

# WEEKLY WEATHER AND CROP BULLETIN

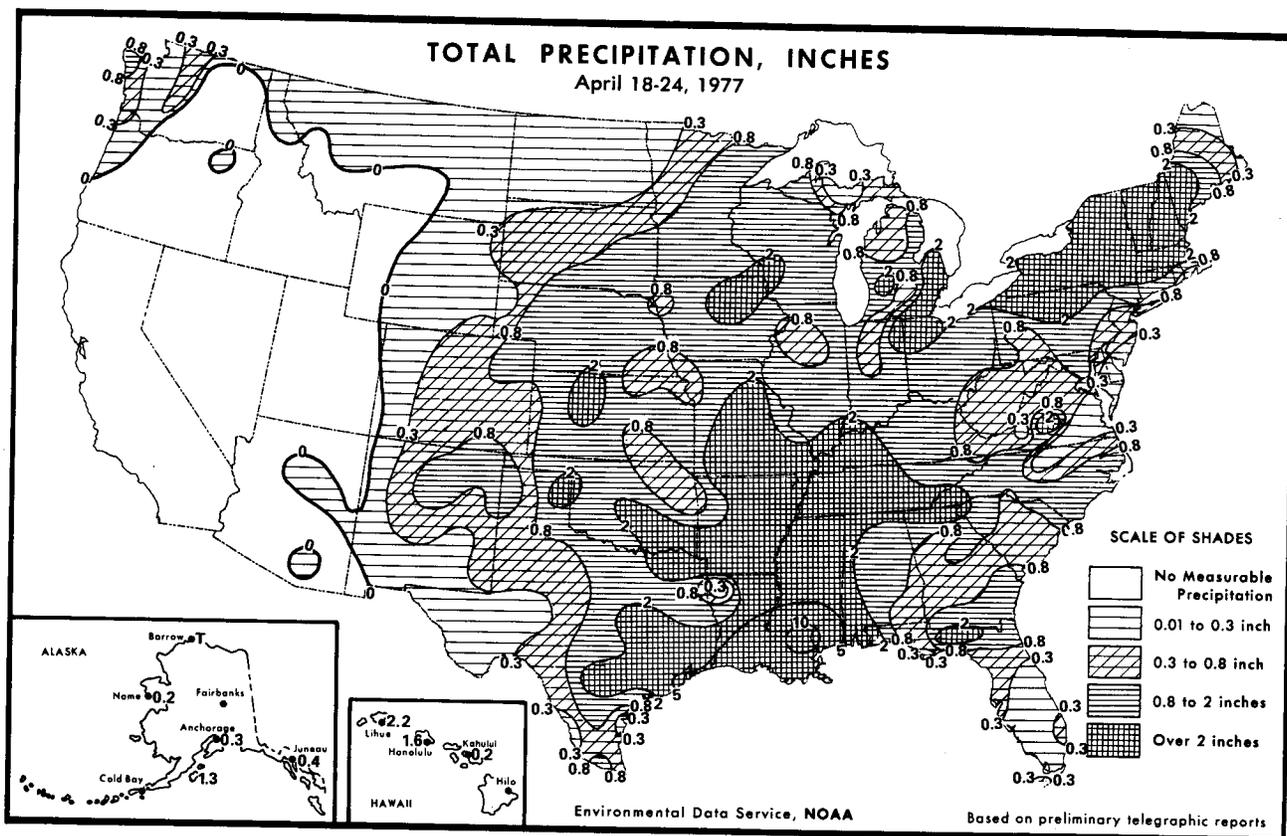
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## National Weather Summary

For the Week of April 18-24

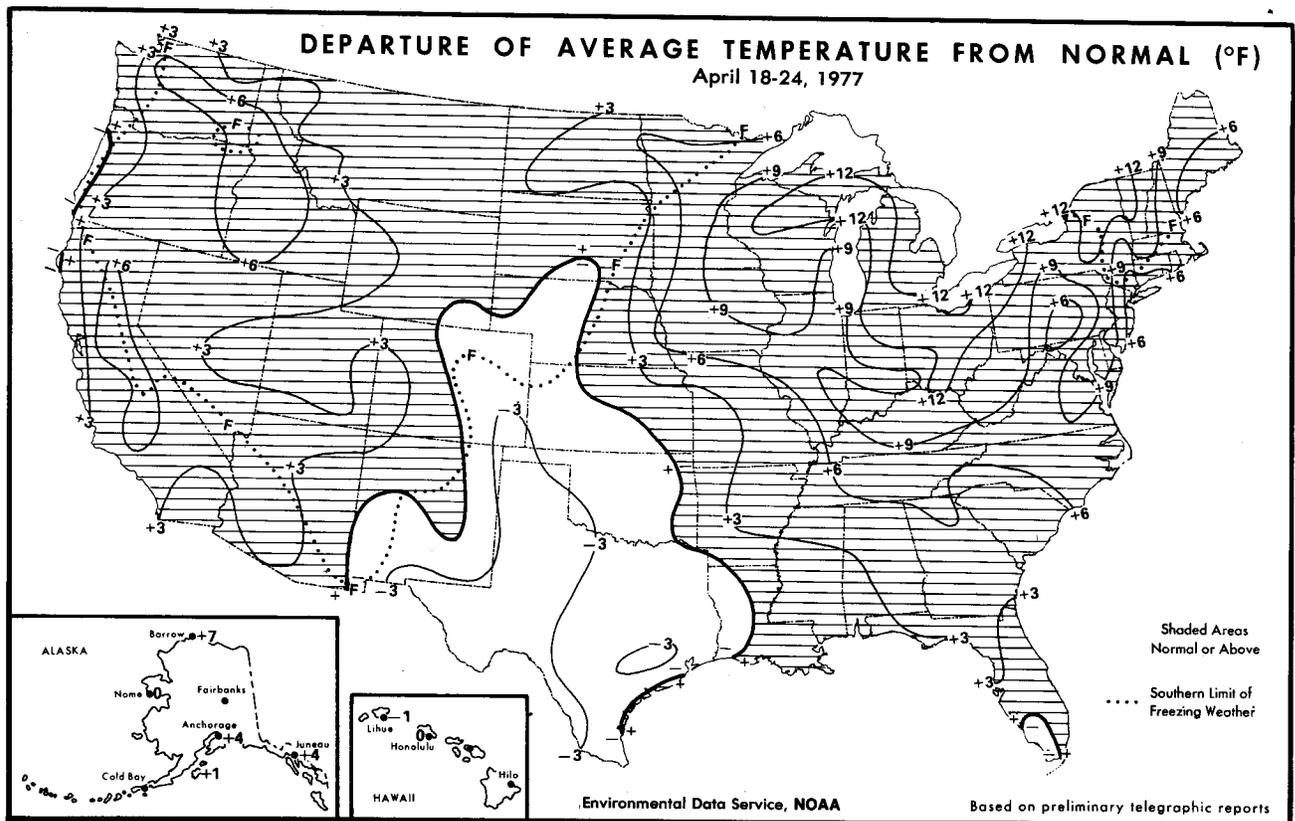
**HIGHLIGHTS:** The near stationary frontal system of the previous week moved slowly out of the western Plains eastward. Severe weather including numerous tornadoes plagued the lower Mississippi Valley. Franklinton, La., measured more than 14 inches in a three-day period. Many residents were forced to flee homes as swollen waterways spilled over their banks. Most areas west of the Rockies received little or no rain.

Much of the Nation averaged warmer than normal temperatures. An area surrounding the Great Lakes was 10 to 13° above normal. A region from western Texas through Colorado recorded 3 to 5° colder than expected.

The region east of the Mississippi River was warm most of the reporting period, however, by week's end temperatures dropped to much cooler readings.

Showers and thunderstorms brought a wet Monday to much of the Nation's midsection. Even some snow whitened central and southern Wyoming. Another hot day unfolded over the upper Mississippi Valley and southwestern Great Lakes. Madison, Wis., broke a daily high temperature record for the fourth consecutive day. Tornadoes were spotted in Oklahoma and Texas, and hail pummeled northeastern New Mexico.

Warm temperatures and fair to partly cloudy skies dominated the Atlantic and Pacific Coasts. From the Appalachians to the Rockies. Precipitation was Tuesday's contribution. Heavy rains, accompanied by hail and tornadoes, cut a swath through western Texas. Locally heavy thunderstorms blasted eastern Colorado and western Kansas where a twister was spotted. A tornado ripped across Louisiana, and another touched down in New Mexico. There was some hail in Arkansas, northwestern Mississippi, and just east of Columbia, S.C.



Thundershowers were scattered from Georgia northward to Pennsylvania.

Unseasonably warm weather held in the Great Lakes region, Ohio River Valley, and the northern and central Atlantic Coast States. The unsettled weather in the Plains continued into Wednesday. Thunderstorms extended from the central Rockies through the lower half of the Great Plains, over the Mississippi Valley, and were scattered along the Atlantic Coast.

