

# WEEKLY WEATHER AND CROP BULLETIN

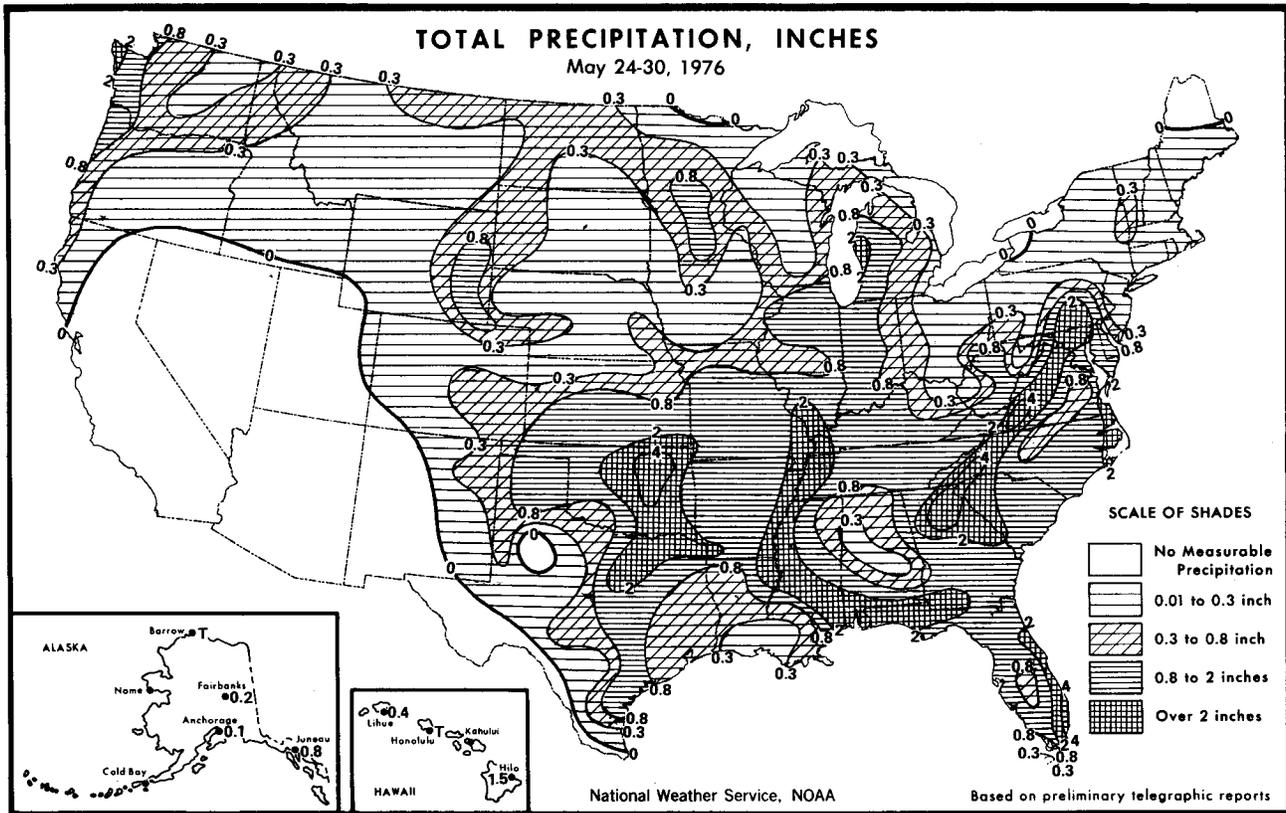
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## National Weather Summary

For the week of May 24-30

**HIGHLIGHTS:** Unseasonably cool weather dominated most of the Nation during the week except for the Great Basin and northern portions of the Plains and upper Great Lakes region. Thunderstorms--at times severe--that lashed the Southeast and central U.S. before subsiding at the end of the week contrasted little or no precipitation across much of the Southwest. Large hail and tornadoes accompanied storm activity in central Texas.

The Gulf storm that cut a path across the Southeast over the weekend thundered out to sea on Monday, bringing an end to heavy precipitation in the area. Charleston, S.C. scored the highest 24-hour precipitation total, 5 1/2 inches of rain. Meantime, a frontal system branching off from the storm into the Mississippi Valley generated the other significant moisture area.

Most daytime precipitation occurred as showers and thundershowers in Arkansas and from central

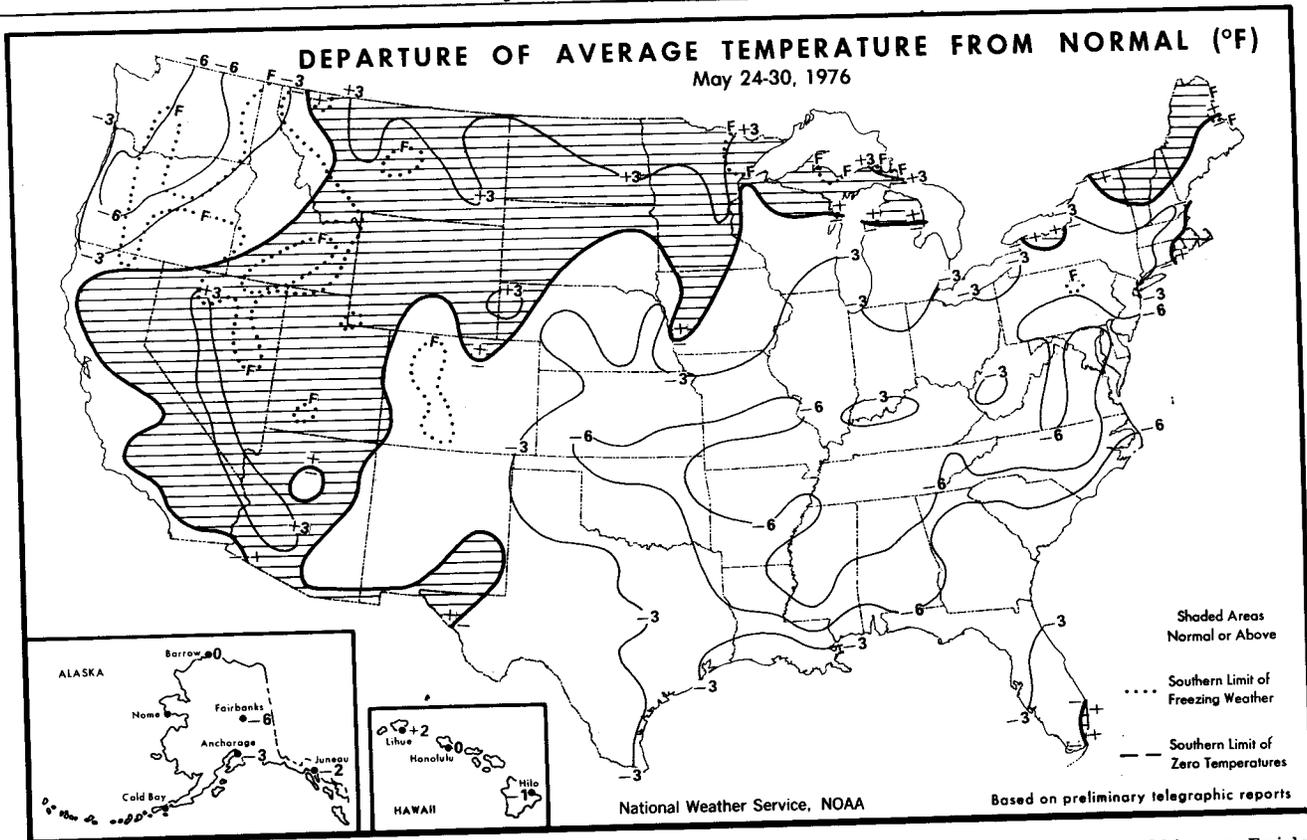
Mississippi into southern Louisiana. Some rain and drizzle lingered over central Kansas and parts of Nebraska, Missouri, and Idaho. In addition, rain was associated with a cold front along the northwest Pacific Coast.

During the day showers and thunderstorms were scattered in a broad band from Ohio and New York southward through the Carolinas, Georgia, and Florida.

A far reaching storm area moved across the western Great Plains. The most intense rainfall was focused on north central and northwest Texas. Lines of strong thunderstorms moved across Texas, prompting the issuance of a tornado watch. Around Amarillo, golf ball size hail fell, accumulating up to a foot in depth in places.

Light rain and showers persisted across the northern Rockies, lower Great Lakes region, and upper Ohio Valley.

High pressure centers cleared Wednesday morning



skies amid cool temperatures from the western Great Lakes region into the southern Appalachians. In upper Michigan the mercury hovered near or below freezing.

Widespread thunderstorm activity in south central U.S. encompassed an area from the eastern two-thirds of Texas northward into Kansas and from Missouri and Arkansas into Mississippi and Alabama. In central Texas the most severe activity spawned 22 of the 23 tornadoes reported across the Nation. Two fatalities and seven injuries were the outcome of one twister that struck a mobile home in central Texas. Large hail accompanied the almost countless thunderstorms that lashed central and eastern Texas and spread into sections of northern Louisiana and southwest Arkansas.

Elsewhere a weak weather disturbance generated some showers along the northern Pacific Coast. A few showers drizzled across the High Plains from Texas to North Dakota.

On Thursday the Pacific cold front triggered showers and thunderstorms ahead of it as it churned through the northern and central Plateau region and northern Rockies. Behind the front, most rainfall came to an end, though skies stayed cloudy.

In the evening lines of eastward moving thunderstorms dropped large hail on eastern and central Nebraska. Stormy conditions ranged from these sections of Nebraska into the Dakotas and Minnesota. End-of-day showers also turned up in the middle Mississippi and lower Ohio Valleys.

Most of the Nation east of the Rockies basked

under temperatures in the 70's and 80's on Friday, though readings in some interior sections of the Southwest pushed towards the 100° mark.

Locally heavy and severe thunderstorms zeroed in on the Southeast and upper Mississippi Valley. Several tornadoes touched down in portions of Georgia and Tennessee.

Persistent thundershowers on Saturday paved the way for a wet weekend from northern Georgia northward into New England.

Except for some widely scattered showers from eastern Montana into central Colorado, dry conditions prevailed across western U.S. Associated with these isolated rainy spots, a dozen tornadoes struck central parts of the Nation. Five twisters gave Colorado the biggest share.

On Sunday rains finally subsided in the Southeast, though a few morning thundershowers still lingered over southern Florida. Along a stationary frontal system, showers and thundershowers were scattered from the Great Lakes region into Texas.

Only about a third of the Nation looked out on fair skies at the end of the week. Sunshine brightened the upper two-thirds of the Missouri Valley and northern Plains. In the Southwest clear skies stretched across the Great Basin, southern New Mexico, and sections of Texas. Another lucky area ranged from South Carolina and Florida through the lower Mississippi Valley in the Southeast.

Sunday evening, heavy thunderstorms struck the Tulsa, Oklahoma area dropping 10 in. or more in less than four hours. Damage was estimated to be 12 million dollars.

