

Weekly Weather & Crop Bulletin

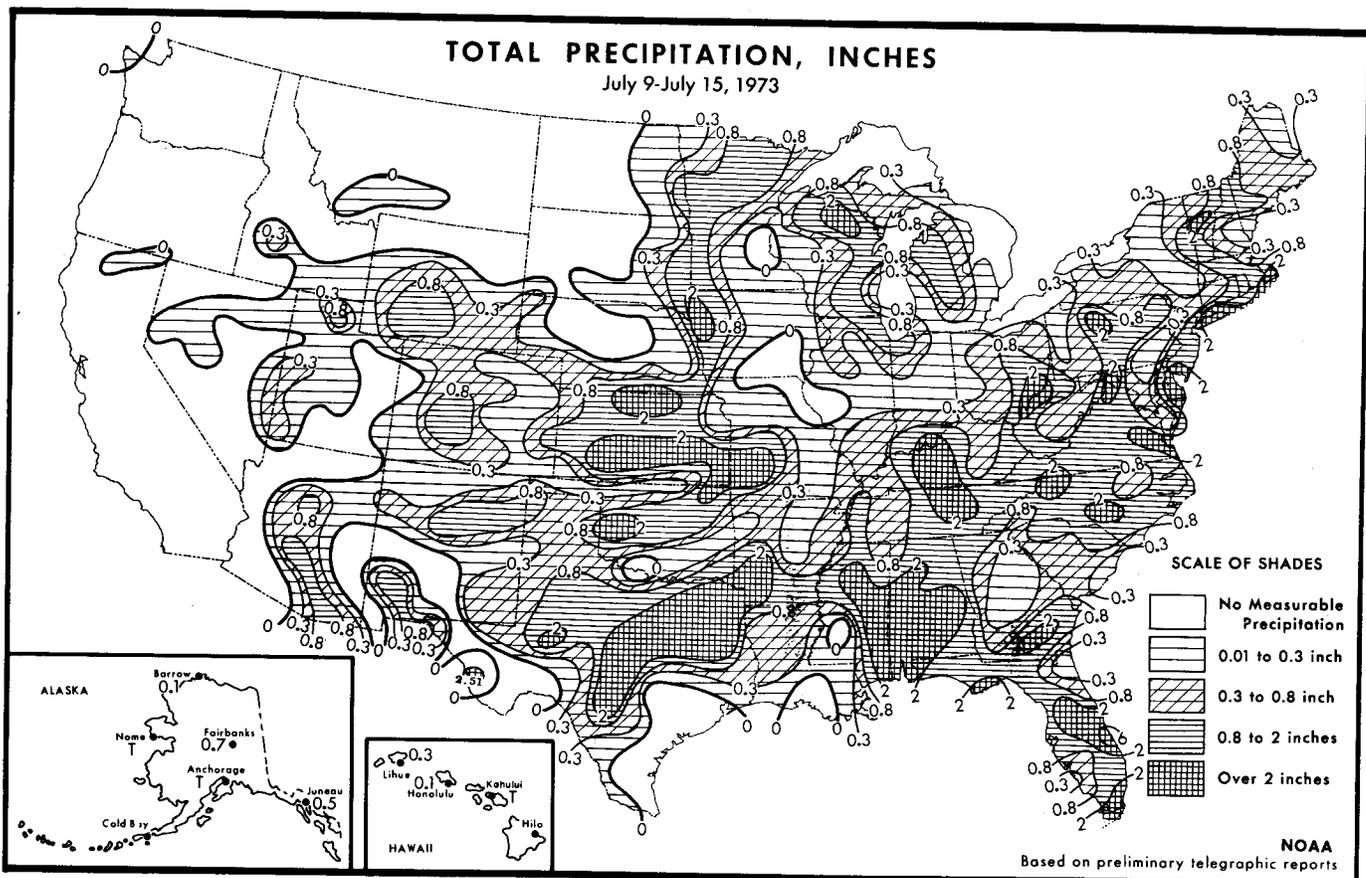
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NATIONAL WEATHER SUMMARY

HIGHLIGHTS: While most of the Nation averaged within 3° of normal the entire week, daily temperatures stood far from normal. Early week was hot, and many record highs were chalked up, while late week numerous record lows got on the books. Pandora, Ohio, tied its record low Thursday and its record high Friday. Thunderstorm activity was common east of the Rockies. Two major cold fronts passed through early and late week.

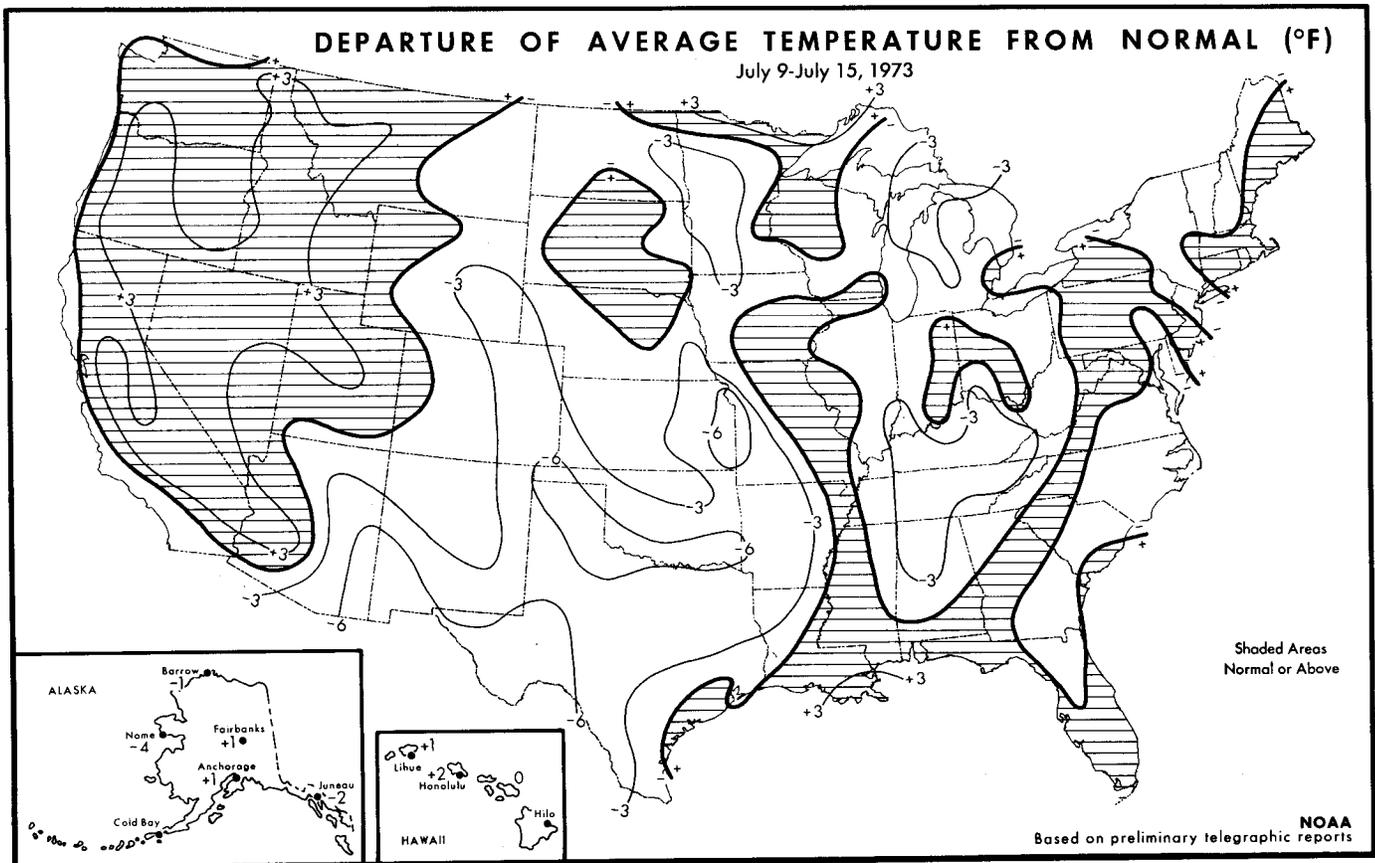
PRECIPITATION: The Northwest and northwestern Plains continued mostly dry, intensifying the drought. Also without rain: Most of California, Nevada, and scattered areas in States eastwards. In the Nation's eastern half, scattered areas had 2.00 in or more rain, while large areas got 0.80 in to 2.00 in.

Monday, a Low over the Dakotas and its

front caused violent weather: The eastern Dakotas were drenched--Sioux Falls, S. Dak., received 1.73 inches of rain accompanied by pea-sized hail in 45 minutes. The storm system moved east during the day and intensified. Madison, Wisc., received 1.91 in of rain in an hour, 1.25 in of that falling in just 25 minutes. Also, 58-mph winds blew over trees and wires as 3/4-in hail pelted the city. Much of central Iowa received 1.00 in or more.

Scattered thunderstorms and showers persisted throughout most of the East and South on Tuesday. Overnight, tornadoes touched down at Huron, S. Dak., near Denver, Colo., and Alamogordo, N. Mex., while 70-mph winds buffeted Sidney, Nebr. Over 1.00 in of rain fell in northeast Texas, Arkansas, and the southeast.

Significant Tuesday morning rains fell at Wichita, Kans., (1.64 in); Oklahoma City, Okla.,



(1.06 in); and at Peoria, Ill., (0.54 in). By afternoon 1.67 in had fallen at Dayton, Ohio, and 1.64 in at Louisville, Ky.

In the East, a thunderstorm drowned Annandale, Va., in 4.00 in rain that mostly fell within an hour's time. Winds blew down trees, interrupted electric service, and flooded highways. Wednesday brought sunny skies to most of the Nation because a High extended from the southern Rockies to the Great Lakes. While the East remained cloudy, and New England had rain, Texas was drenched with thunderstorms. Dallas-Ft. Worth got 2.00 in 24 hours. Later Wednesday, a front trailing from a Canadian low passed through Montana, the Dakotas and Minnesota. Livingston, Mont., had 80 mph winds. International Falls, Minn., got 1.37 in rain, while Baudette got heavy hail.

Thursday, numerous storms raged west of the Continental Divide. Phoenix, Ariz., got 0.50 in driving rain with 70 mph winds. Gusty winds blew dust throughout Arizona, reducing visibility and causing rockslides.

Friday stayed mostly a quiet sunny day; however, Harlan County Dam in south central Nebraska recorded a 6.50 in rain. Over the weekend thunderstorm activity was concentrated along a cold front, extending the Nation. By late Sunday this front had almost reached the East Coast.

TEMPERATURE: Most States had temperatures within 3° of normal. Some western desert areas averaged 3° above normal for the week, while most of Texas, neighboring States and parts of the Plains averaged 3° below.

Monday morning temperatures stood in the 50's over the northeastern Great Lakes, and most West Coast points, in the 70's from New England to Florida and over the Nation's east half. Several points on the Gulf and in the Plains started the week in the 80's. Later in the day it turned hot from the southwest, above 100°, to Atlantic City, N. J., whose airport had a record high, 93°.

