

WEEKLY WEATHER AND CROP BULLETIN

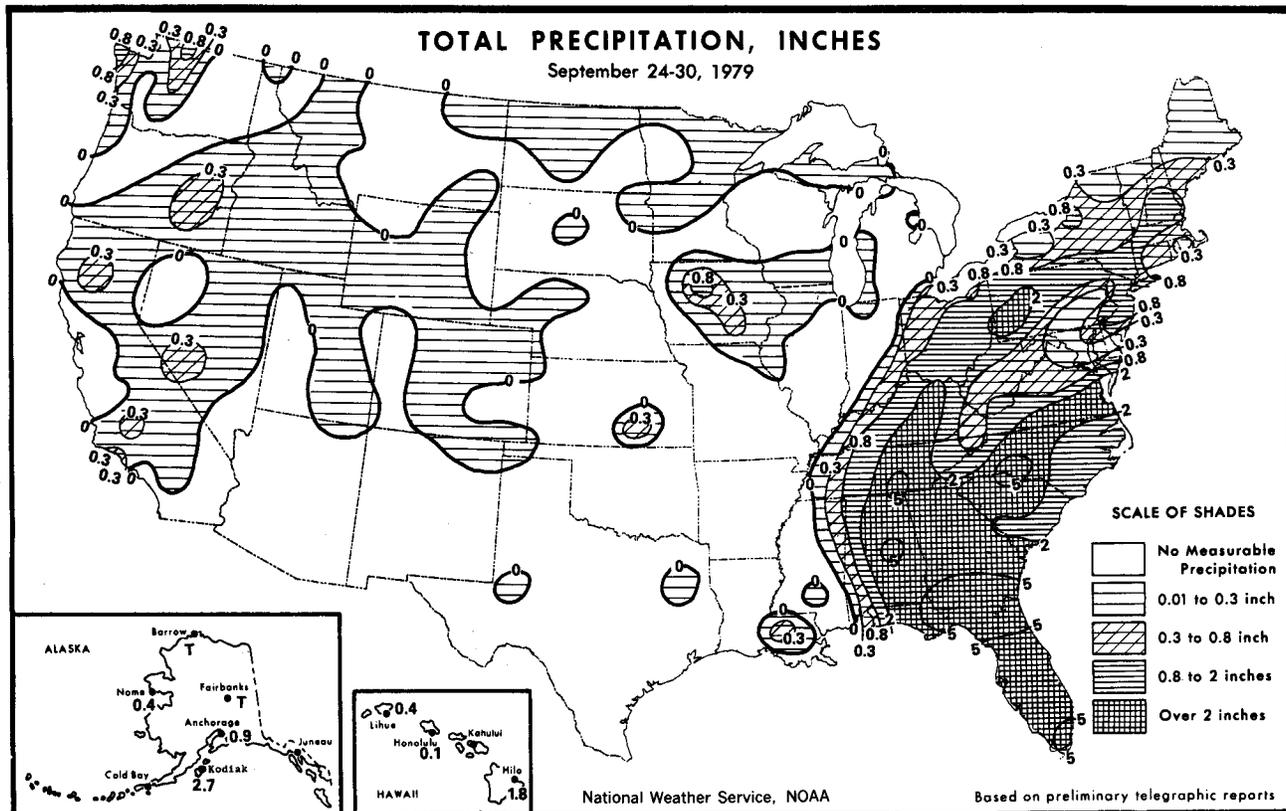
U.S. DEPARTMENT OF COMMERCE
National Weather Service, NOAA

U.S. DEPARTMENT OF AGRICULTURE
Economics, Statistics, and Cooperatives Service

Volume 66, No. 40

Washington, D.C.

Oct. 2, 1979



National Weather Summary

September 24 - 30

HIGHLIGHTS: A stationary front cut through the Southeast forcing moisture over the region every day of the week. Some totals in Florida ranged between 6 and 7 inches. Several amounts running from 3 to 6 inches soaked points in other States as far north as southern Virginia.

The remainder of the Nation received little or no rain.

Much of the Nation reported temperatures at or above normal. Some northern portions of the Plains and Rockies showed temperatures 8 to 10 degrees above the norm. The Gulf Coast and heavy-

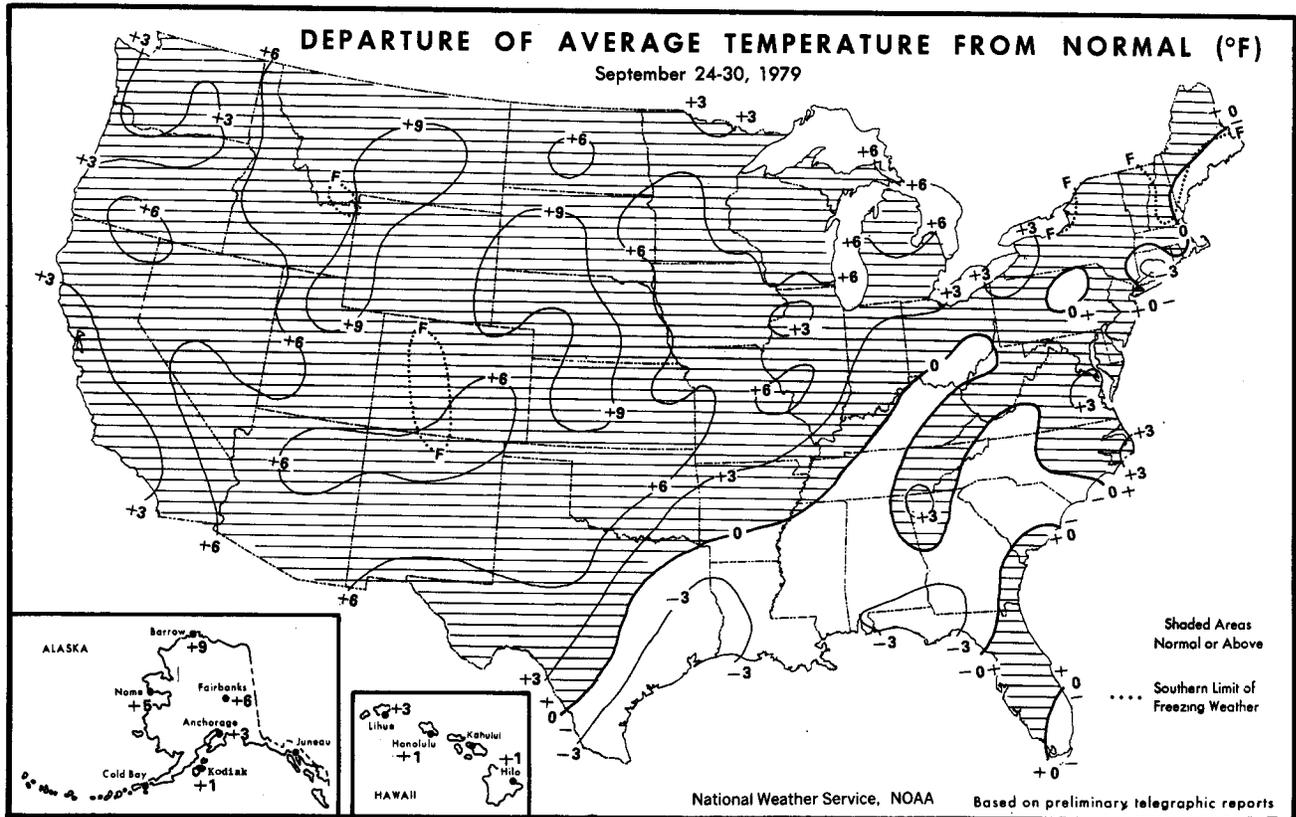
rain areas noted readings 2 to 5 degrees below normal.

On Monday, thunderstorms covered the Southeast producing rain, heavy at times, from Florida to Virginia. In Florida, two-inch-plus rains doused Daytona Beach and Jacksonville.

A few storms brought light rain and hail to the central Plains. South Bend, northern Indiana, noted its first rain in 25 days, ending the longest dry spell there in 33 years.

Temperatures soared in the Southwest; records included 99° at Abilene, north central Texas, and Albuquerque's 91°, which set the mark for the highest reading this late in the year.

A stationary front running from the Atlantic Ocean over Florida continued pumping rain into the Southeast on Tuesday. Tampa, Fla., and Savannah, Ga., both registered about an inch. Very light showers dotted the northern Plateau Region.



tive record day. Del Rio, on Texas's Rio Grande, reached a record 102°.

Rain extended from Florida to New York on Saturday. Florida's 2-to-4 additional inches kept a large portion of the State completely saturated. Other areas of rain included 3.25 inches at Greenville, northern South Carolina; 1.68 inches at Greensboro, northern North Carolina; and 1.17 inches at Poughkeepsie, eastern New York.

Warm readings continued from Texas to the Great Lakes. Alpena notched a record-equaling 73°, and Del Rio showed a record-breaking 104°. New marks in Kansas included Wichita's 94° and 95° at Concordia.

The week of rain in the Southeast lingered on through Sunday. Beleaguered Florida showed heavy amounts of rain again; more than 3 inches fell on Gainesville, and Miami saw more than an inch.

Further north, Richmond, Va., reported flooding after 4.5 to 6 inches streamed over the area. Light rain dampened central California.

In Michigan, Grand Rapids and Lansing put September 1979 in the books as the driest ninth month on record---less than a half-inch fell in those cities.

Temperatures remained on the warm side from the Southwest through the Midwest; Scottsbluff, western Nebraska, at 89°, tied its record reading.

West of the rain area, warm readings persisted. Alpena, Mich., at 81°, managed its second consecu-

Hot temperatures persisted from the Southwest through the central Rockies. In Wyoming, Casper set a new mark at 86°, and Sheridan hit a record-tying 88°. Phoenix's 108° was the warmest reading there this late in the year.

The wet weather over the saturated Southeast continued on Wednesday. Accumulations for the day showed more than an inch at Fort Rucker, Ala.; an inch and one-quarter at Tallahassee, Fla.; and an inch and a half at Macon, central Georgia.

By contrast, dry weather persisted in the Midwest, especially over large portions of Illinois and Indiana.

The already-soaked Southeast saw no letup in rain on Thursday.

Chattanooga scored more than an inch of rain in 3 hours. The Birmingham, north central Alabama, area gathered 2 to 4 inches. Florida stations reported 1-to-2-inch downpours again.

Temperatures were warm from the Southwest through the Great Lakes to New England. Alpena, northern Michigan, tallied a record 83°, topping the 1963 mark by 7 degrees.

Once again, rain fell over the Southeast, but reached as far north as Ohio and Pennsylvania on Friday. Parts of Florida and Georgia measured 1 to 2 inches. Pittsburgh, Pa., totaled nearly 2 inches---the most rain there ever for a September 28.



National Agricultural Summary

September 24 - 30

HIGHLIGHTS: Heavy rains drenched the southeastern United States and extended northward into parts of Ohio, Pennsylvania, and New England. Elsewhere, clear weather with above-normal temperatures speeded crops to maturity. Frosts had yet to strike major row crop production areas; most crops were safe from a killing frost. Soil moisture rated adequate to surplus from the Delta States eastward to the Atlantic Coast and to New England; elsewhere, soil moisture was short to adequate. Rains delayed fieldwork throughout the Southeast where farmers had only 1 to 3 days suitable for fieldwork; in other regions, farmers had an entire week suitable for harvesting row crops and planting winter wheat. The above-normal temperatures speeded maturity of corn and soybeans in the north central States. Winter wheat seeding advanced to 52%, falling between last year's 48% and the 54% average. Cotton harvest reached 8%, lagging 1978's 18% and the 15% average. Corn harvest stood at 8%, short of last year's 13% and the 12% average. Soybean harvest advanced to 13%, 2 points behind last year and average. Grain sorghum harvest stood at 30%, slightly behind 1978's 34% and the 31% average. Rice harvest reached 50%, lagging last year's 75% and the 72% average. Pastures generally rated good east of the Rocky Mountains, but were deteriorating in the Great Plains and Corn Belt because of short soil moisture. Western rangelands rated good in a few of the Mountain States, but in most areas, dry conditions slowed grass growth. Fuel supplies held steady from the previous week. LP gas rated 5% tight, 92% adequate, and 3% surplus. Diesel fuel scored 18% tight and 81% adequate. Gasoline supplies were unchanged from the previous week at 14% tight and 85% adequate.

SMALL GRAINS: Spring small grain harvests were virtually complete; some acreage remained for harvest in the Canadian-border States.

Winter wheat planted reached 52%, nearly on schedule with last year's 48% and the 54% average. Many major producing areas needed rainfall to assure good germination and fast early growth. States reporting dry conditions for planting included Wisconsin, Nebraska, Kansas, Texas, and Oregon. Grasshoppers attacked newly emerged stands in the northern Plains and the Pacific Northwest.

CORN: Most corn reached the mature stage and was safe from a killing frost. Some late-planted fields in the northern Corn Belt could use just a bit more time to mature fully and realize the full potential of the crop. In the eastern Corn Belt, maturity ranged from a low of 41% in Michigan to 95% in Illinois. Corn harvest stood at 5% in the eastern Corn Belt, lagging last year by 4 points and the average by 3 points.

In the western Corn Belt, maturity ranged from 44% in Minnesota to 93% in South Dakota; only Minnesota corn maturity lagged far behind average. Corn harvested in this region stood at 5%, 4 points less than last year and the average.

In the Southeast, corn harvest advanced to 65%, short of last year's 67% but ahead of the 57% average. Heavy rains caused severe local flooding in low-lying fields in Kentucky. Losses were substantial in several major producing areas. Rains caused some lodging and slowed harvest throughout the southeast.

SOYBEANS: Soybeans generally rated good and safe from frost; above-normal temperatures and clear weather speeded the northern crop to maturity.

In the eastern north central States, harvest advanced to 24%, surpassing last year's 23% and the 21% average. In most States, more than half the crop was mature with the exception of Michigan at only 15%.

Harvest reached 14% in the western north central States, lagging last year's 15% and the 19% average. Most of the crop was safe from frost with Minnesota reporting 47% mature. Other States were far ahead of this level.

In the south central States, harvest reached 3%, half of the pace set last year and half the average. Maturity ranged from 4% in Tennessee to 22% in Alabama.

COTTON: Cotton harvest advanced to 8%, lagging last year's 18% and the 15% average. All States lagged last year's pace except North Carolina. The crop matured later than normal with open bolls lagging last year by as much as 40 points. Sub-normal temperatures and rains caused boll rot in many of the southeastern States. Texas growers defoliated stands; the Plains crop needed several weeks of hot weather to realize its full potential. The Arizona harvest increased as bolls opened faster. New Mexico growers ginned the first cotton, but picking was limited. California growers defoliated cotton, and picking got underway.

OTHER CROPS: Grain sorghum harvest reached 30%, lagging last year's 34% and the 31% average. Harvest just got started in Nebraska and South Dakota.

