

# Weekly Weather & Crop Bulletin

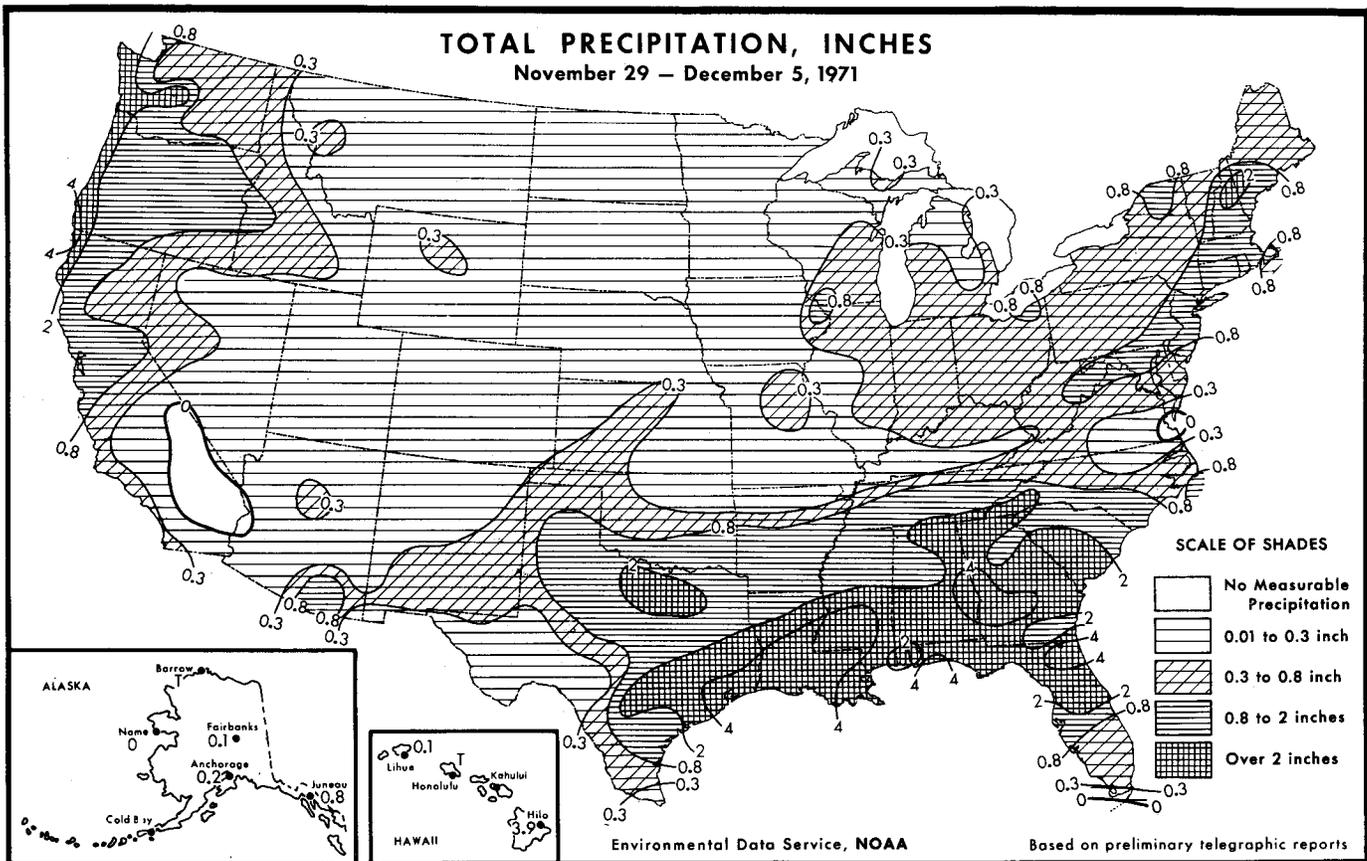
U. S. DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
Environmental Data Service

U. S. DEPARTMENT OF AGRICULTURE  
Statistical Reporting Service

Volume 58, No. 49

Edited by Lucius W. Dye

December 6, 1971 Washington, D. C.



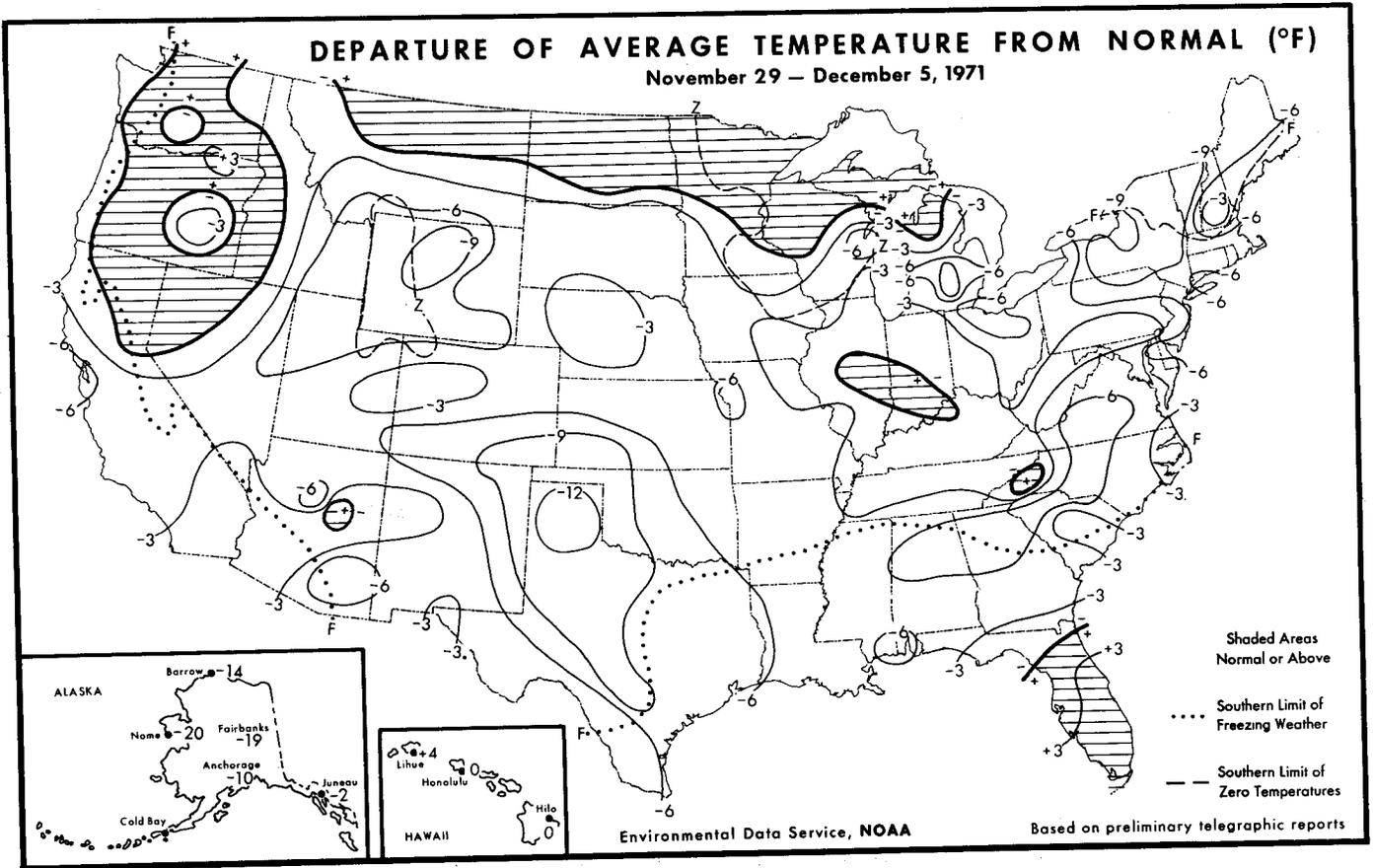
## NATIONAL WEATHER SUMMARY

**HIGHLIGHTS:** December began cold and stormy.

**PRECIPITATION:** November ended and December began with a mixture of snow, sleet, freezing rain and freezing drizzle across much of the North and cold clouds and cold rain farther south. Heavy snow hampered travel near the Great Lakes, over the Upper Ohio River Valley, and New England. By noon Tuesday, 27 inches of snow covered the ground at Montpelier, Vt. By Thursday a storm in the West was approaching major proportions. Gales whipped the coastal areas, rain fell along the coast, and heavy snow blanketed the Rocky Mountains. By midnight Wednesday, 11 inches had fallen at Las Vegas, N. Mex. The storm continued to dump heavy snow over the southern Rocky Mountains and spread to the adjoining Great Plains.

South and east of the Snow Belt, a change to cold rain was marked by a mixture of sleet and freezing rain. Amarillo, Tex., measured 7 inches of snow on the ground at noon Thursday and by evening the snow had accumulated to 11 inches at Oakwood, Okla. As the storm moved along the Gulf of Mexico coast, it dumped generous rains over the Deep South.

The storm crossed the Florida Peninsula and moved to the Atlantic Ocean. It produced combinations of cold rain, drizzle, snow and sleet. Freezing precipitation slicked the roads from northeastern Georgia to southern Virginia. Some highways became blocked and numerous power outages occurred due to broken lines. Charlotte, N.C., measured 8 inches of snow on the ground Friday evening. This is the deepest snow cover



of record for so early in the autumn at Charlotte. The snow depths reached 18 inches or more at some mountain locations in the Carolinas.

