

# WEEKLY WEATHER AND CROP BULLETIN

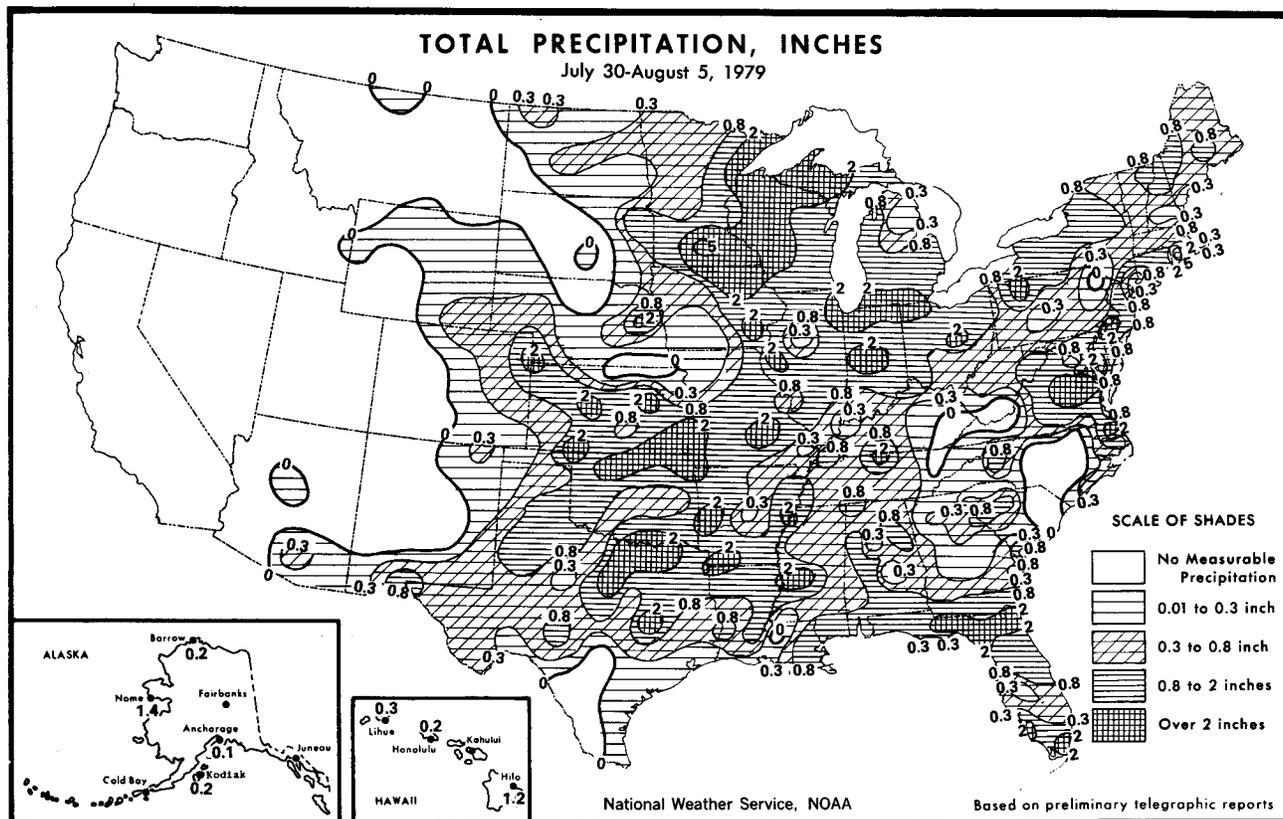
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## National Weather Summary

July 30 - August 5

**HIGHLIGHTS:** Moisture from the Gulf of Mexico moved northward into the central Plains and western Lake States; weather disturbances created heavy downpours and some tornadoes.

Moderate rain fell over parts of previously dry western New England; however, much of the area received only small amounts. Nearly all the area west of the Rockies remained dry.

Although midwestern temperatures ranged cooler than normal, by week's end, very warm air (highs in the mid-nineties) edged into the western portions of that area. Much of the West noted warmer than normal readings.

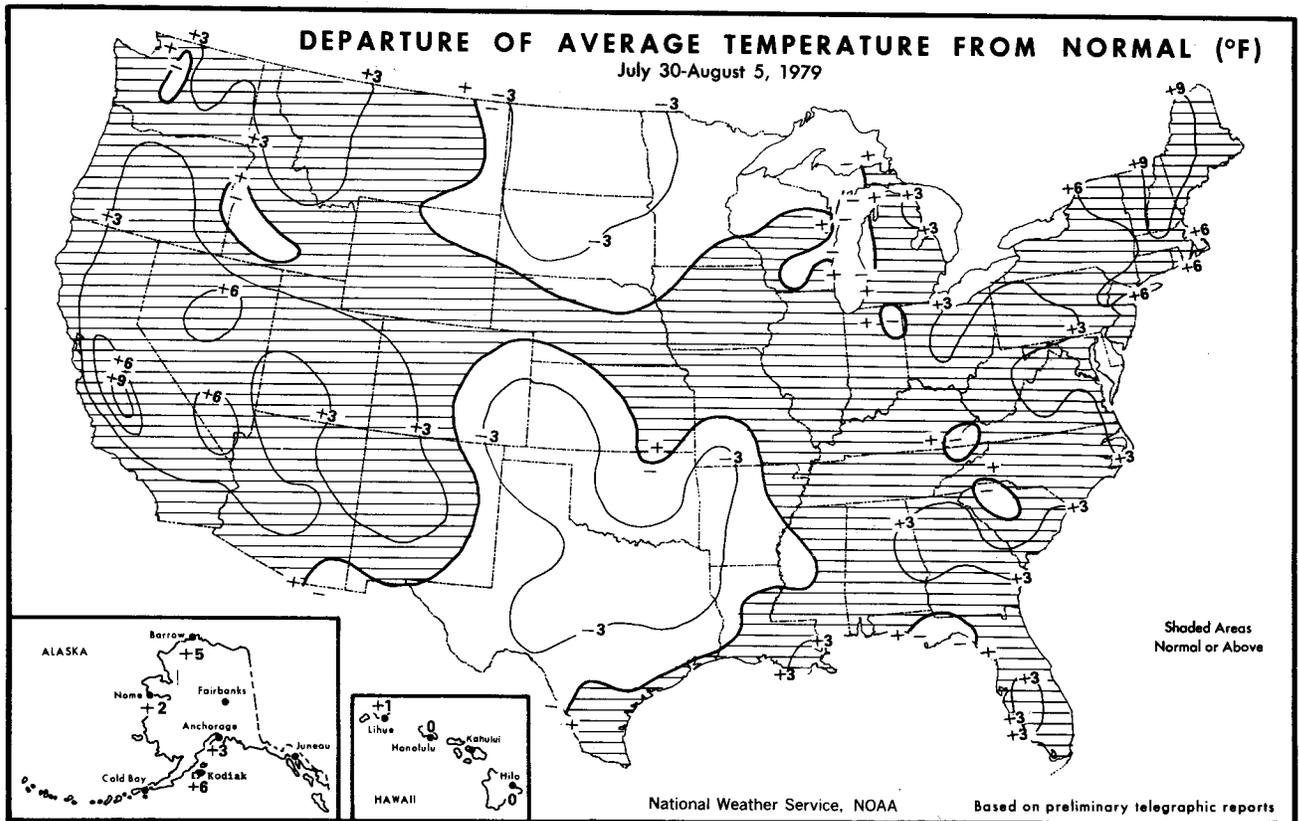
Early Monday, a warm front curved from Minnesota through Iowa triggering heavy thunderstorms; 2.5 inches soaked parts of southeastern Minnesota, and Mason City, northern Iowa, measured 3.4 inches. By afternoon, the rain edged to the Great Lakes; Chicago reported 2.4 inches.

Meantime, a cold front trekked over the western Plains producing hail in Colorado, Wyoming, Kansas, and into Illinois. Four tornadoes touched down near Cheyenne, Wyo. More than an inch of rain covered Goodland, western Kansas.

Storms formed over sections of the middle Atlantic States where Newport News, southeastern Virginia, collected nearly 3 inches of rain.

Thunderstorms ranged from the Plains through the Mississippi Valley on Tuesday. A sampling of rainfall totals showed 2 inches at Monett, southwestern Missouri, and 1.3 inches at Springfield, southern Missouri, and Decatur, central Illinois.

Storms cropped up in the Gulf Coastal States and East Coast; New Orleans posted more than an inch of rain, while in New York State, Elmira and Watertown each registered more than an inch.



Intense storms carried hail and a tornado to southwestern New Mexico and West Texas.

Temperatures dipped sharply in the Rockies; Alamosa, south central Colorado, noted a record low 39°.

A stationary front stretched from New England across the Mississippi Valley to Texas setting off storms on Wednesday.

Some of the heaviest rainfall included more than 2 inches at Franklin, western Pennsylvania; nearly 2 inches at Indianapolis; more than 2 inches in portions of southern Indiana, southern Missouri, northwestern Arkansas; and 4 inches at Springhill, northwestern Louisiana.

In the Southeast, Sumter, east central South Carolina, notched 1.3 inches, and 1.8 inches soaked Tallahassee.

Temperature readings soared in the Southwest, where Las Vegas, Nev., hit a record-equaling high for August of 116°. Ely, eastern Nevada, tied a daily record high of 94°.

On Thursday, rain persisted in the South and Texas and became quite heavy along the upper half of the Atlantic Coast.

More than 5 inches of rain washed over central Texas, and Jackson, Miss., scored nearly 3 inches.

To the east, Richmond, Va., gathered 1.4 inches; Philadelphia tallied 1.6 inches; and Wilmington, Del., got more than 2 inches.

The heat wave continued in the Southwest; Las Vegas called in another record high at 115°, and Albuquerque tied its August high reading of 101°.

Heavy rains drenched northern Texas and southeastern Iowa early Friday. Outside Fort Worth, Everman measured 6 inches, and Burleson collected 5 inches. Brighton, Iowa, logged 3 inches.

Later in the day, rain extended from the Gulf Coast through the middle Atlantic States. Jackson,

Miss., had 1.4 inches, and Baltimore received 1.2 inches.

Record-breaking heat stubbornly held on in Nevada. Las Vegas again sweltered at 116°. Ely, at 95°, set another new mark.

On Saturday, heavy thunderstorms rumbled over the upper Midwest. High winds, hail, and heavy rains accompanied the storms. Rochester, southeastern Minnesota, recorded 2.3 inches of rain with lesser amounts in other States.

Thunderstorms gathered over sections of the East Coast and South. Mobile, southern Alabama, noted an inch, and Miami received a bit more than 2 inches. To the north, Providence, R.I., chalked up about 6 inches in 6 hours.

The heat in the Southwest trudged north through the Rockies setting records along the way. A sampling of new marks included Salt Lake City's 104°, Denver's 98°, a record-tying 101° at Pocatello, southeastern Idaho, and Cheyenne's 95°, which broke the 1881 high reading by one.

On Sunday, a band of storms stretched from Iowa to Ohio; though rain amounts generally stayed below an inch, five tornadoes hit both Iowa and Illinois. La Crosse, western Wisconsin, got 1.2 inches of rain.

Intense storms rolled over Florida; two tornadoes touched down, and 2 to 3 inches of rain soaked Jacksonville and Cross City in the northern part of the State.

Baking temperatures persisted in the Rockies. Records showed Salt Lake City's 103°, and 102° at Grand Junction, western Colorado, and Scottsbluff, western Nebraska. In west central Wyoming, Lander hit an August high of 101°, while in the east central section of the State, Casper, at 102°, reached the century mark for the first time ever in August.



## National Agricultural Summary

July 30 - August 5

**HIGHLIGHTS:** Precipitation continued to maintain good soil moisture supplies throughout the Corn Belt, Northeast, the central and southern Great Plains, the Delta, and Florida. The West remained dry with some crops stressed, and rangelands deteriorating. Farmers had almost a full week available for fieldwork in the West and the middle Atlantic States; elsewhere, only 3 to 5 days were suitable. Farmers plowed land for wheat seeding in the Corn Belt. Grasshoppers plagued crops and rangeland in the Great Plains and the Pacific Northwest. Pastures rated good, except in the West, where dry conditions held them in only poor to fair condition. Rains slowed hay harvesting throughout most of the eastern half of the Nation. Winter wheat harvest advanced to 87%, lagging 1978's 89% and the 92% average. Oats harvest reached 28%, and barley combining stood at 9%. Corn tasseling and silking was almost complete; a significant part of the crop reached the dough stage. Corn harvest advanced slowly throughout the South. Soybean bloom was well advanced in northern areas but lagged in the South. Grain sorghum heading spread throughout the Great Plains; harvest centered in Texas. Rice heading lagged last year, and wet soils held combining in Texas and Louisiana to half of last year's progress. Fuel supplies continued to improve gradually throughout the Nation. LP gas rated 9% tight and 88% adequate; diesel fuel scored 30% tight and 67% adequate; and gasoline stood at 27% tight and 71% adequate.

**SMALL GRAINS:** Winter wheat combining advanced to 87%, slightly behind last year's 89% and the 92% average. Harvest centered in the northern areas from the Pacific Northwest to the Dakotas. Oats harvest in the nine major producing States reached 28% complete, lagging last year's 50% and the 60% average. Barley combining in the seven major producing States reached 9%, compared with 21% last year and the 34% average. Spring wheat harvest advanced to 3%, short of last year's 9% and the 23% average. Rains lodged some small grains in the western north central States.

**CORN:** Corn rated mostly good and, in some areas, excellent. Most areas had adequate soil moisture and very little temperature stress during the critical tasseling and silking stage. In the eastern north central States, tasseling ranged from 55 to 92%; Indiana reported 25% and Illinois 35% of the corn in the dough stage. In the western north central States, tasseling ranged from 85 to 97%; Kansas reported 25% of the corn reaching the dough stage. In the South, corn harvest ranged from 5% in Alabama to 8% in Texas and 11% in Georgia.

**SOYBEANS:** Soybeans rated good to excellent, although rains damaged some stands in the central States. In the eastern Corn Belt, bloom advanced to 85%, slightly ahead of recent years. Pod set ranged from 15 to 55%, close to recent years' development. In the western Corn Belt, bloom ranged from 60 to 91%, and pod set ranged from 26 to 61%, slightly lagging last year's average. In the south central States, bloom ranged from an

unusually low 26% in Arkansas to a near-normal 64% in Mississippi. Pod set spanned 13 to 35%. Both bloom and pod set tended to lag recent years in the Delta.

**COTTON:** Cotton rated only fair to good; rainy weather helped increase insect populations and the incidence of disease. Boll set was well advanced in eastern areas, ranging from 59 to 97% in the Delta, 55% in Texas, and 62% in California. Harvest stood at 3% in Texas, compared with 4% last year and the 2% average.

**OTHER CROPS:** Grain sorghum heading ranged from 71% in Texas to 30% in South Dakota; crop development lagged the usual pace. Only Texas harvested grain sorghum, which stood at 36%, lagging 1978's 57% and the 43% average because of frequent rains.

Rice heading became more widespread throughout the Delta and ranged from 11% in Arkansas to 71% in Texas. California rice heading stood at 45%. Harvest advanced slowly along the Gulf Coast. It reached 29% in Texas and 12% in Louisiana. Earlier rains slowed combining to half the pace of recent years.

**FRUITS & NUTS:** Deciduous fruit harvests continued throughout the Nation, winding down in southern areas and increasing in northern areas. The sweet cherry harvest neared completion, and tart cherry picking was not far behind. New England growers picked early apples and peaches. Pacific Coast growers harvested peaches, pears, plums, apricots, apples, and nectarines. Pecans were sizing across the South. California growers applied the last irrigation and prepared ground in almond orchards. Oregon growers sprayed walnuts and filberts.

Rains improved citrus groves and ended the use of irrigation in Florida. New crop fruit progressed very well. Fuel shortages slowed Florida citrus caretaker operations. Texas growers irrigated and continued general maintenance operations in citrus groves. Arizona citrus groves were in good condition; limited lemon ring picking began. California Valencia harvest continued at a slow pace; lemon and grapefruit movement proceeded unchanged.

**VEGETABLES:** Northern vegetable producers continued to pick a wide variety of summer vegetables. Southern producers prepared seedbeds for late summer and fall plantings. Florida growers planted some vegetable crops and laid plastic mulch. Texas growers prepared land for fall planting in southern areas and harvested a wide variety of vegetables and melons farther north. California growers harvested broccoli, melons, carrots, cauliflower, celery, lettuce, and tomatoes. The California processing-tomato harvest neared its peak.

**PASTURES & LIVESTOCK:** Grasslands in the eastern half of the Nation rated good because of near-normal temperatures and adequate soil moisture. Western rangelands deteriorated because of dry soils. Fire danger was high throughout most of the West. Rain damaged some cut hay in eastern areas. Cattle generally rated good.

