

Weekly Weather & Crop Bulletin

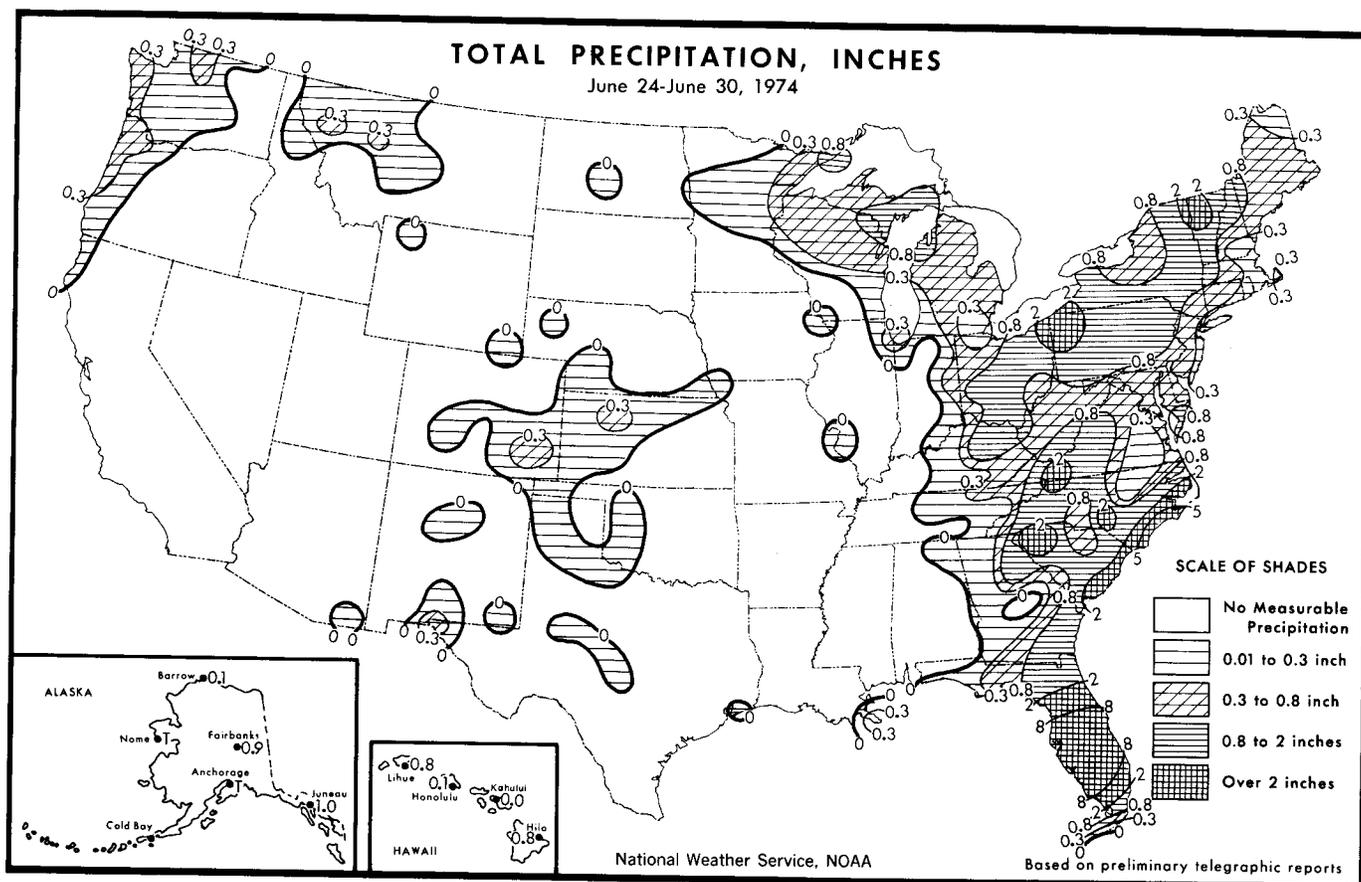
U. S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration

U. S. DEPARTMENT OF AGRICULTURE
Statistical Reporting Service

Volume 61, No. 27

July 2, 1974

Washington, D. C.



NATIONAL WEATHER SUMMARY

HIGHLIGHTS: Storms of tropical origin deluged central Florida and the Tampa - Orlando corridor with rains averaging over 8.00 in. last week. Totals included: Orlando, 10.91 in.; Tampa, 9.21 in.; Fort Myers, 9.68 in.; and Lakeland, 9.00 in. Elsewhere scattered showers fell across the Nation's midsection, Pacific Northwest and the Eastern Seaboard while the Far West remained hot and dry.

Temperatures averaged as much as 12° above normal throughout the Nation's western third. However, temperatures were below normal in the Nation's eastern half, averaging as much as 13° below normal for the week.

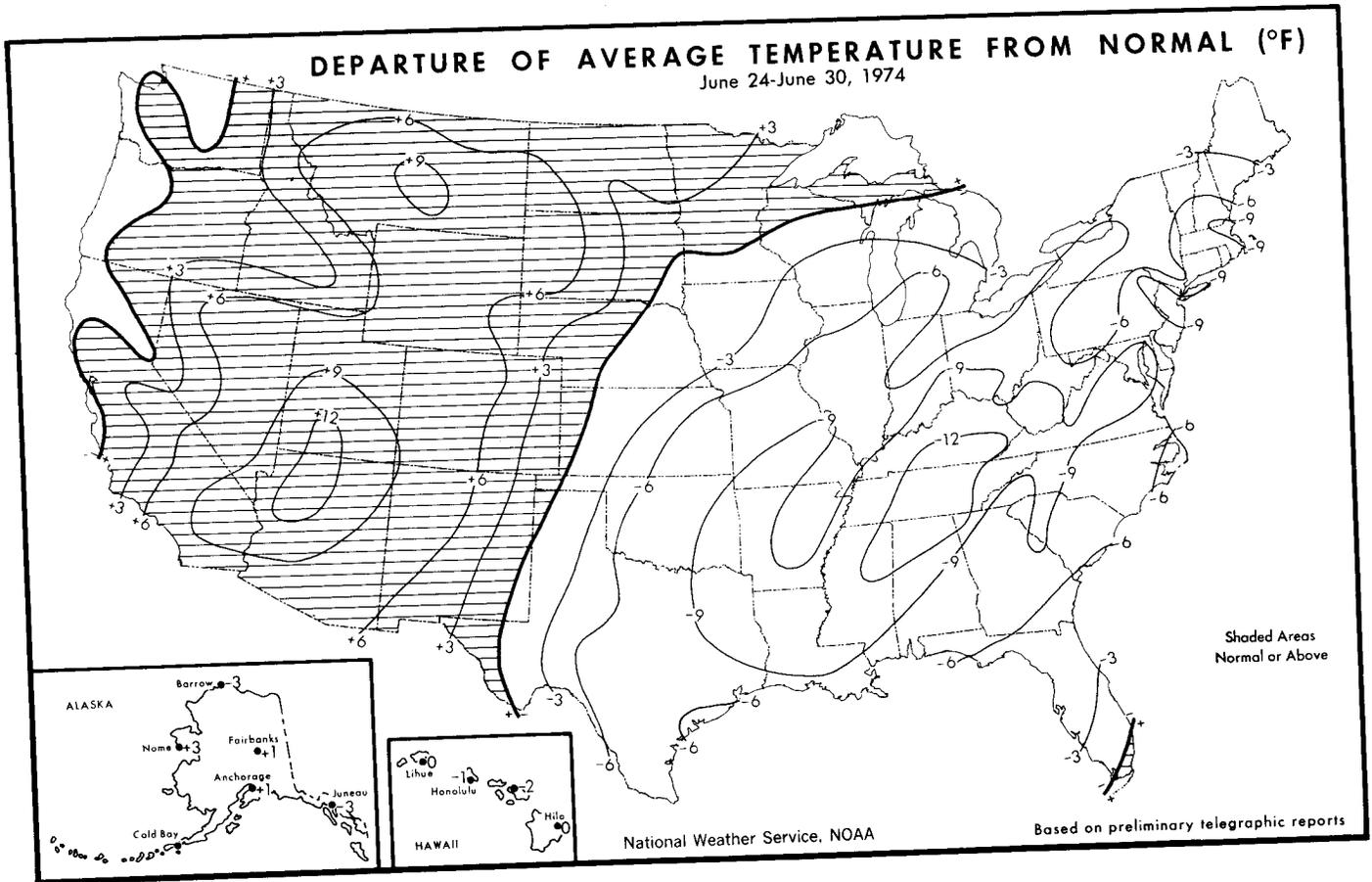
PRECIPITATION: Isolated showers averaging over 2.00 in. drenched the Carolina coasts. Totals included: Greenville, S.C., 2.45 in.; Charleston, S.C., 3.68 in.; Cape Hatteras, N.C., 4.84 in.; and, Wilmington, N.C., 5.31 in. The West remained

dry last week with scattered showers confined to the Midwest and Pacific Northwest.

Early in the week thunderstorms spread across the Atlantic Coast States, along the Gulf Coast and Florida. By Monday afternoon the storms had drenched both Tampa and Fort Myers, Fla., with over 2.00 in. of rain. Beach erosion and flooding were reported in low lying areas as tides pushed 2 ft. above normal during the evening.

Tuesday, a cold front triggered widespread rains and thunderstorms across northern Florida. After six hours of rainfall, Ft. Myers had 2.76 in. Elsewhere during the day, thundershowers spread from the Appalachians to the lower Great Lakes and the upper Ohio Valley.

Wednesday, locally heavy rains continued in Florida as the cold front became stationary over the State. Tampa received an additional 3.50 in. while the Naval Air Station at Jacksonville



reported 2.50 in.

Thursday evening thunderstorms continued along the South Atlantic Coast. A strong low pressure area brought heavy rains to the South Atlantic Coast.

By Friday there was considerable flooding in west central Florida, and Pinellas County alone, reported \$12 million worth of damage.

Saturday, a cold front reaching from Wisconsin into northeast New Mexico triggered showers and thunderstorms during the day from the Central Plains and middle Mississippi Valley into the upper Great Lakes.

Sunday, thunderstorms rumbled through the Ohio Valley, New England, Florida, Missouri west to the southern Rockies and in the Pacific Northwest.

TEMPERATURE: Many of the Southwestern States reported temperatures averaging 4 to 12° above normal while the Nation's eastern half averaged as much as 13° below normal in the Central Gulf Coast States.

Unseasonably cool weather prevailed in the eastern half of the Nation from the Canadian border almost to the Gulf Coast. Monday, it was a hot afternoon in the Rocky Mountains. Record high temperatures were set in Great Falls, Mont., with 97° and Flagstaff, Ariz., 94°. Both the coldest and hottest temperatures in the Nation were measured in California. Tahoe Valley had 32° while Palm Springs hit 117°.

Tuesday, clear skies and northerly winds brought

temperatures 10° to 15° below normal to the Central Gulf Coast States. Early morning record lows were set in 28 communities ranging from 42° at Grand Rapids, Mich., to 68° at Brownsville, Texas. Meanwhile, record high's were set in Helena, Mont., 96°, and Lander, Wyo., 96°.

Wednesday was another chilly morning for a large portion of the Nation's midsection. Record low temperatures ranged from 45° at Chattanooga, Tenn., and Madison, Wis., to 64° at Mobile, Ala. New records were set as far east as Trenton, N.J., and west to Abilene, Texas.

Thursday afternoon temperatures were below normal from Oklahoma through the Ohio Valley. In contrast, record highs were reached in many sections of the Desert Southwest including Yuma 116° and Flagstaff, Ariz., 94°.

On Friday, record lows were confined to an area bounded by Topeka, Kans., 53°, Athens, Ga., 54°, Tallahassee, Fla., 59°, and Midland/Odessa, Texas, 61°. Many Southwestern States again had highs above the 100° mark. Albuquerque, N.Mex., record it's highest temperature in 43 years -- 105°.