## National Agricultural Summary

For the week of May 24-30

**HIGHLIGHTS:** Rain and unseasonably cool temperatures delayed fieldwork and slowed crop development in the eastern half of the Nation. Small grain combining advanced northward into Oklahoma, Arkansas, Kentucky, and South Carolina. Corn planting was nearly complete with most of the planting that remained unfinished in Michigan and New York. Cotton planting was complete except in Oklahoma and Texas where cool, wet weather delayed planting of some fields and replanting of others. Soil moisture was short in many of the North Central States, several of the middle Atlantic States, and some Mountain States, particularly California. Elsewhere soil moisture was adequate to surplus. Pastures generally improved except in drought-stricken areas of California.

**SMALL GRAINS:** Farmers finished seeding the spring wheat crop. Maturity of some earlier spring grains ranged from boot to starting to head. Barley harvest was underway in several States, including Kentucky. Combining of the winter wheat crop extended into Oklahoma, Arkansas, South Carolina, and California. In some of the South Central States rainy weather interrupted harvest operations. In Oklahoma, subnormal temperatures and wet fields slowed small grain maturity and stopped combines in southern areas. Wet conditions hampered combining in Texas, where the wheat harvest stood at 3% complete, a point less than last year and far behind 10% average. Scattered rains aided wheat development in Kansas, where 95% of the crop was headed, compared with 90% last year and average. About 5% of the Kansas crop was turning color, compared with none last year and 10% average. As winter wheat conditions improved in Nebraska, 95% of the crop reached the jointed stage, 5 points ahead of last year and 50% was headed, 10 points above the 1975 level.

**CORN:** The U. S. corn crop was 96% planted, compared with 95% in 1975 and 86% average. In the eastern North Central States 97% of the crop was in the ground, the same as last year but far ahead of 78% average. Planting in the west North Central States was 97% complete, compared with 95% a year earlier and 91% average. In Illinois the crop was in good condition. In Indiana 85% of the corn crop had emerged and averaged 4 inches high, double last year's growth and 4 times the average. Weather favored corn emergence in Iowa, where planting was virtually complete; 92% of the crop was up compared with 85% last year and 72% average. As a percent of full stand corn plantings were 93%, same as last year. Weed control was good in most fields as cultivation began. In Minnesota, 90% of the corn was up, 70% in 1975 and 63% average; average height measured 4 inches. Cool weather slowed crop development in Michigan, Tennessee, and Wisconsin.

**COTTON:** Subnormal temperatures reduced germination and deteriorated condition of the cotton crop across most of the South. Much replanting was necessary and as the season progressed too far some acreage was diverted to soybeans. Nationwide, 88% of the crop was planted, 83% last year and 82% average. Planting was complete in all States, except Oklahoma, 60% complete and

Texas, 78% finished. In Oklahoma, planting was double last year's pace, but much replanting will be required. In Texas wet fields delayed planting and seeded fields need warmer temperatures for germination.

**SOYBEANS:** Planting of the U. S. soybean crop was 72% complete, compared with 62% in 1975 and 50% average. In the east North Central States, 88% of the crop was planted, up from 81% in 1975 and 45% average. Planting in the west North Central States was 77% complete, 67% last year and 59% average. In the South Central States 56% of the crop was sown, 39% last year and 43% average. Farmers turned their attention to planting the soybean crop as corn planting operations ended.

**OTHER CROPS:** Sorghum planting advanced to 57% complete, compared with 61% in 1975 and average. Planting in most major States generally lagged previous years' progress. In Texas, farmers delayed planting, hoping for rain in some areas of the High Plains. Flue-cured tobacco transplanting neared completion in North Carolina; Virginia reached 82% and Maryland, 35%. Condition of the Georgia crop declined, ranging from poor to good. Farmers sprayed to control suckers and insects. Burley tobacco was 60% set in North Carolina, 46% in Kentucky, and 55% in Virginia.

Peanut planting was nearly complete, except in Oklahoma where only 31% of the crop was planted. In Georgia, crop condition declined but remained fair to good.

Irish potato planting in Maine was 10% complete and in Idaho 75% of the crop was in the ground. Harvesting continued in Southern States.

Rice planting was complete, except in Arkansas, where only a few late fields remain unplanted. Rains prevented timely application of herbicides in Arkansas.

**FRUITS AND NUTS:** Apple and peach drop was in progress in New England, New Jersey, and Maryland. Peach harvest continued across the South and in California. Other fruits harvested in California included apricots, plums, nectarines, and Bing cherries. Valencia orange and grapefruit picking increased in California and Arizona. Rains improved condition of the Florida citrus groves and produced abundant new growth.

**VEGETABLES:** Cool weather slowed early development in some northern areas. Early harvests of spring vegetables were in progress in New Jersey. In Florida, spring vegetable harvest declined seasonally as frequent rains interrupted harvest and increased cullage. In Texas and California, harvests of vegetables and melons were active.

**PASTURES AND LIVESTOCK:** Pastures and rangelands were in good condition and provided increased forage supplies in many areas, except in California, where rangeland at higher elevations showed stress and fires posed a potential threat. Alfalfa harvest was underway where conditions permitted. First cuttings ranged from just beginning to 85% complete. Cattle were in good condition, but in California culling was heavy.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., May 30, 1976

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 . . .	67	-6	.3	-.5	La. Baton Rouge . . .	74	-3	.2	-.7	Youngstown . . .	57	-4	.2	-.6
Mobile . . .	74	-3	5.8	+4.7	Lake Charles . . .	75	-2	.1	-1.0	OKLA. Okla. City . . .	67	-4	2.2	+1.0
Montgomery . . .	68	-7	.1	-.7	New Orleans . . .	74	-3	.6	-.4	Tulsa . . .	66	-6	4.8	+3.6
ALASKA. Anchorage . . .	47	-3	.1	0	Shreveport . . .	69	-7	.6	-.4	OREG. Astoria . . .	51	-3	1.3	+ .7
Barrow . . .	26	0	T	-.1	MAINE. Caribou . . .	56	+2	T	-.7	Burns . . .	52	-2	.1	-.2
Fairbanks . . .	47	-6	.2	0	Portland . . .	55	-1	T	-.7	Medford . . .	55	-5	.6	+ .3
Juneau . . .	47	-2	.8	+ .1	MD. Baltimore . . .	61	-5	2.3	+1.5	Pendleton . . .	55	-6	1.0	+ .5
Kodiak . . .	---	---	---	---	MASS. Boston . . .	62	0	T	-.8	Salem . . .	50	-5	.5	+ .1
Nome . . .	---	---	---	---	Chatham . . .	55	-1	T	---	PA. Allentown . . .	59	-5	.3	-.5
ARIZ. Flagstaff . . .	52	-1	0	-.1	MICH. Alpena . . .	56	+2	.2	-.4	Erie . . .	56	-2	T	-.8
Phoenix . . .	82	+3	0	0	Detroit . . .	59	-3	.2	-.6	Harrisburg . . .	59	-5	2.1	+1.3
Tucson . . .	76	-1	0	0	Flint . . .	59	-1	.7	0	Philadelphia . . .	62	-5	.3	-.5
Winslow . . .	67	+1	0	-.1	Grand Rapids . . .	60	-1	1.6	+ .9	Pittsburgh . . .	57	-6	.4	-.4
Yuma . . .	80	-1	0	0	Houghton Lake . . .	56	-2	.4	-.4	Scranton . . .	57	-5	.1	-.7
ARK. Fort Smith . . .	67	-6	1.6	+ .4	Lansing . . .	59	-2	.4	-.4	R.I. Providence . . .	61	+1	T	-.7
Little Rock . . .	67	-6	1.6	+ .5	Marquette . . .	54	+1	.3	-.4	S.C. Charleston . . .	70	-5	1.2	+ .1
CALIF. Bakersfield . . .	74	+2	0	0	Muskegon . . .	58	-1	2.2	+1.6	Columbia . . .	69	-6	1.0	+ .2
Eureka . . .	52	-2	.4	0	S. Ste. Marie . . .	57	+4	.1	-.6	Greenville . . .	64	-8	3.2	+2.5
Fresno . . .	68	-2	0	0	MINN. Duluth . . .	53	0	T	-.9	S.D. Aberdeen . . .	61	+2	.1	-.6
Los Angeles . . .	63	-3	0	0	Internat Falls . . .	59	+5	T	-.7	Huron . . .	59	-2	.2	-.5
Red Bluff . . .	72	+2	0	-.2	Minneapolis . . .	64	+3	.7	-.2	Rapid City . . .	59	+1	.5	-.2
San Diego . . .	---	---	---	---	Rochester . . .	60	0	.2	-.7	Sioux Falls . . .	60	-1	0	-.9
San Francisco . . .	57	-3	T	0	St. Cloud . . .	60	+1	.9	-.1	TENN. Chattanooga . . .	65	-6	1.1	+ .4
Stockton . . .	68	0	0	0	MISS. Jackson . . .	70	-5	2.8	+1.9	Knoxville . . .	64	-7	1.6	+ .8
COLO. Denver . . .	60	0	.3	-.3	Meridian . . .	66	-9	1.4	+ .6	Memphis . . .	68	-6	2.8	+1.9
Grand Junction . . .	65	-1	T	-.1	MO. Columbia . . .	63	-5	.8	-.3	Nashville . . .	67	-5	2.0	+1.1
Pueblo . . .	62	-2	.3	-.1	Kansas City . . .	63	-5	1.0	-.1	TEX. Abilene . . .	75	0	.1	-.7
CONN. Bridgeport . . .	59	-3	.1	-.6	St. Louis . . .	63	-6	2.0	+1.1	Amarillo . . .	65	-4	1.1	+ .3
Hartford . . .	60	-2	.1	-.7	Springfield . . .	62	-6	1.8	+ .7	Austin . . .	74	-4	2.0	+1.1
D.C. Washington . . .	65	-5	1.4	+ .6	MONT. Billings . . .	59	-2	.2	-.4	Beaumont . . .	76	-1	.4	-.7
FLA. Apalachicola . . .	72	-5	.8	+ .1	Glasgow . . .	60	+3	.4	0	Brownsville . . .	78	-3	T	-.7
Daytona Beach . . .	75	-2	2.5	+1.6	Great Falls . . .	60	+4	.2	-.5	Corpus Christi . . .	77	-3	1.8	+1.1
Ft. Myers . . .	77	-2	.9	-.4	Havre . . .	61	+3	.3	-.1	Dallas . . .	---	---	---	---
Jacksonville . . .	73	-3	1.1	+ .2	Helena . . .	56	+1	.2	-.3	Del Rio . . .	78	-2	T	-.6
Key West . . .	81	-1	T	-.7	Kalispell . . .	53	0	.4	-.1	El Paso . . .	75	0	0	-.1
Lakeland . . .	77	-2	.8	-.2	Miles City . . .	62	+3	.1	-.5	Fort Worth . . .	71	-4	2.4	+1.5
Miami . . .	79	0	4.7	+4.0	Missoula . . .	54	-1	.2	-.3	Galveston . . .	75	-3	.3	-.5
Orlando . . .	77	-1	1.6	+ .7	NEBR. Grand Island . . .	62	-2	.1	-.9	Houston . . .	75	-3	.5	-.7
Tallahassee . . .	74	-3	2.3	+1.2	Lincoln . . .	63	-3	.4	-.6	Lubbock . . .	71	-1	T	-.8
Tampa . . .	75	-4	1.2	+ .4	Norfolk . . .	63	-1	.3	-.7	Midland . . .	74	-1	.1	-.4
W. Palm Beach . . .	79	0	7.1	+5.6	N. Platte . . .	57	-5	.4	-.4	San Angelo . . .	75	-2	.1	-.5
GA. Atlanta . . .	68	-4	4.3	+3.5	Omaha . . .	64	0	.1	-.9	San Antonio . . .	76	-2	.2	-.5
Augusta . . .	69	-5	2.2	+1.4	Valentine . . .	60	-1	.3	-.4	Victoria . . .	76	-3	1.1	+ .2
Macon . . .	71	-5	.8	0	NEV. Ely . . .	55	+2	T	-.2	Waco . . .	74	-3	1.7	+ .8
Savannah . . .	71	-5	1.7	+ .6	Las Vegas . . .	79	+3	0	0	Wichita Falls . . .	72	-3	.6	-.4
HAWAII. Hilo . . .	73	-1	1.5	-.4	Reno . . .	59	+2	0	-.1	UTAH. Blanding . . .	61	+1	0	-.1
Honolulu . . .	78	0	T	-.2	Winnemucca . . .	60	+3	0	-.2	Salt Lake City . . .	63	+2	T	-.3
Kahului . . .	---	---	---	---	N.H. Concord . . .	56	-3	T	-.7	VT. Burlington . . .	61	+2	.3	-.4
Lihue . . .	78	+2	.4	-.1	N.J. Atlantic City . . .	56	-9	.2	-.6	VA. Lynchburg . . .	62	-6	2.4	+1.6
IDAHO. Boise . . .	59	-1	.1	-.3	Trenton . . .	61	-5	.2	-.6	Norfolk . . .	63	-7	2.2	+1.4
Lewiston . . .	57	-3	.4	0	N.MEX. Albuquerque . . .	68	-1	T	-.1	Richmond . . .	64	-5	.6	-.2
Pocatello . . .	59	+2	T	-.3	Roswell . . .	74	+2	.1	-.2	Roanoke . . .	62	-5	4.2	+3.4
ILL. Cairo . . .	68	-5	2.3	+1.1	N.Y. Albany . . .	58	-3	.3	-.8	WASH. Colville . . .	52	-5	.4	0
Chicago . . .	60	-4	1.4	+ .6	Binghamton . . .	55	-4	.1	-.8	Omak . . .	---	---	---	---
Moline . . .	61	-4	1.2	+ .3	Buffalo . . .	59	0	T	-.6	Quillayute . . .	49	-4	3.1	+2.2
Peoria . . .	62	-3	1.7	+ .9	New York . . .	63	-3	.8	+ .1	Seattle-Tacoma . . .	53	-4	.8	+ .4
Rockford . . .	59	-4	1.0	+ .1	Rochester . . .	60	0	T	-.6	Spokane . . .	52	-5	.3	-.1
Springfield . . .	63	-4	.4	-.4	Syracuse . . .	57	-4	T	-.7	Walla Walla . . .	57	-6	.5	+ .1
IND. Evansville . . .	66	-3	1.6	+ .6	N.C. Asheville . . .	61	-5	4.8	+4.0	Yakima . . .	52	-8	T	-.1
Ft. Wayne . . .	60	-3	.6	-.3	Charlotte . . .	66	-6	.8	+ .1	W.Va. Beckley . . .	58	-4	1.1	+ .2
Indianapolis . . .	62	-4	1.1	+ .1	Greensboro . . .	64	-6	.5	-.2	Charleston . . .	65	-2	.2	-.6
South Bend . . .	60	-2	1.6	+ .9	Hatteras . . .	66	-4	2.1	+1.2	Huntington . . .	65	-3	.4	-.4
IOWA. Burlington . . .	63	-3	.5	-.4	Raleigh . . .	67	-3	1.2	+ .4	Parkersburg . . .	62	-5	1.1	+ .3
Des Moines . . .	64	-1	.2	-.9	Wilmington . . .	68	-6	1.6	+ .6	WIS. Green Bay . . .	57	-1	.8	+ .1
Dubuque . . .	60	-2	.5	-.6	N.DAK. Bismarck . . .	60	+2	.3	-.3	La Crosse . . .	61	-2	.7	-.2
Sioux City . . .	62	-3	.2	-.7	Fargo . . .	61	+3	.4	-.2	Madison . . .	57	-3	T	-.9
KANS. Concordia . . .	62	-4	.3	-.8	Williston . . .	59	+2	.3	-.2	Milwaukee . . .	54	-4	.7	0
Dodge City . . .	62	-6	1.0	+ .2	OHIO. Akron-Canton . . .	57	-5	T	-.9	WYO. Casper . . .	57	+1	.6	+ .2
Goodland . . .	61	-2	.1	-.5	Cincinnati . . .	62	-5	.3	-.6	Cheyenne . . .	55	0	.8	+ .2
Topeka . . .	63	-5	.5	-.6	Cleveland . . .	59	-3	T	-.8	Lander . . .	58	+2	.1	-.5
Wichita . . .	64	-6	1.4	+ .5	Columbus . . .	61	-4	.1	-.9	Sheridan . . .	57	+1	.1	-.5
KY. Lexington . . .	63	-5	.5	-.5	Dayton . . .	61	-4	.7	-.2	P.R. San Juan . . .	---	---	---	---
Louisville . . .	65	-3	1.4	+ .4	Toledo . . .	58	-5	.4	-.4					

