

# Weekly Weather & Crop Bulletin

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

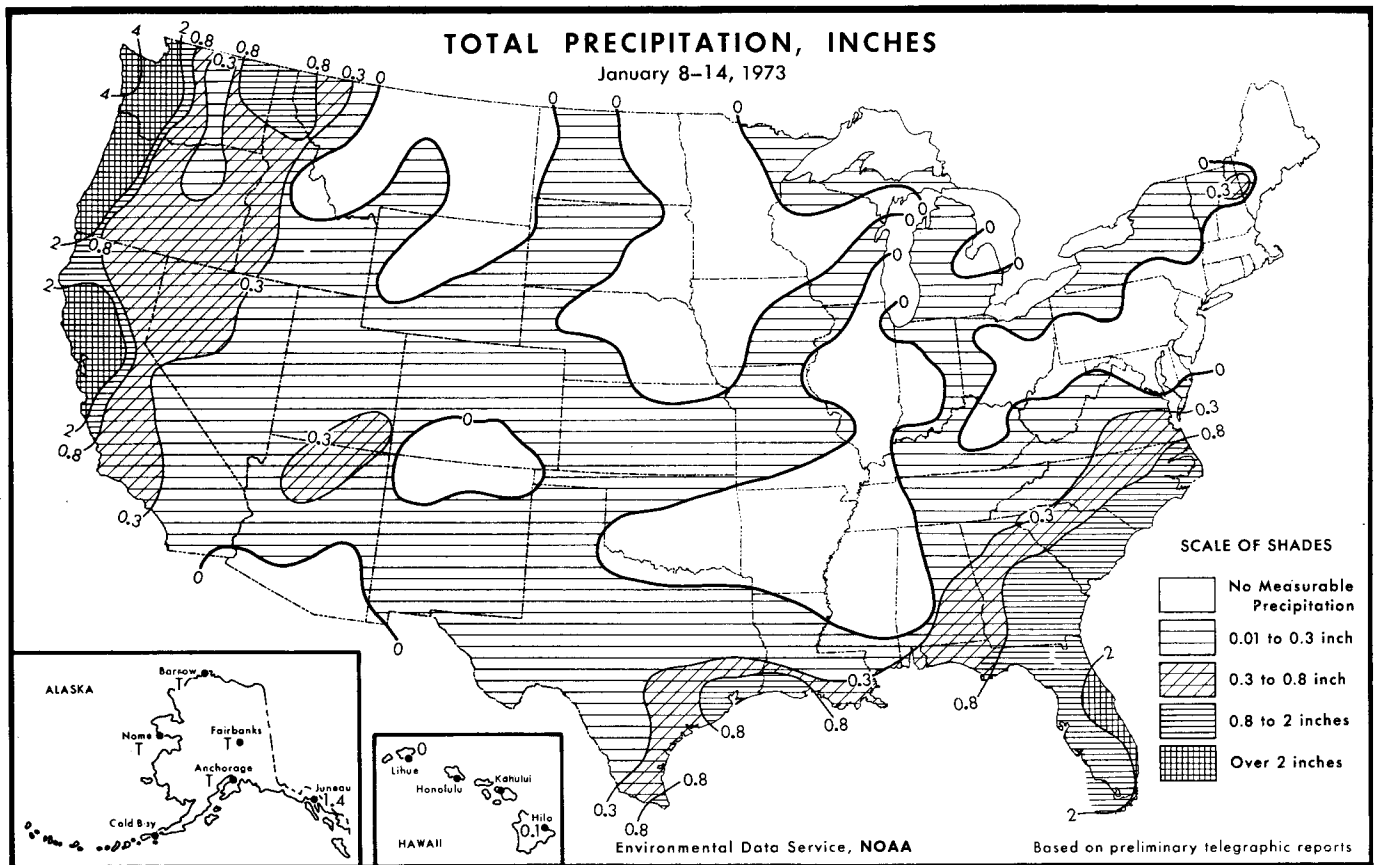
U. S. DEPARTMENT OF AGRICULTURE  
Statistical Reporting Service

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Edited by Lucius W. Dye

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## NATIONAL WEATHER SUMMARY

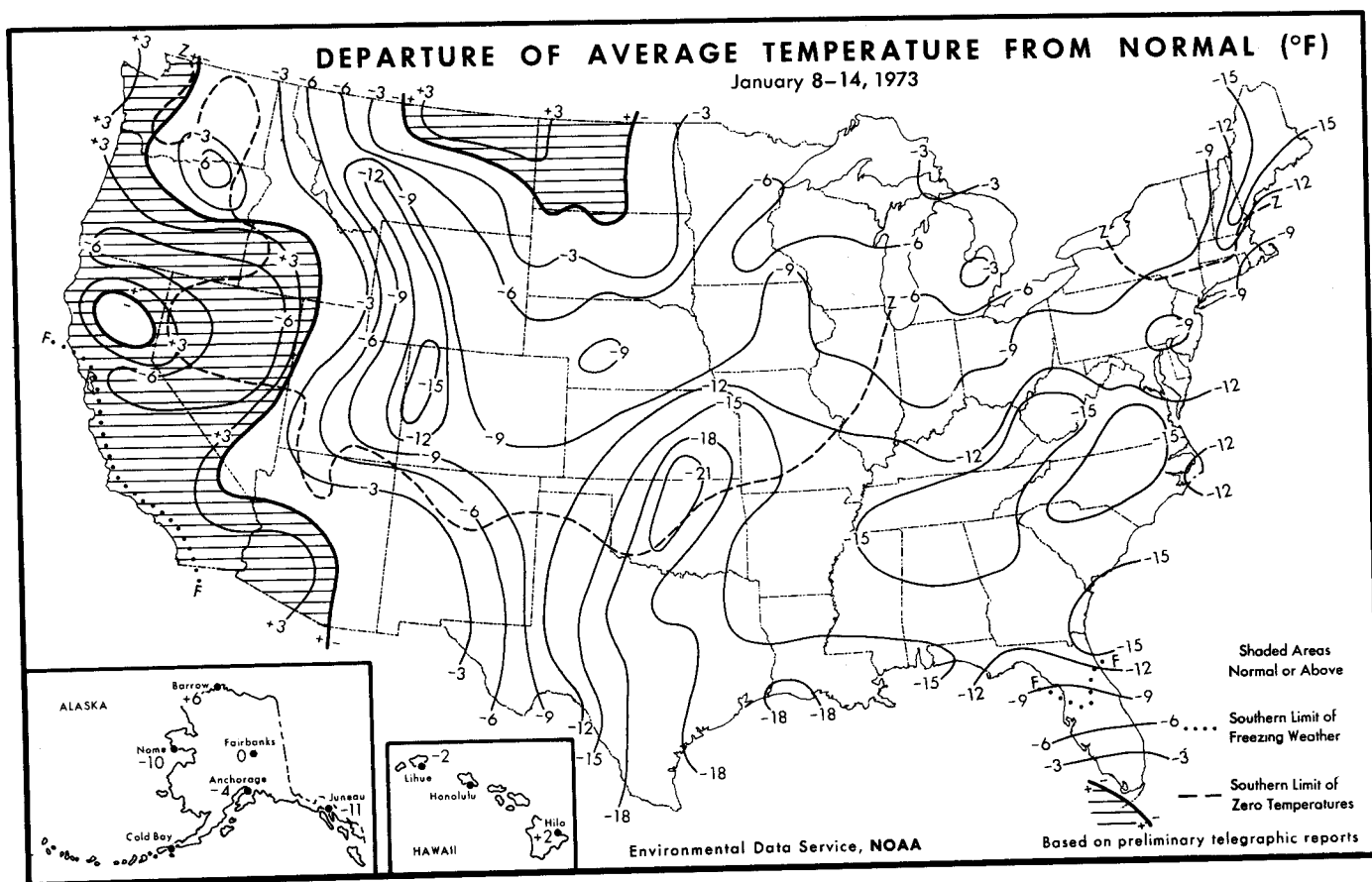
**HIGHLIGHTS:** Most of the central and eastern portions averaged 6° to 15° or more colder than normal. Heavy rains fell along the Pacific Coast. Little or no precipitation fell over most of the rest of the Nation.

**PRECIPITATION:** A Pacific storm spread rain along the Pacific Coast early in the week. As it intensified and moved inland, cold surface air caused much of the precipitation in the Sacramento River Valley and the nearby hills to fall as snow. The snow spread to the intermountain region. Four to 6 inches fell Tuesday in the vicinity of Las Vegas, but none fell at the Las Vegas Airport.

Snow flurries became heavier in the Great Lakes Region at midweek. Mixtures of snow, sleet, freezing rain, and freezing drizzle fell over much

of the South. The variety of precipitation combined with the cold temperatures hampered agricultural work, travel, and other activities. At midweek, the snow continued over portions of Texas and Arkansas and spread to the northern and central portions of Louisiana. Thursday afternoon and evening, dangerous mixtures of sleet, freezing rain, and snow made travel hazardous over the southern two-thirds of Louisiana, Mississippi, and Alabama. The 2 1/2 inch snow at Galveston, Texas, was the second largest amount there in the past 100 years.\* (See box next page.)

Weekend precipitation included rain along the coast in the Pacific Northwest with snow in the higher elevations and light to heavy showers over Deep South.



#### TEMPERATURE:

Bitter cold prevailed from the northern Great Plains to New England early in the week. The frigid air spread southward. Light winds, cloudless skies, and the extensive snow cover over the northern and central Great Plains favored nighttime radiation and the snow reflected incoming solar radiation during daylight hours. The temperature at Fargo, N. Dak., plunged to 27° below zero Friday morning, January 5, and did not warm above -14° on Sunday and Monday. The temperature at Fargo remained below zero until Wednesday, January 10. Kansas City, Mo., warmed only to 6° Tuesday afternoon. Subzero weather occurred as far south as central Oklahoma.

In the Northeast, the mercury at Caribou, Maine, climbed to only -3° Tuesday afternoon before tumbling to -30° Wednesday morning.

The Florida Peninsula cooled as the week progressed. West Palm Beach registered 87° Monday afternoon, January 8. By Wednesday and Thursday, maximum temperatures in northern Florida were in the 40's. Brownsville, Texas registered 28° Friday morning.