Heavy rains drenched eastern Texas and southwestern Louisiana where up to eight inches fell; some flooding occurred. Tornadoes raged through Texas, Oklahoma, Louisiana, Kansas, and Iowa. Showers and thunderstorms reached as far east as the Carolinas and Virginia. Winter returned to eastern Colorado and northwestern Kansas; by early Wednesday afternoon, four inches of snow blanketed Alamosa, Colo.

Heavy rain bore down on Texas and Louisiana through Thursday, and moved into Mississippi. Liberty, Miss., was inundated by 13 inches. The lower Colorado River in southeast Texas reached its highest flood crest in 37 years. Louisiana and Mississippi also were troubled by rising waters.

Occasional showers and thunderstorms fell over the Tennessee Valley and Midwest. Light rain dampened the Pacific Northwest and moved eastward into Idaho and Montana.

New England saw another day without rain, worsening the dry situation. Alpena, Mich., set a new high temperature of 77° for the day while El Paso buttoned its overcoat against a new low of 34°.

Southern Louisiana suffered more flooding on Friday, however, thunderstorms moved eastward providing some relief. Alabama was the next victim of

serious overflow as heavy rains fell near Mobile eastward into the Florida Panhandle.

Bands of heavy thunderstorms, with some hail, developed in northeastern Oklahoma and southeast Kansas, and rumbled into Missouri and Arkansas. Widely scattered showers hit many areas of the Ohio Valley, lower Great Lakes, the middle and southern Atlantic Coast, and New England. Rain and melting snow contributed to flood stage conditions in some northern Maine rivers.

Saturday thunderstorms ranged from Arkansas eastward into the western Ohio Valley. Showers stretched from the middle Mississippi and Ohio Valleys to western New England, and later marched through the central Appalachians and the southern Atlantic Coast States. Some hail peppered Tennessee and Georgia.

Isolated showers moistened the southern Rockies, but dry weather dominated once again westward to the Pacific Coast.

The slowly moving frontal system triggered showers and thunderstorms from the middle Atlantic Coast States to the northeastern U.S. Hail and locally heavy rain fell from central Virginia northward. This rain activity worsened flood problems in Maine, and the Gulf Coast States tended with more overflow. Widely scattered showers were reported in the Great Lakes region, Ohio Valley, central Arizona, and southern New Mexico. Sunday's light rain also was found in parts of northwest Texas, Colorado, southeast Florida, northern California, and the northern Rockies.

Unseasonably warm temperatures produced record highs in several Pacific Northwest and northern Rocky Mountain cities; a morning frost chilled residents of northern Minnesota and Michigan.

## National Agricultural Summary

For the Week of April 18-24

**HIGHLIGHTS:** Rainy weather in the South Central States and parts of the western North Central States slowed fieldwork and damaged some crops in Texas. The precipitation improved the winter wheat crop on most of the Great Plains. Corn planting advanced to 16% complete, 5 points less than the unusually fast pace of 1976, but well ahead of the 10% average. Cotton planting reached 15% in the 11 southern States. Farmers began limited planting of soybeans throughout the southern half of the United States. Soil moisture was adequate to surplus in the South Central States and generally short in the West; elsewhere soil moisture was mostly adequate. Pastures were in fair to good condition, but western ranges were dry and rated only poor to fair. Vegetable planting was active throughout the Nation and fruit trees bloomed in northern production areas.

**SMALL GRAINS:** Rains on the Great Plains improved the 1977 winter wheat crop. East of the Great Plains, the crop was in good condition. In the western States, winter wheat was fair to good, but some dryland wheat was poor and stunted. Some of the Florida winter wheat was ready to combine. In the major winter wheat areas, the crop ranged from headed in southern Texas to 55% jointed in Kansas.

Rains boosted the Kansas winter wheat crop. Weeds posed no serious problems, however, insects could threaten the crop in coming weeks. About 55% of the Kansas crop was jointing nearly average for the date. Rains and lower temperatures in Oklahoma pushed the winter wheat crop to a fair to good condition. Over 90% of the crop was in the joint stage or beyond; 33% of the crop was heading. Last year 40% was heading, but the average was only 20%. Texas wheat on the northern High and Low Plains responded favorably to the needed precipitation. Hail produced some light damage to southern Low Plains wheat. Development reached the jointing stage on the High Plains, and boot stage to heading out from the Low Plains southward. Widespread rains improved New Mexico wheat. Colorado winter wheat was in good condition, in response to recent rains throughout the eastern Plains.

Spring wheat planting, other than durum, reached 37% complete, lagging the 49% set last year, but 10 points ahead of the average. North Dakota farmers planted 20% of the crop; in other States progress ranged from 40 to 65%. Last year seeding ranged from 30 to 94% complete.

**CORN:** Farmers planted 16% of the Nation's corn crop compared with 21% last year and the 10% average. Producers in the eastern North Central States planted 12% of the intended acreage, short of the 18% in 1976, but well ahead of the 5% average. Western North Central States farmers planted 8% of their crop, 2 points less than the 1976 pace, but double the average rate. Planting in the North Central States ranged from 35% in Missouri down to just beginning in Nebraska, South Dakota and Wisconsin. Minnesota farmers prepared soil, however, did not begin planting. Corn planting in southern States reached as much as 88% complete; some early stands were cultivated.

**COTTON:** Producers in the 11 southern States planted 15% of the cotton crop which fell behind both 1976's 26% and the 18% average. Only Georgia growers exceeded the 1976 planting rate. Texas cotton planting made no significant progress. Soil moisture was adequate for planting dryland cotton on the High and Low Plains. Heavy rains damaged

some plantings and hail destroyed some cotton plants in the Lower Rio Grande Valley. Early cotton plantings in the Blacklands and Upper Gulf Coast germinated. New Mexico growers planted less than 20% of the cotton crop. Arizona growers had good stands of cotton, but cool nights slowed germination. California planting was well along. Rain slowed planting in Arkansas.

**OTHER CROPS:** Sorghum planting advanced northward into Missouri. Rains delayed planting in Arkansas and Texas. Hail destroyed some Lower Rio Grande Valley fields. Texas planting reached 55%, only one point behind 1976, but 4 points ahead of the average. Arkansas growers planted 41% of the crop compared with 60% last year and the 38% average. Oklahoma farmers planted less than 5% of the crop; growers in Kansas, Nebraska and South Dakota did not plant any sorghum yet.

Soybean producers planted a few fields mostly in the southern areas of the Nation. In Arkansas, rain delayed land preparation, however, growers planted 3% of the crop, below last year's 1%.

Rice planting was near the halfway mark, ranging from 45% complete in Arkansas and Mississippi to 87% in Texas. Some Texas growers began flooding fields in the Upper Gulf Coast area. Early seeded Arkansas rice fields germinated to good stands. Rice planting generally lagged last year and the average.

Peanut planting extended into Virginia where goober growers seeded the earliest fields. Along the Atlantic Coast planting was 38% complete in Georgia and 27% in South Carolina, lagging the 1976 rate. Texas growers planted 19% of the crop, ahead of the 13% for last year and the average.

North Carolina tobacco plant beds were in good condition and transplanting reached 16%, slower than 1976 and the average. Virginia growers irrigated plant beds. Tennessee tobacco was in good condition. Kentucky tobacco plant beds were good to excellent with 75% of the plants the size of a dime or less, 19% as big as a quarter, and 6% half dollar sized.

**FRUITS AND NUTS:** Apple trees bloomed throughout the Appalachian production area, and Ohio, New York, Wisconsin, Michigan, Oregon, and Washington. Ohio fruit trees bloomed two to three weeks early, making them susceptible to frosts. Growers thinned the fruit crops in the Pacific Coast States. Florida growers irrigated citrus groves and picked Valencias. Growers in Texas, Arizona, and California also picked citrus crops.

**VEGETABLES:** Growers planted vegetable crops throughout the Nation's major production areas. Asparagus picking began in New Jersey and Michigan. Florida vegetable shipments increased 37% over the previous week. All vegetable shipments were steady or higher; only strawberry volume declined. Rains slowed fieldwork and damaged some vegetable fields in Texas. Growers harvested onions, cabbage, carrots, lettuce and potatoes. California growers harvested broccoli, cauliflower, carrots, lettuce, onions, strawberries, and celery.

