



Weekly Weather & Crop Bulletin

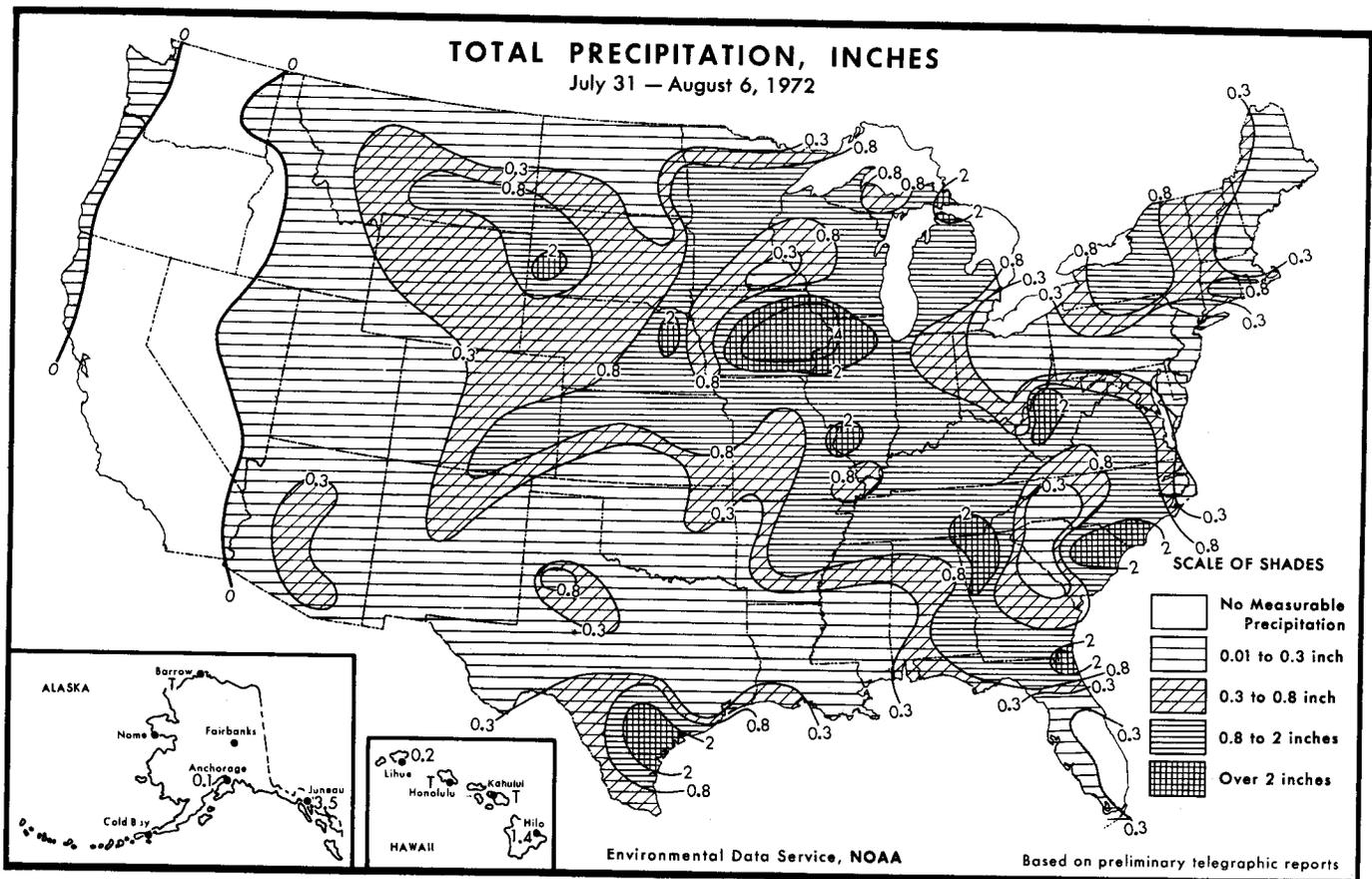
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Edited by Lucius W. Dye AUGUST 7, 1972 Washington, D. C.



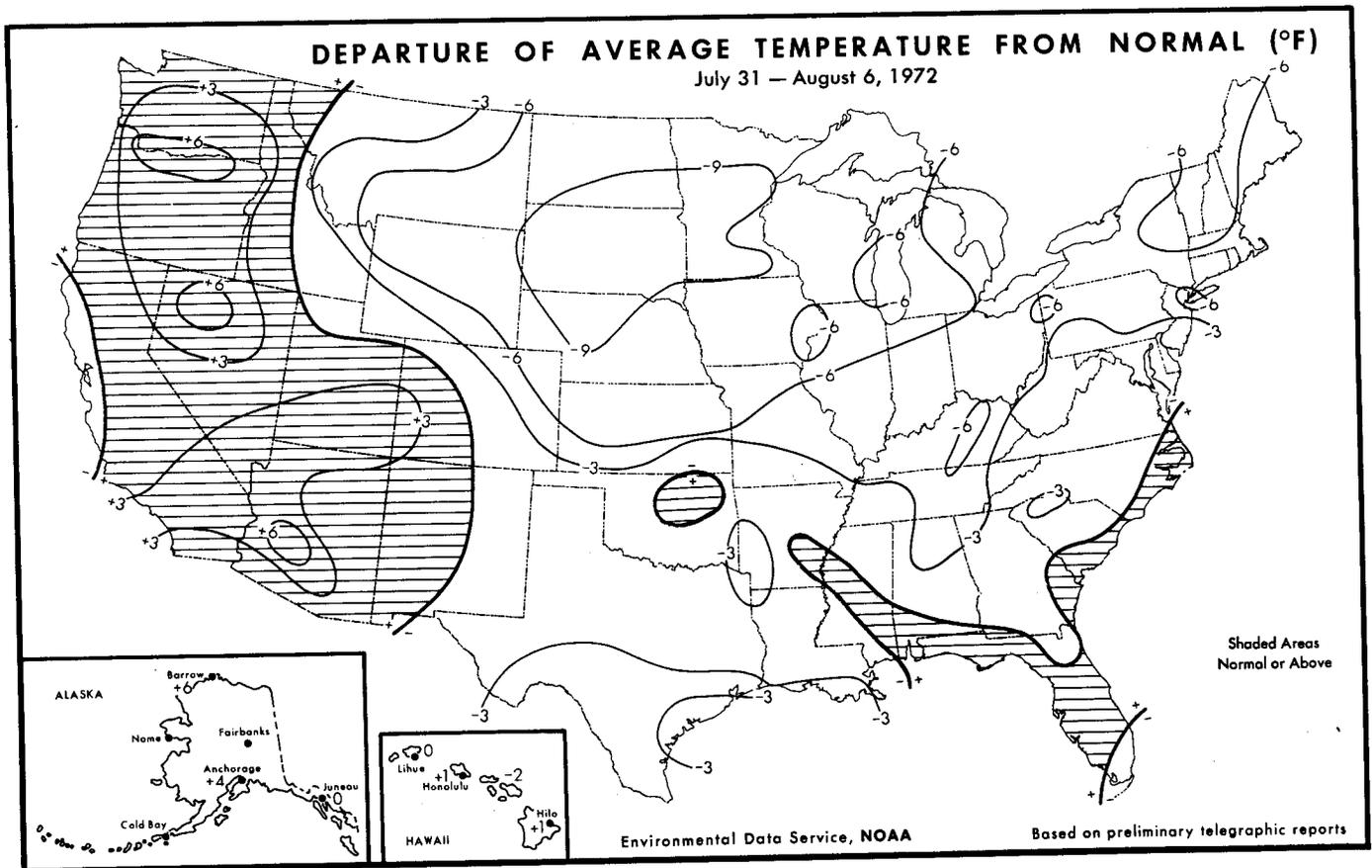
NATIONAL WEATHER SUMMARY

HIGHLIGHTS: Cool weather prevailed most of the week from the Great Plains to the Northeast. The West and South ranged from warm to hot. Spotty showers, light in West, moderate to heavy in East.

PRECIPITATION: Widespread showers and thunderstorms occurred early in the week from the western Gulf coast to the middle and southern Atlantic seaboard due to a front that stretched from eastern Texas to the middle Atlantic coast. Another front stretched from the Great Lakes to the central Great Plains, thence northwestward to British Columbia. It produced some heavy thunderstorms in the central Great Plains. One chunderstorm uprooted trees and damaged farm buildings in the Lost Nation, Iowa, vicinity, about 35 miles north northwest of Davenport. Heavy rains, in some places exceeding 4.00 inches,

swelled streams and rivers in parts of Nebraska, Iowa, and Wisconsin to near bankfull and, in some places, a foot or so above.

Afternoon and evening thundershowers continued through midweek. Flash flooding occurred in the Dubuque, Iowa, area early Wednesday. The waters reached waist deep in homes near the Little Maquoketa River north of Dubuque. Colorado and Montana were lashed by heavy thunderstorms accompanied by hail and high winds. Wednesday, just before midnight, severe thunderstorms swept through Kansas City, Mo. Heavy thunderstorms late Thursday flooded streets in Carbondale and Murphysboro, both in Illinois. Carbondale received 3.50 inches in 1 hour. Many localities from southern Illinois were drenched by heavy rains in the 24 hours ending at noon Friday. Five inches fell in 4 hours at Morehead, Ky. Heavy rains fell in eastern Iowa and northwestern



Illinois Saturday night. Vigorous thunderstorms continued over the central part of the Nation Saturday and Sunday. Hail as large as golf balls fell in the Sioux Falls, S. Dak., vicinity early Sunday and, in the afternoon, hail as large as walnuts fell at Sheffield, Ill. A tornado twisted off the tops of trees on the outskirts of Moline, Ill.

TEMPERATURE: A cold front stretched from the middle Atlantic coast to eastern Texas on Monday, July 31. It produced minimums in the 60's and 70's over the Deep South. This front dissipated but another front moved into the Nation from Canada. About midweek, it extended from New Mexico to New England. A warming trend occurred south of the new front. Afternoon temperatures reached the 90's over much of the South. Wichita, Kans., and Gage, Okla., registered 100° Wednesday, when the mercury at Wichita Falls, Tex., climbed to 101°. A cooling trend north of the front held afternoon temperatures in the 60's and 70's and dropped early morning temperatures into

the 40's and 50's. Grand Forks, N. Dak., recorded 33° Thursday morning. The Northwest warmed. Yakima, Wash., registered 90° or higher on several days. Blythe, Calif., in the Southwest, recorded 120° Monday and Tuesday afternoons but only 110° on Thursday. The weekend brought warmer afternoons to the Great Plains and cooler mornings to the Northeast. Chadron, Nebr., registered only 63° Thursday afternoon but 94° Saturday. Lemmon, S. Dak., recorded 60° Thursday; 89° Saturday. The early-morning temperatures at Buffalo, N.Y., on Thursday and Saturday were 70° and 45°, respectively. 70° minimums were common in the Deep South over the weekend.

Temperatures averaged above normal west of the Rocky Mountains, over the Florida Peninsula, and along the southern Atlantic coast and below normal over most of the rest of the Nation. Most of the northern and central Great Plains and the northern Prairies averaged 6° to 10° cooler than normal.

L. W. Dye

NATIONAL AGRICULTURAL SUMMARY

HIGHLIGHTS: Rains and cool temperatures stall small grain harvest but provide continued favorable conditions for row crops in North-Central States. Western ranges remain very dry.

SMALL GRAINS: Showers, wet fields, and cool temperatures continued to delay grain harvest in the north-central part of the Nation. Unfavorable wet weather slowed curing and harvesting from the Dakotas and Nebraska eastward to New York. Harvest is lagging behind normal schedule in South Dakota and Minnesota. Winter wheat harvest was only 10% complete in Montana and 70% in South Dakota where 93% harvested is normal for this time. Minnesota had 12% spring wheat harvested compared to 29% normal. Indiana and Ohio farmers had harvested 95% of the wheat crop and Michigan reached 85%. Dry weather in the Pacific Northwest helped harvesting already underway.

Oat harvest lagged behind in Iowa at 75% compared to a normal of 100% and in South Dakota at 31% compared to 67% normal. Minnesota at 38% normally is 60% harvested. Wisconsin has 10% of its oat crop harvested.

Small grain harvesting continues active in the northern mountain States.

CORN: Below-normal temperatures and generally good rains covered most of the Corn Belt building adequate soil moisture and improving growing conditions for the Nation's corn crop. In Iowa, 99% of the crop is good to excellent with Illinois rating 82% of its crop in the same category. Missouri corn is fair to good. Development is slightly behind last year and normal in the Corn Belt. Corn is 95% silked in Illinois, a little ahead of average with 50% in the dough stage. Nebraska corn is 90% silked, Indiana 75% and Ohio 70%. In Missouri 88% is silked compared to 95% last year and 49% is in dough stage compared to 62% last year. The crop is doing well in Michigan and looks good in Wisconsin where more sunshine and hot weather would be beneficial. Kansas corn is 39% in dough stage compared to a normal 48%.

In the Southern States, corn is maturing. About 1/2 the corn is in the dent stage in extreme south. Texas has harvested 6% of its crop, a few fields in Alabama have been harvested also.

SOYBEANS: Development advanced to about equal last year and the average. Generally, soybeans are making good to excellent progress. Conditions of Iowa soybeans are 53% good, 47% excellent with 80% blooming and 50% setting pods, right on schedule. In Illinois, 83% of the crop is rated good to excellent with 90% blooming and 60% setting pods. Missouri soybeans are 71% blooming and 35% setting pods. Minnesota's crop is doing well.

Arkansas soybeans have improved with showers, but some acreage is still under stress from dry weather. The crop continues in good condition in Louisiana and Mississippi. Tennessee's crop made rapid growth under favorable weather conditions with 70% blooming and 20% podding.

COTTON: Rains in the Southern half of Texas hampered cotton harvesting making defoliation difficult. Only 2% of the Texas crop has been harvested, about the same as last year's progress. Mississippi cotton is in good condition and is beginning to open. In Arkansas, cotton is fruiting well and insects are increasing, but are not a serious problem yet. Louisiana's crop is growing and fruiting well. Bolls are setting on 90% of the Tennessee crop, 73% of the Missouri crop and virtually all of the

southern Alabama crop. Both North and South Carolina have increasing boll weevil infestation. Pest control measures continue active on California cotton. Arizona cotton is making good progress with bolls maturing and opening near Yuma. Pink bollworm population increasing in Graham and Pima counties.

