

WEEKLY WEATHER AND CROP BULLETIN

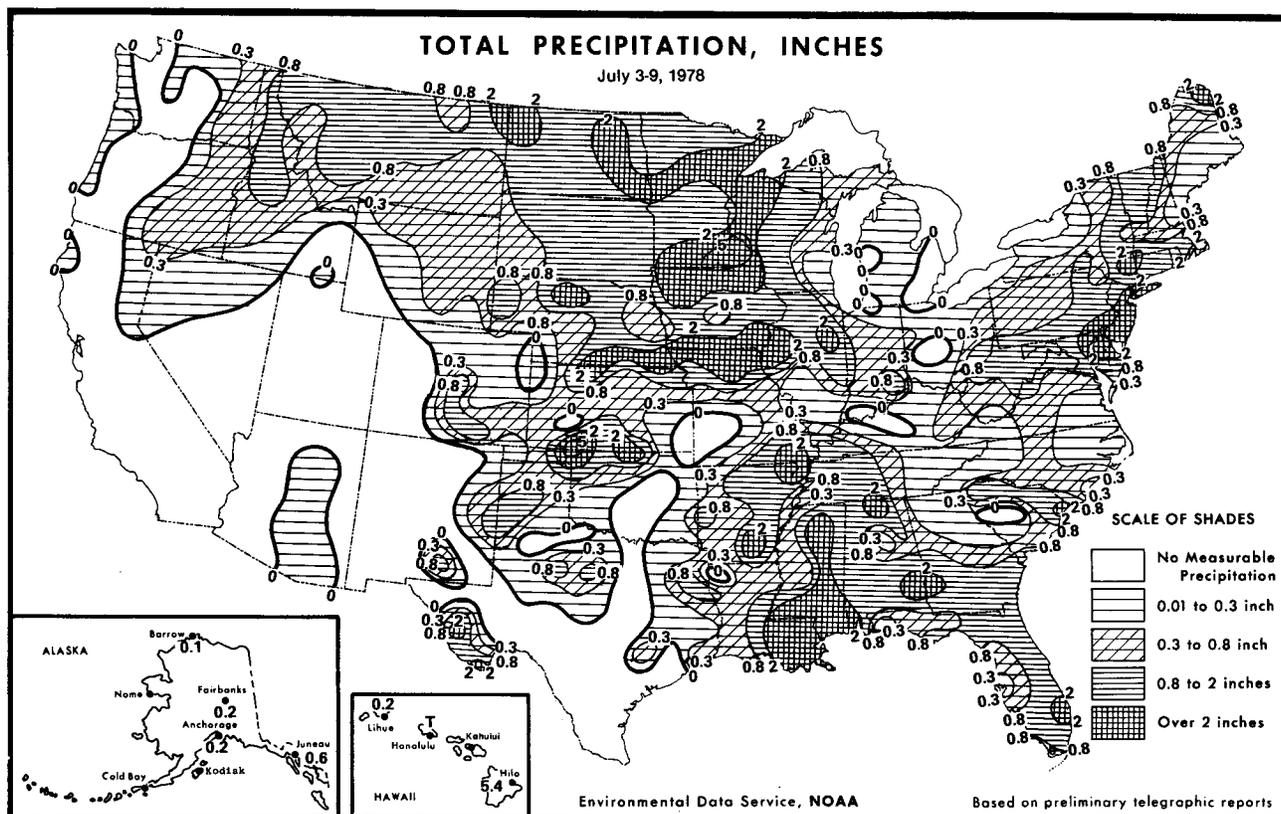
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July 11, 1978



National Weather Summary

July 3 - 9

HIGHLIGHTS: A continuing influx of cool Canadian air into the northern Plains set off heavy rains and other severe weather along its leading edge. Disastrous flooding hit Rochester, Minn., while a devastating tornado tore through Elgin, N. Dak. Isolated thunderstorms and severe weather dotted the country's eastern two-thirds.

Extremely hot temperatures baked the lower half of the Plains, with some readings 8 degrees above normal. The Intermountain Region averaged well below normal.

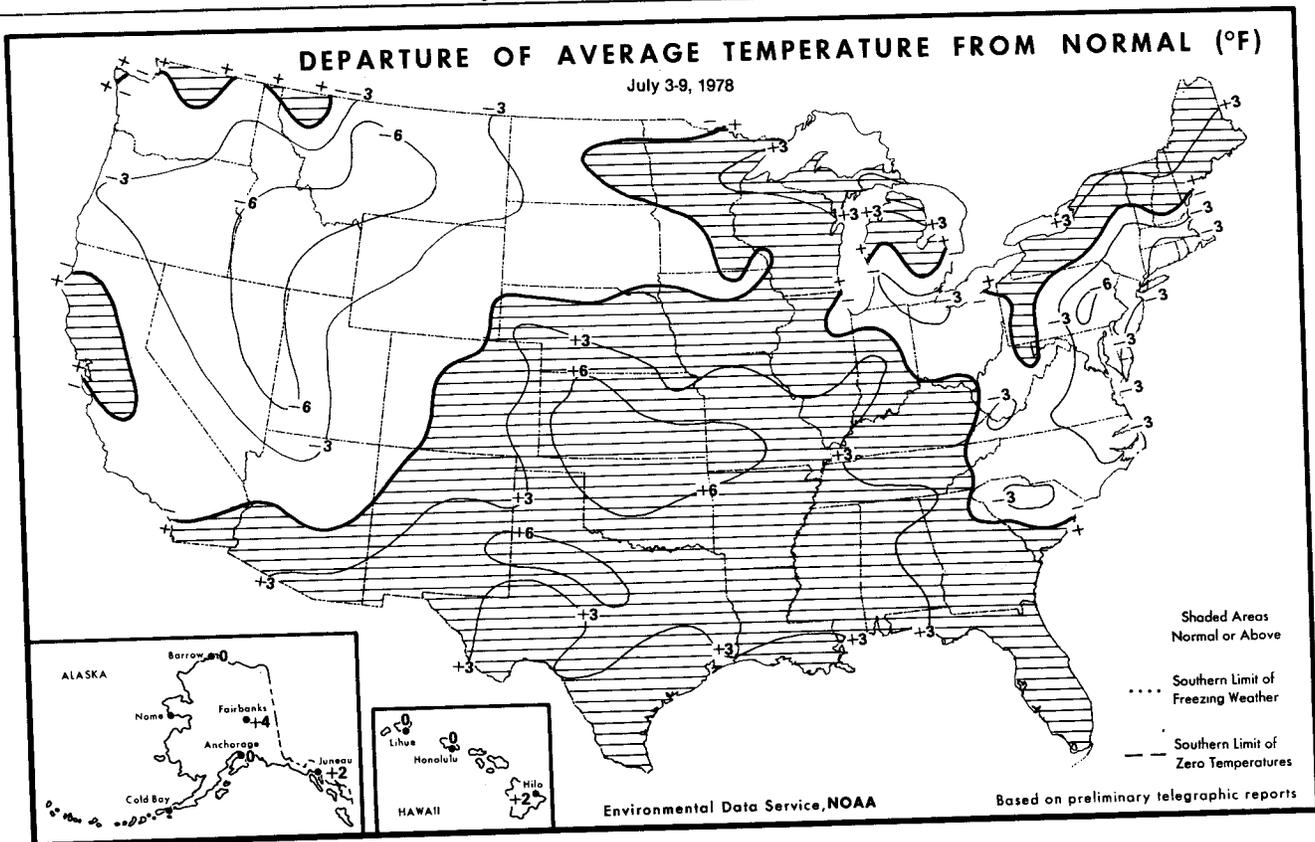
On Monday, rains fell from the Appalachians eastward to the Atlantic Coast and southward to

Florida. Flooding hit the New Martinsville, W.Va., and Huntsville, Ala. areas. Rains up to nearly 4 inches drenched points along the middle and southern Atlantic Seaboard. Showers also dumped one and a quarter inches on Guadalupe Pass, Tex. Three tornadoes were sighted in West Texas.

Temperatures soared in the lower half of the Plains. Wichita reported a record 105° while Abilene, Tex., also set a new mark at 103°. By contrast, Burlington, Vt., at 40° established a record low.

Unsettled weather turned into vicious storms over the upper half of the Plains on Tuesday. Hail and several tornadoes spun through the area; tragedy struck on this Independence Day at Elgin, southern North Dakota where a tornado killed 4 persons and injured dozens. This was North Dakota's first multiple-death twister in 21 years.

Heavy rains hit scattered portions of the Nation. Several points in the Dakotas scored more than an inch. Half-inch to one-inch rainfalls dampened stations in Idaho and Montana. In New England, Bridgeport, Conn., and Providence, R.I., measured an inch. Moving south, Chatham, west



central Miss., was soaked by 1.4 in. while in Florida, Pensacola and Valparaiso chalked up more than an inch.

Most of the Plains were very hot; Kansas City reached 100° for the first time since August 1976.

Once again, intense storms battered the upper Midwest on Wednesday. A killer tornado struck Gary in western Minnesota. By nightfall, nearly 6 inches of rain inundated Rochester, southeastern Minnesota, causing extensive flooding. Tornadoes appeared over a large section of this part of the country; hail and several tornadoes clipped the Dakotas and Minnesota. Hail and 7 tornadoes ripped Iowa. More than 3 inches of rain soaked Spencer, northwestern Iowa, while two and a third inches drenched Mason City. More than an inch fell on some Wisconsin points.

To the south, Myrtle Beach, S.C., gathered 1.79 in. and Valdosta, Ga., 1.23 in. Less than an inch fell in Montana and northern Texas.

Numerous 100-degree readings spanned the Nation from the Southwest across the Plains to the Mississippi Valley. Alpena, Mich., set a record high at 92°, topping the 1975 mark by 4.

Moisture-laden air continued to travel over the upper tier of the country's central States on Thursday. The Zumbro River which winds through Rochester, Minn., rose to a record of more than 10 feet above flood stage.

Heavy thunderstorms and tornadoes roamed the Plains and upper Midwest. Wichita called in 1.75 in. and Ainsworth, north central Nebraska, received 1.3 inches in a half-hour. Fourteen tornadoes raked the central U.S., including 5 in Kansas and 4 in Minnesota. Hail pelted Amarillo and Denver.

Along the middle Atlantic Coast, unseasonably cool air set record low temperatures. In Virginia, Richmond noted 55° and Norfolk 57°. Wilmington,

N.C., equaled its 62° record. Alamosa, Colo., shivered through 38°, undercutting the former mark by 2. The mercury rose to a record-tying 102° at Waco, Tex., and again Alpena hit a new high---this time 97°, breaking 1976's high reading by 7.

Friday's rain subsided in the upper Plains, but became heavy over the middle Mississippi Valley and Great Lakes region. Poplar Bluff, southeastern Missouri, was awash in 3.79 in. and northern Michigan's Houghton and Marquette each saw an inch. Along the Gulf Coast States, up to an inch fell. Storms triggered some local flooding in the Northwest. Three twisters were reported---one each in Missouri, Illinois, and Indiana.

Norfolk, at 57°, observed its second record low temperature in as many days.

Large hail pummeled sections of the central Plains and West Virginia. The heaviest rain hit the Midwest and Appalachians. More than 2 inches covered Ames, Iowa, and an inch and one-half fell over Bemidji, Minn. A one-hour cloudburst produced 2 inches of rain in northern West Virginia. Half-inch to one inch rainfalls were scattered about the Plains, Ohio Valley, Appalachians, middle Atlantic Coast, and New England on Saturday.

The southern tier of States from Arizona to Texas and northward to Kansas and Arkansas sweltered under record heat. The morning low reading at Phoenix was a very warm 88°. The south central U.S. topped several records. In Kansas, Goodland and Wichita hit record-equaling temperatures of 102° and 103°. Dodge City, Kans., not only set a new record at 109°, 4 degrees above the 1913 mark, but tied the highest temperature ever noted there in 104 years. Texarkana, Ark., managed 107°, the warmest that town has been in 35 years. Thunderstorms erupted over Missouri, Illinois, Colorado, and the South on Sunday. Colorado

(continued on page 11)



National Agricultural Summary

July 3 - 9

HIGHLIGHTS: Rains saturated the northern parts of the north central States causing locally serious erosion, hail, and wind damage to crops. Grasshoppers posed a serious threat to parts of Oklahoma, Colorado, Kansas, and Nebraska. Soil moisture generally rated short in the South and short to adequate in the North and West. Most of the corn rated good, but heat and dry soils stressed the southern crop. Soybean planting was almost complete; growers planted second crop beans in harvested small grain fields. Early soybeans bloomed; growth lagged the average by only an inch or two. Cotton squaring was well along and began setting bolls with the advantage of high temperatures. Winter wheat harvest advanced to 65% closing the gap with 1977's 76% and the 72% average. Combining weather was almost ideal in the Great Plains, but storms dampened fields and lodged some stands in the eastern Corn Belt. Grasslands rated fair to good in the eastern half of the Nation but dry soils stressed western rangeland.