Weather Data for the Week Ending Aug. 5, 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-hour, in.	Total, in., since June 4	Pct. normal since June 4	Average maximum	Average minimum	Temperature °F		Precipitation	
														90 and above	32 and below	.01 inch or more	.50 inch or more
ALA. Birmingham . . .	93	72	96	69	82	+ 2	T	-1.1	.0	10.5	108	95	49	7	0	1	0
Mobile . . . . .	92	74	94	73	84	+ 2	1.3	-1.5	13.8	87	94	53	7	0	1	0	
Montgomery . . . . .	90	72	92	71	81	0	.1	-.8	5.6	60	91	53	6	0	1	0	
ALASKA. Anchorage . . .	68	54	71	50	61	+ 3	.1	-.4	5.1	146	94	67	0	0	3	0	
Barrow . . . . .	51	40	60	35	44	+ 5	.2	-.1	20	80	71	0	0	0	3	0	
Fairbanks . . . . .	74	55	78	50					2.3	82	85	47	0	0	0	0	
Kodiak . . . . .	69	53	72	51	61	+ 6	.2	-.6	4.9	62	91	68	0	0	3	0	
Nome . . . . .	56	50	65	47	53	+ 2	1.4	+.6	3.9	97	87	80	0	0	6	1	
ARIZ. Flagstaff . . . . .	87	51	90	48	68	+ 2	T	-.7	.0	.9	26	61	17	1	1	0	
Phoenix . . . . .	107	83	110	78	95	+ 4	T	-.3	.0	.3	27	54	22	7	0	0	
Tucson . . . . .	97	75	102	70	86	+ 1	.7	+.1	.5	3.0	100	64	28	6	2	1	
Winslow . . . . .	101	62	103	57	81	+ 3	0	+.4	.0	.3	17	43	10	7	0	0	
Yuma . . . . .	107	85	112	80	96	+ 2	T	-.1	.0	.3	100	53	23	1	0	0	
ARK. Fort Smith . . . . .	89	71	93	68	80	- 3	.8	+.1	.6	8.5	115	94	56	3	0	3	
Little Rock . . . . .	89	72	94	70	81	- 1	.1	-.6	5.6	78	94	54	4	0	3	0	
CALIF. Bakersfield . . . .	105	74	112	69	90	+ 6	0	0	.0	.0	100	43	18	7	0	0	
Eureka . . . . .	60	53	63	52	57	0	T	0	.4	57	95	76	0	0	0	0	
Fresno . . . . .	107	71	111	68	89	+ 9	0	0	.1	100	58	18	7	0	0	0	
Los Angeles* . . . . .	75	62	82	61	69	0	0	0	.0	100	93	61	0	0	0	0	
Red Bluff . . . . .	103	69	111	63	85	+ 3	0	0	.0	100	48	15	7	0	0	0	
San Diego . . . . .	78	68	82	65	73	+ 2	T	0	.1	50	81	61	0	0	0	0	
San Francisco . . . . .	72	53	80	51	62	0	0	0	.1	50	91	49	0	0	0	0	
Stockton . . . . .	101	65	106	58	82	+ 5	0	0	.2	200	58	19	7	0	0	0	
COLO. Denver . . . . .	91	59	98	53	75	+ 1	.1	-.3	.0	3.2	86	55	17	5	0	2	
Grand Junction . . . . .	98	63	102	60	81	+ 3	0	-.2	.0	.8	80	30	12	7	0	0	
Pueblo . . . . .	93	56	99	53	75	- 2	T	-.5	4.5	129	80	22	5	0	1	0	
CONN. Bridgeport . . . . .	86	75	88	72	80	+ 6	.1	-.8	.1	3.4	53	92	70	0	0	1	0
Hartford . . . . .	90	70	93	65	80	+ 7	.8	0	.5	3.1	43	89	51	3	0	4	1
D.C. Washington . . . . .	90	76	93	72	83	+ 4	.6	-.5	6.5	67	94	62	5	0	2	1	
FLA. Apalachicola . . . . .	89	75	91	73	81	- 1	.3	-1.5	.0	9.8	69	90	57	4	0	0	0
Daytona Beach . . . . .	90	74	91	72	82	0	1.8	+.3	.0	15.8	113	97	61	5	0	0	0
Ft. Myers . . . . .	95	78	97	75	86	+ 3	2.4	+.7	.0	16.0	87	88	50	7	0	0	0
Jacksonville . . . . .	93	73	94	71	83	+ 2	4.2	+2.5	3.2	13.0	90	95	52	6	0	4	2
Key West . . . . .	91	82	92	80	86	+ 1	.1	-.7	.0	6.2	70	82	60	6	0	2	0
Miami . . . . .	88	76	90	73	83	0	2.3	+.9	2.2	10.8	67	83	60	2	0	2	1
Orlando . . . . .	95	74	96	73	84	+ 2	1.6	0	1.4	12.7	79	98	46	7	0	3	1
Tallahassee . . . . .	90	71	95	70	81	- 1	3.5	+1.7	1.9	20.1	123	100	61	4	0	5	2
Tampa . . . . .	91	76	93	75	83	- 1	.5	-1.4	.5	8.3	52	96	61	6	0	1	1
W. Palm Beach . . . . .	92	74	94	72	83	+ 1	.5	-.8	.3	8.9	59	92	50	7	0	3	0
GA. Atlanta . . . . .	92	73	93	72	83	+ 5	.1	-.9	.1	5.1	57	88	46	6	0	1	0
Augusta . . . . .	92	72	94	69	82	+ 1	.2	-.9	.2	7.7	83	95	51	6	0	2	0
Macon . . . . .	96	73	98	72	85	+ 3	T	-.9	.0	7.7	89	93	44	7	0	1	0
Savannah . . . . .	95	74	97	72	84	+ 3	1.1	-1.5	.1	16.2	113	91	48	7	0	1	0
HAWAII. Hilo . . . . .	81	71	82	70	75	0	1.2	-1.4	17.9	102	90	70	0	0	0	0	
Honolulu . . . . .	85	74	90	72	80	0	.2	0	.7	70	80	54	0	0	0	0	
Kahului . . . . .	88	77	90	72	80	+ 2	T	-.1	.0	52	0	0	0	0	0	0	
Lihue . . . . .	83	75	84	73	80	+ 1	.3	-.2	3.4	89	83	66	0	0	0	0	
IDAHO. Boise . . . . .	93	56	98	49	74	- 1	0	0	.0	.2	18	36	10	7	0	0	0
Lewiston . . . . .	93	62	99	57	77	+ 3	0	-.1	.0	.9	39	40	15	5	0	0	0
Pocatello . . . . .	93	55	101	50	73	0	0	-.1	.0	1.5	88	46	12	6	0	0	0
ILL. Cairo . . . . .	89	76	93	72	83	+ 2	.3	-.4	.3	1.4	18	18	3	0	1	0	0
Chicago . . . . .	82	68	87	64	75	0	3.6	+2.8	2.4	8.1	96	91	60	0	0	4	2
Moline . . . . .	88	66	93	59	75	0	1.6	+.8	.5	8.4	91	96	56	1	0	2	1
Peoria . . . . .	85	65	92	56	75	0	.1	-.6	.1	6.6	86	90	61	1	0	1	0
Rockford . . . . .	83	64	86	57	74	+ 1	1.7	+.9	9.8	109	98	64	0	0	0	0	0
Springfield . . . . .	85	68	91	59	76	0	2.0	+1.3	1.5	7.0	86	97	64	2	0	3	1
IND. Evansville . . . . .	89	67	93	62	78	0	.2	-.6	.1	10.1	135	90	50	4	0	2	0
Ft. Wayne . . . . .	80	64	86	61	72	- 1	1.9	+1.1	1.3	9.5	120	99	71	0	0	5	1
Indianapolis . . . . .	85	67	89	60	76	+ 1	2.3	+1.6	2.2	18.2	228	98	69	0	0	3	1
South Bend . . . . .	82	67	88	66	75	+ 2	2.2	+1.4	.9	8.2	108	78	65	0	0	5	2
IOWA. Burlington . . . . .	86	70	93	64	76	0	1.4	+.7	.7	5.9	69	69	0	0	2	1	0
Des Moines . . . . .	86	70	93	64	78	+ 2	.1	-.6	.1	8.9	110	86	58	2	0	2	0
Dubuque . . . . .	82	64	86	58	73	+ 1	1.5	-.7	.6	12.0	122	69	0	0	4	1	0
Sioux City . . . . .	86	65	95	57	75	- 1	.5	-.1	.5	5.5	69	88	54	2	0	2	0
KANS. Concordia . . . . .	91	67	98	60	79	0	T	-.7	.0	7.6	93	88	42	4	0	0	0
Dodge City . . . . .	88	63	94	58	76	- 4	.3	-.3	.3	6.4	97	89	40	4	0	1	0
Goodland . . . . .	89	60	98	57	74	- 3	1.3	+.7	1.2	9.6	166	86	29	3	0	3	1
Topeka . . . . .	88	70	94	63	79	0	.2	-.7	11.7	114	90	57	3	0	3	0	
Wichita . . . . .	93	69	100	63	81	- 1	.3	-.5	.2	8.7	96	83	42	5	0	2	0
KY. Lexington . . . . .	86	67	88	63	77	+ 1	.2	-.7	.1	7.4	80	93	54	0	0	2	0
Louisville . . . . .	88	70	92	65	79	+ 2	.4	-.3	.4	13.6	172	95	57	1	0	2	0

Based on preliminary reports and 1941-70 normals. \*Int'l Airport instead of Civic Center, effective 7/30/79

Weather Data for the Week Ending Aug. 5, 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 June 4	Pct. normal since June 4	Average maximum	Average minimum	Temperature °F		Precipitation		
														90 and above	32 and below	.01 inch or more	.50 inch or more	
LA. Baton Rouge . . .	92	75	94	73	83	+ 1	0	-1.3	.0	8.8	81	96	54	7	0	0	0	
Lake Charles . . .	90	75	93	74	83	+ 0	.3	-1.0	.3	15.8	133	96	63	4	0	1	1	
New Orleans . . .	93	76	95	74	85	+ 3	1.1	-.2	1.1	11.7	97	88	55	7	0	2	0	
Shreveport . . .	91	72	94	70	81	- 3	1.1	+.5	1.1	9.7	154	97	59	4	0	2	1	
MAINE. Caribou . . .	85	62	89	55	73	+ 8	.8	-.1	.6	7.7	100	95	50	0	0	4	0	
Portland . . .	81	67	88	65	75	+ 7	.1	-.5	.1	8.1	137	96	63	0	0	3	0	
MD. Baltimore . . .	90	72	93	71	81	+ 4	1.4	+.4	1.2	7.2	89	94	57	5	0	3	1	
MASS. Boston . . .	87	71	91	67	79	+ 6	1.0	+.3	.7	4.1	67	94	62	3	0	2	1	
Chatham . . .	79	60	82	59	70	-	T	-	.0	2.4	39	--	64	0	0	1	0	
MICH. Alpena . . .	79	59	83	57	69	+ 3	.1	-.5	.1	7.4	130	--	--	0	0	2	0	
Detroit . . .	82	62	86	56	72	0	.5	-.3	.2	9.1	136	95	62	0	0	5	0	
Flint . . .	80	63	85	59	72	+ 2	2.0	+1.3	.7	8.5	129	90	67	0	0	5	1	
Grand Rapids . . .	83	64	87	62	73	+ 1	1.1	+.5	.4	7.3	111	95	57	0	0	3	0	
Houghton Lake . . .	79	61	82	57	69	+ 2	.2	-.4	.2	5.6	85	94	59	0	0	1	0	
MICH. Lansing . . .	82	64	87	57	73	+ 2	1.0	+.4	.0	8.5	135	90	58	0	0	0	0	
Marquette . . .	73	53	82	45	63	- 2	2.2	+1.4	1.8	10.8	164	90	41	0	0	1	1	
Muskegon . . .	79	62	83	58	70	- 1	1.4	+.9	.7	4.5	85	98	65	0	0	3	1	
S. Ste. Marie . . .	78	54	82	50	67	+ 2	.9	+.3	.8	9.6	157	94	59	0	0	2	1	
MINN. Duluth . . .	76	56	83	52	66	- 1	2.1	+1.3	1.3	10.1	122	91	54	0	0	3	1	
Internatl. Falls . . .	76	55	84	47	65	- 1	.4	-.4	.1	5.5	67	98	49	0	0	2	0	
Minneapolis . . .	86	66	89	61	71	- 2	1.1	+.4	.4	8.1	107	87	45	0	0	3	0	
Rochester . . .	84	63	90	58	73	+ 2	3.4	+2.6	2.3	7.9	93	93	57	1	0	4	2	
St. Cloud . . .	81	58	85	53	69	- 2	.6	-.2	.4	8.1	101	87	--	0	0	3	0	
MISS. Jackson . . .	90	71	93	69	81	- 1	3.2	+2.3	1.6	20.6	254	99	57	5	0	3	2	
Meridian . . .	93	72	94	70	82	0	.4	-.6	.2	10.2	111	95	57	6	0	2	0	
MO. Columbia . . .	88	67	96	62	78	0	1.3	+.6	1.0	5.6	65	95	49	4	0	2	1	
Kansas City . . .	87	70	94	62	79	+ 1	T	-.8	.0	10.2	103	92	59	3	0	1	0	
St. Louis . . .	89	72	96	67	80	+ 1	.7	0	.3	5.7	69	89	50	4	0	3	0	
Springfield . . .	87	65	93	57	76	- 3	1.4	+.8	1.4	14.0	171	99	53	2	0	1	1	
MONT. Billings . . .	91	59	96	55	75	+ 2	T	-.1	.0	1.5	45	65	22	5	0	0	0	
Glasgow . . .	86	59	91	55	73	+ 1	T	-.3	.0	1.6	38	81	30	2	0	0	0	
Great Falls . . .	89	54	100	51	71	+ 1	0	-.2	.0	2.9	69	69	20	3	0	0	0	
Havre . . .	86	58	95	54	72	+ 1	.1	-.1	.1	2.6	70	66	32	2	0	1	0	
Helena . . .	91	54	98	50	72	+ 3	0	-.2	.0	3.1	94	60	15	5	0	0	0	
Kalispell . . .	90	48	93	45	69	+ 4	0	-.2	.0	1.5	44	82	18	5	0	0	0	
Miles City . . .	90	61	98	56	76	0	T	-.2	.0	3.5	74	81	27	5	0	0	0	
Missoula . . .	92	52	97	47	72	+ 4	0	-.2	.0	1.4	48	60	14	7	0	0	0	
NEBR. Grand Island . . .	91	63	100	56	77	0	.3	-.3	.3	5.7	77	90	37	4	0	1	0	
Lincoln . . .	89	67	98	58	78	0	T	-.7	.0	6.7	80	91	49	3	0	0	0	
Norfolk . . .	88	63	97	54	75	- 1	T	-.6	.2	7.3	90	89	46	3	0	1	0	
N. Platte . . .	90	61	98	57	75	0	.2	-.3	.2	10.5	157	82	37	4	0	2	0	
Omaha . . .	89	68	98	61	77	+ 1	.2	-.7	.0	5.9	66	88	55	3	0	0	0	
Valentine . . .	91	60	98	55	74	- 1	T	-.5	.0	7.1	115	91	31	4	0	0	0	
NEV. Ely . . .	93	49	95	45	71	+ 3	0	-.1	.0	1.5	115	39	11	7	0	0	0	
Las Vegas . . .	113	78	116	74	96	+ 6	0	-.1	.0	.8	133	22	10	7	0	0	0	
Reno . . .	98	48	101	44	73	+ 4	0	-.1	.0	.6	75	60	9	7	0	0	0	
Winnemucca . . .	100	50	103	46	75	+ 4	0	0	.0	1.1	92	45	8	7	0	0	0	
N.H. Concord . . .	89	69	92	62	79	+10	.3	-.3	.2	4.4	66	91	49	2	0	2	0	
N.J. Atlantic City . . .	86	71	90	68	78	+ 3	.6	-.5	.6	10.5	127	89	53	1	0	1	1	
Trenton . . .	89	73	92	68	81	+ 5	1.2	+.1	.7	10.0	118	--	--	3	0	4	1	
N.MEX. Albuquerque . . .	98	63	101	65	83	+ 5	T	-.4	.0	1.7	74	51	14	7	0	0	0	
Roswell . . .	92	66	95	62	79	0	T	-.4	.0	2.7	84	--	--	6	0	0	0	
N.Y. Albany . . .	88	66	90	61	77	+ 5	.8	+.1	.8	5.6	89	91	51	3	0	2	1	
Binghamton . . .	83	64	88	60	74	+ 5	.5	-.3	.5	2.6	35	66	52	0	0	2	0	
Buffalo . . .	82	66	87	59	74	+ 4	.8	0	.6	5.9	107	92	61	0	0	4	1	
New York . . .	89	75	93	72	82	+ 5	.1	-.9	.1	2.5	35	86	53	4	0	2	0	
Rochester . . .	84	65	90	57	75	+ 4	1.1	+.4	.7	5.5	98	91	62	1	0	4	1	
Syracuse . . .	87	66	92	59	76	+ 4	1.3	+.5	.6	5.2	80	90	52	2	0	4	2	
N.C. Asheville . . .	86	64	87	60	75	+ 1	.1	-1.0	.1	8.3	89	87	58	0	0	2	0	
Charlotte . . .	91	70	93	68	81	+ 2	.2	-.8	.2	9.0	102	87	41	5	0	1	0	
Greensboro . . .	89	69	92	64	79	+ 2	T	-1.0	.0	6.4	73	91	50	3	0	0	0	
Hatteras . . .	87	76	89	74	82	+ 4	.5	-1.0	.4	10.7	94	91	65	0	0	3	0	
Raleigh . . .	89	70	92	66	80	+ 2	T	-1.2	.0	7.0	75	84	58	4	0	0	0	
Wilmington . . .	92	75	94	73	83	+ 2	.3	-1.5	.0	7.2	49	98	61	6	0	0	0	
N.DAK. Bismarck . . .	81	55	88	47	68	- 4	.5	+.1	.2	4.3	75	95	46	0	0	3	0	
Fargo . . .	79	57	87	52	68	- 4	T	-.7	.0	6.3	94	89	52	0	0	1	0	
Williston . . .	80	56	89	51	68	- 3	T	-.4	.0	4.4	83	90	41	0	0	1	0	
OHIO. Akron-Canton . . .	83	64	87	55	74	+ 2	.9	+.2	.6	5.3	72	91	59	0	0	3	1	
Cincinnati . . .	84	67	88	60	76	0	1.9	+1.2	1.4	12.9	159	95	61	0	0	2	2	
Cleveland . . .	86	65	91	55	76	+ 3	1.5	+.8	.9	8.5	120	89	51	1	0	3	1	
Columbus . . .	85	66	88	62	76	+ 3	.7	-.1	.5	13.1	152	94	60	0	0	2	0	
Dayton . . .	86	67	90	63	77	+ 2	1.4	+.7	.9	10.1	136	92	55	1	0	4	1	
Toledo . . .	82	64	87	58	73	+ 1	2.3	+1.6	.9	9.5	138	94	68	0	0	6	2	
Youngstown . . .	84	62	88	51	73	+ 2	1.2	+.4	.5	6.4	85	94	52	0	0	3	1	