OTHER CROPS: Grain Sorghum harvest in Texas made good progress with 32% combined compared to 28% last year. In Kansas, 33% of the crop is headed, about average, and greenbugs were sprayed but damage is limited due to buildup of predator insects. The Nebraska crop made excellent progress with 66% headed. Oklahoma had another week of hot dry weather and the crop is showing some stress with 2/3 headed. Missouri's crop is 57% headed compared to 75% last year. Tobacco harvest is active in North Carolina and flue-cured is in mostly good condition there. Georgia harvest is nearing 90% completion. Some flooding damage occurred in Kentucky's western counties. The crop is growing rapidly in Kentucky except where rain was excessive. The burley crop has 55% blooming and 15% topped. South Carolina's tobacco is in good condition with 76% harvested compared to 68% last year. Some local hail damaged Virginia's crop which is 10% harvested. Rice harvest in Texas is making fair progress with 1st cutting 50% harvested compared to 40% last year. In Arkansas conditions are good despite excessive grass in many fields. Early varieties are maturing with a few fields being drained prior to harvesting. Combining in Louisiana is active with 10% harvested. Some lodging has been caused by heavy showers and wind. Peanuts in Georgia and North Carolina are in good condition. Digging in Texas is making fair progress with 9% harvested. Alabama peanut prospects are excellent, but some acreage needs moisture. Potato fields in Maine continue to look good. Harvest is increasing on Long Island, New York. Digging continues in California near Stockton.

Fruits: Picking of freestone and clingstone peaches is increasing in California with harvest of fruit crops in various stages of completion. Harvest is 82% complete in South Carolina and 75% complete in North Carolina. Tart cherry harvest is completed in southwest Michigan, at peak in northwest area of the State. Harvest continues in Door County, Wisconsin, and is past peak in New York. Apple picking began in northern Georgia and North Carolina, some picking in upper Shenandoah Valley of Virginia. Early varieties picked in Hudson River Valley, New York, and in New England. Citrus tree conditions in Florida are very good but rains are badly needed.

Vegetables: Harvest of seasonal vegetables is active along the Eastern seaboard into Northern areas and in California. Light supplies of tomatoes are available in New York with celery and lettuce increasing. Supplies of most summer vegetables in New Jersey are moderate with sweet corn past peak harvest. Maryland and Delaware sweet corn and tomato harvest is in full swing.

PASTURES AND LIVESTOCK: Ranges in the Southwest and West deteriorated as the hot dry weather depleted moisture, raising fire danger levels in California and Idaho. Supplemental feeding is necessary in some areas but livestock remain in fair to good condition. From the upper plain States east, pastures are good to excellent. Pastures in the South supplied adequate grazing with growth improved by recent showers but more moisture generally needed.

Arlon M. Scott
Agricultural Statistician

Temperature and Precipitation Data for the Week Ending Midnight, L.s.t., AUGUST 6, 1972

| 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. | 78 | - 4 | .3 | -.9 | New Orleans . . . | 80 | - 3 | T | -1.2 | OKLA,Okla. City . . | 84 | 0 | T | -.5 |
| Mobile | 84 | + 1 | .4 | -1.5 | Shreveport | 82 | - 3 | T | -.6 | Tulsa | 85 | + 2 | .4 | -.2 |
| Montgomery . . . | 82 | - 1 | .9 | -.1 | MAINE,Caribou . . . | 59 | - 6 | .3 | -.6 | OREG.Astoria | 64 | + 2 | T | -.3 |
| ALASKA,Anchorage. | 61 | + 4 | .1 | -.4 | Portland | 64 | - 5 | .1 | -.5 | Burns | 75 | + 5 | 0 | 0 |
| Barrow | 45 | + 6 | T | -.2 | MD,Baltimore . . . | 76 | - 1 | .1 | -1.1 | Medford | 76 | + 3 | 0 | 0 |
| Fairbanks | --- | --- | --- | --- | MASS,Boston . . . | 70 | - 5 | .3 | -.5 | Pendleton | 81 | + 7 | 0 | 0 |
| Juneau | 56 | 0 | 3.5 | +2.4 | Chatham | 64 | - 5 | .5 | --- | Portland | 75 | + 7 | 0 | 0 |
| Nome | --- | --- | --- | --- | MICH,Alpena . . . | 62 | - 5 | .9 | + .2 | Salem | 70 | + 3 | 0 | -.1 |
| ARIZ,Flagstaff. | 66 | + 1 | .7 | 0 | Detroit | 68 | - 5 | .1 | -.5 | PA,Allentown | 70 | - 4 | .1 | -1.0 |
| Phoenix | 95 | + 6 | .7 | + .5 | Flint | 66 | - 4 | .8 | 0 | Erie | --- | --- | --- | --- |
| Tucson | 88 | + 3 | .5 | -.2 | Grand Rapids . . . | 65 | - 7 | 1.4 | + .8 | Harrisburg | 72 | - 4 | .3 | -.5 |
| Winslow | 82 | + 2 | T | -.3 | Houghton Lake . . . | 62 | - 5 | .8 | + .2 | Philadelphia | 75 | - 1 | T | -1.0 |
| Yuma | 95 | + 2 | T | -.1 | Lansing | 64 | - 8 | 1.2 | + .5 | Pittsburgh | 70 | - 2 | .3 | -.5 |
| ARK,Fort Smith . . | 81 | - 3 | T | -.6 | Marquette | 66 | - 2 | .7 | 0 | Scranton | 68 | - 5 | .3 | -.6 |
| Little Rock . . . | 82 | 0 | 1.4 | + .8 | Muskegon | 65 | - 7 | .9 | + .3 | R.I.Providence . . . | 69 | + 4 | 1.9 | +1.1 |
| CALIF,Bakersfield. | 86 | + 2 | 0 | 0 | S.Ste.Marie | 60 | - 6 | 3.3 | +2.7 | S.C.Charleston . . . | 83 | + 3 | .8 | -.9 |
| Little Rock . . . | 57 | 0 | T | 0 | MINN,Duluth | 58 | - 9 | 1.1 | + .2 | Columbia | 80 | - 2 | 2.0 | + .6 |
| Fresno | 82 | + 1 | 0 | 0 | Internatl Falls . . | 60 | - 6 | T | -.8 | Greenville | 77 | - 3 | .3 | -.9 |
| Los Angeles . . . | 80 | + 6 | 0 | 0 | Minneapolis | 66 | - 7 | .6 | -.1 | S.DAK,Aberdeen . . . | 65 | -10 | .1 | -.4 |
| Red Bluff | 85 | + 2 | 0 | 0 | Rochester | 64 | - 9 | .3 | -.5 | Huron | 65 | -10 | .5 | 0 |
| San Diego | 73 | + 1 | T | 0 | St. Cloud | 62 | -10 | 1.0 | + .1 | Rapid City | 63 | -11 | 2.1 | +1.7 |
| San Francisco . . | 62 | - 1 | 0 | 0 | MISS,Jackson . . . | 82 | 0 | 0 | -.9 | Sioux Falls | 66 | - 9 | 1.7 | + .9 |
| Stockton | 79 | + 1 | 0 | 0 | Meridian | 82 | 0 | 0 | -1.0 | TENN,Chattanooga . | 76 | - 5 | 2.1 | +1.1 |
| COLO,Denver . . . | 72 | - 2 | .4 | + .1 | MO,Columbia | 74 | - 4 | .5 | -.3 | Knoxville | 76 | - 2 | .9 | -.1 |
| Grand Junction . . | 81 | + 3 | T | -.2 | Kansas City | 75 | - 8 | 1.4 | + .7 | Memphis | 80 | - 1 | 1.1 | + .4 |
| Pueblo | 76 | - 1 | 1.5 | +1.0 | St. Louis | 75 | - 4 | 2.3 | +1.9 | Nashville | 77 | - 3 | 1.2 | + .4 |
| CONN,Bridgeport . | 71 | - 4 | .2 | -.8 | Springfield | 77 | - 2 | .8 | + .2 | TEX,Abilene | 82 | - 2 | .3 | -.1 |
| Hartford | 69 | - 4 | .8 | -.1 | MONT,Billings . . . | 67 | - 8 | 1.2 | +1.0 | Amarillo | 78 | - 2 | T | -.5 |
| D.C.Washington . . | 76 | - 2 | .4 | -.7 | Glasgow | 67 | - 4 | T | -.3 | Austin | 79 | - 4 | .3 | -.9 |
| FLA,Apalachicola. | 84 | + 2 | .6 | -1.1 | Great Falls | 67 | - 3 | .6 | + .3 | Beaumont | 82 | - 3 | .9 | + .4 |
| Ft. Myers | 84 | + 1 | .8 | -.9 | Havre | 69 | - 1 | T | -.3 | Brownsville | 80 | - 5 | .6 | 0 |
| Jacksonville . . . | 82 | - 1 | 3.8 | +2.2 | Helena | 64 | - 5 | .3 | + .1 | Corpus Christi . . . | 82 | - 3 | 3.7 | +3.0 |
| Key West | 84 | 0 | T | -.9 | Kalispell | 66 | 0 | 1.2 | -.1 | Dallas | 86 | 0 | T | -.4 |
| Lakeland | 83 | + 1 | 1.2 | -.4 | Miles City | 68 | - 8 | 1.2 | + .9 | Del Rio | 82 | - 5 | .7 | + .4 |
| Miami | 81 | - 1 | .6 | -.9 | Missoula | 65 | - 3 | 1.1 | + .1 | El Paso | 81 | - 1 | .2 | -.1 |
| Orlando | 85 | + 2 | .3 | -1.4 | NEBR,Grand Island. | 71 | - 7 | 1.1 | + .5 | Fort Worth | 86 | - 1 | 0 | -.4 |
| Tallahassee . . . | 82 | + 1 | 1.3 | -.3 | Lincoln | 73 | - 8 | .8 | + .1 | Galveston | 82 | - 2 | 1.5 | + .5 |
| Tampa | 84 | + 2 | .2 | -1.7 | Norfolk | 69 | - 8 | 2.6 | +2.0 | Houston | 80 | - 3 | 1.1 | -.9 |
| GA,Atlanta | 78 | - 1 | 2.1 | +1.2 | North Platte | 68 | - 9 | .4 | -.1 | Lubbock | 79 | - 1 | .8 | + .4 |
| Augusta | 81 | 0 | .2 | -.8 | Omaha | 70 | - 6 | .5 | -.5 | Midland | 81 | - 2 | T | -.3 |
| Macon | 81 | - 1 | .6 | -.4 | Valentine | 66 | -10 | .5 | -.1 | San Angelo | 83 | - 3 | .3 | 0 |
| Savannah | 84 | + 2 | .8 | -.6 | NEV,Ely | 69 | + 1 | T | -.1 | San Antonio | 81 | - 4 | 2.3 | +1.8 |
| HAWAII,Hilo | 77 | + 1 | 1.4 | +1.2 | Las Vegas | 94 | + 5 | 0 | -.1 | Victoria | 82 | - 2 | 3.7 | +2.9 |
| Honolulu | 80 | + 1 | T | -.1 | Reno | 71 | + 3 | 0 | 0 | Waco | 84 | - 2 | .2 | -.2 |
| Kahului | 77 | - 2 | T | -.1 | Winnemucca | 79 | + 8 | T | 0 | Wichita Falls | 86 | - 1 | .2 | -.2 |
| Lihue | 79 | 0 | .2 | -.3 | N.H.Concord | 62 | - 8 | .3 | -.4 | UTAH,Blanding . . . | 77 | + 5 | .1 | -.2 |
| IDAHO,Boise | 77 | + 2 | T | 0 | N.J.Atlantic City . . | 74 | - 2 | T | -1.2 | Salt Lake City . . . | 78 | 0 | .1 | -.1 |
| Lewiston | 78 | + 4 | 0 | -.1 | Trenton | 73 | - 3 | .1 | -.9 | VT,Burlington . . . | 63 | - 6 | .7 | -.1 |
| Pocatello | 71 | - 2 | T | -.1 | N.MEX,Albuquerque | 79 | + 1 | .3 | 0 | VA,Lynchburg | 74 | - 2 | 1.4 | + .4 |
| ILL,Cairo | 77 | - 4 | .5 | -.2 | Roswell | --- | --- | --- | --- | Norfolk | 78 | 0 | .5 | -.9 |
| Chicago | 70 | - 6 | 1.4 | + .7 | N.Y.Albany | 65 | - 8 | .4 | -.3 | Richmond | 76 | - 2 | 3.2 | +1.8 |
| Moline | 70 | - 5 | 5.1 | +4.3 | Binghamton | 65 | - 3 | 1.9 | +1.1 | Roanoke | 74 | - 2 | .4 | -.8 |
| Peoria | 69 | - 7 | 1.6 | + .7 | Buffalo | 66 | - 4 | .8 | + .1 | WASH,Colville . . . | 71 | + 2 | T | -.2 |
| Rockford | 67 | - 8 | 2.4 | +1.5 | New York | 71 | - 7 | .1 | -1.1 | Omak | 73 | + 2 | T | -.1 |
| Springfield | 72 | - 5 | 1.8 | +1.2 | Rochester | 67 | - 5 | .9 | + .3 | Quillayute | 62 | + 1 | .1 | -.3 |
| IND,Evansville . . | 74 | - 5 | 1.1 | + .4 | Syracuse | 67 | - 6 | 1.6 | + .9 | Seattle-Tacoma . . . | 69 | + 4 | 0 | -.2 |
| Fort Wayne | 70 | - 4 | .6 | -.1 | N.C.Asheville | 73 | - 2 | .2 | -.7 | Spokane | 74 | + 3 | T | -.1 |
| Indianapolis . . . | 72 | - 4 | 1.9 | +1.2 | Charlotte | 77 | - 3 | T | -1.0 | Walla Walla | 80 | + 4 | .2 | -1.2 |
| South Bend | 67 | - 7 | .4 | -.4 | Greensboro | 75 | - 2 | .6 | -.5 | Yakima | 76 | + 5 | 0 | -.1 |
| IOWA,Burlington . | 70 | - 6 | 3.3 | +2.5 | Hatteras | 81 | + 3 | .1 | -1.5 | W.VA,Beckley | 69 | - 2 | 1.4 | + .5 |
| Des Moines | 69 | - 8 | 5.2 | +4.5 | Raleigh | 76 | - 2 | 1.3 | 0 | Charleston | 73 | - 2 | 3.7 | +2.6 |
| Dubuque | 67 | - 6 | 4.2 | +3.4 | Wilmington | 82 | + 2 | 2.7 | +1.1 | Huntington | 72 | - 3 | .6 | -.3 |
| Sioux City | 70 | - 8 | .5 | -.1 | N.DAK,Bismarck . . . | 64 | - 9 | .3 | -.1 | Parkersburg | 72 | - 4 | 2.5 | +1.6 |
| KANS,Concordia . . | 74 | - 7 | 1.9 | +1.1 | Fargo | 63 | - 9 | 1.0 | + .4 | WIS,Green Bay . . . | 64 | - 7 | .9 | + .3 |
| Dodge City | 76 | - 6 | .2 | -.3 | Williston | 64 | - 8 | T | -.4 | La Crosse | 66 | - 6 | .6 | -.2 |
| Goodland | 71 | - 7 | 1.4 | + .8 | OHIO,Akron-Canton . | 68 | - 5 | 1.1 | -.7 | Madison | 65 | - 7 | 1.9 | +1.2 |
| Topeka | 73 | - 7 | 1.5 | + .8 | Cincinnati | 72 | - 3 | 1.5 | + .7 | Milwaukee | 66 | - 4 | 1.7 | +1.0 |
| Wichita | 80 | - 2 | .1 | -.6 | Cleveland | 68 | - 4 | .3 | -.4 | WYO,Casper | 67 | - 6 | .6 | + .4 |
| KY,Lexington . . . | 72 | - 6 | 1.5 | + .7 | Columbus | 70 | - 5 | .1 | -.6 | Cheyenne | 64 | - 6 | .5 | + .1 |
| Louisville | 75 | - 3 | 1.3 | + .6 | Dayton | 70 | - 5 | .5 | -.2 | Lander | 65 | - 6 | .5 | + .4 |
| LA,Baton Rouge . . | 82 | - 1 | T | -1.1 | Toledo | 67 | - 6 | .2 | -.5 | Sheridan | 65 | - 7 | .7 | + .5 |
| Lake Charles . . . | 81 | - 2 | .7 | -.5 | Youngstown | 66 | - 6 | .1 | -.8 | P.R. San Juan | 85 | + 4 | .2 | -1.2 |