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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, NOAA.

**ALABAMA:** Cool with moderate rainfall. Temperatures 5° below normal. Moderate rain fell, generally less than 1.00 in. Fieldwork: 3 days suitable. Soil moisture adequate to surplus. Cotton planting virtually complete, some replanting. Condition reduced by low temperatures. Corn, good condition 96% planted, 94% 1975, 94% average. Soybean plantings slowed, 53% planted, 60% 1975, 59% average. Wheat harvest starting slow, 11% complete. Pastures fair to good.

**ALASKA:** Tanana Valley temperatures cooler than normal. Precipitation near normal in west but much wetter in east. Frost Matanuska Valley near middle week and temperatures below normal. Rain fell beginning and end of week with totals above normal. Kenai Peninsula precipitation negligible. Cloudy latter half but temperatures below normal throughout period. Frost around midweek. Kodiak warm, dry weather prevailed. Temperatures slightly above normal. Rain first of week but totals well below normal.

Cool temperatures slowed crop growth throughout Railbelt. Planting better than 50% completed in Fairbanks and Palmer areas. Little planting in clear water area and Kenai Peninsula. Ground moisture supply adequate. Soil temperatures 3 to 7° cooler than 1975.

**ARIZONA:** Temperatures 3° subnormal. Dry weather, low humidity. Few light showers, north.

Cotton planting complete except late cotton following wheat. Good progress; some insect problems. Irrigation started. Wheat harvest increasing. Barley harvest full swing. Grain sorghum planting limited scale, early fields boot stage. Harvest sugarbeets progressing, yields good. Alfalfa hay yields normal. Lettuce harvest full swing. Potato, dry onion harvest full swing, good yields. Harvest cantaloups underway. Valencia orange, grapefruit picking continued. Range conditions poor southwest desert, good central-eastern mountains. Stock water adequate. Cattle, calves good condition.

**ARKANSAS:** Temperatures below normal. Extremes: 89 and 43°. Cool through week, warm weekend. Precipitation heavy, all stations over 1 in.

Soybeans 56% planted, 44% last year, average 38%. Stands good. Cotton planting 99% complete, 98% last year, 96% average. Acceptable stand, 81%. Some acreage replanted to soybeans. Rice seeding 98% complete, 96% 1975 and average. Rains prevented timely application of propanil. Sorghum acreage 88% planted, 65% last year, average 62%. Wheat harvest underway. Many fields ready, waiting on dry weather. Peach harvest continued early varieties. Hay harvest delayed by rains.

**CALIFORNIA:** Fair weather but periodic high cloudiness. Low clouds at times coastal areas. Some light precipitation northwest and extreme southern coast. Afternoon showers and thunderstorms every afternoon 22nd through 26th over high country of southern Sierra Nevada. Temperatures slightly above normal with highest daytime temperatures midweek. Moderate drying northerly winds northern Sacramento Valley.

Small grain, sugarbeet harvest continue. Rice planting complete. Alfalfa third cutting underway. Dry bean, milo planting continues. Bing

cherry harvest approaching peak activity. Early apricot, peach, plum, and nectarine harvests increasing. Thinning active later fruit. Normal insect and disease control application. Valencia orange harvest increasing. Grapefruit and lemon picking seasonal levels. Artichoke, broccoli, lettuce, carrot, onion and strawberries supply heavy. Cauliflower moderate. Cantaloup, green tomato picking started desert. Celery cutting heavier. Rangeland continues to dry up. Higher levels showing stress. Rangeland fire danger. Heavy cattle culling full feedlots.

**COLORADO:** Partly cloudy west, east much cloudiness, cool, thundershowers. Funnel clouds east 25th, 29th, 30th, accompanied heavy rains, hail. Temperatures cooler than normal.

Wheat condition fair, 89% jointed, 96% 1975, 92% average; 57% headed, 50% 1975, 51% average. Sugarbeets 81% emerged, 12% thinned. Corn planted 95%, 93% 1975, 88% average; emerged 75%. Sorghum planted 54%, 36% 1975, 39% average. Dry beans seeded 24%, 22% 1975, 23% average; 8% emerged. Potatoes emerged summer 68%, fall 5%. Soil moisture much improved, short to adequate. Ranges and pastures poor southeast, fair to good elsewhere.

**FLORIDA:** Heavy rainfall northern half. Southern portion received rainfall from scattered afternoon thundershowers. Temperatures near normal.

Soil moisture adequate south, central, excessive north and west. Soybean plantings active. Corn, peanuts, good condition. Moisture excessive for tobacco, some damage. Small grain harvest complete, very good yields. Sugarcane condition good. Pastures responded well to above normal rainfall. Pastures in a few southern areas continue poor and benefit from additional rains. Condition of cattle and calves mostly good, Panhandle. Elsewhere fair to good. Cattle gaining weight. Citrus grove condition excellent, frequent rains and thunderstorms, new growth in abundance. Harvest most spring vegetables declined seasonally. Frequent rains interrupted harvest, caused increased cullage. Winds, hail damaged crops some areas. Crops declining in volume were snapbeans, cabbage, carrots, celery, cucumbers, escarole, green peppers, radishes, squash, tomatoes, potatoes. Eggplant held steady. Watermelon harvest very active north, central areas. Sweet corn quite active central.

**GEORGIA:** Wet, 1.00 to 2.00 in. northwest, 2.00 to 5.00 in. elsewhere. Temperatures 3 to 6° below normal. Averages low 60's mountains to mid 70's central, south. Low pressure brought additional 1.00 to 5.00 in. over extreme northeast 28th and 29th.

