

# WEEKLY WEATHER AND CROP BULLETIN

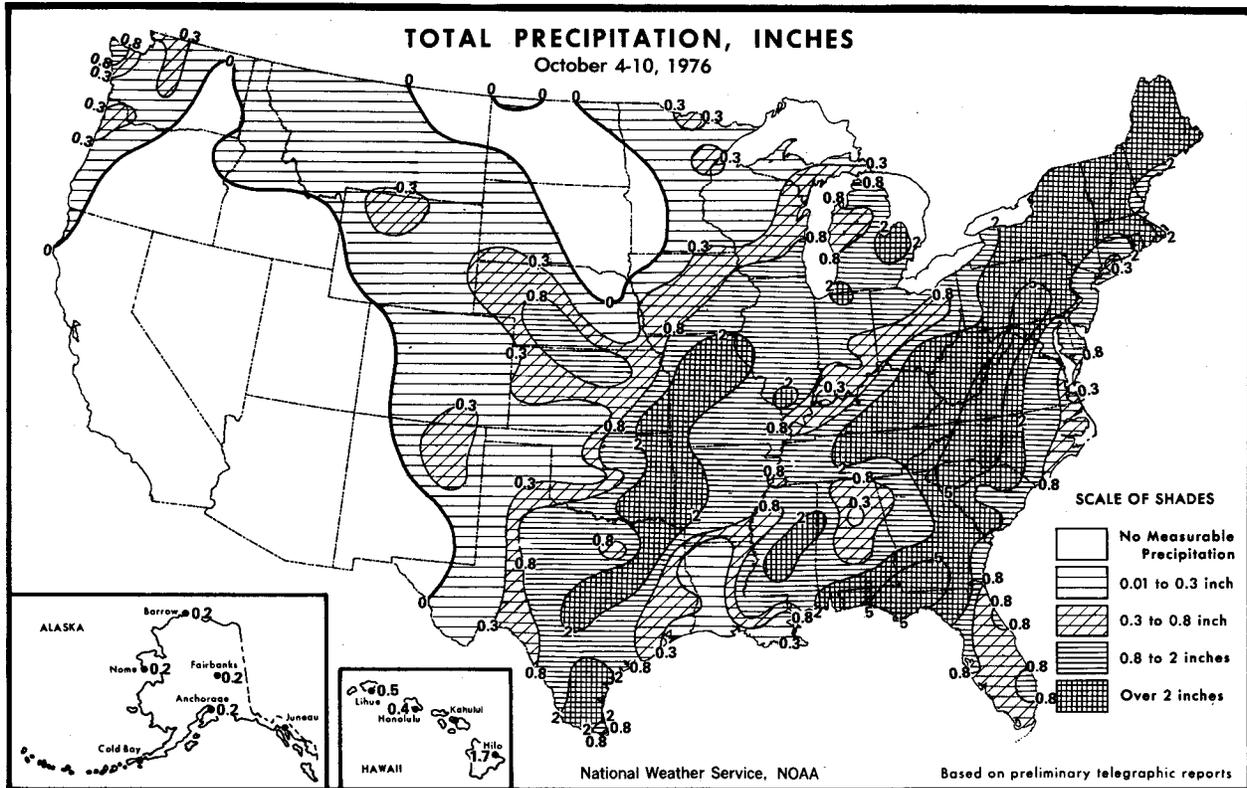
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## National Weather Summary

For the Week of October 4-10

**HIGHLIGHTS:** Rains deluged the central Plains area early in the week and swelled waterways beyond flood stages in southwestern Texas. Observers noted mid-week rains and flooding in the southeastern States and eastern Great Lakes region. In addition, temperatures plummeted below freezing in Minnesota and North Dakota. Raging waterways overwhelmed their banks in Virginia, Maryland, Washington, D. C., and South Carolina, as heavy rains barraged the area over the weekend.

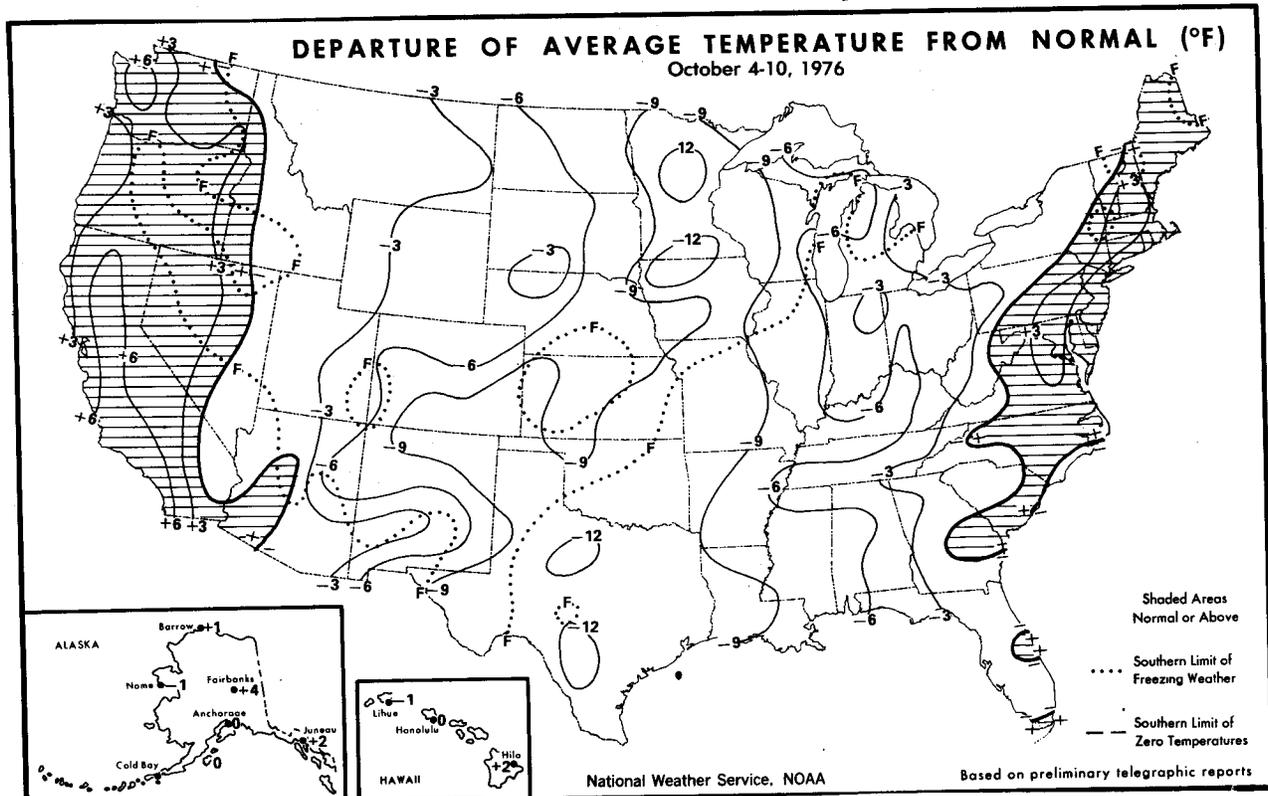
Monday morning found a hard freeze in many areas west of the Continental Divide, while cloudy skies east of the Divide held warmer temperatures in abeyance. Spokane, Wash. reported frost in the early morning hours.

Wet described the central Plains area, as a frontal system caused some showers and thunder-showers. Heavy rainfall occurred in north central

Kansas with amounts from 3 to 4 inches in a 24-hour period. Texas reported flash flood warnings in the southwestern counties, as McKavett noted almost 5 inches in one hour. The Devils River at Sonora hit flood stage and continued to rise.

A cold Canadian air mass continued to move into the north central section of the Nation on Tuesday. The air mass kept maximum temperatures in the 50's or lower through the upper half of the Rockies, the Plains States, and the Mississippi Valley. A mixture of rain and snow fell through western Montana and Wyoming.

Although rains helped to replenish the soil moisture supply in the Great Lakes area and the middle Mississippi Valley, they caused flash flood activity again in Texas. Alice, Tex. reported about 4 1/2 inches in a 6-hour period. Other significant rainfall for the 24-hour period included Wortham, Tex. 8 1/2 inches; Colgate, Okla.



around 6 inches; and 4 1/2 inches in Warrensburg, Mo. and Groesbeck, Tex.

The cold air mass moved southward on Wednesday, and clearing skies and light winds produced freezing temperatures, frost, and record low readings. The mercury plunged to a mere 18° at St. Cloud, Minn. and just 19° at Fargo, N. Dak.

As the day progressed, rain and snow developed over the central high Plains area. East of the Mississippi River, mostly cloudy skies prevailed. Another cold front pushed slowly into the eastern quarter of the Nation and triggered showers and thundershowers through the southeastern States and eastern Great Lakes area. The Tallahassee, Fla. area reported almost 6 inches of rain which caused small streams to overflow their banks and flooding of homes and autos.

South Bend, Ind. set a new record on Wednesday for annual rainfall with a total of 47.61 inches. This exceeded the normal level by 19.05 inches and broke the old record of 46.71 inches set in 1954.

A large high pressure area, centered over southwestern Kansas, brought unseasonably cool temperatures in a wide area reaching from the Appalachians to the central and southern Rockies on Thursday. Afternoon temperatures in this area only reached to the 40 and 50 degree range.

Clouds and light rain accompanied the cold temperatures in the southern Plains States, where Amarillo, Tex. and Las Vegas, N. Mex. each reported a high of 39°. Midland, Tex. set a new record low of only 50° for the date.

A warming trend started in the northern Rockies. Havre, Mont. recovered from a morning low of 24° to an afternoon high of 74°.

Wet weather dominated the eastern section of the Nation on Thursday. Showers and thundershowers soaked much of the Appalachians and the southern

Atlantic Coast. Street flooding was common in Greenville, S. C., with water on one street as much as 8 feet deep. The Reedy River surpassed the flood stage by 3 feet and continued to rise.

Mild temperatures prevailed in the Pacific Northwest, with 70's and 80's in most places. Medford, Ore. reached 90°, the highest reading ever so late in the season. Mercuries also lingered in the 89 and 90 degree range in the interior of California.

A stationary front across the eastern U.S. produced rains over the Atlantic Coast States and the Appalachians on Friday. Flash flood alerts and some actual flood activity resulted.

Just over 2 inches of precipitation fell over Athens, Ga. in a 6-hour period, while Roanoke, Va. received nearly 3 inches in a 24-hour period. Greenville, S. C. reported more than 5 inches in a 2-day period, as more than 8 1/2 inches inundated Tallahassee, Fla. in 3 days.

Clouds and light rain extended along much of the Gulf Coast region and kept temperatures unseasonably cool. Houston, Tex. noted a high of only 55°. A few light showers moved across the upper Mississippi Valley and the northwestern Great Lakes region during the day. Snow fell for a short time at Duluth and International Falls, Minn.

Warm air produced above normal temperatures along the coastal areas of southern California, as highs climbed to 99° at Long Beach, 95° at Los Angeles, and 91° at San Diego.

An icy stab of frost and freezing temperatures thrust into the northeastern States on Sunday. Rampaging water continued to overwhelm the banks of the Potomac River in Virginia, Maryland, and Washington, D.C. and the Congaree and lower Broad Rivers in South Carolina.

## National Agricultural Summary

For the Week of October 4-10

**HIGHLIGHTS:** Most of the United States felt winter's first chills as subnormal temperatures placed frost as far south as the Texas plains. Rains throughout most of the eastern part of the Nation slowed row crop harvest and winter wheat seeding. Soil moisture supplies moved to the adequate to surplus columns, except in the western North Central States and several of the Mountain States, where soil moisture remained short.

**SMALL GRAINS:** Seeding of the 1977 winter wheat crop advanced to 69% complete, one point beyond last year's 68% but short of the 77% average. Farmers gradually closed the gap between the current year and previous year's pace, which developed when dry soils slowed progress in early September. In the western North Central States, 72% of the crop was in the ground, behind last year's 77% and the 83% average. Kansas growers seeded 70% of their crop compared with 75% in 1975 and 80% average. Scattered showers and some snow improved soil moisture supplies in Kansas.