Rice harvest reached the halfway mark, lagging last year's 75% and the 72% average. The Gulf Coast harvest was almost complete. In the Delta, the Mississippi harvest stayed on schedule, but the Arkansas harvest, at 26%, lagged far behind last year's 62% and the 56% average.

FRUITS & NUTS: The apple harvest wound down in the southern States, but the tempo increased throughout the North. Apples in the Pacific Northwest needed cooler temperatures to improve color and speed harvest. Pacific Coast growers harvested a wide range of deciduous fruits including nectarines, peaches, plums, and pears. California growers boxed raisins, packed table grapes, and harvested wine grapes with good sugar content.

Pecans generally rated fair to good except poor in Mississippi. California growers harvested walnuts, almonds, and pistachios; Oregon growers harvested filberts.

Heavy rains inundated Florida citrus areas. Surplus moisture hurt many groves as growers dug ditches to remove standing water; some fruit split. Texas citrus sized well and continued to make excellent progress. The Arizona lemon harvest increased. California growers harvested desert grapefruit, lemons, and Valencias.

VEGETABLES: Northern vegetable growers continued to harvest cauliflower, onions, celery, lettuce, snap beans, carrots, tomatoes, and sweet corn. Florida land preparation and planting continued as weather permitted. Light harvests of a wide

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Weather Data for the Week Ending Sept. 30, 1979

States and Stations	Temperature °F						Precipitation					Relative Humidity, percent		Number of Days			
	Average maximum	Average minimum	Extreme high	Extreme low	Average ^{12H} _{24H}	Departure from normal	Weekly total, in.	Departure from normal	Greatest in 24-hour, in.	Total, in., since Sept. 3	Pct. normal since Sept. 3	Average maximum	Average minimum	90 and above	32 and below	Precipitation	
																.01 inch or more	.50 inch or more
ALA. Birmingham . . .	75	63	80	59	69	- 2	3.7	+ 3.0	3.0	9.1	276	93	74	0	0	3	1
Mobile . . .	80	66	87	62	73	- 2	T	+ 1.3	T	10.3	166	92	65	0	0	1	1
Montgomery . . .	78	67	85	64	73	0	2.5	+ 1.6	1.8	4.8	114	83	66	0	0	3	2
ALASKA. Anchorage . .	51	43	56	35	47	+ 4	.9	+ .4	.6	2.3	100	94	63	0	0	4	1
Barrow . . .	37	32	39	28	35	+ 9	T	- .1	T	.3	75	83	75	0	4	0	0
Fairbanks . . .	57	32	61	27	44	+ 6	T	- .2	T	.1	11	71	43	0	4	1	0
Kodiak . . .	55	40	61	33	48	+ 1	2.7	+ 1.2	1.2	3.8	67	90	67	0	0	4	1
Nome . . .	48	38	50	28	43	+ 5	.4	0	.6	3.5	159	86	77	0	1	6	1
ARIZ. Flagstaff . . .	74	39	77	36	57	+ 2	0	- .4	0	.1	6	68	22	0	0	0	0
Phoenix . . .	104	75	108	71	90	+ 9	0	- .1	0	.1	20	36	13	7	0	0	0
Tucson . . .	97	70	100	65	83	+ 6	0	- .2	0	0	32	11	7	7	0	0	0
Winslow . . .	83	51	85	47	67	+ 1	0	- .1	0	.1	14	-	-	0	0	0	0
Yuma . . .	105	75	108	71	90	+ 6	0	- .1	0	0	55	14	7	0	0	0	0
ARK. Fort Smith . . .	83	58	90	54	71	+ 1	0	- .1	0	0	25	95	47	1	0	0	0
Little Rock . . .	80	58	87	51	69	- 1	0	- .8	0	3.6	109	94	53	0	0	0	0
CALIF. Bakersfield . .	89	63	96	59	76	+ 2	.4	+ .3	.2	.4	400	74	32	3	0	0	0
Eureka . . .	65	55	68	52	60	+ 4	T	- .3	T	.2	29	96	71	0	0	2	0
Fresno . . .	89	57	95	53	73	+ 2	T	- .1	0	0	61	25	3	0	0	0	0
Los Angeles . . .	76	64	83	61	70	+ 2	0	0	0	0	85	54	0	0	1	1	0
Red Bluff . . .	92	60	100	56	76	+ 4	.3	+ .2	.3	.3	75	70	23	5	0	0	0
San Diego . . .	79	70	81	67	75	+ 6	0	0	0	0	89	49	0	0	0	0	0
San Francisco . . .	74	55	78	51	64	0	0	- .1	0	0	72	28	2	2	0	0	0
Stockton . . .	89	57	96	55	73	+ 3	0	- .1	-	-	0	0	0	0	0	0	0
COLO. Denver . . .	79	51	84	48	65	+ 6	T	- .3	T	.3	27	58	24	0	0	2	2
Grand Junction . . .	83	56	87	52	70	+ 6	T	- .2	T	0	40	17	0	0	0	0	0
Pueblo . . .	87	48	98	43	67	+ 5	T	- .2	T	.6	86	83	19	2	0	0	0
CONN. Bridgeport . . .	67	50	74	42	59	- 5	.5	- .1	.3	4.5	173	95	72	0	0	3	0
Hartford . . .	70	43	78	30	56	- 3	.6	- .1	.6	3.0	94	100	50	0	1	1	1
D. C. Washington . . .	74	61	81	54	68	+ 1	.2	- .4	.1	6.6	236	77	66	0	0	2	0
FLA. Apalachicola . .	78	69	86	66	74	- 3	4.8	+ 3.1	2.8	16.7	199	85	66	0	0	6	3
Daytona Beach . . .	85	73	87	70	79	+ 1	4.9	+ 3.3	2.2	13.9	207	98	69	0	0	6	3
Ft. Myers . . .	90	76	92	75	83	+ 3	3.9	+ 2.1	1.1	14.5	177	91	62	5	0	6	2
Jacksonville . . .	83	71	88	69	77	+ 1	6.4	+ 4.8	2.3	17.6	241	96	73	0	0	6	4
Key West . . .	88	78	90	76	83	+ 1	.7	+ 1.9	.4	2.5	36	92	63	1	0	5	0
Miami . . .	85	74	86	73	80	- 1	6.1	+ 3.9	2.2	12.5	152	93	66	0	0	4	4
Orlando . . .	89	73	90	73	81	+ 3	1.0	- .5	.5	9.2	135	98	60	3	0	5	1
Tallahassee . . .	76	67	87	65	72	- 4	5.8	+ 4.5	2.9	10.1	163	98	87	0	0	5	3
Tampa . . .	87	75	90	74	81	+ 2	2.3	+ 1.1	1.4	14.0	237	91	60	1	0	5	2
W. Palm Beach . . .	88	74	89	71	81	+ 1	2.6	+ 2.2	1.7	19.2	209	81	63	0	0	4	1
GA. Atlanta . . .	74	64	84	59	69	0	3.3	+ 2.6	1.9	6.0	200	93	74	0	0	3	2
Augusta . . .	74	65	85	61	70	- 1	1.8	+ 1.1	.7	4.2	140	92	77	0	0	5	2
Macon . . .	74	66	84	61	70	- 3	3.9	+ 3.2	1.8	5.7	190	96	81	0	0	5	2
Savannah . . .	79	68	86	64	74	0	3.7	+ 2.6	1.8	12.3	237	93	73	0	0	7	3
HAWAII. Hilo . . .	83	69	84	66	76	+ 1	1.8	0	-	3.5	51	85	66	0	0	-	-
Honolulu . . .	86	76	88	75	81	+ 2	.1	- .1	.1	.4	80	66	56	0	0	1	0
Kahului . . .	88	-	91	-	82	+ 4	T	- .1	T	0	0	-	57	1	0	0	0
Lihue . . .	85	78	88	72	81	+ 3	.4	- .1	-	.8	47	81	66	0	0	-	0
IDAHO. Boise . . .	80	51	89	44	66	+ 7	T	- .1	T	0	0	49	25	0	0	1	0
Lewiston . . .	79	55	86	48	67	+ 8	0	- .2	0	.2	25	57	26	1	0	0	0
Pocatello . . .	80	45	86	38	62	+ 7	.2	+ .1	.1	.2	50	65	23	0	0	2	0
ILL. Cairo . . .	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chicago . . .	79	53	83	48	66	+ 4	T	- .7	T	0	0	84	41	0	0	0	0
Moline . . .	79	49	85	44	64	+ 3	T	- .9	T	0	0	89	42	0	0	0	0
Peoria . . .	82	51	84	44	66	+ 4	T	- .8	T	0	0	83	38	0	0	0	0
Rockford . . .	79	48	85	43	63	+ 3	T	- .9	T	0	0	96	45	0	0	0	0
Springfield . . .	85	54	89	43	69	+ 6	0	- .8	0	0	0	91	34	0	0	0	0
IND. Evansville . . .	78	55	82	45	66	+ 1	0	- .6	0	2.6	100	88	52	0	0	0	0
Ft. Wayne . . .	78	47	83	40	63	+ 2	0	- .6	0	.4	17	90	41	0	0	0	0
Indianapolis . . .	78	47	81	40	62	- 1	T	- .6	T	.4	15	96	48	0	0	0	0
South Bend . . .	79	51	84	44	65	+ 5	T	- .7	T	0	0	92	44	0	0	1	0
IOWA. Burlington . . .	81	54	84	51	67	+ 5	T	- .8	T	0	0	-	-	0	0	1	0
Des Moines . . .	80	54	84	47	67	+ 6	.1	- .5	.1	.7	25	81	43	0	0	0	0
Dubuque . . .	76	51	80	45	63	+ 5	T	- 1.0	T	0	0	85	49	0	0	0	0
Sioux City . . .	79	50	83	43	64	+ 4	0	- .6	0	2.0	.74	90	44	0	0	0	0
KANS. Concordia . . .	87	55	95	50	71	+ 8	0	- .7	T	.8	27	88	19	1	0	0	0
Dodge City . . .	87	59	95	55	73	+ 8	0	- .4	0	.1	6	66	24	2	0	0	0
Goodland . . .	83	50	89	46	67	+ 7	.1	- .2	.1	.2	15	75	27	0	0	1	0
Topeka . . .	85	52	90	43	69	+ 4	0	- .7	0	.8	27	92	41	1	0	0	0
Wichita . . .	89	60	94	54	75	+ 8	.5	- .3	.3	1.6	47	72	29	4	0	2	2
KY. Lexington . . .	74	55	77	51	64	- 1	1.4	+ .9	.8	9.7	404	91	62	0	0	3	0
Louisville . . .	80	58	82	50	69	+ 3	.7	+ .1	.4	10.5	389	94	59	0	0	3	0

