

Weekly Weather & Crop Bulletin

U. S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration

U. S. DEPARTMENT OF AGRICULTURE
Statistical Reporting Service

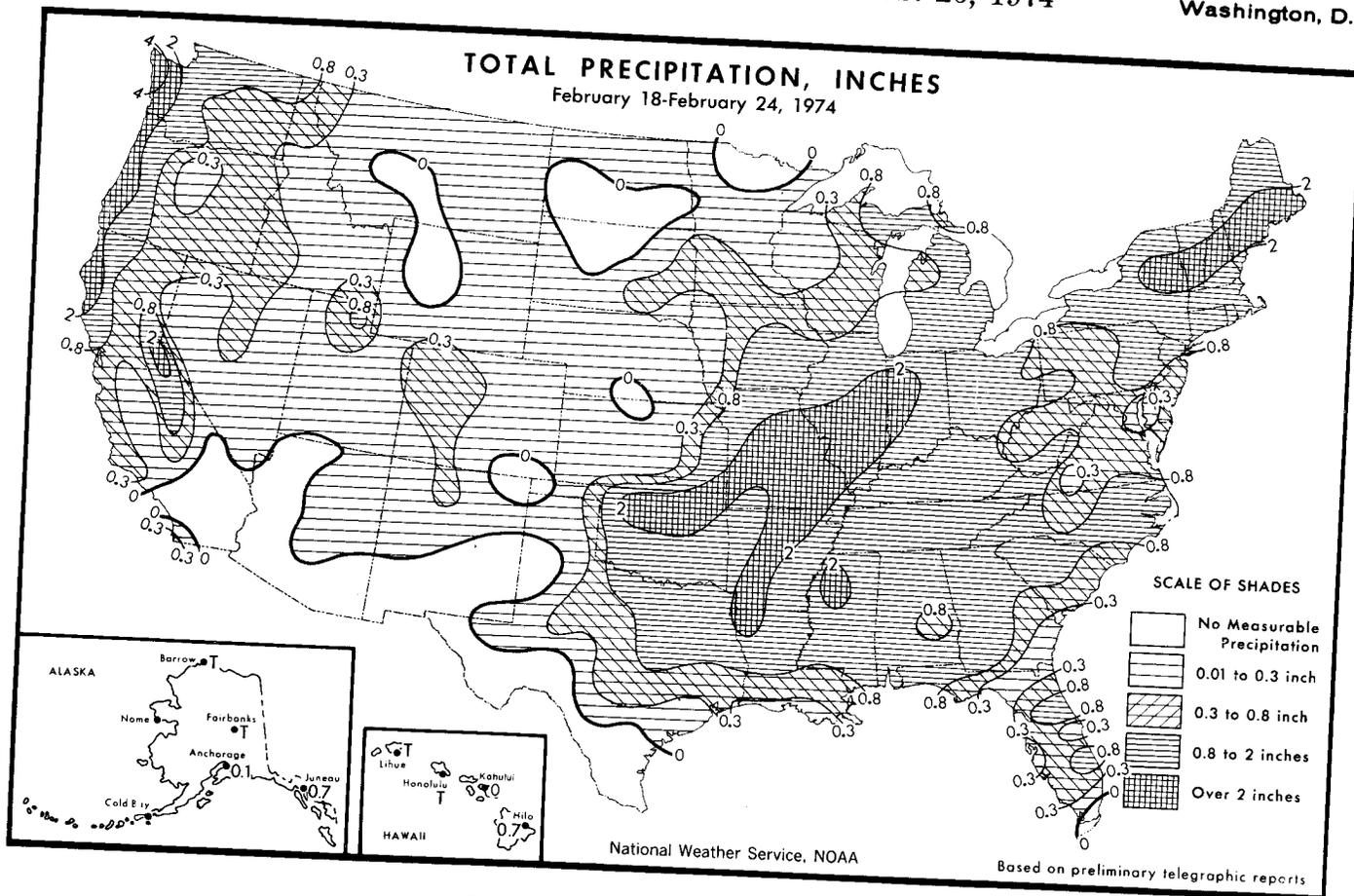
Volume 61, No. 9

Feb. 26, 1974

Washington, D. C.

TOTAL PRECIPITATION, INCHES

February 18-February 24, 1974



NATIONAL WEATHER SUMMARY

HIGHLIGHTS: Heavy precipitation fell over much of the eastern U. S. Over 2.00 in. drenched Missouri, southern Illinois, northeast Oklahoma and parts of Arkansas and New England. Typical winter rains dropped another 2.00 to 4.00 in. rain along the upper Pacific Coast. Above normal temperatures dominated most of the Nation from the Rockies eastward, while the Southwest was much colder than usual. Frontal activity sparked numerous thunderstorms and tornadoes throughout the Southeast, causing considerable personal injury and property damage.

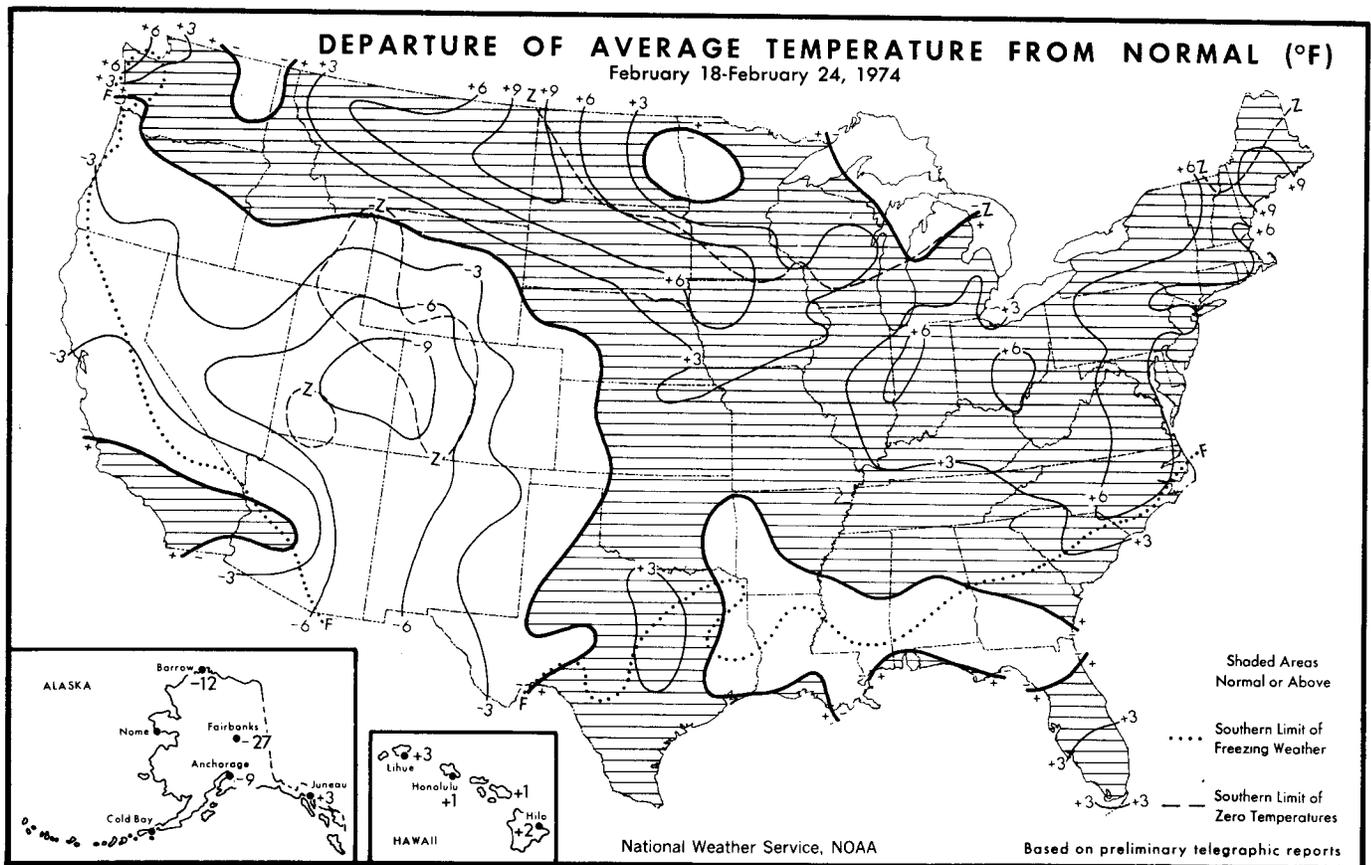
PRECIPITATION: The western half of the Nation received only light precipitation except for the Pacific Northwest coastal areas where 2.00 to 4.00 in. of rain fell. Considerable precipitation fell on the eastern U. S. with heaviest amounts concentrated in Oklahoma, Missouri, and Illinois. St. Louis, Mo., totaled 3.41 in. for the week; Tulsa, Okla., 3.75 in. Only traces or less were

measured along the Mexico border from southern Texas to the Pacific Coast.

Snow blanketed parts of Utah, Arizona, New Mexico, Colorado and Wyoming on Monday. Six inches of new snow in 6 hours accumulated at Lander, Wyo., while Denver and Colorado Springs reported 2 in. and 5 in., respectively. A Low over Oklahoma produced heavy thundershower activity, dropping 1.00 in. or more rain from Tulsa, Okla., to Springfield, Illinois.

The rain spread eastward on Tuesday as a cold front moving through the Southeast triggered widespread thunderstorms and tornadoes. A car, mobile home and ten thousand chickens were destroyed in Bullock County, Ala. Heavy rains drenched parts of the Southeast with 1.24 in. falling over Albany, Ga., in only six hours.

Snow fell along a stationary front reaching from North Dakota to a Low in northeast New Mexico, capping the Colorado Mountains with 6 to 14 in. of snow. Locally heavy snows were reported in north-



ern New England. Newport, Vt., received 6 in. and Runford, Me., got 5 in.

Thunderstorms dumped heavy rains measuring over 2.00 in. on the Shreveport, La., area accompanied by hail and wind gusts up to 40 mph on Thursday. Newspapers reported that a tornado injured 13 persons, uprooted trees, overturned house trailers and knocked out power along a 2-mile stretch near Monticello, Miss.

Moderate to heavy rains soaked Missouri and west-central Illinois with some local flooding reported. A Low over southern Lake Michigan produced snow from Missouri and eastern Iowa to northern Michigan and strong northerly winds gusting up to 50 mph brought 3 ft. snowdrifts to Chicago, Ill.

Snow blanketed Nebraska and Kansas stretching toward eastern Montana, as a result of a Low in Kansas. Over 2 in. of snow covered northeast Nebraska and heavy snow squalls dumped 9 in. of new snow over Utica, N. Y., in only eight hours.

Sunday a winter storm brought new snow to Chicago, Ill., 4 in.; Indianapolis, Ind., 6 in.; Dayton, Ohio, 3 in.

TEMPERATURE: Most of the Nation experienced mild temperatures this week. Temperature averages for the week of 9° above normal were reported through eastern Montana and western North Dakota, while

much of the Appalachian area up through New England recorded temperatures 6-8 degrees above normal.

Mild temperatures settled over many parts of the country, particularly in the Plains States. Early morning temperatures hovered near the 50° mark as far north as Kansas and Missouri.

Mild temperatures hitting the 50's reached north into parts of Montana and South Dakota, the mid-Atlantic Coast and along the Pacific Coast to the southern Oregon border.