Saturday morning temperatures dipped to record lows from the Gulf Coast to the Cumberland Valley. Reports of the lowest temperatures included San Antonio, Texas, 60°; New Orleans, La., 62°; Jackson, Miss., 58°; Jacksonville, Fla., 64°; Atlanta, Ga., 57°; Little Rock, Ark., 60°; and, Nashville, Tenn., 54°.

Sunday, highs rose above the 100° mark throughout the Southwest. The Pacific Coast, upper Great Lakes and the North Atlantic Coast States were the only parts of the Nation to report highs below 80°.

NATIONAL AGRICULTURAL SUMMARY

HIGHLIGHTS: Winter wheat harvest making excellent gains, much ahead of 1973 progress in all states. Corn growing, but needs warmer temperatures. Soybean planting nearing completion in Corn Belt. Cotton growth slowed by cool weather. Rain hampers haying in Eastern States.

SMALL GRAINS: Continued dry weather enabled farmers to make excellent progress combining winter wheat. Harvest continues well ahead of 1973 and normal for most States. Texas wheat is 95% harvested, compared with 91% last year. Kansas wheat harvest advanced 50 points to 85% complete, the most for this time since 1956. Harvesting moved northward into Nebraska, Indiana, and Ohio during the week. Harvest along the Kansas-Nebraska border is half done. Hot temperatures in Colorado continued to push maturity with 13% of the winter wheat harvested. Winter wheat is 75% headed in Montana and some fields are starting to turn. Deteriorating moisture supplies are causing small grains to burn in South Dakota.

Spring wheat is well advanced in southwestern Minnesota, while in the important northwest part of the state none of the late seeding is heading.

Oat harvest is getting underway in Kansas and nearing completion in Texas, Arkansas, South Carolina, and Georgia. Oat maturity in other States: Wisconsin 20% headed, Michigan 26%, Minnesota 39% and Ohio 90%.

CORN: The Nation's corn crop continued to grow well under much cooler than normal temperatures. The Corn Belt crop is in fair to good condition with mostly adequate soil moisture. The height of this year's crop is averaging shorter than last year. Illinois corn fields average 20 in. high, compared to 23 in. last year. Minnesota corn averaged 18 in., 6 in. shorter than in 1973. Indiana farmers had to replant 10% of their crop because of hard topsoil and poor germination. The outlook in Iowa for corn improved and weed control is good except where no herbicide was applied. Early corn in Nebraska is growing rapidly but late plantings are showing signs of heat stress and lack of surface moisture. Corn is 20% silking in southeast Virginia and 40% silking in Alabama. In Kentucky, corn is growing well and early corn is tasseling.

COTTON: Cotton crop development was slowed by cool temperatures in much of the major producing area, but condition of the crop remains good. Weed and insect control have been successful in most areas and is still active with the application of herbicides, insecticides and cultivation. Arkansas weed and grass problems are now under control. Boll weevils are starting to emerge and the crop is in fair to good condition. Cotton plants are small in Tennessee and behind normal. Only 20% of the acreage has squared, compared with 30% last year and 45% normal. Mississippi fields are 61% squared, 6 points more than normal, but only 6% are setting bolls, compared with 17% normal. Cotton is squaring statewide in Alabama with the south and central areas advancing to setting bolls. South Carolina's crop is in good condition with an increasing insect population being sprayed. Arizona's cotton made excellent progress under favorable conditions. The Yuma area is further advanced and in the early stages of boll setting. Dry conditions are being relieved somewhat in California through irrigation.

SOYBEANS: Planting of soybeans in the Corn Belt is nearing completion at 93% done June 30 and is now ahead of last year's progress of 91%. North Central States not finished yet are: Indiana, Illinois and Missouri 85%, Kansas 90% and Michigan 97%. Soybean planting in Iowa is virtually complete, with most emerged. Cool temperatures continued to slow maturity in all major soybean States. Average height of soybeans ranged from 4 in. in Indiana to 10 in. in Ohio.

Soybean planting in the South made good progress. Many farmers are busy planting soybeans in fields where they recently harvested wheat. Planting is 90% complete in North Carolina, 91% in Texas, and 93% in South Carolina. In Mississippi only 63% of the crop has been planted, compared with 86% in 1973.

OTHER CROPS: Wet conditions hampered haying on many farms in the eastern Corn Belt and North Atlantic Region. Wisconsin and Minnesota farmers took advantage of the sunny week and made good progress on their first cutting.

Sorghum planting is 94% complete in Texas, 87% complete in Missouri, and 90% done in Kansas. Planting progress is behind 1973 in Texas and Missouri but equals the pace in Kansas.

Below normal temperatures in Virginia are causing premature blooming in flue-cured tobacco. Harvest of flue-cured tobacco is underway in North Carolina while in South Carolina harvest is 22% complete compared with only 7% in 1973. In Kentucky, tobacco is advancing rapidly, generally 6 to 12 in. tall.

Peanuts in Georgia are in mostly good condition and are blooming.

Potato fields in Idaho are all emerged and making good progress.

FRUITS AND NUTS: Apple prospects in New England remain good, peaches fair. Sweet cherry harvest is underway in southern Pennsylvania and near harvest in western New York where bird damage is widespread. Peach harvest is gaining momentum in South Carolina with 32% complete and continues active in Texas. The Florida citrus tree and new crop conditions are excellent.

Insects continue to damage the pecan crop in Texas. In California, almonds are progressing well and walnuts are sizing well.

VEGETABLES: Harvest of early vegetables is underway in New York and New Jersey and nearing completion in the coastal counties of South Carolina. Watermelon harvest is increasing in South Carolina, Arkansas and east Texas, moving in good volume in Georgia and central Texas. Heavy rains hampered the watermelon and sweet corn harvest in Florida. Cantaloupe harvest is declining in the Desert, starting to increase in the San Joaquin Valley, in full swing in San Antonio. Late cantaloupes are being harvested in Laredo. The Lower Rio Grande Valley is in final stages of cantaloupe and honeydew harvesting. Sweet corn planting just completed in Wisconsin.

PASTURES AND LIVESTOCK: Pastures and livestock in the eastern half of the Nation are generally in good condition. Pastures and ranges in the western half continue to show stress from the hot, dry weather. In New Mexico, ranges continue poor and livestock are in fair condition. Supplemental feeding is required in many areas of Arizona and water is being hauled to drier areas.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., June 30, 1974