Based on preliminary reports and 1941-70 normals

Weather Data for the Week Ending Sept. 30, 1979

States and Stations	Temperature °F						Precipitation						Relative Humidity, percent		Number of Days					
	Average maximum	Average minimum	Extreme high	Extreme low	Average	Departure from normal	Weekly total, in.	Departure from normal	Greatest in 24-hours, in.	Total, in., since Sept. 3	Pct. normal since Sept. 3	Average maximum	Average minimum	Temperature °F		Precipitation				
														90 and above	32 and below	.01 inch or more	.50 inch or more			
LA. Baton Rouge . . .	81	65	86	59	73	- 1	.5	-	.3	-	94	95	64	0	0	0	0			
Lake Charles . . .	84	63	85	60	73	- 3	0	-	.9	0	12.6	90	53	0	0	0	0			
New Orleans . . .	83	69	88	65	76	- 0	T	T	1.1	0	3.0	58	63	0	0	0	0			
Shreveport . . .	82	58	87	52	70	- 4	T	T	.7	0	3.6	129	95	52	0	0	0			
MAINE. Caribou . . .	64	41	75	30	53	+ 3	.1	-	.2	.1	4.7	147	89	39	0	0	0			
Portland . . .	64	39	74	29	52	- 3	.5	-	.7	.3	3.3	114	55	1	1	1	0			
MD. Baltimore . . .	73	56	81	46	65	- 0	.3	-	.3	.1	6.7	239	95	65	0	0	0			
MASS. Boston . . .	68	51	78	42	59	- 2	.6	-	.1	.4	3.6	120	87	60	0	0	0			
Chatham . . .	65	53	70	41	59	- 2	.6	-	.1	-	2.0	67	82	69	0	0	0			
MICH. Alpena . . .	75	44	83	36	60	+ 7	T	T	.7	0	.3	10	-	-	0	0	0			
Detroit . . .	76	48	78	40	63	+ 3	0	-	.5	0	.9	45	92	48	0	0	0			
Flint . . .	76	49	81	42	63	+ 5	0	-	.5	0	.3	13	93	44	0	0	0			
Grand Rapids . . .	79	47	85	40	63	+ 4	T	T	.7	0	0	0	0	0	0	0	0			
Houghton Lake . . .	76	45	81	35	61	+ 7	T	T	.7	0	0	0	0	0	0	0	0			
Lansing . . .	79	47	85	40	63	+ 5	T	T	.6	0	0	0	0	0	0	0	0			
Marquette . . .	72	44	78	36	58	+ 3	T	T	.8	0	2.0	65	91	46	0	0	0			
Muskegon . . .	72	47	77	40	60	+ 2	.2	-	.6	.2	6	97	57	0	0	0	0			
S. Ste. Marie . . .	69	43	78	37	56	+ 4	T	T	.8	0	1.6	44	93	54	0	0	0			
MINN. Duluth . . .	68	47	78	37	58	+ 6	.1	-	.5	.1	1.3	46	89	47	0	0	0			
Internatl. Falls . . .	63	39	72	31	51	+ 2	.1	-	.6	.1	.7	23	94	52	0	1	2	0		
Minneapolis . . .	76	52	85	46	64	+ 8	T	T	.6	0	2.0	80	84	44	0	0	0	0		
Rochester . . .	75	53	83	46	64	+ 8	T	T	.6	0	.6	21	87	51	0	0	0	0		
St. Cloud . . .	72	48	83	35	58	+ 4	T	T	.5	0	1.5	73	91	--	0	0	0	0		
MISS. Jackson . . .	82	61	86	55	72	- 1	0	-	.6	0	5.8	207	97	61	0	0	0	0		
Meridian . . .	81	64	87	59	73	+ 1	0	-	.7	0	8.0	258	95	61	0	0	0	0		
MO. Columbia . . .	83	55	87	49	69	+ 4	0	-	1.0	0	0	0	90	40	0	0	0	0		
Kansas City . . .	83	58	86	51	71	+ 6	0	-	1.0	0	.4	10	74	39	0	0	0	0		
St. Louis . . .	87	59	107	49	73	+ 7	0	-	.7	0	0	0	83	32	1	0	0	0		
Springfield . . .	84	56	90	52	70	+ 4	0	-	1.0	0	.3	8	86	43	1	0	0	0		
MONT. Billings . . .	80	51	83	48	65	+10	T	T	.3	0	.1	7	51	21	0	0	0	0		
Glasgow . . .	77	47	83	40	62	+ 8	T	T	.1	0	.2	25	68	25	0	0	0	0		
Great Falls . . .	78	46	82	39	62	+ 7	T	T	.3	0	.3	25	66	20	0	0	0	0		
Havre . . .	79	44	88	35	62	+ 8	0	-	.2	0	.7	64	66	21	0	0	0	0		
Helena . . .	77	43	81	39	60	+ 8	T	T	.2	0	.1	11	67	22	0	0	0	0		
Kalispell . . .	66	39	81	33	58	+ 9	0	-	.2	0	.4	36	86	27	0	0	0	0		
Miles City . . .	80	50	86	43	65	+ 9	0	-	.3	0	0	0	60	22	0	0	0	0		
Missoula . . .	76	44	82	38	60	+ 9	T	T	.2	0	0	0	77	25	0	0	0	0		
NEBR. Grand Island . . .	84	50	87	46	67	+ 7	0	-	.5	0	2.0	87	84	33	0	0	0	0		
Lincoln . . .	85	53	90	45	69	+ 7	T	T	.6	0	.4	14	91	35	1	0	0	0		
Norfolk . . .	81	50	85	45	65	+ 6	T	T	.5	0	1.8	78	86	36	0	0	0	0		
N. Platte . . .	84	47	89	41	65	+ 7	0	-	.4	0	.4	21	77	26	0	0	0	0		
Omaha . . .	79	52	84	45	66	+ 3	0	-	.6	0	2.1	72	88	41	0	0	0	0		
Valentine . . .	82	49	90	43	66	+ 8	0	-	.3	0	1.4	100	75	24	1	0	0	0		
NEV. Ely . . .	78	39	80	32	59	+ 5	.1	-	0	.1	.1	20	46	16	0	1	1	0	0	
Las Vegas . . .	98	69	100	65	83	+ 8	T	T	0	0	0	0	32	13	7	0	0	0	0	
Reno . . .	82	39	85	35	61	+ 4	T	T	.1	0	0	0	72	14	0	0	0	0	0	
Winnemucca . . .	83	37	87	32	60	+ 4	T	T	.1	0	0	0	63	18	0	1	0	0	0	
N.H. Concord . . .	70	39	77	28	54	- 2	.8	+ .1	.4	0	3.2	110	99	44	0	2	1	0	0	
N.J. Atlantic City . . .	71	56	78	44	64	0	.2	-	.4	.1	3.3	122	74	56	0	0	2	1	0	0
Trenton . . .	71	57	77	48	64	0	1.4	+ .7	1.9	0	6.4	213	--	--	0	0	2	1	0	0
N.MEX. Albuquerque . . .	89	53	91	51	71	+ 5	0	-	.2	0	.4	57	53	15	2	0	0	0	0	0
Roswell . . .	90	56	92	54	73	+ 7	T	T	.4	0	.1	7	--	--	4	0	0	0	0	0
N.Y. Albany . . .	71	41	77	30	56	- 2	.8	+ .1	.7	0	4.0	138	95	44	0	1	1	1	1	0
Binghamton . . .	65	46	70	34	55	- 1	1.0	+ .3	.9	0	4.2	150	95	57	0	0	2	1	0	0
Buffalo . . .	70	49	76	38	59	+ 1	.1	-	.6	.1	5.4	174	87	59	0	0	1	0	0	0
New York . . .	70	57	77	46	64	- 1	.8	+ .2	.1	0	4.0	143	79	57	0	0	1	0	0	0
Rochester . . .	71	45	79	36	58	- 1	.2	-	.3	.1	4.8	218	93	61	0	0	1	0	0	0
Syracuse . . .	70	44	79	35	57	- 2	.5	-	.1	.5	4.3	172	99	48	0	0	1	0	0	0
N.C. Asheville . . .	67	54	77	52	61	- 3	1.9	+ 1.1	.7	0	5.4	164	99	80	0	0	5	1	0	0
Charlotte . . .	69	61	78	55	65	- 4	5.7	+ 5.0	1.0	0	9.0	290	92	80	0	0	6	2	2	0
Greensboro . . .	69	61	74	53	66	0	2.4	+ 1.6	1.7	0	12.8	388	91	81	0	0	5	2	2	0
Hatteras . . .	78	69	85	68	74	+ 3	1.1	-	.1	.5	12.1	228	91	74	0	0	4	1	1	0
Raleigh . . .	72	61	83	55	67	0	1.6	+ .8	1.0	0	6.2	177	93	80	0	0	4	1	1	0
Wilmington . . .	76	66	84	62	71	- 1	1.5	+ .4	1.1	0	14.9	287	94	74	0	0	6	1	1	0
N.DAK. Bismarck . . .	76	40	87	36	58	+ 4	.1	-	.2	.1	.8	62	82	28	0	0	1	0	0	0
Fargo . . .	76	45	90	42	60	+ 6	T	T	.4	0	.2	12	79	27	1	0	0	0	0	0
Williston . . .	76	44	84	38	60	+ 7	T	T	.2	0	.3	27	76	27	0	0	1	0	0	0
OHIO. Akron-Canton . . .	71	51	74	41	62	+ 2	.9	+ .3	.8	0	7.9	329	90	52	0	0	2	1	0	0
Cincinnati . . .	74	53	78	48	63	- 1	.9	+ .3	.8	0	8.4	350	80	60	0	0	2	1	1	0
Cleveland . . .	72	51	75	43	62	+ 1	.7	+ .1	.7	0	3.1	119	88	59	0	0	2	1	1	0
Columbus . . .	73	52	79	45	63	+ 1	1.6	+ 1.1	1.4	0	6.8	296	95	61	0	0	2	1	1	0
Dayton . . .	74	50	80	41	62	- 1	.6	+ .1	.5	0	3.4	155	77	55	0	0	2	0	0	0
Toledo . . .	76	48	80	40	63	+ 3	.4	-	.1	-	2.8	122	99	49	0	0	2	0	0	0
Youngstown . . .	71	47	76	37	59	0	1.2	+ .6	1.2	0	5.2	217	97	57	0	0	2	1	1	0

Based on preliminary reports and 1941-70 normals

Weather Data for the Week Ending Sept. 30, 1979

States and Stations	Temperature °F						Precipitation						Relative Humidity, percent		Number of Days			
	Average maximum	Average minimum	Extreme high	Extreme low	Average	Departure from normal	Weekly total, in.	Departure from normal	Greatest in 24-hours, in.	Total, in., since Sept. 3	Pct. normal since Sept. 3	Average maximum	Average minimum	Temperature °F		Precipitation		
														90 and above	32 and below	.01 inch or more	.50 inch or more	
OKLA.Okla. City	88	60	92	58	74	+ 4	0	-	.1	.3	9	83	37	3	0	1	0	
Tulsa	88	63	96	59	76	+ 6	T	-	1.0	.1	3	81	39	2	0	0	0	
OREG.Astoria	71	49	83	49	60	+ 3	.2	-	.7	.1	3.8	87	65	0	0	2	0	
Burns	76	45	85	42	60	+ 6	.5	+	.4	-	125	70	28	0	0	0	0	
Medford	85	49	92	47	67	+ 6	.1	-	.1	.1	.3	33	77	2	0	1	0	
Pendleton	75	50	88	45	62	+ 2	0	-	.2	0	.2	40	31	0	0	0	0	
Portland	77	52	88	45	65	+ 5	T	-	.5	T	.6	40	84	0	0	1	0	
Salem	76	46	85	41	61	+ 1	T	-	.5	T	.4	29	98	0	0	0	0	
PA.Allentown	71	50	78	38	61	+ 0	.2	-	.5	.1	7.2	218	87	0	0	2	0	
Erie	73	53	78	43	63	+ 5	1.4	+	.6	-	2.4	75	-	0	0	-	-	
Harrisburg	68	53	76	40	63	+ 0	.1	-	.5	.1	6.6	275	95	0	0	0	0	
Philadelphia	71	56	78	45	66	+ 2	1.0	+	.4	.3	4.9	175	84	0	0	2	0	
Pittsburgh	73	49	75	38	62	+ 2	2.0	+	1.4	1.9	3.6	150	86	0	0	3	3	
Scranton	72	48	75	36	61	+ 2	.8	+	.2	.6	5.2	200	87	0	0	2	1	
R.I.Providence	72	49	76	38	61	+ 1	.3	-	.4	-	4.1	137	90	0	0	-	0	
S.C.Charleston	77	67	84	63	72	- 1	1.7	+	.7	.6	15.4	321	95	0	0	4	1	
Columbia	74	64	81	58	69	- 2	2.4	+	1.5	.8	8.5	207	95	0	0	4	1	
Greenville	70	62	81	58	66	- 2	4.7	+	3.9	3.3	7.3	209	91	0	0	7	2	
S.DAK.Aberdeen	78	47	88	40	63	+ 7	T	-	.4	T	0	0	77	25	0	0	0	0
Huron	78	45	85	37	61	+ 5	T	-	.4	T	0	0	88	27	0	0	0	0
Rapid City	80	51	90	45	65	+ 9	0	-	.3	0	.1	8	69	22	1	0	0	0
Sioux Falls	78	50	84	42	64	+ 6	0	-	.7	0	4.1	152	84	0	0	0	0	
TENN.Chattanooga	76	65	80	62	70	+ 2	4.6	+	3.8	4.4	7.2	212	92	0	0	5	2	
Knoxville	74	62	79	60	68	- 2	1.3	+	.7	1.0	2.6	100	95	0	0	3	1	
Memphis	81	62	86	53	72	+ 2	0	-	.6	0	3.1	111	91	0	0	0	0	
Nashville	75	58	81	54	67	- 2	1.1	+	.5	1.1	10.6	353	97	0	0	3	1	
TEX.Abilene	96	65	101	60	81	+ 8	0	-	.6	0	0	0	50	17	6	0	0	0
Amarillo	88	55	91	50	72	+ 5	0	-	.4	0	.5	29	58	20	3	0	0	0
Austin	88	62	94	60	75	- 0	0	-	.9	0	1.4	40	87	37	2	0	0	0
Beaumont	84	62	85	59	73	- 3	0	-	1.1	0	6.4	131	89	52	0	0	0	0
Brownsville	85	65	88	61	75	- 5	0	-	1.2	0	8.7	174	94	52	0	0	0	0
Corpus Christi	87	66	90	62	77	- 2	0	-	1.1	0	12.9	274	94	51	1	0	0	0
Dal Rio	98	64	104	61	81	+ 3	0	-	.7	0	.7	24	65	17	7	0	0	0
El Paso	93	54	96	52	73	+ 2	0	-	.2	0	.4	36	53	16	6	0	0	0
Fort Worth	89	62	98	54	75	+ 1	0	-	.7	0	1.0	33	87	39	4	0	0	0
Galveston	80	69	81	66	75	- 3	0	-	1.1	0	10.1	194	85	60	0	0	0	0
Houston	86	60	87	53	73	- 4	0	-	1.0	0	9.1	212	99	56	0	0	0	0
Lubbock	92	56	94	50	74	+ 7	0	-	.6	0	.2	10	54	16	6	0	0	0
Midland	93	59	97	55	76	+ 4	.1	-	.3	.1	.1	6	51	15	6	0	1	0
San Angblo	93	58	97	52	76	+ 2	0	-	.6	0	.1	4	65	18	6	0	0	0
San Antonio	91	64	94	59	77	+ 1	0	-	.9	0	.8	23	82	32	4	0	0	0
Victoria	85	65	87	61	75	- 3	0	-	1.1	0	9.1	212	93	52	0	0	0	0
Waco	87	61	95	53	74	- 2	0	-	.8	0	2.8	81	89	43	2	0	0	0
Wichita Falls	94	58	99	54	76	+ 3	T	-	.8	T	0	0	83	25	6	0	0	0
UTAH.Blanding	82	49	85	46	66	+ 6	T	-	.3	T	.1	10	--	15	0	0	1	0
Salt Lake City	84	56	90	49	70	+10	.1	-	.1	T	.1	17	64	22	1	0	2	0
VT.Burlington	66	42	71	30	54	- 2	1.2	-	.4	1.2	4.3	154	88	51	0	1	1	0
VA.Lynchburg	70	59	79	52	64	- 1	1.8	+	1.1	1.5	8.9	297	88	--	0	0	3	1
Norfolk	74	65	81	62	69	+ 1	3.8	+	3.0	1.8	13.6	358	92	76	0	0	3	0
Richmond	74	62	82	53	68	+ 2	1.6	+	.9	.4	9.1	276	92	76	0	0	3	0
Roanoke	68	55	73	47	63	- 2	.9	+	.1	.6	8.8	275	94	73	0	0	3	1
WASH.Colville	--	--	--	--	59	+ 5	0	-	.2	0	.4	57	--	0	0	0	0	0
Omak	--	--	--	--	61	+ 3	0	-	.1	0	0	0	--	0	0	0	0	0
Quillayute	67	49	80	40	58	+ 3	1.3	-	.4	.7	6.9	138	95	70	0	0	4	1
Seattle-Tacoma	68	54	72	50	61	+ 4	T	-	.6	T	1.1	58	81	56	0	0	0	0
Spokane	75	47	88	42	60	+ 4	0	-	.2	0	.4	50	67	24	0	0	0	0
Walla Walla	79	53	89	48	66	+ 4	0	-	.3	0	.3	38	66	28	0	0	0	0
Yakima	79	46	87	39	62	+ 4	0	-	.1	0	.1	25	71	30	0	0	0	0
W.VA.Beckley	67	53	72	45	60	+ 0	.8	+	.1	.8	4.6	148	95	76	0	0	3	1
Charleston	75	55	78	46	65	+ 1	.4	-	.2	.1	3.9	144	92	63	0	0	1	0
Huntington	75	56	77	50	66	+ 1	1.1	+	.5	.8	5.3	196	94	66	0	0	3	1
Parkersburg	76	58	81	50	62	- 2	.9	+	.3	--	3.9	150	84	55	0	0	--	0
WISC.Green Bay	73	49	80	43	61	+ 6	T	-	.7	T	.7	23	97	57	0	0	0	0
La Crosse	75	52	85	42	63	+ 5	0	-	.7	0	.4	13	92	42	0	0	0	0
Madison	77	46	82	42	62	+ 6	T	-	.7	T	.1	3	94	48	0	0	1	0
Milwaukee	78	52	84	48	65	+ 7	T	-	.7	T	0	0	90	49	0	0	1	0
WYO.Casper	79	41	86	38	60	+ 5	T	-	.2	T	.2	25	57	18	0	0	1	0
Cheyenne	76	47	80	43	62	+ 7	T	-	.3	T	.3	30	54	23	0	0	1	0
Lander	77	46	83	41	62	+ 7	T	-	.3	T	0	0	51	22	0	0	0	0
Sheridan	80	43	88	38	62	+ 7	T	-	.3	T	.4	33	73	22	0	0	0	0
P.R.San Juan	88	77	90	75	82	+ 1	5.3	+	3.9	4.0	10.1	180	91	67	1	0	5	2

Based on preliminary reports and 1941-70 normals

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 ESCS State offices in cooperation with the National Weather Service.