Slow warming occurred over the weekend over much of the Nation. By Sunday afternoon, temperatures were again above normal except in the Southeast. Maximums over the West ranged from the 30's to 50's in Washington to the 60's to 80's in southern California. Over the Great Plains, maximums reach the 30's and low 40's in the North and the 60's and 70's in southern Texas. They were above normal in the Northeast, near normal along the middle Atlantic Coast and 5° to 10° below normal over the Florida Peninsula.

L. W. Dye

#### \*Galveston's Heaviest Snow

The most memorable of snowstorms along the upper Texas and central Gulf coasts comprises what is probably the greatest deep snow anomaly in the recorded climate history of the United States. On February 14 and 15, 1895, a small coastal low dropped a canopy of white reaching all-time record depths from just north of Corpus Christi northward to Louisiana and eastward along the coast to Florida and into Georgia. Coastal Galveston reported 15.4" and a short distance inland at Houston the count was 20". The heavy snow pattern reached into western Louisiana where Rayne measured 24" and Lake Charles 22". Even the "oldest Creole" could not remember his father telling him of anything like this, and no history mentions such an event. Snow fell even at the very mouth of the Mississippi River on this occasion!

Weatherwise, Incorporated  
Princeton, N.J. 1971

## NATIONAL AGRICULTURAL SUMMARY

**AGRICULTURAL HIGHLIGHTS:** Wet and below normal temperature conditions prevailed over much of the Nation during the week enabling farmers to make only limited progress in harvesting of late crops. Warmer trends did occur in most sections by the week's end but this caused further delay of harvesting in some States because of muddy fields. Freeze damaged some vegetable crops in Texas and California. Farm work was severely hampered in the Southern States by snow and icy conditions. Power failures because of ice caused water shortages to poultry in Georgia and Arkansas. Supplemental feeding of livestock was required in many of the North-central States due to cold weather. Warm weather during the week-end relieved some stress on livestock.

**SMALL GRAINS:** Much of the small grain acreage in the North Central area is in generally good condition. Growth has been slowed in some areas by wintery weather but snow-cover has minimized damage from wind and extremely low temperatures. In the South, growth of small grains was retarded by sub-freezing temperatures. The extent of damage is not yet known. In Texas, wheat and oat fields are in generally poor condition as a result of overgrazing and slow growth rates. Rainfall halted planting in California and will continue as weather permits. In Arizona small grain planting continues at a normal rate. Grazing of wheat pastures in many North Central and Southern areas has been limited.

**COTTON:** Unusually low temperatures, snow and ice held cotton harvest almost to a standstill in the South. In Texas, harvest made little or no progress as ice and snow covered much of the State, with harvest estimated at about 83 percent complete. Snow, sleet, and freezing rain allowed very limited progress in Mississippi with less than 1/2 day suitable for field work during the week. Arkansas's harvest was held back due to snow and ice covered fields with about 95 percent of the cotton now picked. In Louisiana, harvest was almost impossible because of rain, ice and snow. Exceedingly low temperatures in Tennessee caused the snow to remain intact until late in the week reducing harvest possibilities even more. In Arizona harvest is virtually complete.

**OTHER CROPS:** Limited progress was made in harvesting the corn crop with about 93 percent of the Nation's acreage now harvested. The North-central States are estimated at approximately 92 percent complete. Snow and wet fields continued to hold back combining of soybeans and about 90 percent of the Nation's acreage is now harvested. The North-central States are 92 percent complete and Southern States about 85 percent complete. Harvesting of final acreage of grain-sorghum continues as weather permits. Harvesting of sugarcane in Louisiana made some progress and was helped by cooler weather in Florida. Sugarbeet planting is progressing normally in Arizona. Preparation of tobacco for market continues in Virginia, Delaware and Maryland.

**VEGETABLES:** In Florida vegetable harvest was slowed by rains and week-end cold. Considerable acreage of watermelons are expected to be replanted in west-central areas. Damage was otherwise limited to some frost burn. Normal harvest activity is expected by middle of week. In the Lower Rio Grande Valley of Texas, freezing temperatures killed the remaining late tomatoes and peppers. Cabbage and lettuce harvest is at a standstill because of adverse weather. There is some leaf burn on lettuce and cabbage because of cold temperatures. The onion crop was not damaged. At Laredo, lettuce was also hurt by cold weather. In The Coastal Bend, cabbage and lettuce were not damaged and the extent of damage done to the spinach crop remains unknown. Some tender vegetables were damaged in the Winter Garden area. In Arizona, harvest of lettuce and mixed vegetables continue in Yuma and Salt River Valley with the quality generally good. In California, broccoli and cauliflower is light in Salinas Valley. Carrots are steady in Desert Valley. Lettuce is steady in the Imperial Valley and nearing completion in Coachella.

**Fruits:** Florida citrus had no tree damage from week-end cold snap. Rain was most helpful. In Texas, adequate moisture conditions and a short duration of freezing prevented any damage from occurring to the citrus crop in the Lower Rio Grande Valley. In Arizona, grapefruit harvest continues on a limited scale. Harvest of navel sweet oranges continue. Lemon harvest in Yuma Area nearing completion. Unprotected groves in Yuma area are showing freeze damage. Most groves are in generally good condition. In California, packable fruit is harder to find and cullage continues heavy. Picking of navels in Southern California was slowed by cold, wet weather. Lemon harvest in San Joaquin Valley continues. Frost damage in Santa Barbara-Ventura districts caused problems in handling and grading. Picking grapefruit and tangerines active in Desert and nearing completion in Coachella Valley.

**PASTURES AND LIVESTOCK:** The feeding and caring of livestock has increased significantly throughout the Nation because of adverse weather and limited grazing. Deaths are higher than normal because of extremely low temperatures and supplemental feeding is quite extensive. Many cattle have been confined to farm lots because of snow cover. Feed supplies are generally adequate and warm temperatures at the week's end brought relief to stressed livestock.