Early afternoon temperatures topped the 50° mark on Wednesday from southeast Nebraska through Missouri to Virginia, while Oklahoma reported 60°. The warmest spot was Cotulla, Tex., with a high of 90°.

Temperatures at 2:00 p.m. Thursday ranged from 84° at Fort Myers, Fla., to 15° at Grand Forks, N. Dak. At Baltimore, Md., the mercury rose to a record-breaking 62° on Friday, replacing the old record of 53° for this date. Saturday, early afternoon temperatures fell below 10° from North Dakota through northern Michigan. Gila Bend, Ariz., recorded the highest temperature in the Nation; 82°.

As the week ended on Sunday, a high pressure centered over the Dakotas pushed cold Canadian air into the Plains and Mississippi Valley. Temperatures were below zero from the Dakotas to northern Michigan.

NATIONAL AGRICULTURAL SUMMARY

AGRICULTURAL HIGHLIGHTS: Winter wheat in Kansas continued to turn green and show growth but strong winds and blowing soil caused some damage to the crop in parts of Kansas and Oklahoma. Cotton, corn, and sorghum planting gained momentum in southern Texas. Orchard pruning and care was active in many areas. Calving and lambing increased.

SMALL GRAINS: Winter wheat continued to turn green and show new growth in Kansas. Most fields there still lack solid vegetative ground cover. Farmers continued to apply nitrogen to wheat but supplies were short in many areas. Soil moisture is adequate except along the western edge of Kansas. Strong, gusty winds blew some soil causing locally severe damage to wheat on light sandy soils in southcentral Kansas. Topsoils in western Oklahoma remained dry and some blowing occurred, but snow and rain in central and eastern Oklahoma improved wheat condition. Greenbugs and cutworms have caused damage in several southwest and west-central Oklahoma counties.

Winter wheat is reported in good condition in eastern Colorado and Nebraska. However, the situation is bleak on the Texas High and Low Plains, an area which encompasses most of the northwestern part of the State including the panhandle. Monthly precipitation over most of this area has averaged less than half of normal beginning in September 1973, and winter wheat there is in poor condition with grazing restricted to irrigated fields.

Montana winter wheat remains fair to good and winter grains showed a tinge of green in lower elevation areas of southern Idaho. Late planting of winter wheat in eastern Washington tapered off. Freezing and thawing caused some heaving of wheat there. Northwest farmers actively topdressed wheat with fertilizer as supplies became available.

Small grains are doing well in California and Arizona and are generally in good to excellent condition throughout the South from East Texas to Virginia except in lowland areas with excessive soil moisture.

OTHER CROPS: Cotton seeding started to move northward in Texas from the extreme southern part. Field preparations for the 1974 cotton crop are well underway in Arizona and California.

Corn and sorghum planting gained momentum in southern areas of Texas. Most farmers there are ready to plant but waiting for warmer weather and adequate soil moisture.

Tobacco farmers in North Carolina and Tennessee seeded some tobacco beds. Georgia tobacco plants are reported good to excellent but becoming too large.

Potato planting in the Knox-Haskell area of Texas is about 30% complete.

Sugar beets made satisfactory progress in Arizona.

FRUITS AND NUTS: California fruit and nut growers continued making good progress pruning, spraying, cultivating, and fertilizing orchards. Desert area grapes showed new growth; early almond trees are in full bloom and bloom began on early prune, apricot and peach varieties. The Navel orange harvest remained active in the San Joaquin Valley and in southern California where strawberry picking increased.

Washington berry growers pruned, cut, and tied raspberry and blueberry bushes. Orchard pruning was also active in Idaho and in the mid-Atlantic States.

The Texas citrus harvest remained active with heavy backlogs at processing plants. Citrus trees there are blooming and conditions vary with some wood damage apparent from the December freeze.

Florida citrus tree and fruit conditions are excellent; blooming progressed slowly due to cool temperatures.

VEGETABLES: Movement of Florida vegetables was steady last week. Cabbage loadings were heavy, but off some from the previous week. Celery and tomatoes declined while sweet corn and peppers moved up substantially. Snapbeans increased, lettuce held steady.

All vegetables in the Texas Lower Rio Grande Valley are rated in good condition with near ideal growing conditions. Harvesting of cabbage, carrots and lettuce was active. The onion harvest started but will be light until mid-March. Cabbage and carrot harvesting continued in the San Antonio-Winter Garden area and spring vegetable planting began. Cucumber and watermelon planting continued in Gulf Coastal Bend.

Lettuce harvesting held steady at Imperial, California but is expected to increase. Carrot digging increased in the desert area of California while cabbage volume decreased. Celery harvesting declined in the south coast and neared completion at Chula Vista. In Arizona, lettuce harvesting continued in the Yuma area and planting for later harvest made good progress in the central and southeast.

PASTURES AND LIVESTOCK: Pastures in southern Idaho and western Washington started to green last week. Ranges in the southern Great Plains are grazed short and wheat grazing is limited. Early pastures are greening in Kentucky. Most pastures in the South are rated good to excellent.

Calving and lambing gained momentum northward into Montana and the Northwest. Cattle are in good condition generally Nationwide but are still on winter rations in most areas.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., Feb. 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 . . .	48	0	1.4	0	La. Baton Rouge . . .	55	0	.3	-1.0	Youngstown . . .	31	+3	.6	0
Mobile	56	+1	1.1	-.2	Lake Charles . . .	55	-1	.3	-.8	OKLA. Okla. City . . .	44	+1	1.8	+1.4
Montgomery	51	-1	.5	-.7	New Orleans . . .	55	-1	.3	-1.0	Tulsa	44	+1	2.8	+2.3
ALASKA Anchorage . .	10	-9	.1	-.1	Shreveport	51	-1	2.2	+1.3	OREG. Astoria	42	-2	2.6	+ .7
Barrow	-31	-12	T	0	MAINE. Caribou . . .	21	+7	1.2	+ .6	Burns	30	-2	.5	+ .2
Fairbanks	-27	-27	T	-.1	Portland	33	+9	1.8	+ .9	Medford	39	-3	1.2	+ .7
Juneau	32	+3	.7	-.1	MD. Baltimore . . .	41	+5	.2	-.5	Pendleton	43	+2	.6	+ .3
Kodiak	---	---	---	---	MASS. Boston	37	+6	1.8	+ .9	Portland	44	0	1.2	+ .2
Nome	---	---	---	---	Chatnam	36	---	1.3	---	Salem	43	-1	1.5	+ .4
ARIZ. Flagstaff . . .	29	-2	.1	-.3	MICH. Alpena	19	0	1.2	+ .8	PA. Allentown	39	+9	1.0	+ .3
Phoenix	56	0	T	-.1	Detroit	31	+3	1.4	+ .9	Erie	31	+5	.6	0
Tucson	49	-5	0	-.2	Flint	28	+3	1.6	+1.2	Harrisburg	39	+6	.9	+ .3
Winslow	33	-8	T	-.1	Grand Rapids	26	+1	1.3	+ .9	Philadelphia	40	+5	.4	-.3
Yuma	58	-2	0	-.1	Houghton Lake	19	0	.8	+ .5	Pittsburgh	35	+5	1.0	+ .4
ARK. Fort Smith . . .	44	-1	1.4	+ .6	Lansing	27	+2	1.5	+1.1	Scranton	33	+5	1.1	+ .6
Little Rock	45	+1	2.0	+ .9	Marquette	20	-1	.9	+ .5	R.I. Providence . . .	37	+7	1.6	+ .7
CALIF. Bakersfield . .	54	0	.1	-.1	Muskegon	25	0	1.4	+1.0	S.C. Charleston . . .	53	+2	.3	-.6
Eureka	45	-4	2.2	+1.0	S. St. Marie	15	-1	.6	+ .2	Columbia	53	+5	1.1	+ .1
Fresno	49	-2	.1	-.3	MINN. Duluth	16	+2	.1	-.1	Greenville	47	+2	1.1	-.1
Los Angeles	60	+2	T	-.7	Internatl Falls . . .	11	+2	0	-.2	S.D. Aberdeen	23	+6	.1	-.1
Red Bluff	47	-4	.5	-.2	Minneapolis	23	+5	.2	0	Huron	27	+7	.3	+ .1
San Diego	58	+1	.4	0	Rochester	21	+2	.2	0	Rapid City	30	+3	.1	0
San Francisco	49	-3	.8	+ .1	St. Cloud	17	+2	.2	0	Sioux Falls	27	+6	.2	-.1
Stockton	48	-2	.3	-.2	MISS. Jackson	50	-1	1.7	+ .5	TENN. Chattanooga . .	45	+1	1.4	+ .1
COLO. Denver	30	-4	.3	+ .1	Meridian	51	0	1.5	+ .2	Knoxville	46	+2	1.0	-.2
Grand Junction	25	-10	.4	+ .2	MO. Columbia	35	0	2.2	+1.7	Memphis	46	+1	1.9	+ .7
Pueblo	34	-2	.1	0	Kansas City	36	+1	1.1	+ .7	Nashville	43	+1	1.4	+ .3
CONN. Bridgeport . . .	37	+5	.9	+ .2	St. Louis	36	0	3.4	+2.8	TEX. Abilene	50	+1	.6	+ .4
Hartford	35	+7	1.4	+ .6	Springfield	39	+1	1.8	+1.2	Amarillo	39	-2	.1	0
D.C. Washington . . .	46	+8	1.1	-.5	MONT. Billings	34	+5	T	-.2	Austin	57	+3	.4	-.4
FLA. Apalachicola . .	58	+1	.5	-.5	Glasgow	24	+7	T	-.1	Beaumont	55	-1	.2	-.8
Daytona Beach	61	+1	1.0	+ .2	Great Falls	34	+6	T	-.2	Brownsville	65	+1	T	-.4
Ft. Myers	69	+4	.6	0	Havre	33	+4	.2	+ .1	Corpus Christi	62	+1	0	-.5
Jacksonville	56	-1	.5	-.4	Helena	31	+4	T	-.1	Del Rio	59	+2	0	-.3
Key West	74	+2	T	-.4	Kalispell	31	+5	.2	0	El Paso	45	-5	T	-.1
Lakeland	65	+2	.3	-.4	Miles City	32	+9	.1	0	Fort Worth	53	+3	1.0	+ .4
Miami	73	+5	T	-.5	Missoula	32	+3	.2	0	Galveston	59	+2	T	-.6
Orlando	63	+1	.2	-.6	NEBR. Grand Island . .	31	+2	-.1	-.1	Houston	56	0	.3	-.6
Tallahassee	54	-2	.2	-1.1	Lincoln	32	+2	-.1	-.1	Lubbock	44	0	T	-.1
Tampa	63	+1	.2	-.6	Norfolk	30	+5	T	-.2	Midland	50	+1	.3	+ .2
W. Palm Beach	71	+4	.3	-.4	N. Platte	29	0	T	-.1	San Angelo	51	-1	T	-.2
GA. Atlanta	48	+2	1.3	+ .1	Omaha	31	+4	.1	-.2	San Antonio	57	+1	T	-.5
Augusta	51	+2	.5	-.5	Valentine	28	+2	.1	0	Victoria	60	+2	T	-.6
Macon	52	+1	.9	-.3	NEV. Ely	23	-6	.1	0	Waco	55	+3	1.2	+ .6
Savannah	54	+1	.1	-.7	Las Vegas	47	-3	.1	0	Wichita Falls	50	+3	1.5	+1.2
HAWAII. Hilo	73	+2	.7	-2.8	Reno	35	-3	-.1	-.1	UTAH. Blanding	27	-7	.1	-.1
Honolulu	74	+1	T	-.6	Winnemucca	34	-1	.2	0	Salt Lake City	29	-6	.6	+ .3
Kahului	73	+1	0	-.6	N.H. Concord	30	+6	1.7	+1.1	VT. Burlington	25	+5	1.3	+ .9
Lihue	74	+3	T	-1.0	N.J. Atlantic City . . .	40	+5	.3	-.6	VA. Lynchburg	44	+5	.3	-.4
IDAHO. Boise	37	0	.4	+ .1	Trenton	41	+7	.6	-.1	Norfolk	48	+6	.8	0
Lewiston	41	+1	.1	-.1	N.MEX. Albuquerque . .	35	-6	.1	0	Richmond	47	+7	.7	-.1
Pocatello	27	-4	.3	+ .1	Roswell	43	-1	T	-.1	Roanoke	43	+4	.1	-.7
ILL. Cairo	42	+1	1.6	+ .6	N.Y. Albany	31	+6	1.3	+ .7	WASH. Colville	31	-2	1.0	+ .7
Chicago	31	+2	1.5	+1.1	Binghamton	31	+8	.9	+ .3	Omak	33	+1	1.0	+ .7
Moline	30	+3	1.4	+1.0	Buffalo	30	+5	1.2	+ .6	Quillayute	40	+8	4.0	+1.1
Peoria	31	+2	1.5	+1.1	New York	40	+6	.7	-.1	Seattle-Tacoma	44	+1	1.5	+ .5
Rockford	28	+2	1.2	+ .9	Rochester	31	+5	1.0	+ .4	Spokane	34	0	.4	0
Springfield	35	+3	2.5	+2.0	Syracuse	30	+4	1.0	+ .3	Walla Walla	44	+2	.4	+ .1
IND. Evansville	42	+5	1.4	+ .5	N.C. Asheville	43	+3	1.5	+ .5	Yakima	39	+1	.4	+ .2
Ft. Wayne	33	+4	1.4	+ .9	Charlotte	48	+3	.8	-.2	W.Va. Beckley	38	+5	.8	-.1
Indianapolis	37	+5	1.8	+1.2	Greensboro	46	+5	.7	-.1	Charleston	42	+5	.7	-.1
South Bend	33	+6	1.5	+1.0	Hatteras	51	+5	1.5	+ .4	Huntington	43	+6	.6	-.1
IOWA. Burlington . . .	31	+2	1.2	+ .8	Raleigh	50	+7	.9	+ .1	Parkersburg	44	+8	.7	0
Des Moines	30	+4	.8	+ .5	Wilmington	53	+4	.7	-.2	WIS. Green Bay	23	+4	.4	+ .1
Dubuque	26	+2	.8	+ .5	N.DAK. Bismarck	19	+4	T	-.1	La Crosse	25	+3	.5	+ .3
Sioux City	31	+6	.1	-.2	Fargo	12	-1	T	-.1	Madison	25	+3	.4	+ .1
KANS. Concordia	36	+3	T	-.3	Williston	25	+9	T	-.1	Milwaukee	26	+2	1.2	+ .9
Dodge City	36	0	T	-.2	OHIO. Akron-Canton . . .	33	+4	.8	+ .2	WYO. Casper	23	-5	.2	+ .1
Goodland	30	-2	.2	+ .1	Cincinnati	38	+4	1.2	+ .4	Cheyenne	28	-1	T	-.1
Topeka	37	+2	1.2	+ .9	Cleveland	35	+6	1.1	+ .5	Lander	24	-3	T	-.2
Wichita	39	+1	.2	-.1	Columbus	37	+6	.8	+ .2	Sheridan	30	+3	.2	0
KY. Lexington	41	+5	1.2	+ .3	Dayton	36	+5	1.1	+ .5	P.R. San Juan	78	+3	.3	-.2
Louisville	42	+5	1.3	+ .4	Toledo	31	+3	1.1	+ .6					

