

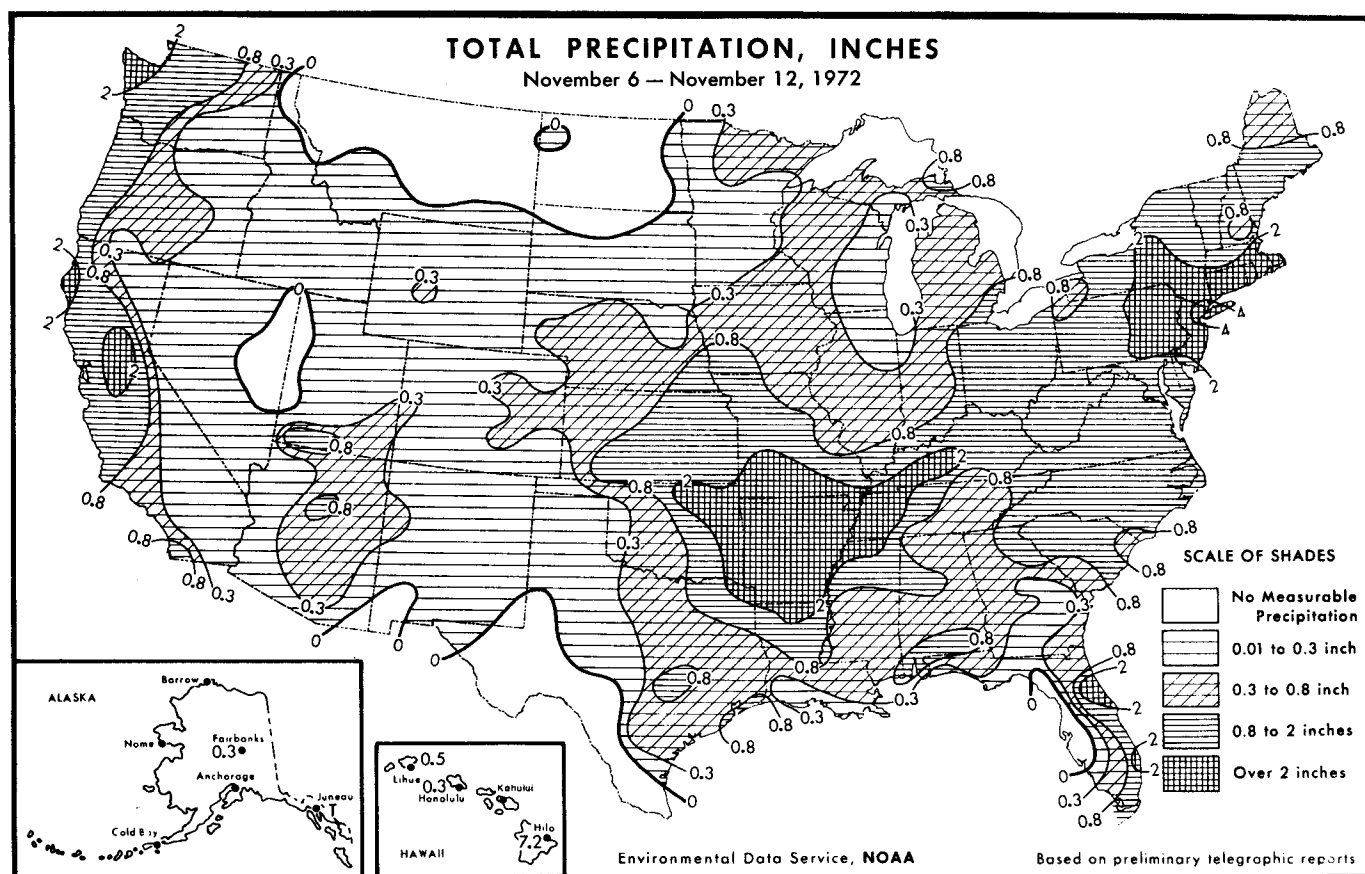
# Weekly Weather & Crop Bulletin

U. S. DEPARTMENT OF COMMERCE  
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U. S. DEPARTMENT OF AGRICULTURE  
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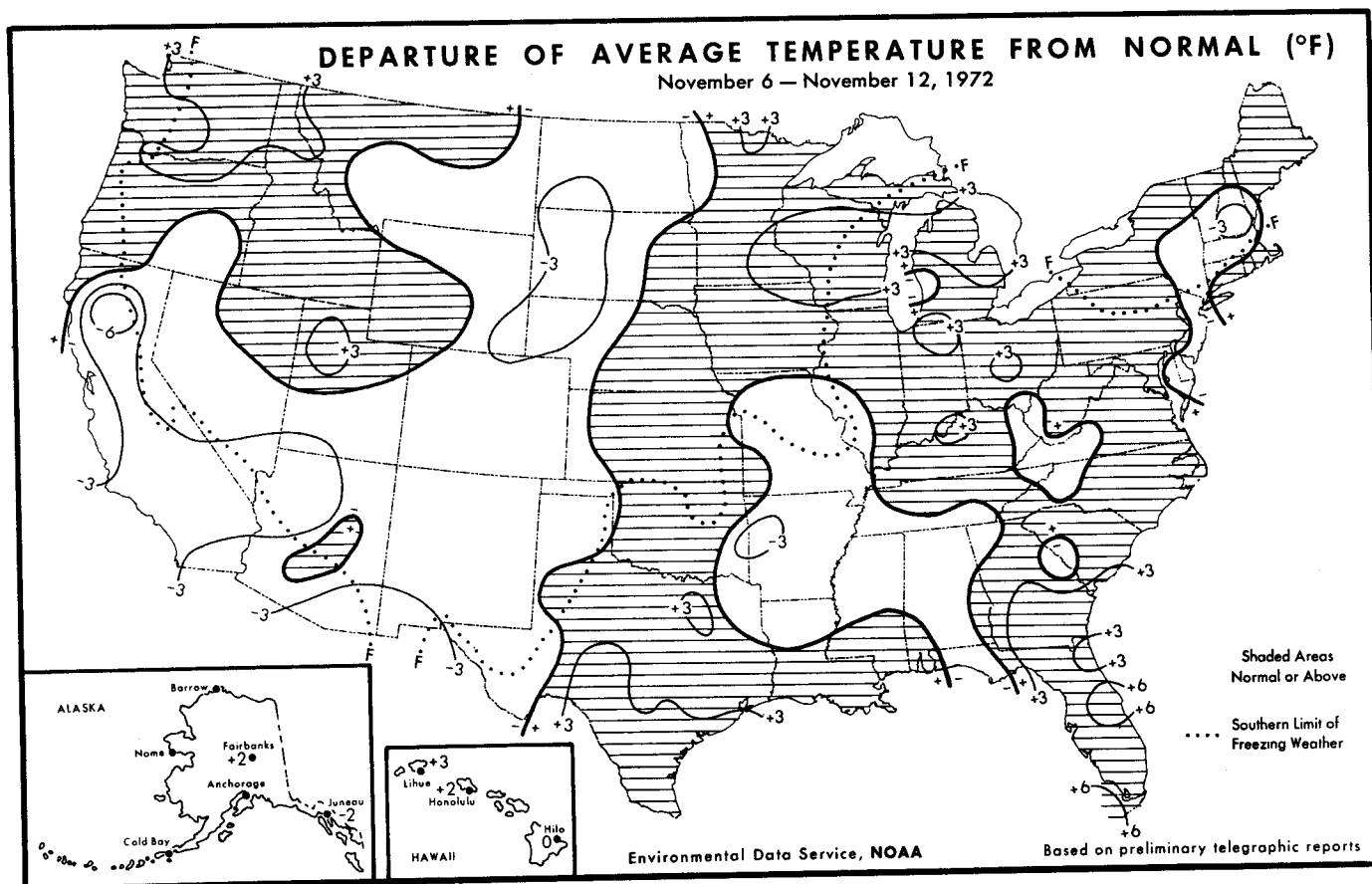
## NATIONAL WEATHER SUMMARY

**HIGHLIGHTS:** Temperatures averaged near normal over most of the Nation. A weekend storm dumped heavy snow over portions of the Great Plains and, as we go to press, threatens the eastern half of the Nation with strong winds, snow, rain, drizzle, fog, and thunderstorms.

**PRECIPITATION:** On Monday, November 6, a low was centered over the northern Great Plains. A cold front extended southward from the low to central Texas. As the system moved eastward it set off some severe thundershowers over the middle and lower Mississippi River Valley and lighter showers

### CORRECTED COPY

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over the upper Mississippi River Valley. On Tuesday morning, numerous stations in Arkansas and Mississippi measured 24-hour totals ranging from 3.00 to more than 7.00 inches. As the system continued eastward, it brought light to moderate rain to most of the area from the Mississippi River to the Atlantic Coast. The generous rains flooded many small streams. By midweek, the rains had stopped over most of the East except from West Virginia to New England.

A storm off the Pacific Coast caused rain from Washington to central California with snow in the western Mountains. Rain and snow fell in the intermountain region and snow whitened the central Rockies.

Heavy thunderstorms occurred in Pima and Pinal Counties, Ariz., early Wednesday. Some of these produced hail and strong winds. Blowing dust reduced the visibility to near zero.

By late Thursday the southern portion of the storm had crossed the Rocky Mountains and was centered over Kansas. Freezing drizzle fell over the northern Great Plains. Fog was widespread from the northern Great Plains to the Great Lakes and rain fell from the Great Lakes to the central Great Plains.

A weekend storm developed over the southern portion of the Great Basin and crossed the Rocky Mountains to the central Great Plains. It dumped heavy snow over Nebraska and Iowa

and, as we go to press, it is centered over Kentucky and is producing rain, drizzle and fog from the Ohio River Valley to New England and thunderstorms from the Carolinas to Florida.

**TEMPERATURE:** Temperatures dropped to below freezing over the Rocky Mountains and the northern Great Plains on most mornings. Alamosa, Colo., cooled to 15° Tuesday morning. Afternoon temperatures ranged from slightly below freezing in North Dakota—24° at Devils Lake Tuesday—to the 80's in the Florida Peninsula—88° at Fort Myers Monday. McAllen and Alice, Texas, warmed to 91° Monday. Temperatures in the 60's were common in the central Great Plains—60° at Burwell and North Platte, Nebr., Tuesday afternoon. In the Far Southwest, maximum temperatures generally reached the 60's to 80's. Phoenix, Ariz., registered 84° Tuesday afternoon.

A surge of cold air dropped temperatures to below freezing over the Rocky Mountains late in the period. Freezing weather occurred as far south as Las Cruces, N. Mex., Saturday morning. Temperatures averaged near or slightly above normal over the Far Northwest and over most of the eastern half of the Nation and slightly below normal elsewhere.

L. W. Dye

## NATIONAL AGRICULTURAL SUMMARY

**AGRICULTURAL HIGHLIGHTS:** Continued wet weather in the eastern United States hampered harvesting of corn, cotton and soybeans. \* Soybean combining in the North Central States was at a standstill.

**SMALL GRAINS:** Winter wheat in the Great Plains continues to respond favorably to additional moisture. Winter wheat is rated in good condition in all the leading producing States. Rains boosted Kansas and Nebraska winter wheat growth and aided root development. In Oklahoma, some late seeding of small grains was delayed by wet fields. Small grains are making good growth and grazing is becoming more widespread. Texas farmers have good moisture available to complete small grains planting intentions. Wheat and oats are making excellent progress. Colorado and Wyoming winter wheat is in very good to excellent condition. In Montana wheat condition ranges from fair to excellent. In Washington small grain stands are good in most areas. Wet fields continue to delay winter wheat seeding progress throughout the Corn Belt. Seeding is 93 percent complete in Illinois, 65 percent complete in Indiana and 70 percent complete in Ohio.

**CORN:** Harvesting of the Nation's corn crop made limited progress last week as wet, cloudy weather continued to plague the eastern half of the United States. About 49 percent of the total acreage is harvested, an increase of 7 points over the previous week. Some headway was made in the North Central States with harvest now 44 percent complete in spite of almost constant cloudy, drizzly weather. Harvesting on the average is 69 percent complete in the Corn-Belt by this time. In Iowa, 38 percent of the crop is picked compared to an average of 62 percent while harvesting advanced in Illinois to 45 percent compared to an average of 72 percent harvested. Precipitation virtually stopped corn picking in Nebraska, Kansas, Missouri, and Ohio but picking is moving along normally in Minnesota. Southern farmers hampered by showers made little progress getting corn harvested.

