

# Weekly Weather & Crop Bulletin

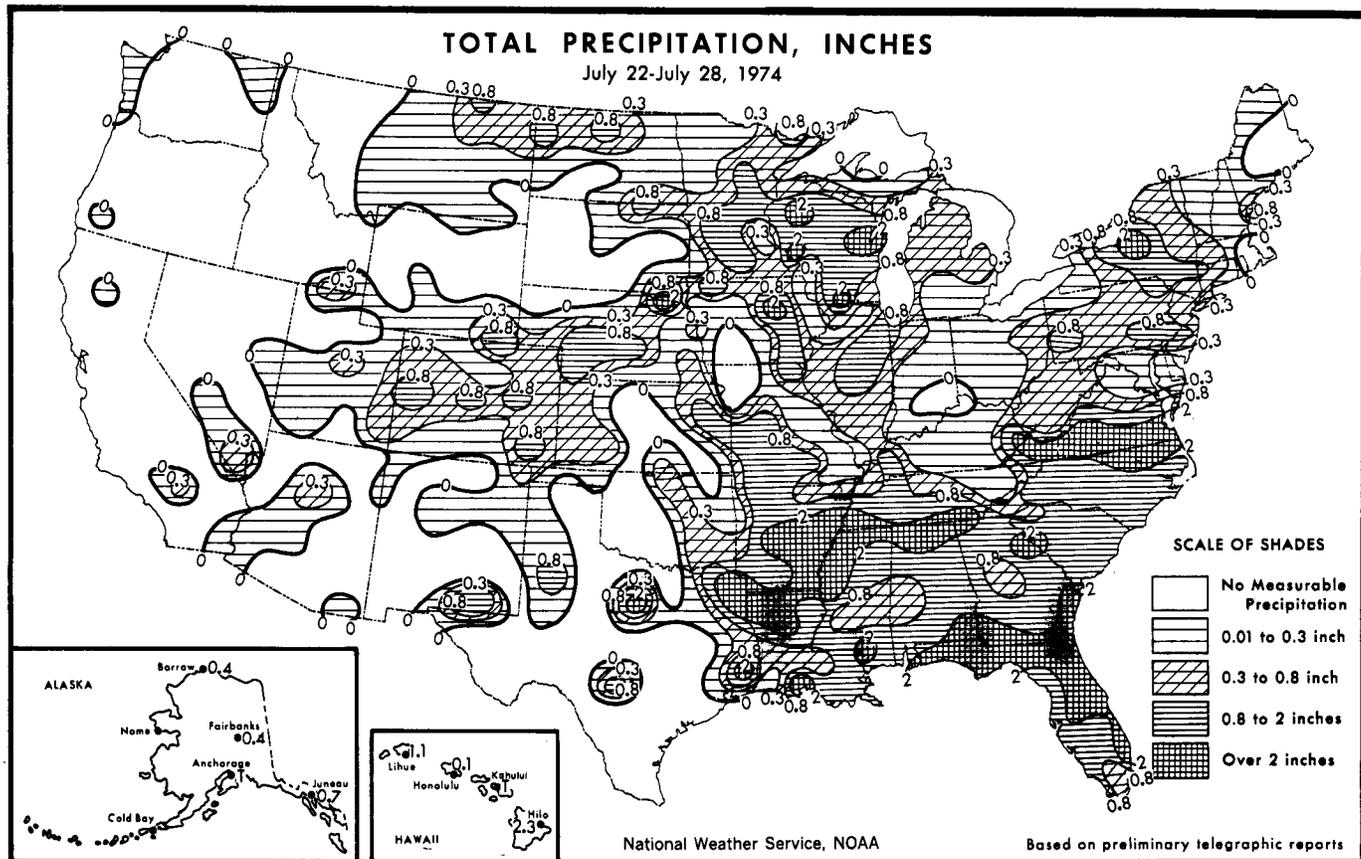
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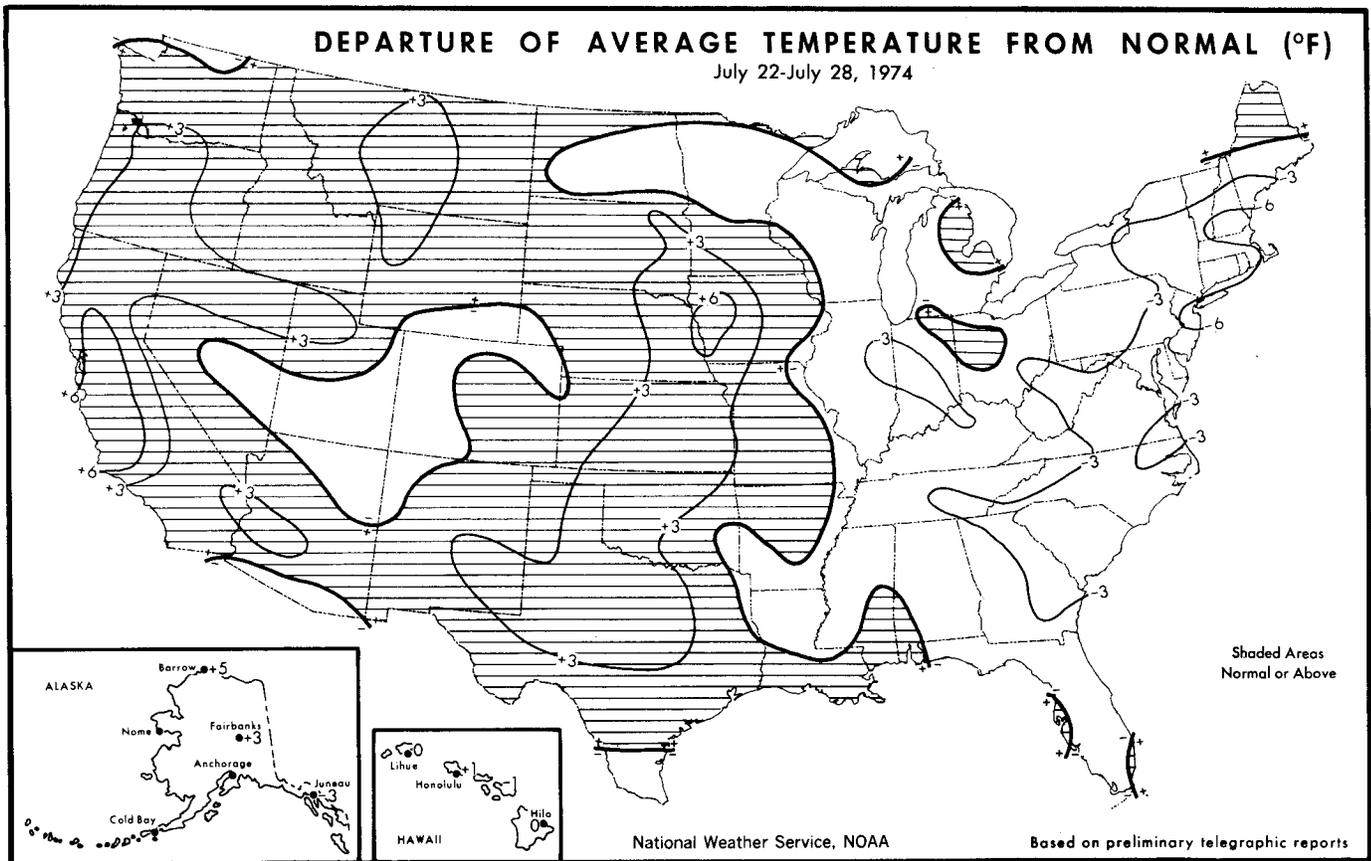
## NATIONAL WEATHER SUMMARY

**HIGHLIGHTS:** Most of the Nation east of the Rocky Mountains received some precipitation last week. Some much needed moisture fell in North Dakota, Nebraska, Eastern Iowa and Illinois. Good rains of 1.00 in. to over 4.50 in., fell in many parts of the Deep South and Southeast, including most of Florida. Isolated heavy showers were also reported in sections of New York, Pennsylvania, and Virginia.

Temperatures averaged near normal or above across much of the western two-thirds of the Nation. These above normal temperatures in the midwest, coupled with low soil moisture, continued to stress row crops. However, thermometer readings fell below normal throughout the Nation's eastern third, with sections of the New England Seaboard averaging as much as 6° below normal.

**PRECIPITATION:** Many sections of the South received heavy rains, while locally heavy showers were scattered throughout the Midwest and North Atlantic states. Some weekly totals included: Little Rock, Ark., 3.43 in.; Tallahassee, Fla., 4.85 in.; Norfolk, Va., 3.90 in.; Syracuse, N.Y., 2.43 in.; Green Bay, Wis., 3.00 in.; and Waterloo, Iowa, 2.00 in. Some sections of the Rocky Mountain and Pacific States received little or no precipitation during the week.

Monday, the 22d two cold fronts triggered thunderstorms in the central United States from lower Michigan to eastern Colorado. In Colorado, 2.00 in. of rain fell at Byers in 1 hour and heavy rains caused flooding and closing of Interstate 70 in the Denver area. Later in the day, hail and gusty winds accompanied



thunderstorms moving through the lower Mississippi Valley, the Tennessee Valley, and in the Gulf Coast States.

Heavy thunderstorms with high wind gusts over 50 mph swept through parts of southern California on Tuesday. Over 1.00 in. of rain fell at China Lake while wind damage and flooding were reported at Ridgecrest.

Wednesday, the 24th, thunderstorms also brought heavy rain to the lower Mississippi Valley. Both Magnolia, Ark. and Shreveport, La., received 3.00 in. of rain. A cold frontal system produced thunderstorms across Nebraska, South Dakota and northern Kansas. This was the first rain in several weeks for parts of the upper Plains.

On Thursday, the front touched off thundershowers from Minnesota to the Texas Panhandle and into Colorado.

Storms dumped nearly 3.00 in. of rain on Huntsville, Ala., Friday, while Muscle Shoals, Ala., got more than 1.00 in. Heavy rains were reported in southeast Virginia.

Saturday, the 27th, thunderstorms continued in the Southeastern States, although rainfall was generally light with only a few stations reporting locally heavy amounts. Tuscaloosa, Ala. and Anderson, S.C., measured over 1.25 in. by early afternoon.

Before dawn, on Sunday, two thunderstorms dumped 1.50 in. of rain on Syracuse, N.Y., making this the city's wettest July on record with a little over 7.00 in. for the month. Elsewhere scattered thundershowers extended from New England to the eastern Gulf Coast.

**TEMPERATURE:** While many states in the Nation's eastern half reported temperatures averaging 1 to 6° below normal, the West recorded temperatures near normal or above. Parts of Nebraska, Iowa, New Mex-

ico, and Texas averaged as much as 5° above normal while California's Imperial Valley averaged 6 to 8° above normal for the week. Early in the week thunderstorms brought some relief to the 5 day heat wave of 100° plus temperatures into the Central Plains.

Monday, the 22d, record lows were set at Concord, N.H. with 42° and Raleigh, N.C. with 55°. Later, bright sunshine brought 100° temperatures to parts of Oklahoma, Texas, Kansas, Arkansas and Missouri.

In many parts of Texas and Oklahoma the mercury climbed above the century mark on Tuesday. Lubbock, Texas set a record for the day with 101° while Wichita Falls, Texas climbed to a new record and claimed the hottest spot in the Nation with 110°.

On Wednesday, the 24th, a high pressure area settled over north central California, causing hot temperatures and light winds. The mercury climbed above the century mark over much of interior and southern California. The system also produced air pollution problems in sheltered coastal areas and valleys.

Thursday, the 25th, temperatures in the 90's were common in the Gulf States, Plains, and Southwestern States with some places over 100° from western Texas to the interior of California.

Friday, temperatures were typical of mid-summer around most of the Nation with high's reaching the 80's and 90's.

High temperatures reached the 80's in the eastern United States on Saturday, except for the New England States where temperatures stayed in the 70's. A few places along the Oregon and northern California Coast held in the 50's and 60's.

Sunday, the 28th, a cold front moving through the Midwest brought some relief from the persistent heat of the past several weeks.

