

Weekly Weather & Crop Bulletin

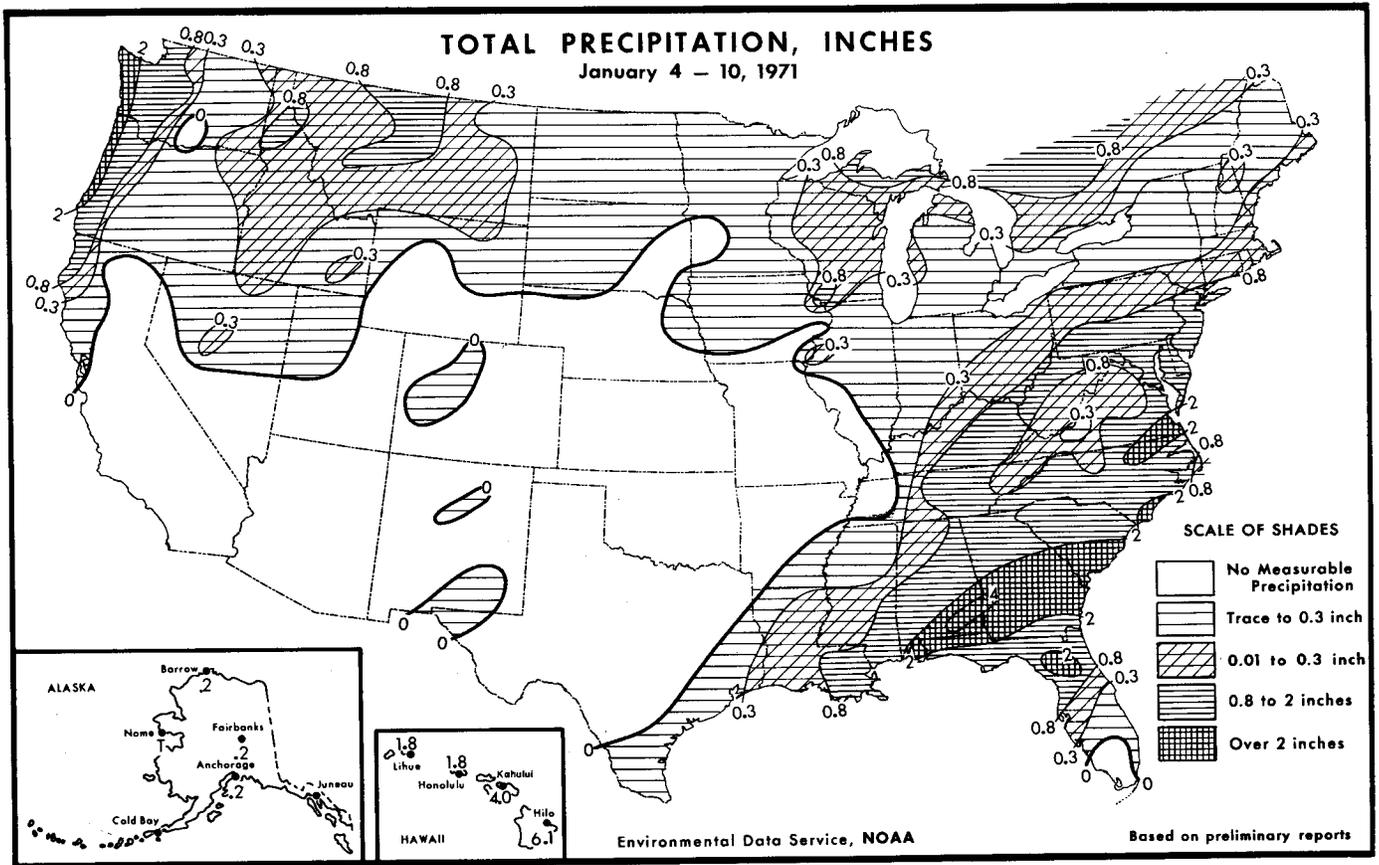
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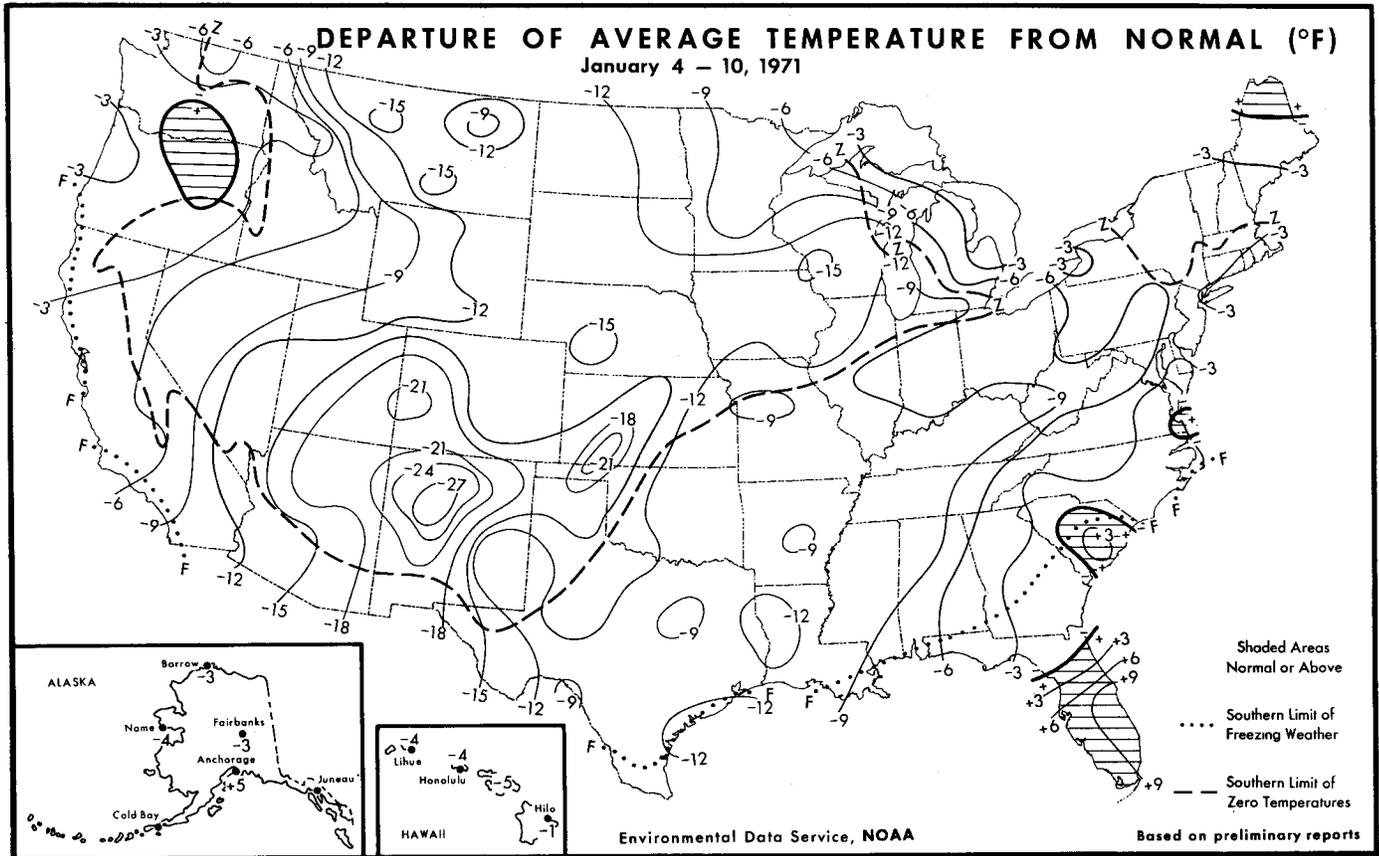
NATIONAL WEATHER SUMMARY

HIGHLIGHTS: Extremely cold temperatures prevailed over most of the Nation. Heavy snow fell in some of the northern border States and, over the weekend, in the northern portions of the Gulf States. Freezing rain south of the snow belts glazed the highways and made driving treacherous.

PRECIPITATION: A severe storm centered over Lake Michigan Monday dumped heavy snow over Wisconsin and Upper Michigan. LaCrosse, Wis., received 16 inches in 24 hours, the greatest amount ever recorded at La Crosse in that length of time. Strong winds behind the storm drifted the snow badly, especially in Minnesota and Iowa. Meanwhile shower and thunderstorm activity was widespread over the Southeast and rain fell in the middle and southern Atlantic Coastal States. Snow flurries occurred from the Ohio River Valley to the Appalachians and New England.

Precipitation was mostly light at midweek. Snow showers dotted the northern portion of the Great Basin and the northern Rocky Mountains. Snow also fell in the lee of the Great Lakes. Rain dampened the Atlantic States.

