

# Weekly Weather & Crop Bulletin

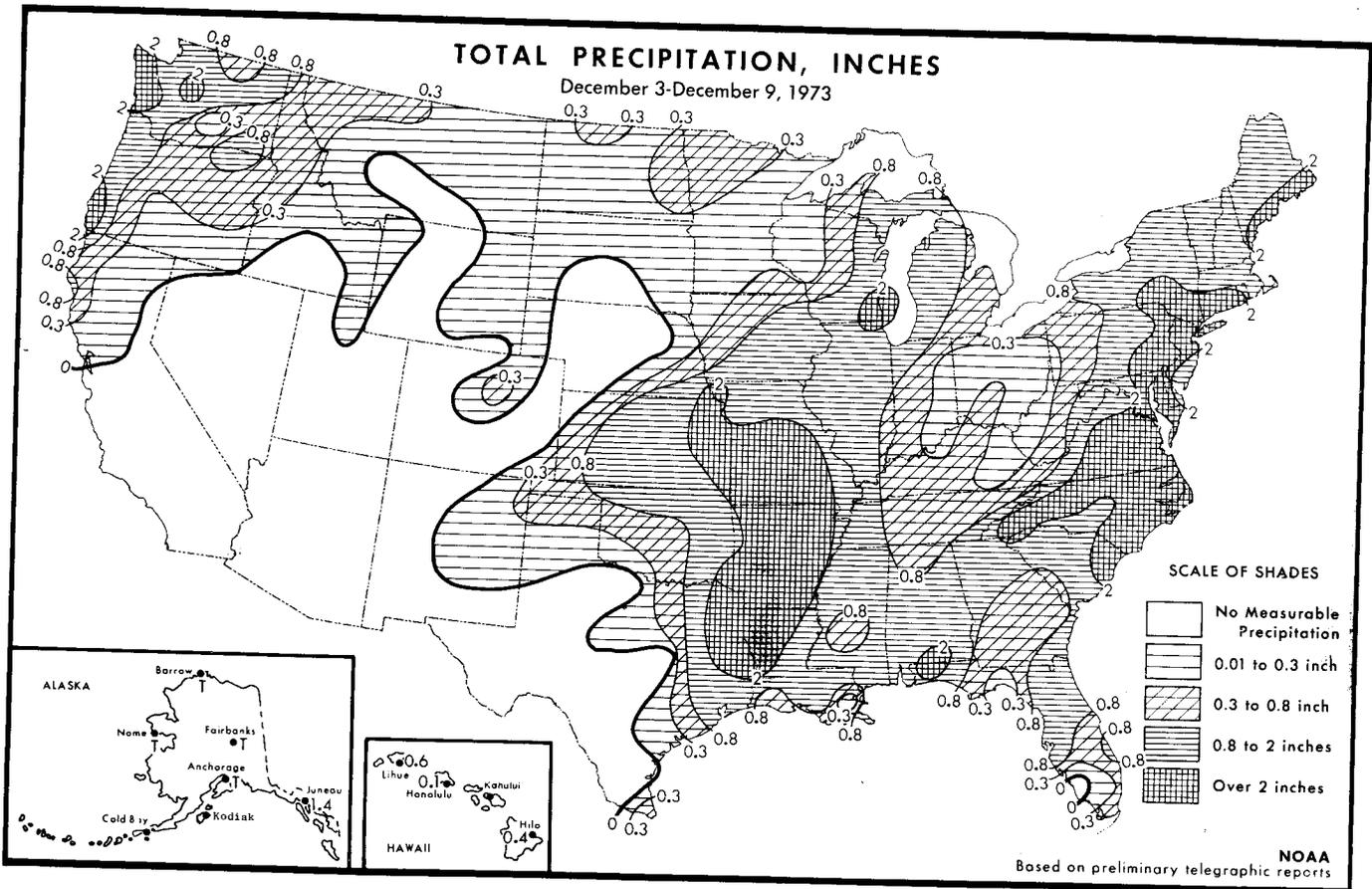
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## NATIONAL WEATHER SUMMARY

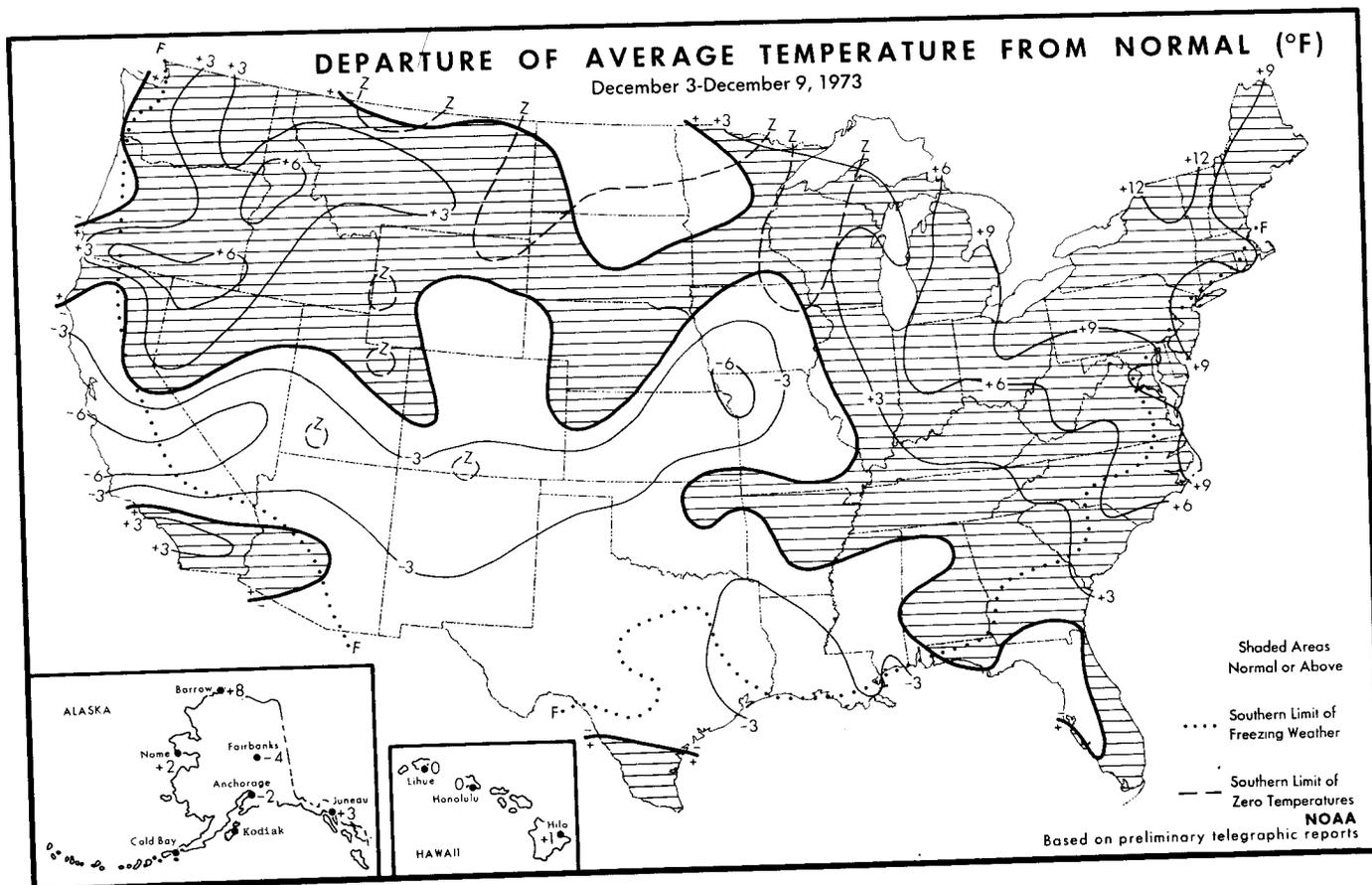
**HIGHLIGHTS:** East of the Mississippi, temperatures remained warmer than normal for the third straight week. The densely populated eastern megapolis averaged 9° above normal, and many eastern cities hit record highs. In the Midwest, an intense Low brought cold, nasty weather including gusting winds, sleet, freezing rain, and snow. Heaviest rains fell Monday and Tuesday. Most of Arkansas and parts of neighboring States received 2.00 in. or more. Winter rains continued over the Pacific Northwest.

**PRECIPITATION:** A deep Low caused a nasty winter storm in the Nation's midsection early in the week. An area from east Texas to southern Missouri received 2.00 in. or more rain or snow. The South got heavy midweek rain. Later in the week, a Low that developed off Florida gave the East more rain. Pacific storms dumped almost daily rains or snows on the Northwest. Coastal Washington, Oregon, and northern California received 2.00 in. in some

places.

A huge Low intensified Monday and brought widespread disagreeable weather to most of the Nation's midsection. Snow blanketed the high Plains of Colorado and New Mexico; tornadoes erupted in Louisiana; gusty winds blew across the Corn Belt. Tuesday morning Wakeeney, Kans., lay under 8 in. snows and 45 mph winds plagued most of Missouri and parts of Iowa and Kansas. Rain turned to ice in Nebraska and Kansas and heavy ice damage occurred. To the east, 84 mph winds were clocked at Carbondale, Ill. Tuesday afternoon, 4 in. snow fell on ice glazed roads in parts of Kansas, Nebraska, Iowa, and Missouri.

By early Wednesday the Low, then over Michigan, brought heavy snow to the upper and mid-Mississippi Valley. Minnesota's snow totaled between 1 and 3 in. By early afternoon, 4 to 7 in. snow whitened an area from central Kansas to Lake Superior. The front extending from the Low stretched along the Appalachians Wednesday. Passing over the South it



caused some heavy rains. Fort Belvoir, Va., and Valdosta, Ga., both got 1.00 in. Cherry Point, N.C., got 2.50 in.

Thursday, winter snows continued in the Lakes area. Michigan and Wisconsin got 1 in. late Wednesday and early Thursday. Gusty winds arose many places. Livingston, Mont., recorded gusts up to 70 mph. Friday, a large High brought clear weather to much of the Nation's midsection, while a cold front out of the Pacific brought rain to the Northwest. Cape Blanco, Oreg., received 1.55 in. rain Thursday night and Friday morning.

Friday and Saturday a Low that developed off Florida brought light rain to the Southeast, and the Northwestern cold front caused showers and snow flurries over the northern Rockies. Sunday, a major storm moved northward along the south Atlantic Coast. Rain fell from the Carolinas to New England. Freezing rain and snow plagued the Appalachians. Morgantown, W. Va., reported 11 in. snow.

**TEMPERATURE:** A large High off the north Atlantic Coast circulated warm Caribbean air over the East most of the week. Many record high temperature marks were set, and the populous eastern megapolis averaged 9° above seasonal norms.

A deepening Low that moved from Oklahoma to the Great Lakes brought cold temperatures to the Nation's midsection early in the week, and a High moved Arctic air into the area later on. An area just north of Kansas City, Mo., averaged 6° below normal for the week. In the West, parts of Washington and neighboring States averaged 6° above normal, while sections of southern California and Nevada averaged 6° subnormal.

Monday, the Nation's eastern third enjoyed mild temperatures. It hit 60's as far north as the lower Great Lakes. Rochester, N.Y., 63°, and Indianapolis, Ind., 67°, hit record highs. Tuesday, warm south winds produced unseasonably high temperatures in much of the East. Record highs: Columbia, S.C., 80°; Richmond and Norfolk, Va., 74°; and Providence, R.I., 65°. In contrast, much of the northern Plains did not get out of the mid-30's.

Again on Wednesday, some eastern cities hit record highs. Rochester, N.Y., topped its old record with a 66° as did Worcester, Mass., with a 58°. Behind the Midwestern storm, however, quite cool air settled over much of the Plains and Rockies. Thursday morning subfreezing temperatures extended from Nevada almost to the Appalachians. Areas in northern Mississippi, Alabama, and Georgia also froze; along the coast at Mobile, Ala., the mercury fell to 41°. Early afternoon temperatures reached the teens across the northern Plains and the 20's and 30's in the central Plains and Great Lakes areas; however, the Eastern warmth held out. Portland, Maine, at 56°, hit a record high. Most other Eastern readings were 40's and 50's.

Friday, a large High spread Arctic air from the Plains to the Appalachians. Single numbers were recorded in Iowa and Minnesota; the East fell into the 30's. Early afternoon temperatures reached only 20's in the upper Mississippi Valley and the 50's along the Gulf. Saturday a new surge of cold air invaded the Nation; Sunday morning lows ranged from 0° to teens in most States along the Canadian Border. Subfreezing temperatures prevailed through the Central and Gulf States. Afternoon highs hit 30's and 40's east of the Mississippi; west of the River they hit mostly 40's and 50's.

### NATIONAL AGRICULTURAL SUMMARY

**AGRICULTURAL HIGHLIGHTS:** The wheat crop nears the first day of winter in good condition. Wet fields delayed completion of cotton harvest in the Delta but good progress was made on the Texas High Plains and in southwest Oklahoma. Soybean harvest is almost over except in South Central region where about 10 percent of acreage is unharvested.

**SMALL GRAINS:** Winter wheat prospects are good throughout the Great Plains and in the Northwest. Soil moisture supplies generally are adequate to surplus in some Kansas and Oklahoma areas. Late Kansas seedings develop slowly and top growth is short. However, moisture helped wheat in the State's western half. Snow cover in the north has been light so far. Unseasonably warm weather aided small grain growth in the Corn Belt. Some Ohio growers are concerned about too much top growth.

Dryland wheat on the Texas plains needs moisture. Grazing of wheat and oats is good to excellent from the Blacklands southward. Colorado's wheat crop is in good condition but growth has been slow and only 11 percent of the acreage is being grazed. The outlook for small grains is good in the South Atlantic and South Central States; however, a considerable amount of acreage remains to be planted in the Carolinas and Georgia.

**CORN:** Most States have completed corn harvest or are nearing completion. Wet fields delayed completion of harvest in Missouri, Nebraska and Kansas, where from 5 to 10 percent of acreage remained unharvested on December 10. About 12 percent of the Colorado acreage is still unharvested compared with 15 percent a year ago.