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 . . .	68	-11	0	-1.1	La. Baton Rouge . . .	72	-10	0	-1.1	Youngstown . . .	62	-7	2.3	+1.5
Mobile . . .	73	-8	0	-1.7	Lake Charles . . .	73	-9	0	-1.3	OKLA. Okla. City . . .	71	-8	0	-.8
Montgomery . . .	72	-8	0	-1.1	New Orleans . . .	74	-7	0	-1.3	Tulsa . . .	72	-8	0	-1.0
ALASKA. Anchorage . . .	58	+1	T	-.3	Shreveport . . .	72	-10	0	-.7	OREG. Astoria . . .	57	-1	.4	-.1
Barrow . . .	33	+3	.1	0	MAINE. Caribou . . .	62	-1	.2	-.6	Burns . . .	65	+2	0	-.2
Fairbanks . . .	62	+1	.9	+.5	Portland . . .	61	-4	.5	-.2	Medford . . .	69	+1	0	-.1
Juneau . . .	52	-3	1.0	+.2	MD. Baltimore . . .	66	-9	.6	-.3	Pendleton . . .	70	+1	T	-.2
Kodiak . . .	-	-	-	-	MASS. Boston . . .	61	-10	.2	-.5	Portland . . .	63	-1	.5	+.2
Nome . . .	51	+3	T	-.3	Chatham . . .	58	-	.6	-.6	Salem . . .	62	-2	.3	+.1
ARIZ. Flagstaff . . .	74	+12	T	-.3	MICH. Alpena . . .	62	-2	.5	-.1	PA. Allentown . . .	64	-8	1.1	+.2
Phoenix . . .	98	+10	0	-.1	Detroit . . .	66	-5	.7	-.1	Erie . . .	61	-6	2.5	+1.7
Tucson . . .	93	+8	T	-.2	Flint . . .	64	-4	.5	-.3	Harrisburg . . .	68	-6	1.0	+.3
Winslow . . .	84	+9	0	-.1	Grand Rapids . . .	64	-6	.3	-.5	Philadelphia . . .	67	-8	.5	-.4
Yuma . . .	97	+8	0	0	Houghton Lake . . .	62	-3	.4	-.4	Pittsburgh . . .	65	-6	1.9	+1.1
ARK. Fort Smith . . .	69	-11	0	-.8	Lansing . . .	63	-7	.3	-.5	Scranton . . .	61	-9	1.5	+.6
Little Rock . . .	83	-7	0	-.8	Marquette . . .	64	+1	.5	-.3	R.I. Providence . . .	62	-7	.2	-.4
CALIF. Bakersfield . . .	84	+4	0	0	Muskegon . . .	64	+1	.1	-.5	S.C. Charleston . . .	73	-6	3.7	+2.0
Eureka . . .	56	+0	T	-.1	S. Ste. Marie . . .	63	+2	.7	0	Columbia . . .	75	-5	.8	-.2
Fresno . . .	79	+2	0	0	MINN. Duluth . . .	63	+1	.4	-.6	Greenville . . .	69	-8	T	-.8
Los Angeles . . .	78	+8	0	0	Internatl Falls . . .	67	+4	T	-1.0	S.D. Aberdeen . . .	72	+3	T	-.8
Red Bluff . . .	79	+0	0	-.1	Minneapolis . . .	70	0	0	-.9	Huron . . .	72	+2	0	-.8
San Diego . . .	71	+4	T	0	Rochester . . .	67	-1	T	-1.0	Rapid City . . .	76	+8	0	-.8
San Francisco . . .	62	+0	0	0	St. Cloud . . .	68	0	.1	-.9	Sioux Falls . . .	70	-1	T	-.9
Stockton . . .	77	+3	0	0	MISS. Jackson . . .	70	-11	0	-.8	TENN. Chattanooga . . .	65	-13	T	-1.0
COLO. Denver . . .	77	+8	T	-.4	Meridian . . .	71	-10	0	-1.0	Knoxville . . .	66	-11	.1	-.9
Grand Junction . . .	83	+8	0	-.1	MO. Columbia . . .	68	-7	T	-1.0	Memphis . . .	72	-9	0	-.8
Pueblo . . .	79	+5	.3	-.1	Kansas City . . .	71	-6	0	-1.3	Nashville . . .	67	-12	.1	-.7
CONN. Bridgeport . . .	66	-5	.1	-.5	St. Louis . . .	68	-9	.1	-.9	TEX. Abilene . . .	78	-4	T	-.6
Hartford . . .	64	-7	.5	-.3	Springfield . . .	67	-9	T	-1.0	Amarillo . . .	76	-1	T	-.8
D.C. Washington . . .	68	-9	.6	-.2	MONT. Billings . . .	75	+9	T	-.6	Austin . . .	76	-7	0	-.6
FLA. Apalachicola . . .	77	-4	.2	-1.3	Glasgow . . .	71	+5	0	-.6	Beaumont . . .	74	-8	0	-1.2
Daytona Beach . . .	79	-3	5.1	+3.4	Great Falls . . .	72	+8	T	-.6	Brownsville . . .	77	-7	0	-.5
Ft. Myers . . .	77	-3	9.7	+7.4	Havre . . .	71	+6	0	-.6	Corpus Christi . . .	77	-7	T	-.5
Jacksonville . . .	76	-4	1.2	-.4	Helena . . .	70	+7	T	-.5	Del Rio . . .	81	-5	0	-.4
Key West . . .	84	0	T	-1.1	Kalispell . . .	65	+5	T	-.5	El Paso . . .	86	+4	.4	+.2
Lakeland . . .	76	-5	9.0	+7.2	Miles City . . .	77	+8	0	-.7	Fort Worth . . .	75	-8	0	-.6
Miami . . .	83	+1	1.2	-.9	Missoula . . .	69	+7	T	-.4	Galveston . . .	78	-5	0	-1.0
Orlando . . .	77	-4	10.9	+9.0	NEBR. Grand Island . . .	73	-1	0	-1.0	Houston . . .	75	-7	0	-1.0
Tallahassee . . .	75	-6	.5	1.3	Lincoln . . .	75	0	0	-1.1	Lubbock . . .	78	-1	T	-.6
Tampa . . .	77	-5	9.3	+7.5	Norfolk . . .	72	-1	T	-1.1	Midland . . .	79	-3	T	-.4
W. Palm Beach . . .	81	0	2.1	+.2	N.Platte . . .	71	0	.1	-.7	San Angelo . . .	76	-7	0	-.4
GA. Atlanta . . .	69	-8	.2	-.8	Omaha . . .	71	-2	0	-1.1	San Antonio . . .	75	-9	0	-.6
Augusta . . .	71	-9	.5	-.5	Valentine . . .	75	+5	0	-.8	Victoria . . .	77	-6	0	-.7
Macon . . .	74	-7	0	-1.0	NEV. Ely . . .	69	+7	0	-.2	Waco . . .	80	-4	T	-.5
Savannah . . .	75	-5	1.4	-.2	Las Vegas . . .	95	+9	0	-.1	Wichita Falls . . .	76	-8	0	-.7
HAWAII. Hilo . . .	75	0	.8	-.8	Reno . . .	65	0	0	-.1	UTAH. Blanding . . .	78	+9	0	-.1
Honolulu . . .	79	-1	.1	0	Winnemucca . . .	72	+6	0	-.2	Salt Lake City . . .	78	+8	0	-.3
Kahului . . .	76	-2	0	-.1	N.H. Concord . . .	61	-7	.2	-.6	VT. Burlington . . .	64	-4	2.6	+1.8
Lihue . . .	78	0	.8	+.4	N.J. Atlantic City . . .	65	-8	.2	-.6	VA. Lynchburg . . .	65	-10	.8	0
IDAHO. Boise . . .	71	+2	0	-.2	Trenton . . .	64	-10	.5	-.4	Norfolk . . .	69	-8	.6	-.4
Lewiston . . .	72	+3	T	-.3	N.MEX. Albuquerque . . .	85	+8	T	-.3	Richmond . . .	67	-9	.3	-.7
Pocatello . . .	69	+3	0	-.2	Roswell . . .	80	+1	T	-.3	Roanoke . . .	65	-9	1.6	+.8
ILL. Cairo . . .	71	-9	T	-.9	N.Y. Albany . . .	64	-6	.8	+.1	WASH. Colville . . .	66	+2	T	-.3
Chicago . . .	66	-7	.5	-.5	Binghamton . . .	64	-3	1.5	+.7	Omak . . .	65	-2	T	-.2
Moline . . .	67	-6	T	-1.1	Buffalo . . .	63	-6	.8	+.2	Quillayute . . .	55	-2	.6	-.1
Peoria . . .	66	-8	0	-.9	New York . . .	65	-9	.3	-.4	Seattle-Tacoma . . .	63	+1	.2	-.1
Rockford . . .	67	-4	0	-1.1	Rochester . . .	63	-7	.5	-.1	Spokane . . .	66	+1	T	-.3
Springfield . . .	68	-7	T	-1.0	Syracuse . . .	63	-7	.7	0	Walla Walla . . .	71	0	T	-.1
IND. Evansville . . .	69	-8	0	-.8	N.C. Asheville . . .	64	-8	.9	-.1	Yakima . . .	67	0	T	-.1
Ft. Wayne . . .	66	-6	T	-.9	Charlotte . . .	69	-9	.8	-.2	W. Va. Beckley . . .	58	-11	1.4	+.4
Indianapolis . . .	68	-6	T	-.9	Greensboro . . .	68	-8	.8	-.2	Charleston . . .	64	-10	.7	-.2
South Bend . . .	66	-5	0	-.9	Hatteras . . .	72	-4	4.8	+3.6	Huntington . . .	65	-9	1.0	+.2
IOWA. Burlington . . .	68	-6	0	-1.1	Raleigh . . .	69	-7	.2	-.8	Parkersburg . . .	65	-9	.5	-.5
Des Moines . . .	71	-2	T	-1.0	Wilmington . . .	72	-7	5.3	+3.7	WIS. Green Bay . . .	64	-3	.6	-.2
Dubuque . . .	65	-5	T	-1.2	N.DAK. Bismarck . . .	70	+3	T	-.8	La Crosse . . .	68	-3	0	-1.0
Sioux City . . .	72	-1	0	-1.0	Fargo . . .	72	+4	T	-.8	Madison . . .	65	-3	T	-1.0
KANS. Concordia . . .	73	-2	T	-1.1	Williston . . .	72	+6	0	-.7	Milwaukee . . .	64	-4	T	-.9
Dodge City . . .	77	0	-1	-.7	OHIO. Akron-Canton . . .	65	-6	1.3	+.5	WYO. Casper . . .	72	+6	0	-.3
Goodland . . .	74	+1	T	-.7	Cincinnati . . .	64	-10	.4	-.5	Cheyenne . . .	71	+6	0	-.5
Topeka . . .	69	-7	T	-1.3	Cleveland . . .	66	-4	1.3	+.5	Lander . . .	73	+8	0	-.6
Wichita . . .	73	-6	T	-1.1	Columbus . . .	65	-8	1.1	+.1	Sheridan . . .	72	+7	0	-.3
KY. Lexington . . .	64	-11	1.3	+.2	Dayton . . .	64	-10	1.3	+.4	P.R. San Juan . . .	86	+5	.1	-1.2
Louisville . . .	66	-10	.2	-.7	Toledo . . .	64	-7	.1	-.7					

BASED ON 1941-70

CONDENSED STATE SUMMARIES

The Bulletin capsulizes nationally important weather and crop conditions. Every Monday SRS publishes more detailed data in State Weekly Weather and Crop Bulletins in cooperation with the National Weather Service, NOAA. Voluntary weather observers, crop reporters, and county extension agents contribute weekly observations for these reports.

ALABAMA: Sunny, remarkably cool and dry. Coolest early in week followed by gradual warming. Record lows many sections, some northern locations 10° below previous records. Lows 26th in 40's north-eastern valleys, 43° Valley Head. No rain entire week.

Prospects for crops remained satisfactory even though cool temperatures and shortage of moisture many localities prohibited maximum development. Cotton squaring, small bolls forming south and central fields. Control for insects where needed. Corn; 40% silking, 25% 1973. Soybean planting nearly complete. Rain needed to germinate recent planted seed. Prospects favorable for peanuts with 40% crop pegging. Wheat harvest 90% complete compared with 66% 1973. Much hay saved. Pastures giving adequate grazing, but need rain.

ALASKA: Temperatures averaged about normal to slightly above normal. Very light precipitation fell over most of the state during the week. However precipitation is 1.00 to 2.00 in. below average for the season.

Extremely dry conditions throughout railbelt. Haying and silage chopping were main farm activities. Vegetable greens, radishes and leaf lettuce also being harvested. Barley near Palmer was up to 36 inches high and headed. Hay 15% harvested in district 1, but more advanced in Mat Valley.

ARIZONA: Thundershowers daily central and eastern mountains and southeast quarter of state. Few stations received more than 0.25 in., most less than 0.10 in.. Lightning caused several forest fires. Heat wave continued. Temperatures 90's in mountains to near 115° in deserts most afternoons. Slight cooling with increasing humidity at weekend.

Cotton showing excellent progress as weather conditions favorable. Yuma ahead other areas, early bolls setting. Small grain harvest progressing rapidly, yields about average. Harvested fields Yuma prepared for next crop. Sorghum progress satisfactory, crop in various stages. Safflower harvest underway Yuma, yields satisfactory. Some fields Pinal almost ready to harvest. Sugarbeet harvest in progress central, Yuma, good yields. Third cutting alfalfa hay progressing normally. Movement of cantaloups from Yuma-Parker area declining fast. Melons continued to move in limited volume from Salt River Valley. Grape harvest active central, Cardinals and Thompson seedless. Deciduous fruit practically complete. Citrus fruit Yuma near completion. Little grapefruit remains on trees. Sizing of new crop fruit slowed by hot weather. Groves in generally good condition. Range conditions very poor. Livestock conditions poor to fair. Supplemental feeding required many areas. Water being hauled livestock in hotter, drier areas.

ARKANSAS: Abnormally cool and dry. Mean temperatures in the upper 60's and low 70's, 6 to 11° below normal. No precipitation during week.

Ideal conditions for herbicide application, cultivation and planting. Soil moisture short, especially surface moisture for seed germination. Weeds and grass in cotton under control. Cool temperatures slowed growth, drier weather big help.

Boll weevils beginning to emerge. Cotton condition fair to good. Rice growing very well, condition good to excellent. Mid-season application of nitrogen began. Soybeans late but growing well, planting 80% complete. Wheat and oats harvest virtually complete. Corn and sorghum growing well. Sorghum 85% planted. Hay harvest continued. Grass becoming dormant in dry areas. Pastures normal. Cattle making satisfactory gains. Peaches sizing well. Tomatoes had some leaf diseases. Few cantaloupe and watermelon moving to market.

CALIFORNIA: Temperatures south much above normal with highs over 100° Los Angeles Basin end of week and over 115° Arizona border. Temperatures along immediate north and central coasts near normal. Central valley highs near 100° end of week. Average ranged from slightly below normal northern California to 5° to 10° above normal over southern California.

Warmer temperatures hastened growth small grains, hay, other crops. Wheat, barley harvesting well along northern California, almost completed south. Cutting alfalfa active throughout. Sugarbeets developing well, harvesting continues southern California. Irrigation cotton fields continues. Cotton fields treated for insects. Rice fields developing normally with pesticide applications for weeds, shrimp, weevils. Safflower various stages growth, many fields in bloom. Grape developing well, vineyards sprayed, dusted for aphids, mites, leafhoppers, and mildew. Almond progressing well. Walnuts sizing well. Cherry harvest nearly complete. Thinning apples complete Watsonville. Hot weather damaged avocados. Valencia oranges, some fruit poor quality. Desert grapefruit harvest nearing completion. Lemon picking active. Broccoli, cauliflower lighter, central coast. Carrots seasonal normal. Cantaloupe decline desert, increase San Joaquin Valley. Celery increase, improved quality. Sweet corn increasing Brentwood, south coast. Lettuce light, some wilting Santa Maria. Dry onions steady. Potatoes continue Kern County, slight decline expected. Strawberries declining. Market tomatoes good volume San Joaquin Valley, increasing south coast. Canning tomatoes good progress. Watermelons declining desert. Livestock good condition. Supplemental feeding increasing. Some livestock being moved to mountain irrigated pastures. Sheep moved from central San Joaquin Valley to mountain pastures east of Valley. Water supplies adequate.

COLORADO: Precipitation was light with major amounts falling during the first half of week in conjunction with the weak front. Precipitation fell mainly near the foothills and in the eastern plains. The largest reported amount was at Byers, Colorado with the weekly total of 1.52 inches. Mean temperatures averaged 3 to 6° above normal with one exception of 15° at Craig, Colorado. Temperatures continued hot through week with some cooling over the east portion on the 30th. The greatest departure from normal was generally over the eastern plains with maximums frequently in the 90's with a few low 100's and minimums in the 50's.

Winter wheat 13% harvested compared 5%--5-year average, 38% ripe. Harvest active. Winter barley 13% harvested, 36% ripe. First cutting alfalfa 70%

completed, 2% second cutting. Oats and spring barley good condition. Corn 64% cultivated, good to excellent condition. Potatoes good to excellent condition. Sugarbeets excellent condition. Range and pasture condition declined, southern and southwestern areas in poor condition. Livestock in good flesh.

