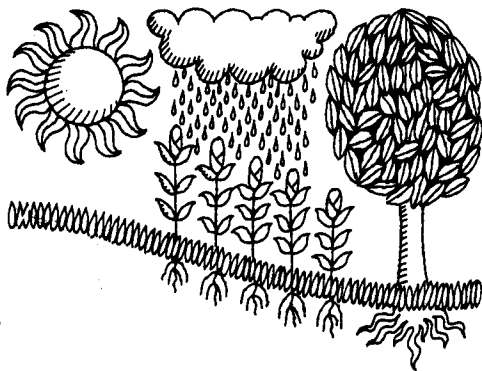




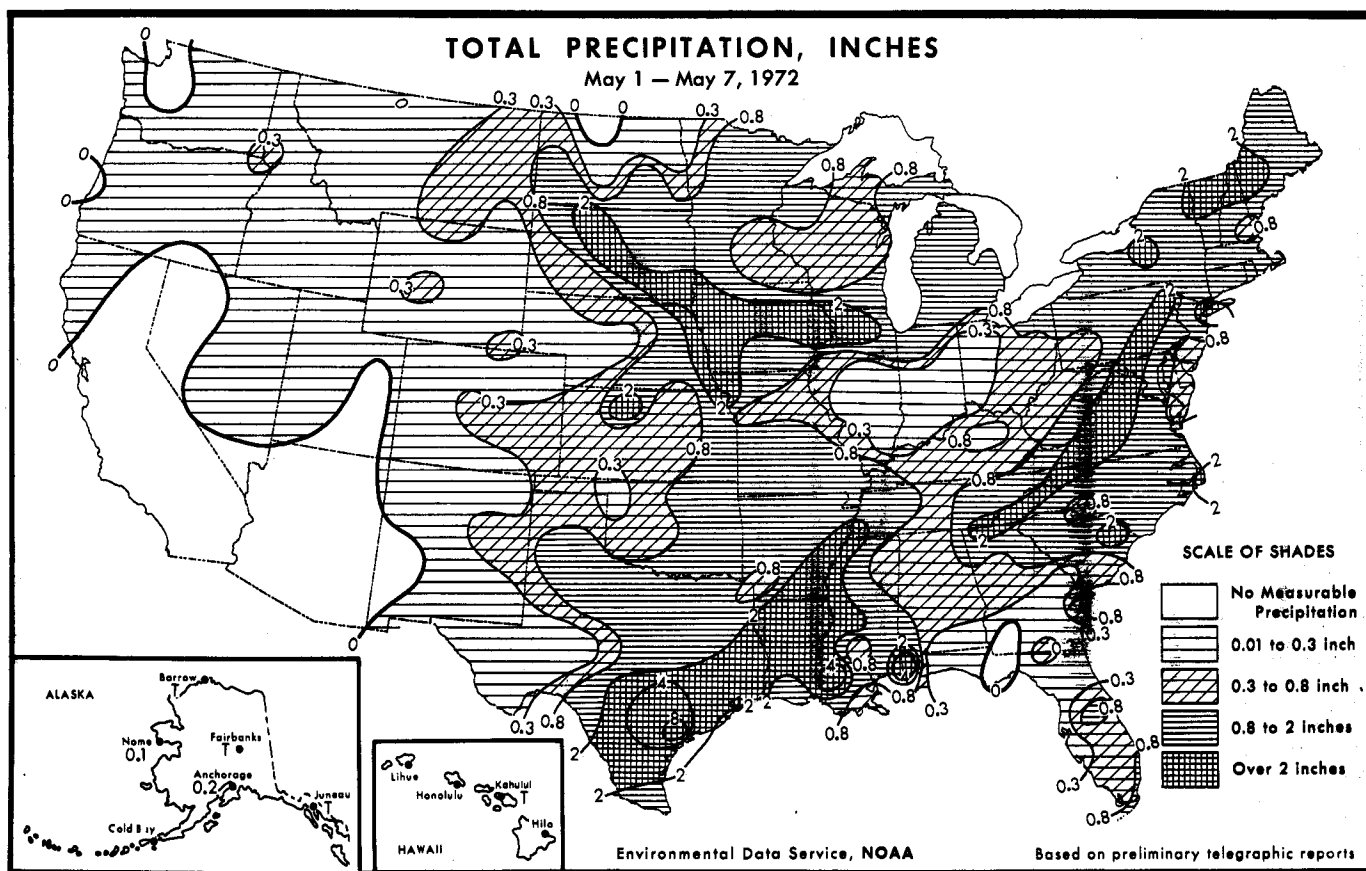
Weekly Weather & Crop Bulletin

U. S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Environmental Data Service
U. S. DEPARTMENT OF AGRICULTURE
Statistical Reporting Service

Volume 59 No. 19

Edited by Lucius W. Dye

Washington, D. C.



NATIONAL WEATHER SUMMARY

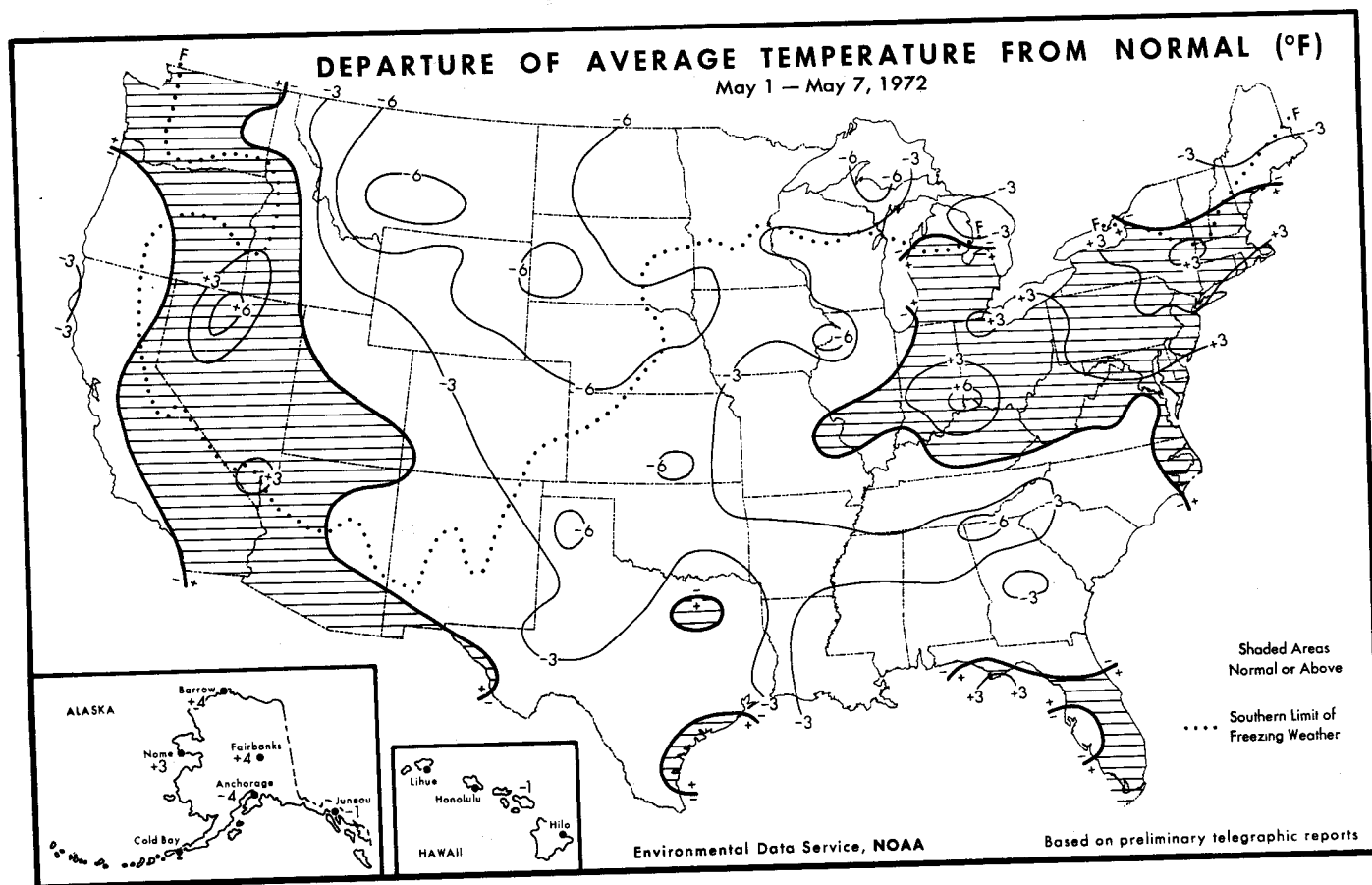
HIGHLIGHTS: The Far Southwest received no rain. Heavy rains fell in central and eastern Texas. Most of mid-America averaged cooler than normal.

PRECIPITATION: Early in the week, a storm centered over the central Great Plains moved toward the Great Lakes. A cold front stretching from the storm center to Texas moved eastward to the Atlantic coast by Thursday morning. At that time a large High sprawled across the Great Plains and a new Low developed over the northern and central Rocky Mountains.

Heavy thunderstorms occurred Monday over the eastern portions of Kansas and Oklahoma and over Missouri and Arkansas in connection with eastward-moving storm. Wet snow and cold rain fell over the northern Great Plains. Sioux Falls, S. Dak., received 3.26 inches of rain in 12 hours

Monday. Winds gusted 40 to 60 m.p.h. over much of the northern and central Great Plains Monday, reaching 75 m.p.h. at Alliance and Chadron, both in northwestern Nebraska.

Thunderstorms increased over a wide area from the Great Plains to the Ohio River Valley and along the cold front that stretched southward to Texas. The thundershowers were especially heavy in eastern and parts of southern Texas, with 2.00 to 4.00 inches in some places on Monday. The storm weakened Tuesday forenoon but still produced heavy showers along the western Gulf coast and light rain as far away as New England. Showers dotted much of the eastern third of the Nation Tuesday afternoon. Hail as large as golf balls fell at Massillon, Ohio, about 15 miles west of Akron. As the cold front continued slowly eastward, heavy rain preceded it soaking the



coastal States from New York to Florida.

Light rains fell in the Far Northwest several days. Elsewhere, the West was mostly dry. Phoenix, Ariz., has not received more than a few drops of rain in 130 days.

As the weekend approached, a high-pressure ridge stretched from north to south across the Great Plains and a new storm was developing in the northern and central Rocky Mountains. The storm center moved to the central Great Plains and dumped generous rains from Minnesota and Wisconsin to central and eastern Texas. Fair skies prevailed over the West and East.

Weekly precipitation totals exceeded 4.00 inches over South-Central Texas and the Upper Coast. A long area from Chattanooga, Tenn., to Scranton, Penna., received more than 2.00 inches of rain during the week. Most of the western half of the Nation received less than 0.50 inch. No rain fell over much of the Southwest continuing the rainless spell which began late in December 1971.

TEMPERATURE: Cold air spread southward over the Great Basin and the northern and central Rocky Mountains early in the week. Evanston, Wyo.,

registered 9° Monday morning. Warm humid air moved northward in advance of the storm that moved from the central Great Plains to the Great Lakes. Chilly northerly winds followed the storm. By midweek, skies were mostly cloudy and mild temperatures prevailed east of the Mississippi River. The West was mostly clear and moderately cool except in the Far Southwest where afternoon readings reached the 90° mark or higher. Palm Springs, Calif., recorded 103° Tuesday afternoon.

As the weekend approached high pressure and cloudless skies prevailed over the West and East. Sunday afternoon temperatures reached the 80's along the Atlantic coast as far north as New York City. Clouds and rain held Sunday afternoon temperatures in the 50's over the northern and central Great Plains.

Weekly mean temperatures were above normal from Washington to Arizona and from Indiana to southern New England and below normal over most of the rest of the Nation. Parts of the northern Great Plains averaged 6° to 10° cooler than normal.

L. W. Dye

NATIONAL AGRICULTURAL SUMMARY

AGRICULTURAL HIGHLIGHTS: Great Plains winter wheat prospects brightened by rain. * Wet fields hold planting at standstill western Corn Belt. * Cotton planting active. * Very few soybeans planted.

