

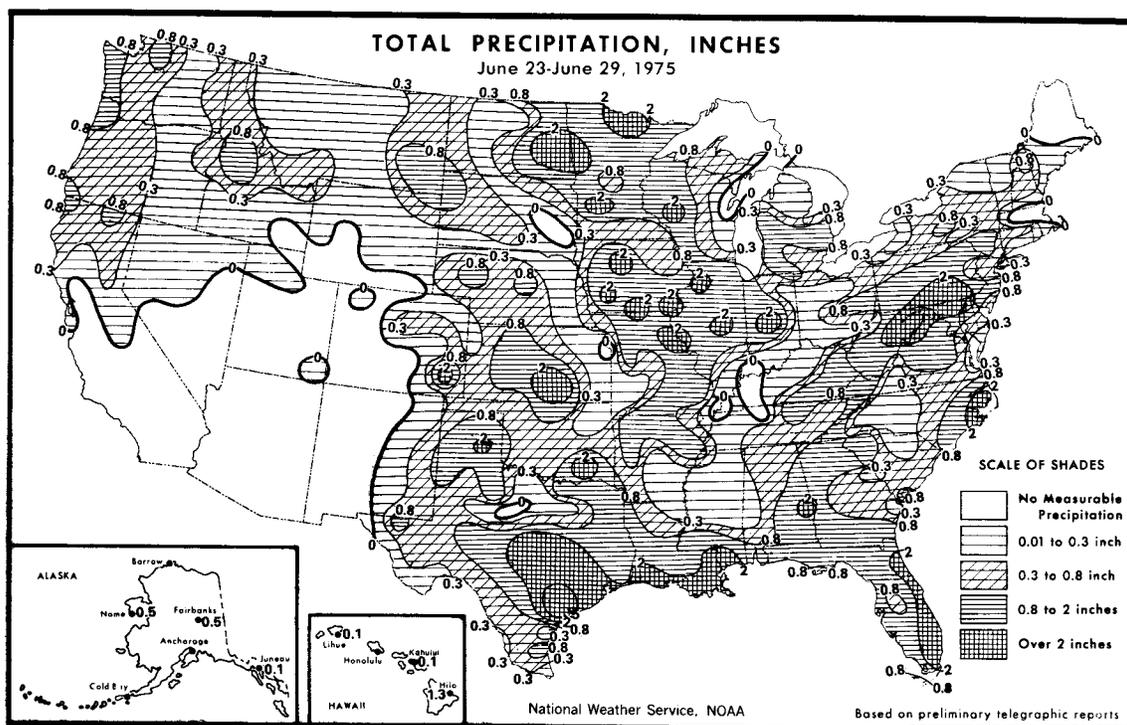
# Weekly Weather & Crop Bulletin

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

U. S. DEPARTMENT OF AGRICULTURE  
Statistical Reporting Service

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## NATIONAL WEATHER SUMMARY

For the Week of June 23-29

**HIGHLIGHTS:** Varying amounts of precipitation fell in all of the Nation except the Southwest. Severe weather occurred in all of the States east of the Continental Divide. Temperatures were below normal in the West; as much as 6 to 10° below in the Pacific Northwest, and near normal to 4° below in the South. The rest of the Nation averaged above normal.

