

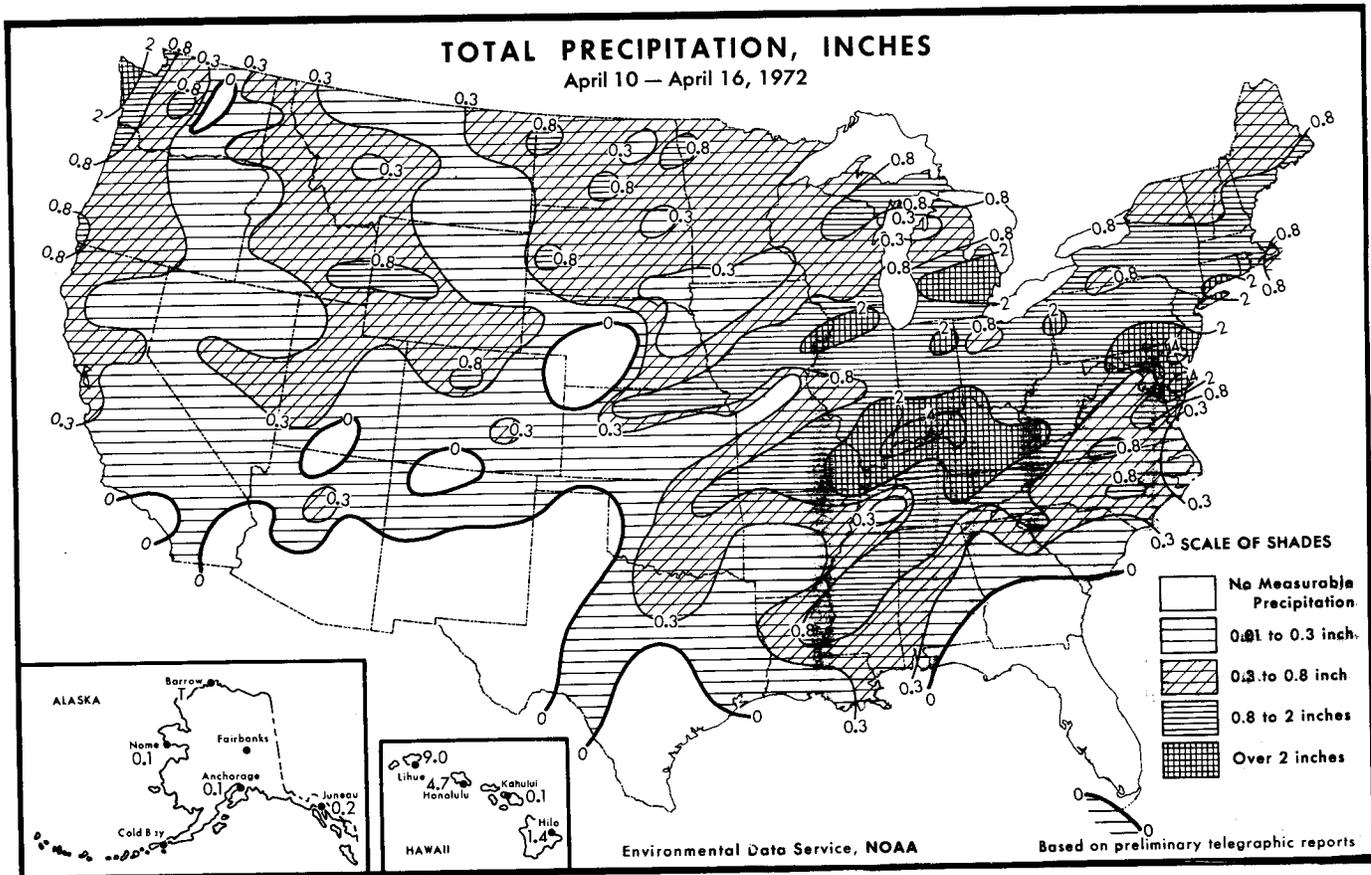
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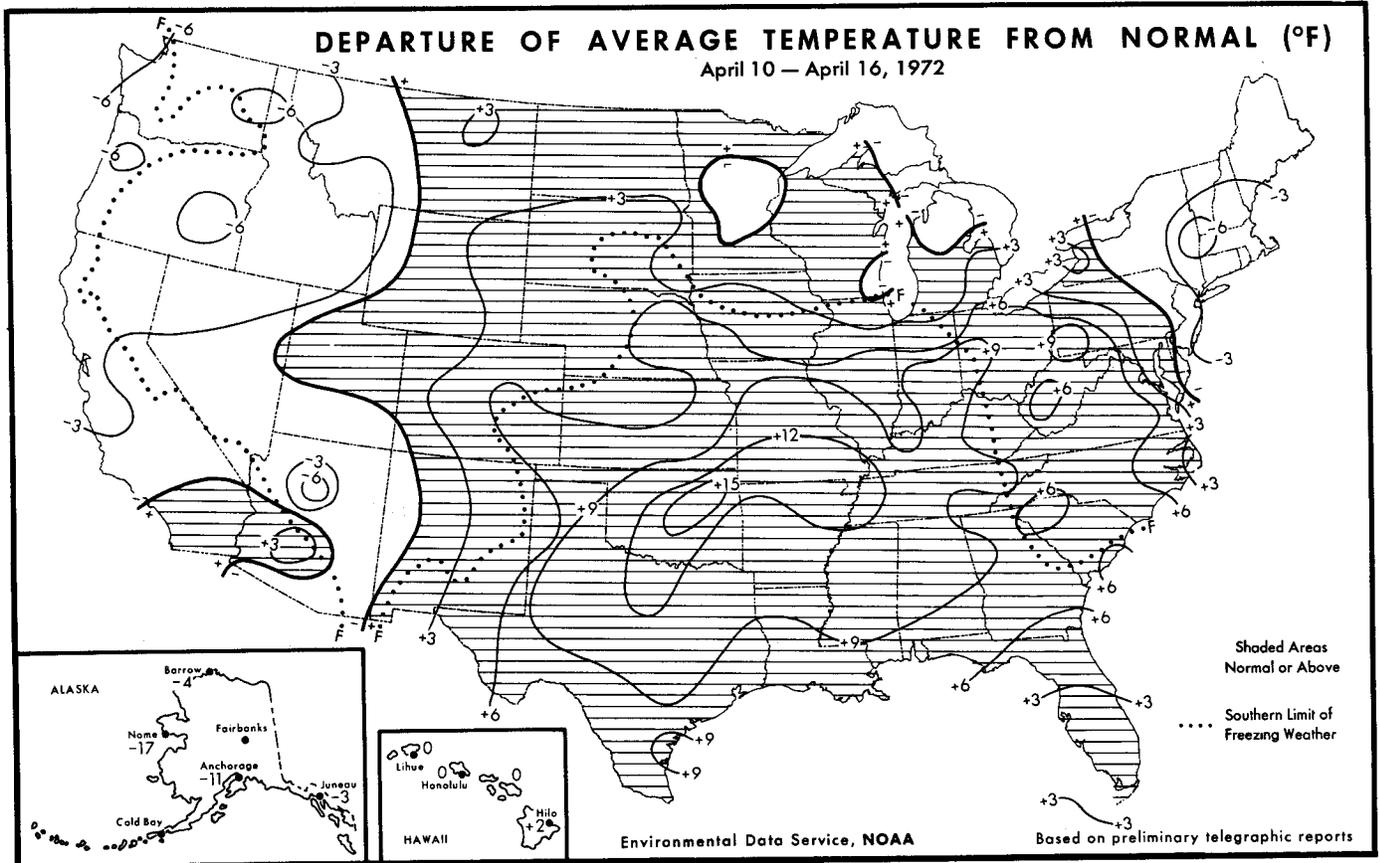
NATIONAL WEATHER SUMMARY

HIGHLIGHTS: Most of the Nation averaged warmer than normal. Flood-producing rains fell from the Missouri Bootheel to the Middle Ohio River Valley. Light showers fell in northern Arizona and northern New Mexico, the first rains in some localities since late December.

PRECIPITATION: Showers fell Monday from Missouri to Pennsylvania. Light rains fell along the northern Pacific Coast and snow flurries occurred in the northern Rocky Mountains. In general, however, most of the precipitation early in the week was light. Showery weather occurred Tuesday along a quasi-stationary front that stretched from Utah to Maryland. The showers were scattered from Utah to Kansas but were more general from Missouri to the Lower Ohio River Valley. Snow whitened the northern Great Plains. A Pacific storm soaked the coast from Vancouver, Wash.,

to Brookings, Oreg., with lighter showers southward to San Diego, Calif. Snow flurries occurred in the higher elevations in Washington. Another Low along the eastern slopes of the Rocky Mountains produced a mixture of wet snow and rain in Montana and Wyoming. A band of thunderstorms stretched along a stationary front from the middle Mississippi River Valley to the middle Appalachians.

A Low developed in Utah Wednesday and crossed the central Rocky Mountains and intensified Thursday. High winds associated with the storm kicked up clouds of dust and sand over parts of the Southwest. Gusts peaked at 60 m.p.h. or higher in spots in the interior of southern California and in Arizona, New Mexico, and northwestern Texas. The low visibility and the strong winds slowed highway travel. Meanwhile, blizzards raged in Montana, Wyoming, Colorado, and the northern por-



tions of Nevada and Utah. Six inches of snow fell Thursday forenoon at Owyhee, Nev. Late Thursday, the storm was centered over western Kansas. A quasi-stationary front extended from the storm center to another Low off the coast of New England. Warm, moist, tropical air covered the area south of the front, arctic air lay north of the front. A long band of thunderstorms marked the frontal zone. Some of the thunderstorms produced hail and high winds. Some of the "dry" thunderstorms filled the air with dust and sand. Snow and cold rain fell north of the front.

The storm centered over western Kansas moved toward the Great Lakes followed by another that developed in Texas and moved northeastward over the weekend. These storms and the associated fronts produced scattered light to heavy thunderstorms over much of the eastern half of the Nation. Heavy showers fell from the Missouri Bootheel to the middle Ohio River Valley Saturday forenoon. Weekly totals at spots in Kentucky exceeded 8.00 inches. Flash flooding occurred many places in southern Illinois, Kentucky, and nearby parts of neighboring States. Meanwhile, light snow fell in the northern and central Rocky Mountains and northern Great Plains.

Light rains fell at midweek in the northern portions of Arizona and New Mexico. The small weekly totals are especially significant because of the extremely dry weather which has persisted in those States since December 1971.

TEMPERATURE: The week began with recordbreaking cold over parts of the East. Cape Hatteras registered 26° Monday morning, April 10. This

is the coldest temperature of record for so late in the spring at Cape Hatteras. Light southerly breezes pushed Monday afternoon temperatures into the 60's as far north as southern Pennsylvania. A warming trend also occurred over mid-America. Grand Island, Nebr., warmed to 82° Wednesday afternoon and numerous stations in Oklahoma registered 100° or higher.

