

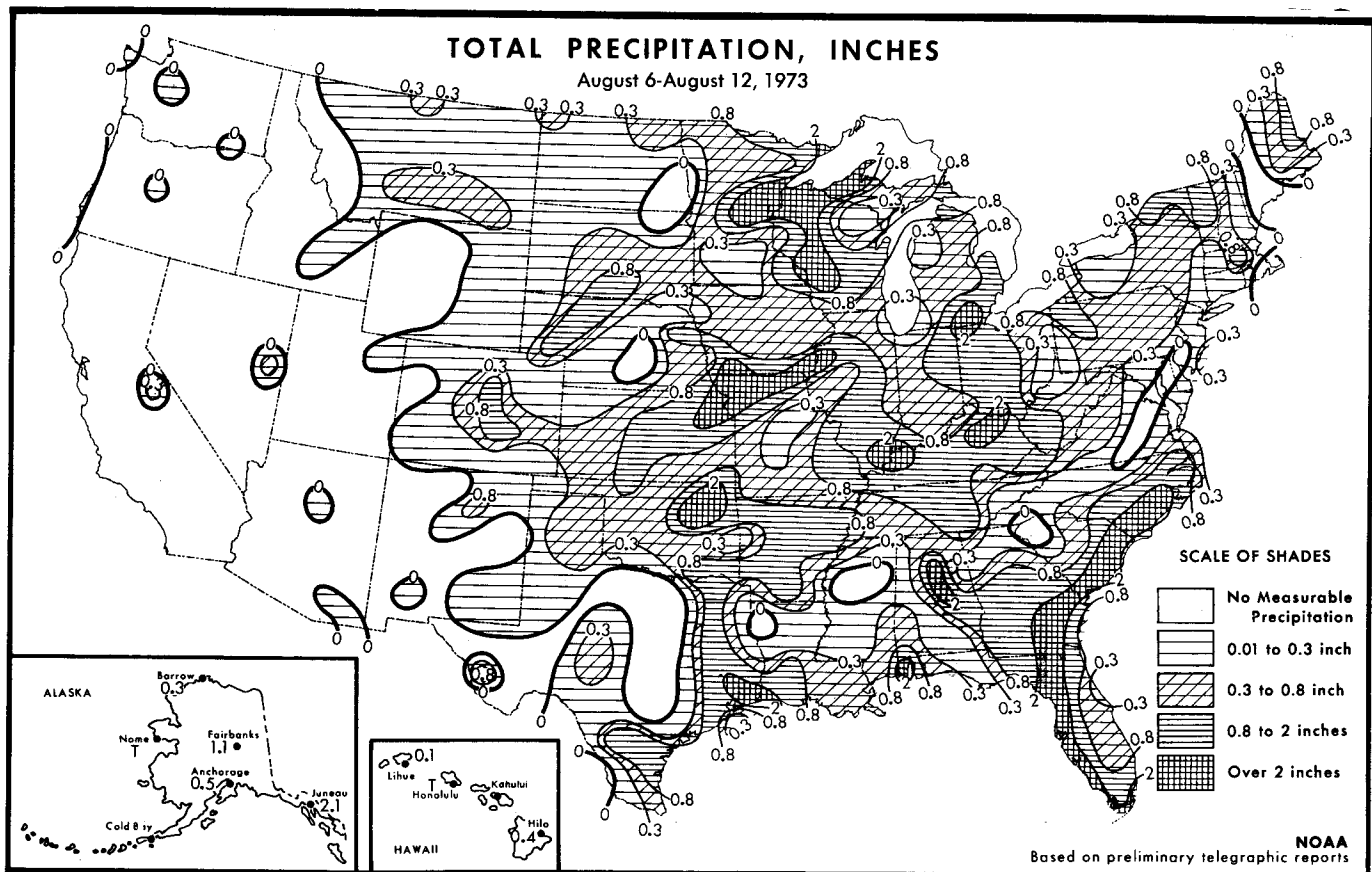
# Weekly Weather & Crop Bulletin

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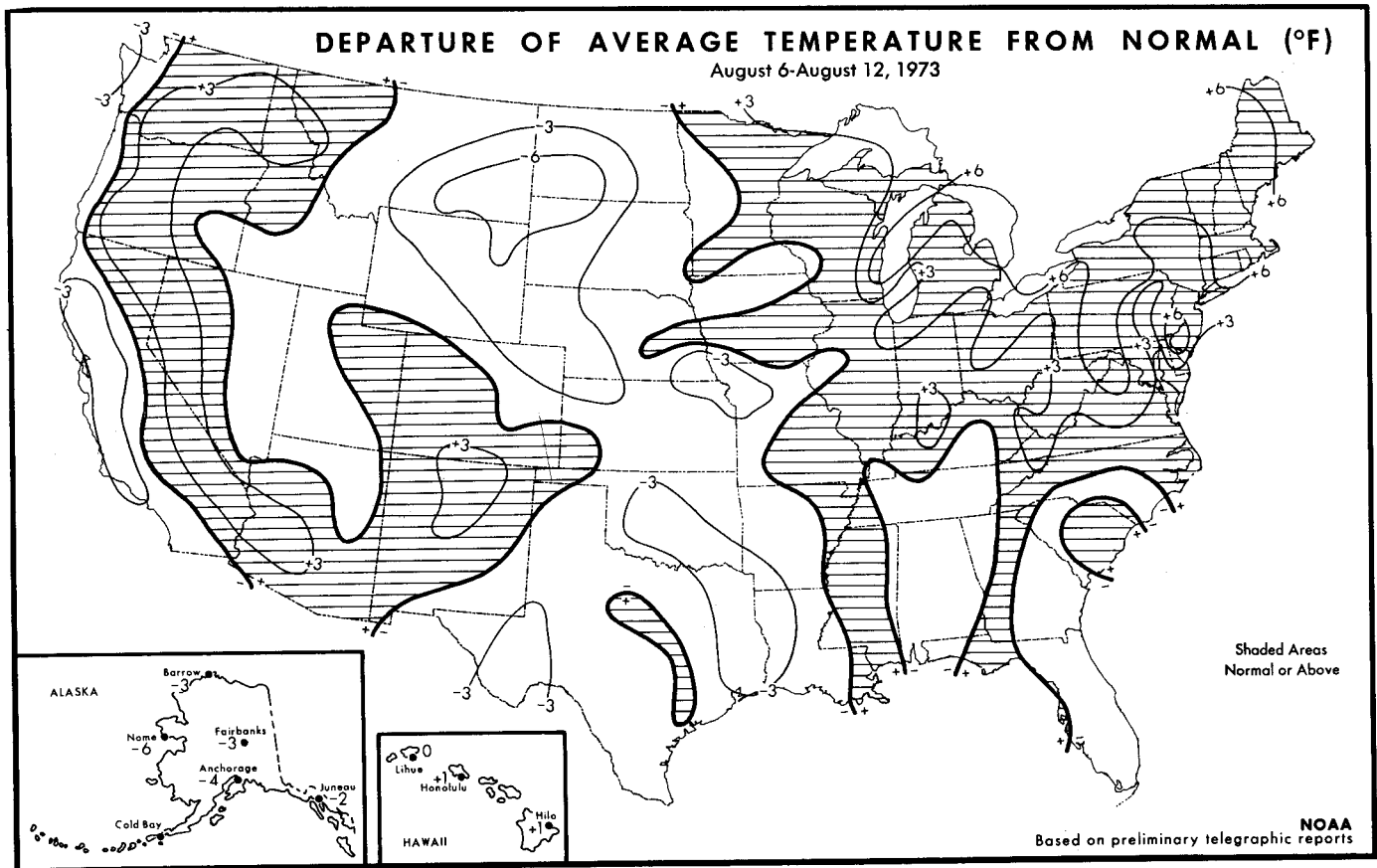


## NATIONAL WEATHER SUMMARY

**HIGHLIGHTS:** Normal temperature and rainfall ruled over all but a few areas in the Nation. The Northeast suffered a late week heat wave, which broke records in Midatlantic States. A wave of Canadian air invaded the Rockies and Plains on Monday, sending some locations into the 40's and 30's the next few days. As the cold air moved east and south, it generated some spectacular local downpours.

**PRECIPITATION:** Rainfall averaged within 0.50 in of normal almost everywhere in the Nation last week; the exception, the South. Parts of Florida got from 1.00 to 1.50 in above the norm. Parts of western Georgia and the Carolinas remained unusually dry. From the Rockies west, virtually no rain fell. Throughout the northern Plains and Corn Belt, some

drenching rains were mostly associated with a stalled front, which became quasi-stationary Tuesday when it extended through the Dakotas into Wyoming. It moved slowly all week, extending through Indiana into Kentucky late Sunday. Monday, rains fell along a front that stretched through the Carolinas into the Atlantic. Heavy flooding bit near Boone, N.C., where a highway lay under 3 to 4 ft water. Early Monday, invading cold Canadian air caused hail in South Dakota and Minnesota. Tuesday, the front generated thunderstorms and severe weather from southwest Iowa to northeast Kansas. One storm left 2.10 in rain at Randolph, Iowa, in 45 minutes; another dumped 2.81 in rain on Baileyville, Kans., in 1 1/2 hours. Salina, Kans., also recorded 63 mph winds. Late Tuesday, a group of cities and



towns, all within a 100 mile diameter, had spectacular rains: Horton, Kans., 5.20 in; St. Joseph, Mo., 3.75 in; Oregon, Mo., 4.75 in; and Clarinda, Iowa, 2.30 in. As the front meandered east it touched off local severe weather: Golf-ball-size hail hit Lovewell Dam, Kans., in 80 mph winds Wednesday. A 3-in rain struck just north of Wichita, Kans., Thursday night. Friday thunderstorms were scattered; Topeka, Kans., got the most evening rain, 1.52 in. Friday and Saturday morning, Miami, Fla., recorded 2.33 in rain, while later Saturday the Tampa area got 1.50 in. Sunday, while most of the Nation enjoyed fair weather, thundershowers roamed the Gulf Coast, Tennessee Valley, and New England.

**TEMPERATURE:** While most of the Nation averaged within 3° of normal for the week, the Northeast suffered a heat wave--especially later in the week and over the weekend--and an invasion of cold air from Canada kept averages 6° subnormal in parts of the Dakotas, Montana, and Wyoming. Monday, a large High over Alberta started to pull cold northern air into the Nation's mid-section. As the cold air advanced, temperatures dropped: Cut Bank, Mont., fell from 47° at 2 a.m. to 40° at 8 a.m. Cold air embraced most of the Rockies' eastern slope, and parts of the northern Plains. Tuesday morning, most of

the Dakotas, and northwestern Kansas dipped into the 50's, while Montana felt 40's. Cut Bank, Mont., recorded 37° at 8 a.m. Later Tuesday, the cold air slowed and the front became stationary from the upper Mississippi Valley to eastern Colorado. In the East, a massive High off the Coast pumped warm air as far north as New England, which averaged 6° above normal for the week. Temperatures there edged into the low 90's and Boston, Mass., hit 91°. To the south, New York, N.Y., also recorded 91°, and muggy air caused air stagnation advisories to be issued in West Virginia. Wednesday, one High kept the northcentral area cool: Evanston, Wyo., started the day at 41°. The second caused Eastern temperatures to rise into sultry 90's, while a third High in the Pacific pushed readings into the 90's throughout the southern Rockies and Plains. Temperatures got most above normal in the East. Friday, Baltimore, Md., and Philadelphia, Pa., both broke records at 95°. The Philadelphia temperature was the highest so far this year. While most of the Nation baked Saturday--Garden City, Kans., hit 100°--snow fell at Kotzebue, Alaska, on the Arctic Circle. Sunday was again hot most places. Baltimore, Md., broke another record, 95°, while Washington, D.C. had the hottest day in 3 years at 97°, plus a windstorm which downed large trees along the Potomac to the northwest of the Nation's capitol.

## NATIONAL AGRICULTURAL SUMMARY

**AGRICULTURAL HIGHLIGHTS:** Showers slowed small grain harvest, progress still ahead of normal. \* Rainfall spotty, soil moisture declined in most Central States. \* Corn, cotton, soybean crops progress favorable.

**SMALL GRAINS:** Harvest of small grains was slowed by showers but continues ahead of last year's slow pace as well as normal. Winter wheat harvesting is nearing completion in Colorado, 60% complete in Montana, 40% in Idaho, and 85% complete in New York. Small grain combining is very active in Washington and Oregon. Spring wheat harvesting made good progress with South Dakota 90% complete compared to 36% last year and 68% normal. Harvest of the crop was delayed by rain and is 33% complete in Minnesota with some swathed grain not drying enough to combine causing some quality deterioration. The Spring crop is 30% harvested in Montana and Idaho, well ahead of normal.

Oats harvesting is virtually complete in Illinois and South Dakota, 50% harvested in Minnesota, 44% in Michigan, and 30% in Wisconsin. Preparation of fields for planting this fall's wheat acreage was active--especially in Oklahoma and California.

**CORN:** Scattered areas of the Corn Belt got good rainfall last week and slightly above normal temperatures prevailed maintaining the corn crop in good to excellent condition. The USDA Crop Report issued August 9 forecasted yields per acre to be below 1972 in 10 of the 12 Corn Belt States, while production is expected to be above 1972 in 6 Corn Belt States and for the U. S. The rain was very beneficial especially in Wisconsin where much of the State received over 2 inches. However, most Corn Belt States indicated a decline in topsoil moisture supplies now generally rated as adequate to short. The corn crop developed favorably aided by the warm, sunny weather. Development is equal to or ahead of normal in Minnesota, South Dakota, Nebraska, Wisconsin and Indiana. In Illinois, 60 percent of the crop is in the dough stage or beyond compared to 66 percent in 1972 and the 1970-72 average of 71 percent. Iowa corn acreage is 43 percent in the dough stage versus an average 51 percent. About 40 percent of the corn acreage in Indiana, Missouri, Nebraska and Kansas has reached the dough stage. The Southern corn crop is rapidly maturing in good to excellent condition. In the South, yields are forecasted higher than 1972 in 7 of the 16 States and more production is expected in 12 of the 16 States according to the August 9 Crop Report.