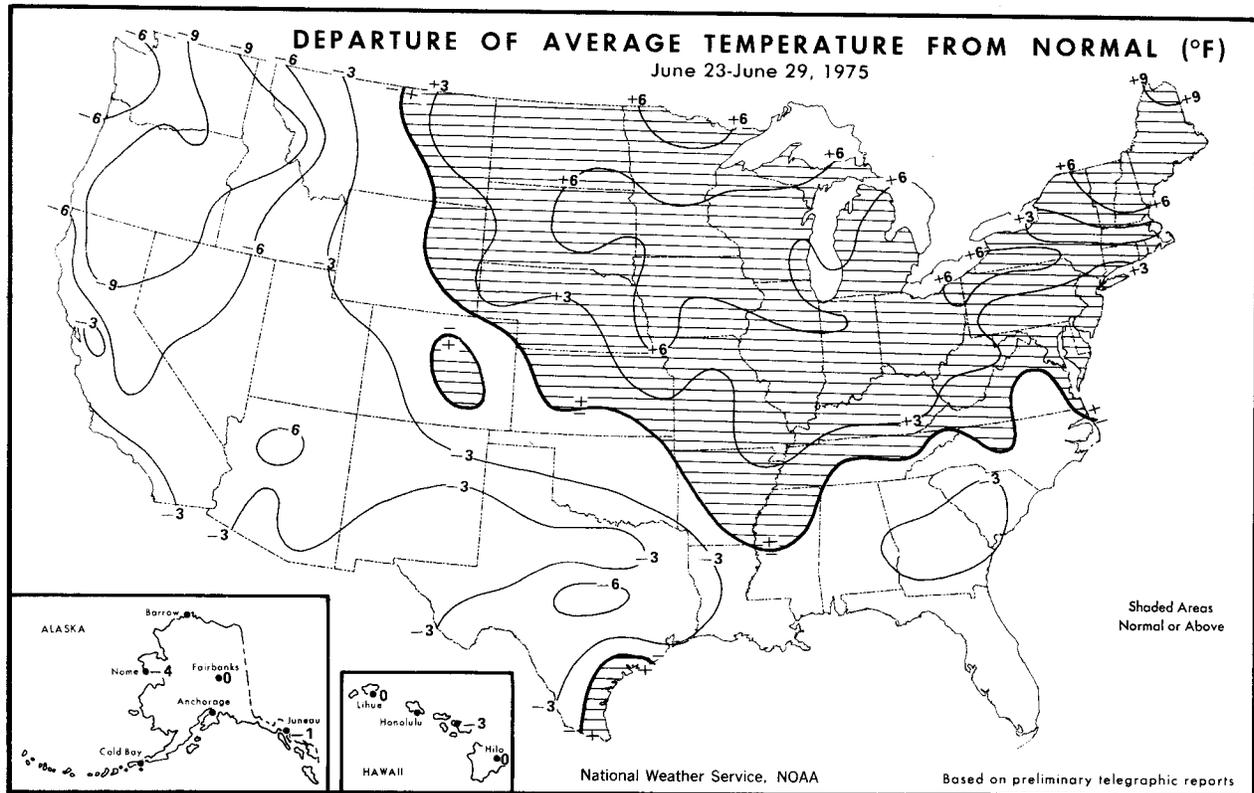
The season's first tropical storm (Amy) was born off the coast of North Carolina.

**PRECIPITATION:** Typical seasonal weather of thunderstorms with associated severe weather began the week on Monday. Thunderstorms were scattered from northwest Texas to New York, north through Kansas, to eastern North Dakota and into Michigan. More storms were along the coast from Georgia around the Florida Peninsula and along the Gulf of Mexico. Showers were numerous from Washington into California and in the northern Rockies. Tor-

nadoes swooped down in Iowa, Texas and eastern Colorado. Baseball sized hail pelted the residents of Amarillo, Texas.

On Tuesday the thunderstorms had moved eastward to central Texas and Louisiana, north to Wisconsin and then east through southern New York and to northern Virginia. The storms along the Gulf Coast and southeast Atlantic States continued. The light rain and showers continued in the Pacific Northwest.

The showers and thunderstorms became more widespread on Wednesday and were scattered in the area east and south of a line from central Texas to Wisconsin and through Pennsylvania. An exception was eastern North Carolina which was still without rain. The rain and thunderstorms that had been confined to the Pacific Northwest and northern Rockies spread into Nebraska and the Dakotas. A low center in Montana and a deep trough southward was kicking up strong winds and severe wea-



ther. Snow was reported at higher elevations in the Rockies.

Severe weather continued in the early morning Thursday from the Dakotas to Kansas and then began to diminish as the line moved eastward. Later, showers, some heavy, and thunderstorms covered most of the East. Showers were scattered from central Texas and the Mississippi River Valley eastward through Pennsylvania. Light showers fell from the Pacific Northwest through the northern Rockies.

Friday was another typical summer day with warm temperatures and scattered thundershowers over much of the Country. The Southwest, the North Central States and New England had mostly clear skies. Late in the day severe weather moved into the western Dakotas and Colorado. Local flooding occurred in central Kansas, Iowa and Colorado. Showers continued in the Pacific Northwest.

The high humidity fed energy to the thundershowers again on Saturday. Activity was scattered from Texas around the Gulf Coast States, the lower Mississippi Valley and the East Coast to New England. Eastern North Dakota and adjacent areas reported severe weather late in the day. Several tornadoes, windstorms and hail struck the area. A tropical depression wound up off the North Carolina Coast and rains were falling near the Coast. Light showers were still occurring from Washington to Montana. The Great Lakes States enjoyed partly cloudy skies and fair skies covered the Southwest.

