

# Weekly Weather & Crop Bulletin

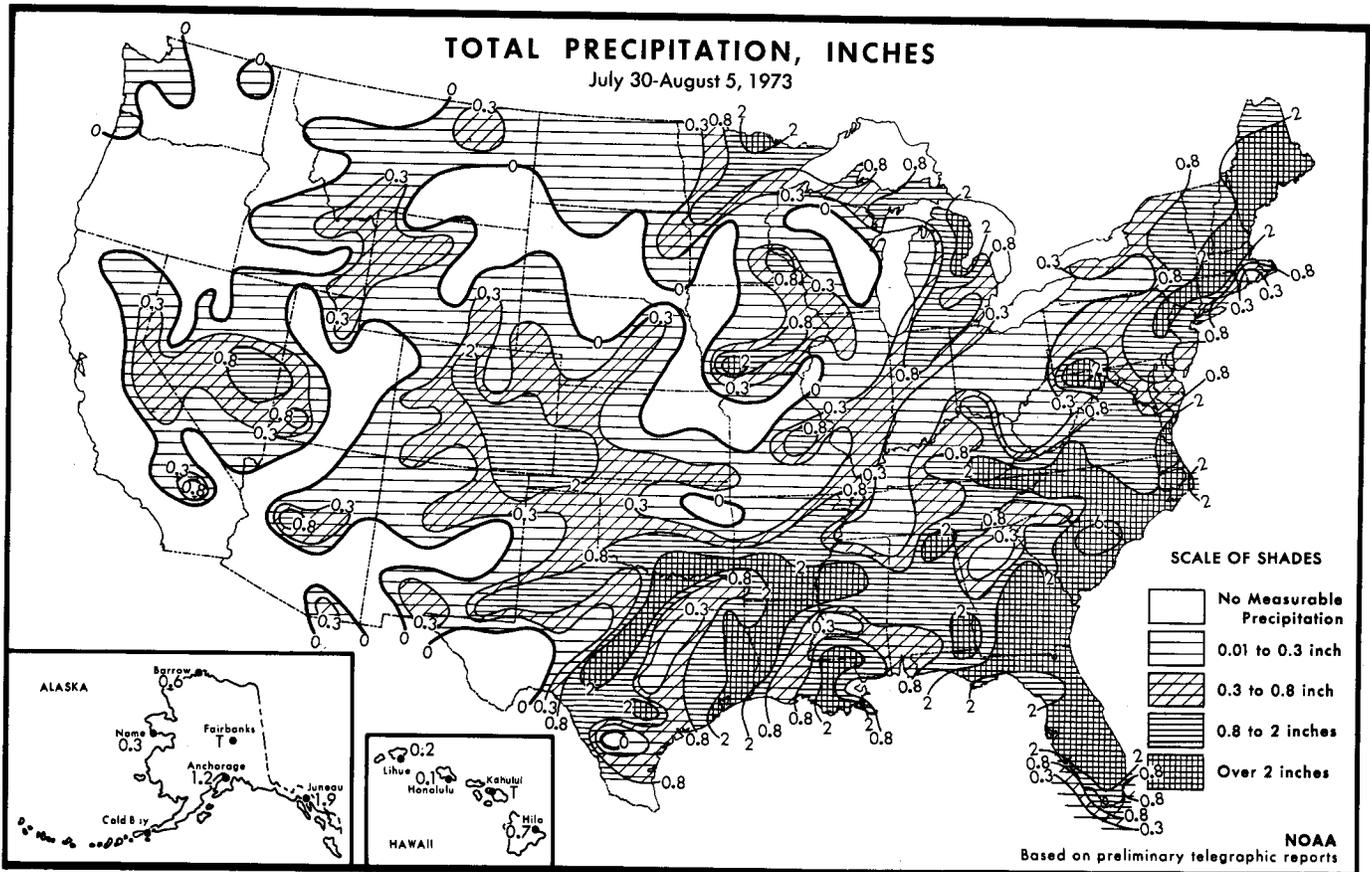
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## NATIONAL WEATHER SUMMARY

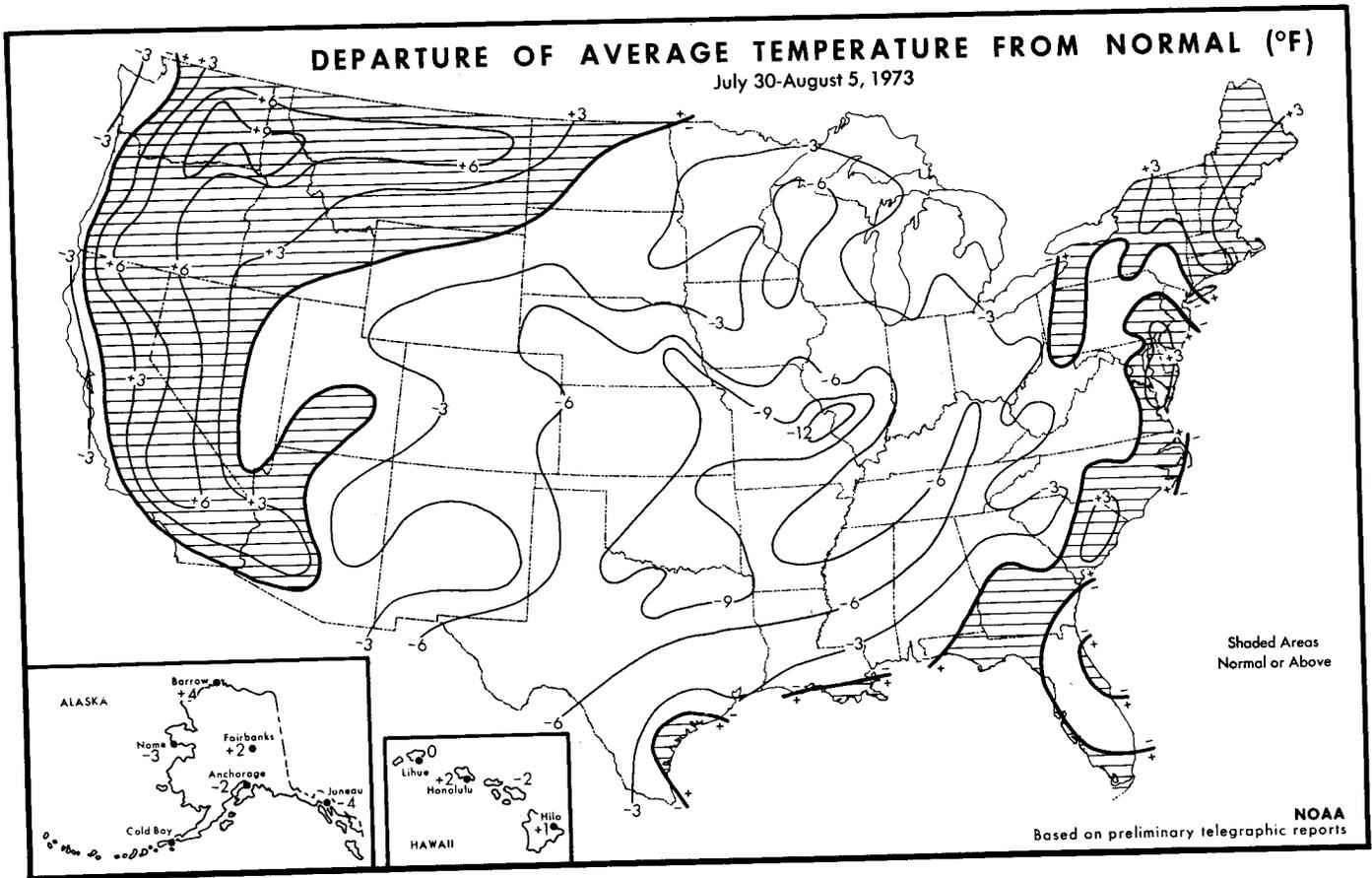
**HIGHLIGHTS:** Most Americans enjoyed a sunny week that stayed relatively cool for early August. Rain fell along a cold front that moved from the Nation's midsection to the Atlantic Coast from about Wednesday through late week. The front, however, dawdled over the Carolinas and Georgia, which received heavy rains into the weekend.

**PRECIPITATION:** While the West Coast States remained relatively rainless, most of the Nation's midsection between the Rockies and the Appalachians got rains varying from 0.30 to 0.80 in mainly in the form of scattered thunderstorms. The East, however, had large areas of 2.00 in or more. Most of Florida, and large sections of the Southern States as far north as Virginia had over 2.00 in: An area in South Carolina had 6.00 in. Most of New England and parts of New York and New Jersey had 2.00 in.

Monday a front extended through the South from North Carolina through Georgia, then north to Iowa, then south through Texas. While Mississippi and Texas got most of the rain associated with the front, thunderstorms were active from Texas to Michigan. Mineral Wells, Tex., got 3.38 in rain in 6 hours Monday morning, Junction got over 3 in by 6 p.m. Greenwood, Miss., got 2.04 in for the day, while Butler, Mo., got 2.50 in.

Thunderstorm activity calmed considerably Monday night, except in Texas and Louisiana; Tuesday morning they erupted from the Gulf to the Ohio Valley, Deyersburg, Tenn., got 1.52 in morning rain, Cincinnati, Ohio, got 1.22 later.