* 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: Temperatures averaged slightly above normal with no major day-to-day changes. Slightly cooler minimums in north during weekend. Extremes: 97° at Mobile, 63° at Huntsville. Widely scattered showers mainly Monday in central and south and Friday evening north and central. However, Gadsden received no rain for week. Virtually all cotton setting bolls with first open bolls in south. Farmers maintained control programs for insects. Nearly half of corn acreage dent stage. Earliest corn in south and central matured with few fields harvested. Most soybeans blooming freely, earliest-planted beans in south and central setting pods. Good progress controlling grass and weeds. Prospects excellent for peanuts but portion of acreage needs moisture. Growers continue to apply fungicides to control cutworms and weeds. Tomato harvest active Blount, St. Clair Counties. Cullman County sweetpotatoes making excellent growth, prospects for crop excellent. Hay harvest slowed by rains several areas but sizeable volume saved. Pastures supplied adequate grazing but need more moisture in few localities.

ALASKA: Above normal temperatures continued agricultural areas. Light precipitation Kenai and Kodiak districts but seasonal totals remain below normal. Elsewhere no significant rain with seasonal shortages of 2.50 inches many areas. Warm sunny weather beneficial to crop maturity. Soil moisture adequate Matanuska Valley, short in Tanana Valley and Kenai Peninsula. Potato hilling generally complete, plants blooming. Commercial vegetable harvest in full swing. Most oats and barley in dough stage with very little turning color.

ARIZONA: Temperatures above normal most of State again this week and precipitation was below normal. Some locally heavy showers, strong winds, and blowing dust in irrigated valleys in southern part of State on weekend. Good progress Arizona cotton crop. Bolls maturing, opening accelerating rate Yuma. Extreme heat Yuma halted further blooms. Graham, Pima Counties have increasing pink bollworm. Controls applied and are effective. All stages sorghum normal, some starting to head out Graham County. Some difficulty insects later plantings. Average yields of safflower, harvesting nears completion. Spring sugar beets need moisture Cochise. Alfalfa hay good condition, harvest continues. Quality Yuma reduced due high temperatures and caterpillar problems. Melon harvest completed. Land preparations continued for late summer, fall vegetables and melons. Citrus harvest completed. Yuma and Salt River Valley areas. New crop prospects good. Insect controls are needed. Ranges continue moderate improvement, conditions variable. Cattle and calves remain fair to good. Sheep and lambs remain fair. Screw worm fly problems continue.

ARKANSAS: Showers mainly late in week and on weekend gave rainfall amounts of 0.50 inch to well over 1.00 inch in northwest and north-central sections and portions of northeast, east-central, and central sections. Largest total for week 2.10 inches at Judsonia, about 55 miles northeast

of Little Rock. Most of southern half of State and west-central sections quite dry with many sections reporting no rain or trace. Measurable amounts generally less than 0.25 inch. Mean temperatures close to normal with departures in range -2° to +2°. Gradual warming most sections during week with several readings 100° or higher on weekend. Highest 102° at Hot Springs on 6th. Lowest 56° at Calico Rock in north-central on 1st. Showery weather for past 2 weekends generally improved soil moisture situation. Crops making fair to good progress. Cotton fruiting well. Insects increasing but no serious problem yet. Rice good despite excessive grass many fields. Early varieties maturing with few fields being drained prior to harvest. Soybeans improved with rain showers, some acreage still under stress from dry weather. Early soybeans blooming. Many late fields poor condition because of grass, nematodes and dry weather. Fair to good corn and sorghum crops maturing. Baling hay continued, yields short dry areas. Fruit and vegetable harvest active. Volume declining peaches and cucumbers. Grazing short much of State. Growth improved by recent showers but rains spotty and more precipitation needed many areas.

CALIFORNIA: Average temperatures ranged 3° below normal San Joaquin Valley to 9° above normal Los Angeles County. Southern California warm temperatures early part week; slight cooling later. Desert stations experienced appreciable warming. Blythe maximum temperatures 110° or higher; 120° on 1st. Scattered showers interior; drizzle on coast. Corn silage, sugar beet harvest continue; pest control underway in dry beans, cotton. Apple harvest increase Sebastopol, Watsonville; Gravensteins major variety. Grape harvest increasing; table grape harvest active Delano, Sanger, Exeter. Raisin grapes put on trays Selma. Picking freestone peaches, nectarines, plums continues. Harvest clingstone peaches increasing, starting midseason varieties. Pear harvest Sacramento River nearly complete; harvest underway Placer, El Dorado, Lake, Mendocino areas. Almond harvest started Paso Robles. Orchards being prepared all areas. Walnuts received sunburn damage. Prune harvest underway Sacramento Valley, orchards being prepared early harvest. Valencia orange harvest moderate; most supplies to processing, export. Harvesting avocados, lemons, grapefruit, continues. Central Coast broccoli, cauliflower light, cantaloupes West-side slowing; Modesto increasing. Central Coast carrot digging lighter. Celery harvest light Salinas. Sweet corn good volume southern California; northern San Joaquin, San Jose active. Bell pepper harvest continues San Joaquin. Honeydew continues all areas. Lettuce supplies lighter Salinas. Onion shipments early crop about complete Stockton; Clarksburg area begin next week. Potato digging continues Stockton. Central Coast strawberries continue decline. Market tomato harvesting, southern California increasing. Processing tomato harvest peaked some San Joaquin areas; increasing Sacramento Valley. Effects hot weather 2 weeks ago showing. Kern County water-melons declining; northern San Joaquin Valley increasing. High elevation ranges, good feed.

Wells being dug or deepened for water. Fire conditions serious. Large fire Central Coast; over 4,000 acres forest and range destroyed. Milk production normal. Honey flow up slightly.

COLORADO: Moderate to heavy showers and cooler temperatures east of Continental Divide followed hot dry weather early in week. Western Mountains remained fairly dry with above-normal temperatures all week. Locally heavy rains interrupted field-work most areas Eastern Plains. Other areas continued dry. Surface soil moisture short to adequate northeast and east-central, very short to short other areas. Subsoil moisture short southwest to adequate northeast. Aerial spraying corn for spider mite active northeast and Arkansas Valley. Winter wheat and winter barley harvest 96% complete. Harvest spring barley 69% complete, oats 48%. Corn condition generally very good, 87% tasseled. Sorghum good to excellent northeast. Sugar beets very good to excellent condition. Potato condition generally excellent, harvest late summer 17% complete. Good growth and development all row crops. Alfalfa condition good, 2d cutting 3/4 complete, 3d cutting progressing. Range and pasture fair. Rain promoting new grass growth local areas. Livestock condition good.

FLORIDA: Temperatures slightly above normal with daily highs in mid- and upper 90's. Many daily high temperature records set. Rainfall 0.50 to 1.00 inch most sections except near 2.00 inches along lower east coast. Field crops needing moisture and showing stress some areas. Hay making and disease and insect control measures active. Livestock and pastures good condition. Soil moisture short to adequate, rain needed all areas. Citrus tree condition very good. Rains badly needed. Very hot, upper 90's most citrus areas, rapid evaporation lowering lakes and ponds. No fruit splitting to date. Planting fall vegetables including snap beans, celery, sweet corn, eggplant, peppers, and tomatoes active. Seeding cabbage plant beds should be underway shortly.

GEORGIA: Rainfall moderate to locally heavy in northwestern 1/3 of State and mostly light in southeastern 2/3. Southeast coastal area and much of east-central Georgia continue very dry. Parts of these areas had little or no rain 2 to 3 weeks. Temperatures near seasonal most of week with highs ranging from high 80's north to mid-90's south. Early-morning lows varied from low 60's in mountains to mid-70's extreme south and southeast. Averages ranged from 1° below normal north to 2° above normal south. Soil moisture adequate northern half, short to adequate southwest and very short to short in southeast. Little change in crop conditions from previous week. Peanuts, soybeans, and hay crops mostly good. Corn and cotton fair to good. Bollworm population increasing in cotton, control difficult. Many counties report new and severe outbreaks of armyworms. Tobacco and peach harvest nearing 90% completion. North Georgia apple harvest began. Cattle condition good.

HAWAII: Warm weather with mostly clear skies. Crop progress fair to good with heavy irrigation. Harvesting sugarcane and pineapples on schedule. Watermelon harvesting declining seasonally. Supplies of papayas and bananas light but adequate for vegetables. Pasture condition poor to fair in lowland areas but fair to good upland. Cattle in fair to good condition.

IDAHO: Temperatures averaged near normal. Precipitation limited to widely scattered thundershowers north and east. Heaviest showers at Idaho Falls 6NW where 0.61 inch recorded first 3 days of August. Weather conditions quite favorable for farmers. Dry weather further deteriorating ranges. Lack of rainfall in mountains raising fire danger level and causing forage to become short there. No movement of livestock reported. Demand for irrigation water for row crops very heavy. Water supplies adequate. Grain harvest southwest nearly 50% complete, south-central 25% complete, north 10% complete, and east 15% complete. Second cutting alfalfa nearly 3/4 complete southwest and about 1/4 done other areas. Harvest of dry peas about 10% complete in north and nearly 20% complete south.

ILLINOIS: In spite of some short-lived warming, temperatures continued to average below seasonal. Friday morning minimums reached into the 40's parts of northern Illinois with Antioch reporting a minimum of 44°. Precipitation frequently totaled over 2.00 inches past week with Newton reporting a weekly total of 5.91 inches. Corn 95% silked, little ahead of average, 1/2 dough stage. Corn rootworms in some fields; most corn pollinated and beetles will not effect kernels. Condition good to excellent 82%, year ago 93%. Soybeans 90% bloomed, 60% set pods, slightly behind normal. Soybean condition 83% good to excellent, 1971, 94%. Oats 95% ripe, 60% harvested, behind normal. Alfalfa hay 2d crop 3/4 cut. Pastures improved with rains. Soil moisture short 34%, adequate 54%, surplus 12%. Average 4.7 days good for fieldwork.

INDIANA: Second cool week. Temperatures averaged 4° below normal. No maximums in 90's. Some minimums in 40's. Precipitation of 0.50 to 2.00 inches quite general midweek and weekend. Humidity and cloudiness above normal. Five days suitable for fieldwork. Topsoil and subsoil moisture mostly adequate. Wheat 95% combined, 3 days behind average. Oats 70% harvested, 5 days behind average. Wheat land 20% plowed, 15% average. Corn 75% silked, one week behind 1971. Corn 10% in dough, remainder not yet in dough. Alfalfa hay 70% cut second time, 6 days behind last year. Pastures improved, mostly fair to good.

IOWA: Wet and cool. Showers primarily on 1st, 2d, 5th, and 6th totaled 2.00 to 6.00 inches except some northern and western counties where showers were light. Some flood and hail damage. Condition of growing crops good to excellent. Corn crop condition 71% excellent, 28% good, and 1% fair. Forty percent corn in or past dough stage, last year 45%. Over 80% soybeans blooming or more advanced with 50% setting pods, same as 5-year average. Last year 72% setting pods by this date. Soybean condition 53% good, 47% excellent. Oats harvest lagging in north-central, northeastern, and east-central areas of State. Statewide oats harvest over 75% complete, last year and 5-year average harvest nearing completion by this date. Second cutting alfalfa hay over 70% complete; second crop clover hay 45% cut. Hay crop condition mostly good to excellent. Pasture condition 55% excellent, 45% good. A little over 3 days suitable for fieldwork. Topsoil moisture 66% adequate, 32% surplus, 2% short.

