvesting progress in spite of rainy weather. The quality of unharvested beans continues to deteriorate. Progress was slow in Arkansas at 75 percent complete and in Mississippi at 67 percent complete.

OTHER CROPS: Ice and snow in Texas delayed the completion of sorghum grain harvesting which remains 98 percent complete, the same as a week earlier. Progress was made in Kansas at 74 percent complete and in Nebraska at 82 percent complete. Many unharvested sorghum grain fields in Nebraska are severely lodged and may not be harvested until the snow cover is gone. In Oklahoma, some combines got back into the fields late in the week but harvesting progress remains about 67 percent. The Missouri sorghum grain harvest advanced slightly to 77 percent complete with freezing rain and snow partially damaging unharvested acreage. Burley tobacco markets closed December 14 and will reopen after the Christmas and New Year holidays.

Fruits and Nuts: Rain in Florida has improved citrus trees and fruit condition and no damage from cold weather has occurred. Fruit are coloring well and harvest is becoming very active. Texas citrus supplies are increasing as cooler wet weather has aided in coloring and sizing of fruit. Record breaking cold temperatures in California slowed the harvest of navel oranges. Pecan harvesting in Georgia is nearly complete while wet weather continues to slow harvesting completion in Texas.

Vegetables: Tender Florida vegetables escaped frost damage last week but high winds caused some windburn and fruit scar damage with some loss expected of young peppers, cucumbers and squash. In the Texas Winter Garden area, a freeze killed most tender vegetables. Record breaking cold weather in California slowed vegetable harvesting. Artichoke production was wiped out and will take several weeks to resume. Lettuce harvesting in the Imperial Valley is increasing, but morning harvesting was delayed last week due to ice on lettuce heads.

PASTURES AND LIVESTOCK: Livestock growers across the Nation have stepped up supplemental feeding as a result of abnormally cold, wet weather. Condition of livestock is generally fair to good. A second week of record breaking cold in the West and Great Plains has been hard on livestock and continues to make their care difficult.

Arlon M. Scott
Agricultural Statistician

Temperature and Precipitation Data for the Week Ending Midnight, L.s.t., December 17, 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 . . .	46	- 1	1.4	+ .3	New Orleans . . .	53	- 2	1.0	- .1	OKLA.Okla. City . . .	27	-14	.2	- .1
Mobile . . .	54	0	1.5	+ .2	Shreveport . . .	37	-13	2.0	+ .9	Tulsa . . .	25	-15	.6	+ .2
Montgomery . . .	53	+ 4	2.3	+1.2	MAINE.Caribou . . .	5	-11	1.9	+1.3	OREG.Astoria . . .	35	- 9	4.1	+ .8
ALASKA.Anchorage . . .	12	- 3	T	- .2	Portland . . .	21	- 5	1.0	+ .1	Burns . . .	11	-18	.9	+ .6
Barrow . . .	15	+26	T	0	MD.Baltimore . . .	36	+ 1	.8	+ .1	Medford . . .	27	-10	.6	- .2
Fairbanks . . .	2	+10	.5	+ .4	MASS.Boston . . .	30	- 4	.9	+ .1	Pendleton . . .	12	-24	.8	+ .4
Juneau . . .	20	- 9	1.4	+ .5	Chatham . . .	35	- 8	1.2	- .1	Portland . . .	29	-13	1.8	+ .3
Nome . . .	11	+ 4	T	- .1	MICH.Aipena . . .	17	- 8	1.1	+ .7	Salem . . .	28	-14	1.3	- .4
ARIZ.Flagstaff . . .	14	-17	T	- .4	Detroit . . .	24	- 5	1.0	+ .5	PA.Allentown . . .	31	0	1.0	+ .3
Phoenix . . .	47	- 5	0	- .2	Flint . . .	23	- 3	1.3	+ .9	Erie . . .	29	0	1.4	+ .8
Tucson . . .	44	- 8	0	- .2	Grand Rapids . . .	---	---	---	---	Harrisburg . . .	32	- 1	1.2	+ .5
Winslow . . .	28	- 5	0	- .1	Houghton Lake . . .	15	- 9	1.1	+ .7	Philadelphia . . .	35	+ 1	.8	+ .2
Yuma . . .	47	- 9	0	- .1	Lansing . . .	21	- 7	1.5	+1.1	Pittsburgh . . .	31	0	.6	0
ARK.Fort Smith . . .	29	-14	.7	+ .1	Marquette . . .	15	-10	.9	+ .5	Scranton . . .	27	- 2	.5	0
Little Rock . . .	31	-11	1.3	+ .4	Muskegon . . .	23	- 7	1.4	+ .9	R.I.Providence . . .	29	- 3	1.4	+ .6
CALIF.Bakersfield . . .	37	-12	0	- .2	S.Ste.Marie . . .	15	- 6	.6	+ .1	S.C.Charleston . . .	57	+ 7	1.3	+ .6
Eureka . . .	45	- 4	1.8	+ .2	MINN.Duluth . . .	3	-11	T	- .3	Columbia . . .	50	+ 4	1.9	+1.1
Fresno . . .	35	-12	.4	- .1	Internatl Falls . . .	3	- 7	T	- .2	Greenville . . .	44	0	3.1	+2.2
Los Angeles . . .	55	- 4	0	- .6	Minneapolis . . .	3	-16	.1	- .1	S.DAK.Aberdeen . . .	3	-16	T	- .1
Red Bluff . . .	34	-13	1.2	+ .2	Rochester . . .	1	-18	.5	+ .3	Huron . . .	7	-12	T	- .1
San Diego . . .	55	- 2	0	- .6	St. Cloud . . .	2	-15	T	- .2	Rapid City . . .	12	-16	T	- .1
San Francisco . . .	39	-11	.9	- .1	MISS.Jackson . . .	44	- 5	2.6	+1.3	Sioux Falls . . .	8	-14	T	- .1
Stockton . . .	35	-11	1.0	+ .3	Meridian . . .	46	- 9	2.2	+1.0	TENN.Chattanooga . . .	39	- 3	1.5	+ .3
COLO.Denver . . .	19	-13	0	- .1	MO.Columbia . . .	19	-14	1.8	+1.4	Knoxville . . .	40	- 2	1.7	+ .7
Grand Junction . . .	18	-11	T	- .2	Kansas City . . .	17	-20	.8	+ .4	Memphis . . .	33	- 9	1.6	+ .5
Pueblo . . .	11	-23	.2	+ .1	St. Louis . . .	24	-11	1.6	+1.1	Nashville . . .	34	- 8	1.9	+ .9
CONN.Bridgeport . . .	31	- 3	1.2	+ .5	Springfield . . .	24	-13	1.2	+ .7	TEX.Abilene . . .	31	-15	T	- .3
Hartford . . .	26	- 4	1.5	+ .7	MONT.Billings . . .	17	-12	T	- .1	Amarillo . . .	24	-15	.3	+ .1
D.C.Washington . . .	39	+ 1	.8	+ .2	Glasgow . . .	5	- 3	.1	0	Austin . . .	38	-15	.4	- .2
FLA.Apalachicola . . .	---	---	---	---	Great Falls . . .	20	- 8	.1	0	Beaumont . . .	---	---	---	---
Ft. Myers . . .	70	+ 5	.5	+ .2	Haure . . .	9	-12	.3	+ .2	Brownsville . . .	49	-14	.1	- .3
Jacksonville . . .	62	+ 5	2.1	+1.6	Helena . . .	9	-16	.1	0	Corpus Christi . . .	44	-16	.1	- .4
Key West . . .	76	+ 5	2.0	+1.6	Kalispell . . .	8	-17	.2	- .1	Dallas . . .	36	-12	.6	0
Lakeland . . .	66	+ 3	.8	+ .3	Miles City . . .	9	-15	.1	0	Del Rio . . .	41	-12	T	- .2
Miami . . .	72	+ 4	1.7	+1.3	Missoula . . .	10	-14	.2	0	El Paso . . .	39	- 5	.3	- .2
Orlando . . .	69	+ 8	.2	- .3	NEBR.Grand Island . . .	6	-21	.4	+ .3	Fort Worth . . .	35	-13	.3	- .2
Tallahassee . . .	60	+ 6	0	- .8	Lincoln . . .	8	-23	.4	+ .2	Galveston . . .	47	-11	.5	- .5
Tampa . . .	68	+ 6	.2	- .2	Norfolk . . .	6	-20	.6	+ .4	Houston . . .	41	-13	1.7	+ .7
GA.Atlanta . . .	45	0	3.4	+2.4	North Platte . . .	5	-23	.2	+ .1	Lubbock . . .	30	- 9	.1	0
Augusta . . .	51	+ 4	1.4	+ .6	Omaha . . .	11	-17	.4	+ .2	Midland . . .	34	-12	.2	+ .1
Macon . . .	58	+ 9	2.2	+1.3	Valentine . . .	7	-19	T	- .1	San Angelo . . .	34	-14	T	- .2
Savannah . . .	59	+ 7	.1	- .6	NEV.Ely . . .	9	-18	T	- .2	San Antonio . . .	41	-13	.2	- .2
HAWAII.Hilo . . .	71	- 1	.5	-3.0	Las Vegas . . .	34	-11	0	- .1	San Antonio . . .	41	-17	.1	- .5
Honolulu . . .	71	- 3	.8	+ .1	Reno . . .	13	-19	T	- .3	Victoria . . .	35	-16	.7	+ .1
Kahului . . .	71	- 2	.4	-1.0	Winnemucca . . .	5	-24	.2	0	Waco . . .	32	-13	.1	- .2
Lihue . . .	69	- 4	.8	- .4	N.H.Concord . . .	19	- 6	.4	- .3	Wichita Falls . . .	20	-11	.1	- .2
IDAHO.Boise . . .	7	-26	.5	+ .2	N.J.Atlantic City . . .	37	0	.6	- .1	UTAH.Blanding . . .	5	-25	.2	- .1
Lewiston . . .	21	-15	.6	+ .3	Trenton . . .	36	+ 1	.8	+ .1	Salt Lake City . . .	17	- 5	.9	+ .4
Pocatello . . .	5	-23	.2	0	N.MEX.Albuquerque . . .	28	-10	.1	0	VT.Burlington . . .	37	- 1	.8	+ .1
ILL.Cairo . . .	29	-11	1.1	+ .3	Roswell . . .	26	-13	.2	+ .1	VA.Lynchburg . . .	45	+ 2	2.5	+1.9
Chicago . . .	15	-15	1.9	+1.5	N.Y.Albany . . .	24	- 2	1.2	+ .6	Norfolk . . .	40	+ 1	1.3	+ .6
Moline . . .	9	-18	.6	+ .2	Binghamton . . .	24	- 3	1.5	+ .9	Roanoke . . .	38	0	1.1	+ .4
Peoria . . .	13	-17	1.5	+1.1	Buffalo . . .	28	0	1.3	+ .6	WASH.Colville . . .	18	-10	.9	+ .5
Rockford . . .	9	-17	.5	+ .1	New York . . .	34	- 2	.9	+ .1	Omak . . .	17	- 9	.5	+ .1
Springfield . . .	17	-15	1.9	+1.5	Rochester . . .	30	+ 1	.8	+ .3	Quillayute . . .	36	- 6	4.4	+ .6
IND.Evansville . . .	25	-12	.8	+ .1	Syracuse . . .	27	- 1	.7	0	Seattle-Tacoma . . .	35	- 6	2.2	+ .7
Fort Wayne . . .	19	- 9	1.3	+ .8	N.C.Asheville . . .	41	+ 1	1.9	+1.2	Spokane . . .	17	-14	.7	+ .1
Indianapolis . . .	21	-10	.8	+ .2	Charlotte . . .	42	- 1	3.2	+2.4	Walla Walla . . .	14	-24	.6	+ .2
South Bend . . .	18	-11	1.9	+1.4	Hatteras . . .	38	- 2	2.2	+1.5	Yakima . . .	14	-18	.4	+ .1
IOWA.Burlington . . .	11	-18	.5	+ .2	Greensboro . . .	53	+ 5	1.0	- .1	W.VA.Beckley . . .	33	- 1	.7	- .1
Des Moines . . .	6	-20	.6	+ .3	Raleigh . . .	40	- 2	3.0	+2.3	Charleston . . .	39	+ 2	1.1	+ .4
Dubuque . . .	6	-18	.7	+ .3	Wilmington . . .	49	+ 1	.4	- .4	Huntington . . .	33	- 5	.7	0
Sioux City . . .	7	-19	.4	+ .3	N.DAK.Bismarck . . .	3	-15	T	- .1	Parkersburg . . .	33	- 3	.7	+ .1
KANS.Concordia . . .	12	-20	.4	+ .2	Fargo . . .	- 2	-17	T	- .1	WIS.Green Bay . . .	7	-15	.4	+ .1
Dodge City . . .	17	-18	.2	+ .1	Williston . . .	6	-11	T	- .1	La Crosse . . .	5	-17	.9	+ .7
Goodland . . .	10	-21	.4	+ .3	OHIO.Akron-Canton . . .	---	---	---	---	Madison . . .	5	-18	.6	+ .3
Topeka . . .	19	-15	.6	+ .3	Cincinnati . . .	26	- 7	.6	0	Milwaukee . . .	11	-14	.6	+ .2
Wichita . . .	20	-16	.6	+ .4	Cleveland . . .	29	- 1	1.3	+ .8	WYO.Casper . . .	15	-13	0	- .1
KY.Lexington . . .	32	- 4	1.2	+ .4	Columbus . . .	28	- 3	.6	+ .1	Cheyenne . . .	19	-11	0	- .1
Louisville . . .	30	- 6	1.1	+ .4	Dayton . . .	23	- 8	.7	+ .2	Lander . . .	0	-24	0	- .1
LA.Baton Rouge . . .	50	- 4	.9	- .2	Toledo . . .	22	- 7	1.2	+ .7	Sheridan . . .	7	-20	0	- .1
Lake Charles . . .	45	-10	.6	- .7	Youngstown . . .	28	- 1	1.3	+ .7	P.R. San Juan . . .	---	---	---	---