Based on preliminary reports and 1941-70 normals

Weather Data for the Week Ending Aug. 5, 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 June 4	Pct. normal since June 4	Average maximum	Average minimum	Temperature °F		Precipitation	
														90 and above	32 and below	.01 inch or more	.50 inch or more
OKLA.Okla. City . . .	92	70	96	67	81	- 2	.5	0	.4	15.7	234	85	42	5	0	2	0
Tulsa . . . . .	93	73	101	71	83	0	1.1	+.5	1.0	11.2	137	84	47	5	0	2	1
OREG.Astoria . . .	70	56	77	53	62	+ 1	T	-.2	1.0	2.8	82	89	62	0	0	0	0
Burns . . . . .	89	58	94	54	72	+ 1	0	-.1	.0	.2	14	39	11	1	0	0	0
Medford . . . . .	94	53	101	48	74	+ 2	0	-.1	.0	.6	55	68	20	6	0	0	0
Pendleton . . . .	89	58	95	53	74	+ 2	0	-.1	.0	.3	21	--	19	4	0	0	0
Portland . . . . .	82	58	92	52	70	+ 2	0	-.1	.0	.9	43	84	36	1	0	0	0
Salem . . . . .	84	52	94	43	68	+ 1	0	-.1	.0	.9	50	84	34	2	0	0	0
PA.Allentown . . .	86	71	90	66	80	+ 6	.1	-.9	.1	6.8	83	78	55	3	0	2	0
Erie . . . . .	80	65	82	56	74	+ 4	.5	-.3	.2	8.5	118	--	--	0	0	3	0
Harrisburg . . . .	86	71	89	69	78	+ 2	.5	-.3	--	5.9	86	100	66	0	0	0	0
Philadelphia . . .	89	73	92	71	82	+ 5	2.2	+1.2	1.6	10.0	123	96	56	5	0	2	2
Pittsburgh . . . .	84	64	88	55	74	+ 2	.6	-.2	.5	6.4	85	96	55	0	0	3	1
Scranton . . . . .	87	68	90	64	77	+ 5	T	-.8	.0	4.2	54	96	51	2	0	0	0
R.I.Providence . .	86	71	89	66	79	+ 7	6.7	+5.9	6.3	9.9	168	95	61	0	0	2	1
S.C.Charleston . .	95	75	97	75	85	+ 5	.1	-1.6	.1	10.4	68	91	51	7	0	2	0
Columbia . . . . .	92	69	94	66	80	- 1	.7	-.6	.6	12.8	127	--	--	6	0	1	1
Greenville . . . .	89	68	90	66	78	- 1	T	-.9	.0	12.2	142	96	57	1	0	0	0
S.D.Aberdeen . . .	81	58	87	53	70	- 3	.1	-.4	.1	7.5	117	90	49	0	0	1	0
Huron . . . . .	85	62	90	53	73	- 2	0	-.4	.0	5.0	86	90	43	1	0	0	0
Rapid City . . . .	85	59	89	55	72	- 2	.3	-.1	.3	7.3	128	80	40	0	0	1	0
Sioux Falls . . . .	83	63	87	54	73	- 1	.4	-.2	.4	6.5	89	85	56	0	0	2	0
TENN.Chattanooga .	89	70	91	68	80	+ 1	.7	-.2	.4	13.0	143	97	57	4	0	2	0
Knoxville . . . . .	87	70	89	66	79	+ 1	T	-.9	.0	12.0	138	96	59	0	0	0	0
Memphis . . . . .	90	76	94	73	84	+ 2	.9	+.1	.6	6.0	83	85	56	4	0	5	1
Nashville . . . . .	89	70	91	67	80	0	.7	-.1	.4	7.2	97	99	58	3	0	5	0
TEX.Abilene . . . .	92	71	99	68	82	- 3	.3	-.2	.2	4.3	81	77	37	5	0	2	0
Amarillo . . . . .	87	61	92	58	75	- 4	.6	-.1	.3	4.6	71	92	39	1	0	3	0
Austin . . . . .	93	75	94	72	84	- 1	T	-.4	.0	11.1	222	91	46	7	0	0	0
Beaumont . . . . .	90	75	92	73	83	- 1	.3	-1.0	.0	19.0	171	100	72	4	0	0	0
Brownsville . . . .	95	77	95	75	86	+ 1	T	-.3	.0	2.6	65	89	48	7	0	1	0
Corpus Christi . .	94	77	96	76	86	0	.1	-.4	.1	5.5	122	87	53	7	0	2	0
Del Rio . . . . .	96	73	100	72	85	- 2	T	-.1	.0	2.8	97	85	33	6	0	1	0
El Paso . . . . .	96	66	101	63	82	0	.8	+.5	.5	1.5	63	77	32	7	0	2	1
Fort Worth . . . .	94	72	100	70	83	- 3	1.7	+1.3	1.0	4.1	84	94	46	5	0	4	1
Galveston . . . . .	87	81	89	80	84	0	.1	-.8	.1	18.4	207	80	65	0	0	0	0
Houston . . . . .	93	73	94	71	83	- 1	.2	-.7	.1	9.1	103	98	55	7	0	1	0
Lubbock . . . . .	90	69	97	66	79	- 1	.8	+.4	.6	5.1	100	74	39	4	0	3	1
Midland . . . . .	92	70	99	66	81	- 2	.4	0	.3	4.0	118	80	35	6	0	2	0
San Angelo . . . .	90	71	97	67	81	- 5	.7	+.5	.7	2.8	90	80	40	6	0	1	0
San Antonio . . . .	92	77	93	74	85	0	T	-.4	.0	8.9	193	92	50	7	0	0	0
Victoria . . . . .	92	75	93	73	84	- 1	T	-.6	.0	7.8	130	92	54	7	0	1	0
Waco . . . . .	91	73	94	70	82	- 5	.4	+.1	.2	9.1	212	89	51	5	0	2	0
Wichita Falls . . .	97	72	103	68	84	- 3	.3	-.1	--	7.6	138	95	36	7	0	0	0
UTAH.Blanding . . .	94	63	94	63	76	+ 3	0	-.3	.0	.7	47	--	--	7	0	0	0
Salt Lake City . . .	99	63	104	59	81	+ 3	0	-.2	.0	.7	37	42	9	7	0	0	0
VT.Burlington . . .	86	66	89	61	76	+ 6	.5	-.3	.2	3.1	43	92	53	0	0	3	0
VA.Lynchburg . . .	89	69	94	64	79	+ 3	1.1	+.1	1.1	8.8	113	91	--	3	0	0	0
Norfolk . . . . .	89	74	91	72	81	+ 3	.2	-1.2	.2	7.6	75	92	60	3	0	1	0
Richmond . . . . .	88	72	94	71	80	+ 2	2.3	+1.0	1.6	7.3	74	60	65	4	0	3	2
Roanoke . . . . .	88	65	91	60	77	+ 2	0	-.9	.0	9.1	123	96	49	3	0	0	0
WASH.Colville . . .	90	55	94	50	72	+ 3	0	-.2	.0	1.2	55	--	--	5	0	0	0
Omak . . . . .	91	59	94	52	75	+ 5	0	-.1	.0	.9	53	52	21	4	0	0	0
Quillayute . . . .	70	50	76	45	60	+ 1	0	-.5	.0	4.8	83	95	54	0	0	0	0
Seattle-Tacoma . .	77	57	87	52	67	+ 2	0	-.2	.0	1.2	55	76	40	0	0	0	0
Spokane . . . . .	87	56	91	52	72	+ 2	0	-.1	.0	1.5	83	50	16	1	0	0	0
Walla Walla . . . .	90	63	98	57	77	+ 1	0	-.1	.0	2.5	179	48	18	4	0	0	0
Yakima . . . . .	91	56	97	50	73	+ 2	0	0	.0	.6	75	56	20	4	0	0	0
W.VA.Beckley . . .	80	61	85	54	71	+ 1	T	-.9	.0	10.8	120	94	61	0	0	0	0
Charleston . . . . .	87	66	90	63	76	+ 1	.4	-.6	.4	8.2	93	96	53	1	0	1	0
Huntington . . . .	87	67	91	64	77	+ 2	.3	-.6	.2	13.7	180	91	56	2	0	3	0
Parkersburg . . . .	85	68	89	63	77	+ 2	.6	-.3	--	6.9	80	83	52	0	0	0	0
WISC.Green Bay . .	79	62	85	55	71	+ 1	1.4	+.8	.8	6.5	100	84	62	0	0	3	1
La Crosse . . . . .	85	61	90	57	74	+ 1	4.2	+3.5	--	8.3	101	97	57	1	0	0	0
Madison . . . . .	81	60	87	51	70	- 1	1.7	+1.0	.8	6.8	82	98	59	0	0	5	1
Milwaukee . . . . .	81	65	89	61	72	+ 1	1.2	+.6	.6	4.8	68	93	63	0	0	4	1
Wyo.Casper . . . .	92	54	102	49	73	+ 1	T	+.1	.0	2.5	104	57	15	5	0	1	0
Cheyenne . . . . .	87	55	95	49	71	+ 1	.7	+.3	.6	5.2	118	56	18	3	0	1	1
Lander . . . . .	92	56	101	51	73	+ 1	T	-.1	.0	.9	38	43	11	4	0	0	0
Sheridan . . . . .	90	53	100	46	69	- 3	.1	0	.1	1.9	48	76	20	3	0	1	0
P.R.San Juan . . . .	89	78	90	76	84	+ 3	2.2	+.7	1.1	12.9	102	93	63	2	0	3	1

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:** Conditions drier, scattered showers, subnormal amounts. Temperatures 2° above normal. Fieldwork: 3.9 days suitable. Soil moisture adequate to surplus. Insect control, hay harvest, readying harvest machinery main activities. Crops, pastures good condition. Corn 73% dented, 74% 1978, 58% average; 50% mature, 38% 1978; 5% harvested. Soybeans 60% blooming, 60% 1978, 59% average; 35% pods set 29% 1978. Cotton 80% setting bolls, 75% 1978, 80% average. Peanuts pegging virtually complete, about normal.

**ALASKA:** General early week showers, warmer temperatures caused fast growth second crop hay in most areas of railbelt. First crop hay virtually complete. Condition small grains good. Most small grains in dough stage. Most areas railbelt expect harvesting small grains late August. Potatoes responding favorably, many fields blossoming. Soil moisture adequate to surplus. Temperatures above normal. Rainfall generally above normal.

**ARIZONA:** Showers mostly limited mountains, southeast. Amounts mostly 0.50 in. or less except some southeast, White Mountain areas over 1.00 in. Temperatures mostly 2 to 4° above normal.

Cotton good condition, bolls maturing rapidly. Limited spraying required. Sorghum good progress, early plantings maturing, harvest expected shortly. Corn silage harvest active, mostly central area. Corn for grain, southeast, seasonal progress. Safflower harvest winding down. Sugarbeet harvest complete. Alfalfa haying excellent progress, fifth cutting in west, fourth cutting in central, southeastern. Watermelon harvest tapering off. Land preparations fall, winter lettuce, other mixed vegetables active. Planting active central, southeast. Citrus groves good condition. Limited lemon ring picking underway. Diesel, gasoline supplies mostly adequate north, central areas, tight west and southeast. LP gas adequate. Cattle, calves good condition. Fire danger extreme. Soil moisture, stock water levels below normal. Range, pasture conditions improving, recent rains.

**ARKANSAS:** Temperatures near normal beginning and end of week. Generally below normal midweek. Rainfall statewide. Heavier amounts in south half. Highest normal 83°; lowest normal 78°. Highest mean 82°; lowest 77°. Highest temperature 97°; lowest 59°.

Most crops good progress due to recent rains. Soil moisture adequate. Fruit development in soybeans, cotton and rice improved but lagged 1978. Fuel supply unchanged; diesel 64% adequate and 33% tight; gasoline 69% adequate, 26% tight; LP gas 90% adequate. Fieldwork: 3.8 days suitable. Soybeans good to fair condition; moisture conditions favorable; fields blooming 26%, 34% 1978; setting pods 13%, 20% 1978. Cotton crop progress improved; condition variable; squaring 99%, 100% 1978; boll set 97%, 86% 1978. Rice heading 11%, 25% 1978. Corn good condition; hard dent stage. Sorghum good condition. Cantaloup harvest continued. Watermelon harvest increasing. Peach harvest active. Tomatoes available in northeast. Apple and grape prospects good to excellent. Pastures average forage; good to excellent condition. Haying slowed. Cattle making good gains..

**CALIFORNIA:** Strong upper level high pressure brought hot daytime temperatures to interior portions. Coastal low clouds prevalent night and morning hours through most of the period. Pressure gradients at surface weak and winds generally light.

Rice 45% headed. Corn 75% tassel stage, 58% silk stage. Cotton 62% setting bolls, 88% blooming. Wheat 99% harvested. Barley 91% harvested. Avocado harvest proceeding, small sizes reported. Grapes sizing, coloring well. Most areas reporting good crops. Peaches, pears, plums, and nectarines moving actively, looking good. Lemon, grapefruit movement unchanged. Valencia orange harvest continues at slow pace. Last irrigation and ground preparation underway in almond orchards. Blight appeared in orchards since recent rains. Broccoli harvest moderate central coast. Cantaloup harvest quite active westside, slowing early areas. Planting fall melons desert areas. Carrot harvest active Kern, Salinas. Cauliflower volume heavy, some diversion to processors. Celery harvest fairly heavy central coast. Lettuce volume moderate central coast, South Bay. Potato digging continued Kern, Stockton, Riverside. Strawberry supplies seasonally light. Market tomato harvest active south coast, northern San Joaquin Valley. Processing tomato harvest near peak. Range conditions normal. Grass cover heavy, fire danger high. Cattle in good condition. Grazing sudan-grass, sugarbeet tops Imperial Valley. Loss of chickens up during hotter weather. Honey production good. Grasshoppers late in emerging north coast. Fuel supply situation unchanged.

**COLORADO:** Hailstorms, funnel clouds over east early week. Dry air, little rainfall after 2d. Temperatures 1 to 2° above normal west, near normal mountains, and 1 to 2° below normal east.

Winter wheat ripe 98%, 100% 1978, 100% average; harvested 91%, 99% 1978, 93% average. Corn average height 71 in., 70 in. 1978; tasseled 78%, 84% 1978, 84% average; silked 54%, 51% 1978. Barley turned color 66%, ripe 49%, harvested 33%. Sorghum headed 14%. Dry beans flowered 53%, 67% 1978. Alfalfa second cutting 65%, 78% 1978; third cutting underway. Fieldwork: 5.5 days suitable. Ranges and pastures good condition. Livestock very good condition. LP gas, gasoline supplies mostly adequate; diesel fuel supply tight to adequate.

**FLORIDA:** Thundershowers widely scattered becoming more numerous end of period. Rainfall varied widely with some locations receiving up to 2.00 to 3.00 in. Temperatures near normal north to well above normal south.

Soil moisture mostly adequate with a few scattered, dry areas in central and south and a few wet spots remaining in extreme north. Corn and tobacco harvest active. Marketing tobacco active. Soybeans, peanuts and sugarcane in good to excellent condition. Early soybeans blooming, haying continued drier areas. Pastures mostly in good to excellent condition, except fair some northern and southwestern peninsular areas. Cattle, calves generally in good condition. Rains improved citrus tree condition all areas, with most irrigation stopped. Fuel shortage slowing caretaker operations. New crop fruit progressing very well. Preparation for fall vegetable planting continued

very active. Planting eggplant, tomatoes, celery, sweet corn gaining. Laying plastic mulch very active. Several summer vegetables being marketed locally on limited basis.

GEORGIA: Temperatures slightly above normal. Average temperatures from 74° in mountains to 84° along coast and center. Precipitation very light except extreme south and along coast. Weekend hot and dry except south.

Soil moisture adequate. Fieldwork: 5 days suitable. Spraying active. Corn fair to mostly good; 11% harvested, 10% year ago. Soybeans good. Peanuts good. Tobacco fair to good; 72% harvested, 66% last year, average 76%. Cotton condition declined, fair to mostly good. Virtually all fields setting bolls, 97% last year, 96% average; none open, 2% last year, 4% average. Watermelons fair to mostly good; 88% harvested, 89% year ago. Peaches fair to mostly good, 95% harvested, 92% last year, 96% average. Apples good; 21% harvested, last year 26%. Pecans, fair to good. Hay good. Pastures, cattle, and hogs good. LP gas 94% adequate, 3% tight; diesel fuel 78% adequate, 19% tight; gasoline 83% adequate, 15% tight.

HAWAII: Weather favorable. Rains on Island Hawaii beneficial. Disease, insect damage to leafy crops continues Waimea area. Elsewhere precipitation generally light. Frequent irrigation required.

Vegetable supplies: Head cabbage output heavy, other vegetables light to moderate. Banana supplies light; orchard condition fair to good. Papaya supplies light; rains beneficial Puna orchards, Hawaii. Other areas irrigation necessary. Pineapple harvesting heavy. Sugar harvesting steady. Harvesting on some plantations still lags as result of storms early in year. Pastures generally good. Fuel supplies adequate.

IDAHO: Temperatures normal or above normal north, slightly below normal remainder. Range: 102 to 39°. Precipitation light and spotty.

Small grains ripening near last year's pace. Winter wheat 10% harvested, last year 10%, normal 15%. Spring wheat 5% harvested, last year 5%, normal 10 percent. Barley 5% harvested, last year 5%, normal 15%. Potatoes 90% closing middles, 85% last year. Ranges fair to poor condition. Farm fuel supplies generally adequate to tight.

ILLINOIS: Temperatures normal to 1° above normal. Precipitation 1.00 to 3.00 in. Some areas central, west 0.10 in., flooding southeast over 7.00 in.

Soil moisture adequate to surplus. Corn 92% silked, 86% 1978, 89% average; dough stage 35%, 37% 1978, 46% average; condition good. Soybeans 84% bloomed, 76% 1978, 80% average; podded 45%, 44% 1978, 53% average; condition good. Wheat land 20% plowed, 24% 1978, 29% average. Oats 80% combined, 78% 1978, 93% average. Second crop alfalfa 90% cut, 82% 1978, 86% average; third crop alfalfa 18% cut, 17% 1978, 12% average; condition good. Pastures good. Fieldwork: 3.3 days suitable.

INDIANA: Wet and humid. Much flooding in low lands in south central and southwest where two week rainfall totals average over 7.00 in. Last week rainfall averaged 0.80 in. southwest to 2.20 in. east and west central. Some point measurements exceeded 4.00 in. Temperatures near normal, but humidity high.

Fieldwork averaged 1 day. Topsoil and subsoil moisture mostly surplus. Corn 85% silked, 1978 80%, average 80%; 25% dough, 1978 25%. Soybeans 85% in or past bloom, 1978 80%; 25% setting pods.

1978 25%. Corn and soybean condition improved. Oats 55% combined, 1978 90%, average 90%. Pastures good condition.

IOWA: Mild early and midweek, becoming hot on weekend, to average 1 to 3° above normal. Most of rain fell over east as scattered showers and thunderstorms, some locally damaging.

Fieldwork: 4.2 days favorable. Topsoil and subsoil moisture adequate. Corn tasseled 97%, 1978 100%; silked 85%, 1978 91%, normal 91%; in or past milk stage 41%, 1978 42%. Soybean acreage blooming 91%, 1978 100%, normal 90%; pods setting 61%, 1978 61%, normal 61%. Oats harvested 82%, 1978 94%, normal 97%. Second crop alfalfa hay harvested 90%, 1978 90%, normal 88%. Second crop clover hay harvested 63%, 1978 63%, normal 60%. All crops, except oats, improved with additional moisture. Livestock market movement and herd replacement slow.

KANSAS: Most areas received rainfall; averages ranged from 0.44 in. north central to 2.19 in. southeast. Locally heavy rains fell 30th with 2.13 in. northwest and 4.04 in. southeast. Heavy rains of 3.20 in. east central 2d evening. Temperatures warmed steadily with readings of 100° west and central 5th. Averages ranged from 76° southwest to 82° northeast or 4° below normal southwest to 3° above normal northeast.

