

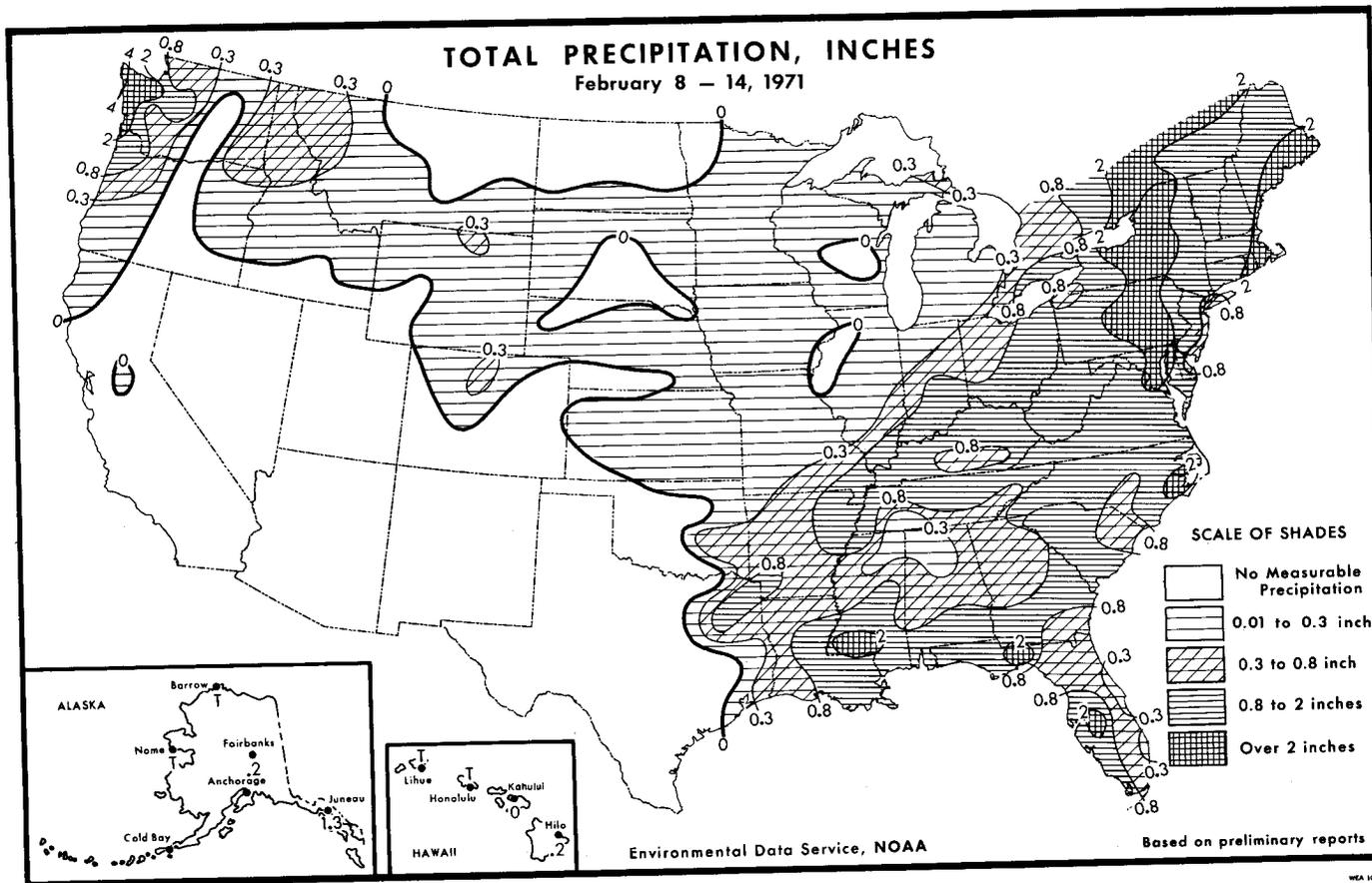
# Weekly Weather & Crop Bulletin

U. S. DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
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**HIGHLIGHTS:** The weather continued mild in the West. It was the warmest week since mid-December in the Northeast but coldest week of the winter in the Deep South. Heavy snow fell in parts of the Northeast.

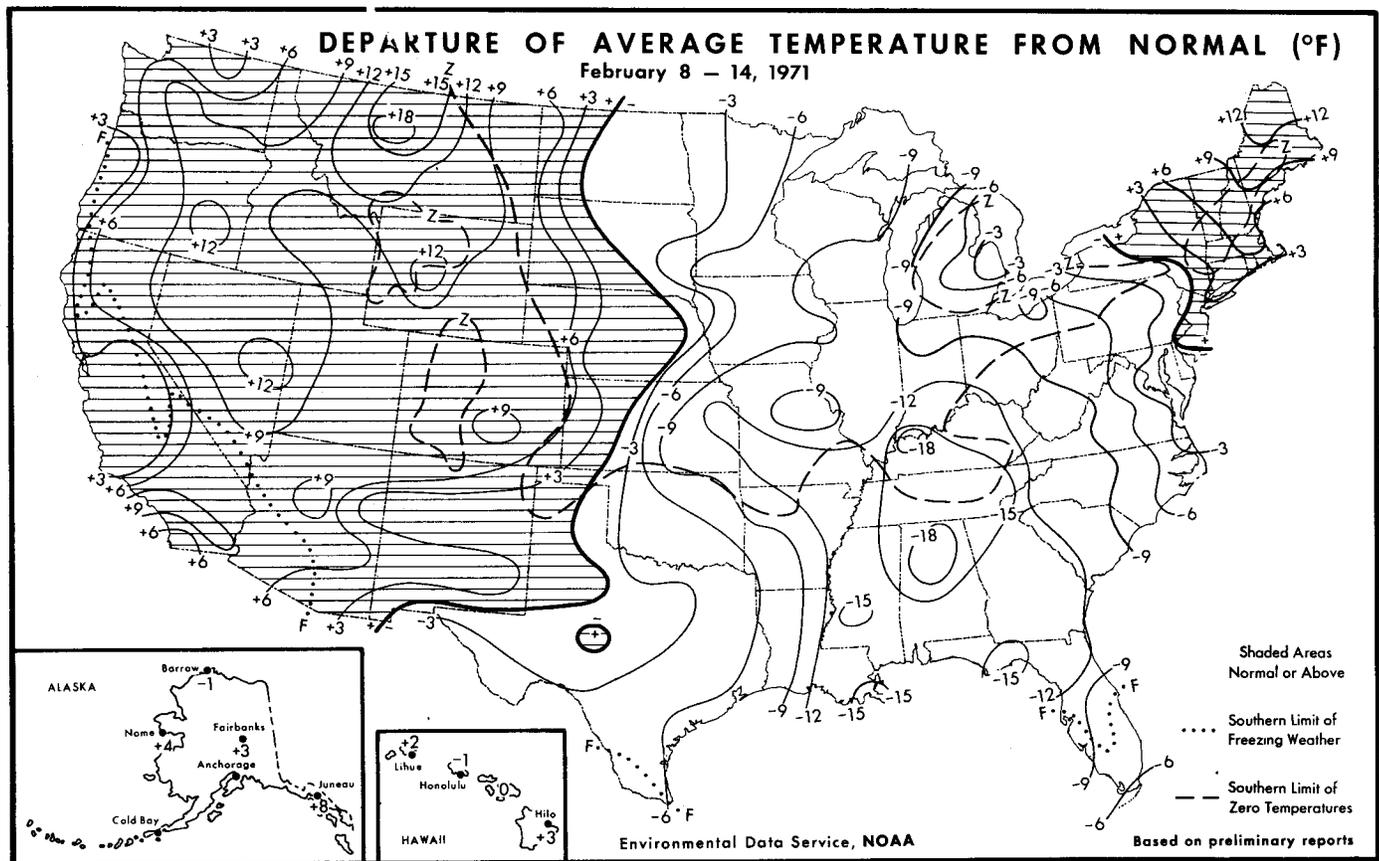
**PRECIPITATION:** No rain or only widely scattered precipitation occurred from California across the Great Basin and southern Rocky Mountains to the central portions of Oklahoma and Texas. Light rain or snow fell across the northern border States from eastern Washington to the Great Lakes and over the central Great Plains. Over 2.00 inches fell along the Washington coast and over 1.00 inch fell over the Deep South and north-eastward to New York and New England.