SMALL GRAINS: Winter wheat prospects improved on the Great Plains. Cool temperatures and light rain boosted the outlook in Kansas and Oklahoma. This was the 3d straight week of beneficial rains in the winter wheat belt. This week's weather also slowed the previously rapid wheat maturing rate in Oklahoma. About 1/4 of the Oklahoma crop is approaching the dough stage. However, all was not bright on the Plains. Wheat continued to deteriorate in some Kansas counties missed by the weekly rains. Hail also caused some local damage to Kansas wheatfields. The overall condition of the Colorado crop declined. The outlook for the New Mexico dryland acreage remains dim. Streak mosaic may become a problem in Nebraska.

In the Northwest and Northeast, grain crops reacted favorably to the warm spring weather. Growth and moisture are good. Wheat made good development in southern Michigan, but some winterkill is showing up in southeast Wisconsin. Rust is spreading in Georgia, and has severely damaged the crop in some Alabama areas.

Spring grain seeding made rapid progress in the eastern Corn Belt and Rocky Mountain States. Seeding is lagging from Wisconsin to the Dakotas -- due to rain and wet fields. The opposite is true in California where dry weather forced growers to cut more grain acreage for hay or abandon fields to pasture. Barley and wheat combining was active in the Desert areas. Wheat and oats were combined in South Texas, but grain prospects are poor.

CORN: Heavy rain and overcast skies held corn planting to a virtual standstill in Iowa, Nebraska, Minnesota, and the Dakotas. The driest week of the spring favored planting in the Eastern Corn Belt and corn growers were busy once fields became workable. The Corn Belt crop is approximately 10 percent planted, well behind last spring when dry fields allowed farmers to have about 60 percent of their corn acreage in by May 7. Corn Belt planting will move into high gear once fields dry.

Corn planting was active in Kentucky and Tennessee where earlier wet fields hurt planting progress. A dry spring allowed farmers in the Deep South to match last year's rapid planting schedule. Many Southern growers have finished corn planting for the year.

COTTON: Cotton planting dominates farm activity in the South. Light showers caused only short delays in planting from Mississippi to South Carolina -- the crop is 3/4 seeded in this region. Headway is slower in Louisiana and Arkansas where heavy rains parked tractors frequently during the week. Arkansas growers will have to do some reseeding. All Southern growers would welcome warmer temperatures -- as cool nights slowed seed germination and plant growth.

In Texas, the number 1 cotton producing State, early planted fields responded well to improved moisture. Planting increased on the High Plains. California cotton growth is increasing, and warmer temperatures aided plant emergence in southeast Arizona.

SOYBEANS: This spring's soybean acreage planted can best be described by two words -- very little. Southern growers have some acreage in, but most are focusing their attention to cotton planting. Ohio growers have about 5 percent of their acreage sown, but virtually no acreage is seeded throughout the rest of the Corn Belt.

OTHER CROPS: Cold, wet weather hampered fieldwork from the Northern Great Plains to Michigan. Drier weather allowed planting to make the best headway of the spring from Illinois to Ohio. Activity was good in the South and West. Strong winds damaged sugar beet fields in Colorado and Nebraska, some acreage will be replanted in Western Nebraska. Tobacco transplanting made good headway in the Carolinas and Virginia. Setting of the South Carolina crop is 92 percent complete. Peanut planting made satisfactory progress in Georgia and Alabama. About 90 percent of the Long Island, New York potato crop is planted, this is 2 weeks behind normal. Only a few sprinkles of rain allowed Idaho growers to plant continuously during the week.

Fruits and Nuts: A May 1 frost did further damage to Utah fruit orchards. Utah orchardmen will have a small fruit harvest this fall as a result of frequent April freezes. West Virginia fruit crop prospects will also be lowered due to frost damage. It was a good pollinating week in the Northwest. Washington State apple trees are in full bloom. Sweet cherries also started blooming in southwest Lower Michigan. Peach prospects are mostly favorable in the South, with thinning underway in many orchards.

Vegetables: Vegetable planting is gaining momentum in the Northern growing areas, but warmer and dryer weather would speed activity. A dry week in the Pacific Northwest allowed growers to plant considerable acreage. Michigan muck farmers are well along in onion and celery plantings. Sweet corn planting is underway in most New York areas. Sweet corn and tomato planting is advancing well in New Jersey. Georgia watermelons are setting fruit, but a rain would be helpful.

Limited asparagus cutting got underway in Maryland and Pennsylvania. Arkansas strawberries are hitting the market in volume.

PASTURES AND LIVESTOCK: Pastures in the North are greening nicely and will soon be providing excellent grazing. Moisture is plentiful. More herds are being turned out to pasture, but hay is still being fed to animals where grass growth is slow. Southern pastures are supplying good amounts of feed, but grass is short in Tennessee and southeast Alabama. Warmer weather enhanced pasture growth in the Pacific Northwest.

No rain fell from California to Central New Mexico, thus the pasture outlook remained bleak in the Southwest. Ranges are extremely dry and ranchers are feeding hay to maintain body condition. Some foothill grain fields are being pastured in California. Some California herds are being shipped to distant feed areas, feedlots or to sales yards.

Steve J. Pscodna
Agricultural Statistician

Temperature and Precipitation Data for the Week Ending Midnight, L.s.t., MAY 7, 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 . . .	66	- 3	.5	-. 3	New Orleans . . .	71	- 1	.4	-. 6	OKLA.Okla. City . .	62	- 3	.8	-. 3
Mobile . . .	72	- 1	4.9	+3.8	Shreveport . . .	68	- 3	2.5	+1.4	Tulsa . . .	62	- 3	.8	-. 4
Montgomery . . .	69	0	.6	-. 2	MAINE.Caribou . . .	41	- 5	1.5	+ .9	OREG.Astoria . . .	53	+ 1	T	-. 8
ALASKA.Anchorage . .	39	- 4	.2	+ .1	Portland . . .	50	+ 1	1.4	+ .6	Burns . . .	54	+ 2	T	-. 2
Barrow . . .	16	+ 4	T	0	MD.Baltimore . . .	64	+ 3	.9	+ .1	Medford . . .	55	- 1	.1	-. 2
Fairbanks . . .	46	+ 4	T	-. 1	MASS.Boston . . .	55	0	1.5	+ .7	Pendleton . . .	58	+ 1	.3	+ .1
Juneau . . .	43	- 1	T	-. 7	Chatham . . .	52	- 1	1.9	---	Portland . . .	58	+ 2	.2	-. 3
Nome . . .	33	+ 3	.1	-. 1	MICH.Alpena . . .	44	- 3	1.2	+ .6	Salem . . .	53	- 2	T	-. 5
ARIZ.Flagstaff . . .	44	- 5	0	-. 2	Detroit . . .	56	+ 1	1.3	+ .5	PA.Allentown . . .	61	+ 4	.9	0
Phoenix . . .	---	---	---	---	Flint . . .	54	+ 3	1.5	+ .9	Erie . . .	53	+ 3	1.4	+ .5
Tucson . . .	71	+ 1	T	0	Grand Rapids . . .	53	0	1.4	+ .6	Harrisburg . . .	62	+ 3	2.3	+1.4
Winslow . . .	60	- 2	0	-. 1	Houghton Lake . .	49	+ 1	.9	+ .3	Philadelphia . . .	64	+ 5	.8	-. 1
Yuma . . .	77	+ 2	0	0	Lansing . . .	54	+ 1	1.0	+ .2	Pittsburgh . . .	60	+ 3	.3	-. 5
ARK.Fort Smith . . .	62	- 5	1.6	+ .4	Marquette . . .	40	- 6	.8	+ .2	Scranton . . .	57	+ 1	2.3	+1.4
Little Rock . . .	70	+ 1	0	-. 1	Muskegon . . .	49	- 4	1.0	+ .3	R.I.Providence . . .	57	+ 3	1.9	+1.1
CALIF.Bakersfield . .	49	- 3	.3	-. 3	S.Ste.Marie . . .	44	- 2	1.1	+ .5	S.C.Charleston . .	69	- 1	.7	0
Eureka . . .	67	+ 1	0	-. 1	MINN.Duluth . . .	41	- 4	1.3	+ .6	Columbia . . .	67	- 2	1.0	+ .1
Fresno . . .	64	0	0	-. 1	Internat'l Falls . .	---	---	---	---	Greenville . . .	63	- 4	.9	+ .2
Los Angeles . . .	64	- 2	T	-. 3	Minneapolis . . .	50	- 3	.5	-. 1	S.DAK.Aberdeen . .	49	- 5	1.2	+ .7
Red Bluff . . .	63	0	0	-. 1	Rochester . . .	48	- 5	.8	+ .1	Huron . . .	49	- 5	1.0	+ .5
San Diego . . .	56	- 1	T	-. 2	St. Cloud . . .	46	- 5	.8	+ .1	Rapid City . . .	44	- 9	.4	-. 1
San Francisco . . .	65	+ 1	0	-. 1	MISS.Jackson . . .	68	- 2	2.9	+1.9	Sioux Falls . . .	48	- 7	3.8	+3.1
Stockton . . .	49	- 4	.2	-. 4	Meridian . . .	68	- 2	.9	0	TENN.Chattanooga .	61	- 6	2.1	+1.3
COLO.Denver . . .	58	- 1	.1	-. 1	MO.Columbia . . .	60	- 1	.8	-. 2	Knoxville . . .	63	- 2	1.7	+ .9
Grand Junction . . .	52	- 5	.5	+ .1	Kansas City . . .	61	- 1	.8	-. 1	Memphis . . .	65	- 3	2.1	+1.1
Pueblo . . .	58	+ 3	2.0	+1.2	St. Louis . . .	63	+ 2	.3	-. 5	Nashville . . .	65	- 1	.8	0
CONN.Bridgeport . . .	56	+ 1	1.4	+ .7	Springfield . . .	60	- 2	1.0	-. 2	TEX.Abilene . . .	66	- 3	1.8	+ .8
Hartford . . .	66	+ 3	1.3	+ .4	MONT.Billings . . .	45	-10	.4	0	Amarillo . . .	58	- 6	.9	+ .3
D.C.Washington . . .	75	+ 3	0	-. 6	Glasgow . . .	45	- 8	.4	+ .1	Austin . . .	71	- 2	5.3	+4.4
FLA.Apalachicola . .	77	+ 1	.3	-. 2	Great Falls . . .	44	- 7	.2	-. 2	Beaumont . . .	70	- 3	2.5	+1.3
Ft. Myers . . .	72	- 1	T	-. 8	Havre . . .	46	- 7	T	-. 3	Brownsville . . .	77	- 1	1.7	+1.3
Jacksonville . . .	79	+ 1	1.5	+1.0	Helena . . .	42	- 9	.3	0	Corpus Christi . .	78	+ 2	2.7	+2.2
Key West . . .	74	- 1	.5	-. 1	Kalspell . . .	46	- 5	T	-. 3	Dallas . . .	72	+ 2	.8	-. 3
Lakeland . . .	77	+ 1	2.0	+ .6	Miles City . . .	47	- 8	.4	+ .1	Del Rio . . .	73	- 3	1.6	+1.0
Miami . . .	77	+ 1	.9	+ .2	Missoula . . .	48	- 3	T	-. 4	El Paso . . .	68	0	T	-. 1
Orlando . . .	71	- 1	T	-. 8	NEBR.Grand Island .	52	- 5	1.8	+1.0	Fort Worth . . .	70	0	1.7	+ .7
Tallahassee . . .	75	- 1	.2	-. 5	Lincoln . . .	55	- 4	1.5	+ .8	Galveston . . .	74	0	1.1	+ .4
Tampa . . .	65	- 1	.4	-. 3	Norfolk . . .	50	- 7	1.0	+ .3	Houston . . .	71	- 1	3.1	+2.2
GA.Atlanta . . .	67	- 1	.3	-. 3	North Platte . . .	47	- 8	T	-. 6	Lubbock . . .	62	- 3	1.9	+1.4
Augusta . . .	68	- 3	.5	-. 3	Omaha . . .	53	- 5	3.2	+2.4	Midland . . .	67	- 4	.3	-. 1
Macon . . .	70	- 1	1.4	+ .6	Valentine . . .	46	- 8	.6	+ .1	San Angelo . . .	69	- 3	.3	-. 6
Savannah . . .	---	---	---	---	NEV.Ely . . .	49	+ 1	T	-. 2	San Antonio . . .	72	- 1	7.9	+7.1
HAWAII.Hilo . . .	---	---	---	---	Las Vegas . . .	74	+ 3	0	0	Victoria . . .	75	0	8.7	+7.8
Honolulu . . .	---	---	---	---	Reno . . .	55	+ 2	0	-. 1	Waco . . .	70	- 2	1.7	+ .7
Kahului . . .	74	- 1	T	-. 7	Winemucca . . .	58	+ 6	T	-. 2	Wichita Falls . . .	65	- 4	1.1	+ .1
Lihue . . .	---	---	---	---	N.H.Concord . . .	52	+ 1	.7	0	UTAH.Blanding . . .	55	+ 1	T	-. 2
IDAHO.Boise . . .	59	+ 3	T	-. 3	N.J.Atlantic City . .	60	+ 3	.8	0	Salt Lake City . .	56	- 1	.1	-. 2
Lewiston . . .	58	+ 1	.3	0	Trenton . . .	63	+ 4	1.3	+ .5	VT.Burlington . . .	48	- 2	2.1	+1.4
Pocatello . . .	50	- 3	T	-. 3	N.MEX.Albuquerque .	60	- 2	.1	-. 1	VA.Lynchburg . . .	63	0	2.6	+1.9
ILL.Cairo . . .	65	- 1	1.0	+ .1	Roswell . . .	65	0	.2	-. 1	Norfolk . . .	66	+ 2	1.2	+ .4
Chicago . . .	55	- 1	1.1	+ .3	N.Y.Albany . . .	57	+ 3	1.9	+1.1	Richmond . . .	61	- 3	1.2	+ .4
Moline . . .	52	- 6	2.1	+1.2	Binghamton . . .	55	+ 3	1.8	+1.1	Roanoke . . .	61	- 2	2.3	+1.5
Peoria . . .	57	- 1	.2	-. 7	Buffalo . . .	54	+ 3	1.0	+ .3	WASH.Colville . . .	54	+ 1	.1	-. 2
Rockford . . .	54	- 2	2.4	+1.5	New York . . .	60	+ 2	2.2	+1.4	Omaha . . .	55	- 1	.2	0
Springfield . . .	59	- 1	.1	-. 7	Rochester . . .	56	+ 3	1.2	+ .6	Quillayute . . .	50	0	.2	-. 9
IND.Evansville . . .	62	- 2	.2	-. 7	Syracuse . . .	55	+ 1	2.3	+1.5	Seattle-Tacoma . .	56	+ 2	T	-. 4
Fort Wayne . . .	59	+ 2	.2	-. 6	N.C.Asheville . . .	59	- 3	2.5	+1.9	Spokane . . .	53	- 1	.3	0
Indianapolis . . .	62	+ 4	1.1	-. 8	Charlotte . . .	64	- 2	.6	-. 1	Walla Walla . . .	60	+ 1	T	-. 3
South Bend . . .	55	0	1.1	+ .3	Greensboro . . .	62	- 1	.9	+ .2	Yakima . . .	58	+ 2	1.1	0
IOWA.Burlington . .	56	- 2	.8	-. 1	Hatteras . . .	66	+ 1	2.4	+1.6	W.VA.Beckley . . .	59	+ 2	1.5	+ .5
Des Moines . . .	54	- 3	1.4	+ .6	Raleigh . . .	64	- 1	2.0	+1.1	Charleston . . .	64	+ 2	.4	-. 4
Dubuque . . .	52	- 3	2.0	+1.1	Wilmington . . .	67	- 1	.8	+ .2	Huntington . . .	62	+ 1	.7	-. 1
Sioux City . . .	54	- 3	2.7	+2.0	N.DAK.Bismarck . .	49	- 4	.3	-. 1	Parkersburg . . .	62	+ 1	.6	-. 2
KANS.Concordia . . .	56	- 3	.5	-. 2	Fargo . . .	47	- 5	.6	+ .2	WIS.Green Bay . . .	49	- 2	.5	-. 2
Dodge City . . .	56	- 4	.2	-. 5	Williston . . .	44	- 8	.8	+ .5	La Crosse . . .	53	- 3	.6	-. 2
Goodland . . .	51	- 4	.4	-. 1	OHIO.Akron-Canton .	56	0	.6	-. 3	Madison . . .	51	- 1	1.4	+ .7
Topeka . . .	58	- 3	1.5	+ .5	Cincinnati . . .	65	+ 6	.2	-. 7	Milwaukee . . .	48	- 2	1.3	+ .6
Wichita . . .	57	- 6	.5	-. 4	Cleveland . . .	56	+ 2	1.4	+ .6	WYO.Casper . . .	44	- 6	.1	-. 4
KY.Lexington . . .	63	+ 2	.8	0	Columbus . . .	59	+ 1	.7	-. 2	Cheyenne . . .	45	- 5	.4	-. 1
Louisville . . .	64	+ 3	.5	-. 4	Dayton . . .	62	+ 4	.3	-. 5	Lander . . .	45	- 5	.7	0
LA.Baton Rouge . . .	71	- 1	.5	-. 4	Toledo . . .	58	+ 3	.5	-. 3	Sheridan . . .	46	- 6	.3	-. 2
Lake Charles . . .	70	- 3	1.1	+ .1	Youngstown . . .	56	+ 2	.9	0	P.R. San Juan . . .	81	+ 3	.1	-1.3