## NATIONAL AGRICULTURAL SUMMARY

**HIGHLIGHTS:** Small grain harvest moved northward at a steady pace. Row crops continue under stress in many areas but beneficial rain aided growth and development in several States. Haymaking continues active.

**SMALL GRAINS:** Small grain harvest active in most northern States as hot dry weather continues to force development and maturity, generally ahead of normal. Winter wheat harvest is into home stretch with harvest now underway in the northern tier of States. Combining started during the past week in New York, North Dakota, Oregon, and Washington. Harvest is virtually complete in Ohio and Indiana, 93% complete in South Dakota and nearing the halfway mark in Michigan. In Montana harvest is 15% finished compared with only 5% in 1973. Idaho is 10% done while Wyoming is 50% complete.

Spring wheat harvest is gaining momentum in southern North Dakota, 4% done in Minnesota, and 52% harvested in South Dakota compared with 41% in 1973 and 14% of the normal.

High temperatures and dryness continue to reduce prospects of late seeded spring grains.

Oat harvest made good advancement during the week and is running well ahead of normal in most States.

**CORN:** Crop progress slow as limited soil moisture supplies and hot, dry weather, particularly in the western Corn Belt, continues to put stress on this year's crop. Corn in western Iowa as well as dryland corn in Nebraska and Kansas has been hurt considerably by the prolonged dry spell in those areas. Near normal temperatures along with showers and thunderstorms aided crop growth in parts of Illinois, Iowa, Michigan, Minnesota, and Wisconsin. However, more rain is needed to bring soil moisture supplies back to normal and to assure good development. Topsoil moisture supplies are now rated mostly short from Nebraska to Ohio.

Crop growth continues to lag behind normal in most States with 55% silked in Illinois against 82% normally. In Iowa 66% of fields are 75% or more silked compared with 70% average. Rains in the Delta States and South Atlantic States will benefit the rapidly growing crop. Harvest was slowed by heavy rain in Florida but progress advanced to 7% complete in Texas.

**COTTON:** Timely rains throughout much of the Delta and South Atlantic States improved cotton prospects, but more moisture is needed in most areas. The crop is in fair to good condition and insect counts are light in most areas as farmers maintain good control measures. In Mississippi 75% of the acreage has set bolls while 30% is set in Tennessee. The Arkansas crop is making good growth but plants are shorter than normal. Squaring is at the same rate as in 1973.

In California cotton is in bloom and setting bolls. Arizona cotton is developing a good boll set and insects are active in the Yuma area.

Harvest in southern Texas made progress as 2% of their crop is out. Hot, dry weather is rapidly pushing crop maturity from the Low Plains southward.

**SOYBEANS:** Soybean development continues behind last year although gains were made during the week despite a shortage of topsoil moisture and hot weather, mainly in the western Corn Belt. Some areas received general rains that will give

the crop a boost but more is needed to replace the depleted supplies. Most acreage remains in fair to good condition as blooming and setting of pods increased. In Illinois, the crop is 45% blooming compared to 59% in 1973 and 72% normally. Only 10% of the Illinois acreage has pods set, versus 20% in 1973 and the average of 42%. Soybean development is running behind last year in nearly all of the Corn Belt States.

In the South Atlantic States, soybeans are in mostly good condition, recent rain will aid growth in most areas. In the Delta States, the soybean crop is in fair to good condition. Rain added new growth to early planted fields in Arkansas and aided germination in recently planted fields. Planting continued in Mississippi and is now 99% complete, several days behind the normal July 20 completion date.

**OTHER CROPS:** The prevailing hot, dry weather has enabled farmers in most States to progress rapidly with haymaking but regrowth has been slow in many areas. Sorghum grain harvesting made excellent progress in the southern half of Texas, as the crop is 36% harvested compared with 19% last year and the 3-year average of 23%. In Kansas sorghum is 15% headed, 10 points behind normal while the Nebraska crop is 25% headed.

Flue-cured tobacco in North Carolina is 30% harvested, South Carolina 65%, and in Georgia harvest is 72% complete.

Potatoes in Aroostook County, Maine are blooming and making good progress while good development continues in Idaho where the middle of the rows are 60% closed in the east and nearly all closed southwest and south central.

**FRUITS AND NUTS:** Early varieties of peaches and apples are being marketed in the southernmost areas of New England and local markets in New York. Apple harvest in Pennsylvania and New Jersey are active. In California prunes are showing color as growers are preparing for harvest. Valencia picking is active and brown rot is threatening the Clingstone peaches. In Washington harvest began on apricots and early peaches.

**VEGETABLES:** Vegetable supplies are increasing in the northeastern States but dry conditions during much of July are causing lower yields and slower growth. In Washington sweet corn, cucumber and zucchini harvest is active. Broccoli and cauliflower harvest, along with carrot digging continues in California. The harvest of fresh market and processing tomatoes is also gaining. In the San Antonio-Winter Garden irrigation is under way on early fields of spinach, cucumbers, cabbage and bell peppers. In the Lower Rio Grande Valley early fields of tomatoes and peppers are being planted.

**PASTURES AND LIVESTOCK:** Pastures are on the decline in nearly every North Central State except parts of Illinois, North Dakota, and Wisconsin. Cows are being culled and sold in some areas of Kansas where pastures and ranges have deteriorated. Ranges are poor to fair in New Mexico and Arizona depending on where rain was received. Range fires continue to break out in all areas of Nevada. Ranges in Oklahoma and Texas continue to show stress and ranchers are culling herds more closely as grazing becomes short. Stock water is also short and hauling is necessary to maintain supplies.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., July 28, 1974