Wednesday, as dry air invaded the Nation's midsection, rain fell mostly on the Appalachians and east. The air was, however, cool and considerable shower activity took place on the fringes of the cold air. Thursday, clouds covered most of



the Nation's eastern quarter, and by afternoon rain in excess of 3.00 in had fallen in New England. Excessive rains hit New Jersey causing flooding, loss of life, and destruction of property. The Passaic River reached record heights at Chatham, N. J. Thunderstorm activity erupted down the Atlantic Coast, through Georgia, and into Texas. Areas in South Carolina got over 4.00 in, while Pensacola, Fla., and Houston, Tex., each got 2.50 in.

On Friday, most of the Nation's rain hit the Southeast, with the Carolinas getting the most. Florence, S.C., got 5.55 in, while Hickory, N.C., got 2.04 in.

Thunderstorms erupted in isolated areas of the California deserts, causing temporary road closings there because of high water.

Saturday was sunny over almost every place in the Nation, with some rain in the Carolinas and Georgia, and Sunday stayed mostly sunny too. Abundant sunshine gave millions of weekenders at most Atlantic beaches the best weekend yet.

**TEMPERATURE:** Early in the week, a Canadian High sent a sprawling mass of cool, dry air into the Nation's midsection as far south as the southwest Plains. Many record lows were either broken or tied during the middle of the week.

Most of the Nation east of the Rockies averaged below normal. A large area, extending from west Texas north into the central Corn Belt and east into the Deep South averaged from 6° to 9° below the norm. An area around St. Louis, Mo., averaged 12° below normal.

In the West, a large part of the Northwest drought area, plus desert areas in Nevada, California and Arizona, averaged from 6° to 9° above the norm.

Monday saw temperatures in the 80's to low 90's throughout most of the Nation. On Tuesday, generally hot temperatures hit the West and Northwest: At 8 p.m. Havre, Mont., had 96° and Blythe and Needles, Calif., registered 107°. Tuesday night, a large mass of Canadian air began to invade the Nation's center and cool 40's set in over the upper Mississippi Valley. Dry air, already present throughout the Midwest, heightened the effect of the cooling.

Thursday morning record lows were broken at Springfield, Mo., 53°; Omaha, Nebr., 53°; and North Platte, Nebr., 53°. Lows were equalled at Duluth, Minn., 42°, and Midland, Tex., 61°.

Midwestern temperatures generally rose to 70's and 80's, but they fell again that night. The record low was equalled at Springfield, Mo., 53°. Further south, record lows were broken: Shreveport, La., 65°; Tulsa, Okla., 58°; and Fort Smith, Ark., 57°. Lowest of the morning was at Alamosa, Colo., 39°.

Saturday morning set more records: Lake Charles, La., 67° and Midland, Tex., 61°.

Saturday was on the cool side for most of the Nation, and Sunday morning lows were also records at Midland, Tex., 61°, and at San Antonio, 65°. And while the South and Texas had cool weather, the Northwest had a heat wave: Sunday temperatures rose to 98° at Miles City, Mont., and 99° at Medford, Ore.

## NATIONAL AGRICULTURAL SUMMARY

**AGRICULTURAL HIGHLIGHTS:** Small grain combining advanced rapidly. \* Adequate soil moisture in major Corn Belt States offset week of sparse rainfall for corn and soybeans. \* Rains in South benefit cotton.

**SMALL GRAINS:** Combining of small grain crops advanced rapidly without interruption last week in the northern Great Plains and Northwest. Winter wheat harvesting is completed in Nebraska, South Dakota and is 80 percent done in Colorado. Hot, dry weather prevailed over the Northwest while winter wheat harvesting advanced to 35 percent complete in Montana and 25 percent complete in Idaho. Small grain combining is active in Washington and Oregon. Spring wheat combining is much ahead of normal in South Dakota at 70 percent complete compared to average progress of 32 percent. Spring wheat harvesting is 20 percent complete in Minnesota, 10 percent complete in Montana and is quite active in Idaho. Oats are 50 percent combined in Minnesota, 90 percent in Iowa, and 85 percent combined in South Dakota. Frequent showers in Michigan halted winter wheat harvesting at 80 percent and oats harvesting at 20 percent done. The New York winter wheat crop is 80 percent harvested.

**CORN:** Rainfall was sparse over the Corn Belt last week but this was offset somewhat by subnormal temperatures and generally adequate topsoil moisture supplies. The cooler temperatures tended to slow corn development especially in the Illinois to Ohio area, but the crop remains in good to excellent condition. Rain boosted the Michigan crop while moisture is needed in Wisconsin and South Dakota. Corn development is equal to or ahead of normal in Iowa, Minnesota, South Dakota, Nebraska, and Wisconsin, but is slightly behind normal elsewhere in the Corn Belt. In Iowa, the leading corn producing State, the crop is good to excellent with about 85 percent of the fields silked and 25 of the corn in the dough stage which is normal although slightly behind last year. In Illinois, the second leading corn State, 83 percent of the crop is rated good to excellent, almost identical to the condition a year earlier but development is behind normal. Illinois corn is 85 percent silked and 35 percent in the dough stage versus normal progress of 91 percent silked and 50 percent in the dough stage. The Southern corn crop made good development with mostly adequate moisture conditions.

**COTTON:** The cotton crop continued to make good progress in all areas. Good rains in the South benefited the crop making soil moisture generally adequate. Most of the crop is in fair to good condition. The Delta crop is generally 1 to 2 weeks later than normal while cotton in the Southeastern States and the West is about normal.

In Texas, cotton harvesting is in early stages in the Rio Grande Valley and heavy defoliation is underway in preparation for active harvesting. Elsewhere, setting of bolls ranges from 40 percent in Oklahoma to 93 percent in Mississippi. About 72 percent of the Arkansas crop is setting bolls. Only 1 percent of the bolls are open in South Carolina. Insects continue to be controlled in most areas, but boll worms are a problem in North Carolina and Arizona. California cotton is blooming heavily and Arizona cotton is maturing

with problems in some areas from dryness and cotton rust.

**SOYBEANS:** The Corn Belt soybean crop made good growth last week aided by generally adequate soil moisture. Most of the acreage is blooming and is well along on setting pods in mostly good condition. Soybean development is generally near or ahead of normal in Minnesota, Iowa, South Dakota, and Nebraska, but behind normal in other Corn Belt States. In Illinois, the leading soybean producing State, 74 percent of the crop is rated good to excellent compared to 82 percent a year earlier. About 75 percent of Illinois soybeans are blooming versus an average of 86 percent and 40 percent of the acreage is setting pods versus an average of 60 percent. Iowa soybeans are 80 percent blooming and 45 percent podding, near normal.

In the Southeast, most soybean fields are in good condition while the South Central region crop is fair to good and later than normal. Early planted acreage is in generally good condition while late planted acreage is mostly fair. Blooming is becoming widespread.

**OTHER CROPS:** Second crop hay yields are down in Wisconsin and the Dakotas due to dryness but hay crop conditions are good to excellent from Nebraska to Texas. Sorghum harvesting is gaining momentum in central Texas, and is nearing completion in south Texas. Kansas sorghum is 20 percent headed versus 30 percent last year and average. Nebraska sorghum is 80 percent headed versus 65 percent in 1972. Kentucky tobacco is in fair to good condition -- treatment of the burley crop with chemical sucker controls is above average. The Idaho potato crop made good progress while rains brought temporary relief to the Maine potato crop. Sugar beet harvesting in California is nearly complete in the Imperial Valley and is underway in the San Joaquin Valley. Heavy rains flooded some dry bean fields in the thumb area of Michigan damaging late planted acreage.

**Fruits and Nuts:** Harvesting of early variety apples and peaches increased in the North Atlantic States, Michigan and Wisconsin. Grape development in New York is ahead of normal. Apple harvesting in North Carolina and Georgia is underway. Fruit harvesting in California remained active and walnuts are developing well with some sunburn and husk fly damage. Citrus trees and new crop fruit are doing well in Florida and Texas.

**Vegetables:** Vegetable supplies increased in the mid and North Atlantic States and Great Lakes area. In New Jersey, a good volume of summer vegetables is moving to market. Celery harvesting is underway in Orange and Wayne Counties, N. Y. North Texas tomato supplies started the seasonal decline while fresh market tomatoes increased in southern California.