Tuesday turned hot, too. Record highs were felt again at the Atlantic City airport, 92°, and Great Falls, Mont., hit 105°, a record. The desert Southwest baked in heat-- from 115° to 118°.

But midweek relief came to the Nation: a High brought cool air to the Nation's mid-section and cool Pacific air invaded the Northwest.

Thursday morning record low's included Bradford, Pa., 33°, Baltimore, Md., 54°, El Paso, Tex., 61°. At Cleveland, Ohio, the mercury fell the lowest in a century, 48°.

By Friday the Pacific air spread over the Northern Plains and upper Mississippi Valley and temperatures at midday were lowered 10° to 15°, as compared with Thursday. A rapid warming, however, occurred: at Pandora, Ohio, a record-tying 95° was recorded, after a record--equalling low on Thursday, 51°.

Over the weekend, the East stayed warm, while a cold front moved across the Plains. The Texas High Plains and Panhandle areas recorded record lows. North Platte, Nebr., set a new low 48° as did Denver, Colo., 48°, and Pueblo, Colo., 51°, breaking a record extending back to 1891.

NATIONAL AGRICULTURAL SUMMARY

AGRICULTURAL HIGHLIGHTS: Hot, dry weather forcing small grain maturity in northern Great Plains.

* Rapid progress combining wheat in central Plains and Corn Belt. * Conditions excellent for growth of corn, soybeans, and cotton. * Pastures drying up in the Dakotas.

SMALL GRAINS: The wheat harvest progressed rapidly on the Great Plains last week advancing to 95 percent complete in Kansas, 43 percent complete in Colorado, and 60 percent complete in Nebraska. High seasonal temperatures and dry weather forced rapid maturing of small grain crops from Nebraska northward. Swathing of small grains is becoming general in the Dakotas as the harvest gets underway earlier than normal. The South Dakota winter wheat harvest is 20 percent complete versus 17 percent normally harvested. In Minnesota where winter wheat is 4 percent swathed, most small grains are in fair to good condition although stands are rather thin and straw is short in some areas. Winter wheat harvesting is well along in the eastern Corn Belt--Ohio is 55 percent complete, Indiana 70 percent and Illinois 99 percent. Montana's winter wheat harvest is expected to start July 29. The Idaho winter wheat and barley harvest has started. Combining of small grains is increasing in Oregon and Washington, but is dwindling in California.

CORN: Several days of hot, humid weather across the Corn Belt last week stimulated rapid corn growth as the crop added a foot of height and continued in mostly good to excellent condition. The crop appears to be catching up with last year's growth in some States but there is a lot more variation than last year between fields and between States. Silking progress is generally behind last year's late crop with the Illinois crop 15 percent silked compared to 30 percent last year and an average of 34 percent. About 14 percent of Iowa's corn fields are in the silk stage versus 16 percent last year. Mostly adequate soil moisture supplies offset a rather light week of rainfall over most North Central States. Good rains were welcomed in Kansas as were showers in Wisconsin; however, corn in South Dakota suffered from hot, dry conditions. Southern corn received abundant rains last week and the crop is growing well in mostly good condition. Development is running behind last year. Silking ranges from 64 percent in South Carolina to 25 percent in Tennessee.

COTTON: Good rains benefited cotton in the South from the Plains of Texas to the Atlantic Coast. The crop made good growth and is in fair to good condition with about 70 percent of the cotton squaring in the Delta. Insects are starting a buildup in Texas and Arkansas but farmers are taking control measures. Development is behind usual in the Delta but on schedule in the South Atlantic States. In Mississippi, cotton is 75 percent squaring compared to 92 percent last year while 37 percent of the acreage is blooming versus 62 percent a year earlier. Early fields in Arkansas are blooming. Most cotton in Alabama is squaring with earliest acreage setting bolls while Oklahoma cotton is only 10 percent squaring compared to 45 percent last year. Cotton made normal progress in the western States with some bolls showing in all

areas of California. Arizona cotton is late but fair to good.

SOYBEANS: Growing conditions were excellent for soybeans both in the North and South Central Regions last week and the crop made good progress. Planting is virtually finished in the North Central Region and is nearing completion in the South Central Region. Development of Ohio and Indiana soybeans is matching last year. Illinois soybeans are in fair to mostly good condition with 15 percent blooming compared to 43 percent last year. Iowa soybeans are 24 percent blooming versus 32 percent last year. Soil moisture supplies from Iowa to Ohio are mostly adequate but soils are drying in Minnesota and South Dakota.

In the South, many farmers will finish planting soybeans this week. Most earlier planted acreage is in good condition with late planted acreage just emerging. Generous rains benefited the crop over much of the South.

OTHER CROPS: Farmers in most North Central States were busy cultivating row crops, combining wheat and oats and harvesting hay with about 6 days of the week favorable for fieldwork. Rains limited haying in the South. Some Texas farmers were planting sorghum following harvested wheat. Sorghum harvesting gained momentum in south Texas. Sorghum is developing well with no serious problems in Kansas and Nebraska. Tobacco harvesting is gaining momentum from Georgia to North Carolina while growth is slow and irregular in Kentucky and Tennessee. Peanuts are in good condition from Virginia to Georgia with rain improving conditions considerably in Alabama. Idaho potatoes made good growth while Aroostook Co., Me., potatoes look good, although skips are more than usual.

Fruits and Nuts: Peach harvesting made good progress in the South while tart cherry picking was well underway in Northern orchards. New Jersey blueberry supplies were heavy. The Georgia pecan crop is in fair to mostly good condition while a smaller crop is indicated in Texas than last year. Stone fruit picking in California was active; harvest of Valencia oranges and grapefruit continued, also.

Vegetables: The harvest of vegetables increased in the Mid and North Atlantic States. Harvest of Orange Co., N. Y., onion sets and celery began. Wisconsin vegetables are in fair to good condition. Watermelon harvesting started in Arkansas but is nearing completion in the San Antonio-Winter Garden area of Texas. Tomato picking is active in North Texas and increasing in the San Joaquin Valley of California.