**COTTON:** Rain and wet fields continued to hamper cotton harvest in the Delta where less than 10 percent of the expected production is left to be picked. Harvest is nearing completion in the Carolinas and Georgia. Good progress was made on the Texas High Plains and in southwest Oklahoma. Picking operations are well along in California but rain and fuel shortage slowed harvest in San Joaquin Valley. Harvest peaked in the Imperial Valley, where farmers shredded and disced soon after harvest. Dry weather permitted good progress in Arizona and the New Mexico crop is 75% picked.

**SOYBEANS:** Rain early in week barred combines from soybean fields in many South Central areas. Most of the Nation's unharvested acreage is in the South Central and South Atlantic Regions. Harvest is 90 percent or more complete in Tennessee, Alabama, Mississippi and Louisiana but only 85 percent complete in Arkansas, the major producing State in the South Central Region. About 5 percent of the Missouri acreage is still unharvested. Combining is nearing

completion in North Carolina and is 90 percent complete in South Carolina.

**OTHER CROPS:** Muddy fields continue to prolong sorghum grain harvest in Oklahoma and Missouri; however, farmers made good progress in southwest Oklahoma and the Missouri harvest gained 3 points to 93 percent complete. Sorghum harvest is virtually complete in other major producing States. Wet weather has delayed completion of sugarbeet harvest in California and Idaho. Sugarbeets in Arizona are growing well.

Suitable tobacco stripping weather has resulted in larger than normal volume burley sales in Kentucky. Buyers pay record high prices, which continue to rise. The Tennessee tobacco crop is stripped and auction sales are about 50 percent complete. Quality is good but quantity is down from last year.

**FRUITS AND NUTS:** Navel orange picking is active in California and Arizona groves. Fruit color is improving but sizes continue small in some areas. Tangerines, lemons and grapefruit are also being picked in Arizona and California desert areas. Citrus harvest in Texas is gaining momentum.

Pecan harvest continues in southern States. Harvest is nearing completion in most southern Texas counties and is past the halfway mark in North Texas. The Mississippi crop is nearly four-fifths harvested.

**VEGETABLES:** Tomato harvest is at fall peak volume in Florida and quality is very good. Peppers are also in plentiful supply. Other Florida vegetables in good supply are sweet corn, snap beans, cucumbers and squash. Strawberries are blooming well and early picking looks likely in late December. Watermelon seedings are increasing in southwest Florida.

Cabbage and lettuce harvest is gaining momentum in Texas's lower Rio Grande Valley, where peppers and tomatoes have started seasonal decline. In the Winter Garden, carrot and cabbage harvest is in full volume and onions and onion plants are being planted.

In California, lettuce cutting continues with morning icing. Potato harvest continues when weather permits. Broccoli supplies are moderate. Arizona lettuce harvest continues at Yuma and in Salt River Valley.

**PASTURES AND LIVESTOCK:** Wheat and native pastures continue to decline in Texas Plains where moisture is seriously short. Grazing is mostly open in Montana but forage supplies are limited. Unseasonably mild weather has maintained good range and livestock condition in Wyoming.

Supplemental feeding increased in Northern States. Ice and snow restricted grazing in some North Central and Western States. Range and pasture growth in California slowed because of cool temperatures.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., Dec. 9, 1973

States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches	
	Average	Departure	Total	Departure		Average	Departure	Total	Departure		Average	Departure	Total	Departure
ALA. Birmingham . . .	46	- 2	.8	-. 3	La. Baton Rouge . . .	51	- 4	.9	-. 2	Youngstown . . .	40	+ 9	.3	-. 4
Mobile . . .	52	- 3	1.1	0	Lake Charles . . .	51	- 4	.7	-. 5	OKLA. Okla. City . . .	40	- 2	.4	+ .1
Montgomery . . .	50	+ 1	.9	-. 2	New Orleans . . .	54	- 2	.3	-. 6	Tulsa . . .	44	+ 3	.9	+ .5
ALASKA. Anchorage . . .	14	- 2	T	-. 2	Shreveport . . .	46	- 5	3.2	+2.2	OREG. Astoria . . .	44	0	1.3	-1.9
Barrow . . .	- 2	+ 8	T	0	MAINE. Caribou . . .	29	+ 9	1.6	+1.0	Burns . . .	35	+ 4	.3	0
Fairbanks . . .	- 9	- 4	T	-. 2	Portland . . .	37	+ 7	2.1	+1.1	Medford . . .	44	+ 6	.4	-. 3
Juneau . . .	33	+ 3	1.4	+ .4	MD. Baltimore . . .	45	+ 7	2.5	+1.8	Pendleton . . .	41	+ 4	1.1	+ .8
Kodiak . . .	-	-	-	-	MASS. Boston . . .	46	+ 9	1.4	+ .6	Portland . . .	44	+ 1	1.1	-. 5
Nome . . .	11	+ 2	T	-. 2	Chatham . . .	45	-	1.2	+ .3	Salem . . .	41	- 2	1.4	-. 1
ARIZ. Flagstaff . . .	31	- 2	0	-. 3	MICH. Alpena . . .	35	+ 8	.8	+ .4	PA. Allentown . . .	43	+ 9	2.7	+1.8
Phoenix . . .	55	+ 2	0	-. 2	Detroit . . .	38	+ 7	.4	-. 1	Erie . . .	41	+10	.4	-. 3
Tucson . . .	51	- 2	0	-. 2	Flint . . .	36	+ 8	.7	+ .2	Harrisburg . . .	44	+ 9	2.0	+1.3
Twinslow . . .	31	- 3	0	-. 1	Grand Rapids . . .	37	+ 6	1.6	+1.1	Philadelphia . . .	47	+11	1.9	+1.1
Yuma . . .	58	+ 1	0	-. 1	Houghton Lake . . .	34	+ 8	.8	+ .4	Pittsburgh . . .	40	+ 8	.6	+1.1
ARK. Fort Smith . . .	42	- 2	1.7	+1.0	Lansing . . .	37	+ 7	.8	+ .3	Scranton . . .	41	+10	1.8	+1.1
Little Rock . . .	45	+ 2	3.3	+2.3	Marquette . . .	30	+ 3	1.0	+ .4	R.I. Providence . . .	45	+10	1.3	+ .4
CALIF. Bakersfield . . .	44	- 6	0	-. 2	Muskegon . . .	36	+ 3	1.3	+ .8	S.C. Charleston . . .	56	+ 5	1.0	+ .4
Eureka . . .	51	+ 1	.7	-. 6	S. Ste. Marie . . .	30	+ 6	.8	+ .1	Columbia . . .	53	+ 5	1.9	+1.2
Fresno . . .	44	- 5	T	-. 3	MINN. Duluth . . .	18	+ 1	.1	-. 2	Greenville . . .	47	+ 2	1.4	+ .7
Los Angeles . . .	63	+ 4	0	-. 4	Internatl Falls . . .	17	+ 4	.3	+ .1	S.D. Aberdeen . . .	18	- 4	T	-. 2
Red Bluff . . .	47	- 2	.1	-. 7	Minneapolis . . .	22	+ 1	.2	0	Huron . . .	23	+ 2	.1	-. 1
San Diego . . .	60	+ 2	0	-. 2	Rochester . . .	21	0	.4	+ .1	Rapid City . . .	30	+ 1	T	-. 1
San Francisco . . .	48	- 4	T	-. 7	St. Cloud . . .	20	0	.1	-. 1	Sioux Falls . . .	26	+ 3	T	-. 2
Stockton . . .	45	- 2	T	-. 5	MISS. Jackson . . .	48	- 2	.4	-. 7	TENN. Chattanooga . . .	45	+ 1	1.6	+ .5
COLO. Denver . . .	31	- 2	.5	+ .4	Meridian . . .	49	0	.8	-. 3	Knoxville . . .	44	+ 1	.8	-. 1
Grand Junction . . .	32	+ 1	0	-. 1	MO. Columbia . . .	34	- 2	2.0	+1.5	Memphis . . .	45	+ 1	1.8	+ .7
Pueblo . . .	32	- 3	T	-. 1	Kansas City . . .	32	- 6	1.4	+1.0	Nashville . . .	44	+ 1	.4	-. 5
CONN. Bridgeport . . .	45	+ 9	2.4	+1.4	St. Louis . . .	35	- 2	1.5	+1.0	TEX. Abilene . . .	45	- 2	T	-. 3
Hartford . . .	42	+ 9	2.2	+1.4	Springfield . . .	38	0	2.3	+1.8	Amarillo . . .	38	- 2	.2	0
D.C. Washington . . .	49	+10	2.0	+1.3	MONT. Billings . . .	34	+ 4	0	-. 1	Austin . . .	52	- 2	0	-. 5
FLA. Apalachicola . . .	57	0	.5	-. 1	Glasgow . . .	22	+ 2	.2	+ .1	Beaumont . . .	51	- 5	1.3	+ .3
Daytona Beach . . .	62	+ 1	1.1	-. 3	Great Falls . . .	33	+ 4	T	-. 2	Brownsville . . .	65	+ 1	.5	+ .1
Ft. Myers . . .	66	0	0	-. 3	Havre . . .	21	- 1	.3	+ .2	Corpus Christi . . .	61	+ 1	T	-. 4
Jacksonville . . .	57	- 1	1.4	+1.0	Helena . . .	30	+ 4	T	-. 1	Dallas . . .	-	-	-	-
Key West . . .	74	+ 3	.3	-. 2	Kalispell . . .	30	+ 3	.4	+ .1	Del Rio . . .	53	- 1	0	-. 1
Lakeland . . .	62	- 2	.9	+ .6	Miles City . . .	26	+ 1	.1	0	El Paso . . .	44	- 2	0	-. 1
Miami . . .	71	+ 2	.4	0	Missoula . . .	29	+ 4	.2	-. 1	Fort Worth . . .	48	- 1	.3	-. 3
Orlando . . .	63	+ 1	.5	-. 2	NEBR. Grand Island . . .	31	+ 1	.1	0	Galveston . . .	56	- 3	1.0	0
Tallahassee . . .	54	- 1	.2	-. 5	Lincoln . . .	28	- 5	.4	+ .2	Houston . . .	52	- 3	1.0	0
Tampa . . .	63	0	1.8	+1.4	Norfolk . . .	29	+ 2	T	-. 2	Lubbock . . .	41	- 1	T	-. 1
W. Palm Beach . . .	70	+ 1	.5	-. 1	N. Platte . . .	30	+ 1	T	-. 1	Midland . . .	45	- 2	0	-. 1
GA. Atlanta . . .	47	+ 2	1.8	+ .9	Omaha . . .	25	- 5	.5	+ .3	San Angelo . . .	47	- 2	T	-. 2
Augusta . . .	50	+ 1	.7	0	Valentine . . .	29	+ 2	T	-. 1	San Antonio . . .	53	- 2	T	-. 4
Macon . . .	52	+ 1	.7	-. 1	NEV. Ely . . .	25	- 4	0	-. 2	Victoria . . .	56	- 2	T	-. 5
Savannah . . .	56	+ 3	.8	+ .2	Las Vegas . . .	43	- 4	0	-. 1	Waco . . .	51	- 1	T	-. 5
HAWAII. Hilo . . .	73	+ 1	.4	-3.0	Reno . . .	37	+ 4	T	-. 2	Wichita Falls . . .	45	- 1	0	-. 4
Honolulu . . .	75	0	-. 4	-. 4	Winnemucca . . .	36	+ 5	0	-. 2	UTAH. Blanding . . .	30	- 3	0	-. 2
Kahului . . .	-	-	-	-	N.H. Concord . . .	35	+ 7	1.6	+ .8	Salt Lake City . . .	31	0	T	-. 3
Lihue . . .	73	0	.6	-. 5	N.J. Atlantic City . . .	47	+ 8	1.2	+ .4	VT. Burlington . . .	39	+14	1.3	+ .7
IDAHO. Boise . . .	39	+ 5	.1	-. 2	Trenton . . .	47	+ 9	2.4	+1.7	VA. Lynchburg . . .	44	+ 5	2.8	+2.2
Lewiston . . .	42	+ 6	.5	+ .2	N.MEX. Albuquerque . . .	34	- 5	T	-. 1	Norfolk . . .	52	+ 8	2.0	+1.4
Pocatello . . .	30	+ 1	T	-. 2	Roswell . . .	40	- 1	T	-. 1	Richmond . . .	48	+ 7	2.4	+1.7
ILL. Cairo . . .	42	+ 1	.8	+ .1	N.Y. Albany . . .	40	+10	1.6	+1.0	Roanoke . . .	45	+ 6	1.8	+1.2
Chicago . . .	36	+ 4	1.3	+ .8	Binghamton . . .	41	+11	2.8	+2.2	WASH. Colville . . .	31	+ 2	.9	+ .5
Moline . . .	31	+ 2	1.7	+1.3	Buffalo . . .	39	+ 9	1.0	+ .2	Omak . . .	33	+ 5	.5	+ .1
Peoria . . .	32	+ 1	1.7	+1.3	New York . . .	48	+ 9	3.0	+2.2	Quillayute . . .	42	- 1	3.6	+ .3
Rockford . . .	32	+ 4	1.5	+1.1	Rochester . . .	43	+11	.8	+ .2	Seattle-Tacoma . . .	43	+ 2	1.9	+ .5
Springfield . . .	35	+ 1	1.7	+1.3	Syracuse . . .	41	+10	1.5	+ .7	Spokane . . .	34	+ 2	.5	0
IND. Evansville . . .	41	+ 3	.3	-. 4	N.C. Asheville . . .	45	+ 4	2.1	+1.6	Walla Walla . . .	41	+ 2	.7	+ .3
Ft. Wayne . . .	38	+ 8	.2	-. 3	Charlotte . . .	47	+ 3	1.4	+ .7	Yakima . . .	38	+ 5	T	-. 3
Indianapolis . . .	40	+ 7	.4	-. 3	Greensboro . . .	45	+ 3	2.4	+1.7	W. Va. Beckley . . .	41	+ 7	.7	0
South Bend . . .	39	+ 8	.9	+ .3	Hatteras . . .	61	+11	2.8	+1.9	Charleston . . .	43	+ 4	.1	-. 6
IOWA. Burlington . . .	28	- 2	1.2	+ .8	Raleigh . . .	50	+ 7	2.0	+1.4	Huntington . . .	42	+ 4	T	-. 7
Des Moines . . .	25	- 3	1.6	+1.3	Wilmington . . .	55	+ 5	2.3	+1.6	Parkersburg . . .	43	+ 6	.1	-. 6
Dubuque . . .	27	+ 1	1.5	+ .9	N.DAK. Bismarck . . .	18	- 2	.2	+ .1	WIS. Green Bay . . .	29	+ 4	1.1	+ .8
Sioux City . . .	28	0	T	-. 2	Fargo . . .	16	- 1	.4	+ .3	La Crosse . . .	25	0	.3	0
KANS. Concordia . . .	30	- 4	1.7	+1.5	Williston . . .	19	0	.1	0	Madison . . .	30	+ 5	1.1	+ .7
Dodge City . . .	33	- 4	1.4	+1.3	OHIO. Akron-Canton . . .	42	+ 9	.2	-. 3	Milwaukee . . .	31	+ 4	2.0	+1.6
Goodland . . .	32	- 1	T	-. 1	Cincinnati . . .	40	+ 5	.4	-. 3	WYO. Casper . . .	27	- 2	.1	0
Topeka . . .	33	+ 1	T	-. 1	Cleveland . . .	42	+ 9	.3	-. 3	Cheyenne . . .	29	- 2	T	-. 1
Wichita . . .	35	- 3	1.4	+1.1	Columbus . . .	42	+ 9	.4	-. 2	Lander . . .	25	0	0	0
KY. Lexington . . .	42	+ 4	.7	0	Dayton . . .	39	+ 6	.3	-. 3	Sheridan . . .	30	+ 2	T	-. 1
Louisville . . .	42	+ 4	.3	-. 5	Toledo . . .	38	+ 7	.4	-. 1	P.R. San Juan . . .	78	0	1.8	+ .6