SMALL GRAINS: Winter wheat harvest in the 11 major producing States advanced to 65%, a 25-point increase for the week -- faster than most recent years. Last year combining stood at 76% and on the average 72%. Great Plains producers had another near-ideal week for harvesting. Oklahoma growers finished harvesting, matching previous years. Texas harvest reached 91%, lagging 1977's 99% and the 97% average. Kansas producers combined half the winter wheat in one week reaching 85%, equaling the average and racing past the 80% last year. Nebraska harvest stood at 25%, only a third of 1977's 75% and half the 50% average. Harvest was not underway in South Dakota or Montana. The California harvest reached 90%; the early Oregon harvest began in the east.

Combining winter wheat in the South advanced into the 90 to 98% range. Harvest in the north central States ranged from 15%, where rains delayed combining, to 65%. Severe weather lodged some stands in Ohio.

CORN: Corn rated fair to mostly good, however, dry soils and above-normal temperatures, particularly in the Southeast, began exacting its toll. South Carolina growers salvaged some corn not expected to produce a good grain crop. Georgia's corn rated only poor to fair. Florida growers started its grain harvest. Across the South tasseling ranged from 20 to 40% in northern portions of the region and 75 to 96% in the Deep South. The crop was under some stress during the tasseling stage of development.

In the Corn Belt, plant growth lagged the average height by 5 to 12 inches in most States but exceeded the average in Michigan and Wisconsin. Early corn tasseled in Illinois, Wisconsin, Minnesota, Missouri, and Kansas among the north central States.

SOYBEANS: Growers almost finished planting soybeans in the southern States and also double-cropped beans in other areas. Some of the crops showed drought stress across the South. Bloom ranged from 7% in Tennessee and Mississippi to 10% in Alabama and 14% in Louisiana.

In the north central States, soybean growth stood at 10 to 15 inches, only one or two inches less than the average but as much as 7 or 8 inches less than last year. Bloom lagged far behind last year and average; this year bloom ranged from none to only 5%. Last year bloom ranged from 46 to 57% and on the average 28 to 40%. In the eastern Corn Belt, excess water standing on fields damaged some soybeans.

COTTON: Cotton condition rated fair to good. Setting bolls lagged both last year and the average by a wide margin. High temperatures gave a boost to cotton, but some stands wilted from lack of moisture. In the Southeast, squaring ranged from 59 to 87%; boll set spanned from 6 to 54%. In the Delta States, squaring ranged from 77% to complete; bloom ranged from starting to 48%; and boll set was just getting started. The Oklahoma crop was up to good stands but late-seeded plants were shallow rooted and may not grow well in dry topsoils. Texas cotton grew well in high temperatures, however, non-irrigated cotton needed moisture and some plants began wilting. The main harvest was a week away in the lower Rio Grande Valley. Arizona's early crop began setting bolls. California's cotton rated good with 75% squaring.

OTHER CROPS: Grain sorghum planting was complete. Oklahoma stands rated fair to good. Heavy rains in the Panhandle 2 weeks ago washed some acreage which was replanted. Hot, dry weather matured Texas sorghum rapidly. Heat and drying winds also stressed the crop in West Texas.

Rice rated good. Texas producers drained fields preparing for harvest in 14 days. Over half of Louisiana's crop headed. Arkansas growers applied nitrogen and herbicides; evaporation rates were high.

FRUITS AND NUTS: Apples and peaches were sizing in northern areas. Early apple harvest should begin in some southern regions. Peach harvest advanced northward; Georgia picking reached 64%; the Carolinas almost 40%; and Mississippi 36%. Dry Texas weather kept peaches from sizing. Sweet cherry harvest was well advanced and tart cherry picking began in Michigan. A wide variety of deciduous fruit moved from California orchards.

VEGETABLES: Spring vegetable harvests declined and summer harvests increased. Wet soils hassled Wisconsin pea growers. Florida's vegetable season was essentially ended; only light supplies moved to market. Florida and Texas growers prepared land for fall seedings. Texas farmers harvested a wide selection of vegetables and melons. California fresh market and processing tomato harvests increased. Growers also shipped broccoli, cauliflower, carrots, lettuce, celery, sweet corn, and melons.

PASTURES AND LIVESTOCK: Eastern pastures generally rated fair to good, but drought stress posed a threat in the Southeast. Grasshoppers became a serious problem in the Great Plains including Colorado, Oklahoma, Kansas, and Nebraska. Southwestern ranges became very dry from California to Texas. California constructed firebreaks to control potential range fires. Texas ranges deteriorated rapidly while stock watering tanks were low.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., July 9, 1978

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 . . .	83	+ 3	T	- 1.8	LA. Baton Rouge . . .	85	+ 3	2.6	+ 1.2	Youngstown . . .	68	- 2	.6	- .3
Mobile . . .	85	+ 4	2.1	+ .1	Lake Charles . . .	85	+ 3	.7	- .8	OKLA. Okla. City . . .	87	+ 6	0	- .7
Montgomery . . .	84	+ 3	1.2	0	New Orleans . . .	83	+ 1	2.4	+ .9	Tulsa . . .	89	+ 8	0	- .9
ALASKA Anchorage . . .	58	0	.2	- .2	Shreveport . . .	87	+ 4	T	- .7	OREG. Astoria . . .	59	0	.1	- .2
Barrow . . .	38	0	.1	- .1	MAINE. Caribou . . .	70	+ 6	2.5	+ 1.6	Burns . . .	63	- 4	.4	+ .3
Fairbanks . . .	65	+ 4	.2	- .2	Portland . . .	67	0	T	- .6	Medford . . .	68	- 2	0	- .1
Juneau . . .	57	+ 2	.6	- .4	MD. Baltimore . . .	72	- 4	2.3	+ 1.4	Pendleton . . .	69	- 3	.3	+ .2
Kodiak . . .	--	--	--	--	MASS. Boston . . .	70	- 3	.8	+ .2	Portland . . .	64	- 2	T	- .2
Nome . . .	--	--	--	--	Chatham . . .	61	- 1	3.0	- .5	Salem . . .	65	- 1	T	- .1
ARIZ. Flagstaff . . .	62	- 2	T	- .5	MICH. Alpena . . .	71	+ 6	.1	- .5	PA. Allentown . . .	71	- 3	1.7	+ .7
Phoenix . . .	92	+ 2	.2	+ .1	Detroit . . .	70	- 2	0	- .7	Erie . . .	69	+ 1	.1	- .7
Tucson . . .	89	+ 3	.2	- .2	Flint . . .	70	+ 1	0	- .7	Harrisburg . . .	70	- 6	1.7	+ .9
Winslow . . .	76	- 1	.1	- .1	Grand Rapids . . .	68	+ 3	.1	- .7	Philadelphia . . .	71	- 5	3.7	+ 2.8
Yuma . . .	91	- 1	0	0	Houghton Lake . . .	67	+ 1	T	- .8	Pittsburgh . . .	72	0	.3	- .6
ARK. Fort Smith . . .	86	+ 5	0	- .8	Lansing . . .	71	+ 0	.1	- .6	Scranton . . .	67	- 5	.6	- .3
Little Rock . . .	85	+ 4	.4	- .4	Marquette . . .	69	+ 0	T	- .6	R.I. Providence . . .	69	- 2	1.7	+ 1.1
CALIF. Bakersfield . . .	82	- 1	0	0	Muskegon . . .	69	+ 0	.3	- .3	S.C. Charleston . . .	81	+ 1	.8	- 1.1
Eureka . . .	56	0	0	- .1	S. Ste. Marie . . .	66	+ 3	.3	- .6	Columbia . . .	78	- 3	T	- 1.2
Fresno . . .	80	0	T	0	MINN. Duluth . . .	67	+ 0	2.6	+ 1.7	Greenville . . .	76	- 2	1.1	+ .1
Los Angeles . . .	70	- 2	0	0	Internat'l Falls . . .	65	0	1.4	+ .5	S.D. Aberdeen . . .	71	0	1.4	+ .7
Red Bluff . . .	83	+ 2	0	0	Minneapolis . . .	71	0	1.0	+ .1	Huron . . .	71	- 1	1.0	+ .4
San Diego . . .	69	+ 1	0	0	Rochester . . .	69	+ 1	6.1	+ 5.2	Rapid City . . .	69	- 2	.4	- .2
San Francisco . . .	62	0	0	0	St. Cloud . . .	69	0	1.3	+ .5	Sioux Falls . . .	70	- 2	1.7	+ .9
Stockton . . .	78	+ 2	0	0	MISS. Jackson . . .	86	+ 5	.1	- .9	TENN. Chattanooga . . .	82	+ 4	.3	- .9
COLO. Denver . . .	73	+ 1	T	- .4	Meridian . . .	84	+ 3	1.3	+ .1	Knoxville . . .	79	+ 1	T	- 1.1
Grand Junction . . .	76	- 2	.2	- .2	MO. Columbia . . .	82	+ 5	.5	- .5	Memphis . . .	85	+ 4	.2	- .6
Pueblo . . .	78	+ 2	.2	- .2	Kansas City . . .	82	+ 4	.7	- .4	Nashville . . .	81	+ 2	1.3	+ .4
CONN. Bridgeport . . .	71	- 2	1.4	+ .7	St. Louis . . .	85	+ 8	0	- .9	TEX. Abilene . . .	89	+ 6	.6	0
Hartford . . .	70	- 2	1.7	+ .9	Springfield . . .	85	+ 8	.4	+ .1	Amarillo . . .	81	+ 3	.8	+ .1
D.C. Washington . . .	75	- 3	2.0	+ 1.1	MONT. Billings . . .	63	- 7	.4	+ .1	Austin . . .	87	+ 3	0	- .5
FLA. Apalachicola . . .	82	+ 1	1.5	- .2	Glasgow . . .	64	- 5	.5	+ .1	Beaumont . . .	86	+ 3	.5	- .8
Daytona Beach . . .	83	+ 2	.9	- .7	Great Falls . . .	61	- 7	1.4	+ 1.0	Brownsville . . .	87	+ 3	0	- .3
Ft. Myers . . .	83	+ 1	1.8	- .4	Havre . . .	63	- 5	1.2	+ .8	Corpus Christi . . .	86	+ 2	0	- .4
Jacksonville . . .	83	+ 2	1.1	- .5	Helena . . .	62	+ 4	1.7	+ 1.4	Dallas . . .	--	--	--	--
Key West . . .	86	+ 2	T	- 1.0	Kalispell . . .	64	+ 1	1.0	+ .7	Del Rio . . .	89	+ 3	0	- .3
Lake Land . . .	83	+ 2	.4	- 1.4	Miles City . . .	68	- 4	.3	- .2	El Paso . . .	87	+ 5	0	- .3
Miami . . .	82	0	1.3	- .5	Missoula . . .	62	- 3	.3	0	Fort Worth . . .	89	+ 5	0	- .5
Orlando . . .	83	+ 2	1.0	- 1.0	NEBR. Grand Island . . .	78	+ 3	1.8	+ 1.0	Galveston . . .	85	+ 2	0	- 1.1
Tallahassee . . .	82	+ 1	.8	- 1.2	Lincoln . . .	79	+ 3	.8	- .1	Houston . . .	84	+ 1	0	- 1.0
Tampa . . .	84	+ 2	.1	- 1.8	Norfolk . . .	76	+ 3	.3	- .5	Lubbock . . .	86	+ 7	0	- .6
W. Palm Beach . . .	82	0	2.1	+ .5	N. Platte . . .	76	+ 2	.4	- .5	Midland . . .	83	+ 1	0	- .4
GA. Atlanta . . .	79	+ 1	T	- 1.1	Omaha . . .	72	- 1	1.2	+ .5	San Angelo . . .	86	+ 2	T	- .3
Augusta . . .	82	+ 2	.1	- 1.0	Valentine . . .	59	- 6	T	- 1	San Antonio . . .	87	+ 3	0	- .4
Macon . . .	83	+ 2	.6	- .4	NEV. Ely . . .	87	- 2	0	- .1	Victoria . . .	86	+ 2	0	- .6
Savannah . . .	83	+ 2	1.0	- .8	Las Vegas . . .	66	- 2	.2	+ .1	Waco . . .	90	+ 5	0	- .4
HAWAII. Hilo . . .	77	+ 2	5.4	+ 3.5	Reno . . .	65	- 5	.2	+ .1	Wichita Falls . . .	90	+ 5	.1	- .5
Honolulu . . .	80	0	T	- .1	Winnemucca . . .	70	+ 1	T	- .8	UTAH. Blanding . . .	--	--	--	--
- Kahului . . .	--	--	--	--	N.H. Concord . . .	70	+ 1	2	- .8	Salt Lake City . . .	72	- 3	0	- .2
Lihue . . .	78	0	.2	- .2	N.J. Atlantic City . . .	68	- 2	3.8	+ 2.9	VT. Burlington . . .	72	+ 3	.9	+ .1
IDAHO. Boise . . .	67	- 6	.5	+ .4	Trenton . . .	71	- 4	2.4	+ 1.4	VA. Lynchburg . . .	72	- 3	.5	- .4
Lewiston . . .	69	- 3	.4	+ .2	N.MEX. Albuquerque . . .	81	+ 3	T	- .3	Norfolk . . .	73	- 5	.2	- 1.0
Pocatello . . .	65	- 5	T	- .1	Roswell . . .	84	+ 5	0	- .4	Richmond . . .	75	- 3	T	- 1.2
ILL. Cairo . . .	83	+ 3	1.2	+ .4	N.Y. Albany . . .	68	- 4	.6	- .1	Roanoke . . .	74	- 1	.6	- .2
Chicago . . .	73	- 1	.1	- .9	Binghamton . . .	69	0	1.2	- .4	WASH. Colville . . .	66	- 1	.3	+ .1
Moline . . .	76	+ 2	1.5	+ .4	Buffalo . . .	70	0	2.3	+ 1.5	Omak . . .	70	+ 1	.1	- .1
Peoria . . .	76	+ 1	2.0	+ 1.1	New York . . .	71	- 5	.2	- .4	Quillayute . . .	58	0	.2	- .4
Rockford . . .	75	+ 3	1.0	0	Rochester . . .	74	+ 3	2	- .4	Seattle-Tacoma . . .	62	- 2	T	- .2
Springfield . . .	78	+ 2	T	- 1.0	Syracuse . . .	73	+ 2	.1	- .6	Spokane . . .	65	- 3	.6	+ .5
IND. Evansville . . .	80	+ 3	0	- .9	N.C. Asheville . . .	73	0	T	- 1.1	Walla Walla . . .	71	- 3	.5	+ .4
Ft. Wayne . . .	71	- 2	.1	- .8	Charlotte . . .	77	- 1	.6	- .4	Yakima . . .	70	0	0	- .1
Indianapolis . . .	78	+ 3	.7	- .2	Greensboro . . .	75	- 2	.4	- .6	W.Va. Beckley . . .	67	- 3	.3	- .7
South Bend . . .	72	0	T	- .9	Hatteras . . .	76	- 2	.1	- 1.2	Charleston . . .	73	- 2	.8	- .3
IOWA. Burlington . . .	75	0	2.1	+ 1.2	Raleigh . . .	76	- 1	.1	- 1.0	Huntington . . .	76	+ 1	.6	- .3
Des Moines . . .	76	+ 2	.7	- .2	Wilmingon . . .	78	- 2	.1	- 1.7	Parkersburg . . .	74	- 1	1.5	+ .5
Dubuque . . .	74	+ 3	1.0	- .1	N.DAK. Bismarck . . .	69	0	1.0	+ .4	WIS. Green Bay . . .	70	+ 2	.4	- .4
Sioux City . . .	75	+ 1	1.1	+ .2	Fargo . . .	70	0	.8	+ .1	La Crosse . . .	71	- 1	2.0	+ 1.1
KANS. Concordia . . .	81	+ 4	.4	- .5	Williston . . .	67	- 2	2.4	+ 1.8	Madison . . .	72	+ 3	.1	- .9
- Dodge City . . .	86	+ 8	T	- .7	OHIO. Akron-Canton . . .	70	- 1	.3	- .6	Milwaukee . . .	70	+ 1	.2	- .6
Goodland . . .	78	+ 3	T	- .6	Cincinnati . . .	75	0	.2	- .8	WYO. Casper . . .	67	- 2	.5	+ .2
Goodland . . .	80	+ 3	.4	- .7	Cleveland . . .	71	0	T	- .8	Cheyenne . . .	67	- 1	.1	- .4
Topeka . . .	88	+ 8	.4	- .7	Columbus . . .	72	- 1	T	- 1.0	Lander . . .	66	- 3	.1	- .1
Wichita . . .	76	0	.1	- 1.0	Dayton . . .	73	- 1	T	- .8	Sheridan . . .	65	- 3	.4	0
KY. Lexington . . .	79	+ 2	.2	- .7	Toledo . . .	69	- 3	T	- .8	- P.R. San Juan . . .	82	+ 1	.7	- .6

