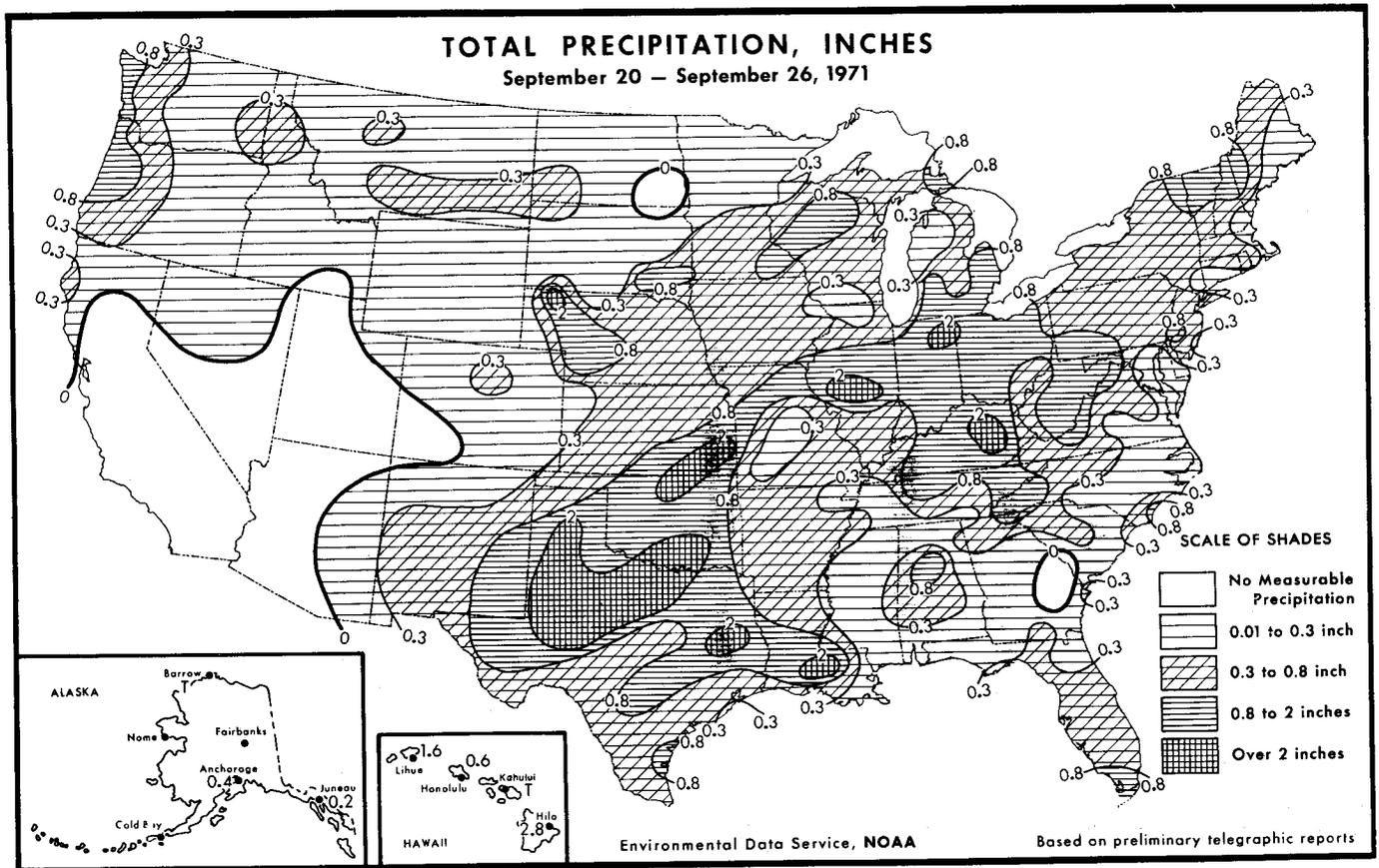


# Weekly Weather & Crop Bulletin

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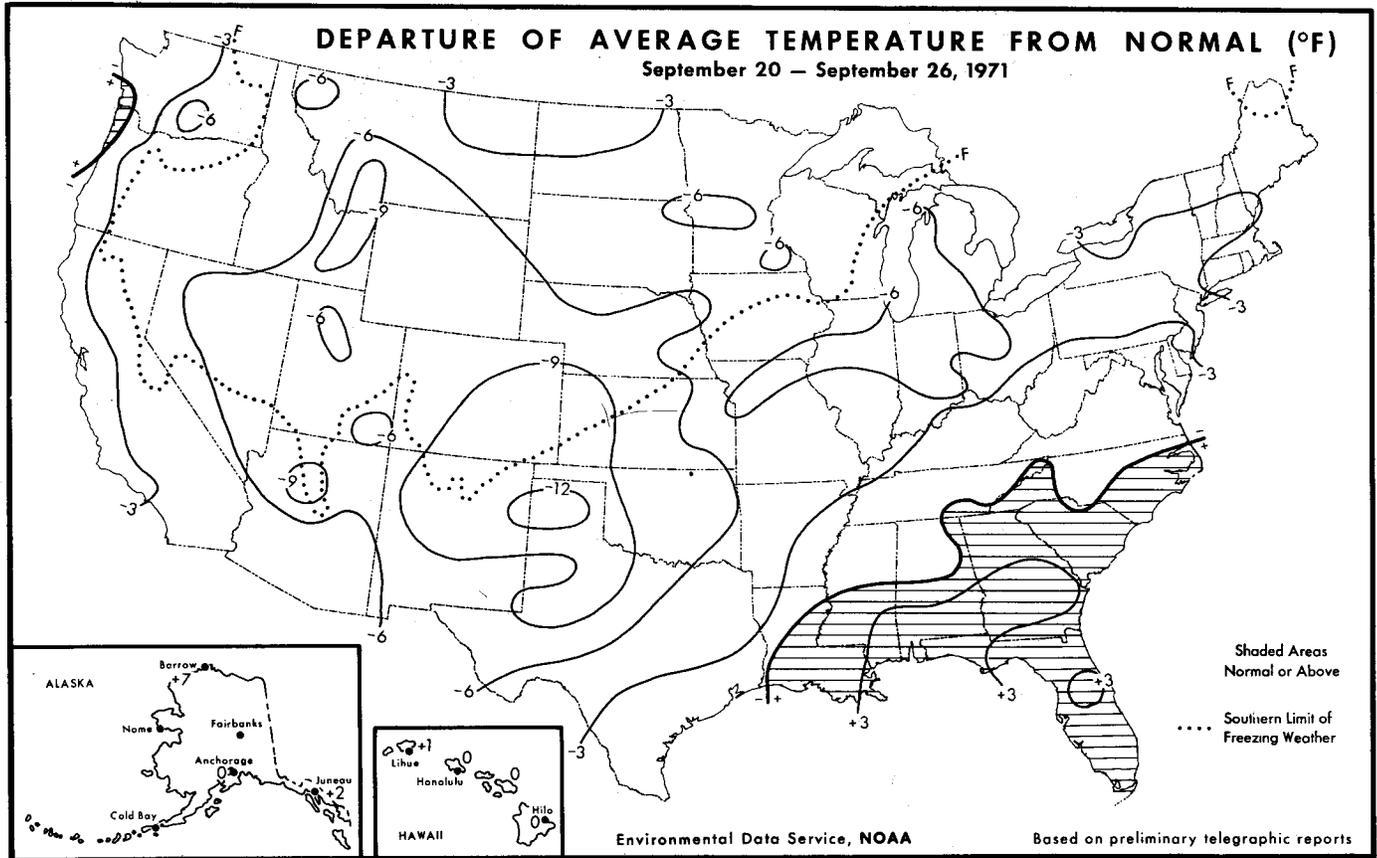
## NATIONAL WEATHER SUMMARY

**HIGHLIGHTS:** Cool autumn temperatures prevailed over most of the Nation. The heaviest rains fell in northern Texas.

**PRECIPITATION:** Light snow fell over the northern Rocky Mountains and northern Great Plains Monday, September 20. Four inches fell at Harrison in the Nebraska Panhandle Tuesday morning. The snow slicked the passes across the Rockies and the gusty winds accompanying the snow made driving hazardous. Cold rain fell from the Great Lakes to the Gulf of Mexico and scattered showers and thunderstorms occurred farther east.

Weekend rains fell in the central and southern

Great Plains and eastward to the Atlantic Ocean. They were most generous over northern and central Texas Friday and Saturday and from northern Missouri to western Pennsylvania Saturday and Sunday. Light rain fell from the northern Pacific coast to the Rocky Mountains Saturday. Weekly totals were less than 1.00 inch over most of the Nation. Areas where more than 1.00 inch fell included northern Texas, Oklahoma, southeastern Kansas, northern Missouri, central Illinois, and from extreme southern Michigan to central Tennessee and West Virginia. Parts of northern Texas received more than 2.00 inches.



**TEMPERATURE:** A high-pressure area centered over the southern Great Plains brought the coolest temperature of record for so early in the autumn to spots in Arizona, New Mexico, Oklahoma, and western Texas. Among the stations to register record-low early-season temperatures Monday morning, September 20 were: Flagstaff, Ariz., 23° and Lubbock, Tex., 41°. Another blast of arctic air pushed into the northern Great Plains Monday afternoon.