* 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: Partly cloudy and warm with scattered light showers first half of period. Fair and cooler Friday and Saturday. General rains Sunday with locally heavy amounts extreme south. Temperatures slightly above average. Rainfall moderate central and heavy elsewhere. Scattered showers early period and over weekend slowed fieldwork, but supplied much needed moisture. Cotton 4/5 planted, about equal last year. Cool temperatures slowed germination and growth young plants. Planting corn 2/3 complete, equal year ago. Will gain momentum as farmers finish planting cotton. Few fields soybeans planted. Planting peanuts 90% complete, compared with 75% last year. Small grains made satisfactory development. Wheatfields severely damaged by rust south and many central counties. Late spring potato harvest continued Baldwin County. Yield and quality good. Chilton County peaches making good growth. Pastures supplying adequate grazing most areas, but short southeast.

ARIZONA: Skies clear most of week and temperatures slightly above normal in most sections. Strong winds and blowing dust some agricultural areas. No measurable precipitation. Cotton progressing normally Yuma. Planting complete central and western areas. New stands good. Warmer temperatures southeast aided plant emergence. Wheat and barley approaching harvest stage west and central. Fields all areas making good growth. Sorghum planting limited Yuma and central areas and full swing southeast. Second cutting alfalfa hay full swing. Spring lettuce harvest active Salt River Valley-central areas. Potato harvest underway Salt River Valley. Mulching, insect spraying, mildew controls active cantaloupes Yuma County. Fruit sizing well. Grapefruit and valencia orange harvest continued Yuma, Salt River Valley. Most fresh grapefruit for export markets. Citrus groves generally good. Arizona ranges remain poor-fair condition. Higher elevation ranges fair. Desert ranges extremely dry. Grass supplies limited. Tank water supplies declining. Extreme fire danger many range areas due dry vegetation. Cattle and calves good to fair. Sheep and lambs fair.

ARKANSAS: Cool weather continued through week with mean temperatures 1° to 6° below normal. Slow rising trend in temperature followed by cooler on weekend. Precipitation heaviest in band from south-central to northeast with numerous amounts of 2.00 inches or more. Terry Dam, near Little Rock, reported 2.60 inches, the heaviest amount. Elsewhere rainfall generally 0.50 inch to just under 2.00 inches. Driest in northwest and extreme southeast. Planting lags due to cool, wet weather particularly northeast. Less than half cotton planted and some of this will be replanted. Better progress rice with 90% seeded. Limited soybean planting to date as other spring crops have priority. Feed grains and hay situation improved by rains. Much wheat and oats dough stage. Hay harvest begun south. Fruit prospects mostly favorable. Thinning peaches underway. Volume marketing strawberries in progress. Tomatoes growing well and putting on fruit. Planting melons, cucumbers, and okra well along. Pastures good most areas and improving. Livestock making satisfactory weight gains.

CALIFORNIA: Warm days interior, cool on coast. Persistent coastal low cloudiness after midweek. Average temperatures 2° to 6° above normal interior, 1° to 4° below normal coast. No precipitation except showers, thunderstorms Sierra Nevada, Cascades; drizzle coast. Small grains still dry--more cut for hay and pastured. Barley and wheat combining Desert. Cotton growth increasing. New beets good progress. Safflower shows moisture stress Sacramento-upper San Joaquin Valleys. Rice planting continues. Some rice above water. Planting field corn, milo, dry beans. Grapevines making normal growth; frost damage evident. New growth slow. Perlette grape harvest Coachella. Thinning deciduous fruit. Orchards not freeze damaged--good sets. Crops sizing normally. Many heavy almond crops, some severely frost affected. Artichoke harvest slow.

Asparagus harvest strong; good quantity to processors. Broccoli, cauliflower good volume Salinas Valley; cauliflower volume sharp decline Oxnard, Orange, San Diego County. Cabbage supply steady. Cantaloupe harvest underway Imperial Valley. Carrot harvest steady Imperial Valley. Celery cutting increasing Oxnard, Orange County; harvest underway Santa Maria. Lettuce harvest active Salinas; moderate Santa Maria; complete Westside. Onion digging increasing Imperial Valley. Potato digging increasing Kern County. Strawberry picking active all areas; some seasonal decline southern California. North winds slow range grass growth. Stockwater supplies critical some areas. Cattle being shipped to distant feed areas, local pastures or feedlots. Sales yards active. Some foothill grain fields being pastured off.

COLORADO: Cool most areas. Minimums near or below freezing all areas 1st few days of month. Light to moderate precipitation, mostly rain in mountains and eastern plains. Relief to crops local areas. Cool temperatures slowing germination and plant growth. Light wind damage to winter wheat, corn, and sugar beets. Condition winter wheat declined, 70% acreage jointing, 3% headed. Winter barley rated good to very good, 67% jointed, 4% headed. Corn 43% seeded, 6% emerged. Sugar beets 94% seeded, 44% up to stand. Late summer potato planting 3/4 complete, 48% emerged. Spring barley and oats 96% and 93% seeded.

FLORIDA: Generally cloudy with scattered showers and a few thunderstorms. Temperatures slightly above normal with most daily highs in upper 80's or low 90's. Rainfall generally below 0.25 inch with occasionally heavier amounts generally along lower east coast. Field crops needing moisture many areas. Peanuts and cotton still being planted. Land preparation for soybeans active. Rust in wheat a problem. Short soil moisture is delaying normal growth of pastures. Grazing short, but adequate. Leafy, radishes, carrots in generally steady volume. Watermelons should increase as cutting shifts to the Arcadia area. Most other commodities in seasonal supply.

GEORGIA: Light to moderate rain occurred in north-central and southeast sections at midweek. Little or none fell in southwest and south-central areas.

Totals ranged from 0.75 to 1.50 inches most areas but less than 0.10 inch in drier parts of south. General rains over north and west this Monday morning were bringing relief to some drier areas. Temperatures were mild, ranging from slightly below to slightly above normal. Soil moisture mostly adequate, except southwest quarter short to mostly very short. Relief being received. Farm activity high, but planting slowed dry areas. Cool nighttime temperatures slowed sprouting and early growth. Tobacco condition good, insect control very active. Planted with "layby" begun south. Peanuts 89% planted, condition mostly good. Soybeans 13% seeded. Wheat condition poor to fair with rust spreading. Peaches mostly good, more thinning likely. Vegetable and melons fair to good, but need moisture south. Melons setting fruit. Pastures and cattle good.

HAWAII: Weather favorable with scattered showers. Crop progress fair to good with irrigation. Sugar-cane harvesting normal--pineapple increasing seasonally. Supplies papayas on uptrend--warm weather hastening fruit maturity. Local bananas short supply. Vegetable supplies adequate. Gradual increase watermelon harvesting. Cattle and pasture fair to good condition.

IDAHO: Little change was noted in average temperatures. They again ranged 2° to 9° below normal. Daytime temperatures averaged highest for season. Extreme lows ranged 12° at Teton, eastern highlands, to generally teens and 20's elsewhere to continue potential freeze damage. Precipitation ranged from mostly zero to a high of 0.22 inch at Salmon. Warm weather speeded crop development and permitted fieldwork all areas. Small grain seeding mostly done except in north where about 25% seeded. Irrigation extensively underway. Potato planting 25% complete east, 60% south-central, and about 70% southwest.

