

# Weekly Weather & Crop Bulletin

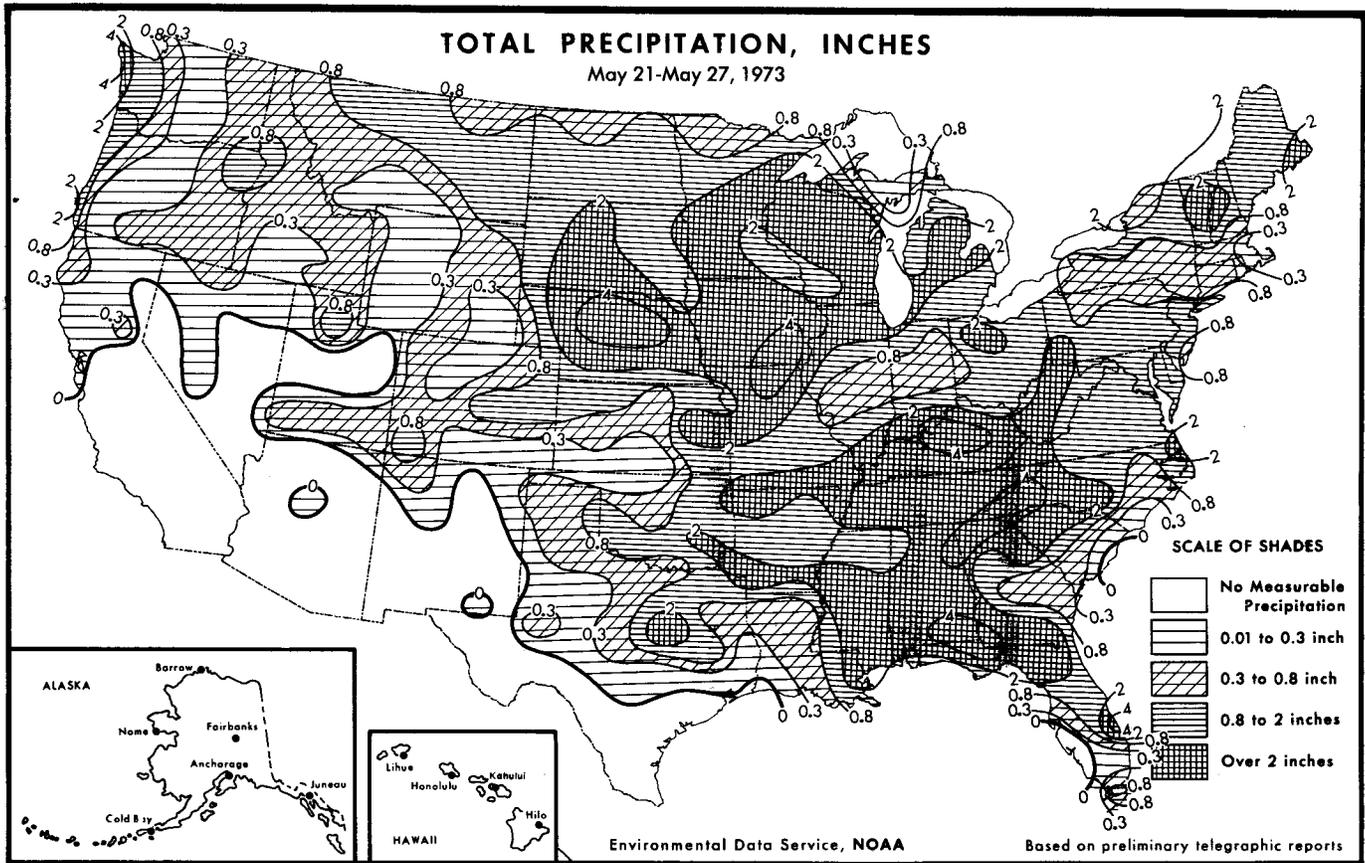
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## NATIONAL WEATHER SUMMARY

**HIGHLIGHTS:** While a murky gloom shrouded the Memorial weekend with chill and rain in the East, violent thunderstorms, hail, and tornadoes devastated the Midwest and South. When a driving dust-storm met rain near Dodge City, Kans., it actually rained mud. The violent weekend weather was associated with two Lows, connected by a front, that engulfed the eastern two-thirds of the Nation.

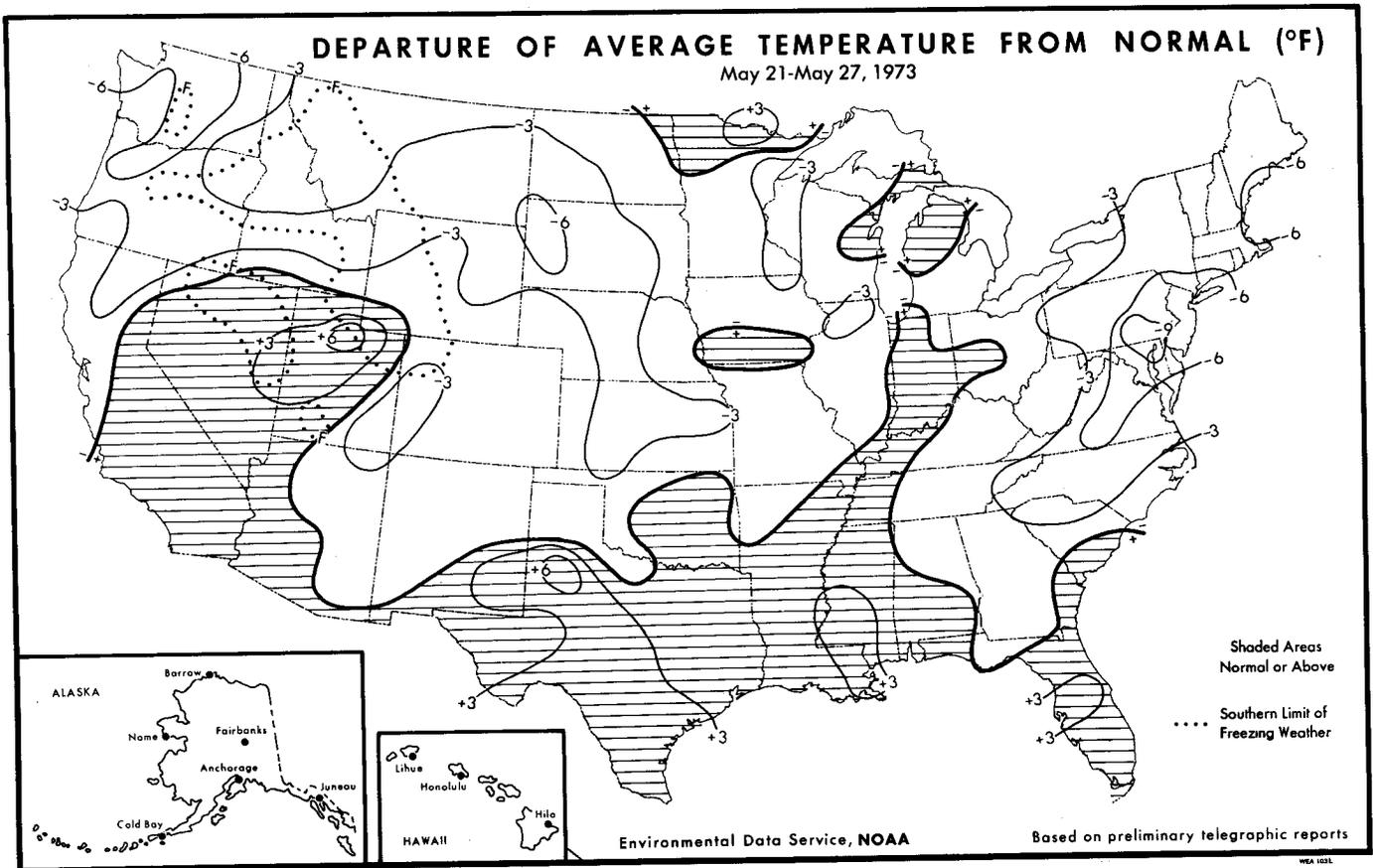
**PRECIPITATION:** The Deep and mid-South, the Corn Belt and the eastern Plains all received from 2.00 in to 4.00 in of rain. Most of Iowa received 2.00 in, with some parts receiving 4.00 in. Parts of the East Coast got sprinkled every day. In the West, some late week rains graced the Northwest drought area, but not enough to end the drought.

Monday a cold front moved into the Plains setting off numerous showers and thunderstorms in

the warm moist air ahead of it. Kansas and Missouri got the worst of it. Windsor, Mo., received 1.44 in during 40 minutes. Golf-ball-size hail fell at Concordia and Sedalia, Kans. The wind was clocked at 63 mph at St. Louis, Mo.

Tuesday the front and the rains moved south and eastward. The heaviest rains stretched from western Texas, across Oklahoma, Arkansas, and into Kentucky. Wednesday the front moved through the eastern Corn Belt and strung itself east-to-west through Tennessee. Jackson, Miss., received 1.41 in, while tornadoes struck towns in four southern States and golf-ball-size hail pelted Tennessee, Texas, and Mississippi. Winds 80 mph struck Temple, Tex., damaging an industrial district, a motel and mobile homes.

Wednesday a Pacific cold front moved over the Northwest, spreading rains throughout Washington,



Oregon, Idaho, and Montana. Quillayute, Wash., received 1.00 in rain on Wednesday, and rain fell over much of the drought area Wednesday-Thursday.

Early Thursday, a Low intensified over the western Corn Belt. By early Friday it was centered over southern Minnesota with a front trailing through Wisconsin, Illinois, Missouri, and Oklahoma into central Texas. The front produced thunder-showers and tornadoes. By Saturday this Low was centered in Wisconsin, near Lake Michigan.

Early Saturday, a record Low intensified over eastern Colorado and west Kansas. Its front met the one from near Lake Michigan, generating a monstrous weather system that spoiled a holiday weekend for most of the Nation.

Forty tornadoes appeared Saturday, mostly in Oklahoma, Kansas, Missouri, Arkansas and Florida. Golf-ball-size hail hit Hoxie, Ark.; heavy rains drenched Cape Girardau, Mo., (6 in) Kirksville, Mo., and Fayetteville, Ark., (2 in).

Sunday, winds up to 70 mph screamed across western Kansas, eastern Colorado, southwest Nebraska, and southeast Wyoming. When a dust-storm, with winds of 60 mph, met rain near Dodge City, Kans., a fall of mud ensued. Adding to the misery, temperatures fell into the 30's and 40's throughout the windy areas.

Late Sunday a chain of 50 tornadoes, of the 80 sighted that day, ripped through the Deep South. Alabama had seven fatalities. Asheville, N.C., was swamped with 4.41 in rain. Memorial Day brought calm to the windy Plains, but tornadoes to Indiana, and unseasonably cold temperatures from the Middle Mississippi Valley to New England.

**TEMPERATURE:** While most of the Nation's eastern third experienced unseasonable cold, with temperatures ranging from 1° to 10° below the norm, most of the Corn Belt and northern Plains averaged from 1° to 3° below normal. The Gulf Coast, Mexican Border, and western desert areas remained mostly from 1° to 3° above normal with a few pockets of higher temperatures.

On Monday and Tuesday a cold front moved out of the northern Rockies into the Plains and Corn Belt, ending an all-too-brief period of nice spring weather.

Outside of a few Rocky Mountain high points Wednesday morning temperatures held above freezing. Douglas, Wyo., recorded 32°. Corn Belt temperatures averaged in the upper 40's and lower 50's. One central Corn Belt area, ahead of the cold front averaged low 60's. But the front kept temperatures down. Lafayette, Ind., for example, had a morning low of 61°, but afternoon temperatures reached only 64°.