Crop conditions decline. Soil moisture excessive. Fieldwork: 2 days suitable. Cool nights hamper plant growth. Corn fair to mostly good. Tobacco condition poor to good, down sharply from last week. Excessive moisture causing problems. Applications of sucker control and insecticides active. Cotton condition mostly fair to good, down from last week; 4% squaring. Peanuts fair to mostly good condition. Spraying active. Soybeans fair to mostly good, 54% planted, last year 54%, average 57%. Sorghum 44% planted, last year 42%, average 43%. Wheat

harvest 22% complete, last year 26%, average 30%. Oat harvest 26% complete, last year 28%, average 30%. Hay good condition, haying active north. Peaches good condition, harvest 17% complete, 18% year ago, 6% average. Apples good, thinning active. Watermelons good but down from last week. Pastures good. Cattle and hogs good.

**HAWAII:** Weather favorable. Rains light. Timely in some dry sections for transplanted crops. Heavy irrigation in progress most sections. Vegetable supplies moderate to heavy. Bananas, papayas supplies light. Pineapple getting active. Sugar harvesting steady. Pastures condition fair to good.

**IDAHO:** Precipitation below normal; totals ranging from none to 0.89 in. and 0.96 in. Temperatures 2 to 4° above normal southwest, 1 to 2° below normal elsewhere. Extremes: 91 and 27°.

Windy weather causing uneven coverage of sprinkle irrigation, also causing soils to dry quickly. Winter wheat progressing rapidly. Localized damage armyworm and sugarbeet maggot. Spring wheat 95% planted, 90% 1975. Spring barley 90% planted, 85% 1975. Spring wheat 60% emerged, 65% spring barley emerged. Potatoes 75% planted, 70% 1975. Potatoes 15% emerged. Range and pastures good condition.

**ILLINOIS:** Temperatures 1 to 6° below normal. Precipitation: 0.50 to 2.00 in.

Corn 6% excellent, 65% good, 28% fair, 1% poor. Soybeans 89% planted, 84% 1975, 45% average. Winter wheat 12% excellent, 56% good, 25% fair, 7% poor; 88% filled, 66% 1975, 67% average; 20% turning yellow, 8% 1975, 7% average. Oats mostly good; 30% headed, 23% 1975 and average; 10% filled, 3% 1975 and average. Hay crops mostly fair to good. Alfalfa 39% cut, 29% 1975, 17% average. Red clover 40% cut, 35% 1975, 17% average. Grain sorghum 55% planted. Pastures mostly fair to good. Soil moisture 61% short, 39% adequate. Fieldwork: 6.00 days suitable.

**INDIANA:** Valuable rains weekend. Less than 1.00 in. extreme northeast and extreme southeast, 1.00 to 2.00 in. much of central and northwest, 2.00 to 3.00 in. much of southwest. Temperatures 3° below normal and ranged from 37 to 88°.

Fieldwork: 6 days suitable. Topsoil and subsoil moisture short to adequate. Corn 97% planted, 1975 95%, average 70%. Corn 85% emerged. Corn 4 in. high, 1975 2 in., average 1 in. Soybeans 80% planted, 1975 75%, average 35%. Soybeans 45% emerged, 2 in. high, 1975 2 in., average 2 in. Sorghum 65% planted, 2 in. high. Wheat 95% headed, 1975 70%, average 60%. Wheat 5% beginning to ripen. Oats 15% headed, average 5%. Tobacco 30% set, average 15%. Pastures declined, rated poor to fair.

**IOWA:** Temperatures slightly below normal except slightly above normal north central. Precipitation 0.50 in. below normal except slightly above normal central.

Corn planting virtually complete. Weather favorable for corn emergence - 92% this year, 85% last year, 72% average. Corn 93% of full stand, 93% last year, 92% average. Corn cultivated and rotary hoed. Most fields weed control good. Soybean planting 92% complete, 82% last year, 65% average. Most advanced western half. Oat condition mostly good and developing well, stands normal. First cutting alfalfa 10% harvested, same as last year, 4% average. Alfalfa

and clover stands good. Wheat development normal, condition mostly fair to good. Topsoil moisture mostly adequate, shortages northeast and east central, surplus areas west central. Subsoil moisture mostly adequate, shortages mostly northwest. Livestock condition good. Farrowing losses normal. Pasture condition fair to excellent. Fieldwork: 4.8 days suitable.

**KANSAS:** Generous precipitation from 0.50 in. to 1.50 in. common east and south. Local amounts 3.00 in. to 5.00 in. south. Temperatures 62° northwest to 66° southeast or 1° below normal to 3 to 6° below normal elsewhere.

Scattered rains aided wheat development; 95% headed by the weekend, 90% average and last year; 5% turning, 10% average, none last year. Corn 90% planted, 95% last year, 90% average. Sorghum 20% planted, 30% last year and average. Soybeans 20% planted, 35% last year, 30% average. Alfalfa first cutting 35% complete, 50% average and last year.

**KENTUCKY:** Temperatures below normal with showers and thundershowers late week. Precipitation 0.75 in.

Fieldwork: 5 days suitable. Showers slowed activities weekend. Farmers setting tobacco, planting corn and soybeans and cutting hay. Corn 93% planted, 87% last year and 78% average. Plants 7 in. high, an inch above 1975 progress. Soybean seeding active, 38% complete compared with 42% a year ago and 32% average. Corn and bean stands about normal at 88% and 90% full. Tobacco setting in full swing at 46% complete well advanced of 24% average. No serious plant shortages expected. Barley harvest just beginning west, 2/3 of wheat turning.

**LOUISIANA:** Temperatures 2 to 5° below normal. Extremes: 91 and 53°. Showers 24th to 27th, heaviest north.

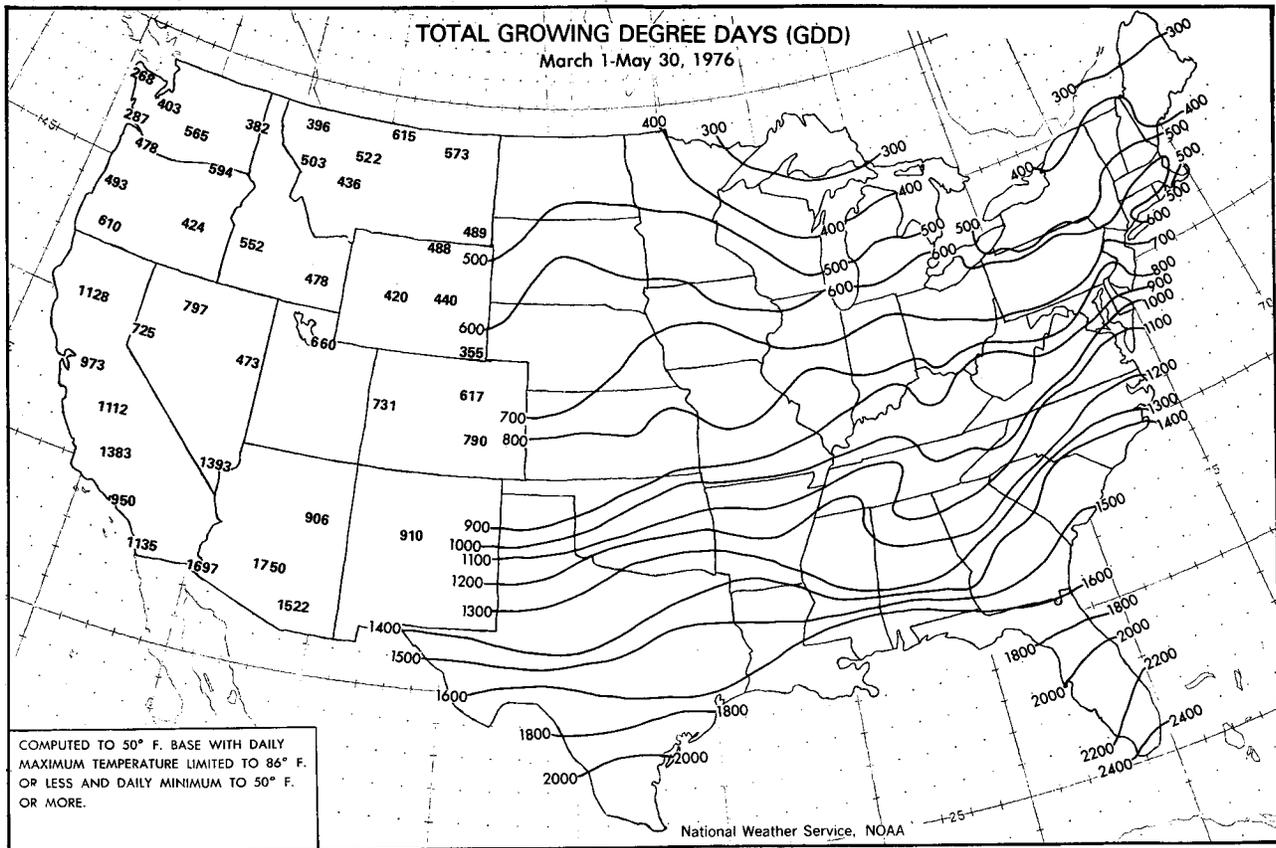
Soil moisture adequate. Fieldwork: 4.3 days suitable. Cotton 96% planted, 68% last year, 92% average; 78% up to stand. Soybeans 64% planted, 30% last year, 50% average; 47% up to stand. Rice good in southwest. Corn good. Sugarcane good; last cultivation continues. Sweetpotato transplanting 59% complete, 49% last year. Wheat, oats harvest 1/3 complete. Good pastures. Cattle condition improved.

**MARYLAND & DELAWARE:** Temperatures 7° below normal. Extremes: low 80's, low 40's. Precipitation 0.25 to 0.50 in., except Eastern Shore and Delaware where amounts were very light. Weekend cloudy, considerable precipitation. Amounts 1.00 to 2.00 in.

Corn 97% planted; 88% 1975, 87% average. Soybeans 35% planted; 35% 1975, 33% average. Tobacco 35% planted; 10% 1975, 15% average. Small grains fair to good condition. Vegetables good condition, need rain and warmer weather. Apple and peach crop underway.

**MICHIGAN:** Temperatures 4° above to 3° below normal. Mean temperatures varied from 55° to 60's. Precipitation 3.0 in. northwest and southwest Lower. Most precipitation fell weekend.

Favorable weather speeded fieldwork and aided crop growth. Plowing 90% done, 88% last year, 86% average. Soil moisture short north and Upper Peninsula, adequate central and south. Good work week with 6 days suitable. Corn development slow but aided by warm weather. Corn 80% planted, 86% 1975 and 76% average. Winter wheat, 13% headed.



Oats planting completed, slightly ahead of last year and average. Planting and replanting sugarbeets near complete, same as 1975 and normal. Potatoes 70% planted, 76% last year and 71% average. Soybean 35% planted, 50% 1975 and 37% average. Fruit set light. Vegetable development below average.

**MINNESOTA:** Warm, dry north and west, temperatures up to 5° above normal north central. Wet with temperatures near normal most of east central and south. Extremes: 83 and 31°. Precipitation heavy much of east central and south central 27th and 28th with over 2.00 in. part of east central. Much of north central and northeast and extreme southwest did not receive measurable precipitation. Growing season precipitation deficiency continues to increase for all but extreme southeast.