Based on 1941-70 normals.

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: Rapidly moving storm systems produced heavy rains, brisk winds and occasional severe weather. Warm with rain on 19th and 22d. Sunny and cool 20th and 23d. Quite cold and windy Saturday night and Sunday. Low 20's Tennessee Valley Sunday morning.

Rain and wet ground further delayed preparation of land for spring planting. Many low-lying fields and pastures remain very wet and boggy from continued heavy rains past few weeks. Fieldwork mainly plowing and applying fertilizer and lime to driest fields early week. Small grains excellent except lowland fields where moisture excessive. No doubt some acreage will be lost if wet weather continues. Growers able to topdress acreage for grain in a few upland fields. Supplemental feeding of cattle reduced as clover and fescue pastures provided good grazing in central and south.

ARIZONA: Active cold front on 19th dropped temperatures and brought snow to north above 5,000 feet, light rain to southwest deserts. Temperatures 4° to 8° subnormal north, 2° to 5° subnormal south. Heaviest precipitation fell on 19th, Payson got 0.47 in., Phoenix got 0.02 in. High pressure on 23rd returned temperatures near seasonal normal, brought strong, gusty winds all sections.

Small grain planting continued. Early planted fields between jointing, boot stages. Cool temperature limited growth higher elevations. Field preparation 1974 cotton crop well underway, 1973 crop harvest virtually complete. Sugar beet crop progress satisfactory. Haying at seasonal low, many fields used as winter pasture. Lettuce harvest continued Yuma area. Market conditions weak. Planting for later harvest made good progress. Central and southeast. Many fields up to good stands. Mixed vegetable harvest continued active central, west. Later plantings carrots, broccoli, cabbage good progress. Final preparations, planting melons underway Yuma, Salt River Valley. Emergence good Yuma area. Early melons Salt River Valley developing fruit.

Valencia orange harvest underway Yuma, Salt River Valley. Grapefruit harvest active but limited. Few mandarins picked Salt River Valley. Citrus groves all areas flushed with new growth, generally good condition. Early bloom prevalent many groves. Ranges poor to fair. Feed supplies limited, need precipitation. Stockwater short most areas, near adequate Salt River Valley. Soil moisture short. Cattle, calves, sheep, lambs generally fair to good.

ARKANSAS: Near normal temperatures most of State. Coolest northcentral and southeast. Warmest at midweek, cooler on weekend. Extremes: 72° at Texarkana and Hot Springs on 20th, 8° at Gilbert on 25th. Rainfall ranged from about 1.00 to 1.50 in. west third to about 2.50 to 3.50 in. east third. Greatest was 3.56 in. at Georgetown. Most rain fell both early and late in week.

Colder weather and rain curtailed almost all fieldwork. Farmers caring for and feeding livestock. Very little roughage obtained from pasture.

CALIFORNIA: Storms brought precipitation to north and central areas into Tuesday and again on Thursday. South coast had light amounts Wednesday. Freezing temperatures reported in many valley areas north and central. Temperatures averaged subnormal in most sections.

Small grains doing well. Rain needed in south. Planting sugar beets active. Alfalfa growing well. Preparations for planting cotton active. Fruit and nut growers continued good progress pruning, spraying, cultivating and fertilizing. Desert area grapes showed new growth. Early almonds full bloom, beginning on later varieties. Bloom beginning early prunes, apricots, and some early peaches. Tangerine harvest slow. Harvest Navel oranges active San Joaquin Valley and south. Lemon picking progressed. Desert grapefruit harvest continued.

Avocado harvest active south. Citrus and avocados in bloom south. Artichokes slow. Broccoli, cauliflower continued, good volume Santa Maria. In desert, cabbage volume decreased, but carrot digging increased. Celery declined south coast, Chula Vista near completion. Lettuce steady Imperial, expected increase. Strawberries increased south. Processing tomato preparation continued valley areas.

Ranges continue to improve most areas. Rainfall needed to sustain ranges growing season. Windy conditions prevailed most of week south, depleting needed moisture dryland soils. Water supplies good. Supplemental feeding continued, but slightly below normal level. San Joaquin valley sheep stocks pastured native grasses. Lamb, calf crops good condition. Turkey poulters moved to brooder houses. Milk, egg production on seasonal upswing.

COLORADO: Weather quite changeable. Several frontal systems brought light to locally moderate snow most of State. Heaviest precipitation northwest, and mountain areas where totals 0.40 to 1.00 in. Elsewhere totals mostly between 0.10 and 0.50 in. Strong northerly winds gusting to 50 MPH east midweek causing some blowing and drifting snow. Temperatures averaged 1° to 3° above seasonal over east and 3° to 8° subnormal in mountains and west. Highs 20's to 40's most days. Warmest on 19th, several readings in 60's southeast.

Light to moderate snow Sunday night followed by warming hampered farm activities on eastern plains. West slope remains cold with snow cover. Winter wheat greening east and southeast and in good condition. Livestock generally good. Forage supplies adequate.

FLORIDA: Temperatures normal or slightly above. Rainfall moderate to locally heavy except light on southeast coast.

Land preparation continued active. Soil moisture variable, excessive western panhandle, short central and many Gulf Coast areas. Small grains good growth, topdressing continued except wet areas. Tobacco plants large, ready to set. Sugarcane harvest continued. Pastures poor to fair. Cattle and calves fair to good.

Citrus tree and fruit condition excellent. New growth most areas, bloom progressing slowly due to cool temperatures. Rain on 19th helped but more needed. Vegetable movement about steady. Cabbage

loadings heavy, but off some. Celery, tomatoes declined. Sweet corn, peppers up substantially. Snap beans increased. Lettuce, escarole, other leafy crops about steady. Potatoes up sharply after this week.

GEORGIA: Rapid change in weather pattern. Rain beginning, middle, and end of week. Periods of clear skies. Heaviest rain amounts north and mountains, also extreme southwest with up to 3.00 in. Lightest central and south coast, less than 1.00 in. Temperatures averaged 2° to 4° above normal. Weekend fair with cold nights and cool to mild afternoons.

Excessive soil moisture restricted fieldwork. Small grains mostly good, but extensive early heading south of Macon causing concern. Fuel and fertilizer short some areas but central areas mostly adequate. Pastures mostly good. Cattle mostly good but grass tetany poisoning causing problems in some areas. Tobacco plants good to excellent but becoming too large.

HAWAII: Weather dry and favorable. Progress of crops fair to good with heavy irrigation. Yield and quality improved. Supplies of most vegetables adequate. Supplies of bananas and papayas steady. Pastures and cattle in good condition. Sugar harvestings picking up at most plantations. Harvesting of pineapple for fresh fruit active.

IDAHO: Series of storm fronts brought intermittent rain and snow to most areas with strong gusty winds in southern valleys latter half of period. Temperatures slightly above normal averaging in mid-30's. Precipitation above normal most areas. Snow depths increased 2 to 7 in. at high elevation stations.

Farm activity centered on caring for livestock. Weather generally favorable for calving and lambing. Farm flocks mostly lambed, range flock lambing increased. Pastures and winter grains showing tinge of green lower elevation areas south. Plowing started on lighter soils southwest. Pruning active southwest orchards. Potato marketing continued southcentral and east.

ILLINOIS: Temperatures slightly above normal most of week, 40's north, 50's south. Sharp downward trend after Friday, 20's north, 30's south. Precipitation heavy, largest amounts 21st especially south portion. Snow 2 to 5 in. north portions 21st and 22d.

