

# Weekly Weather & Crop Bulletin

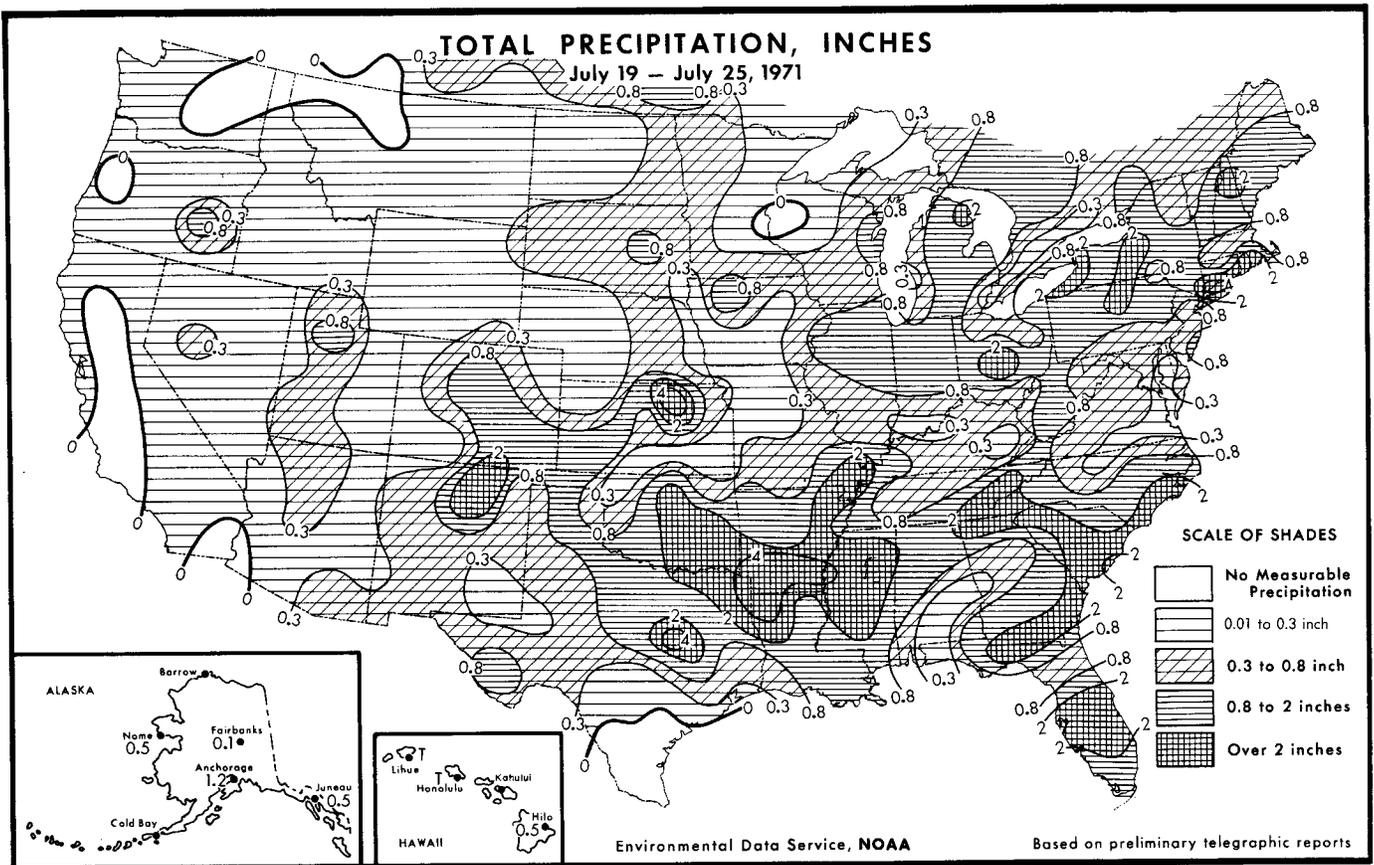
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Edited by Lucius W. Dye

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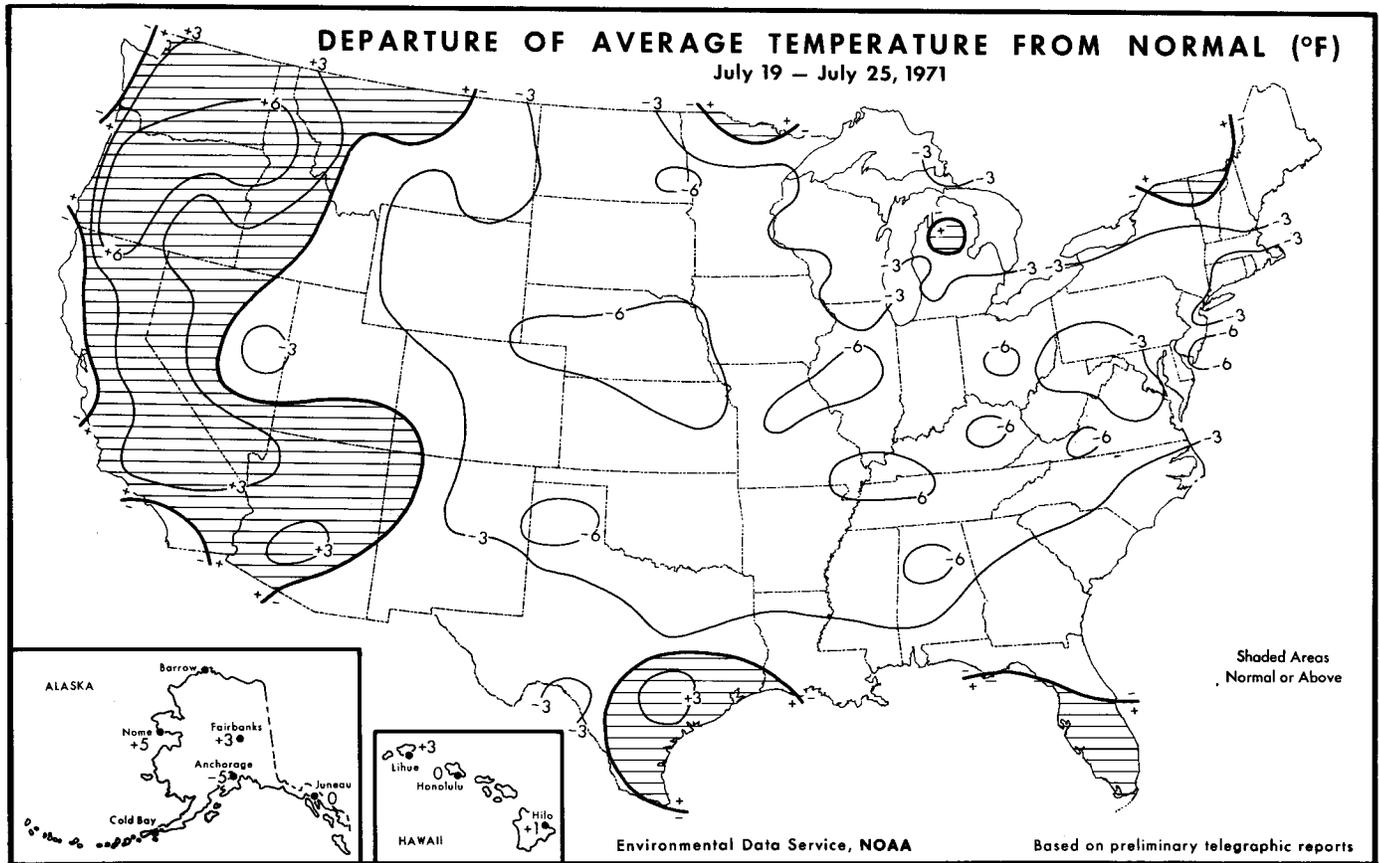


## NATIONAL WEATHER SUMMARY

**HIGHLIGHTS:** High temperatures prevailed in the Far West and along the Gulf of Mexico. The Northeast was mostly cool and comfortable. Thunderstorms were widespread over the Central and East.

**PRECIPITATION:** A large cool High covered much of mid-America early in the week. A front stretched from the northern Atlantic States to the southern Great Plains. It was the battle line which marked the leading edge of the cool dry air which pushed in from the North to replace the retreating warm humid air that lay over the South. A line of showers and thunderstorms occurred along the front. Some of the thunderstorms were accompanied by torrential downpours, strong gusty winds, or hail. A few tornadoes dotted the open country in Ohio, Louisiana, and Georgia. Bridge-

port, Conn., received 5.95 inches of rain in the 24-hour period ending Tuesday morning. Light scattered precipitation occurred in the Rocky Mountains Wednesday, in the Great Plains Thursday, from northeastern Texas to the Great Lakes Friday, and from Louisiana to New England Saturday. Most of the weekend showers occurred in the vicinity of a slow moving cold front that stretched from the Northeast to the southern Great Plains. At times, lines of thunderstorms marked the position of the front. Some of the thunderstorms produced hail and strong winds. Other thunderstorms dotted the warm, humid Southland. Weekly precipitation totals were generally less than 0.50 inch over the western half of the Nation and ranged widely from 1.00 inch to locally 5.00 to 6.00 inches or more over the eastern half.



**TEMPERATURE:** Hot sunny weather prevailed over the western States early in the week. On Tuesday, the mercury reached 107° at Yakima, Wash., and 108° at Red Bluff, Calif., 100° or higher over the Southwestern Deserts and the 90's across the South to the Atlantic Ocean. By Wednesday afternoon, the temperatures in parts of the Deserts had gone above 110°. The heat in the Southwest was especially oppressive because of the unusually high relative humidity in the area.

In sharp contrast to the hot weather in the Far West and across the South, weather over the rest of the Nation was quite comfortable. A large High covered the central Great Plains. It brought cooler weather to a large area extending from the Rocky Mountains to the Appalachians. Afternoon temperatures remained in the 70's and 80's from the eastern edge of the northern and central Great Plains to the northern and middle Atlantic coast. The maximum temperature at

Amarillo, Tex., Monday afternoon was 71°, this being 26° cooler than Sunday's maximum, 97°. Early morning minimums dropped to the 50's over the northern border States. Warm humid weather continued in the Southeast with maximums mostly in the 90's, but dropping to the 80's by Wednesday. The weekend brought a continuation of warm weather to the Far West with maximums in the 90's at most locations but reaching 100° at spots. The Southwestern Deserts warmed to 108° to 112° or higher each afternoon. Afternoon readings in the 90's were common over the Deep South where high humidity added to the discomfort of the citizens. The Northeast continued relatively cool and pleasant. Weekly average temperatures were above normal from the Pacific coast to the Great Basin and in southern Florida. The rest of the Nation averaged cooler than normal.