ILLINOIS: Three to 4 days with rain or showers. Moline and Rockford recorded up to 3.00 inches. Some flooding. Sunny and morning temperatures in low 40's on 3d and 4th. Warmest on weekend and some 80's in south. Corn planting 10% completed, year ago 60%. Oat seeding 90% complete, last year all complete. Plowing 85% complete, last year virtually over. Wheat good to excellent. Pastures good to excellent supplying 75% livestock roughage requirements. Red clover and alfalfa hay good condition. Alfalfa weevil causing some damage southern Illinois. Main activities finishing oat seeding, plowing, disking, planting corn.

INDIANA: Rain early and late in period of 0.50 to 1.00 inch. Sunny but cool with good drying at mid-period. Temperatures above normal and ranged from high 30's to low 80's. Four days suitable fieldwork, fields becoming progressively drier. Topsoil and subsoil moisture mostly adequate to surplus. Fieldwork 8 days behind usual. Plowing 65% done, same as average, but 90% done last year. Corn 5% planted, 35% last year. Few fields soybeans and sorghum planted. Oats 70% seeded, complete last year. Wheat 11 inches high, same as average. Pastures fair to mostly good.

IOWA: A cool, cloudy, wet week. Temperatures averaged 2° to 6° subnormal. Precipitation varied from about 1.00 inch in some northeast and southeast localities to over 3.00 inches in some southwest and northwest counties. Fieldwork at near standstill due to overcast skies and rainy conditions. Only 2 days suitable for fieldwork, mainly

plowing and seedbed preparation. Very little corn acreage planted. Corn planting less than 10% completed. Well behind last year's 55% and 5-year average, "1966 through 1970" 35%. Oat seeding over 90% complete, somewhat behind last year and 5-year average. Plowing for 1972 crops 85% complete, last year about 95%. Feed supplied by pastures 26% below average, 70% average and 4% above average. Moisture and fertilizer spurring growth. Topsoil moisture 45% surplus, 54% adequate, and 1% short. Last year 5% surplus, 71% adequate and 24% short.

KANSAS: Cloudy and cool; moderate to heavy precipitation most northern Kansas and eastern 1/3, generally light elsewhere. Precipitation heavy from Lane County northeast to Phillips County and from Harvey County northeast to corner of State. Generally 1.00 to 2.00 inches those areas. Locally over 3.00 inches. Temperatures averaged 3° to 6° below seasonal. Maxima in 60's to 80's through midweek, cooling to 50's and 60's after 5th. No hard freezes although minima in lower 30's locally northwest and west-central several mornings. Prospects were improved by additional moisture. Wheat responded well over most of State, but continued to deteriorate in some counties missed by rains. Some local hail damage to wheat. Wheat 35% headed, 20% last year, 10-year average 18%. Corn planting 33% complete, 52% last year, 10-year average 37%. Corn emerging, but slow growth. Sorghum planting 4% completed, same as average, behind last year 10%. Some sugar beets emerging to only fair stand. Alfalfa good growth and cutting begun, but weevils bothering southeast areas. Pasture and range feed growth benefited from additional moisture, except southwest dry area.

KENTUCKY: Temperatures above normal 5 days and below normal 2 days, averaging near to about 3° above normal. Daily maxima upper 60's to low 80's. 4 mostly sunny days. 5 days rain one or more areas. Rainfall totals ranged from 0.13 inch to about 1.00 inch; weekly division averages from 0.40 inch to 0.70 inch. Soil temperatures generally averaging in 60's. Skies cleared and allowed 4 days fieldwork on drier soils. Low lands remain wet. Land preparation active to regain early season delay. Corn planting 26% complete, 67% year ago. Emerged tobacco plants 45% size of dime or less, 55% larger than dime. Condition tobacco beds 85%, year ago 79%. Wheat about 50% headed. Alfalfa fields about 90% infested with weevils. Two-thirds sprayed or expected to be sprayed. Pasture condition near excellent 100%. Grass growing fast with ample moisture.

LOUISIANA: Two periods of moderate to excessive rainfall left weekly totals in excess of 4.00 inches several sections of State. Rains were scattered however with some places recording less than 1.00 inch especially extreme south. Heavy rain interior of southeast Sunday caused extensive local flooding. Greatest 24-hour total, 4.69 inches at Baton Rouge. Erwinville, West Baton Rouge Parish, had unofficial total of 6.88 Sunday. Warm first of week, cooler at night after midweek, mild over weekend. Weekly averages near normal coast, 1° to 4° below normal interior. Temperature extremes: 87° at Winnfield and Leesville last Monday and 41° at Homer Thursday. Soil moisture generally adequate, but surplus areas. Fieldwork active where soil drainage good. Main activities were seedbed preparations, application herbicides, and planting. Planting cotton 60%

complete compared to 70% year ago, 40% up to stand. Rice up 90% planted, 95% year ago, good stand. Corn stand good. Planting soybeans and sweetpotatoes still slow with many soybean producers busy planting cotton. Sugarcane farmers cultivating and applying herbicides and fertilizer. Wheat and oats beginning to mature. Fertilization and clipping pastures active.

MARYLAND AND DELAWARE: Temperatures averaged 1° to 4° above normal. Extremes mostly upper 70's and low 80's, 40's except 30's in west. Fifth straight week with precipitation totaling 1.00 inch or more in Maryland, 4th week in Delaware. This week's totals occurring on 3d and 4th, 1.00 to over 2.00 inches except for some scattered 0.50 to 1.00 inch totals in eastern Maryland and in Delaware. Fieldwork active until halted by rain. Progress 1 to 2 weeks behind normal. About 1/5 corn planted, 2/5 year ago. Small grains irregular, barley 1/3 headed south. Vegetable crop planting delayed with irregular progress by areas. Asparagus harvest starting. Apple orchards in or near full bloom. Strawberry harvest expected to start week May 15th southern shore.

MICHIGAN: Near seasonal temperatures south, brief cooling midweek, much cooler late in week. Significant rain early in week north and central, late in week south. Temperature averages normal east to 7° below normal west Upper Peninsula, 3° above normal southeast to 3° below normal northwest Lower Peninsula. Precipitation totals 0.75 to 1.25 inches Upper Peninsula, 0.75 to 1.65 inches Lower Peninsula with smallest totals northeast. Fieldwork retarded by rains and wet fields. Soil moisture surplus to adequate. State averaged only 3.1 days suitable fieldwork. Less than 50% acreage plowed for spring crops, 75% last year. Oats 45%, sugar beets 35%, potatoes nearly 15% planted. Bay County potatoes nearly 1/2 planted, some corn planted on lighter soils. Wheat developing well southern counties. Pastures starting to green Upper Peninsula; furnishing some feed Lower Peninsula. Sweet cherries partial bloom extreme southwest, green tip northwest. Apples and tart cherries green tip northwest, pre-pink southwest. Asparagus harvest started southwest. Onions and early celery planting well along.

MINNESOTA: Temperatures averaged 5° below normal. Extremes: 74°, 22°. 6th consecutive week temperatures have been normal or below except along Canadian Border where temperatures normal or above. Precipitation wetter than normal, southwest district averaged 2.00 to 3.00 inches, southern counties of south-central and southeast districts 1.00 to 3.00 inches. Rest of State averaged 0.75 inch except along Canadian border which received less than 0.25 inch of precipitation. Larger lakes north and east of a line from Duluth to Warroad are still ice-covered. West part of Lake Superior and Duluth Harbor nearly all covered with pack ice. Rains and wet fields delayed fieldwork. Limited progress small grain seeding and corn planting. Cold temperatures slowing germination and growth small grains already seeded. Percentage small grains seeded: Spring wheat 11, normal 55; oats 25, normal 64; barley 6, normal 43; flax 9, normal 31. Percentage small grains emerged: Spring wheat 2, normal 23; oats 7, normal 31; barley 1, normal 14; flax 2, normal 12. Land prepared corn 21%, normal 48%; soybeans 10%, normal 24%. Percent crops planted: Corn 3, normal 20; soybeans less than 1, normal 1;

potatoes 6, normal 7; sugar beets 3, normal 3. Winter wheat, rye, potatoes, fair to good condition, hay fields good.

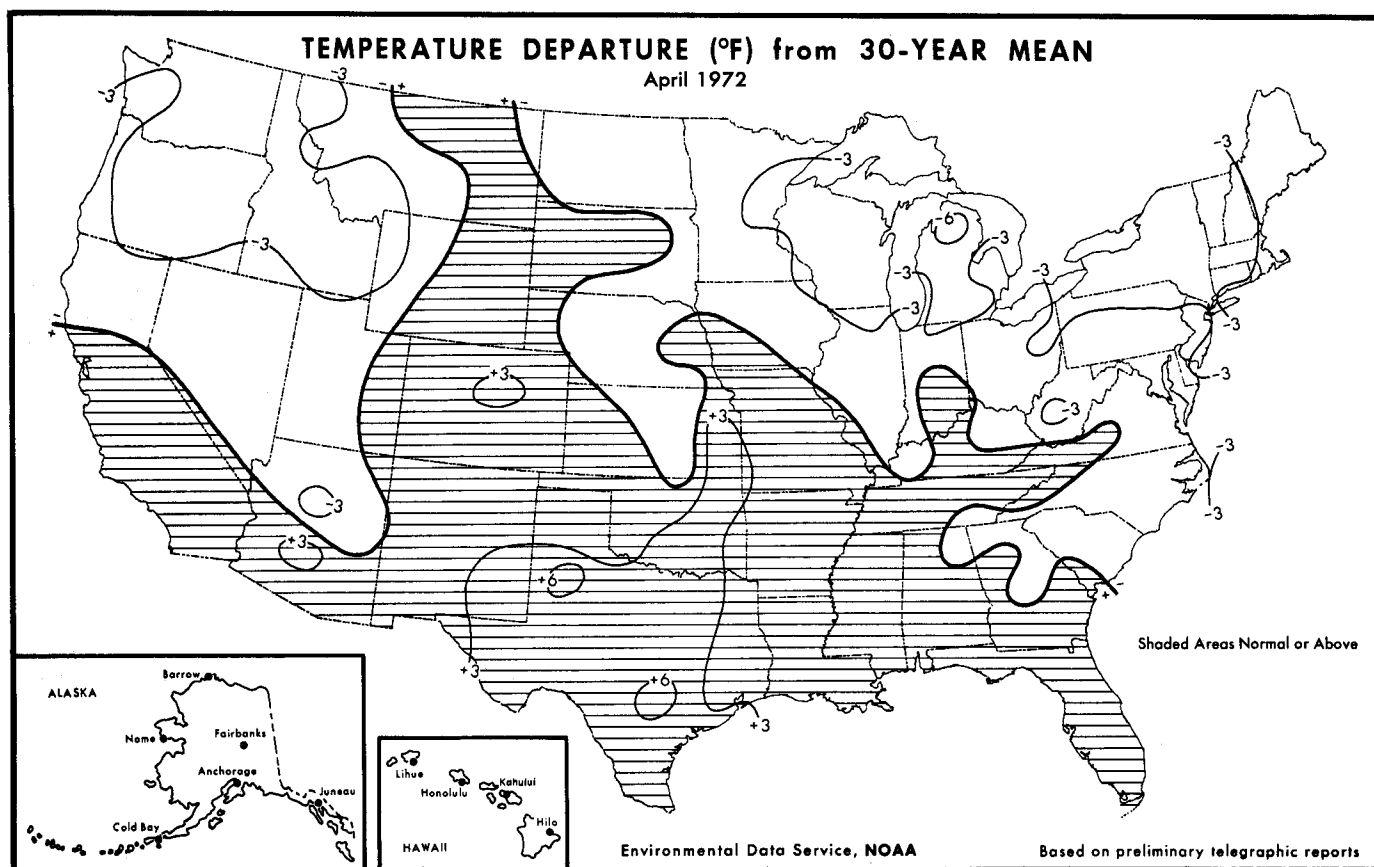
MISSISSIPPI: Rain on 2 to 3 days with totals 0.50 to near 1.00 inch northeast and southeast; elsewhere, over 1.50 inches. The greatest 1-day amount of 3.46 inches measured at Charleston April 29. Temperatures averaged 2° to 5° below normal. Extremes: 88° and 40°. Tornadoes on 7th near Poplarville and near Gulf coast, 2 injured at Gulfport 3 N; 3.00 to 5.00 or more inches of rain caused flash flooding in coastal area, and 5.96 inches was measured at Biloxi this Monday morning. Soil moisture mostly short to adequate southeast, delta counties mostly surplus; remainder of State mostly adequate. Average 3 days suitable fieldwork. Oats 20%, wheat 13% ripe. Harvesting just starting south. Cotton 66%, corn 65%, rice 75%, sorghum 16%, sweetpotatoes 28%, soybeans 5% planted. Cotton 37%, corn 58% up to stand. Corn, wheat, hay crops, soybeans, Irish potatoes, truck crops, pastures, and livestock mostly good condition. Cotton mostly fair to good, peaches fair to good.