**COTTON:** Rain and wet fields early last week across the South continued to slow cotton harvesting. About 55 percent of the crop is harvested from Texas and Oklahoma to the Atlantic Coast. In Texas 35 percent of the crop is harvested compared to 28 percent last year. Some progress was made in Mississippi with harvest 81 percent complete compared to 77 percent last year. Cotton picking in Arkansas advanced slightly to 80 percent complete. The pace quickened in Louisiana with harvest 75 percent complete and in Alabama at 70 percent complete. Missouri and Tennessee cotton farmers made little or no progress in harvesting because of rain. In the Western States the cotton harvest progressed normally with picking past the half-way mark.

**SOYBEANS:** Cloudy, wet weather continued to delay the Nation's soybean harvest with 55 percent of the total acreage combined, an increase of only 5 points over the previous week. Damp, dreary weather and soggy fields held harvest to a standstill in the North Central States. Harvesting progress in the Corn-Belt gained only 1 point

and at 71 percent complete compares with an average for this time of 91 percent complete. Only 4 Corn-Belt States showed an increase in harvesting completion -- Missouri, South Dakota, Nebraska and Kansas. The Illinois and Iowa soybean harvest remains unchanged at 80 percent complete. Fair soybean harvesting progress was made in spite of rain in the South Atlantic and South Central Regions with 50 percent of the crop combined. About 60 percent of the Arkansas soybean acreage is cut. The Mississippi harvest is 51 percent complete while Louisiana advanced to 75 percent complete and Tennessee was held to 25 percent complete.

**OTHER CROPS:** The sorghum grain harvest was again delayed by wet weather and is running well behind average in all major producing States. The Texas crop is 79 percent combined, while Kansas sorghum grain acreage is only 48 percent combined. The harvest is 63 percent complete in Nebraska and Missouri, and 60 percent complete in Oklahoma. The damp weather has favored burley tobacco stripping in Kentucky and Tennessee where stripping is over 75 percent complete. Rains slowed peanut harvesting early last week, but Texas is 87 percent complete, Virginia 80 percent complete and Oklahoma 75 percent complete. Weather has been favorable for harvesting final potato fields in Idaho and good progress is being made on the sugar beet harvest. In Colorado, sugar beet harvesting is 4/5 complete with only scattered fields dug. Sweet potatoes are 95 percent harvested in Louisiana. The second cutting of rice in Texas is 79 percent complete.

**Fruits and Nuts:** The Northern fruit harvest is virtually complete. The filbert and walnut harvest in Oregon is in the final stage while the California almond and walnut harvest is nearing completion. Pecan harvesting is in full swing in the South. Rains improved Florida citrus groves and cool nights are aiding fruit coloring. The citrus harvest is gaining momentum in Texas and Arizona. In California, the valencia orange harvest is nearly complete while picking the new navel orange crop continues to increase in the San Joaquin Valley.

**Vegetables:** Vegetable harvesting in Washington is nearing completion. The total volume of vegetables being shipped out of Florida continues to outpace the previous 2 seasons. Florida sweet corn, cucumbers, snap beans, eggplant, and radishes are moving in good volume while tomatoes, celery, peppers, lettuce and leafy crops are increasing. Carrot harvesting began in the San Antonio Texas-Winter Garden area. Seasonal vegetable harvesting continued in California.

**PASTURES AND LIVESTOCK:** Pastures and livestock conditions remain good in most States. In the West, most cattle and sheep are on winter pastures. In the Plains States livestock marketing is active; although, hampered by cold, wet weather. Grazing of small grains pastures is becoming more prevalent.

Arlon M. Scott  
Agricultural Statistician

## Temperature and Precipitation Data for the Week Ending Midnight, L.s.t., November 12, 1972

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. . .	54	-1	.8	0	New Orleans . . .	63	+1	.4	-.4	OKLA,Okla. City . .	52	+1	.8	+.4
Mobile. . . . .	63	+2	1.6	+.9	Shreveport. . . .	57	-1	1.0	0	Tulsa . . . . .	51	0	3.1	+2.6
Montgomery. . . .	57	+1	.5	-.2	MAINE,Caribou . .	34	+1	.4	-.4	OREG,Astoria. . . .	48	0	1.2	-1.2
ALASKA,Anchorage. .	---	---	---	---	Portland. . . . .	41	0	1.5	+.5	Burns . . . . .	36	-2	.8	+.5
Barrow. . . . .	---	---	---	---	MD,Baltimore. . . .	48	0	1.5	+.8	Medford . . . . .	47	+3	.2	-.4
Fairbanks . . . . .	10	+2	.3	+.2	MASS,Boston . . . .	47	0	2.7	+1.8	Pendleton . . . . .	47	+4	T	-.3
Juneau. . . . .	34	-2	T	-1.5	Chatham . . . . .	46	---	.8	---	Portland. . . . .	50	+4	1.0	-.2
Nome. . . . .	---	---	---	---	MICH,Alpena . . . .	41	+4	.5	-.1	Salem . . . . .	47	+1	.9	-.4
ARIZ,Flagstaff. . .	33	-5	1.3	+1.1	Detroit . . . . .	43	0	.8	+.3	PA,Allentown. . . .	46	+2	3.6	+2.9
Phoenix . . . . .	61	+1	.6	+.5	Flint . . . . .	44	+4	.7	+.2	Erie . . . . .	49	+3	2.2	+1.5
Tucson. . . . .	56	-4	.5	+.3	Grand Rapids. . . .	43	+2	.7	+.1	Harrisburg. . . . .	49	+2	3.1	+2.3
Winslow . . . . .	45	+1	.5	+.4	Houghton Lake . . .	40	+3	.6	0	Philadelphia. . . .	46	+2	.9	+.3
Yuma. . . . .	62	-2	T	0	Lausling . . . . .	43	+2	.7	+.2	Pittsburgh. . . . .	44	+2	3.0	+2.3
ARK,Fort Smith. . .	50	-3	2.7	+2.0	Marquette . . . . .	39	+2	.6	-.1	Scranton. . . . .	---	---	---	---
Little Rock . . . .	51	-2	3.9	+2.9	Muskegon. . . . .	41	-1	.4	-.3	R.I.Providence. . .	---	---	2.4	+1.5
CALIF,Bakersfield. .	56	-2	.8	+.7	S.Ste.Marie . . . .	38	+2	.9	+.1	S.C.Charleston. . .	61	+3	.9	+.4
Eureka. . . . .	53	+1	2.2	+1.2	MINN,Duluth . . . .	33	+2	.2	-.2	Columbia. . . . .	58	+2	1.7	+1.2
Fresno. . . . .	53	-3	1.1	+.9	Internatl Falls . .	31	+3	.4	0	Greenville. . . . .	54	0	.9	+.3
Los Angeles . . . .	62	-2	.5	+.3	Minneapolis . . . .	38	+3	.1	-.2	S.DAK,Aberdeen. . .	33	0	T	-.2
Red Bluff . . . . .	48	-9	1.3	+.8	Rochester . . . . .	37	+2	.6	+.2	Huron . . . . .	35	0	.3	+.1
San Diego . . . . .	60	-3	1.2	+1.0	St. Cloud . . . . .	35	+2	T	-.3	Rapid City. . . . .	35	-3	.2	+.1
San Francisco . . .	54	-2	1.3	+1.0	MISS,Jackson. . . .	57	0	.7	-.1	Sioux Falls . . . .	37	+1	.2	-.1
Stockton. . . . .	52	-3	2.5	+2.2	Meridian. . . . .	57	+1	.7	0	TENN,Chattanooga. .	50	-1	.8	0
COLO,Denver . . . .	39	-1	.3	+.1	MO,Columbia . . . .	45	-2	1.1	+.5	Knoxville . . . . .	51	0	.8	+.1
Grand Junction. . .	41	-1	.3	+.1	Kansas City . . . .	47	-1	1.2	+.7	Memphis . . . . .	51	-1	3.6	+2.6
Pueblo. . . . .	40	-2	.6	+.4	St. Louis . . . . .	45	-2	.6	0	Nashville . . . . .	52	+1	.9	+.1
CONN,Bridgeport . .	48	+1	3.3	+2.4	Springfield . . . .	48	0	2.9	+2.2	TEX,Abilene. . . . .	58	+2	.1	-.2
Hartford. . . . .	44	0	2.2	+1.3	MONT,Billings . . .	36	-2	T	-.1	Amarillo. . . . .	47	-2	.1	-.1
D.C.Washington. . .	51	0	1.9	+1.2	Glasgow . . . . .	33	+1	T	-.1	Austin. . . . .	64	+3	1.1	+.6
FLA,Apalachicola. .	62	-1	.2	-.4	Great Falls . . . .	37	0	T	-.2	Beaumont. . . . .	62	0	1.6	+.8
Ft. Myers . . . . .	76	+5	0	-.3	Havre . . . . .	34	+1	T	-.1	Brownsville . . . .	72	+3	T	-.3
Jacksonville. . . .	66	+2	.5	+.1	Helena. . . . .	32	-2	.2	+.1	Corpus Christi. . .	71	+5	.3	-.1
Key West. . . . .	81	+6	1.1	+.5	Kalispell . . . . .	35	+2	T	-.3	Dallas . . . . .	61	+4	.8	+.1
Lakeland. . . . .	73	-5	T	-.4	Miles City. . . . .	35	-1	T	-.1	Del Rio . . . . .	65	+4	T	-.2
Miami . . . . .	77	+3	1.1	+.4	Missoula. . . . .	36	+3	T	-.2	El Paso . . . . .	51	-3	.1	0
Orlando . . . . .	74	+6	1.0	+.6	NEBR,Grand Island .	43	+3	.7	+.5	Fort Worth. . . . .	60	+3	.7	+.1
Tallahassee . . . .	64	+3	.1	-.4	Lincoln . . . . .	43	-1	1.7	+1.4	Galveston . . . . .	69	+4	1.4	+.5
Tampa . . . . .	73	+5	T	-.3	Norfolk . . . . .	41	+2	.2	-.1	Houston . . . . .	63	+2	.5	-.4
GA,Atlanta. . . . .	55	+2	.7	0	North Platte. . . .	38	0	.4	+.3	Lubbock . . . . .	52	+2	.1	0
Augusta . . . . .	54	-2	.4	0	Omaha . . . . .	42	+1	1.4	+1.1	Midland . . . . .	54	-1	T	-.1
Macon . . . . .	60	+3	.1	-.4	Valentine . . . . .	34	-3	.3	+.1	San Angelo. . . . .	61	+4	.2	0
Savannah. . . . .	62	+3	.3	-.2	NEV,Ely . . . . .	34	-2	T	-.1	San Antonio . . . .	64	+2	.7	+.4
HAWAII,Hilo . . . .	74	0	7.2	+4.2	Las Vegas . . . . .	51	-4	T	-.1	Victoria. . . . .	67	+3	.3	-.3
Honolulu. . . . .	79	+2	.3	-.2	Reno. . . . .	39	-1	.1	0	Waco. . . . .	60	+1	.7	+.2
Kahului . . . . .	---	---	---	---	Winnemucca. . . . .	38	0	.1	-.1	Wichita Falls . . .	56	+1	.6	+.3
Lihue . . . . .	78	+3	.5	-.5	N.H.Concord . . . .	36	-4	.7	-.2	UTAH,Blanding . . .	39	-2	.5	+.3
IDAHO,Boise . . . .	43	+2	.3	0	N.J.Atlantic City . .	49	0	2.8	+1.9	Salt Lake City. . .	42	+3	.2	-.1
Lewiston. . . . .	44	+2	T	-.3	Trenton . . . . .	---	---	---	---	VT,Burlington . . .	40	+2	1.3	+.6
Pocatello . . . . .	39	+2	.1	-.1	N.MEX,Albuquerque .	44	-2	.3	+.2	VA,Lynchburg. . . .	50	0	.8	+.2
ILL,Cairo . . . . .	51	0	2.0	+1.1	Roswell . . . . .	---	---	---	---	Norfolk . . . . .	55	+1	1.2	+.5
Chicago . . . . .	44	+1	.3	-.2	N.Y.Albany . . . . .	41	-1	1.8	+1.2	Richmond. . . . .	52	+1	1.7	+1.0
Moline. . . . .	44	+1	.5	0	Binghamton. . . . .	41	0	2.9	+2.3	Roanoke . . . . .	48	-1	1.1	+.5
Peoria. . . . .	43	0	.3	-.2	Buffalo . . . . .	44	+2	.9	+.1	WASH,Colville . . .	39	+4	.4	-.1
Rockford. . . . .	43	+2	.2	-.4	New York. . . . .	48	-2	4.7	+3.9	Omak. . . . .	41	+4	.9	+.6
Springfield . . . .	45	0	.5	-.1	Rochester . . . . .	45	+2	2.0	+1.4	Quillayute. . . . .	47	+2	3.7	+.6
IND,Evansville. . .	48	0	.9	+.1	Syracuse. . . . .	43	0	2.2	+1.5	Seattle-Tacoma. . .	48	+3	1.0	-.2
Fort Wayne. . . . .	45	+3	.9	+.3	N.C.Asheville . . . .	49	0	1.1	+.6	Spokane . . . . .	41	+4	.1	-.4
Indianapolis. . . .	46	+2	.6	-.1	Charlotte . . . . .	53	0	1.2	+.6	Walla Walla . . . .	48	+4	T	-.4
South Bend. . . . .	46	+4	.6	-.1	Greensboro. . . . .	50	0	.8	+.2	Yakima. . . . .	41	+2	.3	+.1
IOWA,Burlington . .	43	0	.6	+.1	Hatteras. . . . .	60	+2	1.4	+.4	W.VA,Beckley. . . .	45	0	.9	+.2
Des Moines. . . . .	41	+1	.8	+.4	Raleigh . . . . .	53	+1	1.8	+1.2	Charleston. . . . .	49	+1	1.1	+.4
Dubuque . . . . .	41	+3	.4	-.2	Wilmington. . . . .	59	+1	1.0	+.4	Huntington. . . . .	47	-1	.9	+.3
Sioux City. . . . .	42	+2	.4	+.1	N.DAK,Bismarck. . .	29	-3	T	-.2	Parkersburg . . . .	49	+2	.8	+.3
KANS,Concordia. . .	45	+1	2.0	+1.8	Fargo . . . . .	31	-2	.1	-.1	WIS,Green Bay . . .	42	+5	.1	-.4
Dodge City. . . . .	46	0	1.1	+.9	Williston. . . . .	29	-2	T	0.1	La Crosse . . . . .	42	+4	.5	0
Goodland. . . . .	41	0	.6	+.5	OHIO,Akron-Canton .	45	+1	1.2	+.7	Madison . . . . .	41	+3	.1	-.5
Topeka. . . . .	47	+2	1.4	+1.0	Cincinnati. . . . .	46	0	1.4	+.8	Milwaukee . . . . .	43	+4	.2	-.4
Wichita . . . . .	47	0	1.5	+1.2	Cleveland. . . . .	46	+2	1.3	+.7	WYO,Casper. . . . .	36	0	.2	0
KY,Lexington. . . .	49	+2	1.5	+.7	Columbus. . . . .	47	+3	1.4	+.8	Cheyenne. . . . .	33	-3	.2	0
Louisville. . . . .	50	+3	1.6	+.9	Dayton. . . . .	45	0	1.3	+.7	Lander. . . . .	35	+1	.4	+.1
LA,Baton Rouge. . .	64	+4	.3	-.9	Toledo. . . . .	43	+1	1.1	+.6	Sheridan. . . . .	35	-1	T	-.2
Lake Charles. . . .	61	0	.1	-.8	Youngstown. . . . .	43	+1	.8	+.1	P.R. San Juan . . .	81	+2	1.1	-.3