A cold front also arrived in the Northwest Wednesday. Wednesday morning lows along the Washington and Oregon coasts averaged in the mid-50's; Thursday morning lows in the mid-40's.

The Midwestern cold front moved east late in the week, lowering Atlantic Coast temperatures over the weekend. Most visitors to Atlantic beaches suffered through gloomy skies with highs in mid-50's.

Also during the weekend, another cold front moved through the Plains and Midwest; however this front was marked more by a wild and destructive rampage of severe weather than by low temperatures.

## NATIONAL AGRICULTURAL SUMMARY

**AGRICULTURAL HIGHLIGHTS:** Rain benefited small grains in northern Great Plains and Pacific Northwest. \* Corn planting made good progress in Corn Belt until stopped by weekend rains. \* Cotton planting made rapid headway in the South.

**SMALL GRAINS:** Winter wheat in the southern Great Plains made good progress last week although hail and winds caused some local damage. Wheat is developing favorably in Kansas, Nebraska, Oklahoma and Colorado aided by cool temperatures and timely rains. A few fields are turning color in southern Kansas. In Oklahoma, over 50 percent of the wheat acreage is in the dough stage. Wheat on the Texas High and Low Plains is headed out and maturing rapidly. Harvesting is making good progress in South Texas with 2 percent of the State's wheat crop harvested compared to 13 percent a year earlier. Good rains greatly benefited small grain crops in the northern Great Plains where flax is the last small grain being sown this spring. Winter wheat in Montana is in fair to good condition with 5 percent of the acreage in the boot stage. General rains over the Pacific Northwest eased the dryland drouth and helped small grain crops. Small grains in California are maturing rapidly and combining is increasing.

**CORN:** Heavy weekend rains in the Corn Belt virtually halted a week of good corn planting progress as farmers tried to catch up from early month delays. The North Central States corn crop was 77 percent planted as of May 27, compared to 58 percent a week earlier. Last year at this time corn planting in the Corn Belt was 81 percent completed and average progress for the date is 85 percent. Iowa farmers got in 6 days of corn planting last week pushing completion to 83 percent compared to 96 percent last year. Nearly 25 percent of Iowa corn has emerged. Illinois corn acreage is 80 percent planted while Nebraska is 95 percent complete and Minnesota 91 percent complete. Corn planting advanced to 70 percent in Indiana, 55 percent in Ohio and Wisconsin, 87 percent in South Dakota and 54 percent in Missouri. The rain improved seedbed conditions on many Corn Belt farms but slowed drying of saturated fields.

Corn planting in the South Atlantic and South Central Region reached 85 percent complete, about the same as a year earlier.

**COTTON:** Southern cotton growers made rapid planting headway last week in spite of turbulent thunderstorms. Planting of cotton in the South, including Texas and Oklahoma, advanced to 78 percent complete as of May 27 compared to about 85 percent a year earlier. Texas cotton acreage is 75 percent planted, the same as last year. Earlier planted cotton is blooming in South Texas. Cotton planting is almost completed in the South Atlantic States, but the Delta States are only 82 percent planted compared to 96 percent last year. Cotton acreage is 90 percent planted in Mississippi, 87 percent in Arkansas, but only 75 percent in Louisiana where acreage is sharply reduced in some areas because of flooding.

In California, cotton planting is virtually completed, and the crop is making good growth.

In Arizona, 85 percent of the crop has emerged and is making satisfactory growth.

**SOYBEANS:** Soybean planting gained momentum in the Corn Belt and South last week, but fell behind the usual pace as most growers concentrated on planting corn and cotton. As of May 27, soybean planting in the North Central States advanced 18 points over the previous week to 33 percent complete. This is well behind normal progress of 54 percent and last year's 52 percent. Southern soybean planting reached 22 percent complete compared to 38 percent last year. In Illinois, the leading soybean producing State, planting is 35 percent complete compared to average progress of 64 percent. Iowa soybean acreage reached 33 percent planted, normally 70 percent is planted. Missouri acreage is only 14 percent planted while Minnesota is well along at 70 percent complete. Arkansas soybeans are 18 percent planted compared to a normal of 52 percent.

**OTHER CROPS:** Sorghum planting moved ahead of last year's pace in Texas at 77 percent complete. South Texas sorghum is headed out. Sorghum planting continues to lag in Kansas, at 15 percent. Nebraska sorghum acreage is 59 percent planted; Oklahoma 33 percent. Tobacco harvesting has begun in Georgia. Tobacco transplanting is completed in South Carolina and is just getting underway in Kentucky. Cool, wet weather halted potato planting in Aroostook County, Maine. Idaho potatoes are 80 percent planted. Sugar beets are nearly all planted in California, Colorado, and Minnesota. Thinning of beets is active in Idaho and Washington. Rice acreage is nearly all seeded in California and 90 percent complete in Arkansas and Louisiana.

**Fruits and Nuts:** Cool, wet weather has interrupted spraying schedules for North Atlantic Region orchards. Strawberry picking in Maryland and grape shoot growth in New York have been delayed by the weather. Most cherry and apple trees in Michigan are in the petal fall stage or later. Georgia peaches are about 2 percent picked. In California, picking early varieties of stone fruits is active. Prospects for apples, pears, and prunes are good and almonds are making normal progress. Heavy apple drop is occurring in Washington. Cherries in Oregon are starting to color. Lack of labor is slowing the Valencia orange harvest in Florida. Southern California Valencia harvest is active.

**Vegetables:** Wet weather continued to interfere with vegetable planting in the North Atlantic Region. Iceberg lettuce harvesting in New Jersey is increasing. Tomatoes were reset in North Carolina. Snap bean harvesting is active in South Carolina. In Florida, sweetcorn and tomatoes were in steady supply. Cucumber picking is increasing in Texas. In Arizona, lettuce harvesting is nearly completed in the central area but near starting in Cochise County. California mixed vegetables harvesting continued normally.