**PASTURES AND LIVESTOCK:** Pastures were in fair to good condition and growing rapidly. Rains helped improve pastures in many areas of the eastern half of the Nation. In the West, high temperatures and no rain kept ranges in poor to fair condition. Stockmen in some States provided supplemental feed; California ranchers culled herds.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., April 24, 1977

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...	69	+4	1.1	+1	LA.Baton Rouge...	70	0	6.4	+5.2	Youngstown...	62	+12	2.0	+1.1
Mobile...	71	+2	2.4	+1.2	Lake Charles...	69	-1	5.0	+3.9	OKLA.,Okla. City...	61	-2	2.1	+1.2
Montgomery...	71	+4	.9	-1	New Orleans...	72	+2	6.0	+5.1	Tulsa...	62	-1	.7	-4
ALASKA.Anchorage...	42	+4	.3	+2	Shreveport...	67	-1	2.0	-1.1	OREG.Astoria...	50	+1	.5	-5
Barrow...	9	+7	T	0	MAINE.Caribou...	47	+8	T	-6	Burns...	50	+4	0	-2
Fairbanks...	-	-	-	-	Portland...	49	+4	1.5	+7	Medford...	56	+5	0	-2
Juneau...	44	+4	.4	-3	MD.Baltimore...	67	+11	.7	0	Pendleton...	56	+4	0	-3
Kodiak...	39	+1	1.3	+4	MASS.Boston...	59	+8	5.3	+4.5	Portland...	54	+2	.1	-4
Nome...	22	+0	.2	+1	Chatham...	50	-	.7	-	Salem...	51	0	T	-5
ARIZ.Flagstaff...	47	+3	.1	-2	MICH.Alpena...	53	+10	.9	+3	PA.Allentown...	61	+9	.6	-3
Phoenix...	77	+3	0	-1	Detroit...	60	+10	2.4	+1.6	Erie...	60	+13	3.7	+2.9
Tucson...	70	+3	.1	0	Flint...	59	+11	1.4	+7	Harrisburg...	60	+5	1.3	+6
Winslow...	57	+2	T	-1	Grand Rapids...	61	+12	2.3	+1.5	Philadelphia...	66	+11	.5	-3
Yuma...	75	+2	0	0	Houghton Lake...	57	+12	.4	-2	Pittsburgh...	62	+10	.2	-6
ARK.Fort Smith...	64	0	.4	-8	Lansing...	60	+11	.7	0	Scranton...	60	+9	1.8	+1.0
Little Rock...	68	+4	3.8	+2.5	Marquette...	54	+12	1	-5	R.I.Providence...	56	+7	.8	0
CALIF.Bakersfield...	71	+7	0	-2	Muskegon...	59	+11	.8	0	S.C.Charleston...	71	+5	.3	-3
Eureka...	50	0	0	-6	S. Ste. Marie...	50	+9	.4	-2	Columbia...	70	+4	.2	-6
Fresno...	67	+5	0	-3	MINN.Duluth...	48	+7	1.0	+4	Greenville...	67	+4	1.4	+5
Los Angeles...	67	+5	0	-3	Internat'l Falls...	44	+3	.6	+2	S.D.Aberdeen...	48	+1	.4	-1
Red Bluff...	65	+4	0	-4	Minneapolis...	57	+9	.7	+2	Huron...	49	0	1.3	+8
San Diego...	64	+3	0	-1	Rochester...	58	+11	1.4	+8	Rapid City...	49	+2	.3	-2
San Francisco...	57	+1	0	-3	St. Cloud...	53	+7	1.4	+8	Sioux Falls...	53	+4	1.1	+5
Stockton...	68	+8	0	-3	MISS.Jackson...	69	+2	3.7	+2.6	TENN.Chattanooga...	68	+6	3.7	+2.7
COLO.Denver...	49	-1	.5	0	Meridian...	67	0	5.0	+3.9	Knoxville...	68	+6	1.7	+9
Grand Junction...	59	+5	1	-1	MO.Columbia...	60	+3	2.2	+1.2	Memphis...	69	+4	2.7	+1.4
Pueblo...	53	-1	.7	+4	Kansas City...	60	+2	.8	0	Nashville...	70	+8	3.4	+2.5
CONN.Bridgeport...	55	+5	1.1	+3	St. Louis...	63	+4	.6	-3	TEX.Abilene...	62	-5	.7	0
Hartford...	59	+9	2.8	+2.0	Springfield...	61	+2	2.2	+1.1	Amarillo...	54	-5	.6	+3
D.C.Washington...	69	+10	1.2	+5	MONT.Billings...	48	+1	0	-4	Austin...	68	-2	1.5	+6
FLA.Apalachicola...	71	+1	.1	-7	Glasgow...	44	-2	1	-1	Beaumont...	70	0	3.9	+2.8
Daytona Beach...	73	+2	.3	-2	Great Falls...	46	0	T	-3	Brownsville...	75	-1	.7	+3
Ft. Myers...	74	0	.2	-2	Havre...	48	+1	.1	-2	Corpus Christi...	74	0	T	-6
Jacksonville...	71	+2	1.1	+4	Helena...	48	+3	1	-1	Dallas...	-	-	-	-
Key West...	79	0	.4	-2	Kalispell...	48	+4	.2	-1	Del Rio...	71	-3	.4	0
Lakeland...	74	+1	.2	-4	Miles City...	49	+1	.1	-2	El Paso...	62	-4	T	0
Miami...	77	+1	.1	-8	Missoula...	48	+2	T	-3	Fort Worth...	67	0	1.8	+7
Orlando...	74	+2	.1	-5	NEBR.Grand Island...	55	+2	1.5	+9	Galveston...	71	0	5.5	+4.9
Tallahassee...	73	+4	2.2	+1.3	Lincoln...	57	+3	.8	+2	Houston...	69	-2	2.9	+2.0
Tampa...	76	+3	.4	0	Norfolk...	54	+3	1.0	+5	Lubbock...	58	-4	.5	+2
W.Palm Beach...	78	+3	.7	-1	N.Platte...	48	-2	1.8	+1.3	Midland...	62	-4	.3	+1
GA.Atlanta...	67	+4	.4	-6	Omaha...	60	+7	1.8	+1.1	San Angelo...	66	-3	.2	-2
Augusta...	69	+4	.7	-1	Valentine...	48	-1	1.6	+1.1	San Antonio...	69	-2	4.9	+4.3
Macon...	72	+5	.5	-3	NEV.Ely...	45	+2	0	-2	Victoria...	71	-1	1.9	+1.2
Savannah...	72	+4	1.5	+9	Las Vegas...	70	+4	0	-1	Waco...	68	-1	2.0	+1.0
HAWAII.Hilo...	-	-	-	-	Reno...	53	+5	0	-1	Wichita Falls...	63	-3	1.3	+5
Honolulu...	75	0	1.6	+1.4	Winnemucca...	52	+5	0	-2	UTAH.Blanding...	52	+3	0	-2
Kahului...	74	0	.2	0	N.H.Concord...	54	+8	2.6	+1.9	Salt Lake City...	54	+3	0	-5
Lihue...	73	-1	2.2	+1.5	N.J.Atlantic City...	60	+6	.1	-7	VT.Burlington...	57	+12	2.1	+1.5
IDAHO.Boise...	58	+7	0	-3	Trenton...	62	+8	.6	-1	VA.Lynchburg...	67	+8	2.0	+1.4
Lewiston...	59	+7	0	-3	N.MEX.Albuquerque...	58	0	.8	+7	Norfolk...	68	+8	.3	-3
Pocatello...	52	+5	0	-3	Roswell...	62	0	.1	0	Richmond...	69	+9	.3	-3
ILL.Cairo...	67	+4	4.0	+3.0	N.Y.Albany...	58	+9	2.6	+2.0	Roanoke...	66	+8	.1	-5
Chicago...	60	+8	1.1	+2	Binghamton...	59	+12	2.1	+1.3	WASH.Colville...	49	+1	0	-2
Moline...	63	+10	.7	-2	Buffalo...	59	+12	2.8	+2.0	Omak...	54	+4	T	-3
Peoria...	62	+8	.6	-5	New York...	59	+5	.5	-3	Quillayute...	48	+1	.8	-1.0
Rockford...	62	+11	.9	0	Rochester...	58	+10	2.0	+1.4	Seattle-Tacoma...	56	+6	.1	-4
Springfield...	63	+8	1.7	+7	Syracuse...	60	+11	2.4	+1.7	Spokane...	53	+5	T	-3
IND.Evansville...	68	+9	2.4	+1.5	N.C.Asheville...	63	+5	.9	+1	Walla Walla...	59	+5	0	-4
Ft. Wayne...	64	+12	2.6	+1.8	Charlotte...	67	+4	.7	0	Yakima...	55	+4	T	-1
Indianapolis...	64	+9	.8	-1	Greensboro...	68	+7	1	-6	W.Va.Beckley...	64	+11	.6	-1
South Bend...	63	+13	.5	-5	Hatteras...	68	+8	1.3	+6	Charleston...	68	+10	.5	-3
IOWA.Burlington...	61	+7	1.7	+8	Raleigh...	69	+8	.5	-2	Huntington...	69	+11	.6	-1
Des Moines...	60	+8	1.3	+6	Wilmington...	71	+6	1.1	+4	Parkersburg...	68	+11	.4	-4
Dubuque...	61	+11	1.1	+1	N.DAK.Bismarck...	49	+3	T	-4	WIS.Green Bay...	57	+11	1.0	+3
Sioux City...	55	+3	.8	+2	Fargo...	48	+3	.2	-4	La Crosse...	60	+10	2.2	+1.6
KANS.Concordia...	57	+2	.7	+1	Williston...	47	+1	1	-2	Madison...	59	+11	1.4	+8
Dodge City...	55	-1	1.7	+1.3	OHIO.Akron-Canton...	63	+12	1.2	+4	Milwaukee...	55	+8	1.0	+3
Goodland...	49	-2	.6	+2	Cincinnati...	64	+8	.9	+1	WYO.Casper...	46	+1	.2	-2
Topeka...	60	+3	.9	0	Cleveland...	62	+11	1.5	+7	Cheyenne...	44	-1	.4	0
Wichita...	58	-1	.7	0	Columbus...	65	+12	1.4	+5	Lander...	48	+3	.1	-5
Lexington...	67	+11	1.1	+3	Dayton...	65	+11	1.0	+2	Sheridan...	47	+1	.1	-1
Louisville...	67	+9	1.0	+1	Toledo...	63	+12	4.6	+3.9	P.R.San Juan...	81	+3	.6	-3

Based on 1941-70 normals

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## State Summaries of Weather and Agriculture

These summaries provide brief descriptions of crop and weather conditions important on a national scale. More detailed data are available in Weather and Crop Bulletins published each Monday by SRS State offices in cooperation with the National Weather Service.