FLORIDA: Mild days and cool nights with temperatures averaging below normal. Rainfall totals ranged from light over the panhandle to moderate or very heavy over most of the peninsula. Many areas central Florida got excessive rain during the week. Flood conditions prevailed some counties.

Rains beneficial most areas. Field corn, peanuts making good progress. Soybean planting nearing completion. Tobacco harvest active. Sugarcane growing well. Pastures fair to good condition throughout the state. Cattle fair to good condition. Watermelon and sweet corn harvest hampered by heavy rains. Okra available. Land preparation for fall delayed. Citrus tree and new crop condition excellent--long, hard thundershowers all week--some areas 15 and more inches rain. New crop size progressing well.

GEORGIA: Unseasonably strong cold front moved through 23rd and 24th. Coolest 26th with record lows north. Lowest 44° Blairsville. Extra-tropical low produced heavy rains in extreme southeast. Greatest 4.13 in. at Alma. Weekend fair with warming trend. Highest 95° Brunswick 1st.

Soil moisture mostly short to adequate. Crop conditions good. Farm activity heavy; cultivation, haying, insect controls, tobacco harvest, and late plantings. Cotton mostly good with 80% squaring and 34% setting bolls, insect controls increasing. Corn mostly good, some moisture problems. Peanuts blooming, land plastering very active. Tobacco good to excellent, highest rating since 1956, 22% gathered, harvest near peak. Soybeans 95% planted, some insect problems. Sorghum 87% planted. Both wheat and oats 98% combined. Short peach crop harvest continues. Pastures and cattle good condition. Vegetables mostly good, marketings good. Watermelons moving in good volume.

HAWAII: Weather warm with variable rainfall. Spraying continued to minimize insect infestation. Supplies of vegetables adequate. Papaya production declining. Banana production steady. Rainfall added needed moisture in leeward pastures. Sugar and pineapple operations active.

IDAHO: Mostly fair, warm and dry weather for period. Temperatures remained above normal, averages in mid 60's to low 70's were 5 to 10° cooler than previous week. Maxima ranged from mid 90's to 100° and minima 40's to 50's. Light to moderate precipitation in north with none reported elsewhere. Flooding rivers receded.

Continued hot and dry weather causing stress on dryland grains and lower elevation ranges south. North moisture supplies adequate. First cutting hay almost complete southwest and south-central. Northern hay crop good and 45% harvested. Potato fields emerged and making good progress. Sugarbeets completely blocked and thinned. South-west cherry harvest active. Livestock condition generally good. Winter wheat all headed, 20% turned. Hot weather speeding maturity. Spring wheat 40% headed and spring barley 50% headed.

ILLINOIS: Temperatures 5 to 9° below normal, highs mostly in 70's. Precipitation light to

moderate, heaviest rainfall Saturday over central portion.

Average height corn 20 in.; 23 in., 1973, 3-year (1971-73) average 33 in. Most advanced 35 in., 40 in., 1973, average 49 in. Corn fair to good condition 86%. Soybean planting about 85% complete, 88% 1973, average 96%. Fifteen percent acreage replanted, 75% full stand. Winter wheat virtually all ripe, 50% combined, 36% 1973, average 50%; oats, 20% turned yellow; average 43%, fair to good condition 84%. Alfalfa hay about 85% complete same as 1973, average 93%. Red clover hay 75% complete, 73% 1973; average 80%. Grain sorghum 60% complete. Pastures good to excellent throughout. Soil moisture 41% adequate, 59% surplus. Fieldwork: 4 days suitable.

INDIANA: Driest week of season. Sunny, but temperatures below normal. Few scattered thundershowers. Drying rates near normal. Fieldwork averaged 4 days. Topsoil and subsoil moisture mostly adequate to surplus. Soils most workable since late April. Corn planting done. Corn 10% replanted. Soybeans 5% replanted or to be replanted. Soybeans 85% planted, 90% in 1973, two weeks behind average. Soybeans 4 in. high; 6 in. 1973. Wheat 45% ripe. Wheat 10% combined, 5% 1973, 15% average. Alfalfa hay 80% cut first time. Pastures good.

IOWA: Clear and dry week with temperatures averaging near normal Northwest to 6° below normal Southeast. Precipitation averaged only a trace in all districts.

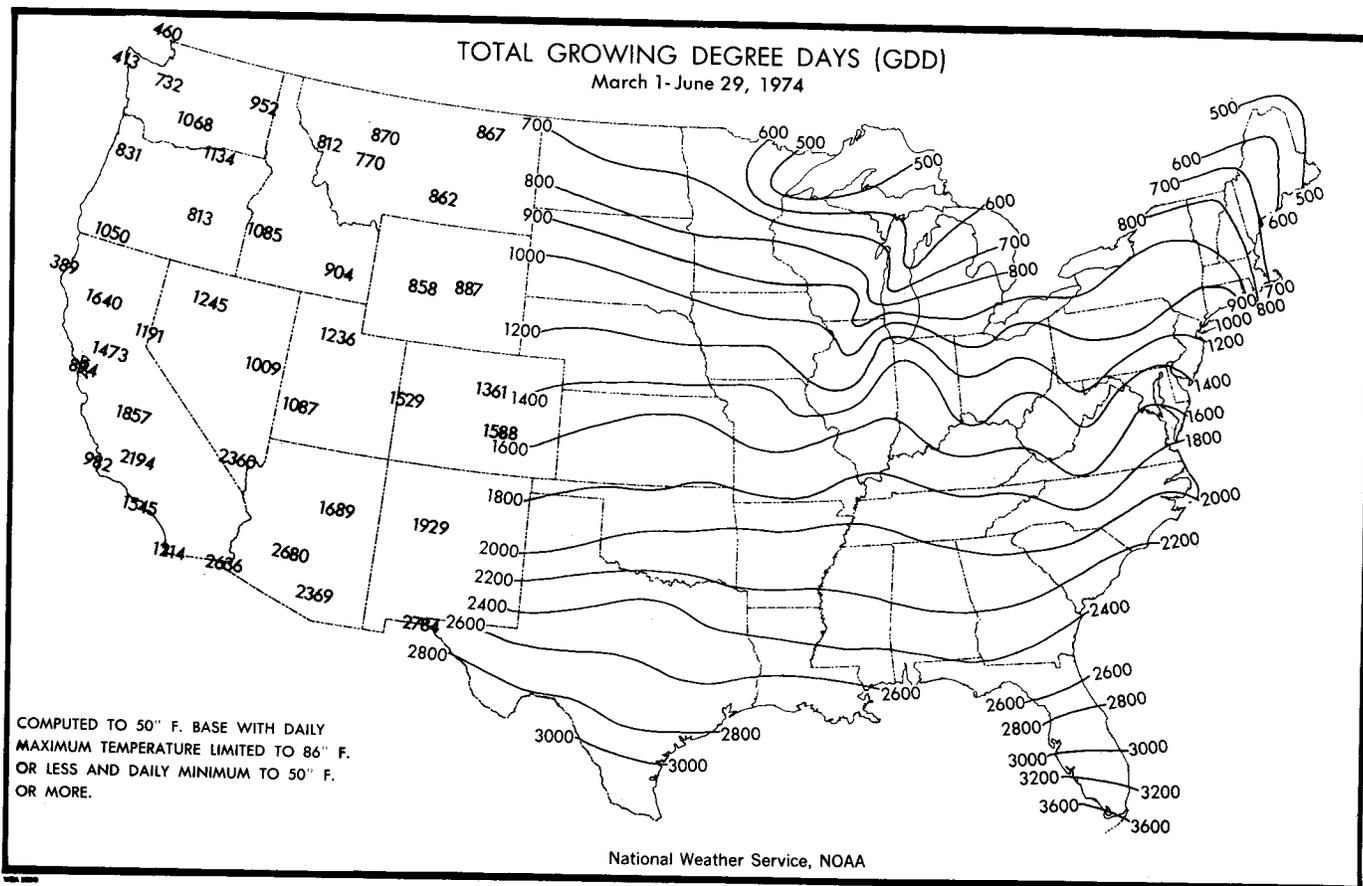
Warm dry week aids crops. Fieldwork 5.9 days suitable. Corn condition fair to excellent. Outlook improved but still not good in Central, East Central, and Southeast. Weed control good except in fields where no Herbicide applied. Soybean planting virtually complete, most emerged. Some replanting done due to hail. Weed control good. First crop Alfalfa 89% harvested, yields good to excellent. First crop Red Clover 60% harvested. Oats headed 86%, condition mostly good. Topsoil moisture 20% short, 68% adequate, 12% surplus. Many areas in need of rain.

KANSAS: Week marked by widely contrasting temperatures, sparse precipitation. Well below normal temperatures with record or near record lows east Kansas through Friday. Record highs Southwest 28th and 29th with highest 110° at Kinsley.

Wheat 85% harvested, 1973, 35%, average 50%. Current harvest most complete by June 29 since 1956. Acreage remaining, Northeast 30%, North Central 25%, Northwest 65%. Topsoil moisture short most areas. Sorghum planting 90% complete, equal to last year and average. Corn acreage 70% laid by, both last year and average 55%. Soybeans 90% seeded, both last year and average 85%. No major insect outbreaks. Oats harvest underway. Second cutting of Alfalfa 45% harvested, both last year and average 35%. Apple crop good south-central Kansas. Pasture and range feed condition declined slightly.

KENTUCKY: Very cool during the week, then a warming trend on temperatures averaged about 10° below normal. Rainfall was spotty and mostly light, but some heavy amounts recorded Friday. Precipitation totals ranged from none West to around 0.25 in. Central and 0.75 in. East.

Fieldwork; 4 days favorable. Soil moisture becoming short South, excessive many Eastern



Counties, generally adequate elsewhere. Soybeans still being seeded, mostly following small grains. Earliest beans now 12 to 14 in. high, average growth 6 in. Corn growing well, early corn tasseling. Tobacco advancing rapidly, 6 to 12 in. tall. Wheat harvest making good progress, harvest 75% complete, slowed by rains North and East. Second cutting Alfalfa about 30% finished, other mixed grass and Clover Hay harvest progressing well

LOUISIANA: Temperatures averaged 5° to 11° below normal. Many new record lows set. Extremes: 95°, Dequincy; 50°, degrees Winnfield. No precipitation reported entire period.

Soil moisture short to adequate. Fieldwork possible 5.6 days. Cultivation, hay baling, insect control, Herbicide application main activities. Soybean planting virtually complete and in good condition.

Cotton cultivation and Herbicide use underway. Corn good condition. Sorghum good, planting almost complete. Rice heading Southwest, Herbicide and Insecticide application continue. Sugarcane good growth. Fallow plowing continued. Sweetpotatoes good growth. Commerical Tomato harvest active. Pastures normal. Livestock good.

MARYLAND AND DELAWARE: Temperatures 6° to 9° below normal. Highs low 80's to 90's. Lows in 50's except cooler parts of Garrett County. Precipitation general 0.75 to 4.00 in. Light hail Westminster area 26th, no damage. Weekend started rainy then cleared.

Fieldwork limited. Topsoil moisture adequate

to surplus, subsoils still dry Southern Shore. Corn needs sunshine, early field tasseling. Small grain harvest near standstill. Soybean seeding 89%, progress slow awaiting grain harvest. Hay harvest delayed, some damaged. Tobacco transplanting about done. Disease and insects causing concern. Vegetable harvest includes Peas, Snap Beans and Cucumbers. Early Apples and Peaches being picked.

MICHIGAN: Temperatures near normal upper to around 5° below normal Southern lower Peninsula. Coolest first of week with low 30's and frost some upper Peninsula areas. Warmest end of week with highs in 80's. Precipitation totaled 0.50 to 1.00 in. Upper and Northern lower and 0 to 0.50 in. Southern lower Peninsula.