The severe weather in southeastern North Dakota and northwestern Minnesota continued into Sunday. Serious flooding was occurring before the rain diminished. Further intensification took place

later in the day. Other thunderstorms developed during the day in the Atlantic and Gulf Coast States and in the Mississippi Valley. The depression off North Carolina developed into the season's first tropical storm and was christened "Amy".

**TEMPERATURE:** Temperatures for the week were cool to cold in the West, cool in the South and Southeast and warm to hot in the Central and Northeastern States. On the first day of the week Augusta, Georgia equaled the record low for the date with 59°. On the same day several places in New England reported new record highs with temperatures in the 90's.

The hot weather continued in New England through Wednesday when cooler air moved south. During the same period and continuing, conditions in the Midwest were hot and muggy with high temperatures near 90°. Meanwhile a low pressure center aloft kept pumping cool air from the Gulf of Alaska into the West.

Flagstaff, Ariz. reported a cold 26° Thursday morning but clear skies and lots of sun warmed them to 81° by the afternoon. In the Northern Rockies and the Northwest, temperatures only rose to the 50's and 60's. The Nation's low temperature Saturday morning was at Truckee, California with a 29°.

All during the week the high temperature at many spots in the Southwest exceeded 100° but this is not unusual for this time of year.

On the last day of the week, Sunday, warm moist air continued to dominate the Nation east of the Rockies. Ninety degree readings moved into Iowa and Nebraska. Fifties in the Pacific Northwest made it the coolest sections of the Nation.

## NATIONAL AGRICULTURAL SUMMARY

For the Week of June 23-29.

**HIGHLIGHTS:** Wet humid weather delayed small grain harvest over much of the Nation's midsection. Winter wheat harvest continued to fall further behind normal progress. By June 29th, only 29% of the U.S. winter wheat crop was harvested versus over half done in 1974 and the normal 40%. Hot humid weather pushed corn growth throughout most of the Corn Belt, however, rain and wet fields also promoted weed growth and increased drown-out. Soybean planting on June 29th was 95% finished, still ahead of the 89% in 1974 and normal 94%.

**SMALL GRAINS:** Rains and humid weather slowed small grain harvest in many areas of the Nation's midsection, while drier conditions allowed good advancement in the South Atlantic Region. Hot and humid weather hastened small grain development over much of the North Central States.

Winter wheat harvest was hampered by rain, humid weather, and wet fields throughout much of the major growing area. By June 29th, 29% of the 1975 winter wheat crop was harvested, trailing last year's excellent progress of 51% and normal 40%. Wet fields in Kansas, slowed harvest and only 10% of the State's crop was harvested, versus 75% in 1974, and normal 45%. Rain and humid weather delayed harvest in Oklahoma to afternoon cutting; 79% was combined against 96% in 1974. In Texas, high winds, rain, and hail stopped harvest until late week with only 69% of the 1975 crop out compared with 95% in 1974 and usual 87%.

Wheat harvest progressed well in Illinois, Indiana, and Missouri; started in Colorado and Ohio, and only 60% of the crop had turned color in Nebraska.

**CORN:** Much of the Nation's 1975 corn crop was in good to excellent condition, while hot and humid weather promoted growth at a rapid pace.

Adequate to surplus moisture prevails over much of the Corn Belt, however, shortages are causing stress in the Appalachian States. The height of this year's crop is averaging above both last year and normal. Iowa corn fields averaged 30 in. high and the most advanced averaged 42 in., while in Illinois the average was 45 in. and most advanced fields 60 in. versus the normal 25 and 41 in. respectively. Growth and development continues ahead of last year in the North Central Region and outpaced the normal progress in all the major States except Minnesota. Weeds, drown-out, and yellowing in low spots continue to show up from wet fields in Iowa, Minnesota, and Wisconsin. Corn in the South Central and South Atlantic States continued to show excellent growth, but moisture shortages are showing up in Kentucky, North Carolina, Tennessee and Virginia.

**COTTON:** Cotton development continued to make good improvement and ranges from fair to excellent. Weed and insect controls continue and have been effective in most areas.

Recent hail and wind damage will necessitate some replanting in the Texas High and Low Plains. Boll weevil and bollworm problems are developing in the Blacklands and from the South Central to the Lower Rio Grande Valley. In Oklahoma, heavy rains and wind caused extensive damage to cotton in the southwest. Some acreage will be lost as the replant date has passed. Cotton in Alabama was 60% squaring, ahead of 57% in 1974, but only 6% setting bolls against 10% in 1974. In Mississippi, 44% was squaring versus 56% in 1974

and average 54%. Georgia's crop was 70% squaring and 32% setting bolls.