## 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:** General rains Tuesday and early Wednesday preceded coldest weather of season. Most of north had 32° or below 4 to 5 straight nights. Many southern counties had first freeze of season. Lows from 24° Anniston and Birmingham to 32 Dothan Friday night. Fair skies accompanied colder weather.

Harvest made fair progress. Rain and wet fields slowed fieldwork early week. Only about 8% expected cotton production remains in field, mostly north. Corn harvest 95% complete, 92% last year. Harvest of soybeans 91% complete, well ahead of 84% year ago. Conditions favored small grain growth, outlook promising. Seeding complete most farms. Stockmen feeding increasing amounts of hay, because temperatures decline and winter pastures in many localities too wet to graze. Supplies of roughages adequate most farms.

**ARIZONA:** Dry, except up to 3 in. new snow White Mountains Monday. Partly cloudy Monday and Tuesday, otherwise mostly sunny. Rising temperature trend because high pressure both at surface and aloft became well established by late week. Highs mostly 4° to 10° subnormal early week and 4 to 8° above by end.

Cotton harvest accelerated. Yuma sugar beets progressed well. Small grain planting continued. First irrigation late plantings Winter Wheat Cochise. Harvest lettuce, mixed vegetables continued Yuma, Salt River Valley. Harvest nearly complete Pima, Pinal Counties. Vegetables progressed well. Honeydew harvest completed. Navels, sweets, tangelos, lemons, few grapefruit picked. Fruit color improved. Sizes continue small, quality very good. Citrus groves good. Ranges improved slightly, but Desert and lower elevation ranges continue dry. More precipitation needed statewide. Stock water supplies adequate. Livestock generally good. Shearing and lambing active.

**ARKANSAS:** Temperature: Mostly 1° to 3° subnormal except 6° below Hot Springs and El Dorado. Extremes: 69°, Fayetteville and Rohrer; and 11°, Gilbert. Heavy rain first of week, over 2.00 in. most of State; amounts exceeding 3.00 in. common. Heaviest 5.05 in. Center Ridge. Fair and dry weather mid and late week.

Early week rains slowed harvesting. Flooded fields in low areas draining, starting to dry. Ten days to 2 weeks open weather needed badly. Cotton 93 percent picked. Soybean harvest 85 percent complete. Wheat and oats growing well. Limited seeding of wheat expected through mid-December. Pecan harvest underway. Pastures supplying above average feed. Livestock good to excellent, minimum feeding.

**CALIFORNIA:** Saturday's storm brought precipitation to most areas except southeast interior. During rest of week only light rains fell over northwest. Skies were cloudy over northern mountains. Fog was general in central valley, and fair weather continued over south. Temperatures mostly below normal. Lows dropped into upper 20's to low 30's in many valley areas early week but climbed to above freezing by late week.

Small grain seeding active. Earlier planted grains look good. Some apprehension over fuel

shortage. Some rice to be harvested. Rain halted corn, milo harvests. Cotton harvest well along; slowed in San Joaquin Valley by rains and fuel shortage; harvest peaked Imperial Valley. Some shredding and discing underway. Few sugar beets to be harvested. Alfalfa planting continued. Bean harvest in progress. Vineyards pruned, sprayed. Pruning, spraying deciduous tree fruit and nut orchards. Tangerine, lemon, date, desert grapefruit harvests active. Navel orange crop improving, picking continues. Olive harvest nearly complete. Carrots at seasonal levels. Lettuce cutting continues, with morning icing. Potatoes harvest continues, weather permitting. Tomato volume down.

Cool temperatures slowed range and pasture growth. Supplemental feed continues most areas. Some producers without feed, selling livestock because of high feed costs. Stock water, soil moisture supplies plentiful. Mud, snow hampered feeding operations, however some freezing temperatures helping alleviate problem. Livestock good. Turkey producers preparing for delivery new crop. Bees moved into almond groves. Milk, egg production at seasonal production, some decline in areas experiencing unseasonal cool weather.

**COLORADO:** Storm early week brought moderate-to-heavy snow to parts of South and East. Heaviest: San Juan Mountains, over and along Rampart Range of Central Colorado, and Denver area. Over 10 in. of new snow fell at Castle Rock, Conifer, Woodland Park and Wolf Creek Pass. Weekly precipitation totals ranged from an average of less than 0.10 in. in Kansas and Rio Grande River Basins up to 0.30 in. in Platte Basin. Most places had less than 0.50 in. Temperatures: near normal west and 3 to 4° below east. Daily highs from low 60's southeast December 8 to teens at Leadville midweek. Low: -20° Fraser.

Light to moderate snow across eastern plains stopped field activity early week. Farmers resumed harvest late week. Corn 88% picked, 85% last week. Normally harvest complete. Grain sorghum 94% combined, 82% last week. Winter wheat good, growth slow, 11% being grazed. Livestock good, supplemental feeding necessary during snow cover.

**FLORIDA:** Temperatures: near normal, significantly lower temperatures toward end week; moderate to heavy rainfall. Soil moisture adequate panhandle, short elsewhere.

Soybean and cotton harvest almost over. Sugarcane harvest active, planting continued. Small grains good west, poor in dry areas. Some small grains yet to be seeded. Pecan harvest continued. Tomato harvest at fall peak volume with quality very good but sizes averaging small. Peppers also in full. Sweet corn should continue in good supply. Pulling will shift from the Everglades Muck to Pompano-Dade areas. Snap beans, cucumbers, and squash gradually declining into winter period, but cabbage, celery, radishes, lettuce, escarole, endive, chihili, other leafy and hardy crops increase loadings weekly. Early red potatoes in Everglades, Martin County areas growing well with planting active in Dade. Strawberries blooming well with early picking likely late December. Seeding of watermelons increasing in southwest. Pastures

severe drought to fair. Cattle and calves fair to good.

**GEORGIA:** Temperatures averaged 3° to 7° above normal. Rains at midweek when front moved through. Amounts totaled 0.50 to 1.25 in. north and west, but a few spots extreme north near 3.00 in. Rain lighter southeast averaging 0.20 to 0.40 in. except less than 0.10 near coast. It turned colder over weekend. Much needed rain fell southeast Saturday.

Soil moisture mostly adequate. Harvest of cotton, corn, soybeans and pecans active. Seeding of small grains and land preparation accelerated because of improved moisture supplies. Tobacco bed preparation underway. Pastures mostly fair. Cattle fair to mostly good. Both fuel and nitrogen material in short supply some areas.

**HAWAII:** Rain wet most areas of State. Farm operations hampered. Strong winds caused some damage to crops. Progress of crops generally slow. Spray programs heavy. Most pastures greening. Cattle fair to good. Pineapple harvest mostly for fresh fruit market. Harvest of sugar complete.

**IDAHO:** Temperatures: mid-teens and mid-20's to high 50's bringing averages above normal. Early and late week storms affected north and southwest, mainly with rain in valleys and new snow in mountains. Lewiston recorded more than 0.50 in. rain while southcentral and east had mostly cloudy weather and light precipitation.

Farmers cared for livestock, repaired machinery, and hauled manure. Muddy fields delayed completion of sugar beet harvest. Some plowing south end week. Livestock generally good with adequate feed supplies. Sheep moving to winter desert ranges.

**ILLINOIS:** Mild. Highs 50's and 60's Monday and Tuesday. Near seasonal temperatures later. Moderate to heavy rains Monday and Tuesday; light later. Light snow north and central between Wednesday and Sunday. Soil moisture mostly adequate. Winter wheat seedings good. Livestock good. Farmers plowed, cared for livestock, did routine chores, such as machinery maintenance.

**INDIANA:** Temperatures 60's on 4th by weekend in teens, average: 5° above normal. Precipitation 0.33 to 0.67 in. at midweek and weekend. Winter condition virtually halted fieldwork until late week. Limited plowing and corn harvest mostly on Friday. Most farmers waiting for soils to freeze. They cared for livestock and did chores.

**IOWA:** Temperatures: slightly above to near normal north two-thirds and 2° to 4° below normal in southern third. Precipitation, beginning early 4th, fell as rain, with heavy glazing followed by snow. Ice and snow in band from southwest to northeast heaviest northcentral and central. It played havoc with trees and electrical and communication lines.

**KANSAS:** Major winter storm Monday and Tuesday. Severe ice storm 50- to 100- mile Dodge City to Junction City to Centralia. It damaged trees, utility lines badly. Two to 4 in. snow common. Heavy rains east early stages of storm, locally over 3.00 in. Temperatures 3° to 5° subnormal northeast and northcentral, 1° to 3° below normal south, but 2° above normal extreme northwest.

Rain, snow and severe ice halted field work, made livestock care difficult. Moisture helped winter wheat west. Moisture already more than adequate elsewhere. Late seedings developing slowly--top growth short. Less than 5% of sor-

ghum and soybean and 10% of corn acreage unharvested. Most livestock on supplemental feed. Power outage caused feeding, watering, milking problems.

**KENTUCKY:** Temperatures 15° to 20° above normal early week. Dropped to near normal midweek and remained there. Precipitation averaged 0.75 in. in west, 0.50 in. central, and less than 0.50 in. east. Snow flurries northeast with little or no accumulation during first and again during last of week.

Pastures approaching dormancy but good for season, still producing some roughage. Most fall sown grains good condition, generally adequate growth for winter, apparent increase in acreage seeded. Suitable stripping weather resulted in larger volume burley tobacco sales. Price rising, now bringing \$8 to \$10 more than opening week, averaging over \$97 per hundred. Green River markets opened, crop selling well.

**LOUISIANA:** Warm Monday, severe thunderstorms and tornadoes. Much cooler rest of week. Subfreezing lows Friday through Sunday. Temperatures ranged 3° to 7° below normals. Extremes: 81° and 25°. Rainfall mostly ranged from 0.25 in. to 0.50 in. Greatest 1-day rain 3.60 in. Cotton Valley Tuesday morning.

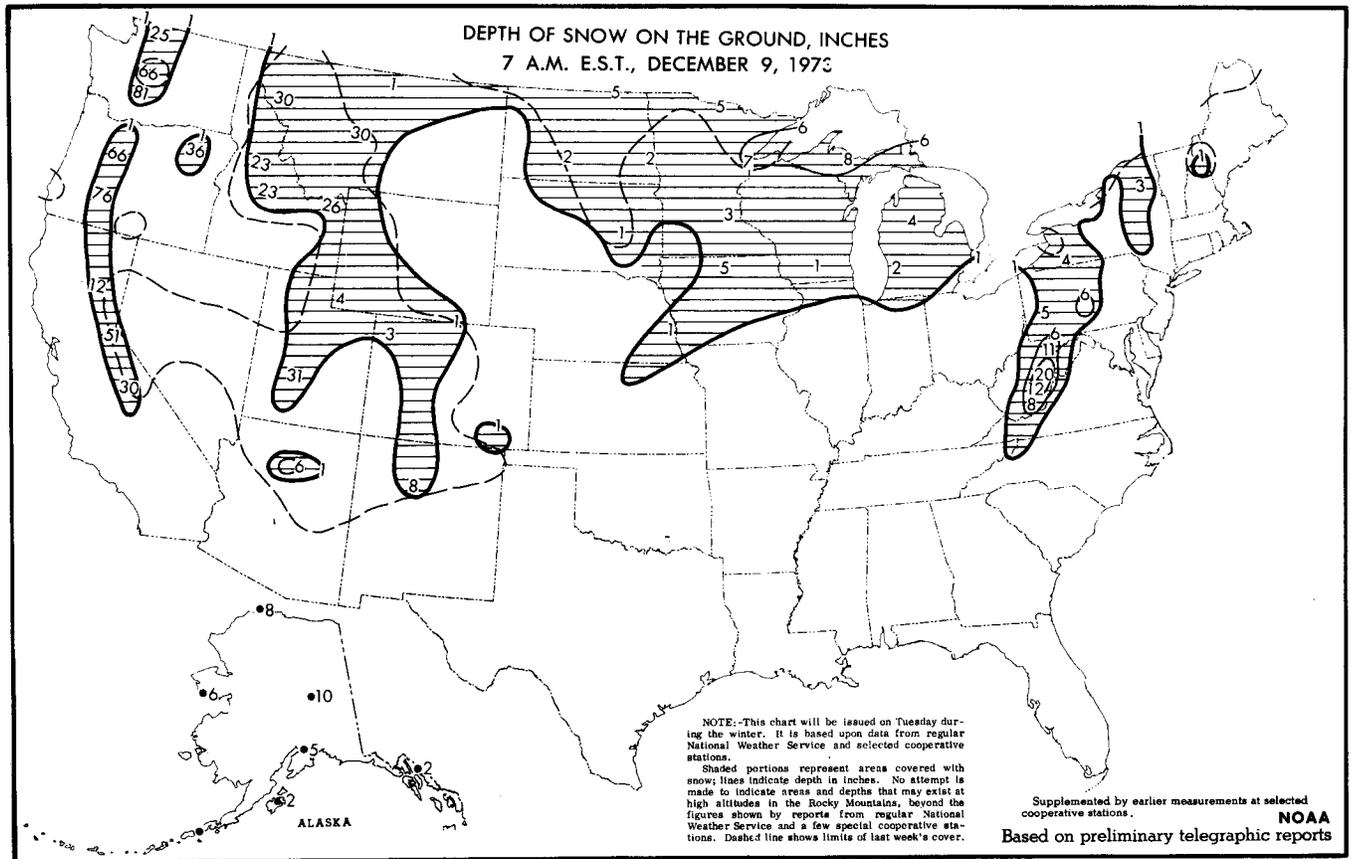
Wet fields limited harvest. Days suitable fieldwork averaged 3.6. Cotton harvest late week on drier soils: 85% picked, 85% last year, 93% 1971. Soybeans 90% combined, 88% last year, 98% 1971. Sugarcane harvest active all week, but muddy fields hampered, 75% harvested, 70% last year. Pecan harvest continued, mostly good yields, quality fair. Small grains and ryegrass good stands and growth. Livestock good.