Luther D. Rives  
Agricultural Statistician

## Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., Jan. 21, 1973

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 . . .	30	-16	.1	-1.0	New Orleans . . .	37	-17	.4	-.5	OKLA. Okla. City . .	16	-21	T	-.3
Mobile . . .	37	-16	.3	-.8	Shreveport . . .	34	-13	.1	-1.0	Tulsa . . .	19	-17	T	-.4
Montgomery . . .	36	-12	.4	-.5	MAINE. Caribou . . .	7	-17	T	-.5	OREG. Astoria . . .	42	+1	2.2	-.5
ALASKA. Anchorage . .	8	-4	T	-.2	Portland . . .	10	-12	T	-1.0	Burns . . .	28	+3	.7	+.3
Barrow . . .	-10	+6	T	0	MD. Baltimore . . .	24	-11	T	-.8	Medford . . .	42	+7	.8	+.1
Fairbanks . . .	-12	0	T	-.2	MASS. Boston . . .	20	-10	0	-.9	Pendleton . . .	26	-6	2.2	+.9
Juneau . . .	14	-11	1.4	+.5	Chatham . . .	23	---	T	---	Portland . . .	38	0	2.2	+.9
Nome . . .	-6	-10	T	-.2	MICH. Alpena . . .	15	-5	.1	-.4	Salem . . .	41	+2	2.8	+1.2
ARIZ. Flagstaff . . .	26	-1	.3	-.2	Detroit . . .	20	-6	T	-.5	PA. Allentown . . .	20	-9	0	-.7
Phoenix . . .	54	+4	T	-.2	Flint . . .	21	-2	T	-.4	Erie . . .	19	-7	.2	-.4
Tucson . . .	50	0	T	-.2	Grand Rapids . . .	19	-6	.1	-.3	Harrisburg . . .	23	-9	0	-.6
Winslow . . .	32	+2	.1	0	Houghton Lake . . .	15	-5	T	-.4	Philadelphia . . .	24	-8	0	-.7
Yuma . . .	56	+3	0	-.1	Lansing . . .	20	-5	T	-.4	Pittsburgh . . .	18	-11	T	-.7
ARK. Fort Smith . . .	26	-13	T	-.6	Marquette . . .	14	-5	T	-.4	Scranton . . .	18	-10	T	-.5
Little Rock . . .	29	-12	T	-1.2	Muskegon . . .	22	-4	.1	-.4	R.I. Providence . . .	20	-9	0	-.9
CALIF. Bakersfield . .	51	+4	.4	+.1	S. Ste. Marie . . .	14	-2	.3	-.2	S.C. Charleston . . .	35	-15	1.1	+.5
Eureka . . .	53	+5	2.0	+.5	MINN. Duluth . . .	3	-6	.1	-.1	Columbia . . .	33	-14	1.4	+.7
Fresno . . .	50	+4	.7	+.2	Internatl Falls . .	4	+1	T	-.2	Greenville . . .	29	-15	.3	-.7
Los Angeles . . .	61	+5	.3	-.3	Minneapolis . . .	8	-4	T	-.2	S. DAK. Aberdeen . .	10	-1	T	-.1
Red Bluff . . .	42	-3	3.9	+2.9	Rochester . . .	5	-9	T	-.2	Huron . . .	11	-2	T	-.1
San Diego . . .	58	+3	.2	-.3	St. Cloud . . .	4	-6	T	-.2	Rapid City . . .	20	-3	T	-.1
San Francisco . . .	53	+5	3.2	+2.3	MISS. Jackson . . .	32	-16	T	-1.1	Sioux Falls . . .	8	-8	T	-.1
Stockton . . .	52	+8	2.8	+2.1	Meridian . . .	35	-13	T	-1.0	TENN. Chattanooga . .	25	-16	.1	-1.2
COLO. Denver . . .	24	-5	T	-.1	MO. Columbia . . .	17	-12	T	-.4	Knoxville . . .	25	-16	.2	-.9
Grand Junction . . .	10	-15	.1	-.1	Kansas City . . .	14	-17	T	-.3	Memphis . . .	26	-15	0	-1.4
Pueblo . . .	21	-9	T	-.1	St. Louis . . .	20	-12	.1	-.4	Nashville . . .	24	-16	T	-1.2
CONN. Bridgeport . . .	18	-12	0	-.8	Springfield . . .	18	-16	T	-.4	TEX. Abilene . . .	24	-20	.8	+.6
Hartford . . .	18	-10	0	-.8	MONT. Billings . . .	16	-7	T	-.1	Amarillo . . .	23	-14	.1	0
D.C. Washington . . .	27	-10	T	-.6	Glasgow . . .	10	0	---	---	Austin . . .	32	-18	.4	-.2
FLA. Apalachicola . .	45	-10	1.2	+.5	Great Falls . . .	20	-2	T	-.2	Beaumont . . .	34	-19	1.0	+.2
Ft. Myers . . .	58	-6	1.8	+1.5	Havre . . .	19	+4	0	-.1	Brownsville . . .	41	-20	1.6	+1.2
Jacksonville . . .	41	-15	1.8	+1.3	Helena . . .	7	-12	T	-.1	Corpus Christi . . .	39	-18	.5	+.1
Key West . . .	70	+1	2.1	+1.7	Kalispell . . .	11	-9	.5	+.2	Dallas . . .	29	-17	.3	-.3
Lakeland . . .	52	-10	1.5	+1.0	Miles City . . .	13	-4	T	-.1	Del Rio . . .	39	-12	.1	-.1
Miami . . .	66	-1	2.7	+2.2	Missoula . . .	13	-6	.2	0	El Paso . . .	41	-2	.2	0
Orlando . . .	52	-9	2.4	+1.9	NEBR. Grand Island .	16	-7	0	-.1	Fort Worth . . .	29	-16	.2	-.2
Tallahassee . . .	42	-12	1.4	+.7	Lincoln . . .	15	-11	T	-.2	Galveston . . .	39	-16	.9	0
Tampa . . .	53	-8	1.4	+.9	Norfolk . . .	13	-7	T	-.2	Houston . . .	35	-16	1.0	+.1
GA. Atlanta . . .	29	-16	.4	-.5	North Platte . . .	14	-10	T	-.1	Lubbock . . .	23	-13	.1	0
Augusta . . .	34	-14	1.0	+.3	Omaha . . .	13	-8	T	-.2	Midland . . .	31	-13	.1	-.1
Macon . . .	36	-13	1.2	+.4	Valentine . . .	14	-7	T	-.1	San Angelo . . .	31	-16	.2	0
Savannah . . .	37	-15	.8	+.2	NEV. Ely . . .	29	+6	.1	-.1	San Antonio . . .	36	-16	.2	-.2
HAWAII. Hilo . . .	73	+2	.1	-2.9	Las Vegas . . .	41	-2	.2	+.1	San Antonio . . .	37	-18	.5	-.1
Honolulu . . .	---	---	---	---	Reno . . .	31	+1	.3	0	Victoria . . .	29	-19	.1	-.5
Kahului . . .	---	---	---	---	Winnemucca . . .	33	+6	.7	+.5	Wichita Falls . . .	24	-18	T	-.2
Lihue . . .	69	-2	0	-1.2	N.H. Concord . . .	5	-16	0	-.8	UTAH. Blanding . . .	17	-9	.4	+.1
IDAHO. Boise . . .	32	+3	.7	+.4	N.J. Atlantic City . .	25	-10	0	-.8	Salt Lake City . . .	24	-3	.2	-.1
Lewiston . . .	29	-2	.4	+.1	Trenton . . .	24	-9	0	-.6	VT. Burlington . . .	10	-7	T	-.4
Pocatello . . .	22	-1	.2	-.1	N.MEX. Albuquerque . .	32	-3	.3	+.2	VA. Lynchburg . . .	22	-16	.2	-.5
ILL. Cairo . . .	25	-12	T	-.9	Roswell . . .	34	-3	.1	0	Norfolk . . .	27	-14	.8	+.1
Chicago . . .	19	-7	T	-.4	N.Y. Albany . . .	16	-7	.1	-.4	Richmond . . .	23	-16	.4	-.4
Moline . . .	16	-7	T	-.4	Binghamton . . .	15	-9	T	-.6	Roanoke . . .	24	-14	.2	-.5
Peoria . . .	17	-9	T	-.5	Buffalo . . .	19	-6	.3	-.3	WASH. Colville . . .	22	-1	1.1	+.7
Rockford . . .	16	-6	T	-.4	New York . . .	24	-10	0	-.8	Omak . . .	19	-2	.2	-.1
Springfield . . .	20	-9	T	-.5	Rochester . . .	20	-6	T	-.5	Quillayute . . .	42	+3	5.8	+2.2
IND. Evansville . . .	23	-12	T	-.8	Syracuse . . .	18	-7	.2	-.5	Seattle-Tacoma . . .	40	+1	2.6	+1.3
Fort Wayne . . .	20	-7	T	-.6	N.C. Asheville . . .	26	-14	.2	-.5	Spokane . . .	24	-1	.2	-.4
Indianapolis . . .	21	-8	T	-.7	Charlotte . . .	27	-16	.4	-.4	Walla Walla . . .	27	-6	.5	0
South Bend . . .	20	-6	1	-.4	Greensboro . . .	21	-19	.4	-.4	Yakima . . .	24	-3	.7	+.4
IOWA. Burlington . . .	15	-10	T	-.3	Hatteras . . .	36	-11	1.3	+.3	W. VA. Beckley . . .	18	-16	.1	-.9
Des Moines . . .	11	-9	T	-.3	Raleigh . . .	25	-17	.8	+.1	Charleston . . .	20	-17	.1	-.9
Dubuque . . .	10	-9	T	-.4	Wilmington . . .	34	-14	1.2	+.6	Huntington . . .	21	-16	.1	-.7
Sioux City . . .	13	-6	T	-.2	N. DAK. Bismarck . . .	10	-1	T	-.1	Parkersburg . . .	22	-13	T	-.7
KANS. Concordia . . .	16	-12	T	-.1	Fargo . . .	4	-4	T	-.1	WIS. Green Bay . . .	11	-6	.1	-.2
Dodge City . . .	18	-13	.1	0	Williston . . .	12	+3	T	-.1	La Crosse . . .	9	-8	T	-.3
Goodland . . .	21	-6	T	-.1	OHIO. Akron-Canton . .	19	-10	.1	-.6	Madison . . .	12	-6	T	-.4
Topeka . . .	13	-16	T	-.3	Cincinnati . . .	21	-11	T	-.7	Milwaukee . . .	15	-6	T	-.4
Wichita . . .	11	-21	T	-.2	Cleveland . . .	20	-9	T	-.6	WYO. Casper . . .	16	-8	.1	0
KY. Lexington . . .	24	-10	T	-1.1	Columbus . . .	21	-9	T	-.7	Cheyenne . . .	20	-6	.3	+.2
Louisville . . .	25	-10	T	-.8	Dayton . . .	20	-10	.2	-.5	Lander . . .	6	-14	T	-.1
LA. Baton Rouge . . .	36	-17	.3	-.8	Toledo . . .	19	-8	T	-.5	Sheridan . . .	18	-7	T	-.2
Lake Charles . . .	36	-18	1.2	-.1	Youngstown . . .	17	-11	T	-.7	P.R. San Juan . . .	78	+3	.2	-.9

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

## CONDENSED STATE SUMMARIES

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

**ALABAMA:** Very little precipitation but very cold; easily the coldest week of season, averaging 12° below normal statewide. At Muscle Shoals, temperature finally climbed above freezing at noon Saturday for first time in over a week--75 consecutive hours. Lowest of season most sections Saturday morning, ranging from 14° at Muscle Shoals and Birmingham to 27° at Dothan. Light rain extreme south midweek, including light snow Mobile area Thursday night, but clearing Friday and sunny weekend. Outdoor activities were limited to care and feeding of livestock and poultry as Alabama experienced coldest weather of season. No progress was made toward completion of harvest cotton, corn, and soybeans. In northern counties, ice knocked beans to ground causing further losses. Growth small grains and winter grazing crops retarded by subfreezing temperatures. Extent of freeze damage remains to be determined. Cattle required additional hay and supplements. Stockmen are concerned about short hay supplies on many farms and high priced supplement.

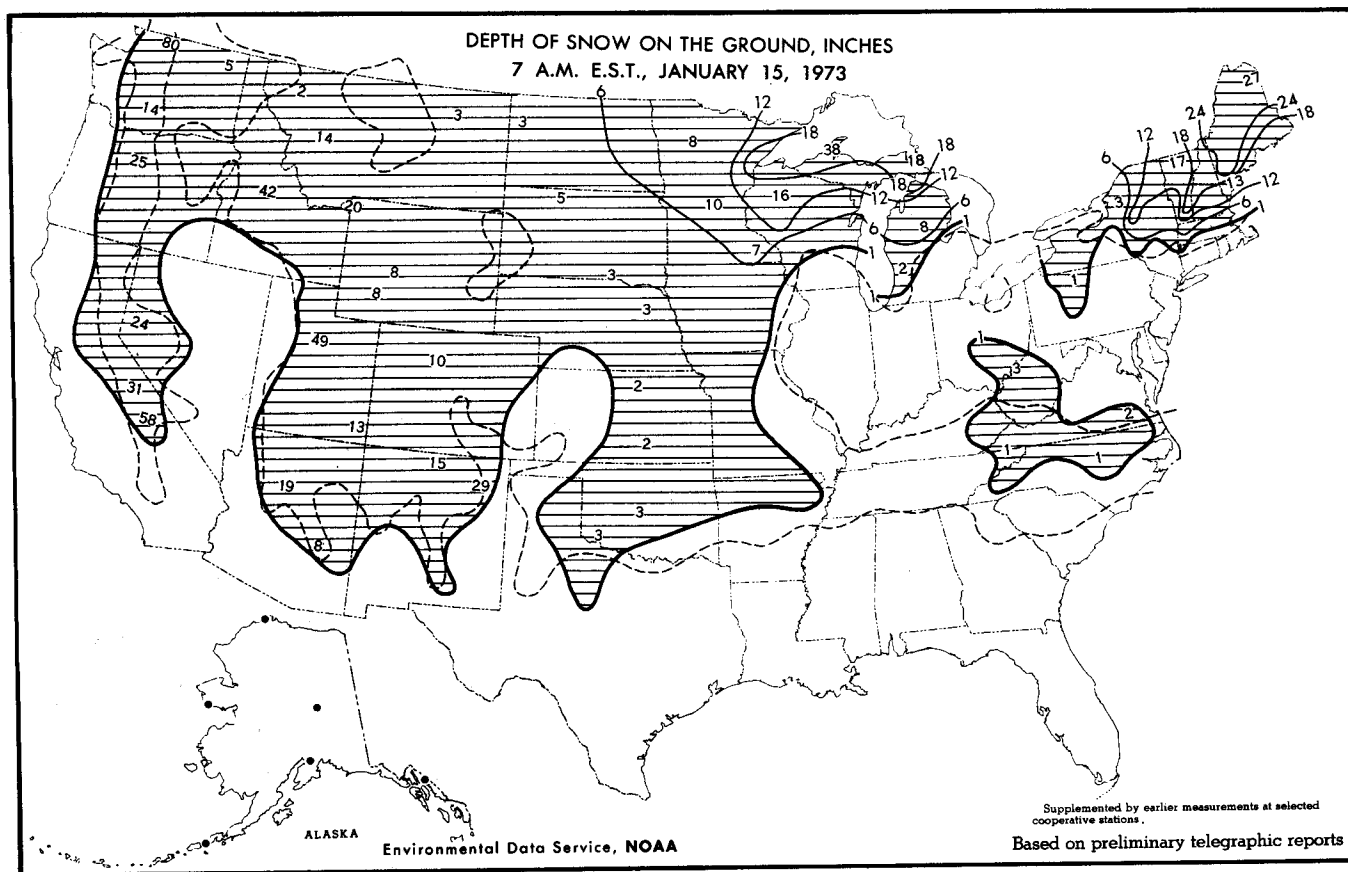
**ALASKA:** December was a month of sharp contrasts over Alaska's agricultural belt. In the Tanana Valley, temperatures averaged more than 5° above normal, with heavy snowfall exceeding twice normal amounts. Fairbanks received 27 inches compared with a normal 12.5 inches. In contrast, the Matanuska-Susitna Valleys and the Kenai Peninsula received only minimum amounts of snow, totaling less than 6 inches in most areas, along with near to slightly below normal temperatures. A 1.34 inch precipitation total at Talkeetna was less than 10% of normal, and established an alltime record dry December there. Gulkana, with 0.07 inch, also tied their previous record dry month. Snow cover at the end of month averaged slightly over 1 foot in Tanana Valley down to 3 inches at Palmer and a trace at Kodiak. Hay supply generally adequate most areas of the Railbelt. Forage feed winter supply greater than in recent years. Livestock in generally good condition with a minimum of winter-time losses reported. Grading of potatoes continues strong with much culling.