Based on 1941-70 normals

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State Summaries of Weather and Agriculture

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

ALABAMA: Hot with increased shower activity. Temperatures 4° above normal. Rainfall below normal.

Fieldwork: 5.7 days suitable. Soil moisture short. Cotton fair to good condition; 59% squaring, 85% 1977, 73% average. Corn fair condition; 76% tasselling, 76% 1977, 66% average. Soybeans fair to good; 10% blooming, 13% 1977, 16% average. Peanuts good; 37% pegging, 45% 1977, 60% average. Harvest of peaches and summer potatoes continued.

ALASKA: Temperatures and rainfall were near normal.

Showers hampered haying until late week throughout railbelt. Dryer weekend saw farmers making hay; harvest reached halfway point. Oat and barley less than 25% headed compared 67% last year. Potatoes, commercial vegetables made good growth. Soil moisture short to mostly adequate. Livestock in mostly good to excellent condition.

ARIZONA: Western, southwestern winds kept south dry; sub-tropical moisture spread northward from Mexico. Scattered showers eastern half, local amounts over 0.50 in. White Mountains, over 1.0 in. some southeast areas. Temperatures near normal.

Cotton good progress, boll set underway early fields. Limited insecticide spraying required. Grain sorghum normal progress. Corn growing well. Harvests wheat, barley near completion. Safflower near maturity. Spring sugarbeet harvest good progress, 75% complete. Preparations advanced, fall beets. Alfalfa haying full swing, 5th cutting near complete west. Melon harvest winding down. Potato harvest tapering off. Few grapes, deciduous fruit remain. Picking Valencias, grapefruit about complete. High elevation ranges spotty rains. Lower, mid-elevations mostly very dry. Stock tanks supplying adequate water. Cattle, calves good condition.

ARKANSAS: Hot, dry weather continued. Rainfall light. Highest normal 82°, lowest 78°; highest mean 89°, lowest 82°; highest temperature 107°, lowest 62°.

Short soil moisture and hot weather adversely affected crops and livestock. Fieldwork: 6.3 days suitable. Soybeans good to fair condition, some drought stress; planting 97% complete, 98% 1977. Cotton squaring, some early blooms; good to fair condition. Rice good condition; mid-season nitrogen and herbicides applied; evaporation high. Corn and sorghum good condition, need moisture. Wheat and oat harvest complete. Peach and tomato harvest continued. Watermelons need rain for maturity. Pastures average to below average condition. Hay harvest continued; regrowth slowed. Cattle making poor gains on pasture.

CALIFORNIA: Light precipitation in the northern mountains and along northwest coast. Temperatures below normal with northern mountain stations showing departures of 10° below normal; only immediate coastal temperatures were near normal.

Weather favorable. Harvest small grains continues. Barley harvest virtually complete. Wheat harvest 90% complete. Planting double

crops continues. Sugarbeets harvested. Early dry bean fields blooming. Cotton 75% square stage. Corn, rice, grain sorghum good growth. California fruit crops developed well. Grapes grew and developed, table varieties colored. Pest controls applied to olives. Peach harvest continues. Desert Valley grapefruit harvest over, new lemon bloom begun, navel oranges sprayed, Valencia orange harvest slow. Broccoli, cauliflower, carrots, and lettuce continue steady. Celery about done south coast picking up central coast. Cantaloup, watermelon, sweet corn, done desert starting San Joaquin Valley. Bell peppers, fresh market and processing tomatoes, picking up San Joaquin Valley. Strawberries slowing south coast, steady central coast. Range conditions good to excellent. Firebreaks being made as threat range fire increases. Movement high mountain ranges nearing completion.

COLORADO: Warm, dry. Isolated thunderstorms eastern plains, some severe. Temperatures 2 to 6° above normal east; near normal elsewhere.

Winter wheat good condition; ripe 54%, 77% 1977, 50% average; harvested 18%, 46% 1977, 21% average. Oats, spring barley very good condition. Corn good condition; average height 31 in., 45 in. 1977. Fall and summer potatoes, sugarbeets, dry bean condition good. Fieldwork: 6.5 days suitable. Range and pastures fair condition. Grasshopper infestations raising concern eastern plains. Livestock good condition.

FLORIDA: Scattered afternoon thundershowers common; rainfall between 1.00 and 2.00 in. with heaviest amounts near 3.00 to 5.00 in. Panhandle. Everglades. Temperatures little above normal.

Soil moisture mostly adequate, few dry areas north and eastern Panhandle. Corn mostly good condition, harvest beginning. Soybean planting continues. Early planted beans, peanuts, sugarcane making good growth. Tobacco and hay harvest active. Pasture condition remains quite varied in upper half of State. Grass growth continues good central, southern areas. Condition of cattle, and calves rated good. Citrus grove condition excellent; moisture adequate all areas, new growth abundant. New crop fruit sizing well. Valencia harvest slowing. Spring vegetable season essentially complete. Light supplies summer vegetables continue. Watermelons moving from Panhandle, northern areas in good volume. Some land preparation fall vegetables beginning.

GEORGIA: Temperatures 1 to 4° above normal. Averages ranged from mid-70's mountains to low 80's central and south. Widely scattered thundershowers, more numerous south. Amounts generally less than 0.25 in. north to 0.50 in. or more south, locally in excess of 2.00 in. extreme southeast. Widely scattered thundershowers weekend.

Soil moisture mostly very short to short northern two-thirds, adequate elsewhere. Fieldwork: 5 days suitable. Corn poor to fair. Peanuts fair to mostly good; 91% blooming, 94% last year; 70% pegging, 83% last year. Soybeans fair to good, 96% planted, same last year. Cotton fair to good, 87% squaring, 92% last year; 54% setting bolls, 80% last year, 56% average.

Tobacco fair to mostly good, 18% harvested, 22% last year, 34% average. Sorghum 88% planted, 77% last year. Hay crops fair to good. Wheat and oats 98% harvested, 100% last year. Pastures mostly fair condition. Cattle and hogs fair to mostly good condition. Peaches mostly fair to good, 64% harvested, 81% last year, 78% average. Watermelons mostly fair to good, 45% harvested, 68% last year. Apples mostly fair to good.

HAWAII: Variable weather continues; rains heavy midweek parts of island Hawaii. More than 3.00 in. Pahoia, Hilo.

Farm activities slowed. Crop progress elsewhere fair to good. Spray program active. Vegetable supplies light to moderate. Banana supplies: Apple variety light, chinese variety moderate to heavy. Papaya production, seasonal flush occurring. Sugar harvesting active. Pine-apple harvesting peak continues. Pastures good.

IDAHO: Temperatures below normal but some days quite warm. Extremes: 96 and 35°. Above normal precipitation except east.

Crops continue to make good growth. First crop hay 80% harvested; second crop harvest started. Winter wheat 30% turning color, 60% last year. Percent headed this year, last year: Spring wheat, 65%, 85%; spring barley 60%, 90%; mixed grain, 75%, 95%. Range forage growth adequate. Livestock showing good gains.

ILLINOIS: Temperatures 1 to 3° above normal. Precipitation 1.00 to 2.00 in. northwest, west; under 0.33 in. south, southeast.

Corn height 50 in., 1977 70 in., average 62 in. Advanced fields 70 in., 1977 85 in., average 78 in. Corn 10% silked, 1977 66%, average 40%. Corn condition good. Soybeans good; 5% bloomed, 1977 48%, average 40%. Winter wheat 65% harvested, 1977 97%, average 89%. Oats 90% filled, 1977 and average 100%; 40% turned yellow, 1977 93%, average 82%; 15% ripe, 1977 64%, average 46%; condition good to fair. Barley 40% combined. Second crop alfalfa hay 40% cut, 1977 69%, average 48%. Hay condition good. Pastures good. Fieldwork: 4.5 days suitable. Soil moisture adequate.

INDIANA: Near normal humidity, solar radiation, and temperatures which ranged from 52 to 96°. No rain in extreme northwest and southwest. Thunder-showers produced 0.60 to 1.10 in. central, less in northeast and southeast.