Seeding in the South Central States stood at 59%, a point ahead of last year but far behind the 86% average. In Texas, wet fields slowed planting progress and made replanting necessary in some areas. Texas growers seeded 58% of their crop compared with 68% last year and 79% average. Oklahoma wheat producers planted 68% of the 1977 wheat crop, ahead of last year's 55% but behind the 75% average.

**CORN:** Harvest of the United States corn crop stood at 32% complete remaining ahead of 1975's 30% and widening the gap with the average 22%. Harvesting advanced most in the western North Central States where clear skies provided good combining conditions.

In the eastern North Central States, harvesting advanced to only 15% complete, well behind 1975's 23% but only 1 point less than the average. Although rains slowed the Ohio harvest, farmers stayed on schedule. A killing frost would be beneficial. In Illinois, harvest was almost half last year but nearly equal the average.

Harvesting in the western North Central States hit 37% complete, surpassing both 1975's 27% and the 18% average. Earlier dry, hot weather pushed the corn crop to early maturity in this area. Continued subnormal rainfall helped dry the corn crop quickly.

**COTTON:** Development of the Nation's cotton crop and picking activity continued to lag recent years. Picking only began in some States and remained 10% complete or less in most other States. Generally harvesting met only half the average rate for this time of year. Exceptions included Louisiana where farmers picked 15% of the crop compared with 11% last year. In Texas, picking stood at 12% complete compared with 24% last year and 19% average. Frosty temperatures damaged cotton on the Texas high plains and Trans-Pecos, and cool weather slowed boll development elsewhere. Rain slowed harvest in eastern Texas. Showers slowed cotton picking in Arkansas and many other southern States.

**SOYBEANS:** Soybean harvest in the United States reached within 2 points of the halfway mark surpassing last year's pace of 44% and the average 33%. Combining advanced far ahead of the average in the North Central States but only slightly ahead of normal in the South Central States. In the eastern North Central States,

harvest hit 64% complete, beating 1975's rate by 3 points and far ahead of the 43% average. Most individual States' current harvest rates far exceeded the average. Farmers in the western North Central States stood at 66% also ahead of 1975's 57% and the 38% average. Minnesota growers harvested 94% of the crop, compared to 50% average. Only Kansas growers failed to stay ahead of the average rate of harvest. In the South Central States, harvest reached 15% compared with 11% last year and 12% average.

**OTHER CROPS:** The United States sorghum harvest advanced to 57% complete compared with 59% in 1975 and 42% average. In Texas, combining stood at 70%, short of the 77% last year but ahead of the 64% average. Frost damaged some late maturing fields in Texas. In Kansas, growers harvested 45% of the crop far ahead of the 30% last year and more than double the 20% average. Harvest progress exceeded the average rate in every major producing State.

Although Arkansas rice growers combined 65% of the crop, behind last year's fast pace of 83%, long lines of trucks developed at unloading stations. California rice producers cut their crop.

Potato harvest in Aroostook County, Maine reached 90% complete. Across the Nation in Idaho, harvest advanced to 55% compared with 40% last year. Washington potato growers also were digging their crop.

The Nation's peanut growers continued to dig and thresh the crop, although rain slowed operations in some areas. In Georgia, 78% of the peanuts were threshed compared with the 82% average. In Virginia, combining reached 4% complete. The Oklahoma crop reached 75% mature, and some growers began digging.

**FRUITS AND NUTS:** The apple harvest continued throughout the United States. Grape harvests were active in Pennsylvania, New York, Michigan, and California. In California, rains caused a 35% loss of raisin grapes. Bunch rot, slip skins, and sugaring problems plagued the California table and wine grape harvests. In Florida, light rains benefited the citrus crop as harvest volume increased. Citrus harvest was also underway in the Texas Lower Rio Grande Valley. In California the new crop of navel oranges looked good.

**VEGETABLES:** Frost damaged all but the hardy vegetable plants in northern production areas. Harvests of cabbage and root crops were underway across the northern United States. In Florida, growers harvested sweet corn, cucumbers, eggplants, and squash. In Texas, a wide variety of vegetables were in various stages of maturity. Cool wet weather slowed development of some crops, and frost damaged some crops in north Texas. In California, previous rains slowed harvest of most vegetable crops to keep market supplies light.

**PASTURES AND LIVESTOCK:** Recent rains coming so late in the season did not improve the pasture outlook throughout most of the Nation. Pastures ranked fair to poor in the North Central States, fair to good in the South Central and southern Atlantic States. In the Mountain States, cattlemen moved herds to winter pastures. Fall calving began in some States. Cattle were in good condition.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., October 10, 1976

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 . . .	61	-6	.2	-.4	La. Baton Rouge . . .	63	-9	1.0	+.4	Youngstown . . .	53	-3	.9	+.3
Mobile . . .	64	-8	2.0	+1.2	Lake Charles . . .	63	-10	T	-.8	OKLA, Okla. City . . .	57	-9	.2	-.5
Montgomery . . .	64	-5	.5	-.1	New Orleans . . .	66	-7	T	-.6	Tulsa . . .	57	-10	1.6	+.8
ALASKA, Anchorage . . .	39	0	.2	-.2	Shreveport . . .	62	-9	.2	-.4	OREG, Astoria . . .	58	+3	1.1	-1.1
Barrow . . .	21	+1	.2	+.1	MAINE, Caribou . . .	48	+1	2.4	+1.6	Burns . . .	54	+3	0	-.1
Fairbanks . . .	36	+4	.2	0	Portland . . .	53	+1	1.9	+1.2	Medford . . .	61	+4	0	-.4
Juneau . . .	47	+2	1.0	-.8	MD, Baltimore . . .	64	+3	1.0	+.4	Pendleton . . .	59	+3	T	-.2
Kodiak . . .	43	0	1.7	+.2	MASS, Boston . . .	60	+2	1.9	+1.3	Portland . . .	60	+3	.5	-.2
Nome . . .	32	-1	.2	-.2	Chatham . . .	60	---	1.5	---	Salem . . .	58	+2	.2	-.5
ARIZ, Flagstaff . . .	50	0	0	-.4	MICH, Alpena . . .	47	-3	.8	+.3	PA, Allentown . . .	60	+3	1.7	+1.1
Phoenix . . .	78	+2	0	-.1	Detroit . . .	54	-3	1.0	+.4	Erie . . .	56	+1	1.4	+.7
Tucson . . .	72	-2	0	-.2	Flint . . .	53	-2	2.1	+1.6	Harrisburg . . .	62	+3	5.0	+4.4
Winslow . . .	55	-6	0	-.2	Grand Rapids . . .	51	-5	1.1	+.5	Philadelphia . . .	63	+2	.8	+.2
Yuma . . .	80	0	0	-.1	Houghton Lake . . .	45	-7	.6	0	Pittsburgh . . .	53	+4	1.4	+.8
ARK, Fort Smith . . .	56	-11	2.0	+1.2	Lansing . . .	51	-4	1.4	+.8	Scranton . . .	57	+1	3.9	+3.3
Little Rock . . .	59	-7	1.1	+.4	Marquette . . .	47	-5	.3	-.3	R.I. Providence . . .	59	+2	3.2	+2.5
CALIF, Bakersfield . . .	77	+7	0	0	Muskegon . . .	51	-4	.6	0	S.C. Charleston . . .	69	0	1.5	+.7
Eureka . . .	57	+2	T	-.5	S. Ste. Marie . . .	45	-5	.2	-.5	Columbia . . .	66	-1	1.4	+.7
Fresno . . .	71	+4	0	-.1	MINN, Duluth . . .	39	-10	.4	-.2	Greenville . . .	63	-2	6.7	+5.9
Los Angeles . . .	77	+7	0	0	Internatl Falls . . .	39	-9	.6	+.1	S.D. Aberdeen . . .	46	-6	T	-.3
Red Bluff . . .	75	+6	0	-.2	Minneapolis . . .	45	-9	.2	-.3	Huron . . .	46	-8	0	-.4
San Diego . . .	75	+7	0	0	Rochester . . .	42	-12	.3	-.2	Rapid City . . .	49	-5	.2	0
San Francisco . . .	65	+3	0	-.1	St. Cloud . . .	40	-12	.2	-.2	Sioux Falls . . .	48	-6	0	-.4
Stockton . . .	73	+6	0	-.1	MISS, Jackson . . .	61	-8	2.2	+1.7	TENN, Chattanooga . . .	62	-2	.9	+.2
COLO, Denver . . .	51	-5	.2	-.1	Meridian . . .	61	-7	1.1	+.6	Knoxville . . .	60	-4	2.6	+2.0
Grand Junction . . .	53	-6	0	-.2	MO, Columbia . . .	51	-11	3.1	+2.2	Memphis . . .	62	-5	.7	+.1
Pueblo . . .	50	-9	.1	-.1	Kansas City . . .	52	-10	1.4	+.5	Nashville . . .	59	-6	2.1	+1.6
CONN, Bridgeport . . .	62	+2	.8	+.2	St. Louis . . .	54	-9	.8	+.2	TEX, Abilene . . .	57	-13	1.6	+1.0
Hartford . . .	60	+4	.9	+.3	Springfield . . .	53	-10	1.3	+.4	Amarillo . . .	52	-11	.2	-.3
D.C. Washington . . .	66	+3	.8	+.2	MONT, Billings . . .	51	-2	.2	0	Austin . . .	63	-10	1.3	+.5
FLA, Apalachicola . . .	70	-4	4.6	+3.6	Glasgow . . .	48	-3	T	-.1	Beaumont . . .	64	-9	T	-.9
Daytona Beach . . .	74	-2	1.6	+.1	Great Falls . . .	52	0	.2	0	Brownsville . . .	68	-10	.6	-.3
Ft. Myers . . .	76	-2	.4	-.9	Havre . . .	48	0	.1	-.1	Corpus Christi . . .	67	-9	3.2	+2.4
Jacksonville . . .	71	-2	.7	-.6	Helena . . .	48	-1	T	-.1	Dallas . . .	---	---	---	---
Key West . . .	82	+1	.8	-.7	Kalispell . . .	44	-2	.2	-.1	Del Rio . . .	63	-11	.4	-.2
Lakeland . . .	75	-1	.4	-.4	Miles City . . .	51	-2	.1	-.1	El Paso . . .	60	-8	0	-.2
Miami . . .	79	0	.6	-1.5	Missoula . . .	46	-2	.1	-.1	Fort Worth . . .	61	-10	.7	0
Orlando . . .	76	0	.7	-.5	NEBR, Grand Island . . .	52	-6	T	-.3	Galveston . . .	67	-9	.1	-.6
Tallahassee . . .	69	-3	9.0	+8.1	Lincoln . . .	51	-8	T	-.4	Houston . . .	63	-11	.4	-.6
Tampa . . .	76	-1	1.0	+.2	Norfolk . . .	51	-6	0	-.4	Lubbock . . .	56	-9	.3	-.3
W. Palm Beach . . .	77	-2	1.2	-1.1	N. Platte . . .	52	-6	1.2	+.9	Midland . . .	59	-10	.3	-.1
GA, Atlanta . . .	63	-3	1.9	+1.3	Omaha . . .	52	-2	.6	+.1	San Angelo . . .	59	-11	1.3	+.8
Augusta . . .	67	0	2.4	+1.8	Valentine . . .	52	-2	.3	+.1	San Antonio . . .	62	-12	1.9	+1.2
Macon . . .	69	0	.8	+.2	NEV, Ely . . .	49	0	0	-.1	Victoria . . .	65	-10	1.7	+.8
Savannah . . .	71	+1	1.0	+.2	Las Vegas . . .	70	-1	0	0	Waco . . .	62	-10	3.0	+2.4
HAWAII, Hilo . . .	77	+2	1.7	+.5	Reno . . .	58	+5	0	-.1	Wichita Falls . . .	58	-12	1.5	+.8
Honolulu . . .	79	0	.4	+.2	Winneucca . . .	57	+5	1.0	+.4	UTAH, Blanding . . .	52	-4	0	-.3
Kahului . . .	---	---	---	---	N.H. Concord . . .	57	+5	1.0	+.4	Salt Lake City . . .	55	-1	0	-.2
Lihue . . .	77	-1	.5	-.2	N.J. Atlantic City . . .	61	+0	2.2	+1.6	VT, Burlington . . .	51	-1	2.4	+1.8
IDAHO, Boise . . .	56	0	0	-.1	Trenton . . .	60	0	2.2	+1.6	VA, Lynchburg . . .	63	+2	4.2	+3.6
Lewiston . . .	59	+3	T	-.2	N.MEX, Albuquerque . . .	56	-6	T	-.2	Norfolk . . .	66	+1	.2	-.5
Pocatello . . .	50	-2	0	-.1	Roswell . . .	59	-4	0	-.4	Richmond . . .	65	+3	1.4	+.7
ILL, Cairo . . .	58	-7	.4	-.2	N.Y. Albany . . .	57	+2	3.0	+2.4	Roanoke . . .	59	-2	5.5	+4.7
Chicago . . .	53	-6	1.4	+.8	Binghamton . . .	52	-1	3.1	+2.5	WASH, Colville . . .	49	-1	T	-.3
Moline . . .	50	-8	1.5	+.8	Buffalo . . .	53	-2	1.6	+1.0	Omak . . .	53	+1	T	-.3
Peoria . . .	51	-8	1.4	+.7	New York . . .	62	+1	1.1	+.5	Quillayute . . .	57	+4	1.4	-.9
Rockford . . .	49	-8	1.3	+.6	Rochester . . .	54	-1	2.1	+1.5	Seattle-Tacoma . . .	61	+6	T	-.7
Springfield . . .	53	-7	1.4	+.6	Syracuse . . .	54	-2	3.2	+2.5	Spokane . . .	54	+2	T	-.3
IND, Evansville . . .	57	-5	.2	-.4	N.C. Asheville . . .	60	0	3.8	+3.0	Walla Walla . . .	60	+2	T	-.3
Ft. Wayne . . .	55	-2	1.3	+.7	Charlotte . . .	64	-1	6.3	+5.6	Yakima . . .	56	+2	T	-.1
Indianapolis . . .	55	-4	.5	-.1	Greensboro . . .	62	0	4.5	+3.8	W. Va. Beckley . . .	54	-2	3.4	+2.8
South Bend . . .	53	-4	2.0	+1.3	Hatteras . . .	69	+1	.5	-.6	Charleston . . .	56	-4	2.4	+1.8
IOWA, Burlington . . .	50	-9	1.7	+.9	Raleigh . . .	65	+2	1.2	+.5	Huntington . . .	57	-4	2.6	+2.1
Des Moines . . .	51	-7	.5	-.1	Wilmingon . . .	67	-1	.5	-.4	Parkersburg . . .	55	-5	2.5	+2.0
Dubuque . . .	47	-9	1.2	+.5	N.DAK, Bismarck . . .	45	-6	T	-.2	WIS, Green Bay . . .	47	-6	.5	0
Sioux City . . .	45	-12	.1	-.4	Fargo . . .	42	-9	T	-.3	La Crosse . . .	47	-9	.2	-.4
KANS, Concordia . . .	54	-7	.9	+.4	Williston . . .	45	-5	T	-.1	Madison . . .	45	-9	.7	+.1
Dodge City . . .	54	-8	.2	-.2	OHIO, Akron-Canton . . .	54	-3	.6	0	Milwaukee . . .	52	3	1.4	+.9
Goodland . . .	47	-10	.2	-.1	Cincinnati . . .	55	-6	.8	+.3	WYO, Casper . . .	47	5	.1	-.1
Topeka . . .	52	-9	.7	0	Cleveland . . .	54	-3	.8	+.2	Cheyenne . . .	46	5	T	-.2
Wichita . . .	53	-10	.3	-.4	Columbus . . .	54	-4	.6	+.2	Lander . . .	48	3	.3	0
KY, Lexington . . .	55	-7	1.6	+1.1	Dayton . . .	53	-6	.7	+.3	Sheridan . . .	47	5	.3	0
Louisville . . .	58	-4	.6	+.1	Toledo . . .	53	-4	1.1	+.6	P.R. San Juan . . .	62	+1	1.6	+.3