**ARIZONA:** Precipitation early in week light in most areas with snow above about 5,000 feet. Maximum weekly water totals were less than 0.75 inch in White Mountains and less than 0.50 inch in mountains in northern part of State. Although temperatures warmed up considerably following the storm in western and southern parts of State, cold air remained over high plateau area in northeast producing heavy fog and stratus and daytime maximums that were subfreezing over much of plateau through weekend. Cotton harvest virtually complete. Grain sorghum harvest virtually completed. Sugar beet planting progressing normally. Small grain planting, stand establishment continue normal rate. Alfalfa hay harvest continues limited scale. Low temperatures caused some injury. Harvest lettuce, mixed vegetables continued in Yuma and Salt River Valley, quality generally good. Later planting making good progress. Grapefruit harvest continued limited scale, harvest navel sweet oranges continued, lemon harvest nearing completion Yuma. Unprotected groves Yuma area showing freeze damage. Most groves generally good condi-

tion. Arizona ranges good statewide. Temperatures warmed during past week. Lower elevation desert ranges green, feed prospects late winter, early spring good. Cattle calves good statewide, no unusual death losses due winter. Sheep, lambs northern Indian Reservations fair, desert pastures fair to good.

**ARKANSAS:** Mean temperature much below normal with departures ranging from -9° to -17°. Greatest departures in north-central and south-central sections. Cold first of week with some moderation latter part of week and pronounced warming on weekend. Highest 66° at Hot Springs on 14th. Lowest 2° at Gilbert in south-central on 12th. Precipitation very light with most localities reporting traces or no precipitation. Largest amount 0.10 inch at Harrison in northwest. Snow and ice from storm of previous week remained on ground most of week. Conditions permitted very little harvest during week. Snow and ice covered most of State and caused additional crop losses from lodging. Frozen ground supported equipment for limited harvest late in week. About 95% of cotton now picked, 85% or a little more of soybeans combined. Extremely low temperatures most of week halted growth of small grains. Snow cover minimized freeze damage. Job of feeding and caring for livestock and poultry greatly increased by very cold weather. Electricity out few areas added much to their burden.

**CALIFORNIA:** Heavy rains from 8th through 12th in northern 1/3 of State. Storm totals near 9.00 inches in central coast range, and 3.00 to 6.00 inches other areas. Local flooding and mud slides. Light to moderate precipitation in San Joaquin Valley and South Coast. Average temperatures near or slightly below normal, except 5° below normal in desert and northern Sacramento Valley. Cold minimums on 6th and 7th. Rainfall halted many activities. Planting small grains, alfalfa continues weather permitting. Cotton plowdown continues. New fields not yet picked Fresno County. Navel orange harvest San Joaquin slow. Packing house operating few days. Packable fruit harder find, cullage continues heavy. Damaged fruit navel, Valencias dropping, trees affected by December freeze. Picking navels southern California slowed by cold, wet weather. Lemon harvest San Joaquin Valley continues. Santa Barbara-Ventura Districts frost damage caused problems handling, grading. Picking grapefruit, tangerines active desert. Harvest nearing completion Coachella Valley. Rain Sacramento, San Joaquin Valleys delayed pruning and dormant spraying. Coachella Valley asparagus increasing. Castroville artichoke plants improving from freeze damage. Broccoli and cauliflower light Salinas Valley. Carrots steady desert valleys. Celery steady southern California. Lettuce steady Imperial Valley, near completion Coachella. Potatoes continue Bakersfield. Range land grasses growing slowly, water supplies have been replenished by recent rains. Feed lots are experiencing muddy conditions hampering daily gains. Supplemental feeding is heavy, calving and lambing are progressing. Egg production is down, milk production at normal levels.



**COLORADO:** Bitter cold early in week with substantial warming by weekend. Temperatures averaged 12° to 20° below normal on plains, 7° to 19° below normal in mountains. Temperatures through Friday ranged from 57° at Delhi on 12th to -30° at Antero Reservoir on 11th. Some temperatures in mid-60's on weekend brought relief from sustained period of bitter cold weather. Precipitation was light to none on plains, with light to moderate snow in mountains. Limited fieldwork. Melting snow causing muddy condition most areas. Winter wheat and barley good to excellent. Limited grazing of winter wheat. Corn and sorghum harvest made little progress. Ranges and pastures provided limited forage. Heavy supplemental feeding of livestock continuing statewide, condition fair.

**FLORIDA:** Cloudy and cool with temperatures averaging near 10° below normal northern to central sections to near normal near lower East Coast and Keys. Trace of snow reported at several stations in Panhandle on Friday was first snow since March 1969. Frost and freezing temperatures were general over State except for lower East Coast and Keys on Sunday morning. Low temperatures of 18° were reported in Monticello and Tallahassee. Moderate rain Wednesday through Friday with all sections reporting 1.50 to 2.00 inches. Cool wet weather slowed farm activities last week. Field crops mostly harvested. Cooler weather helped sucrose content of sugarcane. Weekend freeze killed back green growth in pastures central Florida. Midweek rains most of State aided small grain pastures. Cattle mostly good condition. Citrus had no tree damage from weekend cold snap. Only short traces below 30°, rain very helpful. Cold permitted more color in Valencias. Vegetable

harvest slowed by rains and weekend cold. Temperatures at freezing January 14 with some frost in most southern areas except East Coast. Considerable acreage of watermelons expected to be replanted in West-Central. Damage otherwise limited to some frost burn bloom and small fruit losses. Normal harvest activity expected by middle of week.

**GEORGIA:** Very cold week. Highs remained below freezing in north through Wednesday under cloudy skies. Clearing on Thursday with gradual warming of daytime temperatures through remainder of week but radiational cooling brought lower nighttime readings. Coldest Saturday and Sunday mornings with lows ranging from near 10° in mountains to low 20's extreme south. Averages were under 40° throughout State and ranged from 12° to 15° below normal. Precipitation less than 0.10 inch north and central, increasing to more than 1.00 inch parts of southeast. Ice and sleet storm during night of 7th over northern 1/3 of State caused extremely heavy property damage with estimates now up to \$5 million. Heaviest losses in metropolitan Atlanta area where utility lines and trees suffered tremendous damage. Soil moisture excessive all areas. Fieldwork at near standstill. Small grains and pastures mostly fair to good. Earlier ice storm made livestock and poultry care more difficult. Power losses caused water shortages on many poultry farms. Supplemental feeding for livestock maintenance heavy.

**HAWAII:** Clear, cool weather with light scattered showers. Most crops making satisfactory progress. Farm operations on schedule all crops. Insect and disease damages light. Harvesting of vegetable

and fruit steady. Most pastures in fair to good condition with ample soil moisture. Range feed adequate, cattle condition fair to good.

**IDAHO:** Week was highlighted by colder than normal temperatures and more than normal precipitation except less than normal east. Temperatures dipped to 20° to 25° below zero midweek but increased to well above normal at end. Most precipitation came last half of week. 0.25 to a little more than 0.50 inch of precipitation was recorded in western counties of State. Snow depths at gaging stations did not change significantly. Wet weather kept feed lots muddy and helped expose livestock to disease. Calving and lambing getting started with minimum losses. Farm to market movement of potatoes normal.

**ILLINOIS:** Cold and dry. Little precipitation as light snow or snow flurries. Snow accumulations were 1 inch or less and more commonly only a trace. Temperatures averaged 6° to 12° below normal with a warming trend on weekend. Below normal temperatures kept ground frozen allowing farmers to get into fields. Corn harvest 95% complete. Stalks remaining for harvest standing mostly good condition. Soybean harvest 96% complete. Combining progressed across State. Plants reported standing fair condition. Grain sorghum harvest 90% complete. Soil moisture, January 12, short 2%, adequate 47%, surplus 51%. Average 5 1/2 days suitable fieldwork.

**IOWA:** Temperatures averaged 6° to 19° subnormal and precipitation was negligible. Extremely cold temperatures at beginning of week to above normal temperatures at weekend. Sanborn and Atlantic reported a -23° on 9th while Sioux City measured 50° and Council Bluffs 49° on 14th. Snow cover diminished to zero to a trace south, 1 inch central and 3 inches northern divisions by end of week. Flooding from ice jam on Des Moines River at Bonaparte.