The Pacific Coast States remained in the comfortable 70's and 80's. The Far Southwest continued hot. Thermal, Calif., registered 99° Wednesday afternoon. There was lots of sunshine

in Florida where the mercury at Orlando climbed to 93° Tuesday afternoon.

A cool air surge kept afternoon temperatures in the 50's and 60's from the northern Great Plains to New England over the weekend. Clouds held maximums in the 80's across the Deep South. The Far Southwest continued sunny and hot. The Northwest was damp and chilly. Weekly mean temperatures were below normal except in the extreme Southeast. Parts of northern Texas averaged more than 12° cooler than normal.

L. W. Dye

## NATIONAL AGRICULTURAL SUMMARY

**AGRICULTURAL HIGHLIGHTS:** Rains continue to plague cotton crop. \*Illinois soybean harvest off to fast start. \*Rains on southern Great Plains boost 1972 wheat crop prospects. \*Apple picking heavy in North.

**SMALL GRAINS:** For the second consecutive week good rains covered the southern Great Plains and slowed planting of the 1972 winter wheat crop. Kansas wheat growers have only 28 percent of their crop planted, well behind last fall's 43 percent. Headway has also been slow in Oklahoma where only 25 percent of the fields are seeded. Texas wheat growers are more fortunate as half their acreage is in. However, moisture supplies in these 3 States are the best they have been since last fall and wheat prospects are looking up.

On the northern Great Plains, winter wheat seeding is complete in the Dakotas. Many fields are up. Nebraska growers have 75 percent of their acreage in, but dry soils in the eastern part of the State have hindered final seeding operations. Seeding is also active in the Western section of the Nation; Montana and Wyoming wheat growers have over half their fields planted. Recent rains improved the outlook for the crop. Germination conditions in the East are excellent, as most small grain growing areas have an abundant supply of moisture.

**CORN:** It was a cool, wet week for most Corn Belt farmers. Harvest made spotty progress as rains and high moisture content kept corn pickers parked a fair part of the week. Harvest will move into full swing once the weather clears; as the crop is virtually all mature in the leading States. Harvest progress is a few days ahead of last year in Illinois and Iowa, where about 10 percent of the crop is in the crib. Corn Belt harvest is most advanced in Kansas and Missouri where nearly 1/4 of the crop is under cover. Earlier infestations of corn borers and root worms caused increased lodging in some Illinois fields. Corn borers are also being blamed for a light to moderate ear droppage problem in South Dakota. Silo-filling is doing well in the Corn Belt, and is complete on many farms.

Wet fields and showers continue to slow corn gathering throughout the Southern section of the Country. Picking of the crop is well behind last year, with stalk rot increasing as damp weather continues to hold. In the West, a killing frost caused some losses to the Utah crop.

**SOYBEANS:** Harvest of the 1971 soybean crop is underway in most areas of the Country. However, combining was rather slow in the South where beans are ripening slowly. Wet fields and weeds continue to be a nemesis to the Southern soybean grower.

In the North, over an inch of rain only kept soybean combines parked a short time in Illinois. The Illinois crop is now 1/3 in storage, compared to only 10 percent in at this time last year. Combining is off to a good start in the rest of the Corn Belt, but dryer weather would be ideal to lower the moisture content.

**COTTON:** It was another poor week for most of the Nation's cotton crop. Heavy rains halted picking in Texas. While in the South numerous rain showers hampered picking. Boll rot increased during the week with farmers trying to defoliate plants to limit losses. Wet humid weather continues to slow maturity of the crop, and picking is well behind last season's pace. Georgia and South Carolina growers were more fortunate during the week, as little rain fell and picking gained momentum in these States. Southern cotton growers would like to have some of California's hot dry weather. Picking was active in the Desert area, with defoliation started in the San Joaquin Valley.

**OTHER CROPS:** It was a poor week for the Nation's 2 leading sorghum producing States. Heavy rains halted harvesting in Texas and a frost caused some damage to the crop in northwest Kansas. Damp, humid weather also slowed harvesting in most other sorghum States. The Kentucky tobacco crop continues to suffer even after its in the barn, as humid weather is causing house burn. High humidity is causing the crop to dry slowly in other States also. Flue-cured tobacco is being marketed in North Carolina, with pulling winding up in Virginia. Rains delayed potato digging in Pennsylvania and Upstate New York for the 2d straight week. Digging is half completed in North Dakota with growers working in northern and central Wisconsin areas. Michigan dry bean growers have 3/4 of their acreage harvested, and Colorado growers are about half finished.

**Fruits and Nuts:** Apple harvesting was widespread on Northern fruit farms. Orchards were buzzing with activity as picking was in full swing. Strong gusty winds caused some damage to apples in Washington's Yakima Valley. Harvesting this year's cranberry crop was underway in New Jersey, Massachusetts, and Wisconsin. Prospects vary for the pecan crop, with scab dimming the outlook in Georgia and South Carolina. Picking of Thompsons seedless grapes for raisins was nearing completion in California.

**Vegetables:** Planting of winter crop vegetables in the Lower Valley of Texas was delayed for the 3d straight week because of soggy fields. Some early-planted fields were lost due to flooding. In contrast, improved weather in Florida enabled growers to resume normal planting. Supplies of vegetables are about normal in California. Fall shipments of vegetables are increasing from the Northeast, but rains have plagued harvesting. Summer supplies are rapidly ending in the northern areas of the Nation. Heavy rains are causing tomatoes to crack in Pennsylvania. Lettuce cutting should get underway next week in Cochise County, Arizona.

**PASTURES AND LIVESTOCK:** Pastures in the eastern half of the Country continue to benefit from generous rainfall. Growth of fall grass is excellent. Texas herds are grazing on good pastures, but ranges are only fair from New Mexico to California. California pastures are real dry, with supplemental feeding on the increase. Livestock remain good in the Corn Belt, but feedlots are becoming muddy. Marketing of feeder cattle is on the rise in Virginia.