A large powerful storm moved from the Great Basin across the central Rocky Mountains to the central Great Plains at midweek. Northerly winds behind the storm plunged temperatures to below freezing over much of the Great Basin. Winnemucca, Nev., registered 14° Thursday morning. Temperatures Thursday afternoon climbed to the 90's over most of Oklahoma and Texas, reaching 103° at San Angelo, Tex. The northern Great Plains remained in the cold air with maximums in the 40's Thursday afternoon. The cold weather pushed far southward over the western United States Friday morning when Flagstaff, Ariz., registered 5°. In contrast, the East warmed. Kansas City, Mo., recorded 92° Friday afternoon. The weekend was especially warm from Virginia to Florida. Richmond, Va., registered 87° Saturday and 88° Sunday. Maryland remained in the 60's on those days.

Temperatures averaged below normal from the Pacific Ocean to the Rocky Mountains and over the Northeast and above normal over the rest of the Nation. Parts of the central and southern Great Plains averaged 10° to 16° warmer than normal.

L. W. Dye

NATIONAL AGRICULTURAL SUMMARY

AGRICULTURAL HIGHLIGHTS: Rain benefits Great Plains wheat. * More rain needed. * Corn Belt fieldwork off to slow start. * Frost continues to nip Western orchards. * Nation's pastures greening slowly.

SMALL GRAINS: Light rains benefited the "dry" wheat crop on the Great Plains. Weekend rain fell from northern Texas to Nebraska bringing relief to winter wheat acreage. The rain was generally light - with 1/4 to 3/4 inch falling in most areas. The moisture was greatly needed after temperatures had soared into the high 90's in Kansas and low 100's in Oklahoma on Wednesday. The scorching temperatures and high winds rapidly depleted what little soil moisture was left. The storm missed some areas of Kansas, Oklahoma, Colorado and Nebraska, and a widespread rain is still needed. The 1/2 inch of rain and cooler weekend temperatures gave the Oklahoma crop at least a temporary reprieve -- contingent that further rains will be forthcoming. Better weather also improved the Montana wheat outlook, but dryland wheat prospects in Texas continued downhill. The strong winds during the week caused a lot of blowing dust from Arizona to the Great Plains.

Grain crop prospects vary in the Nation's eastern half. Grain acreage is still dormant from Minnesota to New England. Greening started in Pennsylvania -- some winterkill is evident. Moving to the South, warmer weather allowed grain crops to make good growth and many fields are starting to head. Rust continues to plague acreage from Louisiana to South Carolina.

Wet fields are slowing oats planting in the Corn Belt and northeastern sections of the Nation. Seeding is behind last spring and normal in most States. Planting is ahead of schedule in the northern Rocky Mountain States. But farmers in Washington and Oregon are fighting wet fields to get their acreage seeded.

CORN: Rain limited fieldwork in the Corn Belt. Farmers are behind in their plowing when compared with last year's early spring. A few corn fields have been planted in Ohio, Missouri, and Kansas. Farmers from the Dakotas to Michigan are still waiting to start field activity. Daily rains plagued corn growers in Kentucky and Tennessee -- no acreage is planted compared to 20% seeded last spring. However, the week was not all lost. Southern growers had ideal field conditions and planted corn at a feverish pace. Over half the acreage is planted in Texas, Arkansas, and Florida. Georgia and Louisiana growers are approaching the halfway mark.

COTTON: Farmers had the best week of the year for fieldwork in the South -- and cotton planters were removed from machine sheds and put to work. Planting was underway throughout the South. Progress ranged from just starting in Arkansas, to Georgia with 16% of the acreage in. Planting made good headway from Texas to California. Texas farmers have 21% of their crop planted and planting is progressing northward. Cold winds injured emerged cotton plants in Arizona and also retarded emergence. Rains caused some soil crusting in California.

OTHER CROPS: A wet spring is delaying the start of fieldwork from the Northern Plains to New England. The season will start late, but moisture should be plentiful to get the crops off to a fast start. Wet soils also hampered activity in the middle Atlantic States and Pacific Northwest.

Daily rains have resulted in water damage to tobacco plant beds in Kentucky -- sunshine is needed. Frost also nipped some tobacco acreage in southwest Virginia and the Carolinas'. Peanut planting is underway in the South. Over half the Colorado sugar beet crop is seeded. Frost forced some Idaho growers to replant. Digging started in Imperial Valley, California. Potato planting is active on Long Island New York, but acreage planted is well behind last spring. Very little planting was done in Ohio. Southwest Idaho growers have 40% of their acreage in.

Fruits and Nuts: Freezing temperatures continue to cause havoc in Western fruit orchards. Washington orchardmen kept their heating equipment working during the night to reduce frost damage. More damage also occurred in Utah. Cold, wet weather is limiting bee activity (thus reducing pollinization) in the West. Some California growers are delaying thinning peaches, plums and nectarines until freeze damage becomes evident. Frost damaged almonds are dropping heavily.

Fruit trees and grape vines came through the winter with very little winter injury in New York. Peach buds are starting to swell in New Jersey and Pennsylvania. Alabama peaches have a heavy set.

Vegetables: A mild week saw vegetable farmers busy planting and setting along the Eastern Seaboard. New York muck farmers are off to a slow start as fields are too soft to work. Cabbage, celery, and tomato supplies are in full volume from Florida. Supplies of most other commodities are seasonal. Strawberry production is near it's peak in Louisiana. Onion harvesting is reaching it's peak in the Lower Rio Grande Valley, Texas. Onions and carrots are planted on the High Plains. Supplies of broccoli, cauliflower and lettuce are increasing from Salinas Valley California.

PASTURES AND LIVESTOCK: Pastures and ranges continue to green slowly. Ranges continued their steady decline in the Southwest, but a few light showers were received in northern Arizona and should provide temporary relief. Dry weather is holding back grass development on the Great Plains. Very few cattle are on pastures in the Dakotas. Corn Belt pastures are generally wet and supplying below average roughage. Warmer temperatures and sufficient moisture are allowing pastures to improve steadily in the Southeast. Utah ranchers have 15% of their herds moved to spring rangelands. Some cattle are also on pasture in the Pacific Northwest.

Milder weather cut the weekly death rate of newborn calves and lambs in Wyoming. Calving is very active across the Country. Livestock are in good spring condition -- very few problems exist Nationwide.