**ALABAMA:** Temperatures 4° above normal. Cold fronts brought needed rain, locally heavy. Fieldwork: 5 days suitable. Cotton 42% planted, 54% 1976, 36% average. Corn 55% planted, 60% 1976, 35% average. Wheat 60% headed, fair to good condition. Pastures seasonally short.

**ARIZONA:** Precipitation negligible. Temperatures normal to 5° above.

Near perfect conditions. Cotton stands good. Cool nights slowing germination. Planting 95% complete west, 80% Salt River Valley, 50% south central. Small grains good growth. Earlier planted fields headed; color beginning. Sugarbeet approaching maturity. Alfalfa hay swathing, baling increasing. Second cutting underway. Lettuce harvest continued. Watermelons, cantaloups good progress. Thinning nearing completion, vine turning underway. Valencia orange harvest continued. Grapefruit harvest limited. Drought condition, soil moisture and stock water short. Moisture barely adequate high elevations. Supplemental feeding, water hauling required some areas. Cattle, calves fair to good condition.

**ARKANSAS:** Temperatures above normal. Extremes: 83 and 38°. Precipitation ranged from 6.21 to 0.41 in.

Fieldwork: 2.5 days suitable. Soil moisture adequate to surplus. Soybean land preparation continued where possible, planting delayed by rain. Crop 3% planted, 4% last year. Cotton planting continued as weather permitted, 15% planted, 26% year ago, average 15%. Early seeded rice fields up to good stands. Planting 45% complete, 71% 1976, average 60%. Some corn fields replanted. Corn planting 63% complete, 81% last year, average 67%. Sorghum 41% planted, 60% year ago, average 38%. Wheat and oats good condition. Strawberries excellent condition. Several crates already picked. Pastures supplied adequate feed.

**CALIFORNIA:** No rain. Temperatures averaged several degrees above normal along coast and considerably above normal in the mountains and the San Joaquin and Sacramento Valleys.

Small grain heading. Dryland stands stunted, small heads. Cutting active hay, silage. Rice planting underway. Cotton planting well along. Digging new crop sugarbeets Imperial Valley and overwintered beets Sacramento, San Joaquin Valleys. Avocado, grapefruit, lemon and orange harvest continues. Thinning deciduous fruit. Broccoli, cauliflower, carrot, lettuce, onions, and strawberry harvest increasing. Celery cutting lighter. Melon planting active San Joaquin and Sacramento Valleys. Processing tomato planting continues. Strong winds accelerated drying rangeland grasses. Pastures gone to seed, browning off. Supplemental feed needed. Cattle moved into mountain areas, irrigated pastures. Ranchers thin herds, lack feed. Cattle are poor to fair. Sheep readied for movement summer pasture.

**COLORADO:** Temperatures cooled 20 to 30° with thunderstorms, rain and snow at lower elevations. Snow in mountains continued 20th. Sunny dry warming trend 21st to 24th. Temperatures cooler, 1 to 6° below normal. West 1 to 6° above normal.

Winter wheat responding to recent rains throughout eastern plains. Wheat in mostly good condition. Topsoil moisture adequate, subsoil moisture improved but remains short. Spring seeding: Oats 57% 1977, 65% 1976, average 50%; spring barley 66% 1977, 74% 1976, average 55%; sugarbeets 52% 1977, 33% 1976, average 35%; summer potatoes 26% 1977, 30% 1976, average 19%. Fall potato planting active in San Luis Valley. Ranges and pastures greening but forage growth limited. Grazing fair. Livestock good condition.

**FLORIDA:** Partly cloudy, mild with few widely scattered showers becoming more numerous by 21st, 22d. Cloudiness, increasing showers, thunder-showers end of week. Temperatures averaged near normal. Rainfall averaged 0.25 to 0.50 in. with isolated amounts of 1.00 to 2.00 in.

Recent light rains beneficial but soil moisture remains short. Corn planting nearly complete. Crop good condition but needs moisture. Tobacco planting complete, irrigation heavy. Peanut planting continues. Land being prepared for planting soybeans. Wheat and oats good condition; about ready for harvest. Sugarcane good condition. Pastures need rain; conditions poor to fair Panhandle, northern areas; poor central; fair south. Cattle, calves mostly good Panhandle, north, south; poor central. Citrus grove condition very good. Irrigating all areas, rain needed. Some stress showing. Die-back of freeze damaged limbs continues. Valencia harvest very active. Spring vegetable harvest increased 37% over previous week. Most crops reached good level. Crops increasing were cabbage, sweet corn, cucumbers, chinese cabbage, eggplant, escarole, lettuce, okra, peppers, potatoes and tomatoes. Snap beans, carrots, celery, squash and radishes held steady but strawberries decreased sharply. Light wind damage, fruit scarring continues some fields. Irrigation heavy. Spray programs active. Watermelon crop mostly good. Fruit set, sizing good. Light volume expected week of 25th.

**GEORGIA:** Temperatures 8 to 10° above normal north and 4 to 7° above normal south. Very warm afternoons and mild nights. Showers and scattered thunderstorms late week and weekend. Cooler during weekend.

Soil moisture short except adequate north. Fieldwork: 6 days suitable. Dry fields delayed preparation and planting south. Tobacco condition fair to good; transplanting 93% complete, last year 99%, average 92%. Corn condition good, 88% planted, last year 83%, average 49%. Dry weather hurting stands south and central areas. Watermelons fair to good, 85% planted, last year 92%. Cotton 50% seeded, last year 58%, average 25%. Peanuts 38% planted, last year 42%, average 19%. Sorghum 14% planted, last year 12%. Small grains fair to mostly good. Peaches fair to mostly good, spraying active. Apple condition fair to mostly good. Hogs good. Pastures and cattle fair to mostly good.

**HAWAII:** Weather variable. Light to moderate showers most areas. Occasional heavy downpour parts of Oahu. Thundershowers Kauai 19th.

Reservoirs slightly below normal. Vegetable supplies adequate. Banana, papaya and pineapple

harvesting light. Sugar harvesting active. Pastures fair to good.

IDAHO: Soil moisture very short southwest, south central, short other areas. Few stations measurable precipitation. Temperatures near normal. Field preparation, planting very active.

Percent crop planted this year, last year: Spring wheat 65, 30; barley 65, 25; oats 60, 35; sugarbeets 70, 50; potatoes 10, 10. Percent crops emerged this year, last year: Spring wheat 20, 10; barley 20, 10; oats 25, 15; sugarbeets 20, 25.

ILLINOIS: Temperatures 4 to 12° above normal. Precipitation more than 1.00 in. most areas, heaviest south. Lesser amounts northwest and central.

Corn 15% planted, 24% 1976, 11% average. Winter wheat good. Alfalfa hay good. Pastures good. Soil moisture short. Livestock water supplies adequate. Fieldwork: 4.6 days suitable.

INDIANA: Warm until weekend. Rainfall 0.50 in. extreme northwest and to 2.00 to 3.00 in. central south. Other areas 0.80 to 2.00 in. Temperatures ranged from 34 to 85° and averaged 8° above normal.

Soil temperatures 10° above normal. Fieldwork: 6 days suitable. Topsoil and subsoil moisture short to mostly adequate. Land for spring planted crops 85% plowed, 1976 90%, average 60%. Corn 10% planted, 1976 20% average just starting. Oats 95% seeded, 1976 95%, average 60%. Oats 2 in. high, 1976 3 in. Wheat 8 in. high, 1976 11 in., average 8 in. Wheat 25% jointed, 1976 45%. Barley and rye 10% headed. Pastures improved, rated fair to good.

IOWA: Warm with showers early week, becoming dry with near seasonal temperatures late week.

Fieldwork: 4 days suitable. Plowing 91% complete. Oats seeding 97% complete with 60% emergence. Corn planting 5% complete. Oats stand in good condition. Wheat and pastures fair to good. Livestock turned onto pastures west. Two pockets pseudorabies remain; otherwise disease on decline.