Based on 1941-70 Normals

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## State Summaries of Weather and Agriculture

These summaries provide brief descriptions of crop and weather conditions important on a national scale. More detailed data are available in Weather and Crop Bulletins published each Monday by SRS State offices in cooperation with the National Weather Service, NOAA.

**ALABAMA:** Cool but started cloudy, rainy and warm, turned cooler on 7th and ended clear and cool. Temperatures 5° below normal and rainfall ranged from a trace to 4.00 in.

Fieldwork: 3.5 days suitable. Soil moisture mostly adequate. Major activities harvesting corn, peanuts, soybeans and defoliating cotton. Cotton fair to good, 40% with bolls open, 42% 1975, 62% average. Harvest just beginning. Corn 56% harvested, 39% 1975, 38% average. Soybeans maturing rapidly, 48% mature, 46% 1975, 52% average. Peanut harvest continues, 73% combined, 68% 1975. Seeding of small grains made good progress, 34% complete, 31% 1975. Pastures adequate.

**ARIZONA:** Temperatures below normal 5th consecutive week. Daytime temperatures above normal by end of week. No precipitation.

Cotton defoliation, harvest gained momentum. Picking early planted cotton well underway, good yields. Cultivation, insecticide applications limited to late planted cotton. Harvest grain sorghum continues. Preparations next year's wheat, barley continue. Sugarbeets up to good stands. Alfalfa hay baling slow. Lettuce making good progress southwest. Lemon harvest gaining momentum. Limited redblush grapefruit being picked. Desert ranges mostly poor to fair condition. Stock water supplies adequate higher elevations, short to adequate desert. Ample supplies hay, grain except portions of desert. Livestock mostly good condition.

**ARKANSAS:** Temperatures 1 to 10° below normal. Extremes: 93 and 26°. Rainfall general, averaging near 1.00 in.

Soybean harvest 7% complete, 8% last year. Cotton picking slowed by showers; Harvest 11% complete, 22% year ago. Open bolls 67% of acreage, 66% 1975. Yields disappointing. Rice harvest 65% complete, 83% last year. Long drier lines continued. Corn harvest 89% complete. Sorghum harvest 85% complete, 79% year ago. Wheat 16% planted, 27% last year. Hay shortage intensified. Armyworm populations declining.

**CALIFORNIA:** Spotty light rain first then dry remainder. Temperatures near normal but 3 to 4° above normal south coast and north coast. General warming trend.

Harvest major crops increasing. Cotton harvest increasing. Rice cutting active. Corn and milo harvests progressing. Threshing dry beans. Sugarbeet digging more active as soil conditions permit. Some alfalfa seed acreage abandoned. Field preparations continue fall seeded grain. Almonds, walnut harvest continues. Avocado harvest continues. Raisin grape loss approximately 35% due to rains. Table and wine grape harvests continue with bunch rot, slip skins and sugaring problems. New crop navels look good. Harvest of vegetable crops slow due to previous week's rain. Supplies of most crops light. Quality variable due to wet fields followed by hot weather. Rangeland good condition. Grasses continue growth, need more rain. Stock water supplies stable. Cattle good condition, calving continues.

**COLORADO:** Rain showers eastern plains, snow above 8,000 ft. beginning. Showers southeast middle of

week. Clear nights, sunny days end of week. Highs in the low 80's east.

Winter wheat seeded 95%, 95% 1975, average 94%; emerged 82%, 68% 1975, 78% average. Grain sorghum 46% ripe; 6% harvested, 20% 1975, 11% average. Corn for grain 6% harvested, 11% 1975, 12% average. Sugarbeet harvested 4%, 10% average. Fall potatoes 50% harvested. Dry beans 82% threshed, 79% average. Ranges and pastures fair. Livestock good.

**FLORIDA:** Mild days, cool nights. Temperatures 2 to 4° below normal. Rainfall heavy averaging 1.00 to 3.50 in. and locally higher with as much as 9.00 in. Tallahassee area.

Soil moisture variable, mostly adequate. Corn harvest nearing completion. Yields good. Peanut harvest mostly complete. Yields reduced by dry weather some areas. Soybean harvest underway. Haymaking active. Land preparation small grains, winter grazing active. Sugarcane harvest expected mid-October. Pastures mostly good. Overgrazing evident some areas. Armyworms, mole crickets, loopers, infestation increased. Planting winter pastures full swing. Cattle, calves generally good condition. Citrus tree and fruit condition excellent, light rains beneficial, some irrigation underway, harvest increasing, good natural color break. Vegetable harvest activity increasing as sweet corn gains momentum. Everglades. Cucumber harvest underway central, south-east. Eggplant, squash harvest continues; tomato, green pepper, escarole-endive, lettuce, snap bean harvest to begin in 2 to 3 weeks. Yield prospects generally good. Field work active. Planting continues.

**GEORGIA:** Temperatures 1° below normal. Scattered showers 5th through 8th, totaling 1.50 to 2.00 in. Few places less than 0.10 in. and a few more than 3.00 in. Cooler and dryer 10th and 11th. Scattered frost in mountains.

Soil moisture adequate to excessive. Fieldwork: 3.0 days suitable. Cotton mostly fair to good, 64% open; 6% picked, last year 8%, average 23%. Peanuts mostly fair to good, 87% dug, 78% threshed, last year 89% and 79%, average 96% and 82%. Corn fair to mostly good, 67% harvested, last year 49%, average 42%. Soybean condition fair to mostly good, 1% harvested, last year 5%, average 4%. Hay crop condition and pastures fair to good. Apple condition good, 93% picked. Wheat 17% planted, rye 24% planted. Pecans mostly fair to good, 1% harvested, last year 5%. Cattle fair to mostly good. Hogs good condition.

**HAWAII:** Weather hot and humid. Light to moderate showers mainly windward and higher elevation.

Irrigation heavy leeward sections. Spraying for insect and disease control. Vegetable supplies adequate. Banana and papaya supplies heavy. Sugar harvesting steady. Pineapple harvesting light. Pastures leeward dry. Rains added soil moisture windward areas. Grass growth improving.

**IDAHO:** Extremes: 86 and 21°. Precipitation 0 to 1.83 in.

Crops harvested 1976, 1975: Potatoes 55%, 40%, barley 95%, N.A., spring wheat 95%, N.A., sugarbeets 5%, 10%, dry beans 80%, 85%. Planted: Winter wheat 80%, 70%, barley 70%, 70%. Emerged: Winter wheat 50%, 45%, barley 35%, 45%.

ILLINOIS: Temperatures 5 to 9° below normal. Precipitation less than 0.50 in. south, 1.50 in. elsewhere.

Corn 18% harvested, 32% 1975, 19% average. Harvest most advanced extreme south, least extreme north. Soybeans 85% combined, 78% 1975, 51% average. Harvest active. Grain sorghum 35% harvested. Winter wheat 50% seeded, 63% 1975, 56% average. Pastures 20% good, 58% fair, 22% poor. Soil moisture 58% short, 42% adequate. Fieldwork: 4.5 days suitable.

INDIANA: Cool, rather rainy and cloudy. Temperatures 5° below normal and ranged from 29 to 84°. Some frost in central southern half on 10th. Rainfall ranged from 0.30 in. extreme southwest to 2.00 in. extreme north central.

Fieldwork: 4 days suitable. Topsoil moisture mostly adequate, subsoil moisture short to adequate. Corn 10% harvested, 1975 15%, average 15%. Corn 95% mature, 1975 95%. Soybeans 45% harvested, 1975 40%, average 25%. Soybeans 85% mature, 1975 80%. Wheat land 80% plowed, 1975 85%. Wheat 35% seeded, 1975 45%, average 45%. Silos 90% filled, 1975 90%. Pastures poor to fair.

IOWA: Cool, with hard freeze 6th and 8th. Little or no rain west and north central to over 2.00 in. extreme southeast.