PASTURES AND LIVESTOCK: Hot, dry weather is drying up pastures in the Dakotas and intensifying the drouth in the Northwest. Pastures declined in Wisconsin, Indiana, and Nebraska from drying but most eastern pastures remained in above average condition. Much needed rain benefited pastures in Kansas. Texas ranges are in excellent condition from good rains. Fire danger remained high on lower elevation ranges in the West. Hot weather and pinkeye caused problems for cattle in many States, but most grazing stock are in good shape.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., July 15, 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	- 4	1.2	0	La. Baton Rouge . . .	84	+ 1	T	-.9	Youngstown . . .	69	- 2	.6	-.4
Mobile . . .	84	+ 1	2.3	+ .3	Lake Charles . . .	82	0	.1	-1.8	OKLA. Okla. City . . .	78	- 4	1.4	+ .9
Montgomery . . .	82	0	4.8	+3.5	New Orleans . . .	84	+ 3	.4	-1.1	Tulsa . . .	80	- 2	1.8	+1.1
ALASKA. Anchorage . . .	58	+ 1	T	-.4	Shreveport . . .	80	- 4	.8	-.2	OREG. Astoria . . .	60	0	T	-.3
Barrow . . .	38	- 1	.1	0	MAINE. Caribou . . .	65	0	.1	-.8	Burns . . .	71	+ 1	0	-.1
Fairbanks . . .	61	+ 1	.7	+ .3	Portland . . .	71	+ 3	.2	-.4	Medford . . .	76	+ 4	0	0
Juneau . . .	54	- 2	.5	-.5	MD. Baltimore . . .	77	0	.2	-.7	Pendleton . . .	75	+ 1	0	0
Kodiak . . .	---	---	---	---	MASS. Boston . . .	74	0	.7	+ .1	Portland . . .	72	+ 4	0	-.1
Nome . . .	45	- 4	T	-.4	Chatham . . .	68	---	3.7	---	Salem . . .	69	+ 3	0	-.1
ARIZ. Flagstaff . . .	66	0	.8	+ .4	MICH. Alpena . . .	64	- 2	.2	-.5	PA. Allentown . . .	75	+ 1	.2	-.9
Phoenix . . .	93	+ 3	1.3	+1.1	Detroit . . .	73	0	T	-.6	Erie . . .	68	0	T	-.9
Tucson . . .	83	- 5	.8	+ .4	Flint . . .	69	- 1	.2	-.5	Harrisburg . . .	76	0	.2	-.6
Winslow . . .	76	- 5	T	-.2	Grand Rapids . . .	72	- 1	.2	-.4	Philadelphia . . .	77	+ 1	1.6	+ .7
Yuma . . .	93	0	0	0	Houghton Lake . . .	66	- 1	.4	-.3	Pittsburgh . . .	73	+ 1	.3	-.6
ARK. Fort Smith . . .	78	- 5	.9	+ .3	Lansing . . .	69	- 3	1.4	+ .8	Scranton . . .	71	- 2	1.6	+ .5
Little Rock . . .	78	- 4	.3	-.5	Marquette . . .	65	- 2	.4	-.3	R.I. Providence . . .	73	+ 1	1.7	+1.0
CALIF. Bakersfield . . .	87	+ 3	0	0	Muskegon . . .	69	- 2	.1	-.4	S.C. Charleston . . .	83	+ 2	2.2	-1.5
Eureka . . .	56	0	T	0	S. Ste. Marie . . .	61	- 4	.1	-.5	Columbia . . .	80	- 2	.4	-1.3
Fresno . . .	83	+ 1	0	0	MINN. Duluth . . .	65	0	.4	-.4	Greenville . . .	80	0	.9	-.3
Los Angeles . . .	71	- 2	0	0	Internat'l Falls . . .	70	+ 4	1.4	+ .6	S.D. Aberdeen . . .	75	+ 2	T	-.6
Red Bluff . . .	85	+ 1	0	0	Minneapolis . . .	74	+ 1	0	-.7	Huron . . .	73	- 2	.8	+ .4
San Diego . . .	68	- 2	T	0	Rochester . . .	71	- 1	T	-.8	Rapid City . . .	74	0	T	-.4
San Francisco . . .	62	0	0	0	St. Cloud . . .	68	- 3	.1	-.6	Sioux Falls . . .	76	+ 2	1.7	+1.1
Stockton . . .	83	+ 5	0	0	MISS. Jackson . . .	83	+ 1	0	-1.1	TENN. Chattanooga . . .	79	- 2	.9	-.3
COLO. Denver . . .	71	- 2	.4	0	Meridian . . .	81	- 1	4.5	+3.0	Knoxville . . .	76	- 3	1.4	+ .3
Grand Junction . . .	80	+ 1	.1	0	MO. Columbia . . .	78	+ 1	T	-.7	Memphis . . .	83	+ 1	.6	-.2
Pueblo . . .	74	- 3	.2	-.2	Kansas City . . .	75	- 7	.1	-.5	Nashville . . .	77	- 4	1.4	+ .5
CONN. Bridgeport . . .	74	0	2.5	+1.7	St. Louis . . .	79	+ 1	.1	-.6	TEX. Abilene . . .	79	- 4	.9	+ .4
Hartford . . .	74	+ 1	.4	-.4	Springfield . . .	75	- 4	2.1	+1.2	Amarillo . . .	75	- 6	.6	+ .1
D.C. Washington . . .	79	+ 1	.6	-.3	MONT. Billings . . .	74	- 1	T	-.2	Austin . . .	82	- 3	T	-.5
FLA. Apalachicola . . .	83	+ 2	2.1	+ .4	Glasgow . . .	71	0	0	-.3	Beaumont . . .	82	0	.2	-1.2
Daytona Beach . . .	82	+ 2	.8	---	Great Falls . . .	73	+ 3	0	-.3	Brownsville . . .	83	- 1	0	-.4
Ft. Myers . . .	82	0	.3	-1.8	Havre . . .	71	+ 1	0	-.2	Corpus Christi . . .	84	0	0	-.5
Jacksonville . . .	82	- 1	1.1	-1.7	Helena . . .	72	+ 3	T	-.2	Dallas . . .	---	---	---	---
Key West . . .	83	0	2.3	+1.4	Kalispell . . .	67	+ 1	0	-.2	Del Rio . . .	80	- 6	.3	0
Lakeland . . .	82	0	1.1	-1.0	Miles City . . .	75	- 1	0	-.3	El Paso . . .	76	- 6	1.8	+1.5
Miami . . .	82	0	3.4	+1.8	Missoula . . .	71	+ 4	T	-.2	Fort Worth . . .	82	- 4	5.3	+4.9
Orlando . . .	84	+ 1	2.5	+ .6	NEBR. Grand Island . . .	78	0	.3	-.3	Galveston . . .	83	+ 1	0	-1.0
Tallahassee . . .	82	0	.9	-.9	Lincoln . . .	77	- 3	.1	-.6	Houston . . .	83	+ 1	0	-.1
Tampa . . .	83	+ 1	1.8	-.1	Norfolk . . .	78	+ 1	.1	-.5	Lubbock . . .	75	- 5	.8	+ .3
W. Palm Beach . . .	82	- 1	1.4	---	N. Platte . . .	75	- 1	T	-.6	Midland . . .	76	- 7	1.6	+1.2
GA. Atlanta . . .	79	0	.5	-.6	Omaha . . .	75	- 2	1.0	+ .2	San Angelo . . .	81	- 4	.6	+ .3
Augusta . . .	81	0	.4	-.6	Valentine . . .	76	+ 1	.1	-.4	San Antonio . . .	82	- 2	.7	+ .2
Macon . . .	83	+ 1	T	-1.3	NEV. Ely . . .	70	+ 2	.2	0	Victoria . . .	84	+ 1	0	-.9
Savannah . . .	82	+ 1	1.9	+ .4	Las Vegas . . .	93	+ 3	0	-1	Waco . . .	82	- 4	4.5	+4.0
HAWAII. Hilo . . .	---	---	---	---	Reno . . .	72	+ 4	T	-.1	Wichita Falls . . .	80	- 6	T	-.4
Honolulu . . .	81	+ 2	.1	0	Winnemucca . . .	75	+ 4	T	-.1	UTAH. Blanding . . .	72	0	.2	0
Kahului . . .	78	0	T	-.1	N.H. Concord . . .	68	- 2	.2	-.6	Salt Lake City . . .	80	+ 3	.2	+ .1
Lihue . . .	79	+ 1	.3	-.1	N.J. Atlantic City . . .	76	+ 1	1.7	+ .9	VT. Burlington . . .	67	- 2	.7	-.2
IDAHO. Boise . . .	78	+ 3	.1	0	Trenton . . .	76	0	1.0	+ .1	VA. Lynchburg . . .	75	- 2	2.8	+1.9
Lewiston . . .	78	+ 4	0	-.1	N.MEX. Albuquerque . . .	78	- 1	1.1	+ .8	Norfolk . . .	78	- 1	2.4	+1.0
Pocatello . . .	74	+ 1	.1	-.1	Roswell . . .	76	- 3	.5	+ .1	Richmond . . .	77	- 2	2.0	+ .7
ILL. Cairo . . .	79	- 2	.6	-.1	N.Y. Albany . . .	72	0	.4	-.6	Roanoke . . .	77	0	1.8	+ .8
Chicago . . .	76	0	1.4	+ .7	Binghamton . . .	69	+ 1	.4	-.5	WASH. Colville . . .	72	+ 3	0	-.1
Moline . . .	77	0	.5	-.3	Buffalo . . .	72	+ 2	.5	-.1	Omak . . .	70	- 1	0	-.1
Peoria . . .	75	- 1	.5	-.3	New York . . .	76	- 1	1.9	+1.1	Quillayute . . .	60	0	.1	-.4
Rockford . . .	74	0	.3	-.6	Rochester . . .	72	0	.3	-.4	Seattle-Tacoma . . .	66	+ 1	0	-.2
Springfield . . .	80	+ 2	0	-.9	Syracuse . . .	70	- 2	.3	-.4	Spokane . . .	72	+ 1	0	-.1
IND. Evansville . . .	76	- 4	.9	+ .1	N.C. Asheville . . .	74	- 1	.6	-.4	Walla Walla . . .	77	+ 1	0	0
Ft. Wayne . . .	75	+ 1	T	-.8	Charlotte . . .	80	+ 1	1.2	+ .1	Yakima . . .	73	+ 2	0	0
Indianapolis . . .	75	0	.1	-.7	Greensboro . . .	76	- 2	1.0	-.1	W.Va. Beckley . . .	69	- 2	.8	-.3
South Bend . . .	74	0	.3	-.5	Hatteras . . .	76	- 2	1.0	-.5	Charleston . . .	74	- 1	.6	-.7
IOWA. Burlington . . .	77	0	.1	-.7	Raleigh . . .	76	- 2	.8	-.5	Huntington . . .	76	+ 1	1.1	0
Des Moines . . .	78	+ 2	T	-.8	Wilmington . . .	79	- 1	.6	-1.3	Parkersburg . . .	75	- 1	3.5	+2.6
Dubuque . . .	73	0	.4	-.4	N.DAK. Bismarck . . .	72	0	T	-.5	WIS. Green Bay . . .	70	- 1	.9	+ .3
Sioux City . . .	76	- 1	2.5	+1.8	Fargo . . .	68	- 4	1.3	+ .7	La Crosse . . .	74	0	.1	-.7
KANS. Concordia . . .	78	- 2	3.0	+2.4	Williston . . .	71	- 1	0	-.4	Madison . . .	71	0	1.9	+1.1
Dodge City . . .	79	- 1	2.4	+1.8	OHIO. Akron-Canton . . .	72	- 1	.7	-.2	Milwaukee . . .	70	+ 1	.1	-.6
Goodland . . .	74	- 2	.3	-.3	Cincinnati . . .	73	- 3	.6	-.2	WYO. Casper . . .	69	- 3	.3	+ .1
Topeka . . .	76	- 4	.3	-.6	Cleveland . . .	71	- 1	.4	-.4	Cheyenne . . .	66	- 4	.4	0
Wichita . . .	78	- 3	2.6	+1.7	Columbus . . .	75	0	.7	-.2	Lander . . .	70	- 1	.9	+ .7
KY. Lexington . . .	74	- 3	.8	-.1	Dayton . . .	76	0	.2	-.6	Sheridan . . .	71	0	0	-.2
Louisville . . .	77	0	2.4	+1.6	Toledo . . .	72	- 1	T	-.6	P.R. San Juan . . .	84	+ 4	0	-1.3

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: Warm temperatures with scattered afternoon thundershowers Tuesday preceded cold front passing southward Wednesday. Markedly lower humidity and cooler temperatures over State early Thursday. Temperatures averaged 2° subnormal Wednesday and early Thursday. Near record morning low 62° at Birmingham Thursday. Steadily warming with increased thundershower activity returned weekend. Heaviest rains south and central Friday afternoon spreading northward Saturday. Fieldwork only limited progress as scattered rains slowed activities many localities. Most cotton squaring, earliest acreage setting bolls south and central. Insect scouting underway but no buildup reported. Rains over weekend southeast should prevent further deterioration of early planted corn damaged by dry weather. Corn remainder of State made good development. Prospects for soybeans favorable, but grass and weeds problem many fields. Rain improved conditions for peanuts considerably. Limited amount hay saved as cutting slowed by rain.

ALASKA: Rainfall near or above normal Tanana Valley. Dry weather continued from Matanuska Valley south through Homer with little or no rain. Temperatures agriculture areas near normal. Haying in progress all areas. Crop growth good. Barley headed out Tanana and Matanuska Valleys. Vegetable harvest underway all areas. Soil moisture adequate only in Tanana Valley.

ARIZONA: Tropical moisture over State during week. Scattered heavy showers all sections except southwest. Temperatures near normal. Cotton late but generally fair to good, some boll set except late fields central, southwest. South-eastern areas squaring, some lygus bugs, fleahoppers. Hot weather caused some shedding, normal level. Early sorghum approaching maturity Yuma Co., late planting continues statewide, normal progress all stages. Safflower normal progress, nearing maturity where not harvested. Sugar beet harvest virtually completed Maricopa, Yuma Counties; normal progress, Cochise Co. Alfalfa hay normal progress, some rain damage. Cantaloupe harvest virtually complete Yuma, full swing central; sizes larger than normal, quality good. Watermelon harvest continued full swing central, increasing west. Mixed vegetable harvest completed. Chili good progress southeast. Potato harvest continued active Salt River Valley, shipments behind last season. Harvest grapes active central, west; yields, quality generally good. Limited picking Valencias, grapefruit Salt River Valley; high byproduct elimination both varieties. Groves good, insect controls applied as needed. Fruit set, especially Salt River Valley, light. Ranges generally good. High ranges got scattered rain, low ranges dried, generally fair. Desert ranges poor. Stockwater adequate. Cattle, calves generally good. Sheep, lambs fair to good.

ARKANSAS: Mean temperature mid-70's northwest to near 80° much of eastern third and along southern borders. From 1° to 5° subnormal with largest departures mainly western two-thirds. Extremes: 96° Brinkley; 53° Calico Rock. No major day to

day temperature changes during week, turning cooler weekend. Largest weekly precipitation total 2.72 in at Mena and smallest at Calico Rock with 0.10 in. Most rain fell early week and on weekend. Warm days, scattered showers stimulated crop growth. Rain needed for new plantings. Cotton made good growth, early fields blooming, few small bolls, insect buildup several areas but control measures taken. Rice looks good. Soybeans good, planting to finish this week. Weeds, pythium disease, cyst nematodes, army worms problems. Sorghum maturity varies from planting to heading, some midge and blueworm problems. Corn progressed, fields tasseling to roasting ear stage. Haying slowed by showers. Apple, peach, tomato cucumber harvest active. Watermelon, okra harvest starting. Pastures adequate. Cattle good.