**KANSAS:** Bitter cold through midweek with maxima generally below 25°. Weather moderated after 10th. Maxima warmed to 40's or higher by 14th. Minima mostly 15° to -10° through 12th increasing generally to 20's and 30's at end of period. Precipitation insignificant. No snow cover west at end of week but 1 to 2 inches most of east. Livestock required heavy supplemental feeding due to cold weather. Many cattle confined to farm lots because of snow cover or inaccessibility of grazing. Hay and other roughage feeding heavy but supplies generally adequate. Death losses above normal, cattle gains less than usual. Limited activity in harvest of sorghum, corn, and soybeans remaining in fields. Wheat growth limited by wintry weather but snow cover most areas minimized damage of low temperatures last week.

**KENTUCKY:** Coldest week in about 2 years and driest week in about 7 months. Last 6 days of week mostly fair. Temperatures averaged 20° to 25°, about 9° to 15° below normal. Precipitation ranged from traces to 0.10 inch. Contined very cold until warming to seasonable end of week; early-morning temperatures on 12th, 1° to 11°. Snow ended on 9th, heaviest in south. One to 3 inches of snow cover persisted over much of south until weekend. Cold, dry week favorable for harvest soybeans and corn. Soybeans approximately 90% to 95% harvested, corn 95% harvested. Moisture content less than recent weeks but yields reduced on late harvested acreages, especially soybeans. Cold temperatures caused some concern for fall-seeded grains. Winter weather has

increased demands on supplemental feed. Many burley markets closing,--few growers need damp weather to finish stripping.

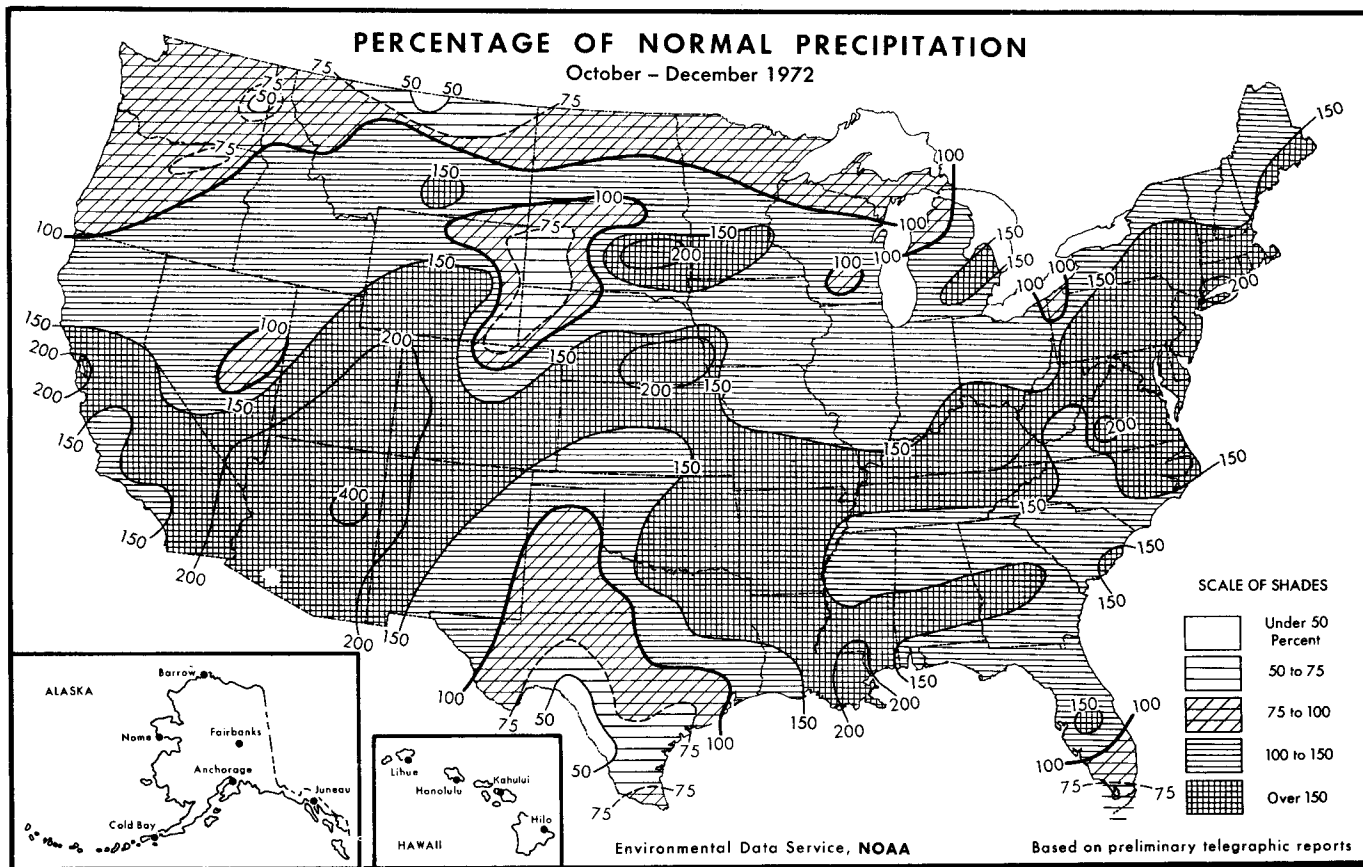
**LOUISIANA:** Very cold entire State. Temperatures averaged 13° to 20° below seasonal. Ice storm most areas except coast Wednesday mixed with sleet and snow north and central. Snow all sections Thursday accumulated to 1 to 4 inches. First snow since 1968 and heaviest since 1960 or 1963 many places. Clearing Friday, cold Saturday morning with minimums teens to mid-20's. Rapid moderation weekend. Temperature extremes: 17° Ashland Friday and 65° Lake Charles Sunday. Precipitation totals variable. Water amount mostly less than 1.00 inch except some areas southwest. Greatest 1-day total 0.68 inch melted measured at Lake Charles Friday morning with 4 inches snow coverage. Fieldwork virtually impossible because of rain, ice, and snow. No progress made in harvest of cotton and soybeans; 5% to 10% of these crops still in fields. Some progress made in harvesting sugarcane, about 3% left in fields. Pasture feed below average, snow and ice cover for several days necessitated heavy feeding of livestock. Rye grass and small grain pastures suffering from excessive moisture. Livestock in fair to good condition.

**MARYLAND AND DELAWARE:** A clear, very cold, and sunny week as temperatures were below normal each day of period, averaging 10° to 12° below seasonal normals. Extremes: Highs in 40's to low of zero at Oakland with low teens remainder of State. No precipitation except on extreme southern Eastern Shore where snow up to 4 inches fell on 8th. Farmers made some progress in cleanup work on the harvest of corn and soybeans. Clear, cold weather early in the week froze topsoil enough to carry harvest equipment. Tobacco farmers continued to strip tobacco in preparation for auction market sales starting in April. Fruit growers were busy with their winter work of pruning fruit trees.

**MICHIGAN:** Mostly fair south, lake snows vicinity Great Lakes, continued cold until warming as period ended. Temperatures averaged 3° to 7° below normal Upper Peninsula, 2° to 7° below normal Lower Peninsula with largest departures interior and southeast. Precipitation totals: 0.50 to 0.75 inch Lake Superior to less than 0.10 inch southern Upper Peninsula, 0.10 to 0.25 inch Lake Michigan to a trace east-central and southeast.

**MINNESOTA:** Temperatures generally 4° below normal in northwest to 8° below normal in southeast. Extremes: 43°, -43°. Little to no precipitation. Snow depths averaged 6 to 18 inches across State except the southwest which had less than 3 inches. The greatest amounts are in the northeast with more than 15 inches.

**MISSISSIPPI:** Temperatures averaged 9° to 17° below normal. Most stations reported highest in 40's and 1 to 4 days when the maximums did not rise above freezing. Light snow, sleet, or freezing rain were present several days in most sections of State. Ice accumulations at several locations caused power lines, poles, and tree limbs to break and fall; roads, highways, and most bridges in affected areas were hazardous. Over weekend: Clearing with sunny dry weather and maximums in 50's and 60's Sunday. Average number of days suitable for fieldwork was 0.1 compared to 0.5 previous week. Soil moisture surplus to excessive. Cotton 89% harvested, a moderate increase from previous week. Soybeans 68% harvested, no change from previous week. Hay, roughage, and feed grain



#### Precipitation - October to December 1972

Precipitation from October to December was above normal over most of the Nation. The main exceptions were the northern border States from Washington to Upper Michigan and western and southern Texas. Most of Arizona received more than three times the normal precipitation. Much of this rain fell in October. Precipitation over the northern Great Plains was relatively light in October and November but heavy in December. Generous precipitation fell over the central Great Plains in October and November and over the Atlantic Coastal States in November and December.

L. W. Dye

supplies short to adequate. Wheat and oats in fair to good condition. Pastures mostly poor to fair and livestock in mostly fair condition. Virtually all areas reported no agricultural activities.

**MISSOURI:** Extremely cold week. Temperatures averaged 10° to 18° below normal. Subzero temperatures over all but extreme south. Warming trend began at end of period, with temperatures rising to near normal. Precipitation light, varying from 0.10 inch north to 0.30 inch southwest. Snow fell early in week covering western half of State with 4 to 5 inches of dry fluffy snow. Only 1 day suitable for fieldwork, as harvest was restricted by snow. Corn 85% harvested, up 1 point from last week. Soybeans 83% harvested, an increase of 3

points from last week. Grain sorghum 86% harvested, up 2 points from a week ago. Cotton 75% harvested, up from 71% completed last week. Wheat fair to good condition, topsoil moisture 29% adequate and 71% surplus.

**MONTANA:** Very cold first of week with minimum temperatures well below zero. Daytime temperatures remained below zero Monday and Tuesday over most of east. Moderating temperatures by midweek as the arctic air was replaced by mild marine air. Temperatures for week averaged 5° above normal north-central, 2° above normal northeast, and 3° to 7° below normal elsewhere. Precipitation confined to western division and higher mountains. Quite windy over eastern sections with very little snow cover over Plains. Snow cover protection for winter wheat poor. Winter wheat condition good north-central, south-central and southeast. Fair central, fair to good elsewhere. Grazing open most areas, 90% of cattle and sheep receiving supplemental feed.