Good week for crop growth and fieldwork. Fieldwork 5.1 days worked. Soil moisture adequate, Corn planting finished. Corn height 10 in., 15 in. 1973. Soybeans 97% planted. Dry beans about 90% planted, 1973 83%. Wheat 27% turning yellow, 1973, 50%. Oats 26% headed, last year 32%. First cutting 52% made. Pasture feed supplies above average. Sweet cherry harvest started Southwest, Tart cherries coloring. Strawberry harvest tapering off Southwest, active Alpena and Manistee areas. Vegetable development behind 1973.

MINNESOTA: Warm; dry and windy with temperatures ranging 4° above North to 2° below normal South. No precipitation for most areas except Northeast.

Favorable dry sunny week for Haymaking, development of small grains and for growth of Corn and soybeans. First cutting Alfalfa 83% completed, average progress 84%. Hay yields and quality good. Heading of small grains well advanced

Southwest, no heading of late plantings in important Northwest. Oats 39% headed, average 55%. Spring wheat, 24% headed, average 47%. Barley 23% headed, average 49%. Flaxseed 33% budded, average 21%. Corn height 18 in., 1973 24 in., average 21 in. Soybean height 7 in., 1973 9 in., average 8 in.

MISSISSIPPI: Record low temperatures at many points 25th through 30th. Extremes ranged from 95° at Belzoni and Charleston on 22nd to 48° at University on 25th and 26th. Temperatures generally 8 to 10° below normals. Rainfall was fairly general on 23rd and 24th. Greatest amounts 2.06 in. at Louisville and 2.00 in. at Calhoun City on 23rd. No rainfall of consequence since.

Field activities regained momentum during week. Fieldwork average 4.8 days suitable. Soil moisture adequate to surplus over Northern two-thirds, short to adequate elsewhere. Soybeans 63% planted, 86% last year, normal 93%. Corn planting 98%, normal 99% Sorghum planting 71%, normal 84%. Sweetpotatoes 79% planted. Cotton acreage 61% squaring, 6% Setting Bolls, normal 55% squaring and 17% setting bolls. Harvest of wheat 93%, Oats 96%, Hay 28%, Peaches 65%, and Irish Potatoes 85% completed. Condition; pastures good, rice fair to good, soybeans and corn fair.

MISSOURI: Dry, very cool, no precipitation except a few light local showers near Missouri/Illinois border. Week's temperatures averaged from 5° to as much as 13° below normal. Lowest was 42° on 25th at Cole Camp in West Central Missouri.

Fieldwork averaged 6.0 days. Soybeans 85% planted, 86% 1973, 76% average. Grain sorghum 87% planted, 88% 1973. Wheat 87% ripe, 77% 1973. Wheat harvesting 59% completed, 46% 1973, 41% average. Second cutting alfalfa 30% finished. Clover and timothy 52% harvested. Cotton crop fair to good, 5% cotton squaring. Corn also fair to good. Soil moisture short to adequate. Some areas need rain for late planted crops and packed soil.

MONTANA: Generally dry with above normal temperatures. Highest 90°, cooler midweek in all but South Central and East. Isolated areas of damaging hail North Central.

Hot winds and dry weather further stressing crops. Topsoil short to adequate. Winter wheat condition mostly to excellent. Winter wheat 5% not yet in boot, 20% in boot, 75% headed, some turning. Spring wheat condition fair to mostly good, 15% headed, 45% in boot, 40% not yet in boot. Sugarbeets 85% thinned in good condition. Alfalfa hay first cutting 35% harvested. Range feed supply short to adequate Western third and North Central, mostly adequate elsewhere.

NEBRASKA: Precipitation extremely light. Record daytime highs, but average near normal.

Fieldwork 7 days suitable. Topsoil moisture 90% short, 10% adequate. Subsoil moisture 22% short, 78% adequate. Winter wheat condition good to excellent East good to fair, West 95% turned. Panhandle wheat 20-40% ripe; extreme South 100%; other areas 0 to 50%. Harvesting began June 22, now 15% complete, ahead of normal. Harvest Kansas-Nebraska border 50% complete. Corn condition good. Growth advancing rapidly in early planted corn, late plantings showing signs of heat stress, lack of surface moisture. Sorghum and soybean condition good to excellent. Oats, small grains turning. Sugarbeet thinning completed second hoeing 50%

complete, some 80% stands. Alfalfa and wild hay condition declining. Pasture and range supplies 22% counties short, 78% adequate. Livestock good condition.

NEVADA: Continued hot, dry weather. Temperatures above normal, near record, except West where nighttime temperatures dropped sharply. Temperatures ranged 111° Las Vegas to low 29° Reno. No precipitation.

Third cutting Alfalfa completed Southern Valleys, first cutting underway Northeast. Earliest potatoes in blossom. Extreme fire danger entire state. Grasslands dry. Livestock holding up well.

NEW ENGLAND: Cool weather much of week especially Coastal areas subject to sea wind. Minimum was at Boston 26th, 53°, 1° above record low. Maximum that day was 56°. Weekend saw Portland, Maine 81° and Boston 85°. Wet weather many areas first of week. Generally fair later with return of rain or drizzle by 29th.

Wet, cool, cloudy weather nearly stopped haying, some haylage made. Corn made little growth, many corn fields weedy and some damaged by cutworms and birds. Cabbage, lettuce, potatoes made good growth. Little growth in tomatoes, sweet corn, and peppers. Apple prospects remain good, peaches fair. Pasture growth good.

NEW JERSEY: Cool week, 9° below normal. Temperatures averaged 63° North, 65° South and Central. Extremes were 87° at Pemberton 30th, 50° at several locations 28th. Rainfall averaged 1.24 in. North 0.82 in. Central and 0.56 in. South. Highest daily total 0.76 in. at Belvidere on 1st.

Soil moisture expressed in percent of field capacity as of July 1, 1974 averaged 93% North, 81% Central and 66% Southern.

Wet weather benefit to vegetable crops, but is encouraging insects and plant disease. Too wet to make hay. Spraying active. Blueberry harvest continuing. Early peach harvest starting. Harvest of early sweet corn gaining. Snap bean harvest started. Soy bean planting finishing up. Wheat harvest delayed. Crop growth behind normal due to low temperatures.

NEW MEXICO: Rainfall still very sparse, spotty, and relatively light; none Northwest Plateau. Temperatures near normal Eastern Plains, 4 to 8° hotter than normal Central and West. Albuquerque had record high 105° 28th, successive days with 100° or more elsewhere. Highest 108°, Rodeo.

Moisture very short. Cotton, few early blooms, stands very good. Alfalfa good; second cut, 80% South, starting North. Irrigation heavy on higher yield hay fields, light on lower yield fields. Irrigated grain sorghum good. Remaining irrigated wheat, barley, oats, fair to good. Dryland poor, harvest nearing end. Irrigated corn stands good to excellent. Early variety onion harvest complete, later variety harvest continues Mesilla Valley. Northern lettuce good, apples fair. No broomcorn planted to date. Ranges continue poor, livestock holding fair.

NEW YORK: Temperatures below normal all stations; New York City down 10°, other cities averaged 4 to 5° below normal. Moist, unstable air brought showers and thunderstorms with several stations Eastern New

York over 1.50 in. Buffalo and Syracuse reported 2.07 and 1.65 in. Maximum temperatures near 70°.

Cool, wet weather delayed fieldwork. Corn and dry bean planting nearly complete, growth retarded by cool weather. First cutting alfalfa 60% complete - clover 45%. Poor drying slowed harvest. Grass silage over 70% complete. Oats beginning to head. Iceberg lettuce harvest continues Orange County, Oswego beginning. Onions and celery good condition. Cauliflower harvest starting Eden Valley. Snap bean and transplant cabbage planting delayed. Beet prospects good. Cool weather and hail damage holding back tomatoes. Long Island harvesting early cabbage. Tart cherries beginning to turn. Some early variety sweet cherries near harvest Western New York, bird damage widespread. Peach prospects variable. Grapes in good condition and growing well.

NORTH CAROLINA: Weather unsettled with severe and hefty thunderstorms combined with below normal temperatures. Precipitation varied from near 7.00 in. Southeast to only traces other areas.

Crops fair to good condition. Soybeans nearly 90% planted, same as 1973. Small grain harvest one week ahead of 1973. Wheat 77% combined, oats 83%, barley 84%, rye 81%. Flue-cured tobacco harvest under way. Irish potato harvest 60% complete. Fieldwork averaged 3.4 days favorable.

NORTH DAKOTA: Temperatures above normal. Hottest in North 5 to 6° above normal. Coolest in South Central and Southeast 2° above normal. Highs from 103° at Pretty Rock to 68°, also at Pretty Rock. Lows 43° at Breten to 69° at Pembina. Precipitation 0.66 to 0.93 in. below normal all areas except Southwest, 0.28 in. below normal. Greatest weekly and 24-hour precipitation 0.99 in. at Rugby. Weekend warm and dry.

Late planted crops suffering from lack of moisture many areas. Some seeded after June 15 lack moisture to germinate. Crusted soil hindering germination some sections. Haying well along with good yields and quality. Haying weather excellent. Livestock doing well on good pasture.

OHIO: Temperatures continued cool, averaging 15° below normal. Rainfall across state. Precipitation 0.12 in. Northwest to 2.21 in., Northeast.

Winter wheat 25% ripe, 10% in 1973, and 20% normal. Harvest started in Southern Counties. Oats 90% headed. Average height; corn, over 20 in., soybeans, less than 10 in., both slightly behind normal. Hay harvest slowed by rain, continues ahead of normal. Fieldwork 3 days favorable. Soil moisture 49% surplus, 42% adequate, and 9% short. Southern and Eastern Counties very wet and having weed problems. Several reports of root rot in wheat.

OKLAHOMA: Temperatures 5 to 11° below normal. Precipitation light, ranging from none Southeast to 0.18 in. panhandle. Weekend hot with few showers in panhandle.

Wheat harvest 99% complete, 2 weeks ahead 1973. Planting row crops complete, 1 to 2 weeks ahead year ago. Corn 99% up to stand, 30% tasseling. Cotton 97% up to stand, 9% squaring. Sorghums 72%, soybeans 76% up to stand. Peanuts 95% up to stand, 8% flowering. Alfalfa cutting in full swing, 75% second crop baled. Pastures good, heat and wind drying top soils. Most areas need moisture. Heavy infestation grasshoppers many areas. Cattle in good flesh.

OREGON: Temperatures averaged 0 to 3° below normal west; east averaged 0 to 5° above normal. Maximums upper 80's most of State. Coastal high

readings remained near 70°. Minimums dropped to 30's during midweek. Eastern basins reported scattered frost. Rain end of period along coast, northern interior valleys. Amounts to 0.70 in. north coast, 0.10 to 0.40 in. in Willamette Valley.

Grain harvest approaching. Limited barley harvest started Sherman County. Swathing grass seed crops started. First cutting hay continuing in later areas and 2nd cutting starting in early areas. Cherry harvest continues at the Dalles, finished at Milton-Freewater. Starting on strawberry harvest in Willamette Valley peaked, near completion early areas. Raspberries, gooseberries starting. Filberts sizing. Pear, apple thinning continues. Second cover spray being applied. Green pea harvest continues, excellent quality, average yields. Early green beans setting, plants small. Potatoes closing rows, onions starting to bulb, Ontario. Lower ranges dry, need rain. Ranches holding feeders and yearlings.

PENNSYLVANIA: Cloudy, cool, wet. Frequent periods of rain with weekly totals 0.50 in. southeast to 3.00 to 4.00 in. parts of southeast and northwest Sunny and warmer June 30. Some locally severe storms late June 30 and early July 1 with hail and high winds. Temperatures 6-9° below normal, extremes 84° and 40°.

Frequent rains temporarily halted most field work and improved soil moisture. Soil moisture surplus, 50%, adequate 50%. Hay and pasture are growing fast, but many fields of hay are becoming over-mature because drying conditions have been poor. Corn height averages 14 in. Growth retarded by cool weather. Barley harvest under way, yields appear good. Wheat harvest will begin next week in south. Oats are beginning to ripen in south. Sweet cherry harvest is underway in south-central and tart cherry harvest will begin in a week.