**PASTURES AND LIVESTOCK:** Widespread rain helped to relieve dry ranges and pastures in the Pacific Northwest. Pastures throughout most other areas of the Nation were in good to excellent condition with wetness limiting grazing in the Great Lakes area and the North Atlantic States. Livestock condition is generally good with movement to summer pastures active in the West.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., May 27, 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 . . .	73	- 1	2.7	+1.9	La.Baton Rouge . . .	80	+ 3	.7	0	Youngstown . . .	57	- 4	1.7	+ .7
Mobile . . .	79	+ 1	2.5	+1.4	Lake Charles . . .	78	+ 1	T	-1.0	OKLA.Okla. City . . .	71	+ 1	1.2	0
Montgomery . . .	77	+ 2	2.6	+1.8	New Orleans . . .	79	+ 3	2.0	+1.0	Tulsa . . .	71	+ 1	1.5	+ .3
ALASKA.Anchorage . . .	---	---	---	---	Shreveport . . .	77	+ 2	.7	-.4	OREG.Astoria . . .	51	- 3	2.0	+1.4
Barrow . . .	---	---	---	---	MAINE.Caribou . . .	48	- 5	1.3	+ .6	Burns . . .	51	- 4	.4	+ .2
Fairbanks . . .	---	---	---	---	Portland . . .	50	- 6	1.6	+ .8	Medford . . .	59	0	.2	- .1
Juneau . . .	---	---	---	---	MD.Baltimore . . .	57	-10	1.8	+ .9	Pendleton . . .	59	- 1	.4	+ .2
Kodiak . . .	---	---	---	---	MASS.Boston . . .	55	- 7	.1	-.6	Portland . . .	56	- 2	1.0	+ .5
Nome . . .	---	---	---	---	Chatham . . .	52	---	.3	---	Salem . . .	52	- 6	.9	+ .4
ARIZ.Flagstaff . . .	52	- 2	T	- .1	MICH.Alpena . . .	53	0	1.4	+ .8	PA.Allentown . . .	55	- 8	1.0	+ .1
Phoenix . . .	82	+ 3	0	0	Detroit . . .	59	- 2	1.4	+ .6	Erie . . .	57	0	.8	+ .1
Tucson . . .	75	- 1	T	0	Flint . . .	57	- 1	1.3	+ .5	Harrisburg . . .	56	-10	1.5	+ .6
Winslow . . .	65	- 2	T	- .1	Grand Rapids . . .	59	- 1	2.1	+1.3	Philadelphia . . .	57	- 8	1.0	+ .2
Yuma . . .	82	+ 2	0	0	Houghton Lake . . .	56	+ 1	2.5	+1.8	Pittsburgh . . .	59	- 3	2.9	+2.0
ARK.Fort Smith . . .	71	- 1	1.3	+ .1	Lansing . . .	57	- 3	1.6	+ .7	Scranton . . .	54	- 8	.6	-.3
Little Rock . . .	73	+ 1	1.4	+ .2	Marquette . . .	50	- 2	1.1	-.6	R.I. Providence . . .	55	- 5	.3	-.4
CALIF.Bakersfield . . .	72	0	0	0	Muskegon . . .	58	+ 1	2.0	+1.3	S.C. Charleston . . .	76	+ 1	0	-.9
Eureka . . .	53	- 1	.5	0	S. Ste. Marie . . .	55	+ 3	1.2	+ .5	Columbia . . .	66	- 9	2.3	+1.5
Fresno . . .	70	+ 1	T	0	MINN.Duluth . . .	49	- 4	2.1	+1.3	Greenville . . .	69	- 5	2.2	+1.5
Los Angeles . . .	66	0	0	0	Internatl Falls . . .	57	+ 4	.5	- .1	S.D. Aberdeen . . .	59	- 1	1.0	+ .5
Red Bluff . . .	67	- 3	.3	+ .1	Minneapolis . . .	59	- 1	1.2	+ .4	Huron . . .	57	- 3	1.5	+1.0
San Diego . . .	65	+ 1	T	0	Rochester . . .	57	- 3	2.0	+1.1	Rapid City . . .	52	- 6	1.5	+ .9
San Francisco . . .	58	- 1	.2	+ .1	St. Cloud . . .	57	- 1	2.1	+1.3	Sioux Falls . . .	60	- 1	1.7	+ .9
Stockton . . .	68	0	T	- .1	MISS.Jackson . . .	78	+ 3	2.3	+1.4	TENN.Chattanooga . . .	69	- 2	3.9	+3.1
COLO.Denver . . .	58	- 1	.5	- .1	Meridian . . .	76	+ 2	2.4	+1.6	Knoxville . . .	67	- 4	3.1	+2.3
Grand Junction . . .	61	- 3	.3	+ .2	MO.Columbia . . .	66	- 1	2.3	+1.1	Memphis . . .	75	+ 3	2.1	+1.1
Pueblo . . .	62	- 1	.4	0	Kansas City . . .	65	- 3	1.7	+ .7	Nashville . . .	69	- 2	3.0	+2.2
CONN.Bridgeport . . .	54	- 8	.7	- .2	St. Louis . . .	66	- 1	.8	0	TEX.Abilene . . .	77	+ 3	.2	-.8
Hartford . . .	57	- 5	.6	- .2	Springfield . . .	65	- 2	1.6	+ .4	Amarillo . . .	66	- 3	.7	- .1
D.C.Washington . . .	60	- 8	1.3	+ .3	MONT.Billings . . .	53	- 5	.3	-.2	Austin . . .	80	+ 3	T	-.8
FLA.Apalachicola . . .	76	+ 1	1.3	+ .7	Glasgow . . .	54	- 3	.5	+ .1	Beaumont . . .	79	+ 2	.1	-1.0
Daytona Beach . . .	78	+ 3	---	---	Great Falls . . .	55	- 1	.8	+ .3	Brownsville . . .	83	+ 3	0	-.7
Ft. Myers . . .	---	---	T	- .9	Havre . . .	55	- 1	.9	+ .5	Corpus Christi . . .	83	+ 4	0	-.8
Jacksonville . . .	78	0	1.8	+1.0	Helena . . .	52	- 2	.7	+ .3	Dallas . . .	---	---	---	---
Key West . . .	81	+ 1	.1	- .5	Kalispell . . .	52	- 1	.6	+ .2	Del Rio . . .	85	+ 5	0	-.7
Lakeland . . .	79	+ 1	.2	- .7	Miles City . . .	54	- 5	1.7	+1.3	El Paso . . .	75	+ 1	T	- .1
Miami . . .	81	+ 2	.5	-1.0	Missoula . . .	52	- 2	.3	-.2	Fort Worth . . .	77	+ 2	1.0	0
Orlando . . .	81	+ 3	1.1	+ .2	NEBR.Grand Island . . .	61	- 2	3.0	+2.0	Galveston . . .	78	0	0	-.7
Tallahassee . . .	77	0	4.0	+3.1	Lincoln . . .	---	---	---	---	Houston . . .	79	+ 2	T	-1.0
Tampa . . .	81	+ 3	T	- .6	Norfolk . . .	62	- 1	5.0	+4.1	Lubbock . . .	77	+ 6	T	-.9
W.Palm Beach . . .	---	---	---	---	N.Platte . . .	58	- 3	3.6	+2.9	Midland . . .	76	0	.4	- .1
GA.Atlanta . . .	70	- 2	1.0	+ .3	Omaha . . .	65	+ 2	3.3	+2.6	San Angelo . . .	81	+ 5	.3	-.4
Augusta . . .	73	- 1	---	---	Valentine . . .	57	- 3	3.4	+2.8	San Antonio . . .	81	+ 4	T	-.8
Macon . . .	75	- 1	.5	- .2	NEV.Ely . . .	51	- 1	T	-.2	Victoria . . .	82	+ 4	T	-1.0
Savannah . . .	78	+ 3	.3	- .5	Las Vegas . . .	78	+ 2	0	0	Waco . . .	76	0	2.1	+1.1
HAWAII.Hilo . . .	---	---	---	---	Reno . . .	58	+ 3	T	-.2	Wichita Falls . . .	73	- 2	.4	-.7
Honolulu . . .	---	---	---	---	Winnemucca . . .	56	+ 1	.3	+ .1	UTAH.Blanding . . .	54	- 5	.5	+ .4
Kahului . . .	---	---	---	---	N.H.Concord . . .	53	- 5	.8	+ .1	Salt Lake City . . .	68	+ 7	1.4	+1.1
Lihue . . .	---	---	---	---	N.J.Atlantic City . . .	57	- 7	.7	- .1	VT.Burlington . . .	54	- 3	1.5	+ .8
IDAHO.Boise . . .	56	- 3	.4	+ .1	Trenton . . .	56	- 9	1.3	+ .5	VA.Lynchburg . . .	61	- 7	1.2	+ .5
Lewiston . . .	59	- 1	.8	+ .4	N.MEX.Albuquerque . . .	65	- 2	T	-.2	Norfolk . . .	65	- 5	1.5	+ .7
Pocatello . . .	53	- 3	.2	0	Roswell . . .	73	+ 4	0	-.3	Richmond . . .	64	- 5	1.4	+ .5
ILL.Cairo . . .	71	0	2.3	+1.3	N.Y.Albany . . .	56	- 5	.7	- .1	Roanoke . . .	64	- 4	2.6	+1.7
Chicago . . .	61	- 2	2.6	+1.7	Binghamton . . .	53	- 5	.4	-.4	WASH.Colville . . .	52	- 5	.7	+ .3
Moline . . .	61	- 3	3.3	+2.4	Buffalo . . .	58	0	.7	0	Omak . . .	54	- 7	.2	0
Peoria . . .	63	- 1	1.6	+ .6	New York . . .	57	- 8	1.0	+ .2	Quillayute . . .	48	- 6	4.5	+3.5
Rockford . . .	58	- 4	2.5	+1.6	Rochester . . .	59	- 1	1.1	+ .5	Seattle-Tacoma . . .	53	- 3	.9	+ .5
Springfield . . .	66	- 1	.3	- .6	Syracuse . . .	57	- 4	.8	+ .1	Spokane . . .	53	- 4	.7	+ .4
IND.Evansville . . .	68	0	2.5	+1.5	N.C.Asheville . . .	64	- 3	5.6	+4.9	Walla Walla . . .	60	- 2	.7	+ .3
Ft. Wayne . . .	62	- 1	.3	- .5	Charlotte . . .	68	- 4	2.1	+1.4	Yakima . . .	53	- 7	.1	0
Indianapolis . . .	66	+ 2	.5	-.4	Greensboro . . .	66	- 3	.9	+ .1	W.Va.Beckley . . .	61	- 2	2.0	+1.1
South Bend . . .	63	+ 2	1.9	+1.0	Hatteras . . .	69	- 1	1.6	+ .7	Charleston . . .	65	- 1	2.2	+1.4
IOWA.Burlington . . .	64	0	4.0	+3.1	Raleigh . . .	66	- 4	1.2	+ .4	Huntington . . .	67	0	1.5	+ .6
Des Moines . . .	64	0	2.7	+1.7	Wilmington . . .	72	- 1	.2	-.7	Parkersburg . . .	65	- 1	1.1	+ .2
Dubuque . . .	59	- 2	2.2	+1.2	N.DAK.Bismarck . . .	55	- 3	1.6	+1.1	WIS.Green Bay . . .	59	+ 2	3.3	+2.6
Sioux City . . .	63	- 2	.9	+ .1	Fargo . . .	58	0	1.4	+ .9	La Crosse . . .	60	- 2	2.3	+1.4
KANS.Concordia . . .	63	- 3	.7	- .2	Williston . . .	54	- 3	.9	+ .6	Madison . . .	57	- 2	1.9	+1.1
Dodge City . . .	61	- 5	.3	-.4	OHIO.Akron-Canton . . .	61	- 2	1.1	+ .2	Milwaukee . . .	54	- 2	2.2	+1.5
Goodland . . .	59	- 2	1.2	+ .6	Cincinnati . . .	64	- 1	1.3	+ .5	WYO.Casper . . .	51	- 4	.6	+ .2
Topeka . . .	64	- 3	2.6	+1.6	Cleveland . . .	60	- 1	1.5	+ .7	Cheyenne . . .	53	- 1	.1	- .5
Wichita . . .	66	- 2	.1	-.8	Columbus . . .	65	+ 1	1.3	+ .4	Lander . . .	53	- 2	.1	- .5
KY.Lexington . . .	66	- 1	4.1	+3.2	Dayton . . .	65	+ 1	.8	- .1	Sheridan . . .	52	- 3	.2	-.4
Louisville . . .	67	0	4.1	+3.2	Toledo . . .	59	- 2	1.4	+ .7	P.R.San Juan . . .	83	+ 4	T	-1.5

## 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:** Showers and thunderstorms, some producing locally heavy rains and spawning deadly tornadoes marked as one of the most destructive weeks in State's history. Wednesday through Saturday scattered showers and thunderstorms broke out mainly south, more widely scattered north. Sunday cool front brought severe weather and heavy rains state-wide. Temperatures averaged 3° above normal early week, but by Friday cloudiness and showers held averages 6° to 9° subnormal. Planting row crops made good progress early week, but heavy rains halted operations later. Cotton planting about 90% complete. Considerable acreage replanted, especially north. Growers cultivated and applied herbicides to earliest acreage. Corn planting slightly over 80% complete. Planting remaining acreage should make good headway because cotton planting completed. Peanut planting neared completion, stands in several localities damaged by "washing" rains. Soybean planting slightly over 25% complete and will gain momentum. Harvest of wheat underway south and central. Cutting of hay limited. Rain caught hay on ground several hay fields cut early week.

**ALASKA:** Temperatures ranged from high of 71° at Fairbanks to a low of 22° at Clearwater. All areas reported localized freezing. Only the Fairbanks area averaged warmer than normal. Precipitation heaviest late in week. All other areas were relatively dry. Even Kodiak below average. Soil moisture supply generally adequate, but short in Matanuska Valley. Planting of crops continues in Tanana and Matanuska valleys with only a small amount of fieldwork accomplished on Kenai Peninsula. Livestock generally good.

**ARIZONA:** Temperatures near normal. Significant showers over mountains of northcentral, northeast, southeast after first of week. Cotton satisfactory growth, 85% emerged. Southwest ahead other areas. Will plant cotton following grain harvest, Pinal County. Almost all small grains turned color, harvesting in Yuma, Maricopa Counties. Good progress sorghum. Safflower good progress, excellent bloom, yield prospects favorable. Sugar beet harvest continues Yuma County. Alfalfa hay harvest continues, eastern Arizona completing first cutting, central, southwest in second cutting. Some third cutting, Yuma County. Lettuce harvest nearly completed central area. Harvesting lettuce Cochise County nearing starting date, crop condition good. Harvesting mixed vegetables continued normally. Potato, dry onion harvesting continues steady rate. Cantaloupe growth progressing well, Yuma. Insect counts low fruit set good. Melons reported sizing well, Yuma County. Harvest expected shortly. Valencia orange, grapefruit picking limited Salt River Valley area, mostly for export. Harvesting Yuma area nearing completion. Ranges good. Warm temperatures accelerating runoff, growth of grasses higher elevations. Lower elevation ranges green, providing good grazing. Poisonous weeds causing cattle deaths. Desert ranges dry. Stockwater adequate. One of best spring runoffs ever. Cattle, calves remain good, calving active. Sheep, lambs fair to good. Movement to summer pasture active.

**ARKANSAS:** Temperatures near normal. Extremes: 44°, 90°. Rainfall varied widely. El Dorado had only 0.65 in while Fayetteville 3.74 in. Unofficial reports from tornado-stricken Jonesboro indicated a total excess of 5.00 in. Rains scattered through week with heaviest on weekend. Tornadoes and severe thunderstorms raked state weekend causing extensive damage. Fieldwork progressed, slowed by thunder-showers. Flood waters receding. Cotton 87% planted, about 44% up to stand. Rice 90% seeded. Soybeans 18% planted, normal 52%. Planting expected full swing coming week. Sorghum planting active. Wheat and oats fair to good, flooded fields poor. Small grains ripening rapidly. Hay harvest active. Fruits growing well. Strawberry harvest nearing completion. Tomatoes fair to good, crop later than normal. Watermelons planted. Okra and cucumber planting nearing completion. Pastures good to excellent, need rain southwest.