**COTTON:** It was a relatively dry week for much of the South Central Region last week but cotton continued making satisfactory progress in fair to good condition. Soil moisture declined from a week earlier and some parts of Tennessee, Mississippi and Arkansas are short and need rain. The USDA Crop Report issued August 9 showed 5 of the 14 major producing States--North Carolina, Tennessee, Georgia, Mississippi, and Louisiana, with projected increased yields from 1972 and lower yields from 1972's excellent crop expected in the other major States. The crop is developing later than normal. Boll set is heavy, but bollworm pressure is keeping control measures active.

Prospects remain bright in Texas, but wet fields in South Texas hampered harvesting. In remaining South Central States, boll setting ranged from 50 percent in Oklahoma to 97 percent in Mississippi.

California, New Mexico, and Arizona cotton remained good with some bolls opening in California and Arizona.

**SOYBEANS:** Mostly sunny skies and slightly above normal temperatures helped the soybean crop grow and develop favorably last week throughout the Corn Belt and the South. Most acreage in the Corn Belt is in good condition and podding is at or past the halfway mark except in Missouri and Kansas. The USDA Crop Report issued August 9 forecasted yields per acre to be below 1972 in 10 of the 12 North Central States while production is expected to be above 1972 in all soybean States except North Dakota. Soil moisture, now adequate to short, declined in most Corn Belt States under spotty rainfall. Development of the North Central soybean crop is generally near to or ahead of last year and normal only in Minnesota, South Dakota, Iowa, Nebraska and Michigan. In Illinois 50 percent of the acreage is podding versus 68 percent in 1972 and a 77 percent average. Iowa soybeans are 70 percent podding versus 67 percent in 1972 and 69 percent average. The Southern soybean crop is in good shape with about half the acreage blooming. Yields per acre are expected to be above 1972 in 12 of the 15 Southern soybean States according to the August 9 Crop Report. Dry weather is slowing the progress of some Arkansas soybeans.

**OTHER CROPS:** Dryness continued to cut second cutting hay in Wisconsin and the Dakotas but recent showers are expected to help third cuttings. Harvesting was hampered in Texas because of a shortage of baling wire. The sorghum harvest is progressing northward in Texas with good yields. Kansas sorghum is lagging with 40 percent headed compared to 50 percent in 1972 and normally. The Nebraska crop is mostly good to excellent. Flue-cured tobacco harvesting is past peak with 60% complete in North Carolina and 85% in South Carolina.

**Fruits and Nuts:** More rain is needed in Western New York for development of tree fruits. Peach and summer apple picking continued to increase in northern orchards. Fresh grape harvest increased in California and the almond harvest started.

**Vegetables:** Summer vegetables in New Jersey are maturing rapidly and moving in good volume. Dryness is limiting vegetable growth and yields in central and western areas of New York. Vegetable harvesting in Michigan and Wisconsin is active. Celery cutting is active in several areas of California. Central and east Texas watermelons started a seasonal decline.

**PASTURES AND LIVESTOCK:** Showers over the northern Great Plains gave dry pastures some relief from prolonged dryness. Good rains benefited Wisconsin pastures, also. The Northwest remained extremely dry and supplemental feeding of livestock continued. Most pastures east of the Rockies remained in good to excellent condition.

## Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., Aug. 12, 1973

States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches	
	Average	Departure	Total	Departure		Average	Departure	Total	Departure		Average	Departure	Total	Departure
ALA. Birmingham . . .	78	- 5	2.5	+1.3	La. Baton Rouge . . .	81	- 2	.5	- .6	Youngstown . . .	74	+ 3	.2	- .7
Mobile . . .	82	- 1	2.2	+ .3	Lake Charles . . .	80	- 3	1.5	+ .3	OKLA. Okla. City . . .	80	- 4	.8	+ .3
Montgomery . . .	82	- 1	1.0	0	New Orleans . . .	83	+ 1	.6	- .6	Tulsa . . .	81	- 2	2.8	+2.2
ALASKA. Anchorage . . .	53	- 4	.5	0	Shreveport . . .	79	- 5	0	- .6	OREG. Astoria . . .	60	- 1	T	- .3
Barrow . . .	36	- 3	.3	+ .1	MAINE. Caribou . . .	70	+ 5	1.0	+ .1	Burns . . .	69	0	T	0
Fairbanks . . .	54	- 3	1.1	+ .5	Portland . . .	76	+ 7	0	- .6	Medford . . .	77	+ 5	0	0
Juneau . . .	53	- 2	2.1	+1.0	MD. Baltimore . . .	79	+ 3	T	+1.2	Pendleton . . .	75	+ 2	T	0
Kodiak . . .	---	---	---	---	MASS. Boston . . .	81	+ 7	.2	- .6	Portland . . .	71	+ 3	.3	+ .2
Nome . . .	44	- 6	T	- .9	Chatham . . .	73	---	0	---	Salem . . .	67	0	T	- .1
ARIZ. Flagstaff . . .	66	+ 1	.3	- .4	MICH. Alpena . . .	73	+ 7	.5	- .2	PA. Allentown . . .	78	+ 4	.5	- .6
Phoenix . . .	93	+ 5	T	- .2	Detroit . . .	75	+ 3	1.2	+ .6	Erie . . .	74	+ 6	1.1	+ .4
Tucson . . .	85	+ 1	T	- .7	Flint . . .	75	+ 5	.7	- .1	Harrisburg . . .	79	+ 3	.9	+ .1
Winslow . . .	77	- 2	0	- .3	Grand Rapids . . .	76	+ 4	.4	- .2	Philadelphia . . .	82	+ 7	T	-1.0
Yuma . . .	92	0	0	- .1	Houghton Lake . . .	72	+ 5	.6	0	Pittsburgh . . .	77	+ 5	.2	- .6
ARK. Fort Smith . . .	81	- 2	.3	- .3	Lansing . . .	76	+ 4	.9	+ .2	Scranton . . .	75	+ 3	.4	- .5
Little Rock . . .	81	- 1	1.1	+ .5	Marquette . . .	70	+ 2	.4	- .3	R.I. Providence . . .	80	+ 7	T	- .8
CALIF. Bakersfield . . .	83	0	0	0	Muskegon . . .	74	+ 2	.5	- .1	S.C. Charleston . . .	81	+ 1	2.9	+1.2
Eureka . . .	55	- 2	T	0	S. Ste. Marie . . .	70	+ 4	.9	+ .3	Columbia . . .	82	+ 1	.3	-1.1
Fresno . . .	79	- 1	0	0	MINN. Duluth . . .	67	+ 1	3.0	+2.1	Greenville . . .	79	0	T	-1.2
Los Angeles . . .	71	- 3	0	0	Internatl Falls . . .	69	+ 3	1.4	+ .6	S.D. Aberdeen . . .	73	- 1	T	- .5
Red Bluff . . .	78	- 4	0	0	Minneapolis . . .	73	+ 1	.3	- .4	Huron . . .	73	- 2	.6	+ .1
San Diego . . .	70	- 2	T	0	Rochester . . .	70	- 2	1.4	+ .6	Rapid City . . .	70	- 4	.2	- .2
San Francisco . . .	61	- 2	T	0	St. Cloud . . .	71	0	2.9	+2.0	Sioux Falls . . .	74	0	.5	- .3
Stockton . . .	73	- 4	0	0	MISS. Jackson . . .	83	+ 1	.1	- .8	TENN. Chattanooga . . .	79	- 2	1.5	+ .5
COLO. Denver . . .	73	0	1.0	+ .7	Meridian . . .	82	0	.4	- .6	Knoxville . . .	78	0	.1	- .9
Grand Junction . . .	78	+ 1	T	- .2	MO. Columbia . . .	78	+ 1	.2	- .6	Memphis . . .	82	+ 1	1.2	+ .5
Pueblo . . .	76	0	1.4	+ .9	Kansas City . . .	78	+ 4	1.4	+ .7	Nashville . . .	80	0	.8	0
CONN. Bridgeport . . .	80	+ 6	T	-1.0	St. Louis . . .	79	+ 1	1.0	+ .6	TEX. Abilene . . .	84	0	.1	- .3
Hartford . . .	80	+ 8	T	- .9	Springfield . . .	79	0	.7	+ .1	Amarillo . . .	79	- 1	.7	+ .2
D.C. Washington . . .	83	+ 5	T	-1.1	MONT. Billings . . .	68	- 6	.5	+ .3	Austin . . .	84	- 1	T	- .5
FLA. Apalachicola . . .	83	+ 1	T	-1.7	Glasgow . . .	68	- 2	T	- .3	Beaumont . . .	80	- 3	4.7	+3.5
Daytona Beach . . .	80	- 1	.1	---	Great Falls . . .	69	0	T	- .3	Brownsville . . .	83	- 2	.4	- .2
Ft. Myers . . .	82	- 1	3.1	+1.4	Havre . . .	68	- 1	.3	0	Corpus Christi . . .	84	- 1	1.9	+1.2
Jacksonville . . .	82	- 1	.9	- .7	Helena . . .	66	- 2	.2	0	Dallas . . .	---	---	---	---
Key West . . .	83	- 1	2.4	+1.5	Kalispell . . .	67	+ 2	.1	- .2	Del Rio . . .	85	- 2	.2	- .1
Lakeland . . .	81	- 1	2.0	+ .4	Miles City . . .	69	- 6	.1	- .2	El Paso . . .	81	- 1	T	- .3
Miami . . .	81	- 2	2.9	+1.4	Missoula . . .	70	+ 3	T	- .2	Fort Worth . . .	84	- 2	0	- .4
Orlando . . .	82	- 1	.7	-1.0	NEBR. Grand Island . . .	77	0	T	- .6	Galveston . . .	82	- 2	.3	- .7
Tallahassee . . .	81	0	1.4	- .2	Lincoln . . .	77	- 3	.5	- .2	Houston . . .	80	- 3	1.1	+ .1
Tampa . . .	82	0	2.9	+1.0	Norfolk . . .	76	- 1	.9	+ .3	Lubbock . . .	79	- 1	.2	- .2
W. Palm Beach . . .	82	- 2	1.0	---	N. Platte . . .	72	- 4	.2	- .3	Midland . . .	80	- 3	.2	- .1
GA. Atlanta . . .	79	0	.6	- .3	Omaha . . .	76	0	.5	- .5	San Angelo . . .	85	- 1	.3	0
Augusta . . .	80	- 1	.5	- .5	Valentine . . .	74	- 1	.9	+ .3	San Antonio . . .	84	- 1	0	- .5
Macon . . .	82	0	1.1	+ .1	NEV. Ely . . .	67	- 1	.3	+ .2	Victoria . . .	84	0	.1	- .7
Savannah . . .	81	- 1	.4	-1.0	Las Vegas . . .	89	0	0	- .1	Waco . . .	86	0	0	- .4
HAWAII. Hilo . . .	77	+ 1	.4	-2.2	Reno . . .	70	+ 3	0	0	Wichita Falls . . .	85	- 2	T	- .4
Honolulu . . .	81	+ 1	T	- .1	Winnemucca . . .	72	+ 2	0	0	UTAH. Blanding . . .	72	0	0	- .3
Kahului . . .	---	---	---	---	N.H. Concord . . .	77	+ 8	.1	- .6	Salt Lake City . . .	78	+ 1	0	- .2
Lihue . . .	79	0	.1	- .4	N.J. Atlantic City . . .	79	+ 3	.5	- .7	VT. Burlington . . .	76	+ 8	1.4	+ .6
IDAHO. Boise . . .	74	0	T	0	Trenton . . .	81	+ 5	.1	- .9	VA. Lynchburg . . .	78	+ 3	.5	- .5
Lewiston . . .	78	+ 4	T	- .1	N.MEX. Albuquerque . . .	80	+ 3	.3	0	Norfolk . . .	79	+ 1	.8	- .6
Pocatello . . .	71	- 1	T	- .1	Roswell . . .	78	0	.9	+ .5	Richmond . . .	80	+ 3	T	-1.4
ILL. Cairo . . .	81	0	1.5	+ .8	N.Y. Albany . . .	77	+ 5	.7	0	Roanoke . . .	78	+ 2	.5	- .7
Chicago . . .	79	+ 4	.2	- .5	Binghamton . . .	75	+ 7	.6	- .2	WASH. Colville . . .	73	+ 4	0	- .2
Moline . . .	77	+ 2	.8	0	Buffalo . . .	76	+ 6	.2	- .5	Omak . . .	73	+ 2	0	- .1
Peoria . . .	76	0	.6	- .1	New York . . .	81	+ 4	T	-1.2	Quillayute . . .	57	- 4	T	- .4
Rockford . . .	75	+ 1	.4	- .5	Rochester . . .	78	+ 7	.2	- .4	Seattle-Tacoma . . .	65	0	T	- .2
Springfield . . .	78	+ 1	1.2	+ .6	Syracuse . . .	78	+ 6	.4	- .3	Spokane . . .	74	+ 4	T	- .1
IND. Evansville . . .	80	+ 1	2.4	+1.7	N.C. Asheville . . .	77	+ 2	.2	- .7	Walla Walla . . .	75	+ 5	0	- .1
Ft. Wayne . . .	76	+ 2	1.4	+ .7	Charlotte . . .	78	- 1	.5	- .5	Yakima . . .	74	+ 3	.8	- .1
Indianapolis . . .	77	+ 2	.7	0	Greensboro . . .	78	+ 1	T	-1.1	W.Va. Beckley . . .	77	+ 2	1.0	- .1
South Bend . . .	77	+ 4	.2	- .6	Hatteras . . .	79	+ 1	.3	-1.3	Charleston . . .	78	+ 3	1.1	+ .2
IOWA. Burlington . . .	76	0	2.7	+1.9	Raleigh . . .	77	0	.6	- .7	Huntington . . .	77	+ 2	.1	- .8
Des Moines . . .	78	+ 2	.5	- .2	Wilmington . . .	80	0	2.0	+ .4	Parkersburg . . .	74	+ 3	1.1	+ .5
Dubuque . . .	73	+ 1	.2	- .6	N.DAK. Bismarck . . .	66	- 6	.1	- .3	WIS. Green Bay . . .	72	- 1	3.8	+3.0
Sioux City . . .	76	- 1	.1	- .5	Fargo . . .	70	- 2	T	- .6	La Crosse . . .	73	+ 2	1.2	+ .5
KANS. Concordia . . .	79	- 2	.6	- .2	Williston . . .	67	- 3	.1	- .3	Madison . . .	75	+ 6	.4	- .3
Dodge City . . .	81	0	.4	- .1	OHIO. Akron-Canton . . .	76	+ 3	.5	- .3	Milwaukee . . .	67	- 5	.2	0
Goodland . . .	74	- 3	.2	- .4	Cincinnati . . .	76	+ 1	.4	- .4	WYO. Casper . . .	66	- 3	.2	- .2
Topeka . . .	79	- 1	2.5	+1.6	Cleveland . . .	77	+ 5	.5	- .2	Cheyenne . . .	69	- 1	T	- .1
Wichita . . .	81	- 1	.4	- .3	Columbus . . .	77	+ 3	1.0	+ .3	Lander . . .	67	- 4	.2	0
KY. Lexington . . .	77	0	2.5	+1.7	Dayton . . .	78	+ 3	1.8	+1.1	Sheridan . . .	83	+ 2	2.4	+1.0
Louisville . . .	80	+ 3	.6	- .1	Toledo . . .	74	+ 2	.8	+ .1	P.R. San Juan . . .				