Steve J. Psodna  
Agricultural Statistician

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., September 26, 1971

States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches	
	Average	Departure*	Total	Departure*		Average	Departure*	Total	Departure*		Average	Departure*	Total	Departure*
ALA,Birmingham . . .	74	-1	1.2	+ .5	New Orleans . . .	80	+ 3	.1	-1.0	OKLA.Okla. City . .	64	- 7	1.7	+1.0
Mobile . . . . .	81	+ 4	.3	-1.2	Shreveport . . . .	73	- 4	.7	+ .1	Tulsa . . . . .	65	- 6	1.2	+ .3
Montgomery . . . .	79	+ 3	.3	- .6	MAINE,Caribou . . .	50	- 2	.4	- .5	OREG.Astoria . . . .	59	+ 2	1.0	+ .2
ALASKA,Anchorage . .	45	0	.4	- .2	Portland . . . . .	54	- 3	T	- .9	Burns . . . . .	50	- 4	.1	- .1
Barrow . . . . .	35	+ 7	T	- .2	MD,Baltimore . . . .	64	- 2	.2	- .5	Medford . . . . .	60	- 3	.3	+ .1
Fairbanks . . . . .	---	---	---	---	MASS,Boston . . . .	62	- 2	.2	- .5	Pendleton . . . . .	58	- 4	.2	0
Juneau . . . . .	49	+ 2	.2	-1.5	Chatham . . . . .	61	---	0	---	Portland . . . . .	59	- 2	.7	+ .2
Nome . . . . .	---	---	---	---	MICH,Alpena . . . .	51	- 3	.4	- .5	Salem . . . . .	58	- 3	1.2	+ .8
ARIZ,Flagstaff . . .	46	-11	0	- .4	Detroit . . . . .	55	- 6	1.1	+ .5	PA,Allentown . . . .	59	- 4	.5	- .3
Phoenix . . . . .	79	- 2	0	- .1	Flint . . . . .	54	- 5	1.2	+ .5	Erie . . . . .	56	- 6	.7	- .3
Tucson . . . . .	78	- 2	0	- .2	Grand Rapids . . . .	53	- 7	1.4	+ .7	Harrisburg . . . . .	62	- 3	.4	- .2
Winslow . . . . .	63	- 6	T	- .2	Houghton Lake . . . .	51	- 4	.3	- .4	Philadelphia . . . .	65	0	1.1	+ .3
Yuma . . . . .	73	-12	0	- .1	Lausling . . . . .	52	- 8	.7	+ .1	Pittsburgh . . . . .	59	- 3	.8	+ .2
ARK,Fort Smith . . .	67	- 6	.4	- .5	Marquette . . . . .	53	- 3	.6	- .3	Scranton . . . . .	56	- 5	.4	- .3
Little Rock . . . . .	69	- 3	.5	- .2	Muskegon . . . . .	52	- 9	.1	- .6	R.I.Providence . . . .	61	- 1	.5	- .3
CALIF,Bakersfield . .	71	- 4	0	0	S.Ste.Marie . . . . .	50	- 4	1.4	+ .4	S.C.Charleston . . . .	76	+ 1	.1	-1.3
Eureka . . . . .	55	- 2	.5	+ .3	MINN,Duluth . . . . .	48	- 5	.2	- .4	Columbia . . . . .	75	+ 1	.3	- .6
Fresno . . . . .	69	- 4	0	0	Internatl Falls . . . .	46	- 5	T	- .6	Greenville . . . . .	71	0	.8	0
Los Angeles . . . . .	69	- 3	0	- .1	Minneapolis . . . . .	53	- 5	.8	+ .3	S.DAK,Aberdeen . . . .	52	- 6	T	- .3
Red Bluff . . . . .	70	- 5	T	- .1	Rochester . . . . .	52	- 7	1.0	+ .4	Huron . . . . .	54	- 5	.2	- .1
San Diego . . . . .	70	+ 1	0	- .1	St. Cloud . . . . .	50	- 7	.3	- .2	Rapid City . . . . .	54	- 5	.1	- .1
San Francisco . . . .	62	- 2	T	0	MISS,Jackson . . . . .	77	+ 2	T	- .6	Sioux Falls . . . . .	54	- 5	1.0	+ .5
Stockton . . . . .	69	- 3	T	- .1	Meridian . . . . .	77	+ 3	.3	- .4	TENN,Chattanooga . . .	73	+ 1	T	- .7
COLO,Denver . . . . .	52	- 9	.4	+ .1	MO,Columbia . . . . .	62	- 5	.2	- .7	Knoxville . . . . .	70	+ 1	1.3	+ .7
Grand Junction . . . .	58	- 7	0	- .2	Kansas City . . . . .	64	- 6	.9	+ .2	Memphis . . . . .	69	- 2	.9	+ .2
Pueblo . . . . .	55	-10	T	- .2	St. Louis . . . . .	62	- 5	.4	- .2	Nashville . . . . .	69	- 2	.9	+ .3
CONN,Bridgeport . . .	62	- 2	.2	- .7	Springfield . . . . .	64	- 4	.2	- .7	TEX,Abilene . . . . .	65	- 9	3.9	+3.3
Hartford . . . . .	59	- 2	.6	- .3	MONT,Billings . . . . .	51	- 7	.5	+ .2	Amarillo . . . . .	57	-12	3.7	+3.3
D.C.Washington . . . .	66	- 1	.3	- .5	Glasgow . . . . .	53	- 1	.1	- .1	Austin . . . . .	75	- 3	1.0	+ .1
FLA,Apalachicola . . .	81	+ 3	.8	- .9	Great Falls . . . . .	50	- 5	.4	+ .1	Beaumont . . . . .	76	- 1	.4	- .5
Ft. Myers . . . . .	81	0	.2	-1.7	Havre . . . . .	49	- 4	.1	- .2	Brownsville . . . . .	78	- 3	.6	-1.1
Jacksonville . . . . .	79	+ 1	T	-1.8	Helena . . . . .	45	- 9	.2	0	Corpus Christi . . . .	78	- 2	1.3	+ .2
Key West . . . . .	82	0	2.1	+ .5	Kalispell . . . . .	46	- 7	.1	- .2	Dallas . . . . .	72	- 4	1.6	+ .9
Lakeland . . . . .	80	0	.2	-1.2	Miles City . . . . .	54	- 4	.3	+ .1	Del Rio . . . . .	74	- 4	.3	- .4
Miami . . . . .	82	+ 1	.7	-1.7	Missoula . . . . .	49	- 4	T	- .3	El Paso . . . . .	65	- 8	.8	+ .5
Orlando . . . . .	83	+ 4	.4	-1.3	NEBR,Grand Island . . .	57	- 6	.7	+ .2	Fort Worth . . . . .	70	- 6	2.2	+1.5
Tallahassee . . . . .	79	+ 2	T	-1.1	Lincoln . . . . .	61	- 5	.4	- .2	Galveston . . . . .	77	- 2	.3	-1.1
Tampa . . . . .	82	+ 2	.4	-1.0	Norfolk . . . . .	55	- 7	.8	+ .2	Houston . . . . .	75	- 2	.4	- .6
GA,Atlanta . . . . .	71	0	T	- .7	North Platte . . . . .	53	- 8	1.3	+ .9	Lubbock . . . . .	61	- 8	3.4	+2.7
Augusta . . . . .	75	+ 1	T	- .7	Omaha . . . . .	58	- 5	.7	+ .2	Midland . . . . .	64	-10	2.2	+1.7
Macon . . . . .	79	+ 4	.1	- .4	Valentine . . . . .	56	- 3	.3	0	San Angelo . . . . .	68	- 8	2.3	+1.7
Savannah . . . . .	78	+ 3	.4	- .7	NEV,Ely . . . . .	47	- 8	T	- .1	San Antonio . . . . .	77	0	1.3	+ .4
HAWAII,Hilo . . . . .	76	0	2.8	+ .9	Las Vegas . . . . .	71	- 6	0	- .1	Victoria . . . . .	76	- 2	.8	- .2
Honolulu . . . . .	79	0	.6	+ .3	Reno . . . . .	55	- 2	T	- .1	Waco . . . . .	73	- 4	.7	0
Kahului . . . . .	78	0	T	- .1	Winnemucca . . . . .	50	- 7	.1	0	Wichita Falls . . . . .	66	- 9	2.2	+1.6
Lihue . . . . .	79	+ 1	1.6	+1.1	N.H.Concord . . . . .	51	- 6	.2	- .7	UTAH,Blanding . . . . .	55	- 5	0	- .3
IDAHO,Boise . . . . .	57	- 4	.1	0	N.J.Atlantic City . . . .	61	- 5	.2	- .5	Salt Lake City . . . .	57	- 5	T	- .1
Lewiston . . . . .	57	- 5	.5	+ .3	Trenton . . . . .	62	- 3	.4	- .4	VT,Burlington . . . . .	54	- 2	.9	+ .1
Pocatello . . . . .	49	- 9	T	- .1	N.MEX.Albuquerque . . . .	57	-11	.7	+ .5	VA,Lynchburg . . . . .	65	- 2	.2	- .6
ILL,Cairo . . . . .	66	- 4	.4	- .3	Roswell . . . . .	60	- 8	1.4	+1.0	Norfolk . . . . .	70	- 1	.1	- .8
Chicago . . . . .	58	- 6	.4	- .2	N.Y.Albany . . . . .	56	- 4	.7	- .1	Richmond . . . . .	66	- 2	.3	- .5
Moline . . . . .	57	- 6	.7	0	Binghamton . . . . .	53	- 4	.4	- .3	Roanoke . . . . .	65	- 2	1.1	+ .3
Peoria . . . . .	57	- 7	1.2	+ .5	Buffalo . . . . .	57	- 5	.7	0	WASH,Colville . . . . .	53	- 4	.2	0
Rockford . . . . .	56	- 5	.2	- .5	New York . . . . .	64	- 5	.5	- .4	Omak . . . . .	54	- 3	0	- .2
Springfield . . . . .	60	- 5	2.1	+1.3	Rochester . . . . .	58	- 2	.3	- .3	Quillayute . . . . .	54	- 2	.9	- .6
IND,Evansville . . . .	63	- 5	.6	- .1	Syracuse . . . . .	55	- 5	.4	- .3	Seattle-Tacoma . . . .	57	- 2	.6	+ .1
Fort Wayne . . . . .	56	- 7	2.4	+1.7	N.C.Asheville . . . . .	69	+ 3	1.6	+1.0	Spokane . . . . .	54	- 5	.5	+ .3
Indianapolis . . . . .	58	- 6	1.7	+1.0	Charlotte . . . . .	70	- 1	.2	- .6	Walla Walla . . . . .	59	- 5	.2	0
South Bend . . . . .	55	- 7	.8	+ .1	Greensboro . . . . .	67	- 1	.4	- .4	Yakima . . . . .	54	- 6	T	- .1
IOWA,Burlington . . . .	58	- 6	.8	0	Hatteras . . . . .	75	+ 2	.2	-1.0	W.VA,Beckley . . . . .	60	- 2	1.3	+ .6
Des Moines . . . . .	58	- 5	.4	- .1	Raleigh . . . . .	69	0	.2	- .7	Charleston . . . . .	64	- 2	.1	- .6
Dubuque . . . . .	55	- 5	.2	- .6	Wilmington . . . . .	74	0	1.3	0	Huntington . . . . .	65	- 1	.8	+ .2
Sioux City . . . . .	57	- 7	.5	- .1	N.DAK,Bismarck . . . . .	51	- 5	T	- .3	Parkersburg . . . . .	64	- 2	.6	0
KANS,Concordia . . . .	60	- 7	.4	- .2	Fargo . . . . .	52	- 4	0	- .3	WIS,Green Bay . . . . .	53	- 5	.5	- .1
Dodge City . . . . .	59	- 9	.6	+ .3	Williston . . . . .	53	- 1	.1	- .2	La Crosse . . . . .	55	- 5	.6	- .1
Goodland . . . . .	53	-10	.2	- .1	OHIO,Akron-Canton . . . .	57	- 5	.9	+ .3	Madison . . . . .	54	- 5	.3	- .7
Topeka . . . . .	63	- 4	.3	- .3	Cincinnati . . . . .	61	- 6	1.7	+1.1	Milwaukee . . . . .	54	- 5	.5	- .1
Wichita . . . . .	62	- 6	.9	+ .2	Cleveland . . . . .	57	- 5	.9	+ .2	WYO,Casper . . . . .	49	- 8	.2	0
KY,Lexington . . . . .	65	- 2	2.1	+1.5	Columbus . . . . .	58	- 6	1.8	+1.2	Cheyenne . . . . .	48	- 8	.2	- .1
Louisville . . . . .	65	- 2	1.3	+ .7	Dayton . . . . .	59	- 5	1.4	+ .8	Lander . . . . .	48	- 8	.2	- .1
LA,Baton Rouge . . . . .	78	+ 2	3.4	+2.4	Toledo . . . . .	55	- 6	1.0	+ .5	Sheridan . . . . .	50	- 6	.4	+ .1
Lake Charles . . . . .	78	+ 1	1.3	+ .4	Youngstown . . . . .	56	- 4	.3	- .4	P.R. San Juan . . . . .	85	+ 4	T	-1.0