Fieldwork averaged 4 days. Topsoil and subsoil moisture mostly adequate. Corn condition fair to mostly good. Corn 40 in., 1977 60 in., average 45 in. Corn silked less than 1%, 1977 30%, average 5%. Soybeans fair to mostly good; height 10 in., 1977 17 in., average 12 in. Winter wheat 15% harvested, 1977 75%, average 55%. Barley 50% harvested, rye 20% harvested, oats 2% harvested.

IOWA: Temperatures normal with moderate to heavy thundershowers with scattered wind, hail, and flood damage.

Topsoil moisture adequate to surplus. Subsoil moisture adequate. Corn, oats, wheat, hays, and pasture good condition. Average tallest corn height 67 in., average corn height 49 in. Corn cultivated for final time 87%. Soybeans cultivated first time 88%, final time 49%. First crop of clover hay harvested 90%, last year 97%, normal 83%. Second crop alfalfa hay harvested 14%, last year 65%, normal 32%. Fieldwork: 3.8 days suitable. Livestock condition good, minor heat stress.

KANSAS: Spotty rains produced beneficial to heavy amounts. Weekend rains locally northeast over 3.00 in.; heaviest amounts south. Temperatures 80° northwest to 85 to 88° south and east or 3 to 5° above normal northeast and 6 to 8° above normal elsewhere.

Wheat harvest 85% complete, 80% last year, 85% average. South central and central in clean-up stage. Corn 10% tasseled, 30% last year, 20% average. Grasshoppers causing some problems southwest. Soybeans less than 5% bloomed, 10% last year. Alfalfa second cutting 60% complete, 65% last year and average. Alfalfa third cutting less than 5% complete, 10% last year, 5% average. Grasshoppers major concern many southwestern alfalfa fields.

KENTUCKY: Warm and humid. Temperatures about 4° above normal. Widely scattered afternoon and evening thundershowers. Precipitation below normal averaging 0.25 to 0.50 in.

Fieldwork: 5.2 days suitable. Major activities: harvesting hay and wheat, planting second crop beans and spraying and cultivating crops. Soil moisture short to adequate. Second crop beans need rain for germination. Corn 20% tasseled, 51% last year, 33% average. All crops would benefit from rain.

LOUISIANA: Temperatures 1 to 5° above normal. Extremes: 102 and 68°. Showers.

Fieldwork: 5.4 days suitable. Main activities: Cultivating, applying herbicides, hay and vegetable harvests. Soil moisture short. Soybeans fair to good, 14% blooming. Cotton fair to good, 77% squaring, 91% last year; week control active. Sorghum fair to good, 60% headed. Corn fair to good; 96% tasseled, 95% last year; 65% dough, 62% last year. Sweetpotatoes, sugarcane fair to good. Rice good; 52% headed, 48% last year. Livestock good. Pastures, hay fair to good.

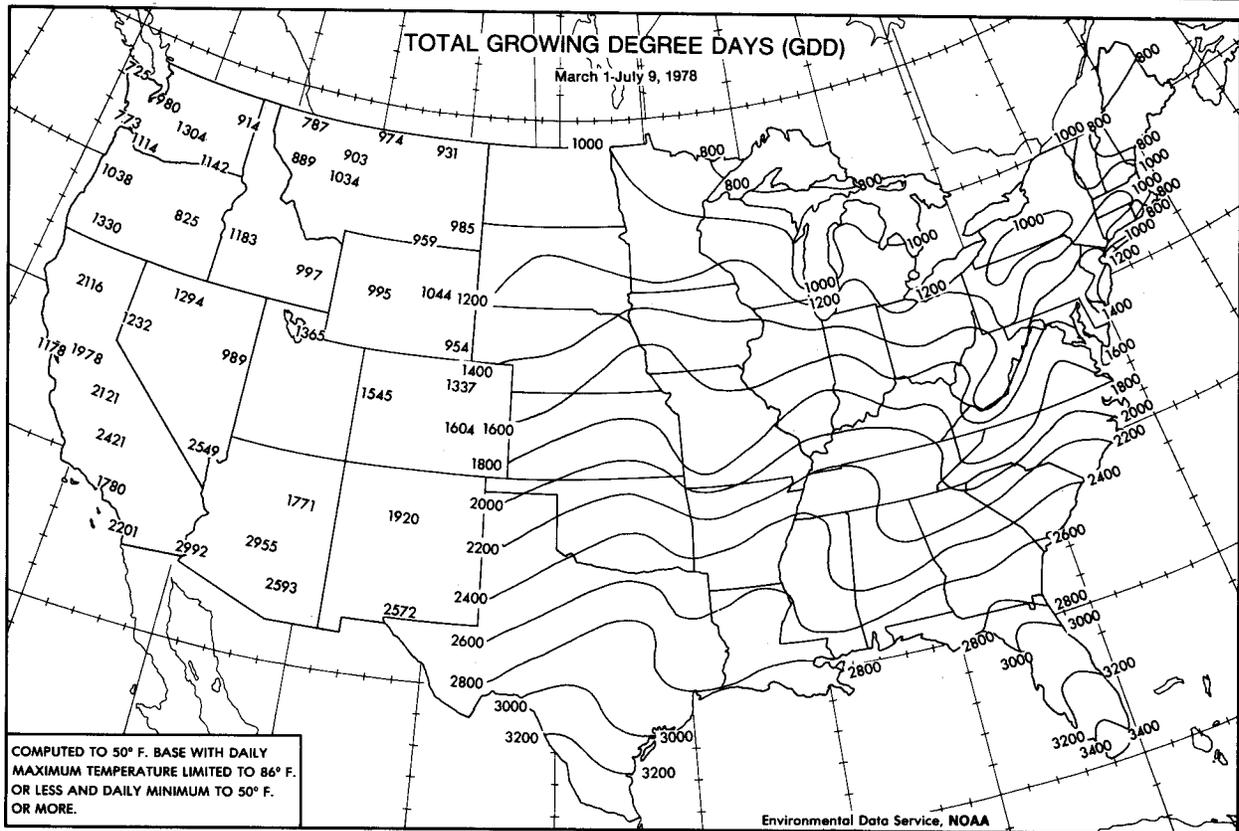
MARYLAND & DELAWARE: Temperatures below normal. Highs in 80's, lows mid-50's. Precipitation 2.00 to 3.00 in.

Fieldwork: 3.5 days suitable. Soil moisture adequate. Pastures supplying average amounts of feed. Corn just over 5% silked. Corn borer continues to cause problems. Soybeans 95% planted, 98% 1977, 93% average.

MICHIGAN: Temperatures normal to 1 to 5° above normal. Cool early week warming to 80's and 90's by midweek. Cooling to 70's and 80's by end of week. Precipitation 1.00 in. over western Upper, otherwise light precipitation.

Fieldwork: 5 days suitable. Soil moisture short to adequate. Mostly wet in south, dry in north. Corn height 33 in., 42 in. last year, 31 in. normally. Winter wheat 1% ripe, 45% 1977, 35% normal. Oats 78% headed, 73% last year, 77% normally. First cut hay 90% complete, 94% last year, 81% normally. Pasture feed supplies adequate south, below average north. Fruit set of apples average. Sweet cherries 45% picked. Tart cherry harvesting underway. Strawberries 90% harvested. Fresh vegetable harvesting underway in southern areas.

MINNESOTA: Temperatures near normal. Extremes 93 and 43°. Precipitation 1.00 in. above normal. Locally more than 5.00 in. above normal southeast, 0.25 in. below normal southeast half of west central. Precipitation totals ranged from near 0.50 in. parts of west central to more than 6.00 in. parts of southeast. Tornados in northwest on



5th with storm related fatalities reported at Gary and Fosston. Torrential rains on 4th, 5th and 6th produced flash flooding and fatalities in southeast, and locally in southwest, central and northwest Twin Cities.

Crops in most areas in good condition but heavy rains damaged crops southeast. Flooding, erosion, lodging immediate damage; standing water may cause additional damage. Some corn tasseling, soybeans blooming, small grains turning color. Wet conditions hindering harvest completion of first alfalfa hay crop. Height: Corn 43 in., 1977 67 in., normal 46 in., soybeans 15 in., 1977 23 in., normal 16 in. Heading: Spring wheat 86%, 1977 99%, normal 84%; oats 85%, 1977 99%, normal 88%; barley 89%, 1977 99%, normal 84%. Turning ripe: Winter wheat 69%, 1977 91%, normal 70%; rye 68%, 1977 91%, normal 76%. Flax 48% blooming, 1977 83%, normal 52%.

MISSISSIPPI: Temperatures 1 to 4° above normal. Rainfall spotty.

Soil moisture short. Fieldwork: 6.1 days suitable. Soybeans 98% planted, 95% 1977, 93% average; 90% up to stand, 89% 1977; 7% blooming, 12% 1977. Cotton 88% squaring, 95% 1977, 71% average; 48% blooming, 81% 1977; 2% setting bolls, 55% 1977, 32% average. Corn 87% silked, 77% 1977, 52% average; 35% in dough stage, 36% 1977. Sorghums 93% planted, 92% 1977, 91% average; 3% headed, 21% 1977. Hay crops 47% harvested, 43% 1977, 43% average. Irish potatoes 88% harvested, 94% 1977, 86% average. Peaches 36% harvested, 58% 1977, 54% average. Cucumbers 71% harvested, 79% 1977. Watermelon 14% harvested, 20% 1977. Cotton good to fair condition. Rice good to fair condition, some fields began heading. Soybeans, corn, pastures good condition. Peaches good to fair condition.

MISSOURI: Temperatures 3 to 9° above normal; highs in 80's and 90's. Rainfall 0.50 to 3.00 in. north, little or none south.

Fieldwork: 5.7 days suitable. Wheat 96% ripened, last year and normal 100%. Wheat 71% harvested, last year 87%, normal 84%. Double crop soybeans 42% planted, last year 79%. Oats 31% harvested, last year 70%. Corn 84% not yet tasseled, 16% tasseling or beyond. Alfalfa hay second cutting 39% complete, last year 69%, normal 57%. Other hay 77% harvested. Cotton 74% squared, last year 100%, normal 54%. Condition of corn, cotton and pasture mostly fair to good. Soil moisture supply mostly short to adequate.

MONTANA: Frequent thunderstorms accompanied by strong winds, heavy rains and damaging hail. Significant precipitation, measuring 2.00 to 4.00 in. Temperatures near normal to 7° below normal central.

Soil moisture adequate. Fieldwork: 3 days suitable. Winter wheat good condition, disease damage light; 10% boot, 80% headed, 10% turning; normal 15%, 65%, 20%. Spring wheat good condition; 30% pre-boot, 40% boot, 30% headed; normal 20%, 35%, 40%. Barley 30% pre-boot, 40% boot, 30% headed; normal 20%, 40%, 40%. Oats good condition; 30% pre-boot, 40% boot, 30% headed; normal 20%, 30%, 45%. Alfalfa hay harvested 50%, wild hay harvested 25%. Considerable rain damage to cut hay. Grasshopper activity light.

NEBRASKA: Temperatures 10 to 20° above normal first 3 days; then 5 to 10° below normal remainder of week. Precipitation averaged 0.75 in. to 2.00 in. Heaviest amounts north central and northeast.

Corn, sorghum, soybeans good condition. Wheat 95% turned, 100% year ago and normal. Wheat ripe 60%, year ago 100%, normal 70%. Harvest 25%

complete; 75% year ago, near 50% normal. Second cutting alfalfa 15% complete, year ago 70%. Topsoil and subsoil moisture adequate. Grasshopper problem persists. Fieldwork: 5.5 days suitable.

NEVADA: Gusty winds common. Scattered thunder-showers north, south remained dry. Temperatures near normal extreme south, below normal remainder. Extremes: 109 and 30°.

Alfalfa first crop hay finished except central highlands. Potatoes and other row crops 2 to 3 weeks behind normal development. Small grain harvesting extending northward.

NEW ENGLAND: Temperatures 3 to 15° below normal early in week, but by week's end, temperatures 3 to 15° above normal. North had only 0.40 to 0.60 in. South picked up from 1.00 to 2.00 in.

Aroostook County potato crop progressing well although stands varied. Growers cultivating, hilling, and spraying for disease and insect control. Apples and peaches sizing well and growers continue thinning operations. Cranberries full bloom with bee activity good; crop continues to do well. Vegetable crops coming along nicely although late. Good hay weather and much hay harvested. Most of silage corn planted and crop prospects good. Pasture conditions generally remain good.

NEW JERSEY: Temperatures 3 to 7° below normal. Extremes: 43 and 92°. Rainfall 1.30 in. North, 3.09 in. Central and 2.98 in. South.