KANSAS: Substantial rains ranged from 0.50 to 2.00 in. and locally over 3.00 in. west and south. Temperatures average 52° northwest to 60° southeast or about degree below normal southwest and 2 to 3° above normal east.

Rains boosted condition wheat, 55% in jointing stage, about average. Weeds in wheat fields no serious threat yet, insect infestations may pose problem weeks to come. Wet fields slowed row crop planting; 10% corn acreage planted, same as average, but behind 20% year ago. Pastures and ranges improving with rains, most cattle taken off wheat pastures, returned to native pastures, some supplemental feeding needed. Farm activities centered around work on machinery, fence mending, care for livestock.

KENTUCKY: Temperatures well above normal averaging in mid to upper 60's. Precipitation about normal averaging around 2.00 in. west and 1.00 in. east.

Fieldwork: 5 days suitable. Soil moisture short before replenished at week's end. Most land for spring seeded crops prepared. Corn planting 28% complete, 41% last year, 14% average. Tobacco plant beds good to excellent condition, 75% with plants size of dime or less, 19% size of quarter and 6% size of half dollar. Small grains mostly good condition, 10% of wheat headed or heading, 35% of barley headed or heading. Pasture condition improving.

LOUISIANA: Temperatures near normal. Extremes: 46 and 86°. Heavy rains 20th and 21st.

Fieldwork: 1.9 days suitable. Main activities: machinery repair, clipping and spraying pastures, and working livestock. Rice 66% planted, 62% last year. Corn 80% planted, cotton 17% planted, both same as year ago. Winds and rain caused some lodging of small grain. Wheat 81% headed; oats 82% headed. Flooding in south damaged various truck crops. Pastures average. Cattle fair to good.

MARYLAND & DELAWARE: Temperatures averaged 5 to 7° above normal. Highs, upper 70's; lows, upper 40's. No precipitation except 0.34 in. western Maryland. Sunny and warm 23; cloudy with thundershowers 24th.

Soil moisture adequate. Pastures average. Plowing for corn completed, slightly ahead of normal. Planting started. Small grains poor to fair; some fields improving. Tobacco bed planting completed. Growers preparing fields for transplanting and marketing last year's crop at auctions. Apples reached full bloom, generally in good condition.

MICHIGAN: Temperatures 10 to 15° above normal Lower and 10 to 12° Upper. Precipitation averaged 1.00 in. Lower.

Fieldwork progressing ahead of normal. Favorable weather increased plowing and planting oats, corn, sugarbeets and potatoes. Fieldwork: 4 days suitable. Corn 4% planted, 5% last year, 1% normal. Oats 58% sown, normal 22%. Sugarbeets planting ahead of normal. Potatoes 10% planted. Asparagus harvest underway and ahead of average. Some tree fruits reaching petal fall stage in southern areas.

MINNESOTA: Temperatures 5° above normal west and north and 10° above normal southeast. Extreme: 81 and 24°. Precipitation ranged from over 2.00 in. extreme southeast to traces extreme northwest.

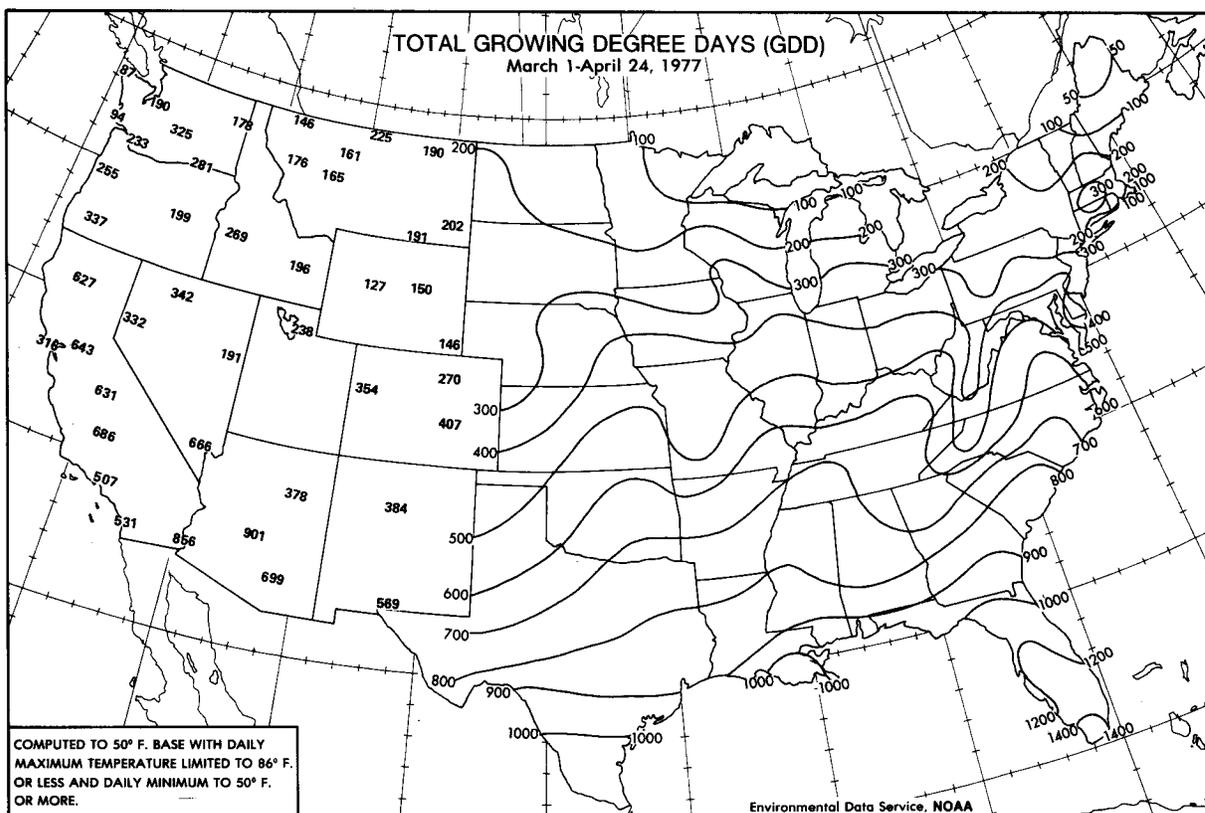
Showers delayed fieldwork but some progress made. Topsoil moisture adequate short north. Small grain seeding nearing completion south; 25% completed in Red River Valley; germination and early growth good. Corn ground preparation underway in south; full scale planting to begin soon. Percent planted: Spring wheat 51%, 1976 61%, normal 29%; oats 59%, 1976 73%, normal 35%; barley 32%, 1976 42%, normal 19%; flax 11%, 1976 25%, normal 13%; sugarbeets 35%, 1976 32%, normal 5%; green peas for processing 30%, 1976 58%, normal 20%. Corn ground 26% prepared, 1976 48%, normal 22%.

MISSISSIPPI: Temperatures 2 to 7° above normal. Extremes: 89 and 46°.

Soil moisture adequate to excessive. Fieldwork: 2.0 days suitable. Acreage plowed 80%, 82% 1976. Cotton 13% planted, 32% 1976, 18% average. Rice 45% planted, 68% 1976. Corn 62% planted, 64% 1976, 34% average; 34% up to stand, 30% 1976. Winter wheat 97% jointing, 96% 1976; 32% headed, 72% 1976. Oats 94% jointing, 96% 1976; 40% headed, 70% 1976. Crops in good to fair condition.

MISSOURI: Temperatures 5 to 9° above normal. High temperatures early week mid 80's dropped to low 60's by weekend. Precipitation averaged 1.00 to 3.00 in.

Fieldwork: 3.5 days suitable. Plowing 92% complete, 93% last year. Corn 35% planted, 43% last year, 22% normal. Cotton 17% planted, 26% last year, 6% normal. Soybeans planted, 3% last



year, 2% normal. Grain sorghum 6% planted, 7% last year. Wheat 4% headed, 17% last year. Pasture and wheat fair. Livestock fair. Soil moisture short to adequate.

**MONTANA:** Week began normal, ended hot and dry. Temperatures averaged 1 to 6° above normal. Maximums end of week 70's except 80's and 90's west. Scattered moisture except southwest and south central. Precipitation well below normal.

Topsoil moisture mostly short north, short to adequate south. Winter wheat fair to good. Winterkill light. About 40% spring wheat and barley seeded, 50% last year, 25% normal. Oat seeding 30% complete, 35% last year, 20% normal. Sugarbeets 65% planted, 40% last year, 35% normal. Field tillage well underway. Ranges growing many areas, still dormant in others. Calving 80%, lambing 75%, shearing 70% done.

**NEBRASKA:** Temperatures near normal. Precipitation 0.50 to 2.00 in.

Fieldwork slowed due to showers. Topsoil moisture adequate. Subsoil moisture short to adequate. Winter wheat mostly fair to good condition. Over 85% of barley and 80% oats planted. Corn planting started on very small scale. Pasture and range feed supplies short to adequate. Calving continues.