L. W. Dye

## NATIONAL AGRICULTURAL SUMMARY

**AGRICULTURAL HIGHLIGHTS:** Rain helps dryland crops in Texas and New Mexico. \* Wheat harvest moves into Dakotas. Corn crop making good progress.

**SMALL GRAINS:** Winter wheat harvest was active in the Pacific Northwest States as growers were getting their combines limbered up. In the Plains States, Nebraska growers had much of their crop in the bin and South Dakota growers were well along in getting their crop in. Much of the crop had been combined in the North Central States; Indiana farmers had 95% of their crop finished as did Ohio growers.

Oat harvest, nearing completion in Illinois, was well past halfway in the eastern North Central States and was active in the Eastern States. Barley harvest was also active in many northern States. Growers had finished in Pennsylvania and were nearly through in West Virginia.

**CORN:** The crop was excellent in Illinois and made good growth elsewhere in the Corn Belt. About 2/3 of the crop is in the silk stage except in Illinois where it is 95 percent silked and well into the dough stage. Soil moisture supplies were adequate as showers fell during the week, however, shortages were reported in many areas. In contrast, some flooding was noted in southeastern Illinois. The crop will need additional moisture to continue its good progress.

Elsewhere the crop was making good progress. Moisture was needed in Virginia, Maryland and Delaware. Weeds and grass were a particular problem in Georgia as muddy fields kept cultivators from getting into fields.

Southern corn leaf blight infection continued to increase in most States as conditions remained favorable for its spread.

**SOYBEANS:** The crop remains good in the major producing areas. In the Corn Belt, growth was very good and somewhat ahead of last year. About half of the crop had podded in the eastern Corn Belt while development was slower in the western portion.

The crop responded nicely to rain in Kentucky and North Carolina. Condition of beans was good. Weeds were a problem in Georgia as wet fields prevented growers from cultivating.

**COTTON:** Warm weather pushed the crop along in California where it was growing fast and expediting a heavy bloom. In Arizona, development was satisfactory as bolls were setting. In the Yuma area first bolls were beginning to open. The crop was only fair to good in the southern area. Most of the fields were squared in Louisiana and considerable bloom was present. Insect activity was building and control was active but showers prevented farmers from their following their spray programs.

**OTHER CROPS:** Harvest of flue-cured tobacco was active in North Carolina but Border Belt harvest was slowed by showers. Georgia harvest was about 1/2 done and was increasing in Virginia. The Kentucky crop experienced locally serious hail damage. Over 10 percent of the crop was in the bloom stage. Potato digging was active in Washington and Oregon while movement from Kern County California was slow. In the Northeast bloom was heavy in Maine and New York where growers are looking for a very good crop. Condition of the peanut crop remains good. Virginia growers were following an active weed control program. Rice in Louisiana had some lodging in mature fields. Harvest was light as growers were testing maturity of the crop.

**FRUITS AND NUTS:** Peach harvest continued active in the producing areas throughout the Nation but is winding down in the Southern regions. Tart cherry harvest was picking up momentum as more growers found blocks of fruit to pick. Apricot harvest was nearly over in California but still active in Washington. Fresh fruit movement was drastically reduced by the railroad strike. Harvest of early summer apples increased in the southern belt of the country.

Citrus trees in Florida were responding well to excellent moisture condition as new growth was heavy. Little, if any, new crop fruit splitting was noted. Light late bloom was noted. Picking of Valencia oranges and lemons continued in California and quality of the fruit was good.

**Vegetables:** Supplies of vegetables were good in major producing areas. California shipments to major eastern markets were dependent upon the rail strike. Peas for processing harvest continued active in the New England States and moved to higher elevations in Oregon. Lettuce movement was increasing in New York while supplies in California were lighter. Celery harvest was normal in the Coastal area.

**PASTURES AND LIVESTOCK:** Pastures over much of the eastern half of the United States provided good grazing for livestock. Pockets of poor forage supplies caused by moisture shortages were noted in New Jersey, Delaware, New England, Michigan, and Wisconsin. Showers provided needed moisture for growth in the Northern Great Plains and below normal temperatures also helped to cut moisture requirements.

In the Southwest pasture condition remained poor. Livestock were being sustained by supplemental feeding and water hauling. Death losses were running slightly higher than normal in Arizona. Pastures in New Mexico and Texas started to respond to good moisture supplies and should help ease the short feed supply situation.

Many vaccinations for equine encephalitis which threatens the horse population in the southwest were given during the week.