ALABAMA: Temperatures 1° subnormal, warming last half. Heavy rains 27th and 28th, heaviest 4.00 in.

Fieldwork: 1.6 days suitable. Soil moisture surplus. Wetness, cloudiness delaying crop maturity. Boll rot several areas. Corn 66% harvested, 65% 1978, 39% average. Soybeans 70% turning yellow, 70% 1978, 67% average; 39% dropping leaves; 22% mature, 39% 1978, 32% average; 3% harvested. Cotton 42% bolls open, 66% 1978, 45% average; 4% harvested, 20% 1978. Peanuts 45% dug, 57% 1978, 63% average; 35% combined, 45% 1978, 52% average. Wheat 20% seeded, 28% 1978. Sorghum 30% harvested. Condition of soybeans mostly good, cotton fair to good, pastures good, pecans mostly fair.

ALASKA: Cloudy, rainy weather. Temperatures above normal with no widespread frost or freeze.

Inclement weather slowed farming activities. Matanuska Valley farmers awaiting break from rain to wind-up combining. Harvest small grains and 2d crop hay nearing completion. Winter supplies hay ranged short to mostly adequate. Potato digging virtually complete. Livestock going into winter good to excellent condition. Soil moisture short to generally adequate. (Last report of season).

ARIZONA: Hot, isolated very light showers. Temperatures 3 to 9° above normal. Cotton picking increasing slowly; 9% harvested, 10% last year, average 8%; harvest in west 25% complete. Central, eastern areas bolls opening increasing rate. Many large unopened bolls. Sorghum harvest active. Corn for grain good progress. Alfalfa haying active, some renovation, planting new fields. Small grain preparations underway. Lettuce harvest underway southeast. Spotty stands central, western areas, hot weather. Cantaloup harvest active central. Melons in west good progress. Mixed vegetables good progress. Lemon harvest increasing; other fruit developing well. Gasoline, diesel and LP gas supplies mostly adequate. Cattle, calves good condition. No summer rains many areas, ranges deteriorating, some water hauling, supplemental feeding.

ARKANSAS: Temperatures averaged 65 to 74°; 4° below to 3° above normal. Most rainfall 0.81 in.

Rice harvest accelerated. Soybean and cotton harvest underway. Fieldwork: 5.6 days suitable. Soil moisture adequate. Soybeans 14% mature; harvest less than 1%, 3% 1978, 4% average. Rice condition good, 26% harvested, 62% 1978, 56% average. Cotton good condition; open bolls 41%, 76% 1978, 62% average; harvest 3%, 12% 1978, 6% average. Corn harvest 34%, 37% 1978, 54% average. Sorghum harvesting 55% complete, 84% 1978, 68% average. Wheat 9% planted, 21% 1978, 18% average. Oats 10% planted, 21% 1978, 18% average. Apple harvest almost finished. Grape harvest completed. Hay harvesting completed. Pastures average to above average. Cattle gains good. Horseflies particularly bad in some areas.

CALIFORNIA: Scattered showers and thunderstorms north 24th. Much cooler 24th and 25th in north; normal temperatures continued southern deserts. Fair, dry weather rounded out week with gradual warming trend.

Rice 79% ripe, 13% harvested. Cotton defoliation underway; 4% harvested. Corn harvest for silage and grain continued. Nectarine, freestone peach, plum packs continued limited scale. Raisins boxed. Table grapes packed. Wine grapes full swing, good sugar. Desert grapefruit, lemons, Valencia oranges packed. Almonds, walnuts, pistachios knocked. Broccoli, cauliflower harvest active central coast, south bay. Cantaloup harvest started desert, decreasing San Joaquin Valley. Celery heavy supply central coast. Lettuce good supply, fall crop developing well. Bell pepper harvest active central coast, northern San Joaquin Valley. Potato harvest slowing south, increasing north. Fall pole-tomato harvest started south coast. Processing tomato harvest over 90% complete. Rangelands dry, but water supplies adequate. Calves beginning to show up in coast, Sacramento Valley herds. Sheep grazing safflower stubble. Milk, egg production normal. Fall bee nectar sources more limited than normal. Farm fuels generally adequate. Gas, diesel supplies tightened coastal areas.

COLORADO: Weak Pacific cold front brought less than 0.25 in. moisture 27th. Warm, sunny rest of week. Temperatures averaged 2 to 8° above normal.

Winter wheat seeded 95%, 88% 1978, 87% average; emerged 79%, 60% 1978, 62% average. Spring wheat harvested 90%, 100% 1978. Corn dough 97%, 100% 1978; dented 91%, 95% 1978; harvested silage 84%, 94% 1978, 89% average. Sorghum turned color 90%, 100% 1978; ripe 53%, 44% 1978. Dry beans cut 91%, 94% 1978, 88% average; threshed 58%, 80% 1978, 62% average. Alfalfa third cutting 80%, 100% 1978. Fieldwork: 6 days suitable. Ranges and pastures good condition. Livestock very good condition. Fuel supplies mostly adequate.

FLORIDA: 6.00 in. rain fell, some Panhandle and west central localities; rainfall west, north, central averaged nearly 5.00 in.; southeast also had heavy rains. Panhandle experienced cooler fall-like temperatures 5 to 6° below normal; temperature over Peninsula averaged 2° above normal.

Soil moisture mostly adequate Panhandle; mostly excessive Peninsula. Harvests of corn, peanuts, hay interrupted by showers. Soybeans, sugarcane generally good condition. Soybeans maturing; no harvest to date. Cutting cane for seed continued. Fuel supplies mostly adequate, however diesel a little tight central, south where fall vegetable planting active. Pasture condition good to excellent; some pastures in low areas flooded. Cattle good condition but high moisture forage is of some concern. Heavy rains all citrus areas, surplus moisture hurting many groves. Caretakers ditching to remove standing water. Some fruit splitting, some areas. The 1979-80 fruit season got off to late start. Vegetable crop conditions generally fair to very good. Growth improving with favorable weather. Damp-off continued some low spots. Fieldwork, planting very active, weather permitting. Gadsden County pole bean, tomato harvests very active; quality generally good. Squash, eggplant harvest gaining Sumter County. Light cucumber harvest for pickles underway Seminole County. Older crop cucumber, squash, sweet corn, okra harvest very active; quality generally good to very good.

Yields improving with better weather. Heavy week-end rains southwest may hamper disease control.

GEORGIA: Temperatures 2 to 5° below normal; averaged mid-60's north to low 70's south. Wet with rains averaging 1.00 to 3.00 in. Several spots in northwest more than 5.00 in. Showers 29th and 30th except drier in northwest.

Soil moisture surplus. Fieldwork: 1 day suitable. Cloudy days, rain and wet soils. Corn fair to good; 76% harvested, 78% last year, average 57%. Soybeans fair to mostly good; 2% harvested, 4% last year, 2% average. Peanuts fair to good; 64% dug and 48% threshed, last year 84% dug and 75% threshed, average 75% dug and 63% threshed. Cotton fair to good; 8% harvested, 18% last year, 12% average. Pecans fair to good; still less than 0.5% harvested, last year and average 2%. Apples fair to good; 94% harvested, last year 90%. Hay crops fair to good. Pastures fair to mostly good. Hogs and cattle good. Wheat 12% planted, last year 7%. Rye 10% planted, last year 8%. Other small grains 13% seeded, 7% last year, 14% average. LP gas 97% adequate; diesel fuel 89% adequate, 11% tight; gasoline 93% adequate, 7% tight.

HAWAII: Weather hot, humid. Beneficial rains previously dry areas Island Hawaii. Crops responding well to added moisture. Elsewhere, showers light, generally dry. Heavy irrigation some areas to maintain fair to good crop growth.

Hot weather affecting semi-head lettuce, snap bean production. Head cabbage harvest slightly down. Other vegetable supplies generally steady. Brazilian type bananas gradually increasing; other varieties light. Papaya supplies light. Rains beneficial to puna orchards Island Hawaii. Pine-apple harvesting sporadic. Sugar harvesting steady. Pastures generally good, some dry areas bad. Fuel supplies adequate.

IDAHO: Temperatures 4 to 9° above normal; range 28 to 91°. Light, subnormal precipitation except southeast.

Small grain harvest completed. Potatoes 20% dug, 15% last year. Winter wheat planted 60%, last year 37%, normal 50%. Third cutting alfalfa hay 85% done, 45% last year. Corn for silage and onions both 60% done. Beginning apple picking; cooler temperatures needed for color. Red clover seed harvest 75% done. Alfalfa seed harvest 66% done. Dry beans 95% swathed, 85% combined. Austrian winter peas 80% seeded. Ranges remain dry. Fieldwork: 6.3 days suitable.

ILLINOIS: Temperatures 2 to 6° above normal. Precipitation minimal, none to less than 0.10 in., except extreme south over 1.00 in.

Soil moisture short. Corn 95% mature, 100% 1978, 94% average; 5% harvested, 13% 1978, 11% average. Soybeans 90% shedding leaves, 84% 1978, 81% average; 37% harvested, 32% 1978, 28% average. Winter wheat 12% seeded, 14% 1978, 14% average. Pasture conditions fair. Fieldwork: 7.0 days suitable.

INDIANA: Very dry except extreme southwest and southeast where showers were 0.10 to 0.70 in.. Temperatures averaged 4° above normal and ranged from 38 to 85°.

Fieldwork: 6 days suitable. Topsoil and subsoil moisture short to adequate. Corn 7% harvested, 1978 8%, average 7%; 80% mature, 1978 80%, average 80%. Soybeans 15% combined, 1978 15%, average 15%; 55% mature, 1978 55%, average 60%; 85% shedding leaves, 1978 85%. Wheat land 55% plowed, 1978 55%, average 70%. Wheat 15% seeded, 1978 15%, average 20%. Tobacco 95% harvested, 1978 90%,

average 60%. Silos filled 70%, 1978 70%, average 70%.

IOWA: Warm, dry weather with low relative humidities and abundant sunshine provided good crop-drying conditions. Temperatures averaged 7° above normal. Precipitation light or none excepting for moderate showers on 24th in central.

Some damaging hail in Boone and Story Counties. Fieldwork: 6.6 days favorable. Corn condition very good; mature 90%, 1978 97%, normal 97%; harvested 5%, 1978 11%, normal 9%. Soybean condition mostly good; acreage with leaves turning 99%, 1978 100%, normal 100%; acreage shedding leaves 87%, 1978 87%, normal 91%; mature 70%, 1978 83%, normal 88%; harvested 21%, 1978 21%, normal 23%. Topsoil moisture short to adequate. Subsoil moisture adequate. Livestock good condition; market movement slowed, herd replacement remains slow. Pasture condition good, decline from previous week.

KANSAS: Precipitation limited to spotty showers of 0.50 in. south central early week. Temperatures averaged from 69° northwest to 76° south central or 7 to 9° above normal.

Corn mature 75%, 85% last year, 80% average; harvested 20%, 30% last year, 20% average. Sorghum mature 50%, 55% last year, 45% average; harvested 10%, 15% last year, 15% average. Soybeans shedding leaves 65%; harvested 5%, last year 5%, 2% average. Wheat planted 55%, last year 45%, average 50%. Fourth cutting alfalfa 75% complete, last year 65%, average 50%. Fieldwork: 6.5 days suitable. Topsoil moisture short.

KENTUCKY: Above normal precipitation and temperatures. Precipitation averaged from 1.00 to 2.00 in. Temperatures 1 to 3° above normal.

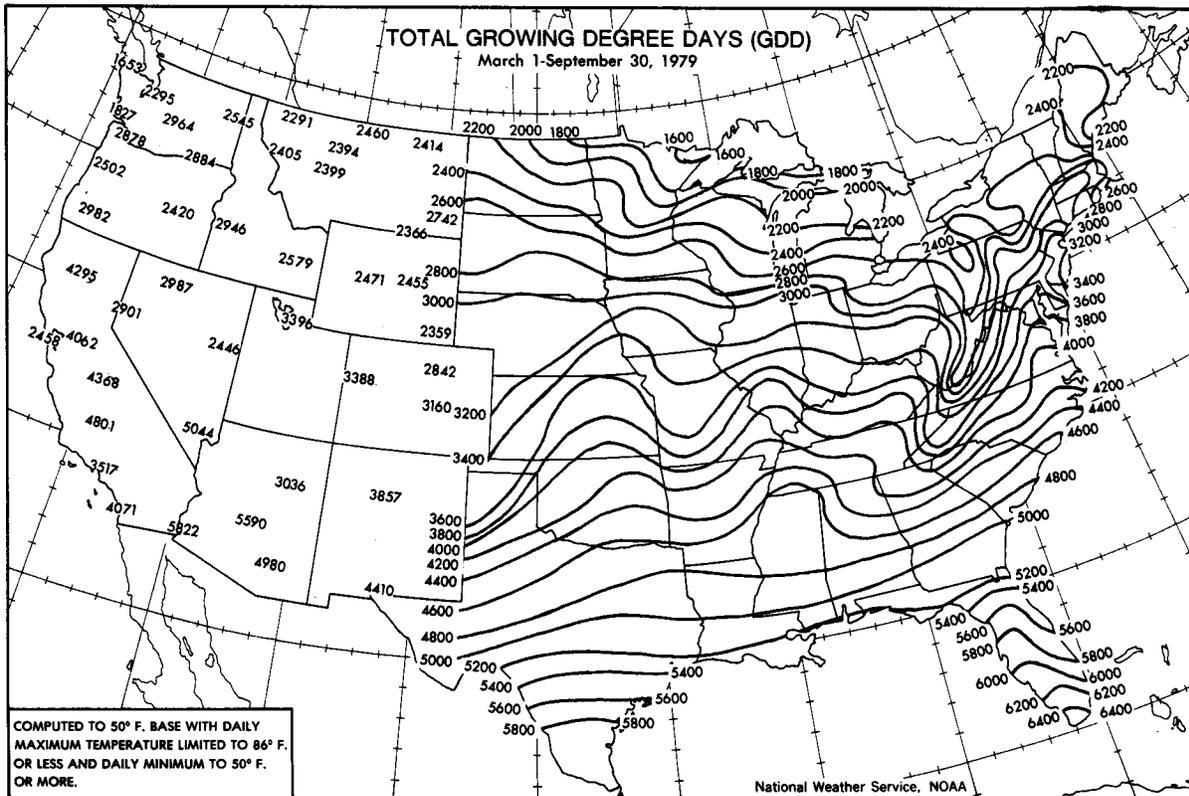
Considerable corn and soybean acreage flooded in west, loss substantial in several major producing areas. Soil moisture adequate to surplus. Fieldwork: 3 days suitable. Less than 5% burley left in field; few burley growers beginning to strip. Houseburn damage light to moderate. Corn 12% harvested, last year 27%, average 19%. Soybean harvest 5% complete, year ago 9%, average 5%. Fall wheat 10% seeded, mostly cover crop. Fuel supplies adequate.