**CALIFORNIA:** Temperatures a few degrees above normal interior and desert areas and near normal along coast. Thunderstorms general most of week mountain areas. Coastal overcast persisted. Cutting small grain hay continues active, maturity rapidly approaching. Combining barley, wheat increasing, some barley harvested Sacramento Valley. Cotton virtually planted, good growth. Rice nearly all seeded, much above water. Tadpole shrimp more than normal problem, spraying progressing. Sugar beets nearly planted, good growth. Overwintered beets remain, quality suffering as harvest delayed. Safflower doing well. Corn, milo and dry bean planting continues, earlier plantings showing good progress. Second cutting alfalfa hay well underway, some first cuttings remain to be taken north and higher elevations. Some spraying alfalfa weevil continues. Vineyards bunch sets good. Harvest cherries underway, weevil damage. Picking early varieties peaches, plums, nectarines, apricots. Prospects prunes, pears, apples good. Almonds normal. Walnuts set well. Harvest Valencia oranges southern active, excellent quality. Lemons decrease. Avocados, grapefruit slow. Asparagus movement mostly processors. Salinas, Santa Maria: Cauliflower light, broccoli good volume, carrot digging underway. Sweet corn picking full swing Coachella. Lettuce cutting continues below normal Salinas. Onion harvest continues desert. Stockton, Fresno digging progressing rapidly. Kern potato harvest full swing. Sweet potato planting continues Merced district. Strawberry picking full swing Salinas, most volume fresh market. Tomato harvest increasing slowly San Diego. Warm temperatures, continued winds parched most foothill ranges increasing fire danger; ample feed supplies remain. Adequate supply stockwater. Some livestock pastured on beet tops. Milk production seasonal levels. Egg production increasing seasonally. Bees active citrus groves, deciduous orchards, lower elevation ranges.

**COLORADO:** Strong winds occurred Sunday with some damage reported eastern plains. Temperatures few degrees above normal statewide. Extremes: 24°, 92°. Precipitation greatest in Platte Basin with 1.83 in at Kassler's Station 22nd. Fleming

in Kansas Basin reported 1.92 in. 21st. Fieldwork rapid progress. Limited moisture received. Eastern plains received locally heavy thundershowers and hail. Small areas winter wheat destroyed by hail northeast and eastcentral. Fall and spring seeded crops made good growth, condition good to excellent. Soil moisture generally adequate, local areas southeast becoming short. Late planted crops being irrigated up to stand. Winter wheat 85% jointing, 16% headed. Winter barley 59% jointing, 13% headed. Oats 93% seeded, 76% emerged. Spring barley 93% seeded, 71% emerged. Corn 76% seeded, 39% emerged. Sorghum 31% seeded, small acreage emerged. Sugar beets 94% seeded, 55% emerged. Dry bean planting 6% complete. Late summer potatoes 90% seeded, 71% emerged. Fall potatoes 90% seeded, 70% emerged. Cutting alfalfa for dehydration full swing Arkansas Valley. Range and pastures good to excellent, providing adequate forage. Livestock improving.

**FLORIDA:** Warm, dry through Wednesday. Numerous showers, thunderstorms Thursday and Friday, particularly north and northwest. Hot, dry much of peninsula Saturday, Sunday. Highest 97° Vero Beach, 96° Orlando. Thunderstorms provided needed moisture north field crops. Shade tobacco harvest in full swing in 2 to 3 weeks. Pastures and livestock fair to good. Citrus tree condition good, some tree stress from heat, moisture short, rain needed. New crop fruit progressing well. Lack of labor slowing Valencia harvest. Vegetable supplies dominated by harvest from central areas northward. Watermelon volume leader, increasing. Potatoes, sweet corn, tomatoes steady. Escarole light, other leaf crops out or very light. Cucumbers, peppers decreased. Eggplant steady. Other crops in seasonal supply.

**GEORGIA:** Heavy to excessive rainfall most west and north with unusual thunderstorm activity. More than 7.00 in in 24-hour period on 27th at Clayton and Tugaloo. Average for week 3.00 to 5.00 in north, 2.00 to 4.00 in west. Temperatures averaged near normal central and south and 1° to 2° subnormal elsewhere. Extremes: 33°, 102°. Prior to weekend, soil moisture surplus north, adequate elsewhere except short to very short southwest. Thunderstorms over weekend, sometime severe, raised moisture levels most areas -- flash flooding in some. Cotton fair, seedling disease problems, less than 1% squaring compared with 15% normal. Corn fair to good, cultivation active. Tobacco fair with numerous hail damage reports, harvest begun. Soybeans 44% planted, near normal. Sorghum planting late at 23% complete. Peanuts fair to good with stands varied. Much haying with considerable rain damage. Wheat 10% harvested, near normal. Oats 8% harvested, about half normal. Peach harvest spreading northward, 2% picked. Pastures and cattle good.

**HAWAII:** Warm, scattered, light to moderate showers. Crops fair to good with irrigation. Supplies of papayas and watermelons heavy--bananas and vegetables adequate. Sugar production to date above last year. Pineapple harvesting increasing. Lowland pastures poor to fair, upland fair to good. Cattle fair to good.

**IDAHO:** Thursday-Friday showers to nearly all points. Rainfall 0.33 inch or more general west. Largest amounts north 1.35 in. Temperatures subnormal early and end week and above middle, averaging to near normal. Rain past week aided agriculture especially north. Crops making good growth. Haying activities southwest, pasture and

range feed improved. Winter grains in boot stage, some heading; spring grains in pre-boot stage. Statewide, 80% potatoes planted, complete southwest to 70% done east. Dry bean planting active, 55% complete. Sugar beet blocking, thinning 50% complete southwest, 25% southcentral, 10% east.

**ILLINOIS:** Cool, wet week. Temperatures subnormal north, central, normal south. Precipitation 6 days of week. Excessive amounts-- 9.00 in 24-hour period extreme south. Spring planting slowed by rainfall. Corn about 80% planted, last year and 1970-72 average 91%. Most planted central, southern sections well behind. Rain improved seedbed conditions, but slowed drying some fields. Some early plantings emerged, looked good, soybean planting 33% complete, 70% last year, 64% average. Winter wheat 16% excellent, 69% good, 15% fair. Cool, wet conditions slow progress. About 90% heading, 92% last year, 91% average. Filling at 50%, 67% last year, average 48%. Oat progress slow, nearly 10% heading, 17% last year, average 14%. Filling started, normal for date. New seeding 8% excellent, 53% good, 34% fair, 5% poor. Red clover, alfalfa good to excellent. Nearly 10% alfalfa cut, about 5% red clover cut. Pastures good to excellent. Soil moisture 23% surplus, 60% adequate, 17% short. Main activities planting corn, soybeans, fertilizer application, ground preparation for soybeans, cutting hay, hoeing planted fields. Average 5 days suitable fieldwork.

**INDIANA:** Temperatures near normal but precipitation heavy some areas, particularly south with up to 2.00 in. Relative humidity high. Sunshine evaporation low. Fieldwork: 5 days suitable. Topsoil and subsoil moisture adequate. Plowing 85% complete, behind average. Corn 70% planted, 65% for 1972 and average. Corn 20% emerged, 2 in high, same as 1972 and average; stands fair to mostly good. Soybeans 20% planted, 30% for 1972 and average. Soybeans 5% emerged, 1 in high; stands fair to good. Wheat 40% headed, 55% in 1972, 50% average. Pastures fair to mostly good.

**IOWA:** Temperatures ran 1° to 2° subnormal with cooling trend through week. Rainfall excessively heavy with more than 2.00 in on much of State and around 6.00 in at southeast tip. Good progress during week, weekend rains brought fieldwork to virtual standstill. Over 6 days suitable for fieldwork. Plowing 87% complete. Corn planted 83%, 1972 96% and average. Nearly 25% corn emerged, 1972 over 50%. Stand of corn 88% of normal. Soybeans planted 33%, 1972 60%, average 70%. Condition of growing crops (oats, clover and alfalfa hay, pastures) reported mostly good. Topsoil moisture 35% short, 53% adequate, and 12% surplus. Rain received over weekend most areas.

**KANSAS:** Damaging storms southcentral and eastcentral. Week climaxed by severe winds of over 60 mph west with considerable property damage northwest. Heavy rains eastcentral and southcentral with flash flooding some small streams. Rainfall elsewhere ranged from traces southwest and extreme north to over 1.00 in westcentral. Tornadoes southeast Reno and Sedgwick Counties 26th. Temperatures averaged 1° to 3° below normal. Row crop planting, other fieldwork progressed rapidly. Corn planting very active all areas, 74% planted, 76% year ago, 85% average. Sorghum 15% planted, 23% last year, 31% average. Soybeans 11% planted, 14% year ago, 31% average. Alfalfa first cutting 48% completed, 34% last

year, range 23-75% other recent years. Alfalfa weevil damage eastern and central. Wheat developing favorably, 69% headed, 90% year ago and average. A few fields turning color south with cool temperatures favorable for filling. Hail damage scattered local areas. Wheat streak mosaic reported west.

**KENTUCKY:** Cloudy, rainy, stormy. Thunderstorms and heavy rains reported in some section each day after Monday. Rainfall totaled mostly over 3.00 in. Temperatures averaged only a few degrees subnormal. Soil moisture again surplus most areas except north. Less than 3 days favorable for fieldwork due heavy rains. Some corn planted early period, now 58% complete, 82% last year and 83% 5-year average. Soybean seeding only 13% complete, well behind previous year and average. Tobacco setting just getting underway, nearly 50% plants 4 in or more and ready to set. Most wheat blooming or earlier. Barley ripening slowed by weather, beginning average harvest date June 9. First cutting alfalfa 40% complete, some hay damaged by showers. Picking underway short strawberry crop.

**LOUISIANA:** Temperatures mostly 1° to 4° above normal. Highs in 80's and lows in 70's most days. Extremes: 59°, 92°. Precipitation confined generally to light showers several days central and north and isolated thunderstorms southeast Thursday. Totals ranged from none many points to 0.50 to 2.00 in thunderstorm areas. Cultivation land preparation and planting very active. Some spots still too wet, others too dry. Major rivers still above flood stage but continue to fall, backwater receding slowly. Planting very late, crop growth behind normal. Haying active. Cotton 75% planted, 50% up to stand, acreage reduced sharply in some areas because of flooding. Rice 90% planted, corn 75%, sorghum grain 60%, sweet potatoes 50%, soybeans 20%. Sugarcane cultivation active, some laid by. Wheat and oats maturing. Pecan and peach prospects good. Pastures average, some supplemental feeding where overstocked. Livestock fair to good.

**MARYLAND AND DELAWARE:** Cool and wet. Temperatures near seasonal through Wednesday, then cool averaging 4° to 8° subnormal. Extremes: 70° west, near 80° elsewhere and 30's west, near 40° elsewhere. Precipitation, 0.75 to 1.50 in west and mostly 1.25 to 2.00 in elsewhere except 2.25 to 3.00 in lower Eastern Shore. Memorial weekend cool and wet. Good progress until Wednesday. Corn planting 76% done, 53% last year and 81% average. Soybean planting less than 10%. Tobacco setting 17%, about normal. Hay harvest progressing slowly. Some lodging of hay and grain crops in heavy showers. Strawberry harvest delayed, at peak Southern Shore.

**MICHIGAN:** Near to slightly above normal temperatures in areas adjacent to Lake Michigan, while 2° to 5° subnormal other areas. Nearly daily rains contributed 0.50 to 1.00 in of rain upper while 1.00 to 2.50 in fell south and central lower with 0.25 to 0.50 in north and east lower. Heavy rains Tuesday and Wednesday halted fieldwork south; good progress elsewhere. Soil moisture surplus southern counties, adequate elsewhere. State averaged 4.1 days suitable for fieldwork. Acreage intended for spring crops only 72% plowed, 83% last year and 93% in 1971. Rains halted corn planting in south; fair to good progress elsewhere. Corn 59% planted, normal 70%. Soybeans 21% planted, normal 30%. Oats 92% planted, normal 94%. Sugar beets 94% planted, normal 95%.