PUERTO RICO: Average rainfall 0.15 in. or 1.06 in. below normal. Highest weekly total 1.07 in. Arecibo. Temperatures averaged 81-83° coasts, 76-77° interior. Extremes: 95° Arecibo and San Sebastian, 50° Arecibo.

Drought intensifying islandwide. Water rationed many localities including San Juan metropolitan area as water storage levels very low. Crop report from Commonwealth Dept. of Agriculture not available.

SOUTH CAROLINA: Temperatures averaged 9° below normal mountains, northwest, north-central; 8° below west-central; 4 to 5° below normal central, northeast, southern sections. All sections received rainfall, heaviest along coast.

Scattered showers improved growing conditions. Moisture still short many areas. Tobacco harvest increasing, 22% harvested, 7% 1973. Cotton condition remains good, blooming freely. Corn fair to good, rain too late for some fields. Soybeans 93% planted, 77% 1973. Plant condition stands good. Sorghum 84% planted, 76% 1973. Sweet potato transplanting nearing completion, 89% 1973. Peach harvest gaining momentum, 32% complete, 23% 1973. Fruit quality good, smaller than usual. Small grain harvest virtually complete. Wheat 97%, 63% 1973; oats 98%, 75% 1973; barley 98%, 76% 1973. Vegetable harvest nearing completion coastal counties. Watermelon condition fair to good, harvest increasing. Hay crops and pastures fair to good. Pinkeye and face flies causing problems in cattle.

SOUTH DAKOTA: Hot and dry. Temperatures, west and central above 100°, east 80's and 90's. Extreme: 107° at Edgemont, Philip and Oelrichs.

Average 4 to 10° above normal west and central; near normal east. Mobridge only location reporting measurable precipitation. Drought continues west with moisture as much as 6.00 in. below normal since first of year, and 5.00 in. subnormal for growing season. East as much as 5.50 in. deficient for year and 4.00 in. for growing season.

Deteriorating moisture supplies affecting crop conditions, many small grains burning. Pastures short and dry. Rain needed badly for all crops. Winter wheat and rye beginning to ripen. Over 80% of spring small grains are headed. Second cutting of alfalfa hay below normal due to dry, hot conditions reduced regrowth after first cutting.

TENNESSEE: Rain mid and eastern sections midweek; no rain west Tennessee. Temperatures 9 to 13° below normal with average lows mostly in the 50's and highs in the 70's except in the lower 80's west.

Cool, dry weather slowed growth and development of corn, cotton, soybeans and tobacco. Cultivation of row crops active. Cotton plants small, 20% acreage squared, 30% 1973, average 45%. Corn 10% silked, average 20%, 5%, 1973. Soybeans 70% planted, 35% emerged, 1973, 80% planted, average 90%. Nearly all small grain acreage ripe, harvesting progressed rapidly. Wheat 80%, oats 66%, and 85% barley harvested. Tobacco growth slow and many plants leafing out too low. Snap bean harvest under way.

TEXAS: Cool, dry weather. Record lows numerous locations central, eastern Texas midweek. Warming end of week with afternoon highs reaching 100° northern high plains and southwest. Average daily temperatures were in 70's across state with readings 4 to 6° below normal. Little rainfall. Amounts less than 0.25 in. in high plains while El Paso was leader in weekly rainfall with 0.36 in.

Wheat harvest nearing completion. Few fields remain to harvest high plains. Planting cotton, sorghum, peanuts, soybeans nearing completion. Short moisture conditions delaying completion planting most localities. Sorghum harvest underway from coastal bend to lower Rio Grande Valley. Early fields rice harvested along upper Gulf Coast. Major crops percent harvested: Wheat 95, 1973 91; oats 100, 1973 91; barley 100, 1973 90. Major crops percent planted: Cotton 94, 1973 100; sorghum 94, 1973 99; peanuts 80, 1973 88; soybeans 91, 1973 92. High Plains: Light onion and potato harvest is underway. Trans-Pecos: Pecos cantaloupe crop continues to size well. Knox-Haskell: Potato digging virtually complete. North: Tomatoes, peppers, squash and cucumbers being harvested. East: Tomato and pepper harvest active. Light watermelon picking has begun. Central: Tomato harvest about complete. Watermelons and cantaloupes being harvested. San Antonio: Cantaloupe harvest in full swing. Onion harvest almost complete. Some late cabbage still being harvested. Laredo: late cantaloupes being harvested. Lower Rio Grande Valley: Final stages of cantaloupe and honeydew harvesting are in progress. Peach harvest active most areas. Insects continue to damage pecan crop. Citrus insect control and irrigation are principal grove activities. Range and Livestock: Livestock continue good condition, grazing deteriorating most areas. Some ranchers western areas feeding to maintain livestock condition. Hay baling active, restricted wire twine supplies. Prospects third, fourth cuttings decreased; hot, dry weather. Confirmed cases screwworms continue south.

UTAH: Another dry week with no reported precipitation. Average temperatures ranged from 3 to 22°

above normal. Accumulated precipitation for crop year, beginning April 1 is much below normal most sections.

Soil moisture in nonirrigated crop and range-lands currently considered very short. Excellent haying weather prevailed with hot, dry days. Nearly 90% first crop hay harvested. Winter wheat starting to ripen. Sweet cherry picking completed in Washington County, started in Weber, Davis, and Utah Counties. Quality and size good. Green pea harvest about 80% completed. Prospects for other vegetable crops good. Range feed on ranges now in use rated short. Ranchers in southern Utah hauling water to cattle.

VIRGINIA: Showers and thunderstorms except fine, dry weather 30th. Temperatures averaging 6° below normal, Extremes: 94° and 40°.

Fieldwork; 2.8 days suitable. Topsoil moisture, 48% surplus, 40% adequate, and 12% short. All crops in very good condition. Corn 20% silked in south-east, other areas 0 to 5%. Barley harvest 79% complete, oats 69%, wheat 50%. Soybeans are being double cropped at rate of 42%, compared to 30% 1973. Peanuts in good condition plant growth normal. Below normal temperatures causing premature blooming in flue-cured tobacco. All types of tobacco are in good condition. Rain stopped eastern shore potato digging, should improve size. Snap beans, cucumbers harvested, tomatoes, sweet corn, close to ready. Cabbage harvested and planted Carroll County. Early peaches and apples harvested. Livestock and pastures in good condition.

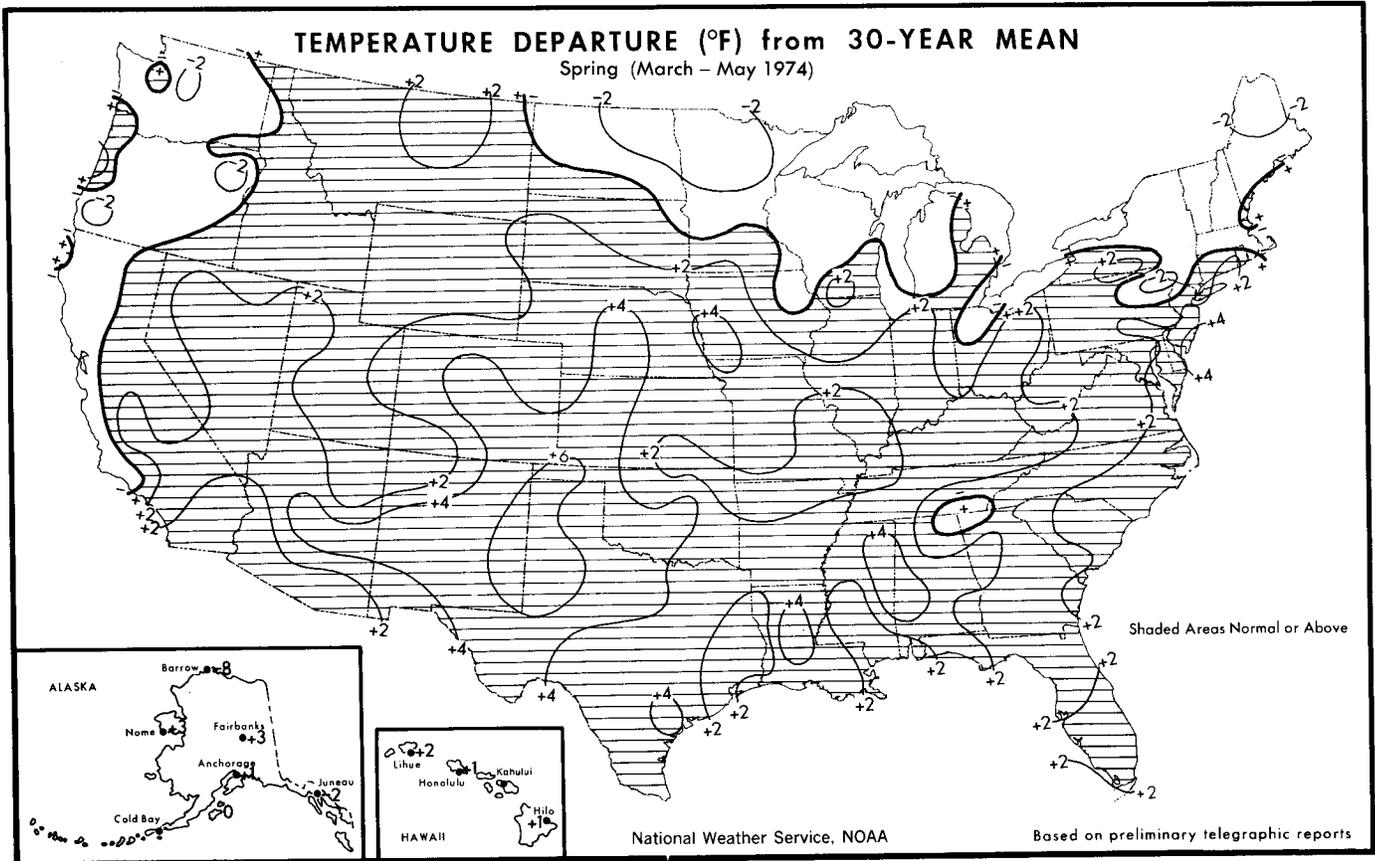
WASHINGTON: West: Cooler, highs 60's, 70's; lows in 40's. Some precipitation. Crops generally in good condition. Strawberry harvest continued, raspberry harvest expected soon, blackberries in bloom. Blueberry loss to mummyberry disease, severe. Insect spraying in pea fields. Corn growth good. Cauliflower planting finished, other vegetable harvest continues. Flower bulb harvest started. Haying continues with good yields. Pasture generally adequate. East: Average temperatures near normal. Few scattered showers. Cherry picking continued with good quality. Hand thinning of apples. Pears sizing well, some pear psylla infestations reported. Asparagus, green pea harvest nearly complete in Yakima Valley. Other green pea and cabbage harvest continues. Cultivation of vegetable crops, fertilizing, ditching of sweet corn active. Irrigating some wheat for last time. Dryland wheat problems include cheatgrass, heat stress, and lack of sufficient fertilizer. Bluegrass turning rapidly. First cutting alfalfa hay virtually complete, second cutting beginning. Range condition excellent.

WEST VIRGINIA: Temperatures averaged much below normal; 30° at Lewisburg 25th. Rainfall on Sunday, showers and thunderstorms scattered remainder of the week.

Soil moisture adequate to surplus. Fieldwork: 2.2 days favorable. Major activities hay harvest, gardening and maintenance and repair work. Hay harvest hampered by rain and wet soils, 50% first cutting completed. Small grains mostly in good condition. Barley 25% ripe, and wheat 50% turning yellow. Corn and hay need warm weather and sunshine. Pastures and potatoes good.

WISCONSIN: Temperatures averaged below normal first of week; sunny, dry all week. Only rain in showers and scattered thunderstorms on 29th and early 30th. Rainfall less than 1.00 in. in

(continued on p. 14)



SPRING WEATHER
(March through May, 1974)

HIGHLIGHTS: While most areas east of the Mississippi experienced normal or above normal precipitation, southern Florida and the Desert Southwest were very dry: Arizona, New Mexico, Utah, Colorado, Nevada, and southern California all received less than 50% of expected precipitation.