LOUISIANA: Temperatures 1 to 2° below normal. Extremes: 93 and 49°. Few showers.

Fieldwork: 5.3 days suitable. Soil moisture adequate. Soybeans good; 57% leaves turning, 71% last year; 33% shed leaves, 45% last year; 4% harvested, 12% last year, 14% average. Rice 94% harvested, 94% last year, 94% average. Cotton good; 43% open bolls, 78% last year, 63% average; 0% harvested, 16% last year, 12% average. Corn 94% harvested, 92% last year, 83% average. Sorghum 82% ripe, 96% last year; 76% harvested, 71% last year, 66% average. Sweetpotatoes 62% dug, 64% last year, 60% average. Sugarcane 67% planted, 48% last year, 57% average; good condition. Oats and wheat 21% planted, 38% last year. Pecans fair. Hay fair to good. Pasture, cattle good.

MARYLAND & DELAWARE: Temperatures averaged 1° below normal. Highs in low 70's and lows in 50's. Precipitation widespread, from 1.00 to 4.00 in., averaging around 2.00 in.

Fieldwork: 3.3 days suitable. Soil moisture adequate to surplus. Fuel supplies adequate. Corn mature 80%, 92% last year, 87% normal. Harvest for corn silage 70%, 88% last year, 82% normal. Corn harvest for grain 30%, about equal to last year and average. Soybeans yellowed 45%,



63% last year, 57% normal; 25% shed leaves, 34% last year, 28% normal. Tobacco harvest complete.

MICHIGAN: Precipitation sparse. Drought conditions over most of Lower for more than month. Temperatures 3 to 5° above normal. Highs reached mid-80's; lows near freezing.

Fieldwork: 6 days suitable. Soil moisture short. Pasture feed supplies below average. Corn 96% dented, 100% last year and normal; 41% mature, 60% last year, 59% normal; 1% harvested, 3% last year and normal. Soybeans 70% shedding, 84% last year, 85% normal; mature 15%, 32% last season, 34% normal; 1% harvested, none last year, 6% normal. Winter wheat 55% seeded, 40% last year and normal. Corn silage 50% chopped, 60% last year, 55% normal. Dry beans 85% harvested, 75% last season, 60% normal. Potatoes 55% dug, on pace with last year and normal. Sugarbeet harvest to start October 1. Third cut haymaking 80% complete, 65% last year, 80% normal. Plum harvest nearly finished. Grape harvest 33% complete. Red delicious and Jonathan apples about 25% picked. McIntosh 80% in. Celery and tomato harvests 90% complete. Carrots 75% harvested. Cauliflower and cabbage over 50% harvested.

MINNESOTA: Temperatures 5° above normal except extreme north where only slightly above. Precipitation averaged about 0.50 in. below normal. Only north central and northeast received precipitation; about 0.10 in.

Dry sunny weather pushed row crops closer to maturity; most now safe from severe frost damage. Soybeans, sunflower harvest well underway in west central; beginning elsewhere. Most small grains now harvested. Soil moisture short west central and parts of northwest, north central, and central; adequate elsewhere. Corn mature 44%, 1978 87%,

normal 86%; picked 0%, 1978 6%, normal 12%; silage cut 31%, 1978 74%, normal 84%. Soybeans mature 47%, 1978 78%, normal 84%; combined 11%, 1978 21%, normal 33%. Harvested: Spring wheat 97%, 1978 99%, normal 98%; sunflowers 8%, 1978 30%, normal 25%; flax 71%, 1978 82%, normal 82%; potatoes 52%, 1978 55%, normal 58%; sugarbeets 3%, 1978 19%, normal 8%; sweet corn for processing 95%, 1978 99%, normal 99%.

MISSISSIPPI: Temperatures 2 to 8° below normal. Extremes 40 and 87°. Mostly fair weather.

Soil moisture adequate except east adequate to surplus. Fieldwork: 5 days suitable. Gearing up for cotton and soybean harvests. Rice harvest in full swing. Winter wheat planting increased. Soybeans 60% shedding, 66% 1978, 61% average; 18% mature, 33% 1978, 29% average; 4% harvested, 12% 1978, 8% average; condition good. Cotton 89% open bolls, 94% 1978, 78% average; 2% harvested, 29% 1978, 11% average; condition fair to good. Rice 91% mature; 55% harvested, 63% 1978, 50% average; condition good to fair. Corn 50% harvested, 64% 1978, 43% average; condition good to fair. Sorghum 81% ripe; 38% harvested, 70% 1978, 60% average. Hay crops 87% harvested, 90% 1978, 86% average. Sweetpotatoes 41% harvested, 44% 1978, 45% average. Peanuts 58% harvested, 50% 1978, 61% average. Winter wheat 18% planted, 33% 1978, 31% average. Pecan condition mostly poor. Pasture condition good. Diesel and gasoline supplies adequate to tight; LP gas supplies adequate.

MISSOURI: Temperatures 1 to 8° above normal, warmest north, coolest Bootheel. Light showers Bootheel, none elsewhere.

Fieldwork: 6.2 days suitable. Corn 78% mature, last year 51%, normal 77%; 19% harvested, last year 22%, normal 28%. Soybeans 77% turning color or

beyond, last year 74%; 40% mature, last year 26%, normal 42%; 12% harvested, last year 7%, normal 8%. Grain sorghum 71% mature, last year 66%, normal 70%; 19% harvested, last year 26%, normal 22%. Cotton 71% with open bolls, last year 100%, normal 53%; 1% harvested, last year 16%, normal 5%. Winter wheat seedings 20% complete, last year 17%. Fall plowing 7% complete, last year 6%. Soil moisture supplies mostly short. Pastures mostly in fair condition. Fuel supplies for farmwork mostly adequate.

MONTANA: Temperatures averaged 5 to 10° above normal. Very dry with little, if any, precipitation. Windy conditions prevailed east of Divide 28th.

Soil moisture short. Fieldwork: 7 days suitable. Winter wheat 70% planted, 70% 1978, 80% normal; germination fair. Barley harvested 95%, 85% 1978, 95% average. Corn silage harvested 80%, 55% 1978, 75% average. Oats harvested 95%, 90% 1978, 95% average. Spring wheat harvested 95%, 90% 1978, 95% average. Dry beans harvested 85%, 55% 1978, 70% average. Potatoes harvested 30%, 25% 1978, 25% average. Sugarbeets harvested 10%, 5% 1978, 5% average. Cattle and sheep 40% moved from summer ranges.

NEBRASKA: Precipitation nil. Temperatures 5 to 10° above normal; abundant sunshine; drying.

Corn mature 60%, year ago 85%, normal 90%. Sorghum harvest less than 5%, year ago 5%, normal 0%. Sorghum ripe 55%, year ago 80%, normal 75%. Soybean harvest 10%, year ago 10%, normal 5%. Soybean leaves shed 75%, year ago 80%, normal 85%. Winter wheat seeding 90% complete, year ago 85%, normal 80%. Wheat needs rain. Fieldwork: 7 days suitable. Diesel and gasoline 95% adequate; 5% tight. LP gas adequate.

NEVADA: Hot and dry. Temperatures averaged 4 to 8° above normal. Extremes: 100 and 22°. Light precipitation northeast, traces elsewhere. Potato digging gaining momentum. Livestock continue move off summer ranges. LP gas, diesel fuel, gasoline rated mostly adequate.

NEW ENGLAND: Delightful fall weather continued due to persistent high pressure through 27th. High pressure over Canadian Maritimes maintained an easterly flow of cool, moist air by weekend. Temperatures averaged slightly above normal. Precipitation amounts from 0.10 to 1.00 in. fell latter part of week.

Weather cooperative for harvest of all crops; some frost damage reported. Maine potato harvest 50% complete. Corn silage 10 to 70% harvested. Second and third cuttings of hay continued. Frost winding up vegetable season. Massachusetts cranberries good quality and above average size. Soil moisture adequate. Grazing adequate to good. Fuel supplies tight to adequate.

NEW JERSEY: Temperatures 1 to 2° above normal. Extremes: 38 and 80°. Rainfall averaged 0.69 in. north, 1.42 in. central, 0.80 in. south.

Fieldwork: 5.7 days suitable. Rain temporarily halted most fieldwork. Fall vegetable movement increasing. Potato and sweetpotato harvest advancing as field conditions permit. Fall apple harvest increasing. Cranberry harvest general. Harvest of corn for grain begun; silage making continued. Soybeans coloring. Some hay still being made as weather conditions permit. Pumpkins being harvested.

NEW MEXICO: Open weather permitted unhampered field activity and crops to advance in maturity.

First cotton bale ginned, picking to remain limited until after mid-October. Most crop conditions good. Light harvest starting grain sorghum, corn; continuing chile, apples; fall lettuce to start late in week. Winter wheat seeding nearly done; most up to good stands. Livestock range good condition, early livestock shipping started.

NEW YORK: Temperatures averaged near normal. Early week frost over eastern areas. Rainfall above normal southeast, below normal elsewhere.

Good week for fieldwork. Corn silage 35% cut, 45% 1978. Grain corn harvest starting. Third cutting alfalfa 70% in, 60% 1978. Potato, cauliflower, onion, celery, lettuce, snap bean harvests active. Apple, grape, pear harvests moving well.

NORTH CAROLINA: Temperatures near normal east; 3° subnormal west. Precipitation 0.50 to 1.00 in. west to 3.50 in. east.

Fieldwork: 2.1 days suitable. Soil moisture adequate to surplus. Condition of soybeans, corn, peanuts, sorghum grain, pasture, sweetpotatoes, apples fair to mostly good. Cotton mostly fair to good. Vegetables mostly poor to fair. Harvested: Burley tobacco 94%, 1978 85%, average 89%; peanuts dug less than 5%, 1978 18%, average 19%; peanuts threshed less than 5%, 1978 11%, average 11%; sweetpotatoes 34%, 1978 51%, average 37%; corn for grain 63%, 1978 65%, average 63%; corn for silage 85%, 1978 87%; cotton 10%, 1978 5%, average less than 5%; apples 57%, 1978 70%, average 60%. Planted: Wheat 8%. Phenological stages: Corn mature 96%; cotton open boll 54%; soybeans flowering 92%; soybeans pod set 91%.

NORTH DAKOTA: Warm, dry. Only significant rainfall up to 1.30 in. along border areas of northwest and north central; elsewhere none. Temperatures averaged 2 to 4° above normal north central and northeast; 6 to 8° above normal elsewhere. Extremes: 91 and 32°.

Small grain harvest wrapping up. Good progress on most other crops. Sunflower combining and corn picking just beginning scattered areas, becoming general 1 to 2 weeks. Percents combined and in swath with last year and average: Hard red spring wheat 97 and 2, 98 and 2, 97 and 2; durum wheat 93 and 5, 95 and 3, 93 and 5. Sunflowers 3% combined, last year 16%, average 10%. Potato digging 57% complete, last year 47%, average 55%. Fall work underway; tillage, chemical and fertilizer application, weed spraying. Dry weather allowed good progress, but tillage hampered by lack of moisture. Lack of rain left soil moisture in short supply. Pastures suffering.

OHIO: Wet conditions slowing most fieldwork. Corn and soybean harvest both slightly behind normal. Corn mature 85%, 80% 1978, 80% average. Corn harvested 5%, 10% 1978, 10% average. Soybeans mature 60%, 70% 1978, 65% average. Soybeans harvested 10%, 15% 1978, 15% average. Corn silage harvest 65%, 75% 1978, 70% average. Winter wheat planted 20%, 30% 1978, 25% average. Potato harvest 60%, 60% 1978, 60% average. Fieldwork: 5 days favorable. Pasture condition good. Soil moisture adequate to surplus.

Temperatures 2 to 4° above normal, ranging from upper 30's to lower 80's. Precipitation ranged from 0.20 in. northwest to 1.10 in. elsewhere. Rains generally statewide 27th and 28th.

OKLAHOMA: Temperatures 6 to 8° above normal except southeast where 2° below normal and east

central where 1 to 2° above. Rainfall limited to the southeast (0.02 in.) and northeast (0.01 in.).

Topsoil moisture supplies short, subsoil moisture supplies adequate. Early wheat good condition. Wheat seeding 35%, 30% 1978, 40% normal. Sorghum harvest 10% complete 1979 and 1978, 15% normal. Cotton good to fair with open bolls on 35% 1979 and normal, 55% 1978. Peanut and soybean harvest just starting. Native pasture rated good to fair, livestock rated good. Fieldwork: 6.5 days suitable.

OREGON: Temperatures 3 to 5° above normal. Maximums, high 80's west, mid-80's east; minimums mid-40's west, and mid-30's east. Rainfall light except for thunderstorms up to 0.50 in. in southeast.

Winter wheat harvest near completion. Winter wheat 25% planted. Summer fallow areas holding back, soil moisture short. Some hay still being made. Corn for silage, filberts, pears, apples, potatoes, onions, other fall vegetables being harvested. Livestock condition fair to good. Pastures showing effects of moisture shortage. Fire danger high again.

PENNSYLVANIA: Weather data not available.

Fieldwork: 5 days suitable. Soil moisture adequate to surplus. Activities: Haymaking; fall plowing; harvest of potatoes, corn, fruits, vegetables, ensilage corn; silo filling; seeding small grains. Potatoes 78% dug, last year 70%. Corn 60% dented, last year 58% dented, normal 49%. Fall plowing 76%, last year 71%. Wheat sown 46%, last year 48%, normal 42%. Barley sown 68%, last year 70%. Hay quality mostly fair to good. Feed from pastures average to above.

PUERTO RICO: Island average rainfall 1.11 in. or 0.72 in. below normal. Temperatures averaged about 81° on coasts and 76° interior. Extremes: 95 and 60°.

SOUTH CAROLINA: Near-normal temperatures ranging from below normal at first to somewhat above by end. General showers throughout.

Soil moisture adequate to surplus. Fieldwork: 2.3 days available. Corn harvest slowed by rains; 80% harvested, 86% last year, 76% average. Cotton open bolls 84%, 92% last year, 78% average; 6% harvested, 20% last year, 9% average; some defoliating; boll rot increasing with cool, rainy weather. Soybeans fair to good, rains help prospects; leaves turning color 18%, 53% last year, 43% average; shedding leaves 9%, 27% last year, 20% average; 2% mature, behind 4% last year, 5% average; insects minor problem, some spraying velvet bean caterpillars, stink bugs. Apples excellent condition; 83% harvested, 84% last year. Fall cucumbers 3% harvested, snap beans 16%, rain delayed.

SOUTH DAKOTA: Warm days, cool nights. Average temperatures 2 to 14° above normal. Extremes: 96 and 34°. Rainfall light and spotty.