**NEBRASKA:** Cold spell broken on 12th. Prior to warmup, minima near or below zero; Chadron had -25° on 9th. Average weekly temperatures 3° to 10° subnormal. Light snow fell intermittently over western Nebraska from 6th through 9th, and in extreme southeast on 7th. Weekend of 13th mild and dry. Maxima from 50's to upper 40's. Extremely cold weather limited farm activities, only essential work such as livestock feeding was attempted most areas. Warming trend over weekend eased stress on livestock and permitted limited amount of corn harvesting which is 96% complete. Roughly 21 million bushels corn remain to be harvested. Sorghum harvest at



standstill with 92% harvested. Winter wheat is good to excellent condition, since snow cover protected crop. Livestock losses higher than normal due to cold weather. Supplemental feeding heavy, livestock gains poor, warming trend relieved stress on livestock.

NEVADA: A warming trend end of week. Temperatures normal in northwest; 4° above normal in north-east and south-central and 6° below normal in extreme south. Light to moderate precipitation all divisions midweek. Snowfall all divisions from trace at Las Vegas to 6 inches at Virginia City. Rain melted local snow ground cover. Livestock continued to winter in generally good condition with hay supplies below normal in several areas. Stockwater adequate in most areas, main source of feed is supplemental feeding. Cattle deaths above normal while sheep and lamb losses high in some areas due to predators.

NEW ENGLAND: Very cold, sunny, and dry. Temperatures averaged 5° to 15° below normal. Some subzero maxima early in week in north with some minima in -30°. Much milder at close of week. A few light snow flurries. Total precipitation mostly trace or none in south but up to 0.20 inch locally in north. Little change in snow cover during week.

NEW JERSEY: A cold dry week. No measurable precipitation. Temperatures averaged from 6° to 11° below normal. Extremes ranged from 7° at Long Valley on 13th to 42° at Atlantic City on 14th. Trenton experienced coldest week since January 1970.

NEW MEXICO: Light precipitation first part of week in all sections of State but most common in the northern and central mountains with 0.25 to 0.50 inch. Fair after Wednesday. Cold first part of week warming to above normal on weekend. Temperatures averaged much below normal in the Eastern Plains. Lowest temperatures were reported on Thursday and highest temperatures on weekend. Severe ice storm eastern New Mexico early in week. Field activities paralyzed, progressing as weather permits elsewhere. Very little cotton, sorghum remaining unharvested.

NEW YORK: Cold wave continued through 12th with some moderation on weekend. Coldest week of winter. Maximums near zero northern valleys on 8th but warming to 20's generally Upstate and low 30's coastal sections by midweek. Warmest maximums in mid-30's on 14th. Minimums 30° to 40° below zero Adirondacks and 15° to 25° below zero St. Lawrence Valley on 8th and 9th; elsewhere mostly 0° to 10° below zero southern interior ranging up to 5° to 10° on Long Island. Precipitation limited to snow showers and squalls midweek in Great Lakes snow belt where some locally heavy to lee of Lake Ontario from 10th to 12th. Reports of 18 inches in Wayne County. Liquid totals 0.30 to 0.50 inch near Great Lakes decreasing to traces or less south-central and southeast. Snow cover continues unseasonably shallow across southern Plateau. Ground has been essentially bare of snow Lower Hudson Valley and Long Island for entire winter through mid-January.

NORTH CAROLINA: Snow 2 to 8 inches covered State January 8 and ground still covered most areas. Coldest week of winter averaged 15° below normal. Lows 0° to 20°; highs 20° to 40°. No fieldwork done as snow caused all farm activities to slip farther behind schedule.

Snow shoveling took precedence over cotton and soybean harvest. Snow caused additional damage to unharvested soybeans and cotton crops. Some soybeans falling due to excessive weight of snow. Snow-covered pastures provided little grazing. Farmers had to feed livestock heavy rations, hay and grain.

NORTH DAKOTA: Continued cold first of week followed by warming trend and highs above freezing on weekend. Temperature extremes: -32° and 42°. Averages above normal west, below normal east. Mostly fair weather. Precipitation totals trace most locations, otherwise less than 0.10 inch. Snow cover 1 to 8 inches. Mild weather with no winter storms enabled farmers to work on snow removal and haul feed and roughage. Grain moving to elevators as box cars become available. Livestock on winter ration, feed supplies adequate.

OHIO: This past week has been quite cold. Minimum temperatures ranged from near zero to upper teens from 8th to 13th. On 14th, lows were mostly in 20's. From 8th to 12th maximum temperatures ranged from upper teens to 30's. The 13th and 14th were warmer with high temperatures in 30's. From 8th to 14th, the only significant snowfall amounts occurred in northeast section of State. Just after midnight on 15th, snowfall amounts of 2 to 4 inches were reported across Central Ohio. Cold temperatures with no precipitation during past week enabled farmers to finally get their combines on the move. The frozen ground really speeded up harvest as some farmers worked around the clock harvesting. Quality of corn and soybeans varies throughout the State. As of January 15, nearly 85% of the corn for grain is harvested. The 1972 soybean crop is about 90% harvested. Best harvesting progress for both corn and soybeans is in the northwest area of the State. Hay supplies were reported short by 2/3 of reporters and adequate by 1/3. Silage supplies reported short from 40% of reporters and adequate or better from remaining 60%.

OKLAHOMA: Very cold temperatures averaged 20° to 29° below normal. Precipitation light with snow cover all week from snow during previous week except extreme southeast. Snow and very cold weather past week rough on livestock until milder weather weekend. Farmers and ranchers report loss newborn calves as well as deaths other livestock, especially feeder calves shipped in. Additional feeding cattle due to snow-covered small grains and ranges. Short hay and roughage supply some localities. Snow also hampered harvest activity. Farmers attempted to gather crops while ground was solid; very little progress made for cotton.

OREGON: Cold windy week, warmer at close. Two days treacherous glazing in Columbia Gorge and northwest at midweek accompanied by 2 to 7 inches of snow eastside and rains western Oregon spreading statewide over weekend. Temperatures averaged 2° to 21° below normal, coldest north-central. Weekly minima 2° to -12° east with subzero north-east quadrant, 20° to 32° western 1/3 of State. Maxima 23° to 62°. Precipitation totaled mostly 0.20 to 0.80 inch except 1.20 to 2.50 inches Willamette Valley and north coast. Routine winter-time activities continue. Orchardists pruning orchards and assessing freeze damage. Orchards in the lower Willamette Valley show severe damage. Filberts are pollinizing. Livestock continue

under full feed, calving underway in western Oregon.

**PENNSYLVANIA:** Very cold, dry week. Coldest week, statewide, in nearly 2 years, and driest since late May. Temperatures below freezing all week until milder trend weekend. Weekly means 7° to 10° below normal, except 5° to 6° below normal near Lake Erie. Extremes: 46°, -48°. No measurable precipitation eastern half except northeast corner; mostly under 0.10 inch west, falling as occasional snow flurries. Snow cover limited to several inches north and west mountains. Farmers tending to routine winter chores.

**PUERTO RICO:** Rainfall averaged 0.25 inch or about 0.50 inch below normal. Little or no rain along south and west coasts. Highest weekly total 2.66 inches in eastern mountains where generally 1.00 to 2.00 inches reported. West of Island generally less than 0.50 inch. Crop moisture conditions near normal all divisions except southern where some nonirrigated zones are too dry for normal crop development. Temperatures averaged 77° on coast and 71° interior divisions or near normal for week. Some warming trend in northern zones early in week due southerly winds. Highest maximum 92°, lowest minimum 55°. Dry weather of past few weeks has helped to mature sugarcane and increase sucrose content prior to final preparation for 1973 harvest. Coffee zones continued cleaning, pruning, and cultivating after end of harvest operations. Tobacco zones continued planting and fertilizing in good weather conditions. Pastures good to excellent all zones except parts of south where growth retarded due lack of rain. Minor crops developing well with good abundance on market except southern zones where more rain needed.

**SOUTH CAROLINA:** Snow, sleet, and freezing rain began falling on 7th and ended early on 8th. Most of State had from 1 to 4 inches on ground and due to low temperatures and high density of the mixture, the ground remained covered entire week in northern part of State. Average temperatures ranged from 32° in north to 40° in south, about 12° below normal. Icy conditions throughout State prevented farm activity most areas. Some setting cabbage plants and harvesting greens Charleston--Beaufort area.

**TENNESSEE:** Very cold most of week but warmer at end. Temperatures averaged 14° to 16° below normal. Extremes ranged from zero at Kingston Springs on 12th to 51° at Jackson on 14th. Precipitation fell early in period as rain, freezing rain, and snow, with totals ranging from about 0.25 quarter to 1.25 inch. Precipitation fell mostly as rain in southeast portion of State. Recent snow hampered farmers attempt to harvest additional cotton, soybeans, and corn. Exceedingly low temperatures throughout the State caused the snow to remain intact until late in period, reducing farm activities even more. The main concern for farmers includes feeding livestock, making plans for a 1973 crop, and salvaging 1972 grain and cotton crops.

**TEXAS:** Bitter cold, snowy, icy weather blanketed almost entire State first half of week. Snow extended as far south as San Antonio, Victoria, Galveston, and Beaumont. Lubbock experienced 157 consecutive hours of freezing temperatures, the second longest period on record. Austin experienced 90 consecutive hours. Minimum temperatures in Lower Rio Grande Valley ranged

from 22° to 28°. Abundant sunshine last half of week warmed temperatures into 60's and low 70's by end of week. Harvest of cotton, sorghum, and soybeans little or no progress as ice and snow covered much of State. Wheat and oat fields generally poor condition result of overgrazing and slow growth rates. Farmers and ranchers full feeding livestock, feed supplies becoming short. Death losses moderate to heavy among lighter stockers on high plains confirmed screwworm cases dropped zero. Harvest cotton 83%, sorghum 99%, soybeans 99%. In the Lower Rio Grande Valley, freezing temperatures killed the remaining late tomatoes and peppers. Carrot, cabbage, and lettuce harvest at standstill because of weather. Some leaf burn on lettuce and cabbage noted because of cold temperatures. Onion crop was not damaged. At Laredo, lettuce was hurt by the cold weather. In the Coastal Bend, cabbage and onions were not damaged by the cold weather. Extent of damage done to spinach crop remains unknown. In the Winter Garden, carrot, cabbage, and lettuce harvest continues as weather permits. Some tender vegetables were damaged, but too early to access losses. Pecan harvest 97% completed compared to 100% last year. If wet fields continue to exist, remaining nuts may not be picked. Adequate moisture conditions and a short duration of freezing temperatures prevented any damage from occurring to the Texas citrus crop in the Lower Rio Grande Valley.

