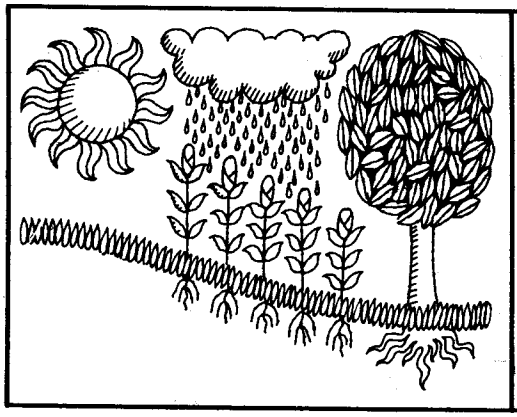
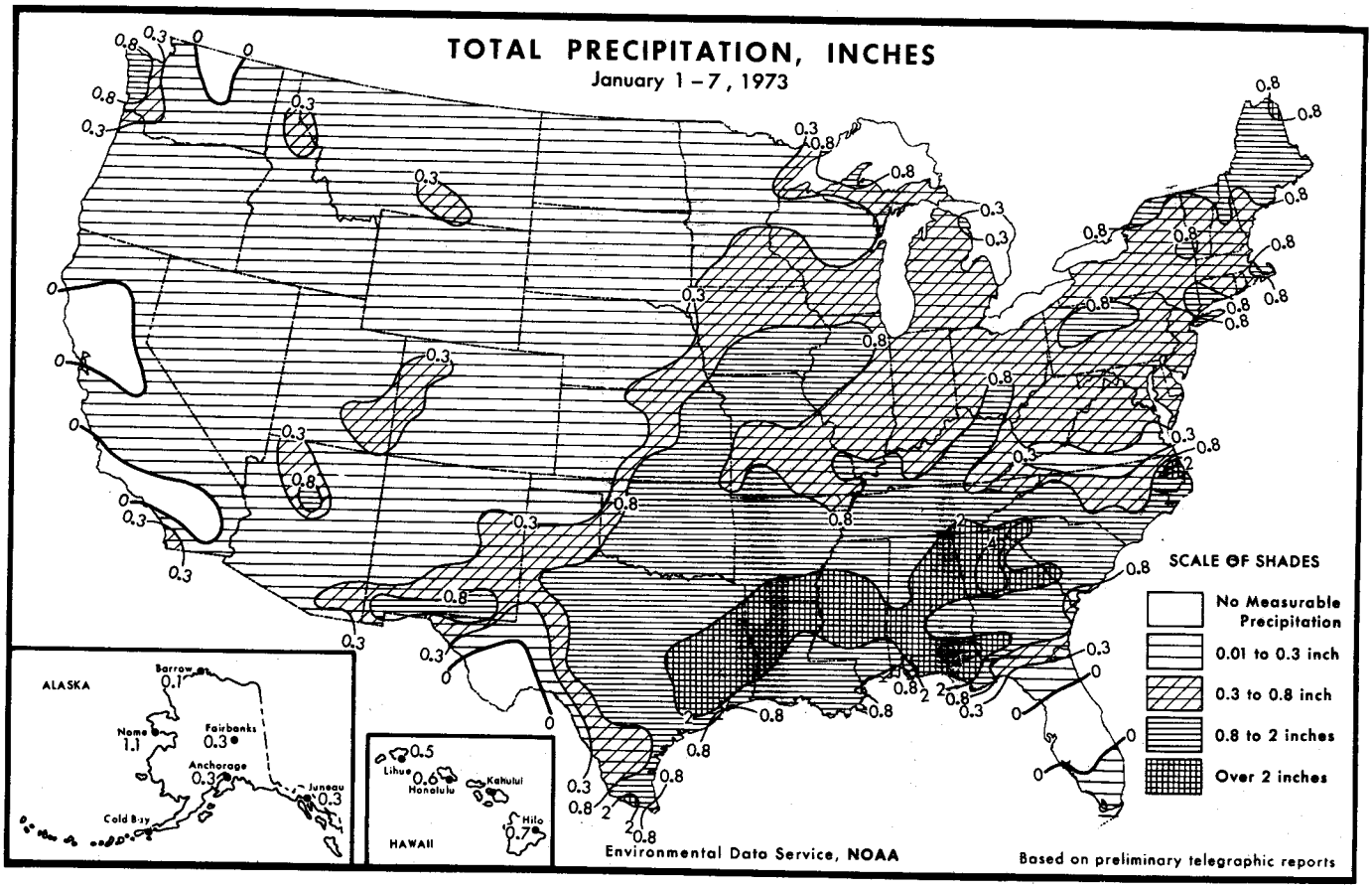


Weekly Weather & Crop Bulletin

U. S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Environmental Data Service

U. S. DEPARTMENT OF AGRICULTURE
Statistical Reporting Service

Volume 60, No. 2 Edited by Lucius W. Dye Jan. 8, 1973 Washington, D. C.

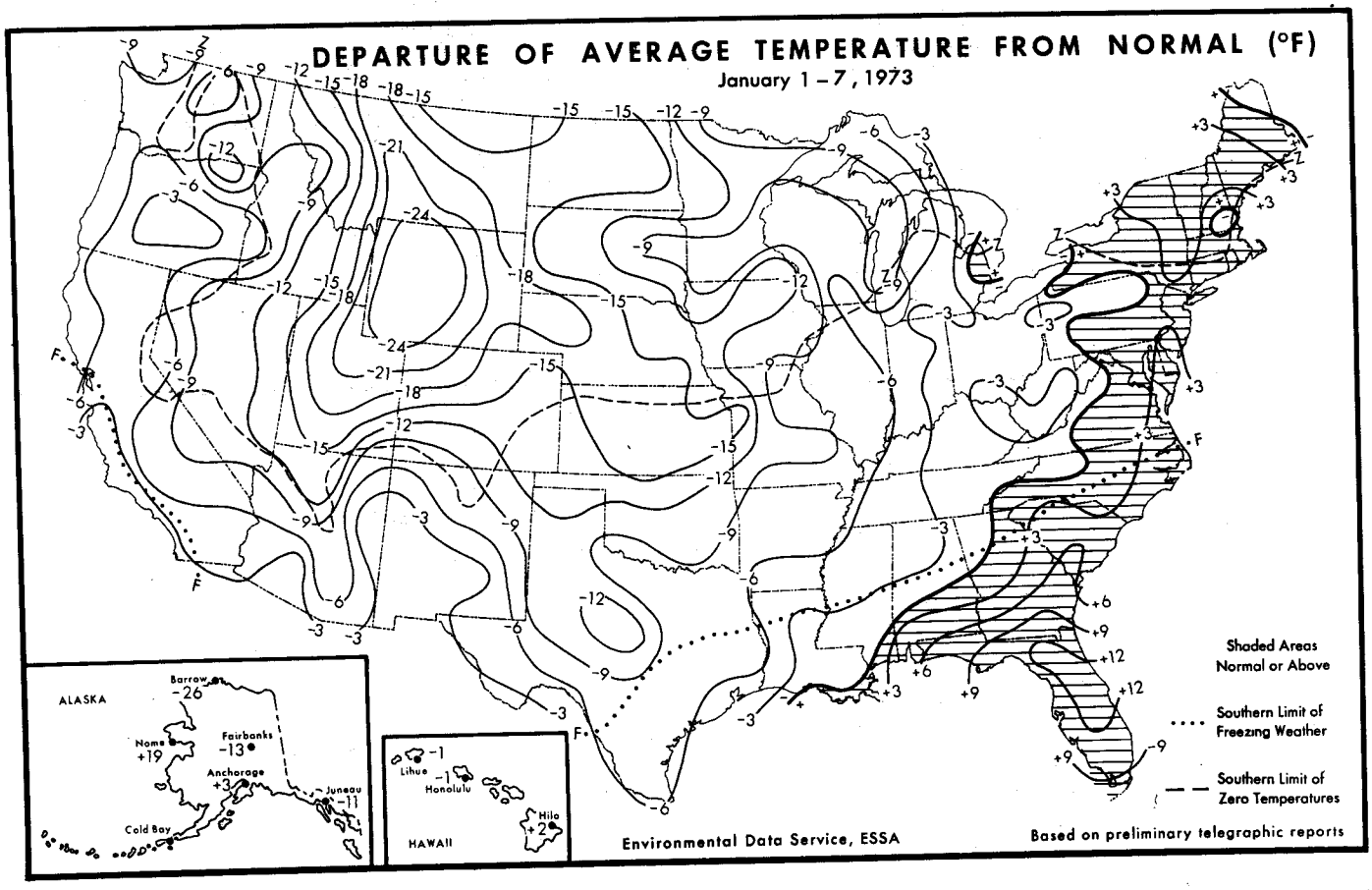


HIGHLIGHTS: Cold stormy weather prevailed over most of the Nation last week.

PRECIPITATION: A variety of inclement weather occurred last week affecting much of the Nation. Early in the week, the storms were mostly in the western half of the Nation. The northern States suffered most at midweek. The entire Nation was affected in the last few days. Santa Ana winds in the southern California deserts filled the air with dust on Monday, January 1. Snow fell in the southern Rocky Mountains from southern Colorado to the northern portions of Arizona and New Mexico. Strong winds caused blowing and drifting snow and blowing sand which closed Highway 66 east of Albuquerque, N. Mex., about midday, January 1. Springerville, Ariz., received 7 inches of snow. A Pacific storm brought rain to the Washington Coast and snow in the nearby hills and eastward to the Rocky Mountains. Strong Chinook winds blew down the eastern slopes of the Rocky Mountains gusting to about 65 m.p.h. at Livingston and Cut Bank, Mont. The snow continued Tuesday in southeastern Arizona and southern New Mexico adding 2 to 6 inches of new snow to the area. Rain fell from the Lower Mississippi River Valley to the Carolinas. Freezing rain slicked the roads and coated exposed objects with ice from Oklahoma northeastward to Minnesota.

At midweek, snow fell over the northern and central Great Plains and freezing rain and sleet occurred in the central Great Plains south of the Snow Belt. One of the worst ice storms of record occurred in the Kansas City, Mo., vicinity Wednesday and Wednesday night. The conditions worsened as the freezing rain fell with snow accompanied by strong winds and cold temperatures.

Shortly after midweek, an intense storm



brought rain from Lower Michigan to the Deep South and freezing precipitation from the Lower Great Lakes to southern New England. Extensive fog covered the southeastern coastal States including portions of Florida.

As the weekend approached, blowing snow and drifting snow were common from the northern Great Plains to the Great Lakes and mixtures of rain, freezing rain, sleet, and snow plagued New York and parts of New England. Another storm developed in the Southwest. Snow fell from the southern Rocky Mountains to Kansas, freezing rain slicked the roads from western Texas to southern Kansas, and rain fell from eastern Texas to the Lower Mississippi River Valley spreading to the western Carolinas by Friday afternoon. The ugly weather continued over the weekend spreading generally eastward. Glazing from Texas to northwestern Mississippi broke tree limbs and power lines and slowed travel.

TEMPERATURE: A slow-moving cold front became quasi-stationary along the Appalachians early in the week. Strong southerly winds ahead of the front kept early morning readings on New Year's Day in the 50's and 60's along the Atlantic Coast. Behind the front northerly winds dropped the early-morning temperatures to the 20's and 30's. Extreme cold plunged into mid-America. By mid-week, the cold had spread to the central Great Plains. Subzero weather reached northern Kansas and northern Missouri. Kirksville, Mo., registered -3° Thursday morning. By afternoon, the arctic air separated the departing storm in the Northeast from the approaching storm in the Southwest. Below-zero weather covered the northern and central Rocky Mountains and the northern and central Great Plains. Mild weather continued in southern Florida with the mercury reaching the middle 80's on most afternoons. The persistent cold dropped the temperature at International Falls, Minn., to 38° below zero Saturday morning.

Temperatures averaged slightly above normal along the Atlantic Coast but much below normal over most of the rest of the Nation. Much of the area from Nevada to the Mississippi River averaged more than 6° colder than normal. Temperatures over the northern Rocky Mountains averaged from 18° to 24° below normal.