Severe weather occurred over much of the eastern half of the Nation early in the week. Heavy snow fell in parts of New York and New

England on Monday. Heavy showers and thunderstorms occurred south of the snowbelt. A tornado occurred at Barretts, Ga., and thunderstorms with winds gusting to 60 m.p.h. whipped the Tallahassee, Fla., area. Another tornado touched down near Tampa, Fla., and winds at St. Petersburg gusted to 68 m.p.h. Flash floods occurred along the coast from extreme southeastern Pennsylvania and New Jersey to Georgia. Snow fell in portions of the Appalachians from Kentucky and North Carolina to Connecticut on Tuesday and on Wednesday, flurries were noted in the Great Lakes vicinity.

Precipitation in the East slackened after midweek but a new storm off the northern Pacific coast began to dampen coastal areas and occasional snow fell in the northern and central Rocky Mountains.

A weekend storm moved from the Deep South to the Lower St. Lawrence River Valley spreading



precipitation from the Gulf of Mexico to Lakes Erie and Ontario and eastward to the Atlantic Ocean. Heavy snow fell in the Appalachians from eastern Tennessee to New England. Freezing rain or freezing drizzle fell east and south of the snow belt.

Strong winds drifted the snow badly and the freezing precipitation iced the highways. The strong winds, deep drifts, and icy roads made travel difficult and, in some places, impossible. Snow accumulated to over 20 inches at some locations in Pennsylvania. Numerous streams in Pennsylvania rose to above flood stage but the cold weather prevented rapid thawing and extensive major flooding. One person was drowned in Berks County when his automobile was swept from the road by high water. By Monday morning, February 15, the only precipitation was intermittent rain in the Far Northwest and spotty snow or freezing drizzle from Wisconsin to north-central Kentucky and western New York.

**TEMPERATURE:** Frigid air continued its southward plunge over the middle and eastern parts of the Nation early in the week. The temperature at Waterloo, Iowa, dropped to 26° below zero Monday morning. A dozen and a half States recorded subzero temperatures Tuesday or Wednesday morning. Nashville, Tenn., registered 1° below zero on Tuesday and Wednesday. Frost or freezing weather occurred over all of Texas except along

the Lower Rio Grande on several mornings early in the week; also in northern and central Florida. Pacific air brought a warming trend to the western and central portions of the Nation. Tulsa, Okla., recorded a 16° maximum Monday but by Wednesday the mercury had climbed to 60°. Great Falls, Mont., with 52°, was as warm as Tampa, Fla., Wednesday afternoon and Bismarck, N. Dak., with 35° Wednesday afternoon, was 10° warmer than Lexington, Ky.

The mild Pacific air continued its warming effects after midweek. By Thursday afternoon, temperatures over almost the entire Nation were above freezing. Subfreezing weather lingered from northeastern North Dakota to Upper Michigan and over the Northeast. Temperatures climbed into the 60's in Florida and into the 80's or higher in southern California, where on Thursday Thermal recorded 94°.

The temperature extremes for the week ranged from 40° below zero at Eagle River, Wis., Monday morning to 94° above zero at Thermal, Calif., Thursday. Weekly mean temperatures averaged above normal over the western half of the Nation and below normal over the eastern half. The Great Basin and the northern Rocky Mountains averaged 9° to 18° warmer than normal. Much of the Deep South averaged 9° to 18° colder than normal.

L. W. Dye

## NATIONAL AGRICULTURAL SUMMARY

**AGRICULTURAL HIGHLIGHTS:** Another dry week in the Southern Great Plains and Southwest. Seeding of spring grains started in the Pacific Northwest. Wintry weather caused stress to livestock in the South. Florida vegetable shipments declined.

**SMALL GRAINS:** Light moisture benefited winter wheat fields in the central Great Plains. Moisture is still needed in western and central Kansas. Mild temperatures reduced snow cover in the Northern Plains, making wheat and rye fields more susceptible to wind damage in Nebraska and South Dakota. In the Southern Plains below-normal temperatures and a shortage of soil moisture limited growth of fall-seeded small grains. Some freeze damage occurred in western Oklahoma. Wheat continues in good condition from Montana to the Pacific Northwest. Some greenbug damage was evident in Washington. Conditions remain dry in the Southwest, but grain crops in Arizona made good progress.

Seeding of spring oats and barley made very little progress in Oklahoma due to the dry fields. Oats seeding is also behind last year in Kansas where only 1% of the crop is planted. Fieldwork started in warmer and dryer regions of Washington, Oregon and Idaho -- some fields were seeded. California grain farmers pushed land preparation and planting as dry warm weather aided fieldwork.

The coldest week of the winter stopped small grain growth throughout the South. Condition of the crop is fair to good for this time of year -- soil moisture is adequate. Below-normal temperatures continued to prevail in the East and fall-seeded grains remained dormant.

Farmers around the country are getting ready to start top dressing small grains with fertilizer when local conditions are satisfactory.

**OTHER CROPS:** Seeding of tobacco plantbeds was active in North Carolina, Virginia and Georgia. Tobacco growers in South Carolina are concerned about the cold temperatures and rain damaging plantbeds. Rain and cold slowed Irish potato planting in Alabama. However, moderate temperatures aided potato marketing in Idaho and Washington. Florida's young sugarcane plants were damaged by frost. The flaxseed crop in South Texas is hindered by the dry-cold weather which is plaguing growth. Safflower planting is completed in Arizona with the early plantings making good progress. Planting in California was underway.

**Fruits and Nuts:** Florida citrus trees not damaged by the January freeze are in excellent

condition. No frost damage was received from the last cold spell and harvest of oranges and grapefruit remains heavy. Warm dry weather aided navel orange picking in the Central Valley of California -- harvest 40% complete in Southern California. Warm temperatures caused early almonds to start blooming and aided in orchard pruning. Strong winds knocked (January) freeze-damaged fruit off trees in Arizona. Only limited picking occurred in the Salt River Valley. The South Texas peach crop suffered a setback as low temperatures nipped some early blooms. Fruit trees in Utah survived the winter in good condition, but a critical period is approaching. Orchard and vineyard pruning was active in the Northwest.

**Vegetables:** California vegetable movement was variable. Asparagus cutting increased in the Imperial Valley while cabbage was light to moderate along the South Coast and in the Imperial Valley. Shipments continued to decline from Florida, but only melons were not available. The inclement weather caused moderate to severe damage to vegetable crops during the period. Some replanting is necessary. Cold temperatures also damaged emerged watermelon plants in the Coastal Bend and Winter Garden areas of Texas. Little damage occurred to vegetables in the Lower Valley. Arizona winter lettuce harvest is active in Yuma. Spring lettuce is progressing well in Arizona and New Mexico. Some cabbage transplanting occurred as far north as South Carolina.

**PASTURES AND LIVESTOCK:** In the South the coldest weather of the winter kept livestock on a full winter feed ration. Cold temperatures, snow and blowing snow caused livestock much discomfort. From the Great Lakes States to New England snow and cold conditions made livestock producers give extra feed and care to their herds.

Milder weather in the central Plains reduced the need for supplemental feeding as animals were getting some feed from crop residues. In the West warm weather reduced the snow cover and relieved the stress on livestock. The climate was ideal for calving and sheep shearing which have begun in some States.

Dry pastures dominate from Oklahoma to the Southwest causing heavy supplemental feeding. Very little wheat is being grazed.

Steve Pscodna  
Agricultural Statistician

Temperature and Precipitation Data for the Week Ending Midnight, Lst., February 14, 1971