A new storm in the Pacific Northwest clogged the mountain passes and blanketed portions of the Great Basin and the Great Plains. By the weekend, snow covered the Northern States from Washington to Maine. The blanket extended as far south as New Mexico and the Texas Panhandle in the West and the southern Appalachians in the East. Heavy rains fell Saturday and Sunday from a new snow storm that developed over the Gulf of Mexico. Some totals near the Gulf exceeded 6.00 inches.

**TEMPERATURE:** Cold weather prevailed over most of the Nation as November ended and December began. The freezing line plunged far southward and, at midweek, stretched from the Texas Panhandle to Columbia, S.C. Maximum temperatures reached 80° in extreme southern Texas early in the week but only the low 50's Thursday afternoon. The southern

half of Florida continued mild with afternoon readings in the 70's. Wednesday was the coldest morning in the Great Plains. Waterloo, Iowa, registered -5° and Hibbing, Minn., -8° Wednesday. The bone-chilling air spread eastward and by Thursday morning, subzero temperatures were common in the northern portions of New York and New England. Boonville, N. Y., registered -13° Thursday morning. Several western and central States recorded subzero temperatures Thursday morning: Montana, Wyoming, Colorado, Minnesota, Wisconsin, and Iowa.

Most of the Nation warmed slightly over the weekend but not enough to offset the cold winter weather that had prevailed. The Rocky Mountains in Idaho and Wyoming averaged 4° to 9° colder than normal; most of Texas averaged 6° to 13° colder than normal; and the Piedmont from Virginia to Georgia averaged 5° to 8° colder than normal.

L. W. Dye

## NATIONAL AGRICULTURAL SUMMARY

**AGRICULTURAL HIGHLIGHTS:** Rains prolong harvest season in the South. \* Texas cotton harvesting moving at snail's pace. \* Wheat crop approaching winter in great shape.

**SMALL GRAINS:** Winter wheat prospects continue to improve. The recent supply of moisture has been beneficial to the wheat crop as it enters the winter season. Cool temperatures slowed growth during the week. Much of the acreage is already snow-covered and dormant in the northern Great Plains. However, growth has been stimulated by an excess of moisture in the southern plains. Kansas growers are finding a few minor problems in their acreages--these include some yellow spots, streak mosaic, and weeds. Cold weather is reducing the small greenbug population in Nebraska and Kansas. Planting of barley and wheat was active in Arizona and California's Imperial Valley. Rains delayed seeding in other California areas. Grain crops are doing well in the Pacific Northwest, but some erosion was noted in Washington wheat fields. Heavy rains were a blessing to fall-sown grains in the South. A big improvement should be forthcoming as grains were mostly in fair to good condition before the rains. Final seedings were held up due to wet fields. The cotton and soybean harvests will need to be completed before seeding is finished.

**CORN:** The bulk of the 1971 corn crop is in the crib. Only scattered fields remain to be harvested in the Corn Belt. Growers in Nebraska and Indiana have less than 5% of their crop to pick. Wisconsin is the only State with a lot of corn unpicked and fieldwork was at a standstill due to 4 to 8 inches of snow. Only a few fields remain unharvested in the rest of the Corn Belt. South Dakota farmers were stymied in their shelling attempts as rain and snow kept corn cribs wet. Harvesting is in the wrap up stage in the South, but rains limited fieldwork. Available storage space is still slowing harvest in Alabama. Some headway was made from the Carolinas to Delaware as fields dried out enough to allow harvesting. Many lowland fields are wet and harvest will be tied up until a hard freeze.

**SOYBEANS:** The largest acreage of soybeans remaining for harvest is located in the Atlantic Coast and south-central States. Combining resumed as the snow melted and fields dried from Maryland to North Carolina, but fields in low areas remain impassible. Heavy rains from Texas to South Carolina held-up field activity and prolonged the soybean harvesting season. A week of clear weather would allow growers to complete combining. The soybean crop is harvested in the Corn Belt, combining is complete except for small acreages in local areas.

**COTTON:** Adverse weather halted cotton picking from Texas to the Atlantic Coast. Rain and snow covered the Texas High Plains--while only rain fell over the rest of the State. Texas cotton growers managed to pick only 3% of their crop between rains; thus only 36% of this year's crop is picked--substantially behind last fall's 93% picked, and the 70% picked in 1969. Harvesting

of the small Oklahoma crop is also well behind schedule. Heavy rains stopped picking in the Deep South. However, this is a different situation as southern growers are nearly finished harvesting this year's crop. Light rains also interrupted picking from California to New Mexico. Picking of the Arizona crop is nearing completion--most fields have been picked twice. Growers are disking fields promptly after harvest.

**OTHER CROPS:** Clear, dry weather is needed from Kansas to Texas so sorghum grain farmers can complete this year's harvest. Lodging is increasing in Kansas as fields remain wet. Rain and snow also slowed combining in New Mexico. Arizona growers are harvesting late planted fields in the Yuma area. Marketing of this season's burley tobacco crop remains strong. The dark-fired auctions opened in Virginia November 30. After a long, slow harvest season the last fields of peanuts were threshed in North Carolina. California sugar beet digging is seasonally slow, with digging stopped in the northern Salinas Valley.

**Fruits and Nuts:** Picking of Florida oranges is accelerating--the first new crop concentrate was manufactured during Thanksgiving week. Good rains enabled growers to stop irrigating groves. Cool nights are enhancing fruit color. Inclement weather hampered citrus picking in Texas, but picking should increase before Christmas. Arizona temperatures are cold, but no fruit harvesting problems have occurred. Rains also benefitted California citrus trees. Pecan harvesting was slowed by rain throughout the South. About 3/4 of the crop is gathered in Texas and Mississippi. Washington fruit growers are fertilizing and pruning their orchards.

**Vegetables:** Cold, wet weather hampered vegetable harvesting in South Texas. Heavy rains also halted activity in the Hastings, Florida area--up to 7 inches were recorded. Fall tomatoes are reaching their peak volume from south Florida. Late planted lettuce and winter vegetables are making satisfactory progress in Arizona. Most California vegetables are declining in supply. Lettuce harvest is underway in the Imperial Valley. Vegetable harvesting in the Moapa Valley of Nevada is nearly complete.

**PASTURES AND LIVESTOCK:** Some livestock continue to graze on fall pastures in the North, but cattlemen are having to feed larger amounts of hay and concentrates. Some herds are foraging through harvested corn and sorghum grain fields. Northern herds are in good shape--but some youngstock are suffering from respiratory problems in heavy snow areas of Wyoming. For the 2nd straight week heavy rains hit the south improving winter pasture prospects. Pasture growth is behind normal and farmers are supplemental feeding. Ranchers also intensified their feeding operations in the Southwest as freezing temperatures have stopped grass growth on higher elevation ranges.