\* 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:** Numerous showers and thundershowers scattered throughout week with light to moderate rainfalls, except little or none extreme south and southeast. Partly sunny, warm, and humid with temperatures for week averaging 3° to 4° above normal. Near normal temperatures Tuesday and Wednesday and much above remainder of week. Rains most areas, except south, delayed harvest. Soil moisture adequate to surplus. Cotton opening slowly due damp weather, 1/3 open compared with 1/2 last year. Boll rot on increase. Need open weather to lower moisture content corn. Soybeans maturing slowly, few fields being harvested with good yields. Many fields weedy, which will make combining difficult and increase harvest losses. Excellent progress with peanut harvest. Pecan prospects vary. Harvest vegetables in season continues. Pastures and livestock good to excellent.

**ALASKA:** Heavy rain over Kenai Peninsula, Anchorage area, Matanuska Valley, and upper portion Tanana Valley Monday last week. Precipitation still below average except isolated areas. No unusual temperatures. Cooler than previous week. Potato harvest nearly complete Tanana Valley, about 2/3 complete Matanuska Valley. Approximately 35% to 50% grain mixtures for silage remain to be harvested. Some grain harvest accomplished Tanana Valley, very little Matanuska Valley. Hay harvest approximately 60% completed most areas railbelt. Topsoil moisture supply adequate.

**ARIZONA:** Temperatures ranged well below seasonal normal all areas. Minimum temperatures fell to the low 20's higher elevations north and east early and again midweek. Scattered light showers east-central mountains, otherwise little or no precipitation. Cotton harvest full swing Yuma; continues limited basis central, southeast areas. Cooler weather slowed boll maturity southeast. Leaf perforators problem Yuma. Harvesting grain sorghum southwest and central. Planting fall sugar beets central. Spring-planted sugar beets making satisfactory progress, harvest expected begin early October. Alfalfa hay harvesting limited basis. Fall lettuce crop making good progress Salt River Valley, Pima, Pinal Counties. Lettuce harvest expected to get underway next week Cochise County. Planting winter lettuce continues Yuma. Fall cantaloupes good condition central, west. Limited picking lemons continues Yuma. Ranges fair condition as dry spots exist. Stock tanks filled or partially filled. Cattle and calves fair to good. Calves slightly lighter than normal. Sheep and lambs fair.

**ARKANSAS:** Cool days and nights followed by warming trend weekend. Weekly means 1° to 8° below normal, from mid-60's to lower 70's. Daily extremes 39° to 93°. Showers from midweek through weekend with generally less than 1.00 inch. Heaviest in south and least in northeast. Heaviest 2.45 inches at Camden. Soil moisture continues short except Mississippi Delta. Cotton maturing rapidly. Conditions fair to good. Harvest temporarily interrupted. Defoliation continues, insect spraying slowing down. Harvest early soybeans underway. Beans not irrigated need moisture.

Rice combining continues heavy with almost 1/2 crop harvested. Yields good. Harvest grain sorghum active; hay cutting almost complete. Supplies expected to be adequate, except some northwest counties. Seeding small grain continues. Harvest apples active. Pastures short northwest and north-central areas.

**CALIFORNIA:** Average temperatures near normal northern, central California, 4° to 8° below normal northeast, southeast interior basins. Below freezing minimums most days northeast. No precipitation except light rains northern 1/3 over weekend. Thompsons seedless raisins nearing completion. Heavy winery deliveries. Harvest Emperors underway Tulare. Harvest cling peaches virtually complete, late freestones continue. Prune picking tapering off. Almond harvest continues with good yields. Early walnut harvest in progress. Valencia orange harvest active. Seeding small grains very slow. Cotton harvest increasing Desert, defoliation started San Joaquin Valley. Harvest early rice well along central Sacramento Valley, just starting other areas. Supplemental feeding increasing. Ranges, pastures very dry. Livestock good, stock-water adequate. Cattle being moved from higher ranges. Broccoli-cauliflower Salinas-Santa Maria seasonally active. Cantaloupes West Side declining, season near end; Imperial start October 1. Central Coast carrots normal volume. Celery Santa Maria-Salinas seasonal levels. Southern California sweet corn normal. Honeydews Sacramento Valley declining seasonally. Lettuce Salinas-Santa Maria active, San Joaquin increasing slowly. Onions San Joaquin Valley-Central Coast moderately active. Green peppers steady northern San Joaquin Valley. Potatoes slow all areas, but increasing. Sweetpotatoes Merced increasing. Strawberries active Central Coast. Market tomatoes Stockton, King City remains active; some warm weather damage.

**COLORADO:** Temperatures much below normal after storm of previous weekend. Warming to near normal this weekend. Minimums below 10° in mountains, 20's to near freezing lower elevations. Mostly light rain east. Snow or rain mountains. Dry west. Subfreezing temperatures and frost early week caused additional damage to crops most areas. Precipitation further improved soil moisture supplies. Surface soil moisture adequate most areas for fall grain seeding. Field activities gained momentum late week after fields dried. Winter wheat 84% seeded, 56% emerged. Winter barley 79% seeded, 46% emerged. All corn in or past dough, 70% mature. Corn silage 51% cut. Sorghums 89% turned color, 44% ripe. Sorghum forage 52% harvested. Dry beans 89% cut, 55% threshed. Cold temperatures enhancing maturing sugar beets. Late summer potato harvest 76% complete. Fall potatoes San Luis Valley harvest limited progress. Range and pastures continue fair. Livestock good.

**FLORIDA:** Daytime temperatures reached into the low 90's at most stations with average temperatures 1° to 2° above normal. Rainfall averaged below 1.00 inch in most sections except heavier showers in the Keys brought the average for this section to near 1.50 inches. Heaviest rainfall

amounts for the week were 3.00 inches at St. Leo, 2.78 inches at Key West, and 1.70 inches at Federal Point. Clear weather allowed active harvest peanuts, corn, and hay. Early soybeans begin this week. Preparation for small grain planting. Pastures and livestock good. Fertilization existing pastures and land preparation for seeding fall and winter pastures. Citrus groves excellent condition, moisture adequate. Very little irrigation fruit, splitting not significant. Color break beginning grapefruit, oranges, and early tangelos. Improved weather conditions beneficial for fall vegetables. Good weather and adequate field drainage enabled growers to resume normal planting. Plantings, spraying, cultivating, transplanting active. Few early radishes and squash being harvested. Harvest earliest sweet corn Everglades expected starting during first 10 days October, followed by most other fall commodities late October.

GEORGIA: Little rainfall since late last week when Tropical Storm Edith brought moderate to heavy amounts to northern and central sections. Rainfall since September 18 confined to light drizzle in north on 1 or 2 days and isolated showers other areas. Unseasonably warm except north on 1 or 2 days when fog and clouds held highs in low 70's. Averages ranged from 1° to 4° above normal. This was 4th straight week with warmer than normal temperatures most of State. Soil moisture mostly adequate, but both wet and dry spots remain. Farm activity very high with harvest and fall planting uppermost. Small grain 19% planted. Corn mostly good to excellent; with 12% gathered. Peanuts 94% dug and 85% threshed. Drying stations still jammed. Cotton harvest late with 12% picked. Defoliation more widespread. Soybeans rated good. Pecans still shedding part of crop due disease. Haying continued active. Pastures and cattle good. Northern area apple and vegetable harvest active.

HAWAII: Increased shower activity many areas, more rain needed. Irrigation restriction in affect Kula, Maui, and Lalamilo, Hawaii, for vegetable crops. Sugarcane harvesting continues, but pineapple harvest seasonal decline. Planting pineapple increasing. Most vegetable and fruit supplies adequate despite shipping tie-up. Pastures benefited from rain. Cattle in fair to good condition.

IDAHO: Temperatures averaged 2° to 10° below normal with greatest departures east. Lowest temperatures first half of week. Minimum temperatures dropped to teens higher valley stations south and east. Freezing temperatures more stations than preceding week. Precipitation negligible except north where totals ranged to 0.30 inch. Weather ideal for harvesting late season crops. Corn silage, dry bean, potato, hop, and fruit, onion, and alfalfa seed harvesting active. Frost, chemicals have done very uniform job killing potato vines major growing areas. Many digging operations underway Idaho Falls south. Fall seeding small grains well underway, some delay north Idaho due lack soil moisture. Some emergence many areas. Cool night time temperatures increasing color apple crop. Picking activity increases, mainly Jonathans.