**NEVADA:** Warm and dry. Weak storms produced high clouds north, mostly clear south. No precipitation. Temperature extremes: 11 and 95°.

Alfalfa haying gaining momentum southern valleys. Livestock movement to summer ranges slow. Some small grain seeding south.

**NEW ENGLAND:** Morning lows near normal through 19th and increased to some 20 to 30° above

normal by 22d. Sharply lower temperatures 23d. Substantial rainfall exceeded 2.00 in. and in some cases went over 3.00 in.

**NEW JERSEY:** Temperatures averaged 4 to 10° above normal. Extremes: 31 and 87°. Rainfall averaged 0.99 in. north, 0.53 in. central and 0.32 in. south. Soil moisture in percent of field capacity averaged 94% north, 76% central and 64% south. Soil temperature averaged: 54 to 56° north and central and 58 to 62° south.

Dry conditions alleviated by weekend rains. Apple trees approaching full bloom. Planting sweet corn and snapbeans underway. Asparagus harvesting began. Strawberries blooming.

**NEW MEXICO:** Wet with widespread showers through 21st, slight drying 22d and 23d and showers again 24th. Very little rain west of Continental Divide.

Widespread rains beneficial to ranges and crops. Dryland wheat, fair. Irrigated wheat, durum wheat, alfalfa, barley, lettuce, onions, fair to good. Wheat, barley 70% jointed. Cotton less than 20% planted. Corn planting getting underway. Apples blooming in north central. Ranges, livestock, fair to good.

**NEW YORK:** Temperatures in 50's, 3 to 12° above normal. Extremes: 15 and 86°. Mostly late week precipitation ranged from 0.50 in. to 4.00 in.

Widespread plowing and planting underway, conditions favorable. Oat plantings variable, 30% complete. Corn planting beginning. Sweet corn, onion planting progressing, moisture adequate. Long Island potatoes 60% planted, Upstate starting. Limited cabbage, snapbean, and lettuce activity. Orchard planting and spraying in progress. Vineyard pruning, tying, fertilizing, spraying underway. Apples 0.50 in. green to pink. Peaches, sweet and

tart cherries in full bloom. Concord shoots 0.50 to 1.00 in. long.

**NORTH CAROLINA:** Temperatures 5 to 10° above normal. Precipitation below normal.

Soil moisture short to adequate. Fieldwork: 5.5 days suitable. Farm activities: Planting corn, cotton, peanuts, sorghum, soybeans and setting tobacco. Condition of tobacco plant beds, Irish potatoes, pasture and truck crops mostly good. Wheat and rye fair to good. Barley, oats and tobacco in the fields mostly fair. Planting: Corn 70% complete, 1976 70%, average 42%; cotton 29%, 1976 35%, average 22%. Transplanting: tobacco 16% complete, 1976 27%, average 20%.

**NORTH DAKOTA:** Temperatures 2 to 7° above normal. Extremes: 21 and 81°. Precipitation below normal except southeast, which was near normal.

Small grain seeding 10 to 15% complete. Row crop seeding just beginning. Livestock fair to good condition.

**OHIO:** Needed precipitation received 22d through 24th, heavy thunderstorms west. Amounts 5.01 to 0.48 in. Very warm through 21st, record highs north. Extremes: 88 and 41°.

Planting completed: Corn 20%, equal 1976, 5% normal; oats 80%, 90% 1976, 60% normal; sugarbeets 85%, 90% 1976, 60% normal; potatoes 50% 1977 and 1976, 30% average. Tobacco beds sowing virtually complete. Average wheat height 6 in., 8 in. last year. Apples, peaches, tart cherries now full bloom 2 to 3 weeks ahead of schedule, very susceptible to freeze. Oats, sugarbeets beginning to emerge. Wheat, oats, pasture, clover, alfalfa fair to good. Soil moisture supplies adequate. Fieldwork: 6 days suitable.

**OKLAHOMA:** Temperatures below normal except northeast and ranged from 6° below normal in Panhandle to 2° below normal in southeast. Northeast averaged normal. Substantial rainfall averaging 1.66 to 0.50 in.

Beneficial rains and cool weather brought wheat condition up to good to fair level. Over 90% crop now jointing and near 33% crop heading, 7 points behind year ago but several days ahead of 20% average. Insect problems continue some areas. Oats and barley in good to fair condition, with 90% crop jointing and near 25% heading. Corn planting slow with under 20% crop planted but near average for date. Condition fair to good. Under 5% sorghum acres planted. Seedbed preparation for row crops made modest progress but progress about same as year earlier at 50 to 65%. Few early fields alfalfa cut. Pecans started blooming, condition mostly good. Ranges improved with rainfall but lots of weeds, rated good to fair. Cattle in good condition with better feed and weather.

**OREGON:** Precipitation along coast ranged from trace to 0.65 in. Willamette Valley 0.05 to 0.23 in., 0.10 or less. Extremes: 80's, 30's, west; 70's, teens, east.

Soil moisture short to adequate, west; short, east. Fall seeded crops fair to good condition, west; poor to fair conditions east. Spraying, fertilizing fall grains. Spring land preparation, seeding nearly completed. Seeding alfalfa, red clover. Cherries, pears, apples, strawberries in bloom. Filberts, walnuts developing normally. Bush beans, broccoli, beets, cauliflower, onions, potatoes being planted. Asparagus, salad vegetables being harvested. Range and pasture forage in fair to good condition, west;

poor to fair condition east. Feed supplies low in some areas, stock water becoming limited. Livestock in fair to good condition.

**PENNSYLVANIA:** Sunny and warm through 22d, cloudy with rain weekend. Temperatures 10 to 15° above normal. Considerably cooler weekend. Extremes: 38 and 87°. Rain 0.50 in. or less southeast and southwest to more than 3.00 in. extreme northeast and northwest. Elsewhere 1.00 to 2.00 in. common.

Fieldwork: 6 days suitable. Moisture mostly adequate to short. Activities: Plowing; spreading lime and fertilizer; orchard pruning and spraying; grape trimming and tying; planting oats, potatoes, alfalfa, some corn. Plowing 61%, behind last year's 74%. Oats 54%, last year 70%. Potatoes 25%, last year 38%. Corn under 5%, last year 7%. Hay condition mostly good. Feed from pastures mostly average to below. Peaches 41% pink, 35% full or past. Cherries 27% pink, 48% full or past. Apples 29% pink, 23% full or past.

**PUERTO RICO:** Island average rainfall 0.89 in. or 0.22 in. below normal. Temperatures averaged about 79° on coasts and 74° interior. Extremes: 94 and 58°.

Light rains increased surface water supplies only slightly. Light showers helped cultivation and preparation of soil for spring planting sugarcane. Showers favorable formation coffee bean. Good weather for tobacco harvest and shed drying. Rains favorable for recuperation and planting of pastures although some southern and western areas continue dry.

**SOUTH CAROLINA:** Temperatures above normal. Rainfall above normal northwest and central while somewhat below normal elsewhere.

Moisture and plant condition in tobacco plant beds fair. Stands fair to good. Corn good to excellent. Some cultivation already started. Cotton fair. Some farmers starting to plant soybeans. Other activities: Transplanting tomatoes; thinning cucumbers, tomatoes and squash; spraying vegetables for insects. Corn planted: 90% 1977; 84% 1976; 64% average. Cotton planted: 66% 1977; 50% 1976; 30% average. Tobacco planted: 72% 1977; 90% 1976. Peanuts planted: 27% 1977; 36% 1976. Watermelons planted: 98% 1977; 91% 1976.

**SOUTH DAKOTA:** Seasonal precipitation averaging above normal. Rainfall varied from 0.75 to 2.73 in. east, elsewhere trace to 0.40 in. Temperatures below freezing several nights, averaged to 6° above normal.

Fieldwork slightly ahead of normal, delayed temporarily by rain. Percent seeded: Oats 63%, 1976 92%, normal 54%; spring wheat 60%, 1976 94%, normal 51% barley 52%, 1976 91%, normal 47%. Spring plowing 42% complete, 1976 63%, normal 32%. Corn planting just beginning. Winter wheat poor to fair, with spot reseeding. Rye fair to good. Wet weather causing some calf scours problems, southwest and south central. Pastures improving, need warmer weather.

**TENNESSEE:** Temperatures averaged 4 to 8° above normal. Rainfall averaged 2.00 to 4.00 in.

Plowing 85% complete. Corn 50% planted, cotton 15%. Tobacco condition good. Wheat and oats in fair condition, wheat beginning to head. Snap bean planting progressing, fruit prospects promising. Pastures in fair condition. Cattle good. Face flies a problem.

**TEXAS:** Heavy thunderstorm activity early, fair behind cold front 21st. Rainfall normal far south,

west, Panhandle, Coastal Bend; above normal south plains, Edwards Plateau, south central, northeast. Temperatures below normal northwest, east, Edwards Plateau, north. Above normal Trans-Pecos, upper, middle coastal plains, Lower Rio Grande Valley. Soil temperature 70's Trans-Pecos, south, east; 60's rolling plains, Cross Timbers, Blacklands; 50's High Plains.