L. W. Dye

NATIONAL AGRICULTURAL SUMMARY

AGRICULTURAL HIGHLIGHTS: Harvesting of late crops continued at a very slow pace during the week. Below normal temperatures accompanied by snow in many areas hampered harvest and caused severe stress on livestock. Farm activities were limited mostly to grain drying, machinery repair and caring for livestock. Cold temperatures, however, did allow some harvest in areas of the North Central States, where the ground was frozen hard enough to support machinery.

SMALL GRAINS: Winter wheat remained in good to excellent condition over most of the Nation. Soil moisture is adequate and snowcover has protected small grain fields. In South Dakota parts of winter wheat areas have only light snow. In Kansas, conditions are mostly favorable and wind damage to small grains has been light. Growth is mostly good in the South Central States but some fields have been retarded by freezing temperatures. Growth of small grains in Texas was limited by cold wet weather. However, moisture in South and South Central Texas improved condition of oats. Planting continued in Arizona, but growth was slowed some by cold weather.

CORN: Harvest of the Nation's corn crop continued to make very slow progress. Approximately 90 percent of the total acreage has been harvested compared to 88 percent a week earlier. Harvest in the North Central States was hindered by wet fields and held harvesting progress at 90 percent, a 3-point gain from the previous week. In the East North Central States some harvest was permitted when the ground was frozen hard enough to support machinery, and harvest gained 4 points for a total of 92 percent. In the West North Central States harvest increased only 1 percent from the previous week and harvest is now 95 percent complete. The Iowa corn crop is 95 percent picked compared to 94 percent the week before while harvesting in Illinois increased 5 points to 91 percent. Nebraska farmers pushed their harvest to 95 percent, a 3 point increase over the previous week. Indiana made fair progress and gained 5 points to reach 75 percent complete.

COTTON: Cotton harvest made slow progress in the South and is now 85 percent complete compared to 82 percent the previous week. Fair progress was made in Texas where cotton harvesting advanced 6 points to 82 percent complete. Harvest in Mississippi was virtually at a standstill with only 1/2 day suitable for field work during the week. Arkansas's harvest is about 95 percent complete being delayed by wet fields and snow. Cotton harvest in Tennessee was hampered somewhat by snow. Harvest in Louisiana increased 3 points reaching 93 percent complete. Oklahoma harvest is 70 percent complete and Alabama is estimated at 94 percent.

SOYBEANS: Cold weather and excessive moisture condition continued to slow soybean harvest with only about 86 percent of the total acreage harvested. This compares with 84 percent harvested the previous week. Soybean combining in the North Central States averaged 87 percent complete compared to 85 percent the previous week. The Southern States also advanced only 2 points to 83 percent complete. Combining in the East North Central States increased 2 points to 81 percent complete while the West North Central States increased only 1 point to 93 percent complete. Soybean harvest in Illinois, slowed by rains gained only 1 point to 91 percent complete. Indiana advanced 5 points to 70 percent complete and Ohio is estimated at 75 percent. Missouri is 80, Arkansas 87 and Mississippi 68 percent complete.

OTHER CROPS: The late sorghum grain harvest continues to be restricted by wet fields. Combining in Texas is about 99 percent complete although very little progress was made during the past week. Nebraska remains at 92 percent and Missouri is up 3 points to 84 percent. Arizona is virtually complete. Sugarcane harvest in Louisiana made slow progress but is nearing completion with about 5 percent remaining to be harvested.

Fruits and Nuts: Citrus tree conditions in Florida remain excellent. Warm temperatures are helpful and moisture levels are adequate. Harvest of lemons and navel oranges in Arizona continue at a normal rate. Citrus harvest in Texas has been hampered by cold weather and wet fields. Pecan harvest continues in many areas.

Vegetables: Vegetable supplies in Florida are increasing as crops respond to improved weather. Tomatoes, celery, cabbage and peppers are in moderate to good volume. Cabbage and carrot harvest in Texas was hampered by rain.

PASTURE AND LIVESTOCK: Most livestock are in good condition although discomforted some by extreme cold weather. Many areas remain muddy and wet causing continued stress. Supplemental feeding is prevalent in many areas.

Luther D. Rives
Agricultural Statistician

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., Jan. 7, 1973

States and Stations	Temperature °F		Precipitation Inches	
	Average	Departure*	Total	Departure*
ALA.Birmingham	43	- 3	3.3	+2.2
Mobile	58	+ 5	.8	- .4
Montgomery	50	+ 2	1.8	+ .8
ALASKA.Anchorage	15	+ 3	.3	+ .1
Barrow	11	-26	.1	0
Fairbanks	1	-13	.3	+ .1
Juneau	15	-11	.3	- .6
Nome	24	+19	1.1	+ .9
ARIZ.Flagstaff	16	-12	.9	+ .5
Phoenix	47	- 3	.1	- .1
Tucson	43	- 7	T	- .2
Winslow	28	- 3	.1	0
Yuma	49	- 4	T	- .1
ARK.Fort Smith	32	- 8	1.0	+ .4
Little Rock	33	- 8	1.4	+ .4
CALIF.Bakersfield	41	- 6	.2	- .1
Eureka	42	- 6	.1	-1.4
Fresno	38	- 7	T	- .5
Los Angeles	53	- 3	0	- .6
Red Bluff	40	- 6	0	-1.0
San Diego	53	- 3	.5	0
San Francisco	43	- 6	T	- .9
Stockton	40	- 4	0	- .7
COLO.Denver	13	-16	T	- .1
Grand Junction	9	-17	.5	+ .4
Pueblo	18	-12	.1	0
CONN.Bridgeport	32	+ 1	1.0	+ .2
Hartford	29	+ 1	.6	- .1
D.C.Washington	38	+ 1	.5	- .1
FLA.Apalachicola	65	+10	.3	- .4
Ft. Myers	74	+10	T	- .3
Jacksonville	67	+11	.2	- .3
Key West	77	+ 7	.1	- .3
Lakeland	71	+ 9	0	- .5
Miami	76	+ 9	T	- .4
Orlando	73	+13	0	- .5
Tallahassee	65	+11	.4	- .4
Tampa	72	+10	0	- .5
GA.Atlanta	45	0	5.5	+4.5
Augusta	51	+ 4	2.4	+1.7
Macon	51	+ 2	1.7	+ .9
Savannah	56	+ 5	.8	+ .1
HAWAII.Hilo	73	+ 2	.7	-2.6
Honolulu	72	- 1	.6	- .2
Kahului	--	---	---	----
Lihue	70	- 1	.5	- .7
IDAHO.Boise	24	- 6	T	- .3
Lewiston	23	- 9	.2	0
Pocatello	8	-15	.2	- .1
ILL.Cairo	32	- 6	.6	- .2
Chicago	21	- 5	.7	+ .3
Moline	17	- 7	.9	+ .5
Peoria	19	- 7	1.0	+ .6
Rockford	17	- 5	1.0	+ .5
Springfield	22	- 7	.8	+ .3
IND.Evansville	29	- 6	.8	0
Fort Wayne	24	- 3	.6	0
Indianapolis	26	- 3	.8	+ .2
South Bend	24	- 2	.7	+ .2
IOWA.Burlington	17	- 9	1.0	+ .7
Des Moines	11	-10	.9	+ .6
Dubuque	11	-10	.5	+ .1
Sioux City	10	-10	.3	+ .1
KANS.Concordia	12	-17	.5	+ .3
Dodge City	17	-15	.1	0
Goodland	15	-13	.2	+ .1
Topeka	17	-13	1.3	+1.0
Wichita	17	-16	1.2	+1.0
KY.Lexington	33	- 2	.8	- .2
Louisville	32	- 3	.6	- .2
LA.Baton Rouge	52	- 1	1.5	+ .3
Lake Charles	49	- 5	1.0	- .2
New Orleans	54	- 1	.8	- .2
Shreveport	43	- 5	2.7	+1.6
MAINE.Caribou	9	- 2	.5	0
Portland	25	+ 3	.5	- .4
MD.Baltimore	36	+ 1	.5	- .2
MASS.Boston	31	+ 1	.6	- .2
Chatham	32	---	.7	----
MICH.Alpena	17	- 3	.2	- .3
Detroit	25	- 2	.7	+ .2
Flint	23	0	.6	+ .2
Grand Rapids	21	- 4	.7	+ .3
Houghton Lake	14	- 6	.5	+ .1
Lansing	21	- 4	.7	+ .2
Marquette	11	-10	.7	+ .3
Muskegon	20	- 7	.7	+ .2
S.Ste.Marie	14	- 3	.5	0
MINN.Duluth	0	- 9	.4	+ .2
Internatl Falls	- 5	- 9	T	- .1
Minneapolis	5	- 8	.6	+ .4
Rochester	2	-13	.8	+ .6
St. Cloud	0	-12	.3	+ .1
MISS.Jackson	45	- 3	3.2	+2.0
Meridian	46	- 2	3.0	+1.8
MO.Columbia	22	- 7	1.0	+ .6
Kansas City	16	-16	1.0	+ .7
St. Louis	24	- 8	.5	+ .1
Springfield	25	- 9	1.1	+ .6
MONT.Billings	6	-19	.7	+ .6
Glasgow	- 1	-14	T	- .1
Great Falls	4	-20	T	- .1
Havre	2	-15	T	- .1
Helena	6	-14	.1	0
Kalispell	8	-13	.1	- .2
Miles City	2	-17	T	- .1
Missoula	12	- 8	.1	- .1
NEBR.Grand Island	9	-14	.1	0
Lincoln	10	-17	.4	+ .2
Norfolk	8	-13	.1	0
North Platte	8	-17	T	- .1
Omaha	10	-13	.7	+ .5
Valentine	6	-16	T	- .1
NEV.Ely	12	-12	.1	- .1
Las Vegas	34	- 9	T	- .1
Reno	25	- 5	.1	- .1
Winnemucca	18	-10	T	- .2
N.H.Concord	22	0	.4	- .3
N.J.Atlantic City	37	+ 2	.7	- .1
Trenton	35	+ 1	.6	0
N.MEX.Albuquerque	29	- 6	.1	0
Roswell	34	- 3	.6	+ .5
N.Y.Albany	28	+ 5	.3	- .2
Binghamton	24	0	.7	+ .2
Buffalo	24	- 1	.6	0
New York	35	+ 1	.5	- .3
Rochester	27	+ 1	.6	+ .1
Syracuse	27	+ 2	.4	- .3
N.C.Asheville	41	+ 2	1.4	+ .7
Charlotte	44	+ 2	1.2	+ .3
Greensboro	39	0	.7	0
Hatteras	52	+ 5	1.2	+ .2
Raleigh	42	+ 1	.5	- .2
Wilmington	52	+ 4	1.5	+ .8
N.DAK.Bismarck	- 4	-17	T	- .1
Fargo	- 6	-15	.1	0
Williston	- 3	-14	T	- .1
OHIO.Akron-Canton	28	- 1	.7	+ .1
Cincinnati	29	- 3	.7	+ .1
Cleveland	28	- 1	.7	+ .2
Columbus	29	- 1	.8	+ .2
Dayton	28	- 2	.5	0
Toledo	23	- 4	.6	+ .1
Youngstown	25	- 3	.6	+ .1
OKLA.Okla. City	27	-11	1.5	+1.2
Tulsa	26	-11	1.4	+1.0
OREG.Astoria	34	- 7	.7	-2.0
Burns	23	- 3	.1	- .3
Medford	31	- 4	.2	- .5
Pendleton	21	-12	.2	- .1
Portland	34	- 5	.3	-1.0
Salem	33	- 6	.2	-1.4
PA.Allentown	31	+ 2	.7	0
Erie	26	0	.4	- .2
Harrisburg	33	+ 1	.7	+ .1
Philadelphia	35	+ 3	.6	0
Pittsburgh	29	0	.8	+ .2
Scranton	28	0	.5	0
R.I.Providence	31	+ 1	.7	- .2
S.C.Charleston	53	+ 4	1.2	+ .5
Columbia	51	+ 5	1.6	+ .8
Greenville	46	+ 3	1.4	+ .3
S.DAK.Aberdeen	0	-12	T	- .2
Huron	6	- 9	.1	0
Rapid City	10	-14	.1	0
Sioux Falls	6	-11	.1	0
TENN.Chattanooga	39	- 2	2.2	+1.0
Knoxville	41	0	1.7	+ .7
Memphis	35	- 6	1.1	- .1
Nashville	37	- 3	1.3	+ .2
TEX.Abilene	32	-13	1.3	+1.0
Amarillo	26	-11	.4	+ .2
Austin	43	- 8	1.7	+1.1
Beaumont	48	- 5	.9	- .4
Brownsville	56	- 6	.5	+ .2
Corpus Christi	52	- 6	1.0	+ .6
Dallas	39	- 8	1.5	+ .9
Del Rio	46	- 5	.3	0
El Paso	40	- 3	.8	+ .6
Fort Worth	39	- 7	1.3	+ .8
Galveston	52	- 4	.7	- .2
Houston	47	- 5	2.5	+1.6
Lubbock	29	-10	.9	+ .8
Midland	34	-10	.3	+ .1
San Angelo	37	-10	.8	+ .6
San Antonio	45	- 7	1.2	+ .8
Victoria	48	- 8	1.1	+ .4
Waco	40	- 8	1.5	+ .8
Wichita Falls	32	-11	1.5	+1.2
UTAH.Blanding	18	- 9	.6	+ .3
Salt Lake City	8	-20	.2	- .1
VT.Burlington	22	+ 5	.2	- .3
VA.Lynchburg	39	+ 1	.6	- .2
Norfolk	45	+ 4	.3	- .4
Richmond	41	+ 2	.5	- .2
Roanoke	39	+ 1	.7	0
WASH.Colville	14	-10	T	- .5
Omak	17	- 5	0	- 3
Quillayute	31	- 8	1.5	-2.9
Seattle-Tacoma	31	- 8	.3	-1.0
Spokane	17	- 9	T	- .6
Walla Walla	24	-11	.2	- .3
Yakima	22	- 7	T	- .2
W.VA.Beckley	31	- 3	.6	- .5
Charleston	34	- 2	.4	- .5
Huntington	33	- 4	.7	- .1
Parkersburg	33	- 2	.7	+ .1
WIS.Green Bay	11	- 7	.3	0
La Crosse	7	-11	.4	+ .1
Madison	14	- 5	.4	+ .1
Milwaukee	13	- 9	.5	+ .1
WYO.Casper	3	-22	.1	0
Cheyenne	11	-16	T	- .1
Lander	- 5	-25	.1	0
Sheridan	1	-23	.2	+ .1
P.R. San Juan	79	+ 3	.5	- .5