Steve J. Pscodna  
Agricultural Statistician

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., December 5, 1971

States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches	
	Average	Departure*	Total	Departure*		Average	Departure*	Total	Departure*		Average	Departure*	Total	Departure*
ALA, Birmingham . . .	43	- 7	1.9	+ .8	New Orleans . . .	52	- 5	3.2	+2.3	OKLA, Okla. City . .	35	- 8	.7	+ .4
Mobile . . .	50	- 6	1.8	+ .7	Shreveport . . .	45	- 6	1.8	+ .8	Tulsa . . .	38	- 4	.2	- .2
Montgomery . . .	45	- 5	3.4	+2.3	MAINE, Caribou . .	15	- 7	.7	+ .1	OREG, Astoria . . .	45	- 0	3.6	+ .4
ALASKA, Anchorage . .	7	-10	.2	0	Portland . . .	27	- 4	1.7	+ .7	Burns . . .	28	- 4	1.0	+ .7
Barrow . . .	-14	- 5	T	0	MD, Baltimore . . .	34	- 6	.8	- .2	Medford . . .	41	+ 3	1.3	+ .6
Fairbanks . . .	-23	-19	.1	- .1	MASS, Boston . . .	32	- 7	1.1	+ .3	Pendleton . . .	41	+ 3	1.6	+1.3
Juneau . . .	29	- 2	.8	- .2	Chatham . . .	34	- 7	.4	- .3	Portland . . .	43	0	2.0	+ .4
Nome . . .	-10	-20	0	- .2	MICH, Alpena . . .	26	- 3	.7	+ .3	Salem . . .	43	0	1.9	+ .4
ARIZ, Flagstaff . . .	26	- 6	.6	+ .3	Detroit . . .	28	- 5	.4	- .1	PA, Allentown . . .	31	- 5	1.2	+ .3
Phoenix . . .	53	- 1	.1	- .1	Flint . . .	22	- 8	.2	- .3	Erie . . .	31	- 2	.7	0
Tucson . . .	49	- 6	.8	+ .6	Grand Rapids . . .	27	- 5	.2	- .3	Harrisburg . . .	33	- 4	1.2	+ .5
Winslow . . .	38	+ 2	.2	+ .1	Houghton Lake . . .	22	+ 1	.2	- .2	Philadelphia . . .	35	- 3	1.7	+ .9
Yuma . . .	55	- 2	.1	+ .1	Lansing . . .	23	- 9	.3	- .2	Pittsburgh . . .	31	- 3	.6	+ .1
ARK, Fort Smith . . .	41	- 4	.7	0	Marquette . . .	28	0	.4	- .2	Scranton . . .	25	- 8	.7	0
Little Rock . . .	40	- 4	1.3	+ .3	Muskegon . . .	27	- 7	.5	0	R.I, Providence . . .	29	- 8	1.7	+ .8
CALIF, Bakersfield . .	47	- 5	.1	- .1	S. Ste. Marie . . .	25	0	.3	- .4	S.C, Charleston . . .	49	- 3	2.0	+1.4
Eureka . . .	48	- 2	2.2	+ .9	MINN, Duluth . . .	21	+ 2	.2	- .1	Columbia . . .	48	- 1	3.1	+2.4
Fresno . . .	44	- 5	.4	+ .1	Internat'l Falls . .	18	+ 3	.1	- .1	Greenville . . .	39	- 8	1.5	+ .8
Los Angeles . . .	57	- 4	.3	- .1	Minneapolis . . .	23	0	.1	- .1	S.DAK, Aberdeen . .	19	- 5	.1	- .1
Red Bluff . . .	45	- 5	T	- .8	Rochester . . .	22	- 1	.1	- .2	Huron . . .	19	- 4	.1	- .1
San Diego . . .	57	- 2	.7	+ .5	St. Cloud . . .	21	0	.1	- .1	Rapid City . . .	25	- 5	T	- .1
San Francisco . . .	49	- 3	.8	+ .1	MISS, Jackson . . .	46	- 5	4.3	+3.2	Sioux Falls . . .	21	- 4	.2	0
Stockton . . .	46	- 3	.6	+ .1	Meridian . . .	46	- 5	2.9	+1.8	TENN, Chattanooga .	41	- 4	2.2	+1.1
COLO, Denver . . .	30	- 3	.1	0	MO, Columbia . . .	34	- 3	.5	0	Knoxville . . .	43	- 1	1.4	+ .5
Grand Junction . . .	32	- 1	.1	0	Kansas City . . .	33	- 6	.1	- .3	Memphis . . .	42	- 3	1.3	+ .2
Pueblo . . .	29	- 7	.1	0	St. Louis . . .	34	- 4	T	- .5	Nashville . . .	42	- 1	1.1	+ .2
CONN, Bridgeport . . .	33	- 5	1.6	+ .6	Springfield . . .	36	- 4	.1	- .4	TEX, Abilene . . .	38	-10	1.1	+ .8
Hartford . . .	27	- 8	1.3	+ .5	MONT, Billings . . .	28	- 3	T	- .1	Amarillo . . .	28	-13	.9	+ .7
D.C, Washington . . .	36	- 5	.6	- .1	Glasgow . . .	23	+ 2	.1	0	Austin . . .	46	- 8	3.2	+2.7
FLA, Apalachicola . .	--	--	--	--	Great Falls . . .	31	+ 2	T	- .2	Beaumont . . .	--	--	--	--
Ft. Myers . . .	70	+ 4	.3	0	Havre . . .	24	+ 1	.1	0	Brownsville . . .	59	- 6	.1	- .3
Jacksonville . . .	58	0	4.4	+4.0	Helena . . .	22	- 5	T	- .1	Corpus Christi . . .	55	- 6	1.4	+1.0
Key West . . .	77	+ 5	T	- .5	Kalispell . . .	26	- 1	.3	0	Dallas . . .	43	- 7	2.9	+2.3
Lakeland . . .	65	+ 1	2.5	+2.2	Miles City . . .	23	- 3	.2	+ .1	Del Rio . . .	49	- 5	2.2	+ .1
Miami . . .	74	+ 4	.3	- .1	Missoula . . .	24	- 2	.6	+ .3	El Paso . . .	45	- 2	.2	+ .1
Orlando . . .	67	+ 4	2.3	+2.0	NEBR, Grand Island .	28	- 3	.3	+ .2	Fort Worth . . .	43	- 7	2.7	+2.1
Tallahassee . . .	54	- 2	3.0	+2.3	Lincoln . . .	30	- 5	.1	- .1	Galveston . . .	53	- 6	4.6	+3.6
Tampa . . .	66	+ 2	1.4	+1.0	Norfolk . . .	24	- 4	.2	0	Houston . . .	49	- 6	4.8	+3.8
GA, Atlanta . . .	40	- 6	2.0	+1.1	North Platte . . .	28	- 2	T	- .1	Lubbock . . .	32	-11	.9	+ .8
Augusta . . .	45	- 5	2.8	+2.1	Omaha . . .	27	- 4	.1	- .1	Midland . . .	39	- 9	.1	0
Macon . . .	45	- 6	3.9	+3.1	Valentine . . .	27	- 1	.1	0	San Angelo . . .	41	- 9	.5	+ .3
Savannah . . .	50	- 4	2.7	+2.1	NEV, Ely . . .	23	- 6	.1	- .1	San Antonio . . .	47	- 9	2.3	+1.9
HAWAII, Hilo . . .	72	0	3.9	+ .5	Las Vegas . . .	46	- 1	T	- .1	Victoria . . .	52	- 7	1.2	+ .7
Honolulu . . .	75	0	T	- .5	Reno . . .	35	+ 1	T	- .2	Waco . . .	44	- 8	1.4	+ .9
Kahului . . .	73	- 1	T	-2.1	Winnemucca . . .	32	0	.2	0	Wichita Falls . . .	37	-10	2.0	+1.6
Lihue . . .	77	+ 4	.1	-1.0	N.H, Concord . . .	29	- 1	.9	+ .1	UTAH, Blanding . . .	28	- 6	.2	0
IDAHO, Boise . . .	35	+ 1	.9	+ .6	N.J, Atlantic City . .	34	- 7	.4	- .4	Salt Lake City . . .	30	- 2	.2	- .1
Lewiston . . .	38	+ 1	.6	+ .3	Trenton . . .	35	- 5	1.4	+ .7	VT, Burlington . . .	18	-10	.8	+ .2
Pocatello . . .	23	- 7	.5	+ .3	N.MEX, Albuquerque .	36	- 3	.1	0	VA, Lynchburg . . .	33	- 8	.3	- .3
ILL, Cairo . . .	40	- 2	.1	- .8	Roswell . . .	37	- 4	.7	+ .6	Norfolk . . .	43	- 3	T	- .6
Chicago . . .	32	- 1	.5	0	N.Y, Albany . . .	23	- 9	.7	+ .1	Richmond . . .	37	- 6	.1	- .6
Moline . . .	28	- 3	.4	0	Binghamton . . .	21	-11	.5	- .1	Roanoke . . .	34	- 7	.4	- .2
Peoria . . .	32	0	.1	- .3	Buffalo . . .	28	- 4	.5	- .3	WASH, Colville . . .	29	- 1	1.0	+ .6
Rockford . . .	--	--	--	--	New York . . .	33	- 8	1.3	+ .5	Omak . . .	31	+ 1	.8	+ .5
Springfield . . .	35	0	.2	- .2	Rochester . . .	24	-10	.5	- .1	Quillayute . . .	41	- 2	3.2	- .1
IND, Evansville . . .	36	- 2	.2	- .5	Syracuse . . .	26	- 8	.5	- .3	Seattle-Tacoma . . .	43	+ 1	.8	- .6
Fort Wayne . . .	31	- 1	.4	- .1	N.C, Asheville . . .	37	+ 3	2.3	+1.8	Spokane . . .	30	- 2	.6	+ .1
Indianapolis . . .	34	0	.4	- .3	Charlotte . . .	38	- 7	1.1	+ .4	Walla Walla . . .	40	+ 1	2.2	+1.8
South Bend . . .	31	- 1	.6	0	Greensboro . . .	36	- 7	.4	- .3	Yakima . . .	32	- 2	.6	+ .3
IOWA, Burlington . . .	31	- 1	.2	- .2	Hatteras . . .	50	- 1	1.7	+ .8	W.VA, Beckley . . .	31	- 5	.2	- .5
Des Moines . . .	27	- 3	.1	- .2	Raleigh . . .	39	- 5	.4	- .2	Charleston . . .	39	- 1	.4	- .3
Dubuque . . .	24	- 4	1.0	+ .4	Wilkinson . . .	47	- 4	.9	+ .2	Huntington . . .	37	- 3	.4	- .3
Sioux City . . .	25	- 4	.1	- .1	N.DAK, Bismarck . . .	22	+ 1	T	- .1	Parkersburg . . .	35	- 4	.6	- .1
KANS, Concordia . . .	30	- 5	.3	+ .1	Fargo . . .	22	+ 3	T	- .1	WIS, Green Bay . . .	21	- 6	.5	+ .2
Dodge City . . .	28	-10	.4	+ .3	Williston . . .	23	+ 3	T	- .1	La Crosse . . .	26	0	.3	0
Goodland . . .	28	- 5	.1	0	OHIO, Akron-Canton .	28	- 6	.6	+ .1	Madison . . .	21	- 5	.3	- .2
Topeka . . .	33	- 4	T	- .3	Cincinnati . . .	34	- 2	.7	0	Milwaukee . . .	27	- 2	.7	+ .2
Wichita . . .	32	- 6	.2	- .1	Cleveland . . .	31	- 4	.8	+ .2	WYO, Casper . . .	25	- 4	T	- .1
KY, Lexington . . .	39	0	.9	+ .2	Columbus . . .	32	- 3	.6	0	Cheyenne . . .	25	- 6	T	- .1
Louisville . . .	39	0	.3	- .5	Dayton . . .	33	- 2	.5	- .1	Lander . . .	17	- 9	T	- .1
LA, Baton Rouge . . .	50	- 5	5.6	+4.5	Toledo . . .	25	- 7	.4	- .1	Sheridan . . .	19	- 9	.1	- .1
Lake Charles . . .	50	- 6	7.3	+6.1	Youngstown . . .	28	- 5	.8	+ .1	P.R. San Juan . . .	80	+ 2	.1	-1.1

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

## CONDENSED STATE SUMMARIES

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

**ALABAMA:** Cloudy and cold. Light rain south and central Tuesday and Wednesday becoming heavy all sections Thursday. Light rain, drizzle, and fog Friday through Sunday. Precipitation for week heavy with more than 4.00 inches local areas of south. Rains delayed completion harvest, but improved prospects for small grains and winter grazing. Harvest remaining cotton slow. Corn harvest also slow, 92% harvested--95% last year. Storage short many farms. About 85% soybean crop harvested, slightly ahead last year. Harvest nearly complete Baldwin County. Rains blessing to small gains, about 95% seeded. Pecan harvest made good progress as weather permitted. Feed from pastures short to adequate, but quality poor. Supplies stored roughage adequate. Many cattlemen feeding. Livestock going into winter fair to good.