Rains east central, central, south central areas temporarily relieved critical moisture shortage; west central, southwest remain very short; crop growth slow, uneven northwest mostly short. Corn: 90% emerged, 1975 70%, normal 63%; height 4 in. Soybeans 90% planted, 1975 82%, normal 72%. Most small grains emerged. Winter wheat, rye prematurely heading dry areas, reducing yields. Alfalfa, pastures very short. Few alfalfa fields cut.

**MISSISSIPPI:** Temperatures 7 to 10° subnormal. Extremes: 89 and 45°.

Soil moisture adequate to excessive. Fieldwork: 3.3 days suitable. Cotton planting virtually completed, 88% 1975, 95% average; 82% up to stand, 64% 1975, 76% average. Soybeans 60% planted, 23% 1975, 41% average; 33% up to stand, 14% 1975. Rice planting virtually completed, 73%

1975; 90% average; 92% up to stand, 52% 1975. Corn 96% planted, 80% 1975, 84% average; 89% up to stand, 65% 1975. Winter wheat 64% ripe, 62% 1975; 5% harvested, 15% average. Oats 70% ripe, 64% 1975; 10% harvested, 21% average. Peanuts 91% planted, 66% 1975. Sorghums 63% planted, 33% 1975, 48% average. Sweetpotatoes 55% planted, 53% 1975, 53% average. Hay crops 20% harvested, 22% average. Irish potatoes 10% harvested. Cotton in poor to fair condition. Other crops in fair to good condition.

**MISSOURI:** Temperatures 4° below normal Bootheel to 7° below normal northwest Prairie. Precipitation 0.50 in. northeast Prairie, 0.50 to 1.00 in. northwest and Bootheel, east and west Ozarks 1.00 in. to 1.75 in.

Fieldwork: 4.4 days suitable. Corn planting 94% complete, 1975 92%, normal 84%. Condition of corn mostly fair. Soybean planting 56% complete, 1975 34%, normal 48%. Grain sorghum planting 55% complete, 1975 67%, normal 52%. Wheat 43% coloring stage, 1975 67%, normal 49%. Condition of wheat poor to fair. Freeze damage throughout most of the central and southern areas. Pasture condition fair to good. First alfalfa cutting 37% complete, 1975 18%, normal 49%. Soil moisture 23% short, 72% adequate, 5% surplus.

**MONTANA:** Temperatures near normal west to slightly above east. Rainfall mostly light, generally less than normal. Cold first with local freezing temperatures west of Divide. High mostly in the 80's.

Crops in good condition although dry topsoils and cool weather slowing growth much of north central and some east central areas. Spring small grain seeding virtually complete. Corn 80%

planted, potatoes 70%, dry beans 90%. Winter wheat good to excellent, drier areas fair to good. Spring grains good, drier areas fair. Almost 30% winter wheat in boot, last year 5% and normal 20%. Range grass growth near normal except slow dry areas. About 80% cattle and sheep moved to summer pastures.

**NEBRASKA:** Temperatures above normal Panhandle, slightly below elsewhere. Rainfall intermittent.

Rains limited fieldwork. Topsoil moisture supplies improved. Subsoil moisture supplies also improved and above 1975. Winter wheat conditions improved. Wheat now 95% jointed, 50% headed out; 1975, 90% jointed and 40% headed. Corn planting 95% completed, 90% normal and 1975; 75% has emerged. Sorghum and soybeans are 60% planted; 1975, sorghum 65%, normal 55%. Soybeans 1975 70%, normal 50%. Emergence of sorghum 35% and soybeans 30%. Alfalfa fair to good condition; 20% of first cutting completed. Wild hay fair to good condition. Pasture and range feed supplies improved.

**NEVADA:** Temperature extremes 101 and 25°. Precipitation from trace to 0.44 in. on the eastern border.

Second cutting alfalfa southern valleys crops responding to warm temperatures. Range providing only limited grazing.

**NEW ENGLAND:** Temperatures below normal through 26th, above thereafter. Precipitation limited near 0.50 in. north New Hampshire, less elsewhere.

Wet fields delay planting. Maine potato planting 10% complete. Northern areas corn 30% planted, southern areas 50%. Blueberry and strawberry bloom extended. Apples sizing well - June drop started. Vegetable process delayed by cool weather.

**NEW JERSEY:** Temperatures 4 to 6° below normal. Extremes: 36° with frost and 83°. Rainfall 0.28 in. north, 0.24 in. central and 0.21 in. south. Soil moisture, in percent of field capacity, averaged: 84% north, 70% central and 61% south. Four inch soil temperature 62° north, and 63° south.

Weekend rain beneficial. Harvest of asparagus, lettuce, peas, spinach and "greens" continues. Tomato planting complete. Pepper, eggplant and sweet-potato transplanting continues. Strawberries available. Blueberries sizing well. Apple and peach drop continues. Hay making as weather permits. Small grains in good condition, some wheat headed on short straw.

**NEW MEXICO:** Substantial rains northeast plains and eastern slopes northern mountains early and late week. Few rainfalls more than 1.00 in. Elsewhere dry. Temperatures to 5° cooler than normal northeast and elsewhere near normal. Few freezing readings higher elevations.

Soils dry. Planting cotton, irrigated grain sorghum, corn virtually complete. Small grains nearly headed. Apples good. Onion pulling underway. Lettuce harvest finishing. Ranges dry, need moisture. Livestock fair, moving to mountain pastures.

**NEW YORK:** Temperatures above normal extreme north, below normal all other areas. Light rainfall below normal, averaging 0.20 in. Significant precipitation limited to 26th. Temperatures cool first half moderated second half.

Limited field activity, but conditions improved late week. Development all crops slowed by prolonged unfavorable weather. Early planted corn slow growing, some yellow. Planting of corn 42% complete

compared to over 80% last year. Oat planting more than 80% complete. Wheat and pastures mostly good condition, growth slowed by high moisture. Green chopping of alfalfa underway. Upstate potato planting 70% complete. Lettuce seeding delayed. Cabbage and sweet corn planting behind. Cold wet weather holding back apple development. Peach prospects fair. Tart and sweet cherry prospects poor.

**NORTH CAROLINA:** Temperatures 5 to 10° below normal. Rainfall spotty and light until late week. Nearly 8.00 in. 24 hr. period southern mountains causing flash flooding and river flooding. Amounts elsewhere 0.50 in. or less same 24 hr. period.

Fieldwork: 5.3 days suitable. Soil moisture 10% very short, 40% short, 50% adequate. Flue-cured tobacco 97% transplanted, 1975 94%, average 90%; condition mostly fair to good. Burley 60% set, 1975 55%. Corn 97% planted, 1975 95%, average 93%; condition fair to mostly good. Soybeans 61% planted, 1975 59%, average 52%. Peanuts 98% planted, 1975 96%, average 91%. Cotton 99% planted, 1975 98%, average 96%. Sweetpotatoes 62% transplanted, 1975 54%. Sorghum grain 66% planted, 1975 53%. Small grains mostly fair to good. Irish potatoes fair to good condition. Pastures 10% poor, 54% fair, 36% good.

**NORTH DAKOTA:** Temperatures above normal except west central, southwest and south central. Extremes: 84 to 30°. Precipitation below normal except southwest. Weekend sunny, scattered showers extreme west and northwest.

All small grain planting virtually completed. Earlier seeded grain jointing. Row crop planting progressed rapidly and winding up south. Rainfall needed for germination, early growth, pastures and hay lands.

**OHIO:** Temperatures 2 to 5° below normal. Extremes: 82° southwest 30th, 35° northwest 24th. No significant rainfall until 29th. Local amounts of 1.00 in. or more central and south 30th. Showers 31st and 1st.

Soybeans 90% planted, 3 weeks ahead of normal, 85% 1975 and 60% normal. Tobacco less than 10% planted, 10% 1975 and 20% normal. Alfalfa hay 25% cut; 20% 1975, and 15% normal. Clover-Timothy hay 10% cut, equal to last year and normal. Planted acreage emerged: corn 85%; soybeans 50%. Wheat 90% headed, 75% 1975 and 60% normal. Oats 5% headed, 10% 1975 and 5% normal. Fieldwork: 7 days suitable. Soil moisture short as of 28th. Weekend rains improved soil moisture conditions.

**OKLAHOMA:** Temperatures 4 to 6° below normal. Precipitation 1.10 in. east central to 2.80 in. west central. Weekend warm with rain.

Cool weather and wet fields kept combines out of fields southwest, slowed maturity small grains. Wheat 67% dough, 77% year ago, 78% average. Some cut for hay because of infestations. Oats cut for hay, condition good, 74% dough, 82% average. Barley condition good, acreage small. Corn virtually planted, 95% average, 99% year ago. Cool weather dropping condition to only fair. Near half sorghums planted, 37% year ago, 57% average. Cotton planting active early week, replant will be heavy because later rains. Average 55%, year ago 30%. Only 14% acreage up to stand. Peanuts and soybeans planting active. Some peanuts to be replanted. Peanuts 31% planted, average 44%; Soybeans 43% planted, 42% average. Earliest peaches being picked. Rains hamper hay harvest. Ranges good to excellent. Cattle making good gains.

**OREGON:** Temperatures below normal. Extremes:

High 80's, high 20's west; high 90's, high 20's east. Precipitation: 0.50 in. along coast, 0.25 in. in western valley and 0.20 in. east of the Cascades.

Grain crops in good condition. Wheat, barley and many grains heading. Crimson clover seed set good. Hay being cut. Good strawberry crop likely. Sweet corn and bush beans progressing well. Rhubarb and asparagus being harvested. Potatoes and onions making good growth. Livestock in good condition. Moisture needed. Higher ranges good condition.

PENNSYLVANIA: Cool and cloudy with frequent rainfall. Temperatures 3 to 6° below normal with daily maxima mostly in 60's and minima in 40's and 50's. Extremes: 81 and 32°. Rain provided 1.00 in. to nearly 4.00 in. through central mountains and Susquehanna Valley. West and extreme east less than 0.50 in.

Soil moisture adequate. Fieldwork: 4 days suitable. Activities: plowing; planting corn and potatoes; spraying; making hay; transplanting tobacco and tomatoes. Potatoes 88% planted, last year 76%. Corn planted 83%, last year 80%. Barley headed 83%, 14% in boot last year 65% headed. Wheat 65% headed, 30% in boot--last year 35% boot. Hay condition fair to good. Alfalfa first cut 17% complete, mostly for silage. Feed from pastures average.

PUERTO RICO: Island rainfall 0.35 in. or 1.42 in. below normal. Temperatures 79° on coasts and 74° interior; Extremes: 93 and 56°.

Sugarcane harvest almost completed. Planting and cultivating operations underway. Coffee cultivation and cleaning of farms. Good weather for tobacco harvest and drying in shed. Planting and fertilizing pasture lands. Insect control underway. Pasture lands south coastal areas dry. Food crops in good condition. Fieldwork: Planting and cultivating.

SOUTH CAROLINA: Temperatures 6 to 10° below normal. Little day to day variation, warmer on 29th. Extremes: 43 and 89°. Rainfall heavier than normal, excessive amounts south early week and northwest 28th.