Moderate heavy rains halted planting. Moisture supplies adequate most areas. Heavy rain cool. Some replanting cotton sorghum necessary. High and Low Plains rains improved planting conditions of spring row crops and boosted prospects dryland wheat. Cotton planting no progress. Early planted cotton Blacklands, Upper Gulf Coast up to stand, some fields damaged heavy rains may need replanting. Some fields cotton Lower Rio Grande Valley damaged or destroyed by hail. Soil moisture adequate, planting dryland cotton High Low Plains. Corn planting, behind last year due to cool, wet weather northern southern High Plains. Some early planted corn High Plains up to stand. Sorghum planting ahead of average, although little planting progress. Early planted sorghum emerging Cross Timbers. Some replanting may be necessary southern High Plains and northern Low Plains. Hail destroyed few fields Lower Rio Grande Valley, remaining fields excellent growth. Wheat northern High Low Plains responded favorably. Some light hail damage reported southern Low Plains. Wheat jointing northern High Plains, boot stage headed out Low Plains southward. Rice planting on schedule. Some flooding of rice fields in upper coast area. Cotton planted: 11% 1977, 22% 1976, 20% average. Corn planted: 36% 1977, 73% 1976, 72% average. Sorghum planted: 55% 1977, 56% 1976, 51% average. Peanuts planted: 19% 1977, 13% 1976, 13% average. Rice planted: 87% 1977, 92% 1976, 88% average. Sugarbeets planted: 83% 1977, 100% 1976, 99% average.

Rains slowed harvests of onions, cabbage, carrots, citrus. Some fields received hail and rain damage. Peach trees in central areas set excellent crop. Fruit in south maturing rapidly, showing good color.

Livestock generally good condition. Ranges improved, responding to rains. Most areas have adequate grazing.

UTAH: Few isolated showers, accumulated moisture very light. Average temperatures variable ranging from 6° below normal to 5° above.

Soil moisture deficit extremely serious. Dry, warm weather pushed crop growth where moisture adequate. Short soil moisture limited growth non-irrigated winter wheat, pastures and ranges. Winter wheat condition mostly poor to fair. Spring grain and sugarbeet planting 80% complete; field and sweet corn planting started. Pasture and range feed supplies poor to fair, mostly poor. Supplemental feeding continues. Calving 80% done, shearing, 60% and lambing range sheep 35%.

VIRGINIA: Temperatures well above normal. Extremes: 88 and 36°. Rainfall averaged 0.25 to 0.50 in. with hail at some locations.

Topsoil moisture short. Corn 34% planted, 34% in 1976, 18% average. Wheat fair condition. Pasture and hay good condition. Small amount of hay cut. Liming, fertilizing, spraying for alfalfa weevil, and land preparation common activities. Livestock good condition. Soybean and peanut planting beginning. Some tobacco plantbeds irrigated. Later blooming apple varieties doing well. Eastern Shore tomato, snap bean, and cucumber plantings underway. Potatoes in good condition.

WASHINGTON: West: Temperatures averaged 1 to 4° below normal. Precipitation averaged below normal.

Farmers planting green peas, spinach, lettuce, broccoli, field corn. Pastures making normal growth. Livestock turned on to green chop.

East: Temperatures averaged 3 to 5° subnormal. Precipitation averaged 0.20 in. below normal.

Frost control necessary but damage slight. Orchardists irrigating, chemically and hand thinning apricots, peaches, apples. Spraying cover crop to conserve moisture. No moisture stress in orchards. Asparagus cutting increased. Hop twinning underway. Low temperatures, high winds put stress on dryland crops and pasture. Winter wheat varies from good to fair. Seeding green peas, lentils, wheat, barley, dried peas, alfalfa, pastures.

WEST VIRGINIA: Temperatures above average; highs, upper 80's, lows, 30's. Rainfall very light and spotty.

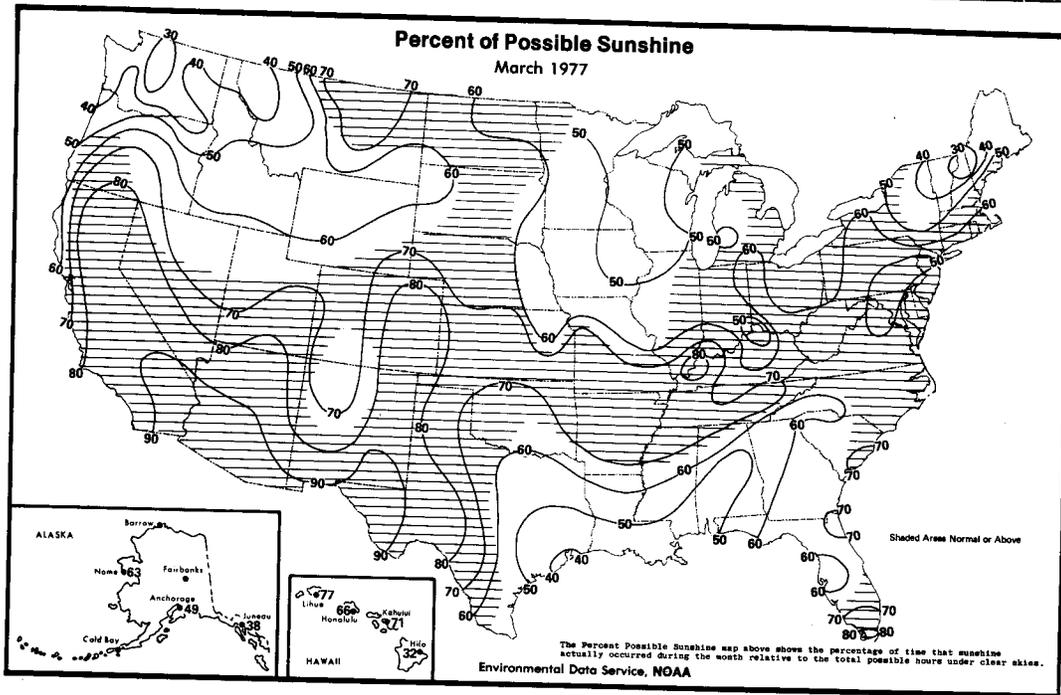
Fieldwork: 5.8 days suitable. Soil moisture short. Planting progress: Potatoes, 65% complete, 87% 1976, well above average; oats 53% complete, 73% 1976, slightly ahead average; corn less than 10%; tobacco beds virtually complete. Crop conditions generally fair to good. Wheat good to fair. Barley fair. Pastures fair. Hay fair. Peaches fair. Apples good to fair.

WISCONSIN: Temperatures 10° above normal. Highs in 70's and 80's until 21st, then cooler temperatures and rain. Sunny and pleasant again 22d and 23d. Cloudy and cool 24th with highs in 40's and 50's. Rainfall totals near 1.00 in. or better.

Oats seeding 50% completed, 1976 38%, normal 22%. Early oats up. Winter wheat and rye growing good. Spring plowing 40% done, 1976 32%, normal 20%. Corn planting 1% completed, 1976 1%, normal none. Early sweet corn up. Potatoes, peas, and cabbage being planted. Tobacco beds being steamed and seeded. Fruit trees in early bloom. Hay fields and pastures growing rapidly. Some cattle out on grass. Soil moisture adequate.

WYOMING: Temperatures slightly above normal. Light precipitation.

Topsoil moisture short southern areas, adequate elsewhere. Most spring plantings behind normal. Spring wheat planted 28%, oats planted 35%, barley planted 58%, sugarbeets planted 45%. Barley acreage 29% emerged. Winter wheat prospects fair to good, some areas significant winterkill. Spring calving 75% completed; lambing and shearing progressing normally. Movement to summer range begins early May.



## World Weather and Crop Update

**USSR.** Moderate to heavy precipitation was general throughout European USSR during the reporting period. Spring field work was held up by incessant rains over the past three weeks in the Baltics, Bielorussia, and the western Ukraine. For the second successive week excellent rains were recorded in the southern and eastern Ukraine and in the lower Volga Valley, greatly improving the moisture situation in those areas. Heavy precipitation fell in the North Caucasus; Rostov and Krasnodar reported 45 mm and 40 mm, respectively. Sowing of row crops was held up somewhat in some North Caucasus areas. Smallest amounts of precipitation were in the Upper and Middle Volga regions and in the Urals. Soil moisture conditions were good to excellent throughout the principal winter grain areas in the USSR, perhaps even excessive in some localized areas. Light precipitation fell over the principal agricultural regions in western and eastern Siberia and north Kazakhstan where sowing of spring wheat will soon be underway.