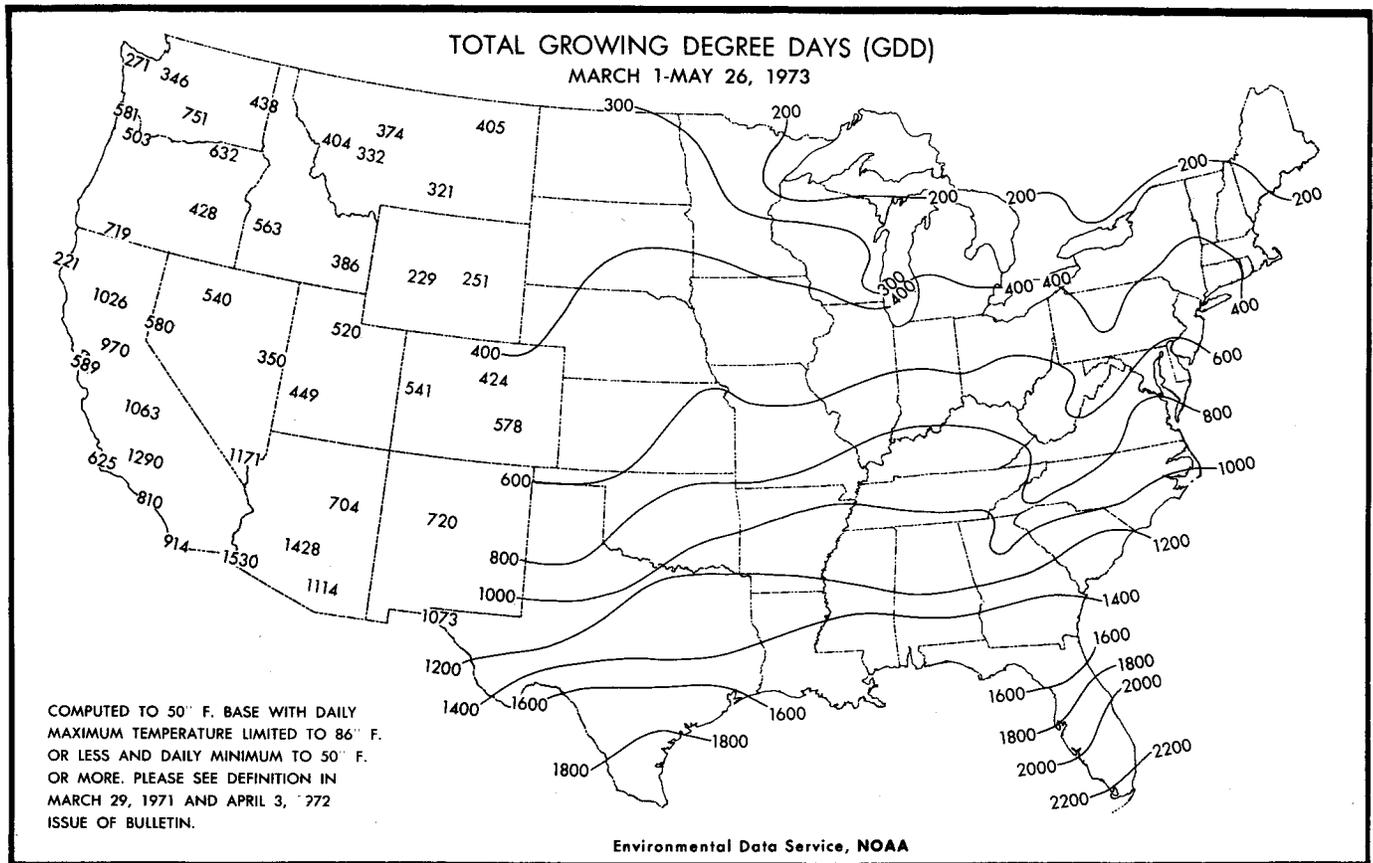
Potatoes 56% planted, normal 64%. Dry bean planting not started. Wheat, hay and pastures made good growth. Corn germinating slowly. Early oats have good start. Pasture feed supplies average. Most cherries and apples petal fall northwest, past petal fall elsewhere. Serious damage to grapes from freezes May 17th and 18th now apparent.

**MINNESOTA:** Wet and cool. Temperatures 1° to 2° subnormal except extreme north 4° above. Extremes high 80's to mid 30's. Precipitation: 1.00 to 3.00 in southern two-thirds. Over 2.00 in in 100-mile wide strip through State center east to west and in southcentral and southeast. Northwest and northcentral received 0.50 in, remainder subnormal. Soil moisture generally adequate, except northwest corner subsoil short, surplus extreme east. Fieldwork possible 4 to 7 days. Hayfields, pastures, winter wheat, rye good condition. Rye starting to head. Planting western two-thirds of State week or more ahead. Southeastern corner behind a week or more. Emergence corn, soybeans behind normal, other crops ahead. Corn 91% planted, 5-year average 83%; emerged 45%, average 57%. Soybeans 70% planted, 56% average, 13% emerged-19% average. Flax 88% planted, 68% average; 65% emerged, 49% average. Potatoes 86% planted, 45% average. Sugar beets 95%, average 63%. Processing peas 93%, average 83%. Processing sweet corn 71%, average 61%. Sunflowers 75% planted. Spring wheat 98% emerged, average 77%, oats 96%, average 80%; barley 94%, 77% average.

**MISSISSIPPI:** Early widely scattered thunderstorms diminished midweek, becoming numerous end week. Temperature slightly subnormal. Extremes: 95° and 39°. Severe weekend thunderstorms over large portion of State. Jones County tornado devastation included 1 person killed, 35 injured, about \$2 million in property losses. Good week averaging 4.1 days suitable for fieldwork. Rains needed on heavy clay soils. Cotton 90% planted, last year 95%, normally 93%; 45% up to a stand. Corn 70% planted, 91% last year, normally 80%; 60% up to a stand. Soybean plantings 15% complete, 40% last year, normally 41%; 5% up to a stand. Rice 80% seeded, virtually complete last year. Sorghums 30% planted, last year 64%, normally 50%. Sweet potatoes 45% complete. Normally 50%. Wheat and oats 80% ripe. Peanuts 73% planted. Cotton, truck crops and peaches in fair condition. Corn, small grains, hay crops and soybeans fair to good. Pastures and livestock good.

**MISSOURI:** Frequent showers with average generally 1.00 to 2.00 in except southeast where intense thundershowers end of week dumped nearly 10.00 in rain in Cape Girardeau area. These intense thunderstorms produced flash floods; 7 deaths due to floods. Temperatures warm early week, but cool end, averaging near or a little subnormal. Intense thunderstorm activity week's end produced damaging winds and at least 6 or 8 tornadoes central and east as well as locally heavy rainfall. Four days suitable for fieldwork. Corn planting 54% completed, 88% year ago. Soybeans 14% planted, year ago 55%. Cotton 68% planted, finished year earlier. Wheat 76% headed. Pasture mostly good. Soil moisture adequate to surplus.

**MONTANA:** Temperatures 0° to 5° subnormal. Maximum temperatures 70's first of week to 50's and lower 60's over weekend. Weather system crossing State late week brought rain to all divisions with most significant amounts over northeast and



southeast. Spring wheat and oat seeding virtually complete. Barley seeding 90% complete, corn 85%, dry beans and potatoes 75%. Topsoil moisture short northwest and northcentral, short to adequate elsewhere. Grain crops fair to good condition. Winter wheat 5% in boot, 95% not yet in boot. Sugar beet thinning just starting. Cattle 70% and sheep 65% moved to summer ranges.

**NEBRASKA:** Temperatures above normal early week, subnormal late. Spotty rainfall end of week ranging traces to 5.00 in. Heavy rains brought fieldwork to standstill many areas. Flooding occurred Platte River and tributaries. Considerable soil erosion. Some fields need replanting. Prior to rains, farmers made good progress in fieldwork consisting preparing seedbeds, planting row crops, applying fertilizer and herbicides, breaking surface crusts for germinating plants, and harvesting alfalfa. In four northcentral counties, dealers' fuel supplies depleted. Corn planting 95% complete, 79% year earlier, 90% average. Early planted corn up, cultivating begun. Planting soybeans 47% complete, 29% year ago, 46% average. Some soybeans up. Sorghum planting 59% complete, 29% in 1972, 55% average. Some plantings delayed, dry topsoil. Sugar beet thinning underway. Moisture needed to germinate late planted beets, some irrigated. Dry bean growers preparing fields for planting. Winter wheat making good progress, rated mostly good, starting to head, some lodging result weekend storms. Alfalfa hay condition and yield good to fair, first crop being cut hay, green chop, and dehydration. Wild hay good to excellent. Range and pasture conditions average to above average. Livestock doing well, making good gains. Feedlots muddy from heavy weekend rains.

**NEVADA:** Temperatures near normal to 3° above. Extremes 27°, 95°. Precipitation ranged from 0.64 in at Owehee to none over remainder of State. Spring planting generally complete. Emerged crops look good. Soil moisture and water supplies plentiful. Cattle moving to summer ranges where growth is best in years. Livestock good.

**NEW ENGLAND:** Cloudy, cool. Frequent rain average 2.00 in north and central, 1.00 to 2.00 in south. Temperatures 3° to 9° subnormal. Crop development and planting near standstill due to cool wet weather. Virtually no potato planting Aroostook County, Me. Apples full bloom north. Blueberries blooming. Strawberries full bloom. Cranberries showing flower buds. Some corn kernels rotting in ground, young stalks yellow.

**NEW JERSEY:** Cold, wet week. Temperatures about 7° subnormal. Extremes: mid-40's, near 80°. Some rain each day. Totals: 1.20 in along coast to 1.50 in over central and southern sections. Planting delayed by rain. Only 2 days suited for fieldwork. Soil moisture excessive all areas. Iceberg lettuce harvest increasing. Asparagus volume moderate. Warmer weather would be beneficial. Pea harvest expected in a week. Spring spinach moving. Rainy weather interrupted spraying schedules for fruit, increasing disease problems. Light strawberry harvest begun. Barley coloring. Milk and egg production lowered by wet weather.

**NEW MEXICO:** Scattered light showers and a little cooler north Tuesday. Dry and warming after turning sharply cooler weekend with light showers mainly north. Warming trend continued. Considerable progress planting activities. Grain sorghum 50% to 70% planted Statewide. Wheat good, 100%

headed, very little turning. Cotton 70% to 80% planted east; over 95% planted State. Most northern counties started first cutting alfalfa hay. Alfalfa weevil, pea aphids, mustard weeds present. Lettuce shipment ahead last year, good quality. Onions good all areas. Apples large crop expected. Thinning very active. Cattle and calves good. Ranges improving accelerated rate.

**NEW YORK:** Cool, wet week. Temperatures near normal west, 2° to 5° subnormal east. Extremes: 37°, 76°. Rain nearly every day varied from as little as 0.33 in at Massena to nearly 2.00 in over eastern Long Island. More significant are 3 and 5-week departures. Soil moisture ranges from surplus to excessive. Cool, wet weather limited fieldwork and brought corn planting to standstill. Some early planted corn emerged but growth slow. Oats about 75% planted in good condition. Pastures and hay fields mostly good condition. Early cutting of hay beginning in a few areas. Wet weather continued to interfere with vegetable planting and cool, cloudy conditions delayed growth. Most Long Island potato fields up. Sweet corn planting behind schedule many Upstate areas. Cauliflower transplanting underway Catskill section. Orange County onion growth slow. Potatoes in Steuben-Livingston Counties over 50% planted. Orchards and vineyards have surplus to excessive moisture. Activities include spraying, applying herbicides, cultivating and vineyard planting. Apple set begun. Bartlett pear set appears light, Bosc set seems better. Cool, wet conditions delaying grape shoot growth. Winter injury to canes, trunks and buds appearing.