Soil moisture in percent of field capacity 66% North, 66% Central and 62% South.

Fieldwork: 5 days suitable. Showers early period beneficial to most crops. Spring vegetable harvest about complete. Summer crop harvest beginning. White potato digging light with movement limited to local outlets. Blueberry volume good. Early variety apple and peach harvest about to begin. Wheat combining begun. Second cutting of hay continues. Soybean planting continues as grains harvested. Pasture growth good.

NEW MEXICO: Hot and mostly dry. Temperatures near normal northwest plateau and 2 to 7° warmer than normal elsewhere. Widely scattered light showers east central and northeast plains but rain totals only 0.25. Very light amounts elsewhere.

Moisture short. Cotton, alfalfa, corn, grain sorghum, chili and apples good. Second cutting alfalfa 95% complete in South, and just starting North. Winter wheat harvest almost complete. Onion harvest continues in Mesilla Valley. Ranges good now, but will be needing rain soon.

NEW YORK: Cool and dry at week's start; hot and humid at end. Temperatures averaged above normal North, below normal South. Scattered rains averaged below normal in most areas.

Good work week. First cut alfalfa 90% done, clover-timothy 80%, grass silage 90%. Corn, oats in good condition. Wheat turning. Sweet corn planting complete. Snap bean planting 85% done. Cabbage planting nearly done. Strawberry harvest in final stages. Sweet cherry harvest continues. Apples, peaches, pears developing well. Grapes in good condition.

NORTH CAROLINA: Temperatures early week 2 to 4° above normal; midweek 3 to 6° subnormal; weekend 3 to 8° above normal. Scattered thundershowers with some local flooding in central Piedmont.

Fieldwork: 5.6 days suitable. Soil moisture short to adequate. Condition of tobacco, cotton,

and pasture fair to good; corn, peanuts, soybeans, hay crops, Irish potatoes, sweet potatoes and apples fair to mostly good. Harvested: Wheat 90%, 1977 95%, average 90%. Oats 94%, 1977 96%, average 93%. Barley 97%, 1977 97%, average 95%. Rye 95%, 1977 96%, average 91%. Flue-cured tobacco 5%, 1977 6%, average 4%. Irish potatoes 76%, 1977 88%, average 75%. Hays 74%, 1977 66%, average 59%. Peaches 37%, 1977 42%, average 44%.

NORTH DAKOTA: Severe weather; many areas reporting heavy rains, damaging winds and hail. Most stations reported 0.75 in. or more rain. Precipitation ranged from 4.73 in. northeast to 0.25 in. southwest. Week began very warm with many areas recording highs in mid-80's to low 90's. Cooling trend latter part with weekend low temperatures in 40's. Extremes ranged from a high of 92° northwest to 43° west central. Temperatures from near normal to 3° below normal.

Extensive damage reported southwest 4th due to tornado, hail and high winds. Many fields destroyed in an area 3/4 mile wide and 25 miles long where tornado touched down. Small grains moving into turning stage. Crop development still lags last year but approaching average progress for small grains and about average for late season crops. Rains beneficial in keeping soil moisture at good level. Haying progresses slowly between rains. Losses of livestock due to severe weather not yet assessed.

OHIO: Rainfall 1.00 to 2.00 in., heavier amounts west. Temperatures below normal. Extremes: 92 and 52°.

Condition of crops good; cool nights slow development. Combining of winter wheat and second cuttings of hay slow due to heavy rains. Some wheat lodged due to strong winds. Some beans hurt by high water. Leaf hopper causing some concern in alfalfa fields. Corn height 39 in., 48 in. 1977, 43 in. average. Soybean height 13 in., 15 in. 1977, 14 in. average. Second cutting alfalfa 15%, 40% 1977, 25% average. Second cutting clover-timothy 10%, 25% 1977, 10% average. Wheat harvested 15%, 55% 1977, 30% average. Oats ripe 20%, 40% 1977, 30% average. Fieldwork 3 days favorable. Pasture condition good to excellent. Soil moisture adequate.

OKLAHOMA: Temperatures 6 or 7° above normal. Maximums averaged 100° or more. Precipitation limited mostly to north central.

Topsoil moisture short, subsoil adequate. Wheat harvest 98% complete, 99% 1977, 98% average. Corn good condition with 16% tasseling, 22% 1977, 37% average. Sorghum 88% up-to-stand and 1977, 92% average; good to fair. Some sorghum acreage replanted in Panhandle due to heavy rains 2 weeks ago. Cotton fair condition with 95% up-to-stand, 98% 1977, 96% average. Some late-planted cotton not deep-rooted enough to withstand heat; otherwise, crop making good growth. Watermelons and cantaloupe ripening south. Grasshoppers increasing, moving into sorghum, cotton, and alfalfa from pastures. Pastures good to fair. Livestock rated good. Fieldwork: 6.4 days suitable.

OREGON: Cool and damp first half of week, dry and warmer latter half. Rainfall moderate as thundershowers brought most precipitation. West of Cascades rainfall ranged from less than 0.10 to 0.75 in. East ranged from 0.50 to 1.00 in.

Soil moisture adequate. Western winter wheat crop in dough stage. East of Cascades, early wheat harvest to begin soon. Barley harvest underway but delayed by rain. Second cutting hay down. Cherry

harvest continues, crop better than expected. Thinning continues in apple and pear orchards. Strawberry harvest in final stages. Raspberry harvest underway and marion and boysenberries to start. Filberts showing good set, walnut crop looks poor. Vegetable crops generally on schedule. Bean harvest to start soon. Corn and onions slowed by weather. Potatoes look good. Ranges and pastures continue good growth. Feed outlook and livestock excellent.

PENNSYLVANIA: Rain through 4th with scattered showers and thunderstorms 7th and 8th producing in excess of 1.00 in. east of Susquehanna River with totals increasing to 3.70 in. southeast. Most central and western areas measured less than 0.20 in. Abundant sunshine with rising temperatures and increasing humidity through remainder of period. Temperatures 1 to 5° below normal due to record low maxima in 50's and 60's 3rd and 4th. Extremes: 42 and 91°.

Fieldwork: 4 days suitable. Moisture adequate. Activities: Making hay and filling silos; cultivating corn; combining wheat, barley; harvesting strawberries, sweet cherries, tart cherries, green peas, snap beans, early cabbage. Tobacco transplanting virtually complete. Barley 24% harvested, last year 60%. Wheat 65% turning; 8% ripe, last year 40% ripe. Oats 82% headed; less than 5% turning, last year 25% turning. Corn height 22 in., last year 34 in. Alfalfa first cut 93%, second cut 18%, clo-tim 80%. Hay quality fair to good. Feed from pastures average.

PUERTO RICO: Island average rainfall 1.02 in. or 0.10 in. below normal. Temperatures 82° on coasts and 76° interior. Extremes: 97 and 60°.

SOUTH CAROLINA: Temperatures near normal. Thunder-showers first of week, rainfall below normal; north-east, northwest, south 0.70 to 1.10 in.

Soil moisture short. Fieldwork: 6 days suitable. Corn fair, 88% silked, 93% last year. Some harvesting as silage to salvage crop. Dough stage 59%, 63% last year. Cotton fair to good, 87% squaring, 96% last year, 84% average. Setting bolls 22%, 62% last year, 41% average. Soybeans fair to good, 95% planted, 98% last year. Tobacco good, topped 78%. Harvested 9%, 17% last year, 22% average. Peaches fair, harvested 39%, 47% last year, 45% average. Tomato, cucumber harvest tapering off. Peanuts fair. Watermelons poor to fair, 48% harvested, 62% last year.

SOUTH DAKOTA: Hot through 4th, cooler thereafter. Average readings mostly below normal. Rainfall statewide. Several severe thunderstorms with high winds, hail and tornadoes in east caused substantial damage to crops and personal property. Grass-hoppers bad in the west.

Topsoil moisture short to adequate. Fieldwork: 4.2 days suitable. Oats 22% turning, 1977 100%, normal 46%. Spring wheat 15% turning, 1977 83%, normal 28%. Barley 35% turning, 1977 94%, normal 54%. Winter wheat 10% ripe, 1977 66%, normal 39%. Rye 8% ripe, 1977 79%, normal 40%. Flax 50% in bloom, 1977 89%, normal 75%. Soybeans none in bloom, 1977 57%, normal 28%. Corn none tasseling, 1977 24%, normal 0%. Corn 78% cultivated 2nd time, 1977 100%, normal 83%. Corn average height 31 in., 1977 48 in., normal 32 in. Alfalfa 6% harvested 2nd time, 1977 34%, normal 10%.

TENNESSEE: Temperatures 3 to 5° above normal. Highs in upper 90's, lows in low 70's. Rainfall amounts averaged 0.50 in. with up to 2.5 in. in a few locations.

Fieldwork: 5.2 days suitable. Soil moisture short. Soybeans 99% planted, 1977 99%, average 100%; 7% blooming, 1977 20%, average 14%. Cotton 75% squaring, 1977 81%, average 67%; 6% setting bolls, 1977 27%, average 11%. Corn 39% silking, 1977 60%, average 39%. Wheat 93% harvested, 1977 94%, average 90%. Oats 87% harvested, 1977 92%, average 87%. Barley 91% harvested, 1977 95%, average 94%. Haying in final stages. Pastures fair. Cattle good. Hornworms and cutworms infesting tobacco. European corn borer in corn.

TEXAS: Scattered afternoon and evening thunderstorms each day over West Texas and Upper Gulf Coast. Temperatures above normal. Rainfall below normal.

Small grain harvest progressed rapidly. Soil moisture further reduced as very hot, dry windy conditions prevailed. Sorghum, corn from Blacklands south maturing rapidly due to high temperatures, low humidity. Wheat harvest active on plains and 91% harvested, 99%, 1977, 97% average. Corn condition generally good, nearing tasseling stage on northern High Plains; stands requiring a lot of irrigation due to hot, dry winds. On southern High Plains, corn tasseling and looks good although starting to burn. Corn prospects elsewhere hurt by lack of rainfall. Harvest expected to begin in two weeks in valley. Sorghum maturing rapidly eastern two-thirds due to hot, dry weather. Statewide crop suffering from extreme heat, dry winds. Some stands in Edwards Plateau have been lost due to dry condition and a few fields in some areas will be cut for hay as low grain yields are anticipated. Sorghum harvested 10%, 6% 1977, 12% average. Cotton making good, rapid growth due to hot temperatures; generally, non-irrigated cotton in need of moisture and some fields starting to wilt. Infestations of bollworms and tobacco budworms increasing in east Texas with some bollworm problems in Blacklands. Harvest expected to begin in lower Valley next week. Rice fields along Upper Coast being drained with harvest expected to begin in 2 weeks. Soybean planting 98% complete, 100% 1977, 99% average; good stands statewide. Peanut stands mostly in good condition but beginning to suffer from lack of moisture. Crop has reached peg stage in Blacklands. Planting 98% complete, same as 1977 and average. Hay harvest continued. Oat harvest now 99% complete compared with 100% last year and average. Sunflowers planted 90%, 100% 1977, 97% average.

Citrus grove irrigation and insect control continue. Land preparation for fall vegetables active. Harvesting cucumbers, cabbage, melons, bell peppers, onions, and tomatoes. Peach harvest active central Texas northward; dry weather limiting fruit size in north and east. Pecan trees central sprayed for insects. Most trees need rain; some nutlet shedding due to dry weather.

Pastures deteriorating rapidly due to lack of moisture and hot dry winds. Tank water remains low, range fires increasing. Showers did benefit grasses in a few areas. Livestock remain in fair to good condition.

UTAH: Little or no precipitation. Temperatures continued quite variable with averages ranging from 4° above normal to 6° below.

Soil moisture deficit becoming critical. Range feed supply fair with outlook poor. Winter wheat in good condition, harvest to begin next week. Potatoes good. Sugarbeets fair with growth behind normal. Corn fair, growth behind normal. Sweet cherry harvest 80% to 90% complete.

VIRGINIA: Temperatures little below normal. Extremes: 90 and 49°. Showers mostly first half except very light or none east and southeast.

Topsoil moisture adequate. Corn 24% silked, good condition. Soybean condition good, planting near completion. Tobacco condition good, some being irrigated. Growers preparing for flue harvest. Barley 86% harvest, 94% 1977. Wheat 61% combined, 88% 1977. Oats 48% harvested, 78% 1977. Peanut condition good, pesticides and landplaster being applied. Hay very good, 2nd cuts increasing. Fieldwork: 4.8 days suitable.

WASHINGTON: West: Temperatures averaged 1° below normal. Precipitation near normal to 0.50 in. below normal.