MISSOURI: A pleasant dry week. Temperatures averaged near or slightly below normal. It was cool midweek, warmed to above normal by weekend. Good drying conditions with little or no rain since heavy rains of last week except in northwest where St. Joseph received 2.69 inches Sunday May 7. Average 2 days suitable fieldwork. Crops planted: Corn 30%, cotton 24%, grain sorghum 4%, soybeans 2%. Wheat and pastures good condition. Wheat 31% headed. Soil moisture adequate western 2/3 State, surplus eastern 1/3.

MONTANA: Temperatures averaged 2° to 10° below normal with progressive cooling after Wednesday. Very little precipitation western mountains and north-central division. Substantial rain or wet snow elsewhere and local amounts exceeding 1.00 inch in northeast. Topsoil moisture adequate 2 eastern districts. Short to adequate elsewhere. Spring seeding progressed normally, spring wheat and oats 55% planted. Barley 65% seeded. Sugar beets 80% seeded, dry beans 40%, corn 30% and potatoes 10%. Prospective supply irrigation water average or above average. Range feed supply generally short, 35% range livestock moved to summer pastures. Calving 90% complete, lambing and shearing 80% finished.

NEBRASKA: Cloudy, cool, damp, and windy. Precipitation amounts ranged from light in west to heavy in east. Freezing temperatures in west. Very little fieldwork with less than 3 days suitable. Topsoils wet. Corn planting 6% completed, compared 15% normally planted. Early-planted fields southeast up to good stand. Wheat conditions remain mostly good. Wheat streak mosaic may be problem some areas. Strong winds caused few western farmers to replant sugar beets. Hay, pasture, and range feed prospects improved with recent moisture. Livestock good, except feedlots have become quite muddy.

NEVADA: Warm dry week. Temperatures averaged 1° to 5° above normal all divisions. Light precipitation north and south-central. Only measurable amounts at Elko and Tonopah. None in extreme south. Planting spring crops remains in progress with wheat and barley over 2/3 complete. Cotton acreage Pahrap Valley about 1/2 planted. Harvest 1st crop alfalfa hay complete southern



WEATHER - April 1972

TEMPERATURE: Temperatures in April averaged near or above normal over the western edge of the Great Plains from Montana to Texas, over the central and southern Rocky Mountains, and across the South from central and southern California to Florida. The Pacific Northwest averaged cooler than normal. It was also cooler than normal in the Great Lakes Region and along the Atlantic Coast from New England to Georgia.

Temperatures were quite changeable. In general, the West was warm and the East cool in the first week. The reverse was true in the 2d and 3d weeks. Cool weather prevailed over most of the Nation in the last week of the month.

PRECIPITATION: No rain or only widely scattered light sprinkles fell in the Southwest. In fact, much of the Southwest has been without rain for the past 4 months.

Rains fell along the Washington and Oregon Coast on many days in April. Snow fell in the nearby hills and mountains. The precipitation

in the Northwest was frequently accompanied by strong gusty winds. There were frequent outbreaks of cold air from Canada. As the cold air masses moved into the northern Great Plains, they produced snow flurries. As they moved farther southward, they set off thunderstorms some of which produced hail and damaging winds. A few tornadoes occurred. On April 6, a tornado damaged a score of aircraft at Joliet, Ill. Tornadoes occurred in Oklahoma, Missouri, and Arkansas in the 3d week of April. More tornadoes and damaging thunderstorms occurred in the central Great Plains in the last week of the month. Heavy snow fell in the central Rocky Mountains and nearby portions of the Great Plains in the last half of April. The snow slowed highway travel and caused young livestock to require more attention and care.

In the Southwest, which received little or no rain, the strong winds kicked up clouds of dust and sand.

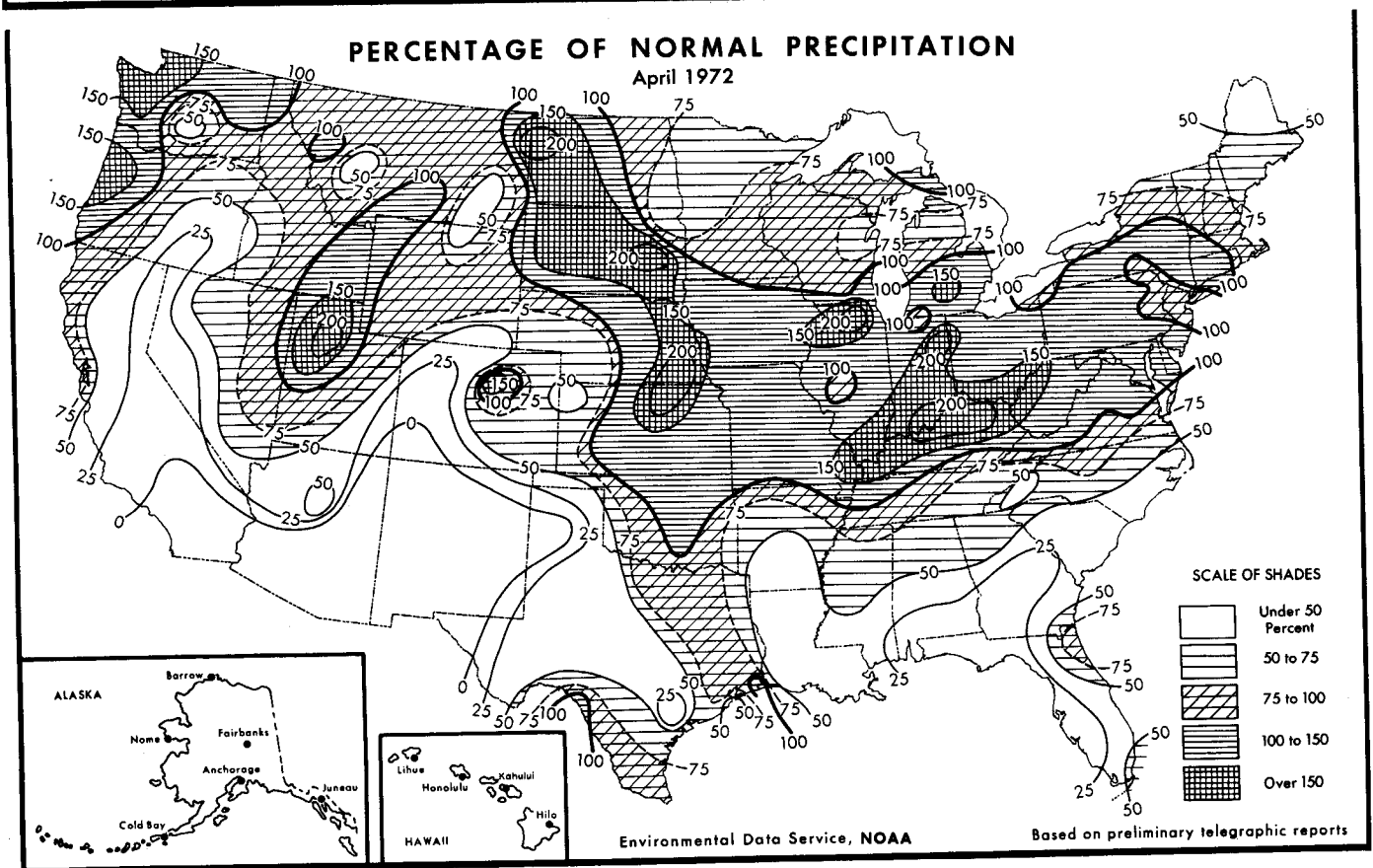
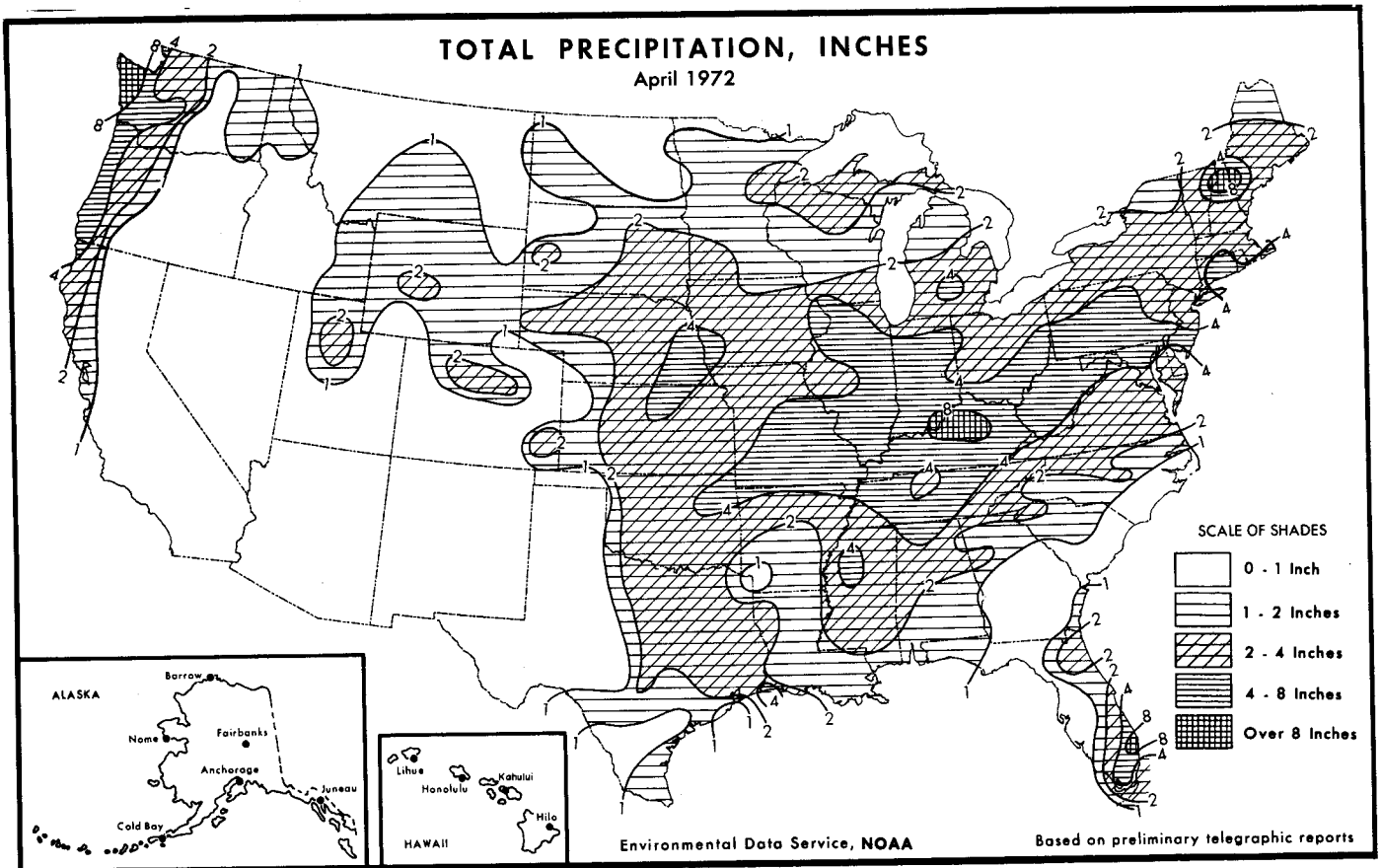
L. W. Dye

valleys. Ranges dry all areas and need moisture. Cattle and sheep generally good. Calving and lambing well along except northeast. Death losses normal to locally heavy. Sheering about 1/2 completed.

NEW ENGLAND: Week cold in north with averages mostly 3° to 6° below normal but warm in south where warm days at beginning and end of period brought averages to generally 1° to 3° above normal. Freezing minima some mornings in north

and most of central portions. Rain frequent except rather dry and sunny over weekend. Totals for week mostly 1.50 to 3.00 inches, except less in southern New Hampshire and higher in western Massachusetts. Snowcover now confined to higher elevations and wooded intermediate elevations in north. Season 10 to 14 days late. Some winter icing to hay crops. Very little corn and no oats planted to date. Peach buds showing little pink. Apple buds in tight cluster. Wet conditions hold-

(Continued on page 10)



(NEW ENGLAND continued from page 8)
ing back land preparation. Transplanting and seeding vegetables behind schedule. Asparagus harvest expected to start next week.