## 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 showers and thundershowers greatest at week's close. Heaviest amounts 3:00 in north central and coast. Crop development favorable but north and southeast counties need rain to maintain growing conditions. Cotton 90% setting bolls. Insect control measures active. About 75% dented. Soybeans satisfactory, over 50% blooming. Insect damage light. Peanuts developed well. Hay harvest active, weather permitting. Livestock good and pastures adequate.

**ALASKA:** Precipitation Matlisu Valley and Kenai Peninsula averaged about 0.33 in above normal bringing soil back to near normal. Soil moisture supply adequate to surplus all areas. Heavy rains caused lodging of grass fields and hampered harvest. About 75% barley acreage turning color in Ianana Valley. Harvest of vegetables underway with a good variety available at roadside stands.

**ARIZONA:** Dry air most of week, moisture returning southeast by Friday. Temperatures mostly near normal, southeast slightly subnormal. Cotton crop normal progress, 95% set bolls, bolls opening Yuma area, insect controls effective. Sorghum growth, development good; some harvest Yuma County, other areas continue some planting. Some insect infestations Graham County, stalk borer infestations Maricopa County. Safflower harvest complete, yields sub normal. Land preparation Yuma County for sugar beets. Alfalfa hay production, harvest continues. Watermelon harvest nearing completion Salt River Valley, Yuma areas. Planting fall cantaloupes underway Yuma. Land preparation fall lettuce Yuma Salt River Valley, central areas. Planting fall lettuce underway Cochise County, limited grapefruit picking Salt River Valley. Lemon groves good but new crop fruit prospects less than normal. Ranges generally good, non-desert ranges providing good summer grazing. Stockwater supplies generally adequate. Cattle, calves fair to mostly good. Sheep, lambs fair to good.

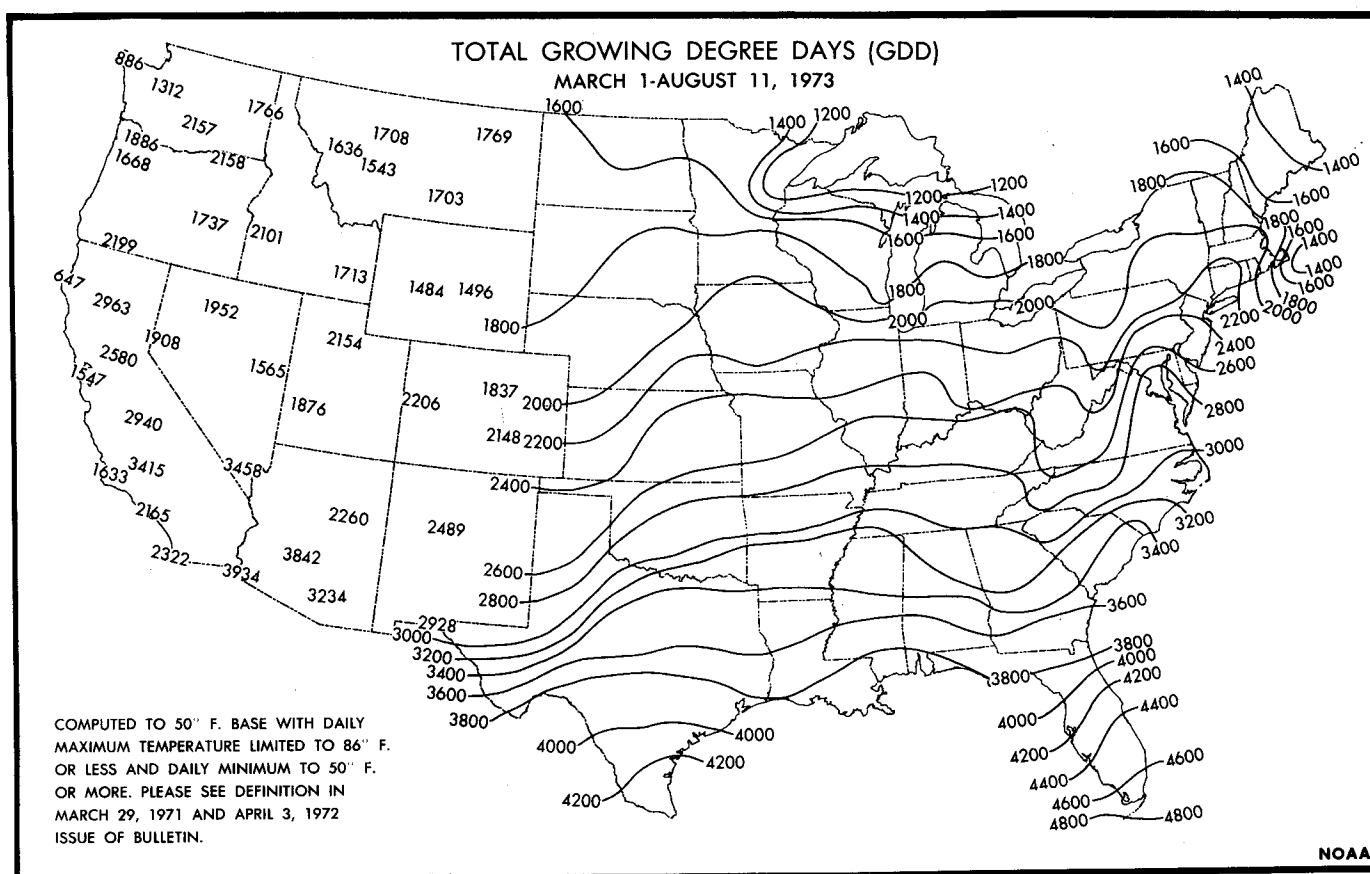
**ARKANSAS:** Scattered showers late week and weekend, heaviest northern half. Largest totals Augusta 4.51 in, Dardanelle 4.47 in and Mountain Home 3.11 in. Most east and west border areas dry. Temperatures near normal. Extremes: 98° at Calico Rock, Ozark, and Clarksville; 60° at Fort Smith. Minor cooling late week with warming on weekend. Soil moisture short, particularly eastcentral and north. Irrigation widespread. Cotton growth slowed, fruiting and boll setting heavy. Cotton pests showing buildup, but lighter than normal, spray programs active. Rice growing rapidly, early fields heading. Soybeans growing but progress slowed by dry weather. Early beans setting pods; late beans small, need rain. Corn maturing rapidly. Sorghums mostly good, development ranges from mature to early growth. Hay cutting still active. Peach harvest nearing completion. Apple picking progressing. Watermelon, Okra harvest active. Pastures mostly good, growth slowing. Cattle good.

**CALIFORNIA:** Scattered thundershowers south northward into central coast, San Joaquin Valley and Sierras Monday; otherwise, no rain. Temperatures

slightly subnormal, 4° subnormal north Sacramento Valley and 2° above normal extreme northeast. Field crops doing well. Safflower harvest increasing. Small grain land preparation underway. Cutting legumes for seed started. Harvest corn silage increasing. Dry beans maturing. Fresh grape harvest active. Harvest plums, peaches, nectarines, gravenstein apples, pears continues. Prune and almond harvest underway. Valencia orange packing continues, grapefruit active. Salinas broccoli, cauliflower seasonal levels. Cantaloupe harvest continued firebaugh-mendota; some bruising cullage. Carrot volume normal Salinas. Celery cutting active Santa Maria-Oceano, Salinas, sizes heavy to large. Sweet corn good supply south. Honeydew harvest full swing Sacramento Valley. Lettuce volume normal Salinas. Potato harvest light Santa Maria, decreasing south. Fresh market tomato shipments heavier south, under way Stockton. Processing tomato increasing Sacramento, San Joaquin Valleys. Watermelon tapering off south San Joaquin Valley, active Turlock and Manteca. Range feed conditions show seasonal decline. Feed and water supplies generally adequate but some areas have declining water supplies. Livestock good condition, movement slow. Sheep grazing stubble irrigated valleys, milk and egg production declining.

**COLORADO:** Temperatures ranged near normal lower elevations to a little subnormal mountain areas. Extremes: 99° on 10th at La Junta, 30° at Fraser on 4th. Northeast driest averaging less than 0.2° in of rain; good amounts west and south averaging near 0.33 in except Rio Grande area under 0.25 in. Rain fell mostly as afternoon and evening showers. Winter wheat harvest 96° complete. Winter barley harvest good progress, 86% cut. Oats 50% harvested. Spring barley 33% cut. Oats and spring barley very good to excellent. Sorghum good to excellent, 33% headed, 69% 1972. Corn very good to excellent, 85% tasseled, 96% 1972. Summer potato harvest 12% complete; all potatoes good to excellent. Sugar beets very good. Dry beans good to excellent. Second cutting alfalfa 67% complete, third cutting less than 10%. Pastures, ranges very good to excellent. Livestock good to excellent. Topsoil moisture being depleted.

**FLORIDA:** Heavy amounts rain north and west portions of Peninsula. Near normal temperatures. Crops good. Moisture adequate to excessive. Soybean progress good, build up in disease and insects. Early corn mature, ready for harvest. Flue-cured tobacco harvest complete. Tobacco marketing heavy. Peanut plant growth excellent. Good crop of pecans set. Sugarcane growing well. Hay harvest interrupted by showers. Pastures good to excellent, soil moisture adequate to surplus. Cattle good to excellent. Tomato seeding, setting for fall underway all areas. Land preparation active for cucumber crop. Citrus tree condition excellent, moisture adequate all areas, rains slowed last week, abundant new growth. Orange harvest continues. Small acreage snap beans, squash planted; activity increasing. Celery, sweet corn planting everglades district accelerating. Early fields eggplant set Pompano, westcentral areas. Land prepara-



tion active for cucumber crop. Citrus tree condition excellent, moisture adequate all areas, rains slowed last week, abundant new growth.

**GEORGIA:** Temperatures near seasonal normals. Precipitation sparse north, scattered showers central and south early week with weekly totals exceeding 1.00 in locally. Widely scattered week-end showers south and sharp increase north. Soil moisture mostly adequate, short locally. Insect and disease control active. Corn mostly good, record yields prospect mid-State, silage harvest begun. Cotton fair to good, boll worm infestation heavy, 93% setting bolls none opening. Peanuts good, white mold prevalent many areas, no digging. Tobacco harvest 94% complete. Soybeans good, early crop blooming and setting pods. Peach harvest 99% complete. Pasture and cattle good, haying active. Vegetables fair to good. Preparations for fall seeding active. Melon harvest peaked and declining.

**HAWAII:** Weather continued dry. Few areas received beneficial showers. Progress of crops fair to good. Supplies of vegetables adequate. Papayas decreasing and bananas plentiful. Supplemental feeding and watering of cattle necessary on some ranches. Pasture forage low. Marketing of feeder cattle very active. Harvesting sugar and pineapple active.

**IDAHO:** North remained dry with above normal temperatures for period. Cooler weather in rest of state with warming midweek. Thundershowers southeast brought 0.50 in or less to local areas. Small grain harvest full swing statewide.