* 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: Cloudy, rainy and very warm until sharp change to colder Friday. Clear weekend with lowest temperatures of season. Lowest 15° at Russellville and Pinson. Subfreezing statewide. Temperatures plunged from 19° above normal Tuesday with high of 82° at Luverne to 14° below normal weekend. Heaviest rains Thursday night preceding cold front, 1.00 to 3.00 inches general. Heavy rains held farm activities to a minimum. Harvest remaining cotton near standstill; much of production still in fields, primarily north, could be lost. Corn harvest pushed ahead slightly with about 6% remaining to be harvested. Combining of soybeans was about 88% complete; quality of unharvested beans deteriorated further. Ample moisture and warm temperatures until weekend provided favorable growing conditions for small grains. Grazing of these crops limited as most fields too wet to support livestock. Stockmen fed large amounts of hay as subfreezing temperatures prevailed over weekend. Livestock in fair to good condition, but rise in feed costs caused some producers to reduce concentrates in brood cow rations.

ARIZONA: Skies were clear over State most of week and temperatures much below normal. Freezing temperatures occurred in colder sections of Salt River Valley on five nights and in Yuma area on four nights. No significant precipitation was reported. Cotton harvest, residue disposal continue. First picking completed Yuma, some plow-up underway. Santa Cruz harvest complete. Sorghum grain harvest nearly completed Yuma, Graham. Sugar beet harvest normal. Small grain plantings continue. Alfalfa hay injury by sub-freezing temperatures, Yuma County. New renovated plantings satisfactory. Graham County harvest completed. Lettuce harvest continued Pinal, Pima Counties. Harvest other mixed vegetables continued central western areas. Later plantings continued good progress. Harvest lemons, tangelos, tangerines, navel, sweet oranges continued Yuma, Salt River Valley. Grapefruit harvest very limited, most groves escaped serious injury. Ranges fair to mostly good. Fall precipitation too late most areas to improve range feed, spring outlook generally good. Stockwater adequate, supplemental feeding for winter maintenance. Cattle, calves fair to good. Sheep, lambs in desert pastures good. Sheep on northern Indian reservations fair.

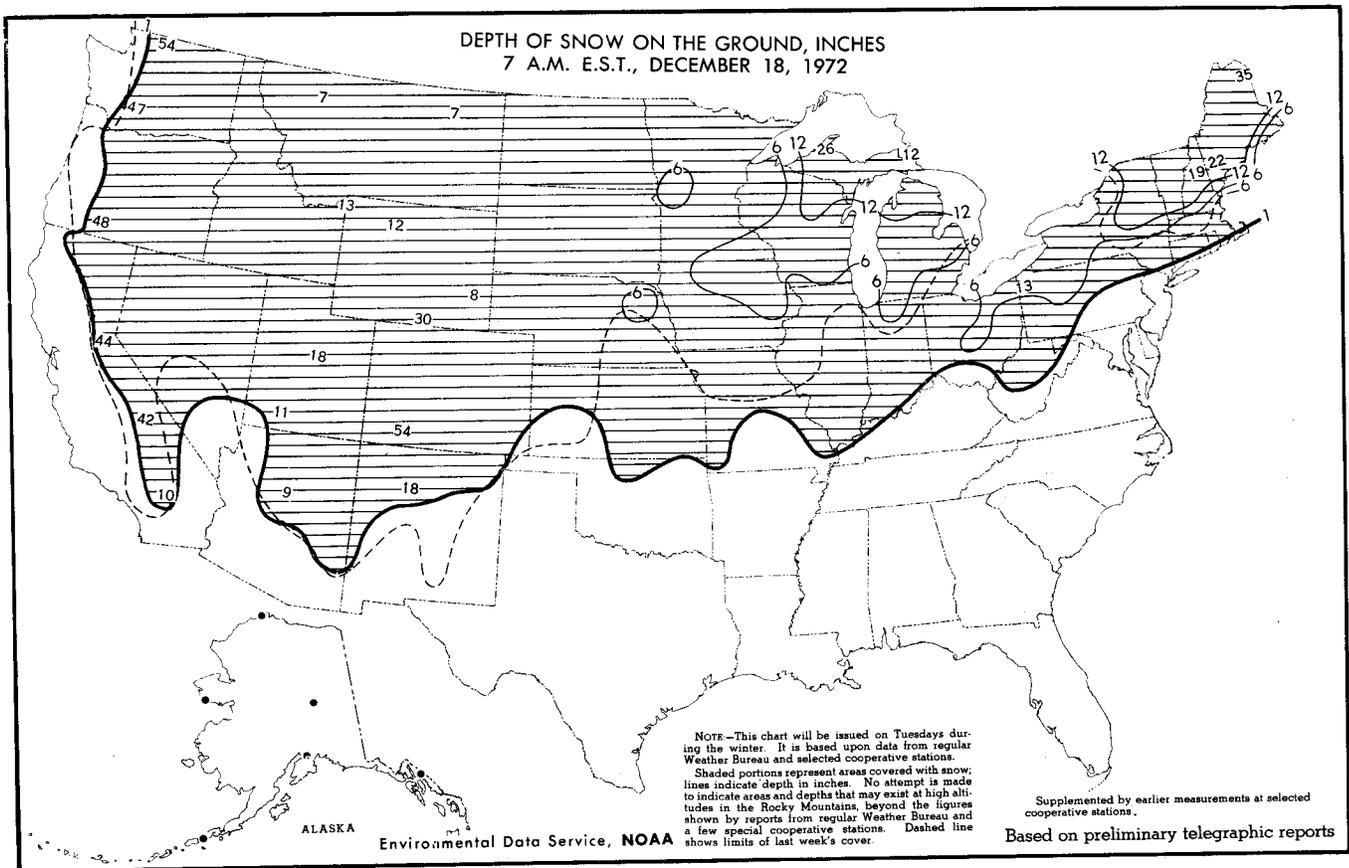
ARKANSAS: Weekly mean temperatures 9° to 19° below normal. Greatest departures in Hot Springs area of central section. Cold through most of week with some warming on weekend. Highest 48° at Fort Smith and Texarkana on 17th. Lowest 4° at Calico Rock in North-central section on 17th. Precipitation generally 1.00 to 2.25 inches over State, but amounts in 0.50 to 1.00 inch range northwest corner. Locally heavy precipitation at Hot Springs with weekly total 4.16 inches. Major occurrences of freezing rain and sleet early in week with widespread disruption of travel. Some freezing rain and snow again latter part of week followed by fair weather on weekend. Some fields, mostly soybeans, again flooded. Weather cleared Friday, but fields too soft for much harvesting remainder of week. Cotton picking remains about 90% finished and combining soybeans around 3/4 complete. Unharvested crops show further deterioration. Small grains good con-