Shortly after midweek, a storm developed over the Gulf of Mexico. It dumped several inches of snow in the northern portions of Mississippi and Alabama. Two weekend storms affected the weather in continental United States. One storm brought wet and windy conditions to the Pacific Northwest. Rain fell along the coast with snow in the mountains and eastward to the northern Great Plains. Freezing rain slicked the highways in parts of Oregon and Idaho. By Saturday evening, Lincoln, Mont., near the Continental Divide, had received 15 inches of new snow. The other storm brought freezing rain from northern Louisiana to Virginia and rain southward to the



Gulf Coast. The freezing rain made highway driving treacherous. Ice accumulated on trees, poles, and wires. Limbs and wires broke. Electric service was interrupted up to 12 hours in the Athens, Ga., vicinity.

Weekly precipitation totals exceeded 2.00 inches along the coast of Washington and Oregon and over the southern portions of Alabama, Georgia, and South Carolina. Most of the area from central and southern California to the Mississippi River received no rain or only light snow flurries or sprinkles.

TEMPERATURE: Cold air plunged southward behind the storm centered over Lake Michigan on Monday. The temperature at Cotulla, Tex., dropped 60° in about 18 hours, from 96° Sunday afternoon to 36° Monday morning. Flagstaff, Ariz., registered 22° below zero Monday morning January 4. By Tuesday, arctic air covered the West from Canada to Mexico. By Wednesday subzero temperatures were common from the northern Rocky Mountains to southern New Mexico and northeastward to Lakes Superior and Michigan. The highest temperature at Rock Springs, Wyo., Tuesday afternoon was 18° below zero. Hawley Lake, Ariz., registered 39° below zero Wednesday morning. Frazer, Colo., recorded 42° below zero Thursday.

The mercury at Albuquerque, N. Mex., plunged to 17° below zero Thursday morning. That is the coldest temperature ever recorded at Albuquerque. Other cold temperature readings included 47° below zero at Antero Reservoir, Colo., and some unofficial readings in the Colorado Rockies of -50° or colder. The temperature at Moline, Ill., was -13° and -17° on Wednesday and Thursday, respectively.

Cold temperatures continued over most of Nation over the weekend. Subzero weather occurred in northern New York and New England on 1 or 2 mornings. Massena, N.Y., registered 25° below zero Saturday morning. Some warming occurred in the central Great Plains. Temperatures in Missouri reached the 40's Saturday which is near normal for early January. A new storm dropped minimum temperatures in Montana to near zero Saturday morning and to below zero over most of the State Sunday morning.

Temperatures averaged much below normal over almost the entire Nation. Most of the northern and central Great Plains and from southeastern Nevada to central Tennessee averaged more than 10° colder than normal. Above-normal temperatures continued in the Florida Peninsula.

L. W. Dye

Correction: The maps on pages 1 and 2 of last week's Bulletin show the total precipitation and the departure of average temperature from normal, respectively, for the week ending January 4, 1971. The map on page 6 shows the snow depth on Monday morning, January 4, 1971.

NATIONAL AGRICULTURAL SUMMARY

AGRICULTURAL HIGHLIGHTS: Extremely cold and snowy weather restricted the marketing of live-stock and grain. Freezing temperatures in California and Arizona damaged the citrus and vegetable crops. Small grain growth was halted by the cold.

SMALL GRAINS: The extreme cold and snow that chilled the Nation during the week stopped or retarded the growth of fall-seeded grains. Temperatures averaged 10° to 20° below normal in the important Midwest growing area. Wheat fields in western Kansas received some benefits from light snow, but high winds caused drifting making some fields bare and thus increased the possibility of freeze damage where no snow cover was available. Cold dry weather also prevailed in the southern Great Plains, with no relief from the dry conditions occurring. In the northern Great Plains area, including Montana, snow coverage is generally adequate, but light to moderate wind damage occurred on some open fields. In the Pacific Northwest, small grains remain in good condition with adequate moisture and snow coverage in many areas. In California and Arizona small grains received some freeze damage and replanting is expected in local areas. Fall-seeded grains are also wintering well in the eastern half of the Country, but the week's cold temperatures halted growth throughout the South and was hard on bare fields in the Corn Belt.

COTTON: Cotton harvesting remains one of the major farm activities in California as growers are concerned about the mid-January plowdown date. Picking in Arizona is nearly complete with scrapping and plowing active. Freezing temperatures allowed Arkansas farmers to make significant headway in finishing fields that were earlier too soft to support picking machines.

OTHER CROPS: Fieldwork was generally at a standstill due to the adverse weather. Many farmers spent their time plowing snow from farm lanes and barnyards and fixing machinery for next season. Bad road conditions also limited marketing of grains early in the week. Freezing weather permitted Arkansas and Kentucky farmers to harvest some soybean fields that were previously too wet to allow the entrance of combines. The inclement weather was also a limiting factor in the movement of potatoes and vegetables from storage in many sectors of the Country.

FRUITS AND NUTS: Temperatures January 2 to 5 dipped to as low as 24° in Central and Southern California causing damage to the citrus crop. The full extent of damage cannot be assessed until about 10 days after warmer weather returns. A reduction in the quality of navel oranges is expected in central areas, with both a loss of fruit and quality anticipated in the valencia crop. Citrus growers in Arizona used all available frost protection devices available during the week (to little reward) as both the Yuma and Salt River Valley areas received variable degrees of damages. The Texas citrus crop was more fortunate, and although picking was temporarily slowed by the cold temperatures, no frost damage was evident. Citrus tree condition remains good in Florida as temperatures were above normal for the week.

Vegetables: Frost and cold weather restricted vegetable growth in California and Arizona, with variable degrees of freeze damage occurring. Lettuce supplies from both States were curtailed as early morning ice limited cutting to the afternoons. Damage in California was limited mainly to the lowering of quality, but artichokes were severely hurt in the Salinas-Watsonville area. Vegetable growth in Texas was also slowed by cold weather but no permanent damage is apparent. South Texas vegetable harvesting should get back to normal this week with a good volume of cabbage, carrots, and lettuce expected. Shipments of vegetables continued to increase from Florida with most commodities available. Planting is generally on schedule, but irrigation in south Florida is essential.

PASTURES AND LIVESTOCK: Livestock farmers and ranchers had to increase both supplemental feeding and care of their herds as the severe cold made its stay felt across the Nation. Snow cover stopped grazing in many States, and thus farmers had to spend a lot of their time hauling and feeding hay. The frigid temperatures caused the usual animal disease problems, but no abnormal death losses occurred. However, some pig deaths in Virginia and newborn livestock losses in Kansas and Nebraska were attributed to the cold. There was above normal stress on all range livestock during the week with light to moderate shrinkage. Snow, ice and frigid temperatures slowed livestock marketing early in the week. Roughage supplies remain generally adequate, but a cold week like this one causes a heavy drain on feed supplies.