ILLINOIS: Precipitation ranged from less than 1.00 inch over more than half of State to about 1.00 to 1.50 inch balance of State. Temperatures averaged 5° to 7° below normal. Virtually all

corn crop mature, about 12% harvested, few days ahead 1970. Southern corn leaf blight, root worms, and corn borers caused lodging some areas. Yields reported good to excellent. Nearly all soybean crop shedding or has shed leaves, 60% last year. Nearly 35% combined. Yields varying considerably. Winter wheat seeding 20% complete. Soil moisture 47% short, 53% adequate. Pastures 9% excellent, 25% good, 47% fair, 19% poor. Days suitable for fieldwork 5. Main activities; harvesting corn and soybeans, filling silos, plowing and seeding wheat.

INDIANA: Cool week. Temperatures averaged 5° below normal. Scattered frost in lowlands in extreme north over weekend. Precipitation general early and late in period averaging 0.90 inch north-central to 1.60 inches in east-central. Five days suitable fieldwork. Topsoil and subsoil moisture mostly adequate. Corn harvest 5% complete. Southwestern areas most advanced. Crop 75% mature, 60% last year. Soybean harvest 10% complete, same as average. Nearly 50% turning yellow and 55% shedding leaves. Seeding wheat 20%, rye and barley 45%. Silos 70% filled. Grain sorghum 15% harvested. Apples 45% picked. Tobacco 50% pulled. Pastures improved.

IOWA: Cool with light to moderate rainfall. With western divisions only one in the past 11 weeks with above normal rainfall. Corn and soybean harvest getting to full swing. Corn acreage cut for silage nearing completion. Over 5 days suitable fieldwork. Corn 10% harvested, little ahead last year. Over 90% soybeans mature, "safe from frost". Soybean harvest over 10% complete, last year about 5% harvested. Grain sorghum near 10% harvested. Winter wheat 60% seeded. Topsoil moisture 72% short, 28% adequate.

KANSAS: Widespread significant rains 2d consecutive week, over 1.00 inch southeast and parts east-central and southwest. Generally 0.25 to 0.75 inch elsewhere. Unseasonably cool weather continued. Weekly mean temperatures averaged 4° to 10° below normal. Cool first of week, warming trend late in period pushed maxima to 80's and 90's. Local freezing weather parts north and west 23d. Wheat planting continued behind usual, progress helped by recent moisture. Wheat 28% seeded, average 43%. Winter barley 19% seeded, average 33%. Early fall crop harvest ahead average. Sorghum grain 45% matured, normal 38% and 14% harvested, average 8%. Frost caused some damage late sorghums northwest. Corn 79% matured, average 71% and 24% harvested, average 14%. Soybean harvest 13% complete, average 5%. Dry bean harvest well along and sugar beets ready. Fourth cutting alfalfa 47% cut. New alfalfa seeding 86% complete. Fall grazing prospects improved by moisture.

KENTUCKY: Temperatures variable averaging 1° to 4° below seasonable. Early morning readings in the 40's in one or more sections on several dates. Rainfall totals 1.00 to 2.00 inches most sections. Heaviest rain on 20th, 25th, and 26th. Three sunny days. Other days mostly cloudy. Soil moisture adequate. Harvest major crops on schedule. Fall wheat 15% seeded, slightly behind last year. Germination conditions excellent. Corn silage cutting winding up. Good tonnage. Corn harvest 10% complete, compared to 27% year earlier. Burley 81% cut, 84% last year. Dark types 86%, same as year earlier. Limited tobacco stripping, house burn evident many barns. Weather too humid for ideal housing and curing. Soybeans 4% har-

vested, same as year earlier. Plants 30% shedding leaves. Pastures excellent. Livestock very good shape.

**LOUISIANA:** Temperatures 1° to 3° below normal north, 1° to 4° above normal central and south. Polar air and abundant clouds early in week kept north Louisiana temperatures in 50's and 60's while highs south were near 90° and lows mostly in 70's throughout week. Temperature extremes: 49° Cotton Valley Tuesday and 92° Carville and Jennings Wednesday. Weekly rainfall totals less than 1.00 inch much of coastal area and portions of north Louisiana with 1.00 to more than 2.00 inches remainder of State. Greatest 1-day total 2.33 inches measured at Baton Rouge 7 a.m. Wednesday. Fieldwork hampered by continued showery weather. Some cotton boll rot continued, especially central and south; cloudy humid weather delayed maturity. Harvest cotton, corn, rice, soybean, sorghum grains, and sweetpotatoes virtually halted by showers. Cotton about 30% open, but very little picked. Insect control continued active and some acreage defoliated. Corn 60% harvested, rice 90% to 95%, soybeans nearly 5%, and sweetpotatoes 35%. Sugarcane planting virtual standstill due wet soil. Pecan prospects good to excellent north half State. Winter oats 30% to 35% seeded, wheat 30%. Pasture feed above average and livestock good.

**MARYLAND AND DELAWARE:** Cloudy except 24th and 25th. Temperatures, warm at first and cool last 5 days, averaged 1° to 4° below normal. Extremes low and mid-80's, mid-30's to mid-40's. Rainfall on as many as 4 days totaled mostly 0.50 to 1.00 inch in western 3 counties and less than 0.50 inch elsewhere. Smithsburg, Maryland, on 21st had 2.19 inches. Slow progress fieldwork as crops and fields dried slowly. Corn harvest limited mostly to southern Eastern Shore. Soybean development week later than last year. Nearly all tobacco cut, but crop curing slowly due high humidity. Fall vegetable harvest slow. Harvest red and golden Delicious apples at peak.

**MICHIGAN:** Unseasonably cool throughout period with heavy frost many interior locations on September 23 or 24. Rain, midweek in north, end of week south. Temperatures averaged 3° to 4° below normal Upper Peninsula and 2° to 9° below normal Lower Peninsula with largest departures southern 1/3. Precipitation totals 0.50 inch east to 1.25 inches west Upper Peninsula, Lower Peninsula 0.25 to 0.50 inch northern half, 0.50 to 1.25 inches south except 2.00 to 3.25 inches southwest. Rains and cool, cloudy weather slowed maturity and hindered harvest. State averaged 4.8 days suitable fieldwork. About 1/2 corn acreage mature. Silage corn nearly 2/3 harvested. Some corn harvested for grain. Soybeans ripening slowly, less than 30% mature. Dry beans 3/4 harvested. Fall potatoes about 1/2 dug. Sugar beets developing well. Pastures improved, but still supplying less than average amounts feed. Rains aided winter wheat germination, about 60% wheat planted. Winter apples being picked increasing volume. Harvest fall vegetables continues.

**MINNESOTA:** Temperatures averaged 5° below normal across State. Extremes: 76°, 23°. Precipitation of 0.50 inch to 0.75 inch fell in south, southern part of central and east-central districts. Northern half of State received little or no precipitation. Frost occurred entire State during week except extreme southeast. Soil moisture

mostly adequate. Corn and soybean harvesting slowed by showers south. Corn 92% mature, normal 68%; 2% picked, normal 1%; silage 78%, normal 60%. Soybeans 70% mature, normal 56%; 7% combined, normal 7%. Flax 83% combined, normal 75%. Hay and grain stubble 63% plowed. Potatoes 40% harvested. Sugar beets 15% harvested, normal 10%.

**MISSISSIPPI:** Most stations had 2d week of below normal temperature averages with range of 1° to 5° below normal. Weekly extremes: 47° and 93°. Rain on 2 or 3 days with weekly totals mostly under 1.00 inch. A 1-day amount of 2.01 inches was measured on 20th at Rolling Fork. Over week-end, temperatures rose slightly with 93° high at Merrill on Friday. Scattered thundershowers were mostly light. This Monday morning, widespread dense fog across State. Soil moisture surplus to excessive northeast, adequate to surplus central and mostly adequate other regions. Average 3 1/2 days suitable fieldwork. Corn 74% mature, 17% harvested. Cotton 20% opened, 1% harvested. Soybeans 19% mature, 2% combined. Rice 68% mature, 23% harvested. Sorghum 58% mature, 46% cut. Sweet potatoes 36%, hay crops 74% harvested. Corn, hay crops, soybeans, rice, pastures, and livestock mostly good condition. Cotton and pecans mostly fair to good.

**MISSOURI:** Very cool week. Temperatures averaged 5° to 10° below normal. Cold early in week with some frost northwest. Temperatures moderated to near normal by weekend. Rain fell early in week and over weekend with all but the northwest and Bootheel averaging 1.00 inch or more. Harvest corn, soybeans and sorghum full swing. Corn 22% harvested, 19% last year. Soybeans 69% turning color, 14% harvested, nearly 2 weeks ahead last year. Grain sorghum 22% harvested, well ahead year ago. Cotton good condition, bolls 48% open, 43% last year. Fall seeding 22% completed, fall plowing 11% done. Pastures mostly fair. Soil moisture extremely short northwest, mostly short western 1/3 State, adequate elsewhere.