Row crop maturity and drying aided by good weather. Early row crop harvest underway; full swing in two weeks. Fieldwork: 6 days suitable. Topsoil moisture short except southeast. Subsoil moisture adequate east central, southeast, portions of central, northeast, southeast; short elsewhere. Transportation and storage problems continued. Farm fuel supplies mostly adequate. Greenbugs and grasshoppers a problem for fall sown small grain. Greenbugs also in grain sorghum. Main farmwork cutting silage. Corn 93% mature, 1978 93%, average 98%. Soybeans 96% mature. Sunflowers 91% mature. Corn for grain 3% harvested, 1978 4%, average 8%.

Soybeans 10% harvested, 1978 5%, average 17%. Sunflowers 6% harvested, 1978 4%. Grain sorghum 2% harvested, 1978 7%, average 17%. Alfalfa seed 35% harvested, 1978 25% average 30%. Grain sorghum 97% showing color, 1978 99%, average 99%. Winter wheat 98% seeded, 1978 91%, average 92%. Rye 96% seeded, 1978 92%, average 91%. Winter wheat 80% emerged. Rye 73% emerged.

TENNESSEE: Heavy rains late week; amounts averaged 2.00 in. west, 3.50 in. east. Temperatures 2° above normal.

Soil moisture surplus. Fieldwork: 2.7 days suitable. Corn mature 79%, 1978 96%, average 83%; harvested for grain 17%, 1978 36%, average 23%. Cotton open bolls 39%, 1978 79%, average 55%; harvested 1% (revised); 1978 24%, average 14%. Soybeans turning yellow 62%, 1978 78%; leaf drop 21%, 1978 39%; mature 4%, 1978 14%, average 20%. Burley tobacco stripped 14%, 1978 16%, average 14%. Lespedeza hay harvested 82%, 1978 85%, average 83%. Wheat seeded 20%, 1978 22%, average 31%. Oats seeded 43%, 1978 43%, average 52%. Crops fair. Pastures and livestock good condition. Fuel supplies adequate.

TEXAS: High pressure produced fair skies, warm afternoons, mild nights. Temperatures averaged 6 to 10° above normal Panhandle, Northwest Texas, Southwest Texas; near normal elsewhere. Very little rain fell, 0.02 in. Northeast Texas, Cross-Timbers region being largest recorded.

Hot days, cool nights, no precipitation. South Central, East Texas, coastal resume harvesting. Hot weather hastened cotton maturity Plains. Lack of moisture slowed seeding small grains. Soil moisture adequate East Texas, Gulf Coast; short Central Texas westward. Hot weather kept insect activity minimal. Cotton aided by hot days Plains. Defoliation prevalent Edwards Plateau, Cross-Timbers, Low Plains. Several weeks hot, open weather needed for late planted High Plains crop to reach full potential. Harvesting picked up Blacklands, South Central Texas; some difficulty with strippers in rank cotton. Corn harvest 30% complete on High Plains. Virtually complete elsewhere. With continued dry weather harvest operations Plains should peak two weeks. Sorghum harvest progressing westward toward Panhandle. Midge reduced yields some localities. Cross-Timbers and Edwards Plateau peanut producers would welcome rain to aid digging dryland peanuts. Early maturing spanish peanut crop already dug. Hot, open weather promoted sunflower maturity. Wheat producers planting throughout State although producers curtailing planting on Low Plains, Edwards Plateau, Cross-Timbers where moisture needed. Some earlier planted oats providing limited grazing Blacklands.

Wet fields dried; land preparation, planting resumed. Citrus continued to make excellent progress and sizing well. North Texas hot dry weather affected fall vegetables which are making only poor to fair growth. Pecans reaching maturity; shucks beginning to split most areas.

Hot, dry weather deteriorated range, pasture conditions across western half. Grass short and mature most areas and a serious fire hazard. Moisture adequate eastern half. Ranges and pastures in above average condition. Cattle good to excellent condition. Sheep and goat shearing continued active.

Cotton open bolls 40%; harvested 13%, 20% 1978, 19% average. Sorghum turning color 100%; mature 76%; harvested 69%, 71% 1978, 65% average. Wheat planted 51%, 40% 1978, 45% average; emerged 23%. Corn harvested 59%, 55% 1978, 57% average. Peanuts harvested 39%, 27% 1978, 35% average. Soybeans harvested 2%, 2% 1978, 2% average. Sugarbeets har-

vested 0%, 5% 1978, 3% average. Sunflowers harvested 12%, 13% 1978, 35% average. Barley planted 18%, 0% 1978. Flax planted 3%, 0% 1978, 0% average. Oats planted 31%, 50% 1978, 41% average.

UTAH: Scattered showers early week. Temperatures up to 10° above average.

Weather dry and frost-free. Excellent harvesting conditions. Soil moisture very short. Most dryland winter wheat planted in dust and irrigated land irrigated before planting. About 65% dryland and 60% irrigated wheat planted. Third crop alfalfa 85% harvested. Corn for silage 60% chopped; grain harvest just started. Potato picking approached 50%. Dry bean threshing 40% complete. Alfalfa seed harvest 60% complete. Dry onions 20% picked. Apple harvest 15% complete with labor short. Cattle 30% and sheep 25% moved from summer range. About 10% of slaughter and feeder cattle moved to market. About 35% of slaughter sheep and 25% of feeders moved to market.

VIRGINIA: Cloudy, quite humid; cool first of period, mild rest. Temperatures averaged near normal. Extremes: 40° to low 80's. Rainfall heaviest at end of period; amounts varied greatly from less than 0.50 in. extreme southwest to several inches central. Considerable flash flooding of small streams, low streets or roads in areas of heavy rainfall.

Wet weather halting fall harvest and seeding. Topsoil moisture mostly surplus. Fieldwork: 2.4 days suitable. Farm fuel supplies adequate. Corn combining 40%, 42% 1978, 39% average; Tidewater, southeast progress 68%, 73% 1978. Corn lodging causing harvest difficulties; a few combines bogged down in muddy fields east. Soybean, peanut harvests at standstill. Tobacco harvests ending. Eastern Shore sweetpotatoes 20% dug, 28% 1978. Apples 45% picked, about equal to 1978. Small grain seedings: Wheat 3%, 4% 1978, 10% usual; barley 10%, 13% 1978, 23% average; winter oats 10%, 17% 1978, 28% usual. Pastures good to excellent. Feeder cattle marketings active.

WASHINGTON: West: Temperatures ranged from 3° below normal to 3° above with most above. Precipitation much below normal.

Harvests of late vegetables continue in sweet corn, carrots, cabbage, celery, lettuce, fresh cauliflower. Processing cauliflower and vegetable seed harvests complete. Potato harvest continued. Corn silage harvest underway; grass silage well along. Final sheering of Christmas trees, liming, raspberry pruning also taking place. Grain planting continued.

East: Temperatures 2 to 7° above normal. Precipitation nil.

Red Delicious apple harvest slowed by warm weather, Goldens nearing completion. Sweet and silage corn harvests progressing, as are dry bean, processing lima, and sunflower. Potato and grape

harvests continued. Winter wheat and barley planting now general. Cheat grass causing some reseeded. Some grasshoppers. Mint root borer infestations reported. Winter wheat planted 48%, last year 55%.

WEST VIRGINIA: Temperatures normal; low 38°, high 83°. Precipitation below normal.

Fieldwork: 3.9 days suitable. Soil moisture adequate to surplus. Main farm activities: Haying, chopping corn, digging potatoes, clipping pastures. Wet soils hampering harvests. Seeding small grains: Wheat 24%, identical average, 36% 1978; barley 39%, 35% average, 36% 1978. Harvesting progress: 2d hay 81%, 91% average, 92% 1978; 3d hay 57%, 63% average, 64% 1978; corn for grain 13%, 21% average; potatoes 80%, 83% average, 85% 1978; tobacco 87%, identical average, 89% 1978. Other crops mostly good. Livestock good. Pastures good to excellent. Fuel supplies adequate. Leaves beginning to change color.

WISCONSIN: Temperatures 5° above normal. Highs in 60's 24th but warmed to 80's 26th and continued pleasant through weekend. Overnight lows in 30's and 40's. Extremes: 85 and 36°. Few scattered light showers but very little measurable rain anywhere.

Fieldwork: 7 days suitable. Corn silo filling 25% completed, 1978 40%, normal 60%. Some corn still high in moisture for silage. Corn for grain matured rapidly in warm, dry weather. Corn 75% mature, 1978 100%, normal 95%. Late corn needs more time to make grain. Moisture content of grain corn dropping, a few large producers started harvesting. Corn for grain 1% harvested, 1978 3%, normal 2%. Soybeans 60% shedding leaves, 1978 60%, normal 60%. Few early soybeans being harvested. Sunflowers maturing. Good quality third crop hay made in dry weather. Pasture conditions declined but slightly above normal. Very little fall plowing being done as ground dry and hard. Some farmers attempting to seed winter wheat, moisture needed for germination. Tobacco harvest completed, curing weather excellent. Apple harvest continued in ideal weather. Cranberry harvest just starting. Rapid progress on harvesting potatoes, sweet corn, vegetable crops. Soil moisture short to adequate.

WYOMING: Warm, dry. Temperatures 3 to 9° above normal. Precipitation below normal; many places no precipitation or only trace.

Topsoil moisture short. Fieldwork: 6 days suitable. Most winter wheat planted, 70% emerged. Winter wheat prospects fair to good. Acreage harvested: Potatoes 82%; sugarbeets 16%; corn silage 79%. Dry beans, 95% windrowed; 75% combined. Corn for grain 48% mature, 10% harvested. Winter grazing prospects fair to good. Producers plan to winter slightly fewer cattle and sheep. Calf and lamb weights up slightly over last year.

International Weather and Crop Summary

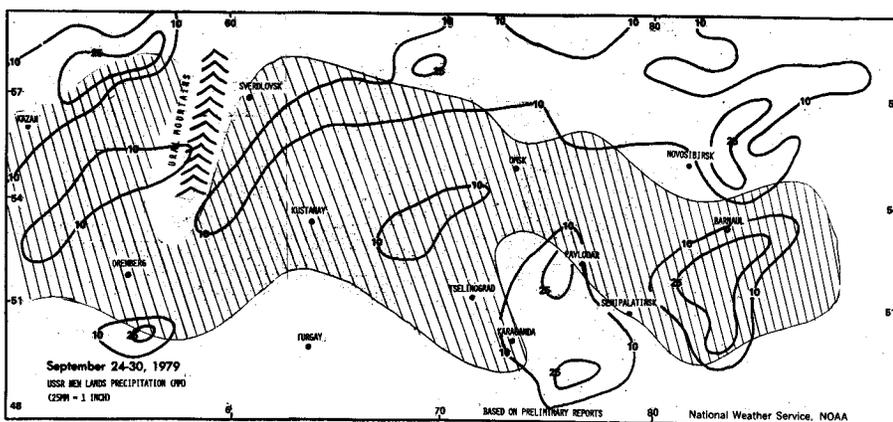
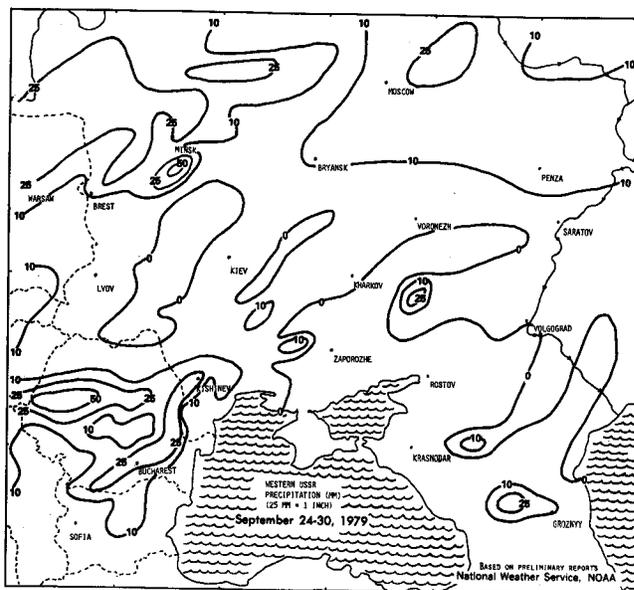
September 24 - 30

HIGHLIGHTS:

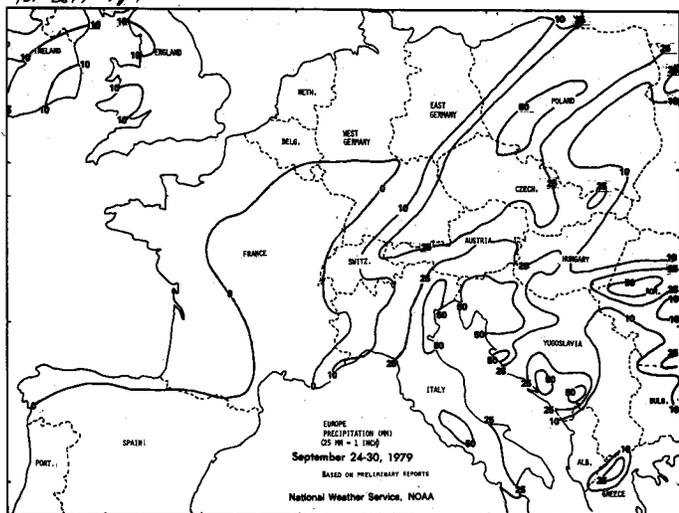
- USSR. Spring grain harvest nearly complete...continued interference by rains. Sowing of winter grains nearly complete...conditions favorable.
- EUROPE. Harvesting maize, planting winter grains...interference by rain in some areas.
- CHINA. Late rice turning color*...too wet in some southern provinces. Harvesting soybeans and cotton*...improved weather.
- INDIA. Rice heading in the south*...good moisture conditions. Wheat sowing near in the north...insufficient water.
- AUSTRALIA. Small grains heading*...good moisture in most areas.
- ARGENTINA. Small grains heading*...adequate soil moisture.
- CANADA. Harvest of small grains nearly complete...good harvest weather.

*Based on normal crop calendar information.

USSR. Mostly fair weather prevailed in southern European USSR as harvesting of spring-planted crops continued and winter grain sowing entered the final stages. Soil moisture should be adequate for grain germination due to rains in previous weeks. Temperatures have remained above normal, but should dip this week as a cold front pushes through to the Caucasus. Late spring grain harvesting in northern European USSR and the New Lands continued under wetter than normal conditions. Grain quality must be suffering, but reports of good yields abound in the New Lands.