Steve Pscodna
Agricultural Statistician

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., January 10, 1971

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 . . .	37	-9	1.3	+ .2	New Orleans . . .	46	-8	1.1	+ .2	OKLA.Okla. City . . .	27	-10	T	- .3
Mobile . . .	45	-8	2.0	+ .9	Shreveport . . .	36	-12	.1	-1.0	Tulsa . . .	27	-10	T	- .4
Montgomery . . .	43	-5	1.4	+ .5	MAINE.Caribou . . .	12	+1	.3	- .2	OREG.Astoria . . .	38	-3	3.0	+ .3
ALASKA.Anchorage . . .	17	+5	.2	0	Portland . . .	17	-5	.5	- .5	Burns . . .	25	0	T	- .4
Barrow . . .	-18	-3	.2	+ .2	MD.Baltimore . . .	29	-6	1.9	+1.1	Medford . . .	33	-2	.2	- .5
Fairbanks . . .	-15	-3	.2	0	MASS.Boston . . .	26	-4	.4	- .5	Pendleton . . .	34	+1	.4	+ .1
Juneau . . .	---	---	---	---	Chatham . . .	---	---	---	---	Portland . . .	37	-2	1.6	+ .3
Nome . . .	1	-4	T	- .2	MICH.Alpena . . .	19	-1	.6	+ .1	Salem . . .	35	-4	1.1	- .5
ARIZ.Flagstaff . . .	9	-19	0	- .5	Detroit . . .	20	-7	.2	- .3	PA.Allentown . . .	23	-6	1.4	+ .7
Phoenix . . .	37	-13	0	- .2	Flint . . .	20	-3	.1	- .3	Erie . . .	22	-6	.3	- .3
Tucson . . .	34	-16	0	- .2	Grand Rapids . . .	18	-7	.2	- .2	Harrisburg . . .	25	-7	1.1	+ .5
Winslow . . .	12	-18	0	- .1	Houghton Lake . . .	15	-5	.3	- .1	Philadelphia . . .	29	-3	1.1	+ .4
Yuma . . .	41	-12	0	- .1	Lansing . . .	19	-6	.1	- .3	Pittsburgh . . .	25	-4	1.0	+ .3
ARK.Fort Smith . . .	29	-11	T	- .6	Marquette . . .	17	-3	1.1	+ .7	Scranton . . .	22	-6	.5	0
Little Rock . . .	30	-9	T	-1.2	Muskegon . . .	19	-8	.5	0	R.I.Providence . . .	27	-2	.5	- .4
CALIF.Bakersfield . . .	42	-5	0	- .3	S.Ste.Marie . . .	14	-2	.9	+ .4	S.C.Charleston . . .	53	+3	3.3	+2.7
Eureka . . .	45	-3	1.3	- .2	MNN.Duluth . . .	2	-7	.1	- .1	Columbia . . .	49	+3	1.4	+ .7
Fresno . . .	39	-6	0	- .5	Internatl Falls . . .	4	-8	.1	- .1	Greenville . . .	41	-3	1.0	0
Los Angeles . . .	48	-8	0	- .6	Minneapolis . . .	4	-9	.2	0	S.DAK.Aberdeen . . .	1	-11	.1	0
Red Bluff . . .	42	-3	T	-1.0	Rochester . . .	2	-12	.3	+ .1	Huron . . .	2	-12	T	- .1
San Diego . . .	46	-10	0	- .5	St. Cloud . . .	5	-6	T	- .2	Rapid City . . .	9	-14	.1	0
San Francisco . . .	44	-14	T	- .9	MISS.Jackson . . .	38	-10	.6	- .5	Sioux Falls . . .	2	-14	T	- .1
Stockton . . .	39	-5	0	- .7	Meridian . . .	39	-9	2.1	+1.1	TENN.Chattanooga . . .	35	-6	1.0	- .3
COLO.Denver . . .	15	-14	0	- .1	MO.Columbia . . .	22	-9	T	- .4	Knoxville . . .	36	-5	.5	- .6
Grand Junction . . .	5	-21	.1	- .1	Kansas City . . .	23	-9	T	- .3	Memphis . . .	31	-10	.1	-1.3
Pueblo . . .	16	-14	0	- .1	St. Louis . . .	22	-10	T	- .5	Nashville . . .	30	-10	1.0	- .2
CONN.Bridgeport . . .	29	-1	1.7	+ .9	Springfield . . .	23	-11	T	- .4	TEX.Abilene . . .	33	-12	0	- .2
Hartford . . .	23	-5	.6	- .2	MONT.Billings . . .	9	-15	.5	+ .4	Amarillo . . .	20	-17	T	- .1
D.C.Washington . . .	31	-6	.8	+ .2	Glasgow . . .	2	-9	.3	+ .2	Austin . . .	40	-11	0	- .6
FLA.Apalachicola . . .	---	---	---	---	Great Falls . . .	7	-16	.8	+ .6	Beaumont . . .	43	-10	.5	- .5
Ft. Myers . . .	75	+11	0	- .3	Havre . . .	3	-13	.9	+ .8	Brownsville . . .	50	-11	.2	- .2
Jacksonville . . .	56	0	1.9	+1.4	Helena . . .	8	-11	1.1	+1.0	Corpus Christi . . .	46	-12	T	- .4
Key West . . .	77	+7	0	- .4	Kalispell . . .	9	-12	.7	+ .4	Dallas . . .	37	-9	0	- .6
Lakeland . . .	69	+7	.2	- .3	Miles City . . .	5	-13	.8	+ .7	Del Rio . . .	40	-9	T	- .2
Miami . . .	77	+10	T	- .5	Missoula . . .	18	-2	.6	+ .4	El Paso . . .	25	-18	.1	- .1
Orlando . . .	69	+9	.3	- .2	NEBR.Grand Island . . .	9	-14	0	- .1	Fort Worth . . .	35	-11	0	- .4
Tallahassee . . .	51	-3	1.8	+1.1	Lincoln . . .	12	-14	T	- .2	Galveston . . .	42	-14	.1	- .8
Tampa . . .	69	+8	.7	+ .2	Norfolk . . .	8	-13	T	- .2	Houston . . .	41	-10	.1	- .8
GA.Atlanta . . .	40	-5	1.6	+ .7	North Platte . . .	9	-16	T	- .1	Lubbock . . .	27	-12	T	- .1
Augusta . . .	46	-1	2.5	+1.8	Omaha . . .	9	-13	T	- .2	Midland . . .	32	-12	T	- .2
Macon . . .	47	-2	3.1	+2.3	Valentine . . .	8	-13	T	- .1	San Angelo . . .	35	-12	0	- .2
Savannah . . .	51	-1	2.5	+1.9	NEV.Ely . . .	10	-14	T	- .2	San Antonio . . .	41	-11	T	- .4
HAWAII.Hilo . . .	70	-1	6.1	+3.1	Las Vegas . . .	29	-14	0	- .1	Victoria . . .	44	-12	T	- .6
Honolulu . . .	69	-4	1.8	+1.0	Reno . . .	24	-6	0	- .3	Waco . . .	39	-9	T	- .6
Kahului . . .	67	-5	4.0	+2.8	Winneucca . . .	20	-7	.1	- .1	Wichita Falls . . .	30	-13	0	- .2
Lihue . . .	67	-4	1.8	+ .6	N.H.Concord . . .	17	-5	.2	- .6	UTAH.Blanding . . .	7	-19	0	- .3
IDAHO.Boise . . .	24	-5	.5	+ .2	N.J.Atlantic City . . .	31	-4	1.3	+ .5	Salt Lake City . . .	18	-10	.2	- .1
Lewiston . . .	28	-3	.8	+ .5	Trenton . . .	29	-4	1.1	+ .5	VT.Burlington . . .	13	-4	.2	- .2
Pocatello . . .	14	-9	.5	+ .2	N.MEX.Albuquerque . . .	7	-28	T	- .1	VA.Lynchburg . . .	35	-3	.9	+ .2
ILL.Cairo . . .	27	-10	0	- .9	Roswell . . .	27	-10	T	- .1	Norfolk . . .	41	0	2.6	+1.9
Chicago . . .	16	-10	T	- .4	N.Y.Albany . . .	18	-5	.2	- .3	Richmond . . .	36	-3	.8	0
Moline . . .	9	-14	T	- .4	Binghamton . . .	19	-5	.3	- .3	Roanoke . . .	34	-4	.2	- .5
Peoria . . .	14	-12	T	- .5	Buffalo . . .	23	-2	.2	- .4	WASH.Colville . . .	20	-4	.3	- .1
Rockford . . .	10	-12	.1	- .3	New York . . .	31	-3	.9	+ .1	Omak . . .	15	-7	T	- .3
Springfield . . .	20	-9	T	- .5	Rochester . . .	21	-5	.2	- .3	Quillayute . . .	37	-2	3.4	- .2
IND.Evansville . . .	24	-11	.1	- .7	Syracuse . . .	21	-4	.3	- .4	Seattle-Tacoma . . .	37	-2	1.0	- .3
Fort Wayne . . .	19	-8	.1	- .5	N.C.Asheville . . .	38	-2	1.1	+ .4	Spokane . . .	24	-1	.2	- .4
Indianapolis . . .	22	-7	.3	- .4	Charlotte . . .	42	-1	1.4	+ .6	Walla Walla . . .	35	+1	.4	- .1
South Bend . . .	15	-11	T	- .5	Greensboro . . .	35	-4	.8	0	Yakima . . .	29	+1	T	- .3
IOWA.Burlington . . .	12	-13	.1	- .2	Hatteras . . .	46	-1	1.4	+ .4	W.VA.Beckley . . .	28	-6	.6	- .4
Des Moines . . .	9	-12	.3	0	Raleigh . . .	39	-3	2.1	+1.4	Charleston . . .	27	-10	.7	+ .3
Dubuque . . .	6	-14	1.7	+1.3	Wilmington . . .	46	-2	2.6	+ .2	Huntington . . .	27	-10	1.0	+ .2
Sioux City . . .	7	-13	T	- .2	N.DAK.Bismarck . . .	-1	-13	.2	- .1	Parkersburg . . .	28	-7	.9	+ .2
KANS.Concordia . . .	12	-16	0	- .1	Fargo . . .	-2	-11	.1	0	WIS.Green Bay . . .	4	-14	.5	+ .2
Dodge City . . .	11	-21	0	- .1	Williston . . .	-2	-13	.3	+ .2	La Crosse . . .	3	-15	.1	- .2
Goodland . . .	15	-13	0	- .1	OHIO.Akron-Canton . . .	22	-7	.5	- .2	Madison . . .	6	-12	.4	0
Topeka . . .	18	-11	T	- .3	Cincinnati . . .	25	-9	.4	- .3	Milwaukee . . .	9	-12	.2	- .2
Wichita . . .	21	-12	T	- .2	Cleveland . . .	22	-7	.2	- .4	WYO.Casper . . .	10	-14	.1	0
KY.Lexington . . .	25	-10	1.0	- .1	Columbus . . .	23	-7	.8	+ .1	Cheyenne . . .	14	-12	T	- .1
Louisville . . .	26	-9	.5	- .3	Dayton . . .	23	-7	.3	- .4	Lander . . .	11	-9	T	- .1
LA.Baton Rouge . . .	42	-11	1.0	- .1	Toledo . . .	18	-9	.1	- .4	Sheridan . . .	11	-12	.5	+ .3
Lake Charles . . .	42	-12	.6	- .5	Youngstown . . .	21	-7	.4	- .3	P.R. San Juan . . .	78	+3	.4	- .7

* 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 offices of the Statistical Reporting Service, U.S.D.A. in cooperation with NOAA State Climatologists.