Steve J. Pscodna
Agricultural Statistician

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., APRIL 16, 1972

States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches	
	Average	Departure*	Total	Departure*		Average	Departure*	Total	Departure*		Average	Departure*	Total	Departure*
ALA,Birmingham . . .	72	+10	.6	-.5	New Orleans . . .	75	+8	.6	-.5	OKLA,Okla. City . .	74	+15	.5	-.3
Mobile . . .	75	+8	.4	-1.0	Shreveport . . .	74	+9	.5	-.6	Tulsa . . .	74	+16	1.9	+.9
Montgomery . . .	73	+9	.2	-.9	MAINE,Caribou . . .	34	-1	.6	0	OREG,Astoria . . .	45	-4	1.5	+.3
ALASKA,Anchorage . .	24	-11	.1	0	Portland . . .	39	-3	1.0	+.1	Burns . . .	37	-7	.1	-.1
Barrow . . .	-6	-4	T	0	MD,Baltimore . . .	54	0	2.5	+1.6	Medford . . .	46	-4	.4	+.1
Fairbanks . . .	-	-	-	-	MASS,Boston . . .	43	-4	1.2	+.3	Pendleton . . .	46	-5	.2	-.1
Juneau . . .	35	-3	.2	-.5	Chatham . . .	47	-	.7	-	Portland . . .	47	-4	.6	+.1
Nome . . .	4	-17	.1	-.1	MICH,Alpena . . .	37	-1	.8	+.2	Salem . . .	45	-6	.7	+.2
ARIZ,Flagstaff . . .	37	-6	.7	+.4	Detroit . . .	49	+3	2.1	+1.4	PA,Allentown . . .	48	0	1.5	+.6
Phoenix . . .	70	+3	T	-.1	Flint . . .	47	+4	3.2	+2.6	Erie . . .	46	+2	1.8	+.9
Tucson . . .	65	-1	0	-.1	Grand Rapids . . .	46	+1	2.9	+2.2	Harrisburg . . .	52	+1	2.5	+1.8
Winslow . . .	53	-2	T	-.1	Houghton Lake . . .	39	-1	.4	-.2	Philadelphia . . .	51	0	2.3	+1.5
Yuma . . .	70	0	T	0	Lansing . . .	47	+2	3.5	+2.9	Pittsburgh . . .	57	+9	1.4	+.7
ARK,Fort Smith . . .	70	+9	.3	-.7	Marquette . . .	39	0	1.4	+.8	Scranton . . .	45	-2	1.7	+.9
Little Rock . . .	72	+10	.1	-1.1	Muskegon . . .	46	+1	1.4	+.8	R.I,Providence . . .	42	-5	1.2	+.8
CALIF,Bakersfield . .	61	-1	.1	-.1	S.Ste,Marie . . .	35	-2	1.2	+.7	S.C,Charleston . . .	70	+5	T	-.3
Eureka . . .	47	-3	.5	-.2	MINN,Duluth . . .	36	0	.5	-.1	Columbia . . .	70	+7	.1	-.8
Fresno . . .	58	-3	.3	0	Internatl Falls . .	38	+1	.5	+.1	Greenville . . .	66	+5	.9	0
Los Angeles . . .	62	0	0	-.2	Minneapolis . . .	44	0	.4	0	S,DAK,Aberdeen . .	47	+4	.3	-.2
Red Bluff . . .	55	-5	.3	-.1	Rochester . . .	45	-2	T	-.5	Huron . . .	47	+3	1.6	+1.2
San Diego . . .	62	+1	T	-.2	St. Cloud . . .	40	-2	.6	+.1	Rapid City . . .	48	+5	.8	+.4
San Francisco . . .	53	-3	.8	+.5	MISS,Jackson . . .	75	+11	.9	-.2	Sioux Falls . . .	45	0	1	-.5
Stockton . . .	57	-2	.2	-.1	Meridian . . .	73	+9	.7	-.5	TENN,Chattanooga .	68	+8	.5	-.5
COLO,Denver . . .	52	+6	.3	-.2	MO,Columbia . . .	64	+10	.5	-.3	Knoxville . . .	67	+9	.9	0
Grand Junction . . .	55	+3	.1	-.1	Kansas City . . .	64	+9	.3	-.5	Memphis . . .	73	+12	.3	-.8
Pueblo . . .	56	+6	.4	+.1	St. Louis . . .	64	+10	1.8	+.9	Nashville . . .	70	+11	1.3	+.5
CONN,Bridgeport . . .	45	-3	2.6	+1.7	Springfield . . .	68	+13	1.4	+.5	TEX,Abilene . . .	76	+12	.2	-.3
Hartford . . .	42	-5	1.4	+.6	MONT,Billings . . .	46	+1	T	-.3	Amarillo . . .	63	+6	T	-.3
D.C,Washington . . .	58	+3	.5	-.2	Glasgow . . .	45	+3	.4	+.2	Austin . . .	78	+11	T	-.9
FLA,Apalachicola . .	72	+5	0	-1.1	Great Falls . . .	41	-2	.4	+.2	Beaumont . . .	75	+7	T	-.9
Ft. Myers . . .	75	+2	0	-.6	Havre . . .	44	+2	.2	0	Brownsville . . .	81	+7	0	-.3
Jacksonville . . .	72	+4	0	-.8	Helena . . .	39	-3	.3	+.1	Corpus Christi . .	80	+9	T	-.5
Key West . . .	79	+3	T	-.6	Kalispell . . .	39	-4	.3	+.1	Dallas . . .	76	+11	.4	-.5
Lakeland . . .	74	+3	0	-.8	Miles City . . .	47	+2	T	-.3	Del Rio . . .	79	+8	T	-.3
Miami . . .	76	+2	0	-.9	Missoula . . .	42	-1	.5	+.3	El Paso . . .	66	+3	0	-.1
Orlando . . .	74	+3	0	-.8	NEBR,Grand Island .	55	+6	.6	+.1	Fort Worth . . .	76	+12	.5	-.4
Tallahassee . . .	73	+6	0	-1.1	Lincoln . . .	58	+7	.7	+.1	Galveston . . .	75	+7	0	-.7
Tampa . . .	72	+1	0	-.6	Norfolk . . .	54	+7	.1	-.4	Houston . . .	76	+9	.2	-.5
GA,Atlanta . . .	68	+9	T	-1.0	North Platte . . .	51	+4	0	-.5	Lubbock . . .	70	+11	0	-.3
Augusta . . .	69	+6	.4	-.4	Omaha . . .	55	+6	.5	-.1	Midland . . .	74	+10	0	-.2
Macon . . .	71	+6	T	-.9	Valentine . . .	49	+4	.3	-.2	San Angelo . . .	77	+10	.1	-.4
Savannah . . .	72	+7	.1	-.8	NEV,Ely . . .	42	0	.3	+.1	San Antonio . . .	78	+10	T	-.7
HAWAII,Hilo . . .	74	+2	1.4	-1.4	Las Vegas . . .	61	-2	T	-.1	Victoria . . .	78	+8	T	-.5
Honolulu . . .	74	0	4.7	+4.4	Reno . . .	45	-3	.1	0	Waco . . .	76	+10	T	-.9
Kahului . . .	73	0	.1	-.8	Winnemucca . . .	41	-4	.3	+.1	Wichita Falls . . .	76	+12	.5	-.1
Lihue . . .	73	0	9.0	+8.2	N.H,Concord . . .	39	-4	1.1	+.3	UTAH,Blanding . . .	47	-1	T	-.2
IDAHO,Boise . . .	44	-5	.4	+.1	N.J,Atlantic City . .	47	-4	2.4	+1.6	Salt Lake City . . .	48	-1	1.3	+.9
Lewiston . . .	45	-5	.3	0	Trenton . . .	51	0	1.3	+.5	VT,Burlington . . .	36	-4	1.2	+.6
Pocatello . . .	41	-5	1.0	+.7	N.MEX,Albuquerque . .	57	+2	T	-.1	VA,Lynchburg . . .	63	+7	.7	0
ILL,Cairo . . .	67	+8	3.6	+2.6	Roswell . . .	-	-	-	-	Norfolk . . .	62	+5	.1	-.6
Chicago . . .	51	+3	1.7	+1.0	N.Y,Albany . . .	40	-6	1.6	+.9	Richmond . . .	64	+7	.8	+.1
Moline . . .	53	+4	2.4	+1.7	Binghamton . . .	42	-1	1.3	+.6	Roanoke . . .	62	+6	.8	+.1
Peoria . . .	56	+6	.9	0	Buffalo . . .	47	+4	1.4	+.7	WASH,Colville . . .	42	-4	.6	+.4
Rockford . . .	49	+2	3.5	+2.8	New York . . .	47	-3	1.4	+.6	Omak . . .	44	-5	T	-.2
Springfield . . .	60	+7	.8	-.1	Rochester . . .	43	-1	1.3	+.7	Quillayute . . .	40	-7	2.6	+.9
IND,Evansville . . .	64	+7	5.0	+4.1	Syracuse . . .	43	-2	1.8	+1.1	Seattle-Tacoma . . .	45	-4	.7	+.1
Fort Wayne . . .	54	+5	2.1	+1.4	N.C,Asheville . . .	65	+9	.8	0	Spokane . . .	41	-6	.3	+.1
Indianapolis . . .	61	+11	1.4	+.5	Charlotte . . .	66	+6	.4	-.4	Walla Walla . . .	47	-6	.5	+.1
South Bend . . .	51	+4	1.0	+.3	Greensboro . . .	63	+6	.7	-.1	Yakima . . .	45	-5	T	-.1
IOWA,Burlington . . .	55	+5	1.0	+.2	Hatteras . . .	60	+1	.1	-.5	W.VA,Beckley . . .	57	+7	1.8	+.9
Des Moines . . .	53	+5	1.2	+.6	Raleigh . . .	65	+6	.3	-.5	Charleston . . .	60	+5	1.3	+.5
Dubuque . . .	48	+2	2.5	+1.8	Wilmington . . .	69	+7	.7	0	Huntington . . .	62	+7	1.0	+.2
Sioux City . . .	54	+6	.4	-.1	N.DAK,Bismarck . . .	44	+2	1.2	+.9	Parkersburg . . .	62	+9	1.8	+1.0
KANS,Concordia . . .	57	+5	1.3	+.8	Fargo . . .	41	0	.6	+.2	WIS,Green Bay . . .	43	+1	.4	-.2
Dodge City . . .	60	+7	.2	-.2	Williston . . .	42	+1	1.5	+1.3	La Crosse . . .	46	0	.7	0
Goodland . . .	53	+5	T	-.4	OHIO,Akron-Canton . .	56	+6	1.6	+.8	Madison . . .	46	+2	.4	-.2
Topeka . . .	61	+7	.1	-.7	Cincinnati . . .	63	+9	2.1	+1.3	Milwaukee . . .	42	-1	1.3	+.7
Wichita . . .	63	+7	.2	-.4	Cleveland . . .	53	+6	1.5	+.7	WYO,Casper . . .	46	+3	.3	-.1
KY,Lexington . . .	62	+8	3.6	+2.6	Columbus . . .	58	+8	1.0	+.2	Cheyenne . . .	45	+3	.3	-.2
Louisville . . .	65	+11	5.0	+4.1	Dayton . . .	60	+10	1.2	+.4	Lander . . .	45	+2	.9	+.3
LA,Baton Rouge . . .	76	+8	.2	-1.0	Toledo . . .	53	+7	1.8	+1.1	Sheridan . . .	46	+3	.2	-.3
Lake Charles . . .	74	+7	.1	-.9	Youngstown . . .	52	+6	2.4	+1.5	P.R. San Juan . . .	80	+4	1.8	+1.0

* Departures are from 30-year means (1931-60).

Based on preliminary reports

CONDENSED STATE SUMMARIES

These summaries provide brief descriptions of condition and activities important on a national scale. Detailed reports of crop and weather conditions during the growing season are contained in State issues of Weekly Weather and Crop Bulletins published by field offices of the Statistical Reporting Service, U.S.D.A. in cooperation with NOAA Climatologists.

ALABAMA: Temperatures averaged more than 10° above normal with maximums reaching 90's Friday and Saturday. Fair much of week with light rain extreme north early in week and most of State Saturday night and early Sunday. Rainfall generally light except moderate extreme north. Farmers had best week of year for fieldwork. Planting cotton and corn made good progress southern and few central counties and gained momentum north. Considerable cotton acreage planted Tennessee Valley. Nearly 1/10 peanut acreage planted. Small grains made good growth. About 1/3 of these crops heading. Rust continues to damage many wheat fields south. Late spring potatoes continue develop nicely. Planting Sand Mountain Irish potatoes neared completion. Peaches generally have heavy set fruit. Setting tomatoes underway Blount and St. Clair Counties. Pastures improving steadily. Livestock remain fair to good condition.

ARIZONA: More precipitation fell over State this week than in any week since last December. However amounts were still light and widely scattered with most weekly totals under 0.10 inch. Temperatures near normal. Strong winds and blowing dust many agricultural areas. Cold winds caused cotton injury Yuma. Cool weather expected to slow emergence Yuma and Mohave Counties. Planting nearing completion central area; fullswing southeast. Barley and wheat Yuma soft dough stage. Winds caused some lodging. Sorghum central and Yuma areas making good growth. Safflower making satisfactory development. First alfalfa cutting nearing completion Yuma, Salt River Valley, and Pima County. Spring lettuce harvest underway Salt River Valley - central areas. Extremely warm weather earlier adversely affected quality Yuma, Salt River Valley, central. Early-planted cantaloupes nearing baseball size. Strong winds caused problems vine turning. Harvest carrots, cabbage, green onions continued. Harvest Valencia oranges, grapefruit continued Yuma and Salt River Valley. Most fresh grapefruit continued export markets. Range conditions steady decline. Higher areas remain fair. New rain should help. Desert areas extremely dry.

ARKANSAS: Warm weather dominated State most of week with mean temperatures 7° to 13° above normal. Lower temperatures by weekend. Highest 94° at Calico Rock 13th. Lowest 38° at Gilbert 17th. Rain of 1.40 inches or more recorded extreme north, extreme northeastern corner, and in Brinkley-Clarendon area of east-central Arkansas. Keiser reported largest total of 2.02 inches. Most rain fell on weekend. Dry weather much of southwest and south-central portions with Camden reporting only trace, El Dorado 0.07 inch, and Texarkana 0.12 inch. Little Rock area also dry with total of 0.10 inch. Planting rice, corn, sorghums good progress. Cotton planting started. Rice 30% seeded, corn over 50%. Soil moisture short all but northeastern and southeastern areas. Too wet parts northeast. Showers weekend beneficial some localities. Preparation soybean land slowed-growers concentrating on rice and cotton. Cotton planting should increase next week. Wheat and oats prospects fair to good. Most acreage ranges from boot to early heading. Peach prospects good

main areas. Apples full bloom northwest. Earliest strawberries fruiting heavily, some approaching maturity. Watermelon, cucumber, okra planting active. Pastures need moisture most upland areas. Livestock fair to good condition, still being fed hay driest areas.