**MONTANA:** Sunny and warm Wednesday through Friday, otherwise cool. Temperatures averaged near normal northeast, elsewhere 4° to 9° below normal. Rain first of week and again weekend with amounts varying to more than 0.75 inch in widely scattered areas. Topsoil moisture adequate southern 1/3, short remainder. Winter wheat 60% planted, good progress past week. Germination winter wheat fair to good. Corn silage 85% harvested. Dry bean harvest 2/3 complete. Potato digging 5% done. Sugar beet lifting getting underway. Range cattle and range sheep moving from summer ranges. Less than normal amounts hay and roughages for sale. Normal amounts feed grains for sale.

**NEBRASKA:** Cool, wet week. Row crop harvesting getting underway slowly east, but light precipitation slowed field operations. Corn reached maturity 90% acreage. Sorghum crop 70% ripe and soybeans 50% matured. Topsoil moisture adequate Panhandle and southwest, but declines to very dry east. Winter wheat seeding 75% complete with delays in east due dry topsoil.

**NEVADA:** Cool week with temperatures averaging 5° to 7° below normal throughout State. Precipitation in northwest only with Sheldon receiving 0.50 inch. Local strong gusty winds, 5 inches snow at Sheldon. Alfalfa seed harvest full activity all seed areas. Alfalfa hay harvest continues most areas, ranging from 2d cutting

northern high valleys to 6th cutting southern valleys. Western and central area 3d cutting hay continues. Cattle and sheep good, with stockwater adequate most areas.

**NEW ENGLAND:** Return to seasonal or even cool weather. Many below-freezing minima over weekend at susceptible locations, with the coldest mostly on September 25. Week averaged normal to 4° below normal, except milder at Nantucket. Showers quite general at beginning of week with a few again at midweek. Totals varied from trace to about 0.90 inch. General harvest all fall crops in full swing. Apples and cranberries coloring fast with cool nights. Harvest active. Maine potato digging moving ahead without interruption. Some summer vegetables still available. Fall vegetables available in abundance. Cutting silage corn active all areas.

**NEW JERSEY:** Temperatures generally 2° to 5° below normal although a few stations averaged near seasonal normals. Readings varied from maxima in low 80's on 20th to a chilly 31° at Charlotteburg on 25th. Rainfall averaged about 0.40 inch over the northern 1/3 of State and 0.30 inch elsewhere. Station totals ranged from 0.10 at several stations to 0.70 inch at Newton. Soil moisture ample all areas. Weather conditions delaying harvest some field crops. Harvest fall lettuce, cabbage, escarole, endive, and snap beans light to moderate. Harvest peppers, eggplant, and squash continues. Irish and sweet-potato harvest light. Apple picking active. Cranberry harvest general. Corn blight damage more severe than last year. Hay and silage making continue to be delayed. Pastures supplying excellent grazing.

**NEW MEXICO:** Precipitation mostly midweek ranged from light in west to heavy showers in east with totals of 1.00 to 3.00 inches. Warming during week from freezing minima in north on Monday to maxima in high 80's in south on Sunday. Average temperatures for week 5° to 10° below normal. Moisture conditions improved. No frost damage reported. Winter wheat, barley up to stand. Cotton good, hand picking southern areas. Broom-corn pulling nearing completion. Alfalfa, apple, miscellaneous vegetable harvest continuing. Ranges fair to good. Livestock good.

**NEW YORK:** First cool week since late August. Average temperatures 8° to 10° cooler than previous week. Minimums Upstate in mid-30's to low 40's on 3 nights mid- and late week. Maximums mostly low 70's coast and in 60's Upstate. Precipitation 0.50 to 1.00 inch Upstate on 20th and 21st but decreasing to 0.20 to 0.40 inch on Long Island. Generally dry remainder of week. Corn harvest 40% complete. Harvest hampered by wet weather. Dry bean harvest continues with some sprouting damage. Alfalfa excellent, nearing completion. Wheat planting generally complete, stands good. Long Island Katahdin and Chippewa potato harvest active. Going to storage now. Upstate areas delayed by wet weather, digging behind normal. Onions nearly all harvested Orange and Elba areas, quality good, size small. Lettuce cutting ending Oswego County. With colder weather tomatoes, cucumbers, and sweet corn nearly finished. Apples coloring slowly. Early warm weather reduced quality. Regular McIntoch harvest getting underway. Growers picking late variety peaches. Pears nearing completion. Concord grape harvest getting underway.

**NORTH CAROLINA:** Temperatures averaged near normal with range from 50° to 90°. Daily showers in mountains diminishing eastward except for a few isolated thundershowers all general areas. Total amounts coastal plain zero to 2.00 inches averaging 0.50 inch. Piedmont and mountains 0.50 inch to 3.00 inches averaging 1.00 inch. Soil moisture increased substantially, some surplus moisture most areas. Flue-cured tobacco being marketed all belts, burley harvest past peak. Corn crop good with harvest active. Cotton deteriorated slightly, harvest underway. Peanut condition good, harvesting active main counties north.

**NORTH DAKOTA:** Temperatures averaged near normal northwest to 4° below normal southeast. Precipitation ranged from a trace to 0.03 inch east and 0.10 to 0.40 inch elsewhere, with greatest amounts in southwest. Combining hard red spring wheat, barley, and oats virtually complete. Durum wheat harvest nearing completion, except north. Flax and dry bean harvest over 3/4 done. Most winter wheat and fall rye acreage seeded. About 1/2 potato acreage dug.

**OHIO:** Widespread coldness and unseasonably cool temperatures continue to dominate Ohio's weather. Daily high temperatures were in 60's and 70's throughout week while lows were in 40's and 50's. Rainfall widespread 20th, 25th, and 26th. Rainfall amounts on 20th ranged from 0.02 inch at Zanesville to 1.66 inches at Findley. Over weekend, amounts ranged from 0.06 inch at Circleville to 0.97 inch at Columbus. Five days favorable fieldwork. Topsoil moisture 15% short, 80% adequate, 5% surplus. Corn 75% mature and 10% harvested, last year 90% mature and 15% harvested. Normally 60% mature and almost 5% harvested. Soybeans 85% have leaves shedding, 50% mature, 10% harvested, last year 20% harvested. Harvest complete; corn silage 75%, potatoes 60%, 3d cutting alfalfa 80%, tobacco 75%. Fall acreage winter wheat 20% planted. Winter barley 50% seeded.

**OKLAHOMA:** Temperatures averaged 6° to 10° below normal. Extremes: 93° and 32°. Precipitation averaged over 1.00 inch all sections with south-west 1.67 and south-central 3.04 inches. Continued General rains slow small grain planting. Wheat 25% planted, 38% year ago. Soil moisture best since last fall. Corn and sorghum grain condition good to excellent, other row crops good. Over 1/4 corn picked, 1/3 last year. Sorghum grain 2/3 mature, 1/3 harvested. Cotton continues late, only 20% bolls open, 55% year ago. Small acreage picked. Peanuts 45% mature, harvest should begin this week. Soybeans 33% mature, 6% harvested. Good pecan crop is prospect. Pastures good condition, show improvement with rain. Cattle making good gains.

**OREGON:** Cooling trend western 1/3 of State with rains beginning on coast at close. Eastern Oregon, cool nights at first and close of week with warmer days and showers midweek. Temperatures averaged 1° to 6° above normal west and 3° to 6° below east. Maxima 76° to 90°, minima 17° to 34° east, 37° to 46° west. Freeze on 3 to 5 nights east border and south-central. Precipitation totaled 0.20 to 0.40 inch in northeast and up to 0.17 inch north coast. Grain harvest about complete. Alfalfa seed harvest near completion. Some 3d and 4th cutting alfalfa hay. Land preparation and fall seeding active. Picking winter pears active Medford and Hood River. Medford wind losses severe. Italian prunes for drying being harvested. Red Delicious

apple harvest 2 weeks Hood River. Harvest continues cole crops and sweet corn. Onion harvest continues. Potato harvest active Ontario and north-central, beginning central and Klamath Falls. Fall pastures good. Cattle moving from ranges. Delivery cattle active.

**PENNSYLVANIA:** Coolest week since late May. Weekly averages 11° below previous week and 2° to 5° below normal. Most maxima in 60's and 70's except 80's southeast Monday. Minima in 40's and 50's, dropping to upper 20's and 30's, colder mountain valleys. First freeze of season with Philipsburg reporting 25° Saturday. Rainfall mostly early and late in week. Highly variable, with less than 0.50 inch north to over 1.00 inch scattered areas south and east. Rainy weather delayed fall harvest. Topsoil moisture 60% surplus, remainder adequate. Over 75% corn safe from frost. Corn silage 50% in. Wet weather increased stalk rot and mold on corn. Winter wheat 50% seeded, barley 60%. Potato harvest delayed 2d week. Vegetables tapering off, tomatoes cracking from rain. Apple harvest gaining momentum. Hay and pastures show lush growth.