ALABAMA: Mild temperatures and moderate to heavy rains 1st day of period; then mostly cloudy and very cold Tuesday through Saturday. Occasional periods of light rain south and sleet, freezing rain, and snow in north Thursday and Friday. Warmer with light rain again Sunday. Temperatures for week averaged much colder than usual and precipitation was generally heavy. Farmwork seasonally slow, primarily consisting of care of livestock and poultry, upkeep of farm records, and planning how to best utilize resources under new farm program. Fieldwork at virtual standstill because wet ground. Small grain growth curtailed north and central, slowed in south by cold weather--overall condition remains fair to good. Livestock condition mostly fair. Increased supplemental feeding and more intensive care brought on by adverse weather.

ALASKA: Temperatures were colder than average everywhere except Anchorage area despite unusually warm temperatures statewide from December 10 through Christmas Day. The effect of the warm weather was snow turned to rain from Anchorage southward and, to the north, water content of heavier than usual snow amount was greatly increased. A new precipitation record was set at Fairbanks. Livestock in good condition. Roughage feed short some areas. Few local sales of hay. Quality fair, minimal marketing of farm animals. Potato marketing slow, especially to military. Chief farm activities include care and feeding of livestock, preparing machinery, potato grading, snow removal, and dairying.

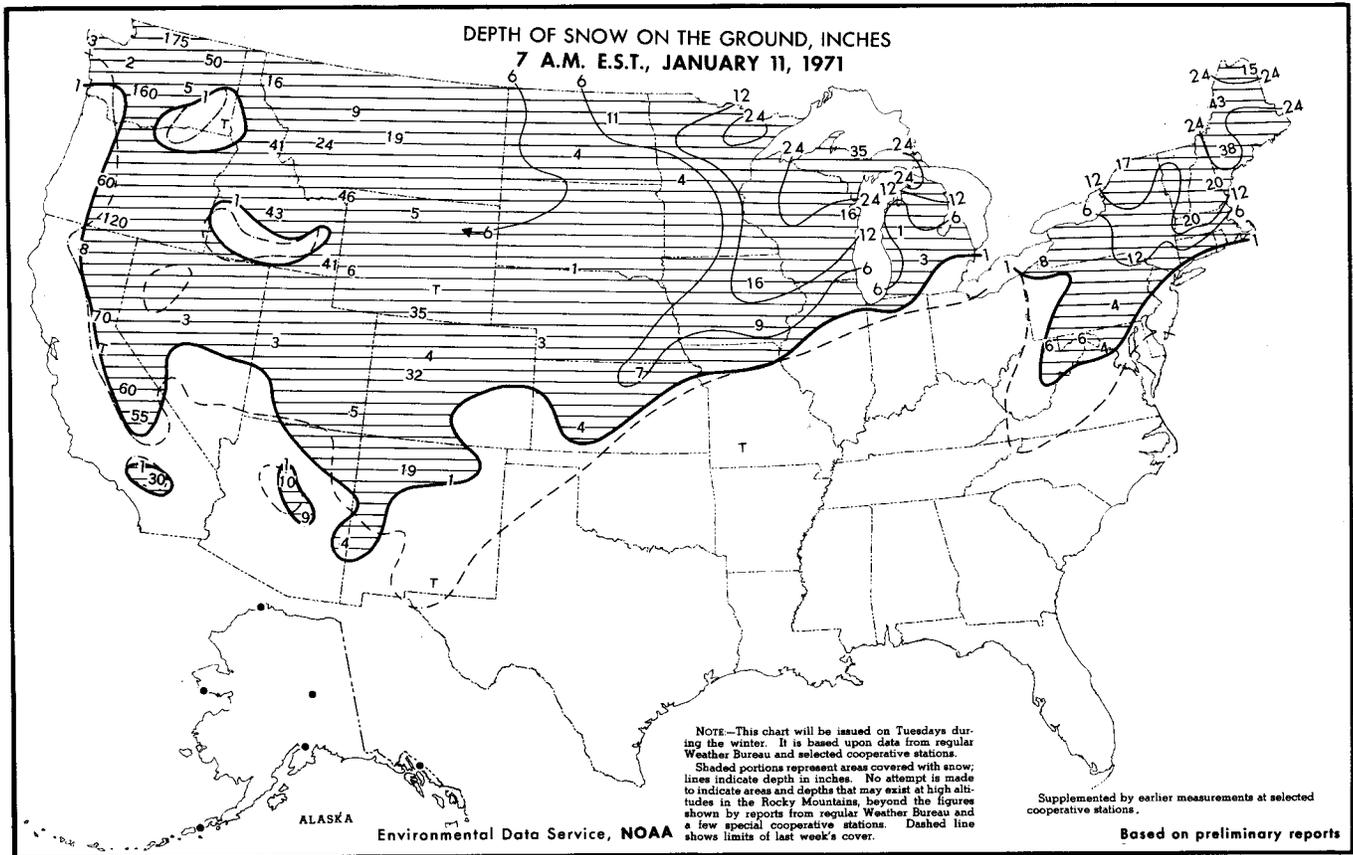
ARIZONA: Unusually cold polar air which had penetrated into State on 3d brought unusually low temperatures to most of State this week. Several stations reported some of lowest minimum temperatures in many years. 41° below zero at Hawley Lake on 7th set a new alltime low-temperature record for State. Previous record was 37° below zero at Maverick on January 13, 1963. Both Salt River Valley and Yuma areas reported freezing temperatures every night of week with temperatures dropping below freezing before midnight in colder sections of Salt River Valley on several nights. Skies were mostly clear during week and no precipitation was reported. Field preparations, planting small grains continued Desert Valleys. Cold temperatures resulted in slow germination and emergence of recent plantings. Some young seedlings injured by cold weather, planting continues, some recently-emerged fields suffered freeze damage. Cotton harvest nearly complete; scraping, plowing active. Alfalfa in Desert Valleys frozen back. This will reduce quantity of forage for grazing, but little permanent damage expected on established stands. Winter and spring vegetables suffered variable damage from freezing temperatures, but too early to assess extent of damage. Harvest lettuce and other winter vegetables delayed by early morning ice in fields. Freezing temperatures hampered citrus harvest operations. All available frost protection used, but fruit and trees both Yuma and Salt River Valley areas sustained variable degrees damage. New growth severely damaged. Higher elevation ranges snow covered, frozen. Lower elevation, desert range feed supplies reduced by frost damage. Supplemental feeding necessary most

areas. Stock water varies from adequate to short. Watering livestock major problem some areas due to frozen stock tanks. Extreme cold caused stress and shrinkage of livestock, but very little increase in death losses.

ARKANSAS: Weekly temperatures averaged 10° below normal ranging from mid-20's north to mid-30's south. Daily extremes: 1° to 72°. Weekend sprinkles with mostly trace totals for week. El Dorado wet spot with 0.04 inch. Significant late harvest of cotton and soybeans as freezes firmed up soil to support machines. Very little plowing during period. Cool temperatures halted growth of small grains and grazing reduced. Heavy cattle feeding underway. Repairs of machinery and other maintenance work major activities many farms.

CALIFORNIA: Light rain on Saturday, but clear and very cold rest of week. Minimums well below freezing all days at low elevation interior points. Average temperatures 4° to 16° below normal with greatest departures in interior basins. Citrus producing areas experienced freezing temperatures 1st week January. January 2 through 5, temperatures dipped to 24° throughout central California. Southern California also as low as 24° from January 2 to 4. Freezing Desert Valley areas also. Early assessment of damage difficult until some 10 days after warmer weather returns. Will be reduction in quality of navel oranges in central California. Actual loss not expected great. Damage to Valenica crop: Losses of fruit with reduced quality expected. Damage to avocados minor. Losses in Desert Valleys restricted to tangerines. Damage to vegetable crop limited to lowering of quality lettuce, cabbage, broccoli. Imperial Valley affected. Coachello Valley radishes moderate damage. Artichokes Salinas-Watsonville more severely hurt. Frost and cold weather during week restricted crop growth. Frost damage to stands small grains, some replanting expected. Fields many areas too wet to work. Cotton harvest, planting small grains, sugar beets and alfalfa major activities. Navel orange harvest continues, fruit sizes good. Harvest tangerines continues. Lemon harvest increasing. Avocado harvest active, quality good. Grapefruit and dates continue to be picked. Growth range grasses slowed by cold; supplemental feeding continues heavy northern and mountain areas. Livestock good condition. Broccoli continues light, cold weather. Harvest desert cabbage afternoon only, frost. Supplies to increase. Carrots continue moderate, volume to increase. Light volume cauliflower due wet fields, frost, to continue light. Good volume celery expected. Lettuce supplies curtailed by frost, afternoon harvest only, future supplies smaller. Spring potatoes being planted. Winter crop potato harvest progressing. Northern California movement stored potatoes hampered cold temperatures.