**MARYLAND & DELAWARE:** Warm, temperatures 4° to 10° above normal. Highs in mid to upper 60's, lows ranged from upper teens to low 30's. Precipitation ranged from less than 0.50 to 1.75 in. Weekend brought 9 in. of snow at Oakland in Garrett County.

Some late harvest work. Farmers prepared for spring crops. Tobacco stripping active. Livestock farmers prepared for winter care and feeding.

**MICHIGAN:** It blew hot and cold first of week and temperatures ranged 3° to 9° above normal. Unseasonably warm temperatures Monday changed to colder over most areas Tuesday when cold front briefly pushed through. Warm air again returned Wednesday when storm center traveled northward through Lake Michigan. Colder air returned Thursday and prevailed rest of week. Precipitation ranged generally 0.50 to 1.00 in. lower to 0.75 to 1.00 upper to 1.80 to 2.00 in. west lower except under 0.50 in. southeast lower. It rained first of week and snowed the rest of the week. Snow accumulated 10 to 15 in. most of west upper Wednesday and Thursday and 1.00 to 2.00 in. most other places into lower Michigan. Snow again on Sunday added 1 to 3 in.

**MINNESOTA:** Temperatures 1° to 4° above normal except near normal northwest quarter; 4th straight week temperatures above normal. Week began and ended above normal, but cold air moved in state-wide 9th. Precipitation: 0.20 to 0.4 in. above normal except for southwest, below normal. New snow, 3 to 8 in., fell on southeast quarter on 5th. Freezing drizzle and rain, Red River Valley on 8th caused ice accumulation on utility lines and broke lines on 9th.



**MISSISSIPPI:** Cold front on 3d brought general showers and scattered thunderstorms, some of which were severe enough to produce wind damage at few places in middle third. By weekend temperatures had plunged about 20° lower than unseasonably warm spell. Temperatures averaged a few degrees above normal. Extremes: 80°, several places; 20°, University. Generally fair and rather cold weather prevailed during weekend.

Soil moisture mostly adequate to surplus. Fieldwork: 2.7 days suitable. When weather conditions improved, harvesting activities progressed well. Cotton harvest reached 94%, soybeans 91%, corn 97%, and pecans 78% complete. Winter wheat and oats fair to mostly good. Killing frost in most areas late week. Winter pasture mostly good. Livestock mostly good with some supplemental feeding. Hay and roughage supplies mostly adequate, but feed grain supplies stand short to adequate.

**MISSOURI:** Temperatures: From 2° above normal north to 8° to 10° above in Bootheel and southwest. Mild first half; daytime temperatures reaching into 50's and 60's. Nevada reported 71° December 1 and 2. Cooled last half. Coldest around 0° in Tarkio Area. Precipitation generally above normal statewide; amounts between 2.00 - 3.00 in. over Ozarks and 1.00 to 2.00 in. elsewhere, except around 1.00 in. Bootheel. Precipitation fell mainly as rain or rainshowers except in north quarter where it came as snow or ice and accumulated from 1 to 5 in. One day suitable for fieldwork. Soybean harvest 95% complete, 67% 1972; 88% - 1968-72 average. Corn harvest 89% complete, 70% 1972; 83% average. Cotton harvest 95% complete, 57% 1972; 86% average. Grain sorghum

harvest 93% complete, 73% 1972; 88% average. Intended fall plowing 65% complete.

Fuel supplies for current farm work reported 35% short and 65% adequate. This is last report for this crop season.

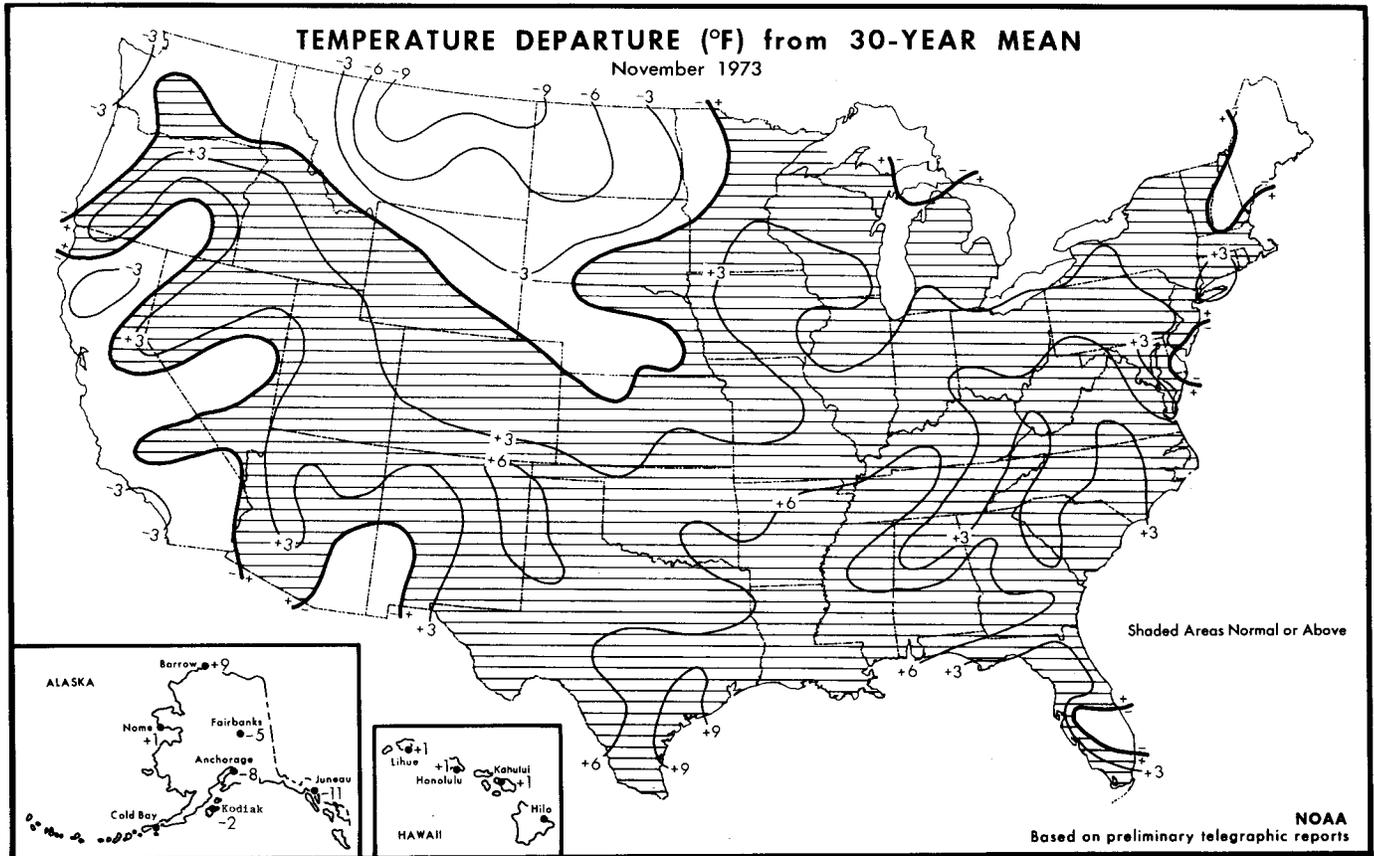
**MONTANA:** Temperatures cooled early week, but overall averages only 2° below normal northcentral to 5° above normal west. Highs from 45° to 55°, while lows mostly teens, some fell below 0° northcentral. Precipitation subnormal except west, northcentral and northeast. It ranged from nearly 0.40 in. west to 0.20 in. northeast. Farmers mostly cared for and fed livestock. Winter wheat fair to good. Grazing mostly open but forage supplies limited.

**NEBRASKA:** Rain changing to snow southeast early week, 0.33 to 1.75 in. moisture. Elsewhere trace to 0.10 in. Temperatures subnormal, but above normal weekend.

Mud and snow reduced fieldwork. Corn 95% harvested, normal, 75% 1972. Moisture 19%, 18% last week, 22% 1972. Harvest progress slowest central and southwest. Wheat good. Surface and subsoil moisture mostly adequate. Livestock doing well. Snow and ice restricted grazing in harvested fields. Some supplemental feeding done. Feedlots muddy.

**NEVADA:** No precipitation fell. Extremes: 65°, Las Vegas and Yucca Flat; -1° Ely. Virginia City with 1 in. snow only place with measurable snow. Sierras snow depth: 51 in. Echo Summit, 47 in. Norden, 18 in. Blue Canyon. Cotton harvest 67% complete Pahrump Valley. Vegetable harvest Moapa Valley complete. Livestock good.

(Continued on Page 13)



#### NOVEMBER WEATHER

**PRECIPITATION:** Extremes were the rule for precipitation also. The entire East Coast was well below normal and virtually no rain fell over most of Texas and New Mexico. Meanwhile, much of the South South, the Ohio River Valley, Arizona and the entire Pacific Northwest received over twice the normal rainfall. Over 8.00 in. fell in Arkansas, western Tennessee and Kentucky, and southern Missouri. From 2.00 to 8.00 in. fell in the Pacific Northwest, helping to alleviate and break the drought in that area. The winter rainy season along the West Coast brought 2.00 to 25.00 in. from Santa Maria, Cal., northward.

The heaviest rains in most areas fell early and late in the month while the rains along the Pacific coast were a daily nuisance. The first major snow storm of the season occurred on the 2nd, dumping 7 to 10 in. over Montana, Wyoming, and Colorado.