Scattered showers and frost. Additional moisture did little to relieve dry soil conditions. Fall plowing continues at a slow pace due to dryness. Fieldwork: 6 days suitable. Harvest continues ahead of schedule with yields of corn and soybeans highly variable. Corn harvest 29%, 22% 1975, 15% average. Soybean harvest 82%, 72% 1975, 42% average. Winter wheat seeded 71%, 77% 1975, 72% average. Grain sorghum harvested 37%, 40% 1975, 26% average. Topsoil moisture short. Subsoil moisture short. Livestock in good condition, supplemental feeding continues as pastures remain poor despite recent rains.

KANSAS: Precipitation first half with 0.25 in. southwest, 1.50 to 2.00 in. north central and southeast. First snows northwest. Temperatures 52° northwest to 55° east and south central or 5 to 10° below normal. Frost or freezing temperatures morning of 8th.

Scattered showers and snow northwest improved moisture supplies. Wheat planting made good progress, 70% planted by weekend, 75% last year, 80% average. Corn 95% mature, 90% last year and average. Corn 35% harvested, 45% last year, 25% average. Sorghum 95% mature, 80% last year, 70% average. Sorghum 45% harvested, 30% last year, 20% average. Soybeans 20% harvested, 10% last year, 25% average.

KENTUCKY: Fair with cloudy skies and rain mid-week and on weekend. Temperatures slightly below normal. Precipitation averaged near 0.50 in. to 2.00 in. east.

Fieldwork: 4.0 days favorable. Soil moisture adequate. Harvesting corn, soybeans and hays, seeding small grains, and some tobacco stripping. Corn for grain 26% harvested, 25% average. Soybeans 19% harvested, 15% average. Tobacco 23% cured and 5% stripped. Wheat seeding 26% complete. Condition of pastures, fall seeded grains and alfalfa mostly good.

LOUISIANA: Temperatures 7 to 8° below normal. Extremes: 89 and 37°.

Soil moisture mostly adequate. Fieldwork: 5 days suitable. Cotton condition fair to good;

harvested 15%, 11% last year. Soybeans fair to good condition; 84% turning, 68% shedding leaves; 36% harvested, 26% last year. Sugarcane good condition; 96% planted, 83% year ago. Corn 90% harvested, 87% year ago. Sorghum 91% ripe; 82% harvested, 54% average. Sweetpotatoes good; 70% dug, 60% last year. Oats 50% planted, 44% last year. Wheat 41% planted, 37% year ago. Hay and pastures fair. Livestock fair to good.

MARYLAND & DELAWARE: Temperatures 2 to 3° above normal. Precipitation well distributed, occurring at beginning and end.

Wet weather kept farmers sidelined. Soil moisture surplus. Pastures average to above average. Corn for grain harvested 45%, 1975 60%, average 52%. Corn for silage 90%, slightly behind normal. Soybeans 45% shed leaves, average for date. Harvest 5% complete, 1975 10%, average 6%. Fall apple harvest slowed. Rains caused some cracking in Staymans.

MICHIGAN: Temperatures ranged from 82 to 23°. Rains beginning offered much needed moisture. Precipitation ranged from 0.18 in. western Upper Peninsula to 1.72 in. Thumb area.

Soil moisture adequate though short north. Fieldwork: 4 days suitable. Grain corn 10% harvested. Silage 90% cut. Winter wheat 75% planted. Dry beans 95% harvested. Soybeans over 25% harvested. Sugarbeet digging started, 5% complete. Potatoes almost 75% dug. Pasture feed short. Third cutting hay over 90% in. McIntosh apples over 95% picked. Other fall apples advancing. Grape harvest 95% complete. Dry onions almost completed. Celery, carrots, cabbage progressing well. Cauliflower 50% cut.

MINNESOTA: Cool, generally dry. Temperatures 9° below normal. Warmest beginning, night freezing temperatures common 6th to 8th. Extreme: 88 and 14°. Precipitation less than 0.25 in.

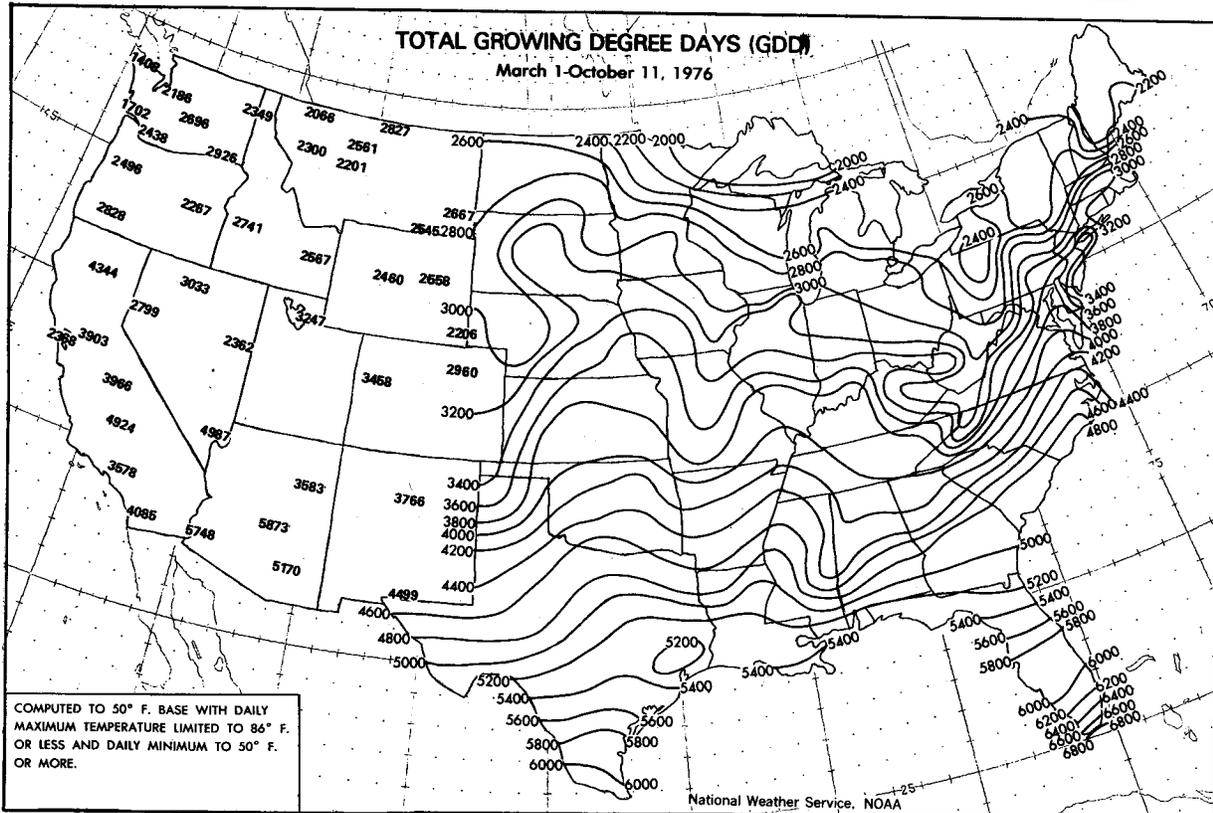
Another good week for harvest. Dry conditions permitting rapid progress, 2 to 3 weeks ahead of normal. Most soybeans, over half of corn harvested. Very short subsoil moisture causing concern for next year. Harvested: Corn for grain 52%, 1975 18%, normal 15%; soybeans 94%, 1975 77%, normal 50%; sugarbeets 30%, 1975 40%, normal 45%; potatoes 94%, 1975 85%, normal 77%; sunflowers 79%, 1975 31%, normal 40%.

MISSISSIPPI: Temperatures near normal. Extremes: 40 and 90°.

Soil moisture short south, mostly adequate elsewhere. Fieldwork: 4.4 days suitable. Cotton 90% open bolls, 85% 1975, 63% average; 10% harvested, 5% 1975, 18% average. Soybeans 86% shedding, 60% 1975; 44% mature, 30% 1975; 17% harvested, 10% 1975, 14% average. Rice 95% ripe, 85% 1975; 71% harvested, 56% 1975, 56% average. Corn 57% harvested, 39% 1975, 40% average. Sorghums 82% harvested, 60% 1975, 62% average. Hay crops 92% harvested, 86% 1975, 88% average. Peanuts 75% harvested, 74% 1975, 68% average. Sweetpotatoes 60% harvested, 58% 1975, 56% average. Winter wheat 47% planted, 46% 1975. Oats 43% planted, 46% 1975. Cotton and soybeans in fair condition. Rice and corn in fair to good condition.

MISSOURI: Temperatures 2° below normal Bootheel, 6 to 7° below normal elsewhere. Precipitation averaged 2.00 in. west central and north, 0.50 to 1.50 in. Ozarks and Bootheel.

Fieldwork: 3.7 days suitable. Soybeans 84%



mature, 72% 1975, 63% normal; 33% soybeans harvested, 30% 1975, 23% normal. Grain sorghum 91% mature, 81% normal; 40% grain sorghum harvested, 63% 1975, 37% normal. Cotton 42% bolls open, 99% 1975. Cotton harvesting 10% complete, 36% 1975, 23% normal. Condition of cotton 50% poor and 50% fair. Winter wheat seeding 29% complete, 47% 1975. Fall plowing 10% complete, 19% 1975. Condition of pastures poor. Soil moisture short.

**MONTANA:** Cool first warming to well above normal by weekend. Light scattered showers first and again latter part in southern portions. Some snow at higher elevations. Windy at times along the east slopes.

Soils dry. Winter wheat condition generally fair. Potato harvest full swing, about 65% complete. Sugarbeet harvest nearly 25% done. Livestock condition good. Nearly 45% moved from summer pastures and ranges.

**NEBRASKA:** Temperatures below normal first and above normal remainder. Frost or freezing temperatures. Rainfall first greatest in south central.

Topsoil moisture 52% short, 48% adequate. Subsoil moisture 91% short and 9% adequate. Corn for grain 25% harvested, normal 15% and 1975 25%. Sorghum 50% harvested, normal 25%, 1975 65%. Soybeans 95% mature, same as normal and 1975; harvest 55% complete, 40% normal, 60% 1975. Wheat 95% sown, same as normal and 1975. Sugarbeet harvest well underway. Alfalfa hay 75% of fourth cutting harvested. Pasture and range feed supplies short. Cattle moving to stalk fields.

**NEVADA:** Dry, mild weather, light precipitation early. Temperatures averaged 2 to 3° above normal except slightly below extreme south. Extremes: 88 and 24°.

Excellent progress potato digging, harvest full swing. Alfalfa seed harvest nearing end. Winter grain seeding continues. Fall and winter improved by past rain.

**NEW ENGLAND:** Temperatures above normal. Rain amounting to 1.50 to 3.00 in. on 8th and 9th.

Potato harvest in Aroostook County, Maine 90% complete. Sugarbeet harvest underway. Frosts closing out vegetable season.

**NEW JERSEY:** Temperatures slightly above normal. Extremes: 29 and 80°. Rainfall averaged 1.50 in. north, 1.48 in. central and 1.24 in. south. Soil moisture, in percent of field capacity 97% north, 94% central and 97% south. Soil temperature averaged 56° north and 62° south.

Soil moisture adequate. Frost hurt tender crops. Fall crop harvest active. White potato and apple harvest well advanced. Sweetpotato crop about 33% dug. Cranberry harvest at peak. Harvest of silage corn well advanced. Harvest of corn for grain increasing. Soybean combining general. Sowing of grain and cover crops continues.

**NEW MEXICO:** Frost and freezing temperatures except south central and southwestern border 8th. Rapid warming 9th and 10th but temperatures averaged 4 to 7° colder than normal.

Soil moisture short to adequate. Ranges fair, short winter feed some areas, cattle and lambs good with movement to market. Some tender

crops hurt by freezing temperatures. Cotton fair to good, 50% open; less than 5% harvested. Alfalfa good, fifth cut proceeded well in south, third and fourth cuts proceeded north. Grain sorghum fair, some damaged from cold weather, light harvest. Corn good, silage harvest neared completion, grain harvest activity began. Irrigated winter wheat good, 90% acceptable stand. Dryland wheat fair, 60% emerged and 60% acceptable stand. Irrigated winter barley good, 90% acceptable stand. Apples good, harvest 85% complete. Lettuce harvest beginning with fair to good crop.