States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches	
	Average	Departure*	Total	Departure*		Average	Departure*	Total	Departure*		Average	Departure*	Total	Departure*
ALA. Birmingham . . .	30	-19	.3	-1.0	New Orleans . . .	42	-15	.9	-.1	OKLA. Okla. City . . .	35	-5	T	-.3
Mobile . . .	41	-14	1.1	0	Shreveport . . .	42	-8	.6	-.5	Tulsa . . .	32	-8	T	-.4
Montgomery . . .	36	-14	.8	-.3	MAINE. Caribou . . .	25	+14	1.5	+1.0	OREG. Astoria . . .	47	+4	2.1	+.4
ALASKA. Anchorage . . .	---	---	---	---	Portland . . .	28	+6	3.5	+2.5	Burns . . .	41	+12	T	-.3
Barrow . . .	-20	-1	T	0	MD. Baltimore . . .	33	+3	2.0	+1.3	Medford . . .	46	+7	.2	-.4
Fairbanks . . .	1	+3	.2	+.1	MASS. Boston . . .	23	+7	2.5	+1.7	Pendleton . . .	46	+10	.3	0
Juneau . . .	35	+8	1.3	+.5	Chatham . . .	37	---	2.3	---	Portland . . .	48	+6	.9	-.1
Nome . . .	9	+4	T	-.2	MICH. Alpena . . .	13	-5	.2	-.2	Salem . . .	44	+2	.8	-.6
ARIZ. Flagstaff . . .	40	+11	0	-.4	Detroit . . .	19	-8	.3	-.2	PA. Allentown . . .	28	-1	2.0	+1.3
Phoenix . . .	61	+8	0	-.2	Flint . . .	19	-3	.2	-.2	Erie . . .	21	-5	.7	+.1
Tucson . . .	57	+5	0	-.2	Grand Rapids . . .	18	-6	.1	-.3	Harrisburg . . .	29	-3	2.1	+1.5
Winslow . . .	40	+3	0	-.1	Houghton Lake . . .	11	-8	.1	-.3	Philadelphia . . .	34	+1	1.7	+1.0
Yuma . . .	64	+7	0	-.1	Lansing . . .	18	-6	.2	-.3	Pittsburgh . . .	22	-7	1.7	+1.2
ARK. Fort Smith . . .	34	-9	.3	-.6	Marquette . . .	11	-8	.2	-.2	Scranton . . .	25	-3	1.9	+1.4
Little Rock . . .	35	-9	.6	-.5	Muskegon . . .	17	-8	.1	-.4	R.I. Providence . . .	33	+3	2.5	+1.7
CALIF. Bakersfield . . .	53	+2	0	-.3	S. Ste. Marie . . .	4	-11	.5	+.1	S.C. Charleston . . .	40	-11	.9	+.1
Eureka . . .	51	+3	.5	-.9	MINN. Duluth . . .	4	-6	.1	-.1	Columbia . . .	38	-10	.8	-.1
Fresno . . .	52	+2	0	-.6	Internatl Falls . . .	1	-5	.1	-.1	Greenville . . .	33	-12	1.1	+.1
Los Angeles . . .	68	+11	0	-.8	Minneapolis . . .	8	-6	T	-.2	S. DAK. Aberdeen . . .	15	+1	.1	-.1
Red Bluff . . .	56	+7	0	-.9	Rochester . . .	7	-8	.1	-.2	Huron . . .	12	-3	.1	-.1
San Diego . . .	60	+4	0	-.6	St. Cloud . . .	7	-5	T	-.2	Rapid City . . .	30	+7	.2	+.1
San Francisco . . .	54	+3	T	-.9	MISS. Jackson . . .	35	-15	1.0	-.2	Sioux Falls . . .	12	-6	.1	-.1
Stockton . . .	49	+1	.1	-.5	Meridian . . .	36	-14	.6	-.7	TENN. Chattanooga . . .	28	-16	.5	-.9
COLO. Denver . . .	39	+8	T	-.2	MO. Columbia . . .	25	-8	T	-.4	Knoxville . . .	27	-16	.8	-.4
Grand Junction . . .	38	+7	0	-.2	Kansas City . . .	25	-10	T	-.3	Memphis . . .	31	-13	1.6	+.4
Pueblo . . .	42	+9	T	-.1	St. Louis . . .	25	-9	.1	-.4	Nashville . . .	24	-17	1.1	0
CONN. Bridgeport . . .	33	+3	1.6	+.8	Springfield . . .	24	-13	.1	-.4	TEX. Abilene . . .	46	-2	0	-.3
Hartford . . .	31	+3	1.8	+1.1	MONT. Billings . . .	36	+11	T	-.1	Amarillo . . .	41	0	T	-.1
D.C. Washington . . .	35	-2	2.2	+1.6	Glasgow . . .	21	+9	T	-.1	Austin . . .	49	-4	0	-.7
FLA. Apalachicola . . .	42	-15	.7	-.3	Great Falls . . .	41	+18	T	-.2	Beaumont . . .	49	-7	.7	-.4
Ft. Myers . . .	56	-9	1.2	+.6	Havre . . .	31	+16	0	-.1	Brownsville . . .	58	-6	0	-.4
Jacksonville . . .	45	-13	.7	0	Helena . . .	35	+13	.2	-.1	Corpus Christi . . .	54	-6	0	-.4
Key West . . .	65	-6	1.0	+.5	Kalispell . . .	33	+9	.4	+.2	Dallas . . .	46	-3	T	-.7
Lakeland . . .	65	+2	3.9	+3.3	Miles City . . .	28	+9	.2	+.1	Del Rio . . .	52	-3	0	-.2
Miami . . .	62	-6	.7	+.3	Missoula . . .	36	+12	.3	+.1	El Paso . . .	46	-3	0	-.1
Orlando . . .	53	-9	1.0	+.4	NEBR. Grand Island . . .	26	+1	T	-.2	Fort Worth . . .	44	-5	T	-.6
Tallahassee . . .	40	-15	2.1	+1.0	Lincoln . . .	22	-6	0	-.3	Galveston . . .	51	-6	T	-.9
Tampa . . .	52	-10	1.4	+.7	Norfolk . . .	23	+1	T	-.2	Houston . . .	48	-5	T	-.9
GA. Atlanta . . .	32	-14	.7	-.4	North Platte . . .	29	+2	T	-.1	Lubbock . . .	44	+2	0	-.2
Augusta . . .	36	-13	1.2	+.3	Omaha . . .	18	-6	T	-.2	Midland . . .	46	-2	0	-.1
Macon . . .	39	-12	.7	-.4	Valentine . . .	25	+3	T	-.1	San Angelo . . .	50	0	T	-.2
Savannah . . .	41	-12	.9	0	NEV. Ely . . .	38	+12	0	-.2	San Antonio . . .	51	-4	0	-.4
HAWAII. Hilo . . .	74	+3	.2	-3.0	Las Vegas . . .	55	+8	0	-.1	Victoria . . .	50	-8	0	-.6
Honolulu . . .	74	-1	T	-8.0	Reno . . .	44	+9	0	-.3	Waco . . .	48	-3	0	-.6
Kahului . . .	72	0	0	-1.2	Winnemucca . . .	42	+10	0	-.3	Wichita Falls . . .	42	-4	0	-.4
Lihue . . .	73	+2	T	-1.3	N.H. Concord . . .	28	+6	1.9	+1.3	UTAH. Blanding . . .	39	+7	0	-.3
IDAHO. Boise . . .	43	+9	.1	-.2	N.J. Atlantic City . . .	35	0	.4	-.4	Salt Lake City . . .	41	+9	T	-.3
Lewiston . . .	44	+9	.5	+.2	Trenton . . .	34	+1	1.1	+.4	VT. Burlington . . .	25	+8	1.4	+.9
Pocatello . . .	34	+8	T	-.2	N.MEX. Albuquerque . . .	41	+2	0	-.1	VA. Lynchburg . . .	32	-7	1.3	+.6
ILL. Cairo . . .	27	-13	1.1	+.2	Roswell . . .	45	+4	0	-.1	Norfolk . . .	40	-2	.9	+.1
Chicago . . .	18	-9	.2	-.2	N.Y. Albany . . .	28	+5	1.9	+1.4	Richmond . . .	35	-5	1.2	+.5
Moline . . .	16	-8	T	-.3	Binghamton . . .	21	-2	2.1	+1.6	Roanoke . . .	30	-9	1.6	+.9
Peoria . . .	17	-10	.1	-.3	Buffalo . . .	22	-2	1.5	+.8	WASH. Colville . . .	33	+4	.3	-.1
Rockford . . .	14	-10	T	-.4	New York . . .	36	+3	.7	-.1	Omak . . .	28	+2	T	-.3
Springfield . . .	21	-10	T	-.5	Rochester . . .	25	0	3.1	+2.5	Quillayute . . .	45	+5	4.8	+1.6
IND. Evansville . . .	21	-16	1.4	+.6	Syracuse . . .	26	+2	2.1	+1.3	Seattle-Tacoma . . .	49	+9	2.0	+.9
Fort Wayne . . .	19	-9	.7	+.1	N.C. Asheville . . .	30	-10	1.4	+.6	Spokane . . .	37	+8	.4	-.1
Indianapolis . . .	19	-12	.9	+.4	Charlotte . . .	32	-12	1.1	+.2	Walla Walla . . .	47	+10	.4	0
South Bend . . .	19	-7	.2	-.2	Greensboro . . .	31	-10	1.1	+.3	Yakima . . .	42	+9	0	-.2
IOWA. Burlington . . .	16	-11	T	-.3	Hatteras . . .	42	-4	1.8	+.8	W.VA. Beckley . . .	23	-11	1.6	+.6
Des Moines . . .	15	-8	.1	-.3	Raleigh . . .	35	-8	.8	-.1	Charleston . . .	26	-11	1.3	+.4
Dubuque . . .	10	-11	T	-.4	Wilmington . . .	42	-6	1.3	+.5	Huntington . . .	27	-10	.9	+.1
Sioux City . . .	20	-1	T	-.2	N.DAK. Bismarck . . .	10	-2	T	-.1	Parkersburg . . .	26	-9	.8	+.1
KANS. Concordia . . .	23	-8	.1	-.1	Fargo . . .	7	-2	T	-.1	WIS. Green Bay . . .	5	-12	T	-.3
Dodge City . . .	35	0	.1	-.1	Williston . . .	19	+8	T	-.1	La Crosse . . .	4	-14	.1	-.2
Goodland . . .	37	+6	T	-.1	OHIO. Akron-Canton . . .	21	-7	1.1	+.5	Madison . . .	8	-11	T	-.3
Topeka . . .	19	-14	T	-.2	Cincinnati . . .	21	-13	1.3	+.6	Milwaukee . . .	12	-10	T	-.3
Wichita . . .	25	-11	.1	-.1	Cleveland . . .	18	-10	1.1	+.5	WYO. Casper . . .	33	+7	.1	0
KY. Lexington . . .	22	-13	1.6	+.8	Columbus . . .	20	-11	1.0	+.4	Cheyenne . . .	34	+7	.2	+.1
Louisville . . .	23	-13	1.7	+.9	Dayton . . .	19	-11	.8	+.2	Lander . . .	36	+13	T	-.2
LA. Baton Rouge . . .	42	-13	.9	-.2	Toledo . . .	19	-8	.5	0	Sheridan . . .	33	+10	.3	+.1
Lake Charles . . .	48	-8	.6	-.5	Youngstown . . .	19	-8	1.2	+.6	P.R. San Juan . . .	76	+2	.8	+.1