Main activities: Livestock care, machinery repair, and fertilizer application where conditions permitted.

INDIANA: Stormy week. Deep low on 22nd caused extremely high winds along with rain in central and south, and drifting snow extreme northwest on 24th. Snow accumulated 3 to 6 inches in central and northeast clogging roads. Week's precipitation was 1.00 to 1.50 in. over State. Soils frozen 2 to 4 in. deep. Wintery conditions generally limited outside activities. However, frozen soils permitted spreading of fertilizer and seeding of grass and legumes. Major projects included getting equipment ready to begin the 1974 season and usual chores.

IOWA: Temperatures averaged 2° above normal east to 5° above normal west. High of 58° at Council Bluffs on 20th, sharp change to colder on weekend gave a low of 6° below zero at Mason City on 25th.

Rain 1.50 in. fell southeast portion on 21st, which is around 1.00 in. above normal. Belt of heavy snow 3 to 8 in. depth laid down across mid-

dle of State, southwest to northeast on 21st. Total of rain and snow on 20th, 21st and 23rd near west border was about half of normal. Sunny on 19th, 22d, and 24th.

KANSAS: Series of fronts brought rainfall amounts ranging 1.00 in. or more eastcentral and southeast to traces west. Temperatures averaged above normal over State.

Winter wheat continued greening and showed new growth. Some soil blowing, locally severe damage light sandy soils southcentral. Most fields still lack solid ground cover. Some fields southwest lack moisture. Nitrogen topdressing of wheat continued. Fertilizer supplies short many areas. Spring oats 5% planted, equal to 10-year average. Seedbed preparation continued. Soil moisture supplies short western edge of State, adequate elsewhere. Calving, lambing and farrowing in progress. Feed grain, hay and forage supplies adequate.

KENTUCKY: Temperatures near normal except 21st, which was unseasonably warm. Showers 19th, 21st and 22d totaled near 2.00 in. extreme west to near 0.50 in. extreme northeast. Snowfall Sunday accumulated 3 to 4 in. extreme north and east, less than 1 in. elsewhere.

Plowing and land preparation underway, but soil too wet to work many areas. Some corn ground broken, especially west. Fertilizer prices up sharply and high price and lack of supply could reduce total crop production. Winter grains and early grasses mostly green. Cattle good, plenty hay left most areas.

LOUISIANA: Temperatures averaged normal to 3° below. Mild first part of week followed by showers on Thursday. Fair but cooler over weekend. Temperatures dropped to freezing many places Monday morning. Extremes: 76° at a number of stations 20th and 21st and 26° Monroe morning of 18th. Weekly precipitation light to moderate, most areas received less than 0.50 in. Greatest 1-day total 2.03 in. Friday morning at Curtis.

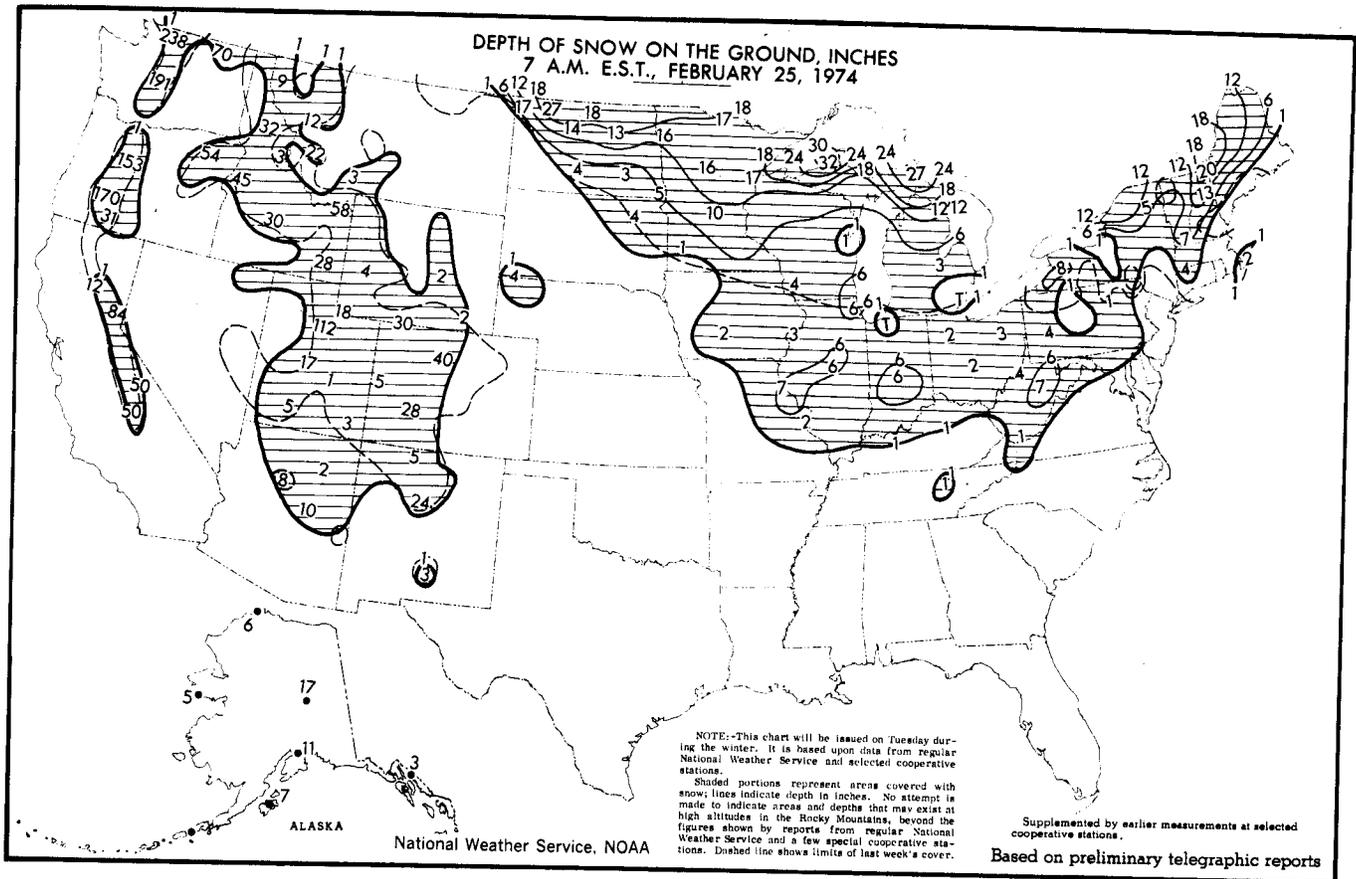
MARYLAND AND DELAWARE: Mild temperatures averaged 2° to 6° above normal. Highs mostly in 60's and low 70's except scattered stations with highs in 50's. Lows ranged from mid-teens to mid-20's. Precipitation over 2 States ranged from less than 0.25 in. to over 2.00 in., heaviest on southern Eastern Shore.

Wet soils continued to limit field activity. Some topdressing of fertilizer on small grains in well drained locations. Some fertilizer stored for late application to assure supplies. Livestock farmers report no major problems with lambing or calving. Respiratory diseases bothering some dairy herds.

MICHIGAN: Warm week. Temperatures averaged from near normal to 4° above normal lower and about 1° above normal upper peninsula. It did not go below freezing 2 nights in southern lower. Coldest over weekend with lows 15° to 20° below zero.

Precipitation fell most days many areas. Heavy rain totaling over 1.00 in. fell through south lower on 21st causing local urban flooding and some local streams overflowed. Over 1 ft. snow fell in some central lower areas that night. Precipitations totaled 0.50 to 0.75 in. north lower, 1.30 to 2.00 central and south lower and 0.30 to 1.00 in. upper.

MINNESOTA: Temperatures 3° to 6° above normal southeast and extreme south and 1° to 3° subnormal



in Red River Valley. Highs upper 30's northeast to lower 50's extreme southwest early week. Lows 8° below zero northeast to upper teens extreme southwest, in zero to 10° above range central.

Precipitation subnormal north, near normal in southwest through eastcentral and above normal extreme southeast. Amounts from none or trace extreme north to 0.50 in. southwest and extreme south falling mostly on 21st. Total snow depths range from 10 to 20 in. northern third and east-central ranging down to 2 in. extreme southeast, and a trace or none extreme southwest. Farm activities routine with concern becoming more evident for fertilizers and other supplies needed for spring crop preparation.

MISSISSIPPI: Heavy rain over State. Most stations reported amounts in excess of 2.00 in. Greatest 24-hour rainfall was 2.40 in. Cool weather early week, warmer than usual by midweek. Extremes: 24° on 17th, 76° on 21st. A cold front moving across State Thursday spawned numerous funnel clouds and damaging winds. Ten persons injured in Lawrence County when a tornado touched down Thursday afternoon. Dry and cool over weekend brought a welcome relief from heavy rains. Soil moisture mostly surplus. Major farm activities: Feeding livestock, repairing farm machinery and fences, applying fertilizer and disking. Fieldwork averaged 0.9 day. Plowing 8% completed, 9% year ago. Hay and other roughage supplies mostly adequate. Feed grain supplies mostly short. Wheat and oats, livestock, and pastures mostly fair.

MISSOURI: Temperatures averaged 3° to 7° above normal, west half had largest departure from nor-

mal. Precipitation heavy and general except for extreme north. Heaviest rainfall in east Ozarks and bootheel.

MONTANA: Pacific air continued to dominate weather over State. Temperatures above normal most divisions. Snow and rain showers. Showers more frequent west with near normal precipitation there. Elsewhere, continued below average moisture. Windy east of divide much of week.