CALIFORNIA: Light to moderate precipitation several days as far south as southern coast range, Tehachapis. Total amounts near 4.00 inches Sierra Nevada, over 1.00 inch north coast, about 0.50 inch central valley north of Stockton. Few tenths inch elsewhere. Average temperatures below normal except south; most negative departures 2° to 5°. 8° below normal Sierra Nevada, northeastern interior several very cold nights. Small grains poor Merced south. Some sheeped off or cut for hay. Cotton planting continues. Some crusting from rain. Sugar beet harvest starting Imperial Valley. Rice planting increasing. Needs warm weather. Planting milo, beans, and corn continues. Alfalfa 1st cutting completed Desert and lower San Joaquin. Some rain damage to Sacramento Valley cuttings. First Chapman cherries shipped. Sulfuring Fresno area grapes discontinued unfavorable weather. Regrowth damaged vines varies vineyard to vineyard. Almonds dropping heavily where freeze damage. Some growers delaying thinning peaches, plums, nectarines until freeze damage evident. Picking Valencias increasing. Harvest lemon, grapefruits continue steady. Asparagus Stockton active, most going to processors. Broccoli Salinas good volume, Santa Maria moderate to decrease somewhat. Salinas cauliflower increasing. Carrots, Imperial moderate. Southern California celery light, though active. Kern lettuce decreasing Oxnard, Salinas increasing, Santa Maria decreasing, Imperial onions underway. Southern California strawberries near seasonal peak. Rangeland benefited slightly from rains. Some supplemental feeding continues. Cattle being moved to feedlots and irrigated pastures. Lambs moving to market, Sacramento and San Joaquin Valley. Vaccination for Newcastle disease underway south.

COLORADO: Warm first of period, cooler with general storm latter part, warming again over weekend. Light to heavy snow in plains. Most precipitation since first of year some southwest areas. Surface soil moisture short to very short statewide. High winds eastern plains midweek caused considerable drying and blowing topsoil. Seed germination slow due dry soils. Winter wheat condition declined. Wind damage to wheat light to moderate. Local areas severe damage. Insect damage light. Spraying for control cutworms and mites. Development faster than year earlier, 19% acreage jointing. Seeding spring barley and oats 83% and 68% complete. Sugar beets 58% seeded. Late summer potatoes 34% planted; plant emergence slow all spring-planted crops. Irrigating some fields to insure adequate seed germination. Range and pastures fair. Limited growth past week. Supplemental feeding most areas.

FLORIDA: Temperatures 4° to 6° above normal with many daily highs in low 90's. Some new daily high records set. Considerable sunshine. Only widely scattered showers. Planting field crops

active. Corn and tobacco planting nearly complete. Peanut planting active. Rain needed. Pastures and ranges fair to good. Moisture adequate. Livestock good condition. Citrus tree condition excellent--rain needed. High winds, high temperatures depleting soil moisture. Growers irrigating. Full open bloom period generally past. Valencia harvest increasing. Cabbage, celery, tomatoes in full volume. Sweet corn, potatoes, watermelons increasing supply. Most other commodities seasonal supply.

GEORGIA: Light rain in north and middle. None central and north. Rain Tuesday with heaviest amount extreme northeast. Some light rain northwest Sunday. This was 2d dry week in south where the last significant rainfall occurred end of March. Some southwestern counties have had no measurable rain last 16 days. Cool beginning of week but rapid warming brought highest temperatures of spring. By early weekend, high's reached low 90's much of south and central and high 80's north Friday and Saturday. Slightly cooler Sunday and lows this Monday morning were 8° to 12° cooler than 24 hours earlier. Averages ranged from 6° to 10° above normal. Soil moisture mostly adequate; but short few southwest counties. Land preparation and planting well underway. Tobacco setting 92% complete, condition fair to mostly good, insect control active. Corn 46% planted, ahead previous 2 years, conditions mostly good. Cotton 16% planted, fair to mostly good. Peaches mostly good. Peanuts 13% planted--ahead previous 2 years. Few soybeans planted. Wheat rust severe many south Georgia counties. Oats fair to good. Pasture fertilization and weed control continuing. Vegetable and melon crops fair to good condition. Warmer temperatures beneficial. Greens continue to move in volume, light harvest cabbage underway.

HAWAII: Rainfall light to moderate Hawaii and Maui, heavy Oahu and Kauai. Strong winds Oahu caused heavy bruising to tender crops. Soil moisture adequate. Increased incidence insect and disease damages. Sugarcane harvesting active--all factories operating. Light harvesting pineapples. Supplies vegetables ample. Banana and papaya light. Pastures and cattle fair to good.

IDAHO: Temperatures averaged below normal with greatest departures north. Lowest temperatures all below freezing, ranging 15° upper valleys to upper 20's elsewhere. Precipitation ranged normal or below southwest valleys to much above north Panhandle and eastern highlands where greatest totals exceeded 1.00 inch. Unseasonably heavy snow fell western Idaho afternoon of 12th; 12 inches fell at McCall to set a new April record for 24-hour fall. Winchester, north-central Prairies, received 7 inches and Boise reported 1.4 inches to exceed 1-day normals for April. Farm fieldwork mostly on schedule except north where wet conditions causing delays. Frost inflicted limited damage to fruit and caused some sugar beet replanting. Field irrigation starting. About 70% spring grain seeded. Nearly 40% potatoes planted southwest. Range grass development slow.

ILLINOIS: Cold rainy week. Some flash flooding in south where rains exceeded 3.00 inches in 24 hours. Tornadoes, high wind, and hail last half of week struck several communities in central and south. Damage light. Temperatures to 80's in south on 13th. Very little sun. Freezing temperatures missed State for most part. Oat seeding about 55% completed, 90% year ago. Plowing for corn and soybeans 3/4 complete, 85% last

year. Pastures good condition, supplying about 40% livestock roughage requirements. Red clover and alfalfa hay good condition, some reports alfalfa weevil infestation southern part State. Main activities plowing, disking, supplying fertilizer and seeding oats as weather permits.

INDIANA: Warm wet week. Temperatures ranged from low 30's to 80's and averaged about 6° above normal. Rains in south of over 4.00 inches caused flash flooding. 0.25 to 2.00 inches of rain in central and north. Severe thunderstorms with high winds and hail struck scattered locations. Damaging winds or tornadoes reported near Charles-town, Spencer, and Seymour. Property damage minor. Some people were injured. One day suitable fieldwork. Topsoil moisture adequate to mostly surplus. Subsoil mostly adequate. Fieldwork and vegetative growth 2 days behind average. Corn and soybean land 50% plowed, 40% average. Oats 30% seeded, 50% average. Wheat 5 inches high, same as average. Pastures fair.

IOWA: Temperatures averaged 2° to 5° above normal. Near freezing north on 10th and 15th. Heavy precipitation east-central diminishing to light west and southernmost counties. Little change in plowing during week. Oat seeding over 55% complete, over 70% last year with 5 year average 60%. Plowing for 1972 crops nearing 65% completion, about same as last year and 5-year average. Feed supplied by pastures below average to average. Days suitable fieldwork, 4.5. Topsoil moisture, 37% short, 57% adequate and 6% surplus. Last week 17% short, 77% adequate and 6% surplus.

KANSAS: Much needed rain fell over central, extreme southeast, and parts west. Generally 0.40 to 1.25 inches those areas. No significant moisture in 2 tiers of counties along Colorado border. Dry weather had prevailed that area for some time. Temperatures averaged about 4° above seasonal north-central, much above normal elsewhere. Very warm south and east 12th. New record temperatures for April established that day. Locally along southern border. Few maxima in upper northeast reported. Blowing dust west 12th. Wheat benefited by weekend rains certain areas. But under considerable stress from lack of moisture. Wheat 51% jointed, compared with range 15% to 42% for recent years. Outside rain areas surface soils quite dry, subsoil moisture being depleted. High winds added to wheat distress. Cutworms, brown mites, soil borne, and streak mosaic some wheat fields, but damage light. Oats seeding 95% completed, 87% last year, 88% average. Corn 8% planted, 12% last year and 5% average. Sugar beet planting continues. Alfalfa made considerable growth, but aphids some fields. Some cattle removed from wheatfields as dry weather limited top-growth. Native pasture growth moderate. Some bluestem pastures burned Flint Hills area, with grass now greening earlier burned pastures. Fieldwork made good progress. Pre-irrigation made progress.

KENTUCKY: Rain every day, totals from about 1.00 inch to 8.50 inches. Heaviest central and east. Temperatures near normal, then above to much above normal, averaging 5° to 12° above normal. Flash flooding in central and east several days beginning on 12th. At Monticello, 250 persons evacuated on 12th due to flash flood; 3.61 inches of rain in 1 hour. Flooding along most of Kentucky River in eastern half on weekend, and along portions of several streams in central and

east after midweek. Numerous thunderstorms with base ball size hail several locations. Wet weather limited fieldwork to 1.5 days. Soil moisture surplus. Plowing slowed, only 45% complete, compared 75% year ago. Some water damage to tobacco plant beds. About half have plants up, sunshine needed. Pastures greening past, supplying about 1/2 roughage requirements. Fruit trees budding and blooming; some early freeze loss.

LOUISIANA: Warm humid but dry. Scattered showers most areas weekend and cooler. Temperatures 5° to 9° above normal. Some daily maximum records set. Extremes: 91° at Monroe Saturday; 39° Cotton Valley April 10. Precipitation totals again light to moderate. Six weeks since all of State received as much as 1.00 inch of moisture for week. Local amounts in 0.20 to 0.80 inch range. Greatest 24-hour amount reported 0.80 inch measured Sunday morning at Alexandria. Fieldwork progressed rapidly as soil and weather conditions were almost ideal. Soil moisture getting short northwest and other scattered areas. Application fertilizer and herbicides active. Considerable rice and corn and some cotton planted. Rice about 50% seeded, 70% year ago. Corn 40% planted, 60% year ago. Cotton 5% to 10% planted, about equal last year. Cultivation sugarcane and early-planted row crops active, stands good. Some rust damage wheat and oats, but conditions mostly fair to good. Strawberry production near peak. Pasture feed average. Livestock good.

MARYLAND AND DELAWARE: Temperatures averaged near normal to 3° above normal. Extremes upper 60's to mid-70's, 20's and low 30's. Precipitation on 13th, 15th, and 16th totaled mostly 1.00 to 2.00 inches except near 0.50 inch extreme south. Fieldwork active especially midweek. Plowing and fertilizer spreading most frequent jobs. Few fields corn planted, will be in full swing southern shore this week. Winter grain fields mostly fair to good. Tobacco beds seeded, growers working with 1971 crop for market opening April 18th. Potato planting active. Transplanting tomato plants starting. Peaches full bloom south and about April 25th north. Growers keeping close watch for winter damage to buds.

MICHIGAN: Near seasonal weather north, warming and wet south after midweek. Snow depths reduced 5 to 10 inches central and north with greatest depths, just over 20 inches, still reported northern Upper Peninsula. Temperatures averaged near normal Upper Peninsula, 3° below normal northeast to 6° above normal southern Lower Peninsula. Precipitation totals: 0.75 to 1.30 inches Upper Peninsula, 1.00 to 3.50 inches except less than 0.50 inch narrow band central Lower Peninsula.

MINNESOTA: Temperatures normal. Extremes: 74°, 18°. Precipitation: Generally more than 0.75 inch north of a line from Marshall to Duluth. Heaviest was at East Grand Forks with 1.94 inches. Little to no precipitation southern 2 tiers of counties. Snow cover heaviest north of a line from Brainerd east into Wisconsin with generally more than 6 inches in the forested areas. Lakes still ice-covered from Minneapolis north. Very little fieldwork during week due wet soils. Oats seeding begun southwest. Topsoil moisture surplus northern 2/3, adequate elsewhere. Percent small grains seeded: Oats 2, normal 13; spring wheat 0, normal 11; barley 0, normal 6. Winter wheat, rye, hayfields, pastures dormant.