COLORADO: Severe cold, high winds, and blowing snow following general storm of 2d and 3d. Minimums: -15° at lower elevations, -20's to -40's in mountains. Lowest reported -47° at Antero Reservoir. Several unofficial reports of -50's. Warming over weekend with additional snow northwest. Condition fall-seeded grains good to



excellent. Subzero temperatures statewide stopped all growth. Snow accompanying cold will improve soil moisture situation. High winds drifted snow with only limited amounts staying on fields. Livestock came through storm in good condition. Supplemental feeding necessary all areas. Moderating temperatures late in week aided condition of livestock.

FLORIDA: Overcast cloudiness with drizzle and fog kept temperatures in north and north-central Florida below normal for week. Precipitation amounts from 1.00 inch in northwest and north-central Florida to over 1.50 inches in northeast Florida. Peninsular Florida enjoyed temperatures 4° to 6° above normal due to unusually high daytime temperatures in early part of week. Little or no rainfall in this section as drought continued in south and southeastern section of peninsula. Benefits from rainfall by small grains curtailed by cloudiness and cool weather. Land preparation started. Tobacco bedding active. Sugarcane harvest normal. Pastures improved by rain. Small grains furnish considerable grazing. Cattle and calves fair. Citrus tree condition very good. Some new growth started. Vegetable shipments increased, most commodities available. Shower activity, mostly north, central areas, generally beneficial. Culture, planting mostly on schedule. Irrigation south peninsula essential. Seeding tender vegetables continued mostly south areas. Seeding tomatoes underway into north-central area. Seeding, transplanting hearty vegetables, including spring potatoes, active most areas, but slowed at Hastings by inclement weather.

GEORGIA: Rain on 4 or 5 days with heavier amounts at beginning of week and on Friday and Friday night. Totals exceeded 3.00 inches parts of southwest and central and 1.00 inch all areas. Freezing rain in northeast Friday and Friday night damaged trees and utility lines with heaviest damage in Athens area. Electric service was interrupted up to 12 hours in parts of city mainly as result of falling tree limbs. Mild beginning of period but cold and disagreeable remainder of week under cloudy, rainy skies. Highs remained in 30's north and 40's south on 2 or 3 days. Averages were below normal except slightly above along eastern border. Soil moisture adequate to excessive. Small grains and pasture conditions remained fair to good. Farm activities limited mainly to care of livestock, poultry, tobacco beds, and land preparation.

HAWAII: Weather generally unfavorable. High winds and heavy rain reduced harvest prospects most vegetables. Low temperatures slowed growth and maturity and wet fields hampered field operations. Grinding of 1971 sugar crop started on several plantations. Pineapple making favorable progress. Supplies of some vegetables and fruits declining. Pastures and cattle in fair to good condition. Soil moisture ample in all pastures.

IDAHO: Temperatures for week averaged much below normal, warming last day. Greatest departures east ranging 15° to 17° below normal. Precipitation mostly in form of snow last of week was light except in north, Lewiston to Grangeville, where precipitation fell 6 of 7 days to accumulate above normal. Low temperatures continue to cause heavy supplemental feeding of livestock. Despite

extreme lows, most livestock still in good condition. Inclement weather also limiting factor in movement of potatoes from storage.

ILLINOIS: Precipitation mostly less than 0.10 inch. Snow on ground now 1 to 4 inches north, except 4 to 7 northwest, and none central and south. Temperatures averaged 10° to 14° below normal north, and 9° to 12° below normal central and south. Soil moisture adequate. Winter-sown crops in good shape. Routine farm chores are main activities.

INDIANA: Cold sunny week. Temperatures averaged from 15° to 27° and were 7° to 12° below normal. Coldest with -2° reported in snow belt in extreme north. Warmest beginning of week with temperatures in 50's. Very little precipitation during week. Snow cover of 2 inches in northern border counties. Bare soils frozen to 1 foot and to 6 inches under sod in north and central. In south, bare soils frozen 4 to 6 inches, 2 inches under sod. Farmers caring for livestock, spreading fertilizer, and doing winter chores.

IOWA: Cold with negligible precipitation after substantial snow storm ended 4th and 5th. Temperatures about 13° subnormal. Coldest 6th and 7th. On 7th Decorah measured -30°. Warmest on 9th with thawing temperatures in southern half of State. Snow cover around 5 inches extreme southeast and northwest--upward to 10 inches southwest and central, and 15 to 20 inches northeast and north-central.

KANSAS: Snow ended northeast early in period. Generally fair to partly cloudy and dry over State rest of week. Two deaths central Kansas due to blizzard January 2 and 3. Snow cover northern and western Kansas, 1 to 7 inches at end of period. Coldest weather of winter January 6 and 7. Minima in snow cover areas generally below zero both days. Coldest weather 21° below zero locally north-central 6th. Weekly mean temperatures averaged much below seasonal. Weather moderated late in week. Livestock suffered severely from snowstorm and cold weather last week. Snow with high winds caused drifting in western areas but cattle losses were fairly limited. Some newborn livestock were lost. Most livestock were moved to lots and provided with supplemental feed. Snow drifts limited movement of feed and made livestock marketing difficult. Wheat fields western half received variable benefits from snow, as high winds blew many fields bare. Severe cold may have caused local freeze damage where there was no snow cover, but extent not yet determined. Topsoil moisture improved eastern portions where snow cover better and part of precipitation received as rain.

KENTUCKY: Most days cloudy with temperature below to much below normal averaging 6° to 12° below normal for the week. The coldest week since late January 1970. Maximum temperature did not reach freezing practically all areas 4 consecutive days 5th through 8th. Heavy rain ending early in week. Little or no precipitation thereafter. Total from 0.60 inch to 2.25 inches. Snow flurries some sections on 5th, 8th, and 9th. Several inches reported on ground parts of south-central morning of 9th. Tobacco markets resume sales following holiday recess. Prices and grades holding well. Burley deliveries off sharply by end of period. Some markets closing. Most farm activities center around care and feeding of livestock and winter chores.

LOUISIANA: Coldest week since year ago. Temperatures 8° to 15° below normal. Arctic air and cyclogenesis in Gulf produced 3 to 4 inches snow north 7th and 8th as temperatures remained continuously below freezing. Sleet and heavy glaze southwest to Florida parishes and near coast west Louisiana. Sharply warmer weekend. Temperature extremes: 79° Bogalouosa 4th and 74° 10th and 10°, Monroe 9th. Weekly precipitation mostly less than 1.00 inch except locally more than 2.00 inches extreme southeast. Farmwork at minimum. **Principal activities:** Routine chores, feeding livestock, and field drainage. Soil moisture generally adequate northwest; surplus elsewhere. Small grains and winter grazing crops in good condition--little growth during week owing to unusually cold temperatures. Livestock mostly good condition, supplemental feeding general.