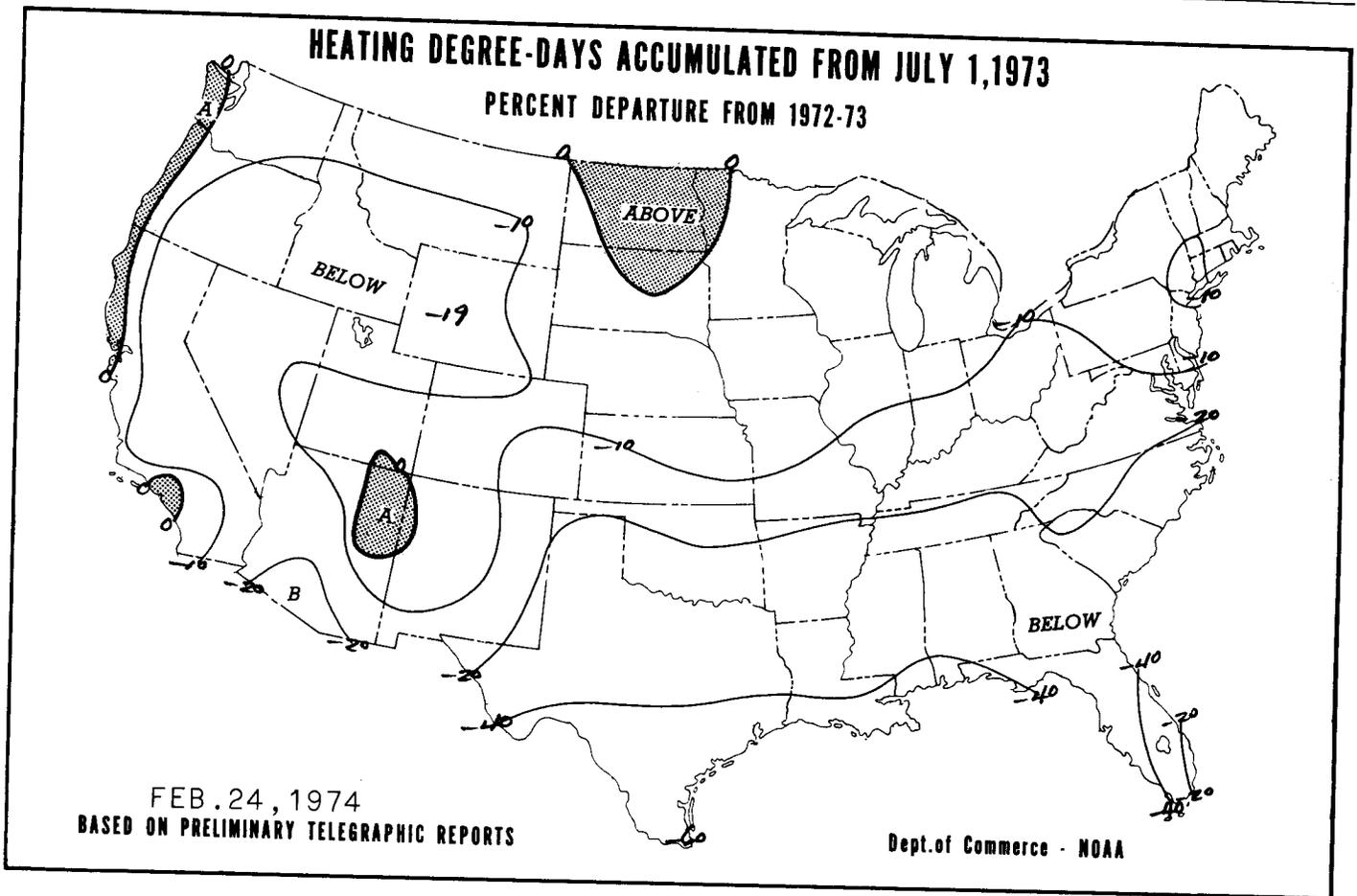
Calving and lambing gained momentum under good weather. Open grazing of hay meadows and stubble fields supplemented hay supplies. Winter wheat remains fair to good.

NEBRASKA: Snow midweek, only small amounts of precipitation. Snow 1 to 3 in. fell over west portion. Temperatures near normal, warm early week and cooler after midweek. Winter wheat and livestock in good condition.

NEVADA: High temperatures averaged 2° subnormal. Lows normal. Extremes: 63° Hawthorne to 1° Owyhee. Precipitation confined to first part of week, 0.79 in. Virginia City and 0.54 in. Owyhee. Owyhee with 2 in. only station with snow on ground. Warm days ideal for calving and lambing, becoming more active. Stockwater and supplemental feed adequate. Fall-planted grains wintered well. Major farm activities still confined to southern valleys.

NEW ENGLAND: Temperatures mild most of week. Extremes: 2° below zero at Caribou, Me. Tuesday morning to 58° at Providence, R.I., on Friday.

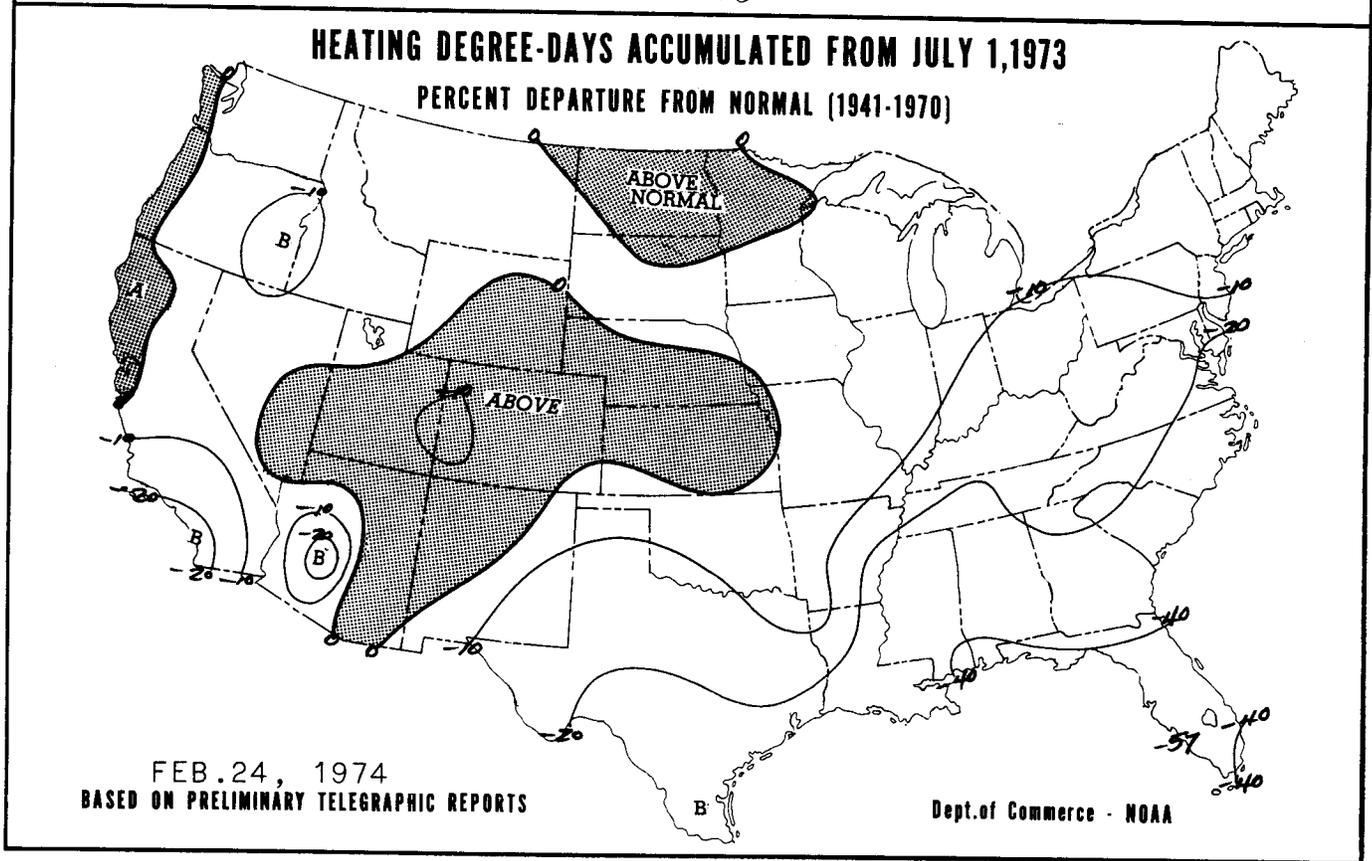
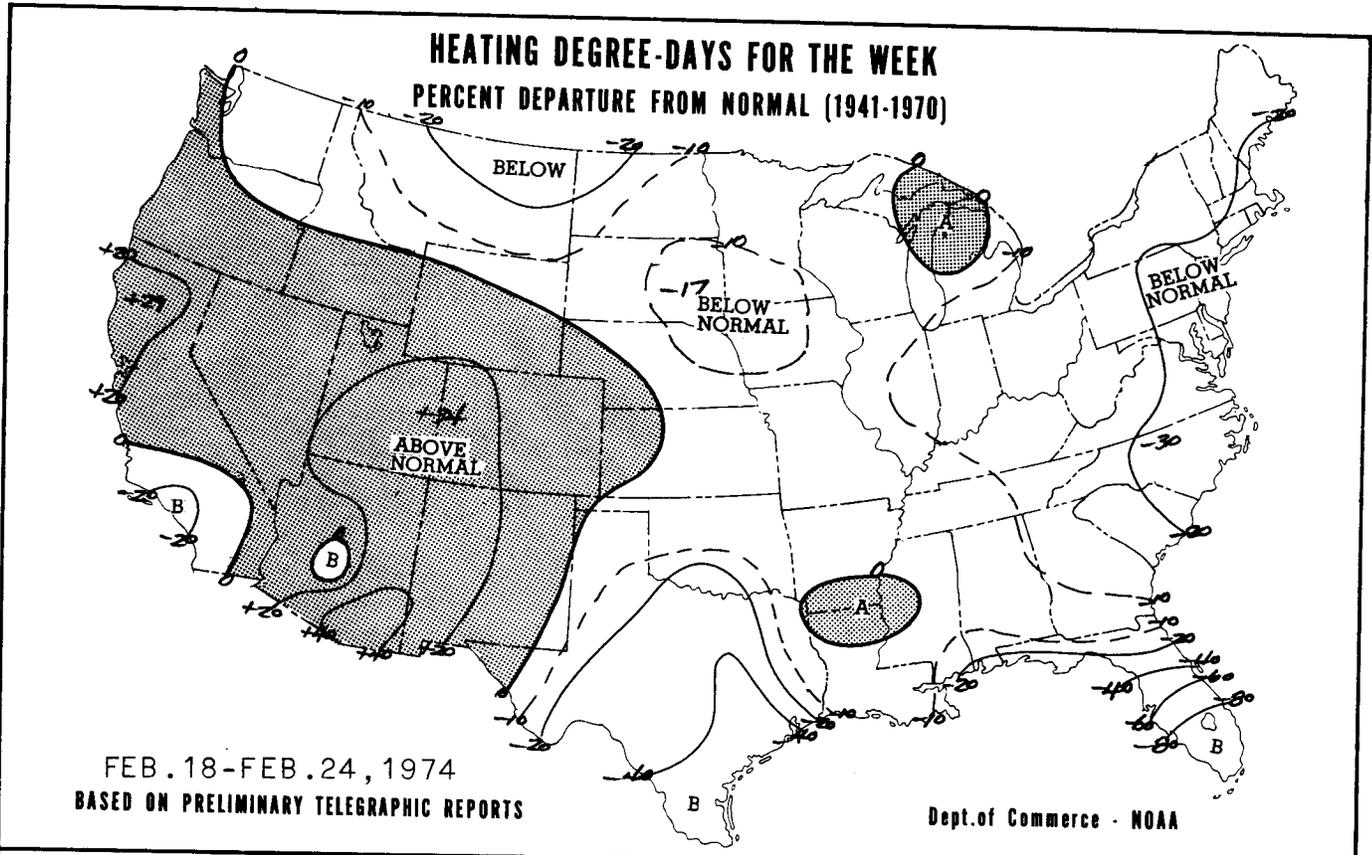
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HEATING DEGREE DAYS
- Continued Cooperation -

The weather has continued to cooperate in the problem of sufficient heating fuel supplies for the winter. Although February started on an extremely cold note, temperatures during the past three weeks have been much warmer than normal in most areas of the Nation. The heavily populated East Coast has been exceptionally warm.

The past week has continued the warmer than normal trend except in the Southwest. Over the heating season to date, the Nation has been warmer than usual except in North Dakota and northern Minnesota and parts of seven States in the southern Rockies and central Great Plains. Compared with last year, the entire Nation has been warmer this year except for a few isolated areas.