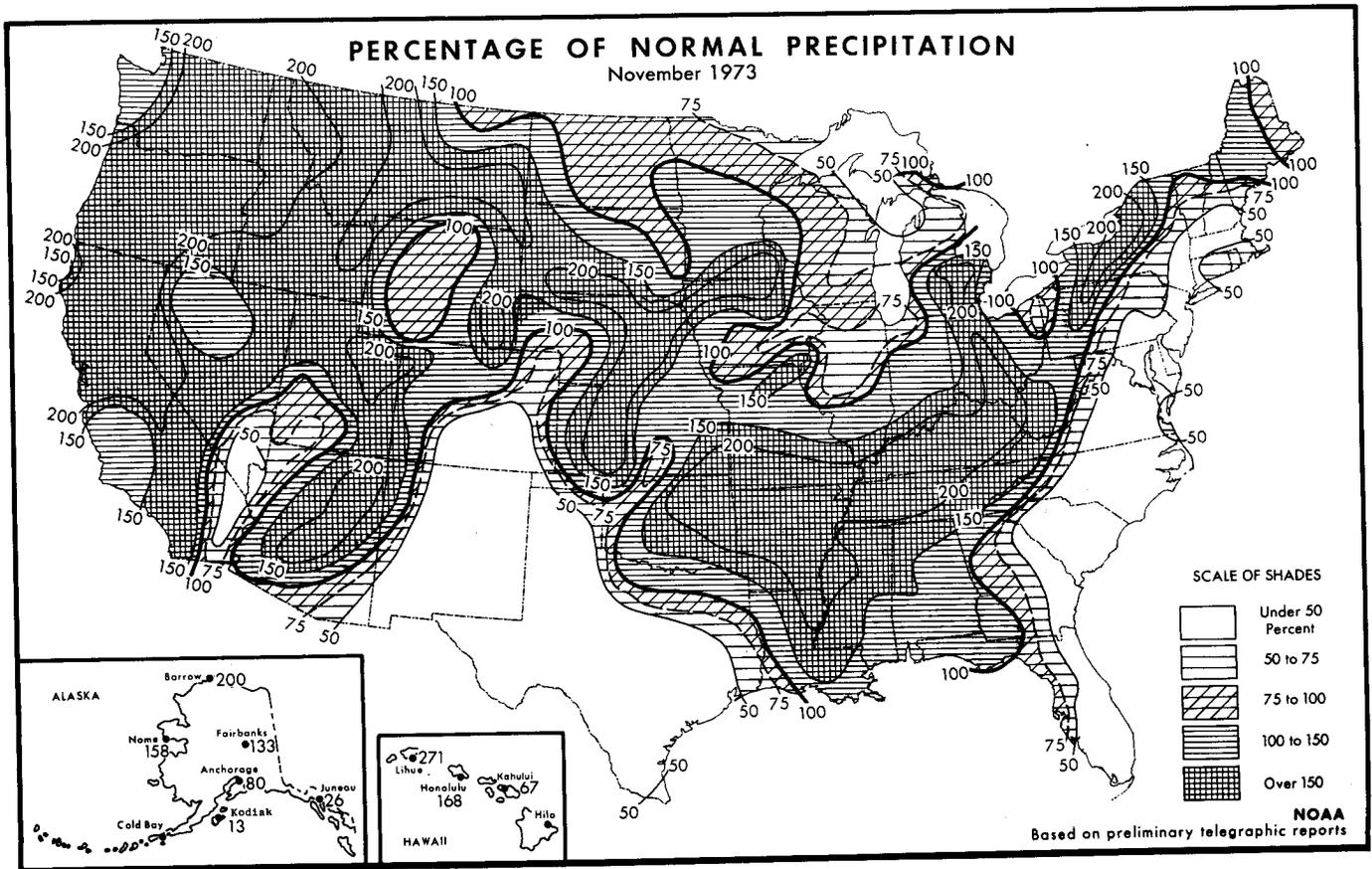
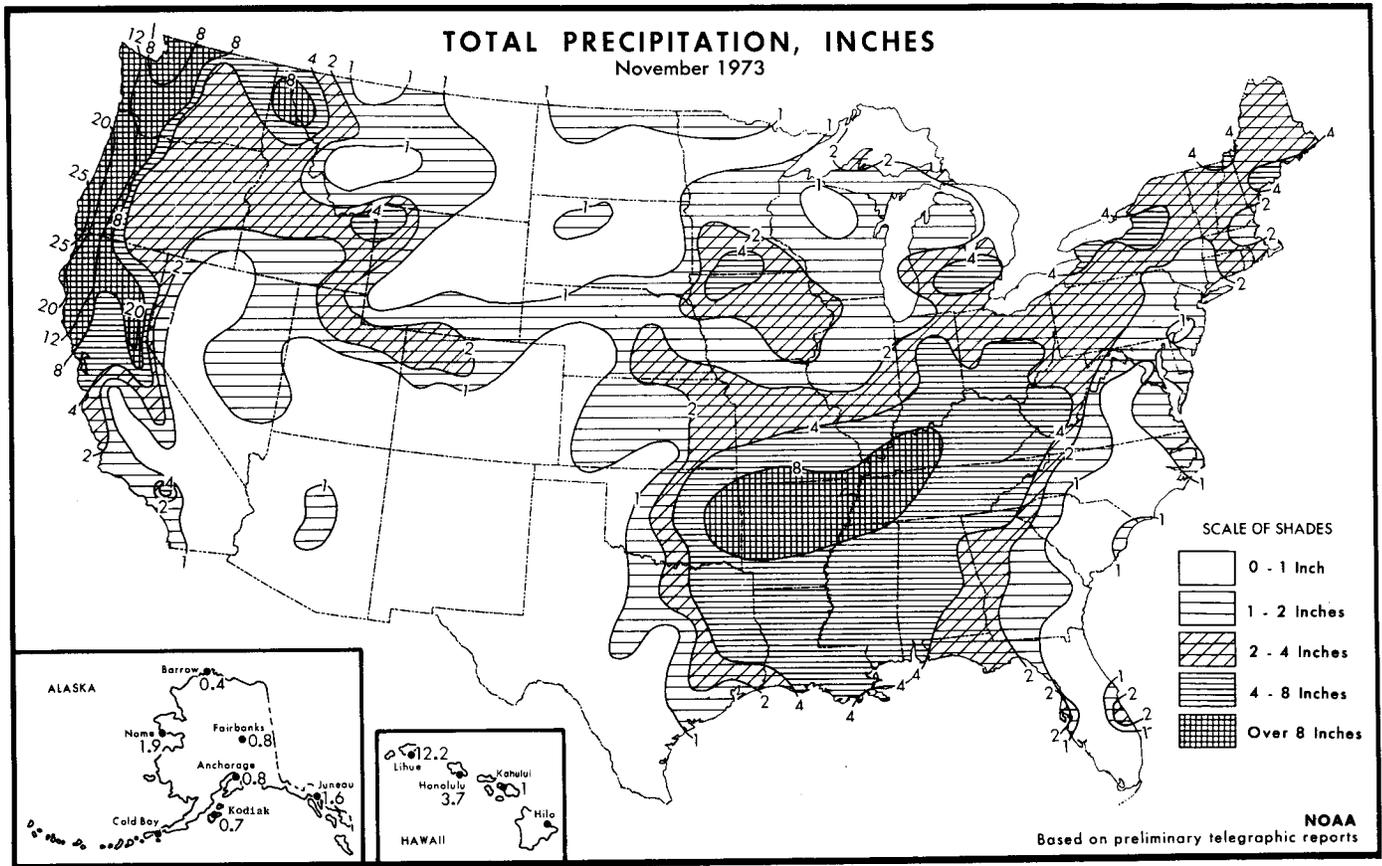
During the week endings the 25th, a series of rapidly moving cold fronts brought heavy rainfall to the central tier of States: 9.92 in. at Ft. Smith, Ark. Over 6.00 in. fell in parts of Oklahoma, Missouri, and Arkansas. The month ended with heavy rainfall from East Texas to western Pennsylvania. An area along the Tennessee-Kentucky border received over 5.00 in. of rain. Considerable violent weather erupted in Dixie at the same time. Twenty-seven tornadoes erupted on the 24th, 22 on the 27th.

**TEMPERATURE:** November began much colder than expected, ended unusually warm, and experienced very marked variations in between. Overall, the Nation was generally warmer than normal except for the northern Rockies and Great Plains, California, and parts of New England and Florida. It was the warmest November on record along the Texas-Louisiana coast, and one of the coldest in central Montana.

The first decade was generally below normal except in the south and southwest, and the eastern tier of Atlantic States and New England early in the period. Many record lows occurred in Idaho and Montana where temperatures averaged 12° to 21° below normal for the period. A great contrast existed during the week ending the 11th. The entire southwest, northward to the Montana border, averaged 6° to 12° above normal while northern Montana averaged 21° below normal.

Midmonth found the entire Nation well above normal with many areas 6° to 12° above. Temperature records were shattered all through the northeast. The eastern half of the Nation continued very warm through Thanksgiving week, but the west turned very cold.

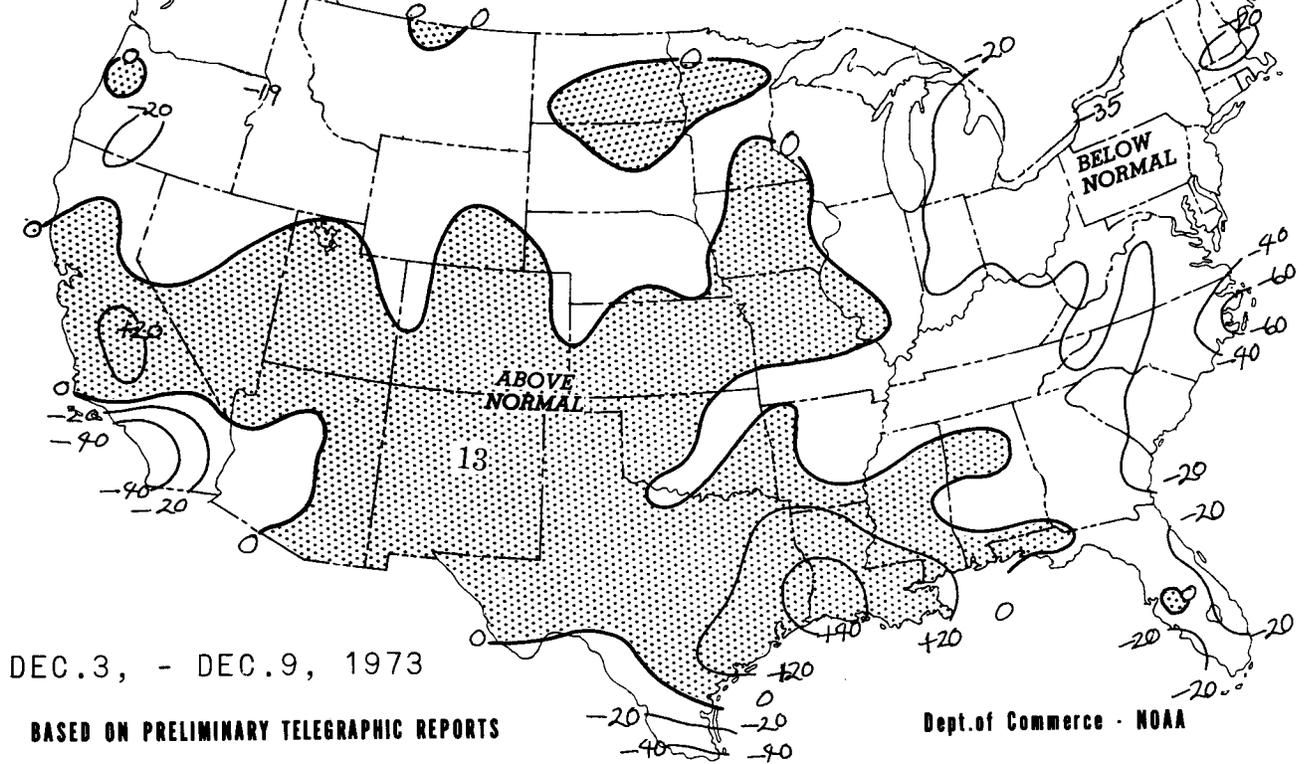
The month ended on a warm note over the entire Nation. On the 28th, record highs were recorded at several locations in the east: Norfolk, Va., 82°, Washington, D.C., 72°, Rochester, N.Y., 67°. Record means for the entire month included Corpus Christi, Texas, 72.9°, Mobile, Ala., 65.3°.



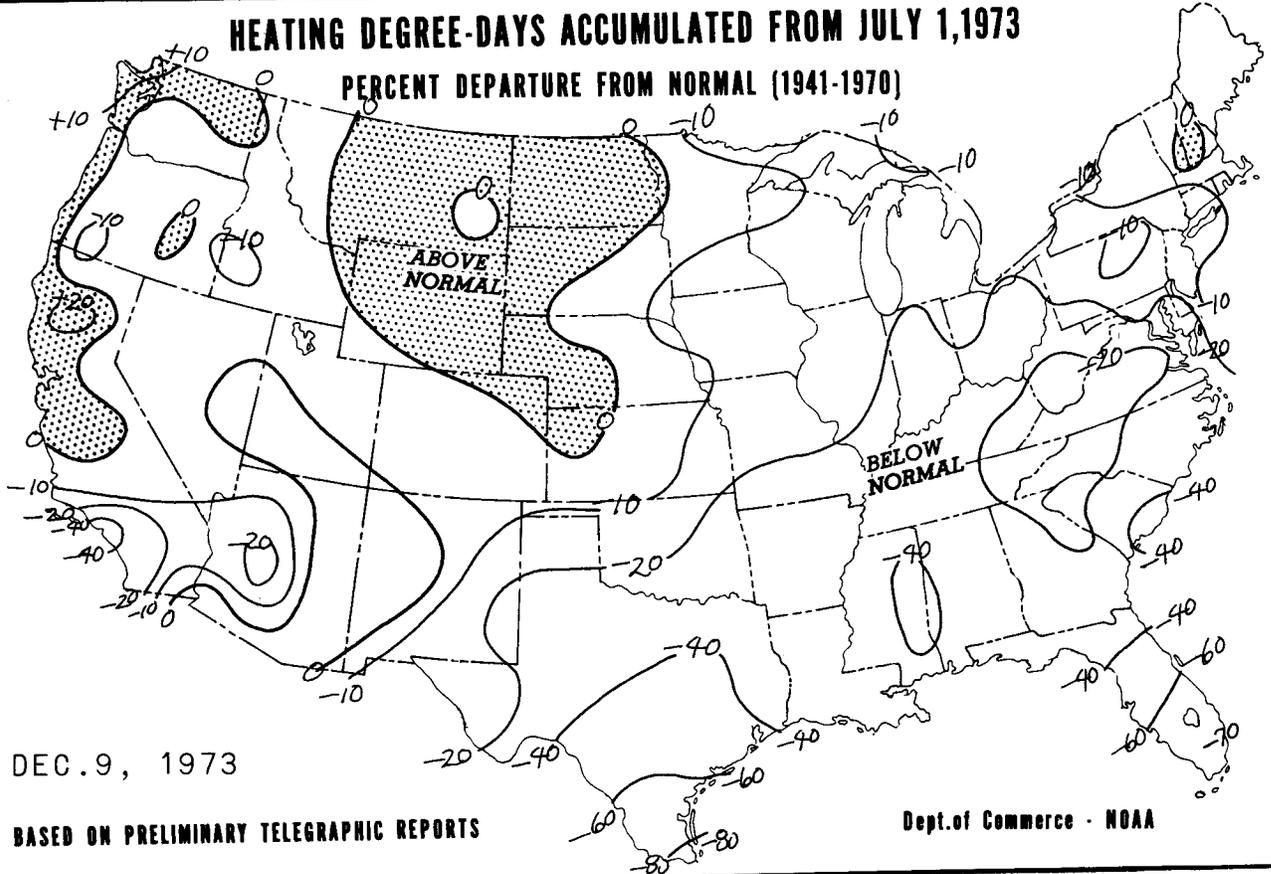
Temperature and Precipitation Data for November 1973

