

# Weekly Weather & Crop Bulletin

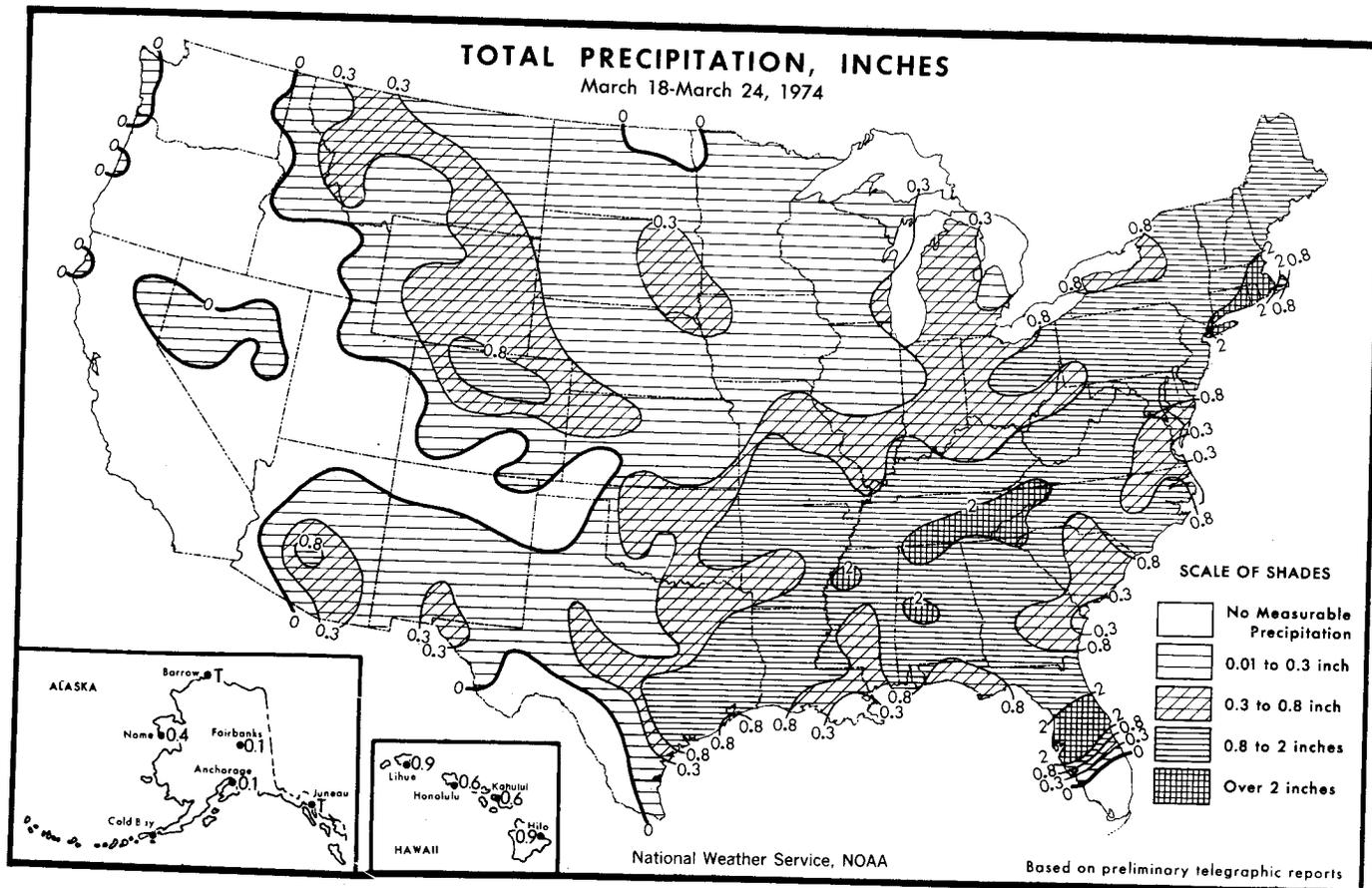
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## NATIONAL WEATHER SUMMARY

**HIGHLIGHTS:** Spring arrived unheralded. Bitter cold air encompassed the Nation's entire mid-section from Montana to central Texas and eastward through New England.

Behind the front temperatures plummeted to record low levels including  $-26^{\circ}$  at International Falls, Minn.;  $3^{\circ}$  at St. Louis, Mo.; and  $26^{\circ}$  at Abilene, Tex.

Only the Southwest reported temperatures significantly above normal with northern Arizona averaging as much as  $9^{\circ}$  above normal for the week.

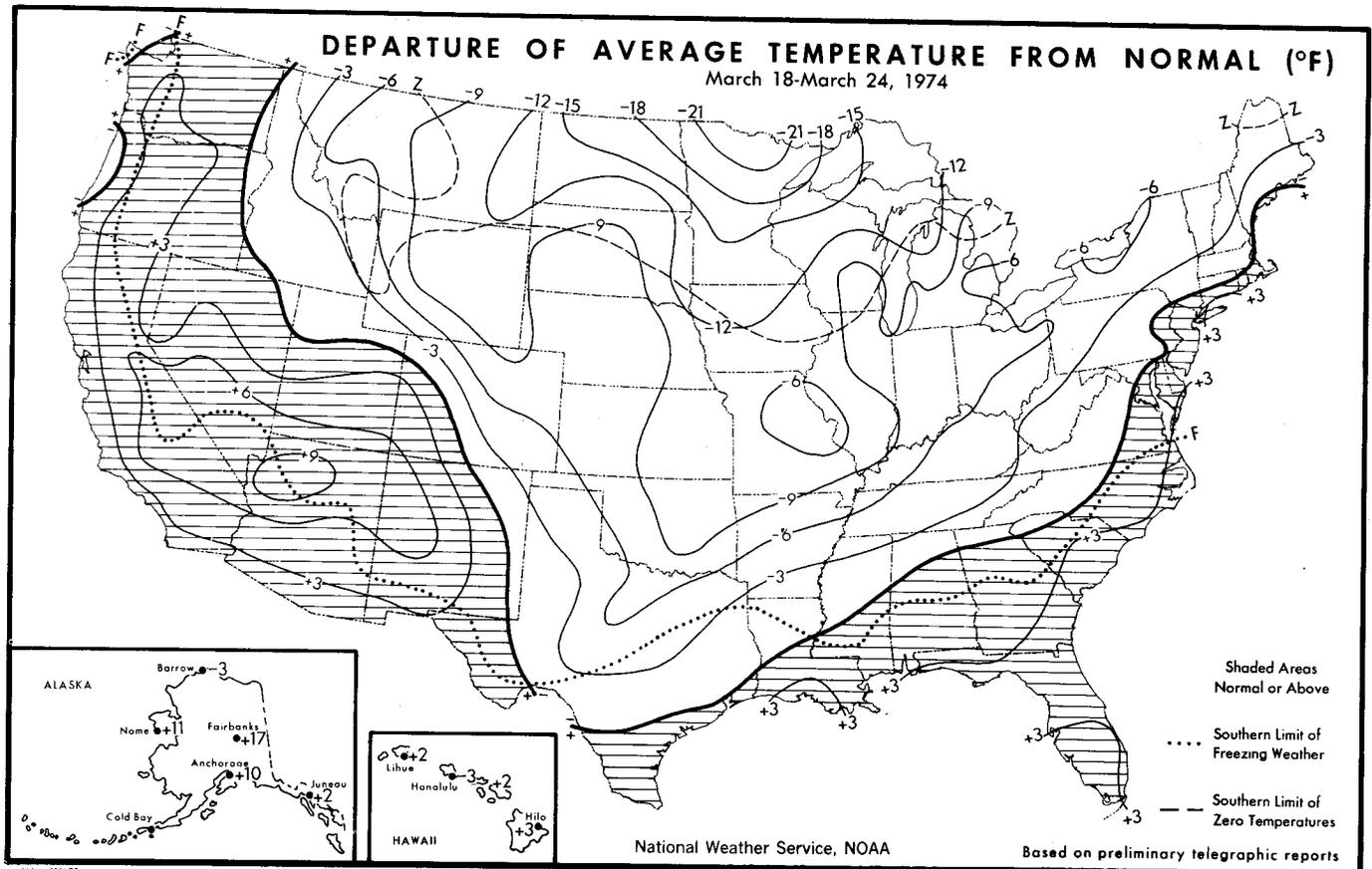
Just ahead of the front, tornadoes, hail storms and torrential rains swept through sections of the Southeast, mid-Atlantic and Northeast, causing at least 3 deaths and widespread property damage.

**PRECIPITATION:** Most of the western half of the Nation remained dry with the normally soggy Pacific Northwest Coastal areas recording only light precipitation last week.

However, both Arizona and west Texas received some much needed rain. Weekly totals measured .88 in. for Phoenix, Ariz., and San Angelo, Tex., got .25 in. of precipitation. Meanwhile, heavy rain, snow and thundershowers drenched the eastern half of the Nation.

Early in the week bitter cold spread over the central U.S., triggering heavy thunderstorms in Arkansas. A tornado was reported 2 miles north of Van Buren, Ark., and .75 in. hail pelted Ft. Smith.

Thunderstorms formed just ahead of a midwest cold front extending from the lower Mississippi Valley to the southern Appalachians by midweek. More than 1.00 in. of rain soaked both Columbus, Miss., and Tuscaloosa, Ala., in only six hours. Tuesday night a low center hovering over Texas began its move across the South stirring up tornadoes, high winds, hail and heavy rains along the Gulf Coast States, and continued into South Caro-



lina during Wednesday afternoon.

Three deaths, one each at Jesup and Montezuma in Georgia and at Many, La., were reported. At least 200 mobile homes were destroyed and numerous downed trees and power lines were reported in the Gulf States, Kentucky, Tennessee and South Carolina.

Thursday afternoon the low pressure center moved into Pennsylvania producing heavy rains in sections of the mid-Atlantic States and snow in the Northeast. Winter fought vigorously to maintain its grip on the Nation as heavy precipitation fell over southern New England. The storm drenched Boston, Mass., with 1.50 in. and Providence, R.I., 1.25 in. of rain and dumped 15 in. of snow on Limestone, Me., before drifting into the Canadian Maritime.

Early Saturday morning an Arctic front moved through the Plains into northern Texas leaving 1 to 4 in. of snow on the ground. Later in the day scattered showers and thunderstorms were reported in the central Gulf States, north of a warm front cutting across southern Florida. Jacksonville, Fla., measured over an inch of rain in only 6 hours. Throughout the day a winter storm dumped 5 to 7 in. of snow over portions of Missouri and southern Illinois with the heavy snows pushing northeastward by evening and by Sunday the storm had left a band of snow measuring 3 to 7 in. extending from central Missouri northeastward through western Pennsylvania, upper New York and into New England.

**TEMPERATURE:** A cold front invaded two-thirds of

the Nation's midsection sending temperatures plummeting to record lows for the first week of spring. The rest of the Nation recorded near normal temperatures except for sections of the Southwest, where temperatures were as much as 9° above normal. During the week temperatures were considerably below normal from the northern and central Rockies to the middle and upper Mississippi Valley.

On Thursday behind the cold front, clear skies and record cold temperatures dropped into the Central Plains and Mississippi Valley. Sioux City, Ia., set a new record low with a 2 below zero reading and Lincoln, Neb., dipped to a cold nighttime 5 above zero.

Friday, Arctic air behind the mid-West front dropped temperatures into the wintry teens and 20's. Meanwhile ahead of the front it was a sunny but a cool spring day throughout the Gulf Coast and southern and middle Atlantic States with highs reaching in the low 60's.

During the weekend the whole nation suffered from below normal temperatures except sections of the lower Plateau, most of California and the Pacific Northwest as Arctic air penetrated deep into the Nation behind the mid-West cold front pushing below freezing temperatures from Texas through the Ohio Valley into New England. International Falls, Minn., recorded the Nation's low with 26° below zero, a record 39° below normal Sunday morning. Record lows were also recorded at Kansas City, Mo., with 15°; Dubuque, Ia., 4° below and Duluth, Minn., 17 below.

## NATIONAL AGRICULTURAL SUMMARY

**AGRICULTURAL HIGHLIGHTS:** Subfreezing temperatures slowed wheat growth in Kansas and Oklahoma but the crop generally held in good condition with little damage from the abnormal cold. Planting progress is ahead of last year in Texas. Corn planting was active in southernmost areas. Freeze damage to peaches in the southeastern States is minor.

**SMALL GRAINS:** Subfreezing temperatures ended several weeks of abnormal warmth and slowed wheat growth in Kansas and Oklahoma. Crop reporters observed little or no freeze damage and rate most wheat in the two States in good condition. Wheat ground cover is adequate in most areas. Insect infestations and damage have been insignificant. About 20% of the Oklahoma wheat crop is jointing compared to nearly 33% a year ago.

Subsoil and topsoil moisture supplies are generally adequate in the central and southern Great Plains with the exception of western Oklahoma and northwestern Texas. Nonirrigated wheat on the Texas High and Low Plains is showing signs of reviving, but most observers think the recent rains came too late. Wheat and oats in other areas of the Lone Star State have made good growth in response to the recent rains.

Spring oats and barley planting in Kansas continued ahead of normal with spring oats 55% planted and spring barley 45% planted. About 84% of the spring seeded acreage of these two crops has emerged in Oklahoma versus 70% a year ago.

Nebraska winter wheat has improved since early March and is now in good condition; little acreage was winter killed but some fields are infested with weeds. Colorado wheat remains in excellent condition. Improved snow cover last week in Montana reduced soil blowing which has been a problem in some areas there. Small grains continued making good growth in California and rapid development in Arizona. Snow helped protect wheat in the eastern Corn Belt from cold temperatures.

**OTHER CROPS:** Cold, wet weather restricted fieldwork in most States east of the Mississippi River although farmers in States along the Gulf of Mexico made good progress early last week.

Corn planting advanced to 34% complete in Texas compared to 24% a year earlier. Corn planting is about complete in southern Louisiana and was active in southern areas of Alabama and Georgia.

Cotton is 6 percent planted in Texas versus 5% last year. Planting cotton started near Yuma, Ariz. and continued in California.

Sorghum planting made excellent progress in Texas at 27% planted versus 19% a year ago.

Tobacco beds in North Carolina are in fair

to mostly good condition. Tobacco transplanting was in full swing in Georgia.

Rice seeding advanced rapidly in Texas to 27% complete compared to 7% a year ago. Louisiana rice farmers prepared seedbeds and got ready to start full scale planting.

**FRUITS AND NUTS:** Freezing temperatures which occurred last week and on the weekend over much of the South caused only minor frost damage to peach crop prospects in the important producing Southeastern States. However, moderate to severe damage to peaches is expected in the Lower Mississippi Valley States. Most mid and late season varieties in the Southeast were still dormant and therefore not as vulnerable to the cold while early season varieties were past the critical bloom stage and were not seriously affected. The extent of damage cannot be determined now. It will be several weeks before all varieties are fully blooming and any damage can be observed.

Heavy rains benefitted Florida citrus trees which are in various stages of blooming.