Irrigated crops made excellent growth responding to normal warm weather. Irrigation water supplies expected adequate. Nonirrigated crops east made good growth. North continued dry putting more stress dryland crops and ranges. Harvesting small grains ahead of usual north, quality off due drought. Livestock marketings above usual north, feed supplies short. Winter wheat harvest active all areas, 40% complete. Barley 33% harvested. Spring wheat harvest active, 15% complete. Potato crop making excellent growth, southwest most advanced with some vines dying. Second cutting alfalfa active, 60% harvested. Dry pea, lentil harvest good progress main north area. Dry peas 90%, lentils 70% harvested.

**ILLINOIS:** Dry early week, moderate rain southwest Thursday, heavy rainfall west central Saturday, light amounts elsewhere. Temperatures mostly near normal, few degrees above normal north. Corn about 60% dough stage, 66% 1972, 1970-72 average 71%; nearly 15% dent stage, 18% 1972, average 23%. Corn 17% excellent, 63% good, 20% fair; 1972 85% good or excellent. Soybeans bloom stage 82%, 1972 85%, average 94%; about 50% setting pods, 68% 1972, average 77%. Soybeans 9% excellent, 64% good, 27% fair; 1972 91% good or excellent. Oat harvest virtually complete, 1972 79% combined, average 93%. Second crop alfalfa hay about 90% cut, 79% 1972, average 87%. About 10% of third crop cut, 10% 1972, average 18%. Alfalfa hay mostly good to excellent. Plowing for winter wheat about 45% complete, 25% 1972, average 34%. Pastures 24% excellent, 63% good, 13% fair. Soil moisture 33% short, 67% adequate. Averaged 6 days suitable for field work. Main activities baling and cutting

hay, combining oats, plowing for winter wheat, controlling weeds.

**INDIANA:** Warm and dry until weekend; 4-week rainfall above normal from 0.50 in north to 3.00 south. Humidity and evaporation near normal. Fieldwork: 6 days. Topsoil moisture short to mostly adequate, subsoil moisture adequate. Oats 90% combined. Wheat land 25% plowed, 30% average, 35% 1972. Corn 80% silked, 40% in or past dough, 5% dented, same 1972, usual 55% dough or later. Soybeans 50% podded, 55% 1972. Alfalfa hay 75% cut second time. Pastures continue fair to good.

**IOWA:** Temperatures average 1° above normal aided by warm humid nights. Heavy rainfall scattered across south and extreme northeast with several spots over 4.00 in, elsewhere only half normal. Scattered showers and thunderstorms were active. Crops mostly good to excellent. Fieldwork suitable 5 days. Corn 43% dough stage, 5-year average 51%. Soybeans 70% setting pods, 5-year average 69%. Soybean weed control 1% poor, 17% fair, 62% good, 20% excellent. Third crop alfalfa 18% harvested, 6% below 1972. Second cutting clover 56%, last year 62%, 5-year average 58%. Condition hay crops ranges poor to excellent, majority good. Pastures 2% poor, 13% fair, 55% good, 30% excellent. Topsoil moisture 16% short, 77% adequate, 7% surplus.

**KANSAS:** Temperatures near normal, above 100° central. Precipitation in most counties, heaviest northeast. For week Brown County received 5.77 in and Nemaha 4.62 in. Isolated severe weather west 11th with high winds caused some damage. Row crops good. Sorghum 40% headed, 50% 1972, 50% average. Insect damage minor. Corn 40% dough, 60% 1972, average 65%. Corn 5% dented, 15% 1972, average 30%. Soybeans 45% setting pods, 60% 1972, average 60%. Third cutting alfalfa hay 60% harvested, 1972 50%, average 55%. Pasture and range good. Livestock marketings light. Fall wheat seed bed preparation active.

**KENTUCKY:** Warm, humid throughout week with rainfall amounts averaging a little over 1.00 in statewide. Showers and thundershowers Thursday through weekend. Fieldwork 5.5 days suitable. Soil moisture 33% short, 67% adequate. Tobacco prospects fair. Burley 21% topped, 49% 1972. Dark types 38% topped, 63% 1972. Soybeans 40% podded, 42% 1972. Corn excellent; 53% milk stage, 40% 1972; 34% dough, 45% 1972; 13% dent, 15% 1972. Hay baling active.

**LOUISIANA:** Temperatures normal to 4° below. Extremes: 63°, 95°. Widely scattered showers heaviest along coast. Several areas north no rain. Other areas varied from 0.25 to 1.00 in except 6.00 in New Orleans. Fieldwork 5.5 days. Soil moisture adequate except extreme northeast. Cotton good, 95% setting bolls, bolls opening early planted field, spraying active. Corn and sorghum good, corn harvest beginning south. Early rice maturing, harvest becoming general south, yields and quality fair to good, rain and wind caused lodging. Soybeans growing rapidly, cultivation and pesticide application continued. Sweet potatoes 20% dug, yield and quality good. Sugarcane good growth, border control continues. Land preparation for fall planting active. Pecans good, some insect damage. Watermelons virtually complete. Hay 50% harvested. Pasture feed fair. Livestock excellent.

**MARYLAND-DELAWARE:** Temperatures near normal. Extremes mid 90's to upper 50's except upper 80's and low 50's Garrett County. Precipitation very light only showers extreme northcentral ranging 0.5° to 2.5° in. Most stations no rain. Soil moisture short northcentral through southern Maryland, elsewhere adequate. Corn dough stage 50%, 1972 46%, normal 45%. Early crop silage harvest starting Eastern Shore. Soybeans podded 33%, 1972 20%. Tobacco harvest 12% complete. Vegetable, early peaches, and apple harvest active.

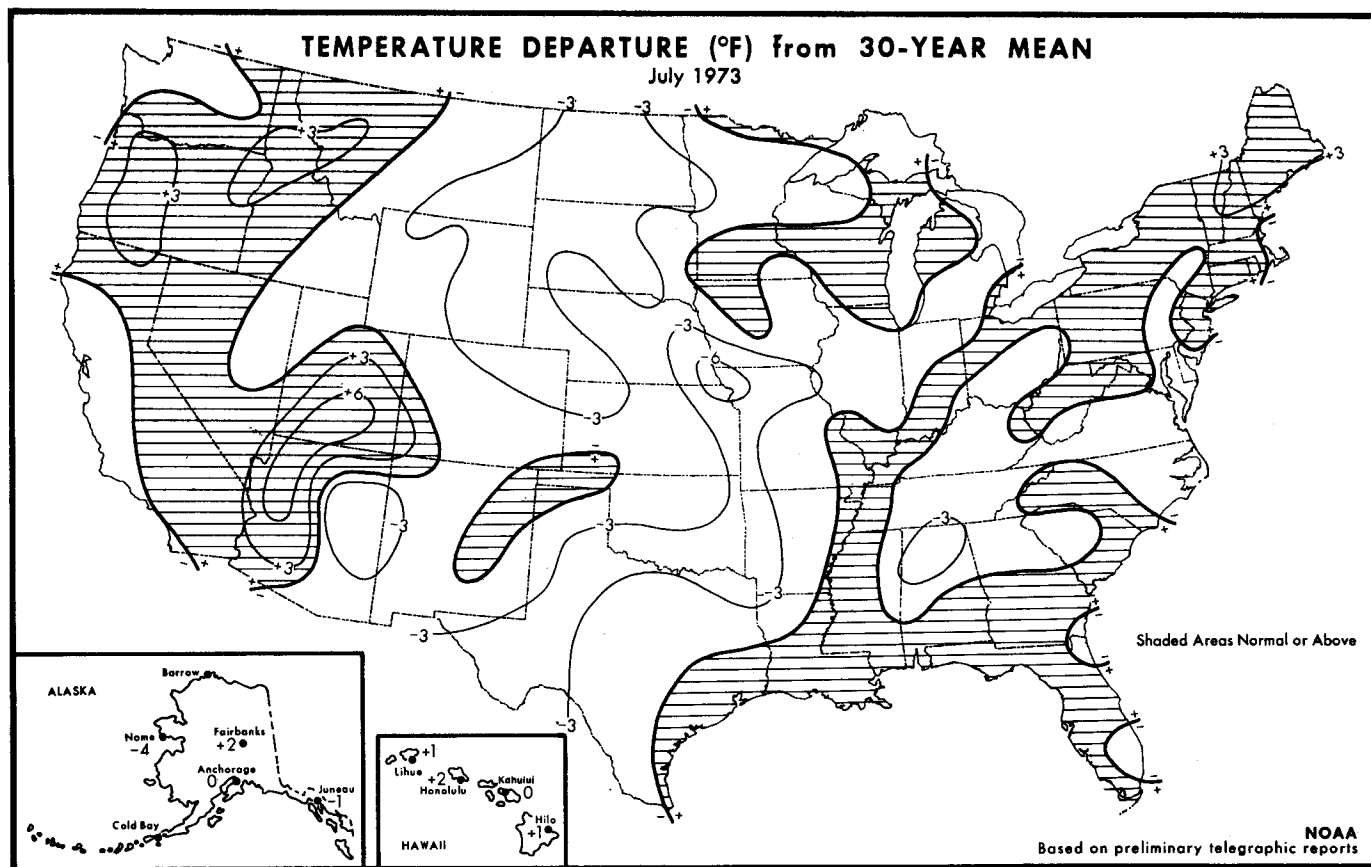
**MICHIGAN:** Temperatures 1° to 6° above normal. Rainfall generally 0.50 to 1.00 in, occurring most days upper and later lower. Showers hindered hay and small grain harvest. Soil moisture mostly adequate to surplus. Days suitable for field work. 4. Corn, soybeans and sugar beets developed well. Corn 77% silked or more advanced. Soybeans 50% setting pods. Extensive water damage navy beans some areas, development fair elsewhere. Wheat harvest near end south, north delayed by wet humid weather. Oats 44% harvested, some badly lodged. Early potato continues. About 41% second cutting hay made. Pasture feed supplies above average. Tart cherry harvest finished. Harvest of peaches and summer apples continued. Most vegetables in volume harvest.

**MINNESOTA:** Temperatures averaged normal to 1° subnormal over west and south, elsewhere 1° to 3° above normal. Precipitation amounted to 1.0 in or more above normal in east two-thirds with 1.50 to 2.50 in above normal in eastcentral and southeast. Normal to 0.5 in above normal recorded northwest and westcentral. Only southwest remained relatively dry. Harvest of wheat, oats and barley in north half slowed by rains and heavy dew, elsewhere very active, progress week ahead of average. About 33% hard red spring wheat, 50% oats and nearly 67% barley combined. Winter wheat and rye over 80% harvested. Fall crops advanced favorably with corn 60% milk stage or beyond. Soybeans 85% podded. Fall cuttings alfalfa active south but slowed in northwest and westcentral by wet conditions. Some swathed small grain westcentral and northwest not drying enough to combine and quality deteriorating. Fall crops good condition. Soil moisture mostly adequate except dryness few southwest counties.

**MISSISSIPPI:** Temperatures 3° to 6° subnormal. Extremes: 54° and 96°. No precipitation in Delta and central sections, average 0.50 in or less elsewhere. Weekend hot and shower activity increased. Soil moisture short to adequate. Averaged 5.5 days suitable for fieldwork. Crops fair to good. Pasture and livestock fair to good. Cotton setting bolls 97%. Soybeans 48% blooming, 18% setting pods. Corn 43% dough stage, 43% dented. Sorghum 68% headed. Completion of harvest: peaches 95%, watermelons 71%, cucumbers 96%, sweet potatoes 9%, and hay 70%.

**MISSOURI:** Precipitation heavy across north third, light and spotty westcentral, southwest; normal southeast. Temperatures near normal statewide. Fieldwork 5 days suitable. Corn silked 83%, 1972 93%, in dough stage 40%, 1972 65%. Soybeans 62% blooming, 79% 1972; 30% setting pods, 55% 1972. Grain sorghum 58% headed, 76% 1972. Cotton 77% setting bolls, 88% 1972.