Heating Degree Days (Base 65°) For Week Ending Feb. 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	119	-4	1738	-514	-742	Portland.	223	-64	4782	-373	-508	Tulsa.	147	-11	2760	-102	-625
Mobile	63	-15	805	-577	-604	MD. Baltimore.	168	-38	3197	-282	-262	OREG. Astoria	180	13	3601	194	216
Montgomery	97	-1	1296	-538	-580	MASS. Boston	193	-42	3640	-280	-328	Burns.	247	19	4753	-204	-467
ARIZ. Flagstaff	247	9	4567	-300	-917	MICH. Alpena	322	1	5571	-213	-238	Medford.	179	20	3043	-385	-457
Phoenix.	62	-4	1006	-266	-244	Detroit.	237	-25	4412	-151	-264	Pendleton.	154	-17	3456	-319	-692
Tucson.	111	34	1425	69	-348	Flint.	257	-24	4675	-263	-143	Portland.	149	2	3045	-241	-138
Winslow.	220	49	3655	128	160	Grand Rapids.	270	-7	4697	-93	-295	Salem.	158	11	3329	59	-240
Yuma.	49	-7	830	-34	-193	Houghton Lake	324	2	5535	-244	-291	PA. Allentown	180	-62	3752	-444	-425
ARK. Fort Smith	142	-2	2490	-148	-725	Lansing.	226	-54	4823	-51	-332	Erie.	235	-38	4214	-469	-425
Little Rock.	139	-8	2147	-497	-598	Marquette.	311	0	5568	-62	-379	Harrisburg.	183	-38	3408	-453	-331
CALIF. Bakersfield.	79	-1	1473	-240	-319	Muskegon.	276	-1	4729	-36	-63	Philadelphia	171	-40	3222	-323	-283
Eureka.	137	25	3052	100	159	S. Ste. Marie	350	8	6267	35	45	Pittsburgh.	206	-38	3726	-566	-459
Fresno.	112	14	1922	-89	-298	MINN. Duluth	344	-15	6940	138	-448	Scranton.	183	-74	4384	-116	-329
Los Angeles.	46	-18	908	-226	38	Internatl Falls	375	-17	7370	-153	-134	R.I. Providence	192	-51	3820	-321	-270
Red Bluff.	126	28	2060	83	-349	Minneapolis	292	-37	5772	-238	-353	S.C. Charleston	82	-18	1034	-684	-565
San Diego.	49	-7	754	-227	52	Rochester.	305	-20	5821	-89	-474	Columbia.	79	-39	1239	-840	-775
San Francisco.	111	20	2094	97	0	St. Cloud.	336	-20	6325	-69	-435	Greenville.	124	-14	2118	-346	-379
Stockton.	120	15	1914	-159	-254	MISS. Jackson.	107	3	1382	-469	-639	S.DAK. Aberdeen	294	-41	6438	196	353
COLO. Denver.	243	23	4307	141	-354	Meridian.	97	-7	1251	-683	-698	Huron.	263	-54	5724	-120	-108
Grand Junction	278	71	4717	520	-338	MO. Columbia	207	-3	3746	-44	-410	Rapid City	245	-21	5015	-45	-478
Pueblo.	215	11	3944	20	-583	Kansas City	200	-13	3853	-9	-367	Sioux Falls.	265	-41	5563	-130	-345
CONN. Bridgeport.	197	-37	3395	-350	-598	St. Louis.	203	3	3605	32	-307	TENN. Chattanooga	135	-15	2205	-520	-882
Hartford.	206	-54	4111	-417	-305	Springfield.	179	-8	3180	-250	-586	Knoxville.	131	-20	2220	-472	-643
DEL. Wilmington	169	-44	3146	-444	-141	MONT. Billings	216	-37	4796	-245	-858	Memphis.	132	-10	2032	-509	-905
D.C. Washington	132	-55	2500	-655	-506	Glasgow	251	-84	6239	-149	-146	Nashville.	149	-11	2286	-377	-567
FLA. Apalachicola	51	-17	624	-496	-409	Great Falls	218	-41	5212	-45	-383	TEX. Abilene	84	-27	1791	-290	-994
Daytona Beach	36	-13	396	-339	-269	Havre.	225	-92	5921	-358	-188	Amarillo.	165	-5	2792	-331	-982
Ft. Myers.	3	-25	195	-200	-144	Helena.	234	-32	5558	-154	-973	Austin.	50	-29	1132	-297	-763
Jacksonville	62	-4	697	-395	-339	Kalispell	239	-31	5443	-513	-676	Brownsville.	16	-19	352	-194	-534
Key West.	0	-7	30	-27	-31	Miles City.	233	-58	5281	-372	-609	Corpus Christi	23	-20	600	-186	-552
Lakeland.	16	-23	311	-255	-270	Missoula.	232	-22	5210	-366	-551	Del Rio.	40	-22	942	-370	-683
Miami.	0	-14	112	-69	-26	NEBR. Grand Island	234	-16	4871	190	-162	El Paso.	125	17	1983	-221	-294
Orlando.	22	-20	325	-262	-162	Lincoln.	230	-18	4857	267	-128	Fort Worth.	72	-34	1573	-329	-729
Tallahassee.	76	1	832	-471	-448	Norfolk.	244	-33	5016	-68	-358	Galveston.	30	-33	609	-374	-651
Tampa.	21	-20	332	-267	-244	Omaha.	254	4	5120	294	-389	Houston.	48	-19	949	-237	-716
W. Palm Beach.	3	-18	147	-117	-32	Valentine.	238	-17	4853	20	-274	Lubbock.	134	-15	2259	-478	-1043
GA. Atlanta	113	-21	1793	-615	-606	W. Ely.	258	-17	5070	-106	-566	Midland.	91	-21	1802	-312	-926
Augusta.	99	-14	1554	-486	-423	Las Vegas	292	40	5312	58	-434	San Angelo.	62	-8	922	-325	-747
Macon.	88	-12	1216	-600	-539	Reno.	209	20	3894	-238	-715	San Antonio.	68	-27	1441	-387	-878
Savannah.	73	-16	985	-600	-395	Winnemucca.	215	7	4156	-403	-730	Victoria.	59	-12	1065	-244	-645
IDAHO. Boise.	196	1	3758	-397	-578	N.H. Concord	247	-42	5180	-11	-548	Waco.	33	-25	695	-327	-715
Lewiston.	171	-6	3714	-210	-372	N.J. Atlantic City	172	-41	3149	-400	-210	Wichita Falls.	93	-32	1946	-356	-951
Pocatello.	262	23	4872	-76	-624	Trenton.	167	-48	3243	-329	-270	UTAH. Salt Lake C	249	37	4193	-87	-561
ILL. Cairo.	156	-12	2724	-254	-515	N.MEX. Albuquerque	206	40	3493	228	-182	VT. Burlington.	281	-35	5393	-142	-417
Chicago.	237	-17	4305	-122	-266	Roswell.	152	7	2554	-371	-476	VA. Lynchburg.	148	-35	2756	-427	-454
Moline.	257	-7	4565	-137	-194	N.Y. Albany.	235	-47	4882	-43	-100	Norfolk.	114	-46	2007	-583	-443
Peoria.	235	-16	4369	-120	-376	Binghamton.	235	-57	4663	-412	-574	Richmond.	127	-46	2491	-495	-396
Rockford.	257	-19	4734	-236	-221	Buffalo.	241	-37	4547	-220	-242	Roanoke.	153	-29	2703	-509	-518
Springfield.	211	-23	3907	-223	-447	New York.	172	-46	3166	-324	-422	WASH. Quillayute.	177	16	4095	250	96
IND. Evansville	161	-34	3026	-480	-733	Rochester.	236	-40	4385	-292	-202	Seattle-Tacoma	148	-6	3282	-198	-246
Fort Wayne	226	-29	4291	-185	-218	Syracuse.	242	-34	4603	-59	-128	Spokane.	214	-4	4696	-128	-136
Indianapolis	195	-37	3631	-479	-478	N.C. Asheville	150	-24	2519	-638	-488	Walla Walla.	146	-15	3232	-320	-635
South Bend	221	-42	4051	-561	-436	Hatteras.	96	-38	1339	-627	-416	Yakima.	182	9	4131	-326	-384
IOWA. Burlington	234	-19	4376	-159	-367	Charlotte.	115	-27	2136	-364	-512	W.VA. Beckley	184	-40	3366	-687	-618
Des Moines	245	-29	4629	-289	-636	Greensboro.	130	-35	2591	-338	-516	Charleston.	159	-34	2902	-531	-535
Dubuque.	274	-16	5161	-119	-309	Raleigh.	108	-46	2111	-589	-620	Huntington	152	-44	2876	-572	-714
Sioux City	233	-46	4859	-258	-387	Wilmington.	81	-34	1265	-648	-568	Parkersburg.	168	-38	3133	-439	-439
KANS. Concordia	204	-20	4185	42	-298	N.Dak. Bismarck.	320	-27	6890	395	328	WIS. Green Bay.	291	-29	5486	-244	-96
Dodge City	200	-1	3699	-17	-565	Fargo.	373	8	7025	331	117	LaCrosse.	275	-28	5246	-163	-335
Goodland.	241	13	4438	97	-483	Williston.	275	-67	6710	145	-17	Madison.	282	-21	5303	-221	-207
Topeka.	194	-16	3969	47	-268	OHIO. Akron-Canton	226	-29	3863	-567	-376	Milwaukee.	270	-18	4818	-378	-360
Wichita.	181	-11	3663	124	-456	Cleveland.	208	-47	3774	-565	-500	WYO. Casper	292	31	5329	180	-590
KY. Lexington	168	-32	2953	-578	-448	Columbus.	191	-45	3607	-559	-454	Cheyenne.	260	10	4954	93	-614
Louisville.	162	-35	2840	-641	-523	Cincinnati.	189	-27	3423	-320	-438	Lander.	285	18	5468	-16	-1260
LA. Baton Rouge	71	-6	883	-506	-556	Dayton.	205	-30	3741	-372	-386	Sheridan.	243	-23	5273	-47	-527
Lake Charles	67	-3	930	-305	-655	Toledo.	237	-20	4485	-86	-217						
New Orleans	66	-3	778	-434	-623	Youngstown.	235	-27	4179	-366	-576						
Shreveport.	99	2	1616	-138	-502	OKLA. Okla City.	146	-11	2711	-150	-714						
MAINE. Caribou.	307	-48	6587	-74	-576												

* Based on 1941-70 Normals. † Accumulated from July 1, 1973.

(Continued from Page 7)

Colder following Saturday storm.

Rain 19th, 22d, and 23d. Amounts from Tuesday night storm averaged from 0.50 in. to well over 1.00 in. The most from this storm fell at Boston, 1.33 in. A very strong storm system moved through Saturday and produced heavy precipitation and strong winds throughout New England. Many areas got over 1.00 in. rain, heaviest was 3.24 in. of melted precipitation on top Mt. Washington. Eastport, Me., got 2.32 in. Winds gusted to 62 mph at Boston on 23rd.

NEW JERSEY: Temperatures averaged 2° above normal. Afternoon readings reached 66° at Newark on 22nd. Cold weather two days later, as low as 15° at East Millstone. Weekly rainfall totals averaged close to normal. Coastal sections averaged 0.80 in. north sections 1.00 in. and 0.60 in. elsewhere. Numerous thunderstorms moved across State evening of 19th.

NEW MEXICO: Showers and snows 18th and again 20th and 21st. Amounts generally light but near 0.33 in. moisture Ruidoso area and 0.67 in. Santa Fe vicinity. Temperatures averaged near 5° sub-normal with sharp cooling most sections 21st and again 24th. Strong, gusty winds east areas 23d up to 40 mph.