Temperatures averaged above normal over the entire Country except for New England, the upper Great Lakes region, northern Minnesota and North Dakota, Washington, Oregon and the California Coast. Parts of Texas and New Mexico averaged over 6° above normal.

PRECIPITATION: Precipitation was highly variable throughout the spring months, but averaged near or above normal for the period in all areas except for the Florida peninsula and a 6-State area in the Southwest.

During March, the largest area of above normal rainfall occurred in the Northwest, where rainfall amounts averaged at least twice the norm. As much as 21.00 in. fell along the Washington Coast. Other areas with much above normal rainfall included southern Texas, southern Lower Michigan and New England.

April continued wet in the Northwest, and turned wetter across much of the Nation's midsection. Parts of North Dakota, Minnesota, South Dakota and Nebraska all received at least twice the normal rainfall for April. Portions of New England and the Deep South also received well above normal rainfall. The Southwest continued very dry and the Florida Peninsula received virtually no significant moisture.

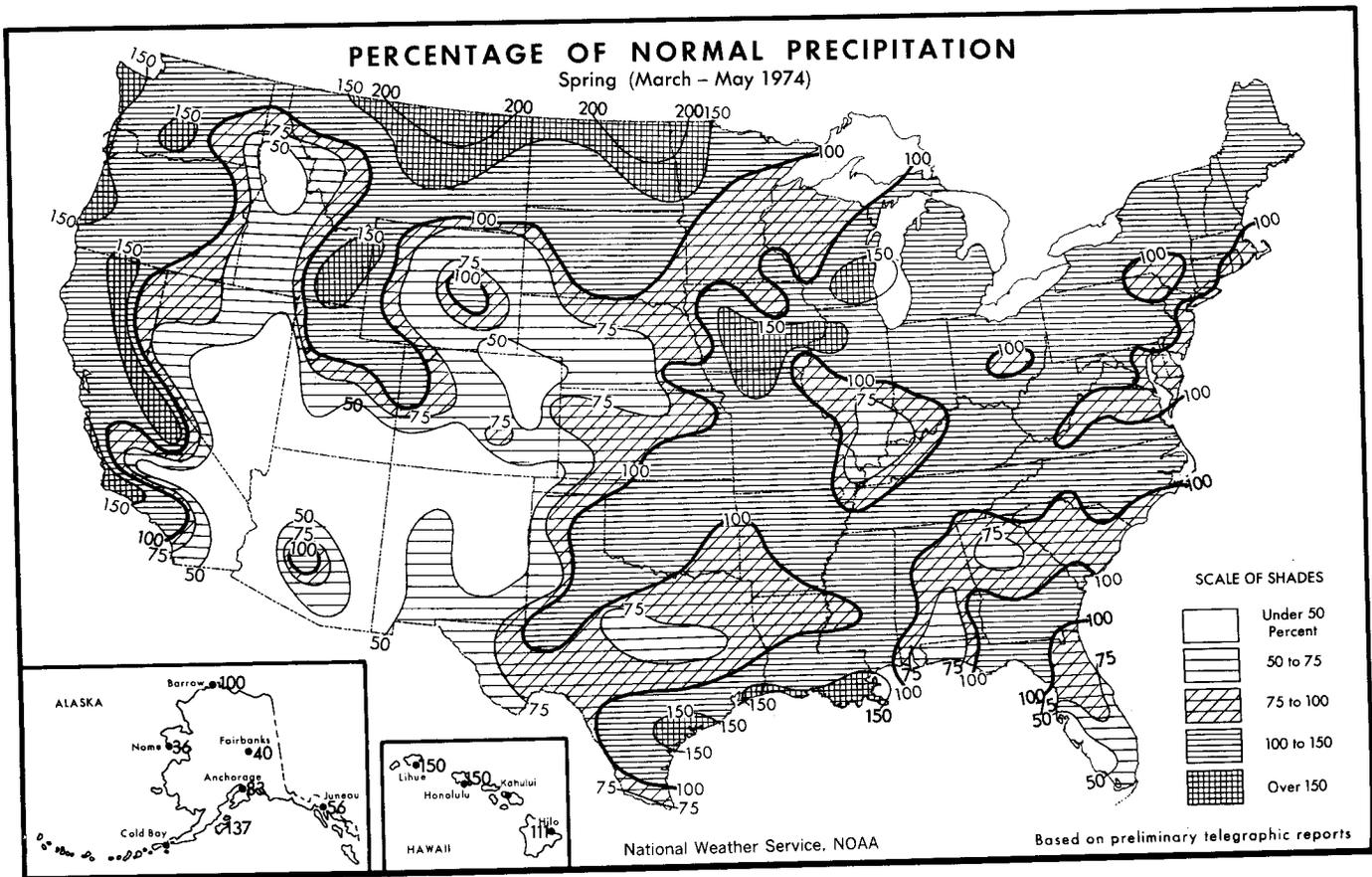
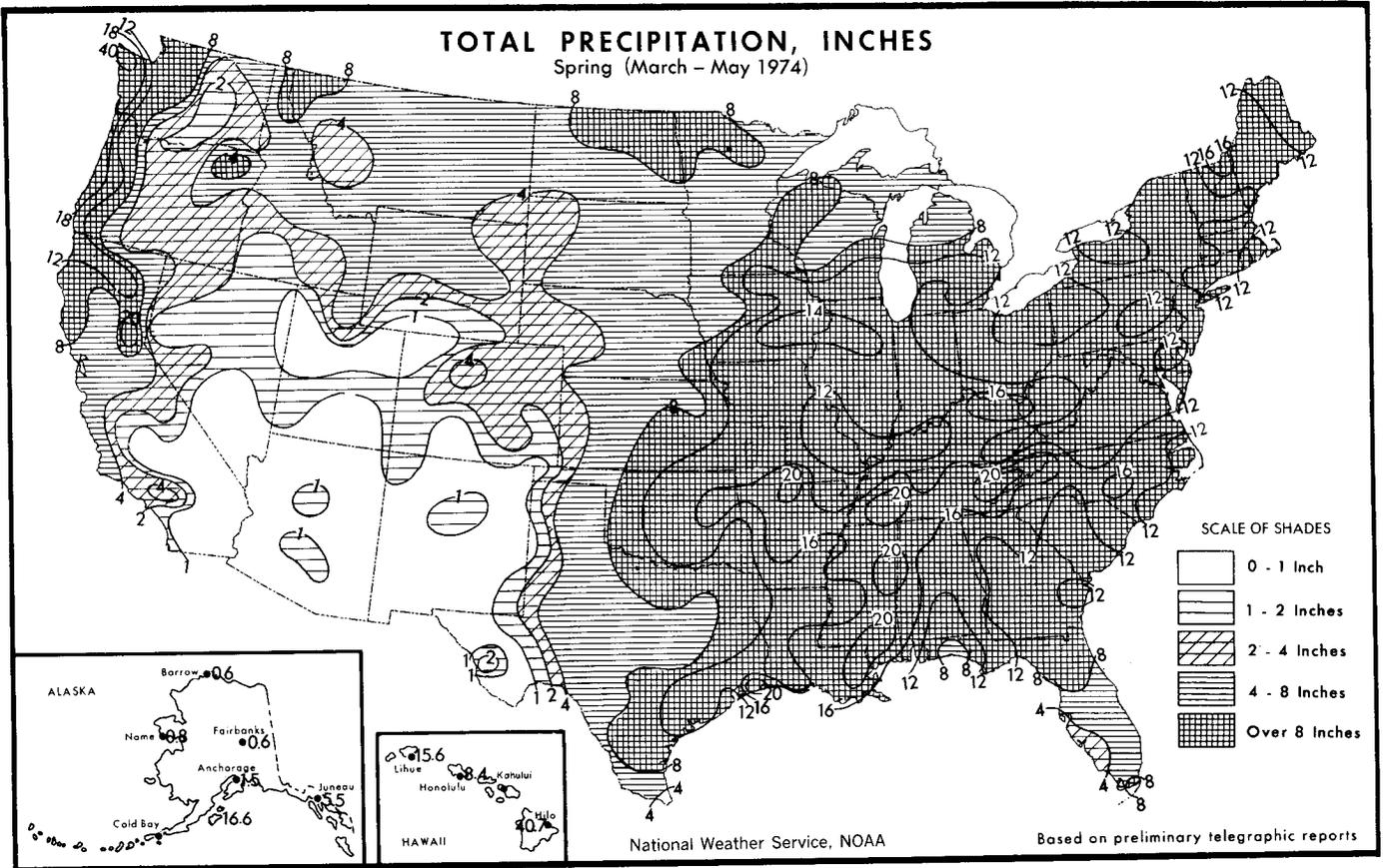
Except across northern Montana and Washington,

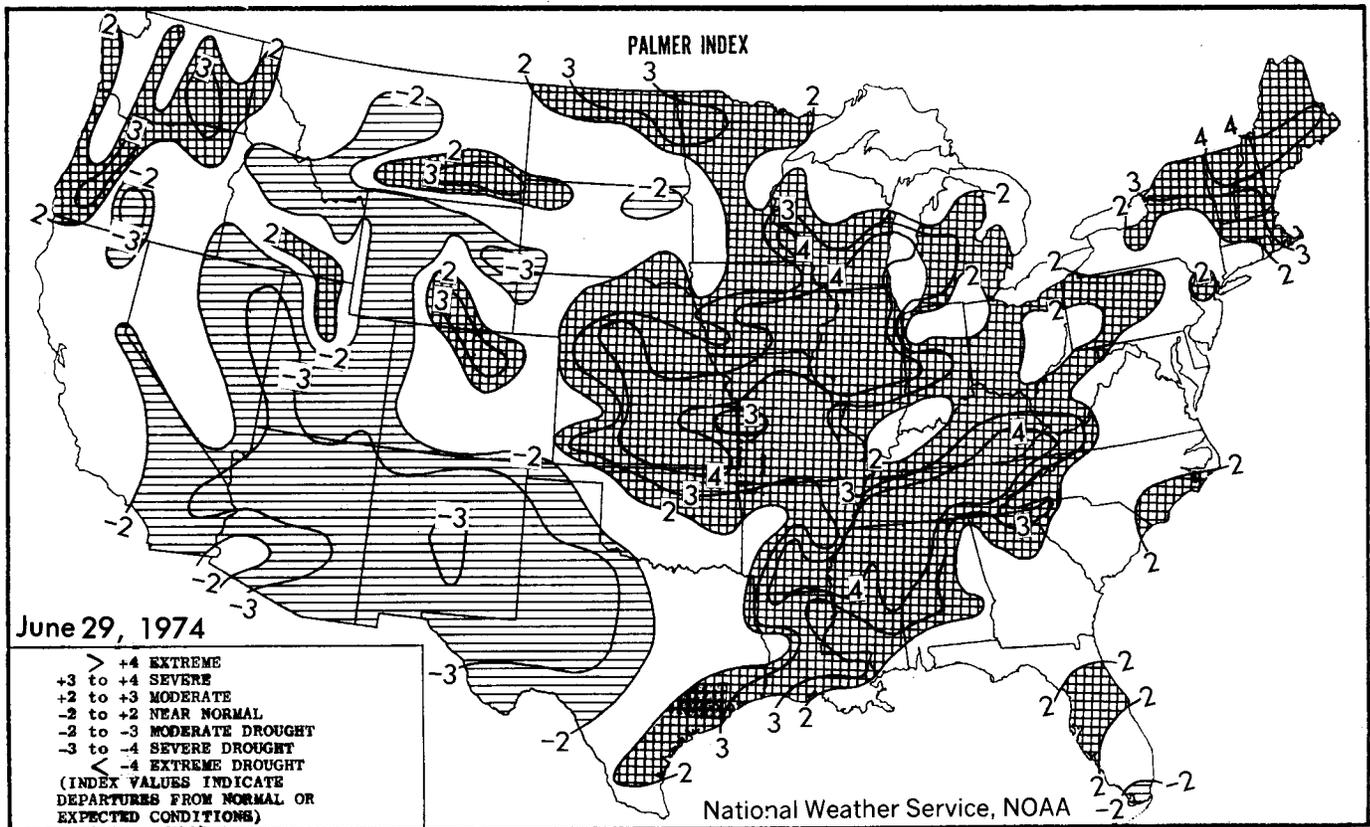
May was very dry across from the eastern Rockies westward. However conditions were extremely wet to the east, with much of the moisture falling after midmonth. The entire Corn Belt, much of the Southeast, the Gulf Coast and southern Texas received much above normal precipitation. The drought in the Southwest generally intensified and spread to the north and east.