The Texas citrus harvest for fresh market rapidly neared completion while Navel orange harvesting continued in California but granulation is a problem with larger sizes.

Other orchard and vineyard activities progressed on schedule in California with grape vines leafing out and stone fruit trees blooming.

**VEGETABLES:** Shipments of cabbage from Florida decreased last week, but are still heavy. Tomatoes continued at a high level while celery, sweet corn, and snap beans moved up sharply.

South Carolina farmers transplanted tomatoes last week and harvested green leafy vegetables.

Onion harvesting continued to increase in the Texas Lower Rio Grande Valley while cabbage and carrot harvests continued there and in the San Antonio-Winter Garden area. Tomatoes were field set in east Texas.

In California, lettuce cutting is drawing to a close at Imperial, but reached a peak at Palo Verde. Light cutting is underway at Oxnard. Carrot digging was active in desert and central coast areas.

**PASTURES AND LIVESTOCK:** Greening of lower elevation pastures and ranges increased in the Western States while abnormal cold slowed pasture growth and development in the North Central Region. Pastures in the South Central and South Atlantic States continued to improve and provide increasing amounts of grazing.

Cold and blizzard conditions created difficulties for calving and lambing in the northern Great Plains. The cold increased hay feeding and put pressure on rapidly dwindling hay supplies.

Standard copy for the Weekly Weather and Crop Bulletin is prepared by: Richard E. Felch, Lyle M. Denny, Orus W. Byrd, National Weather Service, NOAA; Arlon M. Scott, Nancy Burt, Statistical Reporting Service, USDA.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., March 24, 1974

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 . . .	56	+ 1	1.2	- .2	La. Baton Rouge . . .	64	+ 3	.7	- .4	Youngstown . . .	30	- 7	.8	0
Mobile . . .	61	+ 1	1.3	- .4	Lake Charles . . .	63	+ 2	1.2	+ .4	OKLA. Okla. City . . .	41	- 9	.3	- .2
Montgomery . . .	59	+ 1	1.6	+ .2	New Orleans . . .	64	+ 2	.2	-1.0	Tulsa . . .	40	-10	.4	- .2
ALASKA. Anchorage . . .	35	+10	.1	- 0	Shreveport . . .	57	- 1	1.0	+ .1	OREG. Astoria . . .	46	+ 1	7	-1.4
Barrow . . .	-17	- 3	T	- .1	MAINE. Caribou . . .	22	- 4	1.5	+1.2	Burns . . .	39	+ 2	0	- .2
Fairbanks . . .	29	+17	.1	0	Portland . . .	34	0	1.2	+ .4	Medford . . .	48	+ 4	0	- .4
Juneau . . .	35	+ 2	T	- .8	MD. Baltimore . . .	44	- 1	.9	+ .1	Pendleton . . .	47	+ 3	0	- .2
Kodiak . . .	--	--	--	--	MASS. Boston . . .	39	- 1	2.1	+1.2	Portland . . .	49	+ 3	T	- .8
Nome . . .	29	+11	.4	+ .3	Chatham . . .	38	--	.6	--	Salem . . .	40	0	0	- .9
ARIZ. Flagstaff . . .	44	+ 9	.1	- .3	MICH. Alpena . . .	20	- 8	.2	- .2	PA. Allentown . . .	41	+ 1	1.2	+ .4
Phoenix . . .	66	+ 5	.9	+ .8	Detroit . . .	30	- 7	.4	- .2	Erie . . .	29	- 6	1.3	+ .7
Tucson . . .	60	+ 2	.4	+ .3	Flint . . .	29	- 5	.3	- .2	Harrisburg . . .	43	0	.8	0
Winslow . . .	52	+ 6	T	- .7	Grand Rapids . . .	26	- 9	.5	- .1	Philadelphia . . .	44	0	1.5	+ .6
Yuma . . .	67	+ 2	T	0	Houghton Lake . . .	17	-12	.5	+ .1	Pittsburgh . . .	35	- 5	.8	0
ARK. Fort Smith . . .	43	- 9	1.2	+ .4	Lansing . . .	27	- 8	.5	- .1	Scranton . . .	36	- 2	.9	+ .3
Little Rock . . .	48	- 4	.7	- .4	Marquette . . .	16	-13	.1	- .3	R.I. Providence . . .	39	+ 1	2.1	+1.2
CALIF. Bakersfield . . .	63	+ 6	0	- .2	Muskegon . . .	25	- 9	.8	+ .2	S.C. Charleston . . .	62	+ 4	.3	- .8
Eureka . . .	50	+ 2	T	-1.1	S. Ste. Marie . . .	14	-12	.6	+ .2	Columbia . . .	59	+ 3	.6	- .5
Fresno . . .	59	+ 4	0	- .4	MINN. Duluth . . .	6	-20	.1	- .3	Greenville . . .	51	- 1	1.0	- .2
Los Angeles . . .	61	+ 2	0	- .5	Internatl Falls . . .	0	-23	.2	- .1	S.D. Aberdeen . . .	21	- 9	.4	+ .2
Red Bluff . . .	59	+ 5	0	- .6	Minneapolis . . .	17	-14	.1	- .3	Huron . . .	21	-10	.4	+ .1
San Diego . . .	60	+ 2	T	- .4	Rochester . . .	17	-13	.2	- .2	Rapid City . . .	24	- 8	.2	- .1
San Francisco . . .	54	+ 1	0	- .6	St. Cloud . . .	12	-16	.1	- .2	Sioux Falls . . .	19	-13	.6	+ .3
Stockton . . .	57	+ 4	0	- .4	MISS. Jackson . . .	57	0	.7	- .6	TENN. Chattanooga . . .	49	- 2	1.9	+ .6
COLO. Denver . . .	30	- 8	.9	+ .6	Meridian . . .	61	+ 4	.9	- .5	Knoxville . . .	48	- 3	3.0	+1.9
Grand Junction . . .	46	+ 4	T	- .2	MO. Columbia . . .	31	-12	.6	0	Memphis . . .	48	- 4	1.0	- .2
Pueblo . . .	37	- 4	T	- .1	Kansas City . . .	32	-11	.1	- .5	Nashville . . .	46	- 5	1.7	+ .6
CONN. Bridgeport . . .	42	+ 3	2.7	+1.9	St. Louis . . .	33	-12	.7	0	TEX. Abilene . . .	50	- 6	.1	- .1
Hartford . . .	37	0	1.9	+1.0	Springfield . . .	35	-10	1.0	+ .3	Amarillo . . .	42	- 5	T	- .2
D.C. Washington . . .	48	+ 1	1.0	+ .2	MONT. Billings . . .	24	-10	.3	+ .1	Austin . . .	59	- 2	1.1	+ .7
FLA. Apalachicola . . .	65	+ 3	.4	- .7	Glasgow . . .	17	-10	.1	0	Beaumont . . .	62	+ 1	1.6	+1.0
Daytona Beach . . .	69	+ 4	3.0	+2.2	Great Falls . . .	23	- 8	.4	+ .2	Brownsville . . .	71	+ 2	T	- .1
Ft. Myers . . .	71	+ 2	0	- .7	Havre . . .	21	- 7	.1	0	Corpus Christi . . .	67	+ 1	.1	+ .1
Jacksonville . . .	66	+ 4	1.4	+ .6	Helena . . .	26	- 6	.1	0	Dallas . . .	--	--	--	--
Key West . . .	76	+ 1	0	- .4	Kalispell . . .	29	- 3	.2	0	Del Rio . . .	63	- 1	T	- .1
Lakeland . . .	70	+ 3	2.3	+1.4	Miles City . . .	20	-12	.3	+ .2	El Paso . . .	59	+ 3	.4	+ .3
Miami . . .	76	+ 4	0	- .5	Missoula . . .	27	- 7	.4	- .2	Fort Worth . . .	51	- 5	.6	0
Orlando . . .	70	+ 3	3.4	+2.6	NEBR. Grand Island . . .	30	- 7	.1	- .2	Galveston . . .	63	+ 1	.4	- .2
Tallahassee . . .	64	+ 3	.9	- .4	Lincoln . . .	29	- 9	.1	- .3	Houston . . .	61	- 1	1.2	+ .6
Tampa . . .	70	+ 3	2.2	+1.3	Norfolk . . .	25	-10	.2	- .2	Lubbock . . .	49	- 1	.2	0
W. Palm Beach . . .	74	+ 3	0	- .8	N. Platte . . .	28	- 8	.2	- .1	Midland . . .	55	- 1	.1	0
GA. Atlanta . . .	53	+ 1	1.1	- .2	Omaha . . .	27	- 9	.2	- .2	San Angelo . . .	54	- 4	.3	+ .1
Augusta . . .	57	+ 1	.9	- .3	Valentine . . .	27	- 6	.1	- .1	San Antonio . . .	61	- 1	.2	- .1
Macon . . .	59	+ 1	.8	- .4	NEV. Ely . . .	36	+ 2	T	- .2	Victoria . . .	64	+ 1	.8	+ .4
Savannah . . .	64	+ 5	.2	- .8	Las Vegas . . .	63	+ 7	0	- .9	Waco . . .	53	- 5	.3	- .2
HAWAII. Hilo . . .	74	+ 3	.5	-2.1	Reno . . .	42	+ 1	.1	0	Wichita Falls . . .	48	- 6	.1	- .3
Honolulu . . .	70	- 3	.6	- .1	Winnemucca . . .	41	+ 3	T	- .1	UTAH. Blanding . . .	45	+ 6	0	- .2
Kahului . . .	74	+ 2	.6	0	N.H. Concord . . .	31	- 3	1.3	+ .7	Salt Lake City . . .	40	- 1	.1	- .3
Lihue . . .	74	+ 2	.9	- .2	N.J. Atlantic City . . .	45	+ 2	1.1	+ .1	VT. Burlington . . .	27	- 4	1.1	+ .7
IDAHO. Boise . . .	41	- 1	0	- .2	Trenton . . .	45	+ 2	1.7	+ .8	VA. Lynchburg . . .	45	- 2	1.0	+ .2
Lewiston . . .	42	- 2	T	- .2	N.MEX. Albuquerque . . .	53	+ 6	T	- .1	Norfolk . . .	53	+ 3	.3	- .5
Pocatello . . .	34	- 2	.1	- .1	Roswell . . .	51	+ 1	.1	0	Richmond . . .	49	+ 1	.5	- .3
ILL. Cairo . . .	40	- 9	.8	- .3	N.Y. Albany . . .	32	- 3	1.1	+ .5	Roanoke . . .	46	- 1	1.0	+ .3
Chicago . . .	29	-10	.3	- .4	Binghamton . . .	30	- 3	1.0	+ .4	WASH. Colville . . .	40	+ 2	0	- .2
Moline . . .	27	-11	.2	- .4	Buffalo . . .	29	- 5	.8	+ .2	Omak . . .	42	+ 2	0	- .1
Peoria . . .	30	- 9	.1	- .6	New York . . .	44	+ 2	1.9	+1.0	Quillayute . . .	42	0	T	-2.3
Rockford . . .	27	- 9	.2	- .5	Rochester . . .	28	- 7	.8	+ .2	Seattle-Tacoma . . .	47	+ 3	T	- .8
Springfield . . .	30	-11	.2	- .5	Syracuse . . .	30	- 5	.8	+ .1	Spokane . . .	38	0	T	- .4
IND. Evansville . . .	37	- 9	1.1	0	N.C. Asheville . . .	46	- 1	1.1	0	Walla Walla . . .	47	+ 1	0	- .3
Ft. Wayne . . .	31	- 7	.4	- .3	Charlotte . . .	52	0	.4	- .6	Yakima . . .	44	+ 1	0	- .1
Indianapolis . . .	34	- 8	.5	- .4	Greensboro . . .	48	- 1	.9	+ .1	W.Va. Beckley . . .	40	- 2	1.4	+ .4
South Bend . . .	31	- 6	.5	- .2	Hatteras . . .	56	+ 4	.7	- .1	Charleston . . .	44	- 2	1.2	+ .3
IOWA. Burlington . . .	28	-11	T	- .7	Raleigh . . .	52	+ 1	.5	- .3	Huntington . . .	43	- 3	.9	- .0
Des Moines . . .	26	-10	.2	- .4	Wilmington . . .	59	+ 3	.9	0	Parkersburg . . .	40	- 5	.6	- .3
Dubuque . . .	23	-11	.1	- .6	N.DAK. Bismarck . . .	15	-12	.1	- .1	WIS. Green Bay . . .	20	-11	.2	- .2
Sioux City . . .	23	-12	.3	- .4	Fargo . . .	10	-17	.1	- .1	La Crosse . . .	21	-12	.1	- .4
KANS. Concordia . . .	32	- 9	T	- .4	Williston . . .	13	-14	.1	0	Madison . . .	24	- 8	.3	- .2
Dodge City . . .	35	- 7	T	- .3	OHIO. Akron-Canton . . .	32	- 6	.9	+ .1	Milwaukee . . .	25	- 8	.3	- .3
Goodland . . .	30	- 7	.4	+ .2	Cincinnati . . .	36	- 7	.7	- .3	WYO. Casper . . .	21	-11	.7	+ .4
Topeka . . .	33	-10	.2	- .3	Cleveland . . .	33	- 5	.8	+ .1	Cheyenne . . .	22	-10	.5	+ .2
Wichita . . .	34	-11	.2	- .2	Columbus . . .	36	- 5	1.0	+ .2	Lander . . .	22	-10	.5	+ .2
KY. Lexington . . .	39	- 6	.6	- .5	Dayton . . .	33	- 8	.5	- .3	Sheridan . . .	21	-11	.3	0
Louisville . . .	40	- 6	.6	- .6	Toledo . . .	30	- 8	.3	- .3	P.R. San Juan . . .				

## CONDENSED STATE SUMMARIES

The Bulletin capsulizes nationally important weather and crop conditions. Every Monday SRS publishes more detailed data in State Weekly Weather and Crop Bulletins in cooperation with the National Weather Service, NOAA. Voluntary weather observers, crop reporters, and county extension agents contribute weekly observations for these reports.

**ALABAMA:** Dry conditions relieved midweek by 2.00- to 3.00 in. rains over most of State. Warm through Thursday, turning cold Friday. Frost in north Friday morning with low of 23° at Valley Head. Mostly sunny and cool weekend.

Farmers made good progress plowing, disking and applying fertilizer and herbicides early in week. Rain slowed fieldwork latter part of period, but provided needed moisture in many localities. Planting corn and vegetables active south as weather permitted. Prospects for small grains generally favorable, but low temperatures slowed growth in north. Irish potatoes up and growing in Baldwin County area with earliest plantings just breaking ground on Sand Mountain. Peach orchardists concerned about low temperature. Few tomatoes set in Geneva and Houston Counties. Pastures improving steadily, supplying seasonally short to adequate grazing.

**ARIZONA:** Storm produced substantial moisture central sections, eastern Mogollon Rim, White Mountains Tuesday, Wednesday. Moisture amounts between 0.50 and 1.75 in. Traces extreme west, under 0.10 in. extreme south. Average temperatures 2° to 6° above normal. Warmest Monday upper 80's, lower 90's deserts, 60's in mountains. End of week lows, 20's mountains, 45° to 50's deserts.