Rain slowed field activities. Cool nights hampering growth. Soybean planting continues; peach, vegetable, small grain harvest; application of insecticides, nitrogen underway. Weed control problems. Budworms, stinkbugs present in tobacco.

Crop conditions: cotton, poor; small grains poor to fair; tobacco, vegetables, watermelons, hay, pastures fair to good; corn, peaches good. Soybeans planted: 1976 49%; 1975 58%; average, 50%. Wheat harvested: 1976 13%. Cotton planted: 1976 99%.

SOUTH DAKOTA: Showers, over 0.50 in. west. under 0.50 in. east and central. Northwest driest, 2.0 to 4.5 in. below normal. Southeast and central 1.0 to 2.5 in. below normal precipitation. Temperatures normal. Highs 80's. Extremes: 87 and 31°.

Topsoil moisture short except southern 3d, extreme northwest border where adequate. Subsoil moisture short to critically short except southeast, southwest and northwest border strip where adequate. Light 1st alfalfa cutting. Weed spraying full swing. Fieldwork ahead of normal. Row crops planted: corn, 95%, 1975 92%, normal 86%; soybeans 91%, 1975 86%, normal 68%; sorghum 43%, 1975 52%, normal 42%. Winter rye booted 98%, 1975 49%, normal 68%. Winter wheat booted 91%, 1975 52%, normal 83%. Winter rye headed 62%, 1975 8%, normal 53%. Winter wheat headed 51%, 1975 11%, normal 18%.

Spring grains booted: spring wheat 22%, 1975 3%, normal 4%; Oats 28%, 1974 8%, normal 6%; Barley 34%, 1975 0%, normal 0%. Spring wheat and oats starting to head. Corn height 2.0 in., 1975 2.5 in., normal 2.0 in. Livestock good, feed supplies low, pastures short. Stock water short.

TENNESSEE: Temperatures mid 60's except upper 50's Cumberland Plateau, 6° below normal. Rainfall over 1.00 in., about 0.75 in. above normal west to 0.50 in. above normal elsewhere.

Rains beneficial for crop development but hampered fieldwork. Need warm dry weather for haying and cotton crop. Considerable damage to cotton fields by cool damp nights causing rotted seed and dead seedlings. Some fields planted 3 times with damage still occurring. Fieldwork: 4 days suitable. Soybean planting, haying and tobacco transplanting making good progress. Soil moisture adequate. Corn 93% planted, 88% last year, 89% average. Corn needs warmer nights but is 7 to 10 days ahead of normal. Some root worm damage. Cotton 97% planted, 92% last year, 99% average. Aphids and thrips causing damage. Soybeans 55% planted, 45% last year, 50% average. Development of oats, barley and wheat 1 week ahead of average. Wheat 80% turning yellow, 80% last year, 59% average. Oats 65% turning yellow, 65% last year, 35% average. Barley 75% turning yellow, 80% last year, 65% average. Wheat 30%, barley 15%, and oats 19% ripe. Tobacco transplanting full swing with 80% transplanted, 60% last year, 65% average. First cutting alfalfa hay 85% cut, 76% last year, 85% average.

TEXAS: Severe weather, heavy rains, hail, high winds, tornadoes. Heaviest hit central, north; large hail, heavy rain widespread. Central, north rainfall from 1.50 in. to 2.50 in. Far west, no rain, near normal rain remainder west, south. Temperatures at or near normal. Northwest, temperatures 2 to 5° above normal.

Wet grounds slowed fieldwork east, central. Hail damage scattered throughout. Shortage skilled labor. Wheat harvest progressing slowly, now 3% complete. Some hail damage High Plains. Wet continues hamper combining. Oats damaged by hail. Drying weather needed to continue. Minimal insect damage. Warmer weather needed north. Cotton planting progressing same rate last year; now 78%. Warmer weather sunshine needed stimulate growth. Wet fields delay planting completion. Rice planting complete. Growth progressing well. Insects problem few areas. Peanuts seeding continues north. Plains complete elsewhere. Sorghum planting delayed some areas High Plains; Farmers wait rain. Stands south, central look good heading starting some areas. Cool weather slowed growth north, east. Planting 81% complete; 84% last year.

Lower Rio Grande Valley. Most activity centered around harvest of cantaloups, honeydew melons, green peppers, watermelons. Supplies of onions, cabbage, carrots, rapidly diminishing. Rains caused damage in tomato fields. Cucumber, corn, okra, squash in good volume. Laredo onion harvest nearing completion. Melon harvest underway. Coastal Bend cucumber harvest passed peak. Watermelon harvest got underway during week. San Antonio-Winter Garden onion harvest active. Light supplies of cabbage available. Cucumbers for pickle harvest in progress. East Texas sweetpotato planting continues. North Texas potato digging expected to commence next week. Watermelons are beginning to vine. Tomatoes making good progress. Knox-Haskell potato digging get underway next week. High Plains potatoes and onions continue to make good growth. Some reported hail damage to peppers, potatoes, onions. Peach harvest becoming active. Some severe

damage occurred in Cross-Timbers.

Rains greatly improved pasture on Low Plains. East has good range; dry weather needed to harvest hay. Ranges slowly advanced in West. Livestock generally improving; screwworms decreasing south.

UTAH: Isolated afternoon and evening showers and thunderstorms south portion weekend. Accumulated amounts light but locally moderate heavier thunder-showers. Temperatures generally near normal.

Excellent weather to finish spring planting. Few potatoes remain to be planted. Soil moisture shortages appearing southern dryland farming areas and rangelands. Winter wheat in fair to good condition but maturing early in dry areas. Prospects for fruit crops fair to good. Livestock on spring ranges beginning to move to summer grazing areas. Range feed adequate but needs rain south.

VIRGINIA: Temperatures slightly below normal. Extremes: 86 and 39. Light rainfall, scattered showers, averaged 0.25 in.

Fieldwork: 5.1 days suitable. Topsoil moisture: 59% short, 40% adequate, 1% surplus. Corn planting: 92% complete, 1975 - 89%, average 86%. Stand 38% of full. Condition 87% of normal. Cultivation active. Soybeans 36% planted. Peanuts 95% seeded. Tobacco transplanted: Flue-cured 82%, fire-cured 57%, burley 55%, sun-cured 66%. Small grain harvest started. Ensilage cut. Vegetables cultivated. Orchards sprayed. Haying active, yields low. Pastures improving. Livestock good.

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

Planting pastures, peas, corn, other vegetables. Winter wheat beginning to head. Silage making, hay baling active. Tent caterpillars numerous some areas.

East: Temperatures 3 to 5° below normal. Precipitation generally below normal.

Cereal grains good condition. Cool weather slowed growth. Early wheat, barley heading out. Peas, lentils damaged by winds. Planting potatoes, field corn, alfalfa, beans, pastures. Cutting alfalfa, asparagus. Irrigating, thinning beets, fertilizing, working summer fallow, spraying fruit trees. Freezing temperatures, Yakima Valley. Damage unknown. Ranges fair to good. Lambing, calving near end.

WEST VIRGINIA: Temperatures below normal. Extremes: 83 and 30°. Rainfall below normal except eastern Panhandle where above normal.

Soil moisture short. Fieldwork: 5.3 days suitable. Hay harvest and corn planting most active. Corn 90% planted. Emerged: 96% spring oats; 87% potatoes. Over 1/3 tobacco acreage set. First hay cutting 10% complete. Most crops poor to fair condition. Heading: Barley 75%; wheat 44%. Showers 29th and 30th beneficial to all crops especially pastures and hay.

WISCONSIN: Temperatures 2 to 4° subnormal. Sunny until 27th when scattered showers and thunderstorms northwest. Rain spread statewide weekend. Amounts heaviest northeast and southeast where up to 1.00 in. fell.

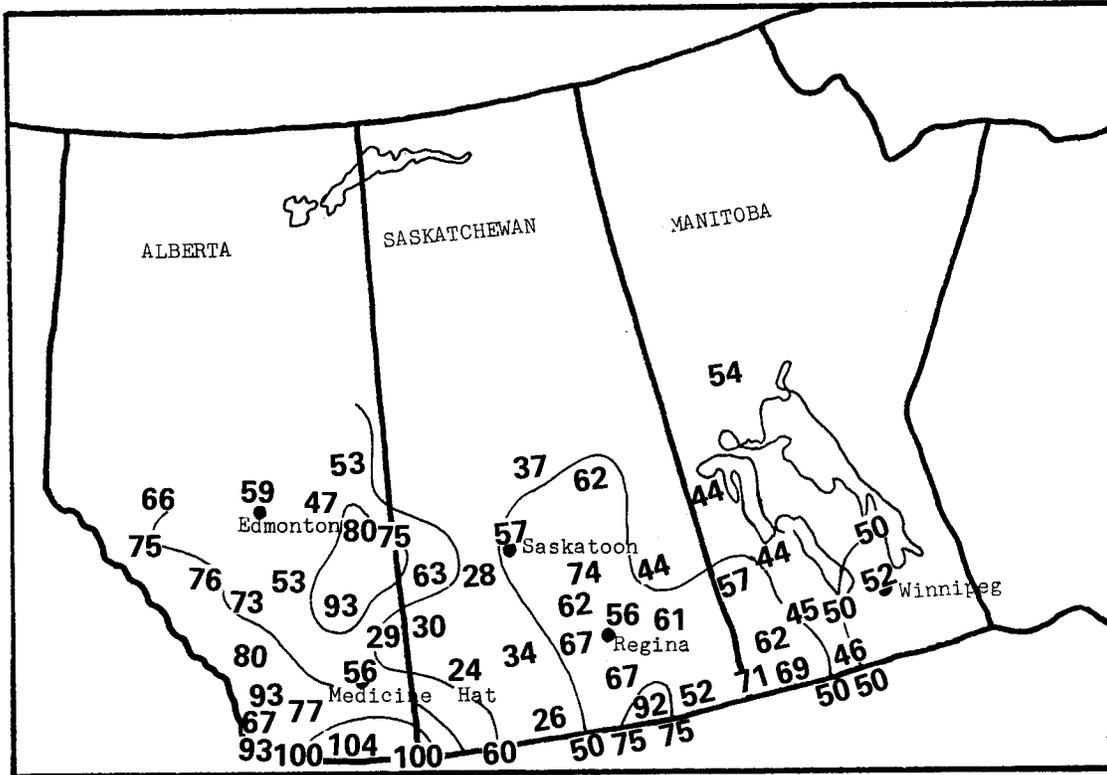
Soil moisture supplies 70% short, 30% adequate prior to weekend rains. Crops need more moisture for development. Corn 95% completed, same as 1975, normal 75%. Early corn up, needs more rain and warmer temperatures to improve growth and color. Late corn not germinating too well in dry soils. Post emergence sprays being applied on corn. Soybeans 55% planted, 1975 60%, normal 35%. Oats and wheat look good but need rain on light soils. First crop hay harvest started, mostly green chopping and haylage. Growth of hay shorter than normal due to cold temperatures and lack of moisture. Hay in bud south. New seedings thin in spots, lots of dandelions and yellow rocket in hay fields. Pasture conditions much below normal, poorest June 1 condition in last 13 years. Less than half of roughage requirements being met by pastures. Potato planting nearing end. Late vegetable crops still going in. Irrigation being used on potatoes and vegetables.