| 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 . . .      | 79             | -1        | 1.4                  | + .2      | La. Baton Rouge . . .        | 82             | 0         | .7                   | -.8       | Youngstown . . . . .        | 69             | -2        | .5                   | -.3       |
| Mobile . . . . .           | 83             | +1        | 1.9                  | + .1      | Lake Charles . . . . .       | 84             | +1        | .1                   | -1.4      | OKLA. Okla. City . . .      | 85             | +3        | T                    | -.5       |
| Montgomery . . . . .       | 79             | -2        | 1.7                  | + .6      | New Orleans . . . . .        | 81             | -1        | 1.1                  | -.4       | Tulsa . . . . .             | 87             | +4        | .2                   | -.5       |
| ALASKA Anchorage . . .     | 58             | 0         | T                    | -.5       | Shreveport . . . . .         | 84             | 0         | 2.7                  | +2.1      | OREG. Astoria . . . . .     | 62             | +1        | T                    | -.2       |
| Barrow . . . . .           | 44             | +5        | .4                   | + .2      | MAINE Caribou . . . . .      | 66             | +1        | .2                   | -.7       | Burns . . . . .             | 73             | +3        | T                    | -.1       |
| Fairbanks . . . . .        | 63             | +3        | .4                   | -.1       | Portland . . . . .           | 64             | -5        | .6                   | 0         | Medford . . . . .           | 77             | +4        | T                    | 0         |
| Juneau . . . . .           | 53             | -3        | .7                   | -.4       | MD. Baltimore . . . . .      | 73             | -4        | T                    | -.9       | Pendleton . . . . .         | 78             | +3        | 0                    | 0         |
| Kodiak . . . . .           | ---            | ---       | ---                  | ---       | MASS. Boston . . . . .       | 67             | -7        | 0                    | -.6       | Portland . . . . .          | 71             | +3        | 0                    | -.1       |
| Nome . . . . .             | ---            | ---       | ---                  | ---       | Chatham . . . . .            | 64             | ---       | T                    | ---       | Salem . . . . .             | 69             | +1        | 0                    | -.1       |
| ARIZ. Flagstaff . . . . .  | 68             | +1        | .3                   | -.3       | MICH. Alpena . . . . .       | 66             | 0         | .4                   | -.2       | PA. Allentown . . . . .     | 69             | -5        | .5                   | -.5       |
| Phoenix . . . . .          | 96             | +4        | T                    | -.2       | Detroit . . . . .            | 70             | -3        | .2                   | -.5       | Erie . . . . .              | 67             | -2        | .1                   | -.7       |
| Tucson . . . . .           | 86             | 0         | T                    | -.6       | Flint . . . . .              | 70             | 0         | .6                   | -.1       | Harrisburg . . . . .        | 73             | -3        | 1.1                  | + .3      |
| Winslow . . . . .          | 79             | 0         | .1                   | -.2       | Grand Rapids . . . . .       | 70             | -2        | .2                   | -.4       | Philadelphia . . . . .      | 73             | -4        | 1.1                  | + .2      |
| Yuma . . . . .             | 95             | 0         | T                    | -.1       | Houghton Lake . . . . .      | 67             | 0         | .6                   | 0         | Pittsburgh . . . . .        | 71             | -1        | 1.1                  | + .3      |
| ARK. Fort Smith . . . . .  | 83             | 0         | .1                   | -.6       | Lansing . . . . .            | 70             | -1        | .2                   | -.4       | Scranton . . . . .          | 71             | -1        | .9                   | 0         |
| Little Rock . . . . .      | 83             | +1        | 3.4                  | +2.6      | Marquette . . . . .          | 70             | +3        | .1                   | -.5       | R.I. Providence . . . . .   | 68             | -5        | 0                    | -.7       |
| CALIF. Bakersfield . . .   | 92             | +7        | 0                    | 0         | Muskegon . . . . .           | 68             | -3        | .7                   | + .1      | S.C. Charleston . . . . .   | 76             | -5        | .9                   | -.9       |
| Eureka . . . . .           | 59             | +2        | 0                    | 0         | S. Ste. Marie . . . . .      | 63             | -2        | .4                   | -.2       | Columbia . . . . .          | 79             | -3        | 1.4                  | + .1      |
| Fresno . . . . .           | 87             | +6        | 0                    | 0         | MINN. Duluth . . . . .       | 65             | -2        | .3                   | -.5       | Greenville . . . . .        | 75             | -4        | .6                   | -.3       |
| Los Angeles . . . . .      | 75             | +1        | 0                    | 0         | Internatl Falls . . . . .    | 67             | 0         | .2                   | -.6       | S.D. Aberdeen . . . . .     | 76             | +3        | T                    | -.6       |
| Red Bluff . . . . .        | 87             | +4        | T                    | 0         | Minneapolis . . . . .        | 74             | +1        | .1                   | -.7       | Huron . . . . .             | 77             | +2        | T                    | -.4       |
| San Diego . . . . .        | 74             | +3        | T                    | 0         | Rochester . . . . .          | 72             | +1        | .4                   | -.4       | Rapid City . . . . .        | 76             | +2        | T                    | -.4       |
| San Francisco . . . . .    | 68             | +5        | 0                    | 0         | St. Cloud . . . . .          | 70             | -1        | 1.0                  | + .3      | Sioux Falls . . . . .       | 78             | +4        | .3                   | -.3       |
| Stockton . . . . .         | 85             | +8        | 0                    | 0         | MISS. Jackson . . . . .      | 80             | -2        | .6                   | -.4       | TENN. Chattanooga . . . . . | 76             | -3        | 3.3                  | +2.2      |
| COLO. Denver . . . . .     | 75             | +1        | .1                   | -.3       | Meridian . . . . .           | 82             | +1        | .4                   | -.8       | Knoxville . . . . .         | 77             | -2        | T                    | -1.0      |
| Grand Junction . . . . .   | 78             | -1        | 1.0                  | + .9      | MO. Columbia . . . . .       | 79             | -1        | .1                   | -.7       | Memphis . . . . .           | 81             | -1        | 3.1                  | +2.3      |
| Pueblo . . . . .           | 78             | +1        | .1                   | -.4       | Kansas City . . . . .        | 82             | +3        | T                    | -.9       | Nashville . . . . .         | 78             | -2        | .8                   | 0         |
| CONN. Bridgeport . . . . . | 70             | -5        | .3                   | -.5       | St. Louis . . . . .          | 79             | 0         | .5                   | -.3       | TEX. Abilene . . . . .      | 89             | +5        | T                    | -.5       |
| Hartford . . . . .         | 69             | -4        | .7                   | -.1       | Springfield . . . . .        | 80             | +2        | .9                   | + .2      | Amarillo . . . . .          | 82             | +3        | .1                   | -.5       |
| D.C. Washington . . . . .  | 76             | -3        | .1                   | -.9       | MONT. Billings . . . . .     | 77             | +4        | .1                   | 0         | Austin . . . . .            | 88             | +3        | T                    | -.4       |
| FLA. Apalachicola . . . .  | 80             | -2        | 2.1                  | + .2      | Glasgow . . . . .            | 73             | +1        | .3                   | 0         | Beaumont . . . . .          | 84             | +1        | .1                   | -1.3      |
| Daytona Beach . . . . .    | 80             | -1        | 2.5                  | +1.0      | Great Falls . . . . .        | 74             | +3        | T                    | -.2       | Brownsville . . . . .       | 83             | -2        | 0                    | -.2       |
| Ft. Myers . . . . .        | 82             | -1        | 1.6                  | -.3       | Havre . . . . .              | 74             | +3        | .1                   | -.1       | Corpus Christi . . . . .    | 85             | 0         | 0                    | -.4       |
| Jacksonville . . . . .     | 79             | -2        | 3.0                  | +1.3      | Helena . . . . .             | 72             | +3        | T                    | -.1       | Del Rio . . . . .           | 89             | +2        | 0                    | -.2       |
| Key West . . . . .         | 84             | -1        | 1.1                  | + .3      | Kalispell . . . . .          | 67             | +1        | T                    | -.2       | El Paso . . . . .           | 83             | +1        | .2                   | -.2       |
| Lakeland . . . . .         | 80             | -2        | 3.5                  | +1.7      | Miles City . . . . .         | 78             | +2        | T                    | -.2       | Fort Worth . . . . .        | 90             | +5        | T                    | -.4       |
| Miami . . . . .            | 83             | 0         | .4                   | -1.0      | Missoula . . . . .           | 70             | +2        | T                    | -.1       | Galveston . . . . .         | 84             | +1        | 0                    | -1.0      |
| Orlando . . . . .          | 81             | -1        | 2.5                  | + .7      | NEBR. Grand Island . . . . . | 79             | +2        | .8                   | + .2      | Houston . . . . .           | 85             | +1        | .2                   | -.7       |
| Tallahassee . . . . .      | 80             | -1        | 4.9                  | +2.9      | Lincoln . . . . .            | 82             | +4        | .4                   | -.2       | Lubbock . . . . .           | 83             | +3        | 1.2                  | + .7      |
| Tampa . . . . .            | 83             | +1        | 1.0                  | -.9       | Norfolk . . . . .            | 81             | +5        | .2                   | -.4       | Midland . . . . .           | 87             | +4        | T                    | -.4       |
| W. Palm Beach . . . . .    | 83             | +1        | 3.6                  | +2.3      | N. Platte . . . . .          | 76             | +1        | 1.7                  | +1.1      | San Angelo . . . . .        | 89             | +4        | 0                    | -.3       |
| GA. Atlanta . . . . .      | 76             | -2        | .8                   | -.3       | Omaha . . . . .              | 82             | +6        | .1                   | -.7       | San Antonio . . . . .       | 86             | +1        | 0                    | -.4       |
| Augusta . . . . .          | 77             | -4        | 1.1                  | -.1       | Valentine . . . . .          | 77             | +2        | T                    | -.5       | Victoria . . . . .          | 87             | +2        | 0                    | -.6       |
| Macon . . . . .            | 80             | -2        | .8                   | -.2       | NEV. Ely . . . . .           | 69             | 0         | .2                   | + .1      | Waco . . . . .              | 91             | +5        | T                    | -.3       |
| Savannah . . . . .         | 78             | -3        | 3.2                  | +1.4      | Las Vegas . . . . .          | 92             | +2        | .4                   | + .3      | Wichita Falls . . . . .     | 90             | +3        | T                    | -.4       |
| HAWAII. Hilo . . . . .     | 76             | 0         | 2.3                  | -.1       | Reno . . . . .               | 72             | +2        | T                    | -.1       | UTAH. Blanding . . . . .    | 73             | -1        | .4                   | + .1      |
| Honolulu . . . . .         | 81             | +1        | .1                   | 0         | Winnemucca . . . . .         | 76             | +4        | T                    | 0         | Salt Lake City . . . . .    | 82             | +4        | T                    | -.1       |
| Kahului . . . . .          | 77             | -1        | T                    | -.1       | N.H. Concord . . . . .       | 64             | -6        | .1                   | -.6       | VT. Burlington . . . . .    | 69             | -1        | .2                   | -.6       |
| Lihue . . . . .            | 79             | 0         | 1.1                  | + .6      | N.J. Atlantic City . . . . . | 71             | -5        | .1                   | -1.0      | VA. Lynchburg . . . . .     | 73             | -3        | 2.3                  | +1.4      |
| IDAHO. Boise . . . . .     | 77             | +1        | 0                    | 0         | Trenton . . . . .            | 70             | -6        | .6                   | -.5       | Norfolk . . . . .           | 76             | -3        | 3.9                  | +1.5      |
| Lewiston . . . . .         | 77             | +2        | 0                    | -.1       | N.MEX. Albuquerque . . . . . | 80             | +1        | .2                   | -.2       | Richmond . . . . .          | 78             | -5        | 1.8                  | + .5      |
| Pocatello . . . . .        | 73             | 0         | T                    | -.1       | Roswell . . . . .            | 82             | +3        | T                    | -.4       | Roanoke . . . . .           | 73             | -3        | 2.4                  | +1.5      |
| ILL. Cairo . . . . .       | 79             | -2        | .3                   | -.4       | N.Y. Albany . . . . .        | 67             | -5        | .7                   | 0         | WASH. Colville . . . . .    | 72             | +3        | T                    | -.1       |
| Chicago . . . . .          | 73             | -2        | .9                   | 0         | Binghamton . . . . .         | 66             | -4        | 1.4                  | + .5      | Omak . . . . .              | 71             | 0         | 0                    | -.1       |
| Moline . . . . .           | 75             | 0         | .3                   | -.7       | Buffalo . . . . .            | 70             | -1        | T                    | -.7       | Quillayute . . . . .        | 61             | +1        | .2                   | -.3       |
| Peoria . . . . .           | 74             | -2        | .8                   | 0         | New York . . . . .           | 71             | -6        | .4                   | -.5       | Seattle-Tacoma . . . . .    | 66             | +1        | T                    | -.1       |
| Rockford . . . . .         | 72             | -1        | .3                   | -.6       | Rochester . . . . .          | 69             | -3        | 1.4                  | + .7      | Spokane . . . . .           | 72             | +1        | T                    | -.1       |
| Springfield . . . . .      | 75             | -1        | .9                   | + .1      | Syracuse . . . . .           | 67             | -5        | 2.8                  | +2.1      | Walla Walla . . . . .       | 79             | +2        | 0                    | 0         |
| IND. Evansville . . . . .  | 77             | -1        | T                    | -.8       | N.C. Asheville . . . . .     | 72             | -2        | 1.2                  | + .1      | Yakima . . . . .            | 73             | +1        | 0                    | 0         |
| Ft. Wayne . . . . .        | 73             | 0         | T                    | -.8       | Charlotte . . . . .          | 74             | -5        | 1.7                  | + .7      | W.Va. Beckley . . . . .     | 68             | -2        | .7                   | -.3       |
| Indianapolis . . . . .     | 72             | -3        | T                    | -.8       | Greensboro . . . . .         | 73             | -5        | .8                   | -.2       | Charleston . . . . .        | 73             | -2        | .4                   | -.8       |
| South Bend . . . . .       | 73             | 0         | .3                   | -.5       | Hatteras . . . . .           | 75             | -4        | .9                   | -.5       | Huntington . . . . .        | 74             | -2        | .3                   | -.6       |
| IOWA. Burlington . . . . . | 74             | -2        | .8                   | 0         | Raleigh . . . . .            | 75             | -3        | 1.3                  | + .1      | Parkersburg . . . . .       | 72             | -4        | .5                   | -.4       |
| Des Moines . . . . .       | 81             | +5        | T                    | -.6       | Wilmington . . . . .         | 77             | -4        | 1.0                  | -.9       | WIS. Green Bay . . . . .    | 69             | -1        | 3.0                  | +2.4      |
| Dubuque . . . . .          | 72             | 0         | .2                   | -.7       | N. DAK. Bismarck . . . . .   | 71             | -1        | 0                    | -.4       | La Crosse . . . . .         | 74             | +1        | .2                   | -.5       |
| Sioux City . . . . .       | 81             | +5        | T                    | -.7       | Fargo . . . . .              | 70             | -2        | .2                   | -.5       | Madison . . . . .           | 69             | -2        | 1.2                  | + .4      |
| KANS. Concordia . . . . .  | 83             | +4        | .1                   | -.5       | Williston . . . . .          | 72             | +1        | .9                   | + .5      | Milwaukee . . . . .         | 69             | -2        | .6                   | -.1       |
| Dodge City . . . . .       | 83             | +3        | .6                   | -.1       | OHIO. Akron-Canton . . . . . | 71             | -1        | .5                   | -.3       | WYO. Casper . . . . .       | 74             | +1        | T                    | -.2       |
| Goodland . . . . .         | 77             | 0         | .6                   | 0         | Cincinnati . . . . .         | 75             | -1        | 0                    | -.9       | Cheyenne . . . . .          | 70             | 0         | 1.1                  | + .7      |
| Topeka . . . . .           | 82             | +3        | 1.7                  | + .9      | Cleveland . . . . .          | 72             | 0         | .2                   | -.6       | Lander . . . . .            | 74             | +2        | .1                   | 0         |
| Wichita . . . . .          | 84             | +3        | .1                   | -.8       | Columbus . . . . .           | 74             | 0         | .1                   | -.8       | Sheridan . . . . .          | 74             | +2        | T                    | -.1       |
| KY. Lexington . . . . .    | 74             | -3        | T                    | -1.1      | Dayton . . . . .             | 75             | 0         | .2                   | -.5       | P.R. San Juan . . . . .     | 84             | +3        | .1                   | -1.4      |
| Louisville . . . . .       | 75             | -2        | .1                   | -.7       | Toledo . . . . .             | 70             | -3        | T                    | -.7       |                             |                |           |                      |           |

Based on 1941 - 70 Normals

## CONDENSED STATE SUMMARIES

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

**ALABAMA:** Scattered afternoon showers all sections of the State, however, heaviest and most numerous rains fell over the Tennessee Valley and extreme southern sections. Cumulative rainfall for the week exceeded 3.00 in. over the Tennessee Valley. Temperatures varied considerably but averaged near normal.

Crops outlook remained favorable. Locally heavy rains north and numerous thundershowers south and central stabilized prospects, but more moisture needed. Cotton 75% forming bolls, 50% 1973. Growers rigorously controlling insects. Corn made satisfactory development 58% in or beyond dough stage and 25% dented, slightly ahead of 1973. Soybeans made vigorous growth, 40% are blooming compared with 25% 1973. Peanuts made favorable development. Hay harvest curtailed several localities by showers. Pastures offered mostly adequate grazing and were improved by rains.

**ALASKA:** Precipitation fell over most of State during week. Kodiak received 2.50 in. Precipitation is still much below normal over the entire State. Temperatures averaged normal and slightly above at all stations.

Ground moisture supply adequate throughout the railbelt. First crop hay 75% harvested. Crop growth improved with warmer temperatures and much needed rain.

**ARIZONA:** Temperatures below normal early week, warming trend started Wednesday, all areas. Temperatures near or slightly above normal by week's end except south central which finished 4° above normal. Precipitation below normal all areas except northeast which had near normal amounts.

Farm work largely devoted to haying, weed control, irrigation row crops. Cotton good condition, developing good boll set. Pink bollworms, leaf perforators active Yuma area. Sorghum continues to develop satisfactorily. Safflower, sugarbeet harvest finished Yuma area, late crop sugarbeets, Cochise County, good condition. Most areas harvesting 4th cutting alfalfa hay. Field preparations underway fall vegetables, melons central, western areas. Emergence early planted cantaloupes good, Yuma area. New crop fruit sizing rapidly, groves good condition. Southeastern ranges welcomed rain. Higher elevation ranges looking better. Stock water, soil moisture supplies not greatly improved. More rain needed to improve supplies.