Row crops have favorable growing conditions. Sorghum headed 25%, last year 25%, average 30%. Only few fields showing color. Corn 25% in dough stage, last year 30%, average 45%; dented 5%, last year 5%, average 15%. Soybeans podding 30%, last year 35%, average 35%. Third cutting alfalfa 40% completed, last year 50%, average 45%. Fourth cutting just underway. Soil moisture mostly adequate. Fieldwork: 4.0 days suitable.

KENTUCKY: Scattered showers and thunderstorms produced around 0.50 in. rainfall while near normal temperatures prevailed.

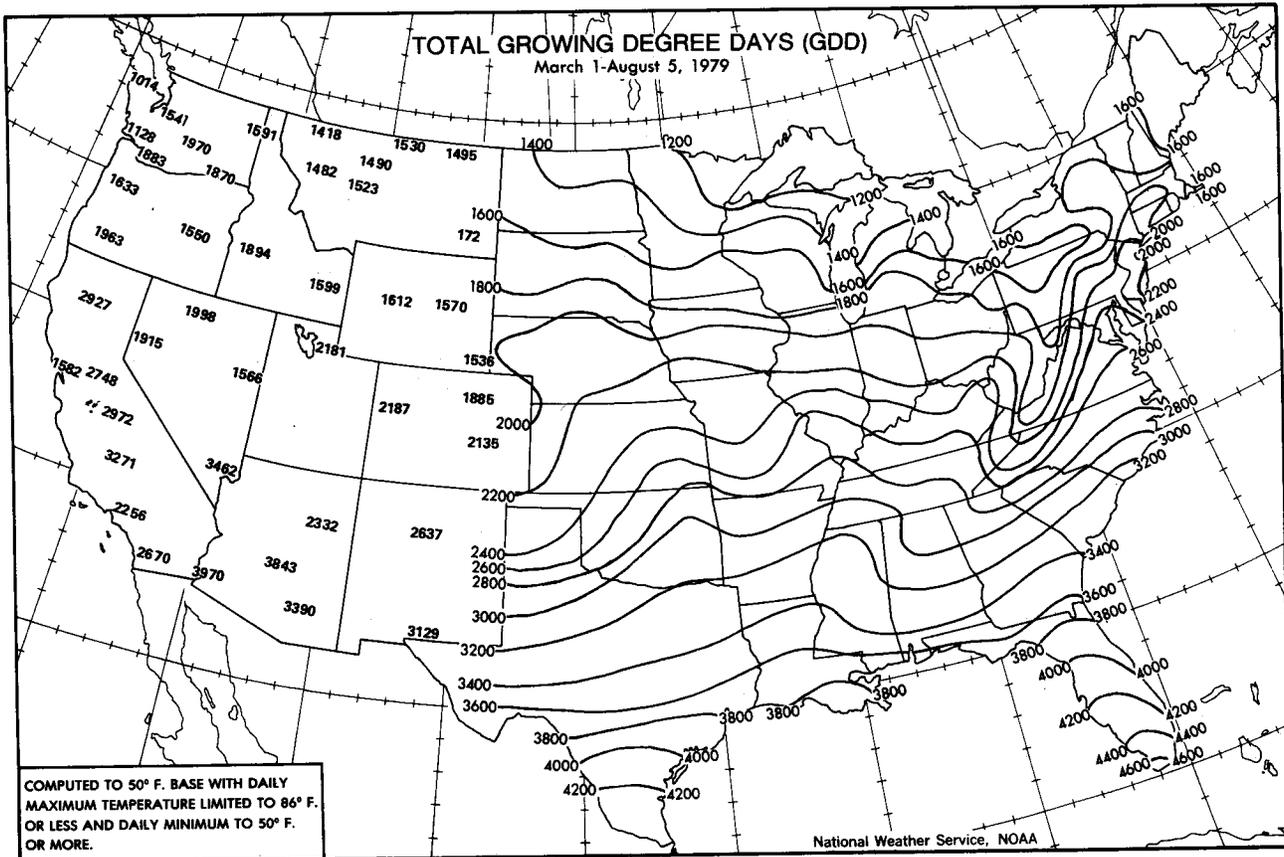
Damage to tobacco and soybeans from heavy rains still not certain. Reporters rate tobacco crop fair, soybeans good. Topping of burley 22% complete, last year 14%, average 30%. Corn in good to excellent condition with nearly 80% silk stage or past. Soybeans 46% bloom stage or beyond, year ago 50% bloomed and average 53%. Hay and pastures good to excellent with adequate to surplus moisture statewide. Fieldwork: 2 to 3 days suitable; limited by scattered rain and saturated soils.

LOUISIANA: Temperatures 2° above to 2° below normal. Extremes: 105 and 69°. Scattered showers.

Fieldwork: 4.6 days suitable. Soil moisture adequate. Cotton good; 98% squaring; 86% setting bolls, 93% last year. Soybeans good; 57% blooming, 78% last year; 32% setting pods, 53% last year. Rice fair to good; 71% headed, 85% last year; 26% ripe, 41% last year; 12% harvested, 27% last year, 22% average. Corn fair to good; 95% dough; 65% mature, 92% last year; 5% harvested, 18% last year. Sorghum good; 93% headed, 90% last year; 54% turned color, 46% last year. Sugarcane fair to good. Sweetpotatoes good; harvest underway. Pecans fair to good. Hay fair to good. Pastures, cattle good.

MARYLAND & DELAWARE: Temperatures 2 to 3° above normal. Highs in upper 80's and lows in low 70's. Precipitation widespread and irregular, 0.50 to 4.50 in.

Fieldwork: 5.3 days suitable. Soil moisture adequate to short. Fuel supplies adequate. Corn 80% silked, 72% last year, 81% normal; dough stage 15%, 29% normal, 12% last year. Small grain har-



vest complete. Soybeans 20% bloomed, 35% last year, 36% normal. Tobacco early harvest beginning in southern Maryland. Potato harvest started.

**MICHIGAN:** Temperatures averaged 3° above normal. Precipitation heavy averaging 1.73 in. Upper and northwest Lower, 1.21 in. remaining Lower Peninsula. Heaviest precipitation along Lake Michigan shoreline, 1.78 in. average.

Fieldwork: 5 days suitable. Soil moisture generally adequate, some short areas. Pasture feed supplies average. Corn 65% silked, equal last year and normal. Wheat harvest 75% complete, 80% last year, 89% normal. Oats 10% harvested. Dry beans 30% setting pods, 40% last year, 35% normal. Soybeans 15% setting pods, behind 22% last year, 28% normal. Second cut hay 50% complete. Sweet cherry harvest complete. Tart cherry 80% harvested. Blueberries steady. Sweet corn 20% picked. Other vegetables harvested: Tomatoes 5%, onions 20%, pickles 25%, snap beans 35%.

**MINNESOTA:** Temperatures near normal except northwest up to 4° below normal. Extremes: 90 and 43°. Precipitation greater than 1.00 in. above normal south, up to 3.00 in. above normal southeast, near normal elsewhere. Precipitation totals greater than 1.00 in. northeast and south with several stations in southeast over 3.00 in.

Small grain harvest underway south. Showers, poor drying weather slowed combining. Moisture mostly adequate. Crop development well behind normal. Corn: Tasseling 83%, 1978 95%, normal 94%; in milk 4%, 1978 32%, normal 41%. Soybeans: Blooming 85%, 1978 95%, normal 95%; setting pods 25%, 1978 54%, normal 58%. Combined: Spring wheat 2%, 1978 8%, normal 26%; oats 5%, 1978 30%, normal 48%; barley 2%, 1978 37%, normal 45%;

winter wheat 17%, 1978 56%, normal 71%; rye 8%, 1978 47%, normal 73%. Flax 50% setting bolls, 1978 76%, normal 91%.

**MISSISSIPPI:** Temperatures below normal north with normal to above south. Most locations received rain 1 to 3 times during week. Greatest 24-hour rainfall 1.60 in.

Soil moisture adequate to surplus. Fieldwork: 3.3 days suitable. Rains continued to hamper weed and insect control and hay harvest. Soybeans 64% blooming, 66% 1978, 63% average; 25% podding, 25% 1978, 31% average; condition good. Cotton 98% blooming, 98% 1978; 73% setting bolls, 96% 1978, 79% average; condition fair. Rice 31% headed, 48% 1978, 35% average; condition good. Corn 91% in or past dough stage, 95% 1978; 64% dented, 72% 1978; condition good. Sorghum 44% headed, 65% 1978. Hay crops 58% harvested, 67% 1978, 57% average. Watermelons 81% harvested, 81% 1978, 72% average. Peaches 85% harvested, 83% 1978, 88% average. Pasture condition good. Diesel and gasoline supplies adequate to tight; LP gas adequate.

**MISSOURI:** Temperatures normal. Rainfall general, 4.00 to 6.00 in. East Ozarks.

Fieldwork: 2.9 days suitable. Corn 92% tasseling, last year 69%; 82% silking, last year 44%, normal 84%. Soybeans 60% blooming, last year 50%, normal 60%; 26% setting pods, last year 20%, normal 30%. Grain sorghum 50% headed, last year 44%, normal 55%. Oats 96% harvested, last year and normal 100%. Cotton 99% blooming, last year 100%; 67% setting bolls, last year 87%, normal 75%. Alfalfa hay second cutting 91% harvested, last year 85%, normal 100%; third cutting 23% harvested, last year 17%, normal 31%. Other hay 91% harvested, last year 92%. Condition of corn, soybeans and pasture mostly good. Condition

of cotton mostly fair. Soil moisture mostly adequate. LP gas supplies mostly adequate. Diesel fuel and gasoline supplies mostly tight to adequate.

**MONTANA:** Scattered thunderstorms brought some precipitation to parts of east but rainfall spotty and generally light. West of Divide and southwest, almost no precipitation. Temperatures near normal. Some parts of north central 5° below normal, but readings in west rarely deviated by more than a degree or two.

Soil moisture short. Fieldwork: 6 days suitable. Winter wheat harvested 15%, 15% 1978, 35% average. Spring wheat harvested 0%, 0% 1978, 10% average. Barley harvested 0%, 5% 1978, 15% average. Winter wheat test weight and protein average. Second cutting alfalfa 15% complete, normal 25%. Wild hay cut 65%, near normal.

**NEBRASKA:** Temperatures averaged near normal. First part week below normal; latter part above. Scattered thunderstorms averaged 0.50 in. to 0.75 in.

Corn silking 85% complete, year ago 90%, normal 90%. Sorghum heading 45%, year ago 60%, normal 70%. Soybeans podding 50%, year ago 55%, normal 60%. Wheat harvest 90%, year ago 100%, normal over 95%. Diesel supplies 65% adequate, 35% tight. Gasoline 80% adequate, 20% tight. LP gas adequate. Fieldwork: 5.3 days suitable.

**NEVADA:** Hot, dry weather returned. Temperatures several degrees above normal. Extremes: 116 and 34°. No precipitation. Winds generally light.

Wild hay harvest full swing. Ranges drying. Fire hazard increasing. Harvesting small grains gaining momentum. LP gas, diesel fuel mostly adequate, some tight. Gasoline mostly adequate, some tight.

**NEW ENGLAND:** Warm, humid weather continued. General shower activity occurred the 1st with as much as 1.00 in. Real tropical downpours occurred 3d and 4th with over 6.00 in. falling in sections of Rhode Island and southeastern Massachusetts.

Hot and humid weather. Rain still needed. Drought-like conditions in Connecticut have stunted corn and eliminated available grazing. Corn progressing rapidly. Third cutting hay begun. Farmers drawing water for livestock. Hot, humid weather promoted disease development in fruit trees and vegetables. Soil moisture and available grazing very short to adequate. Fuel supplies tight to surplus.

**NEW JERSEY:** Temperatures 4 to 6° above normal. Extremes: 59 and 94°. Rainfall averaged 0.90 in. north, 1.66 in. central and 0.96 in. south. Soil moisture in percent of field capacity, 65% north, 71% central, and 57% south. Soil temperature averaged 77° north, 79° central and south.

Fieldwork: 5.4 days suitable. Soil moisture extremely varied; many growers irrigating. Summer vegetable harvest active. Hot weather maturing crops rapidly. Irish potato harvest moderate. Peaches and early variety apples moving in good volume. Blueberry volume declining. Field corn and soybeans making good growth. Weather conditions poor for haying.

**NEW MEXICO:** Shower activity widely scattered and very light. Only Clovis had rain totals of much importance.

Moisture adequate. Cotton fair to good with considerable uncertainty about production prospects. Most crops, including cotton, look extremely good,

but late due to weather at planting time. The date of 1st freeze could be very important this year. Alfalfa 3d cutting 80% complete in south. Corn and grain sorghum very good condition. Grain sorghum just starting to head. Onion and Irish potato harvest underway. Ranges and livestock good.

**NEW YORK:** Hot and humid. Spotty rainfall deluged some areas, missed others.

Field crops growing well where rainfall adequate. Wheat harvesting 45% done, 1978 same. Oat combining starting, 10% 1978. Second cutting alfalfa 45% done, 55% 1978. Dry bean condition good. Onions in good condition, harvest progressing. Snap bean harvest 25% done. Cabbage quality good, harvest 10% finished. Lettuce condition good. Early variety apples and peaches being harvested. Tart cherry harvest ending. Grapes in good condition.

**NORTH CAROLINA:** Temperature near normal in mountains; 2 to 4° above normal elsewhere. Precipitation subnormal, mostly light with locally heavy amounts.

Fieldwork: 5.5 days suitable. Soil moisture short to adequate. Condition of tobacco fair to good; corn, soybeans, cotton, peanuts, sweet-potatoes, apples, hay and pasture fair to mostly good. Harvested: Flue-cured tobacco 45%, 1978 28%, average 36%; hays 75%, 1978 85%, average 72%. Phenological stages: Corn dent 56%, mature 19%; soybeans flowering 30%, pods set 2%; cotton bloomed 85%.

**NORTH DAKOTA:** Scattered thunderstorms produced from 1.20 in. southeast to none some areas. Golf ball size hail did considerable damage portions of north central, central, northeast, east central. Temperatures near normal south and west; 2 to 4° below normal northeast. Extremes: 41° northeast to 95° southwest.

Scattered showers aided crops some areas. General rains still elude dry west and north central areas. Armyworms becoming major problem areas of west central and south central; substantial crop damage. Spraying underway. Presence of sunflower insects being watched. Harvest of winter wheat and rye underway. Spring grain harvest beginning; all late. Percents swathed or combined and normal: Hard red spring wheat 1%, 20%; durum 0%, 9%; barley 7%, 39%; oats 8%, 33%.

**OHIO:** Temperatures ranged from 2 to 4° above normal. Spotty rains left no extended period of good working conditions.

Wheat harvest completed, hay making continued. Condition of most crops good, tobacco fair. Fresh market vegetables being harvested. Problems with weeds in row crops. Corn silked 75%, 85% 1978, 85% average. Soybean pods setting 55%, 55% 1978, 70% average. Oats harvested 45%, 80% 1978, 90% average. Alfalfa 2d cut 75%, 85% 1978, 90% average. Other hay 2d cut 50%, 60% 1978, 65% average. Tobacco topped 15%, 10% 1978. Fieldwork: 3 days favorable. Pasture condition good. Soil moisture adequate to surplus.

**OKLAHOMA:** Temperatures generally near normal in Panhandle; 1 to 4° below normal elsewhere. Rainfall greatest northeast 2.51 in. Totals averaged over 1.00 in. north central and west central. Elsewhere, averages 0.50 in.

Sorghum 35% heading, 30% 1978, 60% average. Sorghum 10% milk to soft, 10% 1978, 20% average. Cotton 75% squaring, 80% 1978, 95% average. Fieldwork: 5.4 days suitable.

OREGON: Maximum temperatures in low 70's to 103°, most in 90's. Minimum temperatures in mid-30's to mid-50's, most in 40's. Average temperatures generally in upper 60's to low 70's, about 3° above normal. Generally dry except some light rain along coast, northeast areas, and trace in Willamette Valley.

Soil moisture supplies mostly short. Winter wheat 64% harvested; yields are variable as a result of winter damage and lack of moisture. Other grains being harvested or almost ready for harvest. Grass seed harvest nearing completion. Mint and sugarbeet seed harvest in progress. Cutting alfalfa and other hay. Peach harvest well started; good quality. Apricots being harvested. Majority of canberries harvested. Walnut and filbert sprays being applied. Vegetable crops in good condition. Snap bean harvest underway; some split sets. Early sweet corn harvest begun, most 10 days away. Potato fields good; digging underway in Hermiston area and Malheur County. Onions fairly good, some neck rot in west. Livestock condition fair to mostly good. Pastures and rangelands vary from poor to fair condition. Only irrigated pastures putting out forage. Dryland pastures and rangeland deteriorating due to lack of moisture and grasshoppers.

PENNSYLVANIA: First break from very humid to hot conditions in nearly a month, 3d and 4th as air became noticeably drier and temperatures dropped 4 to 8°. Return to high temperatures and high humidity 5th. Warmest week in more than year as temperatures averaged 3 to 5° above normal. Extremes: 96 and 53°. Scattered showers and thunderstorms first half brought 0.50 to 2.00 in. rainfall northwest, central, and southeast; elsewhere less than 0.25 in.

Fieldwork: 5 days suitable. Soil moisture mostly adequate to surplus. Activities: Making hay; filling silos; combining grain; baling straw; spraying; cultivating and harvesting apples, peaches, and vegetables. Barley combining virtually complete, 83% last year. Wheat 75% combined. Oats 33% combined, last year 27%. Corn 55% silked, average 54%; 3% dough stage. Alfalfa 2d cutting 58%; 3d cutting alfalfa 7%. Second cutting clo-tim 29%. Hay quality mostly fair to poor. Feed from pastures average.

PUERTO RICO: Island average rainfall 1.34 in. or 0.21 in. below normal. Temperatures averaged about 82° on coasts and 77° interior. Mean station temperatures ranged from 84 to 73°. Extremes: 95 and 61°.

SOUTH CAROLINA: Temperatures rose slowly, week hotter, drier than usual. Widely scattered thundershowers first half.

Soil moisture adequate. Fieldwork: 5 days available. Corn condition good; some younger crop insect pressure; dough stage 91%, same as last year; 52% mature, 59% last year, 53% average; 5% harvested, 7% last year. Cotton condition fair to good, weather now favorable; some insect counts mounting; 95% setting bolls, 86% last year, 91% average. Soybean condition good with moisture adequate during critical blooming stage; 52% blooming, 49% year ago and average; setting pods 9%, 16% last year. Tobacco good condition, 77% harvested, 56% last year, 70% average. Peach harvest completed in Ridge, Piedmont condition fair to good due to previous surplus rain, humidity; 87% harvested, 82% last year, 89% average. Apples good with favorable weather, early harvest 7% complete, major harvest to begin at midmonth. Pastures good condition, some recent forage harvest damaged by rains. Armyworms found in some grain sorghum.