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

CONDENSED STATE SUMMARIES

These summaries provide brief descriptions of conditions 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 Climatologists

ALABAMA: Another mostly cloudy and very wet week. Several periods of rain but heaviest and most extensive weekend with 1.00 to 2.50 inches. Freezing rain northwest counties Sunday. It has been an unusually long period of inclement weather. Since December 1, all stations have received rain on 20 or more days and several stations have had rain on 26 to 28 days. No severe cold this week. State low was 28° at Muscle Shoals Sunday.

Farm activities seasonally low and limited further by another week of rainy weather. Outdoor work consisted mainly of feeding and caring for livestock and poultry. Farmers used time to lease cotton acreage and prepare tax records. Harvest remaining cotton made insignificant progress. Only few fields of corn remain to be harvested. About 9% of expected soybean production still to be combined. Quality of unharvested beans deteriorating rapidly. Small grains and winter grazing crops remained in good to excellent condition. Freezing temperatures over weekend should cause little damage. Grazing of these crops was limited. Rain and subfreezing temperatures necessitated heavy feeding of cattle. Stockmen are concerned about supplies of roughages, especially in southern counties.

ARIZONA: Cold air predominated over State with freezing temperatures in colder sections of both Salt River Valley and Yuma area on 5 nights. Precipitation was light and widely scattered with light snow above about 4,000 feet. Maximum precipitation totals were received in mountains in northern part of State but all reported weekly totals less than 1.00 inch of water.

Cotton activity slowed by rain and snow southeast. Harvest 95% complete. Grain sorghum virtually complete. Sugarbeet planting active. Small grain and safflower planting continues steady rate. Growth being slowed southeast by cold weather. Alfalfa hay activity continues seasonal low. Many desert valley fields pastured. Harvest lettuce, mixed vegetables continued Yuma, Salt River Valley areas. Early-morning harvest delayed by ice, mostly lettuce. Quality generally good all vegetables. Limited grapefruit harvest continued Yuma and Salt River Valley areas. Harvest lemons, navel oranges, sweets and minneola tangelos continued normal rate. Most groves escaped serious frost damage. Arizona ranges received rain, snow past week. Temperatures cold, growth new feed limited. Cattle, calves fair, good condition. Sheep, lambs winter pastures fair condition. A few late lambs. Docking, marking, branding new crop lambs active. Predators problem.

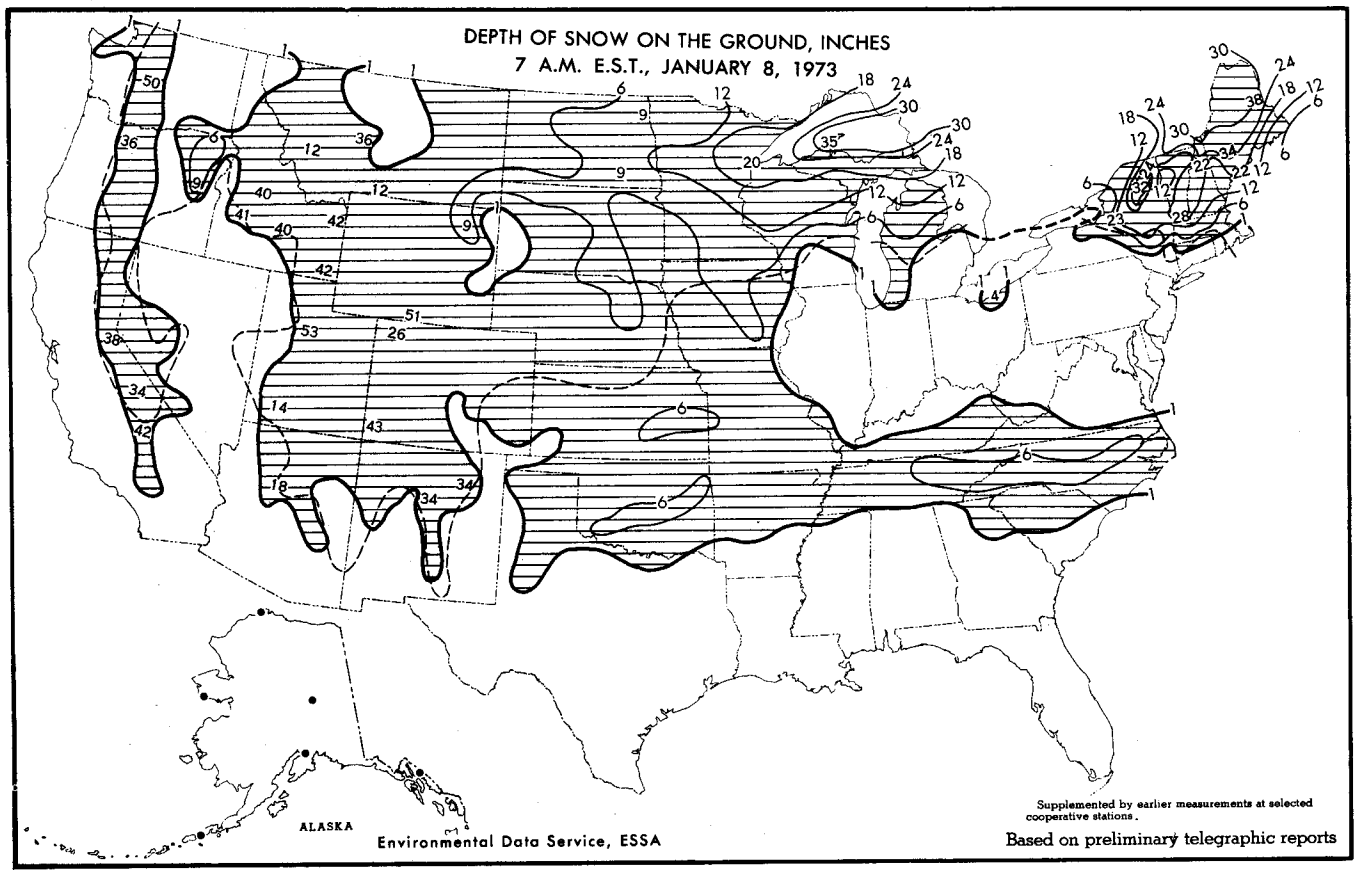
ARKANSAS: Temperatures averaged 6° to 9° below normal over State. Sharp drop in temperatures late in week with coldest weather on weekend. Highest 55° at Texarkana on 3d and 4th. Lowest at Calico Rock in north-central on 8th. Precipitation 1.00 to 2.00 inches most of State except in southeastern corner where Arkansas City recorded 4.17 inches. Some of locations in southwestern corner and in northwestern quarter of State had amounts in 0.50 to 1.00 inch range. Most precipitation occurred from midweek through weekend. Widespread sleet, snow, and freezing rain on weekend with worst ice storm in decade in southern part of State. Considerable disruption of highway travel.

Conditions permitted scattered harvest soybeans and cotton during week, but overall progress very limited. Many fields still too wet to support harvest equipment. Cotton picking about 95% complete and combining soybeans 87% finished for State. Progress variable by areas and generally less advanced northeast. Small grains fair to good condition, but little or no growth during week. Snow and ice end of week increased chores of feeding and caring for livestock and poultry. Situation normal for winter season.

CALIFORNIA: Light to moderate precipitation coastal areas, Sierras several days. Snow above 4,000 feet. Average temperatures mostly 3° to 6° below normal. Cold nighttime readings. Harvest continues sugarbeets, cotton. Cotton harvest, disking, shredding near complete. Planting continues small grains, alfalfa. Cold temperatures January 5, 6, 7 major citrus areas. General firing, wind machines supplied enough protection. Navel orange harvest continues slow San Joaquin. Orange packinghouses selectively picking, cullage continues heavy. Frost damage becoming more apparent. Picking lemons San Joaquin active. Frost damage showing. Grapefruit, tangerines continue harvesting in desert. Limited asparagus cutting in Coachella Valley. Cool weather reduced celery cutting Oxnard, south coast. Carrot harvest active desert valleys, lettuce movement increasing Imperial Valley. Potato digging increasing Stockton, San Joaquin Valley as fields dry. Field preparation for cannery tomato planting underway Sacramento Valley. Pasture growth slow from low temperatures. Soil moisture good, stock water adequate. Calving and lambing continues, losses normal, egg production down as result of weather.

COLORADO: Very cold entire state. Temperatures averaged 10° to 15° below normal both in mountains and on plains. Prolonged cold weather causing fuel shortages, industrial slowdown, and school closures in some areas. Plains endured coldest December since 1932. Some light to moderate snow in mountains, very light snow over much of plains. There has been some snow on ground in Denver and most of eastern areas for 68 consecutive days. Limited fieldwork. Winter wheat and barley good to excellent condition. Approximately 10% winter wheat being utilized for pasture. Corn and sorghum grain harvest limited to early morning and late evening when ground is frozen. Harvest of both crops approximately 88% complete. Most ranges and pastures snow covered...condition fair. Supplemental feeding of livestock heavy statewide. Livestock condition fair. Continued cold temperatures causing considerable stress to livestock.

FLORIDA: Unseasonably warm with temperatures averaging 7° to 10° above normal. Extensive fog latter part of week. Rainfall averaged below 0.20 inch, except for near 1.50 inches in western Panhandle. Sugarcane producers welcomed the cold weather of the 28th, an aid to increasing sucrose content of cane. Only limited damage to newly planted fields. Small grain making good growth. Pastures fair or better. Temporary winter pastures making rapid growth. Cattle and calves fair to good with some supplemental feeding. Citrus tree



condition remains excellent. Warm temperatures increasing transpiration. Moisture levels adequate, rainfall would be helpful as cold protector. Vegetable supplies are increasing as crops respond to improved weather. Tomatoes, celery, cabbage, and peppers are in moderate to good volume and increasing. Snap beans are in steady supply. Most other commodities are in seasonal volume. Early crop red potatoes are starting. Planting and replanting of spring crops active in southern areas. Young crops responding favorably following recent adverse weather.