**NORTH CAROLINA:** Warm and humid with widely scattered showers becoming more numerous over weekend. Very heavy rains mountains night of 27th producing flash floods several areas. Amounts up to 7.00 in averaging 1.00 to 3.00 in. Heavy thunderstorms spreading eastwards 28th with some hail and damaging winds. Spraying, cultivating, herbicide application primary activity. Strong winds and hail caused only light and scattered crop damage. Moisture adequate for germination. Corn 92% planted, average 88%. Some corn knee high. Flue-cured tobacco 88% set. Few fields and plant beds lost from hail. Soybeans 52% seeded, average 50%. Cotton planting complete, slightly ahead average. Wind and hail caused some lodging small grains. Haying active. Peanuts 92% in, complete reversal last year when only 75% in. Vegetables western areas recovering from previous week's frost. Tomatoes reset.

**NORTH DAKOTA:** Wet weather prevailed, all sections received much needed rain. Precipitation in excess of 1.00 in fell across northeast early in week, across southcentral in midweek and over southwest during weekend. Marble sized hail fell over southcentral May 23 and also on Memorial Day. Temperatures above normal across north early week but otherwise subnormal. High 84°, low 30°. Readings 3° subnormal northwest and 3° to 6° subnormal east and south. Small grain seeding interrupted by showers early week, now in windup. Showers very beneficial northeastern area. Flax and row crop planting progressing rapidly. Flax planting 60% completed, corn 65%, soybeans 75%. Year earlier flax 23% planted, corn 20%, soybeans 12%. Average flax 49% planted, corn 50%, soybeans 52%.

**OHIO:** Precipitation every day except 21st. Severe weather hit many sections on 25th, with numerous thunderstorms. Some thunderstorms accompanied by high winds, hail, heavy rain. No important day-

to-day temperature changes, daytime highs ranging from middle 70's south to middle and upper 60's north. Overnight lows mostly in 50's. Showers and thunderstorms produced locally heavy precipitation amounts on 25th with Findlay reporting 2.37 in in 12-hour period. Least amounts over extreme west and extreme east, greatest over north-central. Hopes for 2 consecutive planting weeks were dampened by stormy, rainy weather. Wet, muddy field conditions returned; only southeastern areas had more than 4 days favorable for fieldwork. Statewide, farmers averaged less than 3 days in fields. Soil moisture supplies are 72% surplus, 27% adequate, 1% short. Plowing for corn and soybeans 80% complete, 5 year average 100%. Corn planting 55% done, 80% both 1972 and normal average. Rain slowed soybean planting last week, only 25% done, well behind normal of 45%. Potatoes 65% planted, 80% last year, normal 85%. Sugar beets now over 90% planted. Tobacco less than 10% planted, normally 15% planted. Wheat 15% headed, 50% 1972, mostly fair condition. Barley 50% headed, average 60%. First cutting of alfalfa 5% made, normal 10%.

**OKLAHOMA:** Temperatures averaged near normal to 4° above. Precipitation ranged from 0.50 in in panhandle to 1.70 in westcentral. Precipitation during weekend ranged from traces southwest to 1.00 in eastcentral and southeast. Severe thunderstorm and a tornado on May 26. Just over 50% wheat now in dough stage compared with 75% year earlier. Timely rains helped fill but high winds caused lodging. First field harvested Cotton County on weekend. Oats and barley maturing week or more behind average. Oats hay being cut. Corn planting made good progress and 33% sorghum now seeded. Cotton planting will be active as seedbed condition improved. Peanut seeding stepped up now 13% complete. Pecan set reported best recent years. Ranges good to excellent, cattle showing gains.

**OREGON:** First substantial rainfall all sections since early month. Amounts along coast generally 1.00 in or more, interior valleys averaged about 0.50 in. Central received near 0.30 in while amounts close to 0.67 in fell east. Temperatures near normal. North mostly near to few degrees subnormal, while southern part averaged from near to few degrees above normal. Cooling trend midweek brought frost to much of east. Coldest 22° at Enterprise. Rain eased drought anxiety, slowed or stopped haying, vegetable planting, sprouted recently planted seed crops--vegetables, relieved drying range, pasturelands. More rain needed non-irrigated crops. Strawberry harvest approaches. Cherries starting to color. Cutworm damage showing strawberries, mint. Alfalfa weevil count high. Hops strung, approaching wire in good condition. Onions, potatoes making good growth. Demand strong for first cutting hay. Crop short east. Lambs moving to market.

**PENNSYLVANIA:** Cloudy, cool, wet. Precipitation 0.50 to over 2.00 in. Temperatures 2° to 6° subnormal west, 6° to 9° below central and east. Extremes: 80° and 38°. Topsoil moisture 85% surplus, 5th straight week surplus conditions. Fieldwork possible 1 to 2 days. Corn planting 33% completed, potatoes 50%. Corn stands poor color. Barley 50% headed, wheat 67% boot stage. Alfalfa entering bud stage, unfavorable harvest conditions. Pasture soft, limiting use. Frost damage early planted tomatoes. Asparagus growth slow. Green peas good stands and growth.

**PUERTO RICO:** Generally dry islandwide. Severe drought continues. Rainfall averaged 0.28 in or about 1.71 in subnormal. Highest total 1.53 in north slopes. Highest 24-hour total 0.70 in northwest. Temperatures averaged 80° on coast and 77° interior. Extremes: 57°, 95°. Dry weather favored sugarcane harvesting and transporting but new plantings hurt by lack of rain. Ratoons hurt by yellow aphid in south. Weather favored coffee in general but more rain needed to develop beans. Tobacco harvesting ended and drying in shed continued favored by dry weather. Pastures hurt by severe drought. Fertilization finished some places. Milk production diminished many areas. Rains badly needed pasture areas islandwide. Minor crops suffering due lack of rain. Farmers beginning soil preparation.

**SOUTH CAROLINA:** Temperatures subnormal Sunday, gradually climbing to near or above normal midweek. Little or no rain extreme south; elsewhere, scattered thundershowers first and again last of week. Thunderstorms and tornadoes Thursday. Severe thunderstorms and tornadoes hamper activities in Piedmont week's end. Tobacco stands good, all transplanted. Cotton stands fair to good, 98% planted, same last year. Corn stands good, 97% planted, same last year. Soybeans 39% planted, 40% last year. Sorghum 28% planted, 36% last year. Small grains fair to good. Wheat 96% headed, 54% turning color, 22% ripe. Oats 96% headed, 55% turning color, 20% ripe. Grain hays good, 57% harvested, 53% last year. Peanuts 85% planted, 81% last year. Sweet potatoes 63% transplanted, 51% last year. Peaches fair to good. Tornadoes caused some damage Piedmont section. Pastures good. Vegetable crops fair to good. Spraying tomatoes, picking cucumbers. Snap bean harvest active, yields low.

**SOUTH DAKOTA:** Above normal temperatures first of week. Cool temperatures and widespread showers late week. Many near freezing temperatures central and west. At least 1.00 in precipitation most areas, with heavier amounts northeast. Topsoil moisture short on 25th except eastern third which received rain midweek. Weekend rains changed situation considerably. Spring plowing essentially completed. Flax seeding 86% complete; normal 87%, last year 40%. Corn planting 87% complete, normal 86%, last year 42%. Soybean planting 60% complete, normal 58%, last year 19%. Sorghum planting 33% complete, normal 25%, last year 3%. Most summer fallow has been worked first time. Stock good. Feed and water supplies adequate. Growth of new pasture feed slow.

**TENNESSEE:** Warm humid air spawned numerous showers, thunderstorms, several tornadoes. Precipitation averaged well above normal with 2.00 in or more general. Heaviest 6.29 in at Crossville Sunday and a total of 7.61 in for week. Temperatures about normal west, 4° to 7° subnormal east. Extremes: 46°, 89°. All fieldwork made good progress early week, but heavy rains at midweek and weekend caused further serious delay. About 60% barley, 30% wheat, and 25% oats now yellow or turning. All 3 crops 90% headed. Less than 50% corn planted compared to 75% normal. First cutting alfalfa 67% completed. Poor curing conditions lowering quality of hay.

**TEXAS:** Cool, dry air swept across Texas Sunday relieving heat wave in south and drying areas in northcentral. Southcentral dry with little or no rainfall during week. Regions east and west of Pecos dry, too. Numerous thunderstorms, some

severe, dumped rain on much of north and east. Rainfall exceeded 5.00 in at Thorton while more than 2.00 in soaked large areas of northcentral Texas. Harvest wheat, oats, flax good progress southern half. Wheat headed out high and low plains rapid maturity. Planting cotton, corn, sorghum, peanuts, soybeans satisfactory progress. Cotton blooming south, Coastal Bend, Lower Rio Grande Valley. Corn roasting ear stage Coastal Bend, Lower Rio Grande Valley. Sorghum headed out south, Lower Rio Grande Valley, parts Coastal Bend. Major crops percent planted: cotton 75, year ago 75; corn 99, year ago 99; sorghum 77, year ago 74; peanuts 26, year ago 29; soybeans 24, year ago 22; rice 86, year ago 100. Major crops percent harvested: wheat 2, year ago 13; oats 16, year ago 29; barley 1, year ago 20; flax 61, year ago 100. Lower Rio Grande Valley onion, cabbage, and carrot supplies declining. Potato digging continues. Cantaloupe harvest underway. Cucumber harvest in full swing. Watermelon supplies will remain light for another week. Coastal Bend watermelon harvest underway. Cucumber and squash picking continues. Winter Garden-San Antonio area onion harvest continues. Cucumber picking underway. Tomatoes have good fruit set. Laredo onion harvest almost complete. Cantaloupes making good progress. East and Central Texas tomatoes generally set good fruit crop. Watermelons making good growth and started to run. North Texas watermelons and cantaloupes growing well, rain helped. Knox-Haskell area late freeze in April has delayed potato sizing and harvest more than anticipated. Trans-Pecos area onions showing good growth. High plains most onions and potatoes making good growth. Harvest early varieties of peaches active throughout State. Citrus supplies remain available.

**UTAH:** Few widely scattered showers early week. More general precipitation late week. Totals locally very heavy along Wasatch Front. Temperatures generally near to 4° above normal. Continued improvement fall and spring planted crops and range grasses from earlier cold weather setbacks all areas. Weather 10 days prior May 29 favorable for fieldwork except for 2-day wet period May 25 and 26. Soil moisture adequate most areas. Irrigation water plentiful. Little or no freeze damage of consequence this spring. First crop alfalfa hay growing rapidly. Winter wheat prospects good most areas. Planting virtually completed all crops except potatoes which are only 30% planted main southern area. Range feed supplies currently good to excellent. Movement cattle and sheep to spring and summer range lands virtually completed.

**VIRGINIA:** Frequent rainfall, total 1.33 in, heaviest east. Richmond got 2.42 in. Temperatures 5° subnormal, ranged 11° to 3° subnormal. Haying, planting, and tillage progressed well early in week. Averaged 3.1 days suitable for fieldwork. Topsoil moisture 60% adequate, 40% surplus. Low temperatures slowed crop growth. Corn 85% planted, average 90%. Early stands good, cultivated. Soybeans 25% planted, average 36%. Peanuts 85% planted. Tobacco setting progress similar to last year, but less than usual: flue-cured 50%, fire-cured and sun-cured 25%, burley, 15%. Barley harvest expected about June 1. Good haying progress before rain. Good tonnage in Tidewater and Piedmont. Growth limited west of mountains. Excellent pastures. Sheared sheep.