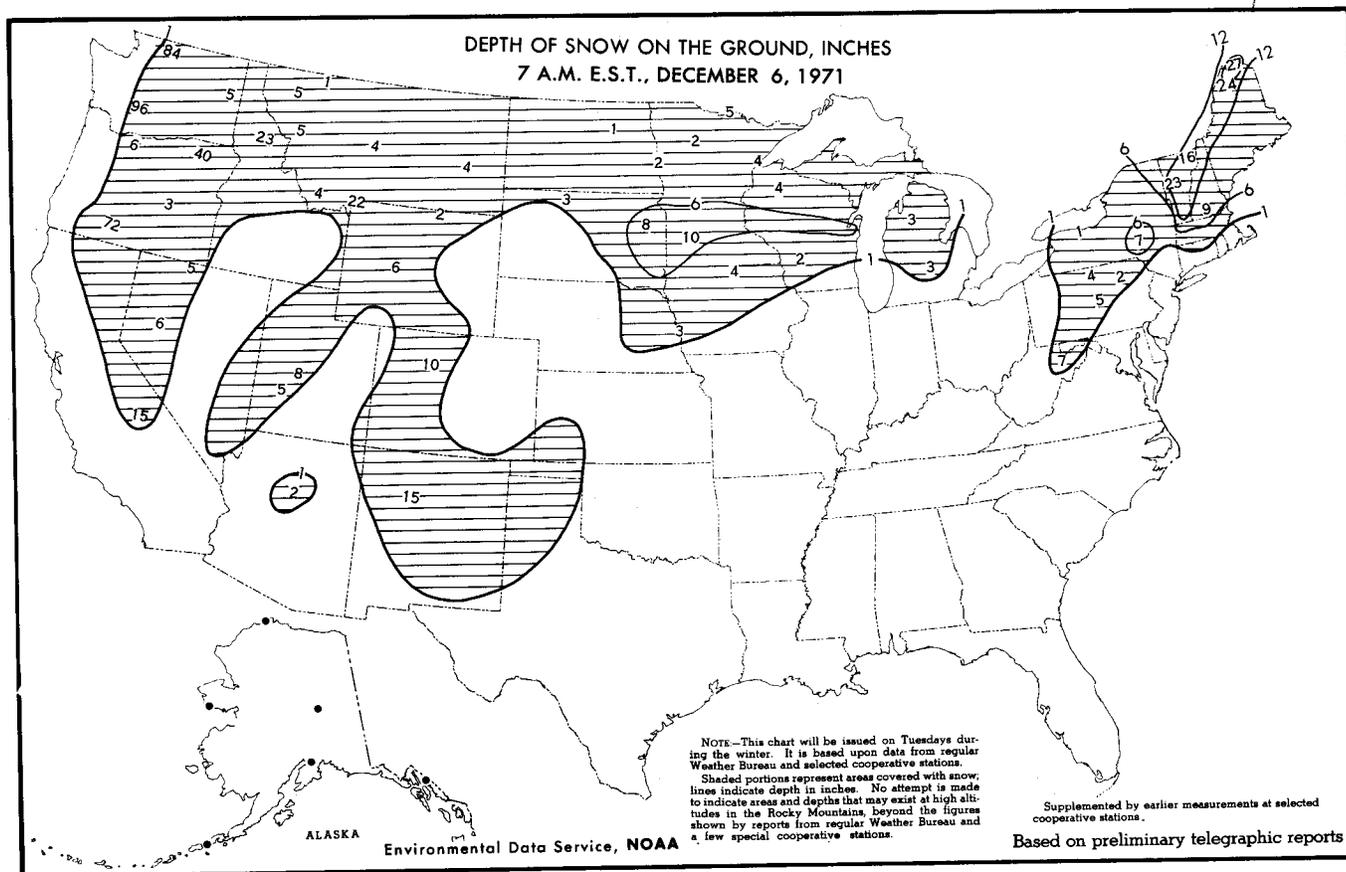
**ARIZONA:** Temperatures below normal most of State. Showers at higher elevations in northern, central, and eastern parts of State early in week with light snow above 5,000 feet. Another storm produced precipitation over southeast Saturday with snow above about 4,000 feet. Maximum reported weekly water totals were between 1.00 and 1.50 inches. Cotton harvest active and nearing completion. Almost all fields picked at least once. Majority picked twice. Rain and snow. Hampered operations southeast. Scrapping and residue disposal following harvest. Harvest late sorghum plantings active Yuma. Harvest nearly complete central and southeast because early freeze, yields Yuma below expectations. Seedbed preparations for small grains and safflower continue. Limited plantings made Yuma and central areas. Southeast small grain planting nearly complete. Alfalfa fields being pastured. Lettuce harvest continued Yuma. Later plantings lettuce, winter vegetables making satisfactory progress. Lettuce harvest continued Salt River Valley areas, Pima, and Pinal Counties. Navel oranges, lemon, and grapefruit harvests active Salt River Valley and Yuma. Weather condition relatively cold no harvesting problems. Range conditions fair to good. Higher elevation ranges deteriorating, freezing temperatures stopped growth. Dry conditions Northeast and southwest reduced winter forage prospects. Stock water adequate most areas. Supplemental feeding increasing scattered areas. Fall cattle sales near completion.

**ARKANSAS:** Snowstorm December 2 and 3 northwest with fall of 1 to 3 inches. Heaviest Devils Den State Park 4 inches. Precipitation averaged over 1.00 inch south half to near 0.50 inch, heaviest 1.89 inches at Texarkana. Weekly means 4° to 8° below normal, from upper 30's northwest to low 40's elsewhere. Daily extremes: 27° at Batesville November 29 to 57° at El Dorado November 29. Harvest nearly finished, but some cotton picking and soybean combining prior to rain and snow late week. Stalk destruction, land leveling underway as weather permits. Black walnut harvest continues active northwest. Progress winter grazing crops below normal most areas. Heavy feeding cattle necessary virtually all areas. Livestock mostly fair to good.

**CALIFORNIA:** Moderate precipitation several days northern half, snow above 3,000 feet. Precipitation amounts range from over 2.00 inches Sierra Nevadas, north coast to about 0.50 inch Central Valley, 0.20 south coast. Average temperatures near normal most low elevation locations, much below normal mountains, locally central coast. Rains late in week halted fieldwork except desert areas. Planting wheat, barley underway Imperial Valley; rains delayed small grain planting other areas. Rains slowed cotton picking; shredding and discing continues. Mild harvest virtually complete Central Valley. Digging sugar beets seasonally slow; northern Salinas Valley harvest stopped. Central Valley, seeding alfalfa active until rains. Recent rainfall benefited growth citrus fruit. Harvest deciduous fruit and nut crops virtually complete. Picking new navel orange crops continues slow. Fruit sizes small and maturity slow. Grapefruit harvest continues. Fruit quality good, sizes below normal. Rains beneficial to ranges. Cold weather slowed growth. Stock water adequate. Bees moving to almond orchards. Light supplies broccoli, cauliflower from Santa Maria, Salinas. Broccoli harvest underway Imperial Valley. Carrots active central coast; underway Imperial Valley; light volume Coachella Valley. Celery volume increasing Oxnard, Orange County; volume declining Salinas, Santa Maria. Sweet corn harvest complete. Lettuce harvest underway Imperial Valley; peak Palo Verde; declining Bakersfield; complete Westside. Tomato harvest declining.

**COLORADO:** Temperatures near normal west, 3° to 7° below normal mountains and east. Generally light to moderate snow, locally heavier some mountain areas. Moisture trace to few hundredths northeastern plains, 0.25 to 0.50 inch most other areas. Weather variable past week. Soil moisture supplies generally adequate. Condition fall-seeded grains good to excellent. Sizeable acreage has sufficient growth for grazing. Corn and sorghum grain harvest hampered by wet conditions. Most fall plowing completed. Other farm activities light. Range and pasture conditions fair. Corn and sorghum fields continue to provide ample forage. Supplemental feeding required local areas.

**FLORIDA:** Temperatures averaged near normal. Cold fronts moved through State Monday and Friday. Both accompanied and preceded by widespread rain and isolated severe weather. Largest rainfall totals over northern half. Precipitation averaged near 2.50 inches western sections, 3.00 inches northern sections, 2.00 inches central and only 0.10 inch southern sections. Except Tuesday and Wednesday, generally a cloudy week. Harvest soybeans and cotton interrupted rains. Planting small grains resumed. Sugarcane harvest active. Rains very beneficial pastures. Supplemental pastures not yet providing pasturage. Most cattle and calves good. Florida's citrus excellent condition. Ample moisture provided by rains. Cool nights enhancing fruit color. Harvest accelerating. First new crop concentrate manufactured week ending November 27. Harvest fall vegetables active between cool fronts which moved across State both weekends. Rain fall accompanying fronts was heaviest north and west



Florida, especially Hastings cabbage and potato area. Local accumulations through December 5 totaled over 7 inches. Lesser amounts received southern areas. Snap beans and cucumbers declining seasonally. Sweet corn, eggplant, radishes, and squash relatively steady. Celery, escarole, lettuce and peppers increasing supply. Tomatoes good volume and nearing peak fall volume. Cabbage supplies light, but increasing seasonally with some harvest delay expected Hastings.