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

## CONDENSED STATE SUMMARIES

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

**ALABAMA:** Coldest week of winter with average temperatures more than 20° below normal on 3 days. A hard freeze all sections Monday, Tuesday and Saturday nights. Highest readings were below freezing over much of northern and central sections Tuesday and Saturday. Precipitation generally light, occurring mostly as rain but with some snow mainly northern sections over weekend. Cold wet weather hard on livestock and severely curtailed farmwork. Principal activities: Care of livestock and poultry, limited land preparation, pruning fruit trees, taking soil samples, record and planning work. Low temperatures curtailed growth of small grains, but plant condition fair to good. Late spring Irish potato planting continued at reduced rate. Livestock condition fair to good. Stored feed supplies mostly adequate, except short several southern counties.

**ARIZONA:** No snow at any reporting station. Skies mostly clear and temperatures above normal over State this week. No precipitation. Field preparations 1971 cotton crop continued. Small grains making good progress. Safflower planting complete, early plantings making good growth. Fall-planted sugar beets making good progress. Winter vegetable harvest continued Yuma, Salt River Valley areas. Winter lettuce harvest continued Yuma area. Spring lettuce making good progress Salt River Valley, Pima, Pinal Counties. Limited citrus harvest Salt River Valley, Yuma. Strong winds knocked off freeze-damaged fruit and there is considerable dead foliage resulting from freeze. Ranges fair condition; very dry. Prospects spring feed poor. Stock water generally adequate, but runoff needed. Livestock fair to good condition.

**ARKANSAS:** Weekly temperatures averaged about 8° below normal ranging from low 30's extreme north to upper 30's and low 40's south. Daily extremes: -11° to 67°. Showers midweek with 1.00 to over 2.00 inches broad band southwest to northeast. Otherwise less than 1.00 inch. Augusta wet spot with 2.78 inches. Very little fieldwork activity; moisture on previous weekend and again midweek kept fields soft. Freezing temperatures early week permitted limited progress of much delayed cotton and soybean harvest. Preparations being made to fertilize pastures and winter grains. Livestock on full winter feed, condition good.

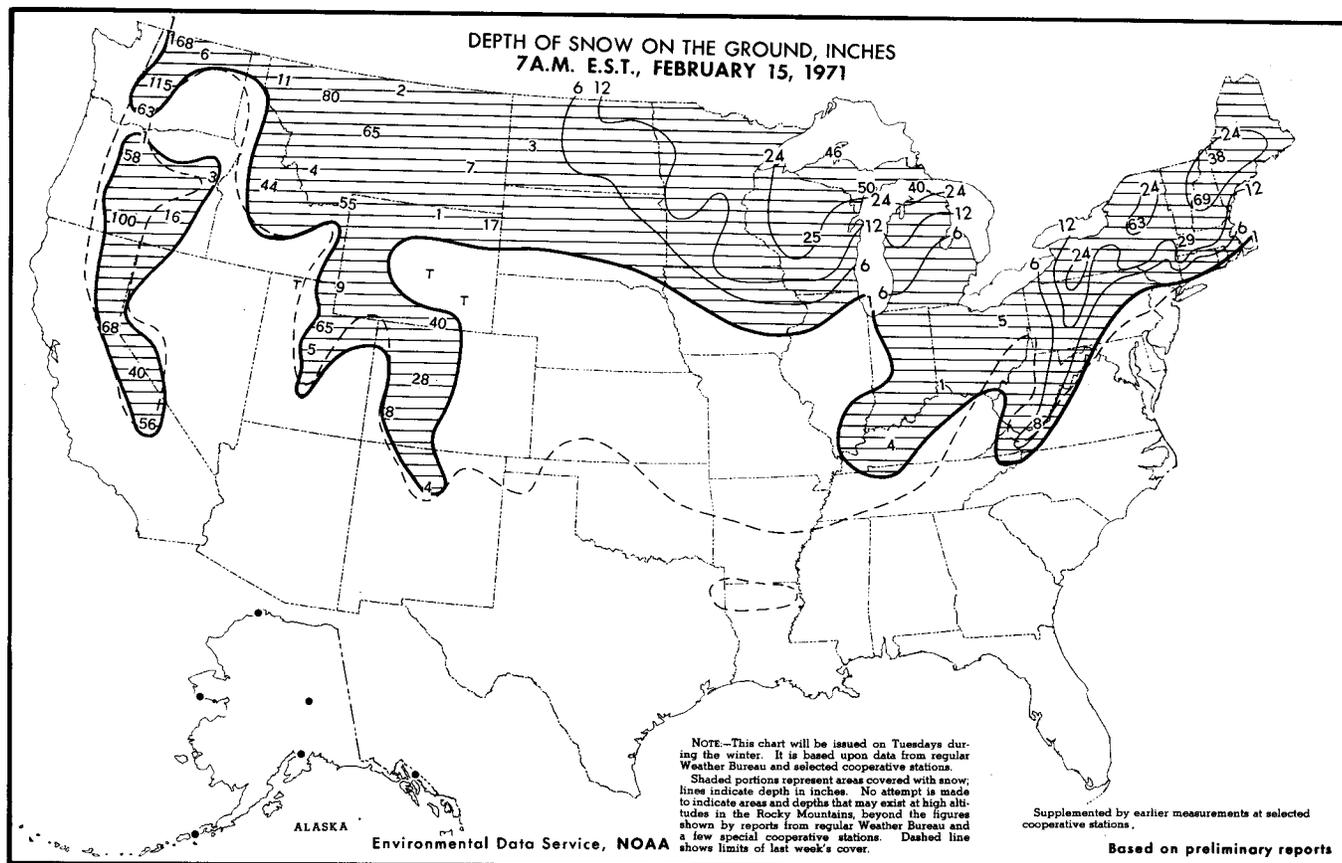
**CALIFORNIA:** Average temperatures 4° to 10° above normal except San Joaquin Valley. Fourth consecutive week of much above normal temperatures south of Tehachapis and in mountains and desert. Near record February maximums this area February 11 and 12. Precipitation extreme north and much valley fog. Dry open weather pushing land preparation for spring planting. Additional planting barley and wheat continues. Fall-planted crops good condition. Planting small grains, pasture, alfalfa and safflower starting. Irrigation and weed control major activities south. Orchard pruning active; many areas well advanced. Tree fruit and grape plantings being made. Warm weather causing early almond blooms. Harvest navel oranges continues central valley; good sizes, quality. Southern California harvest 40% complete. Lemon picking active; quality, size

good. Grapefruit harvest slow Desert areas. Avocados being picked; good volume. Range and stock conditions good. Calving and lambing losses light. Supplemental feeding light, stock water adequate. Light artichoke harvest Castroville. Asparagus cutting continues increase Imperial Valley; starting South Coast with warm trend. Broccoli moderately light Santa Maria. Cabbage light to moderate Imperial and South Coast; good quality. San Joaquin Valley and Coachella-Imperial carrots active. Cauliflower continues light. Celery harvest slow due market conditions. Imperial lettuce steady. Light volume strawberries San Diego; expect increase. Tomato planting active Central Valley.