KANSAS: Temperatures averaged below seasonal 3d consecutive week. Departures 2° below normal in south-central and 6° to 8° below seasonal elsewhere. Maxima in 60's northwest August 3d and 4th, otherwise most maxima 70's to 90's. Moderate to heavy rains northern 2/3 most totals in range 0.50 to 2.50 inches. Few localities had very heavy rains. Quinter in west-central received 4.82 inches and several other spots over 3.00 inches. Southern 1/3 had light to moderate rainfall with totals generally 0.10 to 0.75 inch. Row crops and pastures benefited from rainfall last week. All but few Kansas counties have adequate topsoil moisture. Corn 39% in dough stage, 52% year ago, average 48%, dented 10%, 13% year ago, average 18%. Sorghums 33% headed, 37% last year, average 33%. Greenbugs sprayed some areas but damage limited by predator insects buildup. Soybeans 49% setting pods, 55% last year, average 46%. Cattle marketings light as result of good grass on pastures and ranges. Problems with horn flies and scabies. Third cutting alfalfa hay 33% harvested compared 46% last year and average 42%. Prairie hay harvest active.

KENTUCKY: Temperatures 2° to 6° below normal, except near normal southeast. Rainfall spotty, variable from 0.08 inch to more than 6.00 inches. Flash flooding night of 3d in northeast vicinities of Morehead and Farmers, as 4.00 to more than 6.00 inches fell in less than about 4 hours; no injuries reported but some damage. Temperatures seasonable midweek, below normal balance. Rainless on 5th but rain 1 or more sections other days, widespread on 3d, 4th and 6th. Cloudy 2 days, mostly sunny other days. Fieldwork limited to 3 days by rain and wet ground. Soil moisture adequate to excessive. Some flooding damage in western counties, mostly to tobacco and soybeans. Corn progressing rapidly, about 2/3 in milk stage or beyond, but less than 10% dented; well behind last year. About 1/2 of soybeans blooming with 1/4 setting pods. Tobacco growing rapidly except where rain was excessive. Too early to assess flood damage, but some local scalding. Burley 55% blooming, 15% topped, slightly ahead 1971, but about normal. Darks a bit further advanced. About 82% of burley crop treated with chemical sucker control agents, average for last few years. Third cutting alfalfa nearly 1/2 complete.

LOUISIANA: Warming and drying trend as week progressed with temperatures reaching mid-90's during weekend. However, weekly averages normal to 3° below normal. Fifth straight week with cooler than usual weather statewide. Temperature extremes: 99° at Baton Rouge Saturday and 62° at Bogalusa last Monday. Scattered showers numerous first half of week; very few last half. Many points received no rain and locally amounts were generally less than 0.05 inch except in a few areas in north and southwest. Greatest 1-day total, 1.85 inches measured at Jennings Monday afternoon. Fieldwork slow first of week but active last 1/2. Soil moisture generally adequate but short in extreme northeast where recent rainfall very light. Cotton growing and fruiting well, insect control active. Soybeans blooming and podding, prospects good. Combining rice active latter part of week, yield and quality good. About 10% of crop harvested, some lodging from heavy showers and wind. Sugarcane growing rapidly, good prospects. Borer control active. Corn maturing, yield prospects fair to good. Grain sorghum heading and maturing. Sweet

potatoes growth good, light digging continued. Hay and pasture grasses growing rapidly. Haying active latter part of week. Pasture feed above average. Livestock condition good.

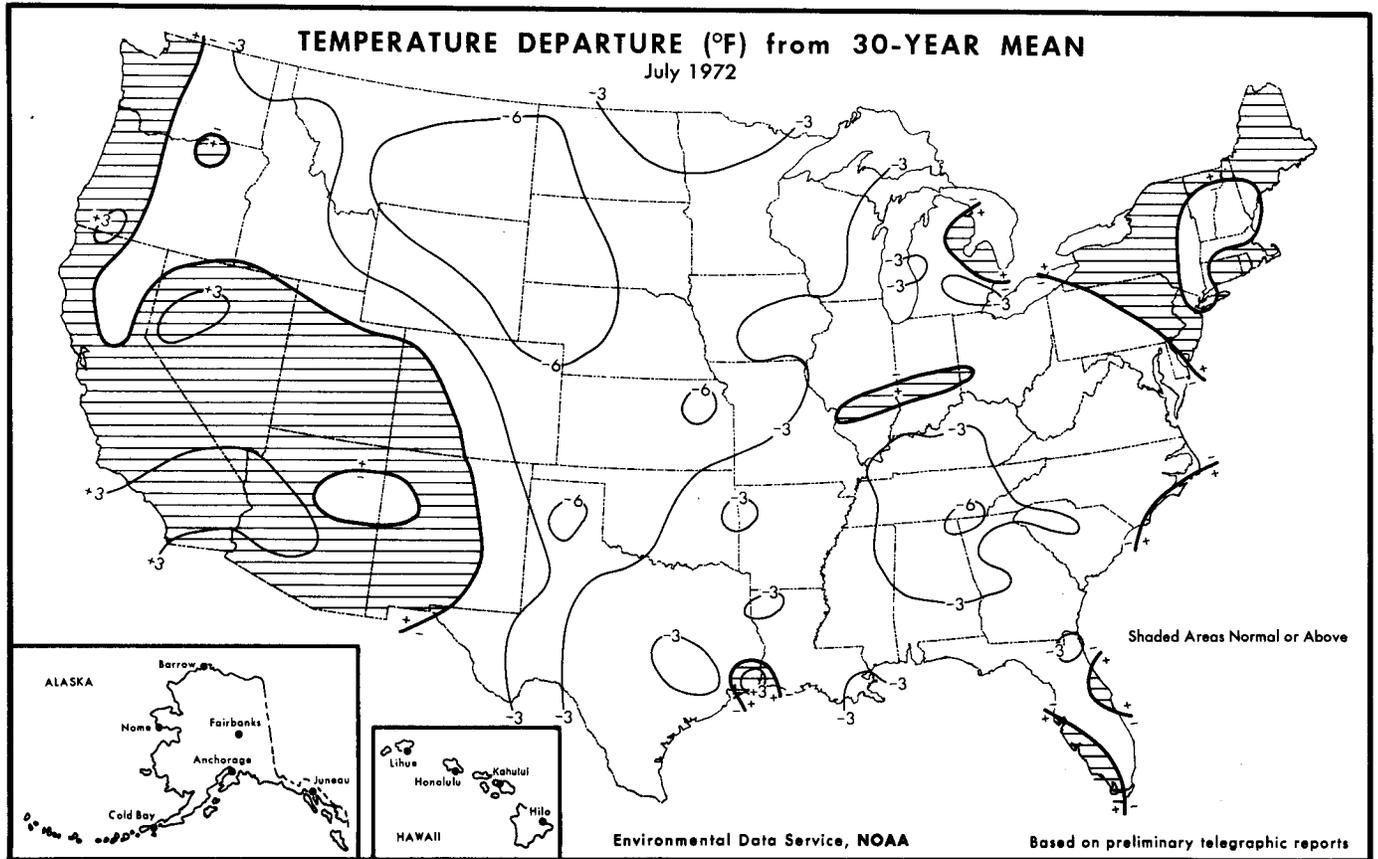
MARYLAND AND DELAWARE: Temperatures averaged 1° to 3° below normal. Extremes mostly upper 80's to low 90's, upper 50's to low 60's. Rainfall light except totals to 2.00 inches or more in southern Maryland and southern Eastern Shore. July 1972 temperatures near normal in spite of a very warm 12-day period; rainfall below normal. General rain needed all areas. Corn generally good but plant food short many fields due to leaching. Corn 70% silked, about 1 week late. Soybeans range from setting pods to just emerging. Rain critically needed for late fields. Early tobacco being cut, later fields developing rapidly. Hay harvest made good progress. Sweet corn and tomato harvest in full swing. Cantaloupe and watermelons being harvested. Peach harvest continues. Apple prospects good but need rain to size properly.

MICHIGAN: Temperatures averaged 4° to 8° below normal with greatest departures in central Lower Michigan. Mild early in week turning colder by midweek and remained cool through weekend. Minimum temperatures in 30's and 40's 4th and 5th. Precipitation totaled from 1.00 to 2.00 inches most areas except along southern border where amounts averaged 0.30 to 0.60 inch. Field crops making good growth. Soil moisture adequate to surplus most areas, but short southwest. State averaged 4.0 days suitable for fieldwork. Wheat and oat harvest slowed by wet weather. Wheat 85% harvested, oats 18% harvested. Corn developing well, 2/3 silked. Soybeans and fall potatoes making good growth. Early soybean fields setting pods. Sugar beets developing well. Hay making delayed by wet weather. Pasture feed supplies average. Tart cherry harvest completed southwest, at peak northwest. Blueberry harvest active. Early plum picking started southwest. Apples sizing well. Melon, pepper and tomatoes development slowed by cool weather. Snap beans, sweet corn and pickle harvest active.

MINNESOTA: Very cold week with temperatures averaging near 9° below normal. Minimum temperatures in 30's part of northern 1/3 of State on mornings of 3d and 4th. Extremes: 83°, 33°. Precipitation: Wet across central district, 1.00 to 2.00 inches of rain fell within an area from Grand Forks-Duluth-Twin Cities to south of Fargo on 5th and 6th. Rest of State generally less than 0.50 inch except a small area in southeast which received 1.00 to 4.00 inches on 31st. Small grains harvest slowed by showers and wet fields. Corn and soybeans good to excellent condition in south, fair to good elsewhere. Corn in milk stage 18%, normal 12%. Soybeans setting pods 46%, normal 48%. Flax fair to good condition, turning ripe 16%, normal 39%. Moisture adequate south and north, short northern part of northwest district and adequate to surplus through central districts. Small grains cut: Spring wheat 12%, normal 29%; oats 38%, normal 60%; barley 38%, normal 56%. Small grains combined: Spring wheat 2%, normal 10%; oats 12%, normal 31%; barley 12%, normal 30%; winter wheat 29%, normal 43%; rye 30%, normal 59%.

MISSISSIPPI: Temperature averages 3° to 5° below normal. Extremes: 63° at Holly Springs Monday and Tuesday; 97° at Wiggins Thursday. Rain from

(Continued on page 10)



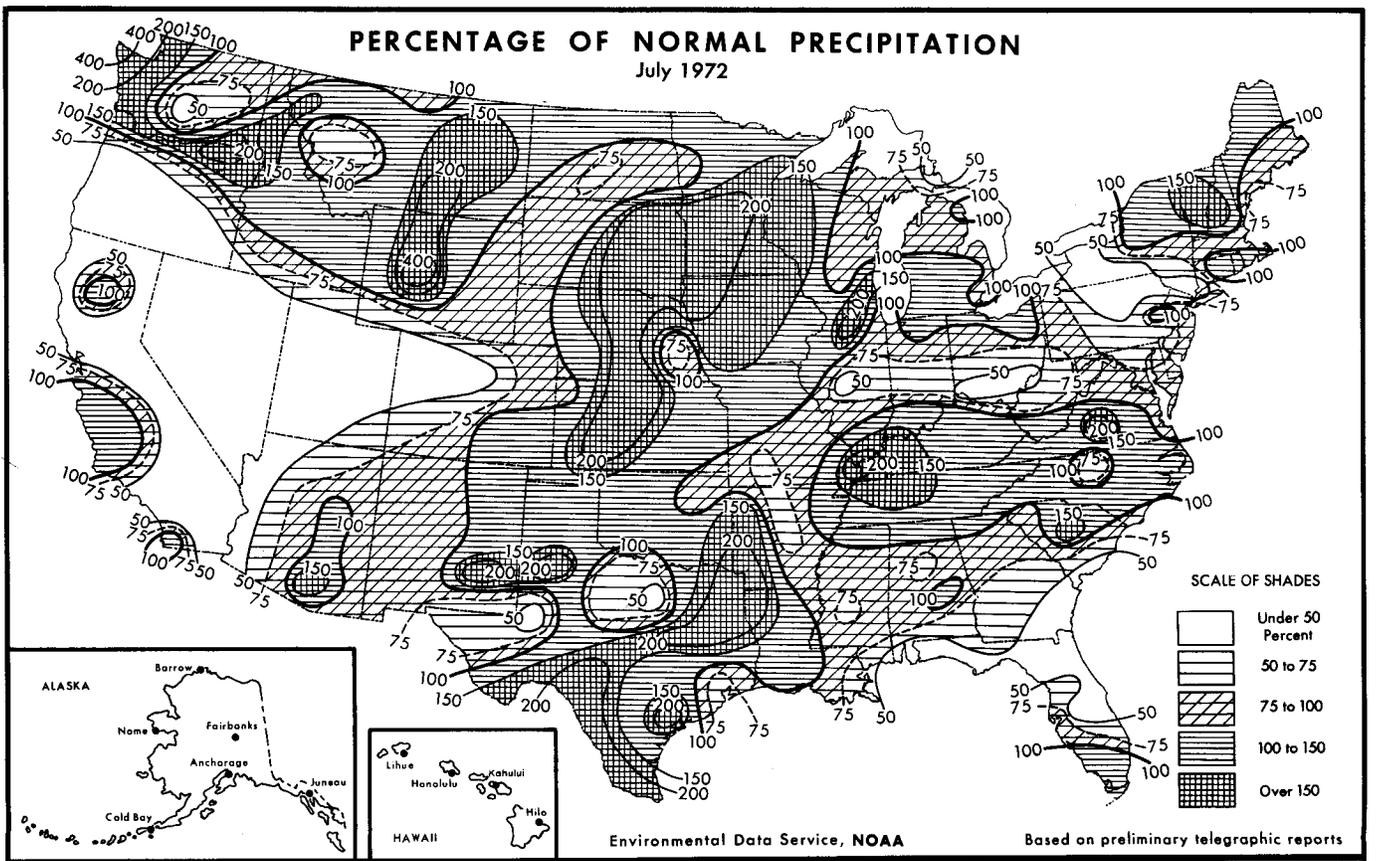
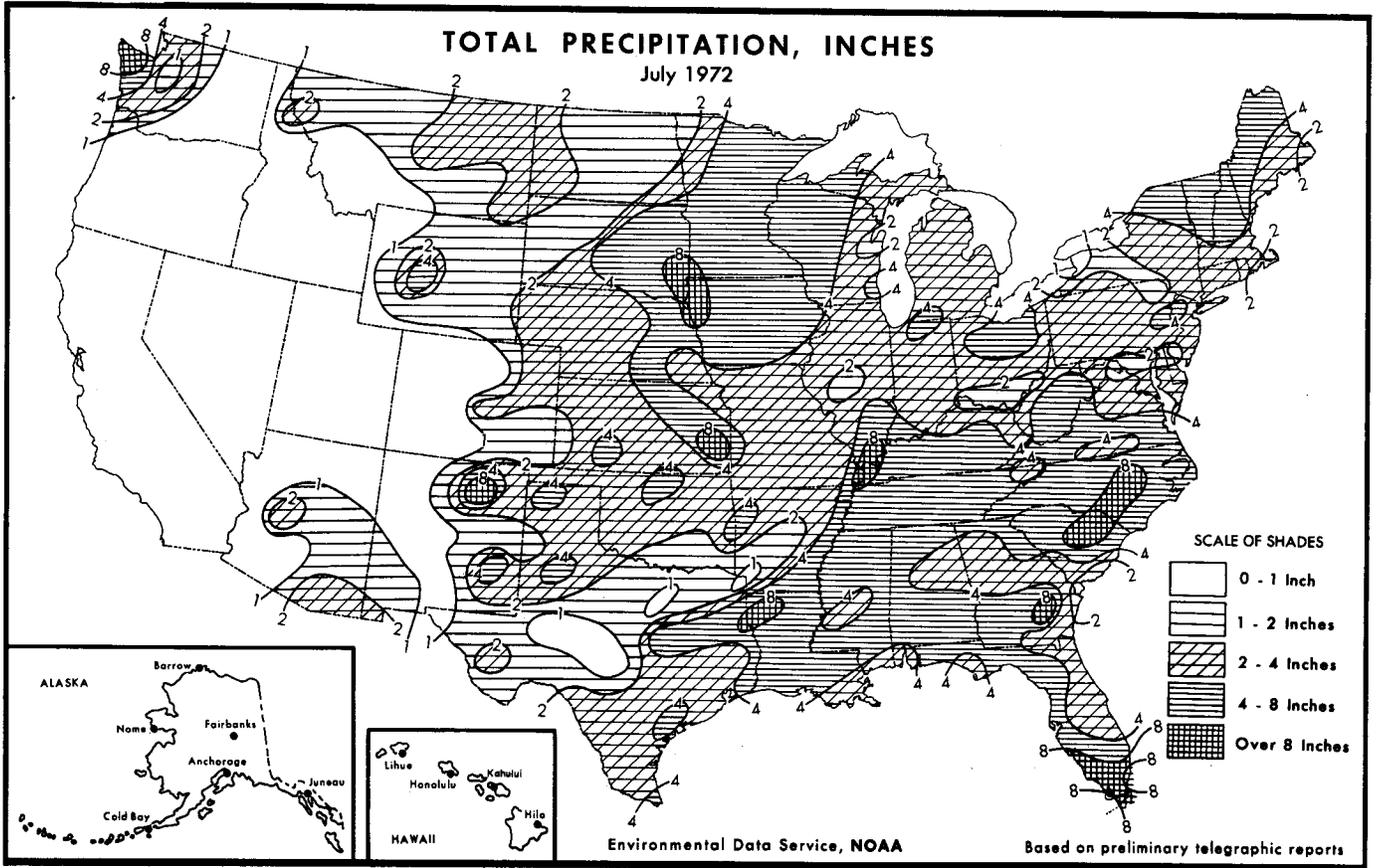
WEATHER - JULY 1972