Small grain development rapid with favorable weather. Much lower elevation crop heading although wide range in development. Bud development on early planted safflower Yuma, other areas normal progress. Preparation for 1974 cotton nearing completion most areas, planting started Yuma. Planting in central valley delayed by recent rains. Virtually no planting Graham County, soil temperatures too cool. Very little activity sorghum crop. Field preparations, some planting occurring Yuma area. Haying picking up seasonally.

Lettuce harvest continued west, season neared completion. Harvesting picking up central, expected to commence Pima County area week to 10 days. Some replanting cantaloupes, melons required, frost injury central. Cantaloupes Yuma area doing well. Valencia orange harvest continued limited scale, volume expected to pick up mid-April. Starting insect control. Rainfall last week, wettest storm in more than 8 months. Will boost range conditions, improve soil moisture. Cattle, calves fair to good. Movement sheep, lambs to higher ranges continued in mostly fair condition.

**ARKANSAS:** A very cold weekend with temperatures 5° to 13° below normal. Greatest departures across north with Harrison 13° below normal and Fayetteville 12° below normal. Warm first of week, cold middle and last of week. Hard freeze weekend with lows 13° at Gilbert in north, 28° at El Dorado, 30° at Camden in south, all on 24th. Highest temperature 88° at Camden on 19th. Rain fall 0.50 to 1.00 in. south half, 1.00 to 1.50 in. north half.

Land preparation ahead of last year, lots of activity in Delta areas. Small grains made good growth. Some tomatoes planted in Bradley County. Freeze damage to early pastures in north on 23rd and 24th. Supplemental feeding of cattle continued. Lice and Ticks a problem on livestock. Heavy freeze damage to peaches and pears in northwest, apples

appear to have received little damage. Full extent of damage will not be known for a week or two.

**CALIFORNIA:** A weak storm front moved through State giving only scattered light showers through Tuesday to sections north and central. Average temperatures near normal along immediate coast degrees above over inland areas. Morning lows stayed above freezing in nearly all areas. Afternoon highs well above normal early week over lower inland areas but lowered to near normal by Friday.

Small grains continued good growth. Some dry-land barley showing moisture stress. Few fields heading out. Weed treatment, topdressing in progress. Aphids reported in some areas. Sugar beets show normal growth, some thinning. Digging of overwintered sugar beets active. Safflower planting active. Some corn planted. Cotton planting continued, some emerged. Alfalfa growing well, some fields cut and green chopped. Weekly treatment underway. Orchard and vineyard activities continued on schedule. Grape thinning expected to begin in 2 weeks, Riverside area. Vines leafing out most of State. Bloom on stone fruits continued over State. Some controls applied for brown rot. Pears beginning blossom Lake County. Walnut buds pushing on early varieties. Cherries near full bloom Stockton. Navel orange harvest continued, granulation becoming a problem on larger sizes. Valencia harvest expected Orange County about one week. Avocado and desert grapefruit harvests continued slow. Lemon harvest active, generally good quality.

Artichoke increased. Asparagus peak Imperial, increased other areas. Broccoli, cauliflower moving good volume central coast, San Francisco Bay. Cabbage continued south coast. Carrot digging active desert, central coast. Celery movement heavier south. Lettuce cutting Imperial drawing to close, reaching peak Palo Verde, light cutting oxnard. Strawberry picking slowed south coast, cool weather retarded growth.

Good spring weather during week brought vigorous growth range pasture grasses. Grasses increased nutritional value. Water supplies adequate. Supplemental feeding virtually stopped most districts. Hay short supply, prices high. Movement cattle slowed result lower prices. Lambing, calving continued north. Docking, castration spring lambs nearly complete most areas, spring shearing picking up. Bee keepers moving colonies into citrus groves and range areas where clover planted. Turkey poults made good progress in brooder houses.

**COLORADO:** Changeable weather was the rule last week. Weather systems brought light to moderate snow to mountains and east plains but little or no moisture fell in lower elevations of west. Greatest weekly totals over and along mountains of northeast where amounts ranged from 0.50 to 1.00 in. Most of northeast received 0.25 to 0.50 in. but in southeast totals generally under 0.10 in. Up to a foot of snow reported in mountains west of Denver.

Unseasonably warm weather which prevailed over

State on 17th was replaced with much cooler weather the next day. Considerable variation in temperatures occurred during week. Mean temperatures averaged near normal to 5° above seasonal in mountains and over west. Elsewhere readings were 2° to 6° below normal.

Fieldwork limited east due to wet soils. Limited amount sugar beets, oats, spring barley in the ground. Some oats and spring barley emerged, good condition. Winter wheat excellent condition. Soil moisture adequate. Winter freeze damage very light. Ranges and pastures greening up east. Snow cover melting lower areas west. Livestock good condition. Calving and lambing active; losses newborn livestock below normal.

FLORIDA: Mild with general rainfall except dry in the south third. Rainfall moderate to locally heavy central and north. Temperatures averaged near normal.

Seeding of spring crops underway. Corn planting active, early plantings up to good stands. Weather conditions generally dry. Rainfall near end of period helpful. Small grains heading, some disease problems. Sugarcane harvest continued. Pastures very poor to poor condition. Cattle and calves mostly fair.

Citrus trees welcomed rains past weekend. Irrigation stopped except southern citrus areas where still dry, bloom in all stages. Cabbage decreased, but still heavy. Tomatoes at high level, expected to be about steady next week. Celery, sweet corn, potatoes, snap beans moved up sharply. Peppers steady. Escarole increased, lettuce decreased. Cucumbers light, increased. Strawberries past peak.

GEORGIA: Temperatures averaged near normal. Light freeze or frost north morning of 18th. Rain most of State ending dry spell. Amounts averaged 1.00 to 2.00 in., except mostly 0.25 to 0.50 in. extreme south and coast. Severe squall line moved through State Thursday morning with 50 to 70 mph wind most areas, except Columbus reported 100 mph. Most extensive damage north and central with 3 killed and millions in property damage.

Soil moisture adequate. Wheat showing disease symptoms in many areas of south. Other small grains good. Land preparation almost complete north and corn planting very active in south. Tobacco transplanting in full swing. Pastures and cattle good.

HAWAII: Weather continued cloudy from previous week. Rainfall light to heavy and generally beneficial. Strong southwest winds caused some damage to orchards. Banana production light and steady. Papaya production to increase gradually. Adequate supply of vegetables. Pastures and cattle good. Sugar plantations idle because of strike. Active harvesting of pineapples for fresh fruit market in progress.

IDAHO: Cloudy skies and scattered light rain or snow showers with locally gusty winds early week. Midweek high pressure over south brought sunny skies and promise of spring. Daytime temperatures warmed but cold lows brought averages to high 30's to mid-40's, slightly below normal. Cool temperatures and below normal precipitation slowed snow melt and runoff.

Fieldwork progressing rapidly on light soils southwest but delayed eastern areas by cold weather and wet soils. Land preparation, seeding, and application of fertilizer underway but behind normal. Cleaning irrigation ditches for coming season. Calving and lambing active under favorable conditions. Sheep shearing continued. Range and pasture forage greening at lower elevations.

ILLINOIS: Temperatures 10° below normal. Highs averaged 30's and 40's north, 40's south. Lows ranged 20's and 30's north to 30's south. Only warm day on 18th, highs 50's north, 60's south. Most precipitation 19th and 20th, heaviest rainfall south. Trace of snow north 22d. Fields most areas too wet for tillage.

INDIANA: Warm early then severe cold over weekend. Temperatures declined from 60° at Evansville on 19th to zero at Terre Haute on 24th. Precipitation averaged 0.50 in. Snow over weekend and slippery roads. Low temperatures broke records for severe cold so late in season.

Field activities nil. Preparing equipment and supplies to begin 1974 season. Otherwise, chores and caring for livestock. Some loss of peach crop from severe freeze and earlier springlike weather.

IOWA: Temperatures averaged 10° to 15° below normal as cold Canadian air dominated through week. Record low temperatures equaled or broken at many points on Thursday and again on Saturday and Sunday. Mason City reported coldest with 6° below zero Sunday morning, 58° at Mt. Ayr on Monday was warmest. Precipitation near normal northwest to well below normal southeast. Frequent periods of light snow with amounts generally less than 1 in. except in westcentral where 3 to 4 in. fell early Wednesday.

KANSAS: Temperatures averaged 5° to 9° below normal over State, with temperatures close to zero northwest on morning of 24th. Precipitation occurred over various portions of State during first half week. Significant amounts 0.50 to 0.33 in. extreme southeast. On night of 22d and morning of 23d, an area of heavy snow reported with 6 in. or more in northwest. Tapering off to about 1 in. in southeast.

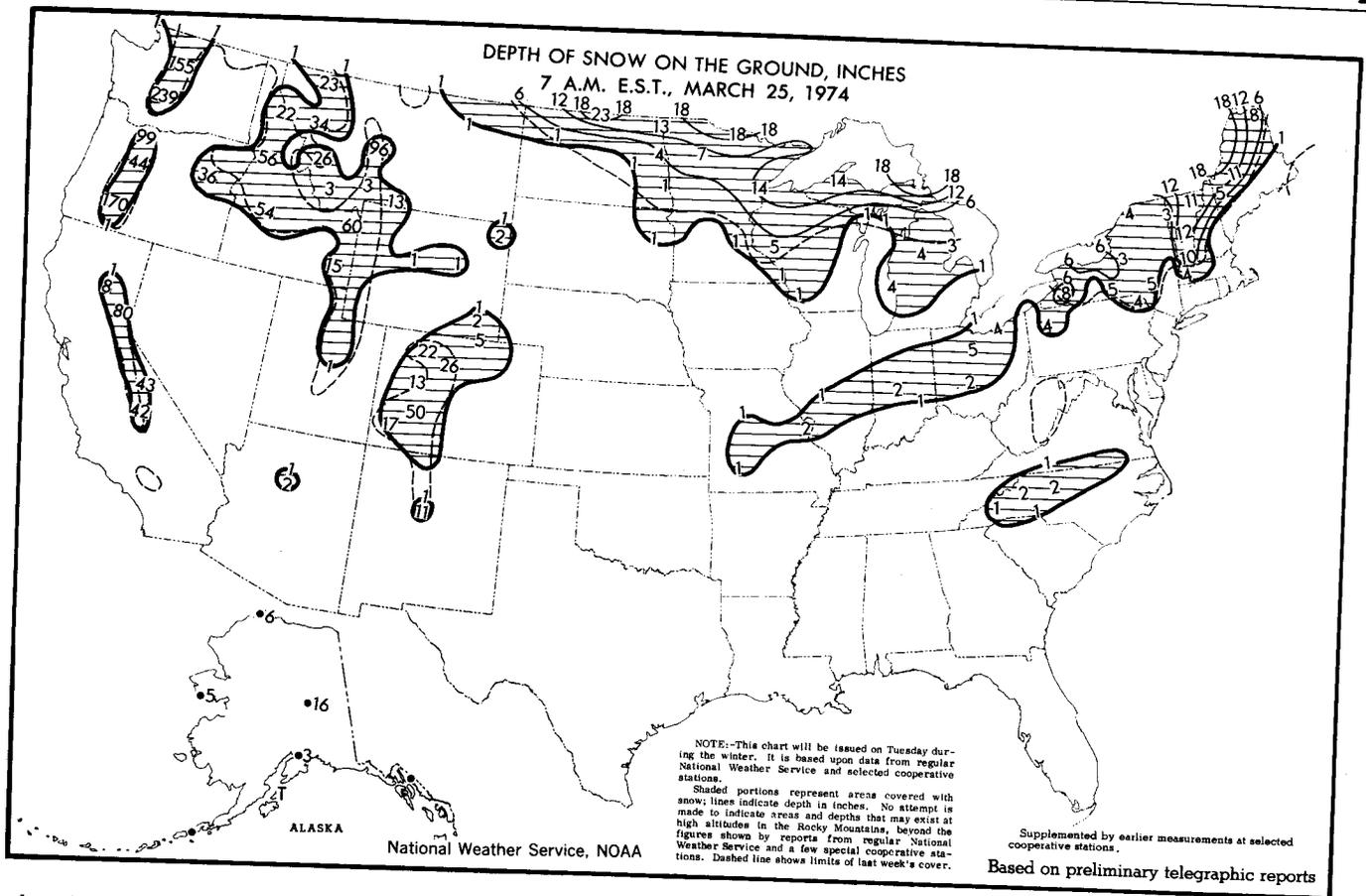
Freezing temperatures slowed growth of wheat, condition remained good, little or no damage from freeze. Ground cover now adequate most areas. Army cutworms, mainly in southwest little damage reported. Spring oats planting 55% complete compared to 45% 10-year average. Spring barley 45% planted compared 30% average. Grasses good although freezing did slow development. Subsoil and topsoil moisture adequate to surplus except few scattered southwest and westcentral counties. Limited amount of freeze damage to fruit trees in south. Calving continued full swing. Cattle being removed from wheat pastures in west. Feed supplies adequate.

KENTUCKY: Weekly precipitation totals of 0.50 to 1.50 in. Snow depth Saturday night 1 to 3 in. north. Temperatures averaged slightly below normal for period with record to near-record low temperatures over weekend.

Lows of 10° to 18° on morning 24th dimmed fruit prospects, full extent damage undetermined. Also concern for small grains, as early season warm temperatures had pushed most advanced fields to first jointing stage. Snowcover helpful to later crops. Most fields too wet for additional fieldwork.

LOUISIANA: Temperatures averaged 3° to 5° below normal north, near normal central and southwest, 3° to 4° above normal southeast. Very warm first of week, much cooler Wednesday north, Thursday night south. Temperature extremes 88° Minden and Shreveport Tuesday, 33° Shreveport and Winnfield Friday. Scattered thundershowers with cold front and again Sunday. Weekly totals near 1.00 in. except less in coastal areas southeast.

Land preparation for spring crops main activity. Farmers rowing up, applying herbicides, ditching



and getting ready to plant. Rain Tuesday and Wednesday halted fieldwork in north. Soil moisture short to adequate southern half, surplus to adequate northern half. Fieldwork averaged 5.0 days. Sugarcane growers cultivating, offbarring, shaving and applying herbicides. Crop appears good. Rice farmers preparing seedbeds, fair amount planted, should increase rapidly next 2 weeks. Corn planted south, preparing to plant north. Sweet potato bedding active. Irish potatoes up to good stand, growing rapidly.

**MARYLAND AND DELAWARE:** Temperatures near normal with highs from mid-50's to mid-60's. Lows ranged from low 20's to low 30's except 17° in Garrett County. Precipitation reported over two states, amounts ranged from a little over 0.75 in. to little less than 3.00 in. Heaviest amounts in Delaware, Eastern Shore and southern Maryland. Good progress early spring jobs. Seeding clover, plowing, fertilizing for spring crops, and seeding early vegetables. Tobacco growers continued stripping and moving to market warehouses. Colder weather worrying orchardists but no serious damage reported. Livestock generally good. Pasturing grain crops increasing, especially rye.