**ARKANSAS:** Mean temperatures near normal. Very hot early week with many readings 100° or higher. More moderate temperatures remainder of week. Extremes: 109° and 57°. Dry southwest and west central but general rains of 1.00 to 4.00 in. Elsewhere late in week. Isolated thundershower dumped 5.58 in. of rain at Corning in northeast early in week.

Rain brought relief to dry fields and pastures except northwest, crops showed remarkable improvement. Soil moisture adequate over 33% of State. Hail damage to cotton and soybeans in Mississippi County. Cotton crop mostly fair condition, making good growth, shorter than normal. Squaring at same rate as 1973, insect population very light.

Nitrogen applications almost finished, giving rice rich green color. Early maturing varieties approaching full head. Some levees broken by heavy rain. Rice in good condition. Rain helped soybean crop, early fields began new growth, recently planted fields germinating. Few fields planted after the rains. Corn growing well, early corn nearing maturity. Sorghum crop made good growth, some fields harvested for silage. Hay and pasture responded well to rains. Northwest pastures declining rapidly. Cattle condition depended on quality and quantity of pasture. Early apple and peach harvest complete. Okra growing well, and production increasing. Tomato harvest tapering off.

**CALIFORNIA:** The whole State experienced warmer weather than usual, greatest above normal readings in coastal and intermediate valleys. The week began with slightly above normal temperatures in the Central Valley and coastal areas. A heat wave end of period gave highs over 90° in San Francisco Bay area, near 105° in Central Valley and over 110° in southeast interior. Scattered showers and thundershowers observed over southern Sierra Nevada through period, southern 22nd through 25th.

Wheat, barley harvest nearing completion. Safeflower harvest beginning. Sugarbeet harvest to begin north, near completion Imperial Valley. Cotton bloom, set bolls. Lima bean progressing normally. Good growth corn. Grape crop develop well, some mildew. Almond hulls beginning to split, San Joaquin Valley. Brown rot threat, clingstone peaches. Prunes showing color, growers preparing for harvest. Gravenstein apple harvest begun, Sonoma, Santa Cruz Counties. Fruit drop in avocados. Valencia picking active, quality good. Grapefruit harvest active, scarred fruit. Lemon fruit good quality. Broccoli light Salinas Valley. Carrot digging continues central coast. Cantaloupe continues westside. Celery cutting heavy Salinas, Santa Maria. Onion about complete Lathrop--French Camp. Potato digging nearly complete Bakersfield. Fresh market tomatoes increasing San Diego, Oxnard. Processing tomato underway Sacramento Valley, continues San Joaquin Valley. Rangelands, pastures good condition. Supplemental feeding continues many areas. Grazing stock irrigated pastures, grain stubble, high meadows good condition. Cattle feedlot activity increasing. Bee colonies San Joaquin Valley did well on citrus groves resulting heavy honey flow. Water supplies remain ample.

**COLORADO:** Week's weather was quite consistent for late July. Fair to partly cloudy weather during morning hours was followed by afternoon and evening temperature buildups and associated thundershowers. On Sunday the 21st some quite heavy thundershowers occurred in the eastern part of the State with Denver getting 1.26 in. This was the first heavy thundershower to hit the east Denver area this summer. Precipitation showed all basins except Rio Grande averaged 1/2 to 3/4 in. or rain for the week. The Rio Grande received just light amounts. Temperatures averaged near

to a little above normal in the east to a little below normal west.

Rain slowed grain harvest southwest. Wheat 55% harvested, southwest, winter barley 60%. Harvest ending east. Spring barley harvest active, 35% cut, 5-year average 33%. Summer potatoes 14% out. Corn 78% tasseled, normal 55%. Crop excellent condition, some rootworms and spider mites damage. Sorghum starting to head, fair condition. Dry beans flowering, crop excellent condition except dryland acreage southeast. Second cutting alfalfa 37% complete. Pastures continue dry south central. Mountain ranges good condition. Livestock good to excellent.

**FLORIDA:** Widely scattered thundershowers early week gave way to more widespread precipitation on weekend. Temperatures averaged near normal while rainfall amounts generally moderate to locally heavy.

Moisture supplies adequate to excessive most areas, very short west. Early corn being harvested, some corn hurt by dry weather. Soybean, cotton and peanut growth slow due to dry conditions west. Flue-cured tobacco harvest nearing completion. Tobacco auction sales active. Sugarcane good condition. Pastures: Mostly good to excellent condition. Cattle and calves mostly good condition. Citrus tree condition excellent; moisture adequate to surplus; insects becoming a problem; harvest slowing. Planting of earliest fields sweetcorn, eggplant getting underway.

**GEORGIA:** Scattered thundershowers occurred almost daily over most of State with weekly amounts averaging 0.50 in. and local amounts in many places over 2.00 in. Temperatures averaged 1 to 3° below normal.

Soil moisture supplies improved, still short extreme western and northwestern counties. Corn condition fair to mostly good, some early corn in drought areas near failure. Tobacco harvest 72% complete. Peanut condition improved, pesticide applications active. Cotton condition mostly good, insect infestation increased. Soybeans mostly good, blooming prevalent. Pastures and many crops not recovered from previous drought stress, condition fair to good. Cattle mostly good. Pecans mostly fair. Vegetables and melons moving in good volume.

**HAWAII:** Windward and higher elevation areas received beneficial showers. In Lee areas, crops under heavy irrigation to maintain good growth. Spraying active to minimize insect infestations. Supply of vegetables adequate. Banana production continued light. Papaya supplies declining. Pastures and cattle in good condition. Pineapple harvesting continued at peak. Sugar operation normal.

**IDAHO:** Continued near seasonal normal weather. Maximum temperatures ranged high 80's to 102°, minima 45° to 55° to average 65° to 75°. Sandpoint, north, Idaho Falls and Montpelier east, received 0.50 in. precipitation. Rest of State reported very light or none.

Irrigated crops excellent growth. Irrigation supplies adequate for heavy demand. Cool weather north slowed maturity dryland grain crops. Dryland crops need rain. Combining small grains increasing, 10% southern winter wheat harvested. Barley harvest starting southern areas. Spring wheat generally in turning and heading stage, with 20% ripe southeastern area. Potatoes good development, 60% middles closed east, nearly all closed

southwest and south central. Dry pea harvest underway north. Mint harvest starting southwest. Second crop alfalfa 50% done southwest, starting elsewhere.

**ILLINOIS:** Near normal temperatures over State. Precipitation less than normal southeast, northwest. Moderate amounts 0.50 to 1.00 in. west central, north Monday. Otherwise little rainfall. Corn about 55% silked, 70% 1973, 3-year (1971-73) average 82%. Corn and soybean condition mostly fair to good. Soybeans 45% blooming, 59% 1973, average 72%, 10% set pods, 26% 1973, average 42%. Virtually all oats ripe, average 94%. Oat harvest 65% complete, 65% 1973, average 69%. Second cutting alfalfa hay about 70% complete, fair to good condition. Pastures fair to good condition. Soil moisture 88% short, 12% adequate. Fieldwork: 6.5 days suitable.

**INDIANA:** Another very dry week with only few scattered showers. However, near normal temperature and humidity reduced evaporation rates. Extremes: 96° and 51°. Hail damaged crops near Williamsport.

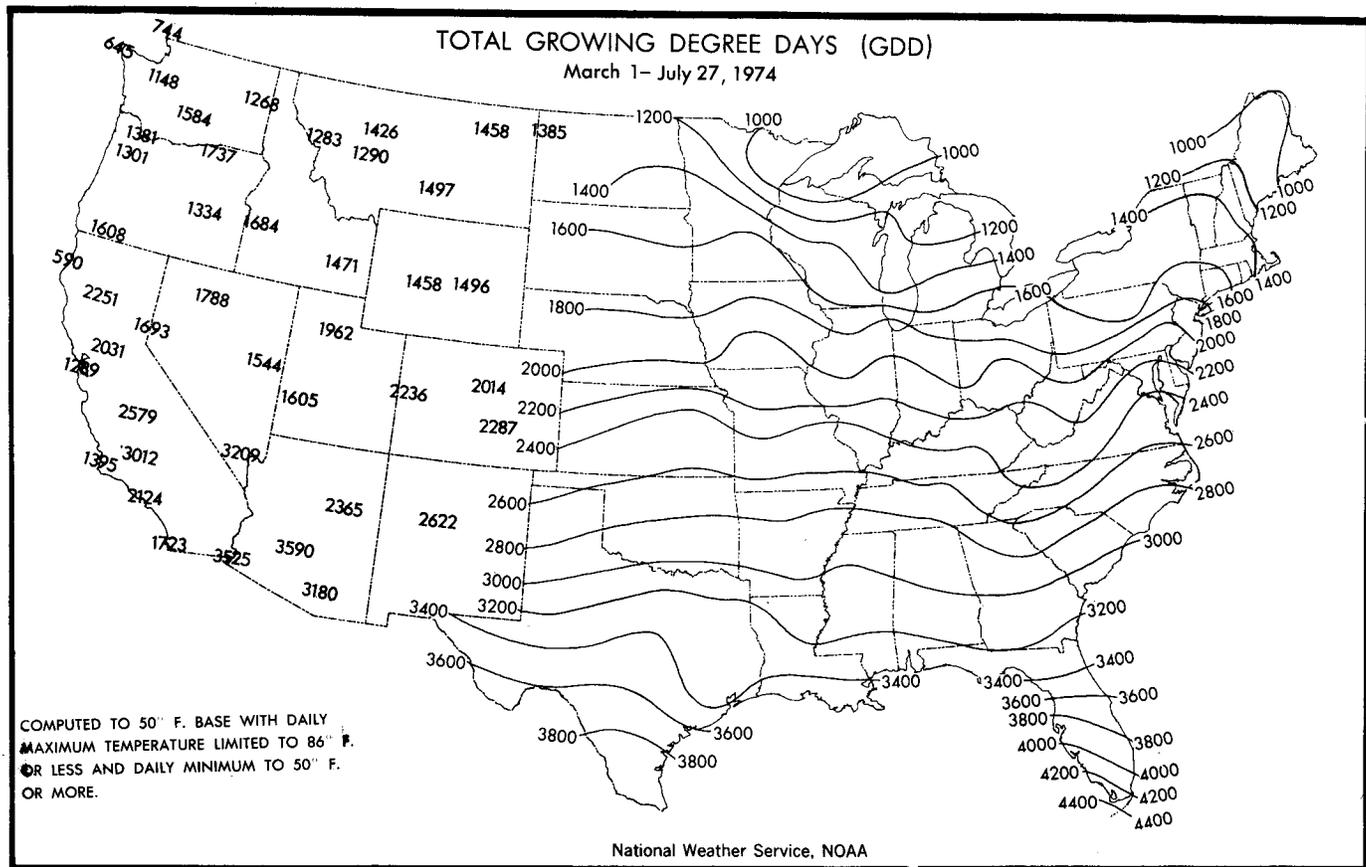
Fieldwork averaged 6 days. Soil moisture edged lower causing additional crop stress. Topsoil moisture short. Subsoil moisture mostly short to adequate. Corn 35% silked, 60% average, 45% in 1973. Soybeans 30% blooming, 10% setting pods, 20% in 1973. Oats 50% combined, 55% average, 45% in 1973. Rye and barley harvest complete. Wheat land 10% plowed for 1975 crop, same as average. Pastures on decline, rated poor to fair.

**IOWA:** Scattered showers and thunderstorms prevailed nearly every day but significant precipitation was spotty. Temperatures averaged near normal east to 6° above normal southwest.

Crop development slow due to hot dry weather. Rain on 25th relieved drought conditions in some areas. Western third and south central still very dry. Fieldwork: 6.5 days suitable, average 5.4. Sixty-six percent corn fields 75% or more silked compared to 70% average. Some corn has reached dough stage. Corn hurt considerably in western areas by hot, dry weather. Some insect damage. Soybeans blooming 63%, average 70%. In dry areas, soybeans in better shape than corn but short and late. Pods setting or more advanced 18% average 30%. Oat harvest 18% complete, average 65%. Second cutting alfalfa 70% complete, regrowth slow. Second cutting clover 40% complete. Pastures brown and of little feed value most areas, livestock under heavy stress due to heat. Topsoil moisture 81% short, 19% adequate. Subsoil moisture 45% short, 55% adequate.