\* 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:** Widespread showers and thundershowers Tuesday and widely scattered south Friday. Clear Wednesday and Thursday and weekend. Lows near freezing south-central Thursday morning and across Tennessee Valley Sunday morning. Extremes: 79° at Mobile and Headland to 31° at Luverne and Pittsview. Open weather needed to complete harvest. Wet fields and rain at midweek slowed harvest. Cotton remaining in fields deteriorating rapidly. Harvest about 70% complete, slightly behind a year earlier. About 3/4 corn for grain harvested. Growers made fair progress combining soybeans, about 3/5 harvested, considerably ahead of last year. Adverse weather and weedy fields may cause limited acreage to be abandoned. Ample moisture and warm temperatures favored growth of small grains. About 4/5 of expected acreage planted with nearly 3/4 up to a stand. Pecan harvest in full swing -- crop is short, but prices are favorable. Pastures furnished mostly adequate grazing upper-half of State. Grazing remained short most of southern counties.

**ARIZONA:** Temperatures below normal most of week. A Pacific storm brought widespread precipitation on weekend with snow above about 3,500 feet. Following the storm, some stations in White Mountains reported more than 1 foot of snow on ground. Maximum weekly water totals in White Mountains where some stations totaled more than 2.00 inches of water. Mountain stations northern part of State also received between 1.00 and 2.00 inches of water from storm. Temperatures agricultural sections southern half of State remained above freezing all week. Cotton harvest progressing normally. Some reduced grades in Yuma County. Sorghum grain harvest full swing southeast, but limited southwest. Weekend rain may delay harvest. Sugar beet harvest progressing well. Small grain planting, land preparation continue. Alfalfa hay harvest continued. Active planting and renovation. Lettuce harvest continued central and west. Cabbage harvest active Salt River Valley, Yuma areas. Vegetables for later harvest making good progress, Yuma area. Planting active. Chili harvest active Graham, Greenlee, Cochise counties. Navel oranges, lemons, tangerines, grapefruit harvested Salt River Valley, Lemon harvest full swing, Yuma area. Harvest navel oranges, tangelos, and grapefruit active. Ranges fair to mostly good, except Navajo, Hopi Indian reservations poor. Winter feed supplies improved. Stockwater supplies adequate. Cattle, calves fair to mostly good. Sheep and lambs in fair to good condition.

**ARKANSAS:** Abundant rainfall all sections of State with largest totals generally in south and east and local areas central and northwest. Continued flooding of low-lying areas along rivers especially in northeast. Heavy rains early in week with only small amounts through mid- and latter part of week followed by heavy rains again on weekend. Largest weekly total, 5.14 inches at Arkansas City in southeast section followed 4.91 inches at El Dorado. Smallest total at Fayetteville with 2.64 inches. Mean temperatures ranged from mid-50's in south to near 50° along northern border. Weekly departures

in range -4° to +3° with much of State near normal. Some warming at midweek followed by cooler weekend. Highest 77° at El Dorado on 6th. Lowest 29° at Calico Rock and Fayetteville on 8th. Harvest continues to lag. Heavy rains early in week following heavy rains of previous week caused flooding along many rivers and streams especially Cache and White Rivers in northeast Arkansas. Undetermined crop losses, notably soybeans. Harvest resumed on well-drained soils about midweek, but rain fell again as period ended. Around 20% of cotton remains to be picked for State and possibly 40% of soybeans yet to be cut. Much land too soft to support harvest machinery and extended period open weather urgently needed. Wheat and oats making excellent growth. Wet soils delaying additional planting wheat many areas. Pastures good for date and small grains providing additional grazing many farms. Livestock situation mostly favorable all areas.

**CALIFORNIA:** Moderate rains northern half State most days, becoming heavier moving into southern California 10th to 13th. Very strong winds, snow above 3,000 feet Monday in north. Precipitation totals over 2.00 inches north coast, Sierra Nevada, 1.00 to 2.00 inches central valley, 0.50 to 1.00 inch south coast. Average temperatures below normal 4th consecutive week interior. Departures mostly -2° to -6° except -10° in mountains, near normal coast. Harvest continues rice, field corn, milo, cotton. Rain slowed fieldwork. Picking table, wine grapes complete. Movement fresh market grapes from cold storage. Almond harvest complete nearly all areas. Walnut harvest virtually complete, continued delay, wet ground. Apple harvest complete. Harvesting persimmons declining. Olive harvest virtually complete. Valencia orange harvest nearly complete. Picking new navel crop continues increase San Joaquin Valley. Sizes large. Picking lemons desert district continues active. Avocado harvest remains seasonally active. Artichokes increasing Castroville. Broccoli and cauliflower good volume Salinas, Brussels sprouts light Santa Cruz. Carrots started Coachella Valley, continues central coast. Sweet corn near completion southern California. Lettuce underway Palo Verde Valley, Peak Bakersfield. Some acreage lost, corn earworm and decay Santa Maria. Potatoes light Salinas Valley. Sweet potatoes continue San Joaquin. Market tomatoes steady Oceanside and Chula Vista, decline Oxnard. Greens being stored Visalia. Continued showers enhancing range grass growth. Most cattle on winter pastures. Stockmen rebuilding herd sizes. Calving and lambing increasing. Stockwater supplies excellent, except remote southern areas. Supplemental feeding as needed.

**COLORADO:** Temperatures near normal northwest and southeast, below normal in mountains and San Luis Valley. Light precipitation all areas first part of week, moderate to heavy snows all areas end of week. Some ground blizzards southeast. Condition winter barley and wheat very good to excellent. Wet fields reduced winter wheat being pastured to 14%. Grain harvest progressed slightly. Corn and

sorghum harvest for grain 49% complete. Threshing of dry beans remained at 4/5 completed. Scattered fields sugar beets dug, harvest now over 4/5 complete. Range and pasture condition fair to good. Supplemental feeding necessary some areas. Livestock condition fair to good.

**FLORIDA:** First cold weather of fall season. Cold front midweek dropped minimum temperatures to mid-30's and low 40's in north and mid-50's central section. Rapid warming after frontal passage left averages for week 4° to 7° above normal. Rainfall averaged over 1.00 inch most sections except 0.50 inch Panhandle and central divisions. Several stations reported amounts over 5.00 inches. Harvest of most crops nearly complete. Sugarcane developing satisfactorily, harvest beginning. Dry soil is deteriorating pastures in principal cattle area of State. Moisture and pastures in upper Florida have improved with most acreage intended for winter pasturage now seeded. Citrus grove condition improved with rains, more needed. Cool nights aiding fruit coloring. Harvest increasing. Total vegetable interstate volume continues to outpace previous 2 seasons. Sweet corn, cucumbers, snap beans, eggplant, radishes, in good volume. Tomatoes in good supply, increasing. Celery, peppers, lettuce, leafy crops increasing seasonally. Heavy rains in Pompano area early week reducing supplies of beans, squash, and caused some bloom drop and split fruit in staked tomatoes.

**GEORGIA:** Light to moderate rain early in week. Amounts ranged from more than 1.00 inch in the extreme north and a small area in southeast to less than 0.50 inch most of central and southwest. Little or no rainfall after Tuesday. Temperatures continued unseasonably warm with highs mostly in 50's and 60's and lows in 40's and 50's. Freezing confined to mountain locations. Averages ranged from 2° to 5° above normal. Extremes: 81° and 30°. Soil moisture adequate except eastern section of State. Harvest of corn, cotton, and soybeans active. Pecan harvest continued. Condition of small grains, pasture and livestock mostly fair. Land preparation and fall seeding continued as conditions permitted.

**HAWAII:** Weather cool and cloudy with frequent showers windward areas. Wet fields hampering farm operations. Progress of crops fair to good. Harvesting of sugarcane on schedule. Production of sugar reached the 1-million ton mark week ending October 21. Operations on pineapple plantations confined to field preparations, plantings, and sprayings. Harvesting continued active bananas and papayas. Vegetable production steady. Pasture condition improving. Cattle in fair to good condition.

**IDAHO:** Temperatures averaged near normal. Precipitation all areas, mostly near normal except above southwest. Greatest totals were Boise, 0.70 inch, Caldwell .63 inch, and Parma 0.60 inch. Good progress being made on sugar beet harvest. A few fields of potatoes are unharvested and weather is favorable for mop-up operations. Fall seedings in good condition. Livestock pastures are still producing and reducing the need for hay feeding.