**MICHIGAN:** Precipitation totaled 0.20 to 0.50 in. over lower peninsula and eastern upper peninsula; and around 0.20 in. or less over remainder of upper peninsula. Periods of light snow or snow flurries reported over State on most days. Temperatures generally averaged 6° to 12° below normal in lower peninsula and 10° to 18° below normal in upper peninsula. Temperatures

coldest over weekend. Minimum temperatures generally below zero in upper peninsula Friday and Saturday nights and below zero in northern lower peninsula Saturday night. Lows in south ranged from 5° to 10° Saturday night.

**MINNESOTA:** An extremely cold and windy week with temperatures averaging more than 20° below normal in extreme north to 12° below normal in south. Each day of week became progressively colder and by Saturday and Sunday record or near record readings observed.

Precipitation as snow showers in flurries frequent but falls generally light. Below normal amounts in all areas except southwest quarter. Snow cover ranged 5 to 10 in. from eastcentral to northwest with 10 to 20 in. over northcentral and northeast. Farm activities sluggish due to weather extremes.

**MISSISSIPPI:** Cool, wet weather prevailed, with temperatures north and central 1° to 5° below normal and 1° to 4° above normal in south. Extremes: 21° and 86°. Very heavy thunderstorms over State Thursday, causing 9 minor injuries and considerable property damage. Rainfall averaged 1.00 to 2.00 in. over north and central and near 1.00 in. over south. Extremes of 2.21 in. in southwest Perry County. Mild, rainy weather preceded a cold front through State Sunday. Soil moisture supplies mostly adequate to surplus. Some excessive moisture central and lower Delta counties. Fieldwork averaged 2.6 days suitable. Fall and spring plowing 51% complete, 20% year ago. Winter wheat and oats fair to good with

50% or wheat and 55% of oats jointing. Irish potatoes 75% planted. Pastures, livestock, and truck crops fair to good. Peaches poor to good. Supplies of fertilizer available 23% adequate and 77% short. Supplies of tractor fuel available 80% adequate and 20% short.

MISSOURI: Low temperatures over weekend fell to near zero or below over some local areas. Temperatures averaged 5° to 13° below normal with below freezing temperatures recorded on 5 days over much of State. Precipitation generally light over north half but averaged from 0.50 to 1.00 in. over south half. Snowfall over weekend primarily across central part from west to east with totals from about 2 to over 7 in.

Record low temperatures over weekend have probably frozen all or most peach crops. Damage to other fruit trees cannot be fully assessed until later.

One day suitable for fieldwork. Plowing 30% complete. Oats sown 26%. Wheat and pasture good condition. Soil moisture adequate to surplus.

MONTANA: Temperatures averaged 2° to 13° below normal. Early week highs mostly in 40's. Arctic air moving over State cooling temperatures down to teens and 20's midweek with near blizzard conditions. Snow flurries throughout week gave most stations near or above normal precipitation.

Colder weather created problems for livestock care. Calving and lambing became difficult with persistent raw winds. Hay requirements increased, putting pressure on short supplies. Fieldwork at standstill. Improved snowcover reduced soil blowing.

NEBRASKA: Temperatures below normal all week. Record lows midweek over east end of State. Precipitation light, mostly as snow. Moisture generally less than 0.33 in.

Soil moisture supplies mostly adequate. Winter wheat good condition, crop improved since first of month. Little acreage winterkilled but some acres weed infested. Sugar beet acreage mostly contracted for 1974, planting underway. Alfalfa and wild hay good condition. Several alfalfa fields have large numbers of army cutworms. Pasture and range feed supplies mostly adequate. Livestock doing well. Calves having less scours than last year. Fieldwork averaged 3.5 days suitable. Farm activities mainly lambing, calving, shearing sheep, hauling manure, discing corn stalks, seeding and other chores.

NEVADA: High temperatures Reno averaged 3° above normal, lows 2° below. Extremes: 85° Logandale, 13° Mountain City. Precipitation confined to north early week. Greatest amount 0.38 in. Austin. No snow on ground any stations.

Seedbed preparation accelerated by mild weather. Planting small grains started local areas. Winter planted grains greening. In Moapa Valley, Fall-planted onion harvest well underway and radish harvest starting. First crop green-chop grains about completed.

NEW ENGLAND: Below normal temperatures across much of north Wednesday to Friday, but seasonal with no drastic changes at other times. Mild weather was the rule by Saturday with Rumford, Me. reporting a high of 50°, Providence, R.I. noted 60° on Sunday.

Precipitation averaged above normal occurring mainly with a fast moving storm on Thursday. This storm dropped a blanket of heavy snow over the north and heavy rains south. Boston got 2.07 in.

NEW JERSEY: Wet week. Rainfall averaged 1.30 in. for State with Long Valley reporting 2.10 in. Coastal strip south of Atlantic City reported less than 1.00 in. Temperatures averaged close to normal until it turned colder Sunday night. Extremes: 65° at Hammonton on 19th, 15° on 25th at Long Valley and Newton.

NEW MEXICO: Very warm Monday with many readings east and south in 80's. Turned sharply colder with scattered rains and light snows Wednesday and Thursday and very cold east again on Saturday and Sunday. Temperatures averaged 2° to 4° colder than normal east plains and about 4° warmer than normal central and west. Below freezing readings all sections except south desert and southwest with lows north mountain and northeast plains in the teens. Precipitation negligible over north while totals in south ranged up to 0.50 in. mainly from midweek showers.

Scattered rainfall, moisture short. Ranges and livestock mostly fair. Wheat mostly good, fair in Clovis, Portales with some dryland plowed up. Barley good. Onions, lettuce good. Land preparation, irrigation continued.

NEW YORK: Temperatures averaged 3° to 6° colder than normal except at New York City where temperatures were above normal. One of coldest spots was Massena with reading of 1° below zero Wednesday. Warmest day was on Saturday when temperatures reached the 50's. Precipitation averaged around 1.00 in. except near Watertown and Danville with less than 0.50 in. Precipitation fell as both rain and snow with some 5 to 10 in. of new snow reported over north country. Some thunderstorm activity also noted over extreme southeast on Thursday.

NORTH CAROLINA: Temperatures averaged near to slightly above seasonal normal with widespread precipitation of 1.00 to 2.00 in. over most of State. Strong cold front passed across State Thursday with frost and freezing temperatures in mountains Friday morning.

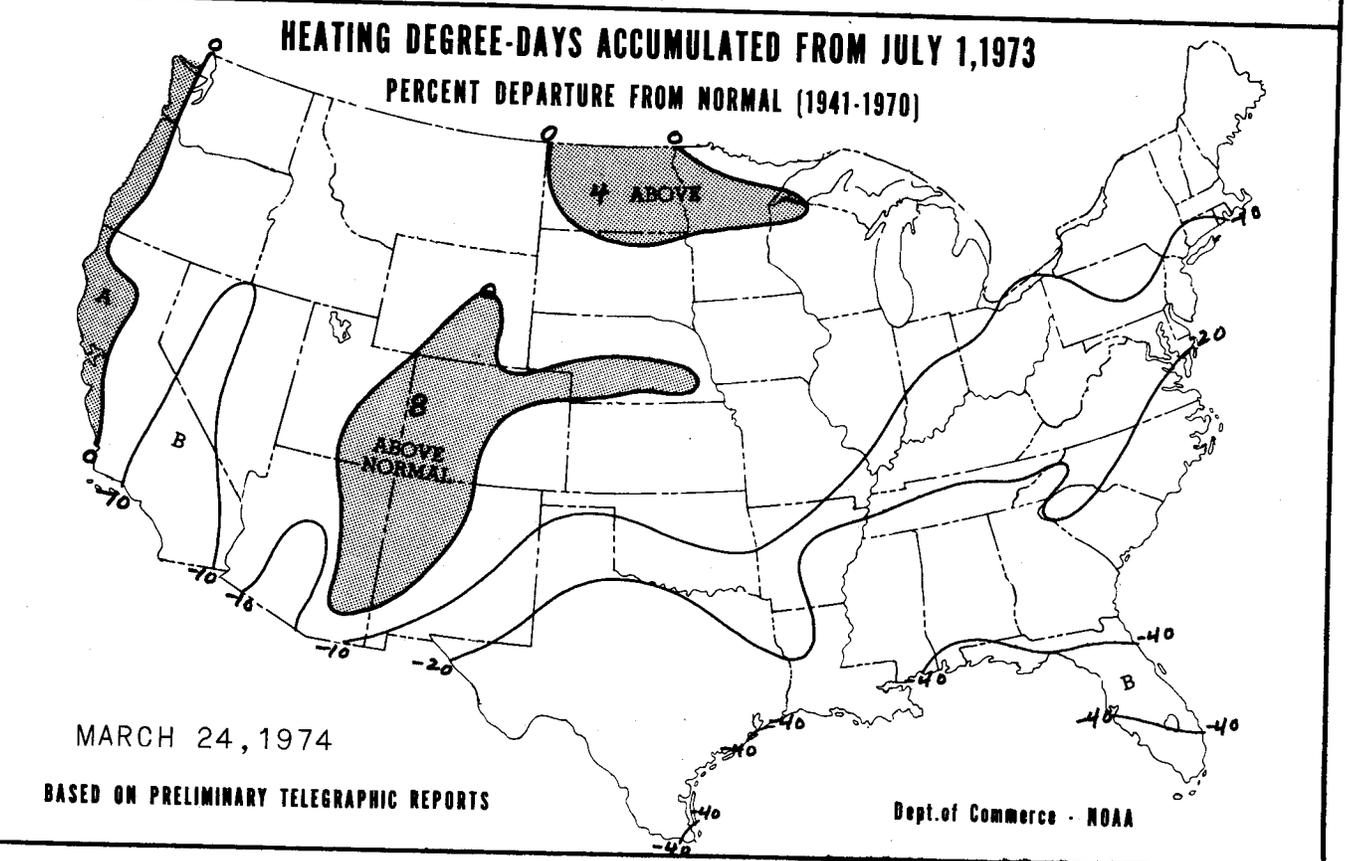
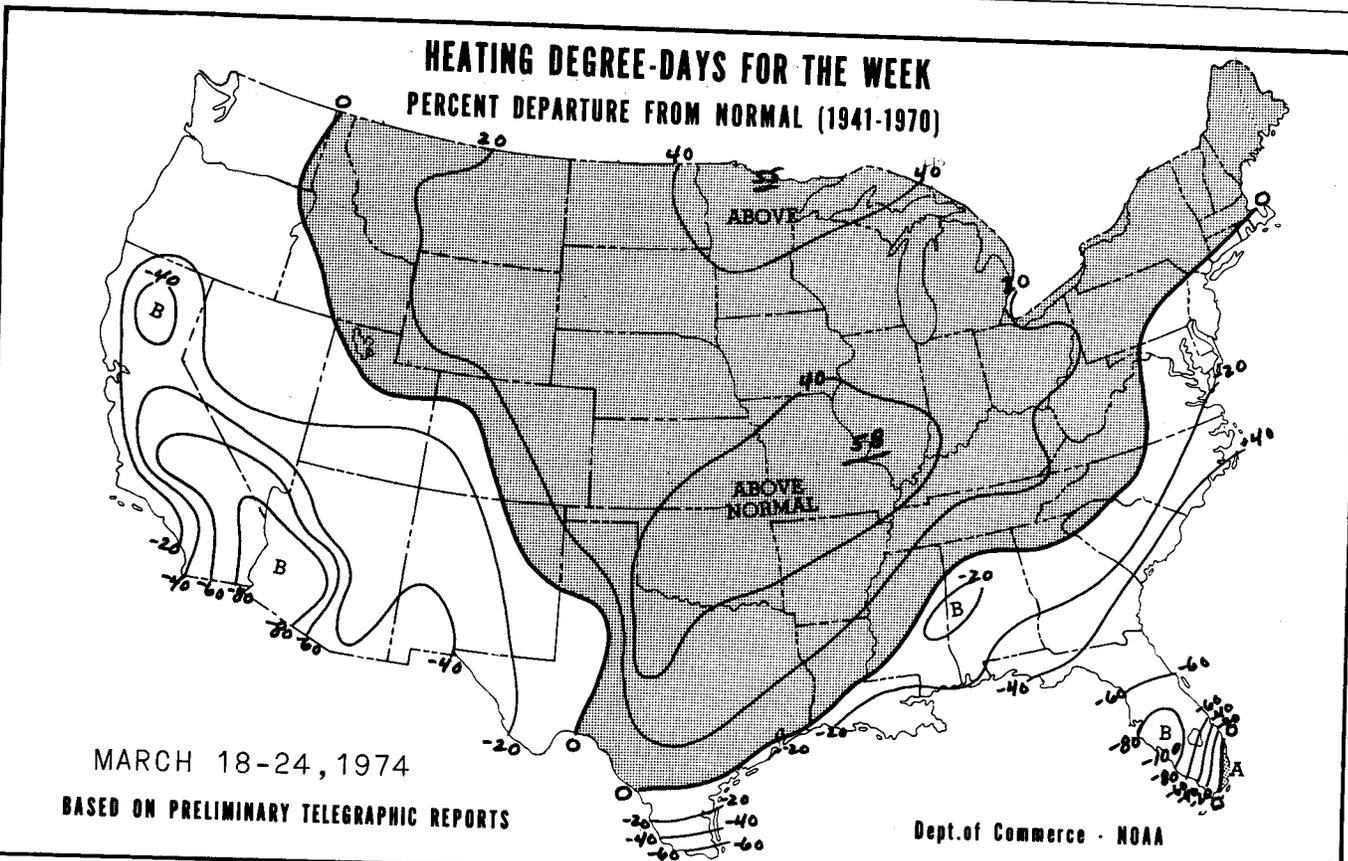
Small grains show excellent growth, all grains 85% good to excellent, 15% fair. Soil moisture 99% adequate to surplus. Fieldwork averaged 2.2 days. Tobacco beds 40% fair, 60% good. Accelerated maturity some local areas. Hay roughage, feed grain adequate. Planted spring Irish potatoes. Cabbage planting neared completion major producing areas, condition good. Peaches unaffected by frost and freeze.

NORTH DAKOTA: Temperatures 9° to 18° below normal. Extremes: 65° at Dickinson, 15° below zero at Bisbee. Precipitation below normal all portions of State. Buttineau reported most for week with 0.21 in. Late week strong winds and snow swept across State causing blizzard conditions in east. Bisbee has most snow on ground with 15 in. Langdon recorded 30° below zero reading on 23d to set new record low for that day.

Subzero temperatures with blizzard conditions were of great concern to many farmers and ranchers who were in midst of calving and lambing. Some scours reported in calves. Roughage supplies short. Little grain moving to market. Farmers arranging for hired help for crop season.