Phillip L. Doctor  
Agricultural Statistician

'Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., July 25, 1971

| States and Stations     | Temperature °F |            | Precipitation Inches |            | States and Stations     | Temperature °F |            | Precipitation Inches |            | States and Stations    | Temperature °F |            | Precipitation Inches |            |
|-------------------------|----------------|------------|----------------------|------------|-------------------------|----------------|------------|----------------------|------------|------------------------|----------------|------------|----------------------|------------|
|                         | Average        | Departure* | Total                | Departure* |                         | Average        | Departure* | Total                | Departure* |                        | Average        | Departure* | Total                | Departure* |
| ALA.Birmingham . . .    | 75             | - 7        | 1.9                  | + .7       | New Orleans . . .       | 81             | - 1        | 1.3                  | - .2       | OKLA.Okla. City . . .  | 78             | - 5        | 1.1                  | + .6       |
| Mobile . . .            | 82             | - 1        | .7                   | -1.7       | Shreveport . . .        | 81             | - 3        | 4.5                  | +3.6       | Tulsa . . .            | 78             | - 5        | .8                   | + .2       |
| Montgomery . . .        | 79             | - 3        | .1                   | -1.1       | MAINE.Caribou . . .     | 65             | - 1        | .6                   | - .3       | OREG.Astoria . . .     | 61             | 0          | T                    | - .3       |
| ALASKA.Anchorage . . .  | 52             | - 5        | 1.2                  | + .8       | Portland . . .          | 67             | - 2        | 1.1                  | + .5       | Burns . . .            | 73             | + 2        | 1.0                  | + .9       |
| Barrow . . .            | --             | --         | --                   | --         | MD.Baltimore . . .      | 75             | - 2        | .4                   | - .6       | Medford . . .          | 80             | + 7        | .1                   | + .1       |
| Fairbanks . . .         | 62             | + 3        | .1                   | - .4       | MASS.Boston . . .       | 70             | - 5        | .8                   | + .2       | Pendleton . . .        | 83             | + 8        | T                    | 0          |
| Juneau . . .            | 56             | 0          | .5                   | - .6       | Nantucket . . .         | 64             | --         | .7                   | --         | Portland . . .         | 75             | + 7        | T                    | - .1       |
| Nome . . .              | 55             | + 5        | .5                   | - .1       | MICH.Alpena . . .       | 65             | - 2        | 3.0                  | +2.4       | Salem . . .            | 74             | + 7        | 0                    | 0          |
| ARIZ.Flagstaff . . .    | 68             | + 2        | .7                   | - 0        | Detroit . . .           | 70             | - 5        | .2                   | - .4       | PA.Allentown . . .     | 71             | + 4        | .8                   | - .4       |
| Phoenix . . .           | 95             | + 5        | .1                   | - .1       | Flint . . .             | 68             | - 2        | .9                   | + .2       | Erie . . .             | 67             | - 5        | 2.2                  | +1.4       |
| Tucson . . .            | 86             | - 1        | .5                   | 0          | Grand Rapids . . .      | 71             | - 1        | .4                   | - .2       | Harrisburg . . .       | 74             | - 3        | .7                   | - .1       |
| Winslow . . .           | 82             | + 2        | 0                    | - .3       | Houghton Lake . . .     | 68             | + 1        | 1.5                  | + .9       | Philadelphia . . .     | 76             | 0          | .1                   | - .9       |
| Yuma . . .              | 95             | + 1        | 0                    | - .1       | Lansing . . .           | 68             | + 4        | 1.6                  | +1.0       | Pittsburgh . . .       | 70             | - 2        | .9                   | + .1       |
| ARK.Fort Smith . . .    | 78             | - 5        | 1.4                  | + .8       | Marquette . . .         | 65             | - 2        | .3                   | - .4       | Scranton . . .         | 69             | - 4        | 1.6                  | + .5       |
| Little Rock . . .       | 78             | - 4        | 1.3                  | + .5       | Muskegon . . .          | 68             | - 4        | .2                   | - .4       | R.I.Providence . . .   | 73             | 0          | 2.5                  | +1.9       |
| CALIF.Bakersfield . . . | 90             | + 5        | 0                    | 0          | S.Ste.Marie . . .       | 62             | - 3        | .6                   | + .1       | S.C.Charleston . . .   | 79             | - 2        | 1.4                  | - .5       |
| Eureka . . .            | 56             | - 1        | T                    | 0          | MINN.Duluth . . .       | 63             | - 4        | T                    | - .8       | Columbia . . .         | 80             | - 2        | 3.2                  | +1.7       |
| Fresno . . .            | 85             | + 3        | 0                    | 0          | Internatl Falls . . .   | 68             | + 1        | .3                   | - .5       | Greenville . . .       | 76             | - 4        | 2.1                  | + .8       |
| Los Angeles . . .       | 74             | 0          | 0                    | 0          | Minneapolis . . .       | 70             | - 3        | 0                    | - .7       | S.DAK.Aberdeen . . .   | 70             | - 4        | .5                   | 0          |
| Red Bluff . . .         | 87             | + 2        | 0                    | 0          | Rochester . . .         | 69             | - 4        | .3                   | - .5       | Huron . . .            | 72             | - 4        | .8                   | + .4       |
| San Diego . . .         | 69             | - 2        | T                    | 0          | St. Cloud . . .         | 68             | - 4        | T                    | - .7       | Rapid City . . .       | 70             | - 5        | .4                   | 0          |
| San Francisco . . .     | 62             | - 1        | T                    | 0          | MISS.Jackson . . .      | 79             | - 3        | 2.1                  | +1.0       | Sioux Falls . . .      | 70             | - 5        | .2                   | - .4       |
| Stockton . . .          | 82             | + 3        | 0                    | 0          | Meridian . . .          | 78             | - 4        | 1.8                  | + .4       | TENN.Chattanooga . . . | 76             | - 5        | 2.8                  | +1.6       |
| COLO.Denver . . .       | 69             | - 5        | 1.1                  | + .8       | MO.Columbia . . .       | 72             | - 7        | .1                   | - .6       | Knoxville . . .        | 74             | - 5        | 3.3                  | +2.1       |
| Grand Junction . . .    | 78             | - 1        | .1                   | - .1       | Kansas City . . .       | 77             | - 5        | .1                   | - .5       | Memphis . . .          | 77             | - 4        | 1.8                  | +1.0       |
| Pueblo . . .            | 72             | - 5        | 1.5                  | +1.1       | St. Louis . . .         | 74             | - 4        | .7                   | + .1       | Nashville . . .        | 74             | - 6        | .6                   | - .4       |
| CONN.Bridgeport . . .   | 72             | - 3        | 6.4                  | +5.5       | Springfield . . .       | 74             | - 5        | .3                   | - .5       | TEX.Abilene . . .      | 83             | 0          | 1.2                  | + .6       |
| Hartford . . .          | 72             | - 2        | .4                   | - .5       | MONT.Billings . . .     | 71             | - 5        | T                    | - .2       | Amarillo . . .         | 73             | - 8        | .9                   | + .4       |
| D.C.Washington . . .    | 77             | - 2        | .4                   | - .6       | Glasgow . . .           | 71             | - 1        | .2                   | - .1       | Austin . . .           | 88             | + 3        | T                    | - .4       |
| FLA.Apalachicola . . .  | 82             | 0          | .5                   | -1.4       | Great Falls . . .       | 72             | + 1        | 0                    | - .3       | Beaumont . . .         | 82             | 0          | .2                   | -1.2       |
| Ft. Myers . . .         | 80             | - 2        | 1.2                  | - .8       | Havre . . .             | 72             | + 1        | .1                   | - .1       | Brownsville . . .      | 85             | 0          | 0                    | - .4       |
| Jacksonville . . .      | 82             | - 1        | .6                   | -1.1       | Helena . . .            | 67             | - 3        | .1                   | - .1       | Corpus Christi . . .   | 87             | + 2        | 0                    | - .5       |
| Key West . . .          | 84             | 0          | 1.9                  | +1.0       | Kalispell . . .         | 70             | + 3        | 0                    | - .2       | Dallas . . .           | 82             | - 3        | 1.9                  | +1.5       |
| Lakeland . . .          | 81             | - 1        | 2.5                  | + .9       | Miles City . . .        | 74             | - 2        | T                    | - .3       | Del Rio . . .          | 83             | - 4        | .3                   | 0          |
| Miami . . .             | 83             | + 1        | 1.2                  | - .3       | Missoula . . .          | 74             | + 5        | T                    | - .2       | El Paso . . .          | 82             | 0          | .5                   | + .2       |
| Orlando . . .           | 83             | 0          | 3.9                  | +2.1       | NEBR.Grand Island . . . | 72             | - 6        | .3                   | - .2       | Fort Worth . . .       | 82             | - 4        | .9                   | + .5       |
| Tallahassee . . .       | 79             | - 2        | 3.0                  | +1.2       | Lincoln . . .           | 74             | - 7        | 1.5                  | + .8       | Galveston . . .        | 84             | + 1        | 0                    | -1.2       |
| Tampa . . .             | 82             | 0          | 2.4                  | + .5       | Norfolk . . .           | 71             | - 7        | .6                   | 0          | Houston . . .          | 85             | + 2        | .8                   | - .2       |
| GA.Atlanta . . .        | 76             | - 3        | .8                   | - .3       | North Platte . . .      | 70             | - 7        | .2                   | - .3       | Lubbock . . .          | 77             | - 3        | .4                   | - .1       |
| Augusta . . .           | 79             | - 2        | 1.0                  | 0          | Omaha . . .             | 71             | - 6        | T                    | - .8       | Midland . . .          | 81             | - 2        | T                    | - .4       |
| Macon . . .             | 81             | - 1        | 1.0                  | - .3       | Valentine . . .         | 72             | - 5        | .2                   | - .3       | San Angelo . . .       | 83             | - 2        | .4                   | + .1       |
| Savannah . . .          | 80             | - 2        | 2.6                  | +1.1       | NEV.Ely . . .           | 69             | 0          | .1                   | - .1       | San Antonio . . .      | 87             | + 3        | T                    | - .4       |
| HAWAII.Hilo . . .       | 77             | + 1        | .5                   | -1.9       | Las Vegas . . .         | 94             | + 4        | T                    | - .1       | Victoria . . .         | 87             | + 3        | 0                    | - .9       |
| Honolulu . . .          | 79             | 0          | T                    | - .1       | Reno . . .              | 74             | + 5        | T                    | 0          | Waco . . .             | 83             | - 3        | 6.5                  | +6.1       |
| Kahului . . .           | --             | --         | --                   | --         | Winnemucca . . .        | 75             | + 2        | T                    | - .1       | Wichita Falls . . .    | 82             | - 4        | 1.4                  | +1.0       |
| Lihue . . .             | 81             | + 3        | T                    | - .4       | N.H.Concord . . .       | 68             | - 2        | 1.1                  | + .4       | UTAH.Blanding . . .    | 74             | + 1        | .2                   | 0          |
| IDAHO.Boise . . .       | 80             | + 3        | .1                   | + .1       | N.J.Atlantic City . . . | 70             | - 6        | 1.3                  | + .4       | Salt Lake City . . .   | 78             | 0          | .9                   | - .8       |
| Lewiston . . .          | 82             | + 7        | .1                   | 0          | Trenton . . .           | 74             | - 3        | .7                   | - .2       | VT.Burlington . . .    | 70             | + 1        | .3                   | - .6       |
| Pocatello . . .         | 73             | - 1        | .3                   | + .2       | N.MEX.Albuquerque . . . | 76             | - 3        | .6                   | + .3       | VA.Lynchburg . . .     | 73             | - 3        | .3                   | - .7       |
| ILL.Cairo . . .         | 74             | - 7        | 2.6                  | +1.9       | Roswell . . .           | 79             | 0          | .2                   | - .2       | Norfolk . . .          | 75             | - 4        | .3                   | -1.1       |
| Chicago . . .           | 73             | - 4        | 1.9                  | +1.1       | N.Y.Albany . . .        | 68             | - 5        | .9                   | + .1       | Richmond . . .         | 75             | - 3        | .3                   | -1.1       |
| Moline . . .            | 71             | - 5        | 1.3                  | + .6       | Binghamton . . .        | 65             | - 4        | .8                   | 0          | Roanoke . . .          | 71             | - 6        | .1                   | - .9       |
| Peoria . . .            | 70             | - 7        | 1.2                  | + .4       | Buffalo . . .           | 68             | - 3        | 3.0                  | +2.5       | WASH.Colville . . .    | 74             | + 4        | 0                    | - .1       |
| Rockford . . .          | 72             | - 3        | 1.0                  | + .1       | New York . . .          | 75             | - 3        | .5                   | - .4       | Omak . . .             | 77             | + 5        | 0                    | 0          |
| Springfield . . .       | 71             | - 7        | .6                   | - .1       | Rochester . . .         | 69             | - 3        | 1.6                  | +1.0       | Quillayute . . .       | 59             | - 1        | T                    | - .5       |
| IND.Evansville . . .    | 75             | - 4        | .4                   | - .3       | Syracuse . . .          | 69             | - 4        | 2.4                  | +1.7       | Seattle-Tacoma . . .   | 69             | + 4        | T                    | - .1       |
| Fort Wayne . . .        | 70             | - 5        | 1.2                  | + .5       | N.C.Asheville . . .     | 70             | - 5        | 1.8                  | + .8       | Spokane . . .          | 78             | + 6        | 0                    | - .1       |
| Indianapolis . . .      | --             | --         | --                   | --         | Charlotte . . .         | 76             | - 4        | 1.0                  | - .2       | Walla Walla . . .      | 84             | + 6        | T                    | 0          |
| South Bend . . .        | 69             | - 5        | .7                   | - .1       | Greensboro . . .        | 74             | - 4        | .3                   | - .8       | Yakima . . .           | 78             | + 6        | 0                    | 0          |
| IOWA.Burlington . . .   | 72             | - 5        | .4                   | - .4       | Hatteras . . .          | 77             | - 2        | 1.4                  | - .2       | W.VA.Beckley . . .     | 67             | - 5        | --                   | --         |
| Des Moines . . .        | 74             | - 3        | .2                   | - .4       | Raleigh . . .           | 75             | - 3        | .8                   | - .6       | Charleston . . .       | 71             | - 4        | 1.1                  | - .3       |
| Dubuque . . .           | 70             | - 3        | .5                   | - .3       | Wilmington . . .        | 78             | - 2        | 2.8                  | + .9       | Huntington . . .       | --             | --         | 1.1                  | - .1       |
| Sioux City . . .        | 72             | - 6        | .2                   | - .5       | N.DAK.Bismarck . . .    | 69             | - 4        | T                    | - .4       | Parkersburg . . .      | 73             | - 3        | .5                   | - .4       |
| KANS.Concordia . . .    | 73             | - 8        | 5.4                  | +4.8       | Fargo . . .             | 66             | - 6        | .5                   | - .1       | WIS.Green Bay . . .    | 70             | - 1        | 1.0                  | + .4       |
| Dodge City . . .        | 76             | - 5        | 1.2                  | + .7       | Williston . . .         | 68             | - 4        | T                    | - .3       | La Crosse . . .        | 70             | - 5        | .7                   | - .1       |
| Goodland . . .          | 74             | - 4        | .2                   | - .4       | OHIO.Akron-Canton . . . | 70             | - 3        | .8                   | - .1       | Madison . . .          | 72             | 0          | .4                   | - .3       |
| Topeka . . .            | 74             | - 7        | .5                   | - .3       | Cincinnati . . .        | 73             | - 4        | .6                   | - .2       | Milwaukee . . .        | 69             | 0          | .7                   | + .1       |
| Wichita . . .           | 78             | - 4        | .2                   | - .6       | Cleveland . . .         | 69             | - 3        | 1.8                  | +1.1       | WYO.Casper . . .       | 68             | - 5        | .1                   | - .1       |
| KY.Lexington . . .      | 72             | - 6        | .7                   | - .2       | Columbus . . .          | 69             | - 6        | 2.3                  | +1.4       | Cheyenne . . .         | 65             | - 6        | .6                   | + .2       |
| Louisville . . .        | 73             | - 5        | 1.1                  | - .6       | Dayton . . .            | 73             | - 2        | 1.6                  | + .8       | Lander . . .           | 68             | - 4        | .1                   | - .1       |
| LA.Baton Rouge . . .    | 81             | - 2        | .6                   | + .5       | Toledo . . .            | 68             | - 5        | .7                   | + .2       | Sheridan . . .         | 69             | - 3        | .1                   | - .1       |
| Lake Charles . . .      | 83             | 0          | .4                   | -1.2       | Youngstown . . .        | 68             | - 3        | 1.3                  | + .3       | P.R. San Juan . . .    | 83             | + 3        | .2                   | - .8       |