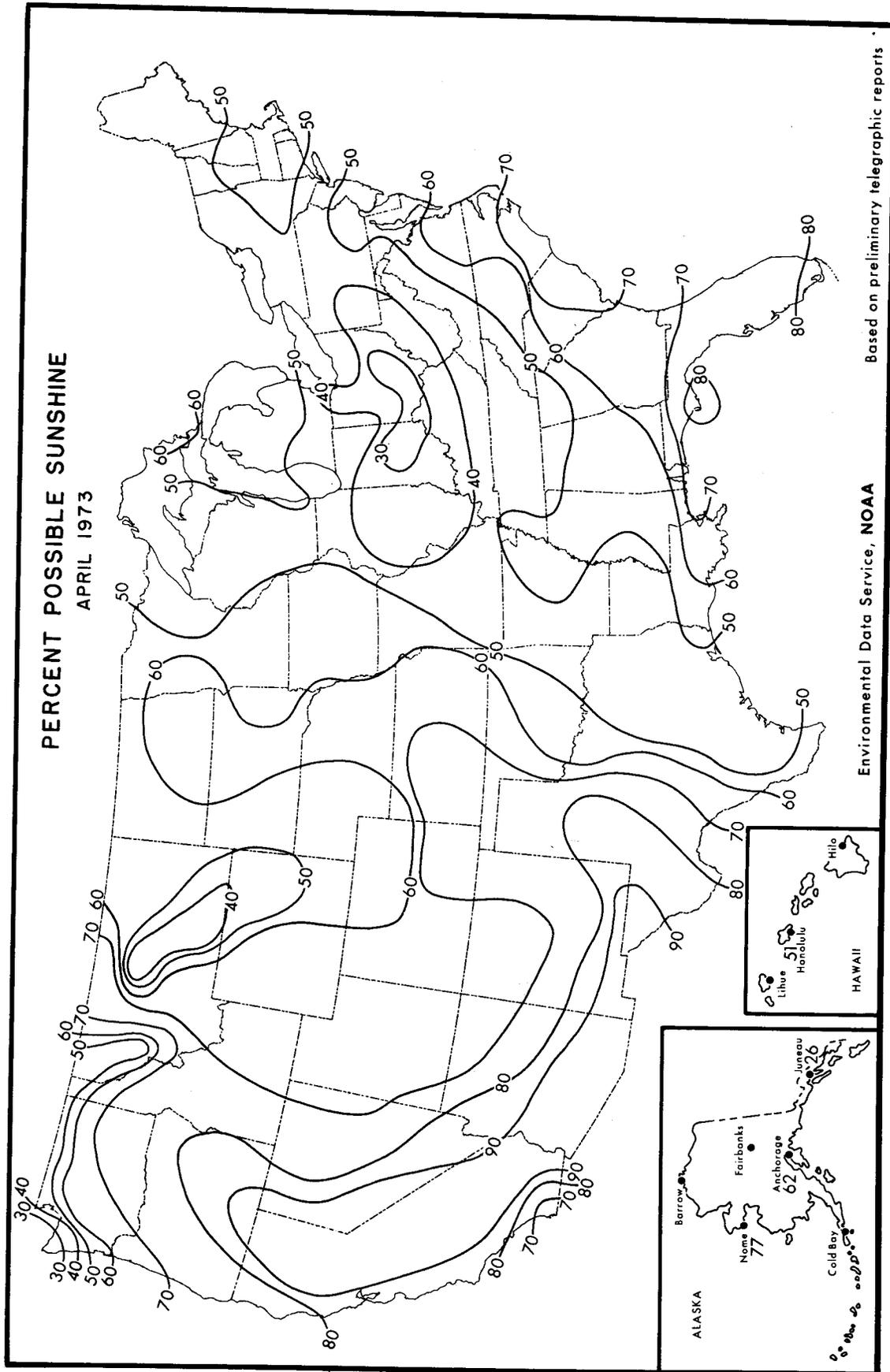
**WASHINGTON:** Western Washington: Subnormal temperatures, 2.00 to 4.00 in precipitation. Strawberries past full bloom, raspberries beginning. Harvest early lettuce, radishes. Planting

peas, corn near completion. Growth all crops improved. Green chopping active. Silage cutting, early haying begun. Eastern Washington: Temperatures 3° subnormal, precipitation up to 0.75 in. Cultivating, irrigating active. Haying full swing. Asparagus cutting, sugar beet thinning continued. Planting dry beans. Some orchard spraying. Heavy apple drop. Dryland drought relieved. Need more rain to build soil moisture reserve. Southcentral shallow soils still showing stress. Wheat, barley heading; 30% some areas. Bluegrass heading. Some spraying for large grasshopper hatch. Pasture, ranges improved, but still lacking adequate forage.

WEST VIRGINIA: Cool, wet. Temperatures 4° to 7° subnormal. Highs: 60's to 70's end week. Lows 30's to 40's early week warming up to mid 50's and low 60's. Rain 0.50 in Sunday. After brief respite of 2 days, showers returned, lasting to end of period. Averaged 2 to 3 days favorable fieldwork. Soil moisture, 44% adequate, 56% surplus. Planting corn, gardening, general chores and repair work major activities. Corn planting about 50% complete, slightly behind year ago. Some spring oats just seeded, about 67% emerged. Gardens late due to cold, wet spring. Most crops fair to good but all need dry weather and sunshine. Pastures very lush but grass contains too much water.

WISCONSIN: Cloudy, cool, very wet. Temperatures 3° subnormal. Rainfall 2.00 to 3.50 in most areas. Heaviest rain Thursday and Sunday. Local flooding in Green Bay on Sunday from 3.00 in rain and strong winds. Planting of crops slowed by saturated soils. Corn 55% planted, last year 98%, normal 66%. Oats 90% planted, last year 100%, normal 100%. Soybeans 10% planted, last year 30%, normal 20%. Spring plowing 75% done, last year 95%, normal 90%. Early oats, winter grains continue to do well. Hay improved slightly but behind normal due to cool temperatures. Some new seedings plowed up, hurt by late oat harvest, persistent wet weather, and winterkill. Pastures good but soft. Planting of vegetable crops lags behind schedule. Potato planting also running late. Tobacco beds good. Cherry trees in bloom. Soil moisture 5% adequate, 95% surplus.

WYOMING: Week warm, especially first half. Afternoon - evening showers and thundershowers most days. Highs 70's to 80's from 19th to 22nd; highs 60's and 70's rest of period. Extremes: 89° Worland, 17° Bondurant. Activities: irrigating, branding, docking, moving to summer pastures. Seeding of spring wheat, oats and barley completed. Corn 80% and dry bean 10% completed. Sugar beet thinning beginning. Surface and subsoil moisture short to adequate most of State.

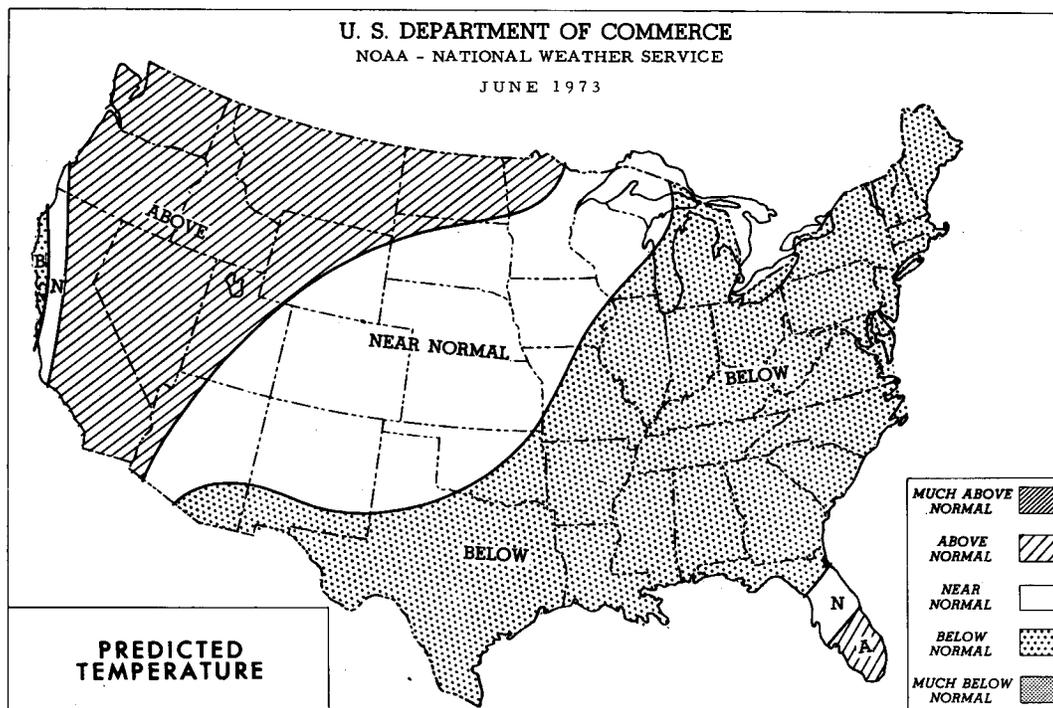
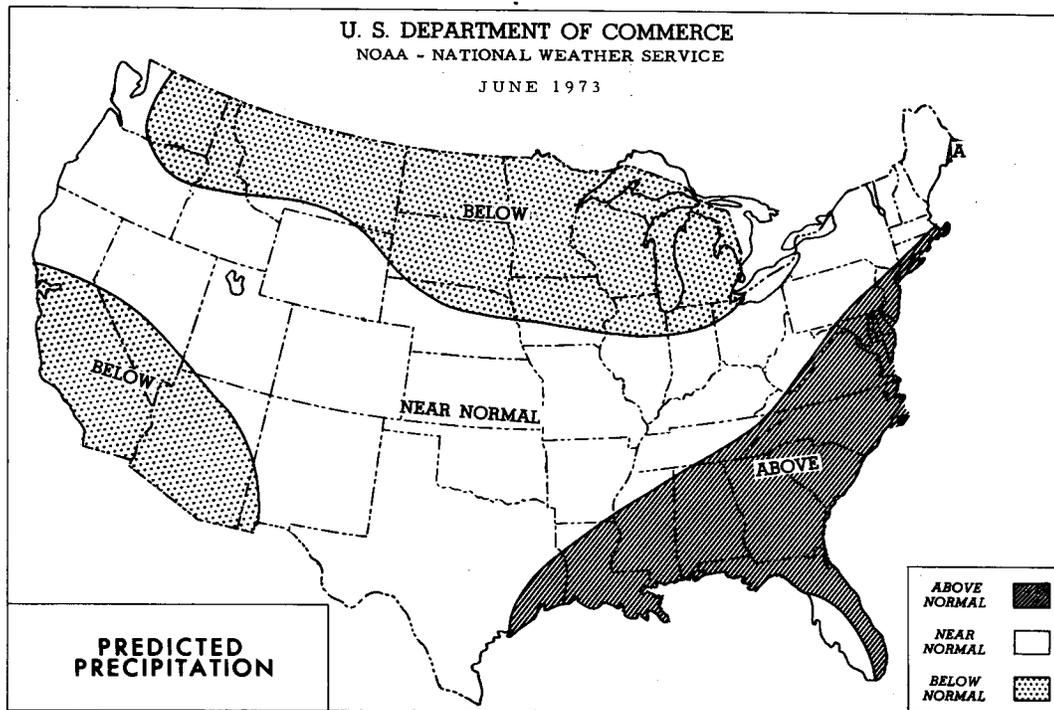