**NEW YORK:** Temperatures 1° below normal west, 3 to 6° above normal extreme east. Extremes: 78 and 22°. Above average rainfall. Precipitation extremes 0.84 and 3.82 in. Up to 5 in. snow Adirondacks.

Good week for fieldwork. Corn silage harvest 50% done. Early grain corn harvest starting. Third cutting alfalfa 80% in. Pasture condition variable. Sweet corn maturity slowed, some frost damage. Potato harvest continuing. Tomato and cucumber harvests complete. Early grape varieties harvested, Concord harvest continues. McIntosh harvest complete. Delicious harvest half done.

**NORTH CAROLINA:** Temperatures near normal east, above normal west. Precipitation heavy in western mountains, near normal elsewhere.

Fieldwork: 4.2 days suitable. Soil moisture short to surplus, mostly adequate. Soybeans mostly fair; few fields harvested. Corn for grain 74% harvested; 62% 1975, 62% average. Burley tobacco 94% harvested, 94% 1975. Peanuts 39% dug, 60% 1975; 22% threshed, 36% 1975, 45% average. Cotton 4% harvested, 5% 1975, 18% average. Sorghum grain 54% harvested, 41% 1975. Sweetpotatoes 52% dug, 47% 1975. Apples 74% picked, 80% 1975, 68% average. Wheat 14% planted, 24% 1975, 26% average. Pastures mostly fair to good.

**NORTH DAKOTA:** Temperatures 5° below normal to normal. Extremes: 86 to 9°. Precipitation ranged 0.09 in. above normal to 0.28 in. below normal. Weekend temperatures well above normal with no precipitation.

Potato digging virtually complete. Sugarbeet lifting about 44% complete. Sunflower and corn for grain combining about 67% complete. Range and pastures poor.

**OHIO:** Seasonable temperatures. Extremes: 83 and 33°. Rainfall 2.70 to 0.55 in.

Harvest slowed by rains but remains on schedule. Killing frost would be beneficial. Harvest completed: Corn 15%, same as last year and normal; soybeans 40%, same as last year, 35% average; Corn silage 90%, 80% normal; potatoes 85%, 75% normal; sugarbeets 15%, 20% 1975, 15% normal; popcorn 25%, slightly ahead of schedule; apples 60%, grapes 70%, both on schedule. Excellent conditions for fall seeded grains. Some wheat emerged. Acreage planted: Wheat 60%, 55% 1975 and average; barley 80% same as average; rye 60%, on schedule. Moisture supplies mostly adequate. Pasture conditions fair to good. Fieldwork: 5 days favorable.

**OKLAHOMA:** Temperatures 8 to 9° below normal. Precipitation ranged from 0.17 in. Panhandle to 2.73 in. southeast. Weekend warm with no rain except showers southeast.

Showers and cool temperatures slowed harvest activity. Wheat seeding made good progress; 68%

complete, 55% year ago, 75% average. Condition mostly good, but armyworms pose threat to emerging crop. Sorghums 30% combined, 34% year ago, 21% average. Freeze 8th hurt late plantings northwest. Cotton only fair, 50% acreage with open bolls, later than 62% average. Need freeze before harvest gets underway. Peanut digging started with 75% crop now mature, average for the date. Soybean harvest under 5% complete, with some late fields being baled for hay. Average for date near 10% combined. Ranges greened some from recent rains but cool temperatures slowed growth. Cattle in good condition. Marketings active as pastures become short and wheat grazing prospects brighten.

**OREGON:** Temperatures mostly 2 to 5° above normal. Extremes: 96 and 29° west; low 80's, low 20's east. Precipitation confined to first week and amounts minor.

Land preparation and fall seeding continued. Haying mostly over. Corn silage harvest continues. Alfalfa and red clover seed harvests nearly complete. Anjou pears mostly picked. Golden Delicious and Newtown apple harvests underway. Sweet corn in later stages of harvest. Potato harvest in various stages of completion. Onion harvest to finish soon. Ranges and pastures in good condition. Livestock in good flesh.

**PENNSYLVANIA:** Sunny with seasonable temperatures beginning, increasing cloudiness 6th and 7th with rain 8th and 9th, clearing 10th. Temperature several degrees below normal west and north and 1 to 4° above normal south central and east. Extremes: 78 and 23°. Intense storm 9th produced rainfall 4.00 to 6.00 in. over Susquehanna Valley decreasing to near 1.00 in. northwest and extreme southeast.

Fieldwork: 4.0 days suitable. Soil moisture surplus to adequate. Activities: Plowing; sowing wheat and barley; filling silos; making hay; digging potatoes; harvest of apples, tomatoes and grapes. Potatoes 81% dug, last year 70%. Ensilage corn 73% harvested, equal to 1975. Corn 5% dough, 42% dent, 48% mature, 5% harvested. Fall plowing 73%, last year 62%. Barley sown 85%, wheat sown 64%, both slightly ahead of 1975. Quality of hay fair to poor. Feed from pastures average. Tomato harvest virtually complete, apple harvest full swing, grape harvest underway.

**PUERTO RICO:** Rainfall 1.64 in. or 0.19 in. below normal. Temperatures about 81° on coasts and 76° interior. Extremes: 95 and 61°.

**SOUTH CAROLINA:** Temperatures above normal. Heavy rains late week northeast and central, 8.00 to 9.00 in. northwest. Flooding along Broad, Congaree Rivers.

Rains slowed farm activities. Corn, cotton, peanut, fall hay, fall vegetable harvest continues. Planting small grains, winter grazing. Corn harvested 86% 1976, 77% 1975, 68% average. Fall hay harvested 77% 1976, 62% 1975, 77% average. Cotton harvested 8% 1976, 12% 1975, 17% average. Cotton open bolls 80% 1976, 76% 1975, 82% average. Soybean leaves turning 57% 1976, 52% 1975, 58% average. Soybeans shedding leaves 27% 1976, 40% 1975, 29% average.

**SOUTH DAKOTA:** Light rains up to 0.60 in. southwest. Moisture deficiency for growing season in east ranges from 6.50 in. to 13.00 in. Temperatures 2 to 10° below normal. Extremes: 87 and 14°. Nighttime lows below freezing.

Topsoil moisture short. Excellent drying and harvesting weather, causing record harvest pace. Corn for grain, 62% harvested, 1975 26%, normal 29%. Fastest corn harvest on record. Grain sorghum harvest pace also a record 77% complete, 1975 68%, normal 47%. Soybean harvest 90% complete, 1975 52%, normal 79%. Sunflower and potato harvest far along, alfalfa seed harvest past halfway point. Fall sown grains vary in condition. Many fields spotted, some seedlings never germinated. Hay shipments into State to supplement livestock feed. Haystacks moved for winter feeding. Above average cattle sales continue northwest.

**TENNESSEE:** Widespread rain ranged from less than 0.75 in. west to greater than 2.00 in. east. Temperatures cooler than normal with lows in 50's and highs in 60's.

Warm, dry weather needed for corn, cotton and soybean harvest. Fieldwork: 3.1 days suitable. Pastures improved. Soil moisture adequate. Corn 30% harvested, 35% last year and average. Corn 90% mature, 87% last year, 90% average. Cotton 40% open boll stage, 55% last year, 65% average. Cotton 5% harvested, 15% last year, 20% average. Soybeans 20% mature, 20% last year, 30% average. Soybeans 5% harvested, same as last year and average. Burley tobacco 25% stripped, 20% last year, 15% average. Fall plowing 70% completed, 70% last year, 75% average. Wheat 45% seeded, 40% last year, 45% average. Oats 68% seeded, 68% last year, 73% average. Barley 65% seeded, 65% last year, 70% average.

**TEXAS:** Temperatures 9 to 14° below normal. Rainfall 0.50 to 3.00 in. above normal over east. Temperatures mid-50's Panhandle, northeast, near 60° north, far west, mid-60's elsewhere. Below normal rainfall northern Panhandle, far west.

Early freeze caused damage in Panhandle. Record lows slowed crop development. Fieldwork many areas delayed by rain, wet fields. Cotton on High Plains, Trans-Pecos suffered freeze damage 8th. Harvest 12% complete, 24% 1975, 19% average. Sorghum harvest on plains active. Frost hurt late fields. Harvest 70% complete, 77% 1975, average 64%. Corn harvest slowed by rain, now 52% complete, 79% 1975, and average 74%. Peanut harvest slowed by rain, sprouting in some areas. Harvest 44%, 69% 1975, 62% average. Soybean harvest began as weather permitted reaching 8% complete, 11% 1975 and 10% average. Sugarbeet harvest began on northern High Plains. Hail damaged some fields. Wheat planting progressed slowly due to wet fields; 58% planted compared with 68% in 1975, average of 79%. Early planted fields up to good stands.

Planting spring onions. Citrus harvest continues. Cool, wet weather slowed harvest of various crops. Freeze damaged some crops in northern areas.

Ranges generally good condition. Cool slowed growth. Grazing wheat, oat pastures in north begun. Cattle generally good.

**UTAH:** Dry, mild weather persisted. No rainfall. Temperatures ranged from near normal to 8° below.

Rains delayed harvest early week. Sugarbeet harvest in early stages, potato and dry onion harvest underway, silage corn 75 to 80% harvested, 3d crop alfalfa 80% harvested, apples 40 to 50% harvested. Fall wheat acreage plantings for 1977 80% completed. Fall and winter range feed 70% of normal.

**VIRGINIA:** Temperatures above normal with average high of 75° and low of 50°. Extremes: 85 and 43°. Cloudy and very wet. Rainfall averaged 2.1 in. with maximum of 5.38 in.

Fieldwork: 2.6 days suitable. Topsoil moisture adequate. Two tornados 9th. Harvest of fall crops and seeding of small grains hampered by wet fields. Corn for grain 40% harvested. Corn silage harvest tapering off. Soybean harvest 11% complete. Peanut digging 12% complete, 4% combined. Flue-cured tobacco marketing active. Pastures in good condition. Small grain seeding progress: Wheat 21%, barley 37%, oats 37%.

**WASHINGTON:** West: Temperatures near normal northeast with precipitation 0.30 in. below normal. Temperatures in west 3° above normal; precipitation 1.40 in. below.

Harvest of potatoes, silage, and sweet corn continue. Fall pasture seeding underway. Good pasture growth.

East: Temperatures 1° subnormal northeast section to 1° above normal central basin; near normal elsewhere. Precipitation 0.10 in. below normal.

Apple maturity 10 days late; harvest continues. Grape picking, potato and beet digging, dry bean harvest progressing. Sweet corn moving to processors. Fall grain seeding continues; some wait for rain. Barley, winter wheat from 40 to 75% complete. Range, pasture available but drying out. Winter feed in good supply.

**WEST VIRGINIA:** Temperatures normal. Precipitation above normal, averaged 2.00 in. Fieldwork: 2.7 days suitable. Filling silos, care and marketing of livestock and clipping pasture most active. Soil moisture adequate to surplus. Potatoes 95% dug, 8% ahead of 1975 and 6% above average. Second haying 96% complete, 3% above average. Third haying 80%. Pasture fair to good condition.

**WISCONSIN:** Temperatures 6° below normal. Warm beginning but much cooler as cold front passed 4th and 5th. Highs in 70's 4th, 50's remainder until 60's 10th. Lows 20's and 30's except some teens north. Rainfall 4th to 5th; amounts ranged from 0.25 in. to over 1.00 in.

Soil moisture short. Rainfall not sufficient to improve moisture conditions. Fall plowing 12% done, 1975 and normal 20%. Ground too hard for good plowing. Corn for grain 20% harvested, 1975 15%, normal 8%. Moisture content low. Corn yields variable, most below 1975 and normal. Stalks being chopped for feed and bedding. Soybeans 25% combined, 1975 25%, normal 5%. Moisture content of beans low, yields down but better in southeast. Rain helped germination of winter wheat, early stands look good southeast. New seedlings need more moisture. Fall pastures poor, cows on full winter feed. Potato harvest nearing completion. Cabbage, beets, and carrots being harvested. Apple and cranberry harvests well along.