GEORGIA: Cloudy and cold most of week with measurable precipitation 4 to 6 days. Sleet and snow in north and northeast and heavy rain remainder of State Friday. Snowfall exceeded 10 inches parts of extreme northeast and more than 3 inches of sleet fell in the Athens area. Some sleet as far south as Macon and Augusta. Schools closed and other activities restricted over several county area. Precipitation totaled mostly 1.50 inches to 3.50 inches. Daytime temperatures remained well below normal under cloudy skies. Averages ranged from 2° to 6° below normal for 2d straight cold wet week. Adverse weather limited fieldwork. Harvest continued where conditions permitted. Small grains and winter pastures fair to good.

HAWAII: Weather cloudy with scattered light to moderate showers. Less daylight and low temperatures slowed crop progress. Sugarcane harvesting declining seasonally. Operations pineapple plantations confined to planting, weeding, and fertilizing. Harvesting coffee and macadamia nuts active. Supplies fruits and vegetables adequate. Pastures and cattle fair to good condition.

IDAHO: Temperatures averaged slightly above normal north and southwest and slightly below elsewhere. Precipitation much above normal excepting near normal Panhandle and northeast highlands. Above normal precipitation ranged 0.50 to 1.50 inches with greatest totals southwest and south central. Mountain snow pack at or above average. Unsettled weather made caring for livestock difficult. Muddy lots still problem.

ILLINOIS: Temperatures averaged near normal ranging from the teens on December 1 in extreme north to the 40's on the weekend. Precipitation of a few tenths inch accumulated mostly on the weekend. Most days were cloudy except at midweek. Most winter wheat stands good to excellent. Soil moisture short to adequate. Heavy rain needed to replenish stock ponds and wells. Livestock conditions good. Pastures fair. Most fieldwork complete. Some scatter fields of unharvested corn remain. Some plowing activity.

INDIANA: Near normal temperatures ranging from 11° in north on 2d to 40's late in week. Few tenths rain early and late in week. Cloudy except at midweek. Five days suitable fieldwork. Topsoil and subsoil moisture adequate. Corn 95% harvested, 75% average. Harvest almost done southwest and 90% to 95% done elsewhere. Soybean combining nearly done. Sorghum grain 95% harvested, 90% last year. Plowing for spring crops 40% done.

IOWA: Light to moderate precipitation and near seasonal temperatures. Coldest on 1st with -5° at Waterloo and -4° at Grundy Center. Snow cover over State partially melted during week.

**KANSAS:** Cloudy, cold weather. Precipitation under 0.10 inch east, central, and northeast, generally -0.10 to 0.50 inch elsewhere. Moderate to heavy snow southwest and central. Two to 5 inches those areas, locally up to 8 inches extreme southwest. Most snow melted by end of period. Temperatures averaged 5° to 10° below seasonal western 2/3 of State, 3° to 5° below normal elsewhere. Additional moisture benefitted wheat, but delayed harvest completion. Wheat generally had good growth, some late wheat seeded. Minor problems include some yellow spots, little streak mosaic, light greenbug infestation and some weeds. Wet fields delayed corn and sorghum harvest and increased lodging problems. New alfalfa good growth. Livestock movement continued. Abundant grazing potential wheat and harvested crop fields, but too wet. Supplemental feeding herds. Feed supplies adequate to surplus. Feedlots muddy.

**KENTUCKY:** Temperatures above normal beginning and end of week, below normal balance, and averaging about normal. Mostly cloudy. Precipitation on 5 days, generally rain but some localities snow and sleet on 3d. Weekly totals 0.10 to 0.70 inch. Rainy, damp weather favorable. Burley tobacco stripping. Burley market strong, averaging more than \$79 per cwt. Fall seeded wheat and barley satisfactory conditions. Livestock good. Roughage requirements mostly from fall pasture and gleaned harvested fields.

**LOUISIANA:** Cloudy, cool and rainy week. Temperatures averaged 3° to 5° below normal. Extremes: 70° Boothville Sunday, 30° Ashland Monday. Weak slow moving cyclonic waves on front in Gulf provided impetus for two periods of moderate to excessive rainfall. Totals midweek ranged from near 1.50 to more than 4.00 inches Statewide; totals from early Sunday to this morning 3.00 to 7.00 inches in south and central portions with lesser amounts north and southeast coastal areas. Heavy rains continuing, extensive flooding southwest and south central this morning. Greatest 1-day rain total, 6.90 inches at Lake Charles. Fieldwork virtually impossible last half week due very heavy rain. Limited progress first half. Cotton about 90% harvested, soybeans 98%, sugarcane 75%. Soil moisture excessive. Growth small grains and rye grass improving. Pasture feed still below average, some livestock receiving supplemental feed. Most livestock good condition.

**MARYLAND AND DELAWARE:** Temperatures continued cold for 2d week, averaging 4° to 6° below normal. Weekly highs mostly 40's and low 50's in west and 50's and low 60's in east, lows in teens. Precipitation 0.50 to 1.25 inches on 29th, 30th, less in southern Eastern Shore and southern Delaware. Some progress in delayed corn and soybean harvest, but low areas remain too wet. Harvest some fields may be delayed until ground freezes to support equipment. Livestock good condition.

**MICHIGAN:** Near seasonal temperatures early and late in period with intermittent rain and snow. Clear skies, unseasonal cold midweek with locally heavy snow near lakes. Temperatures extremes: 40° to near zero. Temperature averages, normal to 2° below normal upper Peninsula; 1° to 10° below normal, Lower Peninsula, largest departure south-central. Precipitation totals 0.20 to 0.50 inch.

**MINNESOTA:** Temperatures averaged about 2° below normal in the southwest to 3° above normal

in north. Extremes: 35°, -8°. Precipitation was light across State generally less than 0.25 inch. Snow depths averaged about 6 inches within an area from Worthington to Twin Cities, north to Hibbing to International Falls to Alexandria with the greatest amount near 11 inches in Redwood Falls to Windom. Outside of this area, snow depth varied from 1 to 4 inches.

**MISSISSIPPI:** Rain on 2 to 4 days and weekly totals ranged from 1.25 inches to 8.11 inches at Columbia; the greatest 1-day amount of 3.94 inches was reported Friday morning at McComb, and most stations reported 1-day amounts over 1.00 inch. Weekly temperature averages ranged from 5° below normal to near normal. Extremes for week: 25° and 69°. Over weekend: rain widespread and heavy with about 8 stations reporting over 2.50 inches. This Monday morning, D'Lo reported 4.60 inches and Liberty reported the greatest 1-day amount of 6.00 inches. Soil moisture surplus to excessive southwest, other areas mostly adequate. Average 3 days suitable fieldwork. Corn, cotton, and soybeans 97%, and pecans 72% harvested. Hay and roughage and feed grain supplies stored on farms mostly adequate. Winter wheat and oats mostly fair to good. Pastures mostly fair and livestock mostly good.

**MISSOURI:** Cool cloudy week. Temperatures averaged from 2° below normal south, to -4° below normal north. Cooler at midweek. Slightly warmer end of week. Rain, drizzle over weekend brought from 0.25 inch to 0.50 inch south to less than 0.10 north.

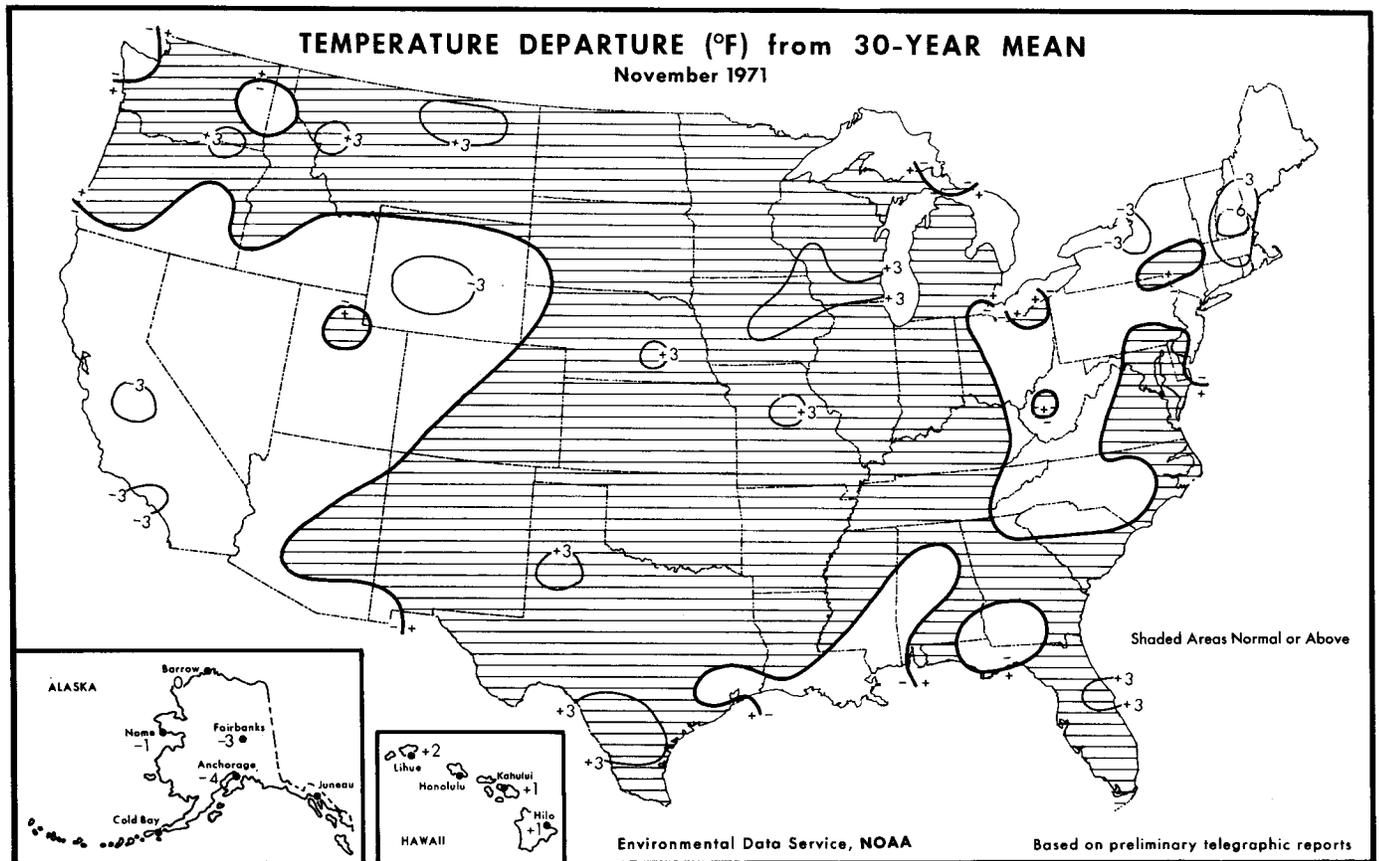
**MONTANA:** Mild first of week followed by cooling late in week with strong warming Sunday. Little precipitation until Sunday when snow began west and spread eastward. Topsoil moisture short to adequate. Winter wheat generally good condition. Supplemental feeding range livestock increasing. Cattle and sheep good. Shrinkage of range livestock normal.