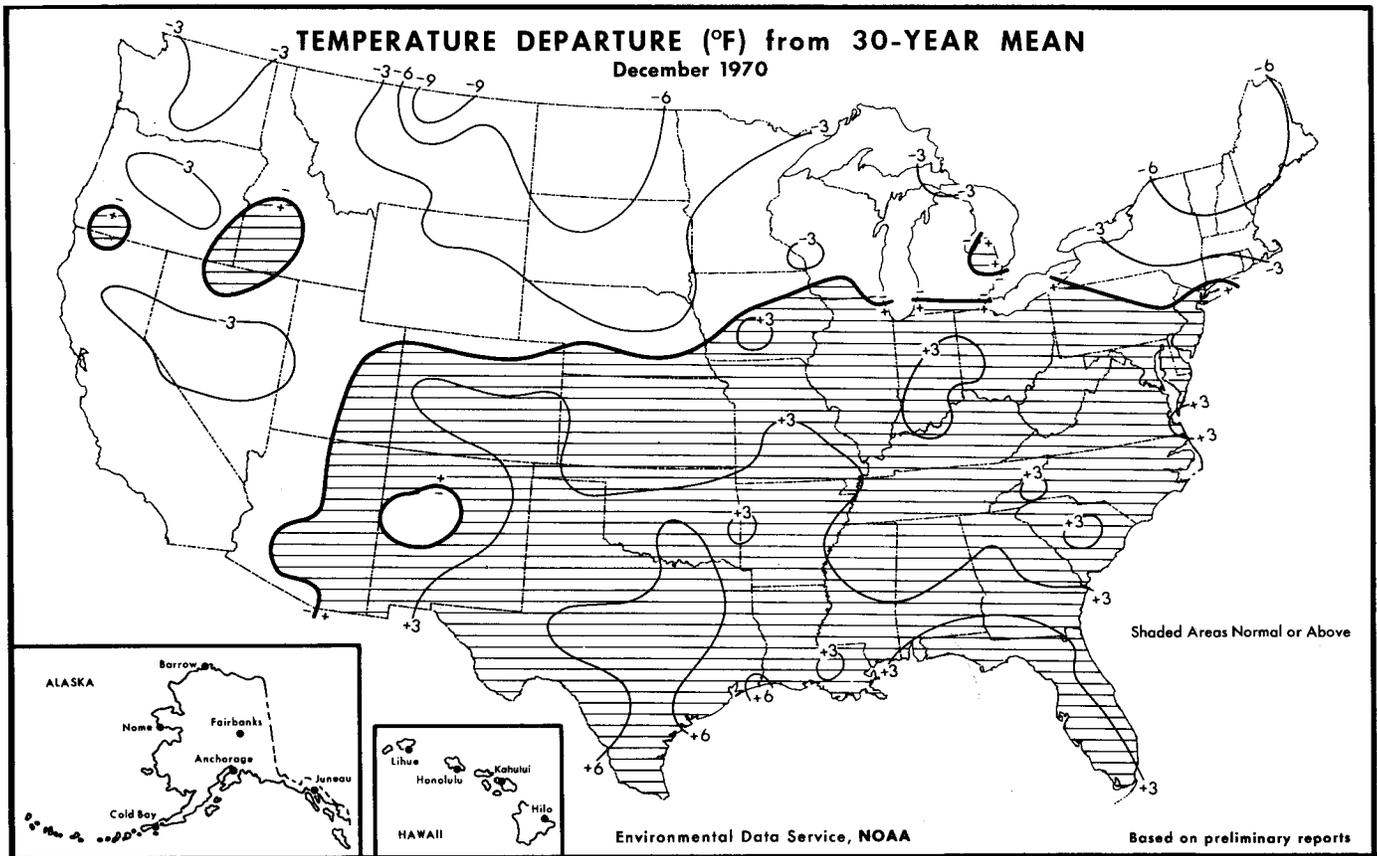
MARYLAND AND DELAWARE: Temperature, below normal last 5 days, averaged 3° to 8° below normal. Precipitation included heavy rain of 4th, 5th, totaling 1.00 to 2.00 inches except 0.50 to 1.00 inch in southern areas and snow during night of 8th, totaled mostly traces except up to 4 inches in southeast. Snow cover up to 9 inches in west at end of period. Little farm work. Snow cover favorable for winter grains. Tobacco stripping continues. Livestock chores major farm activity.

MICHIGAN: Snow storm early in week dumped from 9 to 20 inches of new snow in Upper Peninsula while Lower Michigan received insignificant amounts. Total precipitation for week averaged from 0.50 to over 1.00 inch in northern Lower Michigan and Upper Peninsula while elsewhere amounts were generally less than 0.25 inch. Temperatures in Upper Peninsula and northern Lower Michigan averaged from near normal to 4° below normal while central and southern Lower Michigan averaged from 4° to 8° below normal.

MINNESOTA: Very cold week with temperatures averaging 10° below normal across the State. Coldest in south and warmest around Lake Superior. Precipitation, light across State, generally from 0.10 to 0.30 inch, water content. Snow depth 12 to 24 inches across north and southeast. Rest of State generally 3 to 6 inches.

MISSISSIPPI: Warm early in week; 71° on 3d at Hattiesburg and Wiggins. Heavy rains on 3d or 4th with 1.79 inches rain measured Tuesday morning at Meridian. Then much colder and temperatures dropped to 15° several more northern locations Thursday. Hazardous driving conditions from freezing rain, sleet, or snow Thursday and Friday except in coastal area. Weekly precipitation totals mostly over 0.60 inch and weekly average temperatures generally 4° to 10° below normal. Over weekend warming trend with widespread fog. Soil moisture adequate to mostly surplus. Farm supplies hay and roughage mostly adequate. Feed grain supplies short to adequate. Winter wheat and oats fair to good condition. Pastures mostly fair and livestock mostly fair to good. Average of 1 day suitable for fieldwork.

MISSOURI: Heavy snow on northern counties at end of last week was followed by a blast of cold arctic air which plunged temperatures to their lowest readings in 3 years. The coldest readings included 22° below zero at Princeton and 20° below zero at St. Joseph, both on Wednesday. Temperatures warmed to near normal by end of week. Precipitation first of week with many stations reporting more than 1.00 inch and a few reporting over 2.00 inches.



MONTANA: Substantial warming until turning much colder with heavy snow over weekend. Many 10° to 20° below zero readings. Snowfall heaviest east of Continental Divide averaging 10 inches lower elevations, more mountains. General protective snow cover for winter wheat. Light to moderate wind damage most areas east of Continental Divide. Condition good all areas. Heavy supplemental feeding to virtually all livestock. Grazing difficult to closed throughout State. Prior to weekend storm, condition cattle and sheep good to excellent. Above normal stress most all range livestock.