**WYOMING:** Temperatures below normal. Precipitation above normal with few exceptions.

Soil moisture short. Major activities: Row crop harvest and livestock movement. Dry beans 81% combined. Potatoes 64% harvested. Sugarbeets 31% out of ground. Grain corn 83% mature, 20% picked. Winter wheat prospects fair to good, 87% of plantings emerged. Stock water supplies adequate.

## 1976 COTTON CROP TOPS 1975

The total cotton crop is expected to top the 1975 production by 23%, according to the Crop Reporting Board's October summary.

The total wheat crop is anticipated at 2,127 million bushels, slightly less than last year's record crop but 18% better than in 1974. However, production of spring wheat, excluding durum, may surpass the 1975 crop by 25%.

The 1976 corn crop fell 0.5% during the past month, but is forecast to gain 2% over the 1975 production. The average yield, nationally, is put at 82.7 bushels per acre, down 3.5 bushels from last year.

Down 12% from the 1975 crop, rice is forecast at 4,604 pounds per acre.

Soybean prospects decreased by 18% from the 1975 crop but remained 3% above the 1974 total. Combined production of oilseed crops--soybeans, cottonseed, peanuts, flaxseed--is down by 15%, at only 39 million metric tons.

A rundown on other crops: sugarbeet output is estimated at 3% less than last year; the orange crop is 12% over last season; the tobacco harvest may be 6% less; the projection for hay is virtually unchanged; and the forecast for fall potatoes shows a crop 9% above a year ago.

September weather contributed to the overall decline of crop productions, as rain plagued some areas and drought hit others.

## World Weather and Crop Update

**HIGHLIGHTS.** Rain and cold impeded cotton harvest in Soviet Central Asia. Spring rains aided crops in Argentina and Australia. Shower activity continued in Sri Lanka, extreme southern India, Java, Colombia and Central America.

**USSR.** Periods of rain and areas of frost ended several weeks of favorable weather in the cotton region of Soviet Central Asia. Although typical, warmer and drier weather would have favored harvesting and permitted additional cotton to mature. Showers and fair weather alternated in most of the USSR and extended the fine start for winter grains. Late maturing crops would have been better off with no rain, especially disease plagued sunflowers.

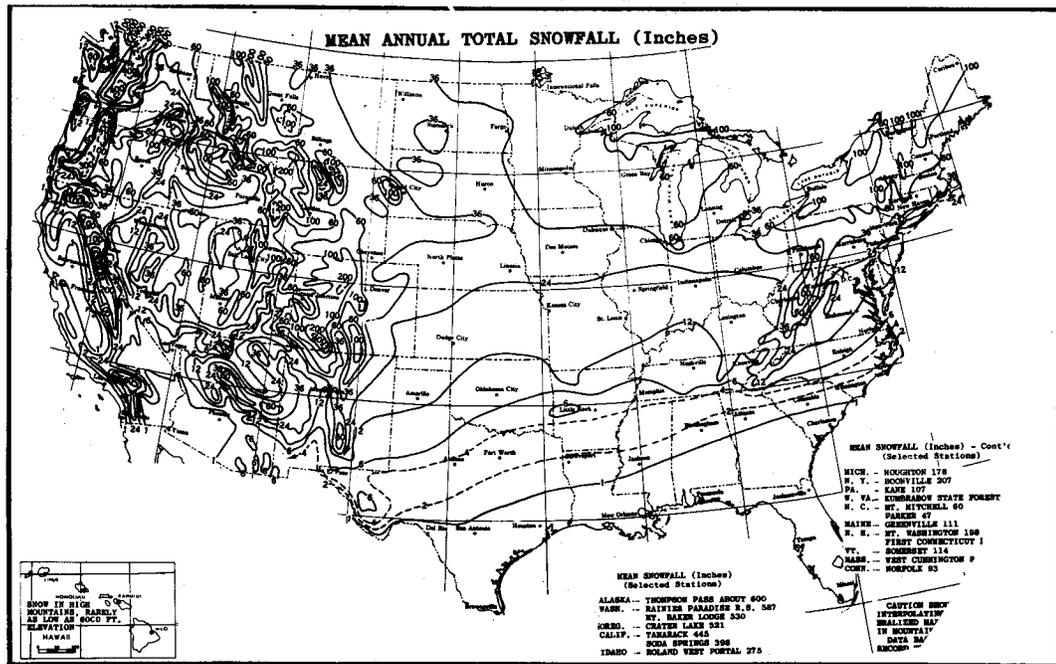
**EUROPE.** Although good rains provided encouragement to Iberian wheat growers, they harassed the grape and dried fruit producers. Wet spells delayed field activities in the Nordic region, but considerable fair weather favored harvest, planting, and tilling elsewhere in Europe.

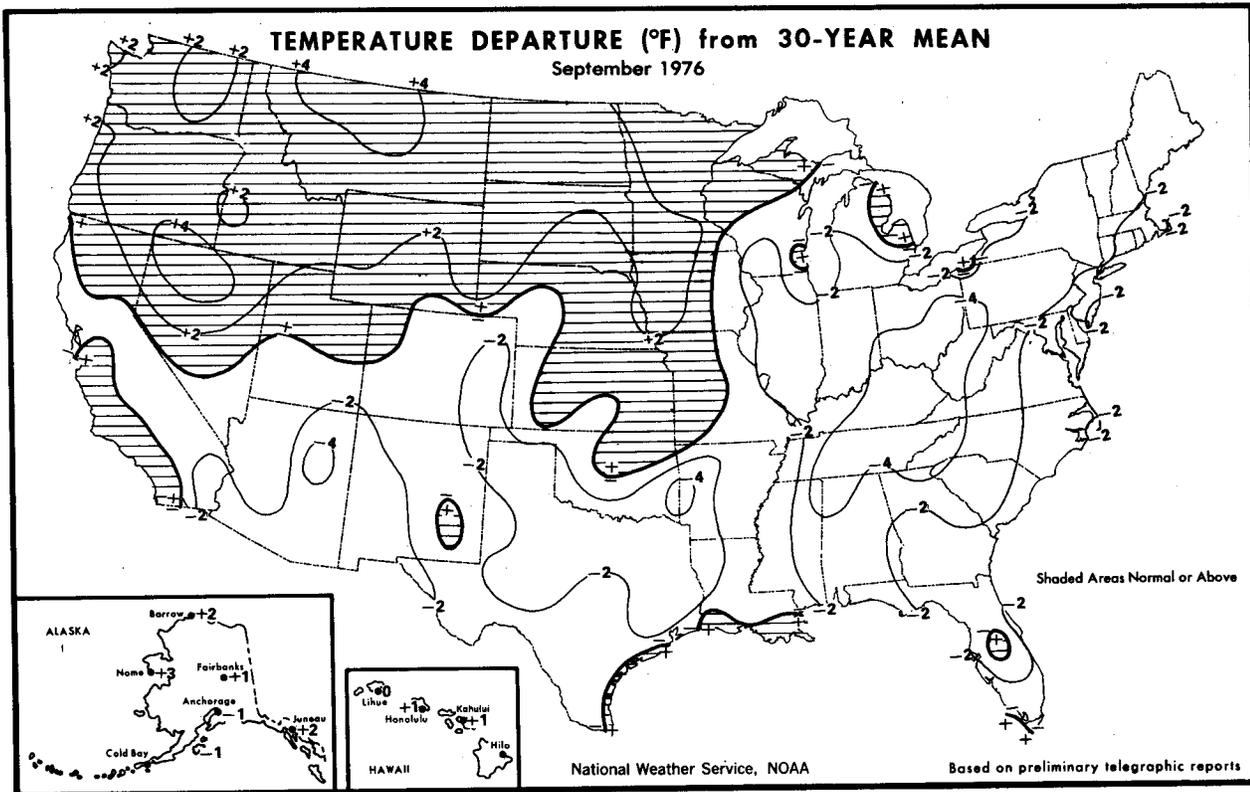
**AMERICA.** Timely rains in Argentina fostered favorable development of winter wheat and a good

start for springsown crops. Rains continued to ease crop stress in Colombia, much of Central America, and parts of northeastern Brazil. Hurricane Madeline slashed at Mexico's states of Guerrero and Michoacan and left a wake of damage. Favorable moisture in the hard red winter wheat area of the U.S. contrasted with powder dry conditions a year ago. Relatively dry weather aided wrap-up of harvesting in the Canadian Prairies, but precipitation is needed for range-land and pastures, and to facilitate fall tillage.

**ASIA.** Rain and showers continued to ease drought in Australia, Java, Sri Lanka, and southern India. They provided hope for establishing newly-sown crops and for improved forage. Chilly weather dominated the Peoples Republic of China (PRC) in the north and northeast along with light rain at times, heaviest in western portions. Light rain was common in the south but much of the PRC's middle latitudes remained rather dry.

**AFRICA-MIDDLE EAST.** Fair weather favored cotton and open-stored grain in Syria and Iran. Showers improved soil moisture for spring planting in South Africa.





### September Weather Summary

**HIGHLIGHTS:** The drought in the northern Plains continues and spread eastward to the northern and central Great Lakes area, and southward into Missouri. Although southeastern South Dakota, southwestern Minnesota and eastern Nebraska listed near normal rain for the month, the warm, dry area felt only limited relief in a few places. Parts of Wisconsin had only one fourth their normal amount of rain, while Missouri received only one third of normal. Unseasonable rain in California helped replenish that area's water supply. Although the month was warmer than normal in the northern Plains, a cold outbreak in the last week brought frost to some places.

Warm moist air from the Gulf of Mexico collided with cooler air in the southern States to produce some heavy rain during the first week of the month. Over 2 inches fell in a large central Texas area, while small areas around Houston and between Wichita Falls and Fort Worth recorded over 5 inches of rain. Mississippi, Alabama, and most of Florida also recorded more than 2 inches.