**PASTURES AND LIVESTOCK:** Pastures in Wisconsin have declined sharply from dryness. Pastures in the Dakotas and the Northwest also continued to deteriorate from continued hot, dry weather. Supplemental feeding of livestock is underway in many areas of the Northwest. Meanwhile pasture condition in most of the remaining eastern and southern States is average to above average.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., Aug. 5, 1973

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	- 5	1.6	+ .5	La. Baton Rouge . . .	81	- 2	2.0	+ .8	Youngstown . . .	70	- 2	.3	- .7
Mobile . . .	82	- 1	1.6	-1.8	Lake Charles . . .	80	- 3	.7	- .7	OKLA. Okla. City . . .	74	-10	.3	- .2
Montgomery . . .	82	- 1	1.2	+ .1	New Orleans . . .	83	+ 1	.4	-1.1	Tulsa . . .	74	- 9	T	- .5
ALASKA Anchorage . . .	55	- 2	1.2	+ .7	Shreveport . . .	77	- 8	1.8	+1.1	OREG. Astoria . . .	60	- 2	T	- .3
Barrow . . .	43	+ 4	.6	+ .4	MAINE. Caribou . . .	69	+ 4	1.2	+ .3	Burns . . .	74	+ 4	0	- .1
Fairbanks . . .	60	+ 2	T	- .5	Portland . . .	70	+ 1	3.1	+2.5	Medford . . .	79	+ 6	0	0
Juneau . . .	52	- 4	1.9	+ .8	MD. Baltimore . . .	76	- 1	1.5	+ .4	Pendleton . . .	80	+ 6	0	- .1
Kodiak . . .	50	- 5	.9	- .8	MASS. Boston . . .	73	- 2	.8	+ .2	Portland . . .	71	+ 3	T	- .1
Nome . . .	47	- 3	.3	- .4	Chatham . . .	67	- 2	1.1	- .1	Salem . . .	69	+ 2	0	- .1
ARK. Flagstaff . . .	64	- 1	1.2	- .4	MICH. Alpena . . .	66	- 1	5.8	+5.1	PA. Allentown . . .	75	+ 1	1.6	+ .5
Phoenix . . .	93	+ 4	T	- .2	Detroit . . .	72	- 1	.5	- .1	Erie . . .	68	- 1	T	- .8
Tucson . . .	83	- 2	.1	- .5	Flint . . .	69	- 1	.8	+ .1	Harrisburg . . .	76	0	.8	0
Winslow . . .	74	- 6	.3	0	Grand Rapids . . .	71	- 1	.8	+ .2	Philadelphia . . .	79	+ 3	.8	- .2
Yuma . . .	94	0	T	- .1	Houghton Lake . . .	66	- 1	1.8	+1.2	Pittsburgh . . .	73	+ 1	.6	+ .2
ARK. Fort Smith . . .	75	- 9	T	- .6	Lansing . . .	68	- 4	.1	- .6	Scranton . . .	72	- 1	1.6	+ .5
Little Rock . . .	77	- 5	1.0	+ .3	Marquette . . .	64	- 4	.7	0	R.I. Providence . . .	76	+ 3	.2	- .4
CALIF. Bakersfield . . .	90	+ 6	0	0	Muskegon . . .	70	- 2	1.1	- .5	S.C. Charleston . . .	83	+ 3	4.1	+2.0
Eureka . . .	54	- 3	T	0	S. Ste. Marie . . .	63	- 2	1.9	+1.3	Columbia . . .	82	0	5.2	+3.8
Fresno . . .	85	+ 4	T	0	MINN. Duluth . . .	62	- 5	.6	- .2	Greenville . . .	77	- 3	1.5	+ .2
Los Angeles . . .	74	0	0	0	Internatl Falls . . .	65	- 1	2.5	+1.7	S.D. Aberdeen . . .	73	- 2	.3	- .2
Red Bluff . . .	85	+ 2	0	0	Minneapolis . . .	71	- 2	.3	- .4	Huron . . .	72	- 3	.2	- .2
San Diego . . .	71	- 1	0	0	Rochester . . .	67	- 6	.6	- .2	Rapid City . . .	72	- 3	T	- .3
San Francisco . . .	60	- 4	0	0	St. Cloud . . .	68	- 4	T	- .8	Sioux Falls . . .	73	- 2	T	- .7
Stockton . . .	80	+ 2	0	0	MISS. Jackson . . .	76	- 6	.3	- .7	TENN. Chattanooga . . .	76	- 5	.9	- .2
COLO. Denver . . .	70	- 4	.1	- .2	Meridian . . .	78	- 4	1.4	+ .1	Knoxville . . .	75	- 3	1.8	+ .7
Grand Junction . . .	77	- 1	.5	+ .3	MO. Columbia . . .	71	- 7	T	- .8	Memphis . . .	77	- 4	.2	- .6
Pueblo . . .	72	- 5	1.3	+ .8	Kansas City . . .	72	-11	0	- .6	Nashville . . .	76	- 4	.3	- .8
CONN. Bridgeport . . .	76	+ 1	.5	- .4	St. Louis . . .	67	-12	.3	- .3	TEX. Abilene . . .	74	- 6	.2	- .2
Hartford . . .	80	+ 5	2.7	+1.8	Springfield . . .	71	- 8	.1	- .7	Amarillo . . .	74	- 6	.1	- .3
D.C. Washington . . .	78	+ 2	.5	- .6	MONT. Billings . . .	76	+ 1	T	- .2	Austin . . .	81	- 3	1.4	+ .1
FLA. Apalachicola . . .	83	+ 1	1.2	- .6	Glasgow . . .	78	+ 7	.5	+ .2	Beaumont . . .	84	- 1	1.3	+ .9
Daytona Beach . . .	82	+ 1	2.8	- .1	Great Falls . . .	77	+ 7	.1	- .2	Brownsville . . .	88	+ 3	.7	+ .2
Ft. Myers . . .	83	0	.8	-1.1	Havre . . .	75	+ 5	T	- .2	Corpus Christi . . .	84	+ 3	.7	+ .2
Jacksonville . . .	82	- 1	3.8	+2.1	Helena . . .	73	+ 4	T	- .2	Dallas . . .	81	- 6	1.1	+ .8
Key West . . .	85	+ 1	T	- .9	Kalispell . . .	72	+ 6	T	- .2	Del Rio . . .	76	- 6	.4	+ .1
Lakeland . . .	81	- 1	3.1	+1.5	Miles City . . .	78	+ 2	T	- .3	El Paso . . .	78	- 9	.8	+ .4
Miami . . .	83	+ 1	.7	- .8	Missoula . . .	74	+ 6	T	- .2	Fort Worth . . .	81	- 3	4.6	+3.5
Orlando . . .	82	- 1	3.2	+1.5	NEBR. Grand Island . . .	72	- 6	T	- .5	Galveston . . .	80	- 3	1.6	+ .6
Tallahassee . . .	82	+ 1	4.6	+2.8	Lincoln . . .	70	-11	0	- .7	Houston . . .	73	- 7	1.1	+ .7
Tampa . . .	82	0	2.9	+1.0	Norfolk . . .	68	- 9	.1	- .4	Lubbock . . .	75	- 8	T	- .4
W. Palm Beach . . .	82	- 1	2.4	- .1	N. Platte . . .	71	- 5	0	- .8	Midland . . .	78	- 8	.2	- .1
GA. Atlanta . . .	78	- 1	.1	- .9	Omaha . . .	71	- 3	0	- .5	San Angelo . . .	80	- 5	1.3	+ .9
Augusta . . .	80	- 1	1.3	+ .3	Valentine . . .	73	- 3	0	- .5	San Antonio . . .	80	- 5	.5	- .3
Macon . . .	83	+ 1	2.8	+1.7	NEV. Ely . . .	67	- 1	1.5	+1.3	Victoria . . .	84	0	T	- .4
Savannah . . .	82	0	2.9	+1.5	Las Vegas . . .	89	0	T	- .2	Waco . . .	78	- 9	.7	+ .3
HAWAII. Hilo . . .	77	+ 1	.7	-1.9	Reno . . .	73	+ 5	.5	+ .4	Wichita Falls . . .	71	- 2	.1	- .2
Honolulu . . .	81	+ 2	.1	0	Winnemucca . . .	76	+ 5	T	- .1	UTAH. Blanding . . .	76	- 2	.3	+ .2
Kahului . . .	77	- 2	T	- .1	N.H. Concord . . .	75	+ 5	4.5	+3.8	Salt Lake City . . .	73	+ 4	1.3	+ .5
Lihue . . .	79	0	.2	- .3	N.J. Atlantic City . . .	77	+ 1	.5	- .6	VT. Burlington . . .	74	- 2	1.1	+ .1
IDAHO. Boise . . .	80	+ 4	T	0	Trenton . . .	78	+ 2	.9	- .1	VA. Lynchburg . . .	80	+ 2	2.8	+1.5
Lewiston . . .	84	+10	T	- .1	N.MEX. Albuquerque . . .	76	- 2	.4	+ .1	Norfolk . . .	77	- 1	.9	- .5
Pocatello . . .	73	0	T	- .1	Roswell . . .	76	- 2	T	- .4	Richmond . . .	75	- 1	2.6	+1.5
ILL. Cairo . . .	76	- 5	.5	- .2	N.Y. Albany . . .	73	0	1.6	+ .9	Roanoke . . .	75	+ 6	T	- .2
Chicago . . .	72	- 4	.1	- .7	Binghamton . . .	70	+ 2	.2	- .6	WASH. Colville . . .	77	+ 6	0	- .1
Moline . . .	71	- 4	.1	- .6	Buffalo . . .	71	+ 1	.4	- .2	Omak . . .	58	- 3	.3	- .1
Peoria . . .	71	- 5	T	- .8	New York . . .	77	- 1	1.6	+ .7	Quillayute . . .	64	- 1	.1	0
Rockford . . .	70	- 5	T	- .9	Rochester . . .	72	0	.4	- .2	Seattle-Tacoma . . .	78	+ 7	0	- .1
Springfield . . .	71	- 6	.2	- .5	Syracuse . . .	73	0	.1	- .6	Spokane . . .	83	+ 7	0	0
IND. Evansville . . .	75	- 4	.2	- .6	N.C. Asheville . . .	74	- 1	.7	- .3	Walla Walla . . .	79	+ 8	0	0
Ft. Wayne . . .	70	- 4	.4	- .3	Charlotte . . .	77	- 3	.8	- .4	Yakima . . .	68	- 3	.6	- .4
Indianapolis . . .	71	- 5	.1	- .7	Greensboro . . .	77	0	2.2	+1.0	W.Va. Beckley . . .	72	- 3	T	-1.3
South Bend . . .	71	- 3	2.0	+1.3	Hatteras . . .	78	0	1.7	+ .2	Charleston . . .	74	- 1	.2	- .9
IOWA. Burlington . . .	70	- 6	0	- .8	Raleigh . . .	78	0	2.2	+ .9	Huntington . . .	73	- 3	.2	- .7
Des Moines . . .	73	- 4	.1	- .5	Wilmington . . .	81	+ 1	3.0	+1.4	Parkersburg . . .	69	- 2	T	- .5
Dubuque . . .	68	- 5	.6	- .2	N.DAK. Bismarck . . .	72	- 1	.6	+ .2	WIS. Green Bay . . .	69	- 6	.2	- .6
Sioux City . . .	73	- 5	T	- .7	Fargo . . .	69	- 3	.2	- .4	La Crosse . . .	67	- 5	0	- .7
KANS. Concordia . . .	73	- 8	0	- .7	Williston . . .	76	+ 4	.1	- .2	Madison . . .	69	- 1	.1	- .5
Dodge City . . .	75	- 7	.4	- .1	OHIO. Akron-Canton . . .	72	- 1	.2	- .6	Milwaukee . . .	70	- 3	T	- .2
Goodland . . .	72	- 6	.5	- .1	Cincinnati . . .	70	- 5	.9	+ .1	WYO. Casper . . .	65	- 5	.2	- .2
Topeka . . .	72	- 9	0	- .8	Cleveland . . .	71	- 1	.1	- .8	Cheyenne . . .	68	- 3	.1	0
Wichita . . .	74	- 8	.3	- .4	Columbus . . .	71	- 4	.1	- .7	Lander . . .	72	0	T	- .2
KY. Lexington . . .	72	- 6	.2	- .7	Dayton . . .	71	- 4	.1	- .6	Sheridan . . .	72	0	T	- .2
Louisville . . .	75	- 3	.4	- .4	Toledo . . .	69	- 4	.7	+ .2	P.R. San Juan . . .	83	+ 2	.8	- .6