CALIFORNIA: Scattered thundershowers began northern mountains Wednesday and spread central Sierras Friday. Temperatures averaged 1° to 3° above normal central valley and desert southeast, slightly above normal over most mountain sections, but fog and low clouds along coastal areas kept temperatures slightly subnormal. Afternoon readings climbed to 105° central valley by midweek. Small grain harvest decreasing. Field corn, milo excellent, treating cutworms general. Rice very good. Cotton good growth, some bolls all areas. Early safflower fields drying rapidly. Perlette, Cardinal, Beauty Seedless, and exotic grape harvests continue. Thompson Seedless harvest declining south, heat reduced some yields; harvest begins this week Bakersfield area. Normal insect and mildew controls. Picking peaches, plums, nectarines, apricots, Bartlett pears, and gravenstein apples active. Prunes showing color early orchards. Husks splitting some almond orchards. Walnut development about normal, whitewashing trees for sunburn protection. Avocado harvest continues light. Packing black figs Visalia. Date bagging becoming active. Lemon harvest slow, season end nears. Valencia orange and other area grapefruit picking still active. Broccoli, cauliflower, shipments moderate Salinas; Santa Maria decreased. Cantaloupe harvest complete Palo Verde; Kern County winding down; central San Joaquin increasing. Carrot digging Salinas, Santa Maria increasing. Celery movement Salinas increasing. Sweet corn picking San Joaquin, southern California increasing. Salinas lettuce volume good; heavy Santa Maria. Honeydew underway. Potato digging continues Hemet area; good yields, quality. Market tomato increasing San Joaquin Valley; San Diego to increase next 10 days. Processing tomato harvest to start this week Sacramento Valley. Watermelon harvest San Joaquin increasing; Blythe nearing completion. Ranges good, some areas supplemental feeding necessary, scarcity feed. Fire danger high on dry rangelands. Stockwater satisfactory most areas. San Joaquin, Sacramento Valleys sheep moved onto stubble, as available San Joaquin Valley. Bees moved seed alfalfa, melon fields pollination.

COLORADO: Significant rainfall much of State. Local amounts central and east totaled over 1.00 in but most between 0.10 and 0.75 in. Cold front dropped maximum temperatures by 5° to 15° most

areas. Highs lower elevations in 80's and 90's early week but fell to 70's and 80's after 12th. Extremes: 99° Grand Junction; 34° Fraser. Weekly mean temperatures averaged 1° to 3° above normal. Condition most field crops good to excellent. Heat and localized shower activity promoting good row crop growth. Some pastures and range areas burning east. Light insect infestation alfalfa and small grains. Winter wheat all turning color, 81% ripe and 43% harvested. Winter barley turning color, 60% ripe and 51% harvested. Corn final cultivation 72% complete. Sorghum up to stand. Sugar beets very good. Dry beans excellent. Potatoes very good to excellent. First cutting alfalfa 90% complete, second cutting 7% complete, condition very good. Range and pasture good to very good. Lettuce harvest San Luis Valley in progress. Livestock good.

FLORIDA: Thundershowers scattered throughout period, heaviest central and south. Most locations received some rain. Warm and humid with temperatures near normal. Cotton good, many fields spotty due to poor germination and dry weather at planting time. Early corn good, late corn fair but additional moisture needed. Peanuts making good growth. Tobacco harvest active. Soybeans good. Grazing conditions good to excellent. Haying active. Vegetable supplies limited. Sweet corn essentially complete. Watermelons near end. Limited quantities eggplant, southern vegetables moving to local markets. Citrus tree condition continues excellent, moisture adequate, new crop sizing well. Old crop Valencia holding well, old crop grapefruit harvest almost complete.

GEORGIA: Temperatures very near seasonal normals but nights a bit cool northern mountain counties Thursday and Friday. Precipitation continued light southwest but heavy southeast to moderate central and north. Substantial outbreak of thundershowers Saturday with little temperature change over weekend. Soil moisture short southwest and some central areas, elsewhere mostly adequate. Crop conditions continue highly variable. Corn fair to mostly good, some showing stress from dry weather. Cotton fair to good, 64% setting bolls. Tobacco harvest 51% complete. Peanuts mostly good, disease control and landplastering active. Peach crop 78% harvested. Haying active, condition good. Sweet potatoes fair to mostly good. Pastures and cattle good, some reports of pinkeye. Pecan crop fair to mostly good. Vegetables and melons fair to good. Japanese beetles in north proving difficult to control.

HAWAII: Shower activity continued in windward sections. More rain needed to replenish water supply. Crop progress fair to good. Harvesting of sugarcane and pineapples active. Night shift in pineapple cannery and field operations in full swing.

IDAHO: Temperatures north slightly subnormal; no precipitation. South averaged warmer and drier than normal, warmest midweek highs in upper 90's and 100's. Highest temperature 108°, Jerome. Cooling late week with light precipitation southwest and southcentral. East heavier precipitation, greatest 0.38 in at Blackfoot. Dry hot weather hastened maturity of all crops especially dryland areas. Livestock good. Range and nonirrigated pastures dry. Aphid infestations southwest alfalfa fields, grasshoppers troublesome east. Winter wheat and barley harvest started. Statewide, 30% spring wheat fields turned, some ripening in southwest. Potato crop made good growth, 85%

rows closed southwest, southcentral 60% closing middles and 15% east. First cutting alfalfa nearly complete. Second cutting alfalfa started southwest and southcentral. Grass haying also active with yields reported light. Dry pea harvest started north, poorer pea fields cut for hay. Alfalfa and grass hay cuttings light all areas mostly north where drouth restricted growth.

ILLINOIS: Temperatures near normal to slightly subnormal southwest, extreme south. Precipitation subnormal. Corn nearly 15% silked, 30% last year, 1970-72 average 34%. Condition 16% excellent, 71% good, 12% fair, 1% poor; last year good to excellent 82%. Soybeans blooming about 15% of fields, 43% last year, average 49%. Condition 7% excellent, 61% good, 28% fair, 4% poor; last year good to excellent 71%. Wheat harvest virtually complete, about usual completion date. Oats 85% turned yellow, 70% last year, average 86%; nearly 55% ripe, 44% last year, average 73%; combining 15%, 23% last year, average 28%. Barley 90% harvested. Alfalfa hay second crop 35% cut, 42% last year, average 51%. Red clover hay cutting virtually complete, condition mostly good to excellent. Pastures mostly good to excellent. Soil moisture 23% short, 77% adequate. About 6.5 days suitable fieldwork. Main activities cultivating, haying, combining wheat and oats.

INDIANA: Sunny week. Scattered showers west-central and south averaged about 0.50 in. Temperatures and humidity subnormal. Evaporation and sunshine above normal. Fieldwork averaged 6 days. Topsoil moisture short to mostly adequate. Subsoil moisture adequate. Wheat 95% ripe, 70% combined, 55% in 1972 and average. Oats 10% combined, 5% in 1972, 15% average. Barley 69% combined, same as 1972. Rye 45% harvested, slightly behind 1972. Corn 5% silked, same as 1972; 44 in high, 42 in last year. Soybeans 12 in high, 10% in bloom, matching 1972. Alfalfa hay 15% cut second time, more than week behind 1972. Pastures decline, fair to good.

IOWA: Sunny, dry week. Temperatures near normal with above normal readings early week followed by subnormal at weekend. Precipitation light and scattered, only small areas receiving significant amounts early week. Growing crops mostly good to excellent. With warm humid weather late planted crops catching up. Weed control generally good, ranges from fair to excellent, some soybean fields being walked to pull weeds. Over 6 days suitable for fieldwork. Corn mostly good to excellent, 14% of fields 75% or more silked, year ago 16%. Soybeans fair to excellent, 24% blooming, year ago 32%. Northwest most advanced, over 20% corn 75% or more silked and nearly 50% soybeans blooming. Oats 10% harvested, last year 5%, 5-year average 18%. Winter wheat 40% harvested, last year 55%. Second cutting alfalfa hay 30% complete, clover hay first cutting nearly 85% complete. Hay crops good to excellent. Pastures fair to excellent, mostly good. Topsoil moisture 16% short, 79% adequate, and 5% surplus.

KANSAS: Significant rainfall over most of State late week. Local rainfall over 3.00 in north-west and northcentral. Temperatures cooler late week, averaging from about slightly subnormal northwest to near 4° subnormal southeast. Wheat harvest in wrap-up stage all except northwest area. Harvest 95% completed, a week earlier 76%, previous year 97%, and 10-year average 94%. Sorghum developing well with no serious problems. Hot, dry weather delayed some forage planting. Corn 85%

laid by, year earlier. 91%, 10-year average 85%. Corn 14% tasseled, last year 30%, average 38%. Soybean development behind normal, 2% setting pods, 5% a year ago, 9% average. Second cutting alfalfa 80% complete, last year 74%, average 81%. Third cutting alfalfa 5% complete, last year 4%, average 9%. Livestock good with some hot weather problems. Dry pastures and cropland benefited from much needed moisture which fell in many areas late week.

KENTUCKY: Temperatures in low 90's early week. Heavy thundershowers Tuesday caused flash flooding in Estill County, rainfall 2.00 to 3.00 in parts of State. Midweek temperatures 5° to 10° subnormal under clear skies. Thundershowers Saturday. Sunday cloudy, mild, some rain. Nearly 5 days favorable fieldwork despite heavy showers. Soil moisture mostly adequate, some shortages developing west. Activities centered around planting late soybeans, cultivating beans and corn, baling hay and spraying tobacco. Corn growing well, 17% tasseled, 27% last year. Soybeans average 10 in tall, 14 in year ago; many late planted beans just emerging. Tobacco mostly under 24 in tall, growth irregular due to wet weather, diseases and nitrogen deficiency. Insect problems on 60% of patches, especially bad in west half. Much hay being saved; field stackers and large round bales becoming popular.

LOUISIANA: Warm week, slight cooling north late week. Temperatures 2° to 4° subnormal north, normal to 3° above south. Extremes: 100°; Colfax; 58°, Winnfield. Precipitation light, widely scattered thundershowers. Totals less than 1.00 in north and central, less than 0.25 in south. Greatest 1-day total 0.75 inch Shreveport. Soil moisture generally adequate except short south. Harvesting hay, cultivating and completing soybean planting active. Early soybeans good stands, late planted not full. Cotton good progress, 70% squaring, first blooms reported south. Rice heading, progress later than last year but near normal. Sugarcane needs rain, good condition. Corn needs rain, maturing in south. Sorghum late, insects troublesome. Harvesting peaches, tomatoes, green peppers declining. Watermelons ripening, 2 weeks later than last year. Pastures need rain.

MARYLAND AND DELAWARE: Temperatures near normal, warm beginning and cool end of week. Extremes mid to upper-90's and low to mid-50's except mid 80's and low 40's in Garrett County. Precipitation subnormal most sections, light amounts northern tier, near normal central and heavier amounts up to 1.70 in southern Eastern Shore. Good week for fieldwork. Topsoils becoming dry central and west. Corn progressing rapidly, 25% silked, 12% last year, 21% in 1971. Soybean planting 97% done, last year 84%. Barley harvest practically done. Wheat 65% combined, last year 27%, average 57%. Cucumber, sweet corn and squash harvest active, cantaloupe and tomatoes starting. Summer apples and early peaches being picked all areas.