MISSISSIPPI: Weekly temperatures averaged mostly 3° to 5° above normal. Extremes: 89° and 32°. Weekly rainfall confined to northern quarter of State. Greatest 1-day amount, 0.54 inch at University on 8th. Over weekend: Severe weather on 15th; most damages in Delta area at Cleveland. About 60 injured and damages over \$100,000. Rainfall amounts across State up to and over 2.00 inches. Remainder of week mostly fair and slightly cooler. Soil moisture mostly surplus northeast, mostly short southwest, other areas mostly adequate. Average 5 1/2 days suitable fieldwork. Considerable progress made land preparation and planting. About 28% corn and 4% cotton planted. Wheat 40%, oats 52% headed. Wheat, oats, Irish potatoes, truck crops, pastures, and livestock mostly good condition. Peaches mostly fair.

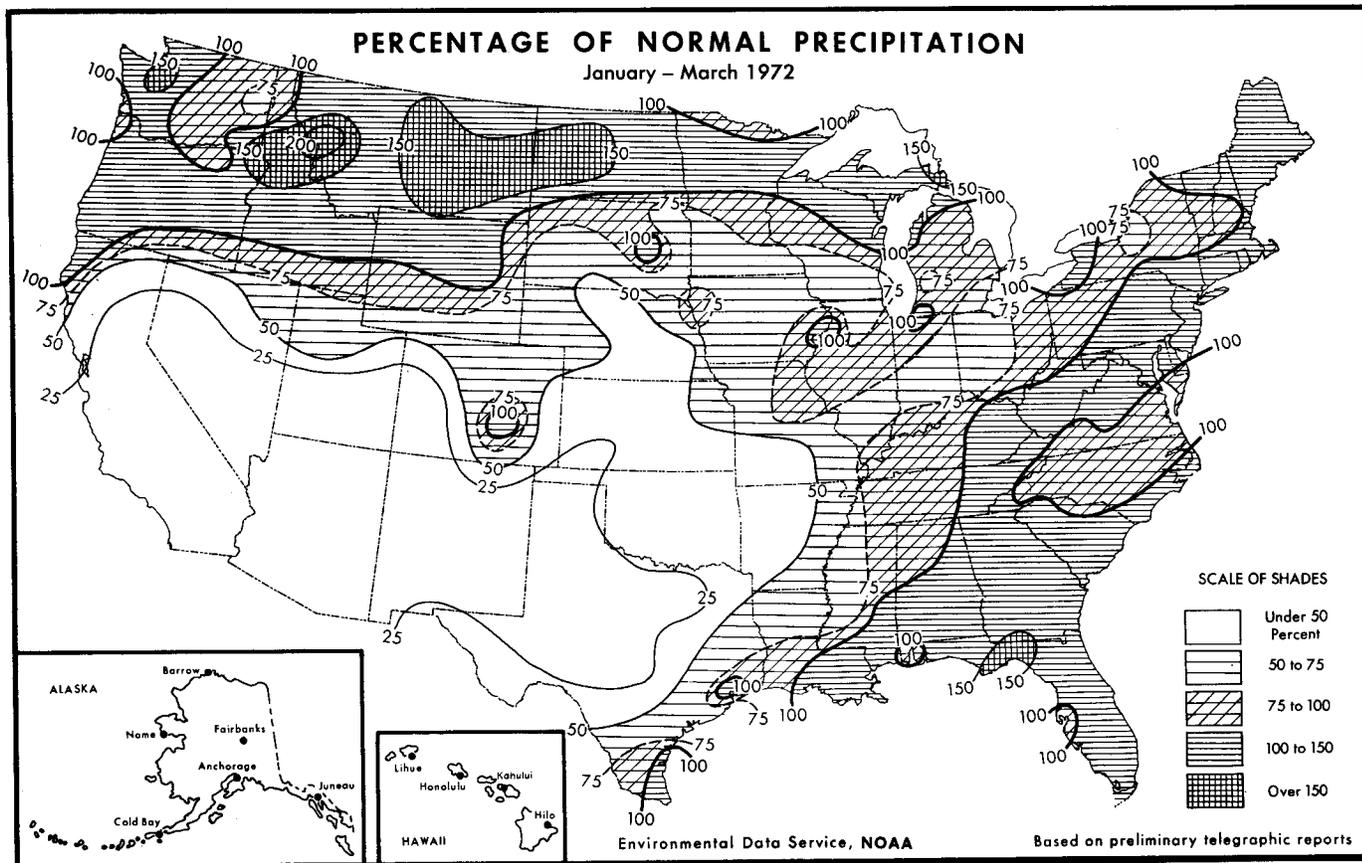
MISSOURI: A warm, wet, spring week. Temperatures warmed rapidly to summerlike levels with many locations setting new daily records after midweek. Highest 96° at Joplin. Temperatures averaged 7° above normal north to 14° above normal southwest. Rainfall plentiful all but northwest. The Ozarks and central Missouri received between 1.00 and 2.00 inches, the Bootheel over 4.00 inches, where some flooding reported, and the northwest received less than 0.25 inch. Average 4 days suitable fieldwork. Plowing 74% completed. Oats 86% sown, corn 6% planted. Wheat good condition. Pastures mostly fair. Soil moisture adequate except dry southwest.

MONTANA: Mild temperatures continued through week with no large changes. Frequent light precipitation west, rain and snow elsewhere midweek and weekend. Total precipitation up to 0.50 inch northern half of State, lighter south. Topsoil moisture generally adequate except for several counties central. Barley and oats 10% planted. Spring wheat 5% seeded. Sugar beets 25% seeded; 20% past week. Condition winter wheat improved, 5% excellent, 65% good and 30% fair condition. Ranges growing slowly most areas. Stockwater supply adequate. Eighty five percent range livestock receiving supplemental feed. Calving 70% complete, lambing 55% and shearing 65% finished.

NEBRASKA: Scattered snow Panhandle and showers in southeast brought temporary relief to those areas. Otherwise, mild dry weather continued. Weekend moisture gave some relief from dry conditions, but most areas need good rain. Wheat condition mostly good, except some eastern areas. Few scattered reports Mosaic in wheat. Seedbed preparation and fertilizer application predominant activities. Sugar beet planting well underway west. Cool season grasses slow developing due dryness. Livestock conditions good with very few problems.

NEVADA: Cool week. Temperatures all divisions averaged 2° to 6° below normal. Light to moderate precipitation all divisions midweek from 0.02 inch at Las Vegas to 0.53 inch at Carson City. Snow all divisions except extreme south from 1.00 inch at Reno to 5.00 inches at Tonopah. High winds accompanied by cold temperatures and snow flurries slowed fieldwork. Livestock remain generally good condition with movement to spring ranges underway. Death losses about normal -- calving and lambing progressing satisfactorily.

NEW ENGLAND: Second quite cool week in row. Temperatures mostly 3° to 5° below normal except nearer normal in coast and northern Maine. Warming Sunday in central and south with some low 60's.



PRECIPITATION - JANUARY TO MARCH 1972

Most of the Nation received less than normal rainfall in the 3-month period, January to March 1972. A large area from central and southern California to southwestern Missouri and central Arkansas received less than half the 3-month normals. This is approximately the same area which was especially dry in the first 3 months of 1971. January to March 1972 precipitation from California to central Texas was less than one-fourth the 3-month normals. Above-normal precipitation occurred from the Washington and Oregon coast to Upper Michigan and over most of the area east of the Appalachians.

Generous precipitation fell over portions of

the Deep South in January and in March, from West Virginia to eastern Pennsylvania in February, and along the coast in western Washington in each of the three months, January to March. The rains along the northern Pacific coast were frequently accompanied by gales. There were about the usual number of winter storms over the Northern States. Thunderstorms, some with hail and damaging winds, brought much of the precipitation to the South. A few tornadoes occurred. Mixtures of snow, sleet, and freezing rain slicked the highways in the areas between the snow and the rain.

L. W. Dye

Quite wet latter half of week, with heaviest yield on 13th. Weekly totals averaged about 1.25 inches but varied from about 0.50 inch extreme northeast to locally over 2.00 inches southwest. Some new snow north and higher elevations of south. Water equivalent of snowpack in north generally much above normal. Over 6 feet snow depth at Cannon Mountain. Week mostly favorable for flow maple sap. Very little springwork to date. Season late.

NEW JERSEY: Temperatures averaged near or slightly below normal. Extremes ranged from mid-20's to mid-60's. Rainfall was abundant with heaviest amounts Thursday and Sunday. Heavy thundershowers numerous Sunday. Station totals varied from 1.30 to 2.80 with heaviest amounts in south. Weekend rain halted fieldwork. Field activities and crop progress most areas week or 2 weeks behind schedule. Some vegetable plants hurt by freeze on 8th. Some

greens being harvested limited volume South Jersey. Fruit buds swelling. Pastures have greened nicely. Warm temperatures would benefit all crops.

NEW MEXICO: Small amounts precipitation midweek, mostly confined to northwestern border. Continued dry elsewhere. Cooling early in week and freezing minimum temperatures quite general Saturday except southeast. Cooler west with return to normal temperatures. Temperatures eastern plains continued much above normal. Soil moisture very short to short. Winter wheat, winter and spring barley, alfalfa hay fair to good. Frost damaged alfalfa being out. Lettuce, onions good. Range condition declining rapidly. Livestock still mostly fair. Supplemental feeding active.

NEW YORK: Steady warming trend followed previous cold weekend. Mild temperatures dominated latter

half, especially in west. Maximums 55° to 65° western half and coastal sections 1 or 2 days, 11th through 13th, with a few low 70's in southwest but mostly 40's to mid-50's northeast quarter. Widespread precipitation midweek totaled 0.80 to 1.30 inches from southeastern quarter with light-estimates 0.20 inch in southwest. Additional rain southern half on 16th averaged 0.50 inch. Wet fields due to snow cover and rain delayed fieldwork. Excess soil moisture and cool temperatures retarded growth pastures and hay. Major activities manure hauling, fence repair, and preparations for fieldwork. Cold weather delayed opening of "maple season." Regular runs began late March and are now near completion. Field preparation and planting potatoes active Long Island. Planting about 20% complete compared with 70% year ago. Very little activity underway Upstate potato sections. Fieldwork muckland areas off to slow start due wet conditions. Few onion fields seeded Elba. Orange County active onion planting. Fruit trees and grape vines appear to have come through winter with very little winter injury. Activity limited to late pruning, fertilizing, trellis repair and grape tying.