NEW JERSEY: Temperatures averaged from 3° to 6° above normal with lowest readings in low 30's and highest in mid-80's on the 7th. Showers, some heavy, on 3d and 4th and on evening of 7th. Averaged 2.00 inches over northern counties, 1.40 inches over central and southern interior and 1.00 inch along coast. Soil moisture adequate to surplus. Some scattered water damage reported. Warmer weather increased plant growth. Asparagus harvest increasing. Early-planted potatoes up. Some fields being cultivated. Sweet corn and tomato planting advancing. Apples, blueberries and strawberries in bloom, prospects good. Field corn planting begun. Soil preparation underway for soybeans. Hay fields and pastures growing nicely.

NEW MEXICO: Showers mostly northeast half on weekend. Showers locally to 0.50 inch, to more than 1.00 inch at Carlsbad. Continued dry northwest half of State. Lowest temperatures early in week. Warming to highest temperatures Thursday, then cooling. Temperatures averaged a little below normal except southwest. Moisture short to very short. Alfalfa harvest active. Planting corn, cotton, sorghum active. Wheat, barley heading. Dryland wheat yield will be low. Lettuce harvest Mesilla Valley continuing. Livestock fair to good. Supplemental feeding continuing. Ranges very dry and most in poor condition.

NEW YORK: Warmest weather of season with averages 8° to 12° above previous week. Warm early week, cooling trend mid-week and on 7th. Maximums in 70's on 1st and 2d but cooling to 50's Upstate on 4th, 5th, and 7th. Minimums remained above freezing except in north where lowest near 30° on 6th. Wet week with precipitation daily through 4th. Totals averaged 1.50 to 1.90 inches east-central and southeast, decreasing to 0.80 to 1.20 inches western 1/3. Additional rain on 7th averaged 0.25 inch. Wet weather throughout week halted most fieldwork. Oat planting underway early week drier fields and some corn being planted. Numerous counties report winterkill alfalfa, some heavy damage. Warm rains stimulating wheat and pasture growth. Condition most grasses fair to good. Rainy weather hinders planting vegetable crops. Potato planting about 90% completed Long Island, nearly 2 weeks behind schedule. Upstate potato planting generally underway. On mucklands planting onions, lettuce and transplanting celery continue. Sweet corn planting underway most areas. Fruit buds various stages development. Bloom limited to lower Hudson Valley where peaches blooming while sweet cherries full bloom.

NORTH CAROLINA: Temperatures averaged near normal with only small changes. Rain May 3, totals 0.50 inch to 5.00 inches, mostly 1.00 to 2.00 inches. Soil moisture increased; some pockets surplus. Major activities transplanting tobacco, planting corn, cotton, soybeans, peanuts. Flue-cured setting 55% complete, field condition fair to good. Burley plant beds mostly good -- plants adequate. Small grains mostly fair to good -- earlier cold and some disease damage. Irish potatoes, other truck crops mostly good. Peaches range poor to good. Corn 75% planted, 77% last year; cotton 65% and 67%, soybeans 8% and 12%. Labor mostly adequate.

NORTH DAKOTA: Rain and snow, which started previous week, continued early in week in southwest with precipitation totals exceeding 2.00 inches at several locations. Showers later in week light to moderate except locally heavy rain parts of southeast. Temperatures averaged near normal except about 5° below normal in west-central and southwest. Most areas had below freezing temperatures on 1 or more nights. Planting made limited progress. Cool temperatures and scattered showers continued to delay seedbed preparation and seeding. Warm sunny weather needed to dry up low areas and potholes. Wild oats could cause problems. Calving and lambing nearing completion.

OHIO: Low temperatures were in mid-40's to mid-50's. Highs were in mid-60's to mid-70's. On morning of 5th, temperatures in low 30's were reported while on the 6th and 7th maximum temperatures reached low 80's. Rain each day. On 1st, Cleveland had 1.06 inches of rain and Paulding, Paulding county, had 1.67 inches. On 2d, State hit by thunderstorms which dumped hail size of golf balls in Massillon area, Stark county. East of Massillon, hickory nut size hail fell in sufficient quantity to be picked up with shovel. Only week this spring with more than 3 days suitable for fieldwork. Soil moisture 40% surplus, and 60% adequate. Plowing for corn and soybeans 80% complete. Corn planting 20% along, compared 60% last year and average progress 30%. Less than 5% soybean acreage seeded, against 5% for both last year and average. Oats 85% seeded. Sugar beets 80% in ground. Potatoes planting 30% done. Condition winter wheat good. Livestock receiving about 45% their forage requirements from pastures.

OKLAHOMA: Rainfall averaged from 0.25 inch Panhandle to 0.90 inch east-central. Temperatures continued below normal. Cool temperatures and light rain. Small grain conditions improved slightly. The rapid rate of maturity also slowed, but nearly 1/4 acreage approaching dough stage. Wheat rated 17% good or better, compared with 13% week earlier. Amount rated poor unchanged at 27%. Condition oats slightly improved, while barley regressed. Over 90% both crops headed. As moisture supplies improve across State, outlook for row crops also better. Planting corn and sorghums slow and very few acres cotton, peanuts, or soybeans planted to date -- due cool nights. Much 1st cutting alfalfa lost to insects. Ranges slowly improving.

OREGON: Few light showers early with cool mornings followed by sharp warming last 5 days of week. Temperature averaged 3° to 5° below normal, few stations near normal. Minima 14° to 25° east, 27° to 32° western valleys, 30° to 36° on coast. Maxima 59° to 82°. Precipitation 1 to 2 days totaled 0.10 to 0.30 inch western 1/3 of State, northeast mountains. Fourth consecutive dry week southeast quadrant. Warm weather improved crop and range condition considerably. Orchardists noted first good pollinating weather to date in areas where trees are still in bloom. Fruit crops will be light to no crop where frost and poor pollinating weather took toll. Vegetable planting well underway. Peppermint and potato planting progressing well. Watermelon planting underway and processing pea planting nears completion. Sheep shearing near end some areas.

PENNSYLVANIA: Cloudy, mild week. Frequent showers and thunderstorms Monday through Thursday. A few storms were severe with hail in Pittsburgh and Erie areas and a tornado north of Mercer in northwest corner. Three persons injured and extensive property damage. Fair latter part of week except few light showers north Sunday. Temperatures 2° to 6° above normal except near normal northeast. Total rainfall over 2.00 inches parts of east to under 0.50 inch southwest. Rains caused additional delays fieldwork. Spring plowing nearing 2/3 point. Oat seeding 50% completed. Potatoes 1/3 finished. Corn planting slow. Winter grains slow. Peaches, cherries, pears full bloom southern areas. Pollinating weather mostly wet and cool. Frost damage to peaches. Limited asparagus cutting.

PUERTO RICO: Rainfall averaged 1.44 inches or 0.15 inch below normal. Highest totals centered in eastern and western interior up to 3.00 to 5.00 inches. Highest weekly total 5.89 inches western interior. Dry belt with generally less than 0.50 inch continued through center of Island from north to south coast. Temperatures averaged 78° on coast and 73° interior with mean departure of 2.0° below normal. Highest maximum 92°; lowest minimum 54°. Sugarcane harvesting operations progressed normally with only minor delays due rains. Coffee plantations reported some minor delays fieldwork, but generally good fruiting continued. Tobacco harvesting and drying made good progress and new plantings continued most zones. Minor crop report soil preparation and planting underway. Good abundance plantains and bananas on market. Pastures generally good to excellent all zones, except some south-central portions too dry for normal development.

SOUTH CAROLINA: Much needed rains came on May 2d and 3d. All sections averaged 1.00 inch or more except north-central which had about 0.60 inch. Temperatures averaged in middle and upper 60's, about 2° below normal. Soil moisture adequate. Tobacco transplanting 92° complete -- same as last year. Stands good condition. Corn 91% and cotton 82% planted. Corn good, cotton fair to good. Hay crops, pastures good condition. Small grains fair to good. Wheat 75% and oats 77% headed. Wheat and oats 15% turning color. Vegetables crops good. Peanut planting 40% and sweet potatoes 30% complete. Soybeans 7% complete, compared with 5% last year. Sorghum 14% planted. Peaches fair condition.

SOUTH DAKOTA: Temperatures averaged 3° to 7° below normal. Extremes: 25° at Shadehill Dam on 4th, 74° at Oral on 5th. Precipitation fell as showers and thundershowers beginning and near end of week with greatest amounts beginning of week. Totals ranged from about 0.40 inch to 2.50 inches. Pierre reported 2.13 inches for 24-hour period ending morning of 2d. Snow in Black Hills beginning of week. Fieldwork near standstill all week, crop growth generally slow. Seeding small grains about 60% complete normally nearly 90% complete. Some northeast counties have yet to get started. Fieldwork will not begin northeast and few other wet areas for 10 days to 2 weeks even with good weather. Very little row crop planting to date. Local frost caused light damage. Some winter kill alfalfa southeast. Conditions good to promote rapid crop growth with warm weather and sunshine. Movement livestock to pastures universal over State with major movement west. Some death losses cattle attributed to grass tetany-particularly southwest.

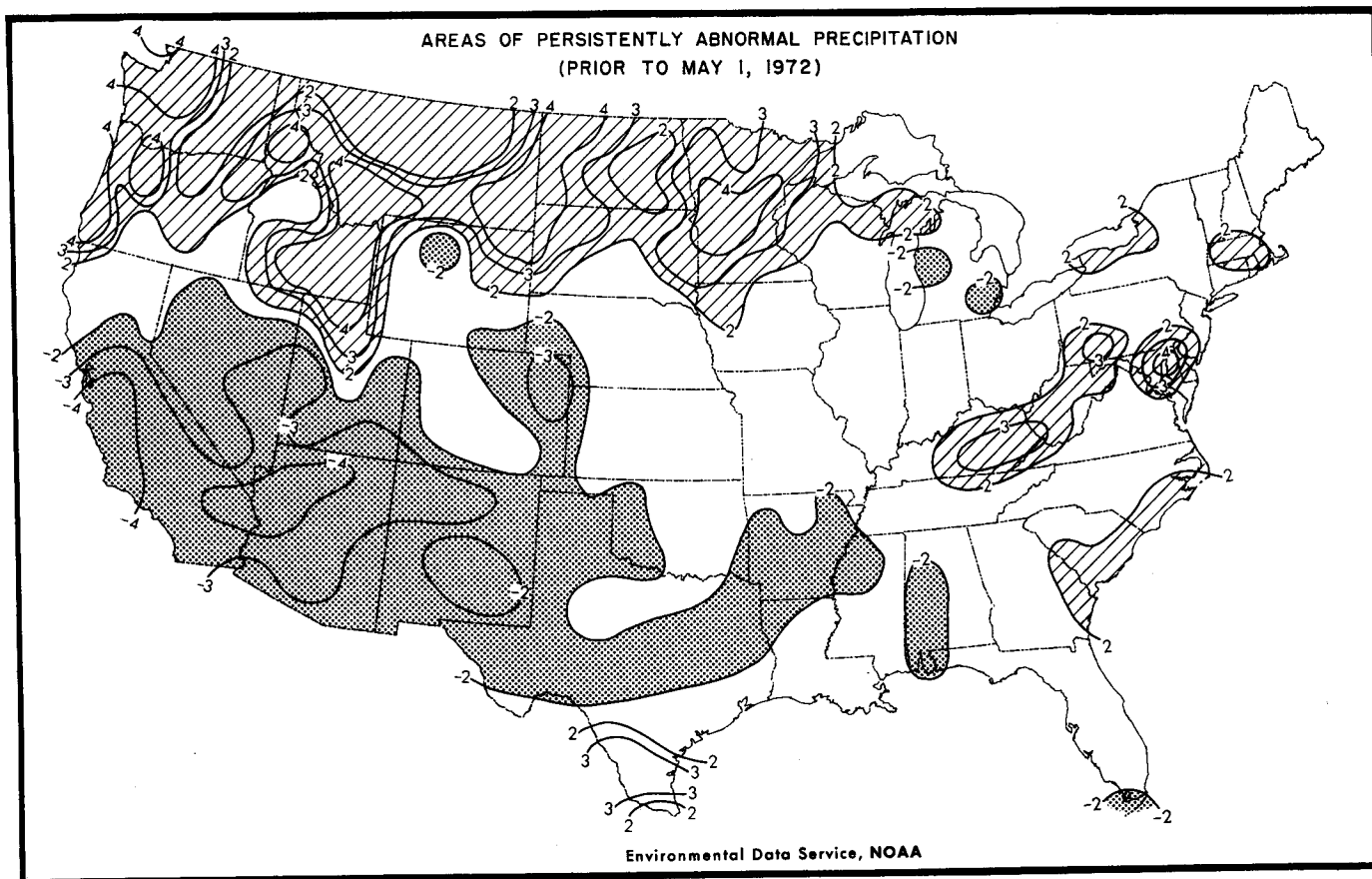
TENNESSEE: Mild week with high temperatures in 70's most days. Minimums in 40's 3 days east. Weekly averages near normal except below normal in southeast. Light to moderate showers Monday and Tuesday in west and Tuesday and Wednesday in east. Moderate showers again Sunday most areas. Weekly totals ranged from less than 0.50 inch portions of northwest to more than 2.00 inches southwest into eastern mountains. Planting corn and cotton dominating outside farm activity. Other farm chores performed were cutting alfalfa hay, pasture fertilization, and planting home gardens. Average 3.4 days suitable for fieldwork. Pastures remain good condition and supplying plenty feed for livestock.