WYOMING: Temperatures above normal except southeast. Precipitation well above normal southern half.

Major activities: Planting row crops, tilling summer fallow, irrigating, moving livestock to summer range. Soil moisture supplies adequate. Prospects for small grains and alfalfa good. Winter wheat prospects good. Small grains, sugarbeets, corn planting finished. Potato planting 70% completed, 40% 1975, 80% average. Dry bean planting 45% completed, 33% 1975, 58% average. Range sheep lambing and shearing near completion.

**Percent of Normal Precipitation**

April 1 - May 24, 1976



**World Weather and Crop Update**

Precipitation since April 1 continued to lag behind normal in much of North America's spring wheat belt. Spotty improvement of soil moisture occurred last week in Alberta and Saskatchewan, but the region still needs a good soaking.

Increased rainfall reduced northern Europe's drought area, but conditions remained critical in northern France, Belgium, and parts of other North Sea and Baltic countries. Spring sown crops had an erratic start, and growth and development of pastures and winter grains were retarded.

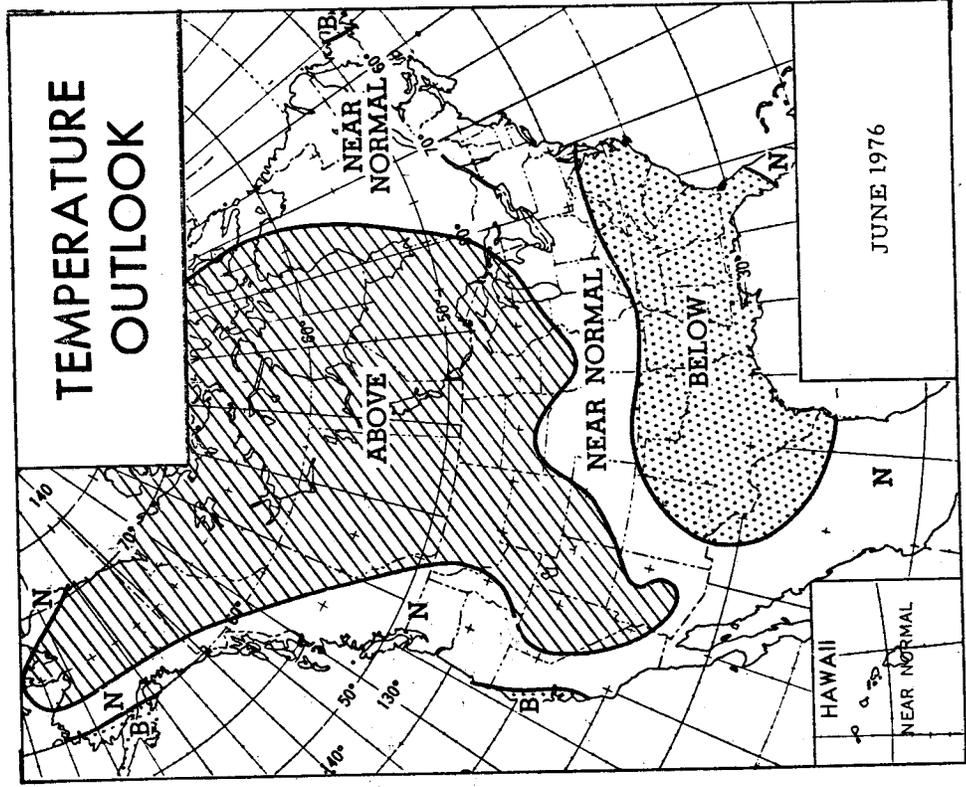
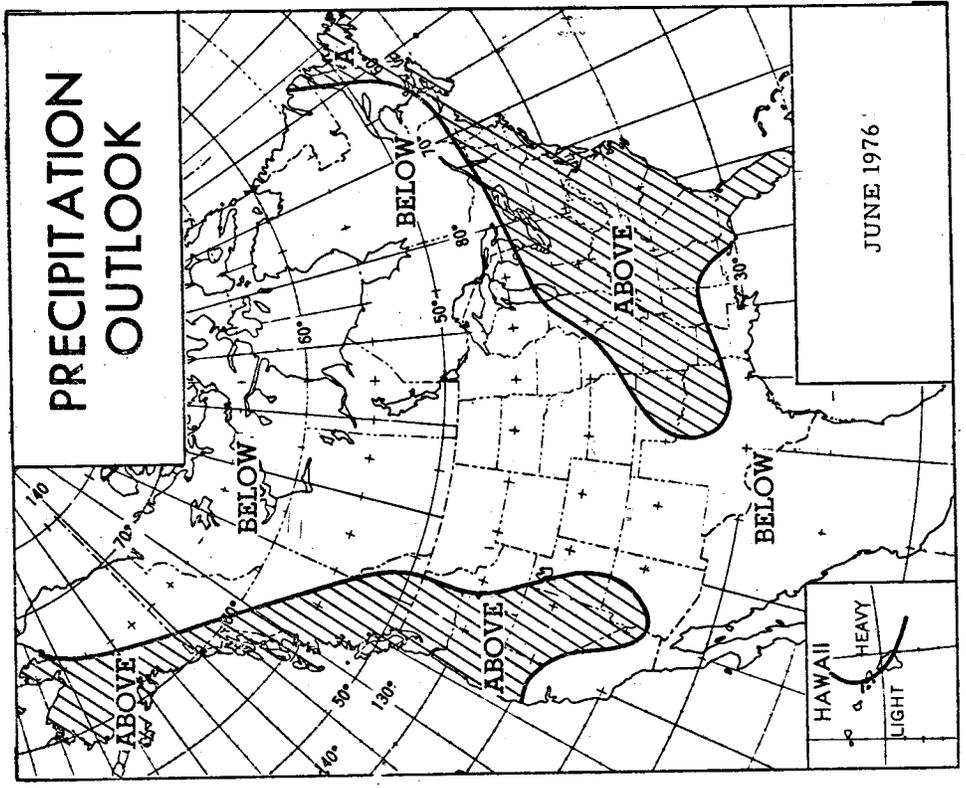
Conditions were drier than desirable in most of the USSR last week. Principal dry spots were Moldavia and the southern Ukraine in the west and northeastern Kazakhstan and the eastern oblasts of West Siberia in the spring wheat region. Despite

recent rains, the Urals remain a problem because of prolonged moisture shortages.

In the People's Republic of China the summer monsoon advanced northward, but little rain fell in the North and northeastern regions. India's summer monsoon appeared on schedule in the southwest and will be anxiously watched for its northward progress and persistence.

Dry weather held up fall seeding in parts of Victoria and South Australia and caused distress slaughter of livestock. Seeding of wheat was well underway in Argentina. In Brazil wheat seeding was close to complete in Paraná, about half complete in Sao Paulo, Mato Grosso, and Minas Gerais, and about 20% done in Rio Grande do Sul. Rain caused some difficulty in Paraná.

**Average Monthly Weather Outlook**



National Weather Service, NOAA

**Extended Forecast Views Mixed Crop Prospects**

In view of the current agricultural weather situation, the average monthly and seasonal forecasts give a mixture of good prospects and potential problems for agriculture in the weeks ahead. Above normal moisture over much of the Corn Belt would insure good moisture for early planted crops. Dry weather in the Great Plains would assist in the wheat harvest but cause problems with other crops. Dry conditions in California are expected to continue, but above normal moisture would break problems in the Carolinas.

**CORN BELT:** The western Corn Belt is forecast to receive below normal precipitation and near or above normal temperatures. Above normal temperatures in June generally boost crop prospects by encouraging good vegetative growth. However, an increased demand for moisture could adversely affect areas that currently are dry.

The eastern Corn Belt may expect above normal precipitation and near normal temperatures. Current moisture supplies are generally adequate to surplus. However, because of the unusually rapid completion of planting of corn and soybeans, crop development should be advanced and benefit from the above normal moisture.

Near normal temperatures over the summer would push maturity ahead of the crop slightly ahead of normal because of the early start.

**GREAT PLAINS:** Except for portions of eastern Oklahoma and Texas, the Great Plains is expected to receive below normal precipitation. Temperatures are expected to be below normal in southern areas, near normal in Kansas and Nebraska, and above normal in the Dakotas. The wheat harvest is getting into full swing in Texas and just underway in Oklahoma. Moisture supplies throughout Kansas are generally adequate to carry the wheat crop to maturity. Somewhat drier than normal conditions would aid harvesting operations. However, other crops will be entering a period of high moisture demand and would be affected by drier than normal conditions.

Moisture is generally adequate in the Dakotas, except for the northeast and east central portions of South Dakota. Below normal precipitation and above normal temperatures would increase the chance for moisture shortages as the season progresses.

**SOUTHEAST:** Cotton in the Southeast would be affected the most by above normal precipitation and below normal temperatures during the next month. Already growers have replanted many areas because of cold weather and development of the crop is well behind normal. Other crops would be expected to develop normally. Wheat harvesting is underway and planting and early development of corn, soybeans, and peanuts are about on schedule.

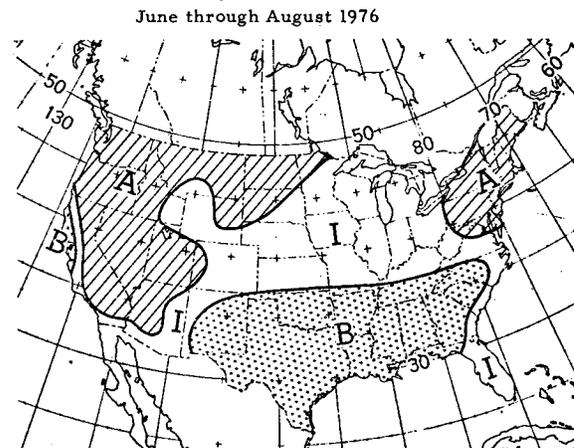
**NORTHEAST:** Below normal precipitation in much of New England during the next 30 days would be beneficial since the area is already very wet. Cool temperatures caused considerable problem with fruit

set and planting. Above normal summertime temperatures would hasten crop development, but could cause some serious power generation problems in nonrural areas.

**NORTHWEST:** The Pacific Northwest is expected to measure above normal precipitation and near normal temperatures. Although normal amounts generally are light, additional moisture would be beneficial. In Nevada and northern Arizona additional moisture would assist dry ranges.

Above normal temperatures over the next 3 months generally would intensify the drought situation in the western States.