dition and providing some grazing. Livestock situation satisfactory. Feeding increased with freezing temperatures at end of week.

CALIFORNIA: Coldest December week since 1932; one of coldest ever. Many low temperature records set. Average temperatures ranged from 8° below normal on south coast to 32° below normal Alturas. Most agricultural areas 16° below normal, with below-freezing minimums each day. Moderate precipitation northern half of State over weekend, slightly warmer. Very cold, wet weather slowed fieldwork; harvest dry beans, milo, rice continues. Planting small grains continues. Cotton harvest continues San Joaquin Valley and desert areas. Wet fields, fog hampering operations in central valley. Fruit growers applying dormant sprays, pruning active. Harvest navel oranges slowed by recent cold weather. Harvest tangerines, grapefruit, dates seasonally active desert areas; picking continues throughout south coast districts. Artichokes current production wiped out, will take several weeks for harvest to resume. Broccoli and cauliflower shipments slow Salinas and Ventura County. Carrots active Coachella Valley, light Imperial. Celery limited movement central coast. Lettuce Imperial increasing, but morning harvest delayed due to ice on heads. Potato slow Stockton and Central Valley. Range feed prospects continue excellent. Rains, snowfall replenished soil moisture, reservoirs. Extremely cold weather retarding grass development. Supplemental feeding hay, concentrates necessary to maintain stock. Some loss new calves, lambs due cold wet conditions. Feedlot operators marketing cattle when ready, daily gain reduced. Milk, egg production rates off. Last mature turkeys moving to processing plants. Bee colonies being supplemented, some freeze loss reported.

COLORADO: Very cold weather continued from previous week over entire State with gradual warming latter part of week. Greatest departures from weekly normal temperatures occurred on eastern plains. Only the extreme southwest escaped sub-zero weather. Many -25° to -35° readings throughout State; coldest -37° at Fraser on 15th. Light to moderate snowfall all areas. Little or no fieldwork past week. Most areas remained snow covered. Corn and sorghum grain harvest limited to fields where ground was sufficiently frozen to support machinery. Most unharvested corn and sorghum still standing. Soil moisture supplies adequate to surplus. Winter wheat and barley condition good to excellent, most acreage still under snow. Ranges and pastures provided virtually no forage, heavy supplemental feeding required statewide. Livestock condition fair.

FLORIDA: Temperatures 10° to 15° above normal through Friday most sections and much below normal Saturday and Sunday. Sunday minima coldest of season with 20's and 30's except for extreme south. Rainfall averaged less than 0.25 inch with few isolated reports of 1.00 to 2.00 inches. Some soybeans and cotton still to be harvested. Sugarcane harvest progressing. Temporary winter pastures making excellent progress. Cattle and calves fair to mostly good; calving continues active. No cold damage to citrus; tree and fruit condition im-



proved; rain all areas beneficial. Fruit coloring well, harvest very active. Harvest all vegetables very active last week to meet holiday demand. Weekend cold front brought near freezing temperatures into all areas. High winds prevented frost damage, but caused some wind burn and possible fruit scar in most crops. Some loss of young pepper, cucumbers and squash expected in southwest and east coast areas. Cooler weather beneficial overall for hardy crops.

GEORGIA: Rainfall heavy to excessive north and central, decreasing to light extreme south. Heaviest rains Thursday night and Friday with 24-hour totals exceeding 3.00 inches over much of north-east. Cloudy and mild north and unusually warm in south until Friday. Clearing and turning cold late Friday and continued cold through the weekend. Highs reached 80's in south on 3 or 4 days first part of week. Freezing entire State Sunday morning with readings under 10° in mountains. Averages ranged from slightly below normal north to about 9° above normal southwest. Soil moisture adequate to excessive. Conditions of small grains and pastures mostly fair to good. Land preparation and fall seeding delayed. Harvest cotton, corn, pecans, and soybeans nearly complete. Livestock condition fair to good.

HAWAII: Shower activity increased latter part of week. Improved soil moisture conditions in usually dry areas. Problems with insects and diseases; spray programs intensified. Condition of vegetable and fruit crops fair to good--supplies adequate. Sugarcane harvesting about over. Planting operations continuing on pineapple plantations. Soil moisture adequate most pastures. Cattle fair to good condition.

IDAHO: Very cold air mass that spread over area during previous week remained over area. As a result, temperatures averaged 21° to 39° below normal with the lesser departures north. An alltime record low temperature was established at Boise with a reading of -23° on 10th. New record low temperatures for December were set at Aberdeen with -32°, Buhl -20°, Burley -29°, Fairfield -37°, Idaho Falls and Malad -30°, and Pocatello -28°. Rupert and Twin Falls tied their previous December records with -27° and -19°, respectively. Precipitation below normal and in form of snow. Amounts greatest in southwest with 0.10 to 0.15 inch. Snow accumulations in mountains did not increase appreciably. Ice jamming became a problem on Portneuf and Snake Rivers. The problem at Pocatello was solved early in week, but flooding occurred in Blackfoot and Weiser areas at end of week. Some homes evacuated and further flooding feared particularly in the Weiser and Payette areas. Caring for livestock difficult. Mechanical feeding equipment often would not operate and frozen water lines common. Some early calving operations had losses especially dairy herds. Farm-to-market potato and onion movement at a standstill.

ILLINOIS: Temperatures averaged 11° to 18° below normal with central and northern Illinois experiencing subzero temperatures early in week. Both Moline and Rockford reported 18° below zero on 11th, record lows for the date. Precipitation totals over 1.00 inch were common in divisions and frequently exceeded 2.00 inches in central Illinois. Much of this precipitation came on 12th as freezing rain in south and 2 to 6 inches of snow and sleet in northern Illinois. Frozen ground allowed some progress, but icy conditions hampered harvest. Corn harvest 82% complete, normally all harvested.

Soybeans made little progress, 87% completed. Grain sorghum harvest 80% complete. Plowing made little progress. Soil moisture, adequate 22%, surplus 78%. Nearly 1 day suitable limited field-work, most activity northern part of State.

INDIANA: Severe winter week. Rain, freezing rain, and snow early in period glazed roads and crops with 1/4 inch of ice primarily in west-central and northwest. Highway travel, particularly on untreated roads, was very hazardous. An arctic air mass brought sunshine but temperatures slipped to 1° above on 17th. Temperatures averaged 8° below normal. Two days suitable for fieldwork. Topsoil and subsoil moisture mostly surplus. Conditions very bad for harvest. Corn 60% harvested, a month behind average, 6 weeks behind 1971. Soybean combining at standstill, still 60% complete, 8 weeks behind last year and average. No advance in plowing for 1973 planted crops.

IOWA: Extremely cold, averaging 16° to 19° sub-normal. Heavy snow 12th, turning colder with minima to -23° F. at Cherokee and Elkader on 14th, moderating on weekend. Snow cover 4 inches most of south and west, to 7 to 9 inches north-central and northeast at weekend. Snow early in week slowed harvesting. Approximately 3 days suitable for fieldwork. Corn harvest progressed slightly to 88% complete, behind near completion for 1971 and 1966 - 1970 average. Harvest ranges from 98% complete in northwest to 72% in southwest. Soybean harvest is 94% complete, compared with virtual completion for 1971 and 1966 - 1970 average. Approximately 90% of popcorn and 88% of grain sorghum harvested.

KANSAS: Another cold week. Warming trend late in period. Mean temperatures averaged much below normal. Maxima mostly teens to 20's warming to 30's and 40's 17th. Minima below zero parts of State several days. Lowest 14° below zero locally northwest 11th and 13th. Major storm early in period brought freezing rain, snow or sleet to entire State. Weekly precipitation totals 0.20 to 0.50 west and 0.50 to 1.00 east. Most of State still snow-covered at end of week. Fall crop harvest progressed some last week despite cold, stormy weather, but remains well behind normal. Sorghum 74% combined, 66% week earlier, and usual near completion by this date. Corn 84% harvested, 80% week earlier, normally nearly completed. Soybean harvest 82% completed, 78% last week, usually virtually completed. Wheat good to excellent, but little growth, and fields covered with snow and ice. Moisture adequate to surplus. Livestock care difficult due to cold weather and snow. Stormy weather hard on young stock. Supplemental feeding heavy. Snow and ice blocked roads and impeded movement of feed; some local scarcities developed.