**PUERTO RICO:** Rainfall averaged 1.02 inches or about 0.75 inch below normal. Heavy showers early in week in western Cordilleras with 24-hour totals on Monday over 3.00 inches and weekly totals up 4.60 inches. Little or no rain South Coast and southeastern interior. North Coast generally less than 0.50 inch. Some crops showing moisture stress south coast and parts north coast. Temperatures averaged 80° to 81° on coast and 75° to 76° interior with average departure of 0.5° below normal. Southerly winds continued causing above-normal temperatures along north coast. Highest maximum 95°, minimum 56° Sugarcane plantations non-irrigated zones need more rain for satisfactory growth. Coffee zones beginning harvest. Pastures need more rain north and south coasts, but excellent other divisions. Minor crops north and south too dry for optimum development. Some areas too dry for fieldwork.

**SOUTH CAROLINA:** Heavy showers beginning of week and lighter rain midweek brought 2.00 to 3.00 inches to the northwest half of State. Greatest was 5.63 inches at York. Most of Coastal Plain had less than 1.00 inch. Temperatures averaged 1° above normal in the northwest and 3° above normal in south. Warm early in week and cool from 22d to 24th. Soil moisture generally adequate. Cotton fair to good. Bolls opening 65%, about 24% harvested. Boll rot problem where growth rank, foliage heavy. Soybean condition good to excellent. Insects, weeds cause concern. Practically all setting pods, about 1/4 matured. Corn practically all mature, harvest 32% complete. Sorghum condition good to excellent, 26% harvested. Peanut harvest 50% complete. Pecans fair to good, scab dimming prospects. Apples mostly good, harvest 78% complete. Pastures mostly good. Fall vegetables doing well.

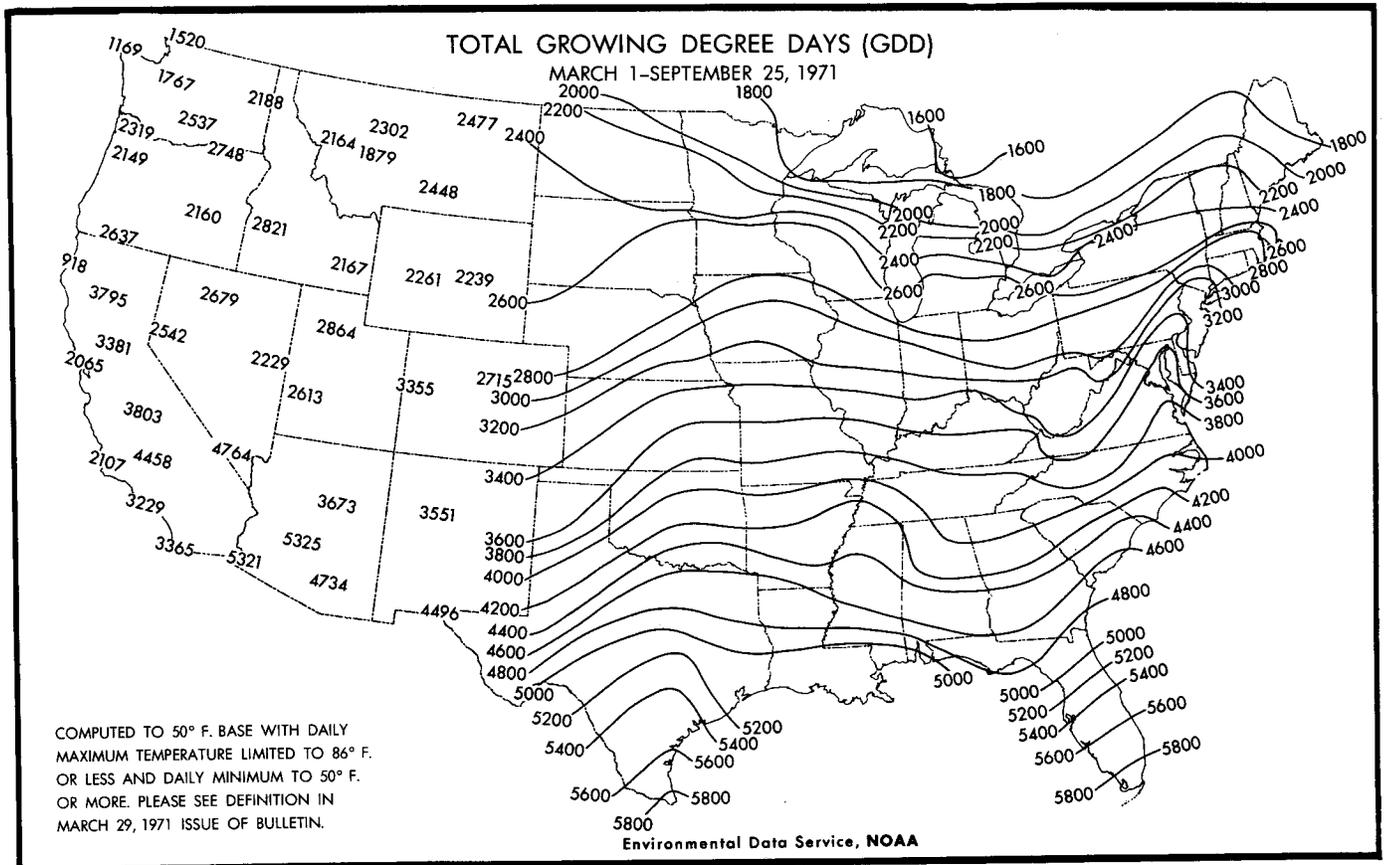
**SOUTH DAKOTA:** Cool and damp much of week most of State. Weekly temperatures averaged from 2° to 9° below normal. Extremes in lower elevations ranged from 23° at Ralph on 21st to 84° at Rapid City and Philip on 25th. Rain or showers scattered through week with amounts ranging from none to about 1.20 to 1.25 inches. Damp weather many areas slowed harvest. Must row crops "safe from frost", but several areas report more drying

needed to lower moisture content. Light to moderate ear droppage due earlier infestation corn borer. Some grain sorghum fields lodged and being windrowed to facilitate harvest. Row crop yields will be variable. Silage harvest generally complete. Corn harvest started, 5% complete. Approximately 25% grain sorghum combined and 15% soybeans harvested. Seeding fall grains mostly complete, many fields up. Pastures vary from poor to good. Recent rains helped growth some areas. Lamb and calf marketing progressing. Yearling marketings coming to close western part State. Livestock condition generally good.

**TENNESSEE:** Mild during week, warm weekend. Scattered showers early and late gave variable totals from less than 0.25 inch to more than 2.00 inches, but mostly 1.00 to 1.50 inches. Crops mostly good, but dry weather needed for maturity. Cotton picking increasing, but full scale harvest several weeks away. Concern over boll rot and harvesting difficulties if rain continues. Cotton growth rank. Corn good prospects, 70% mature. Soybeans satisfactory progress, although later than normal. Tobacco harvest practically complete. Hay and pastures good to excellent. Percent seeded small grains, oats and barley 40%, wheat 25%. Days favorable field work averaged 4.0. Soil moisture supplies 69% adequate, 22% surplus, and 9% short.

**TEXAS:** Moderate to locally heavy showers most sections of State Tuesday through Friday except along the Upper Coast. Extensive cloudiness and showers held maximum temperatures in low 70's most of week but these climbed to upper 80's and low 90's when sunshine returned over weekend. Cold, wet weather delayed planting and harvesting. Danger of early freeze causing concern. Ranges and pastures show improvement. Grazing becoming abundant. Hay prospects good. Percent harvested major crops; cotton 16, 24 last year; corn 69, 79 last year; sorghum 44, 60 last year. Percent planted major crops; wheat 49, 54 last year; oats 31, 36 last year. High Plains vegetable harvest interrupted heavy rains. Some lettuce hail damaged. Carrot digging remains light. Harvest other vegetables past peak, but light supplies bell peppers, potatoes, cabbage, cucumbers, cantaloupes, tomatoes available High Plains. East Texas sweetpotato digging gaining momentum. Winter Garden showers, wet fields hampering planting winter vegetables. Lower Valley vegetable planting at standstill last 3 weeks because excessive moisture. Some early plantings winter vegetables and fields fall vegetables lost due heavy rains and flooding. Citrus trees good condition. Generous moisture will help size fruit. Picking early oranges will resume as soils dry. Pecans maturing with early varieties beginning to split shucks south Texas.

**UTAH:** Few isolated light showers north and east otherwise no precipitation. Temperatures dropped to 8° to 14° below normal. First killing frost many areas 18th and 19th. Frost halted crop growth and caused some losses. Crops affected were corn, alfalfa hay, tomatoes, and dry beans. Percent completion harvest; 85% 3d crop alfalfa hay, 65% to 70% field corn, 15% potatoes, 50% dry onions, and 75% to 80% tomatoes. Peaches about 75% harvested. Apples range from 80% picked some southern counties to 15% leading Utah County. Winter wheat about 80% seeded, with several counties finished. Cattle and sheep good, but winter ranges only fair.



**VIRGINIA:** Mostly cloudy with maximum temperatures below normal most days. Frequent showers west and at midweek east. Wetness hindered harvesting and seeding. Corn for grain 75% harvested lower Tidewater and 40% upper. Harvest elsewhere mostly for silage. Dug few peanuts. Winding up flue-cured tobacco pulling. Cutting burley southwest. Wheat 6% seeded, barley and oats about 20%. Picking golden and red Delicious apples Winchester. Dug sweetpotatoes. Harvested snap beans, cucumbers, and few tomatoes. Pastures outstanding. Haying slow. Feeder cattle marketing active.