**ASIA.** In the People's Republic of China, there has been some improvement in the drought-stricken winter wheat areas in the north. Many areas in the provinces of Hopeh, Shantung and northern Honan--the heart of the drought area--received moderate to heavy rainfall with more than an inch recorded in some places. Precipitation was sparse in Manchuria, a key area producing spring wheat, soybeans, and coarse grains, and in the extreme south in Kwangtung, the PRC's most important rice-producing province where transplanting of the early rice crop was adversely affected in some places because of the shortage of irrigation water. Dryland crops also were suffering from the shortage of rainfall in this province. Moderate to heavy showers have fallen over widespread areas in India with heaviest amounts in the extreme northeast and in the south. Temperatures in the 90's and low 100's are common throughout that country. In Australia, widely scattered, light showers fell on the principal grain areas. Sowing of winter grains will soon be commencing; soil

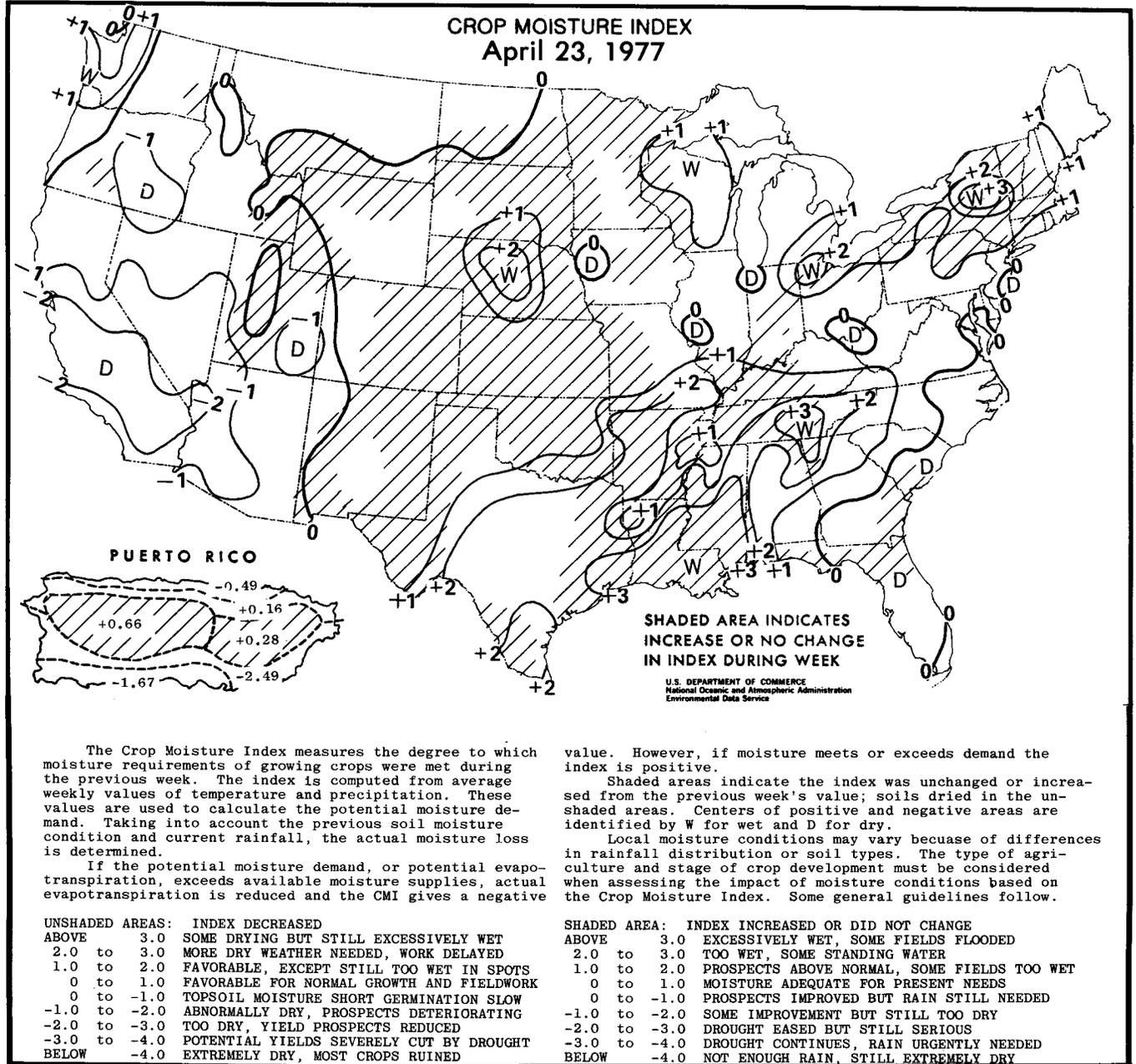
moisture conditions were generally good in Queensland, New South Wales and Victoria. Moisture conditions were considerably poorer in west and south Australia, however, where precipitation was below normal for several months.

**AFRICA.** In North Africa heavy rains have fallen over the wheat growing areas of Algeria and Tunisia, but Morocco was dry during the reporting period. Light, spotty showers fell over the principal agricultural regions in South Africa as the corn harvest season draws near.

**SOUTH AMERICA.** Generally dry weather with above normal temperatures favored the corn harvest and the planting of winter grains in Argentina. In Brazil, the southern states had a respite from the heavy precipitation that plagued these areas in recent weeks. Heavy precipitation fell over parts of the southeast states with Rio de Janeiro recording almost 4 inches of rainfall during the reporting period.

**EUROPE.** Seasonal temperatures have returned to western Europe, but persistent almost daily light rains continue to hamper field operations with spring sowing behind schedule in many areas. The unseasonably cold weather during the first half of April damaged vineyards, deciduous fruits, vegetables and some other crops in western Europe; farmers returned to barn feeding of livestock in some areas. Mediterranean areas of France were generally dry. Moderate to heavy showers fell across the northern half of Spain--Barcelona recorded 27 mm of rainfall--but the remainder of that country received only very light precipitation. Rainfall was scattered and light throughout Italy, bringing a welcome relief in the important Po Valley where persistent rains in recent weeks have hampered field operations and spring sowing. In eastern Europe, light to moderate precipitation fell throughout this entire region with the

(continued on page 12)



The Crop Moisture Index measures the degree to which moisture requirements of growing crops were met during the previous week. The index is computed from average weekly values of temperature and precipitation. These values are used to calculate the potential moisture demand. Taking into account the previous soil moisture condition and current rainfall, the actual moisture loss is determined.

If the potential moisture demand, or potential evapotranspiration, exceeds available moisture supplies, actual evapotranspiration is reduced and the CMI gives a negative

value. However, if moisture meets or exceeds demand the index is positive.

Shaded areas indicate the index was unchanged or increased from the previous week's value; soils dried in the unshaded areas. Centers of positive and negative areas are identified by W for wet and D for dry.

Local moisture conditions may vary because of differences in rainfall distribution or soil types. The type of agriculture and stage of crop development must be considered when assessing the impact of moisture conditions based on the Crop Moisture Index. Some general guidelines follow.

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heaviest rainfall reported in Romania at 10 mm to 20 mm for the period. Greece also received light to moderate rainfall over the past week with 6 mm to 16 mm across the central and northern regions of that country. Crop prospects continue favorable in Turkey as light to moderate, locally heavy, showers fell over wide areas; the western and southern half benefitted most--Konya and Kaysperi reported 33 mm and 36 mm, respectively.

**NORTH AMERICA.** The outlook for the hard winter wheat crop in the United States continued to

improve during the reporting period as excellent rains--1-2 inches, generally--fell throughout most of the plains states including South Dakota. Moisture-deficient North Dakota, an important spring and durum wheat state, however, did not share in last week's rainfall. Only light, spotty showers were reported for the adjacent spring wheat areas in the prairie provinces of Canada where a severe moisture deficit also prevails at this time. There was no improvement in the severe drought situation in California and in the Pacific Northwest.

**PLANTING PROGRESS**

Percent of Acreage Planted as of April 24

CORN				SPRING WHEAT				COTTON			
	1977	1976	Avg.		1977	1976	Avg.		1977	1976	Avg.
Ga.	88	83	49	Idaho	65	30	NA	Ala.	42	54	36
Ill.	15	24	11	Minn.	51	61	29	Ark.	15	26	15
Ind.	10	20	0	Mont.	40	50	25	Ga.	50	58	25
Iowa	5	6	1	N. D.	20	30	18	La.	17	17	NA
Kans.	10	20	10	S. D.	60	94	51	Miss.	13	32	18
Ky.	28	41	14					Mo.	17	26	6
Mich.	4	5	1	5 States	37	49	27	N. C.	29	35	22
Minn.	0	0	0					Okla.	0	0	0
Mo.	35	43	22					S. C.	66	50	30
Nebr.	1/	NA	NA					Tenn.	15	40	14
N. C.	70	70	42					Texas	11	22	20
Ohio	20	20	5								
Penn.	1/	7	NA					11 States	15	26	18
S. D.	1/	NA	NA								
Texas	36	73	72								
Wisc.	1	1	0								
U. S.	16	21	10								

These 5 States produced 96% of the 1976 U. S. spring wheat crop other than durum.

1/ Less than 5%.  
 NA Not Available

These 11 States produced 69% of the 1976 U. S. cotton crop.

These 16 States produced 92% of the 1976 U. S. corn crop.