KENTUCKY: Coldest week in 22 months in west Kentucky, in 10 months balance of State. Temperatures averaging 5° to 12° below normal except near normal in southeast. Precipitation on 3 days totaling 0.50 inch to a little over 1.50 inches. Freezing rain some sections on 11th and 15th. One to 3 inches snowfall on 15th some locations northern portions of west, central and Bluegrass. Mostly cloudy until sunny last two days. Upper Cumberland River in southeast 5 to 10 feet above flood stage several points early in week, then falling. Ohio River near or above bankful from Ashland to mouth early in week and still above flood stage mid- and lower reach end of week. Green River in west and central near or above bankful most of week. Maximum temperatures in upper 60's on 12th

eastern 2/3, record or near record readings for date. Temperatures last 2 days 15° to 25° below normal. Many soybeans still in fields in west. Some fields under water, others in sea of mud. Losses could be considerable and yield on late beans will be reduced. Harvesting progress corn and soybeans extremely slow for about 2 months. Prices advancing sharply as market reflects possibility of production losses. Demand for hay strong. Tobacco markets closing for holidays. Livestock generally vigorous and healthy.

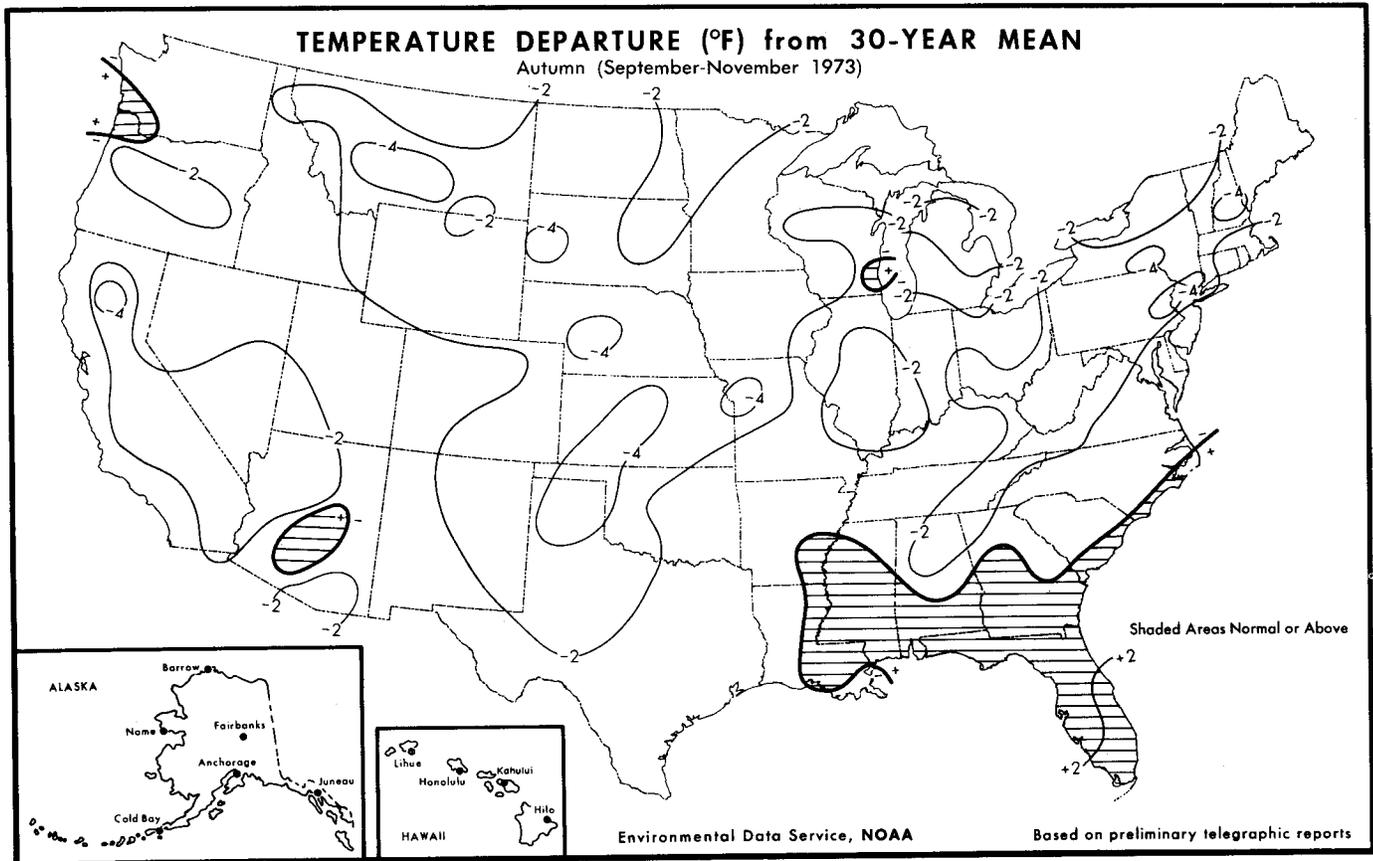
LOUISIANA: Weekly temperature averages 10° to 13° below normal except 4° to 6° below southeast 1/3. Cold all week except brief spring-like warmth central and south Tuesday. Strong gusty winds sharply colder on Friday. Clear weekend with hard freeze except immediate coast. Extremes: 82° Baton Rouge and Diamond Tuesday; 18° Monroe Sunday. Daily rain north through Thursday with scattered showers south. Showers especially heavy north with cold air influx early Friday. Weekly totals 1.50 to more than 4.00 inches north and central, 0.50 to 1.50 inches south. Greatest one-day rain total 3.09 inches measured at Tallulah Friday morning. Almost daily rainfall in the north and excessive moisture statewide prevented any harvest of cotton and soybeans. Harvest of sugarcane continued at a slow pace. Cotton 88% and soybeans 87% harvested. Sugarcane about 80% harvested, some mills operating at less than capacity owing to excessive trash and mud. Some pecans still being gathered. Several hard freezes halted growth of small grains and rye grass. Most fields too boggy to graze. Pasture feed about average, but supplemental feeding active. Livestock in fair to good condition.

MARYLAND AND DELAWARE: In spite of a very cold weekend, temperatures averaged slightly above normal, up to 5° above in southern areas. Extremes mostly mid-50's to low 60's, teens and low 20's except between 5° and 10° in west. Precipitation mostly as rain, totaled between 0.75 and 1.00 inch. Snow cover of 1 to 5 inches in Garrett County area at end of period. Soils saturated all areas. About 5% of corn and 20% of soybeans still unharvested. Low spots abandoned in many fields. Early seeded small grain crop rated good, late seedings only fair.

MICHIGAN: Continued cloudy and cold, significant snow and freezing rain early, warmer midweek, colder, light snow late in week. Temperatures averaged 6° to 10° below normal Upper Peninsula, 4° to 10° below normal Lower Peninsula, largest departures interior. Precipitation 0.50 to 1.00 inch Upper Peninsula, 1.00 to 1.75 inch Lower Peninsula. Snow depths end of week 7 to 10 inches central and southwest, 2 to 6 inches southeast, increasing to 24 inches northern sections.

MINNESOTA: This is the second consecutive week temperatures have been much below normal. The southern 2/3 and the northwest averaged 16° below normal and the northeast and north-central averaged about 10° below normal. Below zero temperatures have been recorded 14 out of the first 17 days across State. Little to no rain except south-central and southeast districts which received late on 11th and the night of 12th 3- to 8-inch snowfalls or water content of 0.25 inch to near 1.00 inch in very southeast corner. Snow depths: northern 1/3 and southwest about 2 inches, southeast and south-central and all central districts 4 to 8 inches with near 12 inches in southeast counties.

(Continued on Page 10)



AUTUMN WEATHER (September - November 1972)

TEMPERATURE: Temperatures over the entire Nation were below normal over the past three months. The only notable exception was in the southeast where portions of Arkansas, Louisiana, Mississippi, Alabama and Georgia, and all of Florida was normal to above normal.

Generally, September temperatures averaged cooler than normal from Washington and Oregon to the Great Lakes and from California to western Texas. Above normal temperatures predominated from eastern Texas to the middle and southern Atlantic coast. A series of cold fronts during the month brought refreshing autumn weather to much of the central and eastern portions of the country, while warm, humid air flowed over the southern States.

October temperatures averaged cooler than normal over most of the Nation. The main exceptions included an area from east-central Arizona to the western Gulf Coast and from Louisiana to southern Georgia.

Some quick temperature changes occurred in October due to several cold fronts that crossed the Great Plains. For example, warm air ahead of one front allowed the mercury to climb to 102° at Wichita Falls, Texas on the 17th, but the maximum temperature could reach only 49° on the 19th after an early morning low of 40°, following the frontal passage.

Most of the Nation was again cooler than normal in November except for along the Canadian border from Washington to Minnesota and along the Atlantic coast from Norfolk, Va., to Key West, Florida. A large area from the central and southern Rocky Mountains to the Mississippi averaged 3° to 9° below normal.