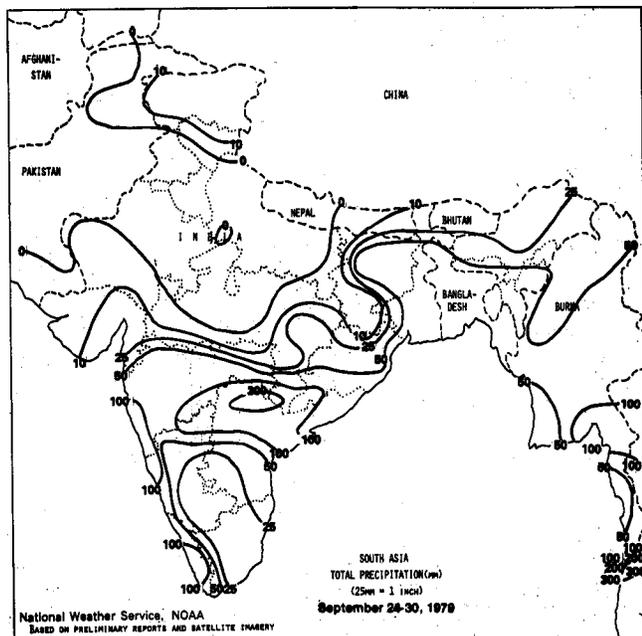
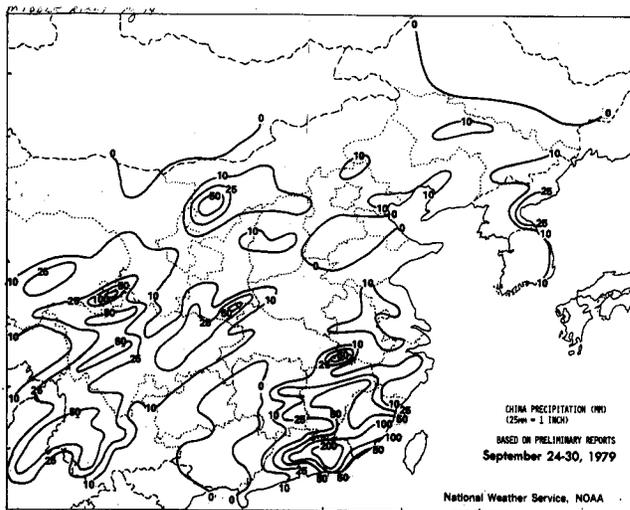


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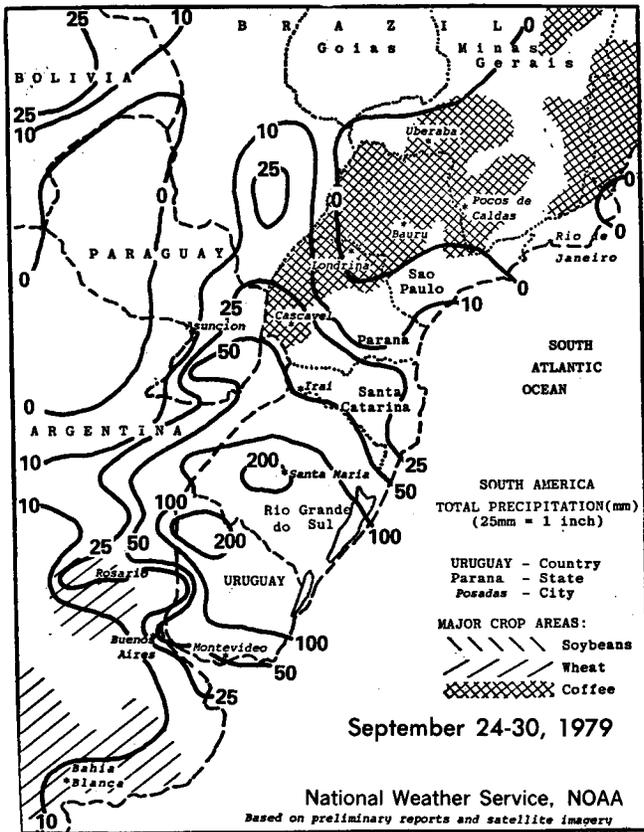


EUROPE. Favorable harvest weather returned to much of western Europe, as the maize harvest continued. Above-normal rainfall in a band extending from Italy and Yugoslavia northeastward through Poland probably interfered with winter grain sowing for a second consecutive week, though totals decreased somewhat. Some winter grains areas in southeastern Europe need rainfall for successful sowing of the crop.

CHINA. Fields dried out, and harvest activities were probably able to resume, as rainfall tapered off in southern portions of the North China Plain. Conditions for winter grain sowing should be excellent as that season approaches. Abundant rains continued in the hills of the southwest in a near-normal pattern. Typhoon Mac drenched the maturing second rice crop in the southeastern provinces of Guangdong, Fujian, and Jiangxi. These abnormally heavy rains may not cause excessive damage if damp weather lets up.

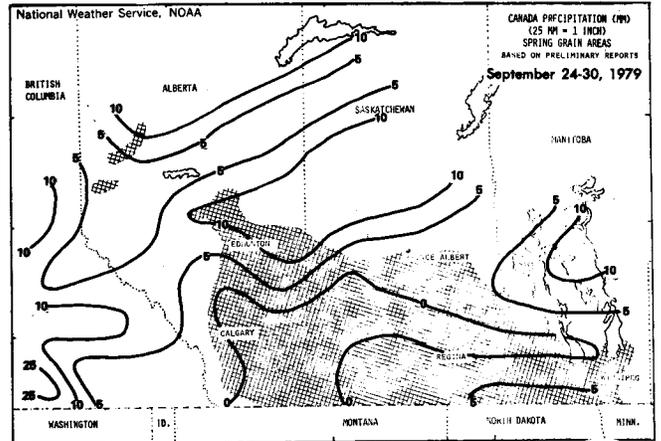
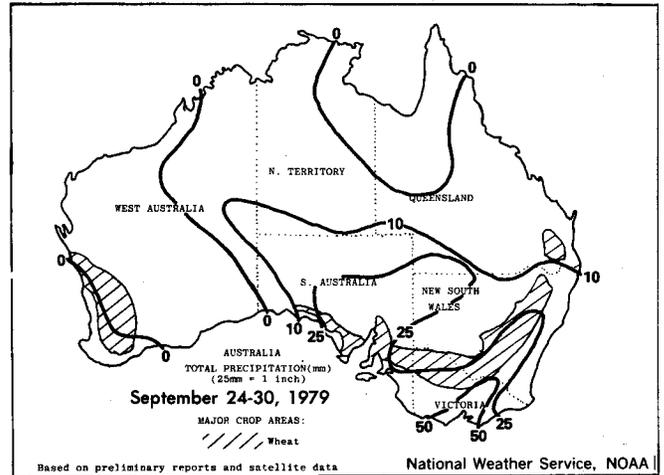


INDIA. The retreating edge of monsoon activity has held relatively stationary for the past three weeks near to just east of its normal October 1st position. No rain fell in the winter wheat belt in the northwest, further dimming prospects for successful sowing next month. The remnants of Tropical Storm Nancy rejuvenated in the Bay of Bengal, but westerly winds prevented it from moving beyond Bihar. Abundant rain continued in Andhra Pradesh and became excessive at some locations. Crops generally benefited from the rain though, and prolonged wet weather could bring a satisfactory harvest even from dryland crops in this previously-parched area.



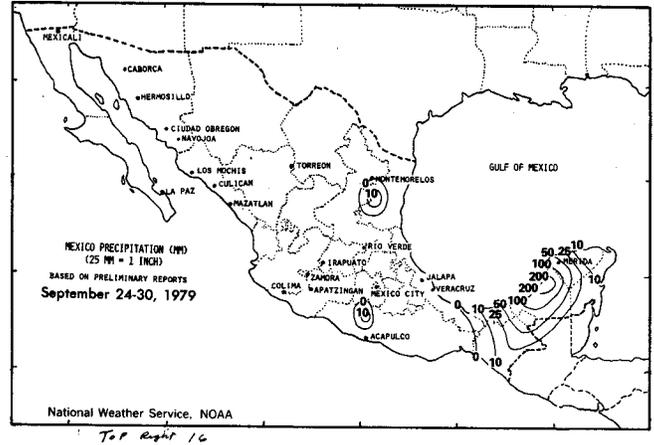
SOUTH AMERICA. Good growing conditions prevailed in Argentina's grain areas because of light-but-near-normal rains. To the north in Brazil, four consecutive rainy days dampened the maturing wheat crop in Rio Grande do Sul. This marked a sharp change in the weather, for the previous several weeks had been relatively dry and quite favorable for the crop. Some benefit from the rains was gained through the replenishment of soil moisture, though soybean planting is some weeks away there.

AUSTRALIA. Much of the grain belt received abundant rainfall this week at a critical time of the crop's development. These generous totals should assure good yields in South Australia, Victoria, and New South Wales. Other grain areas have not been so fortunate. West Australia has suffered through an irregular rainfall pattern this year, and Queensland has not received sufficient rain to maintain growth since June.

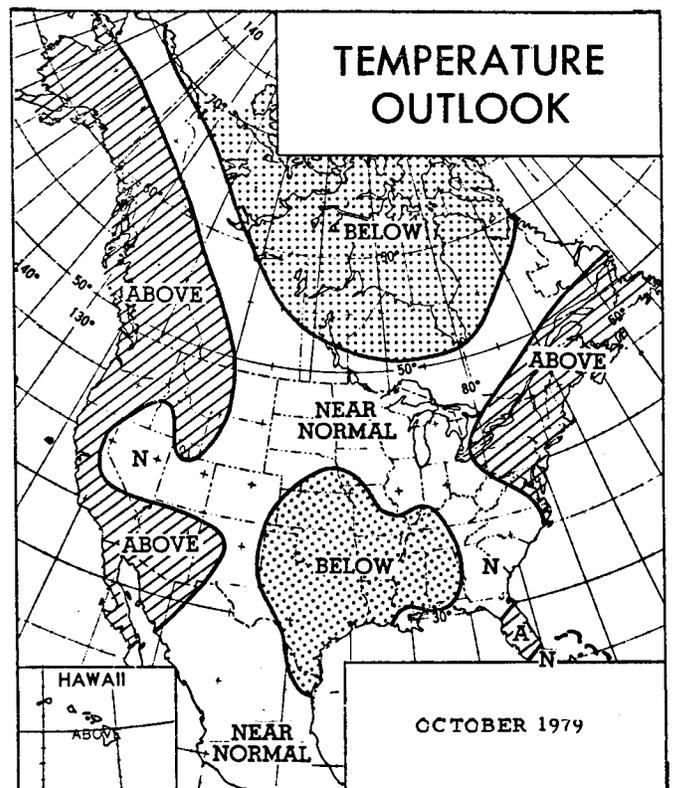
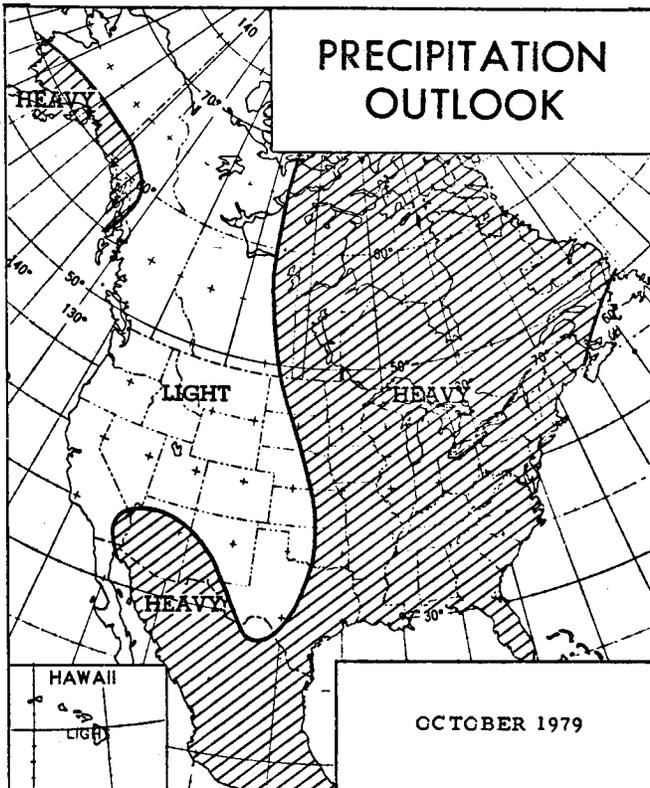


CANADA. Threshing neared completion in the Prairie Provinces with only Manitoba lagging due to previous wet weather. Harvest conditions in Manitoba improved this week allowing rapid gains to be made. In Saskatchewan, flaxseed remains the only crop with a substantial portion yet to be threshed.

MEXICO. Unseasonably sunny, dry weather dominated all major agricultural areas. This hastened maturity of cotton and the older crops, but may have been a bit too warm for some young vegetables in the hottest coastal areas. Culiacan's temperature maxima averaged 35°C with relative humidity of 50 percent while the overnight minima were 24°C with a relative humidity of 90 percent. The only significant rains fell over the Yucatan Peninsula.



Average Monthly Weather Outlook



CROP DEVELOPMENT
FOR WEEK ENDING SEP 30

	CORN MATURE		
	1979	1978	AVG.
COLO	NA	NA	NA
GA	NA	NA	NA
ILL	95	100	94
IND	80	80	80
IOWA	90	97	97
KANS	75	85	80
KY	NA	NA	NA
MICH	41	60	59
MINN	44	87	86
MO	78	51	77
NEBR	60	85	90
NC	96	NA	NA
OHIO	85	80	80
PA	NA	NA	NA
S DAK	93	93	98
VA	NA	NA	NA
WISC	75	100	95

SOYBEANS DROPPING LEAVES

	1979	1978	AVG.
	ALA	39	NA
ARK	NA	NA	NA
GA	NA	NA	NA
ILL	90	84	81
IND	85	85	NA
IOWA	87	87	91
KANS	65	NA	NA
KY	NA	NA	NA
LA	33	45	NA
MICH	70	84	85
MINN	NA	NA	NA
MISS	60	66	61
MO	NA	NA	NA
NEBR	75	80	85
NC	NA	NA	NA
OHIO	NA	NA	NA
SC	9	27	20
TENN	21	39	NA

COTTON BOLLS OPEN

	1979	1978	AVG.
	ALA	42	66
ARIZ	NA	NA	NA
ARK	41	76	62
CALIF	NA	NA	NA
GA	NA	NA	NA
LA	43	78	63
MISS	89	94	78
MO	71	100	53
N MEX	NA	NA	NA
NC	54	NA	NA
OKLA	35	55	35
SC	84	92	78
TENN	39	79	55
TEX	40	NA	NA

GRAIN SORGHUM MATURE

	1979	1978	AVG.
	COLO	53	44
KANS	50	55	45
MO	71	66	70
NEBR	55	80	75
OKLA	NA	NA	NA
S DAK	NA	NA	NA
TEX	76	NA	NA

1/ LESS THAN 5%

NA NOT AVAILABLE

HARVEST PROGRESS
FOR WEEK ENDING SEP 30

	CORN		
	1979	1978	AVG.
COLO	NA	5	8
GA	76	78	57
ILL	5	13	11
IND	7	8	7
IOWA	5	11	9
KANS	20	30	20
KY	12	27	19
MICH	1	3	3
MINN	0	6	12
MO	19	22	28
NEBR	0	0	0
N C	63	65	63
OHIO	5	10	10
PA	3	2	3
S DAK	3	4	8
VA	40	42	39
WIS	1	3	2
17 STATES	8	13	12

THESE 17 STATES PRODUCED 93% OF THE 1978 CORN CROP.