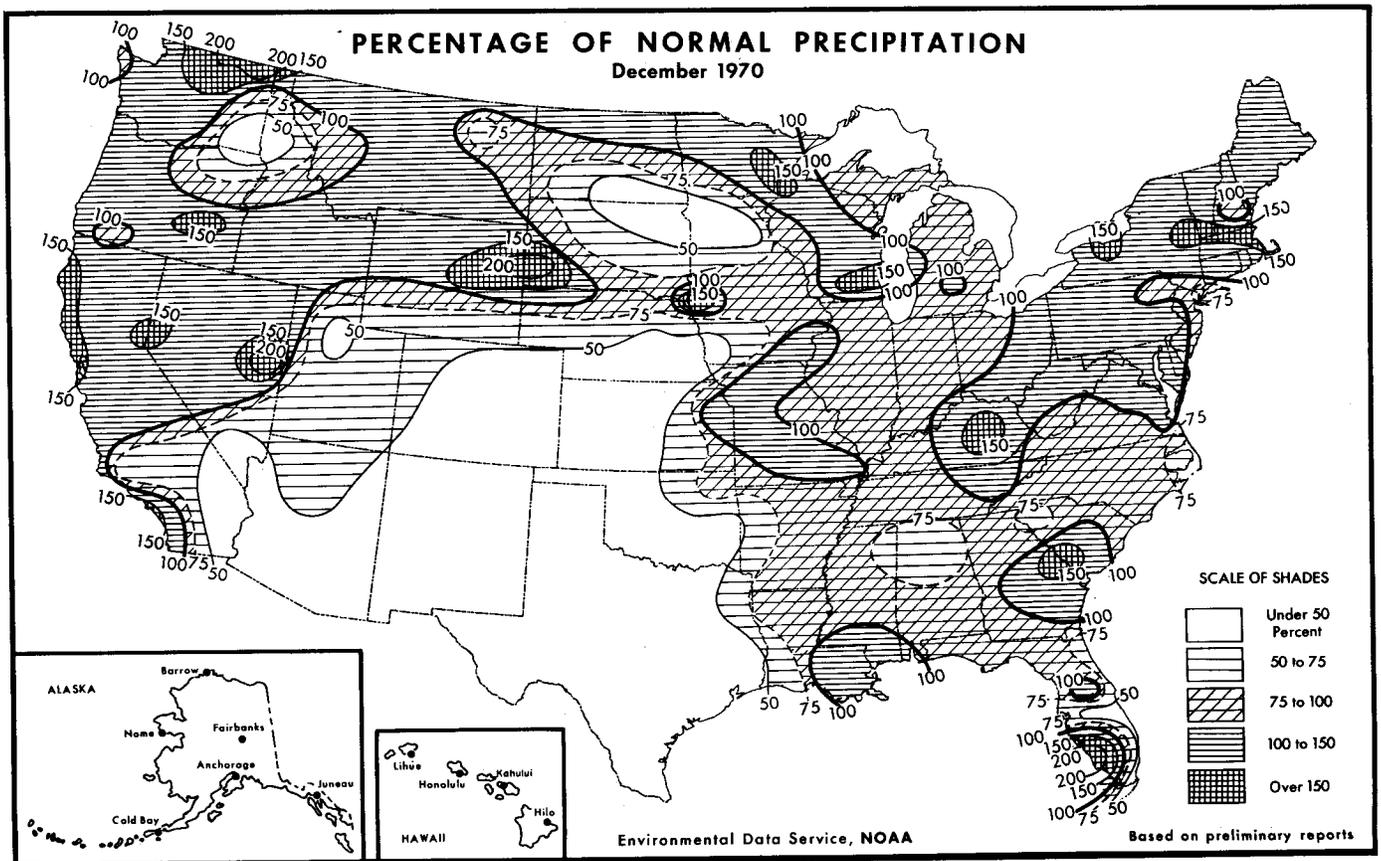
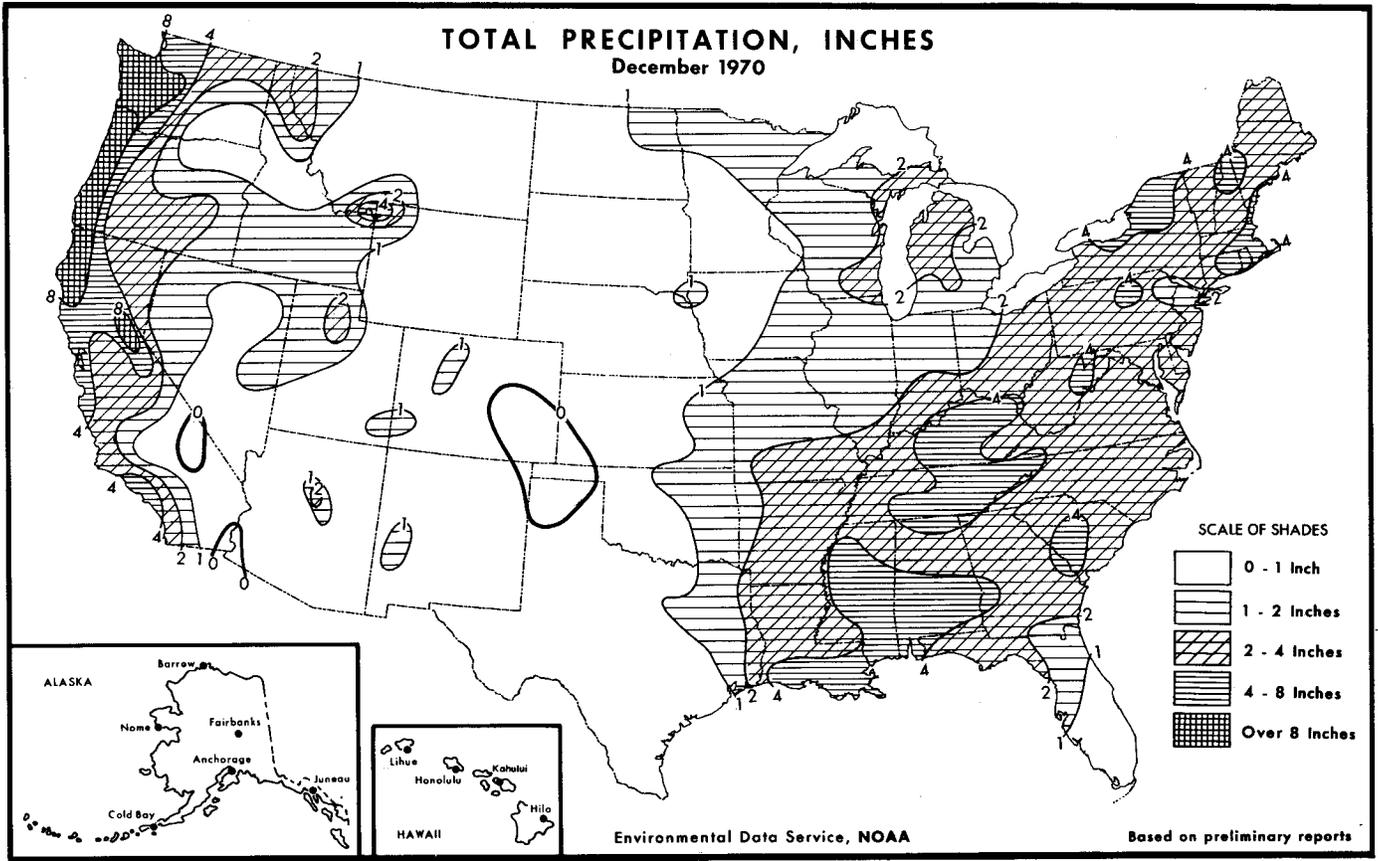
NEBRASKA: A very cold week with frequent reports of 15° to 20° below zero. Ground remains snow-covered from previous storm with a few flurries of new snow during week. Grazing of field forages hindered by snow cover. Little snow cover on open fields with blowing dust in some locations. Farmers and ranchers moving feed supplies with some difficulty. Livestock requiring more feed, but making limited gains. A few young livestock death losses from cold and some dairies had to dump milk.

NEVADA: Very cold week. Temperature from 3° below normal in Winnemucca to 14° below normal in Las Vegas. Las Vegas coldest station in Nevada on January 9. Spotty precipitation, trace to 0.17 inch in northwest; general in northeast, trace to 0.52 inch. Remaining snow cover northern half of State from 1 inch at Yerington to 12 inches at Virginia City. Higher amounts in mountains. Feeding and caring for livestock continue to remain major farm activities. Livestock wintering in fair to good condition. Ranges in fair condition with hay and stock water adequate most areas. Sheep death losses due to coyotes reported high in some areas.

NEW ENGLAND: Week cold and fairly dry. Brief general thaw early in week. Cold thereafter with many minima 10° to 25° below zero January. Temperatures averaged mostly 1° to 5° below normal. Principal precipitation January 4 and 5 with snow changing to freezing rain and rain. Glazing widespread but variable in amount. Precipitation for week ranged from less than 0.10 to more than 1.00 inch but was mostly 0.25 to 0.75 inch. Heaviest amounts in south. Very little new snow with snowcover decreasing several inches.

NEW JERSEY: A cold week with temperatures averaging from 2° to 6° below normal. Greatest departures were in northern interior. Precipitation mostly rain on 4th and 5th averaging 1.30 inches over State. Station totals varied from 0.70 inch in Sussex County to 2.30 inches at East Millstone. Snow cover on morning of 11th from 1 to 6 inches over northern 1/3 of State with none elsewhere.

NEW MEXICO: Extremely cold and persistent air mass covered State Monday reaching lowest temperatures in midweek and warming to near normal on weekend. Temperatures averaged below freezing all parts of State with 12° below normal in southeast to more than 25° below normal in some northern localities. 47° below zero at Eagle Nest on Wednesday tied States January low. 17° below zero at Albuquerque set record low for that city. Only scattered very light snow fell mostly in first part of week. Top and subsoil moisture condition mostly short. Cold weather stunned the State; necessitated heavy livestock feeding in many areas. Snow over all areas. Little moisture benefit. Grain pastures extremely dry. Ranges dry and in fair condition. Livestock remains fair condition.



NEW YORK: Mild early week with maximums 40° to 45° on 4th and 5th. Warmest in northern sections since December 3. Temperatures much below normal from 6th to 9th then moderating on 10th. Minimums zero to low teens midweek, dropping to 10° to 20° below zero northern half on 9th with -5° southern interior and near 15° on Long Island. Precipitation mostly as rain early week totaled 0.60 to 1.00 inch extreme southeast, decreasing to 0.10 to 0.30 inch from Great Lakes plain to St. Lawrence Valley. Locally heavy snow squalls east of Lake Ontario midweek, otherwise no significant precipitation remainder of period. Depths of snow cover in northern valleys greatly reduced from previous week as thin cover of 1 to 4 inches continues most of western half.

NORTH CAROLINA: Temperatures averaged near normal but ranged from highs in 70's January 5 to lows near 20° January 8. Heavy cloudiness most of period. Rain 5th with amounts 0.25 inch to 3.00 inches averaging 1.00 inch. Small amounts on other days. Widespread freezing rain over weekend. Many shrubs, trees, and limbs broken. Soil moisture improved, mostly adequate, except surplus southern Piedmont. Condition small grains mostly good. Pastures mostly fair. Supplies of hay adequate; feed grains short to adequate. Farmers active with repairs, livestock feeding, bookkeeping, and planning 1971 operations

NORTH DAKOTA: Cold temperatures averaged 9° to 15° below normal. Precipitation over weekend mostly 0.10 to 0.25 inch; heaviest north. Snow depths range from 3 inches to 11 inches, deepest in northeast. Snow fell throughout State over weekend leaving a light to moderate cover to previously exposed grass. Cold weather continued during week limiting farm and ranch activities. Livestock remain in good condition. Chores and year-end and bookwork main farm activities.

OHIO: Cold and dry week with considerable sunshine. Major storm passed through Ohio on 4th. Most locations received 0.40 inch or more of rain from the storm. Snow flurry activity generally confined to northeast 5th, 7th and 8th. Daily mean temperatures average about 13° below normal for the 5-day period ending on 9th. Temperatures were generally low enough for soils to remain frozen. Farm activity limited mainly to care of livestock and maintenance of machinery and buildings.