GEORGIA: Cloudy most of week with rain on 4 to 6 days. Totals were over 5.00 inches parts of north, 2.00 to 3.00 inches central, and less than 1.00 inch southeast. Mild until Sunday when much colder air moved in. Average ranged from near normal northwest to several degrees above normal extreme south. Mixture of snow, sleet, and freezing rain began in extreme north Sunday morning and spread southward to cover northern 1/3 of State by Sunday night. Area northeastward from a line just north of Atlanta to Athens covered by 2 to 4 inches of mostly sleet this Monday morning. Little damage this area but freezing rain in a narrow strip just south of this area, including Atlanta, caused considerable tree and utility line damage.

Soil moisture adequate to excessive. Rains and wet soils limited field work. Some cotton, corn, and soybeans still in field. Small grains and pasture condition fair to good.

HAWAII: Cool and cloudy with scattered light to moderate showers. Growth and maturity retarded by low temperatures. Field operations on schedule sugarcane, pineapple, vegetable, and fruit farms. Crop progress about normal this time of year. Supplies of fruits and vegetables adequate. Pasture and cattle condition fair to good.

IDAHO: A cold air mass moved into Idaho early in week to lower temperatures much below normal especially eastern highlands. Averages for the week ranged from 2° to 4° below normal north to 10° to 15° below normal eastern highlands. Idaho Falls recorded a low of 20° below zero on 4th for one of the low readings. Ice jams again created flooding problems in the Blackfoot area. Precipitation was light, consequently less than normal totals ranged from traces to a high of 0.20 inch at Lewiston. Snow depth changes were small. Potato marketing somewhat hampered by below normal temperatures. Hauling sugar beets from dumps to factories active. Livestock remain in good condition. Feeding supplemental forage heavy.

ILLINOIS: Precipitation totals for December 30 through January 5 generally ranged from 1.00 to 3.00 inches, largest amounts occurring in northern Illinois. Most precipitation came in form of rain on weekend of December 30 to 31 with lesser amounts falling about midweek. The week ended with sharply colder temperatures resulting in below-normal averages for week. Rain slowed progress early in week. Colder temperatures over weekend allowed some harvesting. Corn 91% harvested, stalks standing mostly good condition. Soybeans about 91% combined, plants standing fair condition. Soil moisture, adequate 23%, surplus 77%. Nearly 2 days suitable limited fieldwork.

INDIANA: Cool cloudy week. Most precipitation fell on 4th averaging 0.50 to 0.90 inch. Temperatures in mid-20's averaged 2° below normal and ranged from 10° on 5th to 51° on 4th. Snow cover less than 1 inch near Lake Michigan and Ohio Rivers. Soils frozen to 4 inches most of State. Two days suitable for fieldwork. Topsoil and subsoil moisture surplus. High winds flattened some unharvested fields and harvesting problems continue. Freezing of soils aid getting equipment into fields. Corn 75% harvested, 6 weeks behind average. Soybeans 70% combined, 11 weeks behind average. Sorghum grain 80% harvested.

IOWA: Ice and snow at midweek turning colder the 4th. Temperatures averaged about 10° subnormal. Carroll measured -24° and Mason City -29° on the 6th. Snow particularly heavy west-central, north-central, and some northeastern counties. Snow cover 13 inches at Estherville, Algona, and Humboldt.

KANSAS: Cloudy and bitter cold weather returned. Temperatures averaged 12° to 16° below seasonal. Cold wave most of State at mid-week; daily maxima 8° to 23° rest of period. Minima mostly ranged zero to 20° after cold wave. Precipitation all areas but amounts variable; generally under 0.25 inch western 1/3, 0.10 inch to 1.00 inch central and 0.75 to 2.00 inches eastern 1/3. Ice storm northeast caused considerable power line and tree damage 3d. Snow cover 1 to 5 inches most of State at end of period. Livestock suffered from snowstorm, cold weather. Feedlot cattle mired in muddy lots early in week, but lots frozen and rough late in week. Many cattle had respiratory problems and sore feet and livestock death losses continued above normal. Newborn calves, lambs, and pigs under stress due to storms and low temperatures. Supplemental feeding continued heavy with grain and roughage supplies mostly adequate. Few cattle on wheat pasture due to lack of growth, mud, or snow cover. Wheat good to excellent with ample moisture. Wind damage to small grains quite light. Sorghum, corn, and soybean harvest continued slow due to bad weather.

KENTUCKY: Temperatures averaged 2° to 6° below normal except near normal in southeast. Precipitation 0.40 to 1.20, least in southeast. Sunny 1st, cloudy balance. Temperatures 3° to 9° above normal 3d and 4th, on cold side other days, maxima in 20's on last 2 days. General rain on 3d. On 7th scattered snow flurries in north, 1 to 2 inches over much of south.

Rain last week again limiting fieldwork. Snow fell over much south over weekend. Cold temperatures may firm ground enough to support harvest equipment where snow not on ground. Considerable soybeans still in field in extreme western Kentucky. Some fields expected to be total loss. Cold, damp weather demanding increased amounts supplemental feed. Livestock producers feeling affect of higher grain and protein prices.

LOUISIANA: Temperatures averaged near normal southeast, 4° to 8° below normal north-central and southwest. Severe ice storm northern 1/3 on Sunday was worst in some areas since 1951. Strong south winds mid-week caused some tidal flooding coast. Temperature extremes: 76° Lafayette Friday; 28° Ashland Thursday and Friday. Weekly precipitation totals more than 2.00 inches north and central 3/4 to 2.00 inches south with measurable amounts each day at a number of places. Greatest 1-day total, 1.71 inches at Diamond last Monday afternoon. Continuation of wet weather made fieldwork virtually impossible. About 5% to 10% of cotton and soybeans still in fields. Sugarcane harvest made slow progress in rain and mud, but about 95% completed. Winter pastures making slow growth, mostly too wet to graze. Supplemental feeding general. Livestock in fair to good condition.

MARYLAND AND DELAWARE: Cool weekend after mostly mild week lowered temperature averages to normal to 2° above normal except 2° to 4° above normal in southeast and west. Extremes: low and mid-60's on 1st, teens and low 20's except 7° to 15° in Garrett County on 7th. Rainfall on 3d and 4th totaled mostly 0.50 to 0.75 inch.

Farmers made some progress with harvest of corn and soybeans on well-drained fields. Low areas were still too wet to carry harvest equipment. Topsoil moisture conditions adequate to surplus.

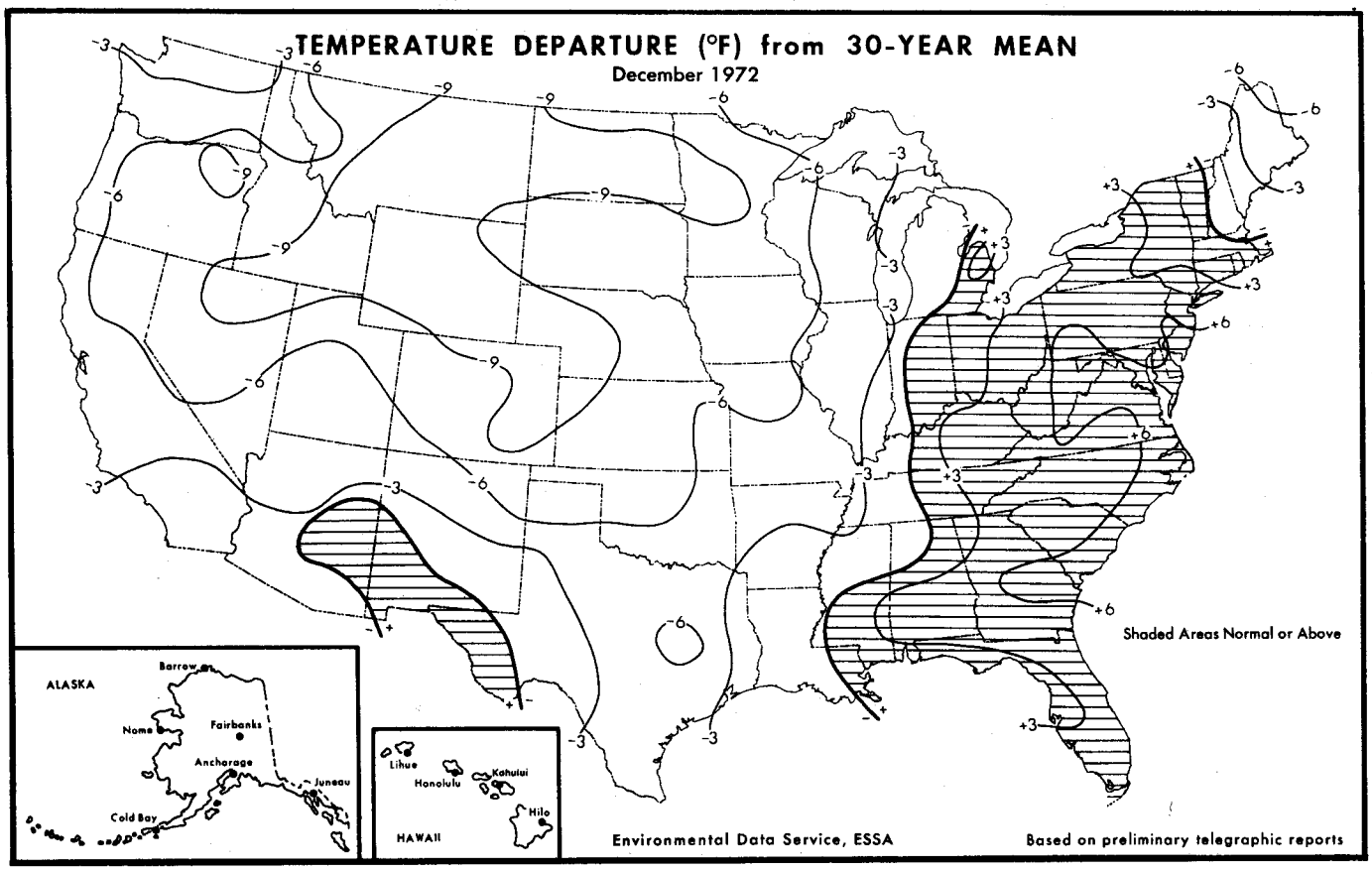
MICHIGAN: Brief warming midweek with freezing rain changing to rain south, snow north. Cold, lake snow late in week. Temperatures averaged 1° below normal to 7° below normal. Smallest departures eastern sections. Precipitation totals 0.50 to 1.30 inches south and west Lower Peninsula and vicinity Lake Superior, 0.20 inch remainder of State. Almost bare ground, cold temperatures and fair skies should aid corn harvest progress south-central and southeast Lower Peninsula.

MINNESOTA: Temperatures varied from 9° below normal in the east to 15° below normal in northwest. Extremes 38°, -38°. Precipitation east of the Worthington-St. Cloud-Hibbing line on Wednesday. Average snowfall 5 to 6 inches. However, in Rochester area, 8 inches with a water content averaging near 0.50 inch. Generally less than 1 inch of snow west of this line. Snow depth varied from 3 inches in southwest to 20 inches in northeast. From Minneapolis north, snow depth generally greater than 9 inches.

MISSISSIPPI: Rain on 4 to 5 days with most totals for week 1.50 to over 3.50 inches; heaviest amounts were reported on 31st with the greatest 1-day amount of 2.71 inches at Ofahoma. Temperatures average from about normal to 4° above normal. Starting Friday evening, freezing rain, sleet, and light snow reported extreme northern portion of State; ice on trees caused some to break, fall, and block some highways and roads, and knocked some power lines down. On Sunday these conditions had spread farther south. Central and southern sections had mostly heavy rain and some amounts up to 3.50 inches decreasing in extreme south. Soil moisture surplus in southern portion, excessive in north and Delta. Average of 0.5 day suitable for fieldwork compared with 1.8 days last week. Cotton 88% harvested, same as last week. Soybeans 68% harvested, same as last week. Hay and roughage supplies mostly adequate. Feed grain supplies mostly short. Wheat and oats in fair to good condition. Livestock condition fair to good. Pasture conditions good in northern part of State, but poor to fair in south. Grazing of pastures hampered by excessive moisture.