SOUTH DAKOTA: Temperatures 5° subnormal to 3° above. Extremes: 101 and 45°. Thunderstorms widely scattered. Precipitation greatest northeast. High humidity.

Small grain harvest continued slow by high humidity and wet fields. Harvest two weeks behind average. Crop growth and development moderate to rapid. Row crops good to excellent condition. Grasshoppers, armyworms and seed weevils common. Fieldwork: 4.5 days suitable. Farm fuel supplies tight to adequate. Topsoil moisture pocket of shortage and surplus west, adequate elsewhere. Winter wheat 58% harvested, 1978 89%, average 92%. Rye 38% harvested, 1978 78%, average 86%. Oats 29% harvested, 1978 53%, average 71%. Spring wheat 17% harvested, 1978 24%, average 52%. Barley 34% harvested, 1978 57%, average 74%. Alfalfa 2d cut, 64% harvested, 1978 67%, average 69%. Wild hay 59% harvested, 1978 59%, average 72%. Soybeans 88% in bloom or past, 1978 84%, average 90%. Flax 97% in bloom or past, 1978 95%, average 100%. Soybeans 25% podded, 1978 34%, average 45%. Sorghum, 30% headed, 1978 24%, average 36%. Corn 81% tasselling or past, 1978 82%, average 84%; 61% silked, 1978 65%, average 74%.

TENNESSEE: High pressure early week. Light showers end of week; amounts 0.25 to 0.50 in. Temperatures near normal.

Soil moisture surplus. Fieldwork: 2.9 days suitable. Corn silked 85%, 1978 90%, average 97%; dough stage 40%, 1978 63%, average 69%; dent stage 9%, 1978 23%, average 30%. Soybeans blooming 53%, 1978 77%, average 68%; setting pods 15%, 1978 30%, average 24%. Cotton setting bolls 59%, 1978 87%, average 79%. Tobacco infested with blue mold in many fields. Topping of tobacco 27%, 1978 38%. Pastures good condition. Fuel supplies adequate.

TEXAS: Stationary fronts provided scattered areas beneficial moisture. Only isolated portions South Texas, Edwards Plateau, West Texas and northern Panhandle need moisture. Moisture conditions statewide considerably more favorable than past several years.

Open weather enabled Valley, some South Texas producers to continue harvest sorghum, corn, cotton. Insect activity generally light. Hot, open weather would be welcomed Panhandle to promote cotton fruit set. Boll set began Panhandle cotton where some producers cultivating last time. Crop generally two weeks late statewide. Some High Plains fields yet to square. Insects generally light statewide: some producers Blacklands and South Texas spraying for bollworm, budworm. Weevil activity extremely light. South Texas, Gulf Coast producers defoliating. Stripping operations began South Texas. Valley crop 33% picked. Sorghum on High and Low Plains received beneficial rains. Producers noted spraying late planted stands for midge. Peak harvesting Blacklands, Central Texas. Producers winding down harvest South Texas while harvest completed lower Rio Grande Valley. Earlier planted High Plains soybeans setting pods. Blooming prevalent except where planted as catch crop. Damage Tropical Storm Claudette confined several counties bordering coast. Peanuts good growth statewide. Spraying leaf spot most areas. Irrigation Edwards Plateau, South Texas. Some South Texas fields harvested. Corn aided by rains Panhandle. Valley harvesting spread northward to Blacklands. Rice harvest gained momentum Gulf Coast. Claudette heaviest damage few counties bordering coast. Armyworms noted East Texas hay although most producers cutting third crop. Alfalfa producers fourth cutting portions of Low Plains, throughout Trans-Pecos. Cotton squaring 96%; setting bolls 55%; open bolls

10%; harvested 3%; 4% 1978; 2% average. Rice turning color 74%; harvested 29%; 53% 1978; 46% average. Sorghum headed 71%; turning color 61%; mature 49%; harvested for grain 36%; 57% 1978; 43% average. Corn harvested 8%; 15% 1978; 11% average. Peanuts harvested 1%; 3% 1978; 1% average.

Preparing land, planting fall vegetables active. Harvest bell peppers, cucumbers, melons, peas, beans, squash, okra, tomatoes active. Irrigating, general maintenance citrus groves continued. Peaches available central, east, north, High Plains. Pecans continued to size; some droppage. Evidence of scab, second generation casebearer spraying active. Pastures, rangelands benefited from rains and furnishing abundance of forage. Western part South Texas dry. Baling hay, weed control common. Cattle good to excellent condition, spring calves making rapid growth. Grasshopper populations a problem in some areas.

UTAH: Little or no precipitation. Maximum temperatures climbed to highest of season in many stations over weekend. Average temperatures ranged from 3° below normal to 6° above.

Soil moisture deficit becoming very critical many lower elevation ranges. Range and feed conditions decline, rated generally poor to very poor. Livestock still in fair to good condition. Some water hauling. All week suitable for fieldwork. Hay harvest about 75% complete. Winter wheat harvest continued; about 60% dryland and 45% irrigated combined. Spring planted small grains ripening with about 33% cut. Tart cherry and apricot harvest about 75% done. Fuel supplies generally adequate with gasoline and diesel tight in some areas.

VIRGINIA: Hot, rather humid with average temperature in upper 70's. Some minor relief west over weekend. Extremes: 103 and 54°. Rainfall light occurring daily except over weekend. Rainfall moderate, range none to several inches, average less than 1.00 in.

Topsoil moisture mostly adequate. Fieldwork: 4.3 days available. Tobacco harvest progress: Flue-cured 15%, 6% 1978, 13% average; fire-cured 5%, less than 1% 1978, over 1% usual; burley less than 1%, 0% 1978, 1% average; sun-cured 15%, 0% 1978, 3% usual. Burley tobacco condition fair due to blue mold, all other tobacco good with hot, dry weather checking mold growth. Spraying aphid infestation some flue-cured fields. Corn, soybeans, peanuts, pasture, hay good. Fall armyworms sprayed in north, central Piedmont corn fields. Spider mites increasing in some soybeans, east. Peanut growers watching for sclerotinia blight, other disease outbreaks promoted by hot, humid weather. Oats, rye, late wheat combined mostly north, west and southwest. Apples, peaches, fresh market tomatoes, sweet corn picked. Processing tomatoes picked Eastern Shore. Cantaloupes southwest failure due to wet, humid conditions preventing proper set. Third cuts alfalfa made. Lambs marketed central mountains, some sows sold central Piedmont.

WASHINGTON: West: Temperatures near to above normal. Precipitation much below normal.

Blueberry harvest in progress, raspberries over. Vegetable crop harvests continued. Moisture stress in all dryland crops and pastures. Irrigation in use where possible.

East: Temperatures above normal but cooled to normal for weekend. No precipitation.

Peach harvest started with some summer apples coming off. Wheat harvest near 58%. Heat keeping irrigated crops in average condition while all dryland shows moisture stress. Grasshoppers and aphids causing problems. Second cutting hay winding down. Wheat harvest: 1979 - 58%, 1978 - 32%.

WEST VIRGINIA: Temperatures above normal. Extremes: 96 and 49°. Precipitation well below normal.

Fieldwork: 3.8 days suitable. Soil moisture adequate to surplus. Main farm activities: Haying, clipping pasture and harvesting small grains. Barley harvested: 66%, 80% 1978; wheat harvested 51%, 77% 1978; oats harvested 35%, 37% 1978. Corn mostly good condition. Some armyworms in late planted corn. Hay: 1st cutting 90%, 92% 1978; 2d cutting 33%, 28% 1978. Hay condition mostly good to fair. Peaches 28% harvested. Fuel supply adequate to tight. Some spot shortages at end of month slowed hay harvest.

WISCONSIN: Temperatures near normal. Extremes: 90 and 46°. Week began warm and wet, with highs in 80's. Showers and thunderstorms occurred 30th. Cooler 31st and 1st with highs in 70's and a few 60's. Very warm and humid conditions returned 2d to 5th as highs in mid-80's to near 90°. Series of showers and thunderstorms developed after midweek. Rainfall ranged upward of 2.00 in. west and south, with 1.00 to 2.00 in. other areas.

Fieldwork: 6 days suitable. Oats 8% harvested, 1978 15%, normal 25%. Late oats just beginning to turn. Winter wheat, barley, and rye being harvested. Strong winds and heavy rain in weekend storms lodged some small grains. Corn and soybeans look very good after recent rains. Corn 55% in silk, 1978 70%, normal 65%. Late corn growing well and tasseling. Second crop hay 50% harvested, 1978 50%, normal 40%. Showers and humidity slowed hay drying. Pasture conditions below year ago but above normal. Early tobacco being topped, moisture will increase leaf spread. Cherries being picked. Early sweet corn being harvested. Harvest continues for snap beans, beets, cucumbers, late peas, and early potatoes. Armyworms causing some damage to crops in north, spraying being done. Topsoil moisture short to adequate, improved after weekend rains.

WYOMING: Temperatures generally below normal. Highest temperature 100°, lowest 35°. Precipitation below normal except parts of east; greatest amount 0.72 in.

Topsoil moisture very short to short 55%. Winter wheat mature 91%, harvest 54%, normally 73% harvested by this time. Spring wheat turning color 70%, mature 30%, harvested 8%. Oats turning color 64%, mature 32%; harvested 9%. Barley turning color 77%, mature 38%, harvested 9%. Hay harvested: First cutting alfalfa 95%; second cutting alfalfa 17%; other hay 58%. Row crops mostly good condition. Corn 60% tasseled, 48% silked. Dry beans 80% bloomed. Potatoes 90% bloomed. Fieldwork: 7 days suitable. Fall and winter grazing prospects fair to poor. Livestock mostly good condition. Range, pasture condition mostly fair.

World Weather and Crop Update

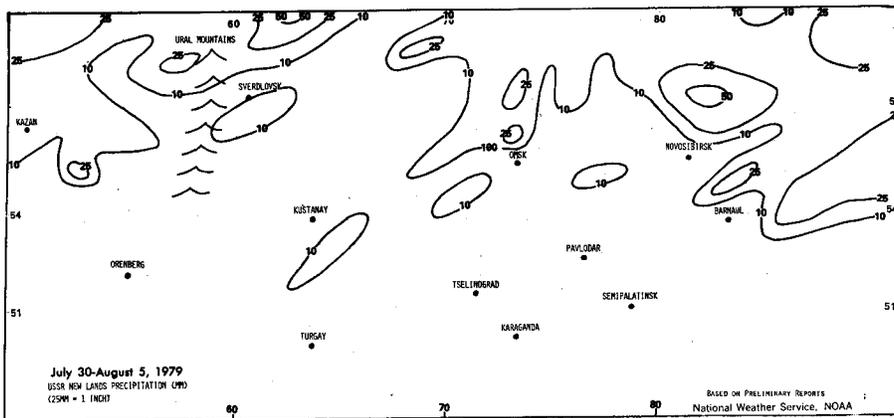
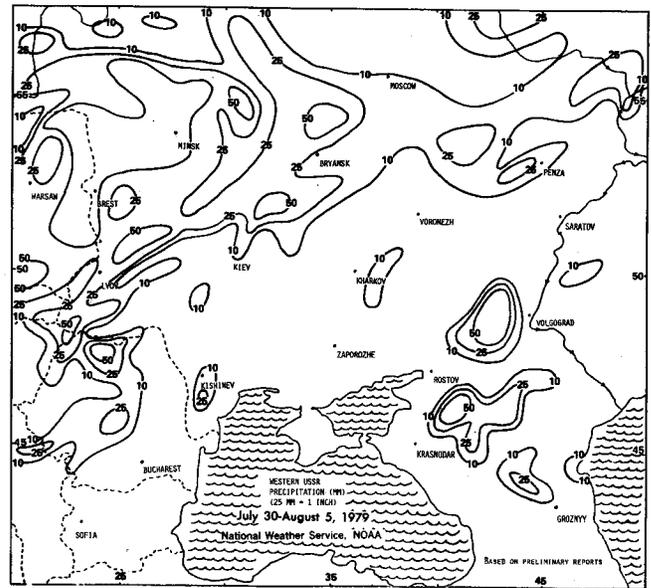
July 30 - August 5

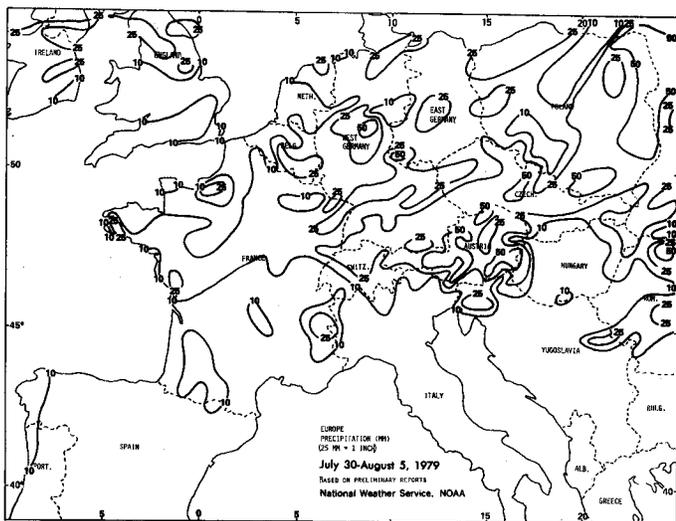
HIGHLIGHTS:

- USSR. Winter grain harvesting. Rains interfering in Belorussia. Spring grains turning.\* Fair weather.
- EUROPE. Winter grain harvesting in the north. Some interference by rain.
- CHINA. Late rice heading.\* Some dry areas in the south.
- INDIA. Rice jointing.\* Quite adequate irrigation water.
- AUSTRALIA. Winter grains nearly dormant in south. Dry weather continues.
- S. AMERICA. Argentina wheat planting. Only light rainfall.
- CANADA. Spring grains heading. Only light rainfall.

\*Based on normal crop calendar information.

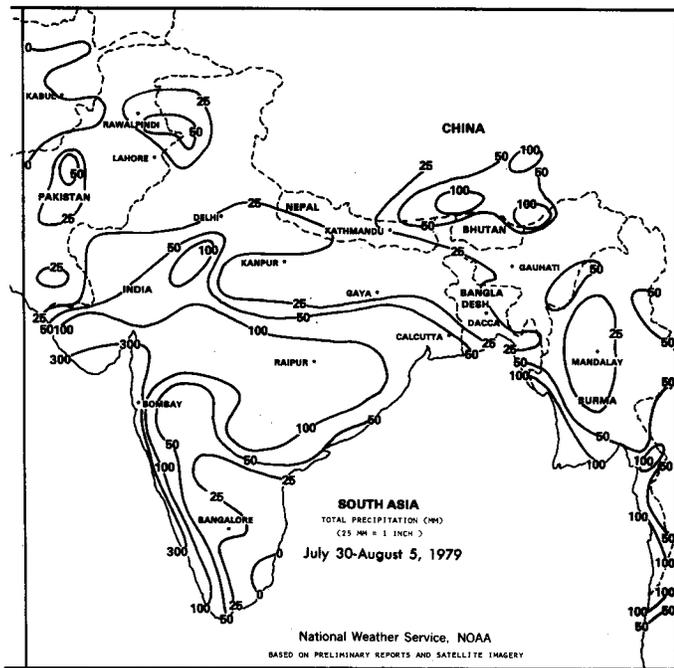
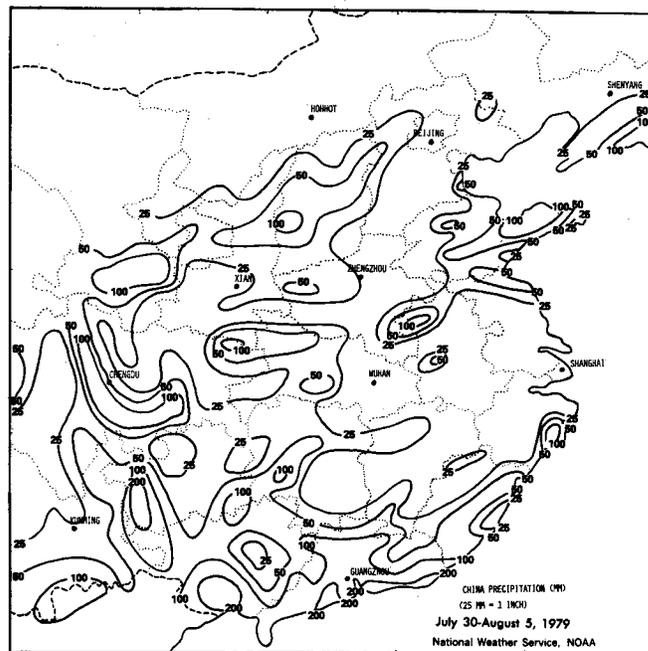
USSR. Rainfall increased over northwestern portions of the winter grains area, with 40-70 mm totals in Belorussia disrupting harvest activities even more than in previous weeks. Favorable harvest weather prevailed over areas east to the Volga Valley. Above-normal totals in the lower Volga Valley and North Caucasus benefited crops planted after the grain harvest. In the New Lands, only widely scattered locations received near-normal rainfall, extending the drying trend to the second week. Weather conditions ranged only slightly on the warm and dry side and were favorable for the maturing grain crop. Cotton-growing areas continued to experience normally hot, dry weather, with highs near 40°C and good irrigation supplies providing excellent growing conditions.



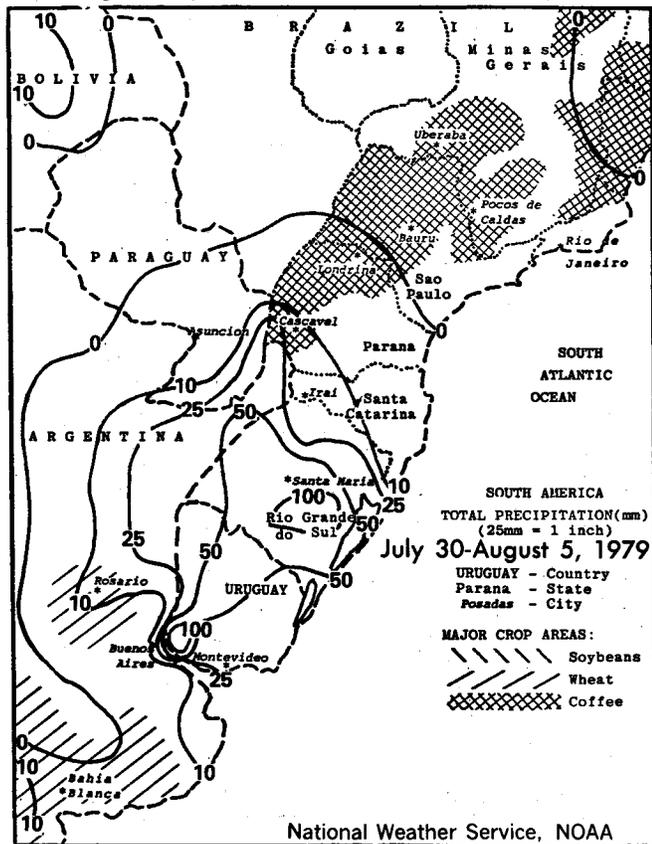


EUROPE. Coarse grain crops in France got some relief from a prolonged dry spell, but rainfall totals remained generally below normal, and soil moisture remains deficient. Rains of 15-30 mm continued to plague the winter grains harvest across northern Europe. Higher totals of 25-50 mm in the Alps were normal for this season.