## CONDENSED STATE SUMMARIES

The Bulletin capsulizes nationally important weather and crop conditions. Every Monday SRS publishes more detailed data in State Weekly Weather and Crop Bulletins in cooperation with the National Weather Service, NOAA. Voluntary weather observers, crop reporters, and county extension agents contribute weekly observations for these reports.

**ALABAMA:** Scattered early week showers and thundershowers and above normal temperatures. Cooler and dryer later. Crops developed well, but several south counties need rain to maintain favorable conditions. Cotton 60% setting bolls. Slightly over 50% corn in or beyond dough stage, 33% dented. Soybeans made satisfactory development with about 40% blooming. Peanuts developed favorably. Hay harvest full swing most areas, but showers slowed cutting few localities. Live-stock good. Pastures provided mostly adequate grazing.

**ARIZONA:** Temperatures generally 2° to 4° subnormal except 2° to 4° above normal northwest. Moisture present all week, thundershowers statewide. Cotton continued to mature; bolls opening Yuma County. Drought cracked bolls Maricopa County. Cotton rust Cochise County severe. Sorghum growth progressed normally. Safflower harvest nearly complete Salt River Valley, Yuma; yields subnormal. Sugar beets satisfactory progress Cochise County. Alfalfa hay harvest normal. Watermelon harvest wound down central areas. Fall cantaloupe planting. Mixed vegetables being planted. Land preparation for lettuce Yuma; planting active, Cochise County. Chili peppers grew well. Melons Graham County progressed well. Land preparation later plantings underway Pima, Pinal Counties. Limited grapefruit picking Salt River Valley. Market conditions good first grade fruit. New crop fruit sizing rapidly, prospects for lighter crop. Fruit, tree growth good, Yuma area. Ranges remain good statewide due to recent summer storms. Stockwater adequate statewide. Cattle, calves fair to mostly good. Sheep, summer ranges fair to good.

**ARKANSAS:** Temperatures averaged from 70° at Fayetteville, northwest to 78° at Morrilton and Hot Springs, central. Subnormal readings 4° to 10° below. Extremes: 96°, Hope; 49° Calico Rock. Little daily change daytime temperatures, but nights cooler after early week. Rainfall heaviest southeastern half with many localities reporting 1.00 to over 3.00 in. Northwest half dry. Largest weekly totals 3.80 in Benton, 3.53 in Leola. Soil moisture insufficient north half. Adequate other locations. Cotton good, 72% setting bolls, insects light. Rice good, early fields heading. Soybeans mostly good, growth normal, early plantings in full bloom. Sorghum fair to good, suffering some from lack of moisture. Budworms, armyworms, and midge causing some problems, controls active. Corn maturing, mostly good. Haying active. Truck crop movement varied. Peach, cucumber, tomato harvest declining. Okra increasing. Cedar rust damage in apples. Watermelon harvest continues.

**CALIFORNIA:** Scattered thundershowers northern mountains, Sierras, southern desert; otherwise, no rain. Average temperatures 3° to 4° above normal most inland areas, near normal along coast. Barley, wheat, oat combining continued coastal, northern mountain areas; virtually complete central valley. Rice progressed well, early varieties heading. Corn, milo progressed well, harvest beginning Imperial Valley. Corn silage

cutting began. Cutting alfalfa hay active with some armyworm damage. Sugar beet harvest nearly complete Imperial Valley, under way San Joaquin Valley. Cotton progressed well, heavy bloom most fields. Dry beans developed well, some high temperature damage. Fresh grape harvest complete Coachella Valley, continued Fresno area. Harvest nectarines, peaches, plum, Gravenstein apples and pears continued. Avocados good growth. Harvest Valencia oranges, remaining areas grapefruit active. Broccoli, cauliflower good supply Santa Maria. Cantaloupe harvest complete Huron-Coalinga, seasonally active Mendota-Firebaugh. Carrot digging San Joaquin, central coast areas continued moderate. Celery active Santa Maria-Oceano, Salinas. Sweet corn good volume south. Honeydew movement continued central valley. Lettuce volume Salinas increasing. Potato digging started Santa Maria, continued active south. Fresh market tomato supplies increased south. Processing tomato picking increased Sacramento, San Joaquin Valleys. Watermelons steady central valley. Summer rangelands provided good feed, remained tinder dry, fire danger high. Water supplies slowly depleting, but adequate. Supplemental feeding limited some areas. Sheep being moved to grain stubble. Early turkeys taken to processing plants San Joaquin Valley. Egg, milk production declined seasonally.

**COLORADO:** Scattered statewide daily afternoon and evening showers and thunderstorms; heaviest Eastern Plains. Holly got most, 2.19 in. Temperatures 5° to 8° subnormal. Extremes: 96°, Grand Junction; 28°, Fraser. Winter wheat harvest 80% complete. Winter barley about 75% cut. Harvest underway southwest. Winter wheat and barley turning color northwest. Spring barley and oats excellent, except southeast, fair to good. Sorghum improved, good to excellent, aided by recent rains. Corn very good to excellent, about 1 week behind 1972; 61% tasseled, 1972 87%. Sugar beets very good. Dry beans and potatoes good to excellent. Second cutting alfalfa 42% complete. Range and pasture generally very good to excellent, forage adequate.

**FLORIDA:** Usual afternoon showers and thunderstorms and summer heat prevailed. Some local rainfall excessive especially west peninsula and parts of panhandle. Temperatures near normal, highs in low to mid-90's. Soil moisture generally adequate. Crops good. Early corn nearly mature, late corn improved. Soybeans, peanuts good to excellent. Flue-cured tobacco harvest complete. Auction markets active. Shade tobacco delivered to packing houses. Sugarcane good to excellent. Haying active although frequent interruptions by showers. Pastures good to excellent, adequate to surplus soil moisture. Cattle, calves good to excellent. Land preparation for fall vegetables active. Tomato seeding started last week in Ft. Pierce area, should begin other southern districts this week. Around Pompano, early eggplant being set and pepper seeding commenced. Plug seeding peppers underway southwest. Citrus: moisture adequate--heavy thundershowers each afternoon, good new crop fruit growth, new crop fruit drop normal, no late bloom.

**GEORGIA:** Temperatures near normal statewide ranging from mid-70's north to low 80's south. Above normal readings early week followed by cooler readings later. Moderate to heavy rains, with several locations reporting in excess of 5.00 in mostly in central, eastcentral and southeast. Rainfall moderate elsewhere except for generally light northwest. Soil moisture adequate. Crops improved. Insects controls received much attention. Corn mostly good. Cotton fair to mostly good, none opening, 90% setting bolls, about 2 weeks late. Peanuts good but white mold troublesome, no digging. Tobacco harvest 87% complete, near normal. Soybeans good, early planting blooming freely. Peach harvest 97% complete. Apple harvest underway. Pastures and cattle good, marketings off. Rains slowed haying. Vegetables fair to good, northern volume high.

**HAWAII:** Weather continued dry. Light showers in windward and higher elevation areas. Irrigation heavy. Crops progress fair to good. Supply of most fruits and vegetables adequate. Watermelon supplies declining. Pineapple harvest at peak. Other field operations slow. Sugarcane harvest active. Most pastures dry, lack moisture. Cattle fair to good.