MISSOURI: Week began mild but turned cold and nasty by midweek. Temperatures at start of week above normal but by end of period were well below normal. For week, temperatures averaged from near normal in Bootheel to 10° below normal in northwest. Precipitation which occurred in a variety of ways, heavy in most areas. A heavy ice storm caused considerable damage to trees and utilities in the

(Continued on Page 11)



WEATHER - DECEMBER 1972

TEMPERATURE: Typical winter weather covered much of the Nation in the first three weeks of December. Although arctic cold covered much of the Nation, the Gulf of Mexico Coast enjoyed balmy weather at the beginning of the month. By the end of the first week of December, the leading edge of the cold air had reached the Gulf Coast States and the Carolinas. Bitter cold continued over much of the West. The mercury at West Yellowstone, Mont., plunged to 40° below zero on December 10. The northern Rocky Mountains and the northern Great Plains were about 30° to 40° colder than normal. At midmonth, "Old Man Winter" was still doing his "thing", combining cold temperatures, strong winds, ice, and snow. Record warmth in Florida, 87° at Vero Beach on the 14th, was replaced by maximums in the 50's and 60's by the 16th. Shortly after midmonth, three high-pressure systems poured cold air southward. One was located just north of the North Dakota-Canada Border; one was over the Oklahoma-Texas Panhandles; the third was over Utah and Wyoming. A Low over the Pacific Ocean battered the coasts of Washington and Oregon. As the Christmas weekend approached, the western Great Plains warmed to the 40's and 50's and Florida emerged from the "deep freeze." In the last week of December, the Southwest averaged slightly cooler than normal. Relatively mild weather continued over most of the rest of the Nation.

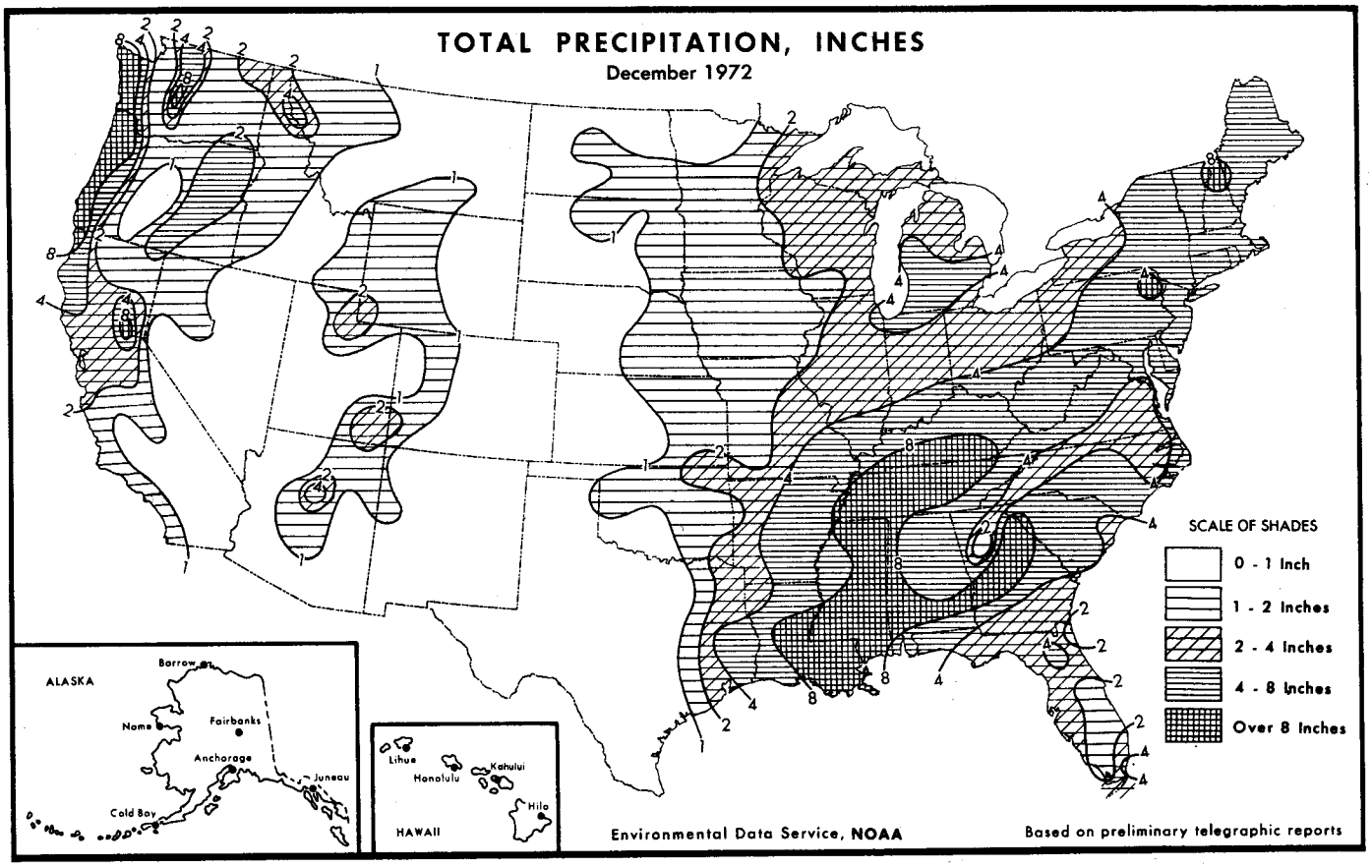
PRECIPITATION: The first few days of December brought heavy snow to the Northeast and lighter snow accompanied by high winds from the northern Rocky Mountains to the Upper Mississippi River Valley.

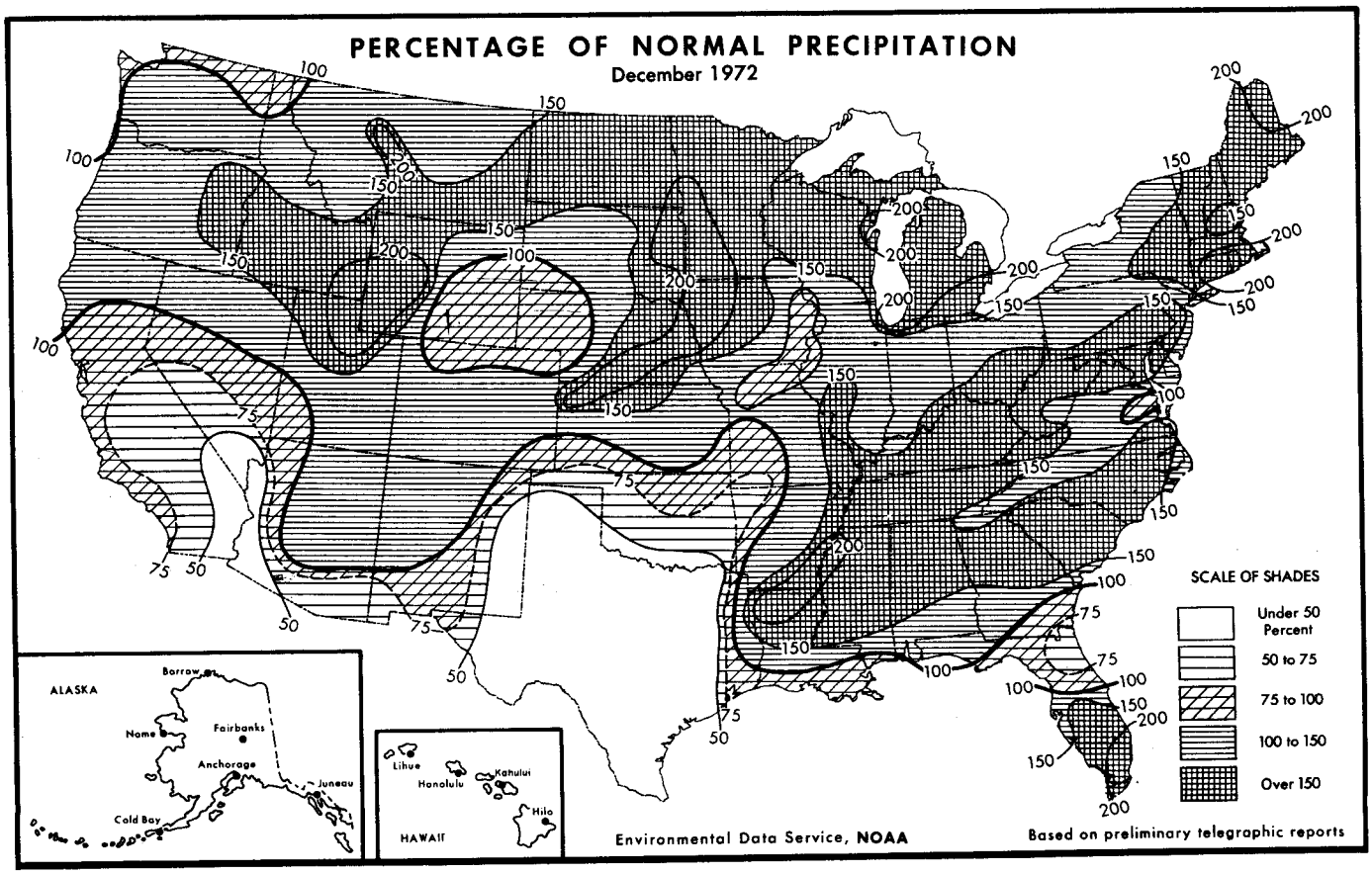
Severe weather spread over much of the Nation near the end of the first week of December. Snow blanketed the northern states from Washington to the California Mountains, the northern and Central Great Plains, the Great Lakes Region, and New England. Rain fell over the Southland and thundershowers popped up along the Gulf of Mexico Coast. Heavy fog covered the parts of the Southeast on some mornings. In some places a belt of freezing rain, freezing drizzle, and sleet separated the snow belt on the north from the rains over the south. Strong winds occurred in places in connection with the massive storm.

The 11th and 12th were especially stormy. A major storm was centered over the Great Basin. Snow fell from the coastal mountains of Oregon and California to the Great Lakes. Mixtures of snow, freezing rain, and freezing drizzle fell over the middle Mississippi River Valley, the Ohio River Valley, and northeastward to New England. Dense fog covered the western Gulf Coast. Rain fell over the lower Mississippi River Valley. Combinations of the various elements made highway travel difficult and, in some places, dangerous. Flooding occurred in some places where the rain fell on saturated or frozen ground. 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.

About midmonth, an intense low pressure system developed over the northern Gulf. It dropped heavy rain over the Gulf States. Then, moving northward, it dropped heavy rain along the Atlantic Seaboard and considerable snow in New

(Continued on Page 11)


TOTAL PRECIPITATION, INCHES
December 1972
SCALE OF SHADES
0 - 1 Inch
1 - 2 Inches
2 - 4 Inches
4 - 8 Inches
Over 8 Inches
ALASKA
Barrow
Nome
Fairbanks
Anchorage
Juneau
Cold Bay
HAWAII
Lihue
Honolulu
Kahului
Hilo
Environmental Data Service, NOAA
Based on preliminary telegraphic reports


PERCENTAGE OF NORMAL PRECIPITATION
December 1972
SCALE OF SHADES
Under 50 Percent
50 to 75
75 to 100
100 to 150
Over 150
ALASKA
Barrow
Nome
Fairbanks
Anchorage
Juneau
Cold Bay
HAWAII
Lihue
Honolulu
Kahului
Hilo
Environmental Data Service, NOAA
Based on preliminary telegraphic reports