MICHIGAN: Thunderstorms midweek. Warm front followed Friday, afternoon temperatures reached mid-90's, warmest this year in places. Cold front near weekend, preceded by showers and thunderstorms lower State. Subsequent overnight low's in low to mid-40's scattered areas. Hail northwest Lower Thursday and in Thumb area Friday. Rainfall totaled 0.50 to near 1.50 in some lower southwest and southcentral areas, 0.50 to around 1.00 in most upper areas, and variable amounts up to 0.50 other areas. Field crops grew rapidly.

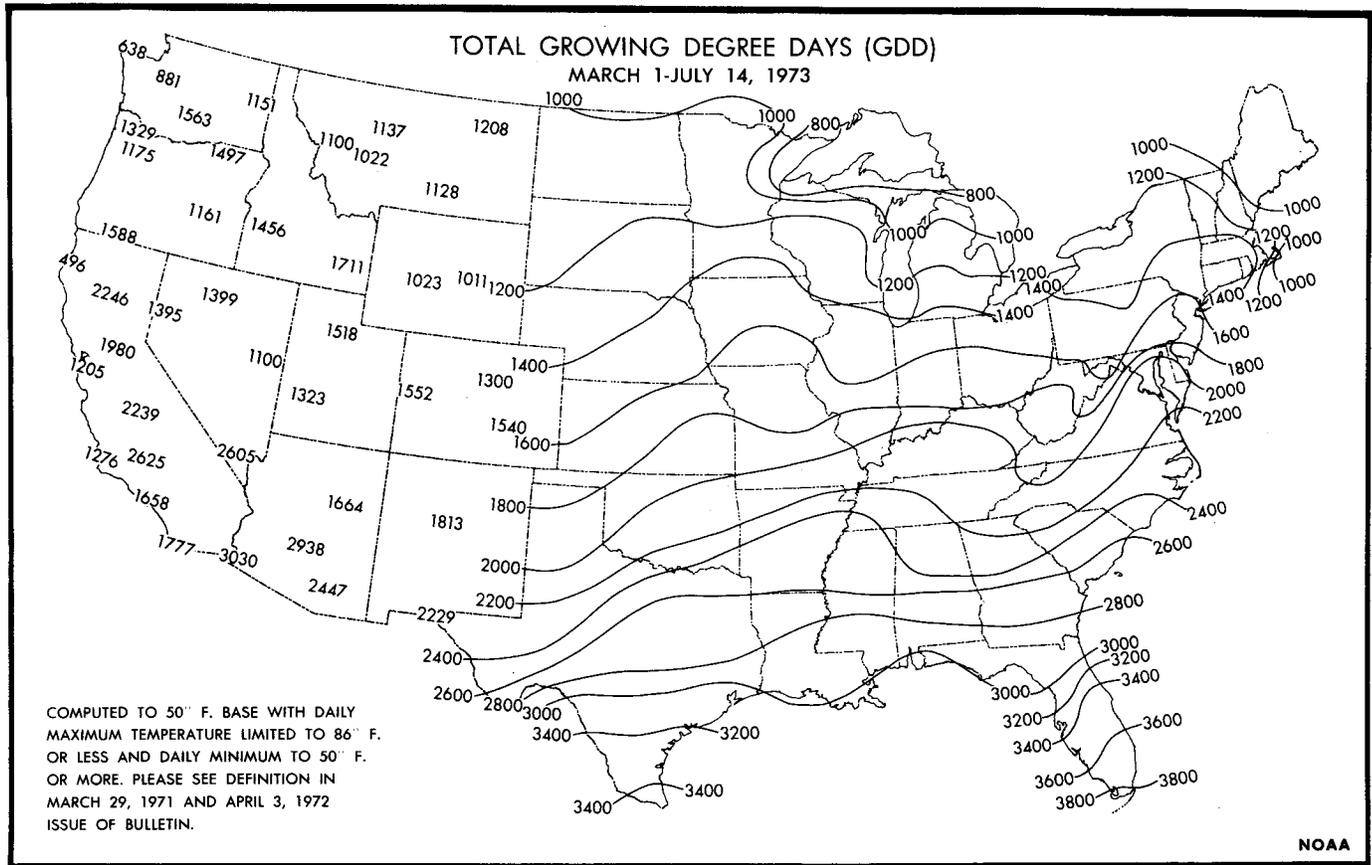
Soil moisture mostly adequate. Averaged 5.3 days suitable fieldwork. Winter wheat 34% ripe, harvest started. Oats 88% headed or more advanced. Corn development varies with planting date, average height 31 in. Soybeans growing well. Sugar beet growth excellent. Considerable water damage to dry beans showing up, some replanted. Root rot prevalent in navy beans some areas. Still harvesting large crop first cutting hay. Pasture feed supplies above average. Sweet cherry harvest active northwest, completed southwest. Tart cherry harvest active southwest, started west-central.

MINNESOTA: Very warm, temperatures 3° to 5° above normal except over northwest and north-central where cool nighttime temperatures lowered averages to about 1° subnormal. Highs 80° to mid-90's common through Thursday with cooling thereafter. Precipitation ranged generally 0.50 to 0.75 in subnormal except for normal to 0.50 in above normal over most northeast, and western sections of southwest district. Warm, dry week hastened crop development, progress continues 1 week ahead of average. Soil moisture depleting rapidly but cool night temperatures aiding ripening of small grains. Most small grains fair to good although stands rather thin and straw short some westcentral and northwestern counties. Rye 19% swathed, winter wheat 4%. Soybeans 50% blooming, 5-year average 33%; height 17 in, average 14 in. Corn mostly good, short 15% tasseling, height 52 in, 5-year average 41 in.

MISSISSIPPI: Temperatures averaged from normal to 4° subnormal. Extremes 54°, 97°. Rain reported 2 to 4 days. Average rainfall statewide generally 0.33 to 0.75 in except 1.30 in southeast and northeast and 2.60 in eastcentral. Soil moisture very short to surplus, mostly adequate. Averaged 5.1 days suitable for fieldwork. Soybean planting 97% complete, 89% up to stand. Cotton 75% squaring, last year 92%; 37% blooming, year earlier 62%. Wheat and oat harvest complete. Hay 97% and peaches 72% harvested. Sorghum and sweet-potatoes 95% planted. Corn 38% silked, year earlier 64%. Field crops fair to good, hay and pasture good.

MISSOURI: Continued dry except for spotty local thundershowers. Afternoon highs: upper-80's to mid-90's daily. Temperatures near normal for mid-July. A few local areas have had ample rain but soil over most of State becoming very dry. Fieldwork: 6 days suitable. Wheat 90% harvested, finished last year. Clover-timothy hay 74% cut, 86% year ago. Second cutting alfalfa 64% harvested, 74% in 1972. Cotton fair; 65% squaring, 79% year ago. Corn fair to good; 9% silked, 36% silked in 1972. Soybeans fair to good. Soil moisture 41% short, 58% adequate, 1% surplus. Motor fuel supply available for current farm work remains adequate.

MONTANA: Unseasonably warm and dry. Record breaking temperatures Monday with readings of 100° or more. Near normal late week portion. Weekly temperatures near normal east, 3° to 4° above central and west. Precipitation well below normal. Topsoil moisture mostly short all areas. Winter wheat 65% turning, 35% headed. Spring wheat 20% turning, 65% headed, 15% boot. Barley 20% turning, 60% headed, 20% boot. Average date winter wheat harvest expected to start July 29. First cutting alfalfa 75% complete, wild hay 45% complete. Current supplies irrigation water below normal northwest, northcentral and central, below nor-



mal to average elsewhere. Grazing prospects late summer range, poor to fair northwest, northcentral, and central; fair to good eastern third, poor to good elsewhere.

NEBRASKA: Temperatures above normal through midweek with highs in 90's, subnormal thereafter. Precipitation spotty, most east. High temperatures speeded maturity of wheat crop, 85% ripe, 70% a year earlier, 79% average. Harvesting progressing rapidly, 60% complete, 65% in 1972, 59% average. Much late wheat west ripened prematurely; result shriveled kernels. Corn, sorghum and soybeans mostly good to excellent. Corn 28% excellent, 66% good, 6% poor; 16% silking, 13% a year earlier and average. Some corn root-worm damage. Sorghum 20% excellent, 71% good, 9% fair; greenbugs present most fields, population low. Soybeans 31% excellent, 56% good, 13% fair. Second crop alfalfa 50% cut. Alfalfa good to excellent. Wild hay mostly good, first cutting reported. Sugar beet weeding almost completed, good to excellent. Dry beans average condition but 1.5 to 2 weeks late. Topsoil moisture 85% short, 15% adequate. Subsoil supplies 47% short, 53% adequate. Main farm activities harvesting wheat, cultivating, hilling row crops and irrigating. Range and pasture declined, mostly average to below average. Stock suffered from heat.

NEVADA: Temperatures 2° to 4° above normal with 6° above southcentral. Extremes: 114° Logandale; 35° Mountain City. Precipitation: None south to 0.25 northeast, heaviest 0.44 Battle Mountain. Alfalfa first cutting nearing completion north, second cutting starting central valleys. Third cutting complete southern valleys. Cotton bloom-

ing and holding up well despite heat. Small grain harvest continuing south. Lower ranges dry and extremely fire prone. Upper ranges supplying good grazing. Livestock good.

NEW ENGLAND: Very warm early, 90's many areas, cooling with showers midweek, near record low's end. Precipitation widespread, generally small amounts, except southeast Mass. Some hay made most areas early week, halted by Tuesday afternoon rains. Repairing fences, roads, gullies, debris and silt removal flood areas. Many vegetables being sold south. Cranberries fair to good. Aroostook, Maine, potatoes generally good, some bloom, some only 3 to 4 in tall. More than usual skips due to poor germination. Some drownouts, washouts central and south.

NEW JERSEY: Strong temperature contrast. Highs ranged mid-90's Monday to mid-70's Thursday. Low's ranged 70's Tuesday and Sunday to low 50's on Thursday. Temperatures near to above normal north and south and slightly subnormal central. Precipitation varied 0.40 in at Newton to 1.73 in at Pomona and fell mostly during thundershowers Wednesday and Sunday. Soil moisture adequate to excessive following weekend showers. Fall vegetable acreage being planted. Cabbage movement heavy. Cucumber and dry onion volumes moderate. Sweet corn, tomato, pepper and potato supplies light but increasing slowly. Sweet potatoes grew well. Blueberry supplies heavy. Peach movement light but increasing. Second cutting hay underway. Wheat combining general. Some corn and soybeans drowned in low areas of fields.