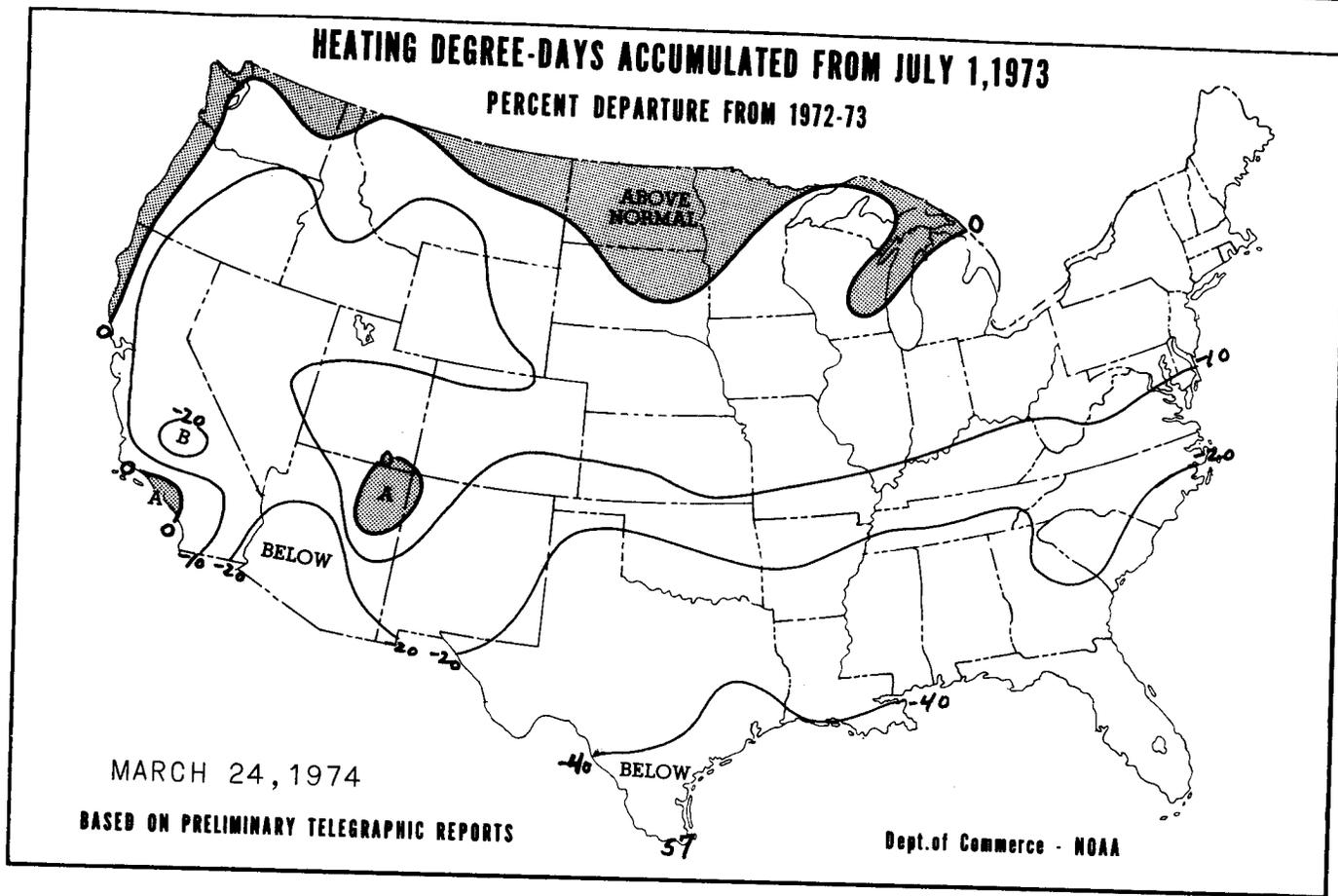
OHIO: Normal temperatures beginning of week followed by record cold temperatures and heavy snow end of week. High 58° at Marietta and Portsmouth Wednesday and low 1° at Toledo Sunday morning. Precipitation every day except Friday with

(Continued on Page 11)



Heating Degree Days (Base 65°) For Week Ending March 24, 1974

States and Stations	Weekly		Seasonal + Accumulation			States and Stations	Weekly		Seasonal + Accumulation			States and Stations	Weekly		Seasonal + Accumulation		
	TOTAL	Departure*	TOTAL	Departure*	Departure From 1972-73		TOTAL	Departure*	TOTAL	Departure*	Departure From 1972-73		TOTAL	Departure*	TOTAL	Departure*	Departure From 1972-73
ALA. Birmingham . . .	63	-16	1951	-694	-753	Portland . . .	218	-1	5622	-518	-508	Tulsa . . .	173	63	3127	-259	-574
Mobile . . .	38	-6	954	-658	-544	MD. Baltimore . . .	140	-4	3765	-389	-203	OREG. Astoria . . .	133	-10	4201	210	262
Montgomery . . .	49	-11	1499	-639	-526	MASS. Boston . . .	179	2	4341	-383	-291	Burns . . .	182	-15	5572	-226	-415
ARIZ. Flagstaff . . .	149	-61	5278	-478	-1250	MICH. Alpena . . .	313	44	6600	-330	-103	Medford . . .	111	-26	3634	-378	-401
Phoenix . . .	4	-33	1088	-375	-375	Detroit . . .	244	48	5225	-228	-146	Pendleton . . .	126	-18	4006	-389	-657
Tucson . . .	35	-12	1587	-5	-526	Flint . . .	250	36	5511	-395	-59	Portland . . .	113	-19	3584	-259	-56
Winslow . . .	89	-45	4170	44	106	Grand Rapids . . .	270	59	5559	-186	-171	Salem . . .	129	-7	3893	54	-207
Yuma . . .	1	-17	904	63	-240	Houghton Lake . . .	338	84	6597	-319	-85	PA. Allentown . . .	164	-12	9999	4992	5175
ARK. Fort Smith . . .	149	51	2830	-280	-695	Lansing . . .	263	51	5677	-159	-290	Erie . . .	251	38	5053	-583	-333
Little Rock . . .	126	30	2435	-682	-564	Marquette . . .	344	92	6629	-111	-223	Harrisburg . . .	153	-2	4039	-551	-307
CALIF. Bakersfield . . .	19	-37	1648	-325	-412	Muskegon . . .	276	62	5625	-102	75	Philadelphia . . .	145	-4	3842	-401	-210
Eureka . . .	106	-11	3500	74	140	S. Ste. Marie . . .	358	84	7449	6	172	Pittsburgh . . .	210	35	4417	-688	-310
Fresno . . .	39	-34	2182	-161	-422	MINN. Duluth . . .	413	138	8188	151	-191	Scranton . . .	204	14	5224	-148	-209
Los Angeles . . .	53	-5	1125	-256	7	Internatl Falls . . .	455	162	8718	-134	243	R.I. Providence . . .	181	-5	4519	-459	-220
Red Bluff . . .	37	-42	2386	59	-52	Minneapolis . . .	334	91	6791	-332	-114	S.C. Charleston . . .	33	-27	1238	-788	-540
San Diego . . .	30	-19	926	-263	-453	Rochester . . .	335	90	6860	-166	-239	Columbia . . .	47	-25	1449	-998	-790
San Francisco . . .	77	-7	2394	50	64	St. Cloud . . .	369	112	7480	-89	-123	Greenville . . .	95	2	2447	-468	-364
Stockton . . .	56	-26	2220	-216	-330	MISS. Jackson . . .	66	4	1602	-569	-581	S. DAK. Aberdeen . . .	330	82	7405	26	587
COLO. Denver . . .	247	58	4964	21	-351	Meridian . . .	48	-14	1435	-188	-645	Huron . . .	305	69	6604	-322	47
Grand Junction . . .	128	-29	5297	390	-406	MO. Columbia . . .	239	85	4337	-168	-326	Rapid City . . .	286	58	5814	-238	-444
Pueblo . . .	196	28	4505	-160	-622	Kansas City . . .	234	77	4440	-151	-313	Sioux Falls . . .	310	80	6427	-317	-231
CONN. Bridgeport . . .	159	-21	4073	-480	-620	St. Louis . . .	224	82	4164	-81	-203	TENN. Chattanooga . . .	112	13	2579	-629	-818
Hartford . . .	196	3	4869	-539	-223	Springfield . . .	207	67	3644	-433	-527	Knoxville . . .	118	19	2564	-613	-593
DEL. Wilmington . . .	136	-16	3742	-554	-32	MONT. Billings . . .	284	65	5657	-332	-689	Memphis . . .	117	24	2313	-686	-898
D.C. Washington . . .	119	-9	2961	-804	-476	Glasgow . . .	331	66	7259	-314	143	Nashville . . .	129	21	2662	-725	-467
FLA. Apalachicola . . .	17	-16	746	-560	-372	Great Falls . . .	295	59	6135	-125	-122	TEX. Abilene . . .	108	35	1981	-456	-1034
Daytona Beach . . .	9	-13	491	-374	-224	Havre . . .	303	46	6925	-495	123	Amarillo . . .	153	25	3167	-541	-1064
Ft. Myers . . .	0	-7	232	-221	-112	Helena . . .	275	42	6467	-244	-851	Austin . . .	49	5	1238	-422	-745
Jacksonville . . .	16	-17	852	-427	-271	Kalispell . . .	250	16	6382	-581	-433	Brownsville . . .	6	-11	383	-258	510
Key West . . .	0	0	41	21	20	Miles City . . .	314	81	6203	-483	-351	Corpus Christi . . .	23	-2	656	-260	-528
Lakeland . . .	1	-13	375	-285	-229	Missoula . . .	254	39	6079	-425	-389	Del Rio . . .	34	3	1029	-455	-637
Miami . . .	0	0	131	75	-7	NEBR. Grand Island . . .	238	42	5558	-5	-168	El Paso . . .	40	-26	2194	-342	-403
Orlando . . .	5	-9	400	-285	-100	Lincoln . . .	253	66	5577	129	-68	Fort Worth . . .	91	23	1747	-493	-721
Tallahassee . . .	22	-13	998	-506	-411	Norfolk . . .	276	64	5787	-262	-297	Galveston . . .	27	-11	684	-494	-636
Tampa . . .	4	-11	406	-292	-194	North Platte . . .	255	49	5876	142	-307	Houston . . .	48	10	1060	-325	-694
W. Palm Beach . . .	1	0	172	-127	-11	Omaha . . .	275	74	5592	-156	-195	Lubbock . . .	102	-5	2490	-747	-1181
GA. Atlanta . . .	81	-10	2088	-761	-541	Valentine . . .	276	49	5874	-302	-454	Midland . . .	63	-8	1936	-530	-1082
Augusta . . .	61	-9	1821	-572	-336	NEV. Ely . . .	202	-18	6079	-108	-621	Beaumont . . .	42	2	1038	-417	-723
Macon . . .	48	-11	1436	-686	-458	Las Vegas . . .	21	-45	2329	-80	-465	San Angelo . . .	70	11	1564	-557	-934
Savannah . . .	24	-27	1162	-688	-326	Reno . . .	136	-34	4501	-343	-860	San Antonio . . .	46	8	1164	-347	-594
IDAHO. Boise . . .	157	-4	4404	-451	-524	Winnemucca . . .	170	-17	4764	-584	-879	Victoria . . .	45	14	789	-401	-659
Lewiston . . .	158	8	4338	-231	-272	N. H. Concord . . .	239	23	6085	-82	-549	Waco . . .	73	16	1557	-402	-905
Pocatello . . .	212	12	5667	-147	-638	N. J. Atlantic City . . .	138	-18	3734	-533	-144	Wichita Falls . . .	120	36	2161	-551	-956
ILL. Cairo . . .	171	58	3157	-370	-415	Trenton . . .	141	-14	3868	-423	-218	UTAH. Salt Lake C . . .	172	2	4801	-229	-590
Chicago . . .	247	63	5049	-230	-121	N. MEX. Albuquerque . . .	85	-41	3893	52	-324	VT. Burlington . . .	266	30	6387	-223	-354
Moline . . .	264	73	5382	-208	26	Roswell . . .	95	-6	2844	-563	-508	VA. Lynchburg . . .	140	14	3249	-533	-386
Peoria . . .	247	67	5086	-243	-235	N. Y. Albany . . .	999	792	9999	4124	4267	Norfolk . . .	86	-25	2388	-728	-476
Rockford . . .	266	64	5574	-328	-46	Binghamton . . .	243	21	5566	-514	-471	Richmond . . .	109	-9	2938	-623	-366
Springfield . . .	242	76	4553	-356	-335	Buffalo . . .	252	34	5419	-326	-137	Roanoke . . .	127	0	3152	-661	-483
IND. Evansville . . .	192	56	3509	-643	-654	New York . . .	145	-14	3807	-417	-397	WASH. Quillayute . . .	158	-3	4773	284	179
Fort Wayne . . .	237	50	5040	-294	-87	Rochester . . .	254	43	5251	-382	-100	Seattle-Tacoma . . .	123	-21	3839	-239	-247
Indianapolis . . .	214	50	4244	-634	-370	Syracuse . . .	242	32	5476	-138	-10	Spokane . . .	185	-1	5466	-158	-19
South Bend . . .	234	39	4758	-746	-293	N. C. Asheville . . .	131	7	2967	-770	-394	Walla Walla . . .	122	-8	3757	-365	-546
IOWA. Burlington . . .	260	77	5107	-279	-227	Hatteras . . .	59	-37	1639	-775	-416	Yakima . . .	143	-14	4768	-299	-293
Des Moines . . .	274	69	5406	-451	-461	Charlotte . . .	93	-2	2469	-494	-518	W. VA. Beckley . . .	171	9	3960	-842	-518
Dubuque . . .	290	75	6064	-203	-105	Greensboro . . .	116	4	3001	-469	-498	Charleston . . .	146	13	3407	-660	-432
Sioux City . . .	290	82	5621	-454	-292	Raleigh . . .	91	-12	2473	-728	-601	Huntington . . .	154	20	3380	-710	-611
KANS. Concordia . . .	228	57	4806	-116	-270	Wilmington . . .	40	-32	1515	-758	-540	Parkersburg . . .	173	30	3681	-565	-290
Dodge City . . .	209	51	4231	-198	-663	N. Dak. Bismarck . . .	349	86	7965	275	694	WIS. Green Bay . . .	310	70	6487	-333	91
Goodland . . .	244	51	5142	-44	-444	Fargo . . .	385	118	8226	303	468	LaCrosse . . .	305	84	6181	-252	-157
Topeka . . .	221	63	4547	-101	-226	Williston . . .	366	99	7823	58	297	Madison . . .	287	58	6222	-344	-16
Wichita . . .	219	78	4208	13	-399	OHIO. Akron-Canton . . .	227	38	4604	-690	-211	Milwaukee . . .	276	54	5703	-495	-207
KY. Lexington . . .	179	39	3476	-717	-305	Cleveland . . .	223	33	4508	-698	-378	WYO. Casper . . .	305	74	6196	-57	-592
Louisville . . .	175	38	3335	-797	-413	Columbus . . .	202	34	4215	-733	-320	Cheyenne . . .	300	70	5777	-46	-679
LA. Baton Rouge . . .	31	-9	1005	-603	-517	Cincinnati . . .	199	48	4010	-442	-328	Lander . . .	297	70	6333	-132	-1455
Lake Charles . . .	38	-1	1046	-397	-624	Dayton . . .	225	56	4413	-487	-229	Sheridan . . .	305	74	6151	-163	-449
New Orleans . . .	27	-10	896	-514	-590	Toledo . . .	245	53	5298	-149	-70						
Shreveport . . .	77	18	1789	-263	-481	Youngstown . . .	242	47	4990	-447	-432						
MAINE. Caribou . . .	302	27	7802	-83	-501	OKLA. Okla. City . . .	167	56	30								



(Continued from Page 8)

amounts from 0.25 in. to 0.80 in. Spring began Thursday with snow central and north. Record cold and heavy snow entire State Saturday and Sunday. Snow ranged from 3 in. Cincinnati and Dayton to 7 in. east of Cleveland.