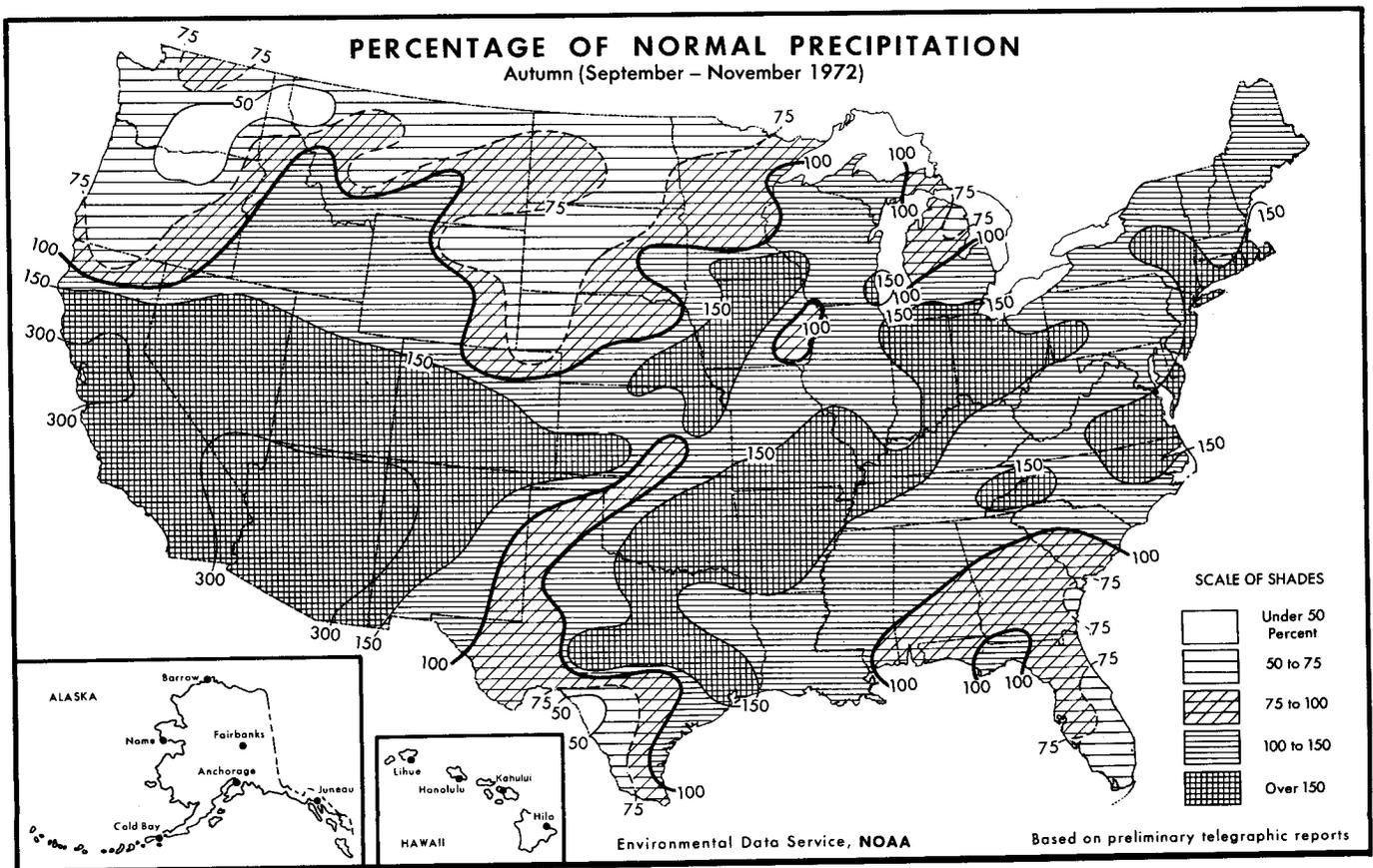
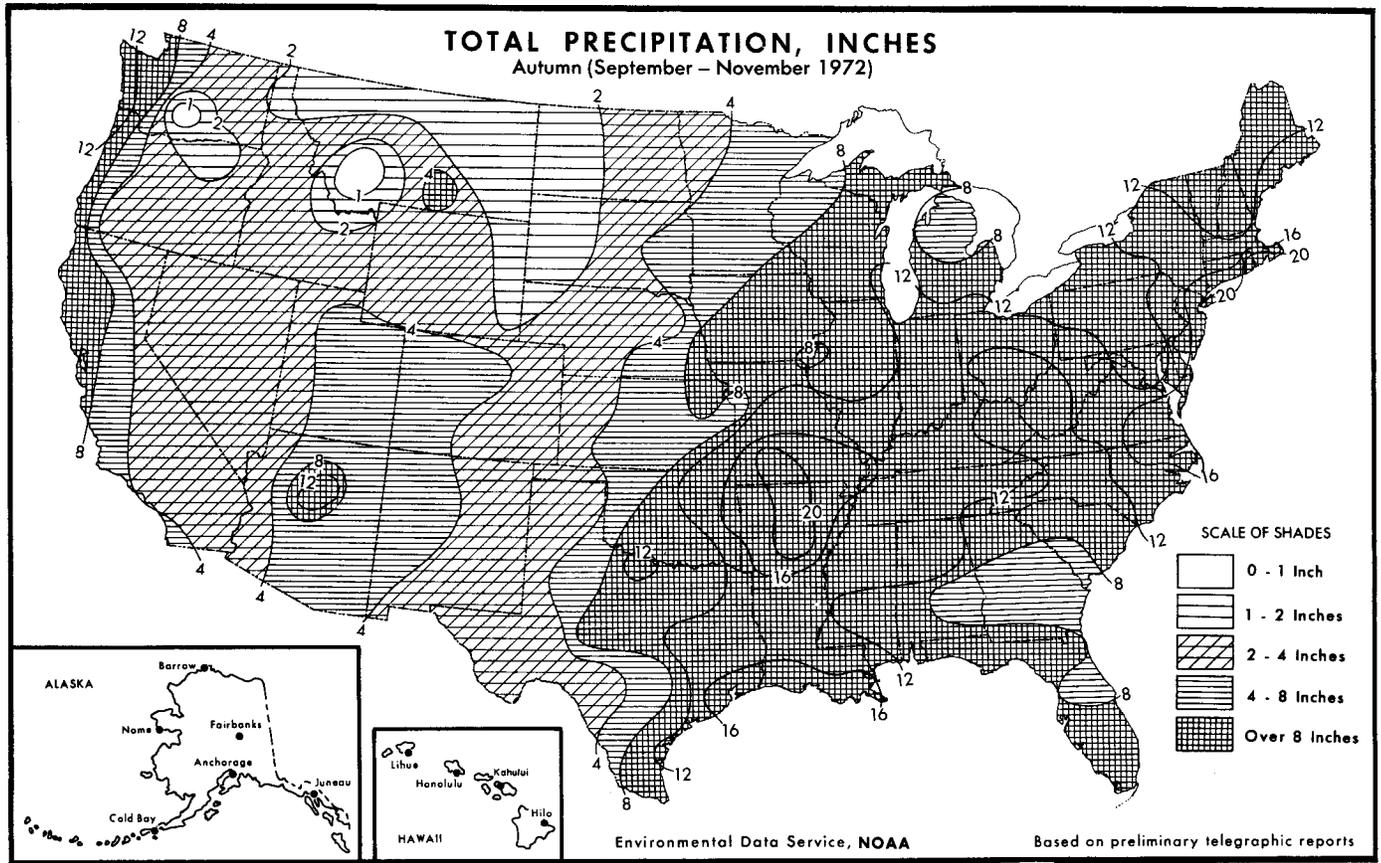
PRECIPITATION: Total rainfall during the autumn months ranged from 1.0 inch in Havre, Montana to over 20 inches in parts of Missouri and Arkansas. While the 21.2 inches at Springfield, Mo., was only twice the normal rainfall for the area, the 2.7 to 12.0 inches that fell over Arizona was over 3 times the normal rainfall, much of it falling during the month of October.

Stormy weather played an important role in the precipitation picture in September. Thunderstorm activity dumped 2.0 to 4.0 inches in 24 hours over east-central Kansas. Hurricane Carrie dumped up to 8.0 inches of rain over eastern Massachusetts. At midmonth, thunderstorm activity dropped especially heavy rains over western Iowa and eastern Nebraska. Several locations received 10.0 inches or more the night of the 17th topped by 21.00 inches at Earling, Iowa.

During October unusually heavy rains fell over the Desert Southwest. An extra-tropical Low developed from Tropical Storm Joanne and produced heavy rains. Over a 4-day period, 1.93 inches fell at Phoenix, Arizona. This total is more than 4 times the normal rainfall for the entire month. Another storm off the coast of North Carolina dumped 6.0 to 12.0 inches over interior Virginia and lesser amounts in western Maryland and North Carolina. Later in the month heavy rains fell in East Texas, southern Oklahoma, northern Louisiana and western Arkansas, where some weekly totals ranged from 6.00 to 13.00 inches.

November was another stormy month with numerous storms dumping rain and snow over various parts of the country. Rainfall amounts for the month exceeded 8.0 inches in some areas. Precipitation was

(Continued on page 10)



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generally normal to above normal over the entire Nation except for portions of Texas and Kansas and the area north of a line from northern California to Lower Michigan.