\* Departures are from 30-year means (1931-60). Based on preliminary reports

## CONDENSED STATE SUMMARIES

These summaries provide brief descriptions of condition and activities important on a national scale. Detailed reports of crop and weather conditions during the growing season are contained in State issues of Weekly Weather and Crop Bulletins published by field offices of the Statistical Reporting Service, U.S.D.A. in cooperation with NOAA Climatologists

**ALABAMA:** Scattered showers early in period followed by sunny and mild weather Wednesday through Friday. Scattered showers again on Saturday becoming general on Sunday. Cooler than usual due to cloudiness and unseasonably cool air. Precipitation heavy north and light to moderate south. Crops made satisfactory development. Cotton fruited heavily with 69% setting bolls, compared with 71% a year ago. Corn prospects remain very promising, 44% of crop in or past dough stage. Harvest of earliest field began in Baldwin County. DEW line reports no Southern corn leaf blight of any consequence. Soybeans in various stages of development with 1/4 crop blooming. Most peanuts pegging. Leaf spot on increase with control measures stepped up. Vegetables and melons moving to market in good volume. Early summer Irish potato harvest lagging. Pastures generally adequate and livestock mostly in good condition.

**ALASKA:** The Tanana Valley continued to be warm except for an isolated low temperature of 37° in the Fairbanks area. Cooler weather elsewhere. Precipitation below average except for isolated locations. Kodiak with almost 6.00 inches for the week received almost 5.00 inches in less than 48 hours. Season to date growing degree days and precipitation are below normal. Topsoil moisture mostly adequate. Silage cutting underway in Matanuska and Tanana Valley. Height of grain varies from 3 inches on lower Kenai Peninsula to about 18 inches in Tanana Valley. Approximately 3/4 of oats and barley headed. Several acres of hay harvested awaiting drying weather for baling. Hay and feed production below average due to late spring and generally cool summer. Light frost scattered areas last week. Minor damage indicated.

**ARIZONA:** Scattered thundershower activity reached most of State with exception of Yuma County. Temperatures averaged slightly above normal most sections. Strong winds and blowing dust in agricultural sections in southern part of State. Arizona's cotton continues satisfactory development. All Yuma fields setting bolls. First bolls beginning to open. Boll set continues favorably in central area. Fields southeast, 40% setting bolls. Some hail damage reported southeast. Spraying for pink bollworm Yuma and central areas. Sorghum in good condition. In Yuma lesser corn-stalk borers causing problems. Safflower harvest full swing. Sugarbeet harvest nearing completion. Alfalfa hay harvest continues normally, wet weather damaged hay southeast. Melon and tomato harvest completed Yuma area. Cantaloupe and watermelon slowing central Arizona areas. Potato harvest complete. Citrus groves good condition. Rain central areas, growth increased. Thrips, mites caused problems Yuma area. Grape harvest completed. Ranges remain in generally poor condition and continue to supply less than adequate amounts of feed. Livestock sustained by supplemental feeding and water hauling. Death losses slightly higher than normal.

**ARKANSAS:** Weekly mean temperatures 5° below normal, from low 70's northwest to upper 70's extreme south. Daily extremes 48° to 99°. Heavy thundershowers over weekend averaged 1.00 inch rainfall over the State. Over 3.00 inches

southern 1/3 and northeast. Heaviest 9.38 inches at Camden. Dry weather slowed crop development. Thundershower localized relief at weekend. Soil moisture still short most areas except where thundershowers occurred and extreme northeast delta and south-central Arkansas. Cotton development mostly good, but slowed by dry weather. Some irrigated. Fruiting active, some shedding small bolls. Older cotton showing signs of cutting out, driest areas. Insect control measures started as population increased. Rice good progress--earlier varieties heading. Mid-season fertilization approaching completion. Soybeans need moisture, particularly late plantings. Irrigating where possible. Early beans blooming. Corn and sorghum slowed, dry weather. Early corn maturing. Southern corn leaf blight confirmed in Calhoun County, total now 3 counties. Earliest sorghum maturing, most acreage heading to filling. Sorghum midge treatment started. Haying good progress; needs more moisture for root growth. Yields cut in many localities. Apple and peach harvest active. Grape prospects good. Tomatoes completed in southern area; harvest active central and west. Cucumber volume declining, okra and watermelon increasing. Pasture short to very short except eastern delta and south-central. Some feeding hay. Livestock gains slowing--some marketing because of dry pastures. Vaccinating horses active at week's end.

**CALIFORNIA:** Average temperatures 2° to 6° above normal except along immediate coast. Scattered light showers, thundershowers mountain areas south of Tehachapis, Desert, Sierras, Cascades. Harvest alfalfa seed started Imperial Valley. Safflower harvest increased Imperial Valley; started San Joaquin Valley. Digging sugar beets past peak Imperial Valley, increasing San Joaquin Valley. Cotton growing fast, blooming heavily. Milo harvest increasing Imperial Valley. Railroad strike drastically cut movement fresh fruit. Harvest Gravenstein apples increasing Sebastopol; light crop expected but fruit sizes and quality good. Apricot harvest drawing to close. Supply exceeds demand; considerable volume will not be harvested. Plums, nectarines, and peaches continue to be shipped; quality good. Harvest Clingstone peaches increasing. Picking Bartlett pears underway, Sacramento River Delta and Upper Sacramento Valley. Olive crop developing normally but set spotty. Prune crop developing normally. Almond crop looks good; hulls starting split early varieties. Walnuts developing normally; some sun damage. Harvest grapes increasing; Thompson and Perlettes being picked Kern district, wine varieties look good. Valencia oranges and lemons continue; good fruit quality. Harvest summer grapefruit and Hass avocados continues. High temperatures continue to dry ranges. Grazing stock good condition irrigated pastures, high elevation meadows, grain stubble. Light supplemental feeding lower San Joaquin Valley. Fire danger rising. Stock water reserves adequate for summer. Daily beef gains, milk, egg production levels off due hot weather. Vegetable shipments this week dependent rail strike. Broccoli, cauliflower Coast areas light. Cantaloupes Kern and Huron past peak; Firebaugh-Mendota increasing. Central Coast, carrot and celery harvest normal. Sweet corn harvest active all areas. Blythe honeydew harvest complete; San

Joaquin and Sacramento Valleys starting this week. Salinas and Santa Maria lettuce lighter this week. Stockton onion practically complete. Santa Clara area beginning. Kern potato digging slow; other areas underway. Strawberry harvest continues active Central Coast; large volume going to processors. Pink tomatoes Cutler and Arosi past peak. Merced area active; other major areas starting soon. Central Valley watermelon harvesting active.

**COLORADO:** Cooler all areas. Temperatures averaged near normal west, a little below, east. Frequent thunderstorm activity. Precipitation totals 1.00 to 3.00 inches in central mountains and southeast, light or none northeast and lower western valleys. Some local flooding and hail. Rain slowed wheat harvest. Condition most field crops good to excellent. Corn root worms and mites evident local areas northeast and west. Surface soil moisture improved but still generally short. Hail damage to crops mostly light. Winter wheat 96% ripe, 88% harvested. Winter barley 94% ripe, 77% harvested. Spring barley 49% harvested. Oat harvest 48% completed. Corn 91% laid by, 26% tasseled. Sorghum conditions good, few fields heading. Second cut alfalfa 1/3 complete. Late summer potato harvest underway. Condition fruit crops good. Peach harvest underway, western slope. Lettuce, onion harvest good progress. Pasture and range condition fair. Moisture needed most areas.

**FLORIDA:** Temperatures averaged near normal with highs in mid-90's except lower along coast. Rainfall averaged 1.50 inches to 2.00 inches most sections except 0.50 inch along lower east coast and Keys. Late afternoon and evening showers and thunderstorms numerous throughout Florida accompanied by strong gusty winds. Heaviest rainfall for week was 4.68 inches at Clewiston, 4.18 inches at Ft. Drum, and 3.47 inches at Melrose. Field crop prospects are for good yields. Flue-cured tobacco harvest continues. Peanuts begin after mid-August. Corn blight limited and not cutting production to any extent. Pastures and livestock mostly good. Wet weather delayed hay harvest. Citrus trees in excellent condition. New growth heavy. Daily rains providing excellent moisture conditions. Practically no new crop fruit splitting noted. Some scattered light late bloom still occurring. Summer vegetables for local market continue. Land preparation for fall crops active. Planting celery, sweet corn, cucumbers, and tomatoes expected underway in early August.

**GEORGIA:** Shower activity decreased most sections early in week but increased in frequency and intensity latter part. Amounts ranged from less than 0.50 inch most of southwest and other scattered areas to locally over 6.00 inches. Excessive rains some areas Friday night and Saturday caused flash flooding and damage to roads and other property. Canton, Cherokee County, had 6.14 inches in 12-hour period ending Saturday morning. Daytime temperatures continued below July normals under mostly cloudy skies while minimums were near normal. Averages ranged from 1° to 3° below normal. Weather ideal for vegetative growth. Soil moisture ample to excessive. All field activities, haying, insect and disease control measures and cultivation hampered by wet fields and frequent showers. Weeds and grass particularly troublesome in late-planted soybeans and sorghums. Peach harvest 3/4, tobacco almost 1/2 completed, much later than normal. Corn, cotton, peanuts, and soybeans best in recent years. Rapid growth of cotton not good for best fruit

set. Some hay crops overly mature. Pastures furnishing ample grazing. Cattle good. Most of corn crop sufficiently advanced so that blight will be no problem this year. Watermelon and cantaloupe harvest nearing completion in major areas. Mountain vegetables nearing peak.

**HAWAII:** Weather ideal for all farm operations. Showers light, confined to mountain area. Progress of crops fair to good with heavy irrigation. Pineapple harvesting at seasonal peak. Sugarcane production to date 8% below same period last year. Vegetable supplies adequate. Banana supplies light but papayas ample. Pastures drying. Cattle fair to good condition.