**NEBRASKA:** Cloudy, cool, and wet. Many hours of precipitation that was light in the west but accumulated 2 to 6 inches of snow in the east. Fieldwork reduced due muddy fields and snow. Limited harvesting few areas. Harvest corn crop 97% complete, which is normal for this date. Soybean and sorghum harvest almost complete. Farmers spent much time repairing and preparing machinery for winter storage, fencing, and handling livestock feed. Cool, wet weather reduced greenbug activity winter wheatfields. Recent moisture beneficial to wheat crop as it entered winter season. Recent moisture caused feedlots to become muddy, placing some stress on livestock. Supplemental feeding necessary where snow cover limited grazing.

**NEVADA:** Cool week with temperatures from 4° to 6° below normal. Precipitation trace to 0.70 inch in north. Light in south. General snow except in extreme south from 1 inch at Tonopah to 7 inches at Austin. Cotton harvest Pahump Valley about 67% complete. Vegetable harvest on limited acreage Moapa valley nearly completed. Livestock remain generally good condition with supplemental feeding starting areas. Feed, stockwater and soil moisture supplies adequate. Winter range feed conditions fair to good.

**NEW ENGLAND:** Cold week, averaging mostly 5° to 10° below normal or near midwinter levels. Subzero several mornings in north and single numbers common

(Continued on p. 10)



#### WEATHER - NOVEMBER 1971

**TEMPERATURE:** November began with cold air covering the western and central States and unusually balmy summer weather from eastern Texas to the Atlantic and northeastward to New England. Jackson, Miss., registered 87° on November 1 and Washington, D. C., 84° on November 2. Never before has such warm temperatures occurred at Jackson and Washington so late in the season. The cold air from the west and north spread across the east and south in the first week of November bringing an end to the abnormally warm weather. Freezing temperatures plunged southward reaching northern Mississippi and Alabama by November 6. Meanwhile, the Far West warmed becoming quite pleasant.

On November 9, a high pressure area centered over the central Appalachians brought record-low temperatures to the East. The temperature at Albany, N.Y., plunged to 11°, the coldest it had ever been so early in the autumn at Albany. Record low temperatures set in 1887 were broken at Rochester, N.Y. (30°), Boston, Mass. (24°), and Erie, Pa. (24°). The same High that brought record cold to the East warmed mid-America which enjoyed a period of Indian summer temperatures. Temperatures over the Great Plains warmed to the 70's. Pueblo, Colo., registered 83° on November 11 and Chicago, Ill., registered 78° on the 14th and St. Louis, Mo., recorded 81° on the 15th.

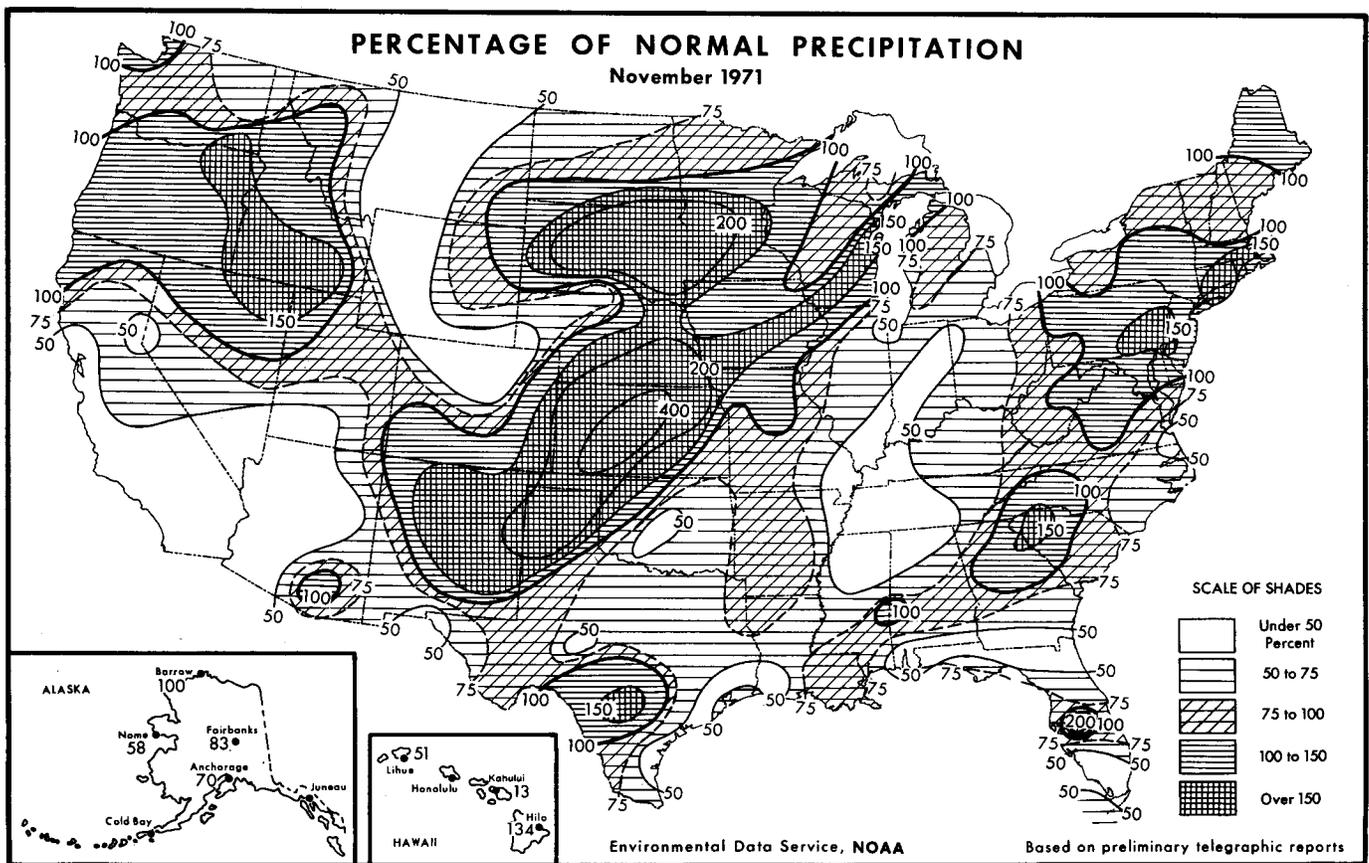
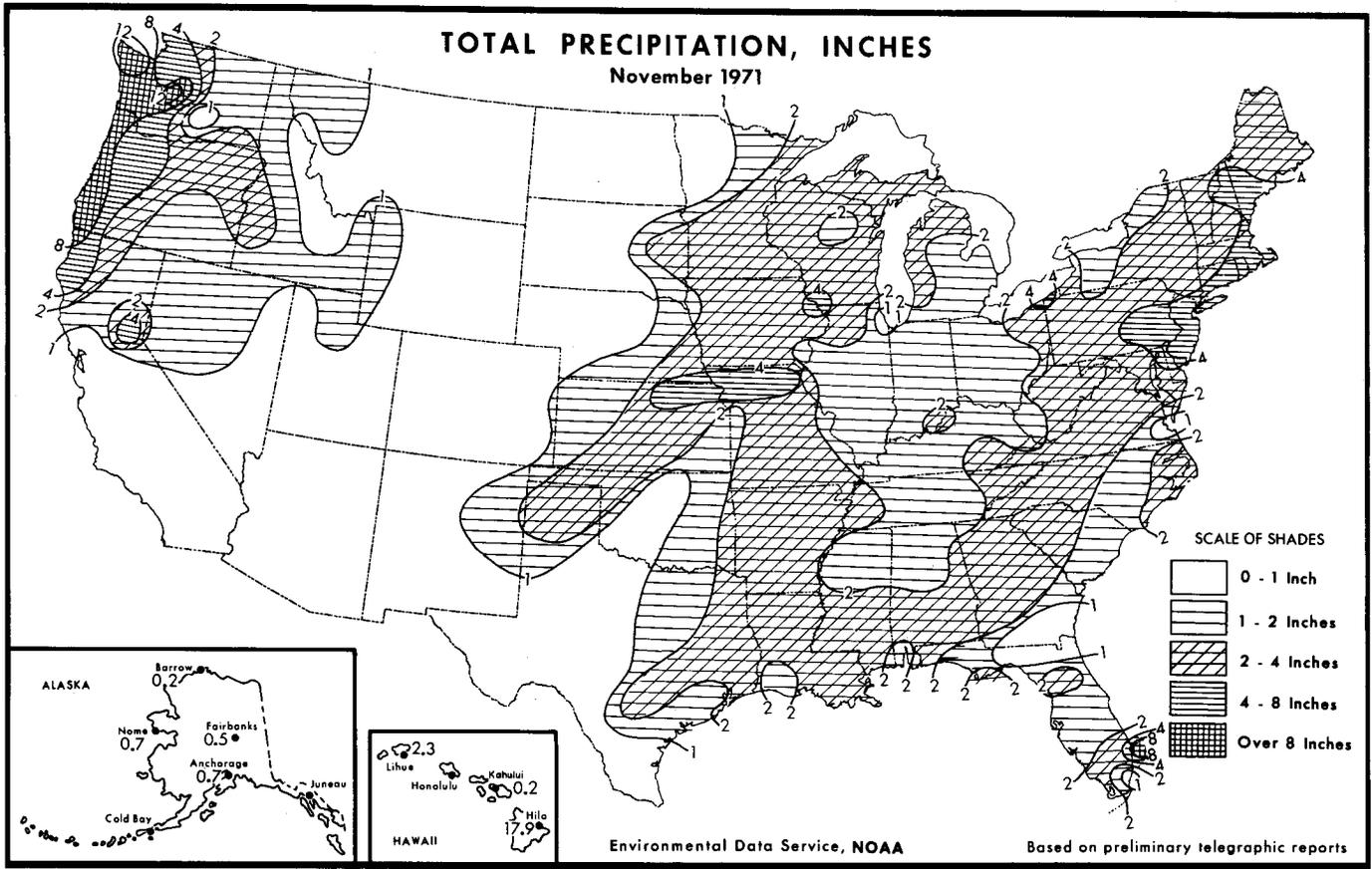
A cold front stretched from Wisconsin to western Texas at midmonth. It moved steadily eastward tumbling temperatures as it advanced. Chicagoans enjoyed a number of days with temperatures 22° to 30° above normal but their highest temperature on the 19th was a chilly 38°. Freezing temperatures occurred as far south as Port