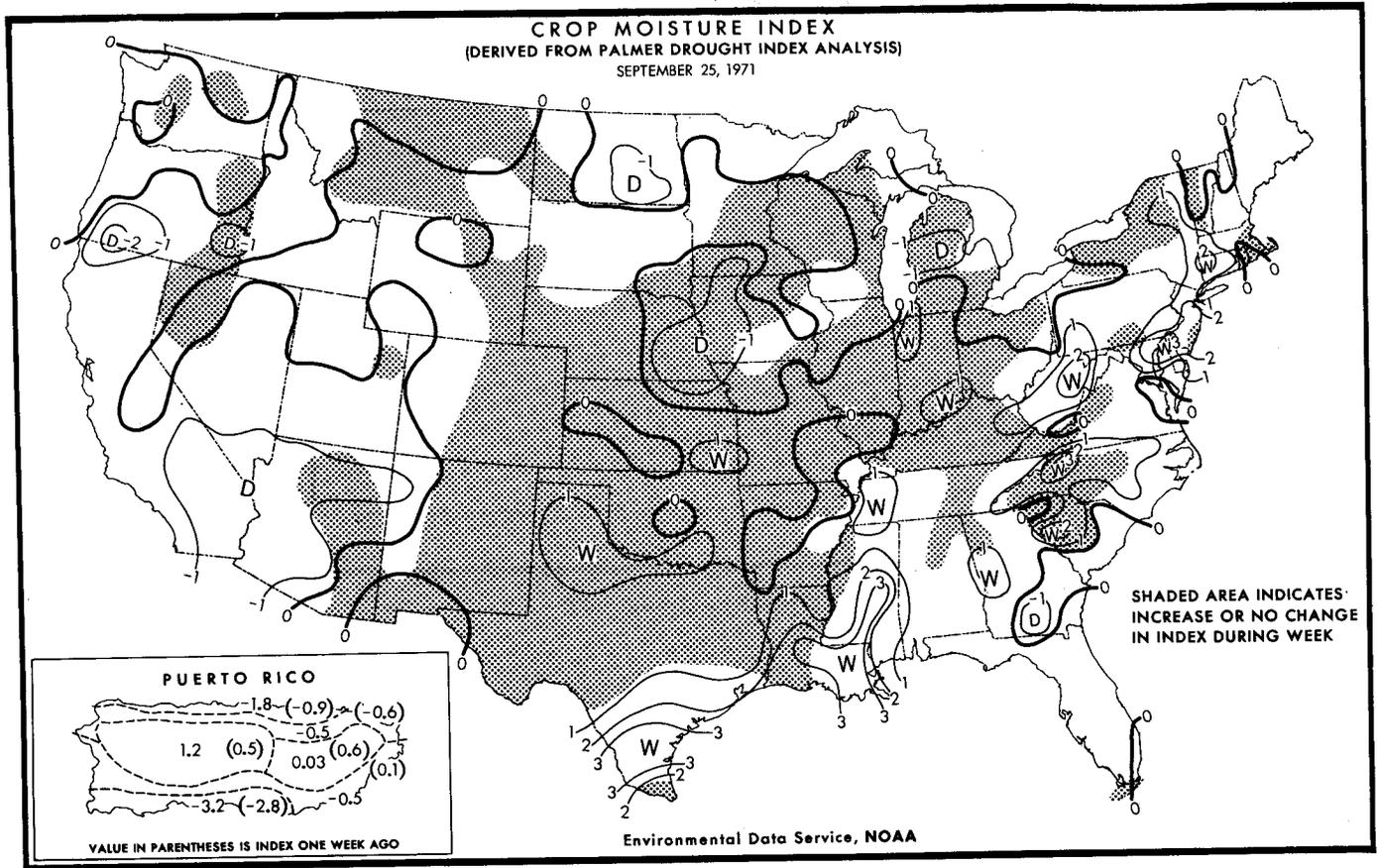
**WESTERN WASHINGTON:** Warm days, cool nights with temperatures near normal. Precipitation well below normal although some spotty heavy showers end of period. Pastures continue to grow with some 3d cutting hay fields possible. Few small forest fires occurred early week, but threat subsided in cooler weekend weather. Blueberry harvest complete and blackberry harvest ending. Harvest sweet and silage corn, carrots, table beets, potatoes, broccoli, and cauliflower continuing. **EASTERN WASHINGTON:** Warm daytime temperatures with some subfreezing nighttime readings. Precipitation quite light except for some heavy shower activity in southeast. Strong gusty winds caused some damage hop and apple crop Yakima Valley. Apple harvest underway. Preparation ground and seeding winter wheat continuing with good soil moisture. Harvest silage corn, alfalfa hay, mint, clover seed, and lima

beans continuing. Pumpkins and tomatoes being picked.

**WEST VIRGINIA:** Rainfall much lighter than previous week, but still totaled over 1.00 inch most stations. Rain almost every day higher elevations. Considerable sunshine September 24 and 25. Highest temperatures on September 21. Cooler balance of week. September rainfall so far greatest since 1950 at several stations. Wet weather limited fieldwork. An average 2.8 days suitable. Main activities farm maintenance, fence building, and livestock marketing. Corn harvest started, muddy fields slowing progress. Apple harvest active as weather permits. Weather conditions poor for curing tobacco. Pastures lush condition from abundant moisture.

**WISCONSIN:** Cool cloudy week with temperatures averaging 5° below normal. Precipitation averaged from 0.20 inch southeast to 0.70 inch northwest in rains during midweek and over weekend. Silo filling going well. Corn well dented, picking underway south. Second and 3d crop hay being made. Vegetables nearly done. Potato digging north and central portions. Cranberry harvest began. Apple harvest continuing. Tobacco harvest nearly through. Soybeans maturing nicely. Fall plowing behind last season. Soil moisture 60% adequate.

(Continued on back page)



INDEX DECREASED DURING WEEK  
(Unshaded Areas)

INDEX INCREASED OR DID NOT CHANGE DURING WEEK  
(Shaded areas)

INDEX

ABOVE 3.0 SOME DRYING, BUT STILL EXCESSIVELY WET.  
 2.0 to 3.0 MORE DRY WEATHER NEEDED, WORK DELAYED.  
 1.0 to 2.0 FAVORABLE, EXCEPT STILL TOO WET IN SPOTS.  
 0 to 1.0 FAVORABLE FOR NORMAL GROWTH AND FIELDWORK.  
 0 to -1.0 TOPSOIL MOISTURE SHORT, GERMINATION SLOW.  
 -1.0 to -2.0 ABNORMALLY DRY, PROSPECTS DETERIORATING.  
 -2.0 to -3.0 TOO DRY, YIELD PROSPECTS REDUCED.  
 -3.0 to -4.0 POTENTIAL YIELDS SEVERELY CUT BY DROUGHT.  
 BELOW -4.0 EXCEPTIONALLY DRY, MOST CROPS ABOUT RUINED

INDEX

ABOVE 3.0 EXCESSIVELY WET, SOME FIELDS FLOODED.  
 2.0 to 3.0 TOO WET, SOME STANDING WATER.  
 1.0 to 2.0 PROSPECTS ABOVE NORMAL, SOME FIELDS TOO WET.  
 0 to 1.0 MOISTURE ADEQUATE FOR PRESENT NORMAL NEEDS.  
 0 to -1.0 PROSPECTS IMPROVED, BUT RAIN STILL NEEDED.  
 -1.0 to -2.0 SOME IMPROVEMENT, BUT STILL TOO DRY.  
 -2.0 to -3.0 DROUGHT EASED, BUT STILL SERIOUS.  
 -3.0 to -4.0 DROUGHT CONTINUES, RAIN URGENTLY NEEDED.  
 BELOW -4.0 NOT ENOUGH RAIN, STILL EXCEPTIONALLY DRY.

The map above is based on weekly areal mean values of temperature and precipitation for 350 climatological divisions. Weather during previous weeks has been taken into account through successive weekly computations of both topsoil and subsoil moisture. The map shows recent crop moisture conditions; i.e., areas in which crops have been hindered by abnormal dryness or wetness, and areas where moisture conditions have been favorable.

This is a generalized picture; local variations caused by the occurrence or absence of heavy rain or by soil differences are not shown. Shallow rooted crops and crops in areas with poor soils are likely, on occasion, to suffer more than indicated. Conditions may be better than shown in areas having exceptionally good soils.

The legend applies primarily to growing rather than matured vegetation. Interpretation of the

effects on crops and native vegetation must, therefore, take account of the stage of growth as well as the status and trend of moisture conditions. The trend is indicated by the shading which denotes areas where the index did not decrease below its value of a week previous; i.e., conditions did not become noticeably drier during the week. A trend toward drier occurred in the unshaded regions. The lines show the crop moisture situation according to the computed index values which may be interpreted using the legends above. One legend applies to the unshaded areas, the other to the shaded. Centers of relative maximum and minimum index values are marked for easier recognition - W for wet and D for dry. In irrigated regions the index values merely reflect departures from ordinary irrigation requirements.