**IDAHO:** Temperatures north averaged 4° to 8° above normal for week; elsewhere near normal. Precipitation was scattered and variable in thundershowers. Aberdeen, east portion, recorded largest total reported with 0.49 inch, 0.48 inch of which fell on Wednesday. Elsewhere totals ranged from zero to 0.36 inch at Parma, southwest and at Fairfield, south-central mountains. Crops making excellent progress. Winter wheat harvest just started southwest. Hay harvesting weather ideal. Grasshopper control programs organized in local areas south portion of State. Seed corn detasseling underway. Soil moisture adequate. Ranges dry lower elevations, extreme fire hazzard. Summer storms minimal.

**ILLINOIS:** Monthly rainfall of 9.83 inches set record at Urbana. Temperatures average 7° below normal, maximums in 80's, minimums near 60°. Corn reported excellent by 52% of reporters, good by 43%, fair 5%. Corn crop 95% silked, 15% dough stage. Some flooding in southeast. Southern corn leaf blight development slow, less damage expected this year. Infections prior to dent stage could cause serious damage. Soybeans reported excellent by 51% respondents, good 43%, fair 6%. Soybeans, 90% bloom stage, 40% started podding, 20% year ago. Some grasshoppers and beanleaf beetles reported in soybeans. Oats 95% harvested. Alfalfa hay considered excellent 20% of respondents, good 47%, fair 27%, poor 6%. Second cutting 80% completed. Pastures reported excellent by 17% of respondents, good 41%, fair 28%, poor 14%. Soil moisture reported 24% short, adequate 70%, and surplus 6%. Five days suitable for fieldwork. Main activities haying, combining and baling straw, cultivating of soybeans.

**INDIANA:** Week cool with two periods of showers. On Friday, week's precipitation ranged from 0.50 inch north and northwest to 2.00 inches south-central and southeast. Temperatures ranged from 47° on 20th to 88° on 23d, and averaged 4° below normal. Near usual was humidity and evaporation. Soil temperatures in low 70's and slightly cool. Six days suitable. Topsoil and subsoil moisture short to mostly adequate. Corn blight increasing but not dramatically. Conditions favorable for spreading disease; development nothing like first week of August last year. Corn 65% silked, 45% average. Wheat 95% combined, 85% average. Oats 75% harvested, 45% average. Wheat land 15% plowed, 10 days ahead of average. Alfalfa 65% cut second time. Pastures fair to good.

**KANSAS:** Weather unseasonably cool with weekly means averaging 4° to 8° below seasonal. Maxima generally 70's to 90's and minimas 50's and 60's. Northeastern 1/3 had moderate to heavy precipitation. Variable precipitation from light to locally heavy rest of State. Few spots north-

central, central and east-central had over 5.00 inches, causing local flash flooding. Crops are mostly growing well. Some areas need moisture. Corn 68% tasseled, insect infestation generally light. Southern corn leaf blight confirmed in 38 counties in eastern Kansas with moderate damage to a few fields. Sorghum 17% headed. Weeds still a problem. Many farmers spraying. Virtually all small grains have been harvested. Soybean growth progressing rapidly. Weeds a problem in some soybean fields. Livestock were getting good pasture feed over eastern 2/3 but dry weather limiting growth Southwest and some other areas. Alfalfa harvest continued last week. Grasshoppers becoming numerous in some areas.

**KENTUCKY:** Sunny, relatively mild, and less humid 20th through 22d, other days mostly cloudy, warmer, and showery. Temperatures for week averaged 3° to 6° below normal. Rainfall spotty, from 0.08 inch to 4.77 inches. Showers and wet soil limited fieldwork to 4 days. Soil moisture adequate to surplus. Tobacco growing out some, but still rather uneven--about 1/4 crop over 36 inches tall, 12% reached bloom stage. Some locally serious hail damage. Corn advancing rapidly; over 1/4 in milk stage or beyond; only 1/3 pre-silk. Leaf blight spreading rapidly in T-hybrids and susceptible side of plants. Overall corn prospects still good. Soybeans improved greatly by recent rains, averaging 17 inches high with about 1/4 blooming. Pastures excellent for mid-summer, late hay prospects improved.

**LOUISIANA:** Very warm beginning, cooler at mid-week especially in northeast. Slightly warmer with abundant clouds and high humidity late in week. Temperatures averaged near normal to 2° below normal south and central and up to 4° below normal north. Extremes: 102° Shreveport, Curtis, and Minden last Monday, 61° Tallulah and Oak Grove Wednesday and Thursday. Rainfall moderate to locally heavy. Weekly totals up to more than 4.00 inches locally but mostly amounts 0.50- to 2.00-inch range. Heaviest amounts 1-day total 3.50 Carville measured 5 p.m. Wednesday. Fieldwork slowed by showers after midweek. Soil moisture excessive southeast mostly adequate elsewhere. Crop prospects fair to good for cotton, corn, soybeans, and sweet potatoes; good to excellent for rice, sugarcane, and sorghum. Cotton virtually all squared, considerable acreage blooming. Insect activity building. Some lodging of mature rice; light harvest underway and no heavy loss expected. Harvest of watermelons, okra, and peaches active. Haying slowed by showers, yields fair to good. Pastures about average but improving. Livestock good condition, vaccination of horses very active.

**MARYLAND AND DELAWARE:** Cool and continued dry. Daily temperatures below normal. Rainfall spotty. Thunderstorms gave some totals 1.00 inch or over mostly in southeast. Many stations reporting less than 1.00 inch during past 3 weeks. Soil moisture short in most areas. Some crop damage but not widespread. Corn maturing rapidly, 44% silked, slightly ahead of normal. Wheat harvest 85% done. Soybean growth slowed by dry soils. Prospects for late cuttings of hay decline. Vegetable harvest continuing. Peach development 4 to 6 days later than normal in western Maryland.

**MICHIGAN:** Showers ending, unseasonably cool south area, rapid warming midweek, showers as period ended. Temperatures averaged near normal Upper

Peninsula; Lower Peninsula near normal north and central to 3° to 5° below normal south. Precipitation 0.30 to 0.60 inch Upper Peninsula; Lower Peninsula, 0.30 to 0.50 inch north, 0.75 to 1.00 inch south, with 0.25 to 0.50 inch from west-central to Saginaw Bay area. Crops progress highly variable. Crop condition critical west-central, central and southeast. Good growth most other areas. Showers at weekend good benefit to all areas except west-central and central counties. State averaged 5.5 days suitable for fieldwork. Corn development varied from very poor in central counties to good in south-central. Average corn nearly 5 feet, most fields tasseled. Wheat 3/4 harvested. Oat harvest underway. Soybean development fair to good. Dry bean development limited by dry soils, many bean fields in blossom. Early potato digging started. Potato yields light on non-irrigated acreage. Irrigated potatoes developing well. Pasture feed supply below average. Tart cherry harvest nearing completion southwest, starting northwest. Vegetable development good southwest, retarded by dry soils east and southeast.

**MINNESOTA:** Cool dry week with temperature averaging 4° below normal. Extremes: 95° to 38°. Dry week with little to no precipitation across the State, except for isolated showers with amounts generally less than 0.50 inch in the northwest and southeast part of State. Good crop progress. Topsoil moisture short to adequate in south, adequate elsewhere. Corn tasseling 75%, normal 45%. Southern corn leaf blight now identified in 20 counties. Soybeans setting pods, 30%; normal 13%. Flax setting bolls 70%, normal 50%. Flax turning ripe 18%, normal 14%. Small grains combined: spring wheat 2, normal 0; oats 9, normal 5; barley 10, normal 4; rye 18, normal 13; winter wheat 16, normal 5.

**MISSISSIPPI:** Weekly temperatures averaged below normal, most stations were 2° to 4° below normal. Daily extremes: 100° on 16th, 55° 21st and 22d. Except for no rain in parts of northwest Mississippi, stations reported 1 or 2 or more days with precipitation. Most weekly totals over 1.00 inch. A 1-day amount of 4.88 inches was measured at Meridian morning of 17th. Over weekend, rain each day at nearly all stations. Weekend totals varied from 0.12 inch at Biloxi to 7.40 inches at Belzonia. A 1-day amount of 4.95 inches was measured at Belzonia this Monday morning. Nearly 5 1/2 days suitable for fieldwork and farmers used the time primarily to control weeds and insects. Soil moisture shortage reached critical stage many areas before weekend rains brought some welcomed relief. Condition of crops generally reflect the pattern of soil moisture reserves but average fair to good over State for cotton, corn, soybeans, and pastures. Harvest of peaches 70% complete and digging of Irish potatoes virtually complete.

**MISSOURI:** Cool air spread across the State early in the week and was reinforced by another surge late in the week. Temperatures averaged 4° to 8° below normal. Rainfall was light with most areas receiving less than 0.50 inch. Heaviest amount occurred between Vichy and Cape Girardeau where amounts exceeded 2.00 inches. About 5 days suitable for fieldwork. Over 50% soybeans are blooming and in good condition. Last year 39% blooming. Cotton crop is 85% squared and 40% setting bolls; last year 73% cotton squared. About 45% grain sorghum headed, 80% of corn silked and crop mostly good condition. Last year 68% silked. There have been increases in

blight incidence, but corn still looks good. Some episodes of extended humidity in northeast and northern Missouri have been conducive to blight development. Soil moisture is reported as short to adequate.

**MONTANA:** Hot and dry west of Continental Divide, warm and dry elsewhere. Daytime temperatures in 80's and 90's during week cooling to 70's week-end. Scattered very light showers midweek with precipitation generally being less than 0.10 inch. Topsoil moisture short throughout State. Some late-planted and continuous crop spring grains burning. Winter wheat harvest just starting with less than 5% of crop combined. Condition of spring wheat down from last week. Spring wheat 40% good condition, 50% fair, and 10% poor. Spring wheat 60% turned color and 5% ripe. Barley and oats 60% turned color. First cutting of alfalfa virtually stacked, two-thirds of wild hay harvested. Hay yield below last year.

**NEBRASKA:** Very cool. Scattered showers were light except for local amounts of 1.00 to 2.00 inches in south-central and eastern portions. Wheat harvest 88% complete, compared 88% normal. Row crop condition good to excellent. Corn 64% silked. 66% normal. Grain sorghum heading in most areas. Soybeans 10% podded. Dry beans and sugar beets in good condition. Second cutting of alfalfa, 78% complete, some 3d cutting beginning. Farmers active in irrigation, observing crops for insect and disease damage. Southern corn leaf blight status unchanged from last week. Pastures and range feed adequate to above average. Flies a problem if uncontrolled.