States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches	
	Average	Departure	Total	Departure		Average	Departure	Total	Departure		Average	Departure	Total	Departure
ALA.Birmingham . . .	56	+ 3	4.9	+1.4	La.Baton Rouge . . .	66	+ 7	7.4	+3.3	Youngstown . . .	43	+ 4	1.7	-1.1
Mobile . . .	65	+ 7	4.5	+1.1	Lake Charles . . .	68	+ 8	3.0	-1.2	OKLA.Okla. City . . .	53	+ 5	2.8	+1.2
Montgomery . . .	60	+ 6	4.3	+1.3	New Orleans . . .	67	+ 7	4.0	+ .7	Tulsa . . .	53	+ 5	6.3	+4.0
ALASKA.Anchorage . . .	14	- 8	.8	- .2	Shreveport . . .	62	+ 6	5.2	+1.0	OREG.Astoria . . .	44	- 2	4.9	+3.7
Barrow . . .	8	+ 9	.4	+ .2	MAINE.Caribou . . .	28	- 2	2.6	- .4	Burns . . .	35	- 1	2.7	+1.5
Fairbanks . . .	-1	- 5	.8	+ .2	Portland . . .	38	0	2.4	-1.8	Medford . . .	46	+ 4	7.0	+4.4
Juneau . . .	23	-11	1.6	-4.5	MD.Baltimore . . .	47	+ 1	1.3	-1.8	Pendleton . . .	43	+ 2	3.8	+2.4
Kodiak . . .	33	- 2	.7	-4.7	MASS.Boston . . .	46	+ 1	1.7	-2.2	Portland . . .	44	- 1	11.6	+6.3
Nome . . .	18	+ 1	1.9	+ .7	Chatham . . .	44	- 1	3.2	- .-	Salem . . .	44	- 1	15.3	+9.8
ARIZ.Flagstaff . . .	37	+ 1	1.9	+ .9	MICH.Alpena . . .	36	+ 1	1.7	- .7	PA.Allentown . . .	45	+ 3	1.7	-1.6
Phoenix . . .	67	+ 3	1.4	+ .9	Detroit . . .	41	+ 2	3.2	+ .9	Erie . . .	43	+ 3	2.8	- .6
Tucson . . .	58	0	.5	- .1	Flint . . .	40	+ 2	4.9	+2.7	Harrisburg . . .	47	+ 4	1.0	-2.0
Winslow . . .	44	+ 3	.9	+ .5	Grand Rapids . . .	40	+ 3	3.5	+1.0	Philadelphia . . .	48	+ 4	.6	-2.8
Yuma . . .	62	0	.1	0	Houghton Lake . . .	36	+ 2	1.3	-1.1	Pittsburgh . . .	44	+ 3	2.6	+ .4
ARK.Fort Smith . . .	55	+ 5	10.9	+7.7	Lansing . . .	40	+ 2	4.2	+2.0	Scranton . . .	42	+ 2	1.5	-1.4
Little Rock . . .	57	+ 7	9.0	+4.9	Marquette . . .	35	+ 1	1.2	-1.9	R.I.Providence . . .	44	+ 1	2.3	-1.8
CALIF.Bakersfield . . .	57	+ 1	.6	+ .1	Muskegon . . .	40	0	2.3	- .6	S.C.Charleston . . .	61	+ 5	.8	-1.3
Eureka . . .	51	0	6.6	+2.0	S. Ste. Marie . . .	33	0	3.9	+ .6	Columbia . . .	59	+ 5	.4	-2.0
Fresno . . .	53	- 1	1.4	+ .4	MINN.Duluth . . .	28	+ 1	1.6	- .2	Greenville . . .	52	+ 1	1.3	-1.5
Los Angeles . . .	60	- 3	1.7	+ .6	Internatl Falls . . .	25	+ 1	1.1	- .4	S.D.Aberdeen . . .	27	- 3	.7	0
Red Bluff . . .	50	- 5	7.4	+5.1	Minneapolis . . .	34	+ 3	2.0	+ .6	Huron . . .	32	+ 1	.9	+ .2
San Diego . . .	61	- 1	1.6	+ .7	Rochester . . .	35	+ 3	3.4	+1.8	Rapid City . . .	32	- 3	.7	+ .3
San Francisco . . .	54	- 1	7.9	+6.1	St. Cloud . . .	32	+ 2	1.6	+ .3	Sioux Falls . . .	35	+ 2	1.0	0
Stockton . . .	53	0	3.7	+2.5	MISS.Jackson . . .	62	+ 6	6.2	+2.3	TENN.Chattanooga . . .	52	+ 3	5.9	+2.2
COLO.Denver . . .	40	+ 2	.8	+ .1	Meridian . . .	62	+ 8	3.6	+ .6	Knoxville . . .	52	+ 3	5.0	+1.8
Grand Junction . . .	41	+ 2	.9	+ .3	MO.Columbia . . .	46	+ 2	2.8	+ .5	Memphis . . .	57	+ 7	8.5	+4.1
Pueblo . . .	42	+ 2	.1	- .4	Kansas City . . .	46	+ 1	2.4	+ .6	Nashville . . .	55	+ 6	7.8	+4.5
CONN.Bridgeport . . .	48	+ 3	1.8	-2.2	St. Louis . . .	47	+ 3	3.6	+1.0	TEX.Abilene . . .	58	+ 5	.2	- .9
Hartford . . .	44	+ 3	2.1	-1.7	Springfield . . .	50	+ 4	6.4	+3.6	Amarillo . . .	51	+ 5	.1	- .6
D.C.Washington . . .	52	+ 4	1.0	-1.8	MONT.Billings . . .	30	- 5	1.2	+ .6	Austin . . .	65	+ 6	.6	-1.5
FLA.Apalachicola . . .	62	+ 1	2.2	- .4	Glasgow . . .	21	- 7	1.5	0	Beaumont . . .	67	+ 7	2.0	-1.5
Daytona Beach . . .	66	+ 1	T	-2.3	Great Falls . . .	25	- 9	1.4	+ .6	Brownsville . . .	75	+ 7	.9	- .4
Ft. Myers . . .	73	+ 4	.1	-1.9	Havre . . .	20	-10	1.0	+ .5	Corpus Christi . . .	73	+ 9	.3	-1.4
Jacksonville . . .	65	+ 3	.4	-1.3	Helena . . .	25	- 7	1.0	+ .4	Dallas . . .	-	-	-	-
Key West . . .	78	+ 4	.2	-2.6	Kalispell . . .	29	- 2	2.8	+1.4	Del Rio . . .	64	+ 5	T	- .6
Lakeland . . .	66	- 1	.1	-1.5	Miles City . . .	30	- 3	1.7	+1.3	El Paso . . .	54	+ 3	.1	- .2
Miami . . .	76	+ 4	.5	-2.3	Missoula . . .	30	- 1	2.5	+1.6	Fort Worth . . .	60	+ 5	2.1	- .4
Orlando . . .	71	+ 5	.7	- .9	NEBR.Grand Island . . .	37	0	2.4	+1.6	Galveston . . .	70	+ 7	.6	-3.0
Tallahassee . . .	64	+ 5	3.2	+ .8	Lincoln . . .	39	- 2	1.8	+ .5	Houston . . .	67	+ 8	1.6	-2.3
Tampa . . .	71	+ 4	2.8	+1.3	Norfolk . . .	36	0	1.9	+1.0	Lubbock . . .	54	+ 6	T	- .5
W.Palm Beach . . .	72	- 1	T	-2.9	N.Platte . . .	35	- 1	.5	0	Midland . . .	57	+ 4	T	- .5
GA.Atlanta . . .	57	+ 6	2.3	- .7	Omaha . . .	39	+ 2	1.5	+ .2	San Angelo . . .	61	+ 6	T	- .8
Augusta . . .	56	+ 2	.6	-1.6	Valentine . . .	35	+ 1	1.1	+ .6	San Antonio . . .	66	+ 6	.3	-1.1
Macon . . .	60	+ 5	2.0	- .5	NEV.Ely . . .	33	- 1	1.1	+ .5	Victoria . . .	71	+ 9	.8	-1.6
Savannah . . .	62	+ 5	.7	-1.4	Las Vegas . . .	53	0	.1	- .2	Waco . . .	63	+ 6	.7	-1.5
HAWAII.Hilo . . .	-	-	-	-	Reno . . .	43	+ 5	1.7	+1.1	Wichita Falls . . .	58	+ 4	1.7	+ .3
Honolulu . . .	77	+ 1	3.7	+1.5	Winnemucca . . .	41	+ 5	.8	0	UTAH.Milford . . .	38	+ 3	.9	-1.1
Kahului . . .	76	+ 1	1.0	- .5	N.H.Concord . . .	36	- 2	1.8	-1.9	Salt Lake City . . .	41	+ 4	2.5	+1.2
Lihue . . .	76	+ 1	12.2	+7.7	N.J.Atlantic City . . .	47	0	1.4	-2.3	VT.Burlington . . .	37	+ 2	2.3	- .3
IDAHO.Boise . . .	42	+ 3	2.4	+1.2	Trenton . . .	48	+ 2	1.1	-2.1	VA.Lynchburg . . .	50	+ 3	1.0	-1.6
Lewiston . . .	40	0	2.8	+1.6	N.MEX.Albuquerque . . .	45	+ 1	.8	- .3	Norfolk . . .	54	+ 3	1.9	-1.2
Pocatello . . .	37	+ 2	1.9	+ .9	Roswell . . .	51	+ 5	T	- .3	Richmond . . .	51	+ 2	1.3	-1.7
ILL.Cairo . . .	53	+ 5	7.8	+3.9	N.Y.Albany . . .	40	+ 1	1.3	-1.4	Roanoke . . .	49	+ 2	1.8	- .9
Chicago . . .	42	+ 2	1.4	- .8	Binghamton . . .	40	+ 2	1.8	- .7	WASH.Colville . . .	33	- 1	6.4	+4.4
Moline . . .	40	+ 1	1.2	- .8	Buffalo . . .	41	+ 2	4.1	+ .5	Omak . . .	32	- 2	3.6	+2.2
Peoria . . .	42	+ 2	1.5	- .6	New York . . .	49	+ 2	1.5	-2.1	Quillayute . . .	41	- 4	17.2	+3.9
Rockford . . .	40	+ 3	2.0	- .4	Rochester . . .	43	+ 3	3.8	+1.3	Seattle-Tacoma . . .	44	0	8.0	+2.6
Springfield . . .	46	+ 4	1.4	-1.0	Syracuse . . .	41	+ 1	6.7	+3.8	Spokane . . .	34	- 2	5.1	+2.9
IND.Evansville . . .	50	+ 5	6.0	+2.8	N.C.Asheville . . .	49	+ 4	3.6	+ .8	Walla Walla . . .	42	0	4.2	+2.5
Ft. Wayne . . .	44	+ 5	3.4	+ .8	Charlotte . . .	53	+ 3	.5	-2.0	Yakima . . .	38	+ 1	2.8	+1.8
Indianapolis . . .	46	+ 5	3.6	+ .5	Greensboro . . .	50	+ 2	1.2	-1.5	W.Va.Beckley . . .	44	+ 2	4.5	+1.8
South Bend . . .	44	+ 5	1.4	-1.3	Hatteras . . .	57	+ 1	1.2	-2.9	Charleston . . .	47	+ 3	5.4	+2.6
IOWA.Burlington . . .	42	+ 3	2.1	+ .2	Raleigh . . .	55	+ 5	.6	-2.2	Huntington . . .	48	+ 2	5.2	+2.7
Des Moines . . .	41	+ 4	1.5	- .3	Wilmington . . .	58	+ 3	.5	-2.6	Parkersburg . . .	46	+ 1	3.5	+1.1
Dubuque . . .	38	+ 3	2.1	- .5	N.DAK.Bismarck . . .	23	- 6	.5	- .1	WIS.Green Bay . . .	35	+ 1	1.4	- .5
Stoux City . . .	38	+ 2	2.7	+1.5	Fargo . . .	25	- 3	.9	+ .1	La Crosse . . .	38	+ 4	1.9	0
KANS.Concordia . . .	43	+ 1	1.3	+ .3	Williston . . .	20	- 8	.8	+ .2	Madison . . .	37	+ 3	1.5	- .6
Dodge City . . .	44	+ 1	1.3	+ .7	OHIO.Akron-Canton . . .	45	+ 4	2.4	+ .1	Milwaukee . . .	39	+ 3	1.8	- .4
Goodland . . .	39	+ 1	.7	+ .2	Cincinnati . . .	45	0	5.0	+2.0	WYO.Casper . . .	33	- 1	.8	+ .1
Topeka . . .	45	+ 2	2.1	+ .6	Cleveland . . .	45	+ 4	2.6	0	Cheyenne . . .	35	+ 1	1.2	+ .6
Wichita . . .	47	+ 3	.9	- .6	Columbus . . .	45	+ 4	5.4	+2.9	Lander . . .	32	+ 1	.7	- .2
KY.Lexington . . .	49	+ 4	6.6	+3.3	Dayton . . .	45	+ 3	3.9	+1.2	Sheridan . . .	29	- 4	.7	-1.1
Louisville . . .	50	+ 5	7.6	+4.4	Toledo . . .	42	+ 3	3.3	+1.3	P.R.San Juan . . .	-	-	-	-