TEMPERATURE: Cold air moved into the north-central Great Plains early in July ending the heat wave which had been in progress over that area. Norfolk, Nebr., registered 95° on July 1 but only 66° on July 2. Near the middle of the first week, a cold front stretched from northern Utah through the Texas Panhandle to New England. Early morning temperatures north of the front were in the 30's and 40's. Maximums reached the 60's. These temperatures are 15° to 20° cooler than normal for early July. Warm humid air drifted northward south of the front. Temperatures averaged about 30° warmer than in the cool air. A large High pushed into the central Great Plains. It helped hold temperatures down over the East but the West warmed. By July 5, Havre, Mont., had warmed to 86°. This was 10° warmer than Birmingham, Ala. The High weakened and moved off the Atlantic Coast. It pumped 90° heat northward. By the middle of the 2d week of July, summer heat prevailed over most of the Nation. Afternoon temperatures reached the 90's over most of New York and New England. Boston, Mass., registered 94° on July 12.

At midmonth, cold air moved into the central Great Plains. Salina, Kans., recorded 107° on the 14th but only 70° on the 15th. The heat intensified in the Northwest. The Dalles, Oreg., recorded 101° on the afternoon of July 16. Blistering heat continued in the Sacramento Valley of California. Red Bluff, at the northern end of the Valley recorded 118° on the 14th and Stockton registered 114°, the warmest Stockton has ever been. Furnace Creek, Death Valley, Calif., recorded 128° on both the 14th and 15th.

Shortly after midmonth the Bermuda High moved westward from a position about 600 miles northeast of Bermuda. By the 21st, it had become quasi-stationary over the western Carolinas. The very light but generally southerly winds on the west side of the High spread warm, humid, hazy weather over the eastern half of the Nation. The light thunderstorms in the moist air brought little relief from the heat, humidity, and atmospheric pollution. Patches of light early-morning fog dotted the eastern half of the Nation on most mornings and the rising sun was reddish orange due to the pollutants in the air. In the last week of July, a cold front brought relief to the Northeast after almost 2 weeks of humid 90° heat. A few days before the end of July, the front became stationary from Utah to the middle Atlantic coast. The Southeast continued hot but the North was comfortably cool.

PRECIPITATION: A quasi-stationary front from western New York caused some dismal rainy weather early in July. As the front became active, tornadoes occurred in spots in the Great Plains from North Dakota to Texas. Property damage was light and we have no reports of deaths nor injuries. Thunderstorms developed along the front and in the humid air that lay over the central and southern Great Plains and the middle and lower Mississippi River Valley. Heavy showers doused spots in the central Great Plains about midmonth. Four to 6.00 inches of rain caused streams to rise in western Kansas and south-central Nebraska. A weak tropical storm moved inland near Myrtle Beach, S.C., on the evening of July 11. It dumped 2-day



totals of 3.00 to 6.00 inches of rain over the eastern portions of the Carolinas and northward to New England. With the soils already saturated, only moderate showers were required to produce local flooding in some areas.

Vigorous thunderstorms broke out along a quasi-stationary front which, shortly after mid-month, stretched from the Great Lakes to the Texas Panhandle. A few twisters occurred in central Kansas, east-central Iowa, and northern Illinois on the evening of July 17. Some farmsteads were damaged and some cattle injured. Heavy rains and strong winds on the 18th caused property damage west of Chicago, Ill. After the front dissipated another front farther north brought active weather to the northern and central Great Plains. The showers were especially heavy north of St. Cloud, Minn., where 24-hour rainfall totals exceeded 8.00 inches at a few localities. Vigorous thunderstorms caused torrential down-pours in South Dakota and Nebraska in the last week of July. Rains in western Tennessee swelled the creeks and small rivers to overflowing.

No rain or only widely scattered light sprinkles fell in California and nearby portions of neighboring States.

L. W. Dye

(MISSISSIPPI continued from page 7)

thundershowers on 1 or 2 days; heaviest amounts mostly in north. Greatest 1-day amount of 4.09 inches measured at Leland Saturday. Over weekend: Temperatures higher with 100° at Merrill Sunday; no rain at most stations; showers mostly in extreme north. Soil moisture mostly adequate over State with scattered local areas still short. An average of 5.0 days suitable for fieldwork. Sweet potatoes 13% harvested. Fifty-five percent of soybeans crop blooming and 15% setting pods. Corn acreage 52% dented. Cotton beginning to open. Cotton, soybeans, pastures, hay crops, and livestock mostly good condition. Corn and sweet potatoes fair to good condition.

MISSOURI: Temperatures averaged 5° to 8° below normal. New record-low temperatures established in northwest at end of period. Rainfall plentiful in all but southwest. Amounts ranged from 0.10 inch southwest to over 2.00 inches north, from showers midweek and over weekend. Corn, soybeans, and cotton fair to good condition. Corn 88% silked, 49% dough stage. Behind last year's 95% silked and 62% dough stage. Soybeans 71% blooming, same as last year but only 35% setting pods, compared to 50% last year. 73% cotton setting bolls. Grain sorghum 57% headed, 75% last year. Third cutting alfalfa 28% harvested. Soil moisture short central and southwest, adequate elsewhere.

MONTANA: Warm first of week and weekend, cool and wet most sections midweek. Average temperatures varied from near normal northwest to 8° below normal southeast. Substantial precipitation all plains areas except northeast midweek with amounts greater than 1.00 inch common. Only scattered light showers west. Rains slowed winter wheat and hay harvesting east of Divide, except northeast corner. Most winter wheat harvesting confined to middle 1/3 and southeast. Winter wheat 10% harvested, 45% ripe, 45% turning. Some barley harvested, mostly north-central, south-central and southeast. Present range feed adequate eastern 1/3, mostly short central, short to adequate elsewhere. Grazing

prospects for late summer range feed helped by recent rain, good to excellent eastern 1/3, mostly fair to good elsewhere. Second cutting alfalfa 15% complete, yields improved by rains. Wild hay harvest 70% complete. Cattle and sheep doing well.

NEBRASKA: Hot west half weekend of July 29, but the influxes of cloudiness and cool air that followed caused temperatures to average 5° to 10° subnormal for week ending August 6. Several periods of showers and thunderstorms first half of week, ending August 6, giving way to dry weather during the latter part of the 7-day period. Largest weekly rainfall totals in south-central and southeast, where close to 3.00 inches of rain fell locally. Weekend of August 6 saw dry weather prevalent as cooler air advanced across State. Surface and subsoil moisture supplies adequate to surplus except for few local areas. Small grain and hay harvest hampered by wet conditions. About 90% of corn has reached silking stage. Row crops good to excellent. Some areas have stopped watering as result of favorable weather. Sorghum made excellent progress, 60% of acreage heading. Soybean development advanced to 55% podding. Sugar beets, potatoes, and dry beans making good growth, but continued wet conditions could be problem for dry bean growers. About 90% second crop and 10% 3d crop alfalfa has been cut. Livestock conditions very good.

NEVADA: Temperatures all divisions averaged 2° to 4° above normal. Light to moderate spotty precipitation north and south-central first part of week. Tonopah reported 0.04 inch, Austin 0.05 inch, Ely 0.15 inch, Yerington 0.40 inch. No precipitation extreme south. Second cutting alfalfa hay and grain harvest in full swing north. Fourth cutting alfalfa hay complete and 5th cutting beginning in south. Harvest other hays nearing 2/3 completion. Cotton development in Pahrump Valley satisfactory. Livestock in fair to good condition. Ranges dry and need moisture.

NEW ENGLAND: Week cool averaging mostly 2° to 6° below normal. Very cold morning of August 5 breaking records for date and dropping to near freezing in colder locations Concord, N.H. reported 36°. Many stations in low 40's. Frequent light showers with scattered heavy showers and thunderstorms on 31st to 1st and again on 3d and 4th. Totals for week mostly 0.25 to 1.00 inch but up to 2.00 inches or more extreme northwestern and extreme southeastern portions. Harvest of vegetables in full swing. Seasonal vegetables appearing at markets in volume. Some early apples and peaches being harvested. Prospects remain good for Massachusetts cranberry crop. Showers and wet fields again delayed haying operations. Very little put into barn. Tobacco crop in Massachusetts improving rapidly. Potato fields in Maine continue to look good.

NEW JERSEY: Second consecutive cool dry week. Temperatures averaged from 1° to 5° below normal. Readings ranged from low 90's to mid-40's. Northern counties averaged 0.20 inch of rain while southern counties averaged 0.10 inch. Coastal division averaged 0.50 inch. Station totals over state varied from none to 0.84 inch. Rainfall limited to local showers. Most areas indicate shortage of topsoil moisture. Irrigation of vegetable crops continues. Damage to

fruits and vegetables from preceding week's hail storm in South Jersey, although relatively limited in area, was severe. Harvest of summer apples active. Blueberry supplies declining. Supplies of most summer vegetables moderate with peppers increasing but sweet corn past peak harvest. White potato digging progressing slowly. Planting and cultivating fall vegetables continue. Good progress toward completing 2d cutting alfalfa, combining small grains, and straw baling.

NEW MEXICO: Light scattered showers most frequent second half of week. A few local totals of 1.00 inch. Temperatures averaged above normal west and central and below normal eastern plains. Daytime temperatures cooling until warming on weekend. Lowest nighttime temperatures on weekend. Soil moisture conditions short to adequate. Cotton fair to good. Grain sorghum good. Dryland, irrigated heading out. Preparation for planting wheat underway. Corn good. Alfalfa hay fair to good. Onion harvest Mesilla Valley active. Chili harvest underway. Broomcorn good. Harvesting miscellaneous crops. Ranges fair to good. Poor scattered areas. Livestock fair to good. Supplemental feeding dry areas.

NEW YORK: Temperatures seasonable through 3d. Turning cooler latter half. Averages coolest since early July. Maximums low to mid-80's on 1st and 3d, but cooled to 65° to 70° Upstate on 4th. Minimums 40° to 45° generally Upstate on 5th with a few upper 30's in southwest. Showers widespread 2d and 3d. Heaviest in Finger Lakes and southeastern plateau with 1.00 to 2.00 inches and locally 2.50 inches. Elsewhere mostly 0.50 to 0.80 inch except 0.40 inch or less Hudson Valley and Long Island. Wheat harvest continues but wet fields, high humidity, and showers delayed progress. Oats turning color, some fields lodged. Corn crop developing but condition and stage of maturity extremely variable. Cornfields range from poor to excellent. Second cutting alfalfa hay about 20% harvested. Wet fields and poor drying conditions delaying harvest. Clover-timothy hay about 80% cut. Potato harvest increasing, Long Island expecting greater proportion of size "B". Onions recovering steadily. Late season, thin stands and lost acreage reducing onion production. Sets being harvested Canastota and Oswego sections. Celery and lettuce increasing. Sweet corn active. Light supplies of tomatoes. Snap beans and cucumbers available. Market cabbage harvest active. Tart cherry harvest past peak, expect to be completed by August 11. Good crop of pears expected, with Clapp harvest to begin about August 15. Some early variety apples picked in Hudson Valley.