**UTAH:** A rising trend in temperatures changed character of precipitation from snow to rain or rain and snow mixed with local areas of freezing rain. Accumulated amounts of moisture generally light to moderate. Snow cover still most sections of State but depths generally less than week ago. Average temperatures for week continued well below normal, ranging from 8° to 20° below normal. Temperatures over weekend generally only 2° to 10° below normal. The very welcome warmer temperatures enabled farmers and ranchers to catch up on operations delayed by the extreme cold and deep snow of preceding few weeks. However, melting snow is causing difficulties from mud in feedlots and barnyards. Care and feeding of cattle and sheep, dairy cattle, and poultry flocks continue leading activities. Placing of poultts for 1973 turkey crops just started. Sugar processing continues in full force. Sorting, grading and marketing of potatoes, dry onions, and apples from storage continue.

**VIRGINIA:** First prolonged cold period of winter. Temperatures much below normal. Snow on Monday mostly from 1 to 5 inches. Care and feeding of livestock was dominant activities on most farms. New born lambs and calves required extra care. Winter feeding increased sharply. Snow cover stopped fieldwork except in north. Some corn picked and soybeans combined where muddy soils frozen. Preparation of tobacco for market and pruning of fruit trees continued. Work on farm records and tax forms began. Preparing for maple syrup season in Highland County.

**WASHINGTON:** Western Washington: Snow, ice, and freezing temperatures at beginning of week with warmer, thawing rain by weekend. Farming activities at minimum. Forcing rhubarb continues. Cabbage seed fields look rough in places. Livestock in good condition. Hay supply short and tightening. Many woodland operations curtailed. Eastern Washington: Subzero nighttime temperatures in colder areas through 10th. Snow and freezing rain latter part of week with amounts

mostly less than 0.50 inch. Main activities pruning orchards and vineyards and fertilizing. Some damage evident in winter wheat and some reseeding being planned. Livestock on heavy feed and in good condition.

**WEST VIRGINIA:** Subfreezing spell finally ended January 14. Light snow flurries January 6 and 10 but little precipitation. 2-inch snowfall northern areas January 15 but rain in balance of State. Farmers active tending livestock as snow and cold weather curtail fieldwork. Hay and feed stocks decreased as colder weather forced increase in supplemental feeding. Most tobacco has moved through the auction.

**WISCONSIN:** Week averaged 5° to 10° colder than normal. Mostly sunny and cold through Friday, then turning partly cloudy and mild over weekend. Extremes: -36° in north on Tuesday and 38° in west Sunday. No precipitation of consequence. Snow depths average 12 inches and above north of a line from La Crosse to Marinette. Ground bare south of line from Dubuque to Manitowoc.

Frost depths range between 1 and 2 feet in much of southern Wisconsin. Little frost in central or north except nearly a foot in extreme northwest corner of State. Some corn and soybeans harvested during week. Otherwise main farm activity care and feeding of livestock. Feed supplies and quality of feed below normal most areas.

**WYOMING:** A very cold week with marked warming at weekend. Light precipitation statewide: Moran reported the most moisture with 0.50 inch. Wind at weekend caused some travel problems. Temperatures averaged 9° to 22° below normal west of Divide and Upper Platte Drainage, 17° to 32° below elsewhere. Maxima mostly 30's western half, high 30's and 40's eastern half. Minima mostly -20° to -30° west of Divide, -15° to -35° east. Temperature extremes were 51° at Sheridan and -38° at Farson. Care and feeding of livestock were the main agricultural activities. Cold weather and snow required heavier than usual feeding of grain and hay.

## WINTER WEATHER ASSISTS SCREWORM PROGRAM

Winter-like temperatures in the South, particularly in Texas, have provided a helpful assist to the screwworm eradication program. 1972 has proved to be the worst year, in terms of the number of confirmed screwworm cases, since the eradication program began. During 1972, 95,642 confirmed cases occurred in the United States, 90,980 of them in Texas. During 1971, only 473 cases were confirmed in the United States, 444 of them in Texas. The total number of confirmed cases in the United States for 1969 and 1970 were 219 and 153, respectively.

The large outbreak in 1972 was the result of several factors. A wet fall in 1971, followed by a mild winter, provided ideal conditions for buildup of viable pupae in the soil. Warm spring temperatures which triggered emergence of the pupae were accompanied by plentiful rainfall providing ideal conditions for survival. Husbandry practices have changed, with surgical procedures occurring year around.

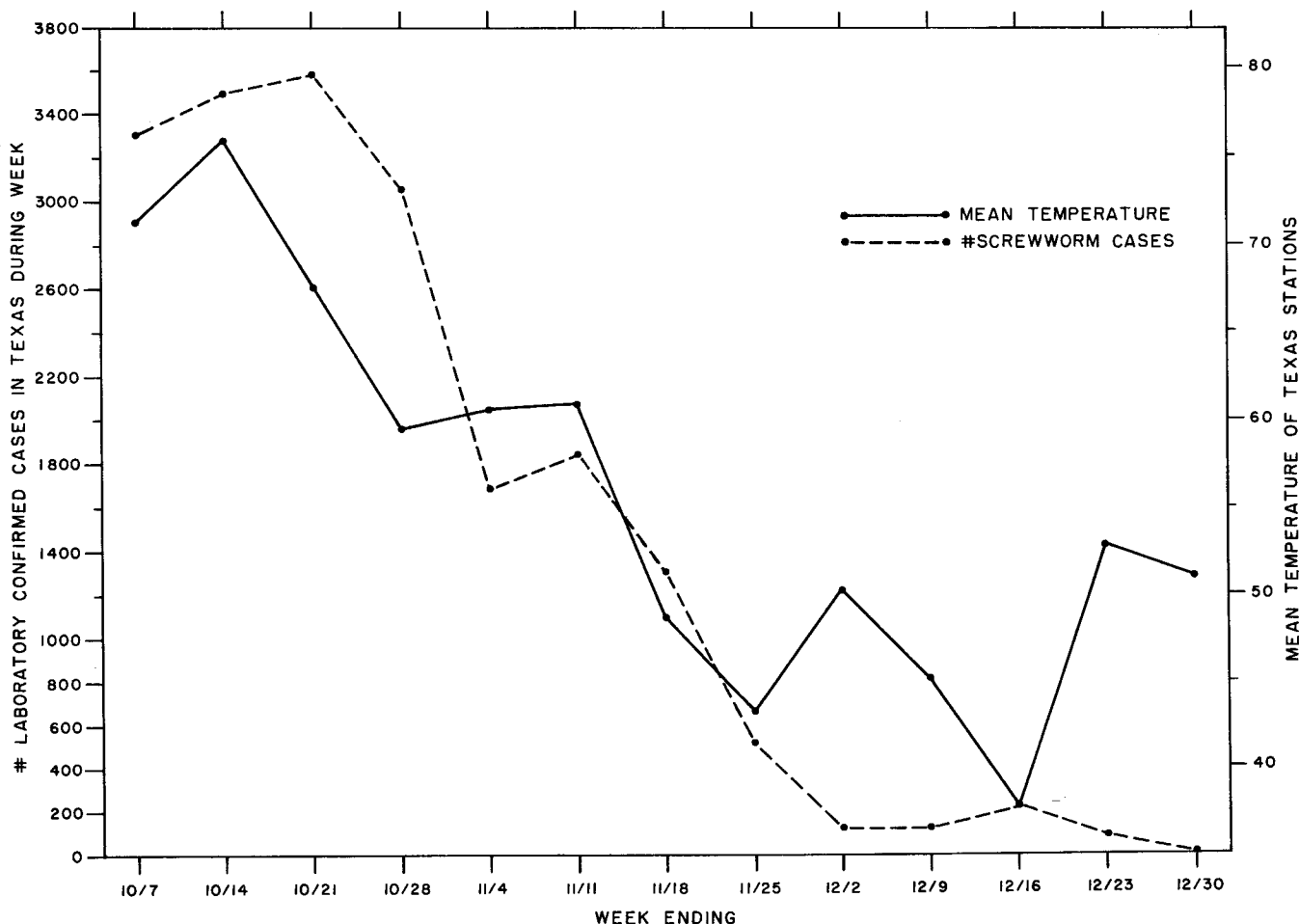
Between 3,000 and 5,000 cases were reported each week from early June through the 1st of November. The maximum caseload was reported the week ending July 1 when 5013 cases were confirmed, 4901 of them from Texas. The figure below shows the number of laboratory confirmed cases each week from October 1 through December. There appears to be a one-week lag in response of the organism to temperature. For example, the first significant