(continued on Page 11)

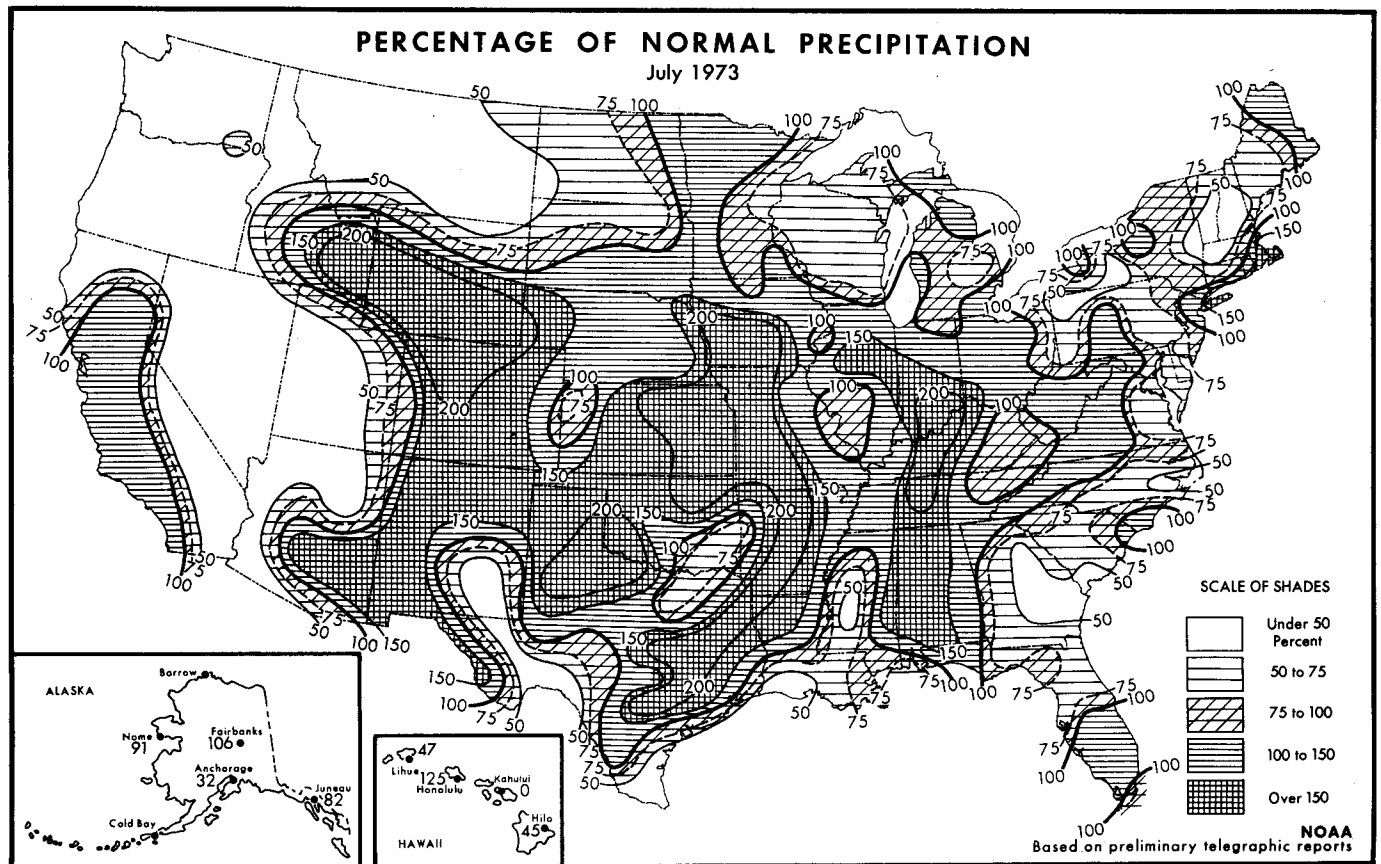
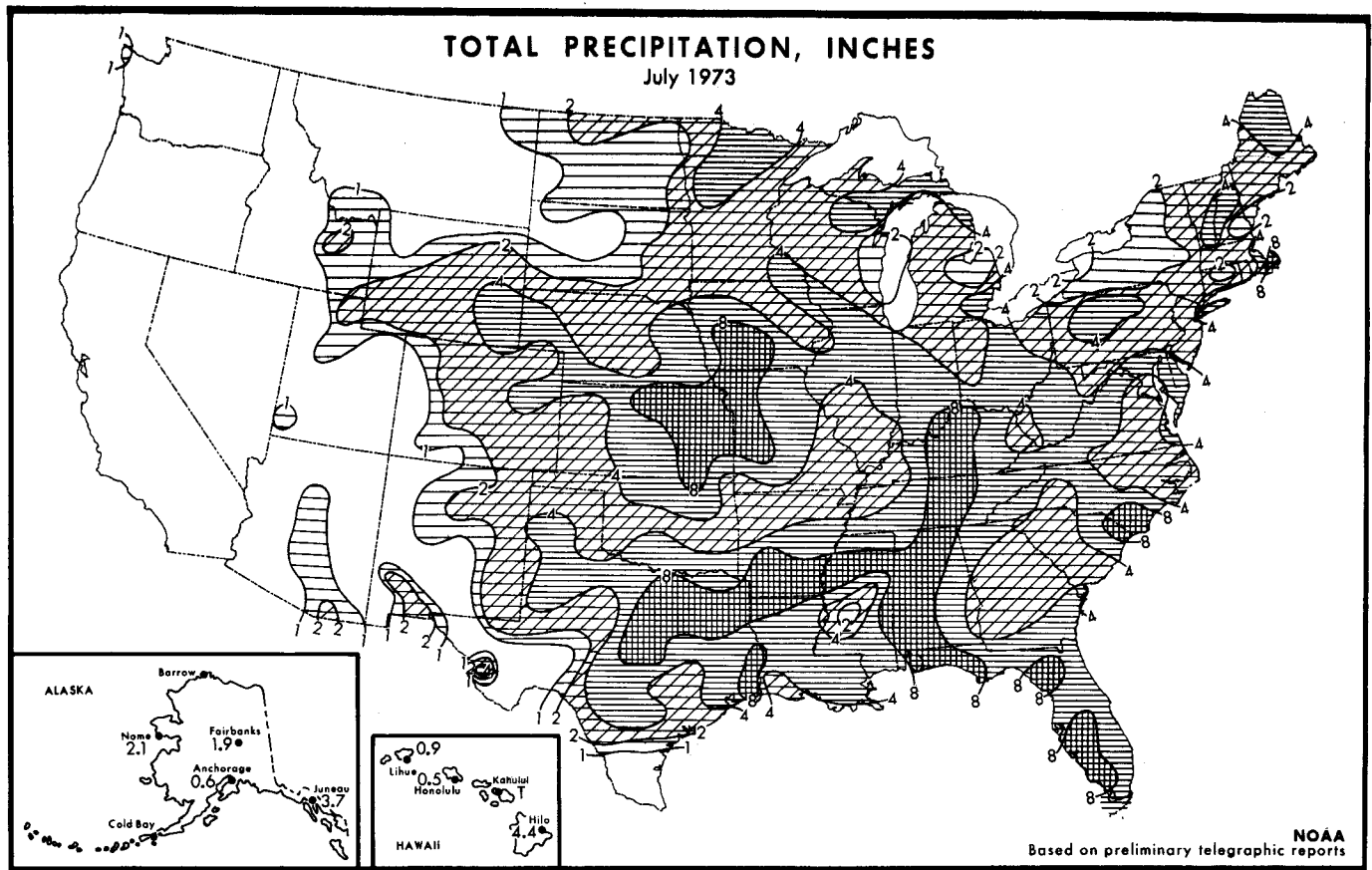


## WEATHER - JULY 1973

**TEMPERATURE:** Temperatures over the Nation as a whole were about normal in July, with cooler than normal conditions in the Nation's midsection and above normal temperatures to the east and to the west. The month began with a traditionally hot week of the 4th. Independence Day itself was hot and clear in most parts of the Nation except where thunderstorm activity occurred locally. Temperatures for the week averaged 3° to 6° above normal over much of the Nation. The remainder of the month was generally below normal over the Rockies and Great Plains, with above normal temperatures confined to the West and eastern parts of the Country. Several record highs and lows were recorded as large variations in temperature occurred. On July 10 the Atlantic City airport recorded a record 92, and Great Falls, Mont., hit 105. Just two days later record lows were observed in these same areas as a large High brought cool air to the Nation's midsection. Record lows on the 13th included Bradford, Pa., 33°, Baltimore, Md., 54°, El Paso, Tex., 61° and Cleveland, Ohio, 48°. The same distribution of temperatures occurred through mid-July. Temperatures averaged 6° to 9° below normal over a six State area during the week ending the 22nd. Above normal temperatures continued to plague the droughty Northwest which received virtually no July rainfall.

**PRECIPITATION:** Precipitation was generally above normal from the Rockies to the Appalachians, with virtually no precipitation to the West and generally below normal precipitation along the eastern seaboard. Actual totals ranged from nothing over much of the western third to over 8.00 in in parts of Iowa, Missouri and Kansas. The first week of July was on the dry side, but heavy thunderstorms in some areas produced heavy rains and violent weather. On the 2d, 16 tornadoes struck South Dakota, Minnesota and Nebraska. Hailstones 1 in in diameter and winds up to 100 mph also struck Nebraska. The heaviest rains of the month came at mid-month. Along the Kansas-Nebraska border 6.00 in or more fell, with an area stretching from Wyoming to the Appalachians receiving 2.00 in or more. This heavy moisture was triggered by thunderstorm activity along a cold front extending from a low located over the Hudson Bay. Thunderstorm activity continued to be the major source of rainfall as the month ended. Scattered but intense thundershowers struck from the Rockies the East Coast. Heavy rains struck Appalachia and the Deep South on the 26th. Millington, Tenn., received 2.01 in in an hour, Chattanooga had 1.99 in of rain, while Macomb, Miss., got 1.44 in. The Pacific Northwest continued to be very dry. Rainfall has been below normal for well over a year in many areas.