**KANSAS:** Hot, dry weather continues. Temperatures at or above 100° in most portions. Temperatures for the week averaged from 2° above normal in northwest to 5° above normal in southeast. Beneficial rains occurred during the week, but amounts were small and scattered. West and south central portions received the most with a small area along the Kansas River also getting significant amounts.

Corn, soybean and sorghums deteriorating. Much corn to be ensiled. Surface and sub-soil moisture short all districts. Water supplies for irrigation decreasing some areas. Sorghum 15% headed, 10% 1973, 20% 10-year average. Corn nearly 100% laid by, 95% 1973 and 10-year average. Corn 80% tasseled, 55% 1973, 70% 10-year average, 20% in dough stage, 10% 1973. Soybeans 15% podded, 25% 10-year average. Second cutting of alfalfa over 95% cut. Third cutting of alfalfa 30% cut, 1973 20%, 25% average. Pasture and range feed deteriorating, all districts



short. Cows being culled and sold in some areas. Cattle being moved frequently, some to feedlots and stubble fields.

**KENTUCKY:** Near normal temperatures throughout the week. Precipitation averages ranged from less than 0.25 in. central to 1.25 in. west and to near 3.00 in. in isolated mountain sections eastern Kentucky.

Soil moisture 60% short, 40% adequate. Rain urgently needed most western and central areas. Corn 37% pre-silking, 41% silked and 22% milk or later. Development ahead 1973, but corn prospects deteriorating and rain badly needed. Soil moisture very short in river bottoms. Soybeans 25% blooming, comparable 1973. Late beans thin and spotty stands because poor germination. Burley tobacco 30% blooming with 13% topped. Burley blooming early and at short height. Growth of tobacco uneven. Black shank, root rot, and manganese toxicity troublesome. Pastures dry and deteriorating.

**LOUISIANA:** Temperatures averaged near normal. Extremes: 101° and 64°. Scattered showers several days. Totals highly variable, ranging from less than 0.10 in. southwest to more than 2.00 in. Greatest 1-day total, 2.46 inches measured at Shreveport Thursday morning.

Scattered showers alleviated shortages some areas, most of northeast and southwest remained short. Fieldwork possible 5.0 days. Main activities: Cultivation, haying, weed and insect control, and land preparation for fall pastures. Cotton declined slightly and was mostly good to fair. Some topping out shorter than normal,

about 85% setting bolls. Insect damage fairly light due to good scouting and control programs. Soybeans continued mostly good, late planted beans small and under drought stress many areas. Corn mostly good condition, some harvested in south. Grain sorghum mostly good to fair. Rice continued mostly good. Harvest of early varieties picked up speed. Sugarcane growth good; most of cane area had sufficient moisture for optimum growth. Spraying for tie vines and controlling borers. Sweetpotatoes generally good and growing well. Watermelon harvest active. Hay harvest active, quality low due to moisture shortages. Pasture feed mostly average except north-east half. Cattle good to fair.

**MARYLAND AND DELAWARE:** Temperatures 4-8° below normal. Highs low 80's to low 90's except 70's Garrett County. Lows upper 40's to low 60's. Precipitation light, less than 0.10 in. to 1.25 in. in showers. Heaviest north-eastern area and western Maryland.

Drought continues to threaten most areas except for scattered showers. Yield prospects reduced but most crops hanging on and could produce favorable crop if rain comes soon. Corn 66% silked, same as 1973. Pollination good early field, later fields doubtful. Soybeans starting to bloom but pod set light. Late soybeans need rain urgently. Vegetable yields being lowered even with irrigation. Tobacco maturing early. Peaches need rain to size, apples not as critical.

**MICHIGAN:** Temperatures slightly below normal. Precipitation totaled 0.50 to 1.00 in. central to less than 0.20 in. extreme southeast and northwest lower

peninsula and 0.30 to 1.50 in. upper peninsula.

Dry soils hurting crops southern counties. Soil moisture critically short south, short to adequate north. Farmers worked 4.9 days. Corn rolling and wilting south. Growth limited on dry soils. Average corn height 47 in., 52 in. 1973. Soybean growth limited. Moderate rains helped dry beans and sugarbeets. Winter wheat 45% harvested. Oats 66% turned or beyond, harvest started. Potatoes developing well north, heavily irrigated central. Rapid pasture deterioration south. Pasture feed below average. Sweet cherry harvest nearing completion northwest, finished elsewhere. Tart cherry harvest active west central, started northwest. Non-irrigated vegetables showing much stress from dry soils.

**MINNESOTA:** Cool central and north with averages near to 2° below normal. Continued warm south third with averages 2 to 4° above normal. Precipitation 0.50 in. below normal north third and 0.25 in. below normal south and east central. Thundershowers on 24th and 25th produced normal to 0.50 in. above normal averages over central and west central districts. Localized heavy rain of 7.20 in. at Millville on 24th.

Crop prospects vary, but conditions remain mostly fair. Hot dry weather rapidly advanced ripening of small grains and also pushed development of row crops. Swathing and combining small grains underway except in important northern counties. Oats 33% swathed, 9% combined, about average progress. Spring wheat 14% swathed, 4% combined, about average. Barley 25% swathed, 11% combined about normal. Corn 77% tasseled, 84% 1973 average 73%. Soybeans setting pods 23%, 1973 33%, average 26%.

**MISSISSIPPI:** Temperatures near normal. Extremes: 101° and 66°. Scattered thundershowers were the rule during the afternoon hours, particularly Thursday and Friday. The largest 1 day total for rain was 3.85 in. southwest Marshall County on the 23rd. Rains tapered off over weekend, but many stations recorded 0.25 to 0.75 in. for Friday night and Saturday morning.

Soil moisture mostly adequate due to rainfall late in week. Fieldwork: Averaged 3.7 days suitable. Planting of soybeans 99% complete and 90% of acreage up to a stand. Sorghums 99% seeded. Cotton 96% squaring and 75% setting bolls. A year ago, 94% squaring and 86% setting bolls. Harvest of peaches 90%, watermelons 60%, cucumbers 95%, hay 47%, corn silage 25% and sorghum silage 15% complete. Condition of cotton, corn, soybeans and pasture mostly fair. Condition of rice good.

**MISSOURI:** Hot and generally dry week for much of state. Showers and thunderstorms were a little more general except for some local areas where they were not sufficient to appreciably alleviate the rather critical drought condition that has developed during the month. Rainfall total for most of state has been generally under 1.00 to 2.00 in. for the month and this is as much as 2.00 to 3.00 in. below normal. Highs in the 90's to over 100° on all except 1 or 2 days. However, with clear skies and dry air, morning lows dropped into the 60's during the last half of the week.

Fieldwork: 6 days suitable. Oats harvest 97% complete, 74% 1973, 87% average. Corn silked 68%, 52% 1973. Corn poor to fair condition. Soybeans fair condition, 27% blooming, 30% 1973. Cotton fair condition, 88% squaring, 85% 1973, cotton setting bolls 60%, 37% 1973. Harvesting second cutting alfalfa 88% complete, 83% 1973. Clover-timothy 87% harvested. Pastures in poor condition. Soil moisture in short supply.

**MONTANA:** Hot week with thunderstorms first of week becoming dry by midweek. Temperatures above normal with highs mostly 90's. Precipitation well below normal except some thunderstorm areas.

Winter wheat harvest in high gear, 15% done 5% 1973. Harvest weather ideal. Continued heat and dryness reducing prospects on late seeded spring grains. Spring wheat 10%, 7% barley, and 15% oats now ripe. Last year 5% spring wheat and 10% barley was ripe. Soil moisture short all areas. Range feed adequate except north central and southwest. Livestock movement limited. Irrigation water supplies adequate. Second cutting alfalfa near 15% complete.

**NEBRASKA:** Temperatures 5° above normal. Rainfall very spotty.

Fieldwork: 7 days suitable. Top soil moisture supplies 93% short. Subsoil moisture supplies 93% short and 7% adequate. All dryland row crops suffering severely due to drought, yield prospects reduced. Irrigated corn condition fair to good in 94% of counties, 80% silked. Dryland corn poor in 79% of counties, 18% fair 3% good. Dryland corn tasseling very short shooting silks very poorly, 50% silked. Sorghum condition mostly fair to poor, 25% headed, normal 35%. Soybean condition mostly fair to poor, 20% podded, normal 28%. Acreages in blossom stage and pods setting very poorly. Alfalfa and wild hay conditions poor to fair, 90% short second cutting harvested. Sugarbeets and dry beans making good progress with indication of early harvest. Pasture and range feed supplies 96% short. Supplemental feeding has started. Livestock good to fair condition.

**NEVADA:** Temperatures 3° to 6° above normal. Extremes: 114° and 33°. Precipitation (thunderstorm) confined south. Yucca Flat received 0.45 and Las Vegas .35 in. Northwest trace amounts.

Small grain harvest completed southern valleys. Winter grains turning ripe northwest. Spring grains mostly milk stage. Second crop alfalfa harvesting well along in north. Fourth crop harvest under way south. Grasslands extremely dry. Range fires continue to break out all areas. Losses of lambs to coyotes greater than usual.

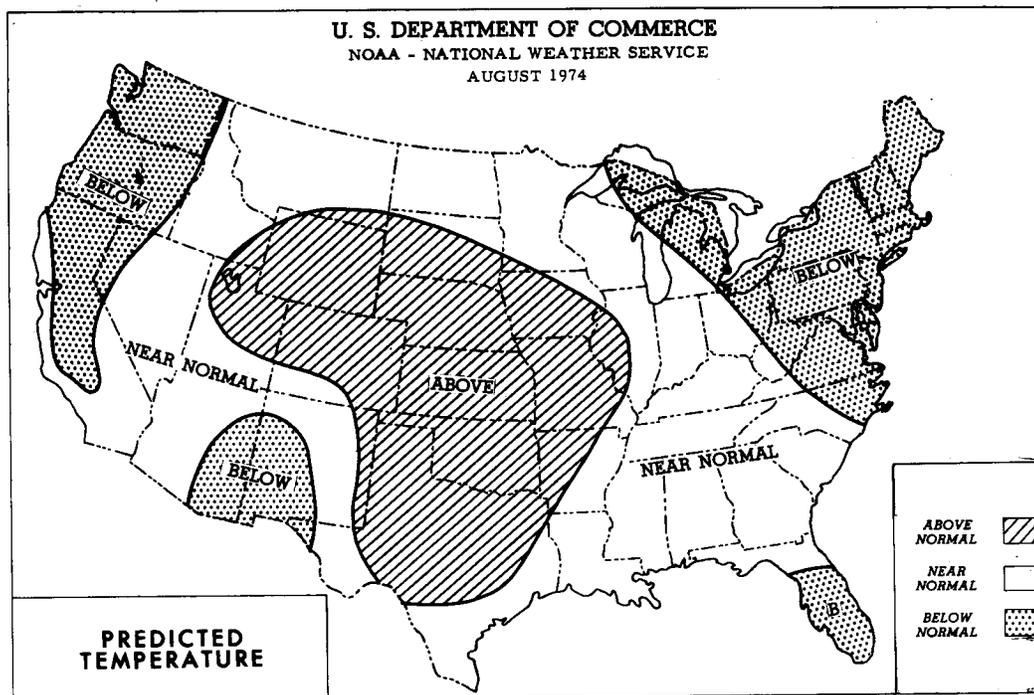
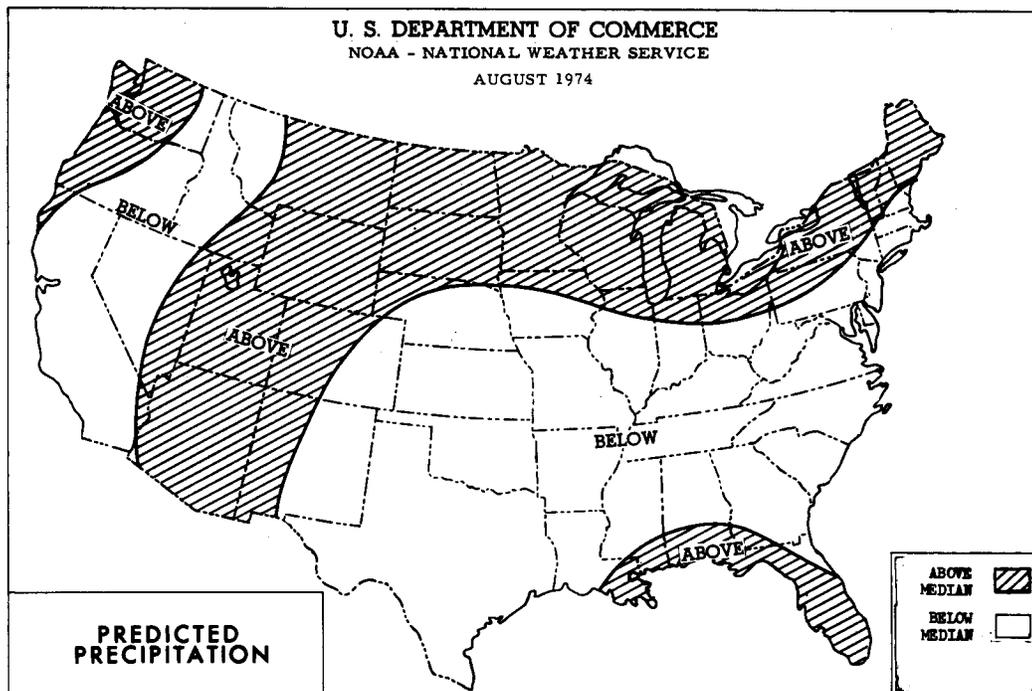
**NEW ENGLAND:** Daytime highs generally in the 70's and 80's with the exception of Maine which dropped into the 60's on Sunday. Extremes: 86° and 42°. Precipitation occurred as showers and thunderstorms over the week, mostly north and west portions. Heaviest recorded amounts were Bridgeport, Conn., 0.26 in.; New port, Vt., 0.27 in., and Pittsfield, Mass., 0.37 in.