**IDAHO:** Continuing hot, dry. Temperatures above normal except southeast. Slight cooling end week and light precipitation southwest and southcentral. Moderate precipitation east with most at Malad 0.27 in. Hot, dry weather put more stress on dryland crops, especially north where forage short on dryland ranges and pastures. Supplemental feeding necessary. Rains end of July east aided range forage and benefited late grains. Irrigated crops making good growth. Harvesting small grains active. Winter wheat 25% harvested. Barley 15% harvested. Spring wheat harvest active. Potato crop late but progressed well. Some spraying for early blight east. Second cutting alfalfa full swing, 50% harvested. Dry pea, lentil harvest good progress north; 60% dry peas, 30% lentils harvested.

**ILLINOIS:** Cooler than normal, warming trend end week. Heavy rains southeast Monday and Tuesday, lighter amounts elsewhere. Little or no precipitation balance of week. Corn about 85% silk stage, 1972 90%, 1970-72 average 91%; 35% dough stage, 1972 46%, average 50%. Corn 16% excellent, 67% good, 17% fair; 1972 82% either good or excellent. Soybeans 75% bloom stage, 1972 82%, average 86%; nearly 40% setting pods, 1972 56%, average 60%. Soybeans 11% excellent, 63% good, 26% fair; 1972 83% either good or excellent. Oat combining 85% complete, 1972 63%, average 86%. Second crop alfalfa hay 75% cut, 1972 73%, average 81%; mostly good to excellent. Plowing winter wheat acreage 20% complete, 1972 10%, average 18%. Pastures 30% excellent, 54% good, 14% fair, 2% poor. Soil moisture 23% short, 60% adequate, 17% surplus. Nearly 5 days suitable fieldwork. Main activities combining oats, baling hay, cultivating late-planted soybeans, weed cutting, plowing winter wheat acreage.

**INDIANA:** Cool week. Temperatures 4° subnormal. Precipitation early in period averaged 1.30 in north, 0.50 to 0.33 in south. Humidity above normal. Fieldwork averaged 3 days. Topsoil and subsoil moisture mostly adequate to surplus. Oats 65% combined, a week behind average. Corn developing at 1972 rate and few days behind average. Corn 70% silked, 20% in or past dough. Soybeans few days behind 1972, 60% bloomed, 35% setting pods. Wheatland 15% plowed, 20% 1972 and average.

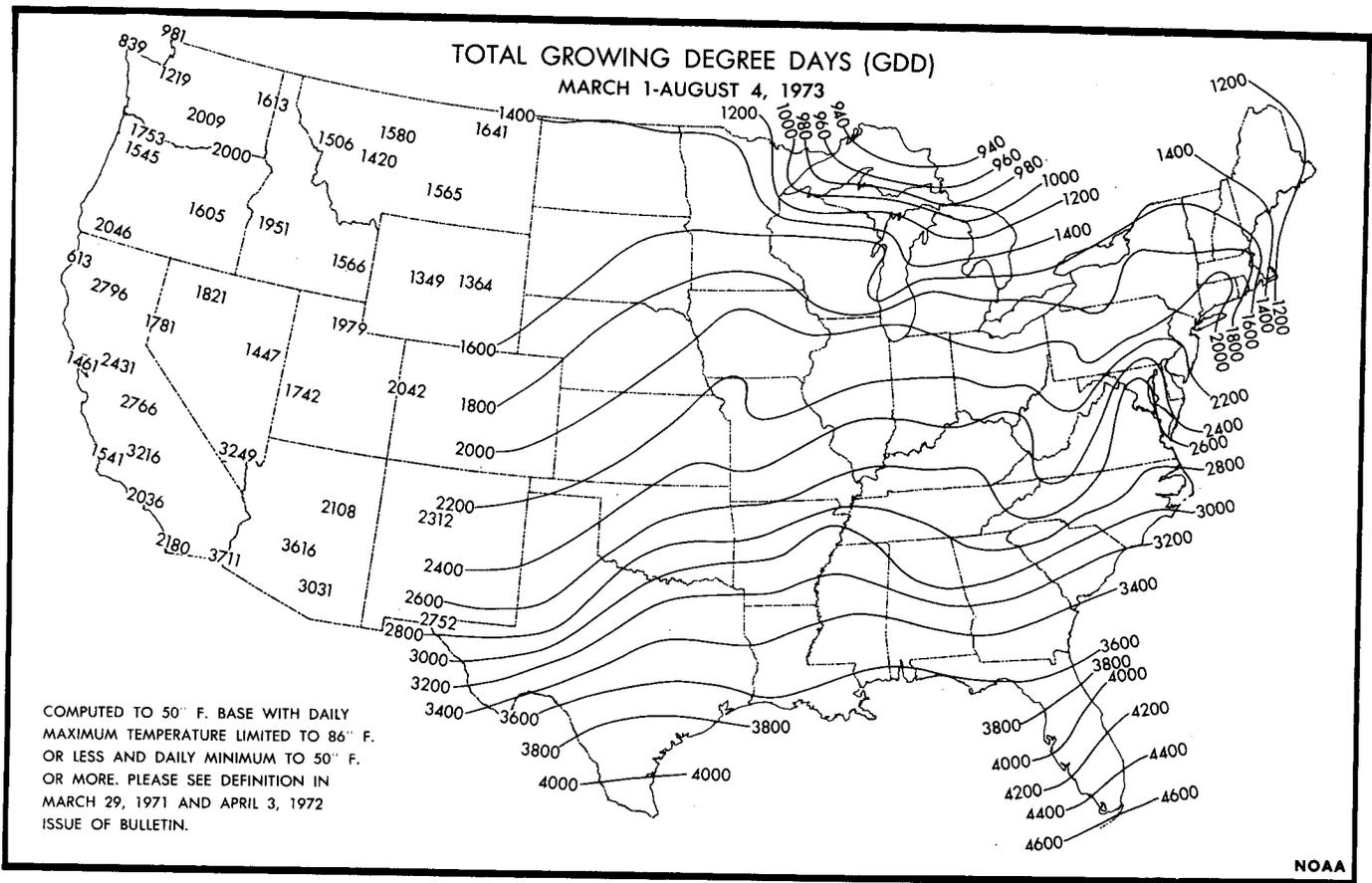
Alfalfa hay 65% cut second time, 70% 1972. Pastures improve but still fair to good.

**IOWA:** Warming trend last part of week but cool Canadian air held temperatures 4° subnormal. Only light scattered thundershowers late week, precipitation 0.50 to 1.00 in subnormal. Considerable sunshine. Crops mostly good to excellent. Six days suitable for fieldwork. About 85% of corn 75% or more silked, slightly behind 1972, same as 1967-71 average. Corn 25% in dough stage, 35% 1972. Soybeans 80% in or past bloom stage, 45% setting pods, same as 1972. Weed control in soybeans varies fair to excellent, majority good. Oat harvest 90% complete, 75% 1972, nearly same as average. Second crop alfalfa, clover good to excellent. Alfalfa 80%, clover 55% harvested. Topsoil moisture 12% short, 83% adequate, 5% surplus.

**KANSAS:** Much below normal temperature; from 6° subnormal northwest to 10° subnormal southeast. Statewide precipitation sparse, some locally heavy rain west and south. Severe weather was at a minimum. Row crops good. Sorghum 20% headed, 1972 and average 30%. Sorghums beginning to turn color, insect damage in general has been minor. About 30% corn in dough stage, 1972 35%, average 45%. About 5% corn dented, 1972 10%, average 15%. Soybeans 35% setting pods, 1972 and average 45%. Second cutting alfalfa virtually complete, 35% third cutting harvested, 1972 30%, average 40%. Pastures and ranges good. Livestock marketings light.

**KENTUCKY:** Only significant rainfall on Tuesday. Fair and cool with low humidity Thursday through Sunday. Average rainfall less than 0.50 in. Temperature subnormal, low to mid-70's. About 4 days suitable fieldwork. Soil moisture 6% short, 72% adequate, 22% surplus. Tobacco fair to good. Burley 26% blooming, 7% topped. Dark types 41% blooming, 18% topped. Corn good to excellent; in all stages 38% milk stage, another 15% dough or later. Soybeans 41% blooming or podding, behind 1972 and usual. About 93% of burley crop has been or will be treated with chemical sucker control agents, above average for last few years. Third cutting alfalfa 38% completed. Pastures, late hay crops mostly excellent.

**LOUISIANA:** Temperatures 3° subnormal south, 5° to 8° subnormal north. Extremes: 98° Oberlin, 59° Homer. Scattered afternoon thundershowers statewide early week. Rain totals near 0.50 to 3.00 in. Greatest 1-day total 1.91 in Baton Rouge. Showers slowed fieldwork early week. Soil moisture generally adequate except areas northwest. Fieldwork possible 4.2 days. Cotton made good growth, 75% setting bolls. Laying by late planted active. Insect controls stepped up. Soybeans fair to good, early fields good, later fields fair and grassy. Rice growth good, early varieties maturing rapidly, harvest not general but picking up. Winds downed some rice scattered areas. Sugarcane growth rapid, stalks shorter than year earlier, borer control continues scattered fields. Corn mostly fair to good, early corn maturing, small amount harvested. Sweet potato harvest increasing, over 10% dug, quality good. Watermelon harvest continued. Pecans good, good crop expected, insect and disease problems some areas. Pasture, hay grasses growth rapid, some areas have armyworms. Cut hay damaged by rain, nearly 50% harvested. Pasture feed supply slightly above average. Livestock good.