**ILLINOIS:** Temperatures averaged near normal with lows in 30's and 40's and highs ranging in 50's and 60's south and 40's and 50's north. Weekly precipitation totals were generally 0.50 inch or less in northern and central portion of State. Southern 1/3 of Illinois received largest totals with a number of stations reporting amounts in 1.00 to 2.00 inch range. Harvest made little head-

way with continued cloudy, drizzly weather. Corn harvest 45% complete, average 72%; last year 90%. Soybean harvest halted, holding at 80%. Fields wet and spongy across State. Winter wheat seeding 93% complete, sorghum harvest 1/2 finished. Fall plowing 30% complete. Pastures mostly good to excellent supplying 55% livestock roughage requirement. Soil moisture short 1%, adequate 22%, surplus 77%. Average 3 days suitable for limited fieldwork.

**INDIANA:** Another week of almost daily rains. Precipitation averaged 1.00 inch. All days cloudy, but temperatures averaged 4° above normal, from high 30's to low 60's. Two days suitable for fieldwork. Topsoil moisture surplus. Subsoil moisture adequate to mostly surplus. Corn 30% harvested, 2 weeks behind average. Soybeans 50% combined, 4 weeks behind average. Sorghum grain 60% combined. Wheat 65% seeded, 70% of wheat emerged. Stands good. Apples 95% picked. Tobacco stripping underway. Pastures fair to good.

**IOWA:** Cloudy, wet week with above normal temperatures. Rains and muddy fields continue to slow harvest which has been at a standstill for 2 weeks. Some progress in corn fields, but very little with other crops. Two and one-half days suitable for fieldwork. About 38% of corn harvest complete, behind 1966-1970 average of 62% and 1971's 85%. Soybean harvest remains slightly over 80%, behind average of 88% and virtual completion in 1971. Grain sorghum and popcorn 60% harvested, unchanged from 2 weeks earlier. Topsoil moisture 76% surplus and 24% adequate.

**KANSAS:** Cloudy, wet weather. All areas received significant moisture as State was hit with 3 storms. Worst storm was late in period as major low pressure area moved into southern Kansas. Near blizzard conditions developed much of north-west night of November 12 with northerly winds 20 to 35 m.p.h., accompanied by considerable snow. Much of north-central and western 1/3 had snow from storm late in week. Greatest totals 2 to 4 inches northwest. Weekly precipitation amounts generally 0.75 to 2.50 inches. Mean temperatures averaged below seasonal parts north-central and east-central; near seasonal elsewhere. Harvest of late maturing crops near standstill. Rains boosted wheat growth and root development. Fall activities slowed considerably. Few corn fields picked. Few sugar beets dug. Sorghum grain moisture content mostly too high for storage. Sorghum grain 48% combined, 82% last year, average 78%. Corn 67% picked, 86% last year, average 73%. Soybeans 71% combined, 85% a year earlier, 10-year range 71% to 97%. Cattle movement slowed. Many recently shipped-in calves sick from damp weather. Few sheep grazing beet tops western Kansas.

**KENTUCKY:** Temperatures averaged about seasonable, from mid-40's in northeast to near 50° along southern border. Cloudy most days. Moderate to heavy rains most sections on 6th and 7th and light on 10th. Weekly totals generally heavy from 0.80 inch to about 2.75 inches. Damp days favorable burley stripping. Fourth straight week mostly cloudy and rainy days. Concern mounting over soybeans standing in fields. Many fields too wet to support harvesting equipment. A week dry weather and sunshine would be most welcome. Considerable corn remaining to harvest. Pastures good to excellent.

**LOUISIANA:** Temperatures highly variable as frontal activity dominant. Warm statewide early

in week, cool after mid-week north, warmer south Thursday, cooler Saturday, then sharply warmer Sunday. Weekly temperatures averaged 2° to 7° above normal. Extremes: 86° Jennings Monday; 35° Ashland and Cotton Valley Wednesday. Precipitation heavy north, light to moderate south. Weekly totals 1.00 to more than 2.00 inches north, mostly less than 0.50 inch central and south. Greatest 24-hour total 1.40 inches measured at Shreveport this morning. Harvest slowed by excessive moisture most of week in north, fair to good progress made in south. Some plowing, land leveling, and seeding of winter pastures accomplished. Soil moisture excessive northern 1/2. Sunny, cool weather needed to facilitate harvest and increase sucrose in sugarcane. Cotton and soybeans about 95%, harvest other crops virtually completed. Winter pastures made good growth, some were topdressed. Pasture feed above average. Livestock in good condition.

MARYLAND AND DELAWARE: Temperatures near normal. Extremes mostly 60's, 30's. Widespread rainfall heavy on 8th as most totals between 1.25 and 3.00 inches. Rainfall on 11th light mostly less than 0.10 inch. Limited progress in remaining harvest of corn and soybeans. Major delay in soybean combining due to wet fields and high moisture grain with some lowering of quality. Farmers using time to catch upon maintenance work before winter. Weather good for tobacco stripping.

MICHIGAN: Cloudy, significant precipitation early minimum temperatures above freezing with little change. Temperature averages: 2° to 3° above normal Upper Peninsula, normal southeast to 3° above normal Lower Peninsula. Precipitation: 0.50 to 0.75 inch northern Lower Peninsula and Upper Peninsula; 0.35 to 0.50 inch central and 0.75 to 1.00 inch southern Lower Peninsula.

MINNESOTA: Temperatures averaged about 2° above normal across State. Extremes: 55°, 10°. Precipitation: Southeast received 0.50 to 0.75 inch of rain while rest of State received generally less than 0.25 inch. This has been the 15th consecutive day that the southeast and east-central part of State have not recorded sunshine. Duluth 14 consecutive days broke old record of 8 consecutive days without observing sun. A slow week for harvest. Surplus moisture stopped most fieldwork eastern half of State; adequate to surplus moisture made harvest slow and difficult in western half. Corn picked 70%, normal 71%; moisture 25%, normal 25%. Soybeans combined 89%, 93%. Southeast district only major area where soybean harvest not near completion.

MISSISSIPPI: Average temperatures were from 1° to 4° warmer than usual for this time of year over much of State. No great day-to-day temperature changes. Most places had their warmest day early in week. Wednesday and Thursday were generally the coolest with a few places reporting lowest temperatures near freezing on those mornings. Canton reported light frost both mornings. Rainfall totals varied widely over State. Several counties in northwest 1/3 of State received over 4.00 inches of rain, mainly on Monday and early Tuesday, while many spots southeastern part of State had less than 0.25 inch. Harvesting operations have been limited due to continued rainfall. Averaged 2.8 days suitable for fieldwork. Wheat crop 60% planted, 80% a year ago. Oats 74% planted compared to 92% last year. Corn crop 85% harvested, 2% above last year. Cotton 81% harvested compared to 76% last week and 77% last year. Soybeans harvested 51% complete, 45% complete last week and

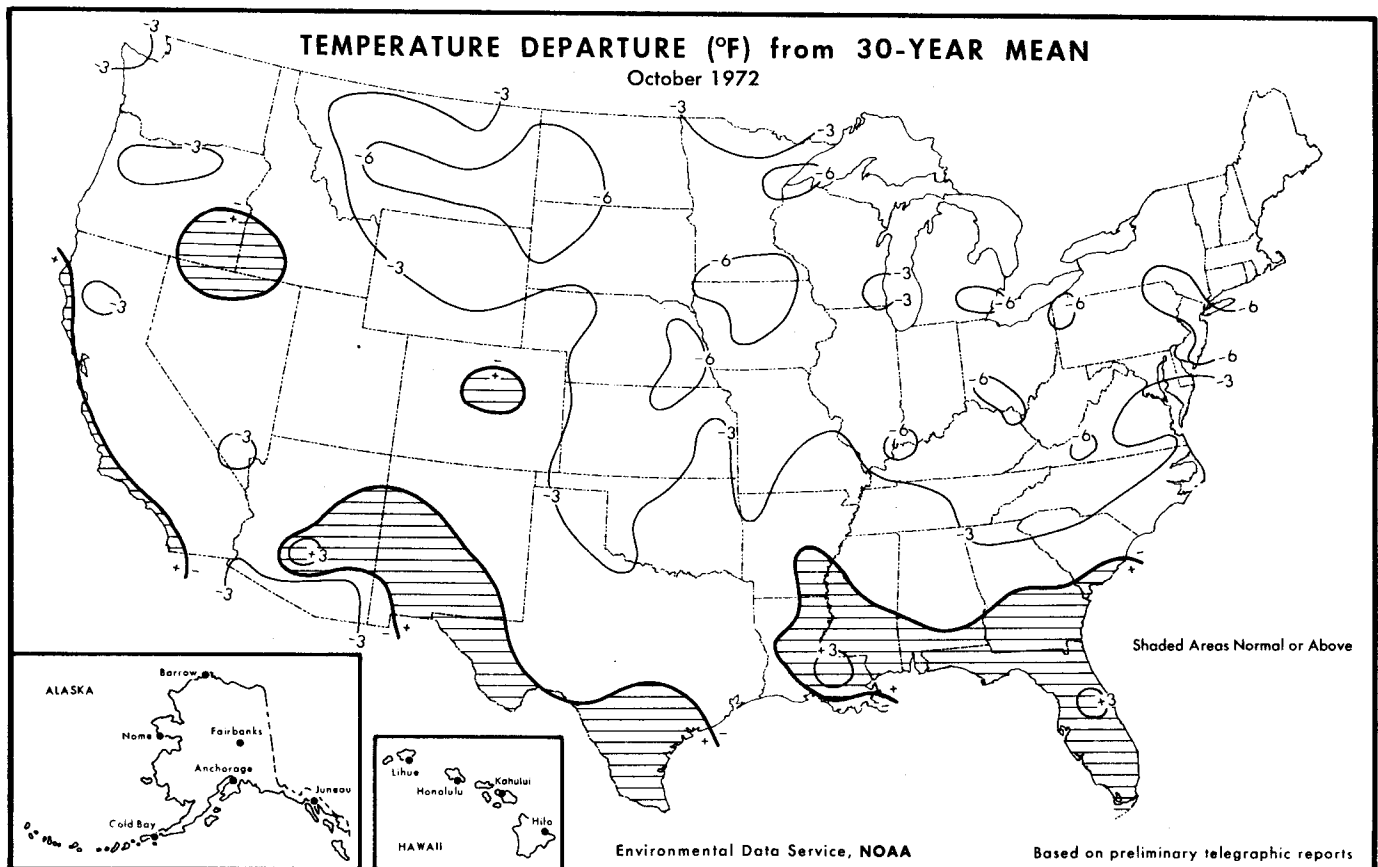
79% a year ago. Grain sorghum harvested is nearing completion. Pastures and livestock in fair to good condition.

MISSOURI: Cloudy, damp with frequent rain. An approaching storm system dumped heavy rain over southern half of State at end of period. Amounts ranged from 3.00 inches in southwest to under 1.00 inch in northeast. Under heavy blanket of clouds, temperatures remained relatively constant, averaging 2° above normal. Days suitable for fieldwork held to 1 by rain; very little harvesting accomplished. Corn 55% harvested, 87% a year ago. Soybeans 56% harvested, 89% last year. Grain sorghum 63% completed, 88% a year ago. Cotton 50% picked, 87% a year earlier. Fall seeding 73% completed, plowing 33% completed. Wheat seeding is in mostly good condition while soil moisture is mostly surplus.

MONTANA: Temperatures averaged about 4° above normal in west and near normal elsewhere. Mild first part of week becoming much colder by weekend. No storms of significance with precipitation confined to light amounts in southwest. Growth and condition winter wheat mostly fair to good, eastern 1/3 good to excellent. Wind damage insignificant. Winter wheat stooling fair to good. Prospective supplies hay and forage short to adequate. Condition winter ranges and pastures mostly fair to good; good to excellent eastern third.