**COLORADO:** Cold first day or 2 of period, then much warmer with lower elevation maximums in 50's or 60's. Light to moderate snow central and northern mountains, scattered very light rains eastern plains. Some high winds and blowing dust. Winter wheat and barley good to excellent condition. Most fields remain dormant. Light to moderate wheat damage isolated areas by blowing soils. Topsoil moisture short most areas. Subsoil moisture short to adequate. Range and pastures fair condition. Available forage becoming short. Hay supplies adequate. Livestock condition good. Weather favorable for early calving and lambing.

**FLORIDA:** Cold weather began and ended the week. Cold front accompanied rain, severe thunderstorms, dusty winds, isolated hail, and a few tornados, swept into Florida on Sunday, February 7 and southward throughout the 8th. Temperatures dropped as much as 30° from the highs of the previous week. Rainfall amounts averaged 3.00 to 5.00 inches in north and central Florida, and 0.50 to 1.00 inch in south Florida. A warming trend late Thursday and Friday was quickly offset by another siege of cold weather on the weekend accompanied by light precipitation. As a result, average temperatures were 5° to 10° below normal over northern and central portions of the State, and 5° below normal southern section. Rainfall, freeze had opposing effects on small grains; land preparations still active. Frost damage to young sugarcane plants. Soil moisture adequate, but cold weather slowed improvement of pastures. Cattle fair. Supplemental feeding moderate to heavy. Citrus trees undamaged by January cold in excellent condition. Most colder area defoliated groves improving. No damage from this week's cold. Harvest continues heavy oranges and grapefruit. Vegetable shipments continue decline. All commodities available except melons. Rain, cold, frost, February 5 to 15 caused moderate to severe vegetable damage. Rain restored some water tables, but immediate effects washed vegetable beds and leached fertilizers. Frost February 15 retarded growth, lowered quality, some acreage lost. Replanting active.

**GEORGIA:** Coldest week of winter with extremely cold weather early in week and again during weekend. Mild briefly at midweek. Minimum below-freezing on 4 to 7 days from south to north and under 20° on 2 to 4 days in northern half of State. Lows averaged 32° or below in all areas. Average temperatures 11° to 15° below nor-



mal. Rain at beginning of period and rain in south and snow in north Friday night and Saturday. Two to four inches of snowfall reported in extreme north. Conditions small grains and winter pastures fair to good. Land preparation active south where field conditions permit. Much of central and north too wet for fieldwork. Care of livestock and poultry plus tobacco plant beds major activities.

**HAWAII:** Sunny weather during week. Sugar harvest gradually increasing with more mills resuming grinding. Pineapple harvest confined to fresh market outlets. Papaya supplies reduced because of disease infestation. Lettuce supplies temporarily reduced by heavy spoilage. Tomato supplies adequate. Pastures and cattle in good condition.

**IDAHO:** Cooler temperatures first half of week lowered the mean for the week to only 2° to 8° above normal. Precipitation was scattered and light excepting moderate Salmon River northward to Clearwater Basin. Totals this area ranged 0.30 to 0.50 inch. Limited tillage and seeding operations underway southwestern valleys. Potato marketing active. Orchard pruning started.

**ILLINOIS:** Precipitation north and central mostly less than 0.10 inch with up to 1.50 inches extreme south. Snow on ground mostly 1 to 2 inches north quarter and extreme southeast with little or none elsewhere. Temperatures averaged generally 8° to 10° below normal north and central and 10° to 15° below south. Winter wheat, legumes, other small grains wintering well, some freeze damage, field ponding in isolated areas. Livestock good, some cold weather farrowing problems.

Feedlots, stalk fields frozen. Secondary roads icy—some breaking up. Water ponding on frozen fields during warm days. Silting of ditches from wind and runoff in east and central districts.

**INDIANA:** Subnormal temperatures 6th consecutive week. Past week averaged 4° to 14° below normal, greatest departures in south. Highest temperature 48° on 11th; lowest, -3° on 14th. Storm on 12th left 2- to 6-inch new snow cover statewide, heaviest in south. Drifting snow from strong winds closed highways central and south night of 12th. Precipitation totals for week near 2.00 inches in south, less than 1.00 inch elsewhere. Bare soils deeply frozen to depths of 24 inches north, 20 inches central, and 8 inches south, with sod-covered soil freeze depth about 1/2 less. Snow limited farm activity to snow removal, caring for livestock, and usual winter chores.

**IOWA:** Another cold dry week. Temperatures averaged about 10° subnormal and precipitation falling late week totaled 0.10 inch liquid equivalent. Snow cover at weekend was less than 5 inches most south and west counties and ranged upward to 15 inches or 20 inches over most north-central and northeast counties. Coldest 8th and 9th. Thirty-four degrees below zero at Atlantic. Coldest February temperature since 1965: -33° at Decorah, -31° at Winterset, and -28° at Elkader.

**KANSAS:** Light to locally moderate precipitation 11th. No significant moisture other days. Weekly mean temperatures averaged much above normal northwestern Kansas and near seasonal southwest. Elsewhere weekly means were much below

normal. Light moisture benefited some wheat parts of western Kansas. Surface moisture still short western third and parts of central, but adequate eastern areas. Spring fieldwork limited by cold weather and wet fields in east and central. Oats seedings 1% completed; 4% last year; 1% average. Supplemental feeding of livestock continued quite heavy, but hay supplies still mostly adequate. Calving and farrowing continued, some additional losses newborn calves and pigs from cold wet weather.

**KENTUCKY:** Two heavy snows. Coldest week since week ending January 25, 1970. Windy, cloudy 5 days. Three to 8 inches snow fall statewide on 8th. Rapid melt on 11th. One to 5 inches snow fall on 12th and 13th. Temperatures 10° to 15° below normal. Daily means much below normal except near 2° above normal 11th and 12th. Minimums 1° to 5° below zero several locations 9th and 10th. Heavy precipitation ranging from about 0.75 inch to 1.75 inches. Cold, snow, and blowing snow caused livestock discomfort and necessitated heavy supplemental feeding. Livestock producers encouraged by strong recovery in hog prices and improved cattle prices.

**LOUISIANA:** Cold week. Temperatures averaged 5° to 8° below normal west, 10° to 14° below east. Freezing or colder statewide on 3 to 5 mornings. Very cold arctic outbreak first half, briefly warmer Thursday, then windy colder through weekend. Temperature extremes: 70° Lake Charles Thursday; 16° Winnfield Wednesday. Locally heavy thunderstorms most areas early Friday with some severe storms south. Weekly precipitation totals 0.50 to more than 2.00 inches with heaviest in central and southeast. Greatest 24-hour rainfall amount 2.59 inches measured Friday morning at Mamou. Unusually cold weather and excessive moisture limited fieldwork. Some plowing and disking in well-drained fields. Soil moisture still short northwest. Topdressing of winter pastures continued. Numerous freezes retarded growth of wheat, oats, and rye grass; grazing getting short. Haying of livestock active. Condition mostly good.

**MARYLAND AND DELAWARE:** Temperatures averaged below normal for 7th consecutive week. This time, however, only 1° to 3° below normal. Extremes: 63°, -2°. Precipitation very heavy totaling 2.00 to 4.00 inches during 2 periods, 7th and 8th and 13th. Mostly in the form of rain in eastern portions, in west on 7th and 8th snow totaled up to 10 inches. Thunderstorms during afternoon and evening of 13th eastern portion. February precipitation now exceeding monthly normals at most stations. Work limited mostly to livestock care. Muddy lots and soft fields hampered feeding and stable cleaning work.

**MICHIGAN:** Intermittent light precipitation and continued below-normal temperatures characterized Michigan weather. Temperatures averaged from 5° to 7° below normal in southeastern Michigan and from 8° to 11° below normal over the remainder of State. Precipitation totaled from 0.10 to 0.35 inch with the heaviest amounts in Upper Peninsula and eastern portion of Lower Michigan. Most precipitation occurred as snow although some freezing drizzle was reported.

**MINNESOTA:** Temperatures averaged about 5° below normal. The last part of period, temperatures were more than 10° above normal. Precipitation, generally ranged from none to 0.10 inch water

content. Snow depths less than 6 inches in southwest, 12 to 18 inches in rest of State, except for 24 to 30 inches from Wadena northeast across the Arrowhead country.

**MISSISSIPPI:** Temperatures dropped early in week and minimums on Tuesday ranged from 2° below zero at University to 25° at Biloxi. Weekly temperatures averaged mostly 10° to 15° below normal and weekly precipitation totals mostly 0.50 to 1.50 inches. Severe weather Friday morning in coastal division with patchy damage; 2 persons injured just south of Lucedale. Over weekend, precipitation generally 0.20 to 0.80 inch and a warming trend with 74° Sunday at Laurel. Soil moisture surplus north, adequate southeast, adequate to surplus remainder of State. Winter wheat, oats, and livestock fair to good condition. Pastures fair condition. Main activities were feeding and caring for livestock and repairing farm equipment. Plowing for 1971 crops 12% complete. Only 1 day suitable for fieldwork.