### HEATING DEGREE-DAYS FOR THE WEEK PERCENT DEPARTURE FROM NORMAL (1941-1970)

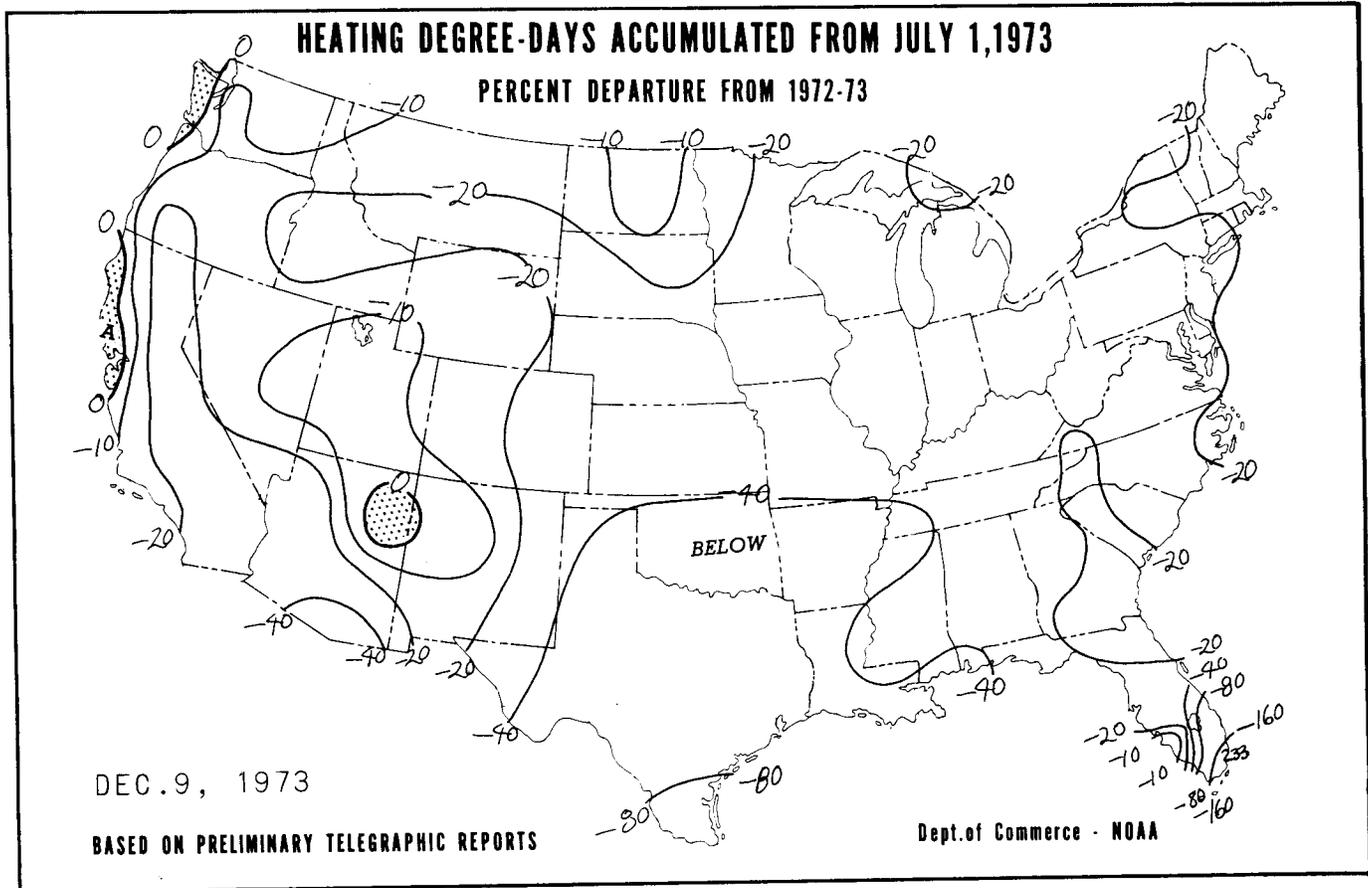


### HEATING DEGREE-DAYS ACCUMULATED FROM JULY 1, 1973 PERCENT DEPARTURE FROM NORMAL (1941-1970)



Heating Degree Days (Base 65°) For Week Ending Dec. 9, 1973

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 . . .	131	2	518	-180	-231	Portland . . . . .	192	-60	1792	-95	-317	Tulsa . . . . .	147	-13	621	-203	-534
Mobile . . . . .	92	15	212	-135	-169	MD. Baltimore . . .	139	-52	963	-123	-260	OREG. Astoria . . .	---	---	---	---	---
Montgomery . . . .	106	-1	378	-156	-169	MASS. Boston . . .	132	-71	1147	-89	-240	Burns . . . . .	210	-36	2066	3	-301
ARIZ. Flagstaff . . .	235	-1	1877	-217	-465	MICH. Alpena . . .	213	-57	1935	-311	-561	Medford . . . . .	145	-37	1147	-211	-394
Phoenix . . . . .	68	-9	236	-60	-114	Detroit . . . . .	184	-52	1332	-215	-538	Pendleton . . . . .	167	-26	1359	-96	-349
Tucson . . . . .	94	13	348	10	-235	Flint . . . . .	178	-69	1445	-300	-532	Portland . . . . .	147	-14	1238	-129	-109
Winslow . . . . .	231	26	1246	60	74	Grand Rapids . . .	195	-50	1457	-201	-560	Salem . . . . .	165	4	1419	38	-271
Yuma . . . . .	45	-8	184	9	-61	Houghton Lake . .	215	-60	1904	-304	-580	PA. Allentown . . .	152	-69	1170	-226	-427
ARK. Fort Smith . . .	163	13	605	-158	-487	Lansing . . . . .	197	-49	1533	-171	-634	Erie . . . . .	168	-64	1364	-301	-525
Little Rock . . . . .	137	-13	474	-305	-382	Marquette . . . . .	248	-24	1896	-251	-711	Harrisburg . . . .	146	-63	1005	-240	-344
CALIF. Bakersfield . .	146	38	461	-6	-171	Muskegon . . . . .	201	-37	1492	-194	-412	Philadelphia . . .	126	-65	905	-188	-328
Eureka . . . . .	94	-15	1747	110	110	S. Ste. Marie . . .	244	-47	2224	-207	-500	Pittsburgh . . . .	176	-49	1191	-306	-408
Fresno . . . . .	148	25	622	31	-168	MINN. Duluth . . .	330	0	2517	-101	-796	Scranton . . . . .	166	-66	1452	-107	-461
Los Angeles . . . . .	25	-31	209	-151	-43	Internatl Falls . .	337	-29	2540	-338	-643	R. I. Providence . .	138	-77	1292	-85	-205
Red Bluff . . . . .	124	5	699	127	-180	Minneapolis . . . .	302	6	1819	-290	-681	S. C. Charleston . .	67	-34	276	-196	-107
San Diego . . . . .	27	-23	192	-77	-60	Rochester . . . . .	308	10	1835	-243	-747	Columbia . . . . .	85	-38	370	-238	-194
San Francisco . . . .	115	18	907	113	46	St. Cloud . . . . .	313	-5	2067	-210	-731	Greenville . . . .	128	-18	676	-83	-130
Stockton . . . . .	138	14	610	1	-180	MISS. Jackson . . .	122	19	372	-151	-173	S. DAK. Aberdeen . .	326	12	2211	8	-303
COLO. Denver . . . . .	239	24	1524	-47	-465	Meridian . . . . .	111	0	352	-231	-211	Huron . . . . .	294	-1	1969	-58	-435
Grand Junction . . . .	230	-1	1318	-117	-209	MO. Columbia . . .	214	7	1035	-150	-466	Rapid City . . . .	242	-12	1985	78	-563
Pueblo . . . . .	232	20	1310	-76	-514	Kansas City . . . .	230	21	1023	-161	-510	Sioux Falls . . . .	273	-18	1791	-195	-645
CONN. Bridgeport . . .	141	-56	906	-216	-483	St. Louis . . . . .	207	11	994	-114	-420	TENN. Chattanooga .	139	-18	690	-183	-315
Hartford . . . . .	159	-77	1285	-227	-367	Springfield . . . .	185	-2	836	-258	-532	Knoxville . . . . .	144	-10	690	-165	-259
DEL. Wilmington . . .	136	-59	858	-254	-284	MONT. Billings . . .	218	-32	2002	70	-614	Memphis . . . . .	137	-7	473	-281	-468
D. C. Washington . . .	109	-68	656	-282	-336	Glasgow . . . . .	299	-12	2435	73	-395	Nashville . . . . .	148	-12	582	-310	-276
FLA. Apalachicola . .	58	-6	158	-102	-73	Great Falls . . . .	226	-26	2228	150	-426	TEX. Abilene . . . .	124	7	399	-175	-535
Daytona Beach . . . .	33	-13	67	-88	-15	Havre . . . . .	309	3	2506	70	-326	Amarillo . . . . .	183	10	817	-191	-683
Ft. Myers . . . . .	16	-5	28	-43	-2	Helena . . . . .	244	-31	2480	125	-609	Austin . . . . .	91	12	170	-173	-406
Jacksonville . . . . .	60	-5	186	-76	-42	Kalispell . . . . .	242	-33	2457	-179	-407	Brownsville . . . .	12	-12	14	-58	-177
Key West . . . . .	0	0	0	0	0	Miles City . . . . .	271	-9	2053	-33	-534	Corpus Christi . . .	40	1	42	-95	-215
Lakeland . . . . .	33	3	59	-51	-33	Missoula . . . . .	250	-18	2277	-105	-427	Del Rio . . . . .	78	-1	150	-167	-271
Miami . . . . .	9	-1	10	-15	7	NEBR. Grand Island	240	-6	1582	-5	-402	El Paso . . . . .	140	5	554	-111	-131
Orlando . . . . .	28	-4	47	-61	-21	Lincoln . . . . .	197	-46	1459	-42	-453	Fort Worth . . . . .	111	5	307	-174	-441
Tallahassee . . . . .	78	0	247	-86	-50	Norfolk . . . . .	251	-13	1627	-101	-489	Galveston . . . . .	63	16	78	-98	-219
Tampa . . . . .	32	-2	64	-49	-20	North Platte . . . .	244	-7	1835	55	-488	Houston . . . . .	80	16	110	-149	-333
W. Palm Beach . . . .	10	-4	12	-28	7	Omaha . . . . .	276	24	1528	-59	-450	Lubbock . . . . .	157	3	614	-238	-562
GA. Atlanta . . . . .	127	-12	531	-199	-213	Valentine . . . . .	249	-18	1817	-78	-617	Midland . . . . .	134	12	472	-120	-426
Augusta . . . . .	102	-18	489	-111	-62	NEV. Ely . . . . .	283	24	2307	107	-148	Beaumont . . . . .	100	33	190	-114	-278
Macon . . . . .	88	-20	352	-170	-122	Las Vegas . . . . .	134	7	551	-41	-213	San Angelo . . . . .	120	14	309	-196	-382
Savannah . . . . .	64	-30	278	-154	-61	Reno . . . . .	193	-20	1589	-120	-396	San Antonio . . . .	79	6	163	-139	-325
IDAHO. Boise . . . . .	179	-37	1419	-158	-391	Winemucca . . . . .	204	-25	1739	-150	-344	Victoria . . . . .	64	11	84	-121	-276
Lewiston . . . . .	162	-37	1459	-81	-278	N. H. Concord . . . .	208	-50	1928	61	-466	Waco . . . . .	96	3	219	-190	-485
Pocatello . . . . .	245	-6	1912	-14	-283	N. J. Atlantic City	126	-67	1019	-97	-218	Wichita Falls . . . .	127	-4	391	-236	-640
ILL. Cairo . . . . .	160	-7	664	-217	-399	Trenton . . . . .	125	-67	934	-161	-315	UTAH. Salt Lake C	233	5	1491	-89	-80
Chicago . . . . .	204	-32	1234	-185	-537	N. MEX. Albuquerque	215	24	1166	83	-68	VT. Burlington . . . .	178	-93	1837	-108	-513
Moline . . . . .	239	-7	1350	-171	-427	Roswell . . . . .	175	5	774	-197	-305	VA. Lynchburg . . . .	144	-33	835	-197	-264
Peoria . . . . .	229	-10	1247	-215	-561	N. Y. Albany . . . .	173	-77	1635	-38	-375	Norfolk . . . . .	89	-56	564	-171	-150
Rockford . . . . .	228	-31	1399	-271	-514	Binghamton . . . . .	170	-87	1592	-227	-583	Richmond . . . . .	120	-47	751	-164	-211
Springfield . . . . .	---	---	---	---	---	Buffalo . . . . .	178	-61	1474	-185	-440	Roanoke . . . . .	136	-45	843	-203	-327
IND. Evansville . . . .	167	-26	829	-289	-507	New York . . . . .	120	-66	858	-162	-426	WASH. Quillayute . .	162	-2	2187	272	73
Fort Wayne . . . . .	189	-47	1210	-299	-513	Rochester . . . . .	154	-82	1352	-242	-434	Seattle-Tacoma . . .	148	-15	1501	-49	-188
Indianapolis . . . . .	173	-49	998	-353	-483	Syracuse . . . . .	168	-68	1481	-75	-347	Spokane . . . . .	216	-23	2005	17	-142
South Bend . . . . .	180	-58	1131	-432	-641	N. C. Asheville . . . .	138	-36	917	-184	-130	Walla Walla . . . .	167	-16	1294	-29	-279
IOWA. Burlington . . .	252	12	1255	-204	-529	Hatteras . . . . .	36	-72	333	-156	-49	Yakima . . . . .	188	-33	1719	-28	-181
Des Moines . . . . .	279	22	1316	-284	-727	Charlotte . . . . .	121	-25	641	-126	-186	W. VA. Beckley . . . .	170	-44	1198	-296	-315
Debuque . . . . .	266	-4	1556	-255	-637	Greensboro . . . . .	138	-27	815	-128	-231	Charleston . . . . .	154	-34	969	-171	-246
Sioux City . . . . .	256	-12	1466	-237	-506	Raleigh . . . . .	108	-47	583	-262	-302	Huntington . . . . .	150	-39	870	-266	-428
KANS. Concordia . . . .	244	20	1254	-87	-462	Wilmington . . . . .	71	-40	356	-152	-114	Parkersburg . . . . .	---	---	---	---	---
Dodge City . . . . .	221	14	1141	-76	-508	N. Dak. Bismarck . .	331	11	2562	202	-275	WIS. Green Bay . . . .	251	-35	1774	-274	-491
Goodland . . . . .	223	-8	1667	82	-410	Fargo . . . . .	346	10	2402	45	-361	LaCrosse . . . . .	---	---	---	---	---
Topeka . . . . .	228	16	1108	-139	-452	Williston . . . . .	315	-8	2583	135	-485	Madison . . . . .	245	-35	1703	-262	-561
Wichita . . . . .	210	14	1001	-98	-492	OHIO. Akron-Canton	161	-70	1134	-381	-468	Milwaukee . . . . .	229	-35	1515	-307	-534
KY. Lexington . . . . .	163	-30	882	-261	-302	Cleveland . . . . .	160	-65	1139	-330	-514	WYO. Casper . . . . .	264	5	2109	50	-494
Louisville . . . . .	156	-37	797	-324	-341	Columbus . . . . .	162	-62	1058	-351	-493	Cheyenne . . . . .	249	8	2061	59	-513
LA. Baton Rouge . . . .	101	26	222	-135	-105	Cincinnati . . . . .	172	-31	1044	-165	-349	Lander . . . . .	275	-5	2206	31	-477
Lake Charles . . . . .	97	31	201	-96	-239	Dayton . . . . .	177	-45	1080	-275	-472	Sheridan . . . . .	240	-22	2196	76	-410
New Orleans . . . . .	86	21	204	-98	-178	Toledo . . . . .	184	-56	1351	-212	-516						
Shreveport . . . . .	133	33	355	-119	-301	Youngstown . . . . .	176	-59	1351	-225	-584						
MAINE																	



(Continued from Page 7)  
Supplemental feeding started locally. Winter feed fair west, very good elsewhere.