**OUTLOOK FOR SUMMER AVERAGE TEMPERATURES**

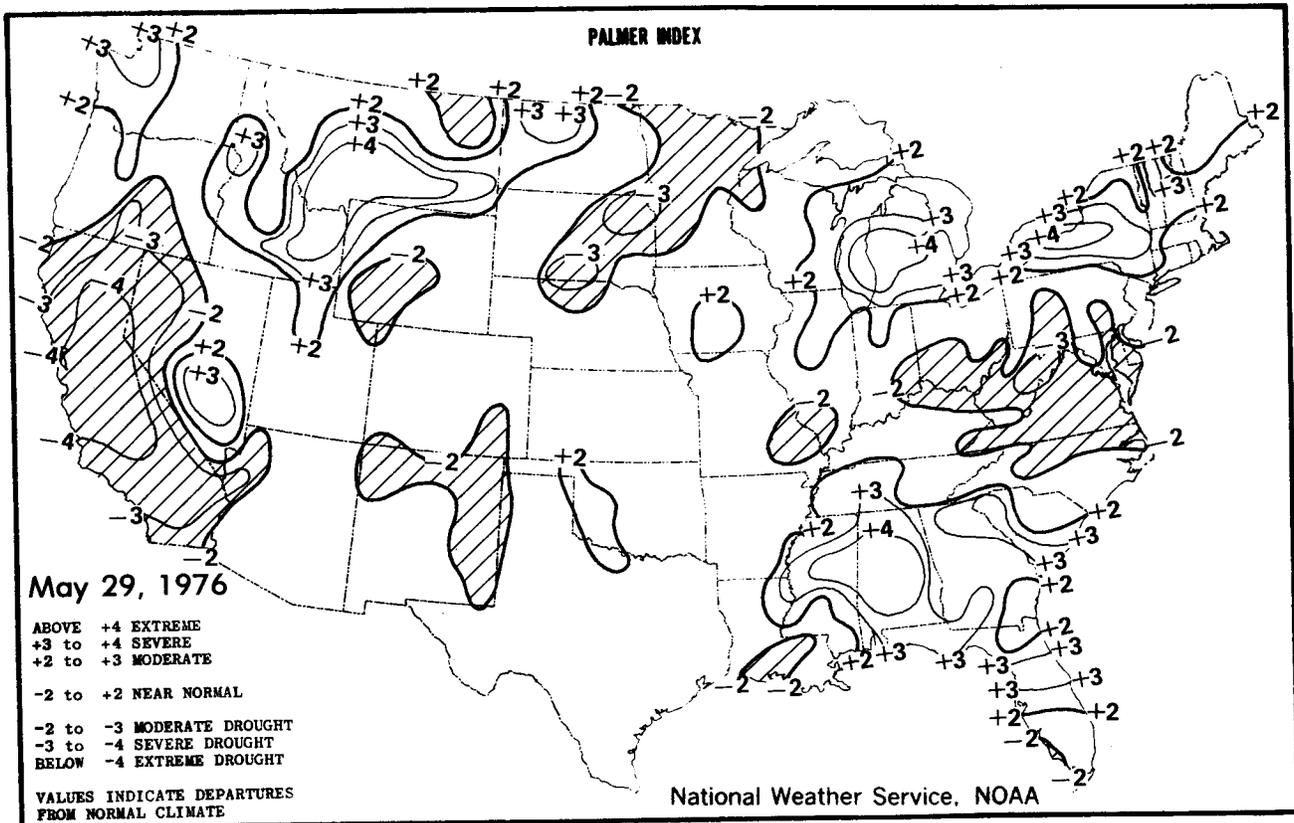


-  Above Normal, 60% chance of occurrence
-  Below Normal, 60% chance of occurrence
-  Indeterminate, 50% chance of Above Normal  
50% chance of Below Normal

The two categories Above and Below are to be compared to the long-term average or "normal" temperatures of the years 1941 - 1970. Each category has a natural climatic frequency or probability of 50%. Each carries a 60% probability of occurring where forecast (shaded area), based on the verification scores of seventeen years of experimental seasonal predictions.

NOAA National Weather Service  
Long Range Prediction Group

May 28, 1976



### Using the Palmer and Crop Moisture Indexes

The Palmer Index evaluates the scope, severity, and frequency of prolonged periods of abnormally wet or dry weather. For this purpose it works reasonably well. However, it does not provide a measure of the current status of agricultural drought, such as the effects of short periods of very dry weather. For this purpose the Crop Moisture Index was developed to respond rapidly to changes in the soil moisture situation and to reflect only those moisture factors that affect vegetation and field operations.

The Palmer Index provides the best evaluation of the overall soil moisture situation since it reflects the effects of the weather over weeks and even months. The Crop Moisture Index is the most useful in determining the availability of moisture to meet current demands. For example, a recent rain may replenish the soil enough to meet current demands. But if the Palmer Index value is highly negative the overall soil moisture situation could still be very poor.

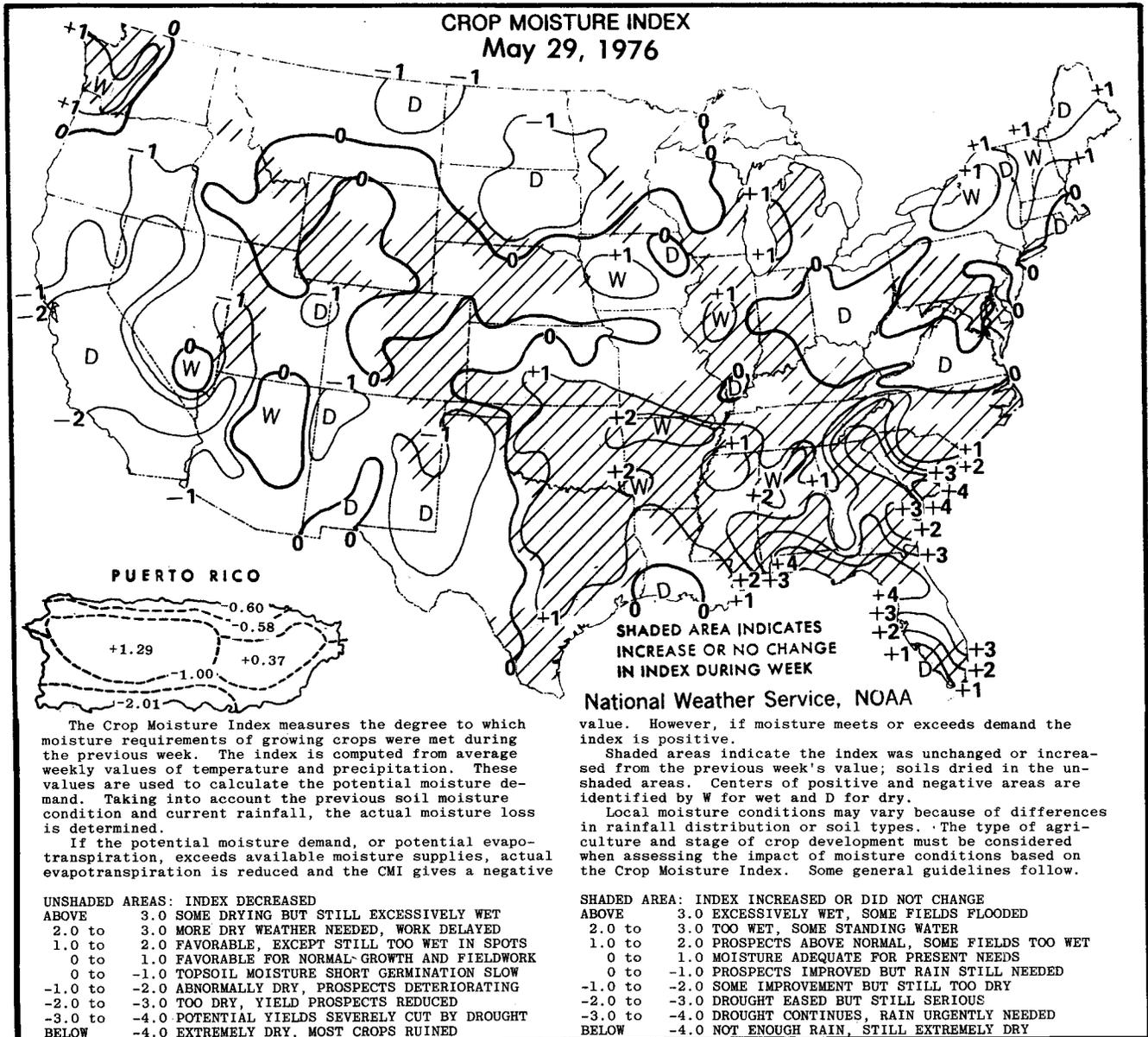
Negative CMI values mean that the demand for moisture, or the potential evapotranspiration, exceeded available supplies, and thus reduced actual

transpiration. On the other hand, positive CMI values mean either that actual evapotranspiration was greater than expected, or that recent rainfall exceeded crop moisture requirements and additional moisture went into the soil or was regarded as runoff.

Negative Palmer Index values imply negative abnormalities of evapotranspiration, moisture stored in or added to the soil, runoff, or a combination of all these types of moisture shortages. In other words, negative PI values indicate abnormally dry weather but do not reflect the exact effects of dry weather.

Positive PI values indicate that the moisture supply either from current or previous rainfalls exceeds the amount needed to sustain soil moisture at a level considered normal and appropriate for the climate of the area.

In brief, Palmer Index values are based on all aspects of the moisture situation, but Crop Moisture values refer only to the current moisture requirements. PI values show long-term moisture conditions, whereas CMI values are more responsive to recent rainfall or its absence.





**FIRST CLASS MAIL**

**PLANTING PROGRESS**

PERCENT OF ACREAGE PLANTED  
 (as of May 30)

**corn**

	1976	1975	Avg.
Ga.	99	100	100
Ill.	99	100	82
Ind.	97	95	70
Iowa	100	100	94
Kans.	90	95	90
Ky.	93	87	78
Mich.	80	86	76
Minn.	99	92	90
Mo.	94	92	84
Nebr.	95	90	90
N. C.	97	95	93
Ohio	100	100	85
S. Dak.	95	92	86
Wisc.	95	95	75
U. S.	96	95	86

These 14 States produced 89% of the Nation's corn in 1975.

**cotton**

	1976	1975	Avg.
Ala.	100	100	100
Ark.	99	98	96
Ga.	100	100	100
La.	96	68	92
Miss.	100	88	95
Mo.	100	100	100
N. C.	99	98	96
Okla.	60	30	55
S. C.	99	100	95
Tenn.	97	92	95
Tex.	78	79	71
11-States	88	83	82

These 11 States produced 68% of the Nation's cotton in 1975.

**sorghum**

	1976	1975	Avg.
Ala.	53	60	59
Ark.	56	44	38
Ga.	54	54	57
Ill.	89	84	45
Ind.	80	75	35
Iowa	92	82	65
Kans.	20	35	30
Ky.	38	42	32
La.	64	30	50
Mich.	35	50	37
Minn.	90	82	72
Miss.	60	23	41
Mo.	56	34	48
Nebr.	60	70	50
N. C.	61	59	52
Ohio	90	85	60
S. C.	49	58	50
Tenn.	55	45	50
U. S.	72	62	50

These 18 States produced 96% of the Nation's soybeans in 1975.

**soybeans**

	1976	1975	Avg.
Colo.	54	36	39
Kans.	20	30	30
Mo.	55	67	52
Nebr.	60	65	55
Okla.	50	37	57
S. Dak.	43	52	42
Tex.	81	84	86
7-States	57	61	61

These 7 States produced 91% of the Nation's sorghum grain in 1975.