OKLAHOMA: Below-freezing temperatures through Thursday becoming near or slightly above normal over weekend. Weekly temperatures averaged 10° to 12° below normal except 20° below normal in Panhandle where there was a snow cover 1st half of week. Extremes: 68° and 16°. No measurable precipitation. Very cold dry weather retarded or stopped growth small grains throughout State. Condition small grains declined during week 16% poor, 58% fair, 26% good, about same as year ago. Small grain pasture very short western half, becoming limited elsewhere. Range feed in short supply, supplemental feeding continues throughout State. Increased supplemental feeding necessary in many areas due cold weather and short forage supplies from range and small grains. Surface moisture continues short western 1/3, short to adequate central, and generally adequate eastern 1/3. Subsoil moisture short western 1/3, north-central and central parts of State, adequate elsewhere. Range and feed condition continued seasonal decline 27% poor, 56% fair, 17% good. Livestock condition down substantially from week

earlier due to cold temperatures. Livestock condition 5% poor, 52% fair, 43% good.

OREGON: Cold, clear days first half of week turned to rain and snow last half. Temperatures averaged mostly 5° to 7° below normal, 9° to 11° below east quarter and southeast quadrant. Minima -11° to -13° east of Cascades, 17° to 35° west side. Maxima 29° to 58°. Precipitation 1 to 3 days last week, mostly light. Totals up to 0.10 inch southern half, 0.20 to 0.60 northern half except 1.00 to 2.50 inches north coast. Decreasing snowpack in mountains during week mostly regained over weekend. Depths 60 to 102 inches above 4,000 feet. Much below normal temperatures limited farm activity to mostly livestock care. Fall-seeded grain crops continue in good condition. Some progress in orchard pruning Hood River. Heavy supplemental feeding of livestock. Feed supply ample most areas. Lambing on increase.

PENNSYLVANIA: A cool dry week. Rain up to 1.50 inches fell Monday but low pressure system was followed by cool Canadian high pressure center which dominated remainder of period. Daytime highs at or above freezing most areas at start and end of week but readings remained below freezing in between. Coldest on 8th and 9th with a low -8° at Pleasant Mount on morning of 9th. Week's high 55° on 4th at Pittsburgh. Overall temperatures averaged 5° to 6° below normal for 2d straight week. Gradient of precipitation on 4th from less than 0.15 inch in northwestern 1/3, 0.50 to 0.57 inch over central 1/3, to 1.00 to 1.50 inches over southeastern 1/3. Greatest total, 1.56 inches at Reading. Routine farm chores continue.

PUERTO RICO: Rainfall averaged 0.62 inch about 75% of normal. Well distributed around Island with some dry areas reporting no rain entire week. Divisional averages ranged from 1.29 inches eastern interior to 0.16 inch southern slopes. Temperatures averaged about 1° above normal with 76° to 77° coast and 71° interior.

SOUTH CAROLINA: Above-average cloudiness with light rain and drizzle most of week. Freezing rain in Piedmont on 8th and 9th. 1.00 inch of rain in upper Piedmont and mountains, 1.50 inches along coast and less than 0.50 inch elsewhere. Temperatures averaged normal or slightly below in the Piedmont and 3° or 4° above normal in sand hills and coastal plain. Adequate soil moisture all areas. Outside activities hampered by wet weather. Ground preparation and top-dressing active, weather permitting. Most fruit tree pruning complete. Tobacco bed preparation continued as weather permitted. Vegetables mostly good condition.

SOUTH DAKOTA: Weekly temperatures averaged from 10° to 16° below normal. Extremes ranged from 23° below zero at Flandreau and Brookings on 6th to 43° at Rapid City on 8th. Snow mostly end of week with amounts ranging from a trace portions of south to 0.40 inch northwest and to about 0.50 inch or more in northern Black Hills. Snow cover end of week generally ranged from 3 to 7 inches in lower elevations and to over 1 foot in northern Black Hills. Cold weather hard on livestock, but most herds in good winter condition. Supplemental feeding increasing with hay and roughage supplies generally adequate. Main farm operations caring and feeding of livestock. Snow cover for winter wheat and rye generally adequate.

TENNESSEE: Temperatures below normal except above normal early and late in period. General light to moderate rain 1st of week and light snow or freezing rain on 8th. Snow on ground Friday limited to 1 to 2 inches some portions of east with thin coating of ice central. Precipitation mostly 0.10 to 0.50 inch western and northeastern sections up to 0.60 to 1.00 inch elsewhere. Field activities very limited. Major farmwork concerned with caring for livestock and machinery maintenance. Small grains in good condition.

TEXAS: Coldest weather of season engulfed State most of week before warming trend began over weekend. Temperatures plunged to 10° below zero in western Panhandle to 25° degrees at Carrizo Springs in Winter Garden and to 32° at McAllen in Lower Valley. Precipitation confined mostly to coastal section and to southeast Texas. Western half of State continued extremely dry. Livestock owners kept busy hauling feed, breaking ice on stockponds as zero temperatures and below spread across plains sector. Light precipitation in form of snow, sleet, showers dotted State, but brought little relief from drought conditions. Outdoor activities were severely curtailed as cold temperatures brought all unnecessary activities to a halt. Cold damp weather temporarily slowed vegetable harvest **all South Texas areas**, but harvest expected to resume normal activity current week. Shipments most winter vegetables will increase slightly as harvest reached peak. Moderate to good volume cabbage, carrots, lettuce and spinach; with light supplies broccoli, cauliflower, greens, and celery. Growth winter vegetables, early spring onions temporarily slowed by cold weather but no permanent damage apparent. Citrus harvest temporarily slowed by cold weather, but good movement grapefruit, early and midseason oranges. No damage to citrus from cold temperatures.

UTAH: Scattered snowshowers beginning of period with coldest temperatures since 1963 at many stations and coldest since 1944 at a few localities. Rising temperatures to well above freezing by weekend with precipitation changing to rain, then back to heavy wet snow Sunday night. Many sections of State continue snow covered. Farmers and ranchers continued their struggle against extreme cold and drifting snow much of last week. Keeping farm roads open real problem some rural areas. Care and feeding dairy herds and laying flocks, beef cattle and sheep on winter ranges, valley farms and feedlots continue major activity. Two turkey plants will process in January. Some **marketing of potatoes**, dry onions, and apples from storage continues. Winter conventions and meetings of various groups of farmers and stockmen being held.

VIRGINIA: Temperatures below normal at beginning. Precipitation at beginning and end, totals under 0.50 inch in west to 2.00 inches in southeast. Snow dominated farm picture over most of State. Southeast received rain instead of snow. Snowfall created extra chores including opening roads, removing snow from barnlots and farmsteads, and carrying extra feed to livestock. Snow cover virtually eliminated grazing. Dairy cattle obtained only 5% of their forage requirements from pastures, beef cattle 15% and sheep 20%. Lambing and calving were problem in heavy snow areas, but losses were low. Some pig losses occurred due extremely low temperatures.

WASHINGTON: West of Cascades: Below-normal temperatures 1st of week, warming trend with rain and snow latter half. Precipitation amounts 0.25 to 1.25 inches. Farmwork limited to care of livestock. Dairy cattle good condition, feed supply adequate. Marketing forced rhubarb beginning. Most logging operations shut down. East of Cascades: Cold until near end of week. Average temperatures 3° to 5° degrees below normal southern valleys, 10° to 15° below normal northern half State. Precipitation trace to 0.10 inch central basis, near 0.25 inch elsewhere. Snow cover agricultural areas, trace to 4 inches southern half, 10 to 25 inches northern half. Pruning orchards and vineyards as weather permits. Potatoes moving from storage to processing plants. Winter wheat in good condition. Feed supply adequate. Livestock in good condition.

WEST VIRGINIA: Cold week except during rain January 4 which totaled almost 1.00 inch. Trace of snow night of January 8 and 9. Considerable sunshine during week. Main farm activity caring for livestock. Soil moisture adequate to surplus.

WISCONSIN: Heavy snow from last weekend storm continuing in north on Monday. Clearing and cold Tuesday through Friday. Mostly fair and mild over weekend. Temperature extremes of 40° and -30°. A good snow cover 6 to 30 inches deep covers State. Frost depths negligible. Farm activities care and feeding of livestock.

WYOMING: Very cold weather persisted until weekend. Temperatures averaged from 11° to 22° below normal statewide. Most of State received light to moderate snow with some drifting. Hecla reported most moisture with 0.91 inch. Maxima were mostly high teens to 30's west of Divide, 25° to 40° east. Minima were mostly -15° to -35° west of Divide, -10° to -25° east. Temperature extremes were 46° at Diversion Dam and -39° at Afton. Feeding and caring for livestock continued to dominate the agricultural scene. Frigid temperatures caused usual animal disease problems, but no abnormal death losses were reported. Feeding increased and livestock shrinkage is light to moderate.

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