Temperature and Precipitation Data for DECEMBER 1972

States and Stations	Temperature °F		Precipitation Inches	
	Average	Departure*	Total	Departure*
ALA.Birmingham. . .	48	+ 1	5.7	+ .7
Mobile.	56	+ 2	5.6	+ .1
Montgomery. . . .	53	+ 5	7.1	+2.3
ALASKA.Anchorage. .	--	---	----	----
Barrow.	--	---	----	----
Fairbanks	--	---	----	----
Juneau.	--	---	----	----
Nome.	--	---	----	----
ARIZ.Flagstaff. . .	22	- 8	4.1	+2.4
Phoenix	52	0	1.6	+ .7
Tucson.	49	- 3	.6	- .3
Winslow	34	+ 1	.7	+ .2
Yuma.	54	- 1	.1	- .2
ARK.Fort Smith. . .	37	- 5	1.6	-1.2
Little Rock . . .	41	- 1	5.1	+1.0
CALIF.Bakersfield .	44	- 5	.7	- .3
Eureka.	46	- 3	7.4	+ .7
Fresno.	41	- 5	1.4	- .6
Los Angeles . . .	58	0	2.4	- .5
Red Bluff	40	- 7	3.1	-1.1
San Diego	58	0	1.6	- .5
San Francisco . .	45	- 5	2.4	-1.7
Stockton.	42	- 4	2.4	- .3
COLO.Denver	25	- 7	.7	+ .2
Grand Junction. .	37	+ 8	.7	+ .1
Pueblo.	23	-10	.4	+ .1
CONN.Bridgeport . .	35	+ 5	7.9	+4.2
Hartford.	31	+ 2	7.1	+3.6
D.C.Washington. . .	44	+ 6	4.6	+1.8
FLA.Apalachicola. .	--	---	----	----
Ft. Myers	--	---	----	----
Jacksonville. . .	60	+ 4	1.4	- .8
Key West.	74	+ 3	3.2	+1.5
Lakeland.	64	+ 2	3.4	+1.5
Miami	71	+ 3	4.2	+2.5
Orlando	66	+ 5	1.9	0
Tallahassee . . .	--	---	----	----
Tampa	65	+ 3	2.2	+ .3
GA.Atlanta.	48	+ 4	1.6	-2.8
Augusta	52	+ 5	5.3	+2.0
Macon	55	+ 6	10.4	+6.3
Savannah.	57	+ 6	2.8	0
HAWAII.Hilo	--	---	----	----
Honolulu.	--	---	----	----
Kahului	--	---	----	----
Lihue	--	---	----	----
IDAHO.Boise	24	- 8	1.8	-9.6
Lewiston.	29	- 6	1.7	+ .3
Pocatello	18	- 9	1.9	+ .9
ILL.Cairo	37	- 3	6.1	+2.4
Chicago	25	- 4	4.7	+2.8
Moline.	22	- 5	2.0	+ .3
Peoria.	24	- 5	2.5	+ .6
Rockford.	22	- 4	2.4	+ .7
Springfield . . .	27	- 5	3.4	+1.5
IND.Evansville. . .	34	- 2	4.5	+1.4
Fort Wayne. . . .	30	+ 2	2.8	+ .7
Indianapolis. . .	32	+ 1	2.8	+ .1
South Bend. . . .	29	0	4.8	+2.6
IOWA.Burlington . .	23	- 5	1.4	- .2
Des Moines. . . .	18	- 7	2.0	+ .9
Dubuque	17	- 7	1.9	0
Sioux City. . . .	18	- 7	1.9	+1.2
KANS.Concordia. . .	25	- 7	1.1	+ .4
Dodge City. . . .	27	- 8	.4	- .1
Goodland.	21	- 9	.9	+ .5
Topeka.	28	- 5	1.8	+ .4
Wichita	29	- 7	1.0	+ .1
KY.Lexington. . . .	41	+ 5	6.9	+3.4
Louisville. . . .	39	+ 3	5.3	+2.1
LA.Baton Rouge. . .	--	---	----	----
Lake Charles. . .	53	- 2	5.5	- .3
New Orleans . . .	55	0	8.7	+4.6
Shreveport. . . .	--	---	----	----
MAINE.Caribou . . .	8	- 8	5.3	+2.9
Portland.	24	- 2	6.5	+2.6
MD.Baltimore. . . .	40	+ 4	5.0	+2.0
MASS.Boston	33	0	6.1	+2.5
Chatham	38	---	6.7	----
MICH.Alpena	23	- 1	3.8	+2.0
Detroit	29	0	3.1	+1.2
Flint	29	+ 3	4.0	+2.2
Grand Rapids. . .	27	- 1	5.0	+3.0
Houghton Lake . .	22	- 2	3.5	+1.8
Lansing	27	- 1	4.2	+2.2
Marquette	19	- 5	3.3	+1.4
Muskegon.	28	- 2	4.1	+2.1
S.Ste.Marie . . .	19	- 2	3.6	+1.3
MINN.Duluth	7	- 7	2.0	+ .8
Internatl Falls .	4	- 5	1.0	+ .2
Minneapolis . . .	11	- 7	1.6	+ .7
Rochester	11	- 8	1.5	+ .5
St. Cloud	8	- 9	1.3	+ .6
MISS.Jackson. . . .	50	+ 1	9.7	+4.4
Meridian.	51	+ 3	8.4	+3.1
MO.Columbia	27	- 6	2.7	+ .7
Kansas City . . .	28	- 8	1.5	0
St. Louis	30	- 5	3.5	+1.5
Springfield . . .	32	- 5	1.7	- .5
MONT.Billings . . .	18	-10	1.1	+ .5
Glasgow	7	-11	.6	+ .1
Great Falls . . .	18	- 9	1.7	+1.1
Havre	12	- 9	.6	+ .1
Helena.	14	-10	.5	0
Kalispell	18	- 7	1.6	+ .3
Miles City. . . .	13	-10	1.0	+ .6
Missoula.	19	- 5	1.5	+ .4
NEBR.Grand Island .	20	- 7	2.0	+1.4
Lincoln	22	- 9	1.4	+ .5
Norfolk	18	- 7	1.2	+ .5
North Platte. . .	17	-10	.4	0
Omaha	20	- 7	1.6	+ .8
Valentine	17	- 8	.3	0
NEV.Ely	20	- 7	.7	0
Las Vegas	41	- 4	.2	- .2
Reno.	25	- 7	.9	- .2
Winnemucca. . . .	21	- 9	1.0	+ .1
N.H.Concord	23	- 2	4.6	+1.3
N.J.Atlantic City .	43	+ 6	3.6	+ .4
Trenton	40	+ 5	4.8	+1.9
N.MEX.Albuquerque .	--	---	----	----
Roswell	--	---	----	----
N.Y.Albany.	29	+ 2	4.2	+1.6
Binghamton. . . .	29	+ 2	4.9	+2.3
Buffalo	31	+ 3	3.9	+ .9
New York.	39	+ 3	4.7	+1.3
Rochester	33	+ 4	2.6	+ .2
Syracuse.	31	+ 3	4.0	+ .8
N.C.Asheville . . .	45	+ 5	3.9	+1.0
Charlotte	47	+ 4	5.8	+2.2
Greensboro. . . .	44	+ 4	4.5	+1.4
Hatteras.	54	+ 6	4.8	+ .2
Raleigh	46	+ 4	5.0	+2.0
Wilmington. . . .	52	+12	5.3	+1.9
N.DAK.Bismarck. . .	8	-10	.7	+ .3
Fargo	4	-10	1.5	+ .9
Williston	7	- 9	.8	+ .3
OHIO.Akron-Canton .	36	+ 5	3.3	+1.0
Cincinnati. . . .	36	+ 2	4.2	+1.4
Cleveland	35	+ 4	3.3	+1.0
Columbus.	36	+ 4	3.5	+1.2
Dayton.	34	+ 2	2.8	+ .4
Toledo.	30	+ 2	3.1	+1.1
Youngstown. . . .	33	+ 4	3.1	+ .4
OKLA.Okla. City . .	34	- 6	1.0	- .4
Tulsa	--	---	----	----
OREG.Astoria. . . .	39	- 4	13.2	- .5
Burns	21	- 8	2.1	+ .7
Medford	--	---	----	----
Pendleton	27	-10	2.3	+ .8
Portland.	37	- 4	8.8	+2.4
Salem	35	- 7	8.7	+1.3
PA.Allentown. . . .	35	+ 4	5.4	+2.1
Erie	33	+ 4	3.7	+1.1
Harrisburg. . . .	37	+ 4	5.3	+2.4
Philadelphia. . .	40	+ 6	5.2	+2.3
Pittsburgh. . . .	37	+ 6	3.0	+ .6
Scranton.	33	+ 4	3.6	+1.1
R.I.Providence. . .	34	+ 2	7.7	+4.1
S.C.Charleston. . .	56	+ 6	4.4	+1.5
Columbia.	51	+ 5	5.4	+1.9
Greenville. . . .	48	+ 4	6.7	+2.7
S.DAK.Aberdeen. . .	11	- 7	.9	+ .3
Huron	15	- 4	1.2	+ .6
Rapid City. . . .	19	- 8	.3	0
Sioux Falls . . .	15	- 6	1.3	+ .6
TENN.Chattanooga. .	43	0	7.1	+1.9
Knoxville	52	+10	7.0	+2.8
Memphis	40	- 3	9.4	+4.5
Nashville	43	+ 2	8.1	+3.9
TEX.Abilene	42	- 4	T	-1.3
Amarillo.	33	- 6	.3	- .5
Austin.	48	- 5	.5	-2.0
Beaumont.	--	---	----	----
Brownsville . . .	60	- 3	.7	-1.0
Corpus Christi. .	56	- 3	.2	-1.9
Dallas	44	- 4	.8	-1.9
Del Rio	51	- 1	T	- .8
El Paso	47	+ 3	.4	- .1
Fort Worth. . . .	44	- 4	.6	-1.8
Galveston	56	- 1	3.6	- .8
Houston	52	- 4	2.2	-2.2
Lubbock	38	- 3	.3	- .4
Midland	44	- 2	.2	- .5
San Angelo. . . .	--	---	----	----
San Antonio . . .	50	- 4	.4	-1.4
Victoria.	53	- 4	.4	-2.2
Waco.	44	- 6	.8	-1.9
Wichita Falls . .	40	- 5	.5	-1.0
UTAH.Blanding . . .	--	---	----	----
Salt Lake City. .	23	- 7	3.2	+2.0
VT.Burlington . . .	23	+ 1	3.4	+1.2
VA.Lynchburg. . . .	43	+ 4	4.3	+1.2
Norfolk	49	+ 6	4.1	+1.4
Richmond.	46	+ 6	2.9	- .1
Roanoke	45	+ 7	4.6	+1.6
WASH.Colville . . .	25	0	2.6	0
Omak.	25	---	1.7	----
Quillayute. . . .	38	- 3	22.2	+5.4
Seattle-Tacoma. .	38	- 3	9.0	+2.7
Spokane	25	- 5	1.9	- .5
Walla Walla . . .	31	- 7	2.7	+ .8
Yakima.	27	- 5	1.3	+ .2
W.VA.Beckley. . . .	40	+ 6	4.3	+ .6
Charleston. . . .	42	+ 5	6.4	+3.1
Huntington. . . .	40	+ 3	5.5	+2.5
Parkersburg . . .	40	+ 4	4.9	+2.1
WIS.Green Bay . . .	17	- 5	2.5	+1.3
La Crosse	16	- 6	2.5	+1.3
Madison	17	- 5	1.9	+ .6
Milwaukee	20	- 5	2.5	+ .9
WYO.Casper.	18	- 9	.4	- .1
Cheyenne.	21	- 9	.4	- .1
Lander.	13	-10	1.5	+1.1
Sheridan.	17	- 9	.9	+ .3
P.R. San Juan . . .	--	---	----	----

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

(Continued from Page 8)

England. A complex Low over the Gulf of Alaska caused gale-force winds along the Washington and Oregon Coast. Moisture over interior Washington, and Oregon fell as freezing rain. As the Christmas weekend approached, the Pacific storm intensified and heavy thunderstorms drenched parts of the Deep South.

Heavy rains fell in the Pacific Northwest in the last week of the Year. Santa Ana winds whipped southern California. Snow spread across the northern Rocky Mountains to the Great Lakes and to New England. In the last few days of the Year a storm in the Southwest intensified and dumped heavy snow in many areas west of the Continental Divide. Mixtures of rain and snow fell in southern Rocky Mountains, portions of the Great Plains, the upper and middle portions of the Mississippi River Valley, the Great Lakes Region, the Ohio River Valley and northeastward to New England. On the last day of 1972, a severe blizzard blocked roads in the central Great Plains, light to heavy showers and few thunderstorms occurred over the southern Great Plains and freezing rain was sandwiched between the snow and rain areas. The glaze broke tree limbs and power lines and made travel dangerous.