Plowing and some seeding of oats early week. Some reports of damage to fruit crops following cold weekend. Snow cover protected wheat crop from low temperatures. Hay supplies adequate. Demand for farm machinery great.

**OKLAHOMA:** Temperatures averaged normal panhandle to 4° below normal southcentral and southeast. Precipitation averaged from 0.08 in. northcentral to 1.03 in. eastcentral. Weekend very cool with no precipitation except light showers in eastern third.

Freezing weather slowed wheat development, damage unknown at this time but expected to be light. Leaf burn only noticeable result of subfreezing temperatures to date. About 20% wheat crop jointing, nearly 33% year ago. Spring oats, barley 84% up-to-stand, 70% year ago. Small grains rated mostly good. Insect problems in wheat not significant. Southwest, west, northwest counties remain in need of surface moisture. Fruit crops suffered severe damage, early peaches virtually all destroyed. Early vegetables hurt by cold weather, growth home gardens nil past week. Cattle good condition, a few lice problems remain. Movement from wheat pasture nearly complete. Limited amount graze-out wheat. Early season grasses continued furnishing good forage east half.

**OREGON:** Light precipitation first of week. Warming trend set in by midweek. Temperatures averaged up to 4° above normal. Highs ranged upper 50's to lower 70's. Brookings warmest with 74°. Lows in 30's and lower 40's western sections, teens and 20's east of Cascades. Lowest minimums mid-week.

Open weather allowed rapid progress in spring work. Plowing, preparing seedbeds, spraying, fertilizing major activities light soil areas. Planting green peas slightly behind schedule. Norgold potato planting Columbia Basin nearly complete, Russets underway. Orchardists rushing to complete pruning. Livestock in fair condition. Feed supplies low. Calving, lambing continued.

**PENNSYLVANIA:** Cool and moderately wet. Temperatures from near normal southeast to 6° below normal north and west for coolest week statewide since early March. Extremes: 63° southeast Tuesday and Saturday afternoons to 3° below zero northwest mountains Monday morning. Daily highs mostly in 40's and 50's and lows in 20's and 30's until end of period when cold Arctic air brought back a bit of winter as nighttime lows dipped into teens and single digit readings most places.

Midweek storm produced nearly all of total precipitation with amounts from 0.50 in. central to 1.00 in. northwest and extreme east, up to 1.50 in. Philadelphia area. Snow from flurries northcentral counties, 3 in. northeast and 6 to 8 in. northwest mountains mostly from Thursday storm. Farmers did spring fieldwork as weather permitted.

**PUERTO RICO:** Island average rainfall 0.41 in. or 0.12 in. below normal. Highest weekly total 2.29 in. at Adjuntas followed by 1.25 in. at Trujillo Alto. Highest 24-hour total 1.25 in. at Trujillo Alto. Temperatures averaged about 76° on coasts and 71° interior divisions with mean station temperatures ranging from 79° at Roosevelt Roads to 64° at Pico Del Este Luquillo. Extremes: 90° at San Sebastian, 51° at Adjuntas. Sugarcane harvest continued under favorable weather most areas. Coffee zones had good weather for care and cultivation of trees and some areas reported formation of beans. Weather favored harvest and drying of tobacco in shed except in north and northwest where lack of rain retarded its development. Pastures good condition most zones but some places need more rain. Dry weather favored preparation of soil and planting of food crops but some sectors suffering lack of rain. Pigeon peas and pumpkins planted in Barranquitas. Celery, cabbage, bananas, and plantains harvested some central zones.

**SOUTH CAROLINA:** Temperatures averaged 3° to 5° above normal most areas. First, last of week cooler than usual; midweek much above normal. Rainfall generally normal. Heaviest amounts reported in mountains with few locations reporting in excess of 2.00 in. Precipitation mostly Wednesday, Thursday. Cold front preceded by severe squall line swept across State Thursday morning. Extensive minor wind damage reported with heavier damage in localized areas.

Harvesting mixed greens, transplanting tomatoes, squash, cucumbers, snap beans, corn along coast. Farmers transplanting some tobacco in Pee Dee area. Applied spray to orchards in Piedmont and other areas.

**SOUTH DAKOTA:** Warm early week, but became quite cool with temperatures averaging 5° to 17° below normal. First week since early January that temperatures have been below normal. Extremes: 70° at Mission on 18th, 10° below zero at Brookings on 24th. Precipitation amounts ranged from 0.10 to 0.75 in. from rain and/or snow received statewide. Heavier amounts fell in east. Half of areas received above normal moisture for week, but precipitation 0.33 to more than 1.50 in. below normal since first of year.

Calving and lambing progressing well. Mild weather has allowed for fewer losses and disease problems.

**TENNESSEE:** Frontal systems and associated precipitation marked beginning and end of week with fair skies during midweek. Temperatures below seasonal normals and precipitation, including some freezing rain and freezing drizzle, occurred over weekend. Temperatures 2° to 5° below normal and precipitation averaged near 0.50 in. to over 3.00 in. in some places.

General, intermittent rains further delayed land preparation for spring planting. Freezes 21st and 22d damaged most fruit trees which were in bloom and may have sharply reduced this year's fruit crops, for second year in a row. Wheat, oats and barley fair to good. Growth and development well advanced but many fields of all three crops showing damage from yellow dwarf disease. Tobacco beds 70% seeded, on schedule with both last year and normal. Heavy rains damaged some recently planted beds in east. Because of wet weather delaying farm operations, fertilizer and fuel supplies have been adequate most areas. However, supplies of both remain tight and deliveries short. Gasoline supplies particularly critical in north-east counties.

**TEXAS:** Freezing temperatures accompanied cold air northwest half late week. Light to moderate rainfall accompanied arctic surge over much State. Readings fell to freezing panhandle to upper Red River Valley east of Wichita Falls. A freeze Saturday morning spread to all northwestern half east of Gaudalupe Mountains Sunday. Scattered showers, thundershowers, rain and drizzle rainfall over most State. Rain slightly below normals over west two-thirds, above normal east third.

Wheat, oats made good growth in response to recent rains. Dryland wheat high plains showing signs of reviving, but for most of crop rains came too late. Cotton, corn, sorghum, rice planting made excellent progress south, east. Some replanting necessary result recent rains coastal bend. Planting moisture generally adequate south half. Major crops percent planted: Cotton 6, 1973 5; Corn 34, 1973 24; Sorghum 27, 1973 19; Rice 27, 1973 7.

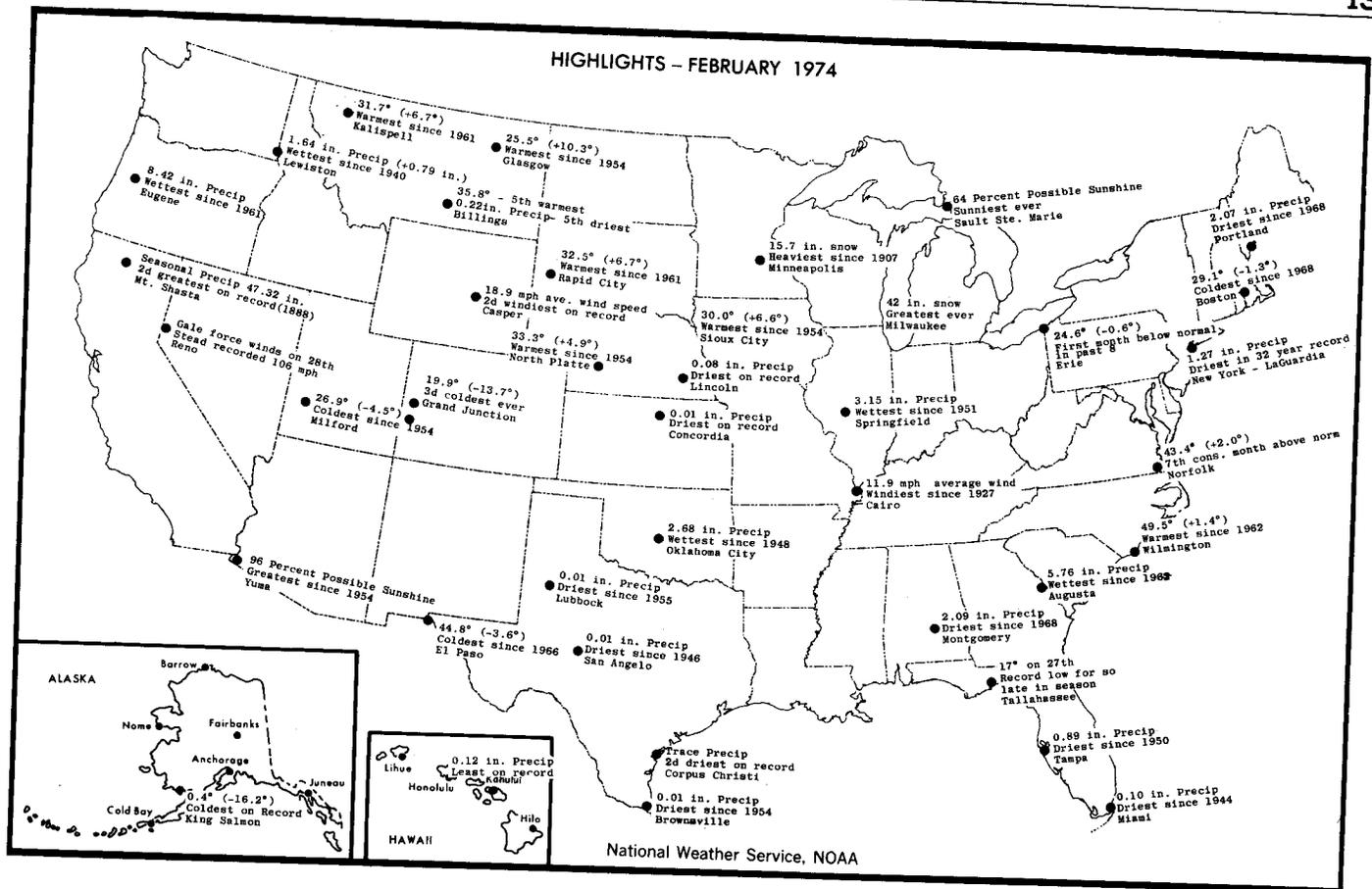
Lower Rio Grande Valley: Onion harvest increased. Lettuce harvest neared completion. Cabbage and carrot harvest continued. Tomatoes made good growth. Cantaloupes good progress. Coastal Bend: Watermelons made good growth. Broccoli and cauliflower harvest getting underway again even though fields still wet. Some sweet corn beginning to emerge. Laredo: Onions continued good growth with harvest expected to get underway early April. San Antonio-Winter Garden: Some late spinach still harvested. Cabbage and carrot harvest continued. Some peppers beginning to emerge. Spring lettuce harvest should get underway shortly. Potatoes made good growth. East Texas: Tomatoes being field set. Watermelon planting well underway. Knox-Haskell: Potato seeding completed. Trans-Pecos: Onions and lettuce continued good growth. Early cantaloupe planting underway. High Plains: Planting of onions and potatoes continued.

Peaches in various stages of bloom throughout State. In northern half, peaches will be hurt by freeze damage. Full extent of damage not yet determined. From central to south, little damage occurred. Citrus harvest for fresh market rapidly neared completion. Most fruit after April 1 will go to processing plants. Ranges, pastures beginning to green across State, furnished increased grazing. Livestock good. Supplemental feeding still underway high and low plains. Internal parasites increased south and east. Some livestock losses from predators, noxious weeds in scattered areas. One confirmed screwworm case reported south.

**UTAH:** Few isolated showers forepart period northwest portion and again latter part north mountains. Accumulated amounts moisture generally light. Average temperatures 2° to 10° above normal. Snow cover most lower valley stations now gone.

Spring plowing and other fieldwork underway in central and south and to a limited extent in north, thanks to nearly 3 weeks of mostly dry weather. Topsoil moisture drying out rapidly but subsoil moisture plentiful in most crop and range lands. Winter wheat fields greening up well. Supply of irrigation water stored in reservoirs best ever. Shortages of seed potatoes and fertilizer noted some areas. Sheep shearing started western desert. Calving underway. Marketing of potatoes and apples from storage nearly completed.

**VIRGINIA:** Temperatures averaged near normal. Beginning warm with turn to cooler end of week. Extremes: 78°, 12°. Precipitation moderate to heavy for the period, varied 0.50 to 3.00 in., with heaviest eastern and central. Excessive precipita-



tion during week restricted fieldwork to an average of less than 2 days, except north. Topsoil moisture 69%, surplus, 31% adequate.

Farmers getting machinery ready, purchasing fertilizer, lime, seed and pesticides. Some local shortages and delivery problems with fertilizer. Topdressing small grains, spreading fertilizer and lime made slow progress. Where soils suitable, plowing and land preparation underway. Planting limited to some spring oats, overseeding pastures, seeding tobacco plants beds with considerable early garden work done. Potato planting on the Eastern Shore slowed but ready for fast pace when weather permits. Setting cabbage on Eastern Shore active. Small grains good, but heavy infestation of aphids, especially on barley. Corn growers getting ready for early planting which may start next week in Tidewater and southeast. Peach damage by freeze of March 12 to 13 varies but considerable damage in south and east, light to moderate damage north. Crop prospects still questionable in many areas. Seasonable weather held apples in most dormant state. Pastures good. Livestock getting more feed from pastures. Calving and lambing about over. Livestock good.

**WASHINGTON:** West: Sunny most of week. Highs in 60's, lows in 30's and a few in 20's. Some early morning fog. Early week precipitation from 0.10 to 3.00 in. Plowing, disking, rotovating sod accelerated. Pruning, planting caneberries. Raspberry tying. Tulips, daffodils, forced rhubarb harvest continued. Christmas tree planting underway. Pastures soggy but greening, some grazing started.  
 East: Temperatures about normal. Highs in 60's, low in 20's, and a few in teens. Early week precipitation totaled from trace to .3 in. Planting

grapes, tree fruits, sugar beets, potatoes underway. Wheat, mint planting almost completed. Pruning, spraying of tree fruits continued. Stringing of hops begun. Fertilizing, spraying, soil testing, spring seeding underway. Pastures slowly greening. Calving, lambing neared completion some areas. Feed supplies scarce to adequate.