TEXAS: Generous showers fell most sections of State for 2nd consecutive week. Torrential rains, 6.00 to 8.00 inches or more in Coastal Bend Sunday sent many streams out of banks and caused flash flooding. Impressive weekly totals were: Palacios 10.87; Victoria 8.73 inches, and San Antonio 7.88 inches. Largely by-passed by rains of past 2 weeks were Trans-Pecos and western Edwards Plateau.

Planting moisture available for Cross Timbers, Low Plains, the Blacklands and East Texas. Farmers will finish planting cotton, corn and sorghum in Blacklands and East Texas as fields dry out. Planting cotton and sorghum gaining momentum on High Plains where farmers plant deep to hold moisture. Early-planted fields cotton, corn, and sorghum responded well to rains. Harvest wheat and oats underway South Texas, but grain prospects poor. Percent planted major crops; cotton, 37 this year, 31 last year; corn, 88 this year, 85 last year; sorghum, 51 this year, 47 last year; rice, 98 this year, 95 last year; peanuts 19 this year, 12 last year. Percent harvested major crops; oats, 1 this year, 0 last year; flaxseed, 54 this year, 3 last year. In Lower Rio Grande Valley, rains interrupted vegetable harvest operations. Cucumbers, potatoes, tomatoes, and squash being harvested. Onion harvest continues. Cantaloupes and melons available light supplies. Winter Garden onion harvest gaining momentum, potato and cucumber harvest continues. Coastal Bend onions and squash being harvested. Some damage from hail to watermelons and cantaloupes. Central and East Texas sweet-potato planting active. Tomato plants show good growth. Peaches showing good progress after rains. Citrus trees good condition. Some young fruit scarred by high winds.

UTAH: Few scattered showers and thunderstorms northwest over weekend, otherwise little or no precipitation. Accumulated amounts of moisture generally light. Drought condition continues severe south and eastern sections State. Temperatures average near to little above normal. Irrigation water major reservoirs totaled 3.4 million acre-feet May 1, 1972, 1% below previous high for any date. Most reservoir supplied crop lands will have adequate water. Soil moisture dry crop and range lands adequate north, very short to short east and south. Freezes April 30 and May 1 further damaged remaining fruit crop. Very little fruit left. Alfalfa hay development slowed by several freezes last 6 weeks, up to 14 days behind schedule for 1st cutting. Spring grains all planted and 80% emerged. Sugar beets 90% planted and 75% emerged. Late crop potato planting hardly started. Field corn 40% planted on largest acreage ever. Calving 85% completed, lambing 35%, shearing 75%. Movement to spring ranges 60% completed for cattle, 65% for sheep.

(Continued on back page)



DROUGHT IN THE SOUTHWEST AGAIN

The above map shows areas where the weather has been rather persistently either wetter or drier than normal for the past several months or, in some instances, years. The lines are based on the Palmer Drought Index (1), which uses observed rainfall and temperature from each climatological division to compute the weekly differences between the actual rainfall and the "expected" rainfall. In this context expected rainfall is defined as the amount needed to sustain the streamflow, reservoir storage, soil moisture and vegetative growth that are normal for a given area. When the actual rainfall rather consistently exceeds the expected rainfall, the computed index numbers are positive, indicating abnormally wet weather. When rainfall tends to be less than the expected amount, drought develops and the index values are negative. The index remains at or near zero in any climate so long as the temperature and rainfall are near normal. Maps of the drought end of this index are currently being transmitted every Tuesday evening on the National Weather Service facsimile circuit.

This Drought Index is a companion to the Crop Moisture Index, which is regularly carried in this Bulletin. The chief difference between the two is that the CMI concerns only the moisture used by vegetation in relation to the amount required for normal growth. That is, it ignores the amount of moisture required to maintain normal streamflow and moisture storage.

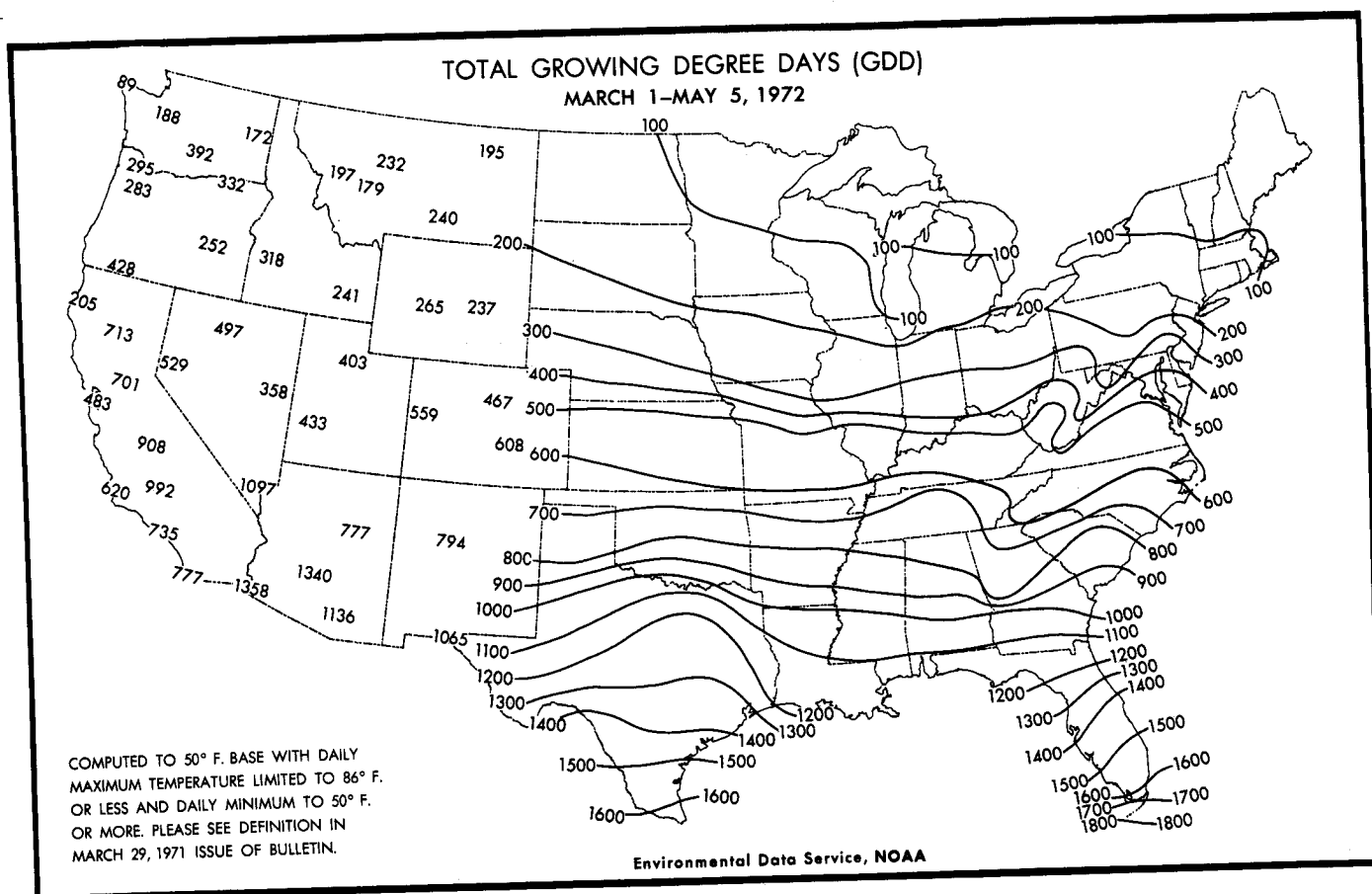
The map above is surprisingly similar to a like map which appeared in this Bulletin on April 12, 1971. The abnormally wet area in the Northwest and the dryness in the Southwest were there a year ago. In fact, the most persistent

moisture anomaly in progress today is the unusually wet region in the eastern Idaho-southern Montana sector. The weather there turned wet early in 1967. In southwestern Montana 56 of the last 62 months and 68 of the past 120 months fall in the "very much wetter than normal" class. Precipitation for the past 5 years has averaged 20% above normal. For comparison, the 30 years prior to September 1961 produced only 12 months in the "very much wetter than normal" class. A really remarkable--and unexplained--climatic fluctuation is underway there.

The abnormally wet area in Minnesota, as well as those in Kentucky and South Carolina, have persisted since October 1970, but the small affair in the Chesapeake Bay area is a relative newcomer, having first appeared in August 1971.

The drought that existed from Texas to Southern California last summer came to a definite end in almost all areas when the weather turned wet in late July. In retrospect, the only places where the drought had not definitely ended by October 1971 appeared as two islands in an extensive area of abnormally wet weather. One of these covered western Arizona and adjoining parts of Nevada and southern California. The other was in west-central and southwestern Oklahoma.

While it is true that west-central and southwestern Oklahoma received 170% of normal rainfall during the August-October period in 1971, amounts were inadequate to compensate for the previous dryness and the computations showed a fairly high likelihood that the abnormally dry weather had merely been interrupted. On the other hand, south-



western Texas--roughly the El Paso, Austin, Rio Grande City triangle--received some 240% of normal rainfall during the same three months and unquestionably terminated the drought.

With the exception of the two "islands" mentioned above, the southwestern drought area shown on the above map has all developed since January 1972.

Moisture anomalies of the sort shown here have an important effect on most weather-sensitive enterprises. The risk of such climatic fluctuations should be evaluated and allowed for in the design of any undertaking which could be adversely affected by these natural ups and downs of moisture supply.

Wayne C. Palmer

- (1) 1965: "Meteorological Drought," Weather Bureau Research Paper No. 45, 58 p.

NATIONAL FLOOD SUMMARY

Flooding developed in several areas since Friday from Texas to Alabama, eastern Kansas and northern Missouri, and on a few tributaries in Iowa and Illinois. Flash flooding occurred in heavy rain area in Texas, southeast Louisiana, and some east Gulf coastal streams.

The Greatest overflow on principal rivers is in Texas on the Guadalupe and San Antonio Basins and in the Lavaca Navidad watershed. Local runoff from the heavy rain in the Victoria area has already pushed the Guadalupe to 7 feet over flood stage at that point. As much as 12 foot overflow has occurred in portions of the San Antonio Basin, on Cibolo Creek near Falls City. New rises and some additional flooding is developing in portions of the Nueces River Basin in Texas on the Frio, Atascosa and main stem Upper Nueces.

In the east Gulf, lowland overflow is developing along the Pearl River in Mississippi and in the upper Tombigbee Basin in Mississippi. Rural flooding developed again in east-central Kansas in the Marais Des Gyges Basin, and on some tributaries in northern Missouri the main stem of the Missouri River is expected to reach near to a little above flood stage from Napoleon, Missouri during the remainder of this week.

Flooding continues from last week in a few other areas including a few places on the Mississippi River, the lower Ohio River, and at several places along the length of the Connecticut River in New England.