General dry, hay making active. Corn, vegetable growth slowed south due to lack of rain, crop growth slowed south due to lack of rain, crop growth good north. Irrigating cranberries, prospects good. A few early apples and peaches marketed south. Lowbush blueberry harvest began New Hampshire, Maine. Tree fruits sizing well. Aroostook County, Maine, potatoes blooming, making good progress.

**NEW JERSEY:** Temperatures averaged 68° north, 70° central, and 72° south counties. Extremes: 48° at Hammonton, Pemberton, and Newton; 90° at Bridge-ton. Average rainfall 0.77 in. north, 1.08 in. central, and 0.46 in. south counties. Heaviest daily total 2.02 in. at Downtown on 24th.

Soil moisture averaged 40% field capacity north, 52% central and 28% in south. Some areas received a good rain on 24th but many areas continue very short on moisture and irrigation active.

### AVERAGE MONTHLY WEATHER OUTLOOK



These prognostic charts show the expected categories of average temperature and total precipitation for the period indicated. They are taken from the Weather Service's publication Average Monthly Weather Outlook which contains additional information necessary for complete interpretation.

Harvest of summer vegetables increasing. Supplies of corn, tomatoes, dry onions and cabbage good. Potato harvest continues light. Summer apples; Julyred, Starr and Lodi available. Peach harvest active. Blueberry harvest beginning to decline. Small grain harvest nearing completion. Much corn, soybeans and vegetables need rain.

**NEW MEXICO:** Definite drying trend early week with gradual return of showers last half. Most showers were light with very few totals of 0.50 in. or more. Temperatures averaged near normal.

Moisture, short to very short. Cotton, 75% squaring, 50% bolls setting; minor insect and hail damage, south and southwest. Irrigation water levels low, Carlsbad. Alfalfa, 2nd cut nearly done; 3rd cut virtually complete southwest. Irrigated sorghum good, 60% headed. Irrigated corn good, 50% silked. Corn silage harvest started. Onion harvesting, Mesilla Valley. Apples fair to good, light crop. Chile, squash, tomato harvesting north. Cattle, sheep, fair, supplemental feeding, water hauling. Range poor to fair depending on rain.

**NEW YORK:** Cooler than normal with temperatures 1-3° below normal north and west, 4-7 below in southeast. Rain highly variable from few hundredths to nearly 3.00 in. Some hail damage reported July 28 lower Hudson Valley. The 3-week rainfall averages showed deficiencies of 1.00 in. or more over Long Island, western New York, and eastern Lake Ontario to Albany. Syracuse has an excess of nearly an inch and smaller excesses were noted in the lower Hudson Valley and Southern Tier. The 5-week averages showed deficiencies of 2.00 in. or more centered near Watertown, Dansville, and Long Island. Syracuse has an excess of nearly 5.00 in. and most of Upstate eastern New York has excesses of less than an inch.

Rain improved crop prospects in many areas. More moisture needed for maximum growth and development. Clover-timothy hay 90% harvested and second cutting alfalfa 30%. Corn in good condition, dry weather slowing growth. Some fields tasseling short. Wheat harvest underway. Oat fields turning. Dry beans in good condition, some fields blooming. Harvest celery and transplant onions gaining momentum in Orange County, lettuce harvest almost finished. Excess moisture in spring and dry July causing low snap bean yields. Sweet corn beginning to move in volume. Tomatoes appearing locally. Cabbage and tomato growth slowed. Moisture improved fruit prospects some areas. Early variety apples appearing on local markets.

**NORTH CAROLINA:** Showers or thundershowers most of State and some areas with heavy rains some areas. Temperatures early in the week were slightly below normal, but about normal remainder of the period.

Soil moisture 19% very short, 38% short, 40% adequate, 3% surplus. Fieldwork: 4.6 days suitable. Corn, cotton, soybeans, and peanuts condition fair to good. Flue-cured tobacco in fair condition, 30% harvested. Peach harvest 70% complete, 54% 1973. Pastures only fair. Vegetable harvest continues active.

**NORTH DAKOTA:** Temperatures above normal all divisions, ranging from 5° above west central to 1° above east central. Extremes: 102° and 44°. Precipitation above normal east central and southwest while remaining divisions reported below normal precipitation. Range was from 1.16 in. above normal east central to 0.50 in. below

normal southeast. Most rainfall for week was 3.13 in. at Fargo. Greatest 24-hour rainfall also at Fargo with 2.97 in. reported July 21. Hot, dry weather continued to force development and maturity of small grains. Rain east central and southwest aided late planted crops, haylands and pastures. Swathing and combining underway southern portion.

**OHIO:** Dry most of week, less than 1.00 in. precipitation anywhere in State. Temperatures normal. Extremes: 94° and 51°.

Wheat and barley harvest complete. Oats 60% harvested, 35% 1973, 50% normal. Corn 60% silked. Soybeans 45% pods set, about normal. Second cutting alfalfa 70% cut, clover-timothy 45%, both ahead of normal. Fall plowing 5% complete. Corn and soybean condition declined fourth straight week, mostly fair. All days favorable. Soil moisture 89% short, 11% adequate. Very dry most areas.

**OKLAHOMA:** Temperatures averaged from 1° to 7° above normal. Precipitation mostly light, averaging up to 0.68 in. north central area. Weekend hot and dry, except showers in panhandle.

Another week of dry, hot weather caused further drop of row crop condition. Topsoil moisture short all areas. Eastern corn is drying rapidly, but irrigated acreage panhandle fair to good. Sorghums mostly fair, needs rain badly to fill, 66% has reached heading stage. Cotton 25% setting bolls, poor to fair condition. Irrigated crop mostly good. Some insect buildup. Peanuts fair to good, 33% acreage spiking, about two weeks ahead normal. Soybean crop now 50% blooming, some shedding in drier areas. Haying progress slowed down, as dry weather continues. Ranges burning west and south, with supplemental feeding on increase. Marketing steady to heavy.

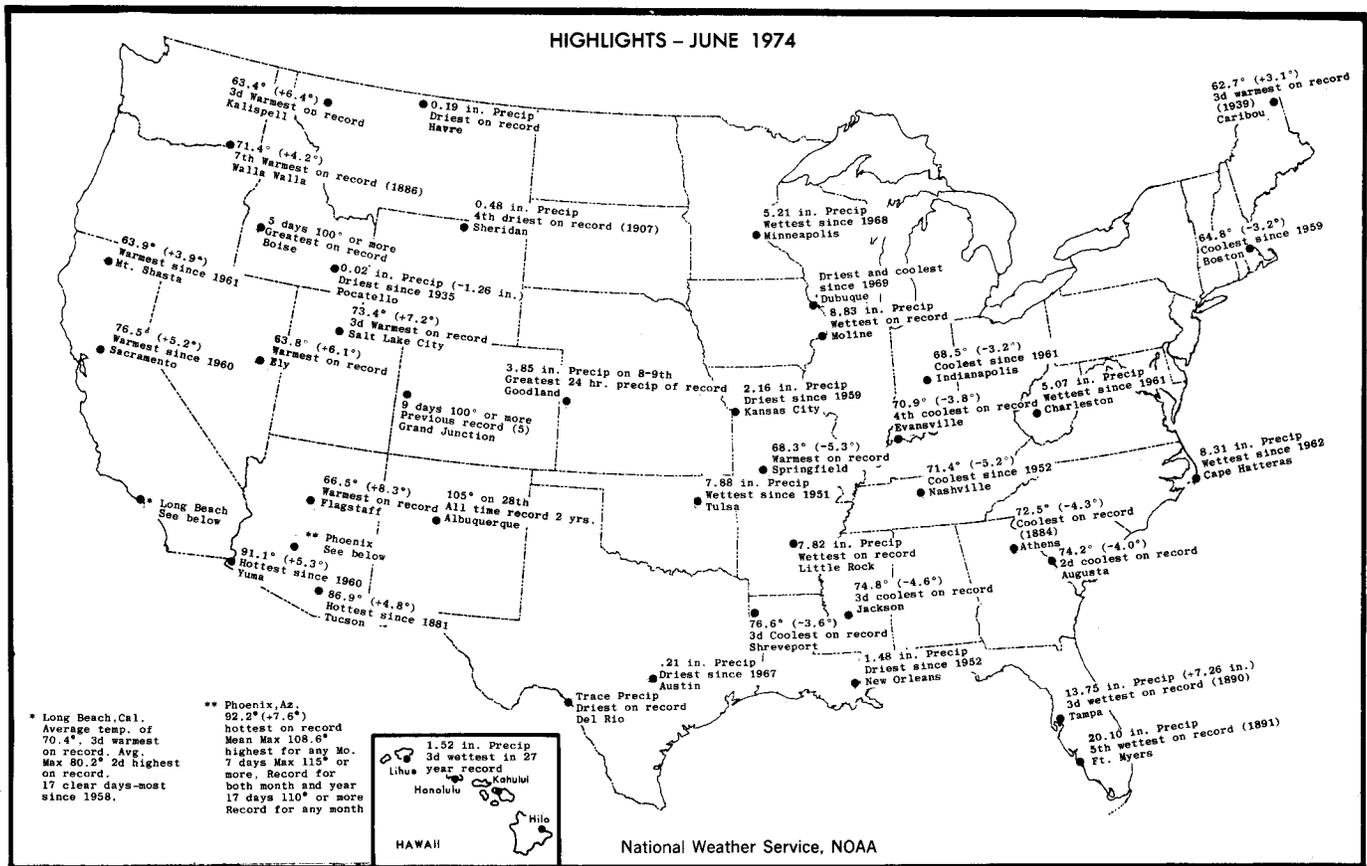
**OREGON:** Weather on dry side except Baker, Condon areas which received 0.20 in. rainfall. Most Oregon averaged near normal temperatures. Highs ranged low 70's to upper 90's. Lows in 30's three nights in northeast.

Wheat harvest beginning. Seed crop harvest well underway. Peppermint condition expected good. Garlic being harvested. Potato harvest continues. Late potatoes filling rows. Broccoli, bean harvest continues. Summer canberries' harvest at peak. Early peach, apple harvest started. High ranges good, others drying. Grass supplies excellent. Livestock condition good. Some market activity reported.