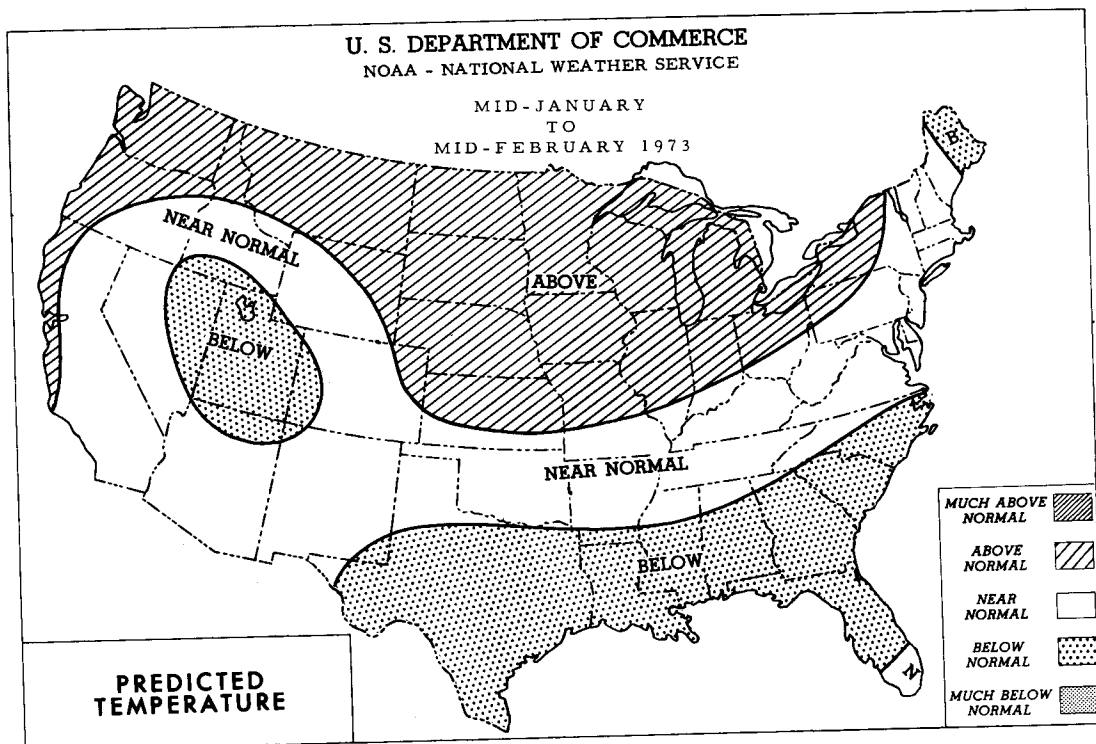
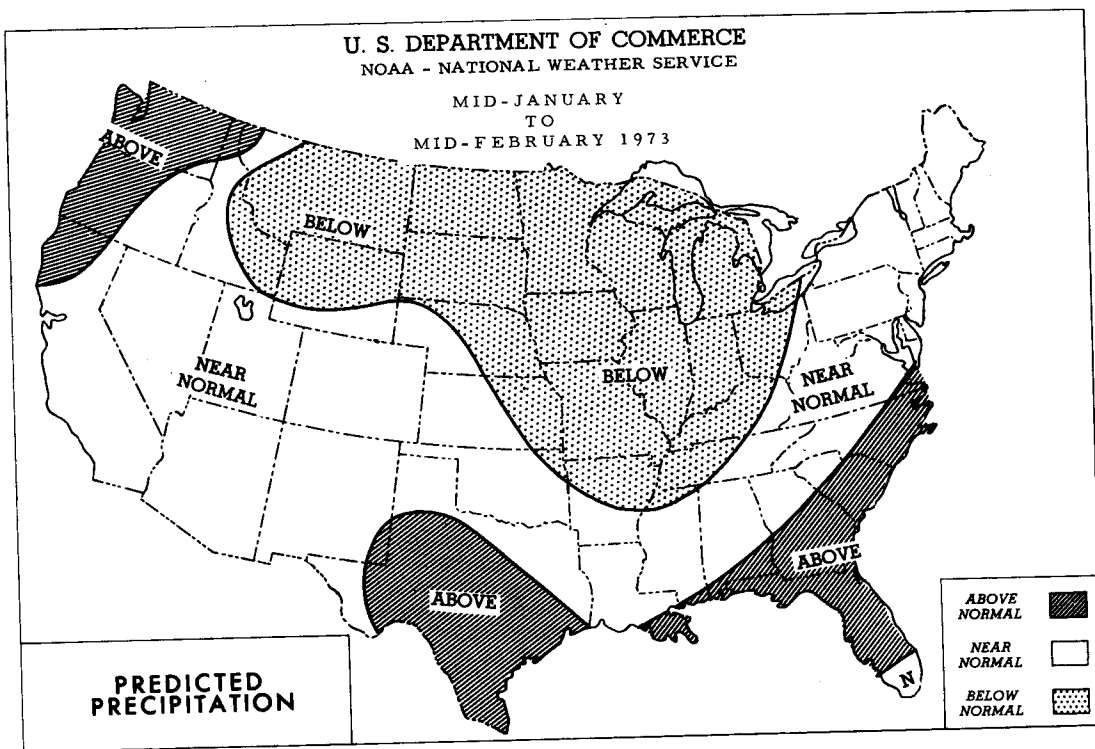
drop in screwworm cases occurred during the week ending November 4, when only 1679 cases were reported in Texas. This was a decrease of 45% from the preceding week. Interestingly, the weekly mean temperatures of all Texas stations reported in the Weekly Weather and Crop Bulletin during the preceding week was 59.5°, the coolest week since early spring.

The next major drop in number of cases occurred three weeks later. The average of the 19 Texas stations was 48° during the week ending November 18 and was down to 43° during the following week. The effect of the colder temperatures is reflected in the number of confirmed screwworm cases reported. There were 519 laboratory confirmed cases in the United States during the week ending November 25, a 61% decrease from the previous week. The number of confirmed cases was down to 126 the week ending December 2.

The coldest temperatures of the winter so far occurred during the week ending December 16. During the following week only 72 cases were reported. Texas reported 69 cases with all but three of them reported south of San Antonio. During the last week of December, only 17 cases were reported in the United States, all in Texas. Cold temperatures have continued into January and should continue to assist in the eradication effort.

R.E. Felch



**AVERAGE MONTHLY WEATHER OUTLOOK**

The above prognostic charts show the expected categories of average temperature and total precipitation for the period indicated. They were extracted from the Weather Service's publication "Average Monthly Weather Outlook" which contains additional information necessary for complete interpretation.

## WORLD WEATHER AND AGRICULTURE

MILD WINTER IN USSR  
MAY AFFECT WINTER WHEAT CROP

One of the mildest winters to date in many years may cause some problems with the 1972-73 winter wheat crop. Severe winterkill losses are a distinct possibility unless snow cover is established before winter temperatures become severe. To date, there have been no prolonged periods of freezing weather nor snow. November and December weather has been predominantly mild and overcast, with afternoon temperatures in the 30's and 40's. In many areas, this has been the warmest winter in dozens of years, contrasting last winter which was the most severe in 96 years. By Christmas the ground was not frozen in Moscow--a fifty-year rarity.

FROST AND HAIL SEVERELY DAMAGES  
ARGENTINA'S APPLE AND PEAR CROP

Severe frosts, which occurred in early October, and some hailstorms have combined to seriously damage deciduous fruits in the production areas of the Rio Negro Valley and in the Province of Mendoza. Production is estimated to be 59 percent less for pears than a year ago and 57 percent less for apples. The apple losses in Rio Negro, which accounts for 64 percent of the total production, is estimated at 61 percent. The situation is considered particularly grave because the remaining fruit will suffer various malformations, discolorations and other forms of deterioration as a result of both the frosts and hailstorms. Pears will be "ringed" internally. The holding period for fruit placed in storage will also be sharply reduced. Damage to grapes will be less severe because they were in the early stage of development when the frost occurred.

INDONESIA SUFFERS ACUTE GRAIN  
SHORTAGE FROM WIDESPREAD DROUGHT

Rice and corn production in Indonesia has been substantially reduced during the 1972-73 crop year due to widespread drought which has seriously affected all major agricultural commodities.

The main-season rice crop (harvested April-June) was reduced by a winter drought which delayed planting. But the most serious loss is reported to be in the dry-season crop, which normally produces about 20 percent of the total rice output. This crop, which is still being harvested, was severely damaged by a long summer drought.

Dry weather has also adversely affected Indonesia's 1972-73 corn crop, most of which is harvested from October to December. Recent reports indicate the outturn from the current crop will likely be the lowest of any recent year. Yields are reported to be down considerably in the major corn-producing areas of Lampung and East Java, and in some areas it was too dry to do any planting.

E. Wayne Denney  
Foreign Agriculture  
January 8, 1973

WATER SUPPLY OUTLOOK FOR THE WESTERN UNITED STATES  
Issued as of January 1, 1973

The table below shows the most probable January 1 forecasts in percent of the 15-year (1953-67) average. The most probable runoff forecasts are for the residual period, except water-year for the Sacramento and San Joaquin Basins; April 1 to September 30, 1973 for the Missouri, Yellowstone, and North Platte Basins; November 1, 1972 to June 30, 1973, for the Little Colorado Basin; and January 1 to June 30, 1973, for the Gila Basin. The publication "Water Supply Outlook for the Western United States," issued as of January 1, 1973 contains water supply forecasts for about 375 stations in the Western United States.

River	Station	FCST 1,000	% 15-yr.
		A.F.	Avg. +
Columbia	Grand Coulee, Wash.	64,800	84
Columbia	The Dalles, Oreg.	105,000	85
Snake	Clarkston, Wash.	19,300	87
Sacramento	Red Bluff, Calif.	8,000	91
San Joaquin	Big Creek, Calif.	1,200	94
Weber	Gateway, Utah	452	142
Jordan	Utah Lake, Utah	533	130
Truckee	Lake Tahoe to Farad	330	94
Colorado	Lake Powell, inflow	12,100	139
Green	Green River, Utah	4,290	128
San Juan	Bluff, Utah	2,120	173
Little Colo.	Woodruff, Ariz.	14	180
Gila	Solomon, Ariz.	195	150
Rio Grande	San Marcial, N. Mex.	800	175
Arkansas	Pueblo, Colo.	681	174
Missouri	Ft. Peck, Mont.	4,110	93
Yellowstone	Sidney, Mont.	7,120	112
North Platte	Glendo, Wyo.	947	142

+ Period, 1953-67

Office of Hydrology  
National Weather Service

# IMMEDIATE - U. S. Weather Report

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### NATIONAL FLOOD SUMMARY January 12, 1973

Continuing heavy precipitation over northern California has caused another rise in the Sacramento River system. The new crest is presently in the Woodson Bridge area. The Colusa Weir overflow is about 2 feet. Continued heavy precipitation in California central Basins is causing high water on the Russian and Napa Rivers. The Missouri River was ice-bridged from Rockport, Mo., to Glasgow, Mo., and from Atchison, Kansas, to above Rulo, Nebr., this morning. Overflows up to 4 feet have occurred in the Rulo, Nebr., area. Severe ice action continues on the Fox River at Dayton, Ill. Minor overflow continues on the Sabine River below Deweyville, Texas, and on the Trinity River between Liberty, Texas, and Livingston Reservoir. Heavy precipitation occurred during the last 24 hours in northern California, northwestern Oregon, and western Washington. Heavy precipitation was also reported in southern and central Florida.

National Weather Service