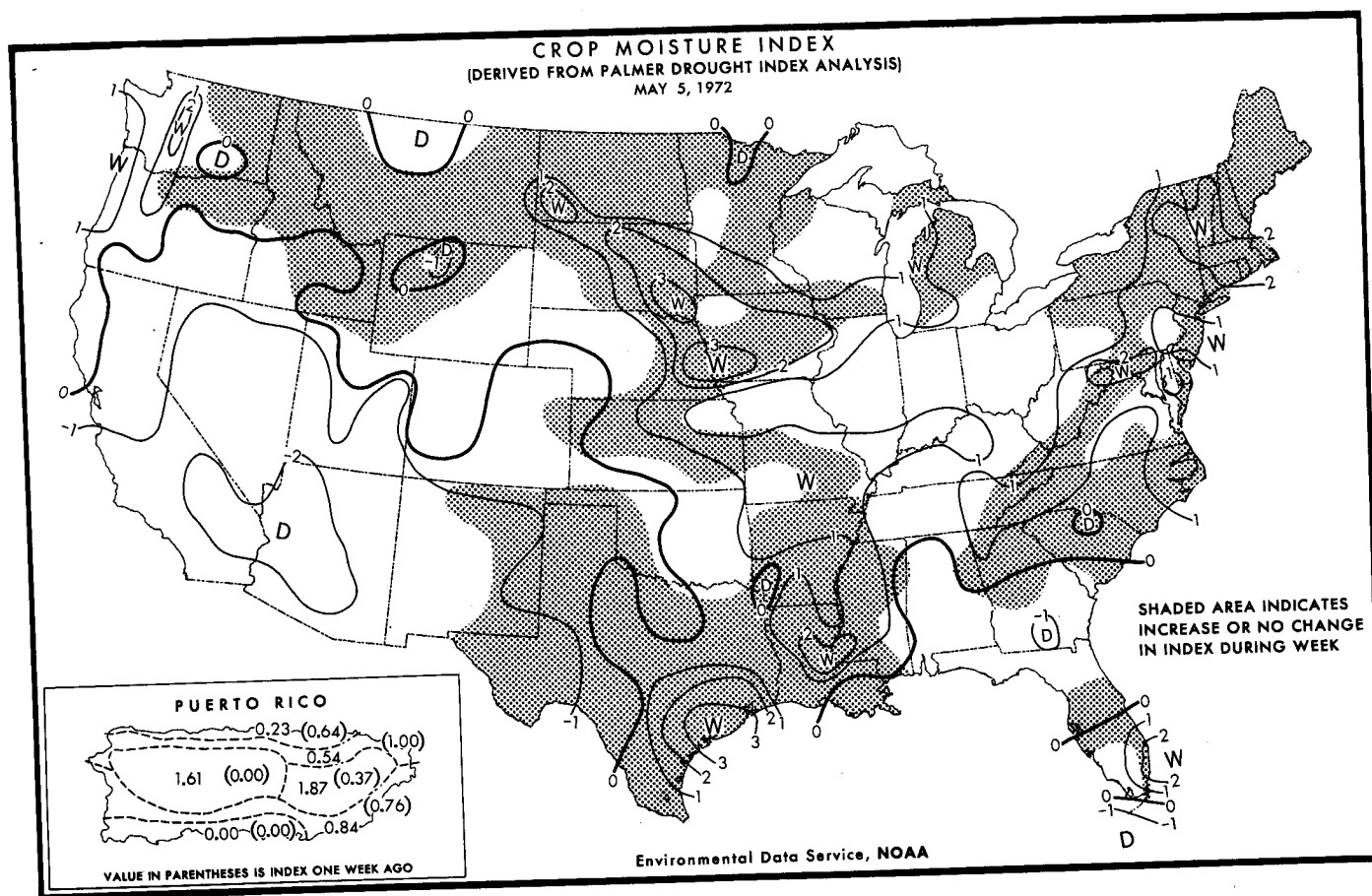
Hydrologic Services Division
National Weather Service

Heating Degree Days (Base 65° F.)

APRIL 1972

ALA. Birmingham . . .	138	MAINE, Caribou . . .	903	OKLA. Okla. City . .	144
Mobile	35	Portland	725	Tulsa	161
Montgomery	91	MD. Baltimore . . .	396	OREG. Astoria . . .	545
ALASKA, Anchorage .	1138	MASS. Boston	598	Burns U.	730
Barrow			688	Medford	505
Fairbanks	1318	MICH. Alpena	883	Pendleton	515
Juneau	906	Detroit	608	Portland	501
Nome	1584	Flint	669	Salem	560
ARIZ. Flagstaff . . .	749	Grand Rapids	675	PA. Allentown	531
Phoenix	12	Houghton Lake	847	Erie	742
Tucson	50	Lansing	696	Harrisburg	457
Winslow	316	Marquette U.	897	Philadelphia	450
Yuma	9	S. Ste. Marie	926	Pittsburgh	489
ARK. Fort Smith . . .	145	MINN. Duluth	946	Scranton	634
Little Rock	147	Internatl Falls	833	R. I. Providence . . .	616
CALIF. Bakersfield . .	82	Minneapolis	687	S. C. Charleston . . .	113
Eureka U.	472	Rochester	704	Columbia	136
Fresno	128	St. Cloud	752	Greenville	205
Los Angeles U. . . .	62	MISS. Jackson	76	S. DAK. Aberdeen . . .	597
Red Bluff	214	Meridian	81	Huron	600
Sacramento		Vicksburg U.		Rapid City	644
San Diego	78	MO. Columbia	304	Sioux Falls	638
San Francisco	282	Kansas City	263	TENN. Chattanooga . .	215
COLO. Denver	486	St. Louis	296	Knoxville	211
Grand Junction	346	Springfield	243	Memphis	146
Pueblo	359	MONT. Billings	633	Nashville	191
CONN. Bridgeport . . .	564	Glasgow	614	TEX. Abilene	49
Hartford	619	Great Falls	667	Amarillo	203
D. C. Washington . . .	326	Havre	635	Austin	6
FLA. Apalachicola . .	16	Helena	747	Beaumont	21
Ft. Myers	0	Kalispell	743	Brownsville	2
Jacksonville	40	Miles City	569	Corpus Christi	2
Key West	0	Missoula	666	Dallas	33
Lakeland U.	6	NEBR. Grand Island . .	463	Del Rio	2
Miami	0	Lincoln	393	El Paso	56
Orlando	6	Norfolk	506	Fort Worth	26
Pensacola U.		North Platte	549	Galveston U.	2
Tallahassee	5	Omaha	461	Houston	17
Tampa	5	Valentine	585	Lubbock	94
GA. Atlanta	161	NEV. Ely	693	Midland	37
Augusta	123	Las Vegas	69	San Angelo	26
Macon	96	Reno	554	San Antonio	7
Savannah	74	Winnemucca	617	Victoria	2
IDAHO, Boise	543	N. H. Concord	736	Waco	19
Lewiston	530	N. J. Atlantic City . .	550	Wichita Falls	77
Pocatello	654	Trenton U.	455	UTAH, Blanding R. . .	
ILL. Cairo U.	195	N. MEX. Albuquerque . .	244	Salt Lake City	499
Chicago	539	Roswell	109	VT. Burlington	872
Moline	504	N. Y. Albany	707	VA. Lynchburg	282
Peoria	475	Binghamton	732	Norfolk	272
Rockford	606	Buffalo	707	Richmond	286
Springfield	381	New York	520	Roanoke	303
IND. Evansville	274	Rochester	677	WASH. Colville	692
Fort Wayne	513	Syracuse	731	Omak	
Indianapolis	389	N. C. Asheville	294	Quillayute	663
South Bend	582	Charlotte	226	Seattle-Tacoma	531
IOWA, Burlington . . .	464	Greensboro	282	Spokane	684
Des Moines	478	Hatteras R.	265	Walla Walla U.	469
Dubuque	632	Raleigh	237	Yakima	578
Sioux City	463	Wilmington	167	W. VA. Beckley	446
KANS. Concordia	388	N. DAK. Bismarck . . .	671	Charleston	334
Dodge City	301	Fargo	718	Huntington	335
Goodland	445	Williston U.	702	Parkersburg U.	334
Topeka	324	OHIO. Akron-Canton . .	581	WIS. Green Bay	762
Wichita	310	Cincinnati U.	352	Madison	705
KY. Lexington	343	Cleveland	564	Milwaukee	758
Louisville	282	Columbus	482	WYO. Casper	653
LA. Baton Rouge	32	Dayton	438	Cheyenne	668
Lake Charles	22	Toledo	560	Lander	642
New Orleans	25	Youngstown	611	Sheridan	607
Shreveport	62				

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



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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Publication of this bulletin began in 1872 as the Weekly Weather Chronicle. It is now issued under general authority contained in the Act of January 12, 1895 (44 USC 213), 53d Cong., Ill. Sess. Quotation or reproduction of this material is encouraged. Please give credit to this publication and, in case of special articles, to authors.

Questions and comments are invited; please send to Editor in Agricultural Climatology Service Office, address above.

(Continued from page 11)

VIRGINIA: Temperatures around normal. Totals were mostly from 1.00 to 3.00 inches. Fieldwork halted by rain, but resumed as soils dried out. Half of topsoil still with surplus moisture. Corn 2/5ths planted, 3/5ths year ago. Cotton 2/3rds planted, peanuts 1/5th planted, few soybeans planted. Set 5% flue-cured and little fire- and sun-cured tobacco. Set cabbage Carroll County. Set tomatoes northern neck and eastern shore. Began haying and silo filling. Pastures excellent. Grass tetany common. Sheared sheep.

WASHINGTON: Western Washington: Clear skies and dry weather prevailed although temperatures below normal. Backyard gardening and field activities at peak. Pastures and lowlands drying out and grass growth improved. Green peas, field corn, broccoli, and potato planting active and planting lettuce and cabbage continued. Raspberries and strawberries making good progress and strawberries beginning to bloom. Eastern Washington: Clear dry weather featured along with balmy but below normal temperatures. Fieldwork very active and planting field and sweet corn, potatoes, beans, pastures, and alfalfa underway. Spraying and spring grain seeding nearing completion many areas and some reseeding fall grains accomplished. Recent drying winds reduced topsoil moisture some areas to critical level. Irrigation underway most crops and alfalfa growth remained slow. Apples generally full bloom and apricots in some orchards being hand-thinned.

WEST VIRGINIA: Rainy periods April 30 through May 4 gave between 1.00 and 2.00 inches except below 1.00 inch near Ohio River. Near freezing temperatures Friday morning but rapid warmup over rainless weekend. Only 2 days favorable fieldwork. 3/4 recorders indicated surplus soil moisture. Planting progress; potatoes 50%, corn

less than 10% and spring oats 50%. Tobacco beds about all sown, 67% with plants emerged. Most crops fair to good, hay and pastures needing warm weather. Fruit prospects reduced by frost and freeze damage. Considerable cattle still on feed.

WISCONSIN: Cool week with frequent rains at beginning and end of week. Weekend rains and cloudiness mostly restricted to south. Some progress made fieldwork, but season running very far behind. Spring plowing about 20% completed, while well past halfway mark last year. Oats about 20% planted, last year 75% done. East lagging most. Pastures and hay fields greening nicely. Unfortunately quite extensive winterkill appearing south while northern seedings wintered well. Also some winterkill winter wheat southeast. Peas and potatoes being planted. Few fields sweet corn going in. Tobacco beds steamed and seeded. Soil moisture 1/2 adequate and 1/2 surplus.

WYOMING: Scattered rain and snow, heaviest north-central and northeast. Alva reported most moisture with 1.41 inches. Temperatures averaged 1° to 7° below normal. Maxima mostly 62° to 79°. Minima mostly 4° to 18° west of Divide and 15° to 30° east. Temperature extremes: 79° at Basin and Worland and 4° at Mountain View. Main agricultural activities planting and irrigating spring crops and general care livestock. About 90% spring wheat, 80% oats, 85% barley sown. Approximately 90% sugar beets and 30% corn planted. Nearly 50% spring wheat, 60% oats, 50% barley and 10% sugar beets emerged. Irrigating spring-planted crops and hays widespread. Surface soil moisture supplies generally adequate. Calving and lambing continue good progress with about 80% spring calving and 45% lambing range ewes completed. Cattle and sheep being moved to summer pasture some areas.