NEBRASKA: General rainfall southeast 1/3 of Nebraska with little or no precipitation elsewhere. Weekly totals between 1.00 and 1.50 inches portions of east-central and southeast. Temperatures averaged from a few degrees below normal northwest to 1° to 3° above normal in east 1/3. A major winter storm brought rain and snow to western Nebraska on 11th and rains to central and east. Snow west on 12th. By forenoon of 13th, snow had spread over Nebraska with 4 to 8 inches of new snow in west half of State. Drifts 3 to 4 feet high in portions of west. Slow progress harvesting fall crops. Most areas able to harvest 1 or 2 days during week with storms of rain and snow arriving November 11. Fields remain wet and muddy necessitating trucks to stay on hard roads. Harvested crops generally in good condition, but some fields starting to lodge. Corn harvest up 2 points, 40% completed compared to 88% last year, and 68% normal. Crops good condition Statewide, but some eastern counties have mold condition in standing corn. Sorghum harvest at 63%, 3 points more than last week and 96% last year, and normal 78%. Rain east accompanied by wind caused some fields to start lodging. Soybean harvest advanced 5 points to 85% completed compared to 96% last year and normal 93%. Sugar beet harvest virtually complete with a small acreage yet to be harvested now covered with snow. Winter wheat in good condition. Moisture supplies are adequate to surplus in most areas.

NEVADA: Temperatures in extreme south 6° below normal; 1° to 2° below normal elsewhere. Light to moderate precipitation in north, moderate to heavy extreme south. Yucca reported 1.12 inches. Snowfall eastern part of State and in mountains. Cotton harvest in Pahrump Valley making favorable progress after several delays. Moapa Valley harvest of limited acreage green onions and lettuce begun. Cattle and sheep remain in generally good condition. Water and feed supplies adequate most areas and livestock should winter in good condition barring any extreme weather conditions. (Continued on page 11)



## WEATHER - OCTOBER 1972

## TEMPERATURE:

October temperatures averaged cooler than normal over most of the Nation. The main exceptions included an area from east-central Arizona to the western Gulf Coast and from eastern Louisiana to southern Georgia; also the Florida Peninsula. A large area from the northern and central Great Plains to the northern and middle Atlantic Coast averaged 3° to 7° cooler than normal. Most of the Nation was relatively cool through the entire month. The Great Basin was mild in the first week. A large area from Idaho to Arizona and eastward to Alabama was warmer than normal in the second week of October and the Atlantic coastal States averaged warmer than normal in the last week.

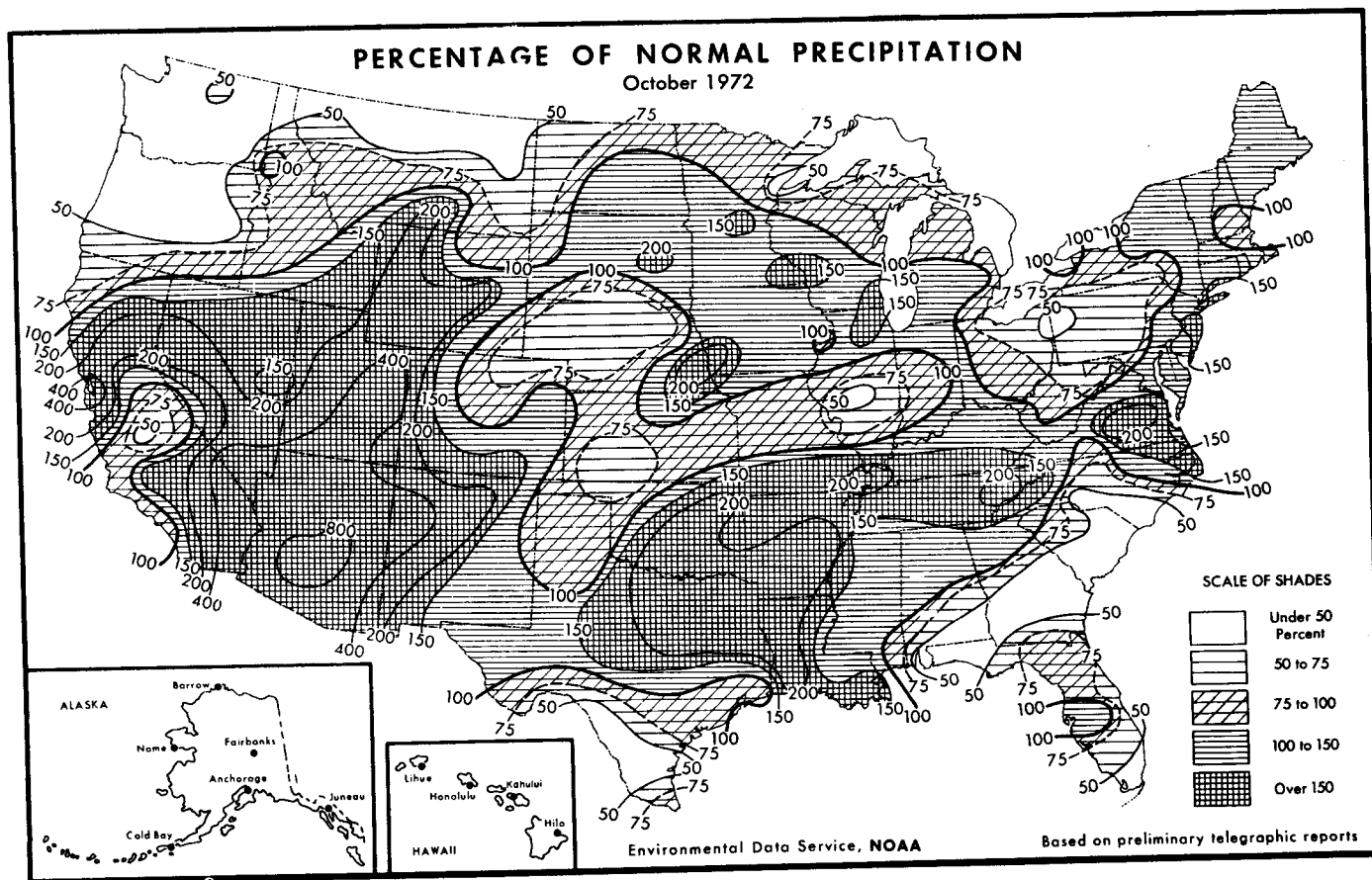
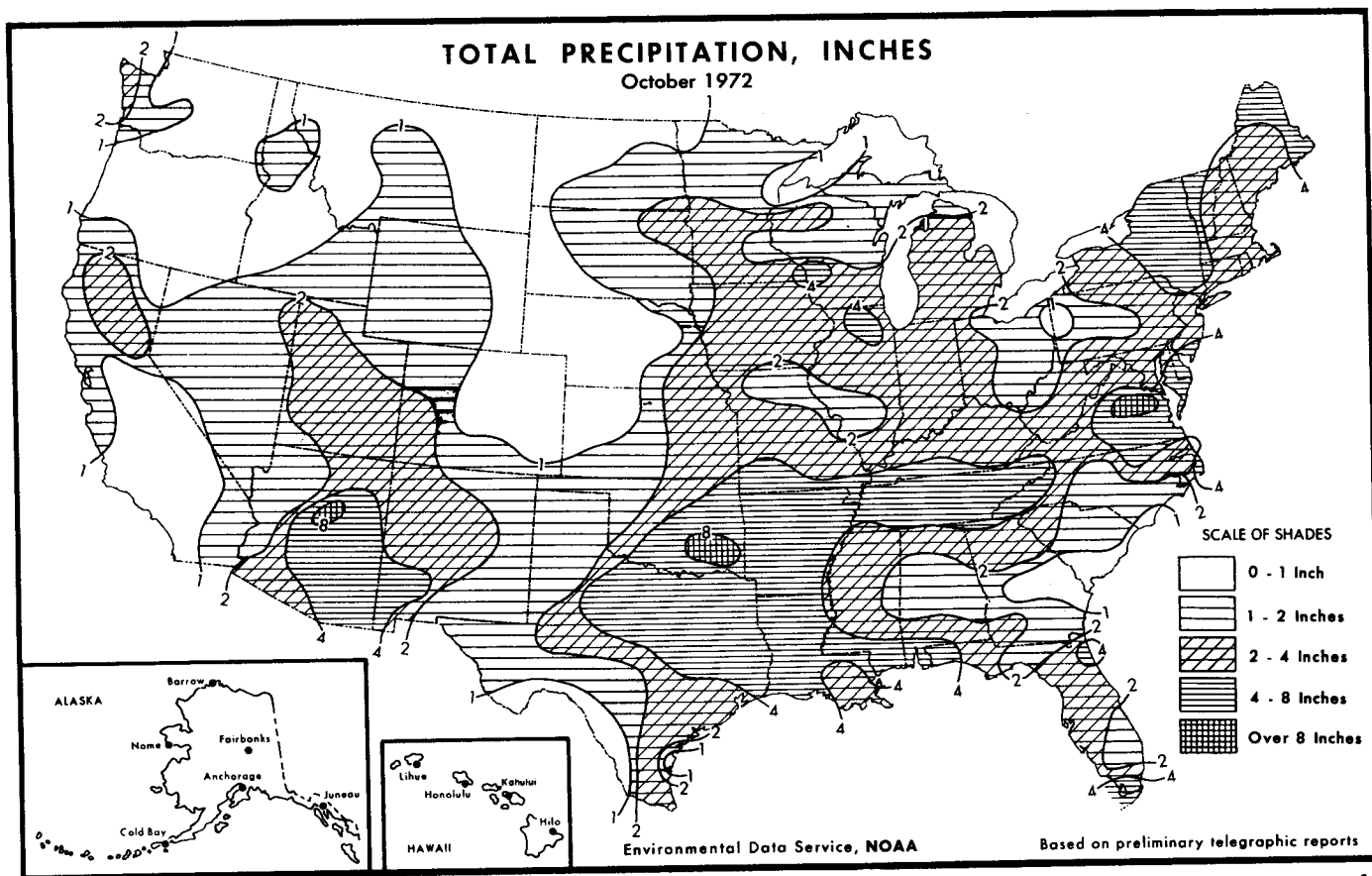
Some quick temperature changes occurred in October due to several cold fronts that crossed the Great Plains. One of these fronts dropped temperatures sharply shortly after midmonth. Southerly winds preceding the front warmed the central Great Plains. The mercury at Wichita Falls, Texas, climbed to 102° on the 17th when Oklahoma City, Okla., warmed to 96°. Neither city had ever seen such high temperatures so late in the season. Northwesterly winds following the frontal passage dropped the temperatures in Oklahoma to the 30's and 40's by the 19th. The freezing line in the East pushed southward across eastern Tennessee and western North Carolina.

Floridians basked in summer weather during the entire month. In contrast, the mercury at West Yellowstone, Montana, tumbled to zero on the 29th.

**PRECIPITATION:** Rainfall in October was very unevenly distributed over the Nation. Hurricane Joanne, about 500 miles south of San Diego, Calif., became Tropical Storm Joanne, and moved across northern Mexico. It became an extra-tropical Low and produced heavy rains over portions of the Desert Southwest. About 3.00 inches of rain fell in the Prescott-Flagstaff, Ariz., area in 24 hours on October 6 and 7. The 4-day total (October 3 to 7) at Phoenix of 1.93 inches is more than 4 times the October normal for Phoenix for the entire month. The heavy rains filled reservoirs but damaged cotton. Another storm off the coast of North Carolina intensified. Onshore winds brought moisture to the hill country of the middle Atlantic States. Almost 11.00 inches of rain fell at Amelia, Va. Three-day totals over interior Virginia for October 5 to 7 ranged from 6.00 to 12.00 inches with slightly lesser amounts in western Maryland and in North Carolina. The intense rains caused serious flooding at Richmond, Va. on the James River and the worst flooding in the 20th Century at Petersburg on the Appomatox River. Weak thunderstorms spattered the central Great Plains in the second week of October. Amounts of rain were mostly light and wide areas in the southern Great Plains received no rain or only light sprinkles. Heavy rains caused flash floods in eastern Arizona and central Oklahoma in the third week of October. Snow fell in the Rocky Mountains and in the lee of the Great Lakes. The heaviest rains in the last week in October fell in East Texas, southern Oklahoma, northern Louisiana,

(Continued on page 11)