R.E. Felch

(Continued from Page 7)

MISSISSIPPI: Weekly temperatures ranged from 9° below normal in north, increasing up to 10° above normal south. Daily temperature extremes: 81° at Wiggins on 10th; 26° on 11th at Tunica. From 3 to 7 days of precipitation at most stations brought weekly totals of 1.00 to 7.00 inches. Over weekend temperatures dropped below freezing across State with most minimums in teens or low 20's; the only precipitation was reported on Saturday and it was light. Average only 0.3 day suitable for fieldwork last week as rainfall continued to limit field activities. Harvest of cotton and corn at virtual standstill with a small advance in combining of soybeans. Cotton 86%, corn 92% and soybeans 67% harvested. Normally over 95% of these crops out of the fields by this date. Surplus of stored hay and roughage on farms, while feed grains reserves are short to adequate.

MISSOURI: A severe ice storm coated most of State with a 1- to 3-inch glaze of ice early in the week. Numerous reports of downed power lines and broken trees with heaviest damage in southwest. Precipitation amounts averaged about 1.50 inches in all but the northwest where amounts were less than 1.50 inch. Temperatures remained subfreezing for the second week in a row in all but the Bootheel region. Subzero readings were common northwest. Temperatures averaged 10° to 15° below normal. Warming trend began at end of period. Snow and freezing rain curtailed harvesting progress, less than 1 day suitable for fieldwork. Corn 74% harvested, up 2 percentage points from previous week. Soybeans 69% harvested, compared to 67% last week. Grain sorghum partially damaged by freezing rain and snow, 77% harvested. Cotton slight progress last week, 60% harvested. Topsoil moisture mostly surplus.

MONTANA: Temperatures averaged 10° to 15° below normal. Very cold temperatures of previous week gave way slowly to a warming trend that covered all the State by the weekend. Near normal precipitation fell over all but the southwest and south-central portions where little or no precipitation was recorded. Precipitation was recorded early in the week over the eastern portions and almost daily in the western portions. Precipitation amounts were less than 0.20 inch. Winter wheat mostly fair to good condition. Snow cover protection fair to good, but receding some areas. Some reported loss from blowing in Cascade County area. Stockwater supply adequate. Grazing difficult, but improving.

NEBRASKA: Cold spell which began on 2d continued last week. Temperatures averaged 15° to 23° subnormal, with subzero minimums as the rule. Lowest -24° at Arnold and Bridgeport on 10th. Snow storm on 11th and 12th deposited 6 to 9 inches of snow from southwest to northeast corner of State, in addition to extreme southeast. Sharp moderation in temperatures on 17th; Sidney reported 50° for State high. Harvest proceeded at slow pace most areas. Snowfall last week did not drift nor cling. Grain drying hampered by fuel shortages. Corn harvest slow and difficult, but progressed to 85% completed. Unharvested corn in good condition, field losses

less than anticipated. Most fields snow filled and harvesting slow. About 80 million bushels of corn remain to be harvested. Sorghum harvest 82% complete. Unharvested, severely lodged fields in poor condition; many fields will not be harvested until snowcover is gone. Farmers have concentrated on harvesting corn first. More than 25 million bushels of sorghum grain remain in fields. Soybean harvest 94% complete. Winter wheat in good condition. Livestock in good condition, but under stress from snow and cold. More livestock being turned into harvested fields as available, helping to conserve hay and forage.

NEVADA: Another cold week with warming trend at weekend. Temperatures averaged 13° to 20° below normal all divisions. Light to moderate precipitation in north, none in south. Snow cover locally and in mountains. Cotton harvest in Pahrump Valley nearing completion. Elsewhere farming activity, except for care and feeding of livestock, at a minimum. Early winter storms and below normal temperatures have made caring for livestock difficult. Condition of most livestock held up quite well during recent storms and cold weather.

NEW ENGLAND: Very cold except briefly mild at midweek with many maxima in 40's and 50's on December 13. Several subzero mornings in north. Week averaged 3° to 5° below normal except up to 10° below normal in northern Maine. First storm of week on December 12 to 13 gave locally heavy yields of 1.00 inch or more of precipitation in north but mostly light in south. Major storm beginning on 15th brought snow with local totals to 18 inches in north with 2 to 10 inches of wet snow in south mixed with sleet, freezing rain, and rain, with precipitation yields frequently over 1.00 inch. Becoming very windy and cold with snow flurries in south Saturday and continuing into Sunday in north. Total precipitation week highly variable but mostly 1.00 to 2.00 inches.

NEW JERSEY: Temperatures mostly above normal except cool Tuesday and turning very cold Saturday and Sunday. Readings ranged from the upper 50's midweek to near 10° on morning of 18th. Light rain fell on Tuesday and a general rain in connection with the coastal storm on Friday produced between 0.60 and 1.20 inches with heaviest amounts in the southeastern counties. An inch or more of snow was reported in the northern counties on Friday. Some damage from high winds occurred Saturday and Sunday.

NEW MEXICO: Mostly light precipitation first part of week and again in south-central on Thursday. No precipitation in much of west and locally in east. Five inches of snow fell at Clovis on Thursday. Temperatures averaged less than 5° below normal most of west to more than 10° below normal extreme southeast. Slow but irregular warming with extreme of high and low temperatures near weekend. Cold nights with subzero minima in north. Cotton, sorghum grain harvest slow due to adverse weather; progressing as field conditions permit. Wheat, barley providing excellent grazing. Cattle, calves continue good, some supplemental feeding started.

NEW YORK: Warming trend early week with maximums mid-40's to low 50's on 12th and 13th. Buffalo reported 56°. Cold after 14th. Severe winter weather 16th and 17th, maximums in teens Upstate to low 20's coastal on Sunday. Minimums 5° to 10° below zero north, near zero southern inter-

ior and low teens near Great Lakes night of 17th. Mostly light precipitation in early week, with up to 3 inches of snow preceding rain. Major storm beginning on 15th and continuing with high winds, blowing snow and hazardous travel conditions 16th and 17th. Snow yields 12 inches northern half, and 5 to 9 inches southern half to Middle Hudson Valley. Mostly rain immediate coast with totals 0.80 to 1.30 inches. Weekly precipitation generally above normal for 6th week. Since early November ground generally bare of snow in southern interior until storm of 15th.

NORTH CAROLINA: Rainy and mild during week becoming clear and very cold over weekend. Total rainfall less than 1.00 inch eastern Coastal Plain and mostly 2.00 to 3.00 inches elsewhere. Some minor flooding of rivers and streams. Most of State without a full day's work due to rain. Progress of harvest during week at virtual standstill. Saturated fields will cause resumption of harvesting and planting to be slowed. Some damage to soybean crop likely due to excessive rains. Cotton and soybean harvest 85% and 75% complete, respectively, unchanged from previous week. Burley tobacco sales closed December 14.

NORTH DAKOTA: Cold weather continued most of week but less severe. Temperatures averaged 8° to 15° below normal. Mostly subzero lows. Milder Sunday with southerly winds and highs above freezing except in east. Precipitation mostly traces except up to 0.04 inch in a few areas. Snow cover mostly 1 to 3 inches at end of week. Snow cover has limited grazing, heavy supplemental feeding of livestock required. No storms past week and feed supplies are accessible. Main farm activities caring for livestock and preparing for Santa's visit. Some livestock and grain marketing.

OHIO: Maximum temperatures ranged from teens to lower 60's. The 60's occurred near midnight on 12th. Temperatures then dropped rapidly on 13th. Minimum temperatures ranged from just above zero to lower 30's. The lowest reported temperature was 2° at Mt. Pelier. Sleet and freezing rain began evening of 11th and spread over most of State by morning of 12th. 24-hour rainfall

amounts ending morning of 13th ranged from a 0.50 inch to 1.00 inch in northern Ohio with lesser amounts southward. Snow started falling over most of State on 15th. By midnight of 15th Dayton had 4 inches on ground. Blizzard conditions hit northeast Ohio on 16th, snowfall amounts from 8 to 28 inches were recorded. Harvesting at a very slow pace. Two days suitable for fieldwork. Early morning harvest permitted on frozen ground surface. Soil moisture supply 98% surplus, 2% adequate. Corn for grain 60% and soybeans 65% harvested. This percentage of corn and soybean harvest usually completed 6 to 8 weeks earlier. Sugar beet lifting almost at a standstill due to frozen ground. Popcorn 60% harvested. Usually all popcorn and sugar beets harvested by this date.

OKLAHOMA: Precipitation averaged 0.23 southwest to 1.12 northeast mostly in the form of snow and sleet or freezing rain. Temperatures much below normal with departures 13° below southwest to 17° below normal north-central. Some combines got back in Panhandle sorghum fields Friday, but general advancement of row crop harvest nearly too slight to measure. Necessary chores and livestock care were main concerns during an icy,

snowy week. Quality of standing cotton deteriorated while some unharvested peanuts and soybeans in eastern counties rotted. Small grains made no growth and snow or ice cover along with mud limited grazing. Supplementary feeding necessary. Hay shortages developing locally and concentrate prices going. Cattle condition declined and death losses increased. Moderating temperatures at weekend week's bright spot.

OREGON: Cold spell of 5 to 15 days ended with freezing rain across most of State at weekend as rains again warmed temperatures above freezing. Weekly temperatures averaged 12° to 17° below normal on coast, 20° to 38° below normal elsewhere. Minima 11° to 24° on coast, -5° to 15° western valleys, -9° to -49° eastside. Precipitation of 0.10 to 0.40 inch statewide maintained 5 to 11 inches snow cover with 16 to 48 inches in mountains. Ice jamb and flooding on Snake River for 30 miles above Brownlee Dam result of 12 days of subzero temperatures. New record December low at Vale -22° near alltime station record of -28°. Continued cold weather held farm activities to a minimum. Feeding continues heavy, with feed shortages anticipated by spring in some areas. Movement of fruit is good with good to excellent markets, except for golden delicious apples. Potato market also good. Precautions being taken to prevent freeze damage to potatoes in storage. Some damage to winter wheat in eastern Oregon due to light snow cover and sub-zero temperatures.