Gibson, about 30 miles south of Vicksburg, Miss.

The last week of the month was cold over the East. Subfreezing temperatures occurred as far south as Montgomery, Ala., which registered 29° on the 23d when Elkins, W. Va., recorded only 4°. A number of stations in Minnesota recorded sub-zero weather; Hibbing, -6°. The central Appalachians and nearby portions of the Piedmont averaged 9° to 12° below normal in the last week of November. A moderating trend warmed mid-America. Pueblo, Colo., warmed to 69° on Thanksgiving Day, November 25. Moderate temperatures prevailed in southern California and Florida on most days in November.

In spite of the frequent temperature changes and the record high and record low temperatures that occurred in November, the monthly average temperatures were near normal. A large area from California to Wyoming, Upper Ohio River Valley, and the northern and central Appalachians averaged 1° or 2° cooler than normal. Most of the rest of the Nation averaged 1° or 2° warmer than normal.

**PRECIPITATION:** Generous rains fell along the eastern Seaboard on the first two days of November. Then followed three days of fair skies over most of the Nation. An exception was Palm Beach, Fla., where 5.05 inches of rain fell in 6 hours on November 4. This brought the November total to 9.11 inches an all-time record for November and the rains kept falling. About the beginning of the second week of November, a cold front brought rain, a few showers to the Pacific Northwest. Strong winds lashed the coastlines



gusting to 80 m.p.h. at Cape Blanco, Oreg. Another cold front set off rain and showers from the mid-Mississippi River Valley to the southern Great Plains. A touch of winter hit New England. An inch of snow covered Logan International Airport at Boston, Mass., on the morning of November 11. This was the earliest date that an inch or more of snow fell at Boston since November 5, 1892. Light rain fell in the Pacific Northwest at midmonth when snow flurries occurred over the Rocky Mountains. The snow increased, spread to the nearby Great Plains, and blanketed several States from Montana to Minnesota and southward to the northern portions of Arizona and New Mexico. Thunderstorms occurred along a cold front that stretched from Wisconsin to Texas. At the end of the third week, several inches of snow fell to the lee of the Great Lakes and flurries were seen at some distance from the Lakes. At some places, gusty winds accompanied the snow, the visibility was reduced, and automobile travel became hazardous.

A storm centered off the Washington Coast brought more rainy weather to the Coast and light snow to the Cascades and the Rocky Mountains. More miserable weather plagued the eastern half of the Nation. The weather was especially severe in the Northeast where heavy snow, freezing rain, gusty winds, and cold temperatures combined to make a storm comparable to that of the last week of November in 1950.

Monthly rainfall totals ranged widely from no rain at a few spots in the Southwestern Deserts to more than 140 inches near Puget Sound. Totals exceeded the normals in Oregon, nearby parts of neighboring States, and in the northern and central Great Plains. In Kansas, totals ranged from about 200% to more than 600% of normal.

L. W. Dye

#### NEW ENGLAND (Continued from p.7)

in colder spots in south. Precipitation mostly from one storm on 29th and 30th with 6 to 12 inches snow in north but all rain in coastal areas and much of south. Totals mostly 0.75 to 1.50 inches but varied from about 0.50 to 2.00 inches. Northern ski area in operation with good cover.

**NEW JERSEY:** Temperatures averaged 1° or 2° below normal with afternoon readings varying from the mid-30's to low 50's. Overnight low temperatures ranged from low 20's to near 40°. Heavy precipitation on Thanksgiving Day was followed by a general rain Saturday. Weekly totals averaged 1.50 inches over northern 1/3 of State and 2.50 inches elsewhere. Up to 10 inches of snow over the northwestern counties Thursday.

**NEW MEXICO:** Precipitation generally totaled 0.25 to 0.50 inch except for less in the northwest and central Rio Grande Valley. Shower activity decreased and became more scattered during week. Temperatures averaged below normal with 7° to 10° below normal in northern mountains and eastern plains. Cooling with cold days and seasonably mild nights. Some days midweek remained freezing at several northern and eastern localities. Moisture adequate. Rain, snow slowed cotton, sorghum active. Cotton 75%, sorghum 90% complete. Wheat good. Pasturing very active. Pecan harvest continuing. Miscellaneous crops mostly completed. Livestock fair to good. Supplemental feeding beginning areas short of grass.

**NEW YORK:** Temperatures continued much below normal. Colder trend began on 30th with only slight moderation by weekend. Minimums: -5° to 15° southern plateau and northern half up to mid-to

upper teens coastal sections on 2d. Maximums ranged from 50's on Long Island on 29th and 30th down to low 20's interior Upstate on 1st and 2d. Major storm early week included heavy rain Hudson Valley to Atlantic Coast and light to moderate snow elsewhere. Liquid precipitation totaled 1.20 to near 2.00 inches extreme southeast, 0.70 to 1.00 inch northern 1/3 and averaged 0.50 inch western half. Snowfall 6 to 12 inches northern valleys with 2 to 4 inches western and southern interiors. Precipitation widespread night of 5th including rain and freezing rain west and central and mostly snow north. Snow depth late week 9 to 15 inches northern half ranging down to 0 to 2 inches southern tier and extreme southeast.

**NORTH CAROLINA:** Continued cold with little change from previous week. Rain 29th and mostly snow with some sleet and rain east portion 3d. Average precipitation 1.00 inch. Heavy snow accumulations 8 to 18 inches southwest diminishing northward and eastward. Some accumulations to within 50 miles of coast. Soil moisture adequate to surplus all areas. Corn harvest about 85% complete, soybeans 60 to 65%, cotton 75 to 80%, sorghum grain about 80%, lespedeza seed 90%. Peanut threshing virtually finished. Seeding small grains behind schedule at 78%, condition mostly fair to good. Pastures continue mostly good.

**NORTH DAKOTA:** Occasional snow flurries mixed with periods of sunshine. Temperatures averaged near or above normal except below normal southwest. Precipitation from trace to 0.12 inch. Snow cover from trace to 2 inches. Rye and winter wheat good condition. Calves mostly weaned and many sold. Farmers busy hauling grain and hay, picking rocks and fixing buildings and fences. Cattle good condition and still grazing, weather permitting.

**OHIO:** Cloudy and cold with temperatures moderating over weekend. Rain widespread 29th and on 5th. Snow flurries common northeast 1st and 2d. Good pasture conditions most areas keeping livestock in good condition. Tobacco auctions full operation. Activities include spreading fertilizer and fall plowing. Winter wheat growth much above normal.

**OKLAHOMA:** Cold damp week with temperatures 3° to 13° below normal. Precipitation western half State ranged from 0.50 to 1.40 inches and from 0.20 to 2.00 inches in eastern half. Snowfall western 1/2 State ranged from 4 to 12 inches. Cool weather slowed growth small grains, but grazing still good to excellent. Wet fields, snow cover necessitated supplemental feeding livestock for few days. Some rust in wheat. Livestock good to excellent condition, making favorable gains. Winter reserves forage and feed concentrates adequate. Harvesting fall crops delayed by wet weather although some headway made early week. Clear dry weather needed to complete remaining sorghum harvest. Some cotton damaged by snow, harvest sharply behind average. Pecan harvest past peak, but expected to continue through December. Soybean harvest completed few areas. Soil moisture adequate throughout State.