## Temperature and Precipitation Data for OCTOBER 1972

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...	62	-4	3.4	+ .4	New Orleans...	70	0	4.6	+1.8	OKLA.Okla. City...	61	-2	7.1	+4.6
Mobile...	71	+1	1.3	-1.7	Shreveport...	67	-1	6.3	+3.5	Tulsa...	61	-2	7.8	+4.5
Montgomery...	66	-1	1.6	-.7	MAINE.Caribou...	38	-5	4.0	+ .6	OREG.Astoria...	52	-1	2.0	-5.8
ALASKA.Anchorage...	32	-3	2.9	+1.0	Portland...	45	-4	3.9	+ .7	Burns...	48	0	.3	-.6
Barrow...	---	---	---	---	MD,Baltimore...	54	3	3.5	+ .3	Medford...	52	-1	1.2	-.7
Fairbanks...	27	+1	.9	0	MASS.Boston...	52	-3	3.0	-.1	Pendleton...	51	-3	.6	-.6
Juneau...	---	---	---	---	Nantucket...	---	---	---	---	Portland...	53	-1	.9	-2.7
Nome...	33	+3	3.8	+2.1	MICH.Alpena...	42	-4	2.0	-.4	Salem...	50	-4	.7	-3.2
ARIZ.Flagstaff...	46	-1	9.9	+8.4	Detroit...	47	-7	2.2	-.4	PA.Allentown...	48	-6	3.6	+ .6
Phoenix...	74	+3	4.4	+3.9	Flint...	46	-4	3.7	+1.3	Erie...	47	-6	1.7	-1.6
Tucson...	67	-3	4.5	+3.9	Grand Rapids...	46	-5	2.9	+ .3	Harrisburg...	52	-4	2.0	-1.0
Winslow...	58	+1	5.6	+4.9	Houghton Lake...	42	-5	2.5	-.5	Philadelphia...	53	-3	3.7	+ .9
Yuma...	72	-3	2.5	+2.1	Lansing...	45	-6	3.3	+ .8	Pittsburgh...	50	-3	2.2	-.3
ARK.Fort Smith...	61	-3	6.4	+2.9	Marquette...	44	-4	2.0	-.3	Scranton...	45	-6	3.3	-.2
Little Rock...	63	0	7.6	+4.7	Muskegon...	48	-5	3.5	+ .9	R.I.Providence...	50	-3	4.4	+1.3
CALIF.Bakersfield...	66	-1	.5	+ .2	S.Ste.Marie...	41	-5	1.8	-1.0	S.C.Charleston...	67	+1	.3	-2.5
Eureka...	54	0	2.0	-1.2	MINN.Duluth...	39	-6	.8	-1.4	Columbia...	63	-2	1.2	-1.2
Fresno...	63	-2	.2	-.2	Internatl Falls...	40	-2	1.6	-.1	Greenville...	59	-4	3.4	0
Los Angeles...	67	0	.3	-.1	Minneapolis...	44	-5	1.8	+ .2	S.DAK.Aberdeen...	44	-4	1.3	+ .1
Red Bluff...	63	-3	2.8	+1.4	Rochester...	43	-7	3.0	+1.3	Huron...	45	-4	2.7	+1.5
San Diego...	66	0	.6	+ .1	St. Cloud...	42	-5	2.5	+ .9	Rapid City...	44	-6	.8	0
San Francisco...	61	0	5.2	+4.5	MISS.Jackson...	68	+1	2.1	+ .2	Sioux Falls...	44	-6	1.8	+ .5
Stockton...	63	-1	.7	+ .1	Meridian...	66	0	2.8	+ .6	TENN.Chattanooga...	57	-5	4.8	+1.8
COLO.Denver...	52	+1	.8	-.2	MO.Columbia...	54	-5	2.7	-.4	Knoxville...	57	-4	6.0	+3.4
Grand Junction...	54	-1	3.5	+2.8	Kansas City...	53	-7	2.3	-.6	Memphis...	61	-2	3.9	+1.2
Pueblo...	54	-1	1.1	+ .1	St. Louis...	55	-3	1.5	-1.4	Nashville...	60	-2	4.1	+1.8
CONN.Bridgeport...	51	-4	6.4	+3.0	Springfield...	57	-3	6.7	+2.9	TEX.Abilene...	64	-2	4.5	+1.6
Hartford...	49	-4	4.2	+1.0	MONT.Billings...	44	-6	2.2	+ .1	Amarillo...	58	-3	1.7	-.1
D.C.Washington...	56	-3	3.6	+ .5	Glasgow...	42	-3	.2	-.4	Austin...	71	0	3.0	+ .2
FLA.Apalachicola...	72	+1	1.5	-.9	Great Falls...	43	-5	1.2	+ .5	Beaumont...	70	-2	2.9	-.3
Ft. Myers...	78	+2	2.2	-1.9	Havre...	41	-5	.3	-.5	Brownsville...	78	+2	3.3	-.2
Jacksonville...	72	+1	4.5	-.7	Helena...	39	-7	.6	-.2	Corpus Christi...	76	+1	.5	-2.3
Key West...	81	+2	.7	-5.1	Kalispell...	39	-5	-.8	-.4	Dallas...	68	0	5.7	+3.0
Lakeland...	75	0	4.3	+1.4	Miles City...	---	---	---	---	Del Rio...	72	0	.4	-1.6
Miami...	---	---	---	---	Missoula...	43	-1	.8	-.2	El Paso...	66	+2	1.3	+ .4
Orlando...	77	+3	2.3	-1.7	NEBR.Grand Island...	49	-4	1.0	0	Fort Worth...	68	0	6.9	+4.3
Tallahassee...	70	0	1.8	-.6	Lincoln...	49	-8	3.2	+1.6	Galveston...	73	-1	3.0	+ .1
Tampa...	76	+1	3.3	+ .5	Norfolk...	47	-6	.8	-.4	Houston...	70	-1	3.3	-.5
GA.Atlanta...	61	-1	3.0	+ .6	North Platte...	46	-5	.6	-.3	Lubbock...	60	-1	1.8	-.2
Augusta...	64	-1	.9	-1.1	Omaha...	49	-5	3.6	+1.9	Midland...	64	-2	2.3	+1.6
Macon...	66	0	.9	-1.1	Valentine...	46	-3	.6	-.3	San Angelo...	66	-2	3.2	+1.4
Savannah...	68	+1	.5	-2.1	NEV.Ely...	45	-1	1.0	+ .3	San Antonio...	72	+1	2.0	-.5
HAWAII.Hilo...	---	---	---	---	Las Vegas...	64	-3	1.1	+ .9	Victoria...	74	+1	3.4	-.1
Honolulu...	---	---	---	---	Reno...	48	-1	1.3	+ .8	Waco...	68	-1	6.6	+4.0
Kahului...	---	---	---	---	Winemucca...	48	0	1.5	+ .7	Wichita Falls...	63	-3	7.9	+5.0
Lihue...	---	---	---	---	N.H.Concord...	42	-7	2.2	-.5	UTAH.Blanding...	54	+2	3.5	+1.9
IDAHO.Boise...	52	0	.6	-.2	N.J.Atlantic City...	52	-5	5.1	+1.9	Salt Lake City...	54	0	2.7	+1.5
Lewiston...	51	-1	1.2	0	Trenton...	52	-5	5.1	+2.3	VT.Burlington...	---	---	---	---
Pocatello...	48	-1	1.4	+ .5	N.MEX.Albuquerque...	58	0	3.1	+2.3	VA.Lynchburg...	55	-3	6.7	+4.1
ILL.Cairo...	59	-3	7.1	+4.2	Roswell...	59	0	1.3	+ .2	Norfolk...	59	-3	4.1	+1.2
Chicago...	50	-5	3.6	+ .8	N.Y.Albany...	46	-5	3.6	+ .8	Richmond...	57	-2	7.9	+4.9
Moline...	50	-5	2.4	-.1	Binghamton...	42	-8	2.2	-.9	Roanoke...	52	-6	3.2	0
Peoria...	50	-5	2.5	0	Buffalo...	46	-5	3.0	0	WASH.Colville...	45	-2	.4	-1.2
Rockford...	49	-4	4.3	+1.6	New York...	52	-7	4.9	+1.5	Omak...	46	-2	.5	-.4
Springfield...	53	-4	1.4	-1.5	Rochester...	48	-4	2.3	-.3	Quillayute...	48	-3	2.3	-8.2
IND.Evansville...	53	-6	3.1	+ .5	Syracuse...	47	-5	4.4	+1.2	Seattle-Tacoma...	50	-2	.7	-3.3
Fort Wayne...	49	-4	3.3	+ .4	N.C.Asheville...	55	-3	4.4	+1.9	Spokane...	47	-2	.2	-1.4
Indianapolis...	52	-3	2.3	-.3	Charlotte...	59	-4	1.4	-1.6	Walla Walla...	53	-2	.6	-.9
South Bend...	50	-3	3.8	+ .6	Greensboro...	55	-4	1.8	-.9	Yakima...	49	-2	.1	-.5
IOWA.Burlington...	51	-4	2.8	+ .1	Hatteras...	65	0	7.3	+3.1	W.VA.Beckley...	49	-5	2.8	+ .1
Des Moines...	48	-6	2.4	+ .3	Raleigh...	57	-4	4.0	+1.3	Charleston...	53	-4	2.5	-.1
Dubuque...	47	-4	3.7	+1.0	Wilmington...	64	-1	.7	-2.3	Huntington...	51	-6	2.0	+ .1
Sioux City...	49	-5	1.7	+ .3	N.DAK.Bismarck...	41	-6	1.6	+ .7	Parkersburg...	52	-5	1.7	-.4
KANS.Concordia...	52	-6	2.1	+ .4	Fargo...	43	-4	1.3	+ .2	WIS.Green Bay...	45	-4	1.8	-.1
Dodge City...	54	-4	.7	-.7	Williston...	39	-7	.4	-.3	La Crosse...	46	-5	4.1	+1.9
Goodland...	50	-3	.8	0	OHIO.Akron-Canton...	50	-3	1.5	-1.0	Madison...	46	-4	2.4	+ .2
Topeka...	55	-3	2.1	-.2	Cincinnati...	52	-6	2.6	+ .4	Milwaukee...	48	-2	3.3	+1.2
Wichita...	56	-4	2.0	-.4	Cleveland...	49	-4	1.6	-.8	WYO.Casper...	44	-4	2.0	+1.2
KY.Lexington...	53	-5	2.7	+ .4	Columbus...	50	-4	1.7	-.4	Cheyenne...	46	-2	.4	-.4
Louisville...	55	-3	2.6	+ .3	Dayton...	50	-6	2.2	0	Lander...	44	-3	2.4	+ .2
LA.Baton Rouge...	72	+3	3.7	+1.2	Toledo...	47	-5	1.5	-.9	Sheridan...	44	-4	1.0	-.1
Lake Charles...	69	-2	6.4	+3.3	Youngstown...	46	-6	.8	-1.9	P.R. San Juan...	---	---	---	---

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

(Continued from page 8)

and western Arkansas where some weekly totals ranged from 6.00 to 13.00 inches.

Monthly totals in October ranged widely from less than an inch along the western edge of the northern and central Great Plains to 4.00 to 6.00 inches or more in southeastern Arizona and from northeastern Texas across southern Missouri, Arkansas, and Louisiana to Tennessee.

October rains exceeded the October normals over the Far Southwest, over the southern Great Plains, and over portions of the northern Great Plains. The heavy rains in the Desert Southwest shortly after midmonth were several times the normals for the entire month. In the Far Northwest, October precipitation was less than 25% of normal.

L. W. Dye

(continued from page 7)

**NEW ENGLAND:** Very cloudy with little temperature change. Cool days and mild nights. Mean temperatures near normal. Frequent light precipitation. Major storm on 8th to 9th brought heavy rain most of area and some snow in north. Total precipitation ranged from less than 1.00 inch in northern Maine to 1.00 to 2.00 inches elsewhere except to 2.00 to 4.00 inches in most of Connecticut and Rhode Island and eastern Massachusetts. Gale winds during storm caused some damage in coastal sections, including beach erosion from high surf.

**NEW JERSEY:** Rainfall from early morning of 8th through morning of 9th varied from 2.00 to 3.50 inches southern and coastal areas and up to 6.00 inches northern counties. Up to 0.50 inch additional rain on 11th. Temperatures and near seasonal normals ranging from mid-20's to mid-60's.