**NEVADA:** Warm week with temperatures averaging 1° to 5° above normal. Light to moderate precipitation in north. Very light and scattered in south. Flash flood and mud slide Mt. Charleston area in Clark County. First cutting alfalfa hay nearing completion with 2d cutting beginning in some western areas. Third cutting ending and 4th cutting beginning in southern valleys. Cotton development behind previous years, has reached the boll stage. Cattle and sheep in good condition. Few contracts have been signed.

**NEW ENGLAND:** Quite sunny temperatures near normal with no unseasonable extremes. A few maxima near 90° in south portion latter part of week. Showers and thunderstorms general July 19. Some severe thunderstorms in southern Connecticut with a small tornado at Norwalk. Showers again over weekend except few in central portion. Rain for week variable up to 6.00 inches locally in southern Connecticut. Yields elsewhere also variable but mostly 0.50 to 1.50 inches. Silage corn, cranberries, blueberries and other crops immediately benefited by rains. Pastures and mowings responding slowly. Aroostook Maine potatoes in bloom, crop potential high. Good crop of peas for freezing being harvested. Apples sizing well, harvest earliest varieties started. Sweet corn, tomatoes, carrots, peppers harvest started. Cabbage, cucumbers, snap beans, lettuce plentiful. Harvest good tobacco crop progressing seasonally.

**NEW JERSEY:** A cool wet week with temperatures averaging mostly from 3° to 6° below normal. Readings ranged from upper 40's to low 90's. Rainfall, mostly on 19th, averaged 1.30 inches over north, 0.90 inch over central and southern interior, and 0.60 inch along coast. The greatest station total was 3.00 inches at Long Valley. Soil moisture remains short and a good soaking

rain is needed. Crops in good condition where irrigation available. Harvest most crops on schedule... however peaches are week late and dry weather affected size. White potato harvest will increase this week. Blueberry volume heavy. Weather good for grain combining and hay making. Second cutting hay short due dry soils. Field-corn and soybeans need rain. Pasture growth very limited.

**NEW MEXICO:** Frequent showers throughout weeks totaled 1.00 to 3.00 inches in mountain areas and near 0.50 inch in rest of State. Dryness in forest areas was greatly eased. Cooler temperatures for week averaged near normal over most of State except for much below normal in northeastern quarter. Cool days in northeast and mild nighttime temperatures. Soil moisture generally improved, isolated areas still very dry especially on west side of State. Sorghum grain in good condition, cotton making satisfactory progress. Cutting of alfalfa still active north and south. Some damage by rain. Ranges in poor condition, should improve result of rain. Livestock in fair shape, drought sales expected to decrease result of moisture.

**NEW YORK:** Average temperatures in mid-60s throughout State, low 70's in coastal regions. Average temperatures 3° to 6° below normal. Cool beginning of week followed by warming trend. Precipitation at beginning of period, with largest amounts in central portion of State ranging from 0.80 to 2.20 inches. Rain moderate to heavy western and central New York. Early corn tasseling; growth good under improved moisture conditions. Small grains maturing rapidly. Wheat harvest starting, lodging light. Dry beans range from fair to excellent condition. Vegetable harvest increasing. Recent rain beneficial in western New York. Upstate potatoes remain in good condition, blooming. Excessive moisture affecting potatoes and onions Elba area. Undercutting early seed onions Orange county; transplant Madison county. Conditions remain dry Orange County. Lettuce harvest increasing, quality good. Sweet corn harvest increasing. Potential fruit crop production remains high. Tart cherry harvest underway. Grapes developing favorably, set good.

**NORTH CAROLINA:** Temperatures averaged slightly below normal. Precipitation variable in scattered daily showers and a few thundershowers. Total amounts 0.10 inch to 3.00 inches mostly 1.00 to 2.00 inches. Soil moisture mostly adequate except central and northern Piedmont still spotty, mostly dry. Southern coastal counties adequate to surplus. Flue-cured tobacco mostly good, harvest active. Border Belt harvest slowed by rains. Burley tobacco mostly fair to good. Southern corn leaf blight spreading in corn now confirmed in 55 counties. Light to heavy in T-cytoplasm and blend varieties. Cotton steady, mostly fair to good. Most growers spraying to hold insect infestation to minimum. Progress good in peanut and soybean crops. Other crops mostly good. Harvest of early-maturing apples started. Peach harvest near peak, Loring, Redglobe and Blake being harvested.

**OHIO:** Widespread cloudiness kept temperatures below normal. Sunshine was plentiful only from 20th to 22d. In central Ohio, temperatures have been below normal daily since the 9th. Shower activity widespread 19th and again over weekend. Most areas received 0.50 to 1.00 inch from the weekend storm, but in Columbus, up to 5.25 inches

fell on 24th. Six days favorable for fieldwork. Soil moisture supplies 62% short, rest adequate. Average corn height 70 inches, normal 58 inches. Corn 65% silked, last year 60%, usual 30%. Average height of soybeans 25 inches compared to 21 inches normal. Soybean pods 50% set, equal to last year. Second cutting alfalfa 70% harvested, above last years 50% and average 50%. Second cutting clover-timothy 40% harvested, compared with 30% last year and average. Oats almost all ripe and 65% harvested, last year 50%, average 35. Wheat 95% harvested, last year 90%, normal 80%. Land 10% plowed for winter wheat. Southern corn leaf blight positively identified in 65 counties.

**OKLAHOMA:** Rainfall averaged from 0.40 inch Panhandle to 3.00 inches southeast. Southwest area averaged 1.20 inches but local amounts of 3.00 inches reported. Temperatures averaged 2° to 6° below normal. Extremes: 50° and 113°. General statewide rains brought immediate relief from hot dry weather. Drought in southwest temporarily broken. Row crop conditions improved due to moisture. Panhandle irrigated corn and grain sorghum excellent. All rowcrop maturity behind last year's development. Cotton real late southwest with State 29% squaring; 59% last year. Corn over 1/5 mature; some silage cut south-central. Grain sorghum 30% headed, peanuts, 49% and soybeans 29% flowering. Third cutting alfalfa hay 45% complete. Expect pastures to respond to moisture and furnish more grazing. Cattle good to excellent. Vaccination of horses for VEE nearly completed.

**OREGON:** The weather returned to normal along the coast, fog or low clouds in morning, clearing in afternoon, while elsewhere it was mostly sunny. Coastal temperatures averaged near normal but in remainder of State temperatures were 4° to 10° above normal. Coastal maxima ranged from 67° to 75° while rest of State varied from 89° at Lakeview to 105° at Hermiston on the warmest day of week, 21st. Coastal minima 43° to 54° and inland minima ranged from 42° at Enterprise to 62° at Pendleton. Rain spotty and very light, 0.00 to 0.06 inch except for east where amounts varied from a trace at Pendleton to 0.01 inches at Burns. Thunderstorms dumped 1.00 inch on Burns July 22. Grass seed harvest continues active. Warmer weather has helped drying of fields. Barley harvest continues with good yields reported. Wheat harvest beginning. Raspberry harvest continues. Picking of Marion blackberries and boysenberries underway. Sour cherry harvest continues. Sweet corn made excellent growth. Snap bean harvest underway. Early broccoli being cut. Green pea harvest moving to higher elevations and later areas.

**PENNSYLVANIA:** Cool through Wednesday, warm and humid thereafter except west where return to cool weekend. Temperature extremes: 40° Philipsburg Wednesday morning to 89° several places southeast Friday and Saturday afternoons. Showers and thunderstorms early in week and again Friday night brought most rain over greatest area of State since mid-May. Amounts in excess of 0.50 inch reported all except southern border counties from Adams through Philadelphia. One to 2.00 inch amounts fell throughout mountain sections and 2.00 to 2.50 inches at Erie and Reading. Topsoil moisture supply improved. Combining small grains on schedule. Barley nearing completion, wheat 50% and oats 15%. Corn tasseling statewide. Second growth hay improved. Pastures below

average. Lodi and transparent apples being picked. Cherry harvest winding up. Early peaches being picked. Limited sweet corn, cabbage, potatoes and tomatoes reaching local markets. Cool nights retarding maturity of vegetable crops.

**PUERTO RICO:** Rainfall around Island averaged 0.98 inch or 0.50 inch below normal. Heavier rains occurred western interior near Mayaguez with totals from 3.00 to 4.00 inches. Other 5 divisions averaged from 0.31 south coastal to 1.28 southern slopes. Crop moisture conditions near normal except too dry some areas north and south coast and too wet some portions western interior. Temperatures averaged near normal around 80° coastal sections and 75° interior with individual departures ranging from plus 2° to minus 2°. Extremes were 93° and 59°.

**SOUTH CAROLINA:** Showers mostly in middle of week brought rain to all areas. Sectional averages were about 0.70 inch in northwest over 1.25 inches in midland and 1.00 inch in south. Average temperatures ranged from 3° below normal in the northwest to normal in the south. Soil moisture adequate practically all areas. Rainfall limiting field work; allowing buildup of weeds, insect infestation. Tobacco condition good to excellent, 44% harvested. Cotton condition good, 97% squaring and 72% setting blooms. Condition corn good to excellent, 94% silk stage, 63% dough stage, 8% mature. Soybean condition good to excellent, 8% blooming. Condition sorghum, peanuts good to excellent. Condition peaches good, harvest practically complete Coastal areas, Peak and Ridge; 56% picked. Grapes good condition. Apples good to excellent. Hay crops pastures good to excellent condition. Fresh market vegetable harvest virtually complete. About 69% watermelons harvested, condition good to excellent. No change in Southern corn leaf blight situation.

**SOUTH DAKOTA:** Weekly temperatures averaged up to 6° below normal. Extremes ranged from 41° at Conde on the 20th and Philip on 26th to 103° at Winner on the 21st. 44° at Sioux Falls on the 26th was a record low for date. Precipitation fell as showers and thunder showers scattered through week with totals generally from a trace to about 1.00 inch although isolated areas received over 1.00 inch. Isolated wind and hail damage to crops reported. Generally ideal conditions prevailed for harvest of small grains. Several areas harvest complete for winter wheat and rye. Good advances made harvest spring seeded small grains. Yields for all small grains generally above average, few reports low test weight spring seeded small grains. Row crops made good growth, but getting dry. Topsoil moisture short throughout the State except small areas northeast and southeast where adequate supplies reported. Southern corn leaf blight has been identified in 5 new counties, but infestation remains light. Corn borer well established in stalks. Some second brood corn borer moth showing up. Green bug in sorghum grain. Grasshoppers becoming a problem. Pastures beginning to brown and stock water supplies becoming low, particularly central where moisture shortages have prevailed for sometime. Livestock in good condition. Several reports of pink eye due fly problem.