NORTH CAROLINA: Temperatures rising from below normal to much above normal. Minima in 20's through 11th rising to 50's and 60's weekend. Maxima in 40's and 50's rising to 80's and low 90's weekend. Rain on 12th and widely scattered showers thereafter. Some heavy thunderstorms north late 13th and early 14th with scattered hail and damaging winds. Precipitation totals 0.25 to 2.00 inches averaging 1.00 inch. Soil moisture increased, adequate to surplus statewide. Small grains and pastures continue to improve, mostly good. Tobacco beds mostly good. Many plants too large Coastal plain, setting active. Condition peaches poor to fair. Irish potatoes and truck crops fair to good. Frost April 7 and 8 damaged tobacco plants in beds and in fields, peaches, early budding potatoes, strawberries, and truck crops. Wet fields hindered land preparation. Corn and cotton planting active coastal plain, limited elsewhere.

NORTH DAKOTA: Temperatures averaged near normal. Cloudy most of week with light snow and light to locally heavy rain. Mostly sunny and mild weekend. Precipitation 0.11 to 1.97 inches. Cool weather and intermittent rain showers continued to delay field work start. Topsoil moisture mostly plentiful to surplus and will get spring-planted crops off to good start. Winter wheat and rye starting to green up southern areas.

OHIO: Temperatures 5° to 10° above normal except along Lake Erie where they were normal to 5° below normal. On 13th Cincinnati recorded a maximum temperature of 83°, highest in State. Precipitation amounts high. The possibility of flash floods existed on 13th, 15th, and 16th. Sections of northeast had nearly 2.00 inches of rain 15th while rest of State had approximately 0.20 inch. On 12th hail 1 inch in diameter reported Cincinnati. Rain kept fieldwork at minimum. Only 2 days favorable fieldwork. Soil moisture supply 60% surplus, 40% adequate. Plowing for corn and soybeans 65% complete. Corn planting just getting underway. Oats 1/4 finished, usual progress 50%. Sugar beets planting 15% complete. Tobacco bed sowing 55% along, against usual progress 70%. Potato planting made little or no progress. Livestock obtaining 5% forage requirement from pasture.

OKLAHOMA: Beneficial rains all areas except Panhandle will temporarily ease drought in State. Temperatures averaged 10° to 14° above normal. High temperatures, hot winds rapidly depleted critically-low supply subsoil moisture most wheat-fields. A 0.25- to 0.75- inch rain over much of Oklahoma wheat belt along with cooler weekend temperatures given crop at least temporary reprieve. This could be one of most valuable 0.50- inch rains in State's history. Freeze damage to wheat and some barley and rye in various degrees from west-central and central Oklahoma northward to Kansas border. This damage varies from field to field, but is generally light southern part of this area and becomes fairly intense some north-central counties. There remains good wheat in this area and given rain and moderate temperatures -- the crop should make substantial recovery. Wheat condition now rated 44% poor, 52% fair, and 4% good. Nearly 1/5 crop heading -- about 7 to 10 days ahead of year earlier. Oats and barley condition declined. Both crops mostly poor to fair. Seedbed preparation summer row crops made only moderate progress. Alfalfa weevil causing considerable damage. Pasture and ranges making slow growth, condition rated mostly poor to fair.

OREGON: Rain and showers 3 to 7 days provided cool wet week. Temperatures averaged 2° to 5° below normal west side, 6° to 8° below normal eastern 2/3. Minima 15° to 28° eastern 2/3 of State, 29° to 32° western valleys and Newport on coast, 33° to 39° other coastal. Fruit areas 2 to 3 nights of 28° to 32°. Maxima 46° to 67° precipitation varied 0.10 to 0.60 inch eastern 2/3 and southwestern valleys, 1.10 to 2.10 inches Willamette Valley, 2.50 to 3.30 inches coast and northern Cascades. Cool, wet weather slowed most farm activities western Oregon. Spring planting grain farm activities western Oregon. Spring planting grain crops ranged from not yet started to 95% completed eastern Oregon. Not started western Oregon. Asparagus harvest slowed by wet weather. Planting green peas for processing nearly on schedule. Bee activity and pollinization fruit poor due to weather. Pears near full bloom. Some cattle out on early ranges.

PENNSYLVANIA: Mild, wet week. Warmest week, statewide, since late October and wettest since last July. Northeast 2° to 3° cooler than normal. Temperatures 2° to 4° above normal central, and 6° to 9° above normal west. No significant temperature changes during week. Showers and thunderstorms widespread Wednesday through weekend. Heaviest Sunday with over 1.00 inch many areas. Weekly totals less than 1.50 inches parts of north and southwest 3.00 to 4.00 inches southern-central mountains and parts of west-central. Some hail west Sunday. Fieldwork temporarily halted by drenching rain. Spring field activities full swing. Farmers off to late start. One week behind last year. Some oats seeded, winter grains greening, some winterkill. Leaf tobacco seedbeds 80% planted. Peaches swelling.

PUERTO RICO: Average rainfall 2.00 inches or 1.14 inches above normal. Heavier rains totaling 3.00 to 5.00 inches northern and eastern interior divisions. South-central coast received generally less than 1.00 inch in light showers. Crop moisture conditions near normal all divisions, except few fields northeast too wet for fieldwork. Temperatures averaged 77° to 78° on coast and 72° to 73° interior divisions or about normal for

week. South winds end of week caused high day-time maximums and generally increasing temperature trend. Highest maximum, 93°; lowest minimum, 57°. No crop report due local holiday.

SOUTH CAROLINA: Rainfall less than 0.25 inch coastal plain. Amounts increased toward north-west with some Piedmont areas exceeding 1.00 inch. Freezing temperatures on 9th and 10th many locations but rapid warming brought temperatures to high 80's as week ended. Extremes: 27° at Greer and 90° at Charleston Airport. Averages were normal, ranging from 59° to 64°. Favorable weather end of week enabled farmers to get into fields. Soil moisture adequate. Tobacco transplanting 58% complete, 22% last year. Some frost damage Darlington area--some resetting taking place. Corn 37% and cotton 6% complete, compared with 40% and 14% respectively last year: condition fair to good. Small grains, hay crops. pastures good to excellent condition. Considerable damage some varieties peaches Piedmont area, light elsewhere. Vegetable crops fair to good. Tomato transplanting complete. Planting watermelons 84% complete -- 71% last year. Peanuts 8% planted, 9% last year. Sweetpotato planting underway.

SOUTH DAKOTA: Temperatures averaged up to 5° above normal. Extremes ranged from 15° near Wessington Springs on 11th to 78° at Yankton on 13th. Precipitation fell as rain and snow mixed mostly midweek with amounts generally from less than 0.10 inch to over 1.50 inches. Most snow melted soon after it fell. Heaviest rain fell northeast with lightest southeast. Fieldwork slowed by damp weather, particularly over northern 2/3. Southern 1/3 made rapid progress fieldwork. Spring seeding small grains southeast over 3/4 complete. Winter rye varies from fair to excellent. Winter wheat conditions mostly good, but some areas showing winterkill and wind erosion damage. Both winter rye and wheat beginning to green and early areas show signs of growth. Top-soil moisture mostly adequate except short across extreme southern edge State and surplus area northeast. Northeast fieldwork considerably delayed by wet conditions. Some scours calves. Few cattle on pasture, but still need supplemental feed. Range lambing beginning. Shearing underway. Sunshine needed to improve pasture growth.

TENNESSEE: Temperatures averaged 7° to 13° above normal. Rain most places on 3 days, on 4 to 7 days parts of east. Totals generally less than 0.50 inch in west to as much as 4.00 inches east. Thunderstorms and damaging winds Saturday. Tornado touched down in Springfield, damage estimated at \$1 million. Near record high temperatures Thursday, Friday, and Saturday. Plowing and planting corn advanced despite continued rain. Weekend thunderstorm activity brought most farm activity to halt. Average 1.9 days suitable fieldwork. Pastures and small grains continue to benefit from rain. Livestock remain good condition, but few cases of grass tetany.

TEXAS. Showers brought some temporary relief to drought north-central Texas. Except for few showers East Texas Saturday, little or no precipitation. Hot dry winds whipped other parts of State Wednesday through Friday. Planting cotton, corn, sorghum, peanuts progressing northward. Dry weather slackened planting activity central and south. Preplant irrigation and fertilization about complete High and Low Plains. Irrigated wheat good prospects. Dryland wheat condition continues to decline. Percent planted major

crops; cotton 21, 12 last year; corn 65, 53 last year; sorghum 41, 31 last year; rice 88, 80 last year; peanuts 9, 6 last year; sugar beets 83, 87 last year. Lower Rio Grande Valley onion harvest reaching peak. Light supplies carrots, cabbage available. Light harvest cucumbers, squash, potatoes, tomatoes, cantaloupes, and watermelons making good progress. Laredo light supplies carrots still available. Winter Garden watermelons and cantaloupes show good growth. Coastal Bend onion harvest continues. Cucumbers and melons running and fruiting. Central and East Texas lack of moisture slowed planting. Tomatoes and sweetpotatoes need rain. High Plains most onions, carrots, potatoes planted, showing fair to good progress. Peaches that survived late freeze, have good to excellent fruit set. Citrus trees good, with heavy irrigation required.

UTAH: First rainfall in 1972 many sections southern Utah. Accumulations locally very heavy north, but generally only light south. Not enough to alleviate drought. Few stations still have not recorded measurable amounts this year. Average temperatures near to a little below normal northern desert and along Wasatch Front, but continued above normal elsewhere. Local areas subfreezing temperatures further damaged already limited fruit crop. This might be worst fruit year since 1950. Rain and snowfall improved soil moisture and dryland crop and ranges many areas. Reservoir-stored irrigation water continues best ever. Winter wheat condition good most areas. Some blow damage San Juan County. Planting spring crops; 75% completed spring wheat, 60% oats, 80% barley, 100% dry onions, and 65% sugar beets. Calving 65% completed -- range lambing 20% -- shearing 45%. Movement to spring range land 15% completed for cattle and 20% for sheep.

VIRGINIA: Temperatures below normal at beginning and above normal second half. Frequent showers and thundershowers. Totals mostly heavy with damage from hail and high water. Wet soil hampered work especially southwest and lower Piedmont. Corn 3% planted. Planted oats, barley, alfalfa, clover, grass, snap beans, sweet corn, tomatoes, and Irish potatoes. Pastures and hay growth retarded. Some grass tetany. Sheared sheep, weaned lambs. Limited freeze damage to tobacco plants beds southwest and early tomatoes northern neck. Some peaches damaged severely.

WASHINGTON: Cold weather throughout period with varying amounts of precipitation mostly in north and west. Western Washington: Fieldwork almost nil. Harvest field rhubarb underway. Cold temperatures hard on raspberries, blueberries, and blackberries. Planting green peas delayed by wet weather. Grass growth slow and most dairies still on supplementary feeding schedules. Staking and spraying cabbage seed fields beginning. Eastern Washington: Fieldwork slowed by weather, but planting activities continuing. Potatoes, sugar beets, onions, sweet and field corn, peas, and spring grains all going into ground. Weed control programs generally as scheduled. Orchard heating at night continuing in fruit areas with some frost damage. Alfalfa and pastures being irrigated drier areas. Hop twining underway and some grape trellising continuing. Pasture growth continues minimal.