NEW MEXICO: Cool, wet week with greatest amount south part of central highland where Ruidoso report-

ed over 2.00 in. Temperatures ranged 1° to 7° subnormal. Extremes: 103°, Rodeo; 35° Ruidoso. Soil moisture adequate, some dry spots. Showers beneficial. Wheat harvest near end, only late areas remain unharvested. Other crops growing well. Cotton squaring active. Showers interrupted hay cutting, limited amount on ground. Third cut south 40%, second cut north 60%. Sorghum grain approaching heading. Ranges fair, need moisture. Livestock good.

NEW YORK: Temperatures ranged within 2° of normal. Monday hottest with 94° Albany. Saranac Lake 40° Thursday lowest. Precipitation heavy again over coastal southeastern and locally over northeast. Elsewhere amounts averaged subnormal. Weekly amounts ranged from around 0.10 in at Watertown and Massena to between 1.00 and 2.00 in Long Island. Weather very good for field activity. Good drying weather enabled rapid progress haying. First cutting alfalfa nearly complete, clover-timothy 75% harvested. About 10% second cutting alfalfa harvested, quality good. Wheat nearing maturity with harvest just beginning few areas. Corn good. Vegetable harvest increasing. Light picking snap beans got underway early planted fields. First sweet corn harvested many areas. Orange County harvest of onion sets began, and celery harvest expected to start around July 14. Sweet cherry harvest complete, tart cherry harvest now underway. Other tree fruits and grapes making normal progress.

NORTH CAROLINA: Cold front moved through mid-week bringing end to stagnant, very warm and humid weather at outset of week. Soil moisture generally adequate ranging from very short to surplus some localized areas. About 4.6 days suitable for fieldwork. Flue-cured tobacco harvest 6% complete, gaining momentum. Corn continues improvement, 22% excellent, 69% good, 8% fair, 1% poor. Small grain harvest virtually complete: Barley 98% complete; rye 96%, oats 93%, wheat 91% complete. Soybean seeding nearing completion, growing crop good. Sweet potatoes, peanuts, cotton good. Apples fair to good. Peach harvest 43% complete. Irish potato digging 77% complete.

NORTH DAKOTA: Temperatures 4° above normal southeast third to near normal elsewhere. Cool early week. Very hot center of State 11th; 109° Bismarck. Cooler Friday but slow warming trend weekend. Very dry week with shortages of precipitation averaging 0.5 in except near normal northcentral and 0.3 in above normal eastcentral. Thunderstorms gave Bottineau 1.27 in on 7th and Fargo 1.29 in. Very hot, dry weather forced rapid maturing small grains. Small grain swathing underway, combining started southern counties. Central and southern areas experiencing drought conditions. North and west dry condition less serious but all areas need rain for crops, hay and pasture.

OHIO: Warm and humid on 9th, cooling trend over State on 10th, quite cool on 11th and 12th. Youngstown, Cleveland, Toledo and Zanesville had record low's on morning of 12th. Quite warm on 13th and 14th. Cooler, drier on 15th. Extremes: 94°, Toledo and Dayton; 46°, Youngstown. Showers and thunderstorms produced locally heavy rainfall on 10th, again on 14th. Hot, humid week stimulated crop growth and development. Farm activity all sectors of agriculture at top speed to recover lost time, over 6 days favorable for fieldwork. best week of season. Soil moisture down; 6% surplus;

74% adequate, 20% short. Corn fair, average height 38 in, normal 46 in. Soybeans fair, 12 in high, 11 in 1972. First cutting alfalfa nearly complete, 10 days behind normal. Rapid progress made winter wheat harvest, 55% harvested, 30% last year, normal 45%. Barley harvest equals 5-year average at 55% complete. Oats 30% ripe, 40% normal, harvest just starting.

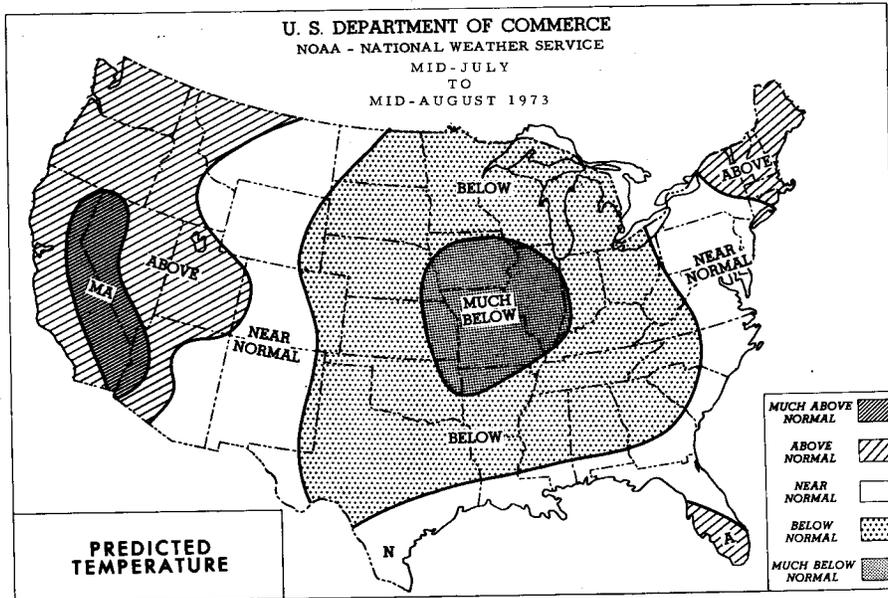
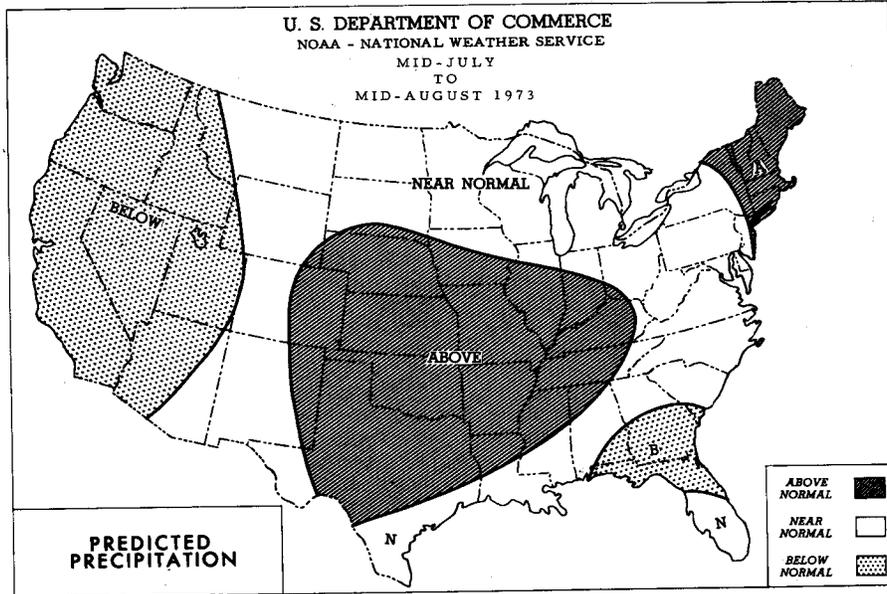
OKLAHOMA: Temperatures normal panhandle to 5° subnormal southeast and eastcentral. Precipitation ranged from 0.17 in northcentral to 1.79 in northeast. Wheat harvest nearly complete, 2 weeks later than year ago. Stubble tillage slowing down as soils dry. Row crops all mostly good to excellent condition but later than year ago or normal. Rains will be needed soon in most areas to maintain condition. Early panhandle irrigated corn fields near tassel stage, while 20% eastern corn in dough. Few fields of sorghums starting to head. Only 10% of cotton squaring compared 45% year earlier. Peanuts good and soybean condition improved with few fields flowering. Second cutting alfalfa near complete. Third growth needs moisture. Native range grasses maturing in drier areas but providing good feed.

OREGON: Temperatures ranged from 5° above to 4° below normal. Most stations close to normal. Maximums reached into upper 80's, mid-90's most locations. Vale, Nyssa in southeast broke 100°. Lows dropped into upper 30's parts east but ranged 42° to 52°. Rainfall limited to north coast, amounts less than 0.10 in. Scattered thunderstorms end week brought few sprinkles southern border east. Harvest tempo increases. Barley harvest well advanced Columbia Basin counties. Rapidly nearing or starting other areas. Wheat harvest starting Columbia Basin area. Limited Willamette Valley. Grass seed harvest continues, yields poor to good. Sweet cherry harvest complete except Hood River and La Grande. Apricots starting the Dalles. Early Red Haven peaches starting Medford area. Caneberries ripening, supply short. Snap bean harvest starting, green peas winding up. Hermiston fresh pack Norgold potatoes underway. Klamath potatoes still recovering from frost. Cut worms infesting Willamette Valley vegetables and mint. Otherwise vegetable crop conditions good. Hay being made from anything available. Water becoming limiting factor on ranges, and cattle may be brought in early this year.

PENNSYLVANIA: Wide temperature fluctuations, generally dry. Extremes: 97°, southcentral; 33° Bradford, coldest in Nation, Thursday morning when record lows reached many places. Temperatures near normal and 2° to 4° below previous week. Rainfall limited in all except northcentral and northeast where in excess of 1.00 in with up to 2.50 in Pocono Mountains. Elsewhere mostly less than 0.50 in. Conditions favorable for small grain harvest. Barley 50% harvested, winter wheat just beginning. Oats vary from boot to medium dough stages. Corn height and development behind schedule. Tart cherry harvest in full swing. Limited picking summer apples, early peaches expected to begin soon. Snap beans and early cabbage harvest continues. Limited sweet corn and tomatoes expected this week.

PUERTO RICO: Hot, generally dry, except for a few scattered rain showers west interior. Average rainfall 0.43 in or 0.75 in subnormal. Greatest weekly total 4.50 in western interior. Temperatures averaged 82° on coasts and 77° interior.

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.

Extremes: 95° Corozal; 50° Aibonito. Drought retarded development of sugarcane ratoons. Preparation of soils continues some places. Drought prevented proper fattening of coffee bean. Very little activity on tobacco fields. Pastures continue to deteriorate. Food crop situation very serious and critical some areas. Rain badly needed for proper development.

SOUTH CAROLINA: Subnormal rainfall, dry central. Temperatures near normal except slightly above extreme south. Cold front passed midweek. Scattered thundershowers and few damaging thunderstorms weekend. Favorable weather for crops. Tobacco good, 28% harvested, 33% last year. Cotton fair to good, 83% squaring, 78% last year; 29% setting bolls, 24% last year; 2% open bolls, none last year. Corn good to excellent, 64% silked, 72% last year; 48% dough stage, 44% last year; mature 19% last year. Soybeans good. Wheat 89%, oats 93% harvested. Pastures, lespedeza good. Peaches fair to good, 30% harvested, 36% last year. Grapes fair to good. Watermelons fair to good, 46% harvested, 42% last year. Peanuts good.