**OREGON:** Very wet week with cooler days at close. Temperatures averaged 1° to 3° above normal except some 4° to 6° above normal north-central. Some clearing on 1st provided weekly minima 1° to 24° east, 28° to 39° west. Maxima 40° to 58°. Rains on 5 to 6 days totaled 1.00 to 1.70 inches on eastside except locally 0.30 to 0.50 inch northeast quadrant. Western valleys 1.10 to 3.70 inches with Cascades and coast 3.00 to 6.50 inches. Rain and snow halted outside farmwork. Still some

nuts to be picked should weather allow. Range feed dry with snow covering at higher elevations.

**PENNSYLVANIA:** Coldest week since mid-February. Rain, some snow beginning of week; rain and freezing rain Sunday night all but southeast. Balance of week generally fair but quite cold. Snow showers left up to 2 to 4 inches new snow some western mountains first half of week. Maxima mainly mid-20's to 30's west and north, 30's and 40's southeast. Minima in teens or lower all sections midweek. Extremes: 52°, -3°. Weekly averages 1° to 2° below normal extreme west, 3° to 5° below normal southeast, 6° to 9° below normal elsewhere. Total precipitation less than 0.50 inch part of north-central, 0.75 to 1.00 inch northwest corner, mostly 1.00 to 1.50 inches elsewhere. Snow cover confined to higher elevations in west and north. Mainly routine winter farm chores. Some clean-up harvesting with dry weather latter week.

**PUERTO RICO:** Average rainfall 1.00 inch or about 0.30 inch below normal. Highest weekly total up to 3.50 inches in central Cordilleras. Generally less than 1.00 inch along coast. Crop moisture conditions near normal all divisions. Temperatures averaged 76° to 77° on coast and 72° to 73° interior. Highest maximum, 91°, lowest minimum, 52°. Sugarcane plantations preparing for harvest operations. Sugarcane maturing stage. Coffee zones active harvesting and seeding. Pastures generally good to excellent islandwide. Minor crops developing well all zones with moderate abundance on market.

**SOUTH CAROLINA:** Rain early in week. Precipitation began again early on 3d and by 3 p.m., 1.00 to 2.00 inches of rain had fallen in the coastal plain, a mixture of rain, sleet, and freezing rain in the midland, and snow in the Piedmont and mountains. Amounts were 6 to 12 inches in upper Piedmont with larger amounts in the mountains. Weekly average temperatures were 4° below normal in Piedmont and 2° below in coastal plain. Rain, sleet, and snow towards weekend further hampered farming activities all areas. Cotton 89%, soybeans 55% harvested. Pecans fair to good condition. Pastures good. Wheat 66% planted, 56% emerged. Oats 84% planted, 66% emerged. Wheat and oats good. Fall vegetables fair to good condition.

**SOUTH DAKOTA:** Weekly temperatures averaged up to 5° below normal. Extremes ranged from 5° below zero at Ipswich and Leola on the 2d to 49° near Mission on 2d. Light snow scattered through week with precipitation amounts ranging from less than 0.05 inch to about 0.25 inch. Snow cover end of week generally ranged from a trace to 4 inches in lower elevations of west to 3 to 7 inches in the east with spotty amounts up to about 1 foot in northeast. Snow cover in Black Hills ranged from a trace in south to 8 inches or more in north. Winter wheat and rye seedings good condition, with generally adequate snow cover. Fieldwork generally curtailed. Wet weather kept few farmers from completing fall plowing and tilling. Corn shelling has not begun due to rain and snow on corn in cribs. Some livestock still on fall pastures. Livestock good condition. Main farm activities are chores and repairing machinery and farm buildings.

**TENNESSEE:** Gulf storm December 3 dumped up to 10 inches of snow in eastern mountain areas above 3,000 feet, and 2 to 4 inches in northeast. Weekly temperatures averaged 2° to 5° below normal until warmup on weekend. Widespread rain Sunday

and above-normal temperatures dissipated most of snow. Weekly precipitation totaled about 1.25 inches. Recent rainfall slowing harvest few remaining crops to be harvested. Cotton picking near complete with only scrapping remaining. Winter-seeded small grains benefited by recent rains. Livestock good condition for this time of year. Most outside activity consisting primarily livestock chores.

**TEXAS:** Cold, cloudy, wet weather prevailed. Except in southwest, moderate to locally heavy precipitation fell almost daily. Early winter storm Wednesday and Thursday covered much of high and low plains under a blanket of 4 to 9 inches of snow. Three inches of snow fell as far south as Haskell. Very heavy rains of 2.00 to more than 4.00 inches fell from Austin, San Antonio area eastward to Sabine Sunday and Monday. Harvest cotton, sorghum, soybeans, and peanuts once again interrupted by wet fields. Snow and rain covered much High Plains while rest of State received light to heavy precipitation. Adequate moisture continues to stimulate good to excellent growth small grains. Although adequate moisture continues to be recorded most of State, isolated areas east Texas still reporting low levels stock-water. Percent seeded to date; wheat 100, 100 year ago; oats 100, 100 year ago. Percent harvested; cotton 36, 93% year ago; sorghum 97, 100 year ago; peanuts 98, 100 year ago; soybeans 89, 98 year ago. Cold, wet weather hampered vegetable harvest south Texas. Harvest fall peppers, cucumbers past peak Lower Valley, but moderate supplies peppers, light supplies cucumbers available. Fall tomato harvest about peak. Cabbage harvest increasing south Texas, but carrot digging light. Light harvest lettuce, broccoli, cauliflower underway. Spinach harvest becoming active Winter Garden. Most winter vegetables satisfactory progress, but cool weather temporarily slowed growth. High plains carrot digging interrupted. Citrus harvest hampered inclement weather, but fruit picking expected to increase next several weeks. Pecan harvest 78%, 80% last year.

**UTAH:** Recurring periods of rain and snow with locally heavy accumulations in mountains, but generally light to moderate at lower elevations. Snow cover quite extensive at higher elevations and in northern valleys. Temperatures averaged near normal most sections, but 2° to 8° below south-central Utah. Sorting, grading, and marketing potatoes, dry onions, and apples from storage continue active. Apple cider being pressed Utah County. Sugar beet harvest almost completed and factories operating at peak. Turkey processing will continue full capacity for 2 more weeks, then taper off to completion by late December. Irrigation water stored in reservoirs and snowpack, as of December 1, best ever. Care and feeding of cattle and lambs in feedlots and valley farms, dairy cattle, and poultry flocks major activity.

**VIRGINIA:** Temperatures mostly normal to below. Precipitation at beginning and end of week. Totals generally light in south and moderate in north. Harvest resumed as snow melted and fields dried, but was halted in west Saturday. Feeding cattle intensified. Hog butchering active. Top soil moisture 3/4 adequate, 1/4 surplus. Thirteen percent corn remains unharvested, 20% soybeans to harvest. Burley tobacco marketing active southwest. Dark-fired market opened November 30, sun-cured to open December 7. Preparation in treating tobacco plant beds.



# FIRST CLASS MAIL

Subscription price \$5.00 per year in U.S. and possessions, foreign mailing \$6.25 per year. For period December to March, \$1.50 domestic, \$2.00 foreign. If air mail is desired, add the appropriate amount. Make checks payable to "Superintendent of Documents."

Publication of this bulletin began in 1872 as the Weekly Weather Chronicle. It is now issued under general authority contained in the Act of January 12, 1895 (44 USC 213), 53d Cong., 1st Sess. Quotation or reproduction of this material is encouraged. Please give credit to this publication and, in case of special articles, to authors.

Questions and comments are invited; please send to Editor in Agricultural Climatology Service Office, address above.

**WASHINGTON:** Western Washington: Cloudy, rainy weather prevailed with near or above normal temperatures. Spotty, but generally deficient rainfall. Few carrots being dug. Christmas tree harvest proceeding well, cutting Christmas greenery underway. Local cattle feed adequate with no indicated shortages. Eastern Washington: Cloudy, wet weather with some snow shower activity. Temperatures generally above normal and precipitation below normal. Fruit growers fertilizing and pruning. Sugar beet and field corn harvesting slowly nearing completion. Fieldwork and grain growth generally slowed by weather. Cattle and sheep doing well with local coyote problem northern areas. Some erosion winter wheat fields. Soil moisture in good supply most sections.

**WEST VIRGINIA:** Light rain November 29 to 30 with light snow higher elevations followed by sub-freezing weather. Considerable warmup by weekend with highs above 50° many locations December 4 and 5. Rain began evening December 5. Some pastures still utilized for grazing. Unusually mild weather held supplemental feeding livestock to minimum this month. Corn harvest almost complete.

**WISCONSIN:** Mostly cloudy and damp weather prevailed during week. Temperatures below normal except mild and foggy over weekend. Fieldwork mostly at standstill as 4 to 8 inches snow covers State, except less extreme northwest and southeast corners. Still a lot of corn unpicked and snowed in. Frost penetration into soils negligible. Soil moisture mostly adequate.

**WYOMING:** Cool week with most of State receiving light to heavy snow. Moran reported most moisture with 1.21 inches. Temperatures averaged near to 8° below normal. Maxima were mostly 30° to 40° west of Divide and Upper Platte Drainage, mid-30's to low 50's elsewhere. Minima were mostly 7° to -19° west of Divide, -5° to 15° east. Temperature extremes: 53° Carpenter and Legrange and -19° at Afton. Ranchers feeding hay and concentrates western half, using grazing eastern half. Livestock generally good condition despite some reports respiratory disease among young stock in heavy snow areas. Both soil moisture and stock-water supplies are adequate most areas.

## AVERAGE MONTHLY WEATHER OUTLOOK