Snow in north, high winds in south. Wheat, barley fair to good. Irrigation started, wheat growth began. Soil moisture short. Ranges fair. Livestock fair to good. Alfalfa starting growth, some irrigation. Land preparation continued.

NEW YORK: Temperatures warmer than normal, Extremes: 2° below zero at Rome, 61° at Elmira. Generally fair weather on 3 days and rain or snow on 4 days. Moderate to heavy rain fell on 22d with around 2 in. at Boonville and Glens Falls. A sharp turn to colder 23d brought heavy snow squalls to the Utica-Rome area and southwest Adirondacks with 9 in. new snow at Boonville. Damaging high winds 22d, 23d.

NORTH CAROLINA: Above normal rainfall with above normal daytime temperatures. Moderate to heavy rainfall many sections 19th and 22d. Baldwin got 9 in. snow. Strong winds over State 22d. Fieldwork averaged 1.5 days.

Most work concentrated on tobacco plant bed seeding and topdressing small grains. Small grains 80% good, 20% fair. Small grain growth advanced for this time of year. Coastal plains pastures starting to offer good grazing. Feed supplies adequate. Orchard pruning active. Many farmers lined up at gas pumps.

NORTH DAKOTA: Temperatures ranged from 53° at Watford city to 25° below zero Grand Forks. Scattered light snow fell over State, greatest precipitation at Grand Forks 0.26 in. and Devils Lake 0.24 in. Snow depths ranged from 28 in. at Bisbee and 13 in. at Grand Forks to little or no snow on ground in southwest.

Farmers moving grain to market. Seed and fertilizer being hauled to farmsteads. Some varieties seed in short supply. Roughage supplies being transferred to areas of short supply.

OHIO: Temperatures averaged above normal with rain early in week, below normal with snow end of week. Wind gusts 50 MPH in most sections on 22d. Snow flurries north on 23d. Four in. snow fell Cincinnati area and 2 to 4 in. central sections on 24th. Most farmers worried about fertilizer

situation. Winter wheat good. Farm activity limited to livestock care.

OKLAHOMA: Temperatures averaged 1° below normal to 6° above normal. Precipitation averaged from 0.07 in. panhandle to 2.18 in. northeast. Week-end dry and cool to mild.

Snow and rain good amounts central and east improved wheat condition. Topsoils west districts remained dry. High winds early week caused light damage to small grains from blowing soils. Greenbugs and cutworms causing damage several southwest and westcentral counties. Planting small grains made only slow progress, but most seedbeds prepared. Spring oats good to fair while barley mostly good. Soils east areas too wet for fieldwork or pasturing small grains. Seedbed preparations for row crops, fertilizing and spray programs main farm activities. Cattle feeding continued as ranges grazed short and wheat grazing limited. Cattle continued good, marketing light.

OREGON: Substantial rains over most of State. Along coast, Cloverdale reported 4.80 in. Interior valleys ranged 1.40 in. at Medford to 4.84 in. at Eugene. Amounts east between 0.20 to 0.80 in. Temperatures near normal through week. Highs mid-40's to upper 50's. Pendleton warmest with 58°. Lows 30's west, teens and 20's east.

Farmers spraying wheat and fertilizing as supplies become available. Irrigation getting underway Columbia Basin. Filberts in bloom. Orchard pruning continued, dormant sprays applied. Calving, lambing continued, egg-hatch increased.

PENNSYLVANIA: Wide variety of weather. Snow beginning and end of week, rain midweek. Spring-like temperatures into 60's and 70's set new records Friday afternoon. Winds to 60 MPH with some rain and turning colder Friday night. Weekly temperatures 3° to 5° above normal and 4° to 6° above previous week for mildest since early February. Extremes: 71°, 3°.

Precipitation totaled 0.50 in. northwest, south-central, and southeast to 1.00 to 1.30 in. elsewhere for wettest week since mid-January. Snowfall generally light with cover from 4 in. northwest to traces elsewhere.

PUERTO RICO: Rainfall averaged 0.76 in. or 0.07 in. above normal. Highest weekly total 2.96 in. at Maricao followed by 1.76 in. at Gurabo and 1.70 in. at San Lorenzo. Highest 24-hour total 2.14 in. at Maricao. Temperatures averaged about 75° on coasts and 71° interior. Mean station temperatures ranged from 66.5° at Adjuntas to 78.1° at San Juan. Extremes: 91° at Utuado, 49° at Adjuntas.

Weather favored sugarcane harvest. Rains interrupted some fieldwork in Lajas and in Cabo Rojo sucrose percentage low probably due to rains. Good flowering of coffee trees promises a good harvest. Rains interrupted fieldwork some zones but weather favored coffee development and field operations most areas.

Tobacco developing well. Harvest and drying in shed also made good progress. Excessive humidity hindered tobacco drying in Barranquitas and Orocovis. Pastures suffering from dryness in few areas northwest, south and interior but elsewhere they are good. Weather favorable for cultivation of food crops.

SOUTH CAROLINA: Temperatures averaged few degrees above normal ranging from 40's west to 50's south. Rainfall 1.00 to 2.00 in. falling early, mid-

week. High pressure over area Sunday moved eastward followed by cold front Tuesday. Second cold front passed Friday, still another over weekend. Freezing temperatures early week in west.

Setting out spring vegetables along coast. Some lime, fertilizer spreading on small grains, pastures, orchards where soil conditions permitted.

SOUTH DAKOTA: Temperatures continued pleasant, 1° to 10° above normal west and south, highs in 40's and 50's. Warmest was 59° at Chamberlain and Mitchell. Storm passed through late week, bringing cooler temperatures and precipitation. Cold lasted over weekend, below zero northeast and central. State's low was 4° below zero at Milbank.

Entire State received some precipitation, mostly as snow. Significant amounts fell east third, as much as 0.33 in. and many locations got 0.50 in. or more. Most snow fell northeast and eastcentral.

Fall seeded grains very good condition, greenbug numbers and damage considerably less than previous year. Feed and fuel supplies continued adequate.

TENNESSEE: Cold fronts moved across State on 19th, 22d and 24th accompanied by rain and thundershowers, also some light snow on Sunday. Temperatures averaged 2° to 5° above normal. Rain fell in all sections, amounts averaged between 1.00 to 2.00 in.

Pasture grasses good condition, but wetness continues to restrict pasture utilization. Very little ground preparation because of surplus moisture. A few wheat fields turning brown due to lack of nitrogen. Small grains generally good with some new growth. A few tobacco beds prepared for planting.

TEXAS: Series of cold fronts caused fast changing weather; strong, gusty winds. A dust storm over west Texas spread into central portions of State reducing visibility to less than a mile at many points. A midweek cold front brought 0.50 to 1.00 in. rains to much of central, east. A late week dry, cold front ushered cold Arctic air across State resulting in freeze for all but coastal and for south portions by Monday morning. Greatest moisture amounts for week in northeast. Little or no rain fell over most of south and west.

Wheat in poor condition on high, low plains and grazing restricted. Wheat south and east made good growth, grazing adequate. Oat prospects improved in response to rain and warm weather. Cotton seeding started south, beginning to move northward. Planting of corn and sorghum underway in south half and gaining momentum. Most farmers ready to plant, but waiting for warmer temperatures and adequate soil moisture.

Lower Rio Grande Valley: Harvest cabbage, carrots lettuce active. Onion harvest begun, will be light until mid-March. Growing conditions near ideal. All vegetables good condition. Cucumber planting begun. Laredo: Late cabbage, carrots, onions excellent progress. Coastal Bend: Cucumber, watermelon planting continued beach area Kleberg County. Spinach harvest neared completion. Other vegetables good growth. San Antonio-Winter Garden: Carrot, cabbage harvest continues. Onions good growth. Planting spring vegetables begun. Spinach harvest active. Trans-Pecos: Onion planting complete. Pepper planting will soon begin. East Texas: Land prepared, land dry. Some Irish potatoes planted. Sweet potato land ready. Knox-Haskell: Potato planting 30% complete.

High Plains: Land preparation, fertilization, pre-irrigation in progress.

Peaches blooming south. Pecans beginning to bud south but dormant elsewhere. Citrus harvest active, heavy backlogs at processing plants. Trees in bloom. Tree conditions vary, wood damage due to December freeze apparent. Calving underway across State and most livestock wintered in fairly good condition. Sheep, goat shearing underway. In east Texas, internal parasites have been problem all winter but death losses have not been unusual. No new screwworm case confirmed past week.

UTAH: Recurring periods precipitation. Moisture totals generally light to moderate but locally heavy over and near northern mountains. Temperatures averaged from near normal to 10° below. Many stations recorded subzero minimums over weekend. Snow cover still persists many fields and ranges.

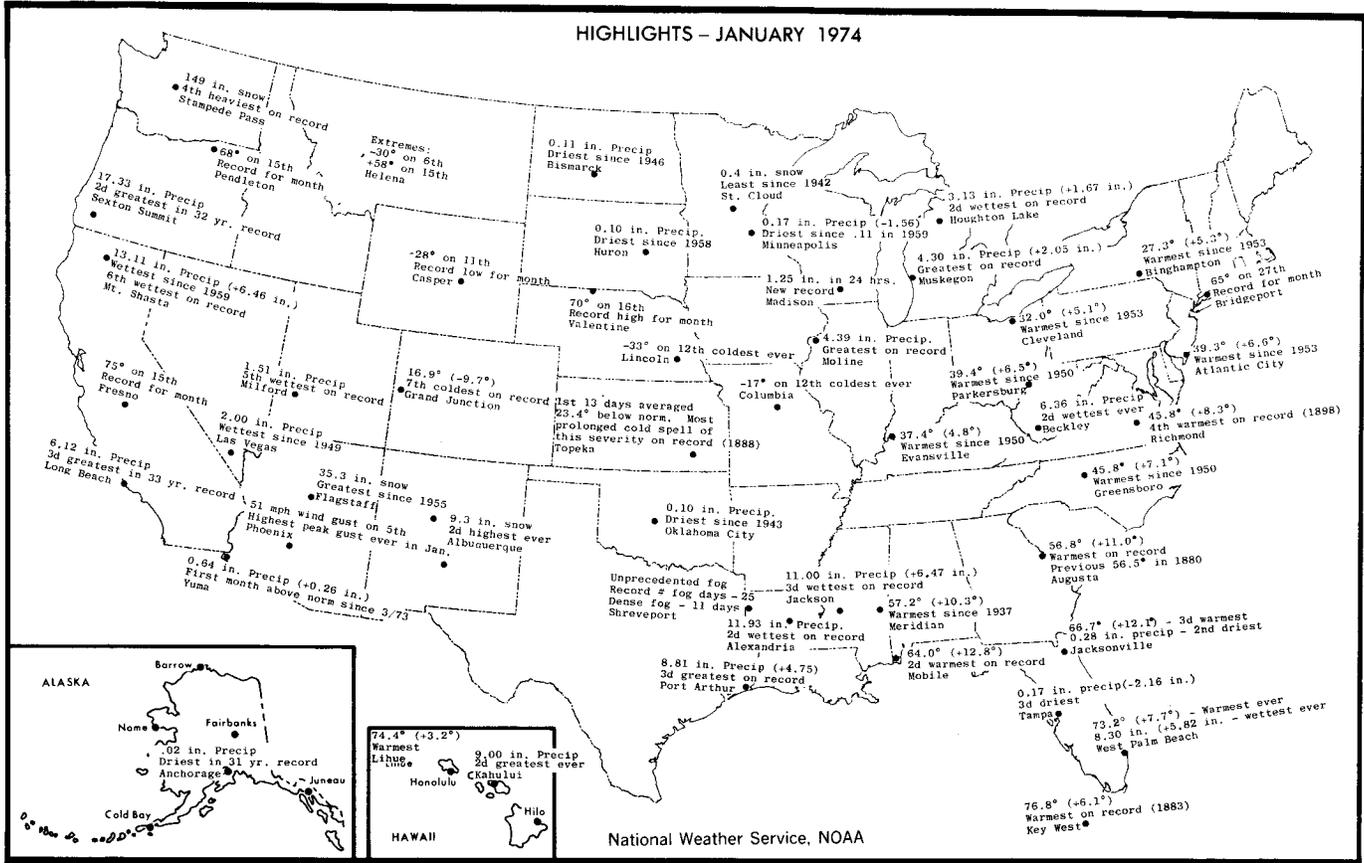
Farm flock lambing in full progress. Marketing of potatoes, dry onions, and apples from storage neared completion. Some orchard pruning started. Fruit outlook good. No unseasonably high temperatures since January 1. Consequently, no abnormal tree development has occurred. Major activities: Care and feeding of livestock and poultry, and preparation of machinery for spring fieldwork.