## Temperature and Precipitation Data for July 1973

States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches	
	Average	Departure	Total	Departure		Average	Departure	Total	Departure		Average	Departure	Total	Departure
ALA.Birmingham . . .	79	- 3	8.4	+3.2	La.Baton Rouge . . .	84	+ 1	4.3	-2.0	Youngstown . . .	71	- 0	3.0	-1.3
Mobile . . .	84	+ 1	6.2	-3.5	Lake Charles . . .	83	+ 1	3.0	-4.3	OKLA.Okla. City . . .	80	- 3	3.4	+1.0
Montgomery . . .	83	+ 1	7.9	+2.5	New Orleans . . .	84	+ 2	5.9	- .8	Tulsa . . .	81	- 1	6.5	+3.6
ALASKA.Anchorage . . .	58	0	.6	-1.3	Shreveport . . .	81	- 3	7.6	+3.8	OREG.Astoria . . .	60	- 1	.1	-1.2
Barrow . . .	---	---	---	---	MAINE.Caribou . . .	69	+ 4	4.6	+ .6	Burns . . .	71	+ 1	T	- .3
Fairbanks . . .	62	+ 2	1.9	+ .1	Portland . . .	71	+ 3	1.7	-1.2	Medford . . .	75	+ 3	T	- .2
Juneau . . .	54	- 1	3.7	- .8	MD.Baltimore . . .	76	- 1	4.2	0	Pendleton . . .	75	+ 1	T	- .2
Kodiak . . .	---	---	---	---	MASS.Boston . . .	74	0	4.8	+1.9	Portland . . .	70	+ 3	.1	- .3
Nome . . .	46	- 4	2.1	- .2	Chatham . . .	67	---	9.1	---	Salem . . .	68	+ 2	T	- .4
ARIZ.Flagstaff . . .	66	0	1.9	+ .4	MICH.Alpena . . .	66	0	5.2	+2.3	PA.Allentown . . .	75	+ 1	2.7	-2.1
Phoenix . . .	94	+ 4	1.3	+ .5	Detroit . . .	73	+ 1	4.7	+2.0	Erie . . .	70	+ 1	1.6	-2.1
Tucson . . .	84	- 2	1.7	- .4	Flint . . .	70	- 1	1.8	-1.1	Harrisburg . . .	76	0	2.2	-1.3
Winslow . . .	76	- 4	.4	- .6	Grand Rapids . . .	72	0	2.1	- .6	Philadelphia . . .	78	+ 2	2.4	-1.8
Yuma . . .	93	0	T	- .2	Houghton Lake . . .	68	+ 1	2.3	- .6	Pittsburgh . . .	73	+ 1	2.2	-1.7
ARK.Fort Smith . . .	80	- 3	1.5	-1.3	Lansing . . .	70	- 2	2.0	- .6	Scranton . . .	72	0	3.9	- .9
Little Rock . . .	81	- 1	6.6	+3.3	Marquette . . .	67	0	2.2	-1.0	R.I.Providence . . .	74	+ 2	2.9	0
CALIF.Bakersfield . . .	85	+ 1	0	0	Muskegon . . .	71	0	3.1	+ .7	S.C.Charleston . . .	83	+ 2	3.6	-3.1
Eureka . . .	56	0	T	- .1	S. Ste. Marie . . .	63	- 2	4.3	+1.8	Columbia . . .	81	- 1	3.2	-2.9
Fresno . . .	80	- 1	0	0	MINN.Duluth . . .	65	- 1	2.4	-1.1	Greenville . . .	78	- 1	3.7	-1.0
Los Angeles . . .	72	- 1	0	0	Internatl Falls . . .	68	+ 2	5.1	+1.6	S.D.Aberdeen . . .	73	- 1	1.8	- .7
Red Bluff . . .	83	- 1	0	0	Minneapolis . . .	74	+ 2	2.9	- .4	Huron . . .	72	- 3	2.1	+ .3
San Diego . . .	69	- 1	T	0	Rochester . . .	71	- 1	4.8	+1.1	Rapid City . . .	71	- 3	1.5	- .3
San Francisco . . .	62	- 1	T	0	St. Cloud . . .	69	- 2	2.9	- .4	Sioux Falls . . .	74	0	3.5	+ .7
Stockton . . .	77	- 1	0	0	MISS.Jackson . . .	84	+ 2	2.0	-2.8	TENN.Chattanooga . . .	79	- 2	6.9	+1.8
COLO.Denver . . .	71	- 2	2.5	+1.0	Meridian . . .	82	0	10.2	+4.0	Knoxville . . .	77	- 1	4.4	- .4
Grand Junction . . .	78	0	.5	- .1	MO.Columbia . . .	78	0	4.5	+1.1	Memphis . . .	83	+ 2	4.5	+1.0
Pueblo . . .	75	- 2	3.2	+1.4	Kansas City . . .	77	- 5	8.7	+5.5	Nashville . . .	79	- 1	7.7	+4.0
CONN.Bridgeport . . .	75	+ 1	6.6	+2.8	St. Louis . . .	79	+ 1	2.9	- .4	TEX.Abilene . . .	81	- 2	2.7	+ .4
Hartford . . .	75	+ 2	1.8	-1.8	Springfield . . .	77	- 2	8.0	+4.1	Amarillo . . .	78	- 3	4.1	+1.8
D.C.Washington . . .	79	+ 1	2.7	-1.5	MONT.Billings . . .	72	- 3	.3	- .6	Austin . . .	83	- 2	3.0	+ .8
FLA.Apalachicola . . .	83	+ 1	6.3	-1.6	Glasgow . . .	70	- 1	.6	- .7	Beaumont . . .	82	0	8.7	+2.7
Daytona Beach . . .	82	+ 2	4.7	-2.0	Great Falls . . .	71	+ 2	.1	-1.2	Brownsville . . .	84	0	.6	-1.1
Ft. Myers . . .	82	0	9.6	+ .5	Havre . . .	70	0	.3	-1.0	Corpus Christi . . .	85	+ 1	.5	-1.8
Jacksonville . . .	82	- 1	5.4	-2.3	Helena . . .	69	+ 1	.1	- .9	Dallas . . .	---	---	---	---
Key West . . .	84	+ 1	4.1	- .1	Kalispell . . .	67	+ 1	.1	- .9	Del Rio . . .	83	- 3	2.4	+1.1
Lakeland . . .	82	0	8.6	+ .3	Miles City . . .	72	- 3	.3	-1.0	El Paso . . .	80	- 2	2.1	+ .8
Miami . . .	82	0	6.1	- .7	Missoula . . .	70	+ 3	.1	- .8	Fort Worth . . .	84	- 1	1.1	- .7
Orlando . . .	84	+ 1	6.2	-1.8	NEBR.Grand Island . . .	76	- 1	2.9	+ .4	Galveston . . .	83	0	2.4	-2.4
Tallahassee . . .	83	+ 2	4.4	-3.7	Lincoln . . .	75	- 5	4.5	+1.2	Houston . . .	83	+ 1	6.8	+2.8
Tampa . . .	83	+ 1	4.8	-3.8	Norfolk . . .	75	- 2	4.1	+1.1	Lubbock . . .	77	- 3	4.2	+2.8
W.Palm Beach . . .	82	- 1	7.7	+1.0	N.Platte . . .	73	- 3	2.9	+ .4	Midland . . .	78	- 5	2.5	+ .6
GA.Atlanta . . .	79	0	2.1	-2.6	Omaha . . .	74	- 5	5.7	+2.3	San Angelo . . .	83	- 2	1.1	- .3
Augusta . . .	81	0	2.5	-2.0	Valentine . . .	74	- 1	2.8	+ .5	San Antonio . . .	83	- 1	6.9	+4.8
Macon . . .	83	+ 1	2.8	-2.8	NEV.Ely . . .	67	- 1	.4	- .3	Victoria . . .	85	+ 2	2.9	- .7
Savannah . . .	82	+ 1	2.9	-3.7	Las Vegas . . .	92	+ 2	T	- .5	Waco . . .	84	- 1	4.9	+2.9
HAWAII.Hilo . . .	76	+ 1	4.4	-5.4	Reno . . .	70	+ 2	.3	0	Wichita Falls . . .	83	- 3	4.5	+2.5
Honolulu . . .	81	+ 2	.5	+ .1	Winnemucca . . .	73	+ 2	.1	- .2	UTAH.Blanding . . .	78	+ 5	.5	- .3
Kahului . . .	78	0	T	- .4	N.H.Concord . . .	70	0	1.0	-2.4	Salt Lake City . . .	77	0	1.1	+ .5
Lihue . . .	79	+ 1	.9	-1.9	N.J.Atlantic City . . .	75	0	3.3	- .4	VT.Burlington . . .	71	+ 2	3.0	- .9
IDAHO.Boise . . .	76	+ 1	.1	- .1	Trenton . . .	77	+ 1	2.4	-1.8	VA.Lynchburg . . .	75	- 1	6.6	+2.4
Lewiston . . .	77	+ 3	T	- .4	N.MEX.Albuquerque . . .	78	- 1	1.8	+ .6	Norfolk . . .	78	- 1	4.2	-1.7
Pocatello . . .	71	- 1	1.8	+1.3	Roswell . . .	79	0	2.3	+ .5	Richmond . . .	77	- 1	3.6	-2.0
ILL.Cairo . . .	81	0	3.8	+ .6	N.Y.Albany . . .	72	0	1.7	-1.8	Roanoke . . .	76	- 1	5.1	+ .8
Chicago . . .	76	0	4.0	+ .6	Binghamton . . .	70	+ 2	1.9	-1.8	WASH.Colville . . .	70	+ 1	.3	- .4
Moline . . .	75	- 1	2.6	- .7	Buffalo . . .	72	+ 2	3.7	+1.1	Omak . . .	71	0	.1	- .2
Peoria . . .	75	- 1	6.0	+2.5	New York . . .	77	0	4.9	+1.2	Quillayute . . .	58	- 2	1.1	-1.2
Rockford . . .	74	0	5.8	+1.7	Rochester . . .	73	+ 1	1.1	-1.7	Seattle-Tacoma . . .	65	0	.1	- .7
Springfield . . .	76	- 2	3.4	- .1	Syracuse . . .	73	+ 1	3.6	+ .5	Spokane . . .	71	0	T	0
IND.Evansville . . .	79	0	3.4	+ .1	N.C.Asheville . . .	74	+ 2	7.0	+1.1	Walla Walla . . .	77	+ 1	.1	- .1
Ft. Wayne . . .	74	0	3.4	0	Charlotte . . .	79	0	3.6	-1.3	Yakima . . .	72	+ 1	T	- .1
Indianapolis . . .	76	+ 1	6.7	+3.2	Greensboro . . .	77	0	5.3	+ .5	W.Va.Beckley . . .	70	- 1	5.2	0
South Bend . . .	74	0	3.3	- .2	Hatteras . . .	77	- 1	2.6	-3.6	Charleston . . .	75	0	6.9	+1.2
IOWA.Burlington . . .	75	- 2	4.3	+ .9	Raleigh . . .	77	- 1	3.1	-2.4	Huntington . . .	76	+ 1	3.5	-1.0
Des Moines . . .	76	0	9.2	+6.7	Wilmington . . .	80	0	9.3	+1.6	Parkersburg . . .	75	- 1	6.5	+2.4
Dubuque . . .	72	- 1	4.3	+ .8	N.DAK.Bismarck . . .	68	- 4	1.2	-1.0	WIS.Green Bay . . .	72	+ 1	1.9	- .8
Sioux City . . .	75	- 2	4.9	+1.8	Fargo . . .	68	- 3	3.6	+ .7	La Crosse . . .	74	0	2.5	-1.3
KANS.Concordia . . .	78	- 2	8.5	+5.7	Williston . . .	68	- 3	1.0	- .9	Madison . . .	72	+ 1	2.7	- .9
Dodge City . . .	80	0	3.9	+1.6	OHIO.Akron-Canton . . .	73	0	3.9	+ .1	Milwaukee . . .	71	+ 2	1.6	-1.4
Goodland . . .	74	- 3	1.8	- .9	Cincinnati . . .	75	- 2	7.2	+3.6	WYO.Casper . . .	68	- 4	2.3	+1.3
Topeka . . .	77	- 3	10.6	+7.0	Cleveland . . .	73	+ 1	2.9	- .4	Cheyenne . . .	66	- 4	5.0	+3.2
Wichita . . .	80	- 1	6.4	+2.8	Columbus . . .	74	- 1	4.1	+ .2	Lander . . .	69	- 2	2.1	+1.3
KY.Lexington . . .	76	- 1	5.2	+1.2	Dayton . . .	76	+ 1	3.8	+ .3	Sheridan . . .	68	- 3	.6	- .6
Louisville . . .	78	- 0	9.4	+6.0	Toledo . . .	72	- 1	3.2	+ .6	P.R.San Juan . . .	83	+ 3	2.4	-3.8

(continued from Page 7)

Third crop alfalfa 33% harvested, 45% 1972. Soybeans fair to good. Cotton mostly fair. Soil moisture supply 43% short, 49% adequate, 8% surplus.

MONTANA: Warm with highest temperatures midweek. Temperatures ranged from 4° above normal west to 5° subnormal southcentral. Low early week. Few showers fell first and latter week, heaviest amounts southcentral. Grain harvest progress ahead of 1972 and normal. Winter wheat 60% harvested, 35% ripe for harvest, 5% headed and turning. Spring wheat 30% harvested, 40% ripe for harvest, 25% headed and turning, 5% headed but still green. Barley 35% harvested, 40% ripe for harvest, 25% headed and turning color. Second cutting alfalfa 35% complete, wild hay harvest 85% complete. Grasshopper damage to crops and ranges light to moderate. Irrigation water supplies exhausted portions northwest, northcentral, central and southwest. Stock-water supply short all areas except parts south half. Range feed supply adequate east, short drought areas, short to adequate elsewhere. Cattle 20% moved from summer ranges.

NEBRASKA: Precipitation variable. Temperatures near normal. Topsoil moisture supplies 41% adequate, 58% short. Subsoil moisture supplies 75% adequate, 25% short. Corn 38% excellent, 56% good, 6% fair. Most corn silked, 40% dough. Sorghum 33% excellent, 56% good, 11% fair, most headed. Soybean 40% excellent, 52% good, 8% fair, most setting pods. Alfalfa hay 70% good, 20% excellent, 10% fair. Second cutting nearly over and third cutting 40% complete. Wild hay 69% good, 23% excellent, 8% fair. Harvesting small grains, irrigating, working summer fallow, weeding soybeans, fertilizing and putting up hay. Range and pasture 14% above average, 74% average, 12% below average.

NEVADA: Temperatures 4° above normal northeast, normal northwest, 3° below normal extreme south. Extremes: 108°, 34°. Precipitation nil except 0.48 in Ely. Small grain harvest and second cutting alfalfa major activity north and central. Fourth cutting alfalfa complete extreme south. Clover-timothy and wild hay 75% harvested. Alfalfa seed development good major producing areas. Humboldt county potatoes marble size with good set. Livestock good to excellent. Ranges dry and need moisture but feed condition good.

NEW ENGLAND: Hot, humid. Scattered areawide thunderstorms. Weather helped crops, but poor for curing hay. Vegetables in abundant supply. Maine potatoes progressed well. Digging became more active in Rhode Island, favorable yields.

NEW JERSEY: Hot, dry, warmest week of summer. Temperatures averaged 4° to 7° above normal. Precipitation light, spotty mostly from showers Friday on. Soil moisture very short in southern vegetable, fruit and berry areas. Vegetables, some blueberries, peaches and cranberries were heavily irrigated. Central area also dry. Excessive heat matured summer vegetables rapidly. Tomato harvest increased. Potato digging progressed. Sweet corn harvest well advanced south, central; active extreme north. Some varieties peaches maturing ahead of expectation. Harvest third cutting alfalfa active, growth short some fields. Some spraying for green clover worm

infestations widespread in soybeans. Rains needed for field corn and forage crops central and south.

NEW MEXICO: Rainfall spotty, scattered and highly variable. Las Vegas and Ruidoso had more than 1.00 in Friday. Other amounts mostly around 0.25 in or less. Temperatures near normal with little daily trend. Soil moisture adequate, few isolated dry areas. Grain sorghum, corn good. Most corn fields tasseled, many in dough stage. Cotton good, some fields well advanced boll setting. Third cutting near complete, fourth started some areas, second cutting progressing in north. Other crops and livestock good. Ranges generally good.

NEW YORK: Temperatures 5° to 10° above normal, ranged from 95° to 53°. Heat wave peaked Thursday but oppressive humidity lingered until Sunday. Rainfall spotty and highly variable: 3-week departure from normal varies from Albany's 1.31 in excess to Bridgehampton's 2.32 in deficiency. Weather favored fieldwork. Crop growth slowed some areas because soil moisture ranged from very short to adequate. Second cutting alfalfa 60% complete, third cutting 10%. Oat harvest 25% complete. Wheat harvest neared completion, over 85% cut. Corn good while pastures fair. Dry weather limited vegetable growth and yields central and west. Onions going down fast in Elba muck, bulk size will be small unless it rains soon. Pulling early seed onions increasing Orange County. Planting of Long Island cabbage, cauliflower about complete. Dry weather may reduce early potato yields some upstate areas. Black leg and hot dry conditions limiting cabbage yields many fields and holding back growth of late plantings. Hudson Valley apples sizing well while west New York needs more moisture for apple sizing and other tree fruit development.

NORTH CAROLINA: Seasonal temperatures and dry weather. Precipitation averaged 1.00 in or less most sections. Temperatures seasonal. Fieldwork averaged 4.5 days. Flue-cured tobacco harvest past peak, 60% complete. Corn rated 20% excellent, 73% good, 7% fair; harvest should be underway by end of month. Soybeans good shape, holding steady. Cotton generally good, bollworm pressure building. Peanuts rated 88% good, 12% fair. Pasture growth ample. Sweet potatoes good shape, harvest just getting underway.

NORTH DAKOTA: Temperatures ranged from 2° above normal west and northwest to 5° above eastcentral and southeast. Warm start turned cool west and central early week and east later. Mild temperatures weekend prevailed. Precipitation above normal northwest and east, subnormal central and southwest. Showers occurred weekend. Small grain harvest slowed by weekend showers.

OHIO: Warm through week, increasing humidity last half. Readings in 90's midweek. Temperatures mostly in middle to upper-80's later. Extremes: 93°, 57°. Frequent showers 9th through 12th. Locally heavy rains associated with thunderstorms some central counties. Greatest reported rainfall 3.06 in at Marysville. Also 2.70 in north of Delaware. Warm temperatures, spotty rainfall, had varied effects on crops. Above normal temperature, a needed change from previous week aided row crop growth. Soil moisture sharply reduced; 50% short, 50% adequate. Over 6.5 days

fieldwork. Corn 80% silked, 20% dough; normal 90% silked, 40% dough. Soybeans 65% pods setting, 15% pods set; ahead of 1972; normals 75% pods setting, 25% pods set. Less than 1% wheat remains in fields. Oats 90% combined. Second hay cuttings progressing week behind normal. Plowing for winter wheat ahead of normal, 25% done. Tobacco 20% topped, normal 30%.