**PENNSYLVANIA:** Rather cloudy, cool week. Occasional rain and drizzle midweek, scattered showers and thunderstorms weekend. Weekly rainfall totals mostly 0.50 to 1.50 in. but locally 2.00 to 3.00 in. Weekly values mostly 2-4° below normal. Extremes: 92° and 42°.

Barley harvest 75% completed, wheat 50% completed, and oats harvest just beginning. Yields small grains good. Soil moisture adequate northern third, short elsewhere. Corn height averages 55 in. Growth rate and color good. Second cuttings alfalfa still being made, quality hay fair to good. Pastures yielding below average, northern third. Snap beans yielding well. Early corn, tomatoes, apples and peaches being harvested.

**PUERTO RICO:** Rainfall averaged 0.78 in. or 0.74 in. below normal. Highest weekly total 3.16 in. at Borinquen airport and Lares. Highest 24-hour total 2.92 in. at Borinquen airport. Tempera-



tures averaged about 81° on coasts and 76° interior, mean. Extremes: 95° and 53°.

Water rationing continued. Water storage levels still very low. Light showers that fell during week somewhat alleviated the drought situation over north and western/interior sections. The rest of island still suffers from lack of rain. Dry weather continued affecting the ratoons and new sugarcane plantings in south coastal areas. Coffee farms in southwest and western/interior sections are improving due to recent rains. The drought continued affecting pasture lands and food crops in most areas.

**SOUTH CAROLINA:** Temperatures averaged a few degrees below normal. Rainfall below normal over much of State, although scattered heavy thundershowers reported especially in extreme southern and higher elevations of northwestern areas. Some areas in east and north have below average rainfall accumulations. Damaging wind storms reported over midlands, along north east coast early week.

Soil moisture short many areas. Farming activities maintained at peak level most areas. Tobacco 65% harvested, 60% 1973, condition good, cutting stalks as harvest ends. Cotton condition good; insect control major concern, 86% setting bolls, 68% 1973. Corn condition good, 88% dough stage, 25% mature. Year ago 76% dough stage, 17% mature. Silage harvest active, some hogging down. Grain harvest underway. Soybean condition good, plants starting to bloom, all pods begin to set some areas. Peach harvest still ahead normal, 84%, 65% 1973. Grape condition fair, harvest underway. Apple condition good. Watermelon harvest 85%,

76% 1973. Peanuts, sorghums good condition. Pastures fair to good.

**SOUTH DAKOTA:** A slow cooling trend spread over the State. By end of week both day and nighttime temperatures were 10 to 20° below earlier July recordings. Extremes: 106° and 45°. Widely scattered thundershowers, but moisture continues 1.00 to 6.00 in. below normal since growing season began.

Small grain season advancing rapidly, generally ahead of 1973 and well ahead of normal. Winter wheat 93% harvested, normally 66%, 87% 1973. Rye 83% harvested, normally 49%, 1973 82%. Most oats, barley and spring wheat ripe. Oats 61% harvested, normally 36%, 61% in 1973. Barley 72% harvested, 35% normally, 1973 70%. Spring wheat 52% harvested, normally 14% and 1973 41%. Flaxseed ripe 24%, well ahead of normal. Corn 48% silked, slightly behind normal. Soybeans 82% bloom stage or past, normal 74%, 81% 1973. Sorghum 14% headed. Wild hay 73% harvested. Livestock generally good condition. Flies and pinkeye still problem. Pastures becoming short. Rain needed.

**TENNESSEE:** Scattered showers and thunderstorms brought much needed rain to most of State with greatest rainfall amounts occurring over middle and west Tennessee. A few places had no rainfall. Temperatures across the State averaged 2° below seasonal normal.

Rainfall west improved prospects for crops. Many parts east received showers, however, most of area needs more rain. Soil moisture supplies

66% short, remainder adequate. Corn received needed moisture during week, 75% has silked and 30% is in dough stage, slightly behind 1973. Soybeans 30% blooming, 5% of the crop has set pods. Cotton crop late, but received boost from rain west. The crop is 90% squaring, slightly behind normal. Less than 30% have bolls set. Boll weevils are becoming a definite problem. Most tobacco needs rain, plants short and have uneven growth. Blackshank spotted in several localities. Pasture condition considerably lower than 1973.

TEXAS: Typical summer weather. Scattered afternoon, evening showers, thundershowers. Temperatures above normal all but south Texas, with readings near normal. Temperatures 3 to 6° above normal north and west. South Texas little or no rain; normally 0.50 to 1.00 in. expected. Elsewhere precipitation 0.25 to 0.50 in. below normal.

Harvest cotton, sorghum, rice excellent progress south half. Hot, dry weather rapidly pushing cotton, sorghum maturity Low Plains southward. Irrigated crops good progress, dryland crops suffering short moisture conditions most localities. High and Low Plains farmers turning under wheat stubble. Preparation fall seeding. Major crops percent harvested: Cotton 2, 1973 0, 3-yr. average 1; Corn 7, 1973 0, 3-yr. average 1; Sorghum 36, 1973 19, 3-yr. average 23; Rice 25, 1973 2, 3-yr. average 12. High Plains potato harvest remains active. Onion harvest nearing completion most areas. Cabbage maturing. Trans-Pecos harvest Pecos cantaloupe crop continues. Onion harvest complete. North: Cantaloupes, tomatoes, peas being harvested. Watermelon season will be short due dry, hot weather. East: Watermelon harvest continues. Light supplies tomatoes available. Irrigated sweetpotatoes making good progress. Central: Watermelon season rapidly nearing completion. San Antonio-Winter Garden irrigation underway on early fields of spinach, cucumbers, cabbage and bell peppers. Lower Rio Grande Valley some early fields tomatoes, peppers being planted. Peach harvest nearing completion as dry, hot weather reduced size on late varieties. Pecan prospects diminishing many areas, nuts falling due to drought stress. Spraying, irrigation, discing main activities in citrus groves.

Hot, dry weather affecting grazing conditions. Ranchers west half culling herds because short grazing conditions. Livestock condition fair to good most areas. Stock water short some areas, ranchers hauling water to maintain supplies. Hay baling still active east and Gulf Coast. New screw-worm cases confirmed Low Plains and Cross-Timbers area.

UTAH: Scattered afternoon and evening thundershowers produced locally moderate amounts of moisture. Shower activity decreased during latter part of week. Average temperatures generally near normal but ranged to 4° above few localities. Accumulated growing degree days base 50 range from near normal to over 400 degree days above.

Soil moisture rated very short to short despite recent thundershower activity. Dryland winter wheat 60% harvested and irrigated winter wheat about 35% combined. Spring wheat 45% and 55% barley ripened, with 15% spring wheat and nearly 25% barley harvested. Farmers very busy haying and 40% second crop alfalfa cut compared with 30% 1973. Clover-timothy and wild hay 55% cut. Sour cherries 65% picked compared with 20% 1973. Apricot harvest 95% done. Ranged feed quite dry and conditions poor to fair. Cattle and sheep fair to good. Insects troublesome.

VIRGINIA: Much needed rain fell most of area with greatest amounts southeast coast to central mountains. Continued seasonably dry over north and south central sections. Extremes: 91° and 47°.

Topsoil moisture 80% short, 19% adequate, 1% surplus. Fieldwork: 4.9 days suitable. All crops continue to decline, much more rain is needed to break drought. Corn good condition southwest, but low fair condition in central Piedmont, Tidewater and southeast. Soybeans and peanuts under a great deal of stress. Extent of damage depends on whether or not adequate moisture is received in time. Crops harvested: Wheat, 96%, flue-cured tobacco, 7%. Hay and pasture in poor condition southeast. Eastern Shore potatoes 80% harvested. Tomato yields cut due to moisture shortage.

WASHINGTON: West: Average temperatures near normal, highs 70's, lows 50's. Some precipitation midweek, mostly along northern coast. Raspberry harvest nearing completion. Early blueberries being harvested. Strawberries cut back and fertilized. Green peas harvested. Pea hay stacked and baled. Broccoli harvest underway. Squash fields cultivated. Haying active. East: Warm, dry with average temperatures near normal, highs 90's lows 50's. Cherry harvest nearly completed with normal yields. Harvest began on apricots, early peaches. Apple, pear thinning continues. Dry field pea swathing, combining underway. Sweet corn, cucumber, zucchini, early potatoes harvested. Green pea harvest virtually completed. Grass seed threshed with average yields. Wheat, barley harvest just beginning. Winter wheat ripening slowly. Farmers making second cutting of alfalfa hay. Third cuttings up and looking good.

WEST VIRGINIA: Temperatures well below normal but with warming trend end of week. Extremes: 91° and 40's. Precipitation in mountain areas about normal, elsewhere about half of normal.

Crops, especially corn, beginning to show need for rain in eastern panhandle and along Ohio River. Soil moisture mostly adequate elsewhere. First cuttings of hay continues, while second cutting 25% complete. Wheat and barley harvest nearing completion. Oats about 25% complete. Corn improved in low areas as soil dries out. Tobacco only "fair" to "good". Needs warmer weather. Hay crops and pasture development continue good.

WISCONSIN: Temperatures near normal. Afternoon readings very warm early in week and on weekend. Nighttime lows were cool in northeast. Showers ended early Monday but returned Wednesday and Thursday over State. Good soaking rains fell in most areas, bringing much needed moisture relief to crops.

Corn continues to develop well, especially on heavier soils. Corn on light soils hurt by hot, dry weather in July. Average height of corn is 52 in. same as normal, but behind 1973's 55 in. Early corn silking and some over 7 feet tall. Harvesting of small grains underway. Wheat, barley, and rye yielding good. Early oats look good, late oats may have been hurt by heat and dryness in July. Second crop hay harvest 20% done same as 1973 and normal. Pastures improving after recent rains, could use more moisture. Soybeans in bloom. Rain a great help to soybeans and tobacco. Early potato harvest started, good yields and quality. Pea harvest continuing. First sweet corn appearing at roadside markets.

Continued on page 16

**WIND EROSION CONDITIONS - GREAT PLAINS**

Summary of Local Estimates as of May 31, 1974  
for the 1973-74 Wind Erosion Season

This is the final summary of wind erosion conditions for the 1973-74 wind erosion season ending May 31, 1974. It is based on reports developed in Soil Conservation Service field offices in cooperation with other U.S. Department of Agriculture field representatives and local authorities. Reports were submitted from 281 counties in the ten Great Plains States where wind erosion was prevalent or expected during the 1973-74 season. The acreage damaged is cumulative for the period November 1, 1973 to May 31, 1974.

Land Damaged

A total of 3,756,444 acres was reported damaged in 281 counties of the Great Plains, according to the Soil Conservation Service. This was more than reported for either of the preceding wind erosion seasons, but about one million acres less than reported damaged during 1970-71. Of the total land reported damaged, 94.1% was cropland (3,534,442 acres), 3.6% rangeland (136,980 acres), and 2.3% other land (85,022 acres). The Northern Plains States reported 1,041,708 acres (27.7%) and the Southern Plains States reported 2,714,736 acres (72.3%). Texas reported 2,053,735 acres damaged, or 54.5% of the total for the 10 States.

Crops or Cover Destroyed

Crops or cover were destroyed on 580,833 acres, although the land itself was not damaged. Crops or cover destroyed in the Southern Great Plains States (421,468 acres) represented 73% of the total.

Emergency Tillage

Emergency tillage to prevent land damage was reported on 2,631,110 acres. In Texas 2,034,920

acres represented 77.3% of the total acres so treated. The Southern Great Plains reported 88.6% of the emergency tillage.

Land in Condition to Blow

A total of 6,146,242 acres was reported in condition to blow. Texas reported 2,649,120 of those acres, or 43.1% of the total for the ten Great Plains States.