**MARYLAND-DELAWARE:** Temperatures near normal, mild days, warm nights. Extremes: low 90's to low 60's except low 80's and low 50's Garrett County. Precipitation above normal except northcentral. All stations reported at least 0.40 in, totals 5.00 in or more central Eastern Shore and south Delaware. Soil moisture short northcentral through southern Maryland, elsewhere adequate to surplus. Corn 85% silked, 1972 71%, normal 82%. Leaves curling driest areas. Eastern Shore rains helped soybeans especially dual crop acreage; 25% podding, 1972 5%. Tobacco cutting became general, 8% done. Vegetable harvest active. Apple and peach picking continued, need rain to size later varieties.

**MINNESOTA:** Temperatures subnormal third week in a row. Past week averaged 2° to 6° below with morning lows in 50's to 60's and afternoon highs 70's and 80's until weekend with low 90's west and south. Precipitation 0.25 to 0.50 in subnormal with much of Minnesota River Valley reporting no rain. Heavy rain did fall the 5th and 6th over eastern northwest, northcentral, northeast, east-central and southeast. Greatest 24-hour totals 2.77 in, Park Rapids; 2.69 in, International Falls. A favorable dry week for small grain harvest. Corn and soybeans made good growth, development about 1 week ahead of 5-year average. Both crops good condition. Improved soil moisture supplies benefited pastures and hay crops and helped recovery from hot dry spell. Harvest progress of small grains continued ahead of 5-year average. Oat and barley nearly 50% combined. Spring wheat less than 20% harvested. Field corn all silked and 20% in milk stage. Soybeans about 60% podded.

**MICHIGAN:** Temperatures 1° to 4° subnormal. Coldest 36°, Stambaugh. Highs in 80's prevailed as week ended. Rainfall varied considerably all areas ranging from 0.50 to 1.50 in except near 6.00 in Alpena in northeast lower, and none to less than 0.10 in some western lower areas. Frequent showers, many heavy, halted hay and small grain harvest many areas. Soil moisture mostly adequate to surplus. Fieldwork suitable 3 days. Winter wheat 80%, oats 20% harvested. Corn, soybeans and sugar beets made good growth. Corn 53% silked or more advanced. About 25% soybean acreage setting pods. Heavy rains flooded some dry bean fields in "thumb" area damaging late planted beans. Over 20% second cutting hay made. Pasture feed supplies above average. Tart cherry harvest nearly complete northwest fruit area, finished elsewhere. Picking of summer apples, early peaches active southwest. Summer vegetable harvest increasing.

**MISSISSIPPI:** Widely scattered thundershowers through Wednesday. Temperatures about 4° below normal north and normal in south. Temperatures ranged from 99° to 54°. Cooling trend began mid-week, continued through weekend. Soil moisture mostly adequate. Averaged 4.2 days suitable fieldwork. Crops fair to good. Pasture and livestock mostly good. Cotton setting bolls 95%. Corn silked 76%, dough stage 53%. Sorghum 60% headed. Completion of harvest: Peaches 93%, hay 64%, watermelons 62%, cucumbers 85%, sweet potatoes 8%.

**MISSOURI:** Heaviest average rainfall reported from central plains to northeast prairie but precipitation statewide in showers. Cape Girardeau had in

excess of 1.50 in and Elsberry in excess of 2.50 in. Temperatures about 5° below subnormal in Bootheel area. Six days suitable for fieldwork. Oats 93% harvested, 1972 complete. Second crop alfalfa 90% cut, 1972 complete. Third crop 14% harvested, 29% 1972. Corn good, 73% silked, 1972 88%. Soybeans fair to good, 48% blooming, 1972 71%. Grain sorghum 37% headed, 1972 60%. Cotton 69% setting bolls, 1972 73%. Pastures good. Soil moisture 17% short, 80% adequate, 3% surplus.

**MONTANA:** Hot and dry. Temperatures near normal southeast to 6° or 7° above central and west. Hot through midweek turning cooler weekend. Scattered showers late week mostly light and did little to relieve drought. Grain maturation and harvest progressed rapidly. Winter wheat 35% harvested, 55% ripe, 10% turning. Spring wheat 10% harvested, 50% ripe, 35% turning, 5% headed but still green. Barley 15% harvested, 50% ripe, 35% turning. Moisture continued short. Irrigation water supplies generally very short to short northwest, north-central and central, very short to adequate elsewhere. Stockwater supplies short northcentral and central, short to adequate elsewhere. Cattle 10% moved from summer ranges. Wild hay harvest 80% complete, second cutting alfalfa 20% complete.

**NEBRASKA:** Rain general except southeast. Amounts varied light to 3.00 in. Temperatures cool through Thursday, near normal afterward. Wheat harvest complete. Corn, sorghum and soybeans declined but continue mostly good to excellent. Corn 27% excellent, 70% good, 3% fair; 90% silked, same as 1972 and average. Rootworm problem in many fields. Sorghum 31% excellent, 69% good; 80% headed, 1972 65%, average 60%. Greenbug infestation heavy in some fields. Soybeans 29% excellent, 67% good, 4% fair; 75% podded, 1972 55%, average 60%. Some severe mosaic infections. Alfalfa, wild hay mostly good to excellent. Second cutting alfalfa 90% complete, 30% of third crop done. Sugar beets very good. Dry beans behind normal. Soil moisture supplies declined. Topsoil 85% adequate, 15% short. Subsoil 3% surplus, 94% adequate, 3% short. Main farm activities: Small grain harvest, haying, working stubble fields and summer fallow, irrigating, spraying, and weed cutting. Range, pasture declined but continued mostly average to above.

**NEVADA:** Temperatures above normal. Extremes: 106°, Las Vegas, 40°, Mountain City. Frequent thunderstorms. Most rain: 1.04 in at Caliente. Hail Ely and Mt. Rose Summit. Second cutting alfalfa hay 25% complete north. Clover-timothy and wild hay 67% harvested. About 80% small grain acreage in dough stage with 15% of winter wheat, barley harvested. Harvest of spring wheat, oats started but less than 10% complete. Garlic harvest in progress. Potatoes bloomed Humboldt County and Cotton Pahrump Valley. Livestock remain good to excellent.

**NEW ENGLAND:** Temperatures near normal. Showers frequent and heavy Wednesday night through Saturday. Amounts varied from less than 1.00 in coastal areas to 4.00 in plus inland. All crops progressed well. Good quality hay made through Wednesday. Vegetables good supply. Rains brought temporary relief to Maine potato crop.

**NEW JERSEY:** Warm summer week. Temperatures slightly above normal ranging from 90° Saturday to mid-50's Monday morning. Generally dry, except torrential rains Thursday particularly

over north. East Millstone reported 5.15 in in 24 hours ending Thursday morning. Floods central Jersey caused deaths and property damage but little crop damage. Soil moisture short south. Irrigating general. Good volume of summer vegetables moving to market. Canhouses opened last week for tomato processing; volume now light. Potato digging increased. Peach and summer apple supplies good. Blueberry harvest decreased; some growers in clean-up stage. Second cutting alfalfa complete, some third cutting started.

**NEW MEXICO:** Scattered showers most days mountains and northeast. Showers mostly light to moderate. Little rain east plains or southeast. Temperatures 2° to 6° subnormal with little daily variations. Highest readings in low 90's; lowest 37°, Chama. Scattered rainfall interrupted some field activity. Soil moisture mostly adequate. Wheat, barley harvest complete some northern areas. Grain sorghum remained good, most fields heading. Cotton mostly good, squaring well advanced, boll setting many fields. Alfalfa well advanced third cutting. Ranges, livestock good.

**NEW YORK:** Temperatures generally above normal east while normal to slightly subnormal west and southwest. Precipitation statewide midweek. Rain began falling late Tuesday west, spread across State by Wednesday. Thursday rains stopped west but continued heavy east. Some sections Hudson River Valley received nearly 4.00 in rain in 24 hours, causing minor flooding. Field activity progressed well under ideal weather conditions. Soil moisture generally adequate, though some areas short. Second cutting alfalfa nearly 50% complete. Third cutting begun in few areas. First cutting clover-timothy virtually complete. July's subnormal precipitation slowed hay regrowth. Wheat harvest 80% complete. Harvesting oats underway, about 10% cut. Early onions being harvested Oswego County. Orange County set harvest complete, early seed harvest begun. Celery harvest underway Orange and Wayne Counties. Early potatoes being harvested west and Long Island. Harvest of good quality early variety apples and peaches continued. Grape development ahead of normal, making good progress.

**NORTH CAROLINA:** Warm, humid air covered most of State with showers and thundershowers, heavy rainfall statewide. Heavy showers early week east. Midweek cold front produced numerous, local heavy showers and thundershowers mountains. Temperatures ranged in high 70's to low 90's. Fieldwork averaged 4 days. Flue-cured tobacco harvest 45% complete, markets going strong -- prices above 1972 but below expectations. Corn rated 26% excellent, 62% good, 12% fair. Soybeans rated 14% excellent, 77% good, 9% fair. Cotton generally good, bollworms plagued crop. Peanuts improving, 92% good to excellent. Apple harvest started. Pastures provided good grazing.

**NORTH DAKOTA:** Temperatures ranged from 6° above normal west and northwest to 1° subnormal east-central and southeast. Cool early week with low 40's. Much warmer at weekend with 100° at Wahpeton. Precipitation early week. Much below normal throughout State except extreme southeast, 1.47 in fell at Lisbon. Small grain combining progressed rapidly with only minimum interruption by scattered showers. More moisture needed for late crops and grasses. Temperatures turned hot end week pushing maturity of late small grains and flax.