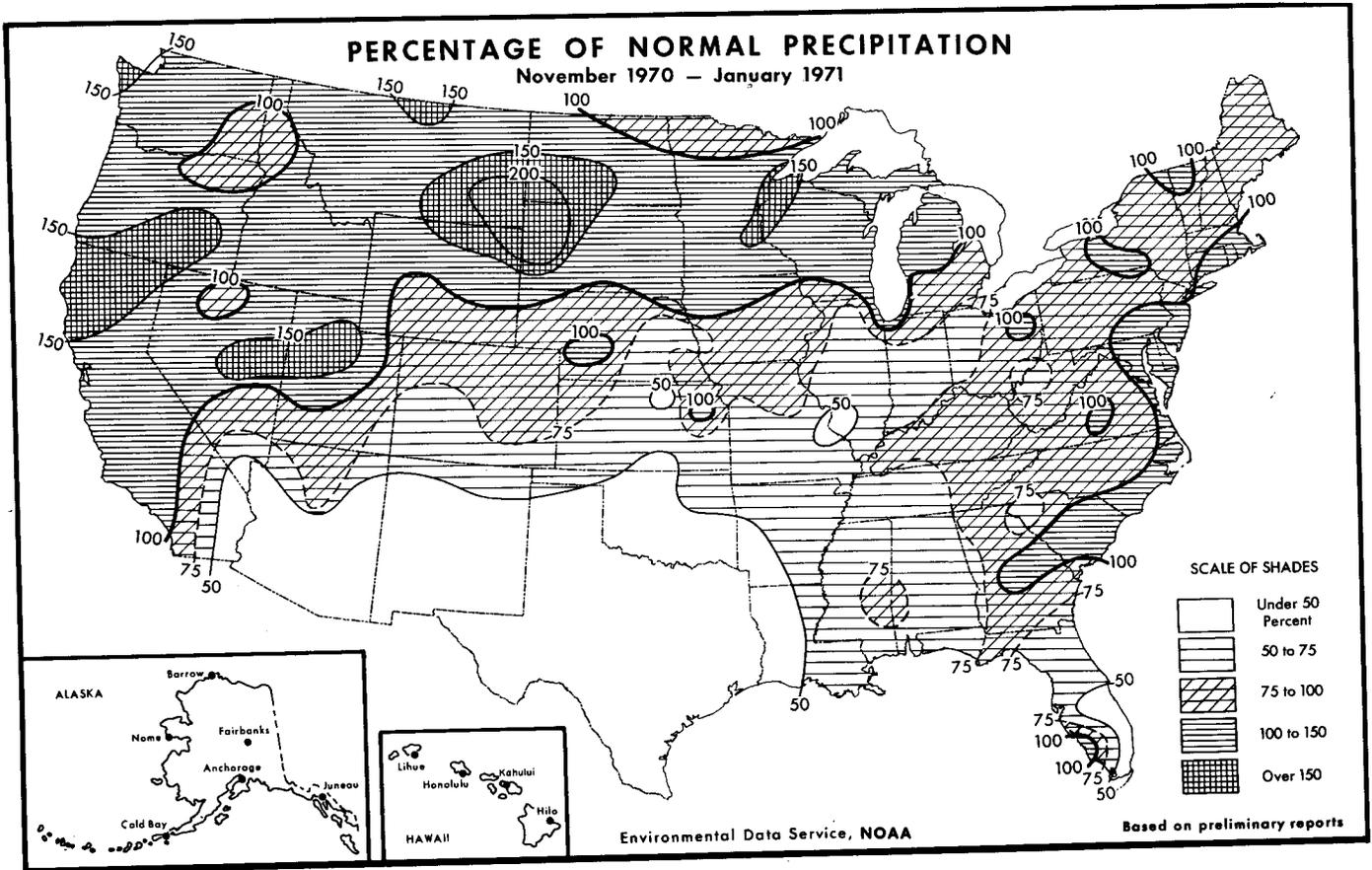
**MISSOURI:** Above-normal temperatures at end of week were not enough to offset the cold readings earlier. Temperatures for week averaged about 10° below normal. Extremes were 24° below zero at Tarkio on Monday and 62° at Cole Camp on Friday. Precipitation was limited to traces north of Missouri River and ranged from a 0.50 inch in the Ozarks to 1.00 inch or more in the Bootheel. A weekend snow storm left 4 to 6 inches of snow in the Bootheel.

**MONTANA:** Warming trend throughout week with temperatures averaging nearly 13° above normal. General precipitation west of the Divide scattered elsewhere. Warm weather eased stress on livestock. Grazing difficult eastern districts. Supplemental feeding required most areas. Feed supplies adequate. Calving and lambing proceeding at normal rate. Shearing continues. Winter wheat condition good.

**NEBRASKA:** Cool in Southeast; mild elsewhere. Frequent sprinkles and light snow flurries but no appreciable moisture. Warm temperatures at end of week melted snow and ice cover. Increased stalk field grazing with decrease in supplemental feeding required. Wheat and rye fields now susceptible to wind damage, however, few reports of damage at this time. Calving and lambing made difficult by cold temperatures early part of week. Lots and feeding areas muddy following warm temperatures of weekend.

**NEVADA:** Very warm week. All stations above normal from 10° above normal in extreme south to 17° above normal in northeast. Light precipitation in northeast only. Rapid melting of snow. Range conditions mostly fair. The lower elevations lack snow covering throughout State. Livestock generally good condition. Supplemental feeding continues and feed supplies remain adequate. Some hauling of water for sheep required in few local areas.

**NEW ENGLAND:** Mildest week in over 2 months, with means averaging mostly 2° to 12° above normal. Some thawing temperatures several days even in extreme north. Storm at beginning of week continued into Tuesday in north where snow changed to freezing rain, and ended as rain Monday in south. Frequent snow flurries in North. Another major storm mostly on Saturday with heavy fog and rain in south and as mixtures of snow, freezing rain, and rain in north. Precipitation totals



#### PRECIPITATION - NOVEMBER 1970 to JANUARY 1971

Cold fronts, about mid-November, caused alternating periods of fair and inclement weather. Heavy snow fell in the northern border States and in the northern and central Rocky Mountains. Snow accumulated to 4 to 10 inches in the northern Great Plains in the 3d week and to 10 to 24 inches in northeastern Ohio and the western portions of New York and Pennsylvania in the 4th week. In the last week of the month, flood-producing rains fell in Oklahoma and the Virginias and a Pacific storm brought heavy rains to the western coast and snow from the Cascades and Sierra Nevadas to the northern Great Plains.

Most areas in the Northwest received above-normal precipitation in December. December totals exceeded the normals from central Kentucky to New England. A large area from Arizona to southern Nebraska and southward to the Mexican

Border and the Gulf of Mexico received less than half of the normals.

January precipitation was heaviest in the Pacific Northwest and from the southern Appalachians to the South Carolina coast. Agriculturalists are optimistic about the deep snow cover in the Far West which, it is believed, will be adequate for irrigating the 1971 crops.

In general, the totals for the 3-month period, November 1970 to January 1971, exceeded the normals from the Pacific coast to the Great Lakes and along the Atlantic coast from Boston, Mass., to Charleston, S.C. A large area from Arizona to western Arkansas and western Louisiana received less than half of the 3-month normals.

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variable but generally 1.00 to 2.00 inches. Heavier amounts in southern Maine and locally in extreme south, from 2.00 to 3.00 inches.

**NEW JERSEY:** Temperatures averaged near normal for warmest week since mid-December. Readings varied from 5° above zero at Long Valley on 11th to mid- or upper 50s at many stations on 12th and 13th. Rain and snow on 8th and rain on 13th caused some flooding on small streams. Precipitation totals averaged 1.70 inches over North Jersey, 1.30 inches over central and southern interior, and 0.60 inch along the coast. From 1 to 6 inches of snow remains on ground over north Jersey on morning of 15th.

**NEW MEXICO:** Continued dry except very light precipitation extreme northeast. Generally warm days and cool nights with average temperatures normal or above except for a few southern localities. Coolest at beginning of week. Warmest in midweek. Top and subsoil continues very short to short. No appreciable moisture received past week. Field activities increasing. Transplanting onions, spring barley preparation, and general land preparation active. Most lettuce acreage up to stand. Ranges very dry. Poor to fair. Live-stock condition fair. Stock water shortage increasing.