L. W. Dye

(Continued from Page 7)

west midweek. Five to 7 inches of snow over a wide area at end of period. Only 1 day suitable for fieldwork as harvest was stopped by snow and ice. Corn 85% harvested, up 3 points from last week. Soybeans 80% harvested, an increase of 4 points from a week ago. Sorghum grain 84% harvested, up 3 points from a week ago. Cotton 71% harvested, up from 68% completion last week. Wheat fair to good condition. Topsoil moisture 25% adequate and 75% surplus.

MONTANA: Mild Monday and Tuesday. Arctic air overspread all the State by Thursday, with temperatures falling to much below normal. Temperatures averaged 9° to 19° below normal. Little or no precipitation across north-central and northeastern sections. Light precipitation elsewhere except south-central area where precipitation totaled up to 0.65 inch. Winter wheat condition good north-central, south-central and southeast. Fair in central; fair to good elsewhere. Wind damage light, snow cover protection poor except portions south-central and southeast. Amount of feed grains, hay and roughage for sale less than normal central, and portions northwest, north-central and northeast, normal elsewhere. Nearly all cattle and sheep receiving supplemental feed. Grazing open except portions northwest, south central and southeast.

NEBRASKA: Two major snow storms affected Nebraska, each producing local blizzards. First storm lasted December 29 to 31; 10 inches or more snow fell in an arc which started at Nelson, extended through Osceola and Stanton, and ended at St. Paul. 5 inches or more snow accumulated over much of west and north. Second storm occurred January 2 and 3. Three to 7 inches of snow fell in southeast quarter of State. Cold wave, strong winds following snow. Temperatures have remained very cold since January 3. Average weekly temperatures ranged from 10° to 17° subnormal. Harvest activities very limited. Shelling corn, grain drying, and moving grain to elevators active. Livestock chores required the most time; supplemental feeding very heavy. Corn harvest made very little progress; 95% complete. Fields "snow" filled, but standing corn in good condition. Roughly 26 million bushels of corn remain to be harvested. Sorghum harvest inactive; 92% harvested. Unharvested sorghum in poor condition and may not be harvested. Most of standing grain in good condition, but heads lying on ground are lost. About 11 million bushels remain in fields. Soybean harvest 98% complete. Winter wheat in good condition with adequate soil moisture. Panhandle area has many open fields where snow has blown off. Livestock are in good flesh but under severe stress. Harvested fields being utilized for supplemental feeding wherever possible. State average of total acreage being pastured are: harvested corn and sorghum 44 percent; fall seeded winter wheat and rye 15 percent; in diverted acres 42 percent.

NEVADA: A cold week with temperatures at all divisions averaging 8° - 12° below normal. General light to moderate precipitation over State from trace at Carson City to 0.55 inch at Yucca. 4 inch snowfall at Yucca. Snow ground cover most stations in north. Feeding and caring for livestock continues major farm activity. Livestock wintering generally good. Stockwater supplies adequate in most areas. Feed supplies continue to be utilized faster than normal. Sheep loss is high in some flocks due to predators.

NEW ENGLAND: Cooling trend from unseasonably warm on New Years Day to very cold with bitter wind-chill conditions over weekend. Means mostly near normal. Daily precipitation until very sunny and dry over weekend. Weekly totals quite variable but mostly 0.25 to 0.50 inch. Snowcover decreased somewhat in week over much of south but little change in most of north.

NEW JERSEY: Temperatures averaged near seasonal normals ranging from low 60's at beginning of week to 10° or lower by end of week. A general rain on 4th averaged 0.50 inch along the coast and 0.60 inch elsewhere over State. High winds prevailed throughout State all day on 6th.

NEW NEXICO: Precipitation on Tuesday and Saturday totaled from 0.25 to 0.75 inch in southeastern half of State and was generally light elsewhere. General snow Tuesday and snow in higher elevations Saturday. Temperatures averaged from 5° to 10° below normal. Temperatures were unsteady with minima on Wednesday and Thursday and maxima on Friday and Sunday. New Mexico practically snow-blanketed first week 1973. Field operations standstill. Livestock generally good. Supplemental feeding expanding rapidly.

NEW YORK: Warm on January 1 with gradual colder trend rest of week. Temperatures moderate through 5th becoming much colder on 6th and 7th. Extremes ranged from maximums in 40's to low 50's on 1st down to minimums 20° to 30° below zero northern 1/3 on morning of 8th. Stillwater reported 32° below zero as minimums in southern interior mostly zero to 10° below zero. Precipitation light, occurring mostly on 4th with mixture of rain, freezing rain, and very light snow. Liquid totals 0.20 to 0.60 inch except 0.10 inch in northeast. Snow cover very thin Saint Lawrence Valley and southern half from Lake Erie to Hudson Valley where depth 3 inches or less. Deep snow cover of 20 to 30 inches across southern Adirondaks with 32 inches reported at Schroon River, Essex County.

NORTH CAROLINA: Cloudy and warm, falling below normal weekend. Rain in State daily. Mostly light to moderate, but totals ranging to 3.00 inches and averaging 1.00 inch. Snow apreading from mountains eastward on 6th continuing on 7th from 1 to 6 inches accumulation. 1973 began with very little fieldwork being done. Daily rains and soaked fields prevented harvest. Cotton and soybean harvest major concern. Small grain damage from excessive moisture. Farmers struggling to do tobacco plantbed work. Snow will completely halt harvest and increase livestock feeding and care.

NORTH DAKOTA: Temperatures averaged 8° to 12° below normal. Near or above normal temperatures first half of week. Cold wave near middle of week with below zero temperatures continuing through weekend. Coldest nights near -30°. Precipitation totals less than 0.10 inch in occasional snow flurries. Snow cover 3 to 12 inches. Very cold temperatures past week caused great discomfort to livestock. Livestock in winter quarters and receiving winter feeding rations. Hay supplies generally adequate, but some shortages could develop depending on weather conditions remainder of winter. Hay and roughage supplies accessible. Background cattle moving to market.

OHIO: Minimum temperatures ranged from about 10° to 40°. The mornings of 6th and 7th coldest. Maximum temperatures ranged from the upper teens to the upper 40's. For the 24-hour period ending at 7:00 a.m. on 4th rainfall amounts across Ohio ranged from 0.39 inch at Findlay to 0.80 inch at Columbus. On the 5th, southeast Ohio had 1 inch of snow. On 6th, the Snow Belt in northeast Ohio had 1 to 3 inches of snow. Cleveland-Hopkins Airport had 4 inches of snow. Harvesting continues when possible. Good progress made past weekend due to frozen ground surface. Soil moisture supplies still surplus. Grain drying, machinery repair and maintenance, and feeding livestock are other major activities. The excess precipitation has made sloppy corrals and feedlots a problem for livestock producers.

OKLAHOMA: Cold damp week. Temperatures averaged 8° to 15° below normal. Precipitation total about 1.00 inch all sections of State except 0.20 inch Panhandle. 1 to 5 inches of snow west on Tuesday and 2 to 8 inches ice and snow entire State beginning Friday and continuing through weekend. Farmers made some headway harvesting row crops until adverse weather toward later part of week curtailed harvest activities. Below-normal temperatures retarded growth small grains and necessitated increased supplemental feeding. Grazing small grains limited, supplies quite expensive and shortages exist several locations. Some young calves lost to extreme cold. Some bloat problems of cattle on wheat pastures. At close of week, cotton harvest 70%, sorghum grain 90%, corn 90%, peanuts 90%. Soybean 60% complete.

OREGON: Cool week, colder last half with 2 to 6 days of light rain. Temperatures averaged 2° to 7° below normal. Minima -8° to 20° east. 23° to 33° west. Maxima 34° to 58°. Precipitation most of State 0.10 to 0.30 inch except 0.70 to 1.90 inches northern Cascades and on coast. Livestock remain on heavy winter feed schedule. Feed supplies are adequate. Sheep are lambing. Pruning of fruit orchards gaining momentum. A strong active market continued for storage fruit. Some fruit trees, caneberries and fall-seeded grain were apparently damaged by last month's cold weather; still too early to assess the extent.

PENNSYLVANIA: Fair and mild beginning of week, much colder weekend. General precipitation Wednesday night and Thursday, mostly rain extreme south, mixture of sleet, freezing rain, rain, and some snow elsewhere. Up to 3 inches sleet some central sections. Snow flurries north weekend. Maximum temperatures 50's and 60's Monday. Teens to low 20's Sunday. Temperatures averaged 1° to 2° above normal southeast, 1° to 4° below elsewhere. Total precipitation 0.25 to 0.75 inch most areas. Snow cover mostly 1 to 2 inches or less north, none south. Routine winter farm chores.

PUERTO RICO: Rainfall averaged 0.70 inch or about 0.10 inch below normal. Most of rain fell in northeast sector with an average of 1.00 to 2.00 inches in that area. Highest weekly total of 2.73 inches reported in eastern mountains. Little or no rain fell along south-central coast. Rest of Island received generally less than 0.50 inch. Crop moisture conditions near normal all divisions except parts of south coast too dry. Temperatures averaged 77 degrees on coast and 71/72 degrees interior divisions with a mean departure of 0.7 degree below normal. Highest maximum 92°lowest minimum 54°. Sugar cane in excellent conditions as preparation continued for 1973 harvest. Coffee zones cleaning up after completion of harvesting operations. Tobacco zones active planting and cultivating under favorable weather. Pastures generally good to excellent all zones except parts of south and southwest too dry. Minor crops developing well with good abundance on market.

SOUTH CAROLINA: Drizzle light rain and overcast conditions most of week. Rainfall totaled range from 1/2 to 1 1/2 inches. Average temperatures were slightly above normal and daily ranges were small due to overcast conditions.

SOUTH DAKOTA: Temperatures averaged from 8° below normal in east to 17° below normal in west. Extremes ranged from 27° below zero on 5th to 52° at Rapid City on 2d. Precipitation fell mostly as light snow scattered through the week, with most amounts from about 0.05 to 0.15 inch. Although isolated larger amounts were reported in northeast where Summit received 0.30 inch, with 3 inches of new snow on 5th. Blizzard conditions in scattered areas of State on 3d. Snow cover on 5th ranged from a trace in southwest to 10 inches in portions of north-central and northeast. Parts of the winter wheat area still have only light snow cover. Wind erosion on some fields, especially where greenbugs caused extensive damage last fall. Livestock remain in good condition with adequate feed supplies. The cold weather hampered farm activities, so feeding and caring for livestock was main farm work.

TENNESSEE: Temperatures averaged below normal except near normal east; extremes mostly from 20's to mid-50's. Precipitation moderate mid-week when rain totaled about 1.00 inch. Seasons first general snowfall 7th ranged from 1 inch to 6 inches, heaviest amounts in parts of eastern half of State. Farmers made little progress in their continued effort to harvest corn, cotton, and soybeans. Snow over the weekend will further delay any attempt to salvage

crops still in the fields. Other farm work consisted of feeding livestock and making preliminary plans for the 1973 crop year.

TEXAS: Cold, cloudy, wet weather prevailed throughout State most of week. Generally precipitation light to moderate except for locally heavy rains on Middle and Lower Navasota River watershed on Saturday. Weekly precipitation totals heaviest in eastern half of State. Harvest of cotton made fair progress on high and low plains. Land preparation in Lower Rio Grande Valley slowed by adverse weather. Sorghum harvest near completion although harvest operations have been restricted. Growth of wheat and oats limited by cold, wet weather. Moisture in Edwards Plateau, south and south-central Texas improved condition of oats. Major crops percent harvested: cotton 82, year ago 66; sorghum 99, year ago 100; soybeans 99, year ago 100. In the Lower Rio Grande Valley, rain and cold weather has been curtailing field activities. Cabbage and lettuce harvest continues as weather permits. Most onion fields continue to show good bulk development but the cold weather may slow top growth. At Laredo, wet fields hampered cabbage harvest. In the Winter Garden, only light supplies of spinach, cabbage, and lettuce were available since harvest was virtually stopped by the rains. At San Antonio, rainy weather halted harvest of cabbage and carrots. In the Coastal Bend, spinach harvest will start this week if weather permits. Pecan harvest now 96% complete compared with 100% a year ago. Citrus harvest has been hampered by cold weather and wet fields.