**OHIO:** Relatively dry but scattered showers over northwest on 30th, and general shower activity statewide 31st and 1st. Warm and humid through 1st, followed by mild days and cool nights rest of week. Temperatures for week ranged from 2° subnormal north, to 5° to 8° subnormal central and south. Subnormal temperatures slowed crop growth and maturity. Most row crops badly need warmer temperatures and less humidity. Soil moisture supplies sharply reduced: 10% short, 78% adequate and 12% surplus. Five days favorable fieldwork. Corn 65% silked, 5% in dough stage, 1968-72 average 75% silked, 15% in dough stage. Soybean crop 50% pods setting, normal 60%. Wheat harvest in wind-up stage most areas, 1972 90% complete, normal 95%. Oat harvest 60% along, slightly ahead of 1972, normal 75%. Potato digging underway few areas. Second cutting alfalfa 50% done. Second crop clover-timothy 30% complete. Plowing winter wheat 15% done.

**OKLAHOMA:** Temperatures 7° subnormal panhandle to 10° subnormal northcentral. Precipitation ranged from 0.20 in northeast to 1.80 in southcentral. Weekend warm and mostly dry. Few showers southwest and panhandle. Row crops grew well. Light to good rains improved moisture supplies and temperatures were moderate. Main activities cultivation and haying. Weed cutting, insect spraying active. Some southcentral corn cut for silage. Over 50% sorghums headed but growth in all stages. Nearly 40% cotton setting bolls as crop gains on progress of crop year ago. Soybeans late but good. Peanuts 1 week late with 25% acreage spiking. Haying continues with some areas expecting good surplus. Range grasses providing ample grazing for good gains to cattle.

**OREGON:** Temperatures warmed with departures 5° to 10° above normal over interior, near normal along coast. Some interior stations had 100° several days. Coast highs: 66° to 83°. Dry with few isolated thundershowers northeast mountains. Grass seed harvest near end, below average yields, prices strong. Considerable grass straw tonnage baled to supplement short hay supplies. Burning fields as weather permits. Grain harvest 70% complete northeast, except Wallowa County where grains are maturing; well underway Willamette Valley; central, southeast areas nearing harvest. Yields below average east, above average west. Mint harvest underway nearly all areas. Milton-Freewater early prune harvest underway. Medford early Bartlett pears underway. Green snapbean harvest continues. Ontario sweet corn harvest starting. Fresh market potato harvest continued, good quality, yield Umatilla Basin, Ontario, Willamette Valley. Hermiston watermelon harvest started. Ranges extremely dry; fire danger extreme. Stockwater short. Ranchers held cattle from market except where feed, water shortages forced sales.

**PENNSYLVANIA:** Warm, humid beginning; wet midweek; cooler, clear and dry weekend. Daytime temperatures mostly in 80's, overnight lows in 60's with extremes 90° and 44°. Late week rain east of Susquehanna River, amounts 1.00 to 5.00 in. Topsoil moisture supplies 67% adequate, most remaining short. Small grain harvest and hay baling hampered by humid weather and midweek showers. Spring oats 33% harvested, winter wheat nearing wind-up stages. Corn growth good, average height above 5 ft. Showers boosted crop growth. Limited topping tobacco in progress--crop

extremely variable due to late transplanting and retransplanting. Limited digging of potatoes continued. Sweet corn for fresh market picking up momentum, snapbeans good supply. Tomatoes slow ripening. Tart cherry harvest completed. Summer apple, early peach picking continues.

**PUERTO RICO:** Rainfall activity increased; averaged 1.83 in or about 0.20 in above normal. Heaviest showers east and west interiors with up to 6.25 in for week eastern interior. A dry belt of less than 0.50 in extended across central portion from northcentral to southcentral coasts. Temperatures averaged 81° on coasts and 75° interior. Highest 95°, lowest 55°. Good progress cultivating, fertilizing sugarcane. Recent rains helped ratoon development. Coffee zones, generally good bean development except some drier zones in interior. Pasture zones good progress cultivating, fertilizing except parts southcentral, northeast where lack of rain has caused some pasture loss. Minor crop zones poor development north, central due poor crop moisture. Good abundance of plantains, bananas west.

**SOUTH CAROLINA:** Temperatures above normal south to normal elsewhere. Rainfall heaviest central and northeast. Cool front moved eastward across State Monday and Tuesday. Heavy thunderstorms preceded second front eastern portion. Scattered wind damage Friday Pee Dee area. Moisture conditions mostly adequate. Tobacco fair to good; 76% harvested, 74% 1972. Cotton fair to good; 96% squaring, 74% setting bolls, 1% bolls opening; 92%, 74%, 4% respectively 1972. Corn good; all silked, 79% dough stage, 25% mature; 97%, 76%, 47% respectively 1972. Soybeans good to excellent. Peanuts, lespedeza, pastures good. Peaches good; 78% harvested, 80% 1972. Remaining harvest concentrated in Piedmont. Grapes fair to good. Watermelons fair; 88% harvested, 84% 1972.

**SOUTH DAKOTA:** Cool temperatures first of week, low to mid-80's, upper 90's and lower 100's by weekend, weekly averages slightly subnormal. Only a few isolated showers--near drought conditions continue: Northeast more than 5.00 in below seasonal average; short 2.00 to 5.00 in southeast, central and west. Winter wheat harvest virtually complete, normal 91%, 1972 66%. Rye harvest 95% complete, ahead of normal and 1972. Spring grain harvest nearing completion. Barley 89% complete, normal 70%, 1972 38%. Oats 85% harvested, normal 65%, 1972 33%. Spring wheat 70% combined, normal 32%, 1972 13%. Row crop maturity ahead of normal. Corn 80% silked. Soybeans 90% in bloom or past, 38% podded. Sorghum 36% headed, normal 35%, 1972 12%. Flaxseed 38% ripe, normal 24%, 1972 18%; flax 10% harvested, well ahead of 1972 and normal. Wild hay harvest 79% complete, normal 67%. Second cutting alfalfa only 50% complete, 20 points below normal. Hay yields subnormal and supplies short many areas. Row crops and pastures need more rain. Livestock generally good. Pastures becoming short, some feeding hay to supplement grass.

**TENNESSEE:** General rainfall statewide, averaged about 0.75 in. Temperatures 3° to 5° subnormal. General rains favored growth of hay, pastures, and all row crops except tobacco. The tobacco crop, which has been in poor condition, suffered further deterioration due to heavy rains -- particularly in important eastern burley counties. Corn 33% in dough stage, normal 50%; 5% dented, normal 20%. Cotton crop developed well consider-

ing its late start, about 50% of plants have set bolls. Soybean crop 15% set pods, with another 40% blooming; normal 20% setting pods, 50% blooming. Both pastures and hay meadows excellent; however, rains hampered harvesting and curing of hay. Lespedeza hay 20% harvested.

**TEXAS:** Cool Canadian air brought unseasonably mild temperatures and above normal rainfall. Temperatures 11° subnormal west of the Pecos and readings averaged 7° to 9° subnormal over much of north and central. Hot temperatures in upper 90's extreme south became mild over weekend as cool air pushed into Gulf. Rains exceeding 1.00 in fell over large areas: 2.00 to 3.00 in soaked Hill country west of San Antonio and areas east and southeast. More than 4.00 in fell at Houston and Galveston. Sorghum harvest gained momentum central, near complete south. Cotton harvest early stages Lower Rio Grande Valley, heavy defoliation in preparation for general harvest. Rice harvest lagged. Second crop rice prospects poor. Peanut harvest behind south. Rains revived dryland crop prospects Cross-Timbers area. Major crops percent harvested: cotton 0, 1972 2; corn 1, 1972 6; sorghum 21, 1972 32; peanuts 1, 1972 9; rice 5, 1972 50. High Plains: Potato digging remained active. Onion harvest neared completion. Cucumber picking continued. Trans-Pecos area: Pecos cantaloupes continued move to market. North Texas: Tomato supplies started seasonal decline. Watermelon and cantaloupe harvest remained active. Central and East Texas: Watermelon harvest continued. Tomato supplies declining. Coastal Bend: Land preparation for fall vegetables. San Antonio-Winter Garden area: Onion harvest complete. Seeding fall cucumbers started. Land prepared for fall vegetables. Lower Rio Grande Valley: Land preparation, planting fall vegetables. Peach harvest near complete most areas. Citrus trees remain above average from timely rains. Fruit set generally good, above average quality. Rains revived ranges, replenished stockwater in low plains, Cross-Timbers. Ranges generally excellent statewide.

**UTAH:** Few scattered showers and thunderstorms throughout week. Locally moderate to heavy accumulation. Temperatures generally near normal but locally 5° to 10° below in heavier shower areas. Accumulated growing degree days now above normal except extreme southeast. Outlook for production most crops continues very favorable but crop development and harvests lagging behind usual because of cold, late spring. Winter wheat 30% harvested, 80% 1972. Second crop alfalfa hay 45% harvested, 55% 1972. Virtually no spring grains harvested. Only 45% sour cherries, 75% apricots picked. Normally picking would be nearly complete. Feed supplies dryland ranges, pastures excellent, perhaps best ever.