**NEW MEXICO:** Scattered precipitation Wednesday and more widespread precipitation on weekend mostly in north and mountains. Locally more than 6 inches of snow Sunday in mountain areas. Temperatures averaged a little warmer than previous week but continued below normal except in southeast. Warmest in midweek. General freezing minimums Friday. Favorable weather prevailed. Field activities full swing. Harvest cotton grain, sorghum 35%. Peanuts, Irish potatoes, red chili peppers active. Pecans, pasture wheat starting. Haying, lettuce ending. Livestock good-excellent, movement from high elevations to market continuing.

**NEW YORK:** Seasonable temperatures with minor day-to-day changes. Maximums mostly 40's to low 50's with highest 55° to 60° on 7th. Minimums low 40's coastal and mostly 30's Upstate with coolest 20° to 25° north and east-central on 6th and 7th. Major storm beginning on 7th with heavy precipitation 8th. New York City 5.60 inches for new record daily total for November. Totals 2.40 to 3.20 inches central interior with minor flooding some streams. Amounts decreased to 0.70 inch in southwest and 1.00 to 2.00 inches Finger Lakes to northern border.

**NORTH CAROLINA:** General rain night of 7th, 0.50 to 2.00 inches averaging 1.00 inch. Otherwise mostly fair weather. Temperatures near normal, highs mostly in 60's and lows near 40°. Above freezing throughout period except light freeze west and north. Early week rains plus election slowed harvesting activities, but excellent progress made latter part of week. Peanut harvest near end, less than 10 percent remains to be com-

bined. Corn harvest nears 90 percent completion. Over 1/2 cotton picked. Soybean harvest under way all areas -- 20 percent complete. Over 1/2 lespedeza seed crop harvested. Sorghum harvest 3/4 complete. Small grains 70% seeded -- slightly behind normal. Soil moisture adequate to surplus northern coastal plains -- adequate elsewhere. Pastures good condition and providing adequate grazing.

**NORTH DAKOTA:** Cloudy most of week with frequent light rain or snow. Precipitation totals traces most areas except up to 0.06 inch in east. Temperatures averaged below normal. Colder on weekend. Corn and sunflower harvest making slow progress because cool, damp weather. Livestock good condition. Grazing continues most areas; however, some supplemental feeding being done.

**OHIO:** Low temperatures mostly in 30's and 40's. Several stations reported lows in upper 20's on 6th. Because of overcast, rainy weather, high temperatures on many days not much different from the lows. The highs remained mostly in 40's and 50's. Rain every day. On Tuesday, many locations had over 1.00 inch of rain. Zanesville had 1.38 inches; Findlay, 1.30 inches; Abbe, 1.18 inches; Columbus, 1.16 inches; and Dayton, 1.10 inches. Wet weather held harvest to nearly a stand-still during the past week. Harvesting of corn and soybeans is 3 to 4 weeks behind average. Less than 2 days favorable for fieldwork. Soil moisture supplies surplus 96% and adequate 4%. Corn for grain 1/3 harvested, average 75% and last year 85%. Soybean crop just over 55% harvested, compared to 5-year average of 90%. Sugar beet lifting progressed from a week earlier, holding at about 45% complete compared with 75% last year. Harvesting of popcorn also made slow progress, only a little over 30% finished, behind average of 85%. Seeding winter wheat continues to make slow progress with 70% planted. Last year virtually all the crop was seeded.

**OKLAHOMA:** Precipitation averaged from 0.60 inch west-central and southwest to 2.50 inches east-central. Temperatures averaged near normal to 3° above normal. Harvest resumed limited scale but weekend rains halted operations. Drying weather and frost needed for full scale harvest to resume. Some late seeding small grains continues, completion delayed by wet fields. Small grains making good growth, and grazing becoming more widespread. Surface soil moisture adequate to surplus except few local western areas. Subsoil mostly adequate eastern 2/3. Sorghum grain harvest made fair progress important Panhandle past week. Statewide harvest nearly 3/5 complete compared to 5-year average of nearly 3/4. Cotton made only limited headway, just slightly over 1/4 completed, about normal progress. Most farmers waiting for fields to dry and frost to defoliate plants. Peanut harvest made some headway, almost 3/4 crop out of fields. Livestock mostly fair to good condition. Increase in rate of gain expected as small grain grazing becomes more prevalent.

**OREGON:** Mild, rainy week provided only brief periods of sunshine. Temperatures averaged up to 6° above normal. Minima 20° to 45°. Maxima 45° to 63°. Rains totaled 0.20 to 0.60 inch east-side, 1.00 to 2.25 inches western 1/3 of State. Rain disrupted some field activity. Sugar beet and vegetable harvest continue between rains. Cranberries, filberts, and walnuts are essentially complete. Winter ranges in good condition. Feed supplies generally adequate.

**PENNSYLVANIA:** Cloudy, wet week. Only widespread sunshine Monday and Friday. Heaviest rain mid-week with coastal storm. Two to near 6.00 inches fell in east with 0.50 to 0.75 inch west. Local flooding eastern counties. Lighter rain weekend. Weekly totals 0.50 to 1.25 inches west, 1.00 to 2.00 inches central, 2.00 to 6.00 inches east. Temperatures ranged mostly from 30's to 50's, with small daily changes under cloud cover. Extremes: 62°, 20°. Weekly means 1° to 3° above normal. Routine winter farm chores.

**PUERTO RICO:** Rainfall averaged 0.50 inch or about 1.00 inch below normal. Highest weekly totals centered in western and eastern mountains with 3.54 inches and 3.21 inches, respectively. An area of little or no rain ran through center of Island from north to south coasts. Crop moisture conditions generally near normal all divisions. Temperatures averaged 80° on coast and 75° interior divisions. Highest maximum 96°, lowest minimum 58°. Weather conditions favored maturing and cultivation of sugarcane all zones. Coffee harvesting and cultivating operations made good progress. Tobacco zones report good progress transplanting from seedbeds to fields. Cultivation and fertilizing continued most zones. Pasture zones report fertilizing, weeding, and planting operations continued. Pasture conditions generally good to excellent all zones except fair in north-central coast where more rain needed to improve conditions. Good abundance all food crops on market.

**SOUTH CAROLINA:** Rain early in week amounted to 1.00 inch most areas, except only 0.50 inch in south. Warm early in week with minimum temperatures lowering to the 30's as week ended. Cotton 76% harvested compared with 68% last year. Corn 91% harvested compared with 82% last year. Soybeans 93% mature, 30% harvested compared with 10% last year. Pastures fair condition. Wheat 42% planted compared with 26% last year, 24% emerged. Oats 46% planted compared with 41% last year, 29% emerged. Sorghum 54% harvested compared with 71% last year. Fall vegetables fair condition. Snap beans harvest almost complete Charleston-Beaufort area.

**SOUTH DAKOTA:** Weekly temperatures averaged from near normal to 5° below normal. Extremes ranged from 11° at several stations in west on 7th and 10th to 64° at Vermillion on 6th. Precipitation fell mostly as snow end of week with amounts ranging from a trace to 0.30 inch or more. Snow cover ranged from a trace to 4 inches or more. Harvest of row crops advanced in most areas. However, melting snow hampered harvesting efforts in south-central part. Most corn and sorghum grain still out is too high moisture to harvest. Topsoil moisture is still adequate over a large portion of State. Surplus topsoil moisture still present in small sections along eastern border, but topsoil moisture remains short in west-central district. Corn harvest now 65% complete, behind average 85% and 100% last year. Soybean harvest 90% complete, normal and last year 100%. Sorghum harvest 62% complete, normal and last year 100%. Fall-seeded grain outlook improved with recent moisture. Poorer fields of fall-seeded grains plowed up. Marketing of all classes of livestock increasing as animals are moved from summer pasture.

**TENNESSEE:** Moderate to heavy rains fell west of Tennessee River; mostly light showers elsewhere. Amounts exceeded 3.00 inches, with Memphis report-

ing 3.64 inches. Temperatures averaged near to 4° below normal. Largest departures in west. Temperature extremes: 74° at Bolton and 28° at Lewisburg. Harvest continues to be slowed by wet weather. Soybean harvest 25% complete, 2 weeks behind normal. Cotton harvest over 60% complete, almost a week behind average. Corn 65% complete, over a week behind normal progress. Burley tobacco stripping over 75% complete and making excellent progress. Pastures continue in good condition.

**TEXAS:** Precipitation confined largely to Sunday when numerous heavy thundershowers accompanied a rapidly-moving cold front across State. Thunderstorms with hail, high winds, and a few tornadoes hit portions of central and east Texas. Hardest hit was area from Parker and Tarrant counties southward to Bell County. Temperatures near seasonal normals most sections. Harvest of cotton, corn, sorghum, soybeans, and peanuts delayed by wet weather. Some farmers getting back into fields toward end of week. Good moisture available to complete small grain planting intentions and give early-planted fields excellent start. Wheat and oats have been making excellent growth from High Plains to South Texas. Grazing good to excellent. Major crops percent harvested: cotton 35, last year 28; corn 99, last year 99; sorghum 79, last year 86; soybeans 54, last year 51; peanuts 87, last year 75; rice (2d cutting) 79, last year 79; sugarbeets 45, last year 39. Major crops percent planted: wheat 94, last year 95, oats 92, last year 92; flaxseed 41, last year 21. High Plains vegetable harvest resumed as fields dried out. Trans-Pecos vegetable season almost complete. East Texas sweet potato digging resumed. In San Antonio-Winter Garden area harvest of pepper, cabbage, eggplant, and cucumbers continued. Some carrot harvest begun. At Laredo tomatoes, peppers, cabbage, and lettuce making good growth. In Coastal Bend cucumber and squash harvest past peak. Cabbage, onions, and spinach making good growth. Lower Rio Grande Valley onion seeding continues. Light supplies of tomatoes, peppers and cucumbers available. Pecan harvest gained some strength this week. Citrus harvest gaining some momentum. Quality of grapefruit remains excellent.

**UTAH:** Recurring periods of rain and snow many sections of State. Generally light to moderate accumulations except locally heavy over and near northern mountains. Accumulations for the water year are averaging much above normal all areas. Snow building up in higher mountains. Average temperature is near to a little below normal except 5° to 10° below normal extreme southwest. Harvest completed all crops except for corn and sugar beets. Corn for grain about 70% harvested, sugar beets 88%. Only 100 acres of beets dug last week because of wet fields. Most of about 2,500 acres still in ground in Salt Lake and Utah Counties. Grading, sorting, and marketing of potatoes, dry onions, and apples continue. Breeding of ewes on winter ranges will continue for another 2 weeks. The very good rainfall so far this water year greened up fields of winter wheat planted for 1973. Irrigation water carryover excellent.

**VIRGINIA:** Temperatures near to above normal after cool beginning. Heavy rain at midweek. First lambs of new season dropped. Rain and wet soils limited planting and harvesting operations. Most tide-water topsoils and over half in Piedmont contained surplus moisture. Peanuts 80% combined, usually near completion. Soybeans 30% harvested. Corn 2/3 picked. 65% sown. Wheat 65% sown. On Eastern

Shore sweet potatoes and fall white potatoes harvested. Pastures favorable. Feeding increasing seasonally.

WASHINGTON: Western Washington: Cool, wet conditions restricted farm work. Most vegetable harvest near completion, potatoes and carrots continue. Pasture providing limited grazing. Eastern Washington: Corn harvest slowed by cool, wet weather. Potatoes near completion. Sugar beet digging continues. Major orchard activity clean-up and rodent control. Soil moisture improved in dryland areas. Grain stands good in most areas. Weed spraying major job now. Ranges benefitted from moisture. Cattle in satisfactory shape.

WEST VIRGINIA: Rain November 7th-8th gave totals near 1.00 inch. Generally mild until November 11 when weak cold front brought light rain, clouds, winds, and lower temperatures. Major farm activities were routine chores and tending to livestock. Some grazing still available. Livestock in good condition. Most fall seeding completed.

WISCONSIN: Cloudy dreary during week except some sunshine Monday and Saturday. Temperatures averaged slightly above normal. Precipitation generally less than 0.50 inch and falling mainly early in week. A few 1.00-inch totals in north. Corn and soybeans still high in moisture content. A little corn picked during week but 1/2 of crop remains in the fields. Soybeans about 40% harvested. Fall plowing nearing the 1/2 mark. Soil moisture about 75% surplus and 25% adequate.