**NEW ENGLAND:** First major winter storm of season Sunday. This east coast storm moved northward through Pennsylvania and New York Sunday bringing heavy rains, and mild temperatures. Many places had over 1.00 in. rain. Augusta, Maine, had 1.91 in. to bring its week's total to nearly 3.00 in. Previous rains Wednesday with amounts averaging between 0.50 and 1.50 in. Gale winds were reported along coast on Sunday. Even though storm began as snow in parts of New England ground was bare when storm ended.

**NEW JERSEY:** Mild, wet. Temperatures: 8° above normal. Extremes: 68°, Lakehurst; 22°, Long Valley. Precipitation averaged 1.65 in. along coast, 1.86 in. central and south, and 2.57 in. north.

**NEW MEXICO:** Snow in mountains and northeast and eastcentral plains Monday. Moisture near 0.25 in. northcentral mountains and around 0.50 in. northeast. Blizzard conditions several hours Monday northeast and eastcentral. Average snow accumulations this sector near 4 in. Clearing Tuesday and Wednesday with generally fair and completely dry weather remainder of week. Daytime temperatures mild and nights cold. Average temperatures for week 4° to 6° below normal north and near normal south.

Snow most northern areas benefited soil moisture. Ranges mostly fair, some poor in southeast. Livestock fair to good. Supplemental feeding started.

Wheat and rye, fair to good but serious greenbug problems. Grain sorghum harvest nearly complete. Cotton fair to good, harvest 75% complete. Pecan harvest active.

**NEW YORK:** Wet, mild. Temperatures: several degrees above normal. Warm till Wednesday; colder after. Extremes: 66°, Poughkeepsie and Elmira Tuesday and Rochester Wednesday; 13° Massena Saturday. Heavy rain fell southcentral and east Wednesday. Coastal storm Sunday brought mixed precipitation which changed to rain, but many western stations got 1 to 3 in. snow. Many southcentral and southeastern sections totaled 2.00 to 3.00 in. rainfall this week.

**NORTH CAROLINA:** Temperatures above normal with 1 good day of rain. Measurable rain fell mountains and parts coastal plains. Less than 5% all crops, still in field. 92% small grain planted. Pastures need rain, critical some areas. Burley tobacco prices high, good usable quality demand strong.

**NORTH DAKOTA:** Temperatures: From a high of 45° at Dickinson and Jamestown on 7th to a low of -12° Bismarck and Bottineau on 6th. Generally light precipitation occurred several days of week with some rain on Saturday and Sunday and snow rest of time. Deepest snow 5 in. on ground at Minot on 1st and 4 in. on 7th. All sections reported snow cover on 7th except in extreme western portion.

Freezing rain and drifting snow made travel on farm-to-market roads hazardous past weekend. Snow and ice restricted grazing. Little or no

snow cover on winter wheat which is mostly good to fair. Roughage supplies for winter feeding expected to be short in 44% of counties, mostly in areas of summer moisture shortages. Livestock good. Marketing little below normal.

**OHIO:** Unseasonably warm temperatures on 3rd and 4th, daytime highs 50's and 60's. On 3rd Zanesville reported high of 64° and Canton-Akron 63°, both new records for date. Temperatures returned normal levels rest of week. Rain general over State on 4th, while showers on 5th changed to scattered snow flurries. Variable cloudiness with some scattered snow flurries on 6th and 7th. Mostly fair on 8th. Cold air advanced into State produced scattered snow flurries night of 9th. Unusually warm weather aided winter wheat growth. Corn harvesting and fall fieldwork as weather permits. Livestock good. Farm machinery bringing good price at farm auctions.

**OKLAHOMA:** Temperatures: From normal southeast to 6° above northeast. Precipitation: From 0.29 in. southwest to 1.70 in. northeast. Snowfall of 2 to 5 in. panhandle and 1 to 2 in. northcentral Tuesday. Weekend cool and mostly dry.

Continued rain stifled harvest operations everywhere except southwest, where cotton and sorghum grain harvest progressed. Good cotton yields reported. Flooding in southeast and southcentral caused fence damage and loss of fallen pecans. Small grains continue to provide good grazing but bothered by greenbugs and rust. Livestock, pastures and ranges good. Surface soil moisture adequate to surplus most areas, subsoil moisture adequate. Killing frosts received all areas.

**OREGON:** Rainfall along immediate coast ranged from 1.70 in. Astoria to 4.33 Brookings. Interior valleys western Oregon, Portland low with 0.58 in. Eugene high with 1.78 in. Northcentral, east ranged from 0.76 in. Heppner to 1.17 in., Pendleton. Elsewhere eastern Oregon from 0.20-0.60 in. Redmond 0.16. Temperatures near normal. Pendleton warmest with 8° above season normal. Maximum temperatures ranged from mid-40's - mid-50's. Lowest ranged from low 30's - low 40's, west. Mostly in teens and 20's east of Cascades.

Farm work limited, mostly choring, attending meetings, some limited grain spraying dryer areas. Water standing, low spots statewide. Orchard pruning getting underway weather permitting. Moderate to normal livestock feeding rates.

**PENNSYLVANIA:** Mild and wet early week, cool thereafter, precipitation weekend. Fourth straight week above normal temperatures, departures 4° to 6° this week. Daily highs 50's and 60's through Wednesday, 30's and 40's later. Lows minima mostly 20° to 40°. Extremes: 68°, 15°. Storms produced fourth wettest week of 1973. Precipitation from 0.50 in. extreme west to 3.00 in. middle and upper Susquehanna Valley, 0.50 in. Central and East. Weekend snowfall up to 6 in. central and south central mountains.

**PUERTO RICO:** Rainfall averaged 1.76 in. or about 0.65 in. below normal. Heaviest rains centered in northern zones; highest weekly total 6.60 in. and 24 hour total 2.76 in. Crop moisture conditions much improved north but southcentral continued too dry for optimum crop development. Temperatures averaged 75° to 76° on coasts and 70° to 71° interior. Extremes: 91°, 55°. Sugarcane crop continued its good development under favorable weather. Most plantations preparing for coming harvest operations. Coffee harvest

practically ended all zones with interruptions due heavy rain showers. Young tobacco plants developing well in most zones. Other zones report harvesting of next crop underway. Pastures generally good to excellent all zones except southcentral fair due lack of rain.

**SOUTH CAROLINA:** Temperatures averaged 3 to 4° above normal in mountains and northwest; 5 to 10° above elsewhere. Warmest early week, general cooling late. Rainfall averaged above normal in mountains, northwest, and westcentral; below elsewhere. Cold front Wednesday triggered some shower activity; heaviest rainfall in mountains and northwestern sections.

Although showers fell throughout State, more moisture still needed. Cotton 95% harvested; 90% harvested last year. Soybeans 90% harvested; 68% last year. Sorghums 89% harvested; 90% last year. Pastures fair. Oats and wheat fair to good. Oats 90% planted; 82% planted last year; 80% emerged. Wheat 84% planted; 77% last year; 68% emerged. In Piedmont, pruning peach trees, grape vines. In Pee Dee, tobacco seedbed preparation.

**SOUTH DAKOTA:** Cold air invaded midweek. Lows near or below 0°. Coldest -14° Newell Thursday morning. Warmed by weekend: Highs mostly 50's. Warmest 62° Union Center December 3. West and central averaged above normal. East ranged from 5° below to 3° above. Precipitation generally light and widely scattered. Some areas north and west received 2 in. snow. Lead in Black Hills reported 5 in. snow on ground. No feed or fuel shortages yet. Livestock generally good.

**TENNESSEE:** Vigorous cold front swept east early week. Temperatures which were averaging 15° to 20° above normal lowered to near normal west and 5° above normal east. Maximums dropped from 60's and low 70's to upper 30's and low 40's. Minimums from upper 50's and low 60's to 20's and low 30's. Heavy rainfall preceded front with Memphis receiving 1.78 in. Following frontal passage only a few snow flurries reported northeast.

Tobacco crop stripped and ready for sale. Auction sales lagged last year's but 50 percent complete. Quality good but quantity down. Small grains entering dormant period in good condition with above average growth. Few fields of cotton and soybeans still to be picked.

**TEXAS:** Cold front early week, 1 to 3 in. snowfalls over panhandle. Thunderstorms developed as front moved east. Midweek, freezing nighttime temperatures had moved as far south as San Antonio with daytime highs peaking in the 40's over the plains, and the 50's across central Texas. Cold: 7° west of the Pecos and 4° along high plains. Gulf winds brought near normal temperatures to extreme south and produced some cloudiness and showers late in week.

Vegetables: Lower Rio Grande Valley: Harvest peppers and tomatoes started seasonal decline. Cabbage and lettuce harvest gained momentum. Carrots and onions showed good growth. Winter Garden: Carrot and cabbage harvest full swing. San Antonio: Cabbage and carrot harvest continued. Laredo: Cabbage harvest started. Some early spinach was harvested. Trans-Pecos: Carrot harvest underway. Pecan harvest almost over most south-central counties and past halfway mark in north Texas. Citrus harvest continued to gain momentum.

Crops: Cotton harvest rapid progress high plains, satisfactory progress low plains. Peanut harvest near completion small acreage remain low

plains, Cross-Timbers and Blacklands. Dryland wheat continues decline high and low plains, moisture stress serious. Grazing wheat, oats good to excellent Blacklands southward. Stalk destruction and seedbed preparation underway across State.

Range and livestock condition held up well, localized exceptions. Wheat, native pastures continues decline high, low plains moisture seriously short. Wheat, oats good growth cross-timbers to Lower Rio Grande Valley.

UTAH: Few isolated areas light snow early week. Moisture less than 0.10 in. Generally fair later. Temperatures: Near to little below normal except 6° to 10° below normal Uintah Basin and some colder valleys west. Main agricultural activities: Hauling hay to livestock; sorting, grading, marketing of potatoes, dry onions, and apples from storage. Utah farmers are concerned about how to cope with impending shortages of fuel, fertilizer, bailing wire, and other items.

VIRGINIA: Temperatures continued quite mild, departures averaged about 7° above normal. Extremes: 80°, 18°. Showers occurred over State on Wednesday and Thursday. Soil moisture 60% adequate, 26% short - mostly southeast, 14% surplus - mostly central and mountains. Fertilizing, liming and soil sampling active. Winding up soybean, corn, and sorghum grain harvest. About 10% of cotton acreage remaining. Pasture excellent except south and southeast where lack of sufficient soil moisture retarded growth. Calving and lambing increasing. Marketing Burley and Dark-fire tobacco active.

WASHINGTON: Western: Cloudy and wet, highs 40's-50's, lows 30's-40's. Precipitation 0.60 to 5.00 in. Some flooding low lying fields. Fall grains good. Shortage of forage and feed for dairy farmers.

Eastern: Average temps 4°-6° above normal. Highs 40's, lows 20's-30's. Precipitation 0.05

in, to 1.00 in. Sugarbeet harvest winding up. Corn harvest active when weather permits. Pruning, fertilizing, vineyards and orchards active. Fall grains good. While soil moisture nears normal, some fallow ground showing effects of saturated soils with erosion taking place. Livestock good. Some pasturing crop residue with most herds on full winter feed. Supplies of feed short in various localities.

WEST VIRGINIA: Temperatures 6° to 10° above normal. High temperatures, generally in 60's, early week. Cold front late Wednesday accounted for some light showers. Weekend low pressure system caused up to 20 in. snow. Farmers cared for livestock and did other routine chores.

WISCONSIN: Temperatures began well above normal then cooled. First major winter storm of season brought heavy rains to southeast half and snow to northern and western areas. Up to 8 in. snow fell north central and some snow fell in all areas as storm moved eastward on 6th. Light snow and a little freezing rain fell again on December 8-9. Frost depths average only 1.00 in. as mild fall weather limited frost penetration. Snow depths average 2.50 in. with deepest snow located in west and north. Soil moisture adequate to surplus everywhere but in north central counties where fall precipitation sparse. Harvesting of 1973 crops mostly completed.

WYOMING: Temperatures mild early week and again Thursday and Friday; cool midweek. Temperatures below normal at several locations mostly in southcentral and southwest and up to 7.4° above normal elsewhere. Extremes: 70° Sheridan County Airport; -9° Big Piney. Precipitation scattered. Precipitation mostly below normal, all amounts less than 0.33 in.

Unseasonably mild weather maintains good condition of ranges and livestock. Supplemental feeding at minimum. No unusual livestock losses.

#### NATIONAL FLOOD SUMMARY December 10, 1973

The areas in the Midwest where flooding has been in progress for the past several days were free of significant precipitation during the past 72 hours. Rivers have crested in all but a few places and are receding, but they remain bankfull in many areas.

The minor flood crest on the Mississippi River is in the vicinity of Caruthersville, Mo., where the river is 1.5 feet over flood stage. Flooding will not occur at stations below Caruthersville.

The streams in the Missouri Basin in Missouri, including the main stem Missouri, should be back within banks today or tomorrow. The St. Francis River is a few feet over flood stage at Fisk, Mo., and will remain so for several days.

Some minor flooding continues on several East Texas streams, and in a few places on Mississippi streams.



**FIRST CLASS MAIL**

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 NOAA-NATL WEATHER SERV OFFICE  
 FOR AGR  
 DELTA BR EXPT STA  
 STONEVILLE MS 38776

Heating Degree Days (Base 65° F.)

NOVEMBER 1973

ALA. Birmingham . . . . .	285	MAINE, Caribou . . . . .	1112	OKLA. Okla. City . . . . .	362
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Shreveport . . . . .					

Preliminary reports from airport locations, except those marked U for urban and R for rural.  
 \*Estimated.

Standard copy for the Weekly Weather and Crop Bulletin is prepared by: Dr. Richard E. Felch, Agricultural Climatologist; Arlon M. Scott, Agricultural Statistician; John Carlin Ryan, Editor.