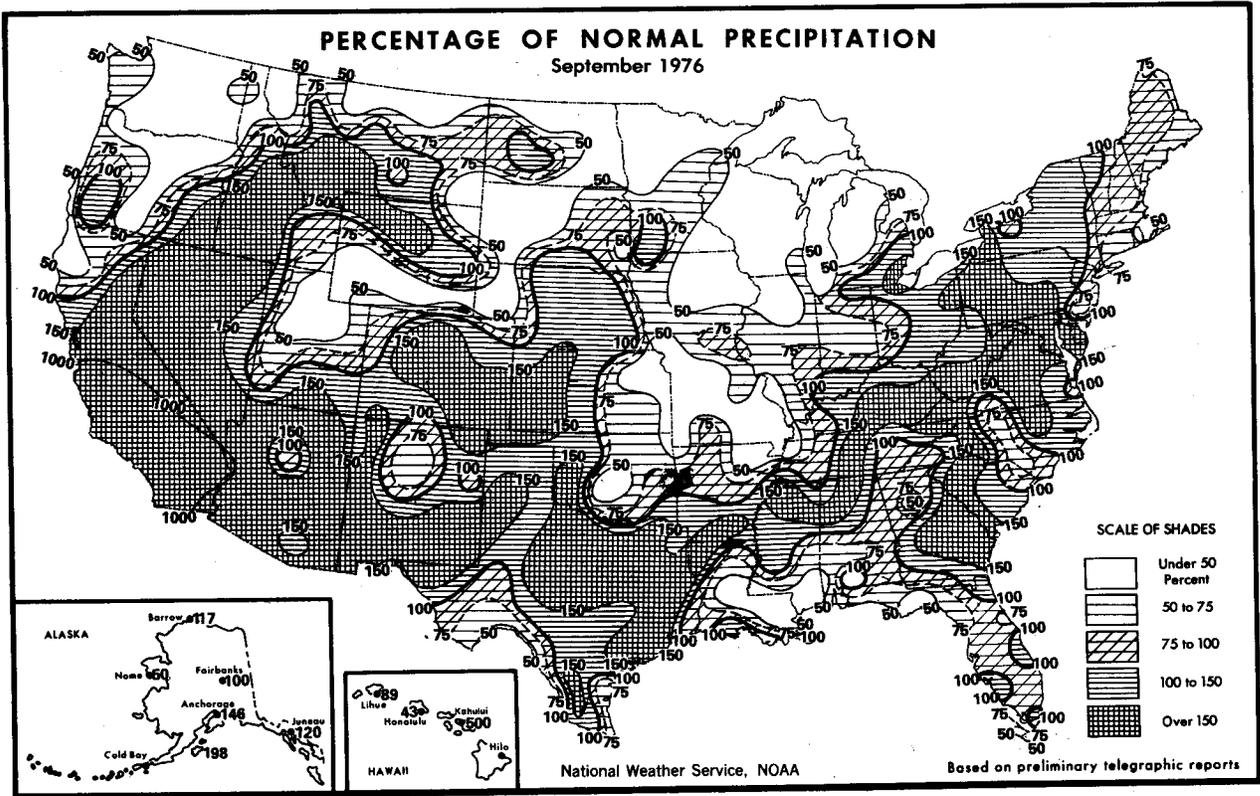
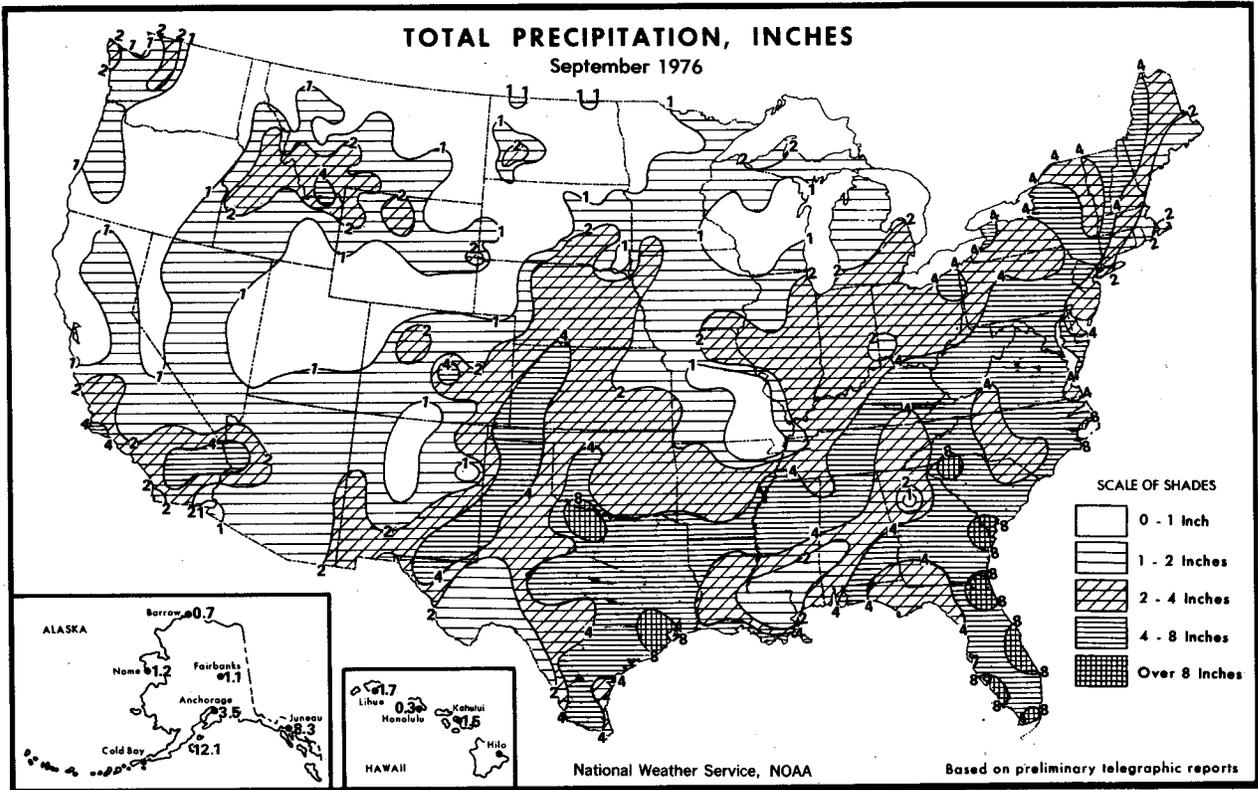
Thunderstorm activity reached from the Texas coast all the way to Nebraska where golf ball sized hail fell at Axtell. More severe weather occurred from the mid-South into the Ohio River Valley. Generally cooler than normal temperatures prevailed in the South and East, while warmer readings persisted in the West. From central Tennessee to New England, the temperature averaged as much as 6° below normal. New England central Pennsylvania reported frost. In the West, some readings averaged as much as 9° above normal. Approaching mid-month, the warmest area shifted to the northern Plains. The hot days, added to the problems created by the severe to

extreme drought. The rest of the Nation, except for the West Coast, recorded below normal temperatures.

Nearly all sections received some rain during the next week. The largest rainfall occurred over southern California, when tropical storm Kathleen moved northward over Baja California. Over 2 inches of rain were common in southern California. Some locations measured more than 5 inches. Although the excessive and unseasonable rain caused some problems, it did help replenish the low water supplies. Elsewhere, thundershowers extended from Texas into eastern South Dakota where the week's total rain came to nearly 1 inch.

At mid-month, precipitation concentrated over northeastern Texas and along the East Coast. Thunderstorm activity deluged northeast Texas and caused extensive flooding. The downpours extended into southeastern Oklahoma with 2 inch totals for the week. A low pressure system brought heavy rain and high winds to the southeastern sector of the Nation early in the week. The system then moved northward and provided much needed rain to most of the eastern section of the Nation. Temperatures warmed over most of the U.S., except in the Southeast and the Southwest where below normal temperatures prevailed.

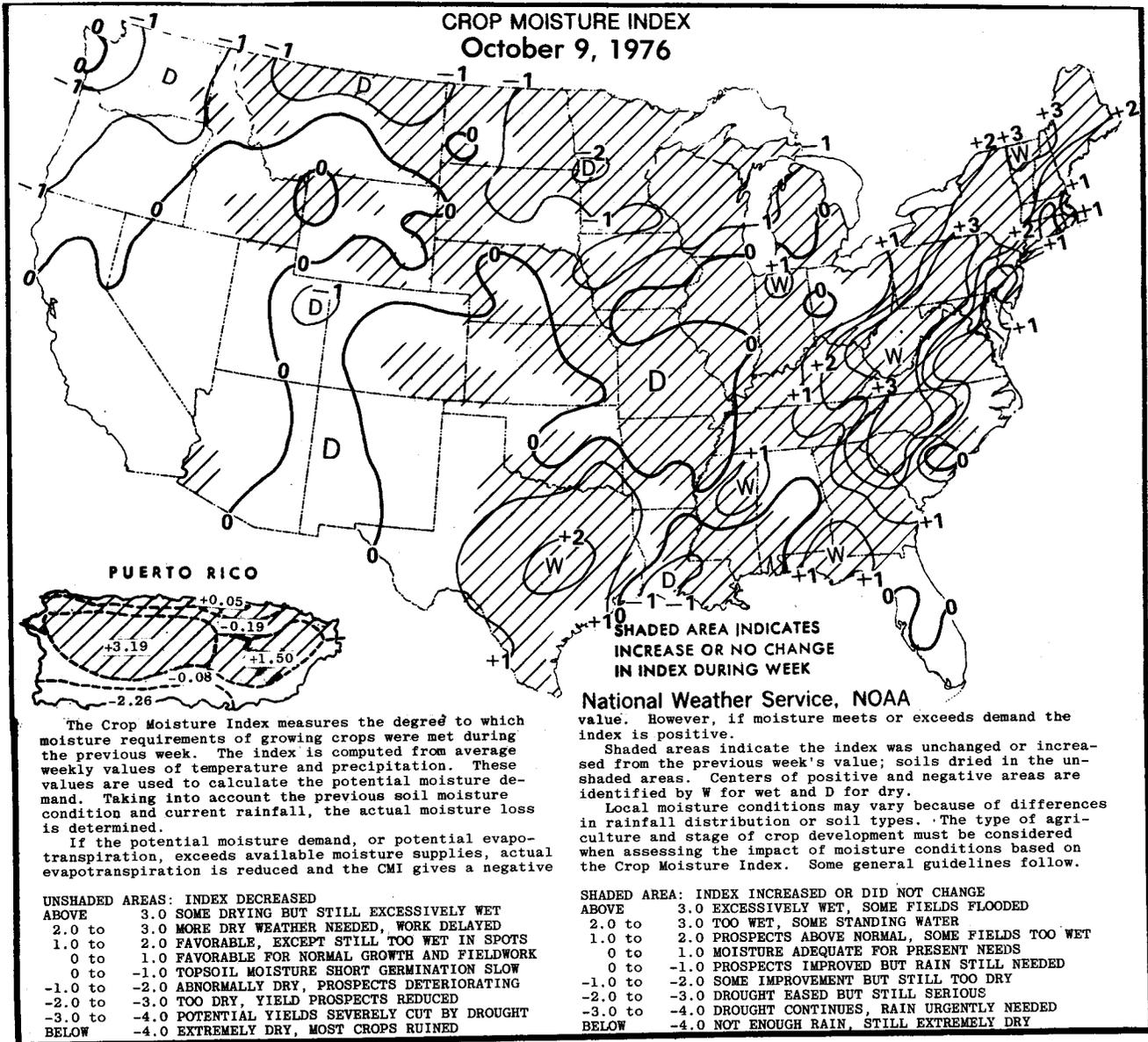
Precipitation was again widespread over most of the country during the last ten days. Showers reached northward into eastern South Dakota but did little to relieve the drought. Southern Iowa and northern Missouri received an accumulation of over 2 inches. Over 5 inches of rain deluged the Houston, Tex. area, for the second time during the month. Cool air moved southward through the plains and spread eastward. Frost formed over South Dakota.