TEXAS: Torrential rains of 5.0 to more than 11.0 inches fell in Central Texas over weekend. Brady caught 11.77 inches within 3 days of which 8.27 inches fell within 26 hours. Live Oak Creek near Brady reached highest level since 1938 and was still rising. Heavy 25 hour totals include San Saba 6.10, Hewitt 6.12 inches, McGregor 7.25 inches, Waco 5.76 inches. Rains of 3.0 to 4.0 inches were numerous over drought-stricken Northcentral Texas. Other sections received light to moderate showers, while little or no rain fell in southern Texas south of Del Rio, Austin, Galveston line.

Cotton resumed Lower Rio Grand Valley. Sorghum making good progress. Hot, dry weather aiding maturity from Blacklands southward. Corn, cotton, sorghum making excellent progress on High Plains. Dryland peanuts need rain in Cross Timbers and Blacklands. Harvest of 1st crop peanuts started South Texas. Soybeans making excellent progress on High Plains, East Texas and Gulf Coast. Harvest of rice underway south-central Texas and Gulf Coast. Range and livestock conditions continue to deteriorate. Harvest of major crops: cotton, 1% this year, 0 last year; corn, 2% this year, 0 last year; sorghum, 18% this year, 9 last year; rice 7% this year, 1% last year. Potato digging active High Plains with supplies to remain at current level for several weeks. Onion harvest continues High Plains, Trans Pecos, with supplies declining. High Plains: light supplies of cabbage, cucumbers, with digging early carrots to begin soon. Fall lettuce being planted Hereford area. Cantaloupe harvest active Pecos, North Texas. Watermelon harvest nearly complete South Central; past peak East Texas with melons ripening North Texas. South Texas early planting fall tomatoes, peppers up to stand. Cabbage being seeded Winter Garden. Peach harvest continues but supplies substantially below last year. Pecan prospects poor to fair as nut set below normal and moisture needed to size nuts.

UTAH: Scattered showers and thunderstorms with generally light to moderate accumulation of moisture. Few areas of heavy showers. Scattered areas of hail. Heavy hail damage to wheat, corn, and gardens west side of Cache Valley. Temperature range near normal to 6° above normal. Accumulated growing degree days continue to range from 150 degree days behind last year same locality western Utah, to 140 degree days ahead few areas eastern portion. Sweet cherry harvest practically completed, apricot harvest nearly 1/2 done and sour cherry harvest starting by weekend. Winter wheat, spring wheat, oats, and barley harvest started earlier counties. Fieldwork few areas delayed by thundershowers, soil moisture central and southern Utah mostly short to very short.

VIRGINIA: Temperatures mostly below normal. Scattered showers and thundershowers at beginning and end of week. Soil moisture progressively more serious. Shortage mostly east of the Blue-ridge. Corn condition declining. Dry soils and advance of Southern corn leaf blight. Farmers spraying, no kernel damage. Small grain harvest favored. Wheat 90% finished. Haying active, condition good except southwest. Planting late soybeans close to end, crop needs moisture. Tobacco little changed, irrigation throughout most flue cured area. Harvest flue-cured increasing. Weather favored burley. Condition of peanuts very good. Crop clean but hoeing. On eastern shore 75% potatoes dug. Tomatoes and cukes

in volume. Harvest peaches advanced seasonally. Apple spraying effective. Rain needed. Plowing for fall planting good progress.

WASHINGTON: Western Washington: Hot, dry weather with morning cloudiness and fog at end of period. Average temperatures more than 5° above normal except near normal coastal section. Raspberry picking in full swing; early blueberry harvest beginning. Lettuce and cauliflower harvest continues. Corn and cucumber growth aided by warm temperatures. Second cutting of hay most areas. Pastures holding up but additional moisture needed. Eastern Washington: Hot and dry. Average temperatures 5° to 10° above normal. Grain ripening rapidly and harvest increasing. Some concern of hot weather affecting late spring wheat. Sweet corn harvest continues in Yakima. Cherries being harvested in Wenatchee Heights and northern sections. Apricots and early peaches being picked. Green peas being harvested in Columbia and Walla Walla sections. Onions being harvested and early Norgold potatoes being dug. Dryland pastures need additional moisture. Second cutting alfalfa hay well underway.

WEST VIRGINIA: Severe electrical storms and local cloudbursts southwest July 17 to 19. Rainfall over 4.00 inches Huntington area. Additional rainfall July 24 and 25. Crops making good progress due to recent rain and variable weather conditions. Some areas beginning to need rain. Soil moisture 31% short, 59% adequate, 10% surplus. Fieldwork possible average 4.6 days. Wheat harvest progressing well, 70% complete. Barley 80% complete. First cutting hay almost completed, 20% of second cutting harvested.

WISCONSIN: Cool summer week with scattered showers mostly late in period. Best rains generally fell south and east where needed most. Crops doing well. Corn about 25 percent silked. Southern corn leaf blight condition stable, confirmed in 39 of State's 72 counties. Most severe infestation in southwest counties in low land fields. Corn borers and wood worms bothersome. Some concern for lodging. Oat combining getting underway with 5% harvested. Yields of small grains generally good. Straw short east half of State. Soybeans looking good. Tobacco growing well. Some fields uneven due to dry weather during planting. Cucumber and early potato harvest started. Pea harvest finishing up. Getting ready for sweet corn packing. Cherry harvest in Door County in full swing. Some additional hail and wind damage in orchards on July 23. Serious hail damage to many cranberry bogs in Jackson and Monroe Counties from July 18 storms. Second crop harvest about 20% done. Plenty of hay in the north. Pasture conditions fair east and good west. Soil moisture 55% adequate and 45% short.

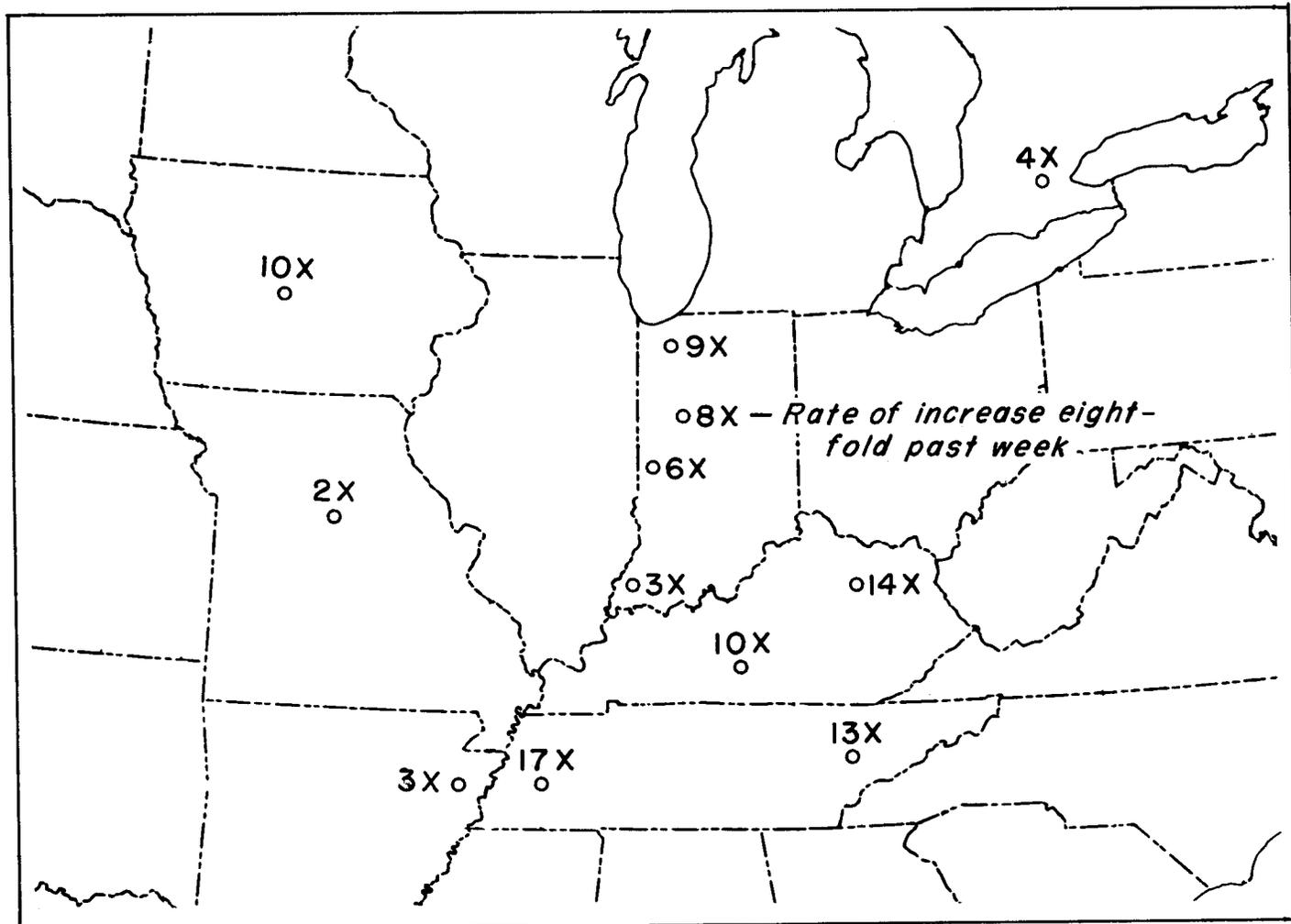
WYOMING: Scattered showers occurred Statewide. Thayne had the most moisture with 1.30 inches. Temperatures averaged near to a little below normal, up to 6° below normal in the Belle Fourche Drainage. Maxima were mostly 80's to low 90's west of Divide, high 80's and 90's east. Minima were mostly high 30's and 40's west of Divide, 40's to low 50's east. Temperature extremes were 99° at several stations, and 27° at Thayne. Haying and irrigating main activities. Winter wheat harvest started some localities. Spring wheat 60% soft dough, 30 percent hard dough. Oats soft dough stage with only 15% in hard dough. Nearly 70% of barley in soft dough stage. First

cutting alfalfa nearly complete, about 3/4 other tame hay harvested, 1/5 wild hay cut. Little corn has tasseled, about 15% dry beans in bloom. Sugar beets fair to good condition.