SOUTH DAKOTA: Second consecutive week of 100° plus except in extreme east with highs in 90's. Nighttime lows in 40's east. Scattered showers east and Black Hills. Little or no precipitation elsewhere. Rainfall 1.50 to 4.50 in below seasonal average. Combination of extremely high temperatures and lack of moisture creating serious drought. Crop maturity being forced and swathing becoming general. Winter wheat 83% ripe and rye 90% ripe, both 40 points ahead of normal. Small grain harvest ahead of normal. Winter wheat 20% harvested, 17% normal, 5% last year. Rye 14% harvested, 9% normal. Test weights of winter wheat, rye good; spring small grains light. Spring wheat 34% ripe, normal 8%. Oats 50% ripe, 28% normal. Barley 65% ripe, 27% normal. Large amounts of oats of being cut for hay and silage. Corn beginning to silk, heat past week slowed growth, caused some leaf rolling. Soybeans ahead of normal 46% blooming, 28% last year, normal 40%. Wild hay 47% harvested, 32% normal. Many farmers not making normal second cutting of alfalfa. Pastures beginning to dry up. Water supplies getting low many areas. Livestock holding their own.

TENNESSEE: Warm, dry, but showers over weekend. Temperatures near normal to 4° subnormal. Rainfall, highly variable ranging from a trace to around 3.00 in. Soybean planting completed 2 to 3 weeks later than usual. Much of soybean crop needs rain for germination, 10% blooming, normal 25%. Corn 25% silked, normal 50%. Cotton making good to excellent progress but later than usual; 70% squared, normal 85%; 10% setting buds, normal 20%. Tobacco poor, growth slow, blooming at short stage, disease prevalent. Practically no fruit for harvest due to April freezes.

TEXAS: Above normal rains and subnormal temperatures prevailed. Beneficial rains fell on high plains for first time in over 2 months. Weekend rainfall exceeding 5.00 in fell at many points from northcentral Texas southward into hill country west and north of San Antonio. Considerable flooding occurred in Bandera county where more than 9.00 in rain fell at Tarpley. Temperatures averaged 7° subnormal along high plains and west of the Pecos, but in immediate coastal sections where rainfall was sparse, readings were near normal--warm. Oat harvest complete, wheat har-

vest nearing completion, yields satisfactory. Farmers making effort to get late stand sorghum following harvest of wheat crop. Harvest sorghum gaining momentum extreme south. Cotton insects began buildup following wet weather, control measures common low plains southward. Peanuts, soybeans, rice satisfactory to excellent progress. Major crops percent harvested: Wheat 99, last year 100; oats 100, last year 100; sorghum 4, last year 14. Major crops percent planted: soybeans 100, last year 100; peanuts 98, last year 98. High Plains: Demand for onions, potatoes exceed volume available. Supplies to increase, reach peak late July, early August. Cucumber active early fields. Carrots excellent growth. Trans-Pecos: Light harvest cantaloupes underway. Tomatoes Dell City slow progress. Onion, cabbage and squash harvest continues El Paso. Knox-Has-kell: Watermelon, cantaloupe harvest underway. North Texas: Tomato picking active. Central-East Texas: Tomato harvest continues. Watermelon harvest underway. Insect damage noted watermelon, tomato fields. Sweet potatoes excellent growth. San Antonio-Winter Garden area: Cantaloupe, watermelon harvest near completion. Bell pepper harvest full swing, good yields reported. Coastal Bend: Watermelon season near complete. Lower Rio Grande Valley; Land preparation, seeding fall vegetables underway. Peaches move local markets. Commercial areas problems controlling brown rot. Casebearer damage to pecan orchards not sprayed. Commercial areas indicate smaller crop this year than in 1972. Citrus trees good growth, fruit showing good size.

UTAH: Recurring shower and thunderstorm activity relieved moisture deficit from 3 weeks of virtually no precipitation. Locally moderate to heavy accumulations reported with some flash flooding. Average temperatures for period continued 2° to 8° above normal but dropped to near or a little subnormal late week. Grass fire danger now temporarily reduced some areas. Soil moisture nonirrigated crop and range lands short most areas, normal for July. Range feed fair to good. About 20% of the 207,000 acres of winter wheat--fourth largest acreage since 1950--now ripe. Harvest about 5% complete July 16. Production prospects good. Sweet cherries 80% picked; quality, yield good. Sour cherry picking starts this week, quality, yield prospects good. Good apple, pear crops in prospect; peaches only fair. Cutting second crop alfalfa hay starts this week early areas, yield prospects good.

VIRGINIA: Week mostly favorable for crops and farm activities. Moisture varied widely, driest in valley and north with parts of Piedmont needing rain. Light to moderate showers midweek many localities. About 5.2 days suitable for fieldwork, activities on schedule. Wheat over 80% harvested, barley virtually completed. Oat harvest about over. Soybean planting continued, both no-till and conventional following harvest of small grains. Planting milo following small grains underway. Corn crop good all areas except crop under stress in Piedmont from hot, sunny days. Attributed to shallow root systems following wet early summer. Flue-cured tobacco variable, some irrigation, scattered leaf scald. Leaf mosaic more than most seasons. Early acreage cultivation over; topping, sucker control applications, spraying and dusting for insects. Harvest starting labor short. Burley good and being cultivated. Ideal for peanuts, vine growth excellent, heavy blooming and good pegging, landplaster application

continued. Cotton doing well, squaring heavily and blooming. Much good hay cut and saved. Orchardgrass seed combined. Pastures deteriorated, much clipping done. Pinkeye problems in cattle being treated. Irish potato harvest eastern shore peak. Harvested snap beans, cucumbers, and sweet corn. Carroll County early cabbage cut, late crop being set. Apple spray programs maintained, early summer varieties available. Peach harvest increased.

WASHINGTON: West: Temperatures 2° subnormal precipitation near zero. Green pea harvest underway, some broccoli harvest early areas. Corn plantings good growth, some weed problems. Strawberry harvest complete; yields down due to winter freeze injury, fruit rot damage. Raspberry harvest continued. Haying activities continued, some second cutting underway. Christmas tree shearing continued, aphids causing problems some operations. East: Temperatures 4° cooler than normal. No precipitation. Cherry harvest continues, high yields most orchards, Apricot, peach harvest approaching. Apples sizing well. Green pea harvest continued, yields down. Lima beans good foliage, not setting pods yet. Early potatoes defoliated, harvest soon. Lentil swathing, some harvest. Wheat, barley harvest beginning. Hay supplies low, ranges dry earlier than normal. Grass seed harvest continued. Livestock producers culling. Sheep going to market.

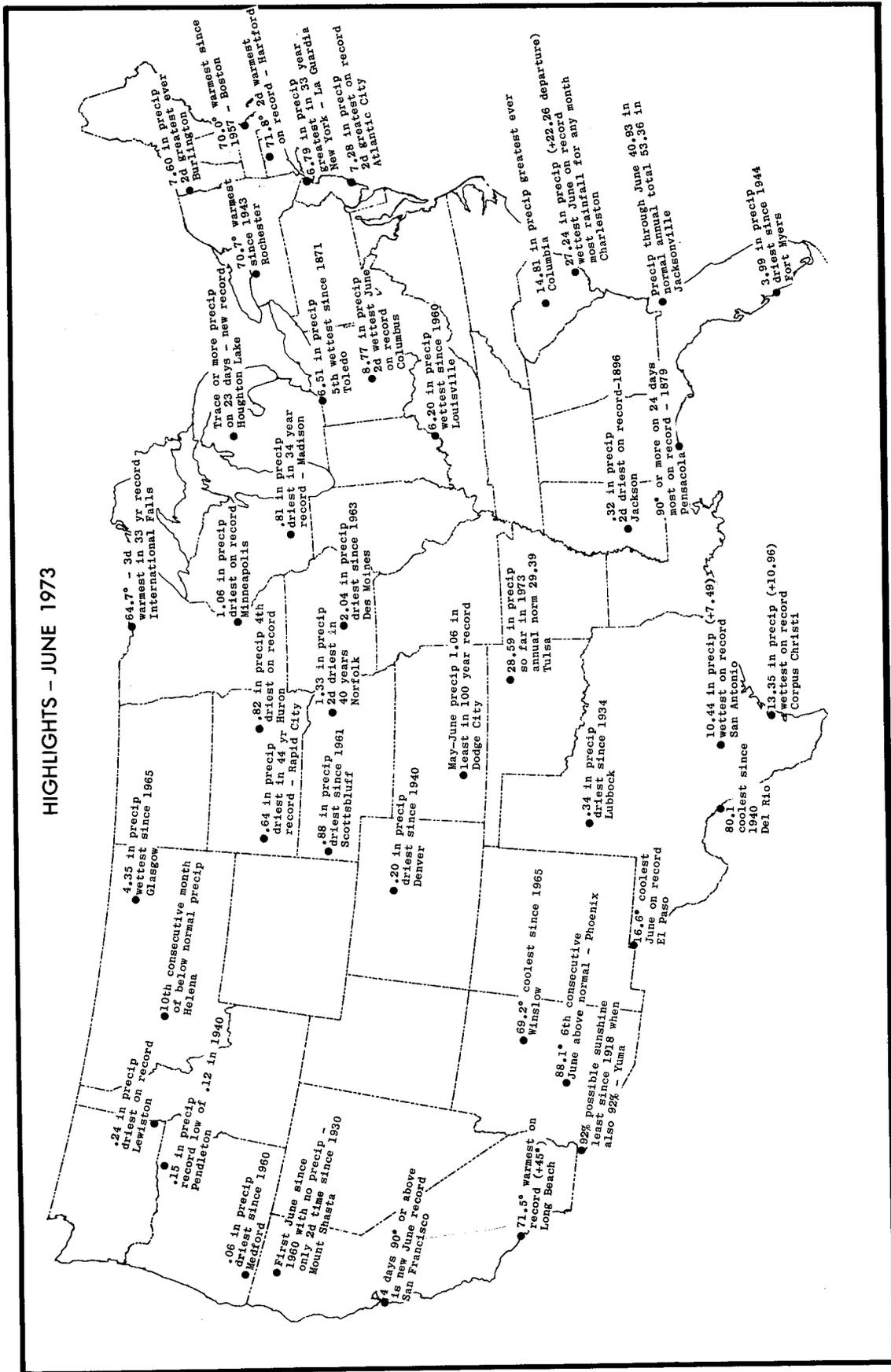
WEST VIRGINIA: Temperatures mostly near normal. Average 7° above normal eastern panhandle, few highs in 90's. Daytime temperatures cooled into 70's most of State by Thursday. Scattered thunderstorms southern part 8th and 9th, some heavy. Result flash flood near Charleston. More numerous thundershowers on 10th and 11th. Another excellent week for crop development. A few dry spots developing but 70% indicate adequate soil moisture. About 4.9 days favorable for fieldwork, best of season. Hay making continues most active farmwork followed by gardening, clipping pastures and cultivating crops. Barley 70% harvested,

wheat 40%. Oats just beginning to ripen. Corn making rapid development, fair to mostly good. First cutting hay nearing completion, second getting underway. Pastures continue very good. Cattle plagued by flies and pinkeye.