UTAH: A general snow storm swept across State latter part of week accompanied by light to moderate precipitation. Much of State now reporting snow on ground including 6 inches in St. George area. Very cold during period with minimums most localities below zero. Average temperatures for week ranged between 8° and 22° below normal, except 4° to 6° below extreme southwest. The extreme cold and general snow cover making all farm operations and transportation more difficult. Care and feeding of cattle and sheep on feedlots and valley farms, dairy cattle, and poultry flocks continue leading activities. Sugar processing in full force. Sorting, grading, and marketing potatoes, dry onions, and apples from storage continue. Irrigation water stored in reservoirs January 1, 1973, 2.9 million acre feet - about 7% below a year ago, but still excellent considering good high country snow pack.

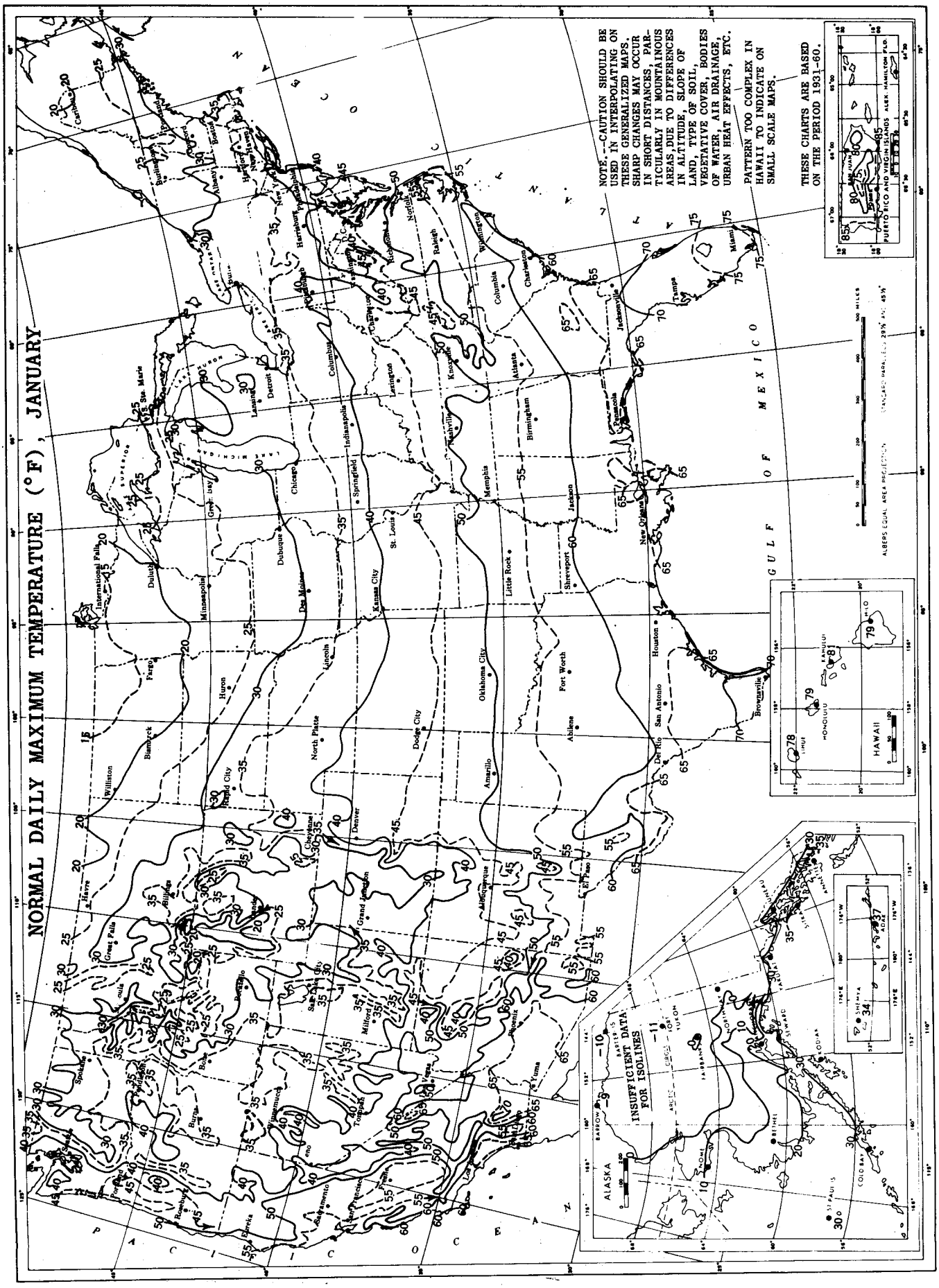
VIRGINIA: Temperatures above normal except below normal Wednesday and over weekend. Moderate rain at midweek and snow at end of period. Winter feeding and care of newborn calves and lambs were top priority on most farms. Feed supplies were adequate. Three-fourths of top soils contained surplus moisture, wetter soils were in south and southeast; soils west of the mountains were slightly drier. Limited volume of corn, sorghum, and soybeans were harvested. Dark sun-cured and burley tobacco prepared for market. A few flu-cured growers began preparing plant beds. Pruned orchards, butchered hogs, spread manure, prepared tax records, and repaired machinery.

WASHINGTON: Western Washington: Rain and cool temperatures first of period with snow and freezing conditions by weekend. Main activity forcing Victoria rhubards now behind schedule due to bad weather. Some freeze damage to berries, carrots, and seed cabbage, cattle good condition but local hay supply short some areas. Eastern Washington: Temperatures near normal with average maximum in 30's. Light snow most areas. Main activities pruning orchards and vineyards and fertilizing. Cattle still heavily fed with some grazing on beet and corn residue. Wheat condition good, some erosion. Reseeding winterkill areas will be necessary.

WEST VIRGINIA: Cool and windy but generally sunny until midweek. Cold arctic air from northwest pushed across State January 4 and subfreezing temperatures prevailed balance of period. Heaviest precipitation from rain night of January 3, generally over 0.50 inch. Light snow flurries January 6 and 7. Most farm activities limited to care and feeding of livestock. Livestock in good condition with supplemental feeding increasing. Small grains in good condition, responding favorably to abundant moisture.

WISCONSIN: Mild through Wednesday. Sharply colder latter part of week. Heavy snow in north and west Wednesday. Mostly rain and sleet in southeast. Ground bare or ice-covered southeast 1/3 of State. Snow cover 1 to 2 feet deep over much of northwest half. A heavy ice crust on the snow in many areas makes it difficult for deer and other wild life. Also some concern for alfalfa where ice cover is heavy or ground is bare during recent cold weather. Frost penetration increasing rapidly in south. Frost depths range between 12 inches in both the extreme northwest and in the south and zero to 4 inches over much of central Wisconsin. Farm activities mainly care and feeding of livestock.

WYOMING: Light to moderate snow over most of Wyoming. Wind early week caused considerable road blockage. Lusk reported the most moisture with 0.93 inch. A brief warm spell occurred around Tuesday but temperatures averaged 8° to 19° below normal. Maxima were mostly 20's to low 30's western half, 30's to low 40's east of Big Horn and Laramie Mountain ranges. Minima were mostly -20° to -40° west of Divide, -5° to -35° east. Temperature extremes: 44° at Kaycee and -41° at Bondurant. Care and feeding of livestock main agricultural activities.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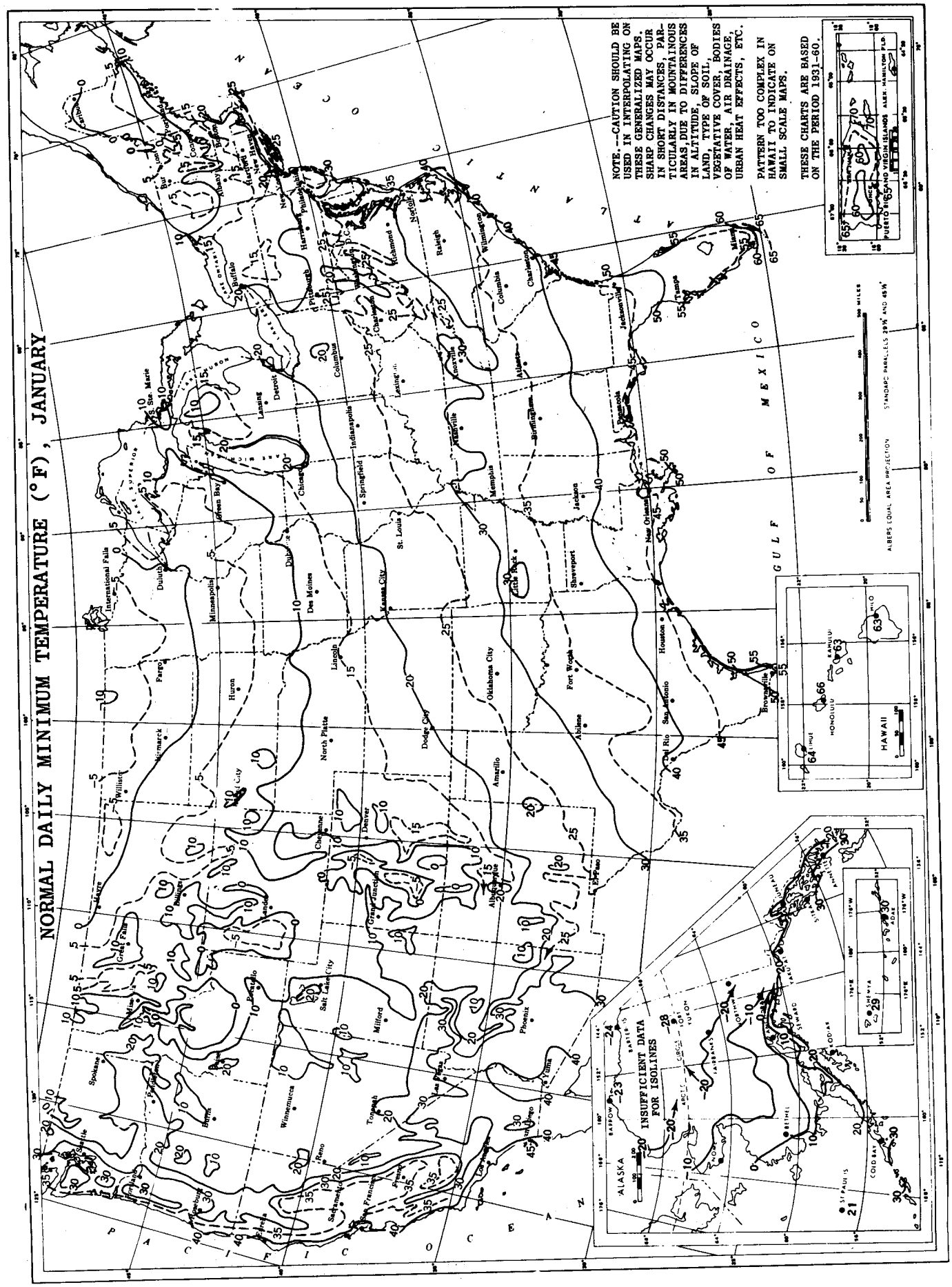
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NATIONAL FLOOD SUMMARY -- JANUARY 4, 1973

Lowland flooding today in Mississippi on the Pearl, Big Black and Tombigbee Rivers. The stage at Jackson on the Pearl River was eight feet above flood stage this morning. The Marmaton River in Missouri and the Little Osage River in Kansas are slightly over flood stage today. The Red Cedar, Raisin, Shiawassee, Saginaw and lower Grand Rivers in Michigan are all at or slightly above flood stage but are either near crest or are falling. The White River in Arkansas is slightly over flood stage at Edwardsport and the St. Francis River continues over flood stage. The Pecatonica and Lower Rocks Rivers in Iowa continue above flood stage along most of their length. The Sangamon River is two feet above flood stage at Riverton and near crest. The Big Muddy at Murphysboro is two feet over flood stage. The lower reaches of the Neuse and Roanoke Rivers in North Carolina, the Lumber River in South Carolina and the Choctowhatchee in Alabama continue in lowland flooding. The Mississippi River is slightly above flood stage at Keithsburg and below Cairo. The lower reaches of the Ohio River continue above flood stage. An ice jam on the Snake River near Blackfoot has resulted in overflow affecting some residents. Levees are being constructed. Precipitation: Except the extreme southwest, precipitation was quite general over the country with heavier amounts in the eastern half.

National Weather Service