CHINA. Typhoon Hope ripped across the southernmost provinces of China late in the week, causing extensive wind damage farther inland than expected. More than 100 mm of rainfall occurred over an extensive area, but some previously dry areas were left rainless once again. These areas, in the southern portions of Hunan and Jiangsi Provinces on the south rim of the Yangtze Valley, have been deficient in rainfall since June, and although not a major crop region, the area should be large enough to warrant concern. Spring wheat areas in the north saw a sudden change to dry weather, much needed after previous weeks' heavy rains and the harvest so close.

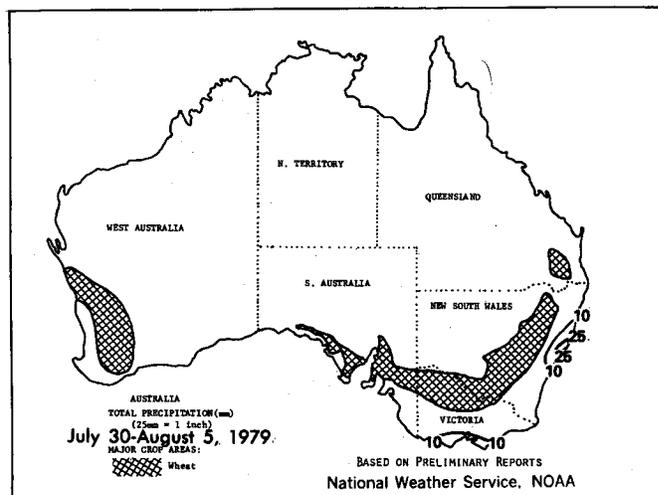


INDIA. Central portions of the country were drenched with 150-250 mm of rainfall. These rains extended into Gujarat, where cotton and peanut crops had been suffering from a prolonged dry spell since June. A large portion of the major rice area in the Northeast received less than 25 mm, but irrigation supplies should be quite adequate. Much of Andhra Pradesh on the south-eastern coast remained relatively dry, worsening conditions there.



S. AMERICA. Only light rains of less than 5 mm fell in parched wheat areas of southwestern Buenos Aires Province, Argentina. These may allow some planting to continue, but 50-75 mm is needed to replenish soil moisture deficiencies, and this is climatically unlikely in August. To the north in Brazil, much of Rio Grande do Sul received abundant rains in excess of 50 mm.

AUSTRALIA. Much of the winter grains area remained rainless again this week. The near-dormant crops were still in good condition with adequate sub-soil moisture, but rain will be needed soon to permit normal crop development.



CANADA. Grain prospects in Canada's prairie provinces dwindled despite light rains in dry southern areas last week, where substantial yield losses have occurred. Northern portions of the provinces are reported in satisfactory condition with higher than average yields expected; however, prospects even here dimmed somewhat.

## WHEAT PRODUCTION IN ARGENTINA

Argentina is an important agricultural exporter and a major competitor with the United States in certain commodities. Among the most important of these are wheat, corn, and sorghum. The purpose of this article is to summarize some of the physical factors affecting production in Argentina with special emphasis on wheat.

Argentina is about one-third the size of the continental United States. It has a variety of climates from subtropical to cold, but most of the country lies in the Temperate Zone, where climate and soils resemble those of the United States between the Mississippi River and the Rocky Mountains. Rainfall is adequate and often abundant in the northeastern part of the country but diminishes in the west. About 24 percent of the country is humid, 15 percent semi-arid, and 61 percent arid.

Main Production Regions 1/

Argentina can be roughly divided into six production regions--Pampa, Northeast, North, Northwest, Cuyo, and Patagonia (fig. 1).

The Pampa region is a vast, originally treeless, lowland prairie with mild climate and regular rains in the east. It has no major rivers. Because of poor surface drainage, abundant rains occasionally create large shallow lakes. Annual rainfall averages 38 inches at the region's eastern edge and decreases to 20 inches at its western limit. Hence, the Pampa is often divided into a humid and a semi-arid section. The soil of most of the Pampa is deep, black, friable chernozem, except for sandy steppe loam in western Cordoba, La Pampa, and southwestern Buenos Aires Provinces.

The temperate climate, adequate moisture, and good soil make the Pampa the agricultural heartland of Argentina. Excluding the federal district, it contains over 50 percent of the country's population (70 percent if the federal district is included), nearly 80 percent of total cattle, nearly 90 percent of hogs, and 48 percent of sheep. It produces over 90 percent of the country's grains and oilseeds.

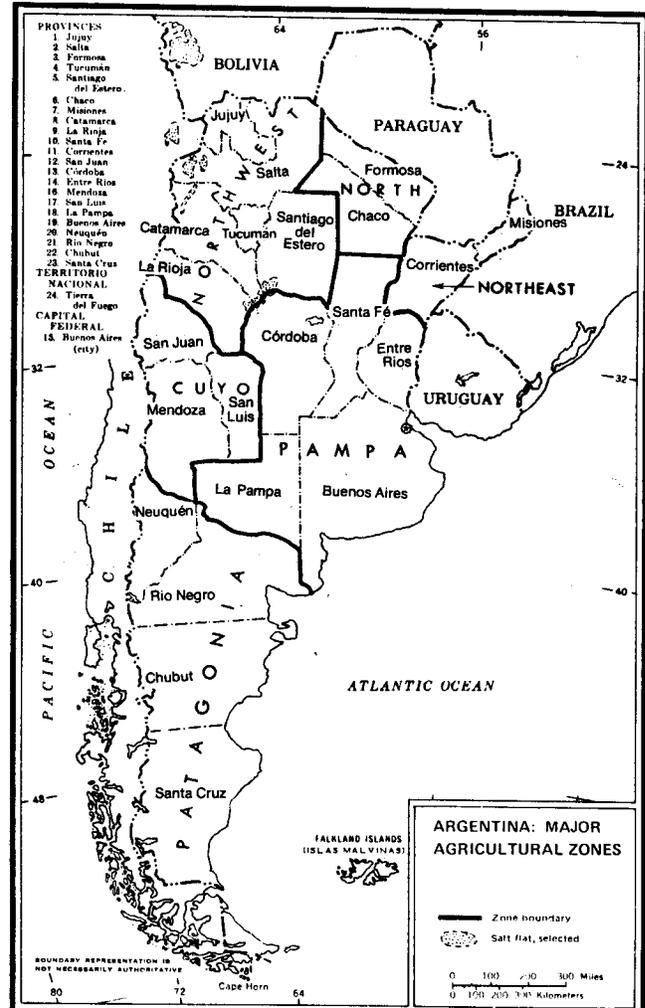
The Northeast region lies between the Parana and Uruguay Rivers. It generally is a rolling plain still largely forested. Soils are mainly alluvial in the Parana flood plains but red, leached, and acid elsewhere. Rainfall is evenly distributed throughout the year, averaging 57 inches in Corrientes Province and 65 inches in Misiones Province.

Misiones produces tung nuts, yerba mate, bananas, pineapples, and citrus fruit. Corrientes produces citrus fruit, rice, tobacco, and cotton, and cattle and sheep are grazed there.

The North region also known as the Chaco region, is a vast, wooded lowland plain extending from western Paraguay and eastern Bolivia. It is subtropical with high temperatures; the average is 82°F in January and 62°F in July. Rainfall averages 62 inches in the

1/ U. S. Department of Agriculture, Foreign Agricultural Economic Report No. 78, Economic Research Service, USDA, May 1972.

Figure 1.



U.S. DEPARTMENT OF AGRICULTURE NEG. ENS 9388 - 7(17) ECONOMIC RESEARCH SERVICE

east and 22 inches in the west, with greatest accumulation in the summer months. Soils are alluvial along the Paraguay and Parana Rivers; predominantly red soils are found elsewhere. Cotton and querbracho wood are its chief products, but bananas and pineapples are important in eastern Formosa Province.

The Northwest region is largely an arid tableland. The soils are mainly shallow lithosols, the exceptions being chestnut and brown soils of Santiago del Estero and Tucuman Provinces. Average annual rainfall is 37 inches in Santiago del Estero and Jujuy. Rainfall patterns in Tucuman and, to a lesser extent, Salta and Jujuy, allow cultivation of sugarcane and citrus fruit.

The Current Situation

The Cuyo region is an extension of the northwestern arid tableland. The soils are lithosols in the Andean highlands and most of San Juan province, and sierozem on the eastern limit of the region. Annual rainfall ranges from 4 inches in the Andean foothills in San Juan and Mendoza Provinces to 23 inches in San Luis Province. Extensive irrigation has made Mendoza and San Juan the center of the Argentine wine and food-processing industries.

The Patagonia region is mainly a semi-arid, windy plateau, separated by deep lateral and waterless canyons. Annual rainfall averages about 13 inches in the northeast and 23 inches in Tierra del Fuego, but only 7 inches in most of the plateau. The soils are mostly sierozems in the northeast, lithosols in the Andean highlands, and chestnut and brown in western Chubut and southwestern Santa Cruz. In the north, the irrigated valleys of Rio Negro and Rio Colorado are important fruit producers, accounting for most of Argentina's apple and pear production.

The Pampa Region and Wheat

The five provinces which make up the Pampa region produce over 90% of the nation's grains and oilseeds. This is not surprising since it has some of the best soils and most favorable climate. More than 90% of the corn and grain sorghum come from this region. Nearly all the wheat is grown in the region as well. The distribution is shown in figure 2 and table 1.

Table 1. The percentage of national cropland, wheat acreage, and wheat production in the five provinces of the Pampa, 1970.

Province	National Cropland	Wheat Area	Wheat Production
Buenos Aires	42.5	55.2	66.1
Entre Rios	5.1	5.8	4.2
Santa Fe	13.2	11.5	11.1
Cordoba	20.2	13.7	10.0
La Pampa	8.3	11.9	7.3
Total	89.3	98.1	98.7

Wheat production tends to vary widely from year to year as a result of both weather and agricultural policies. Wheat yields and production for the past five years appear in figures 3 and 4. While the variability in yields has been low, the trend has been downward. Actual production levels have been much more variable because of large year-to-year differences in planted acreage. The years shown in the chart refer to the year planted.

Wheat planting normally begins in May and is completed in mid-July. However, moisture is the key to planting progress. In both 1974 and 1977, planting was delayed until mid-August because of dryness. A similar situation may be developing this year with only 40% of the wheat planted as of mid-July. As a result, some planting may be delayed.

The planting season began with fairly good moisture as of mid-June because of favorable conditions in May. However, overall June precipitation was generally less than 60% of normal over most of the winter grains area. July has turned out to be even drier with the southwestern areas receiving 10 to 25% normal. No precipitation fell the last two weeks of July or into early August. Overall, it appears that winter wheat will be off to a very slow start. Ample September moisture will be very important if the crop is to recover from the dry weather.

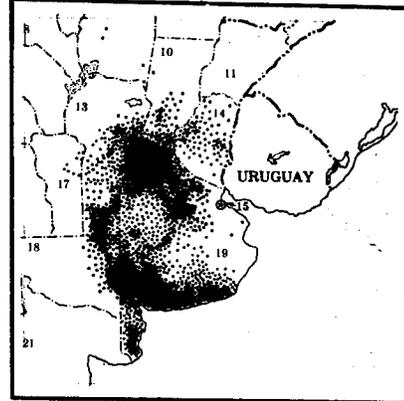


Figure 2. Distribution of wheat production in Argentina.

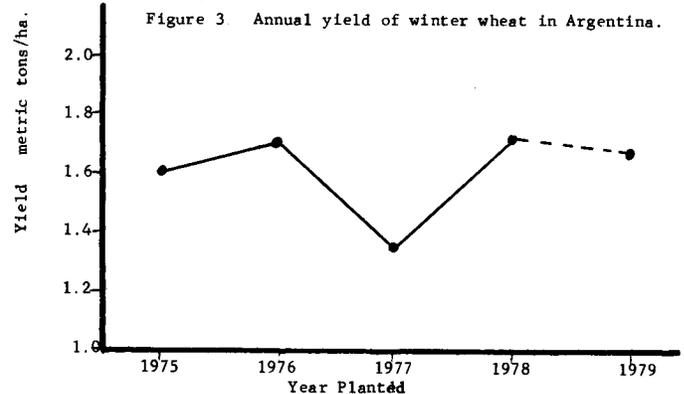


Figure 3. Annual yield of winter wheat in Argentina.

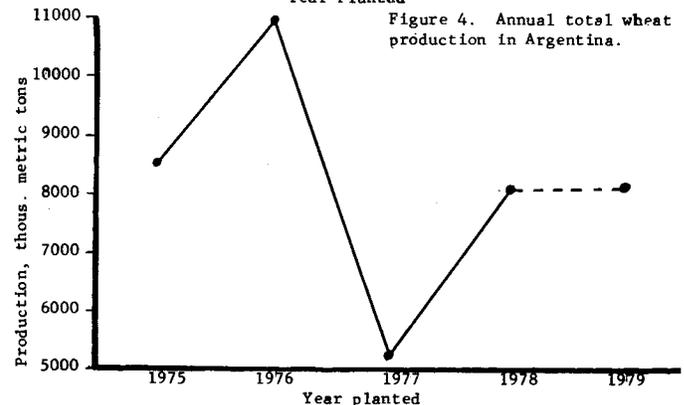
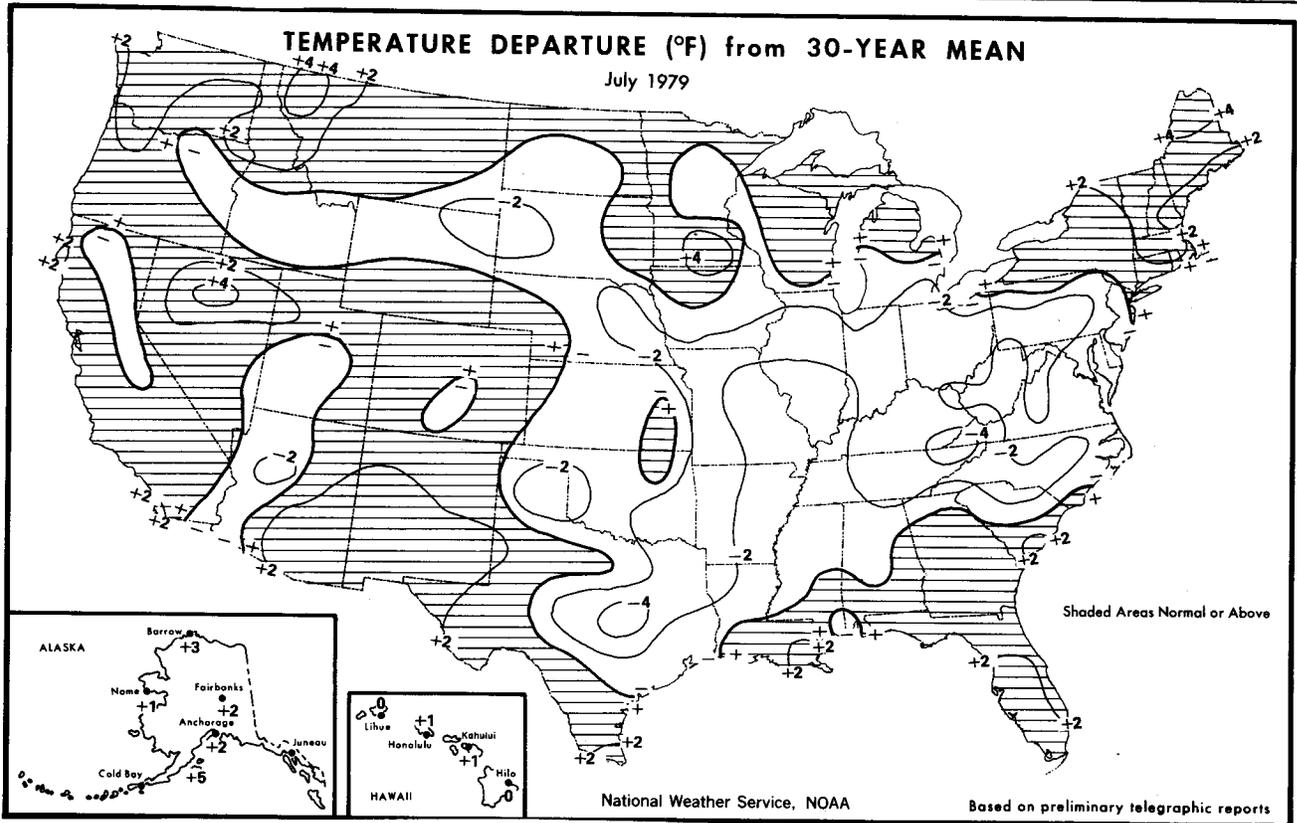


Figure 4. Annual total wheat production in Argentina.



### July Weather Summary

**HIGHLIGHTS:** July rainfall covered nearly every point in the country. Some areas in the normally dry Southwest and Plateau Region received up to 2 inches. Two tropical systems, Bob and Claudette, dominated the rain patterns in the East. Both storms, occurring a week apart, followed similar tracks from Southeast Texas to the Ohio Valley and the middle Atlantic States. Flooding occurred in Texas and Indiana. Temperatures in the Pacific Northwest averaged above normal. During parts of the month, unusual high readings ranged above 100° in the State of Washington. New Mexico and New England also averaged well above normal for the month.

A cool high pressure system was poised over Hudson Bay in Canada as July began. As the first week of the month progressed, the cold front marking the periphery of the cool air moved southward and encompassed all of the central and eastern United States. Precipitation fell all along the front as it moved southward. Light amounts were recorded in very dry central Illinois. The heaviest rain fell in the eastern portion of the southern Plains and in the central Gulf Coast States where severe weather including heavy downpours and tornadoes were reported. Tornadoes also touched down in the eastern Great Plains.

Many record low temperatures chilled the Midwest and Eastern Seaboard. Only the Rocky Mountains and Florida showed warmer than normal temperatures.