WYOMING: Most of Wyoming received light to moderate rain and snow, South Pass City had most moisture with 0.83 inch. Temperatures averaged near to a little above normal. Maxima mostly 40's to low 50's west of Divide and Upper Platte Drainage, 50's to low 60's elsewhere. Minima mostly 10° to 20° west of Divide, 15° to 30° east. Temperature extremes: 64° at Thermopolis and 8° at Medicine Bow. Farm activity included care and feeding of livestock. Winter wheat seedings are in good to excellent condition. Movement of livestock to market nearing completion.

#### THE FALL CROP MOISTURE SITUATION

As the harvest season progresses and the winter season rapidly approaches, soil moisture conditions are generally adequate to surplus over most of the Country. The coastal portions of the Gulf States, from Mississippi to Florida, are the only dry areas of concern, although considerable improvement has occurred recently. In the western and southwestern States, water supplies and pasture conditions are good to excellent. Barring severe winter weather, livestock should winter over in good condition in these areas. Fall grains are in good to excellent conditions in Utah, Wyoming, Colorado and Montana. Hay and forage supplies are short in Montana, but adequate elsewhere.

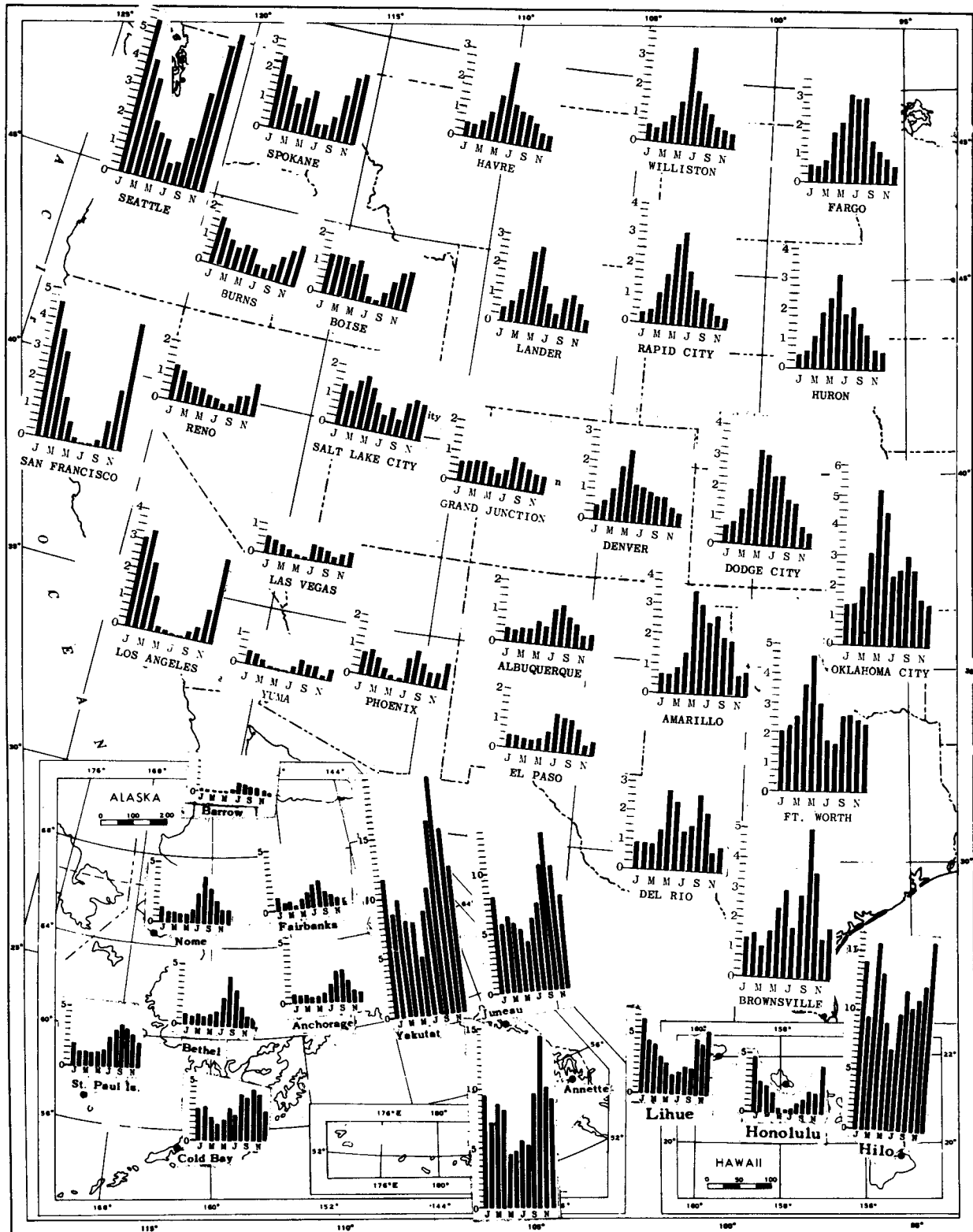
Over the Great Plains, fall grains are in good to excellent condition with good moisture carryover. Surface moisture is adequate to surplus all across the Great Plains. The Corn Belt is being affected by numerous rains which are delaying the harvest of corn and soybeans. Forty-four percent of the corn in the Corn Belt has been harvested, compared to a normal of 69 percent. Seven percent was harvested during the past week. The soybean harvest is at a virtual standstill as the wet conditions prevent the use of heavy machinery in the field. To date 71 percent of the soybean crop has been harvested in the Corn Belt, compared to a normal of 91 percent harvested by this date.

In the south, excess moisture is creating harvesting problems in many areas. Cotton remaining in the field is deteriorating rapidly. Soybeans have been damaged in Arkansas. Moisture is generally surplus in Missouri and Arkansas and the northern half of the Gulf States. Moisture is adequate elsewhere in the area except along the Gulf Coast.

In general, moisture conditions are adequate to surplus in most areas. While wet conditions are generating harvesting problems, the general moisture picture for the winter grain crops and for the coming crop year are generally good.

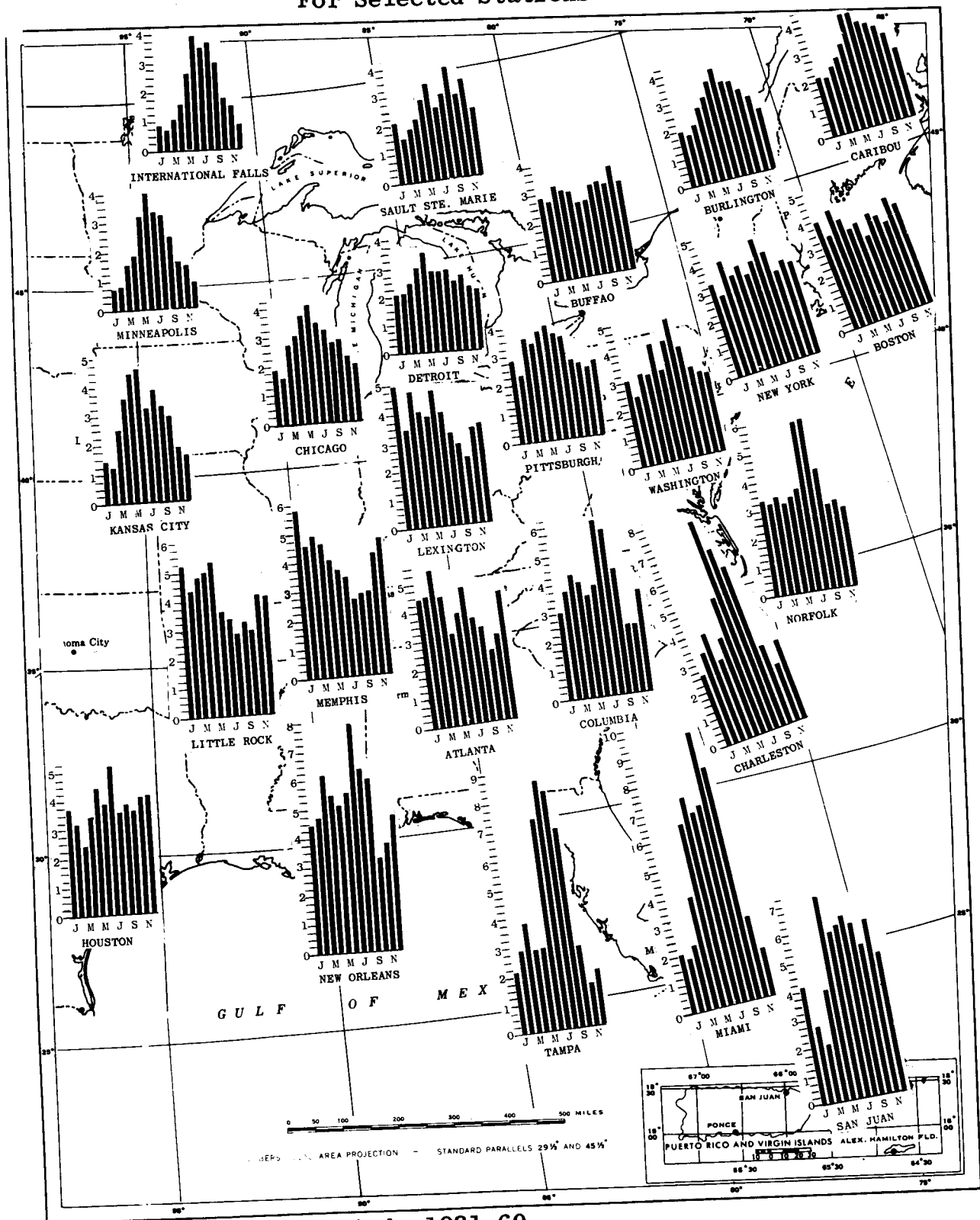
R.E. Felch

# NORMAL MONTHLY TOTAL PRECIPITATION (Inches) WESTERN UNITED STATES For Selected Stations



Based on 30-year Period, 1931-60

# NORMAL MONTHLY TOTAL PRECIPITATION (Inches) EASTERN UNITED STATES For Selected Stations



Based on 30-year Period, 1931-60



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## WORLD WEATHER AND AGRICULTURE

### USSR WINTER GRAIN CROPS HELPED BY FALL RAINS

The fall rains which complicated harvesting efforts, particularly in the eastern portions of the USSR, have provided the much needed moisture for winter grain crops. Soil moisture conditions are generally good to excellent in most locations. Snow cover and winter temperatures will greatly affect how the crop overwinters, but the outlook at this time is good.

### BRAZILIAN AGRICULTURE REELING UNDER EFFECTS OF FLOODING AND DROUGHT

The combination of heavy rains and flooding in the south and drought conditions to the north is seriously affecting Brazilian farmers. In the south, the heaviest winter rains in many years in the State of Rio Grande do Sul have affected virtually all agricultural operations. The most significant effect has been the loss of at least half of the 1972 wheat crop. Normally, Rio Grande do Sul supplies nearly 90 percent of the country's wheat. The rice planting season has been delayed, and this will result in significant yield reductions. Approximately 100,000 sheep drown when the Lagoa Mirim River flooded.

To the north, in the State of Bahia, serious drought was affecting cattle operations as of late September. There are approximately 7 million head of cattle in Bahia, making it one of the more important livestock States in Brazil. In the area, over half of the normal rainfall occurs during the months of November, December and January. Immediate relief from the severe drought was not imminent at that time.

### DROUGHT AFFECTING NICARAGUAN CROPS

One of the most serious droughts in memory is affecting the areas of Nicaragua bordering the Pacific Ocean. August and September are normally months of heavy rainfall throughout the country. This moisture is critical for the planting of corn, beans, sorghum and cotton. Cotton is the leading export crop of Nicaragua. Upwards of 80 percent of the grain crops may be lost. The less than normal rainfall will also reduce the yield of the 1973 sugar and coffee crops.

The Department of Leon, which contains 44 percent of the country's cotton plantings, is the hardest hit area. Managua has received only three torrential rains during the past three months. Such rains characteristically occur several times a week during the rainy season of the year.

The mean annual temperature range is small. The climatic year consists of two more or less distinct seasons: the dry season which exists from December to April and a wet season from May to November. Nearly everywhere March is the driest month. Paradoxically, winter is considered the rainy season of higher temperatures and summer is the dry, cooler period. The normal crop season is determined by the occurrence of rainfall more than changes in temperature.

R.E. Felch