VIRGINIA: Temperatures averaged a little above normal. Extremes: 75° and 12°. Unseasonably warm on Friday. Precipitation averaged 0.90 in. as rain 19th and 22d. Topsoil moisture condition improved north, elsewhere mostly excessive amounts. Fieldwork 1.8 days statewide. Limited fieldwork activities, mainly fertilizer and lime spreading, orchard pruning, preparing tobacco beds. Limited spring plowing. Some seeding of clover and grasses; cleaning barns, spreading manure; fencing work, machine repairs; and caring for livestock, poultry.

Lot of time given to planning, meetings, farm records and tax work; ordering seeds, fertilizers; and obtaining fuel allocations. Winter grains and grazing crops continued good to excellent.

WASHINGTON: West: Precipitation almost daily with amounts from 0.50 to 4.00 in. Temperatures near normal with highs 40's and 50's, lows mostly mid-30's or higher. Wet grounds limited most fieldwork. Berry growers pruning, cutting, tying raspberry, blueberry bushes. Raspberry planting stock being dug, plantings to begin soon. Cabbage seed, strawberry fields showing growth. Hay supplies tight. Pastures greening up. East: Temperatures about 4° above normal, highs 40's and 50's, lows mid-20's and 30's. Precipitation from 0.20 to 1.00 in. Fieldwork limited to drier soils where land preparation, planting spring crops active. Orchard pruning, installing irrigation systems, heaters underway. Pruning, trellising, tying grape vines continued. Spraying pear psylla Yakima County. Late planting winter wheat tapering off. Topdressing fertilizer to wheat, grass seed fields active. Some lifting of wheat due to freezing, thawing. Calving, lambing active. Hay supplies below normal. Livestock remained on winter rations.

WEST VIRGINIA: Temperatures above normal 6° to 7° north and east, as much as 10° southwest. Temperatures mostly normal until Tuesday when highs to 50's and 60's and remaining above normal through most of Friday with highs in 70's at Martinsburg and Welch. Late Friday a cold front brought showers and normal temperatures. Precipitation ranged from 0.25 in. northeast to 1.00 in. or more in some mountainous areas. Bluefield got 1.50 and Franklin 1.10 in. Saturday brought snow to some mountain areas as much as 1 to 3 in.



Some early gardening. Grass greening up. Cattle doing fine except for mud.

WISCONSIN: Temperatures near or few degrees above normal. Mild early and midweek with highs in 30's extreme north and 40's elsewhere. Morning lows remained above zero. Cold weather moved in toward weekend keeping afternoon highs below freezing and allowing lows to fall below zero many areas. State's low was 12° below zero north-west.

First 3 days dry. Snow fell on 21st, 1 to 3 in. most sections. Blizzard conditions developed night of 21st and on 22d south and east. Heavy snow and winds 50 MPH. Snowfall amounts: Milwaukee 9 in., Green Bay 5 in., and Madison 4 in. Numerous power outages, some lasting over 48 hours. Water equivalent of week's snow from 0.10 in.

extreme northwest to 1.25 in. southeast. Total snowfall to date in Milwaukee area 76 in.

WYOMING: Precipitation generally averaged below normal with exception of Green and Bear Drainages which averaged above normal. Considerable precipitation also fell on Snake, Wind River and Powder Drainages. Moran got most with 0.94 in. Temperatures averaged a little above normal with some subnormal temperatures in Green and Bear Drainages. Highest average of 36° at Torrington. Lowest average 14° at Big Piney. Extremes: 50° at Torrington, 24° below zero at Moran.

Livestock wintered well. Increasing numbers shorn sheep, newborn lambs, and calves showing up. Fertilizer spreading underway. Spring small grain planting starting soon. Fertilizer in short supply and in strong demand.

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WEATHER AND THE 1973 BURLEY TOBACCO CROP

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On February 7th, the final basket of the 1973 burley tobacco crop was auctioned in Lexington, Kentucky. The quantity of the tobacco sold and its quality significantly reflect the weather which occurred during all production phases of that crop. Burley growers have accepted production quotas for several years in exchange for price support and the quota for 1973 was 574 million pounds. This was to be grown in the burley production region consisting primarily of Kentucky (about 2/3rds of the total) with lesser amounts in Tennessee, Indiana, Ohio, West Virginia, Missouri, North Carolina, and Virginia.

Above normal precipitation during the spring and early summer delayed transplanting into many fields. The rainfall also leached much of the fertilizer below plant root zones and kept many fields so water-logged that plants grew poorly. In much of the Kentucky production region, the weather turned dry at the end of July and burley continued to grow poorly as moisture and fertility became limiting. As the plants entered their major period of vegetative growth, they responded by producing small, thin leaves. Most growers delayed harvesting 2 or 3 weeks in hopes of additional growth and weight but the entire month of August remained dry.

September was also very dry and provided nearly perfect weather conditions for the 4 to 6 week period required to air cure the burley. There were hardly any of the extended periods of high humidity which can cause deterioration of the leaf quality and reduction of weight by encouraging microbial activity. When markets opened at the end of November, buyers found a crop which had a thin leaf - characteristically low in nicotine, had a low moisture content, but weighed only 494.6 million pounds.

Domestic buyers were faced with pressures brought on by dwindling stocks of burley which stood at their lowest levels since 1964 and increased competition from foreign buyers. When only 86% of the expected crop arrived on the market and quality was high, sales were active. When sales ended, preliminary figures indicated the value received for the 1973 United States burley crop was \$459 million. Even though prices were the highest ever recorded, total value was about \$25 million below 1972 due to the reduced volume.

For 1974, burley growers will be asked to produce about 687 million pounds in order to meet market demands and replenish depleted stocks. Their ability to produce 39% more will depend not only on the availability of production materials and labor but weather conditions during the season ahead. Markets can be expected to provide a strong demand but the weather is still the unknown quantity every producer will have to deal with.

UPPER MIDWEST SPRING FLOOD OUTLOOK
February 20, 1974

Precipitation during the past two weeks generally has been below normal, allowing most of the flooding midwestern streams to return within their banks. A noticeable exception is the lower Illinois River which is still more than two feet out of banks and considerably higher than last year at this time. In general however current stages are comparable or lower than at this time last year. Ideal protracted melting conditions have allowed the snow line to retreat northward and it now lies across southern Michigan, northern Illinois and Iowa, northeastern South Dakota and across central North Dakota.

The water content of snow in the Red River varies up to 4 to 5 inches along the Canadian Border, and in the downstream tributaries of the Red even normal or faster melt of current snow alone can produce major overflows. In the remainder of the Red major overflows would occur if current snow is augmented by normal precipitation through March. These in general would be comparable to the floods of 1948 though this may vary from point to point.

For the remainder of the area, significant flooding would not be anticipated from melt of current snow alone unless melt is very rapid, accompanied by rain, or aggravated by severe ice action. However, high degrees of soil saturation and/or fairly deep frost indicate that if this snow is augmented by normal snowfall with subsequent normal or faster melt rates, light to moderate overflows could develop on the Mississippi mainstem and tributaries down to Winfield, Mo.

Flood potential on the Platte River of Nebraska and its headwaters in the mountains would be above average if current high elevation snow is augmented by normal precipitation from now until the end of snowmelt in May. However, this potential is considerably less than early May of last year.

The level of spring rainfall, in conjunction with well saturated soils, particularly in the eastern and northern parts of the upper Midwest, hold the key to the magnitude of the coming flood season. An additional factor is the evidence of unusually heavy ice this winter.

SPRING RUNOFF POTENTIAL FOR THE NORTHEAST

Snow depths in the northeastern United States as of mid-February are well below normal and the lowest for this time of year since the winters of 1965 and 1966. The abnormally warm weather throughout the first 15 days of February depleted the snow cover in a winter already well below normal.

Snow depths generally range from 1 to 5 inches in southern areas, 5 to 10 inches in central sections, and 10 to 20 inches in northern portions of the northeast. Isolated reports from sheltered

higher elevations indicate depths of more than 20 inches. Densities generally average about 30 per cent of normal for this time of the year.

A continuation of high snowmelt conditions through the spring period would reduce flows considerably. This will probably have little or no effect on the height of the spring crests on the rivers and streams of the northeast. The magnitude of flooding will be dependent upon rainfall and its time distribution during the spring months.



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WATER SUPPLY OUTLOOK FOR THE WESTERN UNITED STATES
 Issued as of February 1, 1974

The table below shows the runoff forecast in percent of the 15-year (1958-72) average. The forecasts are for the remainder of the water year (October thru September), except for the full water year for the Sacramento and San Joaquin Basins; April 1 to September 30, 1974, for the Missouri, Yellowstone, and North Platte Basins; November 1, 1973 to June 30, 1974 for the Little Colorado Basins; and January 1 to June 30, 1974, for the Gila Basin. The publication "Water Supply Outlook for the Western United States," issued as of February 1, 1974, contains the complete water supply forecasts for about 375 stations in the Western United States.

River	Station	Forecast 1,000 Acre-feet	Percent 15-year average
Columbia	Grand Coulee, Wash.	81,200	108
Columbia	The Dalles, Oreg.	139,000	117
Snake	Lower Granite, Wash.	28,250	128
Sacramento	Red Bluff, Calif.	13,500	151
San Joaquin	Big Creek, Calif.	1,600	123
Weber	Gateway, Utah	444	124
Jordan	Utah Lake, Utah	468	124
Truckee	Lake Tahoe to Farad	270	77
Colorado	Lake Powell, inflow	11,600	132
Green	Green River, Utah	4,420	126
San Juan	Bluff, Utah	1,610	137
Little Colo.	Woodruff, Ariz.	7.7	90
Gila	Solomon, Ariz.	97	70
Rio Grande	San Marcial, N. Mex.	575	128
Arkansas	Pueblo, Colo.	507	132
Missouri	Ft. Peck, Mont.	5,370	113
Yellowstone	Sidney, Mont.	7,480	107
North Platte	Glendo, Wyo.	1,010	122

1/ Period, 1958-72

Office of Hydrology
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