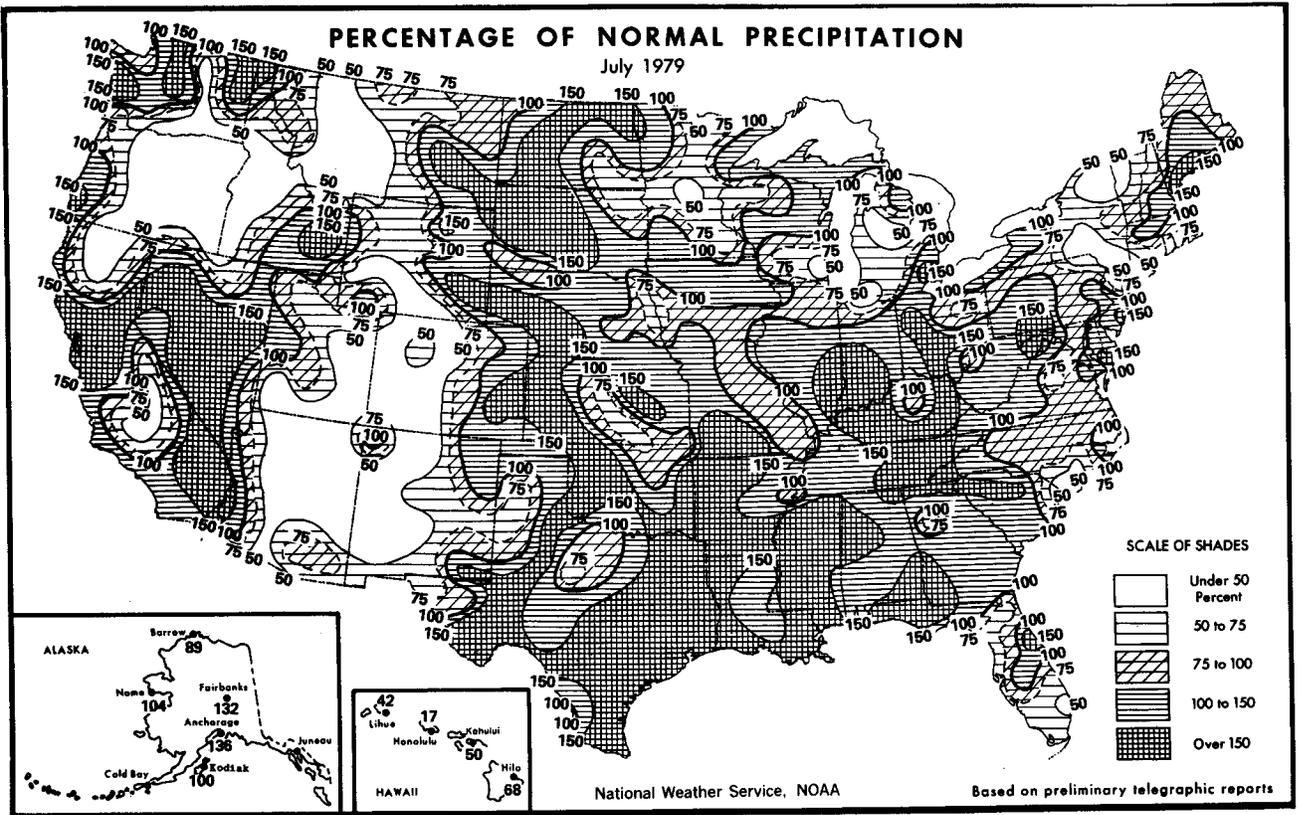
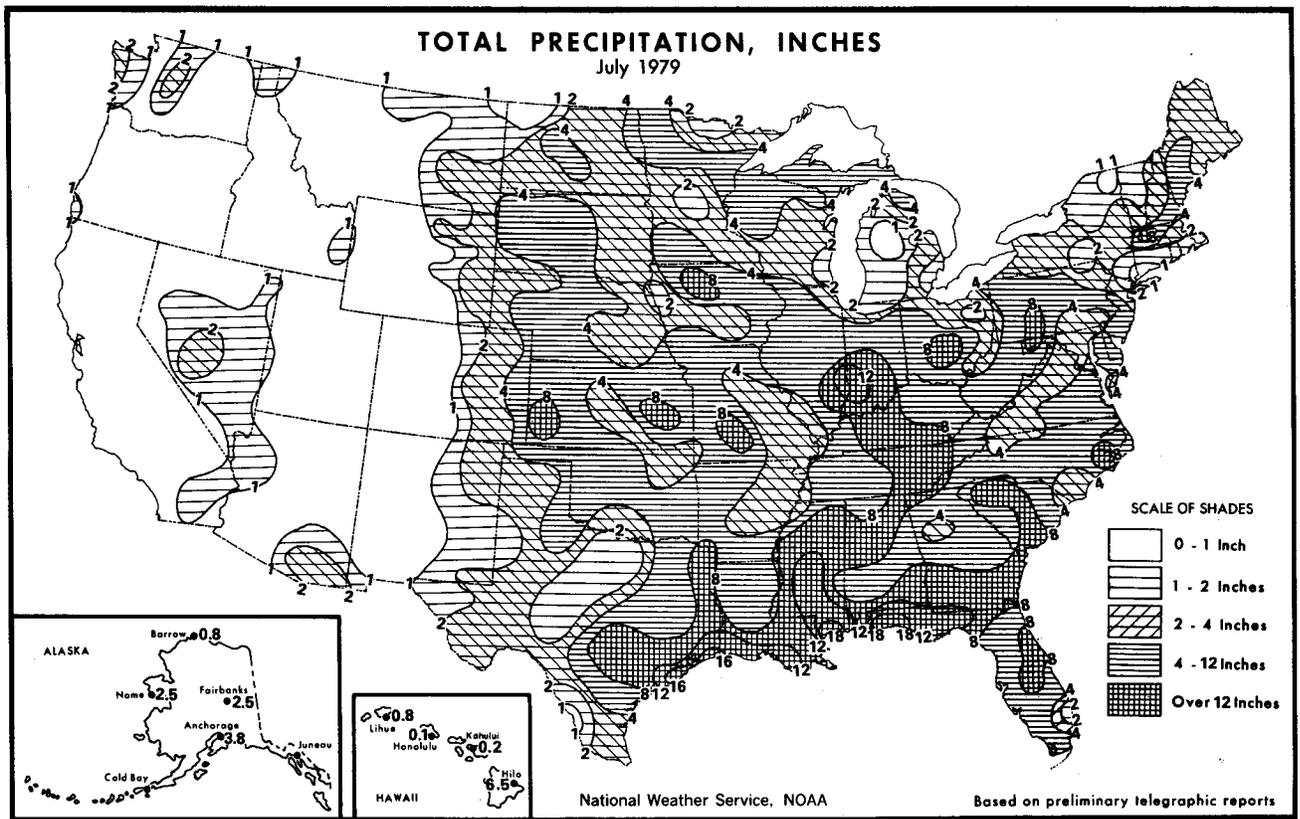
The cool air moved eastward out of the Nation during the early part of the second week of July (9th to 15th). Light showers edged through the eastern part of the Midwest as the cooler air departed. At midweek, Hurricane Bob moved onto the Louisiana coast and proceeded to the Ohio

Valley and the middle Atlantic States. Heavy downpours fell along the track of the storm. Five to 8 inches were measured in Mississippi, Alabama, and southern Indiana. Another area of thunderstorms rolled into the northern Plains in the latter half of the week. Temperatures ranged warmer than normal throughout the Southwest, the Plains, and through the Great Lakes to New England.

Early in the third week of the month (16th to 22nd), showers and thunderstorms formed in the central and northern Plains, but then the moisture from the Gulf of Mexico began to flow toward the Southwest. Above-normal rain fell as showers in the Southwest and the Plateau Region. Heavy showers also fell in central and western Texas, the Southeast, and throughout the area east of the Appalachians.

The Pacific Northwest averaged 9 to 10 degrees warmer than normal with some daytime temperatures exceeding 100° as far north as the State of Washington. The central Plains cooled to an average of 6 degrees below normal.

In the beginning of the last period (23rd to 31st), Tropical Storm Claudette approached the southeastern coast of Texas. The storm was downgraded to a low pressure system as it moved slowly to northeastern Texas. A circulation pattern carried large amounts of moisture into the area from southeastern Texas to the Midwest. More than 12 inches of rain flooded portions of the Texas coast. Five or more inches fell on already wet southern Indiana and flooded large acreages there. Only at week's end did the remnants of the storm move out of the country through the middle Atlantic States. The last two days of the month produced thunderstorms from the central Plains to the upper Mississippi Valley. Hot weather continued in the West and from the mid-Atlantic Coast through New England.



Temperature and Precipitation Data for the July 1979

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 . . . . .	80	0	9.9	+ 4.7	LA. Baton Rouge . . . . .	82	0	8.8	+ 2.3	Youngstown . . . . .	68	- 3	3.6	- .3
Mobile . . . . .	81	- 1	10.8	+ 1.9	Lake Charles . . . . .	82	0	13.2	+ 6.6	OKLA. Okla. City . . . . .	81	- 1	5.6	+ 2.9
Montgomery . . . . .	80	- 1	5.2	+ .1	New Orleans . . . . .	84	+ 2	11.4	+ 4.7	Tulsa . . . . .	83	+ 1	2.7	- .8
ALASKA Anchorage . . . . .	60	+ 2	3.8	+ 1.7	Shreveport . . . . .	81	- 2	7.5	+ 4.6	OREG. Astoria . . . . .	62	+ 2	.9	- .1
Barrow . . . . .	42	+ 3	.8	- .1	MAINE. Caribou . . . . .	69	+ 4	3.4	- 3.6	Burns . . . . .	69	+ 1	T	- .3
Fairbanks . . . . .	63	+ 2	2.5	+ .6	Portland . . . . .	69	+ 1	5.9	+ 3.3	Medford . . . . .	73	+ 1	T	- .3
Juneau . . . . .	- 1	- 1	- .3	- .1	MD. Baltimore . . . . .	76	- 1	3.7	- .4	Pendleton . . . . .	73	- 1	.1	- .2
Kodiak . . . . .	59	+ 5	3.5	+ 0	MASS. Boston . . . . .	75	+ 2	2.4	- .3	Portland . . . . .	70	+ 3	.3	- .2
Nome . . . . .	51	+ 1	2.5	+ .1	Chatham . . . . .	68	- 2	1.0	- 1.7	Salem . . . . .	68	+ 1	.3	- .1
ARIZ. Flagstaff . . . . .	64	- 1	3.8	+ 1.7	MICH. Alpena . . . . .	67	+ 1	4.5	+ 2.0	PA. Allentown . . . . .	73	- 1	5.6	+ 1.2
Phoenix . . . . .	94	+ 3	.3	- .5	Detroit . . . . .	70	- 2	5.0	+ 1.9	Erie . . . . .	68	- 1	4.3	+ .8
Tucson . . . . .	88	+ 2	2.0	+ .4	Flint . . . . .	70	0	3.0	- 0	Harrisburg . . . . .	73	- 3	3.1	- .6
Winslow . . . . .	79	+ 1	.3	- .9	Grand Rapids . . . . .	71	- 1	2.3	- .8	Philadelphia . . . . .	76	- 1	3.4	- .7
Yuma . . . . .	93	+ 1	.3	+ .1	Houghton Lake . . . . .	67	+ 1	.9	- 2.2	Pittsburgh . . . . .	70	- 2	4.3	+ .5
ARK. Fort Smith . . . . .	80	- 2	5.8	+ 2.6	Lansing . . . . .	70	- 1	1.9	- .9	Scranton . . . . .	71	- 2	3.0	- 1.3
Little Rock . . . . .	80	- 1	3.3	+ .3	Marquette . . . . .	65	+ 1	4.6	+ .8	R.I. Providence . . . . .	74	+ 2	1.7	- 1.2
CALIF. Bakersfield . . . . .	85	+ 1	0	0	Muskegon . . . . .	69	- 1	1.7	- .8	S.C. Charleston . . . . .	82	+ 2	8.4	+ .2
Eureka . . . . .	58	+ 2	.3	+ .2	S. Ste. Marie . . . . .	65	+ 1	4.4	+ 1.8	Columbia . . . . .	79	- 2	7.3	+ 1.6
Fresno . . . . .	82	+ 1	.1	+ .1	MINN. Duluth . . . . .	66	0	5.5	+ 1.8	Greenville . . . . .	78	0	8.7	+ 4.5
Los Angeles . . . . .	73	0	0	0	Internatl Falls . . . . .	66	0	1.1	- 2.9	S.D. Aberdeen . . . . .	71	- 1	2.6	- .1
Red Bluff . . . . .	83	+ 1	T	0	Minneapolis . . . . .	74	+ 2	2.3	- 1.4	Huron . . . . .	75	+ 1	2.6	+ .4
San Diego . . . . .	72	+ 2	.1	+ .1	Rochester . . . . .	73	+ 3	2.7	- 1.0	Rapid City . . . . .	70	- 3	4.1	+ 2.0
San Francisco . . . . .	64	+ 1	.1	+ .1	St. Cloud . . . . .	69	- 1	1.2	- 1.0	Sioux Falls . . . . .	74	+ 1	3.1	+ .2
Stockton . . . . .	78	+ 1	.2	+ .2	MISS. Jackson . . . . .	80	- 2	13.3	+ 9.0	TENN. Chattanooga . . . . .	76	+ 3	11.8	+ 6.7
COLO. Denver . . . . .	74	+ 1	.8	- 1.0	Meridian . . . . .	82	+ 1	6.5	+ 1.4	Knoxville . . . . .	75	- 3	9.5	+ 4.8
Grand Junction . . . . .	79	0	.1	- .4	MO. Columbia . . . . .	76	- 1	3.0	- .4	Memphis . . . . .	83	- 1	3.1	- .2
Pueblo . . . . .	77	+ 1	1.5	- .4	Kansas City . . . . .	76	- 3	4.7	+ .3	Nashville . . . . .	78	- 2	4.7	+ .9
CONN. Bridgeport . . . . .	74	0	.5	- 2.9	St. Louis . . . . .	79	0	3.7	- 0	TEX. Abilene . . . . .	84	0	1.6	- .7
Hartford . . . . .	75	+ 2	2.0	- 1.4	Springfield . . . . .	75	- 3	5.4	+ 1.8	Amarillo . . . . .	77	- 2	2.0	- 1.0
D.C. Washington . . . . .	81	0	8.9	+ .9	MONT. Billings . . . . .	73	+ 1	.5	- .4	Austin . . . . .	83	- 2	10.5	+ 8.6
FLA. Apalachicola . . . . .	82	+ 1	11.7	+ 5.0	Glasgow . . . . .	72	+ 1	.8	- .6	Beaumont . . . . .	82	- 1	15.6	+ 9.7
Daytona Beach . . . . .	86	+ 3	6.0	- 2.9	Great Falls . . . . .	69	0	.3	- 1.0	Brownsville . . . . .	86	+ 2	2.1	+ .9
Ft. Myers . . . . .	82	+ 1	4.7	- 2.7	Havre . . . . .	70	0	1.2	- .2	Corpus Christi . . . . .	86	+ 1	3.5	+ 1.6
Jacksonville . . . . .	85	- 0	3.5	- .6	Helena . . . . .	69	+ 1	.3	- .7	Del Rio . . . . .	87	0	2.5	+ 1.5
Key West . . . . .	85	- 0	3.5	- .6	Kalispell . . . . .	68	+ 4	.7	- .3	El Paso . . . . .	85	+ 3	1.0	- .5
Lakeland . . . . .	84	+ 2	5.1	- 1.8	Miles City . . . . .	75	+ 1	2.8	+ 1.2	Fort Worth . . . . .	85	0	1.9	+ .1
Miami . . . . .	83	+ 2	8.0	- .3	Missoula . . . . .	69	+ 2	.8	- .1	Galveston . . . . .	82	- 1	17.5	+ 13.1
Orlando . . . . .	81	+ 0	15.2	+ 6.3	NEBR. Grand Island . . . . .	74	- 2	2.7	- .3	Houston . . . . .	83	0	8.1	+ 4.0
Tallahassee . . . . .	84	+ 2	5.9	- 2.5	Lincoln . . . . .	75	- 2	3.6	+ .3	Lubbock . . . . .	82	+ 2	1.8	- .4
Tampa . . . . .	83	+ 1	1.9	- 4.6	Norfolk . . . . .	74	- 2	4.1	+ .9	Midland . . . . .	82	0	3.1	+ 1.3
GA. Atlanta . . . . .	79	+ 0	3.6	- 1.3	N. Platte . . . . .	74	0	7.1	+ 4.1	San Angelo . . . . .	83	- 2	1.3	+ .1
Augusta . . . . .	80	0	6.1	+ 1.0	Omaha . . . . .	74	- 1	2.2	- 1.5	San Antonio . . . . .	85	0	7.4	+ 5.7
Macon . . . . .	81	0	5.7	+ 1.2	Valentine . . . . .	73	- 1	2.4	- .1	Victoria . . . . .	83	- 1	6.9	+ 4.1
Savannah . . . . .	82	+ 1	10.8	+ 2.9	NEV. Ely . . . . .	67	0	1.3	+ .7	Waco . . . . .	82	- 4	5.0	+ 3.5
HAWAII. Hilo . . . . .	75	0	6.5	- 3.0	Las Vegas . . . . .	91	+ 1	.8	+ .4	Wichita Falls . . . . .	85	- 1	1.7	- .5
Honolulu . . . . .	81	+ 1	.1	- .5	Reno . . . . .	70	+ 1	.6	+ .3	UTAH. Blanding . . . . .	74	+ 1	.2	- .8
Kahului . . . . .	79	+ 1	.2	- .2	Winnemucca . . . . .	73	+ 2	.7	+ .5	Salt Lake City . . . . .	79	+ 2	.4	- .3
Lihue . . . . .	78	0	.8	- 1.1	N.H. Concord . . . . .	71	+ 1	3.5	+ .4	VT. Burlington . . . . .	72	+ 2	1.2	- 2.3
IDAHO. Boise . . . . .	74	- 1	T	- .2	N.J. Atlantic City . . . . .	75	0	7.6	+ 3.2	VA. Lynchburg . . . . .	74	- 2	4.5	+ .4
Lewiston . . . . .	76	+ 3	.2	- .3	Trenton . . . . .	75	- 1	6.8	+ 2.1	Norfolk . . . . .	77	- 1	4.7	- 1.0
Pocatello . . . . .	71	- 1	.6	+ .2	N.MEX. Albuquerque . . . . .	81	+ 2	.8	- .6	Richmond . . . . .	77	- 1	4.4	- 1.2
ILL. Cairo . . . . .	81	0	3.0	- .2	Roswell . . . . .	81	+ 2	1.5	- .2	Roanoke . . . . .	74	- 1	4.0	+ .3
Chicago . . . . .	73	- 2	3.8	- .3	N.Y. Albany . . . . .	73	+ 1	2.8	- .3	WASH. Colville . . . . .	71	+ 3	.9	+ .2
Moline . . . . .	73	- 2	4.4	- .2	Binghamton . . . . .	69	0	1.5	- 2.3	Omak . . . . .	73	+ 3	.2	- .3
Peoria . . . . .	73	- 2	4.8	+ 1.0	Buffalo . . . . .	71	+ 1	3.5	+ .6	Quillayute . . . . .	60	+ 1	2.2	- .2
Rockford . . . . .	72	- 1	4.3	0	New York . . . . .	77	0	1.4	- 2.5	Seattle-Tacoma . . . . .	67	+ 2	.7	0
Springfield . . . . .	75	- 1	4.6	+ .8	Rochester . . . . .	72	+ 1	3.2	+ .3	Spokane . . . . .	70	0	.9	+ .5
IND. Evansville . . . . .	77	- 1	7.2	+ 3.4	Syracuse . . . . .	72	0	2.3	- .8	Walla Walla . . . . .	77	+ 1	.1	- .2
Ft. Wayne . . . . .	71	- 2	4.8	+ .9	N.C. Asheville . . . . .	72	- 2	5.5	+ .6	Yakima . . . . .	72	+ 1	T	- .2
Indianapolis . . . . .	73	- 2	11.1	+ 7.4	Charlotte . . . . .	77	- 2	4.7	+ .1	W.VA. Beckley . . . . .	68	- 2	4.9	+ .5
South Bend . . . . .	72	0	1.8	+ .9	Greensboro . . . . .	76	- 1	4.3	- .1	Charleston . . . . .	73	- 2	5.2	+ .2
IOWA. Burlington . . . . .	72	- 3	4.3	+ .5	Hatteras . . . . .	77	- 1	6.3	+ .4	Huntington . . . . .	74	- 1	6.2	+ 2.0
Des Moines . . . . .	75	0	3.0	- .3	Raleigh . . . . .	75	- 3	4.8	- .3	Parkersburg . . . . .	72	- 3	3.8	- .5
Dubuque . . . . .	71	- 1	6.7	+ 2.4	Wilmington . . . . .	80	0	2.8	- 5.5	WISC. Green Bay . . . . .	70	+ 1	3.6	+ .5
Sioux City . . . . .	74	- 1	1.9	- 1.4	N.DAK. Bismarck . . . . .	70	- 1	3.2	+ 1.0	La Crosse . . . . .	72	- 1	3.5	0
KANS. Concordia . . . . .	77	- 1	4.2	+ .9	Fargo . . . . .	72	+ 1	3.4	+ .2	Madison . . . . .	70	0	2.8	- 1.0
Dodge City . . . . .	78	- 1	5.2	+ 2.1	Williston . . . . .	70	0	1.8	- .2	Milwaukee . . . . .	71	+ 1	1.1	- 2.3
Goodland . . . . .	76	0	4.5	+ 1.8	OHIO. Akron-Canton . . . . .	69	- 3	2.0	- 1.8	WYO. Casper . . . . .	71	0	1.2	+ .2
Topeka . . . . .	78	0	5.8	+ 1.6	Cincinnati . . . . .	73	- 3	5.5	+ 1.4	Cheyenne . . . . .	70	+ 1	1.8	0
Wichita . . . . .	80	- 1	2.2	- 2.2	Cleveland . . . . .	71	0	3.8	+ .3	Lander . . . . .	71	0	.2	- .4
KY. Lexington . . . . .	74	- 2	4.7	- .1	Columbus . . . . .	72	- 2	8.1	+ 3.9	Sheridan . . . . .	68	- 2	.8	- .3
Louisville . . . . .	75	- 2	10.1	+ 6.3	Dayton . . . . .	73	- 2	4.4	+ .9	P.R. San Juan . . . . .	83	+ 2	6.6	+ .2
					Toledo . . . . .	70	- 2	4.0	+ .8					