PENNSYLVANIA: Coldest week of season. Near or slightly above normal temperatures until weekend, then much colder. Daytime maxima teens and 20's Saturday and Sunday. Weekly values mostly 2° to 4° below normal, except near normal southeast. Extremes: 62°, -4°. Major storms Tuesday and weekend deposited mixture of rain, freezing rain, sleet, and snow. Heavy snow of 8 to over 12 inches on weekend in northwest snowbelt. Weekly precipitation mostly 0.50 to 1.50 inches. Snow cover: none southeast, 1 to 6 inches most other areas, except over 12 inches northwest snowbelt. Routine winter farm chores.

PUERTO RICO: Rainfall averaged 2.81 inches or 1.76 inches above normal. Heavy rains in north and east early in week with highest weekly total of 8.15 inches in eastern mountains. Generally light showers in southern and western divisions. Crop moisture conditions near normal except too wet in northeast and too dry in parts of south. Temperatures averaged 77° on coast and 71° to 72° in interior divisions with mean departure of 1.7° below normal. Highest maximum temperature 91°, lowest minimum temperature 55°. Sugarcane plantations report growth and maturing process retarded by heavy rain in northeast. Western zones report generally good development in favorable weather. Coffee harvesting and drying operations slowed by rains in some zones.

SOUTH CAROLINA: Light rain, morning fog, and overcast skies prevailed until the evening of 14th. Heavy rain on 14th and 15th measured as much as 4.00 inches in northwest, less than 1.00 inch in most of Coastal Plain. Cold front passed on 15th bringing in coldest air of year. Average temperatures were about 10° above normal all areas. Rain most of week stopped farm activities. Cotton harvest 91% complete. Soybean harvest 76% complete. Pastures, wheat and oats good condition. Wheat 85% planted, 81% emerged. Oats 91% planted, 86% emerged. Sorghum grain 95% harvested.

SOUTH DAKOTA: Another cold week. Weekly temperatures averaged from 8° to 16° below normal. Extremes: -28° Harrington on the 12th; 53° at Rapid City on the 17th. Little or no precipitation reported over State with most areas reporting amounts of zero or a trace of snow. Snow cover end of week was generally from 1 to 3 inches in south and 3 to 6 inches in the north. Frozen ground and light snow cover combined to allow corn and sorghum harvest to proceed. Most will be harvested this fall if weather holds. Unseasonally cold weather resulted in shortage of LP and natural gas, so grain drying has been hampered. Some corn being piled in streets at local elevators until gas becomes available. Livestock condition generally good with a few respiratory diseases in calves weaned prior to cold weather. Feed grain and hay supplies still appear adequate even though cold weather required additional supplemental feeding of livestock.

TENNESSEE: Week began wet and mild, ended cold, averaging near normal northeast to 10° below normal southwest. Most places 4 to 5 days with precipitation. Totals generally 1.00 to 2.00 inches. Rain and muddy fields continued to hinder harvest of fall crops. Frozen fields over weekend helped farmers resume harvest in many areas. Burley tobacco growers continued to sell crop. Livestock farmers have begun to feed larger amounts of hay and grain with lower temperatures.

TEXAS: Temperatures continued rather cold throughout week with weather dominated by large polar Canadian air mass. Light precipitation fell eastern half of State Tuesday, then returned to most all sections Thursday with heavy thundershower activity in eastern half. Minimum weekly temperatures were 13° at Lubbock, 19° at both Longview and San Antonio, 24° at Victoria, and 34° at McAllen. Ice and snow covered much of State early this week. Wheat and oat fields furnish little grazing under ice conditions. Growth rates retarded many fields, southern 1/2 too muddy to graze. Harvest cotton, sorghum, peanuts, soybeans made progress toward end of week after thawing out. Major crops percent harvested: cotton 56, last year 43; sorghum 98, last year 98; soybeans 91, last year 94; peanuts 99, last year 99. Major crops percent planted: wheat 97, last year 100; oats 100, last year 100. Lower Rio Grande Valley vegetable harvest slowed by bad weather conditions. Harvest of tomatoes, peppers, and lettuce underway as weather permits. Cabbage movement slow. Carrots and onions show good growth. At Laredo cabbage and carrots show good growth. In the Winter Garden a freeze killed most squash, peppers, and tomatoes. Harvest of spinach, cabbage and carrots underway. Onion seeding near completion. At San Antonio carrots and cabbage harvested. In the Coastal Bend cabbage making good progress. Other vegetables growing slow due to cold weather. On High Plains cold weather, ice, and snow prevented late carrot fields from being harvested. Digging of potatoes in Gaines County also hampered by bad weather. Pecan harvest creeping near completion as wet, cold weather in north-central Texas has delayed harvest. Citrus supplies increasing as cooler wet weather has aided in coloring and sizing the fruit.

UTAH: Very strong cold front swept across State over weekend of December 9 and 10. This front followed by weaker systems--one later part of last week and second this past weekend. Accumulated amounts of moisture generally light to moderate but locally heavy northern mountains. Minimum temperatures following cold front dropped to near record values. Only warmest areas of State failed to record subzero values. Scofield Dam, with 36° below zero, coldest. Average temperatures ranged from 33° below normal at Delta and Logan USU to 12° below normal at Blanding and St. George. Extreme cold slowed or halted some farming operations and made all more difficult. Care and feeding of cattle and sheep in feedlots and on valley farms, dairy cattle, and poultry flocks continue major activities. Processing of 2d largest ever turkey crop winding down to completion this week. Sorting, grading, and marketing of potatoes, dry onions, and apples from storage continue. Some apple cider being pressed in Utah County. Utah farm families preparing for yearend holidays, hoping this Christmas will bring peace to mankind.

VIRGINIA: Quite wet and mild until becoming windy and very cold late Friday and Saturday. Topsoil moisture 94% surplus. Fieldwork stopped. Corn 15% and soybeans 25% unharvested. Pastures excellent for this date. Winter grains and grazing crops very good. Livestock feeding increased seasonally. Dairy cattle obtained 15% of forage from grazing. Beef cattle 45% and sheep 50%. Burley tobacco market closed for holidays after December 14. Sun-cured and fire-cured markets will close after 21st. Other activities included fencing, pruning, bookkeeping, grinding feed, livestock care, and Christmas preparation.

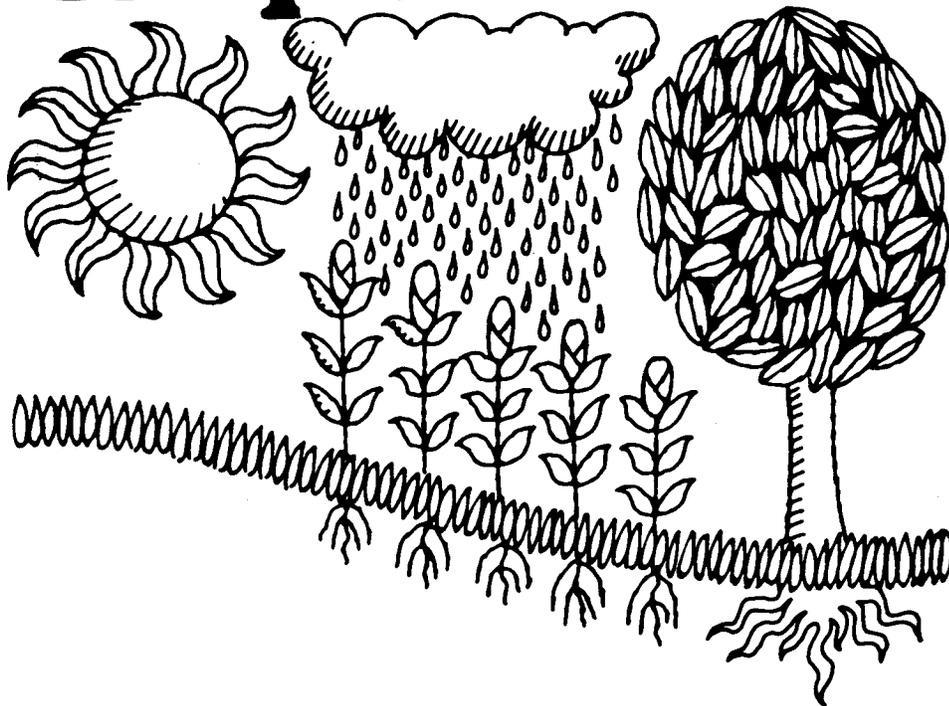
WASHINGTON: Western Washington: Below-normal temperatures and general snow early in week. Warming trend and rain by end of period. Christmas tree harvest near completion, some tree freeze damage and needle drop. Holly cutting delayed. Livestock good condition, heavy winter feeding reducing supplies. Eastern Washington: Subzero temperatures and intermittent snowfall kept many farmers indoors. Accumulated snow several inches gave added protection to fall grains. Reports on freeze damage optimistic. Some fruit tree pruning underway. Livestock satisfactory; calving progressing.

WEST VIRGINIA: Heavy rains December 15 turned to snow overnight as frigid air from the northwest moved across State. Light snow flurries with temperatures near zero December 16 to 17. Snow depths generally below 4 inches. Extremely windy after midweek. Farm activity has slowed because of winter season. Supplemental feeding increased due to cold wet weather. Corn harvest delay continued.