**VIRGINIA:** Showers and thunderstorms near midweek. Totals averaged 1.40 in, ranged 0.9 in north and southwest to 2.20 in southeast. Temperatures near normal. Extremes -- 93°, John H. Kerr dam; 52°, Hot Springs. Fieldwork suitable 3.7 days. Topsoil moisture 64% adequate, 19% surplus, 17% short. Southwest wettest, Tidewater driest. Pulling, curing flue-cured tobacco, 14% harvested, 1972 10%. Topping, suckering dark-fired. Rain improved Piedmont outlook, but continued rain and cool weather southwest held back burley. Peanut leafspot heavy some fields but crop growth very good. Sprayed soybeans, cultivated late crop. Rain helped Piedmont corn.

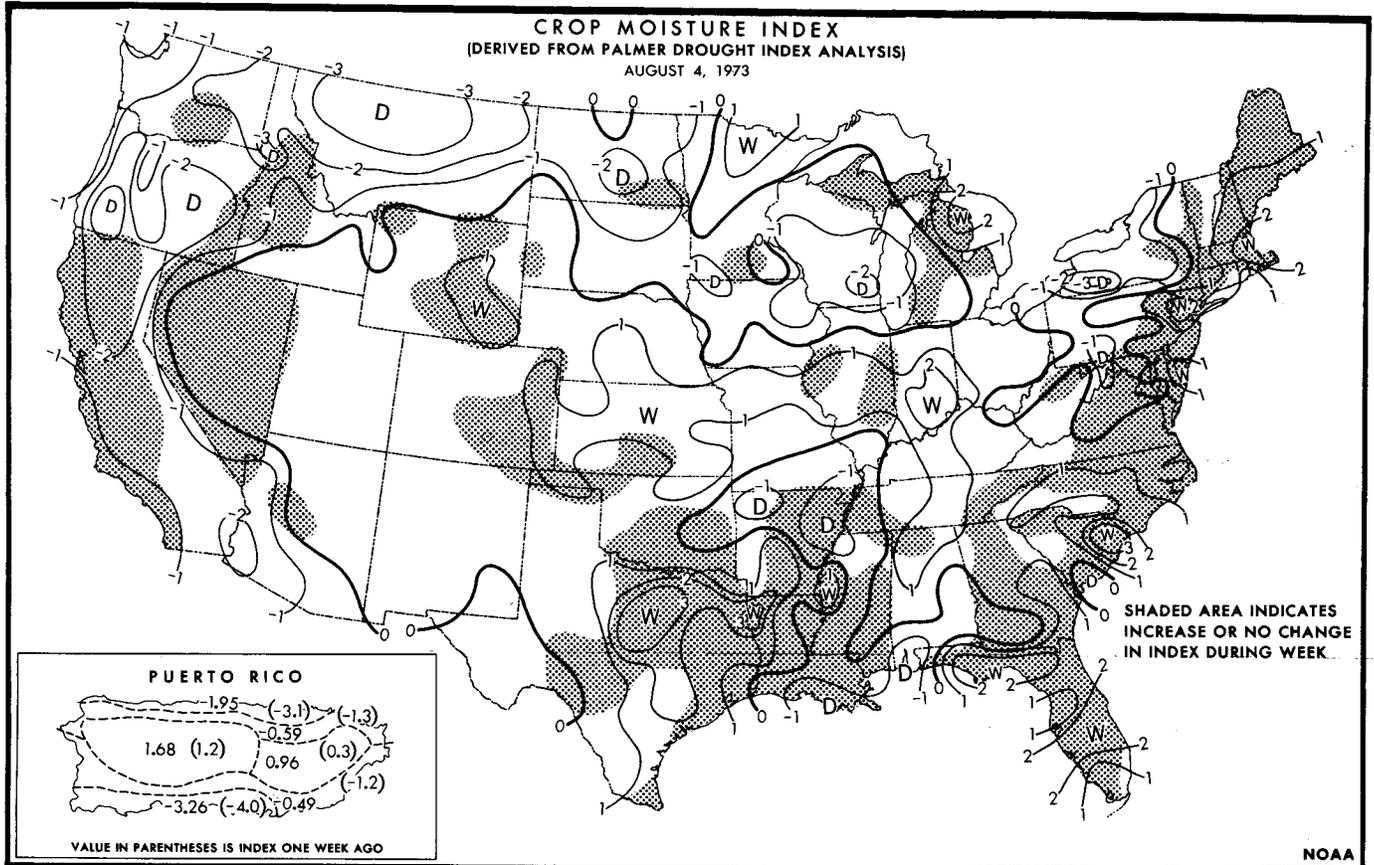
Japanese beetle numbers up. Picked peaches and early apples. Pastures improved slightly. Clipped pastures and made hay when weather permitted. Harvested fresh market and processing tomatoes. Dug Irish potatoes on Eastern Shore.

**WASHINGTON:** West: Temperatures 4° above normal, no rain. Green pea harvest wound down, yields near normal. Early sweet and silage corn fields tasseling. Harvest other vegetables continued. Raspberry harvest complete most areas, subnormal yields. Blueberry harvest in progress. Most hay harvested. Feed scarce, demand high. Pastures, vegetables, fruit suffering moisture stress. All available irrigation being used. East: Temperatures 5° above normal, zero rain. Harvest peaches, pears, early apples underway. Hot weather aggravated orchard mite control. Drought injury evident in few orchards. Potato harvest underway. Demand for irrigation water high. Harvest barley, wheat, peas, lentils underway, variable yields reported with southern areas receiving most satisfactory yields. Grass seed harvest generally done, yield subnormal. Feed supplies critically short, hay demand high. Pastures very dry, supplemental feeding underway. Fire danger high.

**WEST VIRGINIA:** Temperatures warm beginning, cooling off midweek. Averaged slightly subnormal, except eastern panhandle slightly above. Extremes: 93°, Romney; 47° Canaan Valley. Precipitation mostly light showers Tuesday and Wednesday. Fieldwork favorable 4 days. Mostly hay harvesting, clipping pastures and cutting weeds and grass. Combining small grains active, but hampered by showers, heavy fog and dew. Soil moisture 74% adequate, 18% surplus, few scattered areas indicate shortage. Wheat, barley harvest nearing completion, oats beginning. Corn mostly in silk or earlier stages, continued good development. Tobacco only fair. Second crop hay and pastures good to excellent. Cattle, good condition -- prices too high for farmers to eat.

**WISCONSIN:** Temperatures 3° subnormal. Cool midweek but rapid warming weekend. Rainfall sparse. Soil moisture remains 70% short, 30% adequate. Driest in south and east. Crops need more moisture. Early corn good but late corn tasseling on short stalks. Corn 45% silked, 1972 60%, normal 45%. Oat harvest proceeding south and west, 15% harvested, 1972 7%, normal 25%. Early oats yielding well, late oats have light kernels and short straw. Winter wheat, rye, early barley producing good yields. Second crop hay 30% harvested, 1972 and normal 25%. Second crop mostly short, some pastured or green-chopped for feed because regular pastures have declined sharply. Soybean growth good, could use rain for pod set. Tobacco needs rain. Pea harvest about done, yields poor. Harvest continues for early potatoes, snapbeans, cucumbers. Sweet corn harvest to begin soon. Early apples being picked, crop down from 1972. Home gardens doing well.

**WYOMING:** Eastern half continued slightly cooler than normal by 2° to 6° and also received greatest precipitation. Western half fairly dry with near normal temperatures. Highs generally in mid to upper 90's north and upper 80's elsewhere. Extremes: 98°, Colony; 35°, Big Piney. Winter wheat 45% harvested. Barley, spring wheat and oats maturing. Malting barley harvest started. Second crop alfalfa 30% harvested, 40% of other hay harvested. Corn 55% tasseled. Row crops fair to good.



**SHADED AREAS:** Index increased or did not change last week

Index

- Above 3.0 Excessively wet, some fields flooded
- 2.0 to 3.0 Too wet, some standing water
- 1.0 to 2.0 Prospects good, some fields too wet
- 0 to 1.0 Moisture adequate for present normal needs
- 0 to -1.0 Prospects improved, but rain still needed
- 1.0 to -2.0 Some improvement, but still too dry
- 2.0 to -3.0 Drought eased, but still serious
- 3.0 to -4.0 Drought continues, rain urgently needed
- Below -4.0 Not enough rain, still extremely dry

**UNSHADED AREAS:** Index decreased last week

Index

- Above 3.0 Some drying, but still excessively wet
- 2.0 to 3.0 More drying weather needed, work delayed
- 1.0 to 2.0 Favorable, except still too wet in spots
- 0 to 1.0 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 near ruin

The map gives a general picture of how wet or dry the Nation was last week. It shows areas where abnormal wetness or dryness have hindered crops and areas where moisture conditions have favored them.

The lines show the crop-moisture situation according to an index computed from values of temperature and precipitation by areas...350 climatological divisions, which correspond roughly to SRS's crop reporting districts. Previous weekly computations of soil moisture account for the effects of prior weather.

Shaded areas are those where precipitation increased the index last week or where soils did not dry. Unshaded areas dried last week.

The centers of wet or dry areas are marked: W=wet; D=dry. The map lines mark off crop situations. Use the legend to interpret.

Local variations caused by isolated rain or by soil differences are not shown. While shallow rooted crops in poor soils may suffer more than the map shows, conditions may be better where soils are good. Also, legends apply to growing rather than mature plants. Any map interpretation must consider both the growth stage and moisture status and trend. In irrigated regions, the index values reflect only departures from ordinary irrigation requirements.

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