WEST VIRGINIA: Rapid change from statewide snow flurries April 8 to warm humid showery weather with temperatures above 70° by April 12. Severe

thunderstorms with heavy rain April 13, 15, and 16. Weekly rain totals over 4.00 inches in Logan areas. Local flooding many areas. Preparation for spring planting temporarily halted by wet weather. Soil moisture adequate to surplus. Pastures good, but need warmer weather. Supplemental feeding still required. Ample feed supplies available. Livestock remains good condition.

WISCONSIN: Springlike weather finally arrived as week ended. Weather earlier in week mostly cloudy and cool. Season running quite late. Rainfall moderate in north Wednesday and heavy along Illinois border Sunday. Some 2.00 to 3.00 inch totals extreme south. Rivers and streams running high and soil moisture excess most areas. Remaining snow cover melting north. Frost in ground moving out central Wisconsin while soils generally free of frost south. No fieldwork started as yet.

WYOMING: Light to moderate snow and rain most of Wyoming. Moran reported most moisture with 1.38 inches. Temperatures averaged 1° to 7° above normal. Maxima were mostly mid-50's to mid-60's west of Divide, 60's to mid-70's east. Minima were mostly 15° to 30° west of Divide, 20's to low 30's east. Temperature extremes: 76° at Guernsey Dam and 15° at Border and Moran. About 1/3 sugar beets, 1/4 spring wheat and 2/5 oats and barley planted. Soil moisture supplies improved some areas. Mild weather cut death losses in calves and lambs. About 60% calves, 70% farm flock lambs and 20% range lambs born. About 40% range sheep shorn.

WATER SUPPLY OUTLOOK FOR THE WESTERN UNITED STATES
Issued as of April 1, 1972

The table below shows the most probable April 1 forecasts in percent of the 15-year (1953-67) average. The most probable runoff forecasts are for the residual period, except water-year for the Sacramento and San Joaquin Basins; April 1 to September 30, 1972, for the Missouri, Yellowstone, and North Platte Basins; November 1, 1971, to June 30, 1972, for the Little Colorado Basin; and April 1 to June 30, 1972, for the Gila Basin. The publication "Water Supply Outlook for the Western United States," issued as of April 1, 1972, contains water supply forecasts for about 375 stations in the Western United States.

River	Station	FCST 1,000 A.F.	% 15-yr. Avg+
Columbia	Grand Coulee, Wash.	86,500	125
Columbia	The Dalles, Oreg.	133,000	126
Snake	Clarkston, Wash.	28,700	130
Sacramento	Red Bluff, Calif.	6,350	72
San Joaquin	Big Creek, Calif.	700	55
Weber	Gateway, Utah	375	148
Jordan	Utah Lake, Utah	256	105
Truckee	Lake Tahoe to Farad	130	47
Colorado	Lake Powell, inflow	7,500	100
Green	Green River, Utah	3,700	128
San Juan	Bluff, Utah	645	62
Little Colo.	Woodruff, Ariz.	3.5	46
Gila	Solomon, Ariz.	10	24
Rio Grande	San Marcial, N.Mex.	195	58
Arkansas	Pueblo, Colo.	345	99
Missouri	Ft. Peck, Mont.	6,750	152
Yellowstone	Sidney, Mont.	8,720	137
North Platte	Glendo, Wyo.	677	102

+ Period, 1953-67

Hydrologic Services Division
National Weather Service

NATIONAL FLOOD SUMMARY - Monday, April 17, 1972

Many streams in Kentucky...Indiana...Ohio...Michigan...Illinois...and Missouri left their banks following the heavy rainfall during the weekend. Much flash flood damage was reported in Ohio in the Youngstown-Warren-Niles areas on Saturday, April 15. Precipitation the middle of last week is causing several feet of flooding in portions of the Red River of the North Basin in North Dakota and Minnesota.

Some streams in Kentucky are also well above flood level.

Precipitation...heavy rain fell over a sizeable portion of the middle Mississippi Valley and middle and lower Ohio Valley during the weekend. This occurred mostly during the 24-hour period ending 7a.m., April 16. Grand Chain Illinois on the extreme lower Ohio River received 7.50 inches during this period. Since 7a.m., April 16, heavy rain fell in a narrow band from northern Illinois across the southern part of lower Michigan. General heavy rain fell also over the eastern two thirds of Pennsylvania and eastward to the coast.

Hydrologic Services Division
National Weather Service

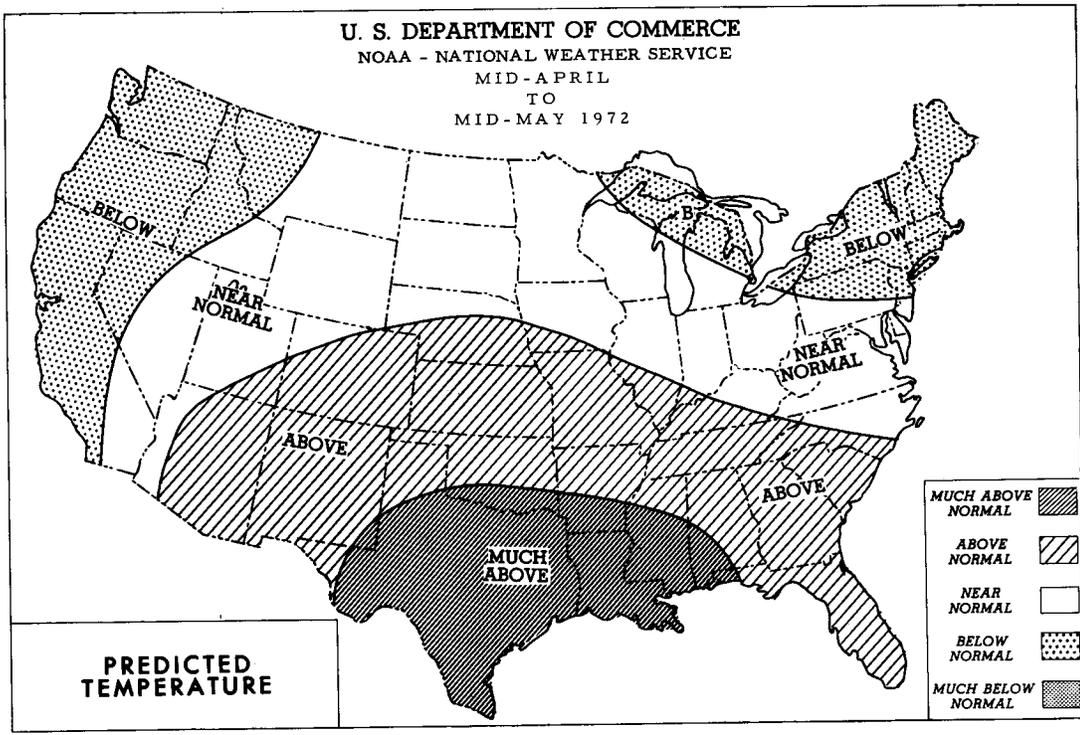
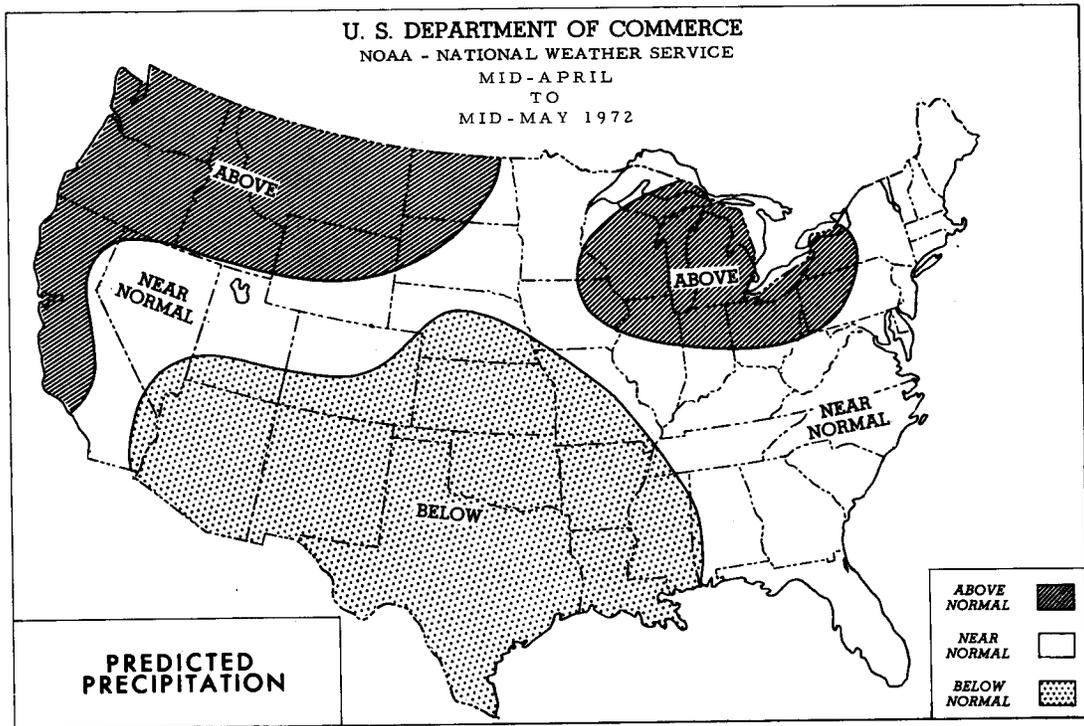
Heating Degree Days (Base 65° F.)