NORTH CAROLINA: Slightly cooler than last week, averaging near normal. Daily showers totaling 0.25 to 4.00 inches, mostly 1.00 to 2.00 inches. Scattered thunderstorms with some local damage from wind and lightning. Soil moisture mostly adequate to surplus. Showers over most of State during week. Crops generally good. Cotton boll weevil infestation increased due to rains preventing spraying, not critical yet. Flue-cured tobacco mostly good. Harvesting active, some flue-cured completed. Selling active in border belt, record-high prices. Fruit and vegetable harvest continues. Irish potato digging slow, some on orders only. Peach crop fair, about 75% harvested. Apple prospects favorable, harvest just beginning. Average 3.5 days fieldwork during week.

NORTH DAKOTA: Sunny and cool except some scattered thunderstorms with strong winds and light hail on weekend. Temperatures averaged 4° to 7° below normal. Highest 95° and lowest 33°. Precipitation ranged from one to 1.45 inches, highest in west-central region. Scattered showers and cool temperatures delayed harvesting but promoted good kernel development in late-planted small grains. Swathing early small grains well begun. Additional moisture needed several areas. Over 1/3 hard wheat and about 1/4 durum turning ripe. Cattle making good gains.

OHIO: Cool and dry with temperatures generally below normal. Lows 31st to 4th ranged from low 50's to low 70's. On 5th to 6th lows were in 40's with Toledo, Dayton, and Cleveland setting new low temperature marks on 5th, 43°, 45°, 46°, while Youngstown 46° on 6th set a new low mark. High temperatures for week were mostly in 70's and 80's. Rainfall amounts low. However, thunderstorms did bring higher amounts some locations. Zanesville had 1.80 inches on 1st and Marietta had 1.83 inches from 6 p.m. on 3d to 6 p.m. on 4th. Drier weather permitted 6 favorable days fieldwork. Warmer temperatures were lacking from otherwise excellent growing conditions. Soil moisture supplies 23% short, 68% adequate, 9% surplus. 70% of corn is silked, 10% dough stage. Average development 80% silked, and 20% dough stage. Soybean crop has 45% pods setting, 10% pods set, leaves green. Normal progress 15% pods set, leaves green. Wheat harvest 95% complete, equal average progress. Oat harvest 60% done, 80% average. Potato harvest underway, about 10% harvested. 70% second cutting alfalfa and 50% second cutting clover-timothy harvested. Plowing for winter wheat 10% done, usual progress 20%.

OKLAHOMA: Rainfall varied from trace southwest to 0.30 inch Panhandle and east-central. Temperatures averaged near normal except slightly above normal northeast. Most row crops showed further deterioration. Hay and pasture growth slowed after another week of hot dry weather. Sorghums showing some stress as 2/3 of crop headed or more advanced. Cotton mostly good condition but needing rain with 90% squaring and 40% setting bolls. Nearly 1/2 peanut acreage spiking. Over 1/4 soybeans setting pods. Third cutting alfalfa nearing completion but prospects for next cutting dropping. Some alfalfa seed harvested with poor to fair yields. Ranges need rainfall with only small northern counties favored by local showers rated good. Cattle condition continues good with little supplemental feeding.

OREGON: Hot dry week except morning cloudiness midperiod western 1/3 of State. Weekly temperatures averaged near normal on coast, above normal elsewhere with 7° to 10° above normal northeast. Minima 37° to 58°. Maxima 68° to 83° coast, 88° to 102° elsewhere. Midweek light showers mostly scattered traces except 0.04 inch Condon and 0.22 inch Lakeview. Grass seed harvest 85% complete. Field burning limited and behind schedule. Grain harvest underway in Willamette Valley and most northern counties. Central and southeastern grain filling and ripening. Caneberry harvest coming to end except blackberries. Red Haven peaches and Gravenstein apples being harvested. Picking completed on sweet and tart cherries. Italian prune harvest underway at Milton-Freewater. Potato digging continues at Hermiston and Ontario. Digging continues for table beets. Cucumber harvest also underway. Cattle in Columbia Basin counties moving on to stubble.

PENNSYLVANIA: 2d consecutive week with below normal temperatures. Daytime maxima from 70's north to 80's south. Overnight minima mostly 40's and 50's north to 50's and 60's south. Near-record lows for date Saturday morning with 32° at Bradford; the first freezing temperature in Pennsylvania since mid-June. Showers most western and northern counties through week with rainfall 0.50 to 1.00 many places and over 2.00 inches Somerset County. Most central and southern areas very dry with amounts less than 0.25 inch. Topsoil moisture mostly adequate. Corn 1/2 silked, wide variations because of delayed planting. Combining wheat lags, oats 1/3 finished. Second cutting alfalfa in progress. Quality fair to good. Seed head appearing on earliest tobacco. Wide variations in tobacco fields. Sour cherry harvest continues, mostly Erie County. Early apples and peaches in progress. Tomato development late. Sweet corn for processing started July 31. Cabbage full, sound heads. Pasture mostly average.

PUERTO RICO: Significantly dry week with little or no rain reported islandwide except for 4 stations. Rainfall averaged 0.31 inch or 1.30 inches below normal. Agricultural drought continued to intensify and the situation is very serious for dairy and cattle industry. Emergency supplies of molasses and feed continued to keep many farmers in business. Temperatures averaged 81° to 82° on coast and 77° interior with mean departure of 0.4° below normal. Highest maximum 97° lowest minimum 59°. Sugarcane plantations report good weather for cultivation and general field work but too dry for development of young cane in non-irrigated zones. Coffee plantations report some harvesting but due to drought it will not be plentiful. Tobacco plantations report weather too dry for crop. Pastures very poor most places due to agricultural drought. Minor crops suffering from drought. Farmers awaiting for rains to begin plantings. Pineapples planted in Hatillo and Lajas. Harvest of avocados has been good in Rincon.

SOUTH CAROLINA: Temperatures slightly below normal Piedmont but normal elsewhere. Cloudiness more predominant and precipitation amounts greater in Piedmont than in rest of State. The south Coastal Plain had less than 0.50 inch of rain while a strip of 1.50 to 2.50 inches extended from Chesterfield County through Fairfield to Abbeville County. Crops improving, insects increasing. Tobacco good condition, 76% harvested compared with 68% last year. Cotton fair to good condition, boll weevil, boll-worm infestation increasing most areas, 94% of plants begun squaring, 76% setting bolls, 5% open bolls. Corn good condition, 97% reached silk stage, 76% dough stage, 50% mature. Soybeans, peanuts, lespedeza and pastures good condition. Peaches fair to good, 82% harvested compared with 79% last year. Watermelons fair condition, 86% harvested, same last year.

SOUTH DAKOTA: Temperatures averaged from 5° to 11° below normal. This is the 6th week in a row that weekly temperatures averaged below normal. Extremes ranged from 41° at Ipswich on 3d to 96° at Oelrichs and Mission on 31st. Precipitation fell as showers and thundershowers scattered through week with locally heavy amounts. Amounts of 4.00 to 5.00 inches fell Brandt area during night of 31st. Weekly totals ranged from less than 0.10 inch to over 2.00 inches with most totals from about 0.20 inch to 0.50 inch. Rain and heavy dew continues to de-

lay harvest over most of State. Some small grains in windrow 3 weeks and sprouting. Weed growth will cause combining problems. Early grains combined showed good yields and quality. Northwest and southwest corners State have had good weather for harvest. Harvesting small grains progressing as follows: winter wheat 70% this year, 93% normal; rye 69%, 89% normal; spring wheat 16%, 41% normal; oats 34%, 67% normal; and barley 40%, 74% normal. Development of row crops slowed by cool weather, much of the acreage still behind last year. Corn silked 68%, normal 96%. Pastures and livestock good to excellent condition. Pink eye still a problem over State. Hay supplies above normal.

TENNESSEE: Light to moderate rains early and late in week. Totals ranged from less than 0.25 inch to over 2.00 inches averaging about 0.75 inch. Heaviest in mountain areas. Temperatures averaged slightly below normal southeast, 1° to 3° below normal elsewhere. Hay harvest, burley tobacco topping and fall plowing were major farm activities. Soybeans continue rapid growth under favorable weather conditions with 70% blooming and over 20% setting pods. Corn growth about one week ahead of last year's crop with nearly all corn silked, 45% dough stage, 25% dented, and some corn maturing. Virtually all the cotton has squared and around 90% setting bolls. Excessive moisture and black shank trouble Middle and East Tennessee tobacco growers. Burley tobacco harvest getting underway. Pasture conditions continue to improve due to adequate moisture. Lespedeza hay harvest is 15% complete. Days suitable for field work averaged 3.4. Soil moisture 66% adequate, 31% surplus and 3% short.

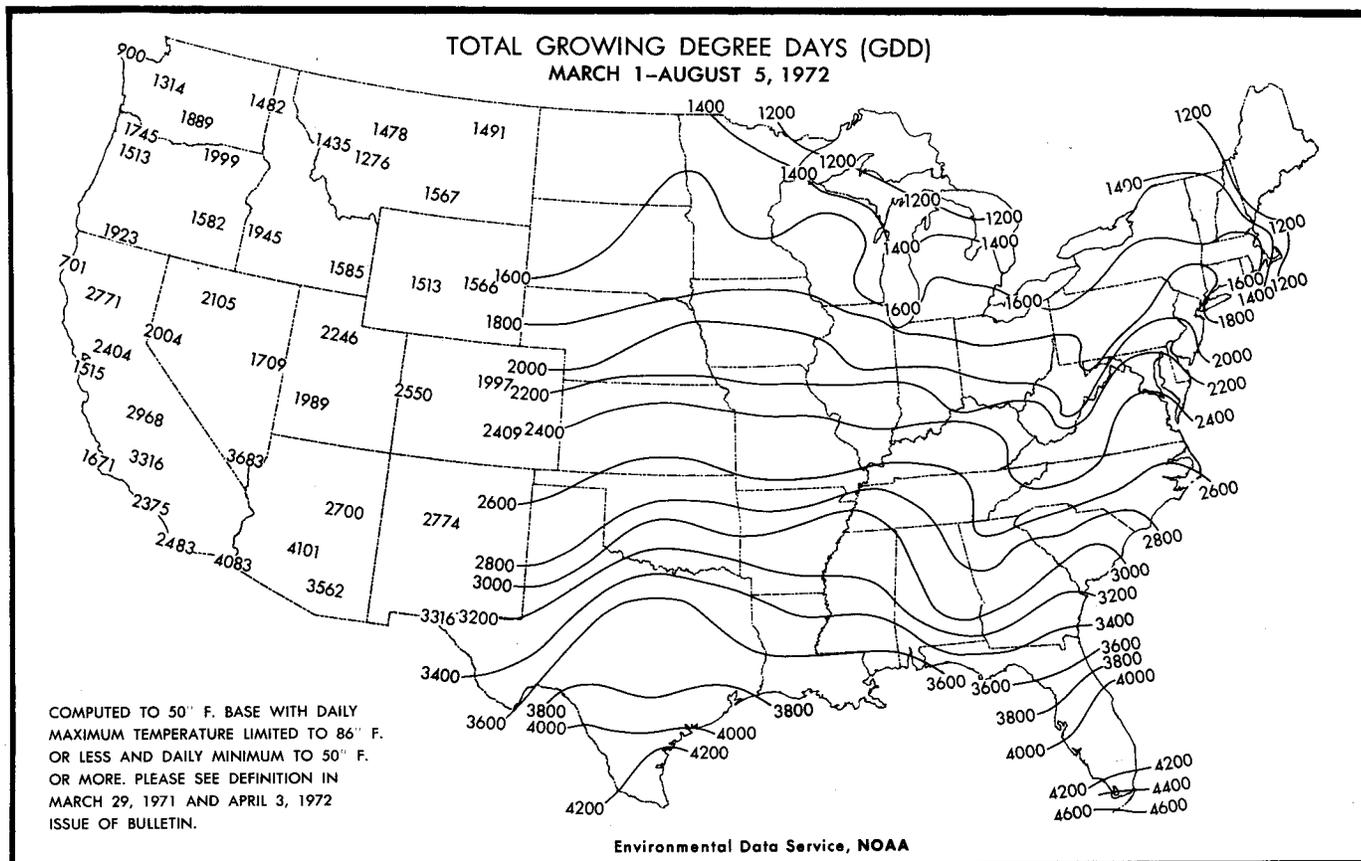
TEXAS: Scattered showers many parts of State with most significant amounts along middle coast and in northwest Texas. A small tropical depression brought heavy showers of 2.00 to 4.00 inches to Middle Coast and as far inland as San Antonio area at midweek. Fair hot weather returned to most of State over weekend but showers continued northwest. Rains southern 1/2 State hampered cotton harvest, making defoliation difficult. Sorghum harvest making good progress Blacklands and East Texas. Harvest first cutting rice making fair progress on Gulf Coast. Sorghum and rice yields above average. Rains threaten prospects. Corn and peanut harvest making fair progress South Texas. Percent harvested major crops; cotton 2, 3 last year; corn 6, 9 last year; sorghum 32, 28 last year; peanuts 9, 1 last year; rice 50, 40 last year. On High Plains onion and potato harvest has passed peak with declining supplies available. Cucumber and pepper picking underway. In the Trans Pecos area Pecos cantaloupe supplies will start decreasing. Potato digging has started. Tomato harvest to start 1st of September. In North Texas watermelon and cantaloupe harvest continues. In East and Central Texas moderate supplies of cantaloupes and watermelons remain available. Light supplies of tomatoes, squash and cucumbers available. In Winter Garden-San Antonio area planting of fall peppers, carrots, and winter cabbage underway. In Lower Rio Grande Valley land preparation for seeding of early fields and vegetables is main activity. Peach harvest nearly complete except for late varieties. Pecan crop outlook remains good. Routine citrus care with next years crop making good development.