Temperature and Precipitation Data for September 1976

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 . . .	72	-1	2	+1.3	La.Baton Rouge . . .	77	-1	1.5	-2.3	Youngstown . . .	60	-3	5.2	+2.6
Mobile . . .	76	-1	2	-3.1	Lake Charles . . .	78	0	3.3	- .8	OKLA.Okla. City . . .	73	0	1.5	-2.1
Montgomery . . .	74	-1	2	-1.6	New Orleans . . .	78	0	1.6	-4.0	Tulsa . . .	73	0	2.6	-1.5
ALASKA.Anchorage . . .	47	-1	3.5	+1.1	Shreveport . . .	74	-3	6.3	+3.2	OREG.Astoria . . .	61	+3	1.6	-1.2
Barrow . . .	32	+2	.7	+ .1	MAINE.Caribou . . .	52	-2	2.5	-1.0	Burns . . .	60	+2	.5	0
Fairbanks . . .	45	+1	1.1	0	Portland . . .	57	-2	1.9	-1.2	Medford . . .	65	+1	.9	+ .3
Juneau . . .	51	+2	8.3	+1.4	MD.Baltimore . . .	68	-1	6.9	+3.8	Pendleton . . .	67	+3	.2	- .4
Kodiak . . .	49	+1	12.1	+6.0	MASS.Boston . . .	65	0	1.6	-1.6	Portland . . .	64	+2	.7	- .9
Nome . . .	45	+3	1.2	-1.2	Chatham . . .	---	---	---	---	Salem . . .	62	0	1.1	- .4
ARIZ.Flagstaff . . .	57	-1	1.2	- .5	MICH.Alpena . . .	57	+1	1.3	-2.0	PA.Allentown . . .	63	-2	4.6	+1.0
Phoenix . . .	83	-1	1.7	+1.0	Detroit . . .	62	-2	3.7	+1.5	Erie . . .	61	0	3.9	+ .3
Tucson . . .	78	-2	1.7	+ .3	Flint . . .	61	0	2.7	+ .2	Harrisburg . . .	65	-2	4.7	+2.0
Winslow . . .	65	-5	1.1	+ .2	Grand Rapids . . .	60	-2	1.2	-2.1	Philadelphia . . .	67	-1	2.5	- .5
Yuma . . .	83	-4	.3	+ .1	Houghton Lake . . .	56	-1	1.0	-2.2	Pittsburgh . . .	60	-4	3.3	+ .8
ARK.Fort Smith . . .	70	-4	2.7	- .6	Lansing . . .	59	-3	1.7	- .9	Scranton . . .	61	-2	3.8	+ .9
Little Rock . . .	72	-1	3.4	- .2	Marquette . . .	57	0	1.3	-2.2	R.I.Providence . . .	62	-1	1.6	-1.7
CALIF.Bakersfield . . .	78	+1	1.1	+1.0	Muskegon . . .	58	-4	1.1	-2.3	S.C.Charleston . . .	74	-1	6.0	+ .8
Eureka . . .	56	-1	T	- .7	S. Ste. Marie . . .	54	-1	1.7	-2.2	Columbia . . .	72	-3	5.7	+1.4
Fresno . . .	72	-2	1.2	+1.1	MINN.Duluth . . .	55	+1	1.8	-1.3	Greenville . . .	69	+3	8.3	+4.5
Los Angeles . . .	73	0	2.8	+2.6	Internatl Falls . . .	54	+1	1.2	-2.1	S.D.Aberdeen . . .	62	+3	.9	- .8
Red Bluff . . .	77	+2	1.0	+ .7	Minneapolis . . .	62	+2	1.4	-1.3	Huron . . .	62	+1	1.4	- .4
San Diego . . .	74	+4	1.0	+ .9	Rochester . . .	59	0	.8	-2.3	Rapid City . . .	63	+2	.3	- .9
San Francisco . . .	63	-1	.3	+ .1	St. Cloud . . .	58	0	1.4	-1.3	Sioux Falls . . .	63	+2	.8	-2.1
Stockton . . .	74	+2	.4	+ .2	MISS.Jackson . . .	75	-1	3.8	+ .8	TENN.Chattanooga . . .	69	-3	3.4	- .3
COLO.Denver . . .	62	-1	1.9	+ .8	Meridian . . .	72	-3	1.9	-1.4	Knoxville . . .	68	-4	2.9	+ .1
Grand Junction . . .	67	0	.7	- .1	MO.Columbia . . .	68	0	.5	-3.9	Memphis . . .	73	-1	5.4	+1.4
Pueblo . . .	64	-2	2.7	+1.9	Kansas City . . .	69	0	1.4	-2.8	Nashville . . .	67	-5	5.1	+2.0
CONN.Bridgeport . . .	65	-2	1.5	-1.4	St. Louis . . .	68	-2	.9	-2.0	TEX.Abilene . . .	74	-2	4.0	+1.7
Hartford . . .	62	-1	2.6	-1.0	Springfield . . .	69	0	1.9	-2.2	Amarillo . . .	67	-3	4.3	+2.4
D.C.Washington . . .	70	-1	7.2	+4.1	MONT.Billings . . .	62	+3	1.2	- .2	Austin . . .	78	-1	3.8	+ .1
FLA.Apalachicola . . .	77	-2	4.4	-5.4	Glasgow . . .	60	+3	.4	- .5	Beaumont . . .	78	-1	4.5	- .8
Daytona Beach . . .	78	-2	5.1	-2.0	Great Falls . . .	61	+4	.6	- .6	Brownsville . . .	82	0	2.9	-2.3
Ft. Myers . . .	79	-3	8.8	+ .1	Havre . . .	61	+4	.1	-1.0	Corpus Christi . . .	81	0	2.5	-2.4
Jacksonville . . .	77	-1	8.6	+ .8	Helena . . .	58	+2	1.8	+ .8	Dallas . . .	---	---	---	---
Key West . . .	84	+1	3.4	-3.9	Kalispell . . .	57	+4	.4	- .7	Del Rio . . .	79	-1	1.1	-2.0
Lakeland . . .	80	0	5.7	- .4	Miles City . . .	63	+3	1.1	- .1	El Paso . . .	71	-3	1.7	+ .5
Miami . . .	80	-2	7.8	- .9	Missoula . . .	57	+2	.6	- .5	Fort Worth . . .	76	-2	5.0	+1.8
Orlando . . .	81	+1	5.9	-1.3	NEBR.Grand Island . . .	65	+1	2.4	- .1	Galveston . . .	80	0	8.3	+2.7
Tallahassee . . .	77	-1	2.8	-3.8	Lincoln . . .	67	+1	3.1	+ .2	Houston . . .	76	-3	11.4	+6.7
Tampa . . .	79	-2	6.0	- .4	Norfolk . . .	64	+1	2.6	+ .2	Lubbock . . .	70	-1	3.3	+1.1
W.Palm Beach . . .	80	-2	7.7	-2.2	N.Platte . . .	60	-2	2.0	0	Midland . . .	72	-3	1.3	- .2
GA.Atlanta . . .	70	-2	.7	-2.5	Omaha . . .	67	+3	1.6	-1.6	San Angelo . . .	74	-3	4.7	+2.0
Augusta . . .	70	-4	6.1	+2.8	Valentine . . .	62	+1	2.2	+ .7	San Antonio . . .	78	-1	3.8	+ .1
Macon . . .	75	-1	6.7	+3.6	NEV.Ely . . .	57	0	.7	+ .1	Victoria . . .	79	-1	7.6	+3.0
Savannah . . .	75	-1	10.1	+4.5	Las Vegas . . .	79	-1	1.1	+ .8	Waco . . .	78	-1	5.7	+2.5
HAWAII.Hilo . . .	---	---	---	---	Reno . . .	62	+2	1.1	+ .9	Wichita Falls . . .	74	-3	8.1	+5.1
Honolulu . . .	81	+1	.3	- .4	Winnemucca . . .	64	+5	1.5	+1.2	UTAH.Blanding . . .	61	-2	1.3	+ .3
Kahului . . .	79	+1	1.5	+1.2	N.H.Concord . . .	57	-3	2.7	- .4	Salt Lake City . . .	66	+1	2.2	- .5
Lihue . . .	79	0	1.7	- .2	N.J.Atlantic City . . .	65	-2	3.1	+ .1	VT.Burlington . . .	57	-2	3.8	+ .7
IDAHO.Boise . . .	64	+1	2.1	+1.7	Trenton . . .	66	-1	2.6	- .6	VA.Lynchburg . . .	66	-2	5.1	+1.8
Lewiston . . .	69	+6	.3	- .6	N.MEX.Albuquerque . . .	68	-2	.5	- .3	Norfolk . . .	71	-1	3.5	- .7
Pocatello . . .	61	+2	.5	- .1	Roswell . . .	70	0	2.3	+ .8	Richmond . . .	69	-1	4.8	+1.2
ILL.Cairo . . .	71	-1	1.2	-2.3	N.Y.Albany . . .	59	-3	2.6	- .5	Roanoke . . .	65	-3	3.2	- .2
Chicago . . .	65	-1	2.2	- .8	Binghamton . . .	57	-3	3.9	+ .9	WASH.Colville . . .	60	+1	.1	- .7
Moline . . .	63	-2	1.9	-1.9	Buffalo . . .	60	-2	5.4	+2.1	Omak . . .	63	+1	.1	- .4
Peoria . . .	63	-3	1.8	-1.8	New York . . .	68	0	2.8	- .4	Quillayute . . .	58	+1	2.4	-2.8
Rockford . . .	60	-3	1.4	-2.6	Rochester . . .	61	-1	2.1	- .3	Seattle-Tacoma . . .	63	+3	1.3	- .7
Springfield . . .	65	-2	2.2	-1.1	Syracuse . . .	60	-3	3.3	+ .6	Spokane . . .	63	+3	.5	- .3
IND.Evansville . . .	67	-2	3.3	+ .5	N.C.Asheville . . .	63	-4	3.5	- .1	Walla Walla . . .	68	+2	.1	- .8
Ft. Wayne . . .	62	-3	2.2	- .4	Charlotte . . .	70	-2	5.6	+2.1	Yakima . . .	64	+3	.1	- .2
Indianapolis . . .	64	-2	2.0	- .9	Greensboro . . .	67	-3	2.4	-1.2	W.Va.Beckley . . .	60	-3	5.5	+2.1
South Bend . . .	61	-3	3.3	+ .2	Hatteras . . .	72	-2	8.6	+1.8	Charleston . . .	63	-5	5.4	+2.5
IOWA.Burlington . . .	64	-1	2.6	-1.1	Raleigh . . .	70	-1	6.0	+2.2	Huntington . . .	63	-5	4.3	+1.4
Des Moines . . .	66	+2	1.0	-2.1	Wilmington . . .	74	-1	4.8	- .8	Parkersburg . . .	63	-4	2.8	0
Dubuque . . .	60	-2	.9	-3.7	N.DAK.Bismarck . . .	60	+2	1.6	+ .3	WIS.Green Bay . . .	58	-1	.3	-2.9
Sioux City . . .	64	+1	2.0	- .8	Fargo . . .	60	+2	.6	-1.2	La Crosse . . .	61	-1	.5	-2.9
KANS.Concordia . . .	69	+1	2.8	- .3	Williston . . .	59	+2	1.0	- .2	Madison . . .	58	-2	.5	-2.9
Dodge City . . .	70	+1	3.0	+1.3	OHIO.Akron-Canton . . .	60	-4	3.9	+1.3	Milwaukee . . .	63	+2	1.7	-1.3
Goodland . . .	63	-1	2.0	+ .6	Cincinnati . . .	64	-4	2.0	- .6	WYO.Casper . . .	59	0	1.2	+ .3
Topeka . . .	69	+1	1.1	-2.2	Cleveland . . .	61	-3	3.7	+ .9	Cheyenne . . .	58	0	.8	- .2
Wichita . . .	70	-1	2.0	-1.7	Columbus . . .	62	-3	2.5	+ .1	Lander . . .	60	+2	.5	- .6
KY.Lexington . . .	64	-5	4.2	+1.5	Dayton . . .	62	-4	1.7	- .6	Sheridan . . .	60	+2	1.6	+ .3
Louisville . . .	67	-2	3.1	+ .2	Toledo . . .	61	-3	3.7	+1.3	P.R.San Juan . . .	83	+2	11.4	+5.4

Based on 1941-70 Normals





**FIRST CLASS MAIL**

**HARVESTING PROGRESS**

Percent of Acreage Harvested  
 (As of October 10)

CORN			
	1976	1975	Avg.
Ga.	67	49	42
Ill.	18	32	19
Ind.	10	15	15
Iowa	29	22	15
Kans.	35	45	25
Ky.	26	1/	1/
Mich.	10	1/	1/
Minn.	52	18	15
Mo.	54	60	34
Nebr.	25	25	15
N. C.	74	62	62
Ohio	15	15	15
S. Dak.	62	26	29
Wis.	20	15	8

U. S. 32 30 22  
 These 14 States produced 89%  
 of the Nation's corn in 1975.

SOYBEANS			
	1976	1975	Avg.
Ala.	1/	1/	1/
Ark.	7	8	1/
Ga.	1	5	4
Ill.	85	78	51
Ind.	45	40	25
Iowa	82	72	42
Kans.	20	10	25
Ky.	19	1/	15
La.	36	20	1/
Mich.	25	1/	1/
Minn.	94	77	50
Miss.	17	10	14
Mo.	33	30	23
Nebr.	55	60	40
N. C.	1/	1/	1/
Ohio	40	40	1/
S. C.	1/	1/	1/
Tenn.	5	5	5

U. S. 48 44 33  
 These 18 States produced 96%  
 of the Nation's soybeans in  
 1975.

SORGHUM			
	1976	1975	Avg.
Kans.	45	30	20
Mo.	40	63	37
Nebr.	50	65	25
Okla.	30	34	21
S. Dak.	77	68	47
Tex.	70	77	64
6-States	57	59	42

These 6 States produced 90% of the  
 Nation's sorghum grain in 1975.

1/Data not available.

**PLANTING PROGRESS**

Percent of Acreage Planted  
 (As of October 10)

WINTER WHEAT			
	1976	1975	Avg.
Colo.	95	95	94
Ill.	50	63	56
Kans.	70	75	80
Mont.	100	100	100
Nebr.	95	95	95
Ohio	60	55	55
Okla.	68	55	75
S. Dak.	100	100	100
Tex.	58	68	79
U. S.	69	68	77