**NEW YORK:** Cold midperiod and on 14th; otherwise moderate temperatures for warmest averages since week ending December 20. Extremes from minimums of zero to  $-10^{\circ}$  interior Upstate on 10th to maximums of  $38^{\circ}$  to  $48^{\circ}$  on 12th. Snowfall totals from storm on 7th, 8th, and 9th ranged from 5 inches in extreme north and Lower Hudson Valley to 20 to 25 inches eastern lee of Great Lakes with 8 to 15 inches remainder Upstate. Severe weather on 13th with 8 to 12 inches of snow west of line Elmira-Watertown-Ogdensburg and rain changing to unusually heavy sleet east of line. Snow and blowing snow near Great Lakes to Mohawk Valley on 14th continued hazardous travel conditions for 2d day. Liquid equivalent totals on weekend 1.20 to 2.20 inches Lake Ontario to South central border decreasing to 0.50 to 1.00 inch elsewhere Upstate and 0.40 inch New York City. Moderate to very deep snow cover all sections by weekend except Long Island where cover of short duration and of little consequence.

**NORTH CAROLINA:** Temperatures continued below normal. Lowest zero to  $15^{\circ}$  below zero mountains and  $10^{\circ}$  to  $20^{\circ}$  above zero elsewhere, February 10 and 11. Highest 50's west and 60's east portion over the weekend. Rain 8th and 13th with totals mostly 1.00 to 2.00 inches. Little snow. Very windy at times over weekend. Soil moisture increased slightly and continued mostly surplus. Condition of small grains declined because of cold and wet weather, mostly fair. Pastures mostly fair. Hay and feed grains in adequate supply. Farm activities limited largely to caring for livestock and poultry and farm repairs. Seeding of tobacco plantbeds beginning coastal plain.

**NORTH DAKOTA:** Sharp warming over weekend. Temperatures averaged  $1^{\circ}$  below normal southwest to  $8^{\circ}$  above normal northwest and north-central. Precipitation light with amounts less than 0.05 inch. Blowing snow during week and farmers busy clearing yards and driveways. Unseasonably mild temperatures allowed catching up on repairs of buildings and equipment and treating farm animals. Livestock still on heavy feeding rations.

**OHIO:** One of the heaviest snowfalls since 1950 fell throughout the day on 8th. Snow depths early on 9th ranged from 4 inches at Chesapeake to 11 inches at Youngstown. Winds of 30 to 40 m.p.h. made drifting a common problem on 9th. Many businesses and schools were closed on 9th. Temperatures of  $5^{\circ}$  to  $15^{\circ}$  accompanied strong winds on 9th and hampered snow removal. Following brief warmup on 11th and early on 12th, rain changed to freezing rain and then to snow. Snow depth morning of 13th ranged from 1 inch at Marietta to 5 inches at Mansfield and Akron. Temperatures for week averaged  $9^{\circ}$  to  $13^{\circ}$  below normal. Heavy snowfall and frozen water lines caused extra care of livestock. Other farmwork limited to record keeping and planning for Spring crop season.

**OKLAHOMA:** Temperatures averaged  $2^{\circ}$  to  $4^{\circ}$  above normal Panhandle and  $2^{\circ}$  to  $8^{\circ}$  below normal elsewhere. Extremes:  $73^{\circ}$  and  $9^{\circ}$  below zero. Precipitation averaged near 0.50 inch southeast and less than 0.10 inch elsewhere. No moisture in critically dry southwest. Below-normal temperatures and short soil moisture limited growth fall-seeded small grains. Wheat condition at 33% poor, 48% fair and 19% good; virtually same as last week, but sharply below year ago. Moisture critically needed western Oklahoma. Seeding spring oats and barley made very little progress due dry field conditions. Some freeze

damage small grains western Oklahoma. Green bugs reported active several localities southwest Oklahoma. Native range feed short all areas, small grains furnishing only limited grazing most areas. Heavy supplemental feeding required, but hay supplies appear adequate most localities (although prices are high). Livestock fair to good.

**OREGON:** Continued mild weather aided by warming trend and 1 or 2 rainy days at midweek. Temperatures averaged  $3^{\circ}$  to  $6^{\circ}$  above normal with  $8^{\circ}$  to  $10^{\circ}$  above southeast. Minimums east ranged  $5^{\circ}$  to  $21^{\circ}$ , western valleys  $23^{\circ}$  to  $32^{\circ}$ , coast  $27^{\circ}$  to  $38^{\circ}$ . Maxima  $56^{\circ}$  to  $74^{\circ}$ . Precipitation south-east totaled only traces, elsewhere 0.10 to 0.50 inch except northern coast 1.00 to 1.80 inches. Supplemental feeding of livestock continues, though soil is too wet for good feeding conditions in some places. Some fieldwork started, plowing, seeding. Clover and grain fields being sprayed. Livestock and fall-seeded crops continue to be in good condition.

**PENNSYLVANIA:** Cold wet week. Low-pressure system dumped mixture of snow and rain across Commonwealth on Monday, 8th, and Saturday, 13th. Temperatures averaged below normal for 7th straight week. Temperature ranged from about  $6^{\circ}$  below normal over western 2/3 to about  $2^{\circ}$  below normal over eastern 1/3. Coldest on 10th with  $-10^{\circ}$  at Hawley and warmest on 13th with  $56^{\circ}$  at Philadelphia. Low pressure on Monday dropped 5 to 10 inches new snow over western 2/3 of Commonwealth and about 1.00 inch of rain over eastern 1/3. Coastal low on Saturday gave 5 to 10 inches new snow to western 1/3 of State, mixture of rain and snow in central portions and mainly rain over eastern 1/3. Water equivalent with this latter storm ran on the order of 0.50 to 1.00 inch over western 1/3 to an excess of 2.00 inches over much of remaining portions. Minor flooding many areas on Saturday but the sharp change to colder temperatures prevented a complete thaw and thus deterred any major flooding. For the week heaviest water equivalent occurred in the middle and upper Susquehanna regions where over 3.00 inches were recorded at many stations. From 1.00 to 2.00 inches were recorded in most other areas. Snow depths in excess of 20 inches are prevalent over most of northwest and 10 to 15 inches were common over the Appalachian mountain region. Routine winter farm chores.

**PUERTO RICO:** Generally good stable weather entire week. Well distributed light to moderate showers with near-normal rainfall average of 0.70 inch. Highest total rainfall 2.94 inches Eastern Luquillo Mountains. Temperatures averaged  $73^{\circ}$  to  $74^{\circ}$  on coast and  $68^{\circ}$  to  $69^{\circ}$  interior with average departure of  $1^{\circ}$  below normal. Highest maximum,  $89^{\circ}$ ; lowest minimum,  $49^{\circ}$ . Sugarcane harvesting and transportation operations made good progress. Coffee plantations made good progress pruning and fertilizing in all zones. Tobacco farms made good progress with fieldwork and some harvesting. Pastures good to excellent all zones, but some dryness in south. Minor crops reported good progress seeding of bananas and yams central zones and active fieldwork in fertilizing and cultivating.

**SOUTH CAROLINA:** Rain early in week followed by very cold weather. Rain again on 12th and 13th with 1 to 3 inches of snow in northwest on 13th. Weekly rainfall totaled 1.00 to 2.00 inches in all parts of State. Temperatures averaged  $9^{\circ}$  below normal. Lows in low teens in colder locations from 9th through 11th with highs in

30's on 9th and 10th. Soil moisture adequate, too wet all areas. Farming activity limited by bad weather. Scattered pruning of peach trees. Cold and rain causing concern over tobacco plant beds. Some cabbage transplanted.

**SOUTH DAKOTA:** Weekly temperatures averaged from 3° below normal in east to 8° above normal in west. Extremes ranged from 30° below on 9th at Selby to 53° at Rapid City on 10th. Precipitation fell as rain and snow scattered through week with amounts ranging from trace to about 0.30 inch. Snow cover on 12th ranged from trace in south to 20 inches in spotty areas of north and to 32 inches in northern Black Hills. Warm temperatures over weekend caused considerable melting of snow cover. Warm weather reducing snow cover and relieving stress on livestock. All livestock remain in good condition. Cold winter has required heavy supplemental feeding and hay supply becoming short in several areas. Early calving and lambing underway with few losses reported. Blowing of fall grains expected with disappearance of snow cover. Main farm activity caring and feeding livestock and planning spring work.

**TENNESSEE:** Fourth consecutive week of much below-normal temperatures. Weekly departures 12° to 18° below normal. Extremes: 56° and -5°. Precipitation fell as snow early in week, with amounts ranging from traces in south to about 0.40 inch in north. Most areas had over 0.75 inch of precipitation from rain, followed by snow 12th to 13th. Snow depths mostly 2 inches in west to 8 inches in northeast, but warming over weekend melted much of snow cover. Most outside activities halted due snow. Farm planning and record-keeping main activities. Feeding and care of livestock continued. Calving started. Ample hay and forage available.