## AVERAGE DAILY SOLAR RADIATION

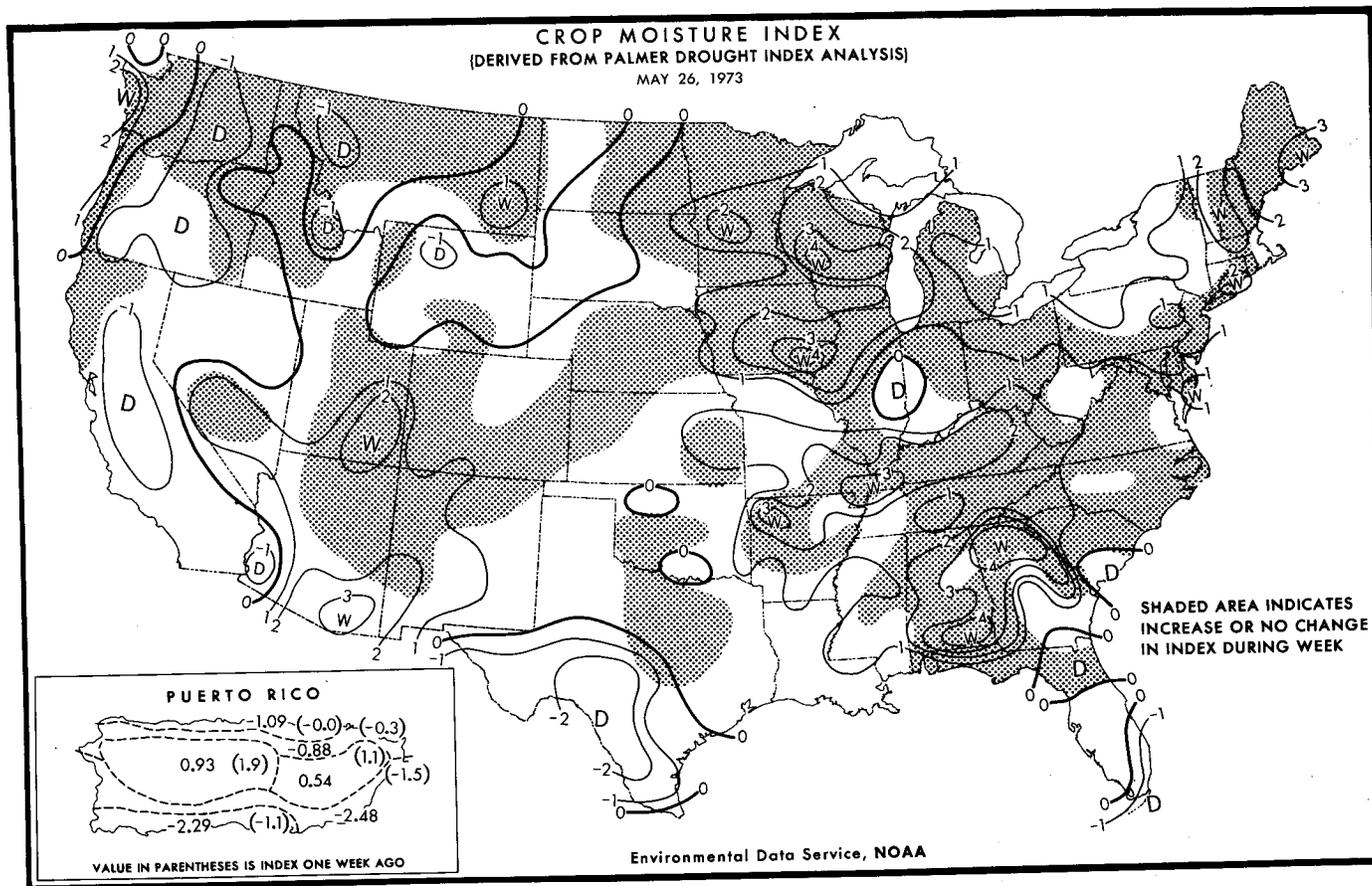
April 1973

Station	Daily average (langleys)	Normal
Bethel, Alaska	431	437
Phoenix, Ariz.	587	629
Little Rock, Ark.	323	449
Fresno, Cal.	570	547
Los Angeles, Cal.	532	536
Grand Junction, Colo.	526	537
Miami, Fla.	---	572
Boise, Idaho	575	483
Indianapolis, Ind.	310	410
Caribou, Maine	389	409
Milton (Blue Hill Obs.), Mass.	366	394
Kansas City, Mo.	397	---
Omaha, Neb.	458	460
Las Vegas, Neb.	604	626
Reno, Nev.	476	504
Albuquerque, N.M. * 26 days	535	606
Cape Hatteras, N.C.	528	536
Greensboro, N.C.	423	461
Bismarck, N.D.	404	432
Oklahoma City, Okla.	439	475
Medford, Oreg.	509	480
Charleston, S.C.	476	515
Rapid City, S.D.	397	466
Nashville, Tenn.	343	439
Oak Ridge, Tenn.	328	430
Brownsville, Tex.	432	472
Fort Worth, Tex.	368	478
San Antonio, Tex.	401	440
Seattle-Tacoma, Wash.	465	386
Spokane, Wash.	466	447
Madison, Wis.	351	396
Lander, Wyo.	516	525

### 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.



INDEX DECREASED DURING WEEK  
(Unshaded Areas)

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

**INDEX**

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

**INDEX**

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

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

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

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

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



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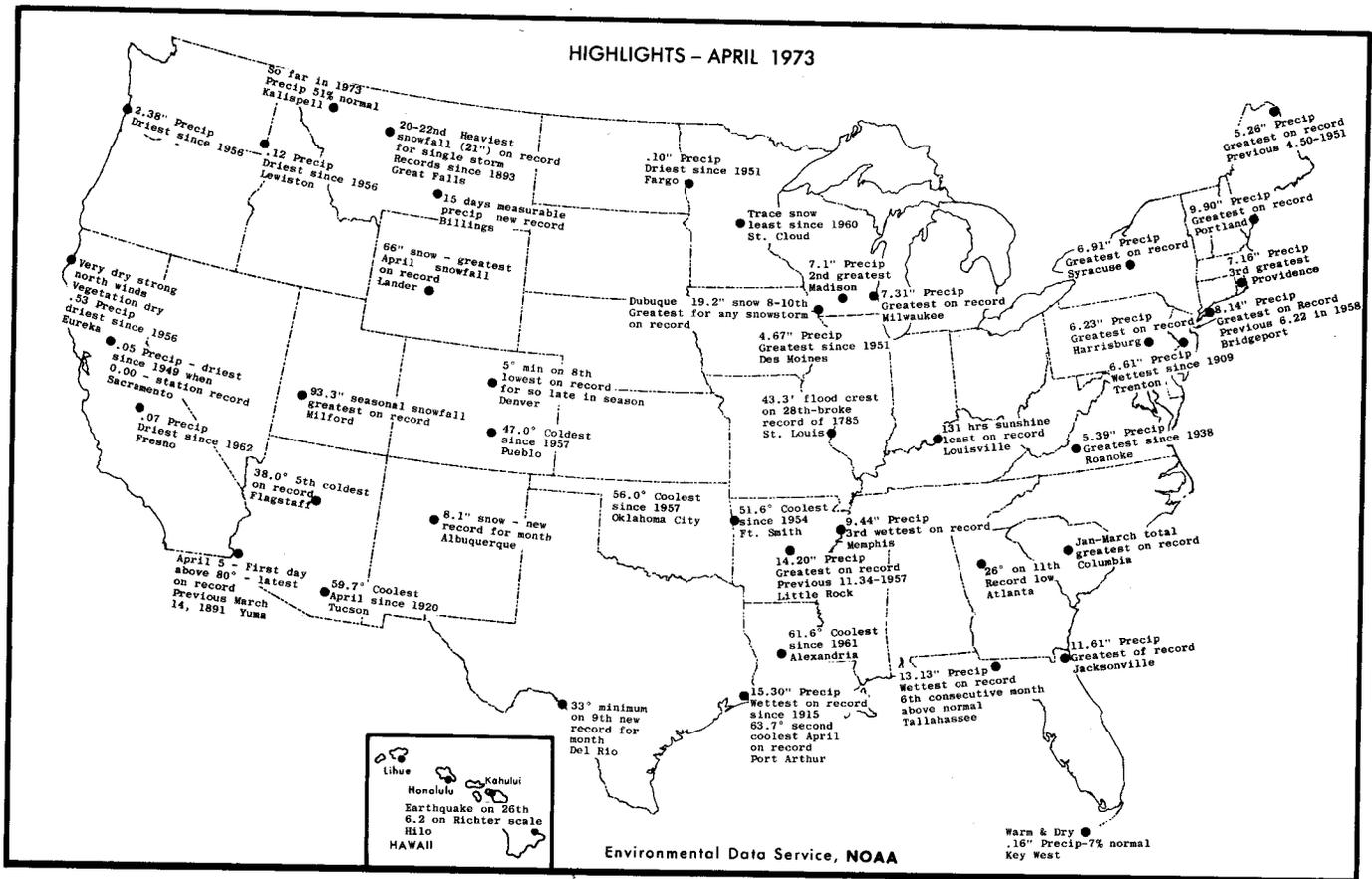
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**HIGHLIGHTS - APRIL 1973**



30" far in 1973 Precip 51% normal Kallispell

2.38" Precip Driest since 1956

.12 Precip Driest since 1956 Lewiston

20-22nd Heaviest snowfall (21") on record for single storm Records since 1893 Great Falls

.10" Precip Driest since 1951 Fargo

15 days measurable precip new record Billings

66" snow - greatest April snowfall on record Lander

Trace snow least since 1960 St. Cloud

7.1" Precip 2nd greatest Madison

7.31" Precip Greatest on record Milwaukee

6.91" Precip Greatest on record Syracuse

9.90" Precip Greatest on record Portland

7.15" Precip 3rd greatest Providence

8.14" Precip Greatest on Record Previous 6.22 in 1958 Bridgeport

6.23" Precip Greatest on record Harrisburg

6.61" Precip Wettest since 1909 Trenton

5.39" Precip Greatest since 1938 Roanoke

131 hrs sunshine least on record Louisville

49.3" flood crest on 28th-broke record of 1785 St. Louis

19.2" snow 8-10th Greatest for any snowstorm Dubuque on record

4.67" Precip Greatest since 1951 Des Moines

5" min on 8th lowest on record for so late in season Denver

47.0° Coldest since 1957 Pueblo

56.0° Coolest since 1957 Oklahoma City

51.6° Coolest since 1954 Ft. Smith

9.44" Precip 3rd wettest on record Memphis

14.20" Precip Greatest on record Previous 11.34-1957 Little Rock

61.6° Coolest since 1961 Alexandria

13.13" Precip Wettest on record 6th consecutive month above normal Tallahassee

11.61" Precip Greatest of record Jacksonville

8.1" snow - new record for month Albuquerque

59.7° Coolest April since 1920 Tucson

38.0° 5th coldest on record Flagstaff

56.0° Coolest since 1957 Oklahoma City

33° minimum on 9th new record for month Del Rio

15.30" Precip Wettest on record since 1915 63.7° second coldest April on record Port Arthur

26° on 11th Record low Atlanta

Jan-March total greatest on record Columbia

Very dry strong North winds Vegetation dry driest since 1956 Eureka

.05 Precip - driest since 1949 when 0.00 - station record Sacramento

.07 Precip Driest since 1969 Fresno

April 5 - First day above 80° - latest on record Previous March 14, 1891 Yuma