Strawberry harvest near completion. Raspberries near peak. Blueberry harvest in progress. Vegetable harvest continues. Good quality hay and silage being cut.

East: Temperatures averaged 3 to 5° below normal. Precipitation ranged from 0.40 to 0.80 in. above normal.

Some hail and erosion damage. Cherries, apricots, and Red Haven peaches being harvested. Diseases reported in other pears. Barley harvest continues. Various diseases winter wheat. Rains slowed hay production. Dry pea harvest begun.

WEST VIRGINIA: Temperatures above normal. Precipitation well above normal. Flooding low areas, north, northwest.

Soil moisture adequate to surplus. Farmwork: 3.9 days suitable. Haying, small grain harvesting, major activities. First cutting hay 79% complete, 83% 1977, 81% average. Second cutting 11%, 13% 1977, 12% average. Corn 95% emerged. Small grain harvest: Wheat 12%, 21% 1977, 22% average; barley 32%, 55% 1977, 50% average; oats 8%, 14% 1977,

10% average. Crop maturity: Wheat preheaded to ripe, barley mostly ripe, oats preheaded. Grain crops mostly good. Tobacco 90% set, condition fair. Potatoes good. Hay and pastures good to excellent. Fruit good to fair. Cattle plagued with pink eye.

WISCONSIN: Temperatures near normal. Highs 70's and 80's but reaching 90° west and south 6th. Lows 50's to 70°. Extremes: 90 and 50°. Scattered showers and thunderstorms; rainfall varied, heaviest northwest at over 2.00 in. and lightest south and east at 0.50 in.

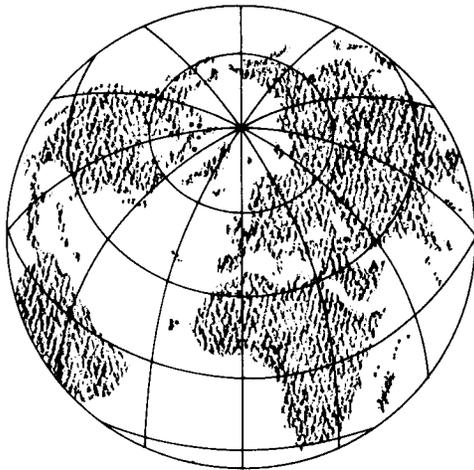
Little fieldwork due to rains and soft fields; only 1 day suitable. First crop haying 82% harvested, 1977 98%, normal 85%. Some first crop spoiled by poor harvesting weather. Second crop coming fast, harvesting started. Oats 85% headed, 1977 99%, normal 85%. Early oats beginning to turn, crop looks good but some lodged by storms. Winter wheat ripening. Corn growing rapidly; average height 35 in., 1977 58 in., normal 33 in. Early corn 6 feet tall and beginning to tassel. Corn crop looks very good except where water damaged. Soybeans good. Pastures above normal. Pea harvest slowed by soft fields. Tobacco doing well but some acreage washed out or not planted yet. Cherries starting to ripen. Apples look promising. Soil moisture mostly surplus. Severe erosion and flood damage to crops in west and south from heavy rains in last 3 weeks.

WYOMING: Temperatures near normal. Precipitation well below normal.

Topsoil moisture short. Winter wheat 69% turning color, 15% mature. Acreage headed: Spring wheat 71%; oats 58%; barley 72%. Row crops good. First cutting alfalfa 62% complete; 27% other hay harvested. Light to moderate hail damage south-east and north central areas. Range in good condition. Stock water supply adequate.

World Weather and Crop Update

July 3 - 9



USSR. Crop conditions continued to be favorable over most of the main agricultural areas. In European USSR, heavy rains fell throughout the Baltic Plain, Belorussia, and much of the Ukraine. Timely rains enhanced growing conditions in the central Black Soil and non-Black Soil regions. Precipitation was light, however, in the southern and southeastern Ukraine, the North Caucasus, and the extreme lower Volga Valley where harvesting of winter grains was underway. Haying operations proceeded vigorously throughout European USSR although excessive rains have complicated activities in some areas. Rainfall has been spotty in the spring wheat areas of western Siberia and North Kazakhstan, but precipitation in general has been enough to maintain good growing conditions in most areas. In particular, timely moisture occurred in several sections where topsoil was beginning to dry out.

ASIA. India's monsoon continued satisfactorily; by July 3, the monsoon was established over the entire country. Cumulative rainfall from June 1 through July 5 was normal or above for all of the country except Orissa, Tamil Nadu, and south interior of Karnataka. Sowing operations in these deficient states, however, are reportedly progressing satisfactorily. In the People's Republic of China heavy precipitation, excessive in places,

occurred in a broad band stretching from Szechwan in the southwest across most of the North China Plain and extending into the agriculturally important provinces in the northeast. For the second consecutive week, rice growing provinces south of the Yangtze River received very little precipitation. Moreover, some areas experienced a midsummer heat wave characterized by the Chinese as one of the longest in several decades. Vast irrigation facilities could mitigate the effects of the hot spell in most areas, but some nonirrigated crops were probably hurt a bit.

AUSTRALIA. Moderate to heavy amounts of precipitation dotted most of the principal grain areas. The lightest amounts fell in South Australia where additional moisture was required to build soil moisture reserves.

AFRICA. North Africa---Morocco, Algeria and Tunisia---was warm and dry, and South Africa held seasonally cool without significant precipitation in the main agricultural areas.

EUROPE. It was cloudy, cool, and damp over most of northern and western Europe and the United Kingdom. Heavy rains soaked West Germany, Benelux, and parts of northern France. Crop development continued to reflect the relatively poor conditions in these areas in recent weeks. Rainfall was light throughout southern France, Spain, and Italy. Cool, damp weather prevailed over the northern half of eastern Europe. Precipitation continued below normal in Bulgaria, but showers brought light to moderate amounts of moisture over scattered areas in Hungary, Romania, and Yugoslavia. Turkey's heat and dryness persisted.

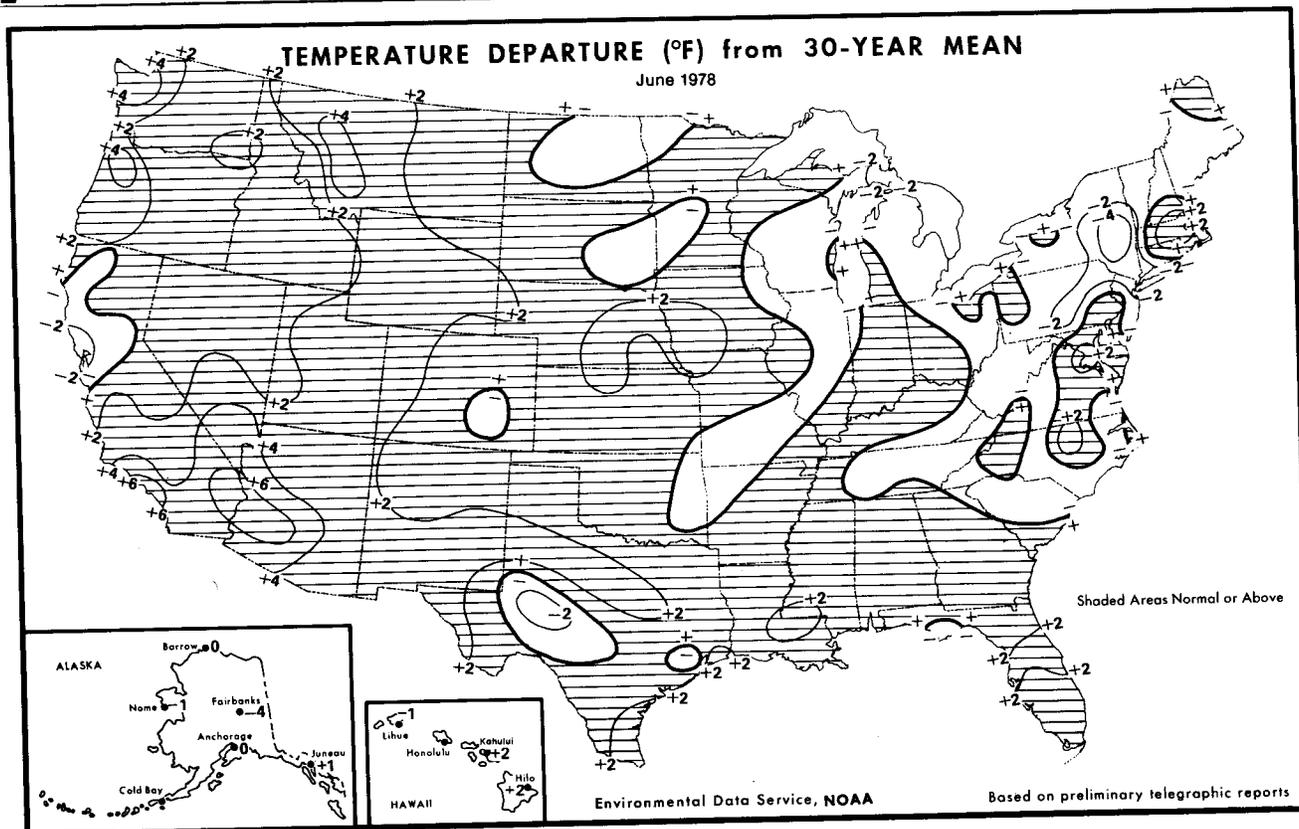
AMERICAS. Light to moderate rains, heavy in places, fell over much of Argentina's main grain belt with heaviest amounts in Buenos Aires and Entre Rios. Wheat planting slowed in some areas, especially in the southwest, because of short topsoil moisture. Light rains moistened Rio Grande do Sul and Santa Catarina in Brazil's main wheat belt, but there was no improvement in the drought in Parana. Heavy rains drenched the coast of Bahia's cocoa-producing region, but moisture was only light to moderate in the interior. Crops progressed favorably throughout the Prairie Provinces of Canada. Although moisture generally was adequate, rainfall was needed in some areas, especially in parts of Saskatchewan.

(continued from page 2)

Springs counted 2 inches of rain in an hour; north of the city 12 inches of hail was reported. More than an inch dampened Vichy, east central Missouri, and 1.73 in. fell on Peoria. Other thunderstorms dumped rain and one-inch hail on southeastern Maine.

In the South, 3 inches drenched Cross City, Fla.; 1.33 in. covered Nashville; and 1.14 in. touched Greer, S.C.

The heat wave persisted over the south central U.S. Wichita Falls, north central Texas, tied the 1925 record of 108°. Springfield, Mo., chalked up 103°, breaking the 1966 record by 5. Wichita, Kans., at 105°, again established a record; Wichita's readings have exceeded 102° 7 of the first 9 days in July.



June Weather Summary

HIGHLIGHTS: Surges of cool Canadian air pushing into the northern Plains during June caused above-normal rainfall from the border of North and South Dakota southeastward to Indiana and into Pennsylvania and New England. Severe flooding occurred in Wisconsin and southern Michigan. Elsewhere, warm, moist, unstable air caused thunderstorms from the southern Rockies through the South. Little rain fell in the Southwest. Temperatures averaged near normal for the month.

As the month of June began, the eyes of the Nation were on the Corn Belt where planting and plowing were as much as two weeks behind schedule. Cool weather and frequent rain on wet soils kept farmers out of their fields. Some progress was made during the first four days of the month, especially in the eastern portion of the Midwest.

Elsewhere during the first four days, intense thunderstorms rumbled over Texas, the lower Mississippi Valley, and the Gulf Coast. Temperatures ranged warmer than normal in the West and east of the Mississippi River, but cool weather prevailed in the Plains and Rockies.