WISCONSIN: Another very cold week with temperatures averaging 15° to 20° below normal. Some moderation at the end of period. Extremes of -26° and +34°. Skies mostly sunny and clear except cloudy with snow in most areas outside the extreme northwest on Monday night and Tuesday. Some freezing rain and sleet with this storm in the southeast. Snowfall amounts generally between 4 and 8 inches. Snow depths range between 4 inches southeast up to 18 inches central, and back down to 4 inches extreme northwest. Tuesday's heavy snow put an end to harvests of corn and soybeans. About 90% of corn harvested. Soybean harvest 85% completed. Livestock in good condition though feed and bedding supplies short in many areas.

WYOMING: Weather continued very cold with scattered light snows early in week. Chugwater reported the most moisture with 0.15 inch. There was warming at week's end. Temperatures averaged 24° to 31° below normal west of Divide, 15° to 38° below east. Maxima mostly 15° to 20° west of Divide, 5° to 35° east. Minima were mostly -27° to -42° west of Divide, -11° to -42° east. Temperature extremes: 35° at Douglas, -42° at Medicine Bow and Farson. Farm and ranch activity confined mainly to care and feeding of livestock. Producers feeding more hay and grain because of snow cover and cold weather. Livestock mostly in good condition.

Weather & Crop Service



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**U.S. Department of Commerce
U.S. Department of Agriculture**

NATIONAL FLOOD SUMMARY -- DECEMBER 15, 1972

Flooding has developed on a number of streams from Mississippi through Alabama, northern Georgia and the Carolinas. Heavy 24-hour rainfall through a considerable portion of the area up to 7 a.m. today fell on wet ground with many of the rivers already at high levels. Lowland flooding will be in evidence for several days on many of these streams with crest stages occurring during the next week or 10 days. Drainages involved include the Tombigbee Basin in Mississippi and Alabama, Upper Alabama Basin in Georgia and Alabama, the Broad River, tributary of the Upper Savannah River in Georgia, Santee Basin in South Carolina, Pee Dee Basin in North Carolina and South Carolina, the Neuse and Cape Fear Rivers in North Carolina and the Upper French Broad River in western North Carolina.

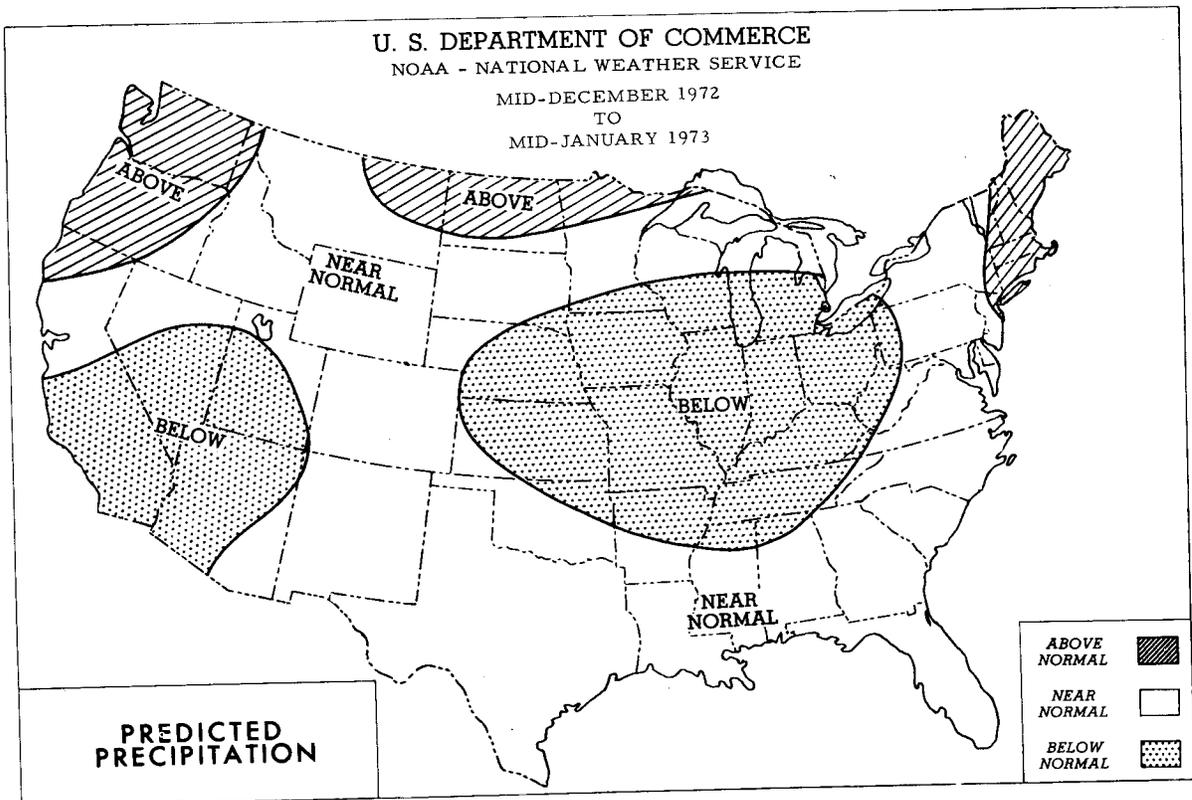
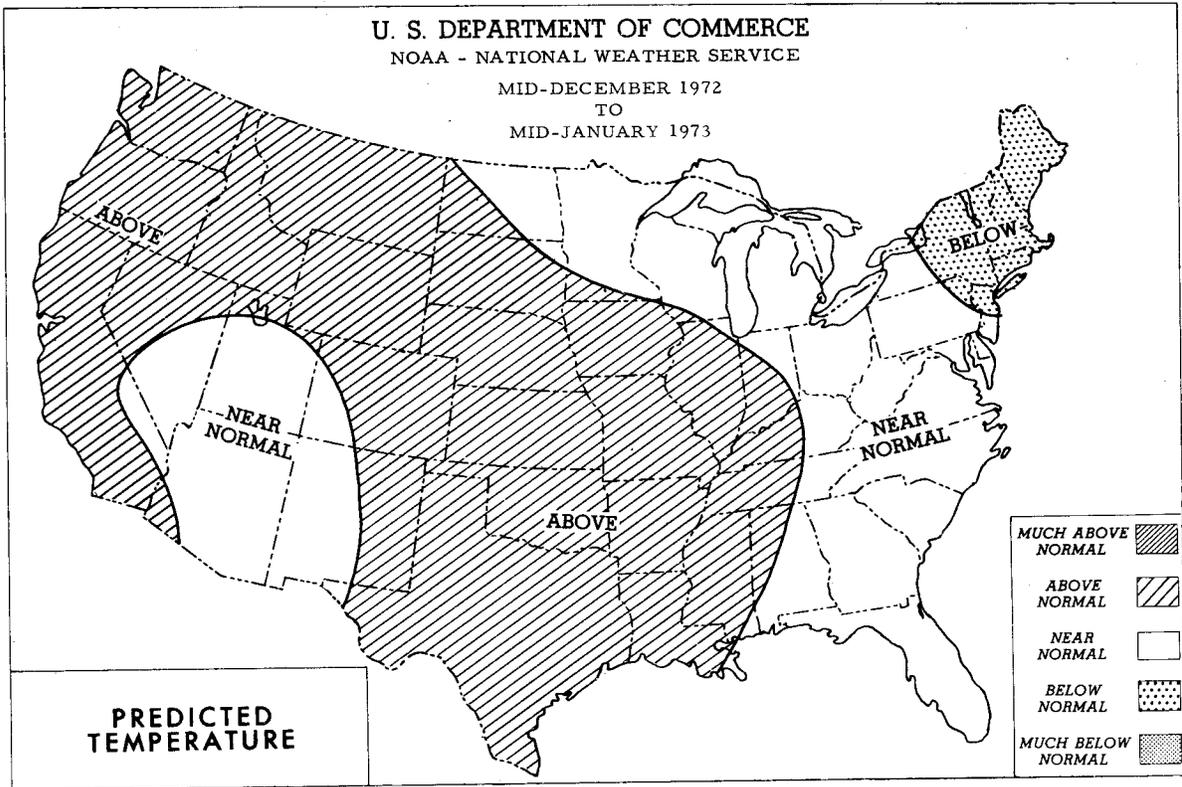
The Pearl River has exceeded flood level at Jackson, Mississippi, and in Arkansas; above flood level conditions have developed on the lower portions of the Black, White, Cache, and portions of the Quachita River. Minor overflow is occurring along the Sulphur River in Texas and on the Calcasieu in Louisiana.

In the Ohio River Basin, flooding is in progress or forecast for much of the Wabash Basin of Indiana and Illinois. Some flooding continues on the Green River in Kentucky, and the main stem of the Ohio River is above flood stage at all points from Louisville, Kentucky.

River ice conditions continue to present flood problems throughout southern Idaho. Several trouble spots have developed but the worst was on the Snake River west of Blackfoot, Idaho, where 18 families were evacuated from a trailer court and a few business houses and homes near the River were invaded by icy water.

Stages on the Missouri River continue to be affected by ice action with several feet of stage fluctuation expected in places from the lower Nebraska-Iowa border downstream to Kansas City, Missouri. The lower Kansas River is similarly affected. Precipitation: More than an inch occurred over much of the lower Mississippi Valley, East Gulf Drainage, and on through the western Carolinas. Several stations in northern Georgia and western South Carolina received between 3.00 and 4.00 inches. Locally heavy rain fell in northern Florida Peninsula and in eastern half of Texas.

Hydrologic Services Division
National Weather Service



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