**SOYBEANS:** Soybean planting was restricted in many areas by inclement weather and slow progress in small grain combining where soybeans will be planted as a second crop. By June 29th, planting had reached 95% complete still out pacing the 1974 progress of 89% and usual 94%.

Planting in the North Central States was virtually complete except in Kansas, Michigan, and Missouri as well as other areas where soybeans will be planted after winter wheat or other small grains are harvested. Above normal temperatures sparked growth in most areas. Soybeans were in good to excellent condition in Illinois and mostly good in Iowa, but late stands were uneven and showing some disease and insect problems. Average height in Ohio was 12 in., 4 in. taller than normal.

Planting was 92% finished in the South Atlantic States and 88% in the South Central Region. In Arkansas, planting was 91% done, while in Mississippi 85%, much ahead of the 1974 level.

**OTHER CROPS:** Sorghum planting in the 7 major producing States was 94% finished, equalling both the 1974 and normal pace. Planting trails last year and normal in Colorado and Kansas. In Texas, planting was essentially complete from the Blacklands southward and rapidly nearing completion in the High and Low Plains where extensive replanting was necessary.

Wet and humid conditions hampered haying on many farms in the eastern half of Nation, reducing quality from both over maturity and wetness.

Kentucky tobacco was in good condition and 13% of the crop was over 12 in. high versus 11% in 1974 and 10% average. Transplanting was 90% complete in Maryland while limited harvest was underway on types 12 and 13 in North Carolina.

**FRUITS AND NUTS:** Peach harvest advanced to 65% complete in Georgia; 28% in South Carolina; and 26% in North Carolina. Harvest continues active in Arkansas, California, Mississippi and Texas. Apples were sizing 15 days ahead of 1974 in New England. Sweet cherry harvest was active in Pennsylvania and beginning in Oregon and Washington. Citrus trees and new fruit in Florida and Texas continue to size well. Pecans in Texas continue to show good growth as recent rain kept most trees in excellent condition.

**VEGETABLES:** Hot, humid weather stimulated vegetable growth in Wisconsin, Michigan, and the North Atlantic States while subnormal temperatures stymied growth in Oregon and Washington. Watermelon harvest was moving to the north and west in Florida; the volume was increasing daily in Georgia and in Texas, harvest was nearing completion in southern areas and continuing in the San Antonio Winter Garden area. Elsewhere in the State, the crop was making good growth. California vegetables were in good supply and quality.

**PASTURES AND LIVESTOCK:** Pastures and livestock are in generally good condition, however, pastures have declined in Virginia, Tennessee, and lower elevations in Arizona and California. Rains were beneficial to range and pasture land in Oregon and Washington. Forage growth was near normal in Montana, Idaho, Utah, Nevada, Texas, and improving in Florida.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., June 29, 1975