MARCH 1972

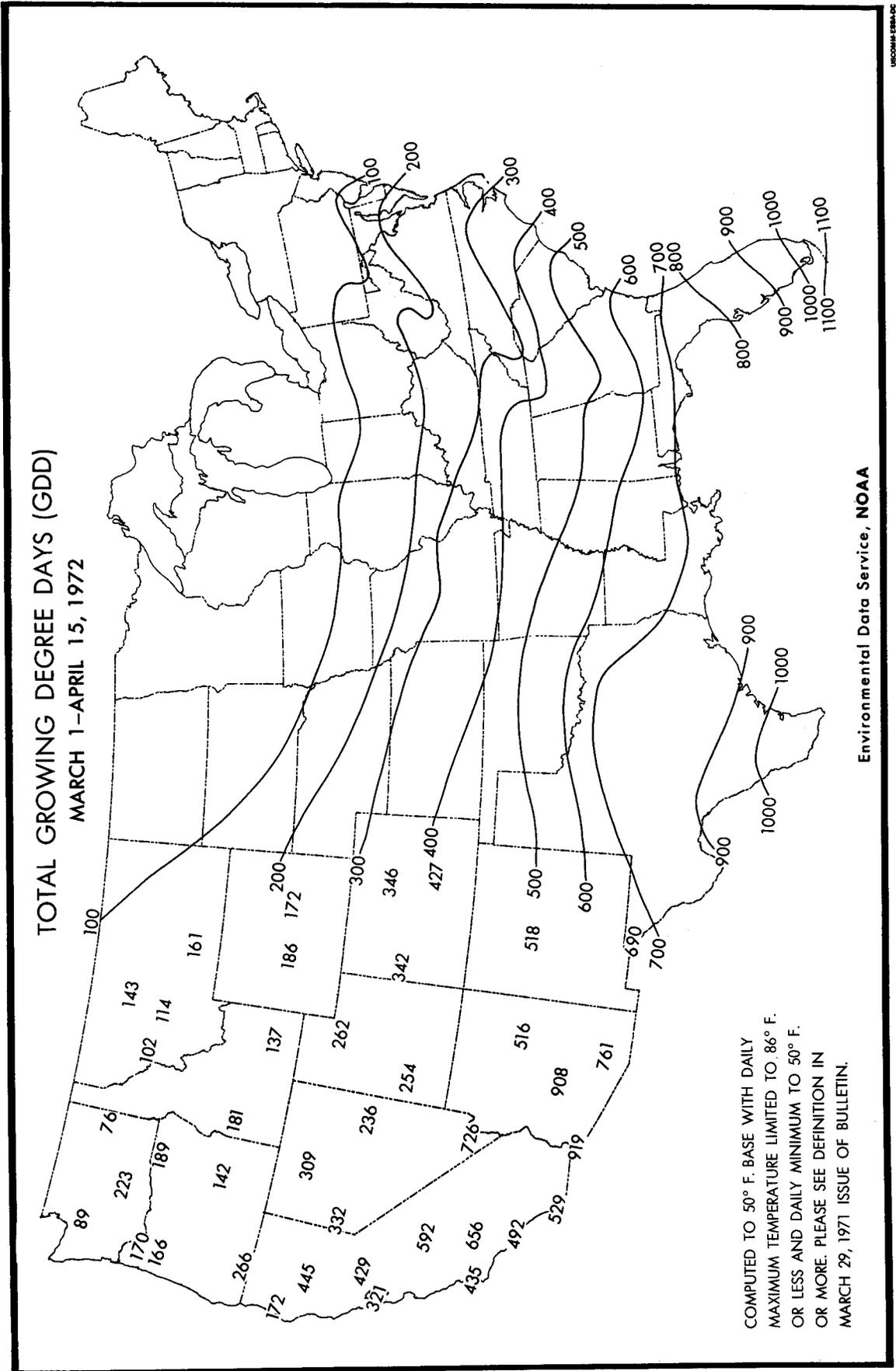
ALA. Birmingham	348	MAINE, Caribou	1440	OKLA. Okla. City	365
Mobile	13	Portland	1112	Tulsa	365
Montgomery	241	MD. Baltimore	663	OREG. Astoria	526
ALASKA, Anchorage	1520	MASS. Boston	883	Burns U.	716
Barrow	2630	Nantucket	889	Medford	465
Fairbanks	--	MICH. Alpena	1329	Pendleton	528
Juneau	1186	Detroit	997	Portland	465
Nome	2250	Flint	1052	Salem	523
ARIZ. Flagstaff	736	Grand Rapids	1089	PA. Allentown	853
Phoenix	22	Houghton Lake	1320	Erie	1082
Tucson	73	Lansing	1089	Harrisburg	765
Winslow	403	Marquette U	1304	Philadelphia	748
Yuma	11	S. Ste. Marie	1419	Pittsburgh	881
ARK. Fort Smith	378	MINN. Duluth	1458	Scranton	996
Little Rock	360	Internatl Falls	1413	R. I. Providence	879
CALIF. Bakersfield	97	Minneapolis	1165	S. C. Charleston	249
Eureka U.	422	Rochester	1142	Columbia	341
Fresno	142	St. Cloud	1265	Greenville	434
Los Angeles U	61	MISS. Jackson	216	S. DAK. Aberdeen	1100
Red Bluff	251	Meridian	231	Huron	1032
Stockton	163	Vicksburg U	--	Rapid City	877
San Diego	139	MO. Columbia	635	Sioux Falls	1039
San Francisco	294	Kansas City	557	TENN. Chattanooga	496
COLO. Denver	621	St. Louis	617	Knoxville	516
Grand Junction	563	Springfield	549	Memphis	391
Pueblo	585	MONT. Billings	765	Nashville	448
CONN. Bridgeport	853	Glasgow	1067	TEX. Abilene	207
Hartford	935	Great Falls	820	Amarillo	409
D. C. Washington	599	Havre	964	Austin	66
FLA. Apalachicola	--	Helena	796	Beaumont	--
Ft. Myers	0	Kalispell	817	Brownsville	11
Jacksonville	--	Miles City	891	Corpus Christi	22
Key West	--	Missoula	749	Dallas	142
Lakeland U.	31	NEBR. Grand Island	714	Del Rio	--
Miami	0	Lincoln	681	El Paso	126
Orlando	24	Norfolk	824	Fort Worth	143
Pensacola U	--	North Platte	745	Galveston U.	53
Tallahassee	167	Omaha	795	Houston	85
Tampa	26	Valentine	827	Lubbock	275
GA. Atlanta	387	NEV. Ely	732	Midland	176
Augusta	306	Las Vegas	99	San Angelo	138
Macon	270	Reno	549	San Antonio	61
Savannah	182	Winnemucca	626	Victoria	50
IDAHO, Boise	598	N. H. Concord	1142	Waco	109
Lewiston	552	N. J. Atlantic City	816	Wichita Falls	273
Pocatello	736	Trenton U	771	UTAH, Blanding R	--
ILL. Cairo U.	491	N. MEX. Albuquerque	346	Salt Lake City	556
Chicago	929	Roswell	251	VT. Burlington	1239
Moline	893	N. Y. Albany	1060	VA. Lynchburg	571
Peoria	866	Binghamton	1133	Norfolk	494
Rockford	1006	Buffalo	1070	Richmond	554
Springfield	745	New York	837	Roanoke	594
IND. Evansville	639	Rochester	1071	WASH. Colville	744
Fort Wayne	900	Syracuse	1098	Omak	--
Indianapolis	774	N. C. Asheville	574	Quillayute	660
South Bend	972	Charlotte	472	Seattle-Tacoma	557
IOWA, Burlington	850	Greensboro	550	Spokane	726
Des Moines	857	Hatteras R.	393	Walla Walla U.	480
Dubuque	1051	Raleigh	485	Yakima	643
Sioux City	838	Wilmington	340	W. VA. Beckley	775
KANS. Concordia	606	N. DAK. Bismarck	1157	Charleston	649
Dodge City	485	Fargo	1269	Huntington	661
Goodland	615	Williston U	1209	Parkersburg U.	720
Topeka	567	OHIO. Akron-Canton	999	WIS. Green Bay	1253
Wichita	521	Cincinnati U.	730	Madison	1119
KY. Lexington	700	Cleveland	930	Milwaukee	1149
Louisville	623	Columbus	860	WYO. Casper	824
LA. Baton Rouge	123	Dayton	871	Cheyenne	771
Lake Charles	102	Toledo	952	Lander	736
New Orleans	126	Youngstown	1028	Sheridan	761
Shreveport	185				

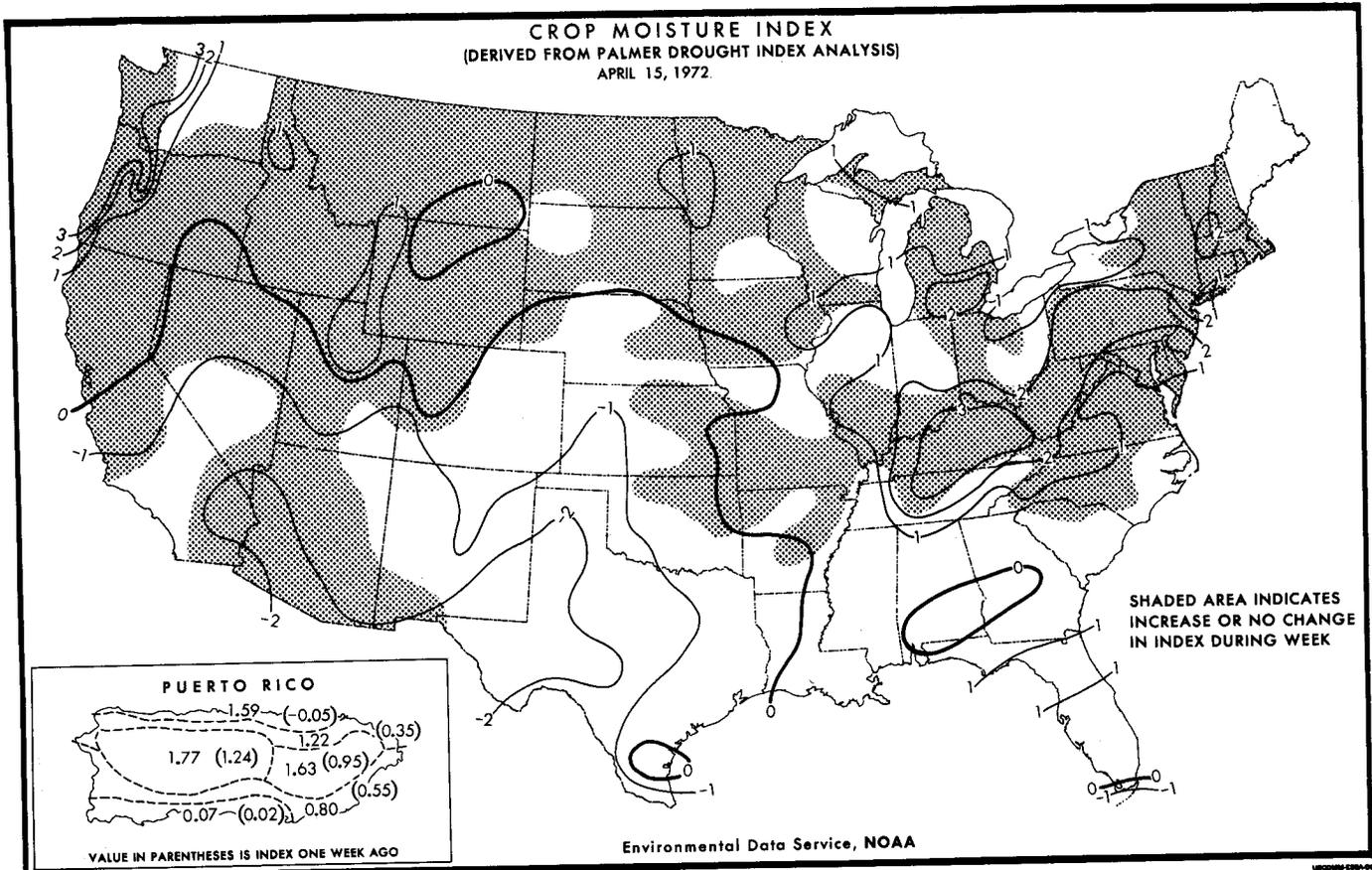
Preliminary reports from airport locations, except those marked U for urban and R for rural.

*Estimated.



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





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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