**TEXAS:** Rains fell in north-central and East Texas Thursday. Amounts of 0.50 to more than 2.00 inches northeast of line from Sherman to Beaumont. Heaviest 24-hour totals were 2.23 at Weiss Bluff near Beaumont and 1.94 at Mount Pleasant. Temperatures rose gradually throughout week. Scattered rainfall over northeastern and upper coastal areas brought some relief to dry conditions. Elsewhere the picture remained much the same with cold dry weather followed by warm dry weather. Movement of cattle continues strong. Flax crop in south and south-central Texas continues to struggle for survival as dry weather followed by low temperatures continues to plague growth rates. Peach crop South Texas received setback as low temperatures nipped some early blooming trees. Primary activities this week were preplant irrigation, application of herbicides and fertilizer. Cabbage, carrots, lettuce harvest active Lower Rio Grande Valley. Little damage to Lower Valley spring vegetables from last week's cold weather. Coastal Bend-Winter Garden emerged watermelons suffered considerable damage with many fields lost. Cabbage, carrot harvest declining Winter Garden. South Texas onion growth interrupted, but little noticeable damage to fields from cold temperatures. Lower Valley onion harvest to begin early March. Citrus harvest active Lower Valley.

**UTAH:** A weak storm moved across the northwest part of Utah Sunday night and Monday accompanied by light to moderate precipitation. Rising trend in temperatures forepart of week but cooling over weekend. Average temperatures ranged between 1°

and 7° above normal most sections except 8° to 12° above in Uinta Basin. Subzero minimums were again reported from many higher mountain valleys. Precipitation in northwest improved topsoil moisture. Fruit trees survived winter in good shape, but critical period just ahead. Farmers now pruning. Care and feeding of milk cow herds, poultry flocks, beef cattle, and sheep continue major farm activities. Preparation of machinery for spring field work current activity. Some marketing of potatoes, dry onions, and apples from storage continues.

**VIRGINIA:** Temperatures generally below normal except above normal on 12th and 13th. Heavy precipitation with rain and snow at beginning and over weekend. Snow and ice held fieldwork to standstill west of Blue Ridge. Spreading lime and fertilizer and topdressing small grains on frozen soils made some progress central and east. Some flue-cured tobacco beds seeded. Fire-cured and sun-cured growers finishing up sales. Feeding and caring for livestock with special attention to new born were main jobs of livestock farmers. Feed consumption heavy and little grazing available. Soil moisture situation continued good with more than half of respondents reporting adequate and remainder surplus.

**WASHINGTON:** West of Cascades: Temperatures slightly below normal first of week, above normal latter half. Precipitation 0.50 to 1.00 inch Puget Sound lowlands, 2.00 inches mountains and coastal areas. No winter damage red raspberries, strawberries, and blueberries. Harvesting forced rhubarb continues. Hay supply adequate. East of Cascades: Warming trend, temperatures below normal first of week, above normal latter half. Precipitation amounts trace to 0.10 inch central basin and southern valleys, 0.25 to 0.50 inch extreme eastern counties. In dryland areas of central basin spring wheat being planted and fertilizers applied. Pruning orchards and vineyards continues. Potatoes moving to market. Sugar beet processing about completed. Greenbug damage to wheat few localities. Grass beginning growth in warmer southeastern valleys. Livestock good condition.

**WEST VIRGINIA:** Rain February 8 and 9, turned to snow afternoon February 9 and gave entire State 4- to 8-inch snowfall. Cold wave followed. Warm-up with rain February 12 and 13 which turned to snow afternoon February 13 but gave only 1 inch totals. Cloudless day February 14. Snow and cold weather slowed most farm activities to performing usual chores and tending livestock.

**WISCONSIN:** Cold early in week, turning mild at end. No precipitation of consequence. Some compacting of deep snow cover and a little melting extreme south. Snow depths average about 10 inches across the south and 30 inches in the north. Frost penetration into soils continued shallow. Outdoor farmwork hampered by deep snow.

**WYOMING:** Light to moderate snow fell over most of State, heavy over high mountains. Foxpark reported the most moisture with 1.01 inches. Temperature averages were mostly above normal over the western half, below normal over the eastern half of Wyoming. Maxima were mostly in the 40's west of Divide and Upper Platte Drainage, mid-40's and 50's elsewhere. Minima were mostly 5° to -15° west of Divide, zero to -28° east. Temperature extremes were 60° at Riverton and -28° at Moorcroft. Main agricul-

tural activity continues to be care of livestock. Warm weather has been quite favorable for calving and shearing which have begun in some areas.

WATER SUPPLY OUTLOOK FOR THE WESTERN UNITED STATES  
Issued as of February 1, 1971

The table below shows the most probable forecasts for the residual period (February 1 to September 30, 1971) at selected points in the West. Water Supply Outlook for the Western United States issued as of February 1, 1971, contains supplementary information and forecasts for these and many other points in the West.

River	Station	Forecast in 1,000 acre-ft.	Forecast % of 15-yr. Avg.†
Columbia	Grand Coulee, Wash.	80,900	108
Columbia	The Dalles, Oreg.	139,000	117
Snake	Clarkston, Wash.	41,800	140
Sacramento*	Red Bluff, Calif.*	11,700	134
San Joaquin*	Big Creek, Calif.*	1,550	121
Weber	Gateway, Utah	515	172
Jordan	Utah Lake, Utah	530	150
Truckee	Lake Tahoe to Farad	340	102
Colorado	Lake Powell inflow	10,950	131
Green	Green River, Utah	4,870	149
San Juan	Bluff, Utah	1,000	85
Little Colo.**	Woodruff, Ariz.**	3	39
Gila#	Solomon, Ariz.#	30	28
Rio Grande	San Marcial, N. Mex.	365	87
Arkansas	Pueblo, Colo.	315	84
Missouri##	Ft. Peck, Mont.##	6,440	145
Yellowstone##	Sidney, Mont.##	8,390	132
North Platte	Glendo, Wyo.	1,089	138

HOW COLD IS IT?

Sometimes on a cold day we may hear a remark such as, "The temperature is low but it does not feel cold because there is very little wind." At other times the remark may be, "It feels much colder than it really is because of the strong wind."

A number of formulas and tables have been devised to indicate in a general way the combined effect of wind and low temperatures on a person who is out of doors. The following table, prepared by Paul A. Siple and Charles F. Passel, is an easy one to use. Listen to your radio to learn the temperature and wind speed. Then refer to the table. Beneath the "Dry Bulb Temperature" and horizontally from the wind speed (m.p.h.) is the equivalent temperature.

L. W. Dye

WIND CHILL TABLE

°F. Dry-Bulb Temperature

WIND, MPH	EQUIVALENT TEMPERATURE (Equivalent in cooling power on exposed flesh under calm conditions)																
	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45
CALM	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45
5	33	27	21	16	12	7	1	-6	-11	-15	-20	-26	-31	-35	-41	-47	-54
10	21	16	9	2	-2	-9	-15	-22	-27	-31	-38	-45	-52	-58	-64	-70	-77
15	16	11	1	-6	-11	-18	-25	-33	-40	-45	-51	-60	-65	-70	-78	-85	-90
20	12	3	-4	-9	-17	-24	-32	-40	-46	-52	-60	-68	-76	-81	-88	-96	-103
25	7	0	-7	-15	-22	-29	-37	-45	-52	-58	-67	-75	-83	-89	-96	-104	-112
30	5	-2	-11	-18	-26	-33	-41	-49	-56	-63	-70	-78	-87	-94	-101	-109	-117
35	3	-4	-13	-20	-27	-35	-43	-52	-60	-67	-72	-83	-90	-98	-105	-113	-123
40	1	-4	-15	-22	-29	-36	-45	-54	-62	-69	-76	-87	-94	-101	-107	-116	-128
45	1	-6	-17	-24	-31	-38	-46	-54	-63	-70	-78	-87	-94	-101	-108	-118	-128
50	0	-7	-17	-24	-31	-38	-47	-56	-63	-70	-79	-88	-96	-103	-110	-120	-128

Hydrologic Services Division  
National Weather Service

- † Period, 1953-67
- \* Period, Oct. 1, 1970 to Sept. 30, 1971
- \*\* Period, Nov. 1, 1970 to June 30, 1971
- # Period, Feb. 1, 1971 to June 30, 1971
- ## Period, Apr. 1, 1971 to Sept. 30, 1971

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## AVERAGE MONTHLY WEATHER OUTLOOK