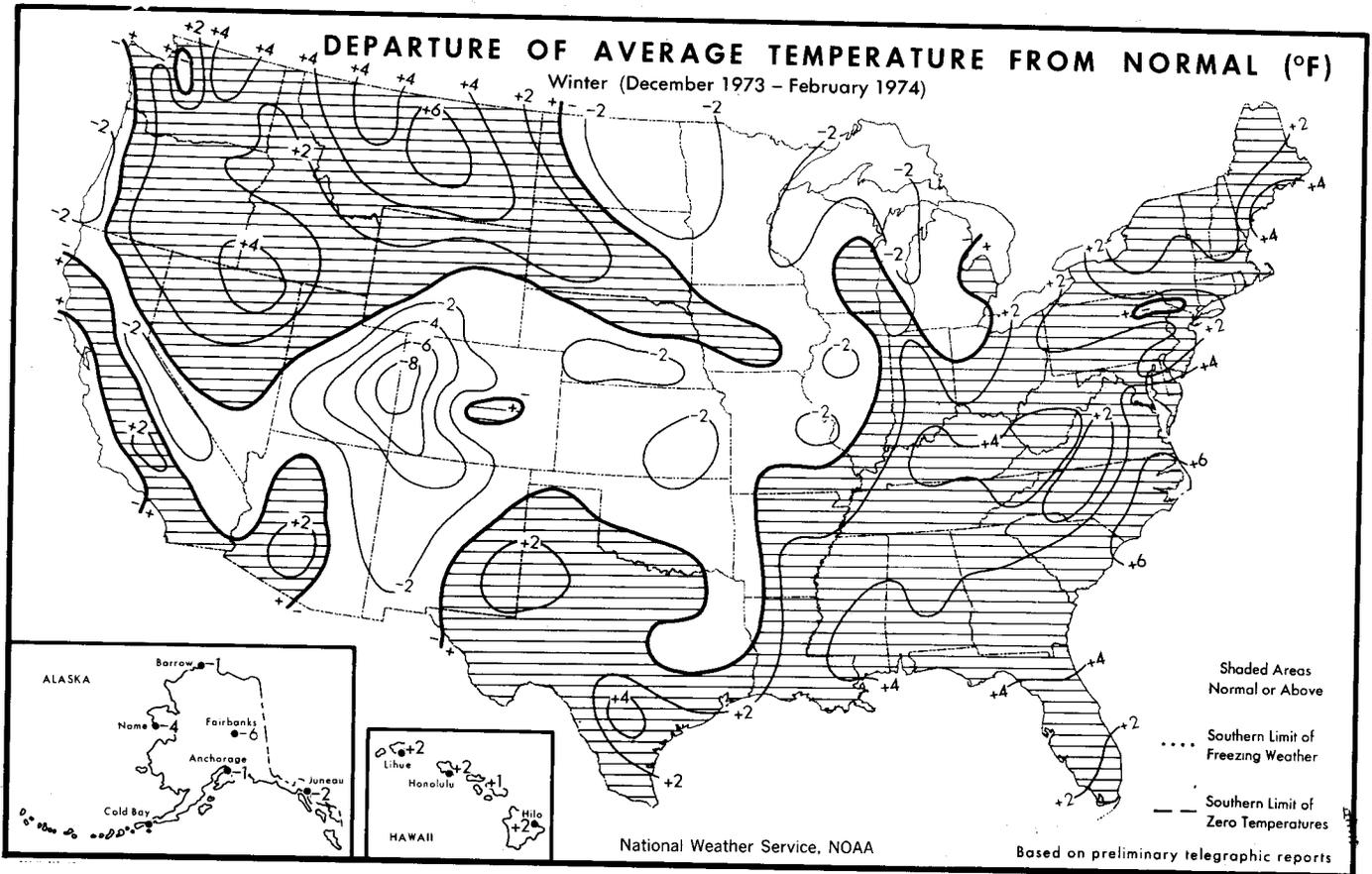
**WEST VIRGINIA:** Temperatures in northeast area ranged above normal, near normal elsewhere. Precipitation scattered through entire week, above normal except for northwest near normal and northeast below normal.

Cool, damp weather limited activities to caring for livestock and routine chores. Spring flowers and budding of trees show little development from previous week.

**WISCONSIN:** Week began mild with high temperatures near 50° in south Monday. Gradual cooling until late in week when a bitter cold arctic air mass moved in. Nighttime temperatures below zero over much of State on weekend. Record lows for date reported throughout State Sunday. Precipitation light and averaged less than 0.25 in. most areas, falling as light snow mainly on Friday.

**WYOMING:** Precipitation widespread with more than average amounts falling over most of State. Hecla received most with 1.35 in. Temperatures averaged near normal, very warm first of week and cold second half. Extremes: 72° at Basin and Torrington, 12° below zero at Dubois.

Calving, lambing, and shearing continued. Snow, cold weather end of week halted soil preparation activities. Wheat and ranges starting to green up. More moisture needed many areas. Cattle on corn stalks where available.



**WINTER (Dec. 73 - Feb. 74)**

**HIGHLIGHTS:** A mild winter with plentiful moisture. Temperatures averaged well above normal east of the Mississippi River, in the Northwest, and the northern and southern Plains. The only unusually cold area was the southern Rockies. Precipitation was about normal or above over most of the Country. The major exception was in Texas and New Mexico, which experienced the driest winter in many years.

**PRECIPITATION:** Precipitation amounts ranged from only a trace in parts of Texas to 57.20 in. at Quillayute, Wash. Rainfall totals were generally above normal. Most of the Corn Belt received at least 150 percent of normal rainfall. Lubbock, Texas was only 6 percent of normal for the 3-month period; San Angelo, 4 percent.

December was the wettest of the three months. Total precipitation was highly variable in December, ranging from over 20.00 in. along the Washington-Oregon coast to nothing in much of Arizona, New Mexico, and Texas. Many new precipitation records were established: Caribou, Me., 7.97 in.; Pendleton, Ore., 4.68 in.; Glasgow, Mont., 0.78 in. The heaviest precipitation fell at midmonth as an intense low pressure system dumped heavy snow from the mid-West to the Eastern Seaboard.

January precipitation was about normal over most of the Nation. Unusually heavy precipitation was confined to the Mississippi River Valley. February turned off generally drier than normal in most areas.

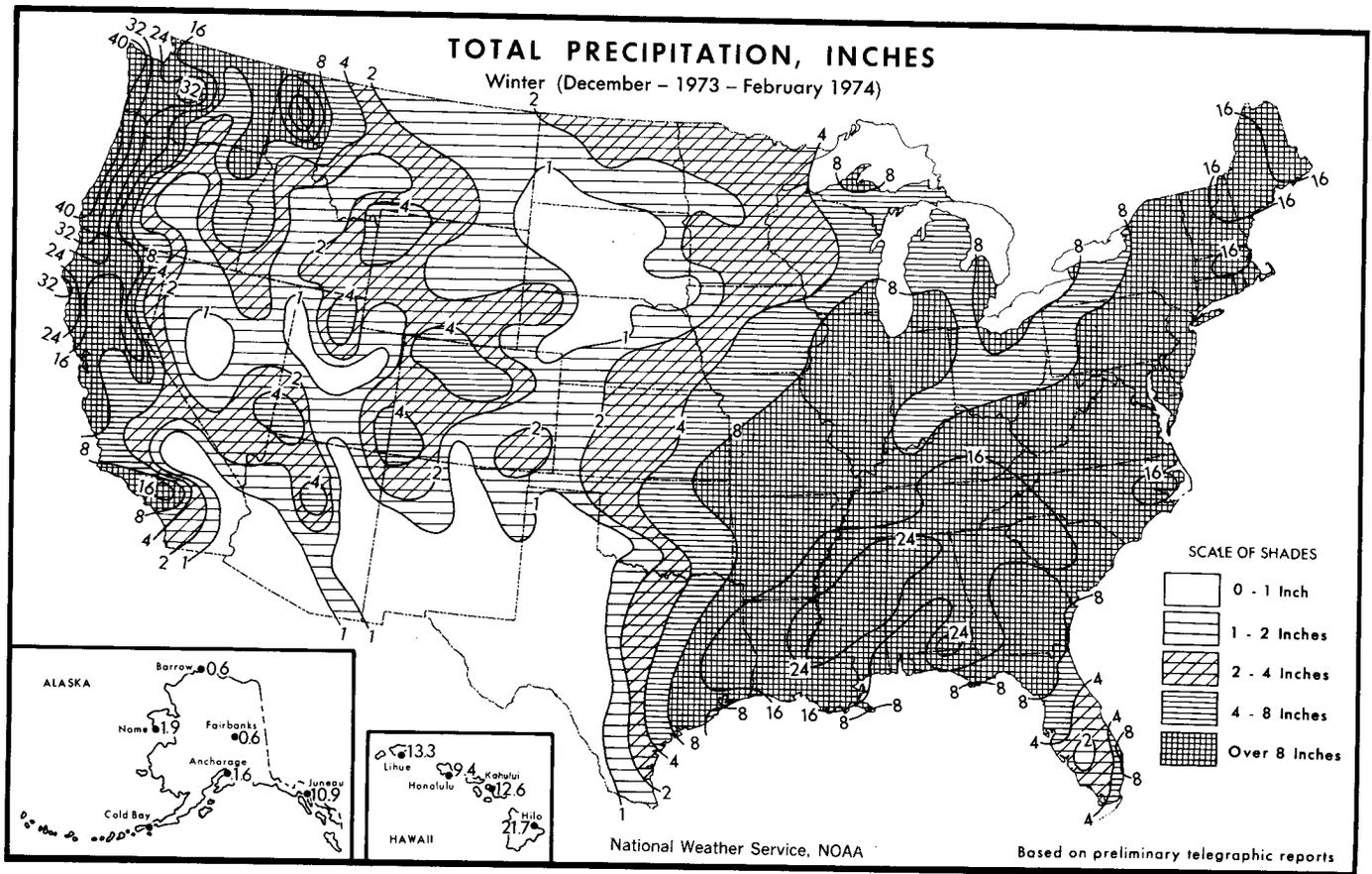
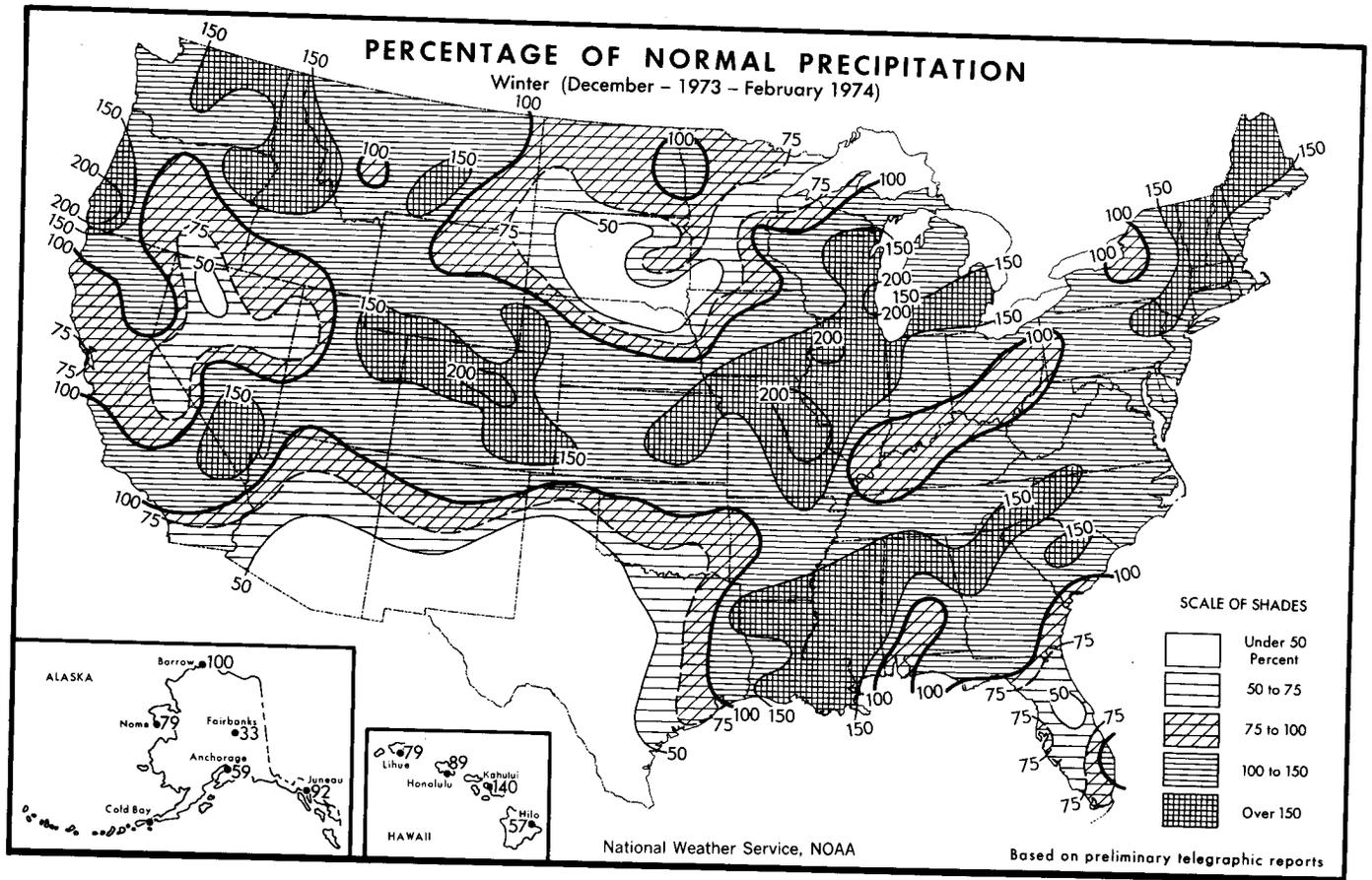
**TEMPERATURE:** A generally mild winter in most areas