WISCONSIN: Temperatures near normal. Warm, humid first half; cooler and drier over weekend. Warmest on Thursday when in 90's. Cool 40's late Sunday evening. Rainfall generally less than 1.00 in. Showers and thunderstorms Monday south and Wednesday north. Scattered showers Thursday and Friday. More moisture needed to maintain good crop development. Topsoil very dry most areas. Corn growing rapidly, average height 34 in, last year 40 in, normal 31 in. Early corn starting to tassel. Oat crop varies: Early oats good and changing color; late oats spotty. Heat and lack of moisture may cause light weight kernels. Straw length short. Crown rust severity increasing. Some oats going in silos. Oats 80% headed, last year and normal 95%. Rye, winter wheat, barley ripening fast. First crop haying near end. Early cuttings had good regrowth but late cuttings not coming back as moisture lacking. Pasture condition falling off in heat and dryness. Soybeans and tobacco growing good. Potatoes also good, vegetables fair to good. Cherry crop will be short. Apple crop will be down from last year. Soil moisture 60% short, 40% adequate.

WYOMING: Hot, dry weather prior to 12th. Highs 85° to 105° range common. Extremes 106° at Midwest, 29° at Bondurant. Clouds, showers, and cooler air moved in on 12th and 13th. South and mountains of west received much needed rainfall. Highs on 13th range 55° to 75°. Winter wheat 15% hard dough stage, 80% soft dough and 5% milk stage; poor to fair prospects. Spring wheat 5% hard dough, 50% soft dough, and 45% milk stage. Oats, barley both 60% milk stage, 40% soft dough. Hay harvest behind last year. Prospects for row crops fair to good. Soil moisture continues short.

HIGHLIGHTS - JUNE 1973



WIND EROSION CONDITIONS - GREAT PLAINS
 Summary of Local Estimates as of May 31, 1973
 for the 1972-73 Wind Erosion Season

The final summary of wind erosion conditions for the 1972-73 wind erosion season ending May 31, 1973 was recently released by the Soil Conservation Services (SCS), USDA. It is based on reports developed in SCS field offices in cooperation with other USDA field representatives and local authorities. Reports were submitted from 275 counties in the 10 Great Plains States. Counties reporting are those in which wind erosion was prevalent or expected during the 1972-73 season. The acreage of land damaged is cumulative for the period November 1, 1972 to May 31, 1973.

Land Damaged

A total of 1,958,286 acres was reported damaged in 275 counties compared to 2,245,297 acres reported in 253 counties a year ago, a decrease of 287,011 acres, or 12.8%. Of the total land reported damaged 90.9% was cropland (1,779,343 acres), 6.3% rangeland (124,193 acres) and 2.8% other land (54,750 acres). The Northern Plains States reported 724,228 acres (37.0%) and the Southern Plains States reported 1,234,058 acres (63.0%). Texas reported 1,018,250 acres damaged, or 52.0% of the total for the 10 States.

Crops or Cover Destroyed on Land Not Damaged

Crops or cover was destroyed on 207,866 acres of land not damaged compared to 281,331 acres reported a year ago, a decrease of 73,465 acres, or 26.1%. Crops or cover destroyed in Texas (110,320 acres) represents 66.3% of crops or cover destroyed in the Southern Great Plains States and 53.1% of the total.

Land Not Damaged Due to Emergency Tillage

Emergency tillage to prevent land damage was reported on 2,795,126 acres. Emergency tillage in Texas (2,239,500 acres) represents 80.1% of the total acres so treated. The Southern Great

Plains States reported 89.3% of the emergency tillage.

Land in Condition to Blow

Land reported in condition to blow was 3,668,176 acres compared to 3,269,060 acres reported a year ago. Texas reported 1,696,500 acres in condition to blow, or 46.2% of the total for the 10 States.

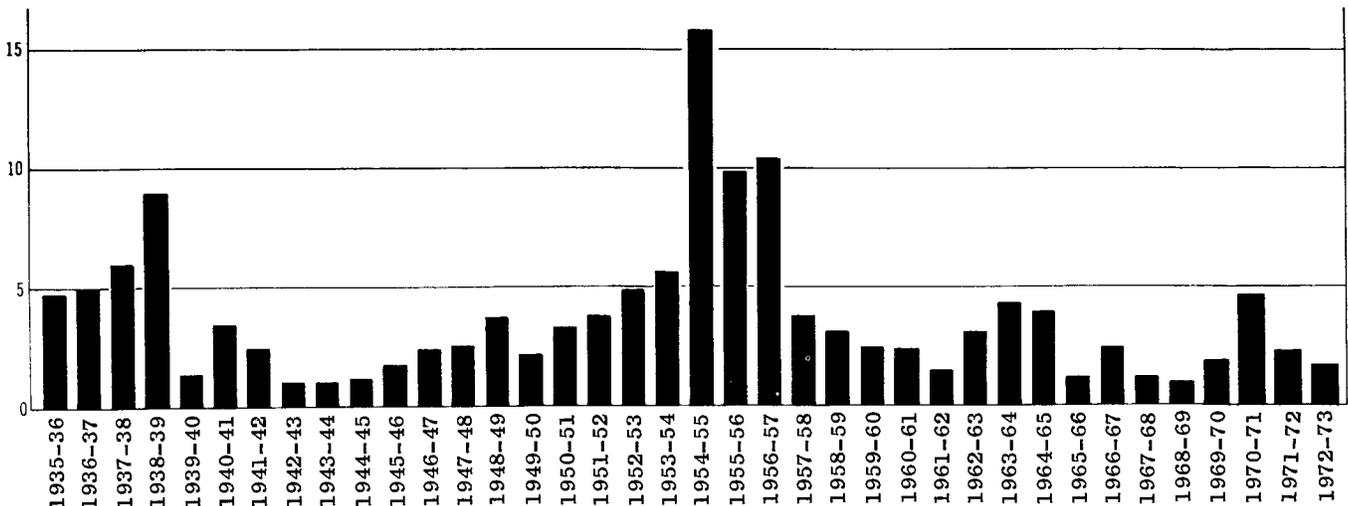
Major contributing factors to wind erosion this season include: (1) Inadequate plant growth and ineffective residues; (2) Insufficient soil moisture and poor soil structure; (3) Land clean tilled for seedbed preparation and unsatisfactory tillage operations; (4) Greenbug damage of winter wheat; and (5) Excessive grazing of small grain, grasslands, and other crop residues.

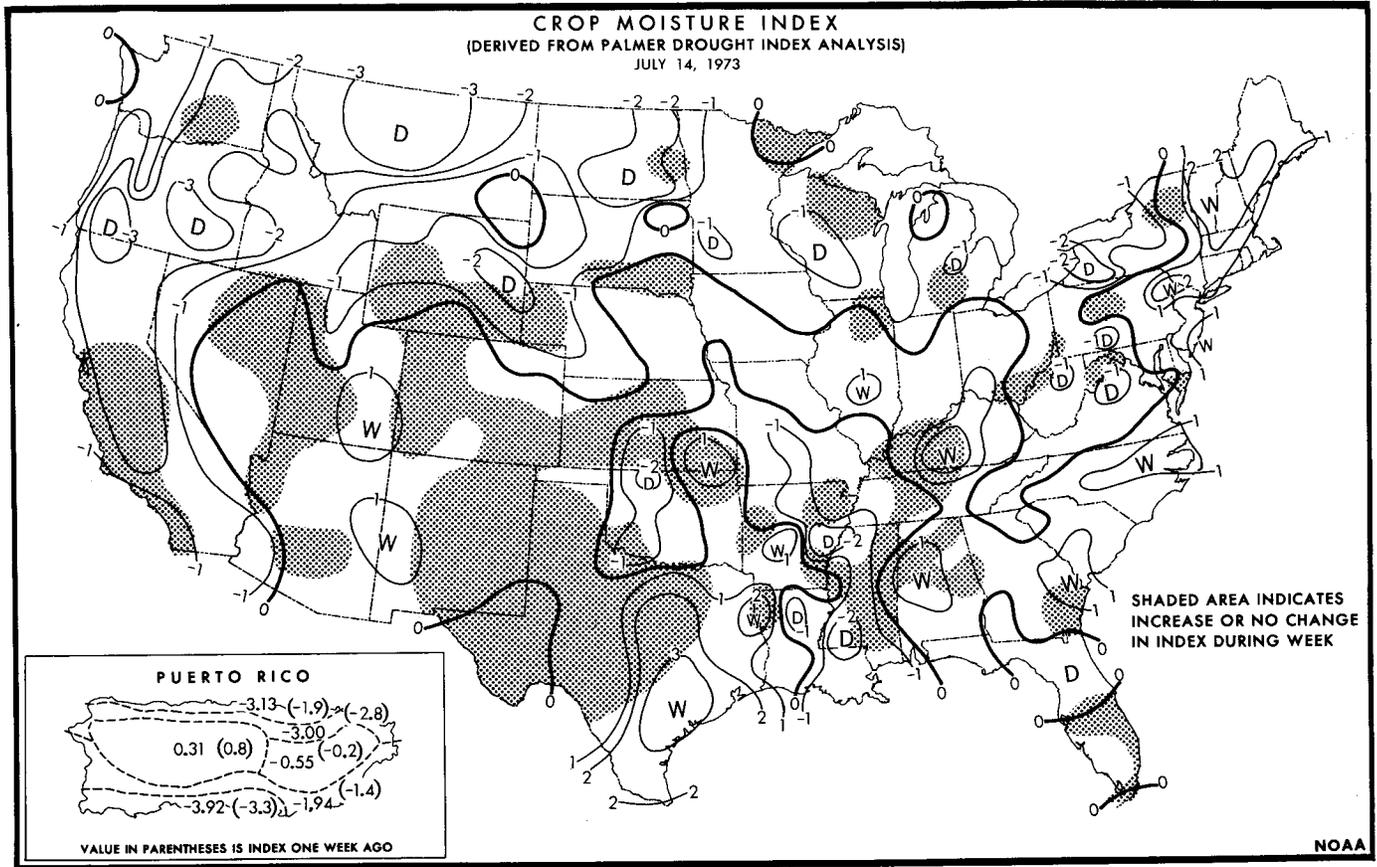
Total Acres of Land Damaged

Great Plains States	Co's Rptg. No.	Total Land Damaged	
		5/31/73 Acres	5/31/72 Acres
Northern:			
Montana	15	210,075	241,510
Nebraska	10	17,050	113,010
North Dakota	53	316,180	277,450
South Dakota	35	161,123	121,150
Wyoming	7	19,800	72,650
Subtotal	120	724,228	825,770
Southern:			
Colorado	36	67,330	76,480
Kansas	39	20,158	133,472
New Mexico	7	35,800	40,550
Oklahoma	17	92,520	23,875
Texas	56	1,018,250	1,145,150
Subtotal	155	1,234,058	1,419,527
Grand Total	275	1,958,286	2,245,297

ACRES OF LAND DAMAGED ANNUALLY IN GREAT PLAINS BY SOIL EROSION
 Seasons 1935 to 1972-73, inclusive

Million acres





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.

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

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