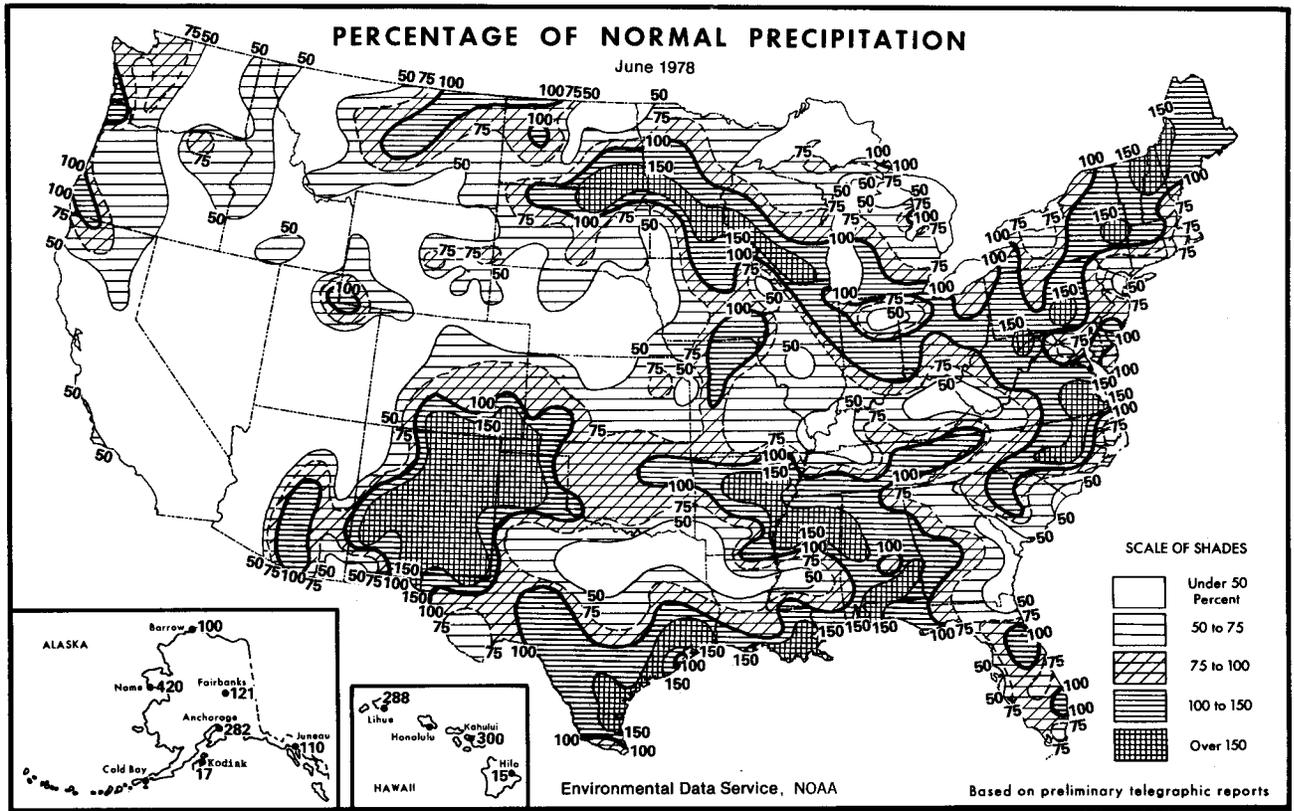
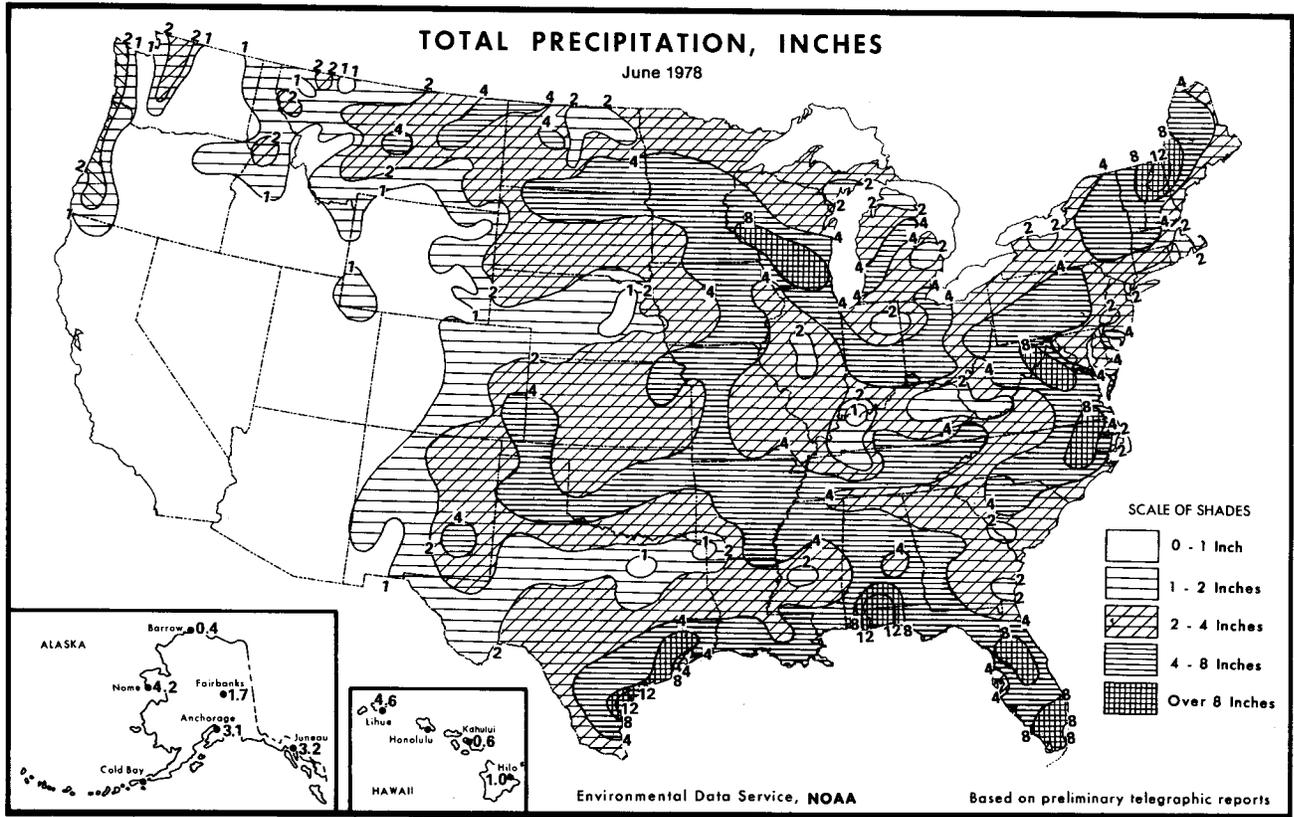
During the week of June 5-11, corn growers made great strides in planting and the Nation reached 96% of the intended acreage planted. The weather hurt some farmers from the Texas Panhandle to the Gulf Coast and northeastward to the mid-Atlantic States. Heavy downpours caused local flooding in some Texas and Louisiana areas and in southern Alabama. The cool weather from the Plains moved eastward; the week's average temperatures scored warmer than normal only along the East Coast and west of the Rockies.

The mid-month week of June: 12-18 began a series of cool air outbreaks from central Canada into the

northern Plains. The cool air moved slowly south-eastward colliding with warm, moist air from the Gulf of Mexico to set off thunderstorms. The most intense and widespread rain fell in the upper Mississippi Valley and western Great Lakes region. Some very heavy localized rains flooded points in Florida and Alabama. Except for the Pacific Northwest, little or no rain fell in the West. The eastern U.S. enjoyed cool, clean air by the end of the week, however, record-breaking heat baked the Rocky Mountains and the Southwest.

In the period from June 19-25, rain was heaviest in the central Plains and upper Mississippi Valley. Winter wheat combining lagged in Oklahoma and Kansas due to rainy weather, but Texas leaped ahead with its previously delayed harvest as the week produced little or no rain there. Cool air continued to push into the upper Mississippi Valley in surges. Some heavy thunderstorm activity occurred along the front bounding the cooler air as it moved south and eastward. A disturbance in the eastern Gulf brought heavy downpours to the lower Florida peninsula. Again, little or no rain fell in the hot Southwest.

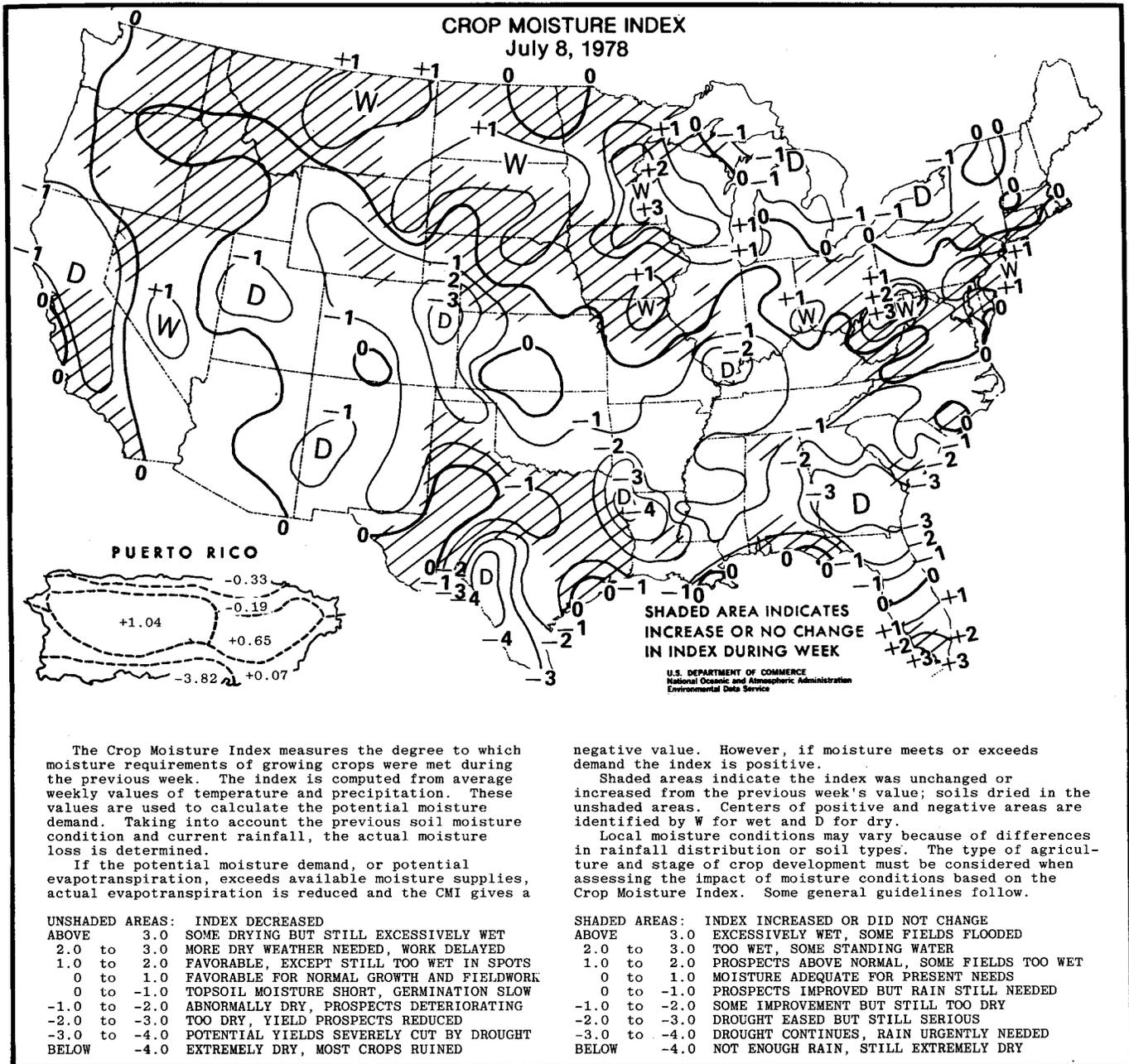
Warm air surged northward during the last four days of the month and fought for supremacy with the cool Canadian air in Wisconsin and southern Michigan causing thunderstorms and floods in those areas before the warm air pushed the cool air back. By the last day of the month, another such battle was staged in the eastern Dakotas and west central Minnesota. Thunderstorms were rife throughout the Nation east of the Rockies. Most of the Nation, except for the Southwest and Plateau region was much warmer than normal. The central Plains and Mississippi Valley soared to 9 degrees warmer than normal.