OKLAHOMA: Temperatures averaged 2° subnormal panhandle to 7° subnormal southeast. Precipitation averaged 0.30 in southeast to 1.10 in central. Weekend very warm, rains most areas. Row crops continued mostly good but need rain. Crop growth gained on 1972. Fertilizing wheat ground active most acreage tilled once. Most cotton squaring, 50% setting bolls. Crop rated 80% good, insect damage light. Soybeans good or better with 67% blooming, week behind 1972. Peanuts excellent, 50% spiking. Sorghum grain 20% near dough, 75% good. Haying continued with good yields. Some alfalfa windrowed for seed. Rains needed to speed range growth.

OREGON: Warm, dry weather continued. Temperatures 1° to 6° above normal except immediate coast. Highs in 90's except upper 80's Willamette Valley and upper 60's coast. Precipitation none or traces. Grain harvest about 90% complete Columbia Basin counties, about 80% complete Willamette Valley, southern counties started. Yields continued subnormal east, normal or above west. Grass seed harvest essentially complete except bentgrass. Field burning continued. Sale baled straw continued. Mint harvest underway. Hops maturing. Second to fourth cuttings hay underway where water adequate. Working summer-fallow, spraying morning glory east. Need rain for fall crops. Bartlett pear harvest underway Medford area. Walnut husk fly control applied. Filberts maturing, kernels near full size. Winter damage still showing. Potatoes, beans, corn, beets, melons, cucumbers being harvested. Ranges dry. Fire danger extreme. Scattered thunderstorms started many small fires over weekend.

PENNSYLVANIA: Hot, humid and hazy. Averages 5° to 8° above normal for hottest week in 3 years. Extremes: 50°, Bradford; 95°, Philadelphia. Showers and thunderstorms, especially last half, brought 0.5° to 1.0° in most areas except southwest and extreme east where 0.25 inch or less. Topsoil moisture supplies 65% short, remainder adequate. Winter wheat and barley harvest virtually complete. Oats harvest about 50% complete statewide. Corn growth good, 80% pre-silk or silk stage. Isolated showers boosted development in localities, now needs rain. Quality of hay baled improved, second and third growth needs rain. Limited potato harvest continues. Spraying Colorado potato beetle active. Limited tobacco topping continues. Cabbage prospects dim, blackleg infestations. Snap beans supplies moderate but declining volume. Tomatoes slow ripening. Sweet corn larger volumes. Peach and summer apple picking continues. Grape prospects good Erie County.

PUERTO RICO: Rainfall about normal, averaged 1.65 in. Heaviest showers Mayaguez area and El Yunque range, where close to 7.00 in fell. Temperatures averaged 81° on coasts and 76° interior. Extremes: 94°, 58°. Weather generally favored sugarcane except in Manati area. Conditions favored development of coffee bean except Barranquitas where low rainfall hurt.

Little activity on tobacco farms. In Caguas soil prepared for planting. Rainfall favored pastures islandwide, except Corozal Barranquitas Manati area.

SOUTH CAROLINA: Temperatures near normal except slightly subnormal northcentral. Relatively dry except mountains and south, heavy rainfall southeast coastal. Insects and weed spraying active, boll weevil infestation increased. Soil moisture adequate. Tobacco fair to good, 98% squared, 85% set bolls, 1% open bolls. Corn good to excellent, most silked, 88% dough, 32% mature. Soybeans good, 54% bloomed, 25% set pods. Peanuts good, 17% harvested, 30% 1972. Lespedeza and pastures fair to good. Peaches fair to good, 83% harvested, 97% 1972. Grapes fair to good, 11% harvested. Watermelons fair, 95% harvested, 87% 1972.

SOUTH DAKOTA: Near drought conditions continue: Northeast more than 5 in below average; elsewhere short 2 to 5 in. Precipitation quite light western third, rest got some light rain. Temperatures early week in mid to upper 90's, few in lower 100's; dropped mid-week, warmed again weekend. Spring grain harvest almost complete. Barley 96% complete, normal 89%, 1972 66%. Oats 97% harvested, normal 82%, 1972 62%. Spring wheat 90% combined, normal 68%, 1972 36%. Corn 20% in dough stage, same as 1972 and normal. Flaxseed ahead of normal, 61% ripe, normal 52%, 1972 19%, harvest 28% complete. Soybeans 75% podded, normal 79%, 1972 52%. Sorghum 63% headed, normal 55%, 1972 28%. Wild hay harvest 86% complete, ahead of normal and 1972. Second cutting alfalfa hay 69% complete, below normal and 1972. Some damage to row crops by grasshoppers, aphids and greenbugs. Need more rain for row crops and pastures. Feed may become scarce later this year. Water supplies getting low. Flies and pinkeye still bothered livestock, some losing flesh.

TENNESSEE: Thundershowers late week produced locally heavy rainfall mainly west and middle. Amounts from trace to 1.50 in. Crop prospects mostly good, though late. Soil moisture short some areas, particularly west. Soybean development satisfactory; 30% setting pods, normal 35%. Cotton good growth, 75% fields setting bolls. Corn looking good, though late with insects damaging late fields. Tobacco condition spotted with some areas expecting good crop while in others prospects not that promising. Hay and pasture mostly good. Fieldwork averaged 5.3 days. Soil moisture supplies 60% adequate, 36% short, 4% surplus. Rainfall over weekend will alleviate shortage some areas.

TEXAS: Temperatures returned to seasonable levels. Thundershowers dotted most sections but more general along coastal plains. Rainfall averaged 1.00 in or more over coastal plains area but fell below 0.10 in across broad strip from west of Pecos River to northcentral. Sorghum harvest progressed northward into blacklands, good yields. Wet fields hampered cotton harvest in Lower Rio Grande Valley and lower coastal bend. Rice harvest progressed slowly, first cuttings generally good but spotted with second crop prospects poor. Peanut harvest still behind 1972. Ranges good to excellent, above normal, scattered showers helped. Livestock good to excellent. Hay harvesting continued with interruptions from showers and shortage of baling wire. Fall sheep, goat shearing under-

way Edwards Plateau and Trans-Pecos area. High Plains: Potato, onion harvest active. Cucumber picking continued. Trans-Pecos: Pecos cantaloupe harvest active. North: Watermelons and cantaloupes continued move to market. Central and East: Watermelon supplies started seasonal decline. Coastal Bend: Rains delayed start of planting fall vegetables. San Antonio-Winter Garden Area: Fall cucumber, carrot planting underway. Some early cabbage fields replanted due to poor stands, loss of seedlings. Lower Rio Grande Valley: Mostly land preparation, fertilization. Peach harvest almost complete. Walnut caterpillars continued to strip foliage on pecan trees not sprayed in southcentral and upper coast counties. Citrus trees remain excellent aided by rains.

UTAH: Few scattered showers and thunderstorms south, locally moderate accumulations. Temperatures near normal. Warm, dry weather aided lagging grain and hay harvests. Winter wheat 55% harvested, spring wheat and oats 30%, barley 35%. June frost damage to grains in central showing; but good grain yields still expected. Harvest 70% complete second crop alfalfa hay, 85% clover and wild hay. Corn, though late, looking good, silk stage, 20% milk stage. Sour cherry harvest 85% completed. Some early variety peaches being picked. Range feed continues good, perhaps best ever mid-August. Cattle and sheep thriving.

VIRGINIA: Increasing temperatures and humidity. Extremes: 95°, Farmville and Washington, D. C., National airport; 58°, Harrisonburg. Rainfall averaged 0.70 in southwest mountains to 0.10 in north. Limited rainfall, warm weather, and heavy moisture use depleted topsoil moisture. Topsoil moisture 45% short, 17% week earlier. Japanese beetles, Mexican bean beetles, and clover worms more numerous, control measures required. Pulled and cured flue-cured tobacco, 23% harvested, 18% 1972. Fire-cured harvest began, 3% done. Began topping burley southwest. Sprayed peanuts for leafspot. Haying common west of mountains and northern Piedmont. Pastures deteriorated. Harvested peaches and early apples. Irish potato harvest ending on Eastern Shore. Tomato harvest peaking.

WASHINGTON: West: Temperatures near normal, precipitation half normal. Pea harvest continued, good yields. Harvest broccoli, cucumbers, other vegetables underway. Cauliflower button stage. Lettuce fields experiencing damage by root aphids. Sweet and silage corn growing well, few areas moisture stress. Raspberry harvest complete. Blueberry harvest well underway. Nonirrigated second cutting hay crops short. Small grain,

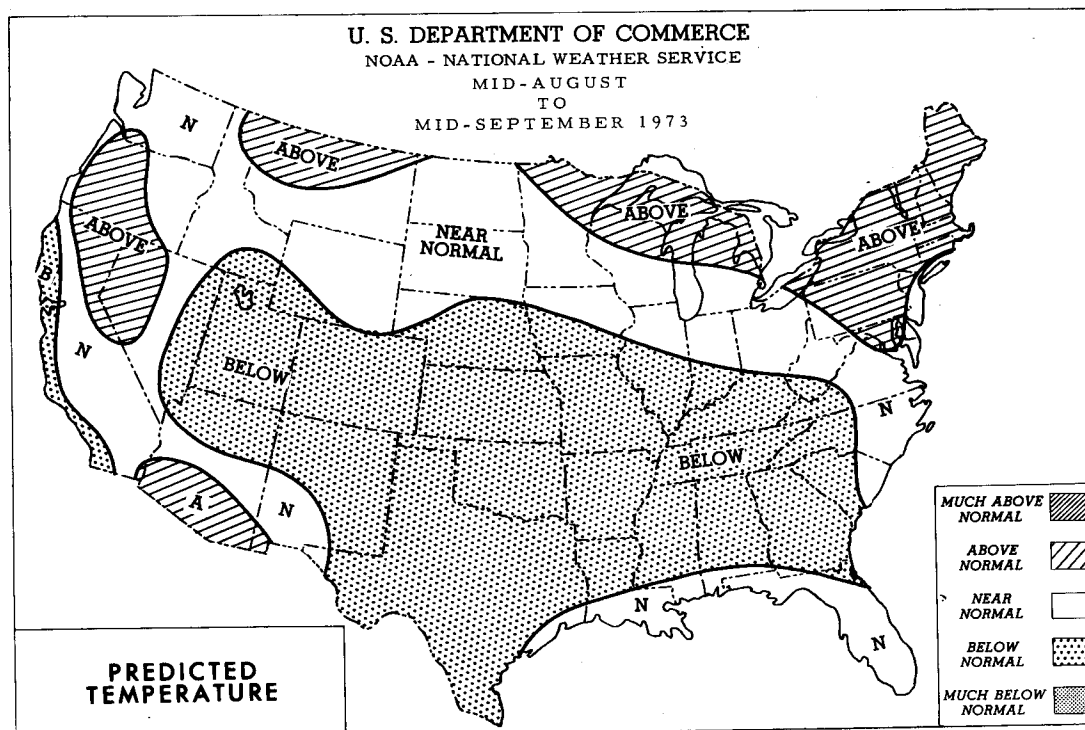
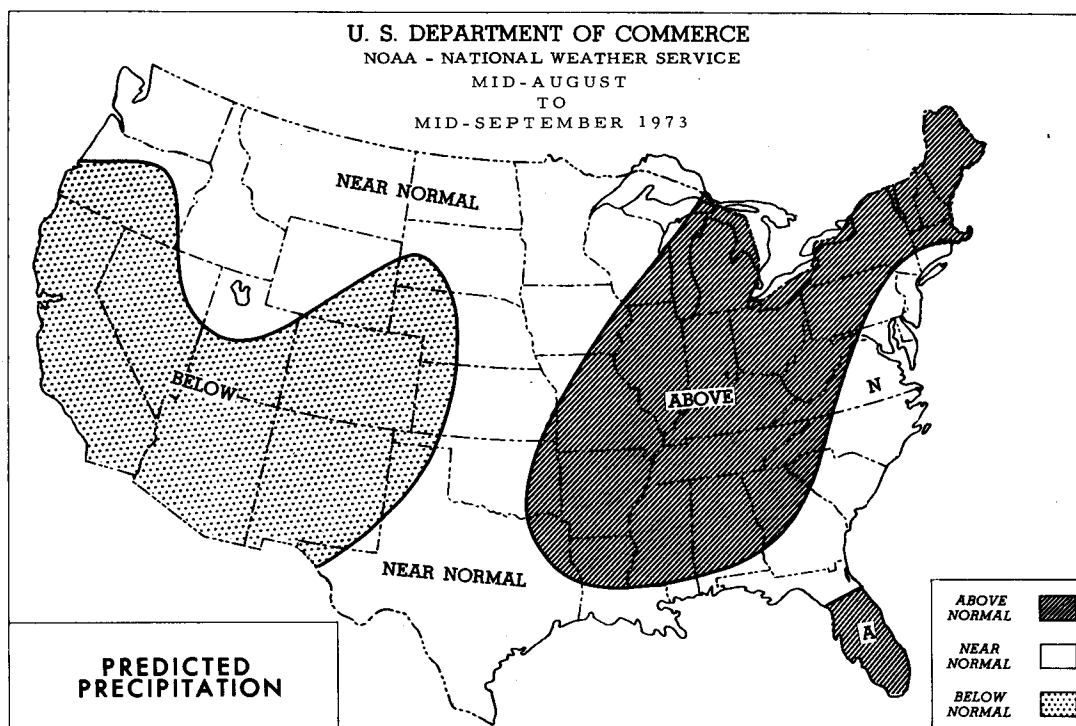
grass seed harvest continued. Straw being baled and utilized. Pastures poor to fair. East: Temperatures 3° above normal, no precipitation. Peach, pear harvest continued, excellent crops. Mites problem in apple and pear orchards. Some fruit trees suffering moisture stress. Harvesting potatoes. Cutting alfalfa. Irrigation active. Harvest grains continued, yields low. Straw, chaff being saved for feed. Pastures, ranges poor, supplemental feeding underway. Farmers preparing fields for fall seeding. Summerfallow moisture low. Fire danger high.