Based on 1941-70 normals

Heating Degree Days (Base 65° F.)

ALA. Birmingham . . . . .	0	MAINE, Caribou . . . . .	34	OKLA. Okla. City . . . . .	0
Mobile . . . . .	0	Portland . . . . .	21	Tulsa . . . . .	0
Montgomery . . . . .	0	MD. Baltimore . . . . .	2	OREG. Astoria . . . . .	91
ALASKA, Anchorage . . . . .	--	MASS. Boston . . . . .	2	Burns U. . . . .	33
Barrow . . . . .	678	Chatham . . . . .	10	Medford . . . . .	8
Fairbanks . . . . .	124	MICH. Alpena . . . . .	45	Pendleton . . . . .	12
Juneau . . . . .	--	Detroit . . . . .	12	Portland . . . . .	8
Nome . . . . .	435	Flint . . . . .	17	Salem . . . . .	24
ARIZ. Flagstaff . . . . .	68	Grand Rapids . . . . .	7	PA. Allentown . . . . .	13
Phoenix . . . . .	0	Houghton Lake . . . . .	48	Erie . . . . .	36
Tucson . . . . .	0	Lansing . . . . .	19	Harrisburg . . . . .	12
Winslow . . . . .	0	Marquette U. . . . .	93	Philadelphia . . . . .	4
Yuma . . . . .	0	S. Ste. Marie . . . . .	69	Pittsburgh . . . . .	23
ARK. Fort Smith . . . . .	0	MINN. Duluth . . . . .	52	Scranton . . . . .	34
Little Rock . . . . .	0	Internatl Falls . . . . .	36	R. I. Providence . . . . .	11
CALIF. Bakersfield . . . . .	0	Minneapolis . . . . .	0	S. C. Charleston . . . . .	0
Eureka U. . . . .	208	Rochester . . . . .	0	Columbia . . . . .	0
Fresno . . . . .	0	St. Cloud . . . . .	8	Greenville . . . . .	1
Los Angeles U. . . . .	0	MISS. Jackson . . . . .	0	S. DAK. Aberdeen . . . . .	6
Red Bluff . . . . .	0	Meridian . . . . .	0	Huron . . . . .	0
Stockton . . . . .	0	Vicksburg U. . . . .	--	Rapid City . . . . .	3
San Diego . . . . .	0	MO. Columbia . . . . .	2	Sioux Falls . . . . .	0
San Francisco . . . . .	55	Kansas City . . . . .	5	TENN. Chattanooga . . . . .	0
COLO. Denver . . . . .	0	St. Louis . . . . .	0	Knoxville . . . . .	0
Grand Junction . . . . .	0	Springfield . . . . .	0	Memphis . . . . .	0
Pueblo . . . . .	0	MONT. Billings . . . . .	2	Nashville . . . . .	0
CONN. Bridgeport . . . . .	8	Glasgow . . . . .	6	TEX. Abilene . . . . .	0
Hartford . . . . .	16	Great Falls . . . . .	19	Amarillo . . . . .	0
D. C. Washington . . . . .	0	Havre . . . . .	23	Austin . . . . .	0
FLA. Apalachicola . . . . .	0	Helena . . . . .	11	Beaumont . . . . .	0
Ft. Myers . . . . .	0	Kalispell . . . . .	50	Brownsville . . . . .	0
Jacksonville . . . . .	0	Miles City . . . . .	1	Corpus Christi . . . . .	0
Key West . . . . .	0	Missoula . . . . .	37	Dallas . . . . .	--
Daytona Beach . . . . .	--	NEBR. Grand Island . . . . .	9	Del Rio . . . . .	0
Miami . . . . .	0	Lincoln . . . . .	3	El Paso . . . . .	0
Orlando . . . . .	0	Norfolk . . . . .	3	Fort Worth . . . . .	0
W. Palm Beach . . . . .	0	North Platte . . . . .	4	Galveston U. . . . .	0
Tallahassee . . . . .	0	Omaha . . . . .	4	Houston . . . . .	0
Tampa . . . . .	0	Valentine . . . . .	14	Lubbock . . . . .	0
GA. Atlanta . . . . .	0	NEV. Ely . . . . .	22	Midland . . . . .	0
Augusta . . . . .	0	Las Vegas . . . . .	0	San Angelo . . . . .	0
Macon . . . . .	0	Reno . . . . .	9	San Antonio . . . . .	0
Savannah . . . . .	0	Winnemucca . . . . .	1	Victoria . . . . .	0
IDAHO, Boise . . . . .	5	N. H. Concord . . . . .	33	Waco . . . . .	0
Lewiston . . . . .	12	N. J. Atlantic City . . . . .	6	Wichita Falls . . . . .	0
Pocatello . . . . .	1	Trenton U. . . . .	7	UTAH, Milford . . . . .	0
ILL. Cairo U. . . . .	0	N. MEX. Albuquerque . . . . .	0	Salt Lake City . . . . .	0
Chicago . . . . .	2	Roswell . . . . .	--	VT. Burlington . . . . .	23
Moline . . . . .	5	N. Y. Albany . . . . .	19	VA. Lynchburg . . . . .	0
Peoria . . . . .	3	Binghamton . . . . .	37	Norfolk . . . . .	0
Rockford . . . . .	9	Buffalo . . . . .	16	Richmond . . . . .	0
Springfield . . . . .	0	New York . . . . .	2	Roanoke . . . . .	3
IND. Evansville . . . . .	0	Rochester . . . . .	13	WASH. Colville . . . . .	36
Fort Wayne . . . . .	8	Syracuse . . . . .	19	Omak . . . . .	--
Indianapolis . . . . .	3	N. C. Asheville . . . . .	2	Quillayute . . . . .	157
South Bend . . . . .	3	Charlotte . . . . .	1	Seattle-Tacoma . . . . .	27
IOWA, Burlington . . . . .	4	Greensboro . . . . .	1	Spokane . . . . .	41
Des Moines . . . . .	1	Hatteras R. . . . .	0	Walla Walla U. . . . .	7
Dubuque . . . . .	6	Raleigh . . . . .	0	Yakima . . . . .	29
Sioux City . . . . .	1	Wilmington . . . . .	0	W. VA. Beckley . . . . .	28
KANS. Concordia . . . . .	6	N. DAK. Bismarck . . . . .	11	Charleston . . . . .	5
Dodge City . . . . .	0	Fargo . . . . .	3	Huntington . . . . .	2
Goodland . . . . .	0	Williston U. . . . .	7	Parkersburg U. . . . .	9
Topeka . . . . .	0	OHIO. Akron-Canton . . . . .	35	WIS. Green Bay . . . . .	14
Wichita . . . . .	0	Cincinnati U. . . . .	1	Madison . . . . .	14
KY. Lexington . . . . .	0	Cleveland . . . . .	20	Milwaukee . . . . .	20
Louisville . . . . .	0	Columbus . . . . .	11	WYO. Casper . . . . .	0
LA. Baton Rouge . . . . .	0	Dayton . . . . .	7	Cheyenne . . . . .	2
Lake Charles . . . . .	0	Toledo . . . . .	16	Lander . . . . .	0
New Orleans . . . . .	0	Youngstown . . . . .	35	Sheridan . . . . .	6
Shreveport . . . . .	0				

Preliminary reports from airport locations, except those marked U for urban and R for rural.  
\*Estimated.

CROP DEVELOPMENT  
FOR WEEK ENDING AUGUST 5

CORN TASSELING				SOYBEANS BLOOMING				SOYBEAN POD SET			
	1979	1978	AVG.		1979	1978	AVG.		1979	1978	AVG.
COLO	78	84	84	ALA	60	60	59	ALA	35	29	NA
GA	NA	NA	NA	ARK	26	34	NA	ARK	13	20	NA
ILL*	92	86	89	GA	NA	NA	NA	GA	NA	NA	NA
IND*	85	80	80	ILL	84	76	80	ILL	45	44	53
IOWA	97	100	NA	IND	85	80	NA	IND	25	25	NA
KANS	NA	NA	NA	IOWA	91	100	90	IOWA	61	61	61
KY*	80	NA	NA	KANS	NA	NA	NA	KANS	30	35	35
MICH*	65	65	65	KY	46	50	53	KY	NA	NA	NA
MINN	83	95	94	LA	57	78	NA	LA	32	53	NA
MO	92	69	NA	MICH	NA	NA	NA	MICH	15	22	28
NEBR*	85	90	90	MINN	85	95	95	MINN	25	54	58
NC	NA	NA	NA	MISS	64	66	63	MISS	25	25	31
OHIO*	75	85	85	MO	60	50	60	MO	26	20	30
PA*	55	54	NA	NEBR	NA	NA	NA	NEBR	50	55	60
S DAK	81	82	84	NC	30	NA	NA	NC	2	NA	NA
VA	NA	NA	NA	OHIO	NA	NA	NA	OHIO	55	55	78
WISC*	55	70	65	SC	52	49	49	SC	9	16	NA
				TENN	53	77	68	TENN	15	30	24

\* SILKING PROGRESS

COTTON SETTING BOLLS				GRAIN SORGHUM HEADED			
	1979	1978	AVG.		1979	1978	AVG.
ALA	80	75	80	COLO	14	NA	NA
ARIZ	NA	NA	NA	KANS	25	25	30
ARK	97	86	NA	MO	50	44	55
CALIF	62	NA	NA	NEBR	45	60	70
GA	97	96	NA	OKLA	35	30	60
LA	86	93	NA	S DAK	30	24	36
MISS	73	96	79	TEX	71	NA	NA
MO	67	87	75				
N MEX	NA	NA	NA	RICE HEADED			
NC	NA	NA	NA		1979	1978	AVG.
OKLA	NA	NA	NA	ARK	11	25	NA
SC	95	86	91	CALIF	45	NA	NA
TENN	59	87	79	LA	71	85	NA
TEX	62	NA	NA	MISS	31	48	35
				TEX	100	NA	NA

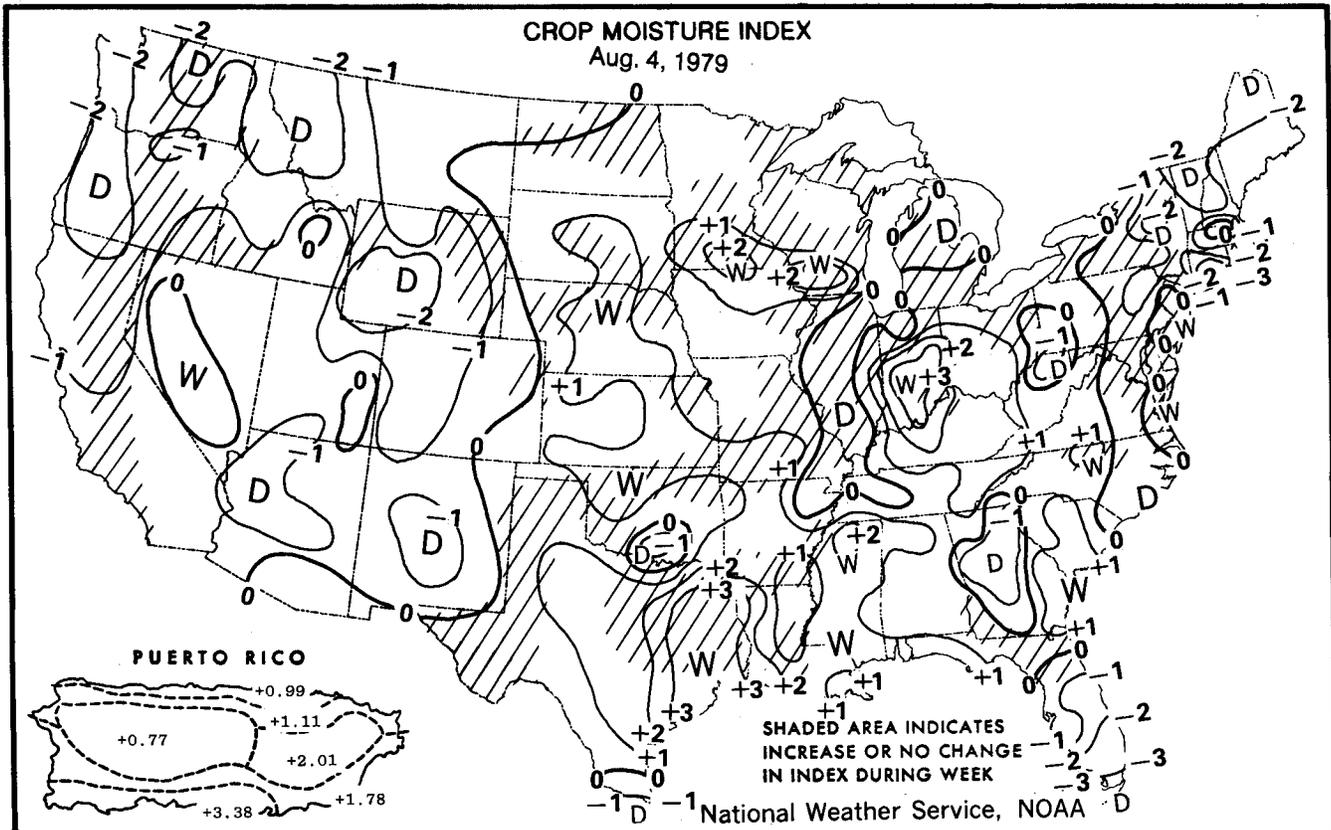
CORRECTION FOR W/E JULY 29  
MISS 16 36 24

HARVEST PROGRESS  
FOR WEEK ENDING AUGUST 5

WINTER WHEAT			
	1979	1978	AVG.
CALIF	99	NA	NA
COLO	91	99	93
IDAHO	10	10	15
ILL	100	100	100
IND	100	100	100
KANS	100	100	100
MO	100	100	100
MONT	15	15	35
NEBR	90	100	95
OHIO	100	100	100
OKLA	100	100	100
OREG	64	NA	NA
S DAK	58	89	92
TEX	100	100	100
WASH	58	32	NA
15 STATES	87	89	92

THESE 15 STATES PRODUCED 91%  
OF THE 1978 WINTER WHEAT CROP.

NA NOT AVAILABLE



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	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	EXTREMELY DRY, MOST CROPS RUINED

SHADED AREA: INDEX INCREASED OR DID NOT CHANGE	
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 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

SPOTTY RAIN IN NEW YORK HAS IMPROVED THE CROP MOISTURE IN MOST AREAS, BUT SOME LOCATIONS REMAIN VERY DRY. THE REST OF NEW ENGLAND BECAME EVEN DRIER. THE LACK OF RAIN IN SOUTHERN FLORIDA DURING A HIGH DEMAND PERIOD HAS DRASTICALLY DECREASED THE AVAILABILITY OF CROP MOISTURE. SOUTHERN INDIANA AND SOUTHEAST TEXAS ARE STILL IN THE EXCESSIVELY WET CATEGORY, RESULTING FROM THE VERY HEAVY RAIN OF THE PREVIOUS WEEK. LITTLE OR NO RAIN WEST OF THE ROCKIES HAS KEPT THE AREA DRY.



# FIRST CLASS MAIL

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