(Continued on page 14)

Temperature and Precipitation Data for JULY 1972

| 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 | 3.6 | -1.6 | New Orleans | 79 | -3 | 3.9 | -2.8 | OKLA.Okla. City | 80 | -3 | 3.2 | + .8 |
| Mobile. | 81 | -2 | 2.2 | -7.5 | Shreveport. | 81 | -3 | 9.5 | +5.7 | Tulsa | 80 | -2 | 2.7 | - .2 |
| Montgomery. | 80 | -2 | 5.8 | + .4 | MAINE.Caribou | 65 | 0 | 4.2 | + .2 | OREG.Astoria. | 62 | +1 | 2.0 | + .7 |
| ALASKA.Anchorage. | 59 | +2 | .4 | -1.5 | Portland. | 68 | 0 | 2.1 | - .8 | Burns | 67 | -3 | T | - .3 |
| Barrow. | 43 | +4 | .1 | - .7 | MD.Baltimore. | 68 | -9 | 2.1 | -2.1 | Medford | 75 | +3 | T | - .2 |
| Fairbanks | 65 | +5 | .6 | -1.2 | MASS.Boston | 74 | 0 | 2.2 | - .7 | Pendleton | 75 | +1 | .6 | + .4 |
| Juneau. | 58 | +3 | 1.2 | -3.3 | Chatham | 67 | -1 | 1.8 | --- | Portland. | 71 | +4 | .6 | + .2 |
| Nome. | 56 | +6 | 2.5 | + .2 | MICH.Alpena | 66 | 0 | 3.5 | + .6 | Salem | 68 | +2 | .1 | - .3 |
| ARIZ.Flagstaff. | 66 | 0 | 1.9 | - .4 | Detroit | 71 | -3 | 2.2 | - .6 | PA.Allentown. | 75 | +1 | 5.9 | +1.1 |
| Phoenix | 94 | +4 | .7 | - .1 | Flint | 70 | 0 | 3.9 | +1.0 | Erie | 76 | 0 | 2.3 | +1.2 |
| Tucson. | 87 | +1 | 3.5 | +1.4 | Grand Rapids. | 70 | -2 | 3.7 | +1.0 | Harrisburg. | 77 | +1 | 2.6 | -1.6 |
| Winslow | 79 | +1 | 1.2 | + .2 | Houghton Lake | 67 | 0 | 2.5 | - .4 | Philadelphia. | 71 | -1 | 3.0 | - .9 |
| Yuma. | 95 | +2 | T | - .2 | Lansing | 68 | -4 | 3.3 | + .7 | Pittsburgh. | 72 | 0 | 1.2 | -3.6 |
| ARK.Fort Smith. | 78 | -5 | 4.9 | +2.1 | Marquette | 64 | -3 | 2.9 | - .3 | Scranton. | 73 | +1 | 4.3 | +1.4 |
| Little Rock | 80 | -2 | 1.8 | -1.5 | Muskegon | 68 | -3 | 3.5 | +1.1 | R.I.Providence. | 80 | -1 | 1.8 | -5.9 |
| CALIF.Bakersfield | 85 | +1 | T | 0 | S.Ste.Marie | 64 | -1 | .9 | -1.6 | S.C.Charleston. | 70 | -3 | 9.3 | +3.2 |
| Eureka. | 58 | +2 | T | - .1 | MINN.Duluth | 61 | -5 | 6.7 | +3.2 | Columbia. | 79 | -3 | 4.2 | - .5 |
| Fresno. | 82 | +1 | T | 0 | Internatl Falls | 84 | -2 | 4.5 | +1.0 | Greenville. | 77 | -3 | 4.2 | - .5 |
| Los Angeles | 78 | +5 | 0 | 0 | Minneapolis | 69 | -3 | 5.1 | +1.8 | S.DAK.Aberdeen. | 70 | -4 | 7.7 | +5.2 |
| Red Bluff | 83 | -1 | T | 0 | Rochester | 68 | -4 | 6.0 | +2.3 | Huron | 70 | -5 | 4.9 | -3.1 |
| San Diego | 73 | +3 | T | 0 | St. Cloud | 67 | -4 | 7.3 | +4.0 | Rapid City. | 66 | -8 | 1.7 | - .1 |
| San Francisco | 64 | +1 | T | 0 | MISS.Jackson. | 80 | -2 | 3.3 | +1.3 | Sioux Falls | 70 | -4 | 10.5 | +7.7 |
| Stockton. | 78 | 0 | 0 | 0 | Meridian | 79 | -3 | 5.7 | - .5 | TENN.Chattanooga. | 75 | -6 | 7.5 | +2.4 |
| COLO.Denver | 70 | -3 | .6 | - .9 | MO.Columbia | 76 | -3 | 3.9 | + .5 | Knoxville | 75 | -3 | 6.8 | +2.0 |
| Grand Junction. | 80 | +2 | .3 | - .3 | Kansas City | 77 | -5 | 3.4 | + .2 | Memphis | 79 | -2 | 2.4 | +1.4 |
| Pueblo. | 74 | -3 | 2.0 | + .2 | St. Louis | 78 | -0 | 3.1 | - .2 | Nashville | 77 | -3 | 6.4 | +2.7 |
| CONN.Bridgeport | 74 | 0 | 1.8 | -2.0 | Springfield | 67 | -2 | 2.2 | -1.7 | TEX.Abilene | 81 | -2 | 1.2 | -1.1 |
| Hartford. | 74 | +1 | 3.8 | + .2 | MONT.Billings | 67 | -8 | 1.9 | +1.0 | Amarillo. | 75 | -6 | 2.6 | + .3 |
| D.C.Washington. | 74 | -4 | 3.4 | - .8 | Glasgow | 65 | -6 | 2.3 | +1.0 | Austin. | 82 | -3 | 2.6 | + .4 |
| FLA.Apalachicola. | 82 | 0 | 1.6 | -6.3 | Great Falls | 65 | -4 | 1.5 | + .2 | Beaumont. | 87 | +3 | 4.9 | -1.1 |
| Ft. Myers | 83 | +1 | 9.7 | + .6 | Havre | 66 | -4 | 1.2 | - .1 | Brownsville | 81 | -3 | 5.2 | +3.5 |
| Jacksonville. | 80 | +3 | 3.2 | -4.5 | Helena. | 62 | -6 | .6 | - .4 | Corpus Christi. | 84 | 0 | 2.8 | + .5 |
| Key West. | 84 | +1 | 4.9 | + .7 | Kalispell | 63 | -3 | 1.5 | + .5 | Dallas | 83 | -2 | 2.0 | + .1 |
| Lakeland. | 81 | -1 | 3.5 | -4.8 | Miles City. | 68 | -7 | 2.0 | + .7 | Del Rio | 83 | -3 | 2.6 | +1.3 |
| Miami | 81 | -1 | 7.1 | + .3 | Missoula. | 65 | -2 | .6 | - .3 | El Paso | 82 | 0 | .7 | + .6 |
| Orlando | 83 | 0 | 4.0 | -4.0 | NEBR.Grand Island. | 74 | -3 | 5.0 | +2.5 | Fort Worth. | 83 | -2 | .6 | -1.2 |
| Tallahassee | 80 | -1 | 4.1 | -4.0 | Lincoln | 77 | -3 | 2.2 | -1.1 | Galveston | 82 | -1 | 3.4 | -1.4 |
| Tampa | 82 | 0 | 6.7 | -1.9 | Norfolk | 73 | -4 | 4.9 | +1.9 | Houston | 80 | -3 | 2.8 | -1.5 |
| GA.Atlanta. | 77 | -2 | 3.8 | - .9 | North Platte. | 70 | -6 | 3.6 | +1.1 | Lubbock | 77 | -3 | 4.5 | +2.5 |
| Augusta | 80 | -1 | 3.4 | -1.1 | Omaha | 73 | -4 | 5.6 | +2.0 | Midland | 79 | -4 | .6 | -1.3 |
| Macon | 79 | -3 | 3.3 | -2.3 | Valentine | 70 | -5 | 4.6 | +2.3 | San Angelo. | 83 | -2 | .2 | -1.2 |
| Savannah. | 81 | 0 | 1.4 | -5.2 | NEV.Ely | 68 | 0 | .2 | - .5 | San Antonio | 82 | -2 | 3.1 | +1.0 |
| HAWAII.Hilo | --- | --- | --- | --- | Las Vegas | 93 | +3 | .1 | - .4 | Victoria. | 83 | 0 | 7.3 | +3.7 |
| Honolulu | 80 | +1 | .2 | - .2 | Reno. | 71 | +3 | --- | --- | Waco. | 82 | -3 | 4.1 | +2.1 |
| Kahului | 78 | 0 | T | - .4 | Winnemucca. | 74 | +3 | T | - .3 | Wichita Falls | 83 | -3 | 1.1 | - .9 |
| Lihue | 78 | 0 | 2.3 | + .4 | N.H.Concord | 69 | -1 | 5.4 | +1.0 | UTAH.Blanding | 77 | 0 | .1 | - .5 |
| IDAHO.Boise | 74 | -1 | 2.7 | 0 | N.J.Atlantic City | 76 | +1 | 2.8 | - .9 | Salt Lake City. | 77 | 0 | .1 | - .5 |
| Lewiston. | 73 | -1 | .7 | + .3 | Trenton | --- | --- | --- | --- | VT.Burlington | 69 | 0 | 6.1 | +2.2 |
| Pocatello | 69 | -3 | .6 | + .1 | N.MEX.Albuquerque | 79 | 0 | 1.0 | - .2 | VA.Lynchburg. | 75 | -1 | 8.5 | +4.3 |
| ILL.Cairo | 78 | -3 | 9.2 | +6.0 | Roswell | 79 | 0 | 5.4 | +3.6 | Norfolk | 78 | -1 | 4.7 | -1.2 |
| Chicago | 74 | -2 | 2.9 | - .5 | N.Y.Albany | 71 | -1 | 3.1 | - .4 | Richmond. | 77 | -1 | 5.8 | + .2 |
| Moline. | 75 | -1 | 3.8 | + .5 | Binghamton. | 72 | +4 | 1.7 | -2.0 | Roanoke | 74 | -3 | 4.9 | + .6 |
| Peoria. | 73 | -3 | 3.5 | 0 | Buffalo | 71 | +1 | 1.0 | -1.6 | WASH.Colville | 64 | -5 | .6 | - .1 |
| Rockford. | 71 | -3 | 8.4 | +4.3 | New York. | 75 | -2 | 3.5 | - .2 | Omak. | --- | --- | --- | --- |
| Springfield | 76 | -2 | 1.7 | -1.8 | Rochester | 73 | +1 | 1.4 | -1.4 | Quillayute. | 61 | +1 | 9.3 | +7.0 |
| IND.Evansville. | 76 | -3 | 5.3 | +2.0 | Syracuse. | 73 | +1 | 3.5 | + .4 | Seattle-Tacoma. | 66 | +1 | 1.3 | + .5 |
| Fort Wayne | 73 | -1 | 2.6 | - .8 | N.C.Asheville | 72 | -2 | 4.7 | + .4 | Spokane | 68 | -3 | .3 | - .1 |
| Indianapolis. | 75 | 0 | 2.0 | -1.5 | Charlotte | 77 | -2 | 6.6 | +1.7 | Walla Walla | 74 | -2 | .6 | + .4 |
| South Bend. | 71 | -3 | 4.5 | +1.0 | Greensboro. | 76 | -1 | 2.5 | -2.3 | Yakima. | 70 | -1 | T | - .1 |
| IOWA.Burlington | 74 | -3 | 3.8 | + .4 | Hatteras. | 78 | 0 | 8.6 | +2.4 | W.VA.Beckley. | 69 | -2 | 5.8 | + .6 |
| Des Moines | 74 | -2 | 5.9 | +2.8 | Raleigh | 77 | -1 | 6.8 | +1.3 | Charleston. | 73 | -2 | 4.1 | -1.6 |
| Dubuque | 70 | -3 | 5.0 | +1.5 | Wilmington. | 80 | 0 | 6.4 | -1.3 | Huntington. | --- | --- | --- | --- |
| Sioux City. | 74 | -3 | 10.3 | +7.2 | N.DAK.Bismarck. | 67 | -5 | 1.6 | - .6 | Parkersburg | 74 | -2 | 1.5 | -2.6 |
| KANS.Concordia. | 76 | -4 | 6.9 | +4.1 | Fargo | 68 | -3 | 2.8 | - .1 | WIS.Green Bay | 70 | -1 | 1.9 | - .8 |
| Dodge City. | 76 | -4 | 7.3 | +5.0 | Williston | 64 | -7 | 2.1 | + .2 | La Crosse | 70 | -4 | 6.0 | +2.2 |
| Goodland. | 72 | -5 | 2.6 | - .1 | OHIO.Akron-Canton | 71 | -2 | 7.3 | +3.5 | Madison | 68 | -3 | 3.5 | - .1 |
| Topeka. | 74 | -6 | 4.8 | +1.2 | Cincinnati. | 75 | -2 | 1.7 | +1.9 | Milwaukee | 69 | 0 | 4.6 | +1.6 |
| Wichita | 77 | -4 | 3.9 | + .3 | Cleveland. | 71 | -1 | 4.4 | +1.1 | WYO.Casper. | 66 | -6 | 1.0 | 0 |
| KY.Lexington. | 74 | -3 | 5.6 | +1.6 | Columbus. | 72 | -3 | 2.6 | -1.3 | Cheyenne. | 64 | -6 | 1.4 | - .4 |
| Louisville | 77 | -1 | 3.6 | + .2 | Dayton. | 75 | 0 | 2.1 | -1.4 | Lander. | 67 | -4 | 4.4 | +3.6 |
| LA.Baton Rouge. | 81 | -1 | 6.3 | 0 | Toledo. | 71 | -2 | 2.8 | + .2 | Sheridan. | 64 | -7 | 1.6 | + .4 |
| Lake Charles. | 80 | -2 | 7.8 | + .5 | Youngstown. | 69 | -2 | 3.7 | - .6 | P.R. San Juan | --- | --- | --- | --- |

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



(Continued from page 12)

UTAH: Few scattered showers and thunderstorms principally mountains and east. Accumulated moisture generally light, but locally moderate in Uintah Basin and a few mountain stations. Average temperatures ranged from near normal to 6° above normal. Soil temperatures, at 4-inch depth, ranged from upper 70's at Logan and Richfield to low 80's Salt Lake City and upper 90's St. George. The hot summer temperatures and sparse precipitation continued to limit feed for livestock on range land. Concern for fall range feed being voiced. Soil moisture in dry crop and range lands very short most counties. Percent of acreage harvested: 80% winter wheat, 40% spring wheat, 35% oats, 50% barley, 55% second crop alfalfa, 85% clover-timothy and wild hay. Corn tasseling, but corn wood worm causing damage many areas. Sugar beets, dry beans, and potatoes doing well and promise good yield. Snap bean harvest nearing completion. Early crop potatoes being harvested Davis County.