TEMPERATURE: Spring came early in 1974. March was well above normal across the entire Country except for parts of North Dakota, Minnesota, Wisconsin, New York, and Maine. South of a line from Reno, Nev., to West Virginia temperatures averaged 6° or more above the normal. Parts of Texas and New Mexico were 9° above normal.

April continued well above normal in most areas except for the Southeast and parts of the Southwest. However, conditions were highly variable during the month. During the first week of April, temperatures were generally warmer than normal over the eastern half of the Nation, but cooler in the West. However this changed as a late winter storm brought cooler than normal weather to most of the Country. Record low temperatures were experienced from Florida to the Great Lakes. Temperatures warmed markedly over the western half of the Country during the last half of April as temperatures averaged 3° to 6° above normal.

The northern half of the Country cooled markedly in May. Temperatures averaged at least 3° below normal in these areas. However, temperatures continued well above normal in the southern half of the Nation. Readings of 6° or more above normal helped to intensify the drought situation there.





PALMER INDEX

The Palmer Index (PI) map, above, differs from the Crop Moisture Index (CMI) map, on the opposite page, in that it depicts the long range departure of the moisture climate from normal and the CMI shows the evapotranspiration anomaly for the week expressed as an index.

The drought area in the Southwest began last October and because rainfall has been continuously below normal the PI value has declined each month. The drought spread rapidly after its beginning in Arizona but the area has remained nearly the same during the last month.

Moderate drought has begun in Montana, Idaho, and Wyoming since the map published June 1, 1974.

The positive index area in the U.S. showed little change during the month indicating that precipitation was slightly above normal for the month. Most of this area has had an abnormally moist climate since the fall of 1972.

Some improvement in the Florida drought occurred in the past weeks from heavy rainfall. Drought continues in extreme Southern Florida. If normal rainfall does not continue, the index will fall rapidly.

(continued from p. 11)

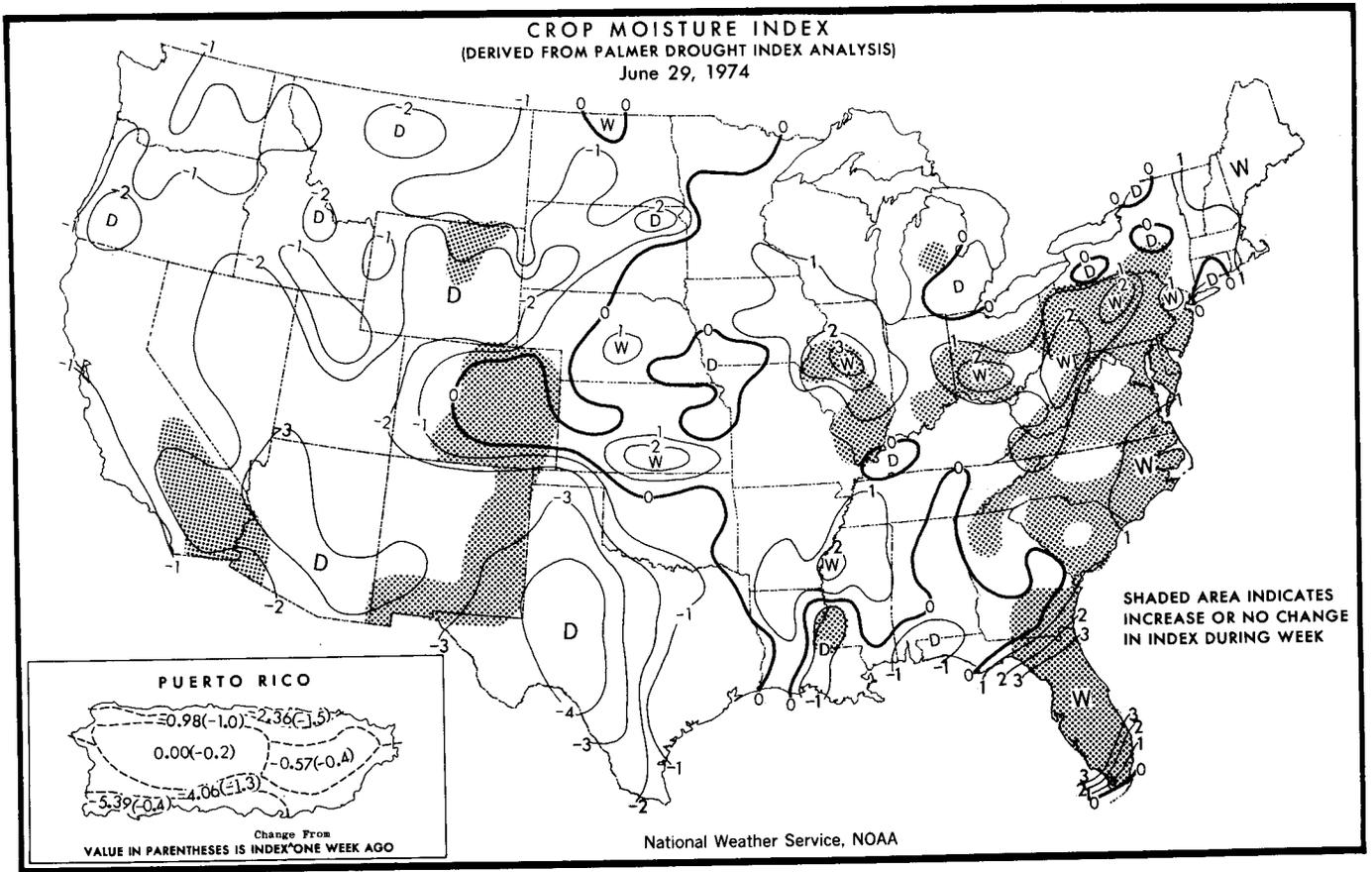
all districts, with the south receiving minimal amounts.

Harvesting first crop hay made much progress in excellent haying weather. Hay harvest 66% done, 1973, 50%, normal 60%. Yields heavy and quality good. Corn crop development behind normal due to late planting and cold, wet weather. Corn averages 11 in. high, 1973 14 in. normal 16 in. Oats and small grains look good. Oats 20% headed, 1973 30%, normal 50%. Pastures in good condition, need rain soon. Planting of soybeans just finished in southeast. Pea harvest underway. Potatoes look good. Sweet corn planting just completed, behind normal. Vegetable crops fair to good, being irrigated in central part of state. Strawberry crop good. Soil moisture

20% short, 75% adequate, 5% surplus.

WYOMING: Weather basically hot and dry. Temperatures 5 to 10° above normal, many readings in 90's and few in low 100's. Most western sections got no precipitation, only light rain east.

Topsoil moisture supplies short. Ranges deteriorating. Some forced selling livestock in north-east. Dry beans prospects good with 95% emerged. Sugar beets fair to good with 90% thinned. Winter wheat 95% headed, 40% turning color, earlier harvest indicated. Spring wheat 75%, barley 55%, oats 40% headed. First cutting alfalfa hay 25% harvested, other hay 5%. Cultivating row crops continued. Less than 5% of cattle calves, lambs are contracted for fall delivery, same as in 1973.



SHADED AREAS: Index increased or did not change last week

Index

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

UNSHADED AREAS: Index decreased last week

Index

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

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

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

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

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

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



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WORLD WEATHER AND AGRICULTURE

INDIAN MONSOON RAINFALL

There are four rainfall seasons in India. These are: (1) the southwest monsoon or rainy season extending from June 1 thru September 30; (2) post-monsoon season extending from October 1 thru December 31; (3) winter or northeast monsoon season extending from January 1 thru February 28 or 29; (4) summer or pre-monsoon season from March 1 thru May 31.

About 74 percent of the annual precipitation is received during the monsoon (southwest) season, 13 percent during the post-monsoon season, 3 percent during the winter monsoon season, and 10 percent during the pre-monsoon season.

The monsoon season is the pivot upon which the whole of Indian life swings. Monsoon rains are of crucial importance to the country's kharif (fall and winter harvested) crops which include rice, coarse grains, cotton, jute, peanuts, etc., and account for about two-thirds of the total annual agricultural production. Rainfall during the monsoon season is also important in filling the country's major water reservoirs which are used for: (1) irrigation purposes; (2) supplying drinking water in many urban centers and rural areas; and (3) the generation of hydro-electrical power which accounts for some 40 percent of the total electrical power supply in the country.

The pre-monsoon season in India began on March 1 and ended on May 31. Approximately 10 percent of the total annual average precipitation of 42 inches is received during this season. These rains are highly important to the growth of rabi (spring harvested) crops, including summer rice, and also to the sowing of jute in eastern India.

During the 1974 pre-monsoon season, rainfall as a whole, was generally normal or above normal in most of the country except Uttar Pradesh, Haryana, Punjab, Himachal Pradesh, Jammu and Kashmir, Madhya Pradesh, Vidarbha (North East Maharashtra) and Coastal Andhra Pradesh where it was 'deficient' to 'scanty'.

The extremely dry weather conditions of late winter continued through the third week of March over most parts of the country. In addition, snowfall in the Himalayan Mountains, which supply water in the spring and summer months to the irrigation reservoirs of northern India, was below average during the winter months.

The southwest monsoon set in over Kerala on time in the last week of May and reached the southern parts of Maharashtra by June 1. Subsequently, the monsoon slackened over approximately 20 percent of

the total kharif cereal grain production, based on the distribution of the kharif production during 1970-71. This situation is not as favorable as in 1973 when 24 weather zones, accounting for 70 percent of the total kharif cereal grain production in 1970-71, were in the normal or above normal rainfall categories during the same period of time.

The slackening of monsoon rains at this early stage of the season is not cause for undue concern unless these conditions continue to prevail for the next few weeks.

CONTINUING DRY WEATHER IN THE UNITED KINGDOM THREATENS SPRING SOWN CROPS

May saw a continuation of the unusually dry conditions which characterized spring in the UK. Much of the early part of the month, moreover, was cool and windy although the UK temperatures improved towards the end of the month. Almost everywhere, however, rainfall amounts were again considerably below normal following the record dry April.

The condition of spring sown crops and grassland is now giving serious cause for concern. Winter cereals, however, mainly wheat, are in much better condition and even making good progress. Since about 85% of the UK wheat crop is autumn and winter sown, farmers are much less worried about it than about spring sown cereals, principally barley. Germination of spring barley and of sugar beet has been patchy. Growth of early potatoes is also very much behind normal and lifting, which should by now be well under way, has barely begun. Main crop potato varieties are also very backward.

Farmers are particularly worried about the condition of grassland. High feedstuff prices led earlier this year to a much greater use of grazing and in any case the unusually mild winter encouraged a much greater degree of out-wintering of livestock than usual. The very dry conditions, however, have meant that the recovery of grassland for the cutting of hay and silage has been severely delayed. There is not only now a shortage of grazing but also the prospect of very poor hay and silage production.

Continuing dry weather during May and early June is also posing a serious threat to UK sugar production from the 1974-75 beet crop. Reports indicate that 30,000 acres of sugar beet land have been ploughed under in the major growing area of eastern England because dry weather prevented seed from germinating.