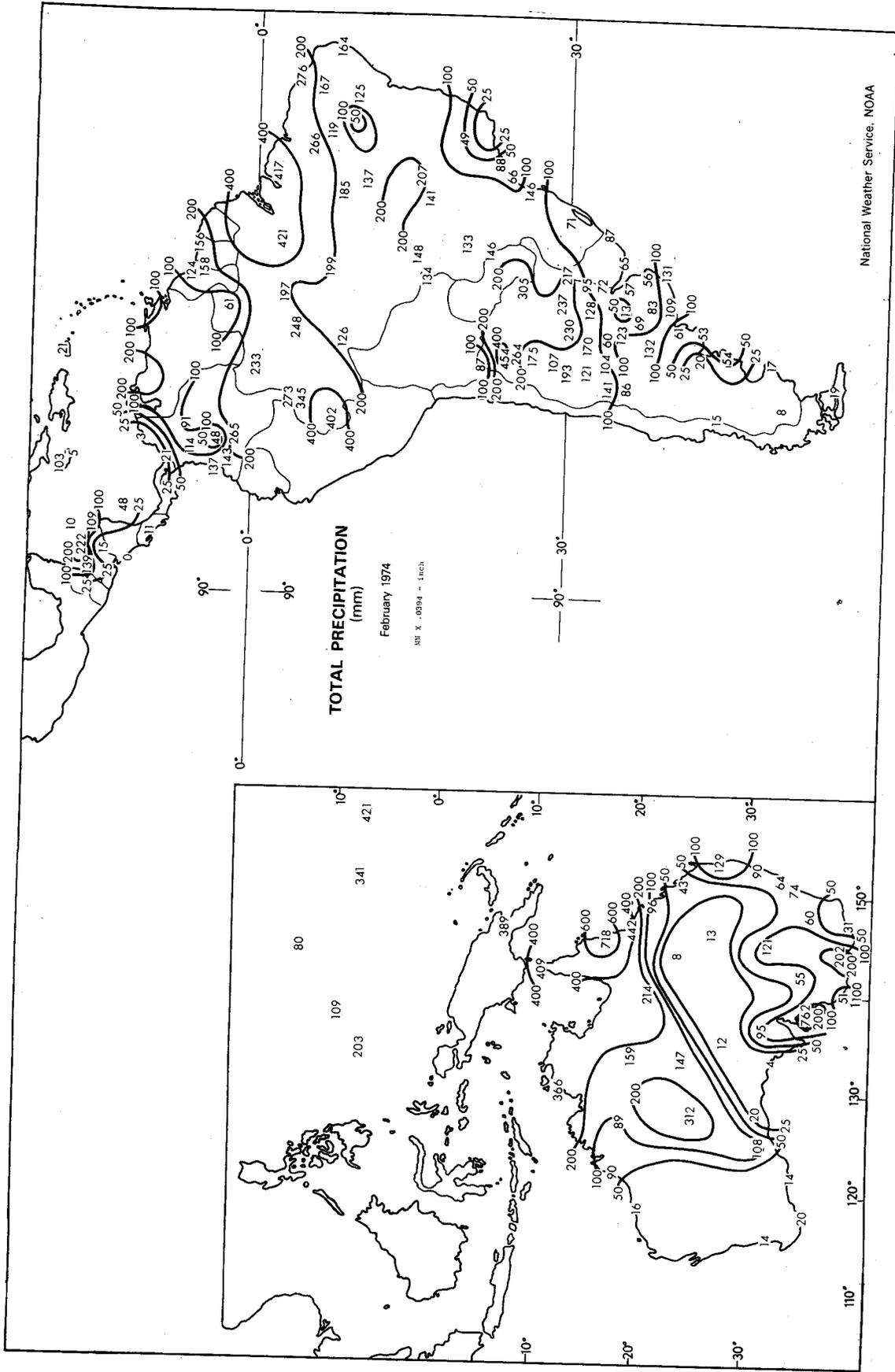
of the Country provided a big boost to overcoming tight heating fuel supplies. Below normal temperatures were confined to the less populated Plains States.

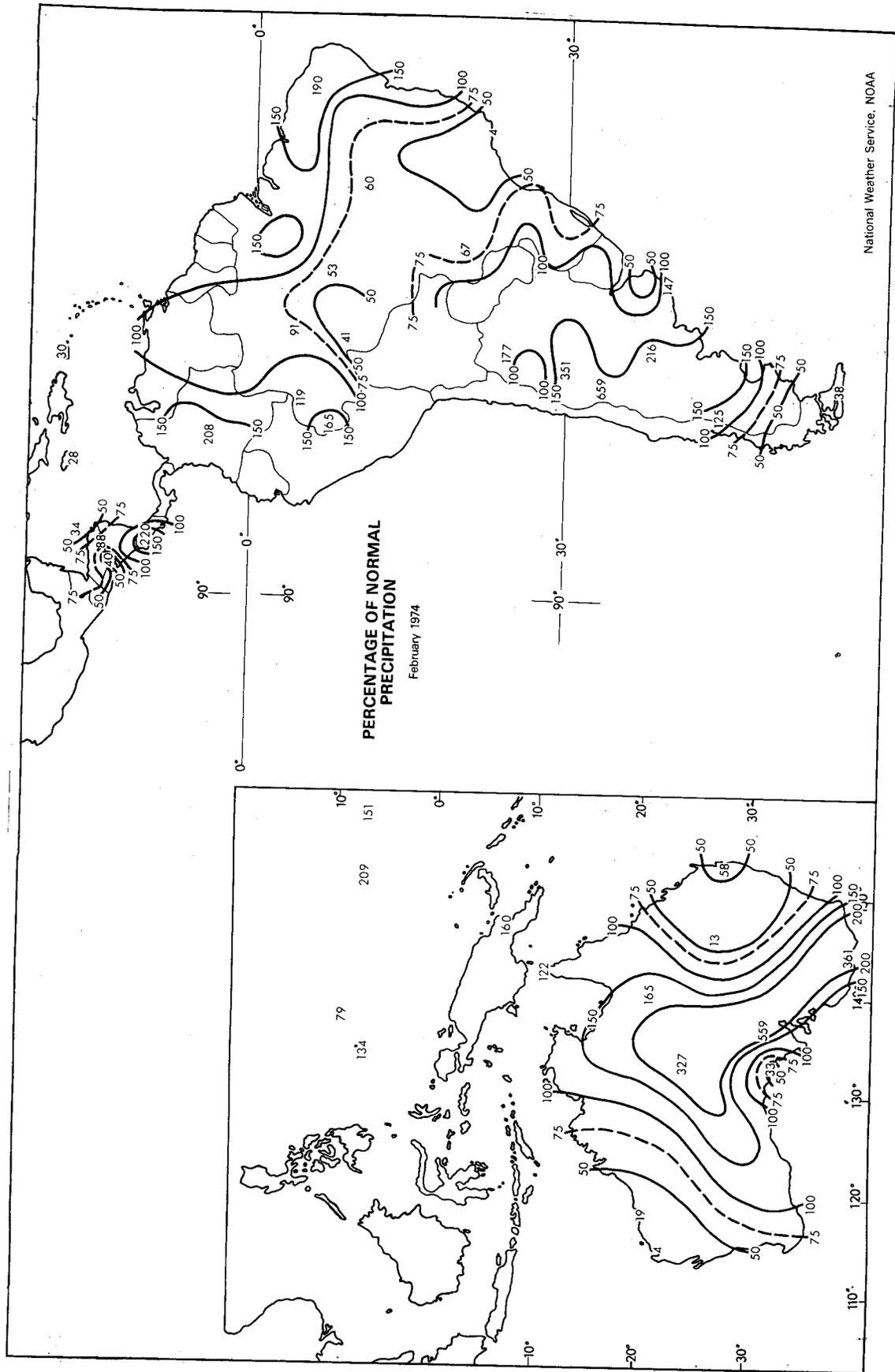
The eastern and western third of the Nation averaged warmer than normal in December, while the central third was below normal, particularly over the northern Plains and western Corn Belt. It was one of the warmest winters on record in parts of New England, the Carolinas, and the Northwest. Portland, Me., averaged 34°, 8° above normal, which is the warmest December since 1923. Wilmington, N. C., averaged 55° (+7°) which is the 2d warmest on record, exceeded only by 57.1° in 1956.

Extremes were the general rule in January over the Nation with record cold the first two weeks, and record warmth the last two in most areas. Overall, temperatures averaged 3° to 12° warmer than normal east of the Mississippi and 1° to 4° warmer in parts of the far West. The central Great Plains and Rocky Mountain States averaged 3° to 6° below normal.

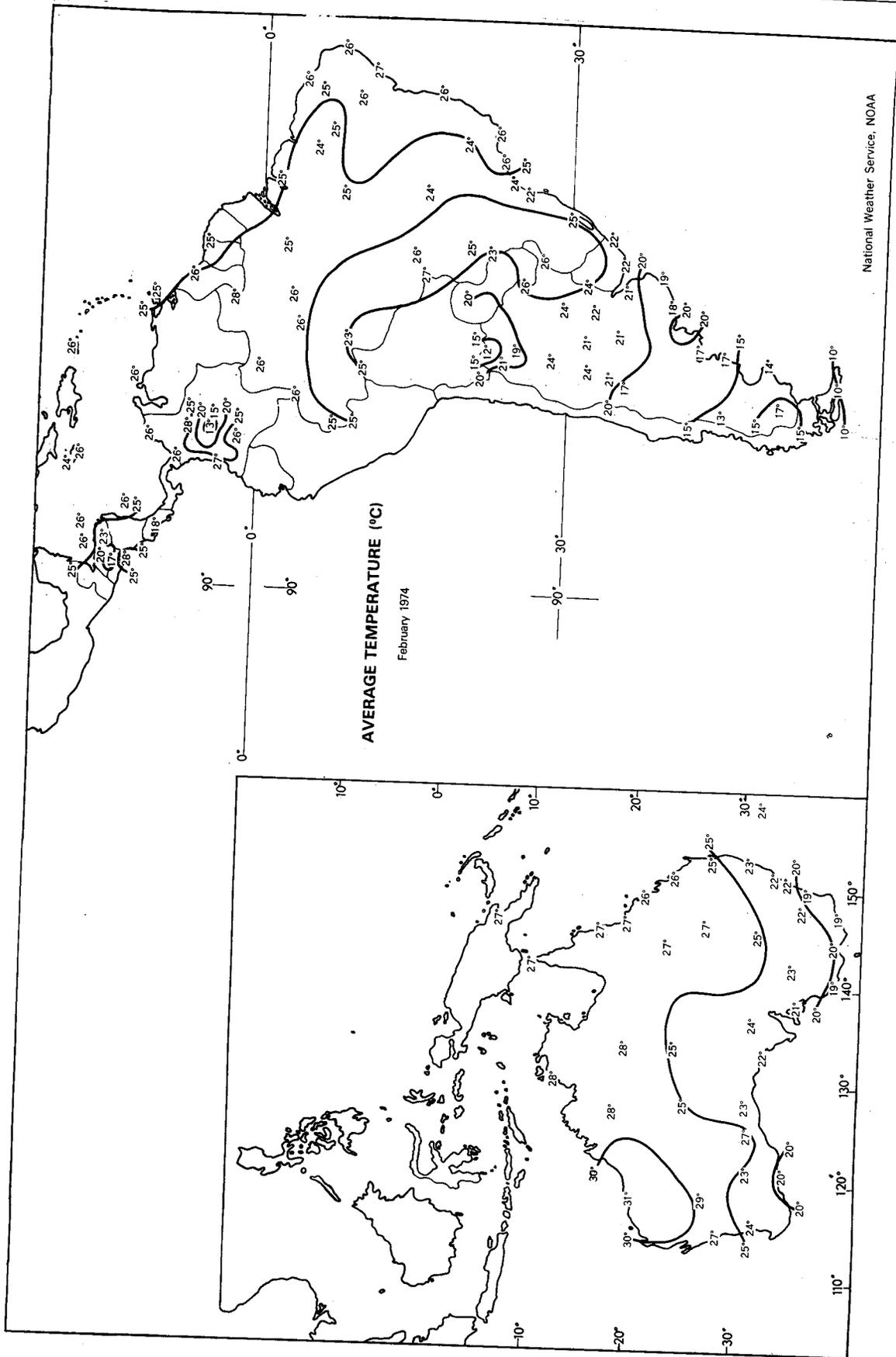
The greatest February departures in average monthly temperatures occurred over the Rocky Mountain States, although the greatest variations during the month occurred east of the Rockies. Unusually mild temperatures persisted over the northern Rockies most of the month, and the unusual cold in the Southwest. Temperatures to the east were extremely cold early in the month, while later in the month, temperatures began a push for an early spring.



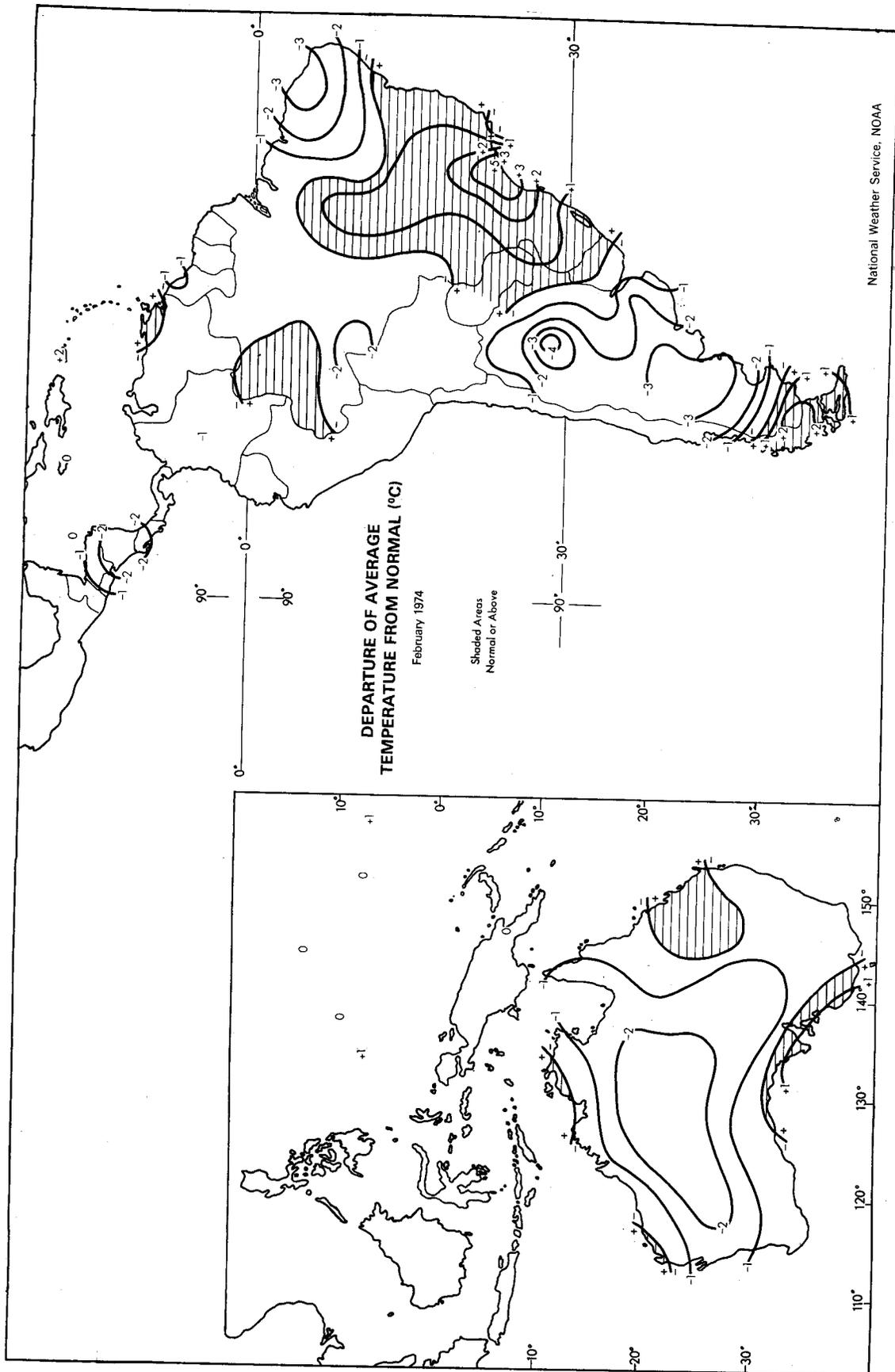




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210

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