Temperature and Precipitation Data for June 1978

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 . . .	77	0	5.0	+ 1.0	LA. Baton Rouge . . .	82	+ 2	2.9	- .9	Youngstown . . .	65	- 2	3.9	+ .3
Mobile . . .	81	+ 1	6.1	- .0	Lake Charles . . .	81	0	6.0	+ 1.0	OKLA. Okla. City . . .	77	0	4.0	- .2
Montgomery . . .	80	+ 1	3.9	- .1	New Orleans . . .	81	+ 1	7.8	+ 3.1	Tulsa . . .	78	+ 1	6.1	+ 1.4
ALASKA. Anchorage . . .	55	0	3.1	+ 2.0	Shreveport . . .	81	+ 1	1.2	- 2.1	OREG. Astoria . . .	59	+ 2	3.1	+ .6
Barrow . . .	33	0	.4	0	MAINE. Caribou . . .	61	+ 1	3.7	+ .3	Burns . . .	59	0	.4	- .6
Fairbanks . . .	55	- 4	1.7	+ .3	Portland . . .	61	- 1	2.4	- .7	Medford . . .	66	+ 2	1.0	- .1
Juneau . . .	54	+ 1	3.2	+ .3	MD. Baltimore . . .	73	+ 1	2.8	- 1.0	Pendleton . . .	66	0	.8	- .2
Kodiak . . .	50	- 0	.7	- 3.4	MASS. Boston . . .	72	+ 4	1.5	- 1.7	Portland . . .	63	+ 1	1.7	+ .1
Nome . . .	45	- 1	4.2	+ 3.2	Chatham . . .	62	-	2.5	-	Salem . . .	65	+ 4	.5	- .9
ARK. Flagstaff . . .	61	+ 3	.1	- .5	MICH. Alpena . . .	61	0	1.1	- 1.8	PA. Allentown . . .	71	+ 1	3.2	- .3
Phoenix . . .	91	+ 6	T	- .1	Detroit . . .	67	- 1	2.7	- .7	Erie . . .	65	0	2.7	- .8
Tucson . . .	86	+ 3	.2	0	Flint . . .	65	- 1	1.7	- 1.7	Harrisburg . . .	70	- 2	5.2	+ 2.1
Winslow . . .	74	+ 2	.3	0	Grand Rapids . . .	67	0	4.7	+ 1.3	Philadelphia . . .	74	+ 2	1.1	- 1.9
Yuma . . .	91	+ 5	0	0	Houghton Lake . . .	62	- 1	2.4	+ .9	Pittsburgh . . .	69	0	4.1	+ .6
ARK. Fort Smith . . .	77	- 1	3.1	- .8	Lansing . . .	66	- 1	2.7	- .8	Scranton . . .	65	- 3	2.5	- .9
Little Rock . . .	78	0	4.2	+ .7	Marquette . . .	61	+ 1	2.7	- .7	R. I. Providence . . .	68	+ 2	2.0	- .7
CALIF. Bakersfield . . .	80	+ 3	0	- 1.1	Muskegon . . .	69	+ 3	3.2	+ .6	S. C. Charleston . . .	79	+ 1	3.4	- 2.9
Eureka . . .	56	+ 1	.3	- .4	S. St. Marie . . .	56	+ 3	3.8	+ .5	Columbia . . .	77	- 2	4.7	+ .9
Fresno . . .	76	+ 2	0	- 1	MINN. Duluth . . .	60	+ 1	3.0	- 1.4	Greenville . . .	75	- 1	3.5	- .6
Los Angeles . . .	74	+ 6	0	0	Internat Falls . . .	60	0	2.9	- 1.0	S. D. Aberdeen . . .	66	+ 1	7.3	+ 3.7
Red Bluff . . .	77	+ 1	.1	- .4	Minneapolis . . .	68	+ 1	7.1	+ 3.2	Huron . . .	66	- 1	2.2	- 1.6
San Diego . . .	71	+ 5	T	- .1	Rochester . . .	66	0	5.6	+ 1.0	Rapid City . . .	65	+ 1	2.0	- 1.7
San Francisco . . .	60	- 2	T	- .1	St. Cloud . . .	64	- 1	6.0	+ 1.4	Sioux Falls . . .	67	- 1	2.9	- 1.4
Stockton . . .	73	+ 1	T	- .1	MISS. Jackson . . .	80	+ 1	1.0	- 2.4	TENN. Chattanooga . . .	77	+ 1	2.6	- 1.1
COLO. Denver . . .	67	+ 1	1.2	- .7	Meridian . . .	79	0	2.8	- .9	Knoxville . . .	75	- 1	5.3	+ 1.7
Grand Junction . . .	73	+ 2	T	- .6	MO. Columbia . . .	74	+ 1	2.5	- 2.1	Memphis . . .	80	+ 1	4.5	+ 1.0
Pueblo . . .	70	- 1	1.2	- .2	Kansas City . . .	75	+ 1	2.6	- 3.0	Nashville . . .	76	- 1	1.5	- 1.9
CONN. Bridgeport . . .	66	- 2	1.6	- 1.0	St. Louis . . .	74	- 1	2.4	- 2.0	TEX. Abilene . . .	83	+ 3	1.2	- 1.6
Hartford . . .	69	+ 1	2.9	- .6	Springfield . . .	73	- 1	4.1	- .6	Amarillo . . .	82	0	3.0	- .1
D. C. Washington . . .	77	+ 2	2.4	- 1.1	MONT. Billings . . .	64	+ 1	1.6	- 1.0	Austin . . .	83	+ 2	7.5	+ 2.7
FLA. Apalachicola . . .	79	- 1	5.9	+ .6	Glasgow . . .	63	+ 1	2.7	0	Beaumont . . .	85	+ 2	2.3	- .5
Daytona Beach . . .	82	+ 3	7.5	+ .9	Great Falls . . .	63	+ 2	2.6	- .5	Brownsville . . .	84	+ 2	12.0	+ 9.3
Ft. Myers . . .	82	+ 1	6.8	- 2.1	Havre . . .	64	+ 2	1.3	- 1.3	Corpus Christi . . .	-	-	-	0
Jacksonville . . .	79	0	2.6	- 3.7	Helena . . .	63	+ 4	.4	- 2.0	Dallas . . .	84	0	2.0	0
Key West . . .	84	0	5.1	+ .5	Kalispell . . .	60	+ 3	.9	- 1.7	Del Rio . . .	83	+ 3	1.5	+ .9
Lakeland . . .	82	+ 1	5.9	- .8	Miles City . . .	66	+ 1	1.5	- 1.8	El Paso . . .	82	+ 1	.8	- 2.3
Miami . . .	82	+ 1	5.3	- 3.7	Missoula . . .	60	+ 1	.8	- 1.3	Fort Worth . . .	83	+ 2	3.6	- .5
Orlando . . .	83	+ 3	10.0	+ 2.9	NEBR. Grand Island . . .	74	+ 3	.5	- 3.9	Galveston . . .	80	- 1	9.4	+ 4.9
Tallahassee . . .	80	0	6.1	- .5	Lincoln . . .	72	0	2.4	- 2.6	Houston . . .	79	+ 2	1.9	- .9
Tampa . . .	83	+ 2	2.0	- 4.5	Norfolk . . .	72	+ 2	.9	- 4.0	Lubbock . . .	78	- 2	1.2	- .3
W. Palm Beach . . .	82	+ 1	10.4	+ 2.3	N. Platte . . .	68	0	1.8	- 2.0	Midland . . .	80	- 2	2.8	+ .9
GA. Atlanta . . .	76	0	2.9	- .8	Omaha . . .	72	+ 2	1.8	- 3.1	San Angelo . . .	83	+ 1	4.0	+ 1.2
Augusta . . .	78	0	1.6	- 2.1	Valentine . . .	67	0	2.5	- 1.1	San Antonio . . .	82	0	4.9	+ 1.6
Macon . . .	81	+ 1	4.2	+ .3	NEV. Ely . . .	59	+ 1	T	- .9	Victoria . . .	84	+ 2	1.5	- 1.2
Savannah . . .	80	+ 1	2.2	- 3.7	Las Vegas . . .	87	+ 5	0	- .1	Waco . . .	81	0	2.1	- 1.3
HAWAII. Hilo . . .	77	+ 2	1.0	- 5.6	Reno . . .	63	+ 1	.1	- .9	Wichita Falls . . .	69	+ 3	.1	- .4
Honolulu . . .	-	-	-	-	Winnemucca . . .	65	0	3.2	- .2	UTAH. Blanding . . .	69	+ 3	.1	- 1.2
Kahului . . .	79	+ 2	.6	+ .4	N. H. Concord . . .	69	- 1	3.0	- .4	Salt Lake City . . .	64	- 1	4.4	+ .9
Lihue . . .	77	- 1	4.6	+ 3.0	N. J. Atlantic City . . .	71	0	2.7	- .5	VA. Lynchburg . . .	72	- 1	3.4	0
IDAHO. Boise . . .	65	0	.6	- .5	Trenton . . .	76	+ 1	1.1	+ .6	Norfolk . . .	74	- 1	7.8	+ 4.2
Lewiston . . .	67	+ 2	.3	- 1.5	N. MEX. Albuquerque . . .	79	+ 2	4.3	+ 3.1	Richmond . . .	75	+ 1	5.3	- 1.8
Pocatello . . .	62	0	.2	- 1.1	Roswell . . .	64	- 4	4.6	+ 1.6	Roanoke . . .	73	+ 1	2.1	- 1.4
ILL. Cairo . . .	79	+ 1	2.0	- 2.4	N. Y. Albany . . .	64	- 1	3.9	+ .3	WASH. Colville . . .	62	+ 1	.5	- 1.2
Chicago . . .	69	- 2	3.7	- .3	Binghamton . . .	65	- 1	2.4	+ .2	Omak . . .	65	+ 1	.4	- .8
Moline . . .	71	0	3.5	- .9	Buffalo . . .	70	- 2	1.3	- 1.6	Quillayute . . .	59	+ 4	3.5	0
Peoria . . .	71	0	2.0	- 1.9	New York . . .	67	0	1.3	- 1.2	Seattle-Tacoma . . .	64	+ 4	.8	- .7
Rockford . . .	69	0	5.6	+ 1.2	Rochester . . .	65	- 2	3.6	+ .5	Spokane . . .	63	+ 1	1.2	- .2
Springfield . . .	74	+ 1	1.7	- 2.5	Syracuse . . .	71	0	2.3	- 1.7	Walla Walla . . .	69	+ 2	.6	- .6
IND. Evansville . . .	77	+ 2	.8	- 2.8	N. C. Asheville . . .	76	0	4.2	+ .5	Yakima . . .	65	0	.3	- .4
Ft. Wayne . . .	70	0	1.7	- 2.2	Charlotte . . .	73	- 1	3.7	- .2	W. Va. Beckley . . .	66	- 1	1.5	- 2.7
Indianapolis . . .	74	+ 2	4.4	+ .2	Greensboro . . .	74	0	.4	- 4.4	Charleston . . .	71	- 1	3.0	- .3
South Bend . . .	69	0	3.8	+ .1	Hatteras . . .	76	+ 2	4.1	+ .4	Huntington . . .	73	+ 1	1.7	- 1.7
IOWA. Burlington . . .	71	0	4.8	+ .1	Raleigh . . .	77	- 1	2.3	- 3.3	Parkersburg . . .	71	- 1	3.8	- .2
Des Moines . . .	73	+ 2	2.7	- 2.2	Wilmington . . .	63	- 1	1.8	- 1.8	WIS. Green Bay . . .	64	- 1	2.7	- .7
Dubuque . . .	67	- 1	2.5	- 2.8	N. DAK. Bismarck . . .	65	0	4.4	+ 1.2	La Crosse . . .	68	- 1	6.6	+ 2.2
Sioux City . . .	71	+ 1	1.5	- 3.1	Fargo . . .	64	+ 1	2.5	- .8	Madison . . .	66	0	10.0	+ 5.7
KANS. Concordia . . .	75	+ 2	2.1	- 2.9	Williston . . .	68	0	3.3	- .2	Milwaukee . . .	65	0	4.5	+ .9
Dodge City . . .	75	+ 1	3.5	+ .2	OHIO. Akron-Canton . . .	72	0	6.6	+ 2.8	WYO. Casper . . .	64	+ 2	1.4	0
Goodland . . .	69	0	2.3	- .6	Cincinnati . . .	69	+ 1	3.3	0	Cheyenne . . .	61	0	.6	- 1.8
Topeka . . .	75	+ 1	4.6	- 1.2	Cleveland . . .	70	0	3.7	- .4	Lander . . .	63	+ 2	.2	- 1.7
Wichita . . .	77	+ 1	3.2	- 1.3	Columbus . . .	70	+ 1	4.7	+ .8	Sheridan . . .	61	0	.5	- 2.5
KY. Lexington . . .	73	0	1.9	- 2.4	Dayton . . .	68	- 1	5.3	+ 1.9	P. R. San Juan . . .	82	+ 1	2.9	- 2.7
Louisville . . .	76	+ 3	2.7	- 1.4	Toledo . . .	-	-	-	-	-	-	-	-	-

Based on 1941-70 normals



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FIRST CLASS MAIL

HARVESTING PROGRESS

PERCENT OF ACREAGE HARVESTED
AS OF JULY 9

winter wheat

	1978	1977	AVG.
COLO	18	46	21
ILL	65	97	89
IND	15	75	55
KANS	85	80	85
MO	71	87	84
MONT	0	0	0
NEBR	25	75	50
OHIO	15	55	30
OKLA	100	100	100
S DAK	0	11	11
TEX	91	99	97
11 STATES	65	76	72

THESE 11 STATES PRODUCED
75% OF THE 1977 U.S.
WINTER WHEAT CROP.