SOYBEANS

	1979	1978	AVG.
	ALA	3	NA
ARK	1	3	4
GA	2	4	2
ILL	37	32	28
IND	15	15	15
IOWA	21	21	23
KANS	5	5	2
KY	5	9	8
LA	4	12	14
MICH	1	0	6
MINN	11	21	33
MISS	4	12	8
MO	12	7	8
NEBR	10	10	5
N C	NA	NA	NA
OHIO	10	15	15
S C	0	0	0
TENN	0	0	0
18 STATES	13	15	15

THESE 18 STATES PRODUCED 95% OF THE 1978 SOYBEAN CROP.

	COTTON		
	1979	1978	AVG.
ALA	4	20	NA
ARIZ	9	10	8
ARK	3	12	6
CALIF	4	NA	NA
GA	8	18	12
LA	0	16	12
MISS	2	29	11
MO	1	16	5
N MEX	0	0	1
N C	10	5	2
OKLA	0	0	0
S C	6	20	9
TENN	1	24	14
TEX	13	20	19
14 STATES	8	18	15

THESE 14 STATES PRODUCED 99% OF THE 1978 COTTON CROP.

RICE

	1979	1978	AVG.
	ARK	26	62
CALIF	13	NA	NA
LA	94	94	94
MISS	55	63	50
TEX	100	100	100
5 STATES	50	75	72

THESE 5 STATES PRODUCED 99% OF THE 1978 RICE CROP.

GRAIN SORGHUM

	1979	1978	AVG.
	COLO	0	0
KANS	10	15	15
MO	19	28	22
NEBR	1/	5	0
OKLA	10	10	15
S DAK	2	7	17
TEX	69	71	65
7 STATES	30	34	31

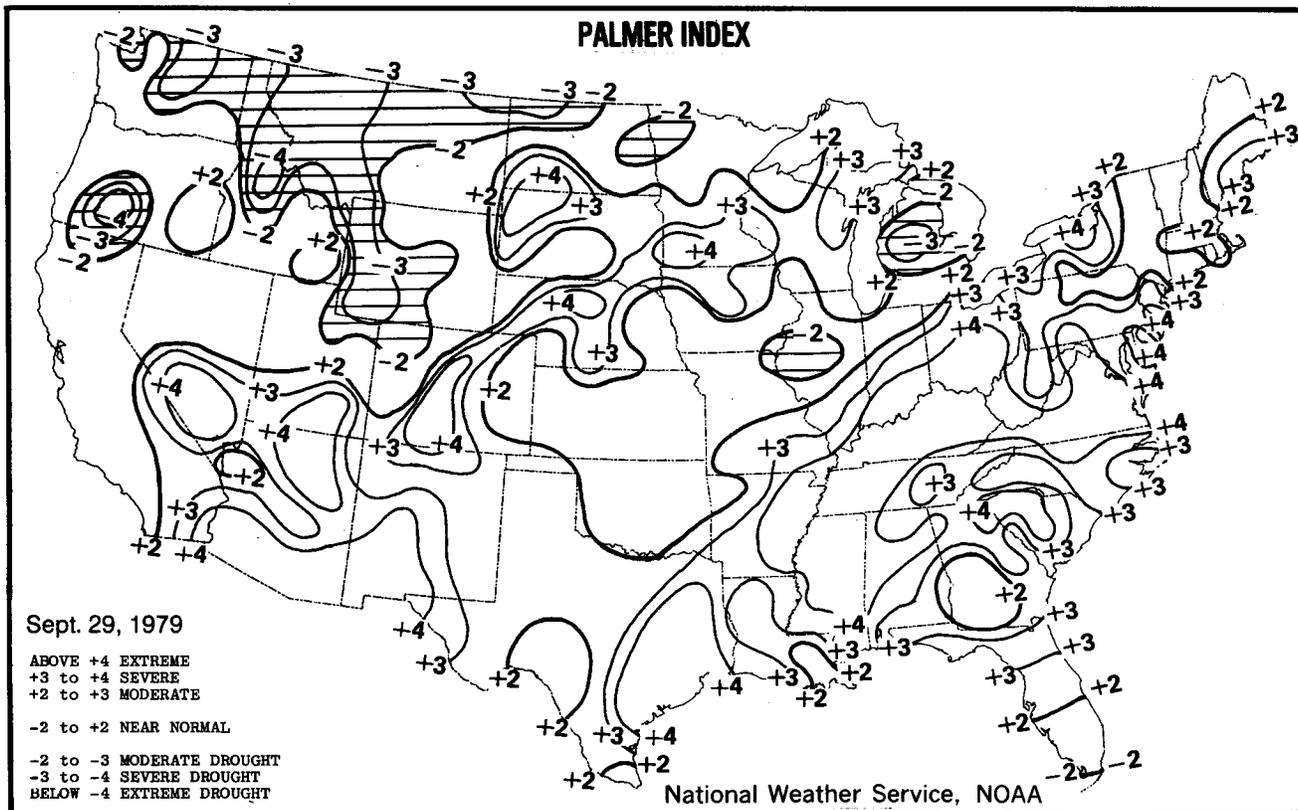
THESE 7 STATES PRODUCED 92% OF THE 1978 GRAIN SORGHUM CROP.

PLANTING PROGRESS
FOR WEEK ENDING SEP 30, 1979

WINTER WHEAT

	1979	1978	AVG.
	CALIF	0	NA
COLO	95	88	87
IDAHO	65	40	50
ILL	12	14	14
IND	15	15	20
KANS	55	45	50
MO	20	17	NA
MONT	70	70	80
NEBR	90	85	80
OHIO	20	30	25
OKLA	35	30	40
OREG	25	NA	NA
S DAK	98	91	92
TEX	51	40	48
WASH	56	55	NA
15 STATES	52	48	54

THESE 15 STATES PRODUCED 90% OF THE 1979 WINTER WHEAT CROP.



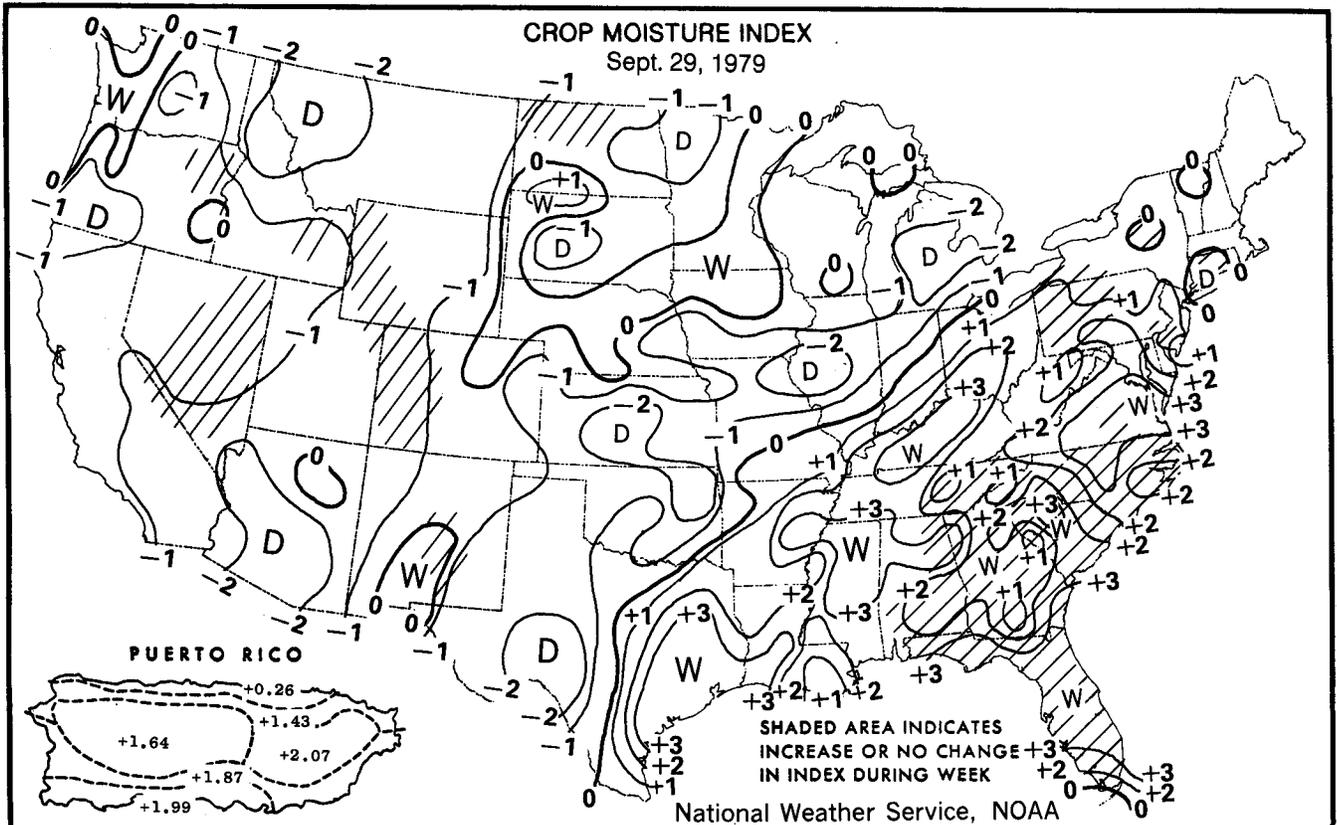
The Palmer Index

The Palmer Index is an index of meteorological drought, which may be defined as a prolonged and abnormal moisture deficiency. The general concept is one of supply and demand. Supply is represented by precipitation and stored soil moisture. Demand is the combination of potential evapotranspiration, the amount needed to recharge the soil moisture, and the runoff needed to keep the rivers, lakes, and reservoirs at a normal level. The results of this water balance accounting produce a positive or negative anomaly which is then weighted by a climate factor. The final product is an index that expresses the abnormality for that particular place for the period of time being computed. This manipulation allows the index to have a reasonably comparable local significance in space and time, that is, a certain index value obtained for a division in New York would have the same local significance as a like value in the more arid areas of western Kansas. This monthly increment is added to a portion of the previous month's index to include the duration of the anomaly in the final index.

The Palmer Index was designed as a climatological indicator of the scope and severity of past droughts. Using the Palmer Index on a real-time basis presents difficulties. A day or so of normal or better rainfall is certainly welcome in an area that has experienced a long drought, but one cannot know whether it indicates the end of the drought or just a brief respite. In order to

make the program have some real-time value, a system of computing a "probability" that a weather spell has ended was devised. This is not entirely satisfactory, but does allow one to assign a definite index value at times when there may be some doubt as to whether it should be positive (wet) or negative (dry).

Another aspect of using the Palmer Index is that one must remember that the demand part of the computations includes three parameters---potential evapotranspiration, recharge of soil moisture, and runoff, any one of which may produce a negative index. For instance if only enough rain fell to satisfy most of the expected evapotranspiration, but not enough to supply the expected recharge and runoff, then a negative index would result. If such a situation continued then one might find that agriculture was progressing at a near normal pace but the Palmer Index would be indicating a worsening drought. In this situation the drought would cause shallow wells and springs to go dry and the levels of rivers, lakes and reservoirs to fall below normal and, if this odd situation continued long enough, would cause serious economic stress to the livestock industry and eventually to other industries and cities. Then if rainfall fell below the minimum needed for agriculture, crops would suffer drastic and rapid decline because there would be no reserve water in the soil. Such a situation, to some extent, occurred during the Northeast drought in the 1960's when New York City almost ran out of water.



The Crop Moisture Index measures the degree to which moisture requirements of growing crops were met during the previous week. The index is computed from average weekly values of temperature and precipitation. These values are used to calculate the potential moisture demand. Taking into account the previous soil moisture condition and current rainfall, the actual moisture loss is determined.

If the potential moisture demand, or potential evapotranspiration, exceeds available moisture supplies, actual evapotranspiration is reduced and

the CMI gives a negative value. However, if moisture meets or exceeds demand the index is positive.

Shaded areas indicate the index was unchanged or increased from the previous week's value; soils dried in the unshaded areas. Centers of positive and negative areas are identified by W for wet and D for dry.

Local moisture conditions may vary because of differences in rainfall distribution or soil types. The type of agriculture and stage of crop development must be considered when assessing the impact of moisture conditions based on the Crop Moisture Index. Some general guidelines follow.

UNSHADED AREAS: INDEX DECREASED	
ABOVE	3.0
2.0 to 3.0	SOME DRYING BUT STILL EXCESSIVELY WET
1.0 to 2.0	MORE DRY WEATHER NEEDED, WORK DELAYED
0 to 1.0	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
	EXTREMELY DRY, MOST CROPS RUINED

SHADED AREA: INDEX INCREASED OR DID NOT CHANGE	
ABOVE	3.0
2.0 to 3.0	EXCESSIVELY WET, SOME FIELDS FLOODED
1.0 to 2.0	TOO WET, SOME STANDING WATER
0 to 2.0	PROSPECTS ABOVE NORMAL, SOME FIELDS TOO WET
0 to 1.0	MOISTURE ADEQUATE FOR PRESENT 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 CONTINUED, RAIN URGENTLY NEEDED
BELOW	-4.0
	NOT ENOUGH RAIN, STILL EXTREMELY DRY

SOIL MOISTURE INCREASED IN THE SOUTHEAST AND PARTS OF THE NORTHEAST BECAUSE OF HEAVY RAINS. SOME POORLY DRAINED FIELDS CONTINUE TO BE FLOODED. EXCESSIVE MOISTURE IN THE DELTA AND NORTHWESTERN GULF COAST DECREASED IN SUNNY, WARM WEATHER. THE CORN BELT, WHEAT IN THE CENTRAL PLAINS, AND MOST WESTERN AREAS ALSO LOST MOISTURE IN NONIRRIGATED DISTRICTS.

(continued from page 3)

variety of vegetables moved from southern Florida. Wet fields dried in Texas allowing farmers to prepare land and plant crops. In northern areas of Texas, hot, dry weather slowed growth of fall vegetables. In California, the processing-tomato harvest advanced to more than 90% complete; broccoli, cauliflower, celery, lettuce, and bell peppers moved from central areas.

PASTURES & LIVESTOCK: Grasslands east of the Rocky Mountains generally rated good. However, dry conditions in the Plains and Corn Belt slowed pasture growth. The same dry conditions helped farmers produce a good quality hay crop. In the West, rangeland in several of the Mountain States rated good, but in most areas, dry conditions slowed grass growth and, in Oregon, produced a fire hazard. Arizona livestock producers hauled water and supplemental forage to herds. Stockmen continued to move cattle off summer ranges.



FIRST CLASS MAIL

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Publication of the Weekly Weather and Crop Bulletin began in 1872 as the Weekly Weather Chronicle. It is issued under general authority of the Act of January 12, 1895 (44USC 213), 53d Congress, 3d Session. Contents of the Bulletin may be reprinted freely, with proper credit.

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