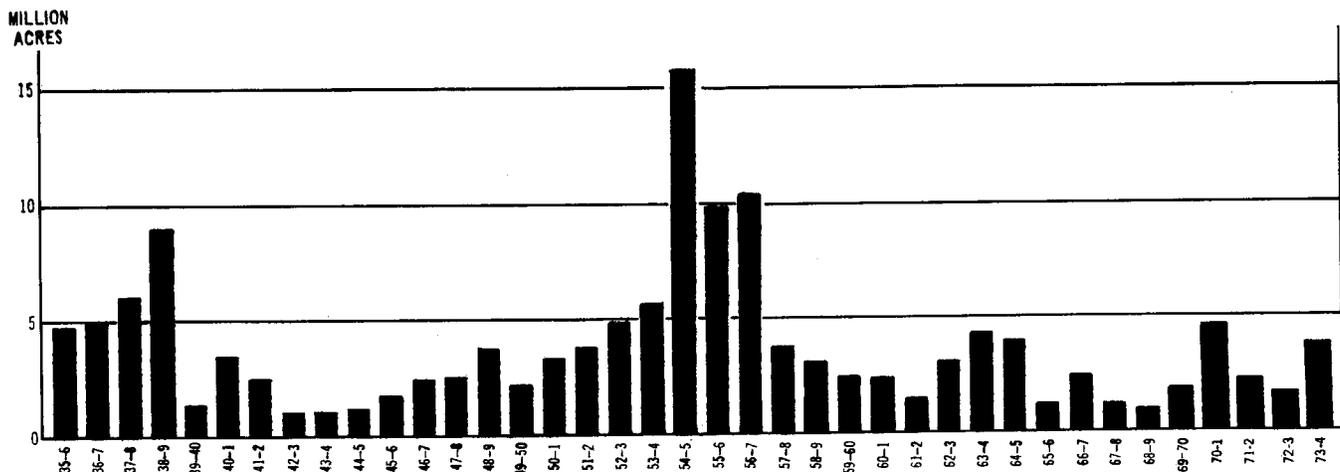
Reasons for Wind Erosion

Major contributing factors to wind erosion this season included: (1) Lack of moisture; (2) Inadequate plant growth and ineffective residues; (3) Poor soil structure; (4) Land clean tilled for seedbed preparation and unsatisfactory tillage operation; and (5) Excessive grazing of small grain and grasslands.

In addition to direct damage from wind erosion, adverse social and environmental effects included: (1) Loss of income from reduced crop yields or destruction of vegetation; (2) Health and safety hazards; (3) Increased cost of property maintenance, particularly roads and fences; and (4) Siltation of lakes and streams.

**ACRES OF LAND DAMAGED ANNUALLY IN GREAT PLAINS**

Seasons 1935-36 to 1973-74, inclusive



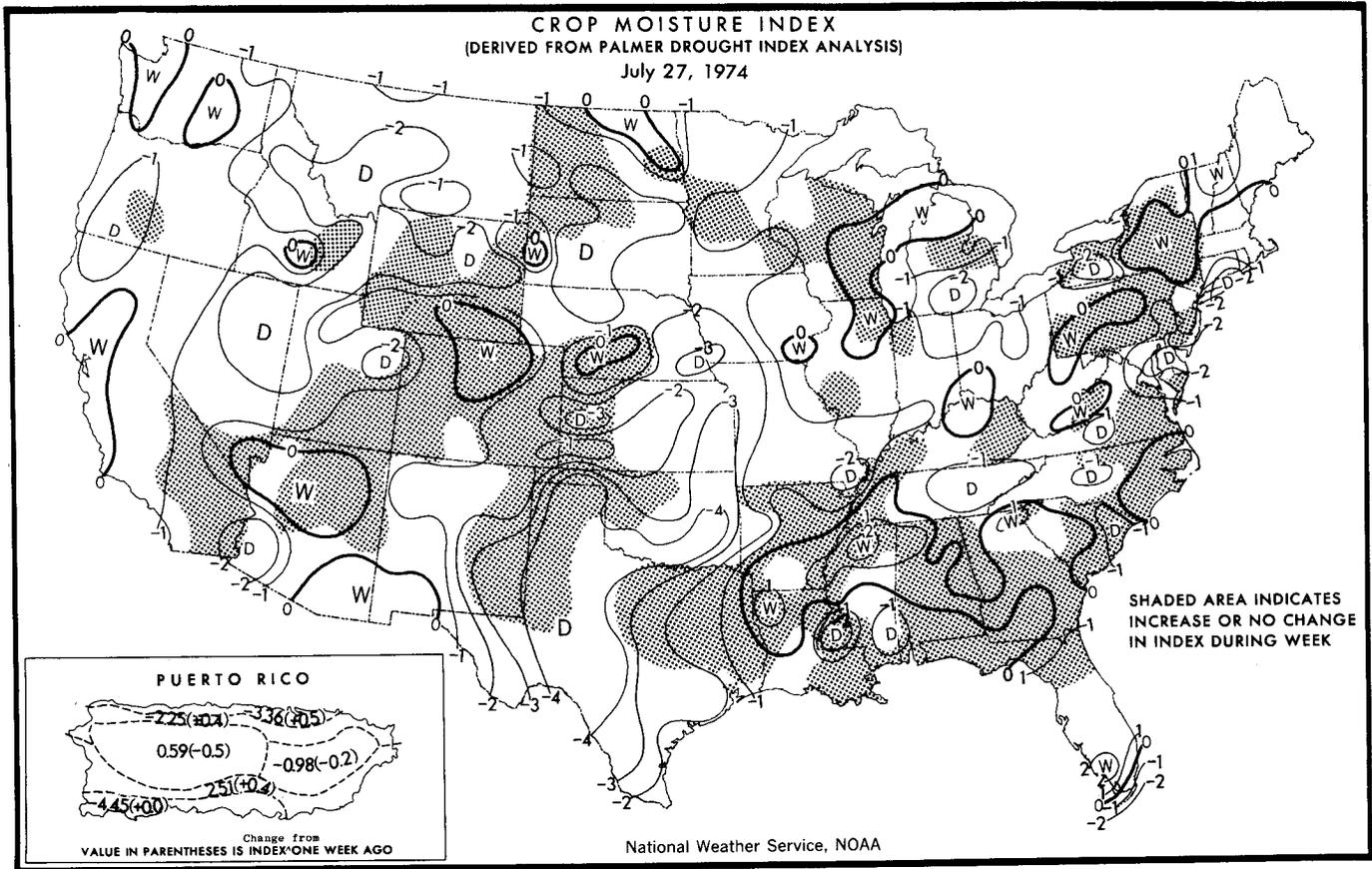
Note: Data for period 1943-44 through 1952-53 obtained from reports of the Great Plains Council. All other data was obtained from SCS reports. (The number of counties reporting may vary from year to year.)

Acres Damaged

| Great Plains States | Counties Reporting No. | Land Damaged |           |            | Total Land Damaged |           |
|---------------------|------------------------|--------------|-----------|------------|--------------------|-----------|
|                     |                        | Cropland     | Rangeland | Other Land | 5/31/74            | 5/31/73   |
|                     |                        | Acres        | Acres     | Acres      | Acres              | Acres     |
| <b>Northern:</b>    |                        |              |           |            |                    |           |
| Montana             | 19                     | 530,650      | 19,000    | 650        | 550,300            | 210,075   |
| Nebraska            | 10                     | 39,600       | 7,500     | 2,660      | 49,760             | 17,050    |
| North Dakota        | 52                     | 247,800      | 200       | --         | 248,000            | 316,180   |
| South Dakota        | 37                     | 172,257      | 150       | 82         | 172,489            | 161,123   |
| Wyoming             | 7                      | 15,159       | 4,900     | 1,100      | 21,159             | 19,800    |
| Subtotal            | 125                    | 1,005,466    | 31,750    | 4,492      | 1,041,708          | 724,228   |
| <b>Southern:</b>    |                        |              |           |            |                    |           |
| Colorado            | 37                     | 91,390       | 15,200    | 7,920      | 114,510            | 67,330    |
| Kansas              | 39                     | 80,576       | 600       | 500        | 81,676             | 20,158    |
| New Mexico          | 7                      | 359,300      | 35,850    | 6,200      | 401,350            | 35,800    |
| Oklahoma            | 17                     | 52,965       | 100       | 10,400     | 63,465             | 92,520    |
| Texas               | 56                     | 1,944,745    | 53,480    | 55,510     | 2,053,735          | 1,018,250 |
| Subtotal            | 156                    | 2,528,976    | 105,230   | 80,530     | 2,714,736          | 1,234,058 |
| Grand Total         | 281                    | 3,534,442    | 136,980   | 85,022     | 3,756,444          | 1,958,286 |

Acres in Condition to Blow

| Great Plains States | Crops or Cover Destroyed on Land Not Damaged |           |            |         | Land Not Damaged Due to Emergency Tillage Acres | Land in Condition to blow Total Acres |
|---------------------|--|-----------|------------|---------|---|---------------------------------------|
|                     | Cropland                                     | Rangeland | Other Land | Total   |   |                                       |
|                     | Acres  | Acres     | Acres      | Acres   |   |                                       |
| <b>Northern:</b>    |  |           |            |         |   |                                       |
| Montana             | 112,050                                      | 700       | --         | 112,750 | 14,700  | 530,850                               |
| Nebraska            | 17,400                                       | 1,700     | 500        | 19,600  | 36,000  | 162,000                               |
| North Dakota        | 13,000                                       | 50        | --         | 13,050  | 100,800   | 847,500                               |
| South Dakota        | 11,195                                       | --        | 20         | 11,215  | 112,355   | 541,607                               |
| Wyoming             | 2,600  | 50        | 100        | 2,750   | 35,900  | 52,600                                |
| Subtotal            | 156,245                                      | 2,500     | 620        | 159,365 | 299,755   | 2,134,557                             |
| <b>Southern:</b>    |  |           |            |         |   |                                       |
| Colorado            | 44,130                                       | 4,440     | 200        | 48,770  | 50,335  | 314,500                               |
| Kansas              | 20,800                                       | --        | --         | 20,800  | 46,300  | 60,700                                |
| New Mexico          | 158,300                                      | 4,000     | 25         | 162,325 | 130,200   | 882,000                               |
| Oklahoma            | 25,850                                       | --        | --         | 25,850  | 69,600  | 105,365                               |
| Texas               | 155,703                                      | 520       | 7,500      | 163,723 | 2,034,920                                       | 2,649,120                             |
| Subtotal            | 404,783                                      | 8,960     | 7,725      | 421,468 | 2,331,355                                       | 4,011,685                             |
| Grand Total         | 561,028                                      | 11,460    | 8,345      | 580,833 | 2,631,110                                       | 6,146,242                             |



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

**UNSHADED AREAS:** Index decreased last week

Index

**Above 3.0** Excessively wet, some fields flooded

**2.0 to 3.0** Too wet, some standing water

**1.0 to 2.0** Prospects good, some fields too wet

**0 to 1.0** Moisture adequate for present normal needs

**0 to -1.0** Prospects improved, but rain still needed

**-1.0 to -2.0** Some improvement, but still too dry

**-2.0 to -3.0** Drought eased, but still serious

**Below -4.0** Not enough rain, still extremely dry

Index

**Above 3.0** Some drying, but still excessively wet

**2.0 to 3.0** More drying weather needed, work delayed

**1.0 to 2.0** Favorable, except still too wet in spots

**0 to 1.0** Normal growth and fieldwork

**0 to -1.0** Topsoil moisture short, germination slow

**-1.0 to -2.0** Abnormally dry, prospects deteriorating

**-2.0 to -3.0** Too dry, yield prospects reduced

**-3.0 to -4.0** Potential yields severely cut by drought

**Below -4.0** Extremely dry, most crops near ruin

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

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

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

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

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



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Continued from page 12

Cherry picking continues, prospects for apple crop reduced by hail in some areas. Soil moisture 55% short, 45% adequate.

**WYOMING:** Most temperatures averaged few degrees above normal, except in south central portion where readings were a little below normal. Extremes: 100° to 33°. Precipitation quite variable ranging from none in Powder, Little Missouri, and Tongue Drainage up to 1.60 in. at Rawlins.

Topsoil moisture supplies short. Winter wheat 85% mature, 50% harvested, compared with 10% 1973. Spring wheat 75% turning color, 35% mature, 5% harvested. Barley 35% mature, 5% harvested. Oats 90% headed, 30% turning color, 20% mature, harvest beginning. Condition of dry beans good, 45% in bloom. Corn fair to good, 25% tasseled. Potatoes, sugarbeet conditions good. First cutting alfalfa hay 90% complete, second cutting 5%. Other hay 40% harvested. Stock water short in some areas.