NORTH DAKOTA: Temperatures averaged near normal northwest, 2° to 5° below normal elsewhere. Precipitation amounts, zero northwest to 0.20 inch central portion and from 0.50 inches to 1.50 inches southeast. Crops continue to show excellent development under favorable growing conditions. Small grain harvest started in southeast counties. The cool nights will slow starting of harvest some areas. Row crops look good. Haying progressing well. Many farmers finishing 1st cutting. Some started on 2nd cutting. Insects are becoming a problem for cattle and crops.



## CORN BLIGHT SIMULATION



NATIONAL WEATHER SERVICE, KANSAS CITY, MISSOURI

## BLIGHT WEATHER MARKS TIME

The simulated rate of increase in number of lesions occurring on corn plants was up last week but not at rates observed a year ago just before Southern Corn Leaf Blight (SCLB) destroyed whole fields. The numbers on the map simply indicate how many times the estimated number of lesions multiplied between July 15 and July 22; for example, at Columbia, Missouri, the number of expected lesions increased 2 times during the week but at Lafayette, Indiana, there was an 8 fold increase according to the computer.

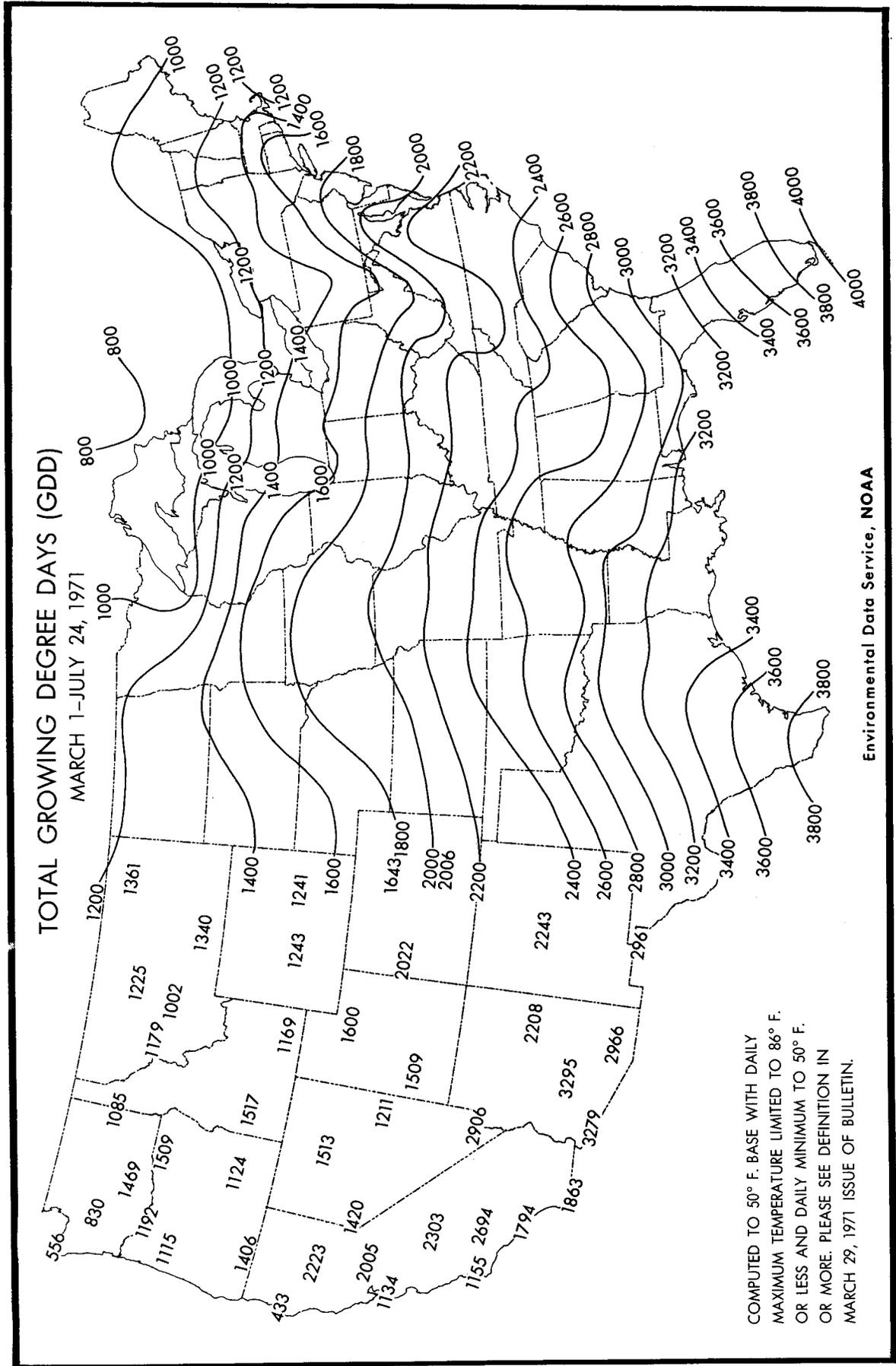
The actual number of lesions in an area is only assumed. It is the rate of increase which measures how favorable the weather was for the fungus. We don't have a lot of experience with this weather evaluation program but compared with Tennessee and Georgia last year we don't expect extreme conditions to develop immediately in Iowa and Indiana even though 6 to 10 fold increases are computed. From Kentucky southward, higher

rates are noted but last year 40-50 fold increases were calculated in Tennessee and Georgia.

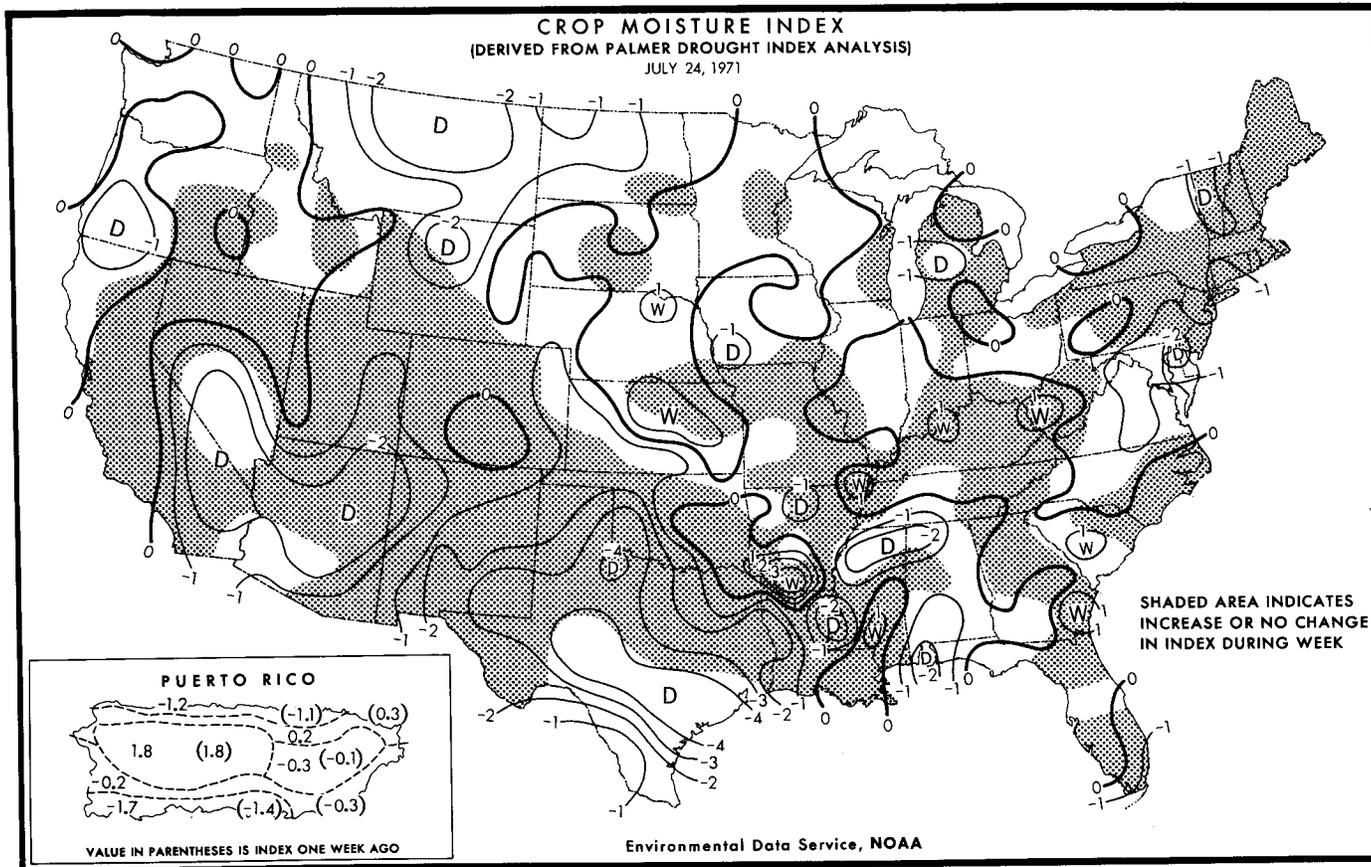
If next week the simulator should produce much higher rates of increase then there would be more reason to expect greater spread and severity. As it is now, the weather appears to have been spotty and not yet the cause of widespread severe blight. More rain and dew during early August in the heavy producing area from Iowa to Indiana could still cause real damage.

Within 1 - 2 weeks, we hope to have data from additional reporting stations in Iowa and Illinois and farther north in Minnesota and Wisconsin where corn is less mature. Remember - we are just sharing experimental results here; keep in touch with your agricultural information services for the latest actual field conditions.

Gerald L. Barger



COMPUTED TO 50° F. BASE WITH DAILY  
 MAXIMUM TEMPERATURE LIMITED TO 86° F.  
 OR LESS AND DAILY MINIMUM TO 50° F.  
 OR MORE. PLEASE SEE DEFINITION IN  
 MARCH 29, 1971 ISSUE OF BULLETIN.



INDEX DECREASED DURING WEEK  
(Unshaded Areas)

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

INDEX

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

INDEX

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

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

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

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

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

Agricultural Climatology Service Office  
South Building Mail Unit  
U. S. Department of Agriculture  
Washington, D.C. 20250

## IMMEDIATE - U. S. Weather Report

This Report Will be Treated in All Respects as Letter Mail

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