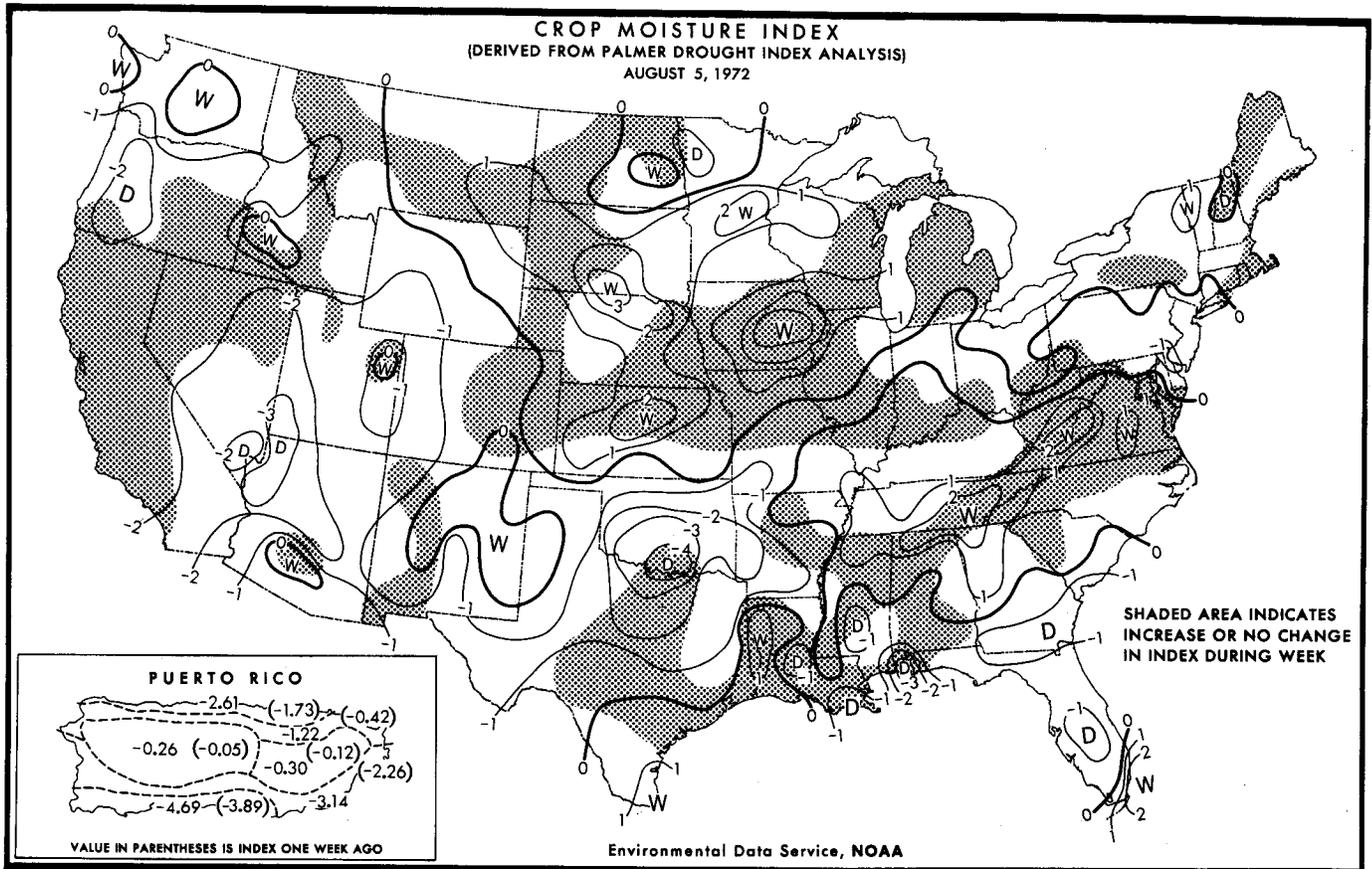
VIRGINIA: Temperatures around normal. Frequent showers and thundershowers at beginning becoming scattered thereafter. Fieldwork difficult. Crop growth accelerated. Topsoil moisture 62% adequate, 35% surplus. Cultivated late soybeans. Peanuts much improved. Some local damage to tobacco. Topping, suckering, and insect control continued, 10% harvested. Began topping burley. Curing of hay difficult. Pastures produced well. Picked tomatoes for both fresh market and canning. Dug Irish potatoes. Picked summer apples and peaches in Upper Shenandoah Valley.

WASHINGTON: Western Washington: Warm and dry. Temperatures near normal. Conditions brought stress to pastures. Hay cutting continued, few areas tapering off. Blueberry harvest in full swing while raspberries near completion. Sweet and field corn growth excellent. Green peas and truck crops harvested. Eastern Washington: Hot and dry. Temperatures averaged 2° to 5° above normal. A few isolated thunderstorms midweek with locally gusty winds. Wheat, barley, peas main activity with southeastern sections nearing peak. Haying continued into second week. Field corn looked good and growers harvesting sweet corn in Basin and Yakima Valley. Pastures drying out. Peach harvest continued and apples propped and sprayed.

WEST VIRGINIA: Cloudy humid week. Rain almost every day with heavy thunderstorms August 1 and 4 many stations. Highest temperatures on August 1. Rain slowed farm activities to average of 3 days. Harvesting made little progress. Soil moisture varied, mostly adequate. Hay, pasture, and corn good condition. Corn 68% pre-silked, 29% silked, and 3% dough stage. Tobacco fair condition, 6% topped. Harvest of small peach crop well underway.

WISCONSIN: Another quite cool week. Record low temperatures for date at many stations with minima in 30's or low 40's morning of August 4. All-day rain again Tuesday over south half with heavy amounts in excess of 3.00 inches locally in southwest and in counties bordering Illinois. Mississippi River at record-high August levels.

(Continued on back page)



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.



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Questions and comments are invited; please send
 to Editor in Agricultural Climatology Service Office,
 address above.

(WISCONSIN continued from page 14)

More showers throughout State Sunday. Wet weather
 not favorable for harvest of small grains and
 hay. Only 10% of oats harvested. Yields light
 and straw short. Some improvement expected as
 harvest moves northward. Second cutting hay about
 25% done. Yields better than 1st cutting but
 quality often poor due wet weather. Corn looks
 real good. About 60% in silk. Could use more
 hot weather and sunshine. Soybeans and tobacco
 doing very well. Topping of tobacco to get
 underway. Sweet corn harvest going on. Early
 potatoes dug, yield and quality good. Cherry
 harvest continuing Door County. Pastures coming
 along real good. Have the greenest August appear-
 ance in several years. Soil moisture 5% short,
 65% adequate, and 30% surplus. Surpluses mostly
 southwest and southeast.

WYOMING: Scattered light showers statewide, some
 moderate to heavy northeast half. Casper reported
 downpour of 5.01 inches August 2. Temperatures
 averaged near normal west of Divide, 3° to 8°
 below normal east. Maxima mostly 80° to 90°
 west of Divide, high 80's to low 100's east.
 Minima mostly 30's to mid-40's west of Divide,
 40's to low 50's east. Temperature extremes:
 102° at Glenrock and Dull Center and 28° at Fox-
 park. Main agriculture included haying, irriga-
 ting, and harvesting small grains. About 20%
 of 2d crop alfalfa and roughly 2/3 of other hays
 harvested. About 1/2 of barley and 1/3 of both
 spring wheat and oats reached maturity. Harvest
 of wheat about 40% completed by August 5 while
 barley harvest about 10% complete. About 90%
 of corn has tasselled and virtually all of
 dry beans are in bloom. Sugar beet condition
 good. Stock water supply adequate.

Heating Degree Days (Base 65° F.)

JULY 1972

| | | | | | |
|------------------------------|-----|-------------------------------|-----|-----------------------------|-----|
| ALA. Birmingham | 0 | MAINE, Caribou | 55 | OKLA. Okla. City | 0 |
| Mobile | 0 | Portland | 27 | Tulsa | 0 |
| Montgomery | 0 | MD. Baltimore | 27 | ORIG. Astoria | 99 |
| ALASKA, Anchorage | 185 | MASS. Boston | 31 | Burns U. | 47 |
| Barrow | 681 | Chatham | 27 | Medford | 2 |
| Fairbanks | 63 | MICH. Alpena | 72 | Pendleton | 5 |
| Juneau | 207 | Detroit | 24 | Portland | 10 |
| Nome | 286 | Flint | 34 | Salem | 34 |
| ARIZ. Flagstaff | 22 | Grand Rapids | 26 | PA. Allentown | 4 |
| Phoenix | 0 | Houghton Lake | 77 | Erie | - |
| Tucson | 0 | Lansing | 56 | Harrisburg | 0 |
| Winslow | 0 | Marquette U. | 103 | Philadelphia | 0 |
| Yuma | 0 | S. Ste. Marie | 105 | Pittsburgh | 20 |
| ARK. Fort Smith | 1 | MINN. Duluth | 134 | Scranton | 21 |
| Little Rock | 0 | Internatl Falls | 72 | R. I. Providence | 8 |
| CALIF. Bakersfield | 0 | Minneapolis | 34 | S. C. Charleston | 0 |
| Eureka U. | 217 | Rochester | 39 | Columbia | 0 |
| Fresno | 0 | St. Cloud | 48 | Greenville | 0 |
| Los Angeles U. | 0 | MISS. Jackson | 0 | S. DAK. Aberdeen | 19 |
| Red Bluff | 0 | Meridian | 0 | Buron | 26 |
| Stockton | 0 | Vicksburg U. | - | Rapid City | 74 |
| San Diego | 0 | MO. Columbia | 2 | Sioux Falls | 64 |
| San Francisco | 64 | Kansas City | 1 | TENN. Chattanooga | 0 |
| COLO. Denver | 42 | St. Louis | 2 | Knoxville | 0 |
| Grand Junction | 0 | Springfield | 9 | Memphis | 0 |
| Pueblo | 16 | MONT. Billings | 85 | Nashville | 0 |
| CONN. Bridgeport | 7 | Glasgow | 71 | TEX. Abilene | 0 |
| Hartford | 8 | Great Falls | 109 | Amarillo | 13 |
| D. C. Washington | 0 | Havre | 74 | Austin | 0 |
| FLA. Apalachicola | 0 | Holena | 136 | Beaumont | 0 |
| Ft. Myers | 0 | Kalispell | 113 | Brownsville | 0 |
| Jacksonville | 0 | Miles City | 52 | Corpus Christi | 0 |
| Key West | 0 | Missoula | 81 | Dallas | 0 |
| Lakeland U. | 0 | NEBR. Grand Island | 6 | Del Rio | 0 |
| MIAMI, Boise | 11 | Lincoln | 2 | El Paso | 0 |
| Orlando | 0 | Norfolk | 12 | Fort Worth | 0 |
| Pensacola U. | - | North Platte | 24 | Galveston U. | 0 |
| Tallahassee | 0 | Omaha | 7 | Houston | 0 |
| Tampa | 0 | Valentine | 30 | Lubbock | 2 |
| GA. Atlanta | 0 | NEV. Ely | 16 | Midland | 0 |
| Augusta | 0 | Las Vegas | 0 | San Angelo | 0 |
| Macon | 0 | Reno | 8 | San Antonio | 0 |
| Savannah | 0 | Winnemucca | 1 | Victoria | 0 |
| IDAH. Boise | 11 | N. H. Concord | 27 | Waco | 0 |
| Lewiston | 13 | N. J. Atlantic City | 5 | Wichita Falls | 0 |
| Pocatello | 30 | Trenton U. | - | UTAH, Blanding R. | - |
| ILL. Cairo U. | 0 | N. MEX. Albuquerque | 0 | Salt Lake City | 0 |
| Chicago | 15 | Roswell | 0 | VT. Burlington | 26 |
| Moline | 8 | N. Y. Albany | 18 | VA. Lynchburg | 2 |
| Peoria | 9 | Binghamton | 19 | Richmond | 0 |
| Rockford | 17 | Buffalo | 16 | Richmond | 0 |
| Springfield | 3 | New York | 4 | Roanoke | 10 |
| IND. Evansville | 2 | Rochester | 7 | WASH. Colville | 73 |
| Fort Wayne | 15 | Syracuse | 9 | Omak | - |
| Indianapolis | 8 | N. C. Asheville | 3 | Quillayute | 160 |
| South Bend | 24 | Charlotte | 0 | Seattle-Tacoma | 48 |
| IOWA, Burlington | 10 | Greensboro | 1 | Spokane | 36 |
| Des Moines | 7 | Hatteras R. | 0 | Walla Walla U. | 12 |
| Dubuque | 20 | Raleigh | 0 | Yakima | 26 |
| Sioux City | 6 | Wilmington | 0 | W. VA. Beckley | 35 |
| KANS. Concordia | 5 | N. DAK. Bismarck | 41 | Charleston | 16 |
| Dodge City | 6 | Fargo | 25 | Huntington | 0 |
| Goodland | 28 | Williston U. | 75 | Parkersburg U. | 10 |
| Topeka | 10 | OHIO, Akron-Canton | 25 | WIS. Green Bay | 37 |
| Wichita | 2 | Cincinnati U. | 11 | Madison | 44 |
| KY. Lexington | 10 | Cleveland | 32 | Milwaukee | 40 |
| Louisville | 0 | Columbus | 22 | WYO. Casper | 67 |
| LA. Baton Rouge | 0 | Dayton | 15 | Cheyenne | 85 |
| Lake Charles | 0 | Toledo | 28 | Lander | 56 |
| New Orleans | 0 | Youngstown | 51 | Sheridan | 95 |
| Shreveport | 0 | | | | |

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