WEST VIRGINIA: Temperatures near normal. Extremes: 98° Martinsburg; Canaan Valley, 44°. Precipitation extremely light, soil moisture 46% short, 53% adequate. Field work favorable 5 days; hay making, cutting pasture, cutting weeds and grass. Combining small grain active, oats 75% harvested. Corn 17% pre-silked, 58% silked, 25% dough. Tobacco fair to good. Hay, pasture and corn good.

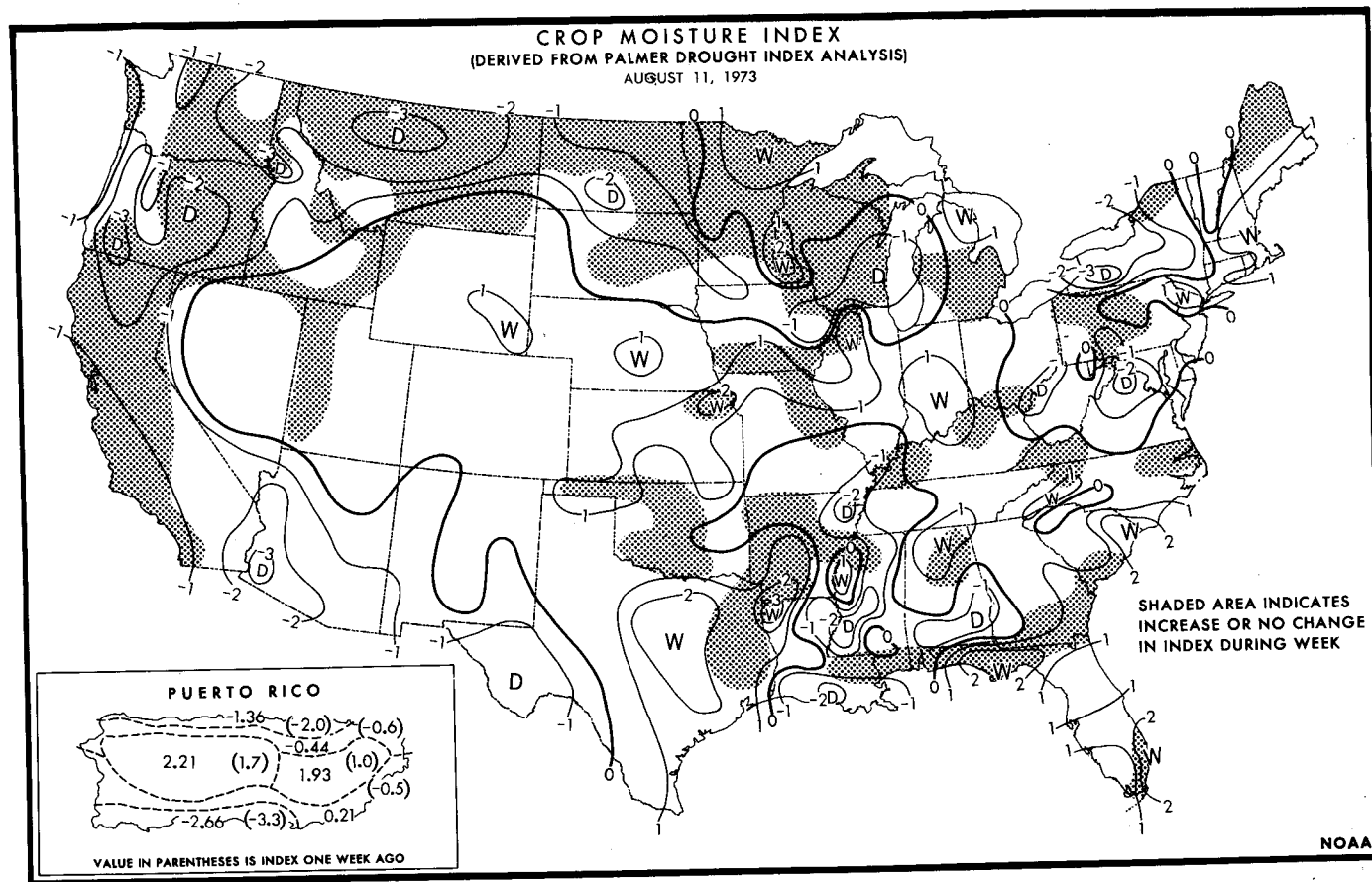
WISCONSIN: Temperatures 2° above normal. Good rains statewide, averaging from 0.70 in southeast to 2.70 in northwest. Soil moisture 44% short, 52% adequate, 4% surplus. Rain very beneficial for crops, more moisture needed south and east. Corn crop uneven; early corn good but late corn hurt by dryness in July. Corn 65% silked, 1972 80%, normal 65%. Less corn disease symptoms than on same date in each of previous 5 years. Oat yields vary, early oats good but late oats poor; harvest well along south and west. Oats 30% harvested, 1972 12%, normal, 45%. Second crop hay short, rains may help third growth and pastures. Second crop hay 40% harvested, 1972 30%, normal 40%. Soybeans growing well, rain helpful for pod set. Rain also helped tobacco, very little topping done. Sweet corn fair to good, harvest underway. Harvest continued for early potatoes, snapbeans, cucumbers, beets. Early apples being picked, scab unusually heavy on apples. Wild blueberry crop excellent. Home gardens producing well.

WYOMING: Scattered thundershowers with many stations over 0.50 in moisture. Temperatures near to 5° subnormal; highs mostly 80's, low 90's, lows mostly 30° to 50°. Temperature extremes 94° Sheridan Field Station, Lovell and Basin and 30° Big Piney. Winter wheat harvest 1 week behind 1972 with 60% cut. Barley 10% harvested, Spring wheat 20%, and oats cutting remaining spotted. Small grains 1 to 2 weeks behind 1972. Other hay 60% cut. Corn 75% tasseled, 60% silked. Dry beans 75% in bloom. Row crops 2 to 3 weeks behind 1972.

## AVERAGE MONTHLY WEATHER OUTLOOK



The above prognostic charts show the expected categories of average temperature and total precipitation for the period indicated. They were extracted from the Weather Service's publication "Average Monthly Weather Outlook" which contains additional information necessary for complete information.



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

#### Index

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

**UNSHADED AREAS:** Index decreased last week

#### Index

Above 3.0	Some drying, but still excessively wet
2.0 to 3.0	More drying weather needed, work delayed
1.0 to 2.0	Favorable, except still too wet in spots
0 to 1.0	Normal growth and fieldwork
0 to -1.0	Topsoil moisture short, germination slow
-1.0 to -2.0	Abnormally dry, prospects deteriorating
-2.0 to -3.0	Too dry, yield prospects reduced
-3.0 to -4.0	Potential yields severely cut by drought
Below -4.0	Extremely dry, most crops near ruin

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

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

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

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

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

# IMMEDIATE - U. S. Weather Report

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### Heating Degree Days (Base 65° F.)

July 1973

ALA. Birmingham . . .	0	MAINE, Caribou . . .	9	OKLA. Okla. City . .	0
Mobile . . .	0	Portland . . .	0	Tulsa . . .	1
Montgomery . . .	0	MD. Baltimore . . .	0	OREG. Astoria . . .	164
ALASKA Anchorage . .	216	MASS. Boston . . .	0	Burns U. . .	19
Barrow . . .	0	Chatham . . .	42	Medford . . .	0
Fairbanks . . .	111	MICH. Alpena . . .	0	Pendleton . . .	1
Juneau . . .	343	Detroit . . .	0	Portland . . .	6
Nome . . .	598	Flint . . .	8	Salem . . .	30
ARIZ. Flagstaff . . .	39	Grand Rapids . . .	1	PA. Allentown . . .	0
Phoenix . . .	0	Houghton Lake . . .	27	Erie . . .	9
Tucson . . .	0	Lansing . . .	11	Harrisburg . . .	0
Winslow . . .	0	Marquette U. . .	59	Philadelphia . . .	0
Yuma . . .	0	S. Ste. Marie . . .	92	Pittsburgh . . .	2
ARK. Fort Smith . . .	0	MINN. Duluth . . .	72	Scranton . . .	2
Little Rock . . .	0	Internatl Falls . .	26	R. I. Providence . .	2
CALIF. Bakersfield . .	0	Minneapolis . . .	1	S. C. Charleston . .	0
Eureka U. . .	287	Rochester . . .	3	Columbia . . .	0
Fresno . . .	0	St. Cloud . . .	14	Greenville . . .	0
Los Angeles U. . .	0	MISS. Jackson . . .	0	S. DAK. Aberdeen . .	2
Red Bluff . . .	0	Meridian . . .	0	Huron . . .	5
Stockton . . .	0	Vicksburg U. . .	0	Rapid City . . .	16
San Diego . . .	0	MO. Columbia . . .	0	Sioux Falls . . .	1
San Francisco . . .	100	Kansas City . . .	0	TENN. Chattanooga .	0
COLO. Denver . . .	8	St. Louis . . .	0	Knoxville . . .	0
Grand Junction . . .	0	Springfield . . .	0	Memphis . . .	0
Pueblo . . .	2	MONT. Billings . . .	4	Nashville . . .	0
CONN. Bridgeport . . .	0	Glasgow . . .	8	TEX. Abilene . . .	0
Hartford . . .	0	Great Falls . . .	6	Amarillo . . .	0
D.C. Washington . . .	0	Havre . . .	18	Austin . . .	0
FLA. Apalachicola . .	0	Helena . . .	23	Beaumont . . .	0
Ft. Myers . . .	0	Kalispell . . .	47	Brownsville . . .	0
Jacksonville . . .	0	Miles City . . .	3	Corpus Christi . .	0
Key West . . .	0	Missoula . . .	18	Dallas . . .	0
Lakeland U. . .	0	NEBR. Grand Island .	2	Del Rio . . .	0
Miami . . .	0	Lincoln . . .	1	El Paso . . .	0
Orlando . . .	0	Norfolk . . .	4	Fort Worth . . .	0
Daytona Beach . . .	0	North Platte . . .	10	Galveston U. . .	0
Tallahassee . . .	0	Omaha . . .	2	Houston . . .	0
Tampa . . .	0	Valentine . . .	7	Lubbock . . .	0
GA. Atlanta . . .	0	NEV. Ely . . .	18	Midland . . .	0
Augusta . . .	0	Las Vegas . . .	0	San Angelo . . .	0
Macon . . .	0	Reno . . .	7	San Antonio . . .	0
Savannah . . .	0	Winnemucca . . .	1	Victoria . . .	0
IDAHO, Boise . . .	4	N. H. Concord . . .	15	Waco . . .	0
Lewiston . . .	1	N. J. Atlantic City .	0	Wichita Falls . . .	0
Pocatello . . .	5	Trenton U. . .	0	UTAH, Blanding R . .	0
ILL. Cairo U. . .	0	N. MEX. Albuquerque .	0	Salt Lake City . . .	1
Chicago . . .	0	Roswell . . .	0	VT. Burlington . . .	10
Moline . . .	0	N. Y. Albany . . .	2	VA. Lynchburg . . .	0
Peoria . . .	0	Binghamton . . .	5	Norfolk . . .	0
Rockford . . .	0	Buffalo . . .	2	Richmond . . .	0
Springfield . . .	0	New York . . .	0	Roanoke . . .	0
IND. Evansville . . .	0	Rochester . . .	2	WASH. Colville . . .	22
Fort Wayne . . .	0	Syracuse . . .	2	Omak . . .	0
Indianapolis . . .	0	N. C. Asheville . . .	0	Quillayute . . .	217
South Bend . . .	0	Charlotte . . .	0	Seattle-Tacoma . . .	70
IOWA, Burlington . . .	0	Greensboro . . .	0	Spokane . . .	17
Des Moines . . .	0	Hatteras R. . .	0	Walla Walla U. . .	0
Dubuque . . .	0	Raleigh . . .	0	Yakima . . .	13
Sioux City . . .	0	Wilmington . . .	0	W. VA. Beckley . . .	5
KANS. Concordia . . .	0	N. DAK. Bismarck . .	12	Charleston . . .	0
Dodge City . . .	4	Fargo . . .	32	Huntington . . .	0
Goodland . . .	0	Williston U. . .	14	Parkersburg U. . .	4
Topeka . . .	0	OHIO, Akron-Canton .	0	WIS. Green Bay . . .	4
Wichita . . .	0	Cincinnati U. . .	3	Madison . . .	10
KY. Lexington . . .	0	Cleveland . . .	0	Milwaukee . . .	36
Louisville . . .	0	Columbus . . .	0	WYO. Casper . . .	36
LA. Baton Rouge . . .	0	Dayton . . .	0	Cheyenne . . .	35
Lake Charles . . .	0	Toledo . . .	3	Lander . . .	35
New Orleans . . .	0	Youngstown . . .	8	Sheridan . . .	24
Shreveport . . .	0				

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