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 . . .	77	- 2	. 4	- . 6	La. Baton Rouge . . .	80	- 1	1.1	0	Youngstown . . .	75	+ 6	. 4	- . 4
Mobile . . .	80	- 1	1.6	- . 1	Lake Charles . . .	80	- 2	3.3	+2.0	OKLA. Okla. City . . .	77	- 2	. 7	- . 2
Montgomery . . .	78	- 2	1.6	+ . 5	New Orleans . . .	79	- 2	3.7	+2.4	Tulsa . . .	79	- 1	. 2	- . 8
ALASKA. Anchorage . . .	---	---	---	---	Shreveport . . .	79	- 3	. 9	+ . 2	OREG. Astoria . . .	55	- 3	1.5	+1.0
Barrow . . .	---	---	---	---	MAINE. Caribou . . .	71	+ 9	0	- . 8	Burns . . .	53	- 9	. 1	- . 1
Fairbanks . . .	61	0	. 5	+ . 1	Portland . . .	69	+ 4	. 2	- . 5	Medford . . .	57	-10	. 4	+ . 3
Juneau . . .	54	- 1	. 1	- . 7	MD. Baltimore . . .	76	+ 1	2.1	+1.2	Pendleton . . .	62	- 7	. 1	- . 1
Kodiak . . .	---	---	---	---	MASS. Boston . . .	73	+ 2	0	- . 7	Portland . . .	57	- 7	1.0	+ . 7
Nome . . .	44	- 4	. 5	+ . 2	Chatham . . .	66	- 1	0	---	Salem . . .	55	- 8	. 7	+ . 5
ARIZ. Flagstaff . . .	54	- 7	0	- . 2	MICH. Alpena . . .	69	+ 5	. 7	- . 6	PA. Allentown . . .	73	+ 1	. 7	- . 2
Phoenix . . .	86	- 2	0	- . 1	Detroit . . .	74	+ 3	. 7	- . 1	Erie . . .	74	+ 7	. 2	- . 6
Tucson . . .	82	- 3	0	- . 2	Flint . . .	72	+ 4	1.9	+1.1	Harrisburg . . .	74	0	3.4	+2.7
Winslow . . .	71	- 4	0	- . 1	Grand Rapids . . .	74	+ 4	1.1	+ . 3	Philadelphia . . .	75	0	1.1	+ . 2
Yuma . . .	85	- 4	0	0	Houghton Lake . . .	70	+ 5	. 7	- . 8	Pittsburgh . . .	73	+ 2	1.5	+ . 7
ARK. Fort Smith . . .	79	- 1	. 4	- . 4	Lansing . . .	74	+ 4	. 7	- . 1	Scranton . . .	73	+ 3	1.4	+ . 6
Little Rock . . .	82	+ 2	T	- . 8	Marquette . . .	68	+ 5	. 5	- . 3	R. I. Providence . . .	72	+ 3	. 3	- . 3
CALIF. Bakersfield . . .	76	- 4	0	0	Muskegon . . .	75	+ 7	. 4	- . 2	S. C. Charleston . . .	77	- 2	. 4	-1.3
Eureka . . .	53	- 3	. 5	+ . 4	S. Ste. Marie . . .	68	+ 7	. 7	- . 7	Columbia . . .	76	- 4	. 3	- . 7
Fresno . . .	70	- 7	0	0	MINN. Duluth . . .	65	+ 3	1.2	+ . 2	Greenville . . .	75	- 2	1.0	0
Los Angeles . . .	70	0	0	0	Internatl Falls . . .	70	+ 7	4.1	+3.1	S. D. Aberdeen . . .	75	+ 7	. 3	- . 5
Red Bluff . . .	70	- 9	. 2	+ . 1	Minneapolis . . .	76	+ 6	1.0	+ . 1	Huron . . .	76	+ 6	T	- . 8
San Diego . . .	66	- 1	0	0	Rochester . . .	75	+ 7	. 4	- . 7	Rapid City . . .	69	+ 2	. 6	- . 2
San Francisco . . .	58	- 4	T	0	St. Cloud . . .	72	+ 5	. 2	- . 8	Sioux Falls . . .	75	+ 5	T	-1.0
Stockton . . .	73	- 1	T	0	MISS. Jackson . . .	80	- 1	T	- . 8	TENN. Chattanooga . . .	76	- 2	. 7	- . 3
COLO. Denver . . .	70	+ 1	. 4	0	Meridian . . .	80	- 1	T	-1.0	Knoxville . . .	78	+ 1	. 3	- . 7
Grand Junction . . .	71	- 4	0	- . 1	MO. Columbia . . .	77	+ 2	. 6	- . 4	Memphis . . .	82	+ 2	. 9	+ . 1
Pueblo . . .	75	+ 1	0	- . 4	Kansas City . . .	79	+ 3	T	-1.3	Nashville . . .	79	0	T	- . 8
CONN. Bridgeport . . .	72	+ 1	. 1	- . 5	St. Louis . . .	80	+ 3	1.0	0	TEX. Abilene . . .	79	- 3	T	- . 6
Hartford . . .	74	+ 4	. 7	- . 1	Springfield . . .	78	+ 2	. 1	-1.0	Amarillo . . .	74	- 3	1.1	+ . 3
D. C. Washington . . .	79	+ 2	. 3	- . 5	MONT. Billings . . .	65	- 1	. 1	- . 4	Austin . . .	79	- 4	4.2	+3.6
FLA. Apalachicola . . .	79	- 2	. 6	- . 9	Glasgow . . .	69	+ 4	. 2	- . 4	Beaumont . . .	79	- 3	2.0	+ . 8
Daytona Beach . . .	79	- 1	2.5	+ . 8	Great Falls . . .	61	- 3	. 2	- . 4	Brownsville . . .	84	0	T	- . 6
Ft. Myers . . .	81	- 1	1.1	-1.2	Havre . . .	64	- 1	T	- . 6	Corpus Christi . . .	84	0	T	- . 3
Jacksonville . . .	80	0	1.5	- . 1	Helena . . .	57	- 5	T	- . 5	Del Rio . . .	82	- 4	. 4	0
Key West . . .	84	0	. 6	- . 5	Kalispell . . .	55	- 5	. 2	- . 8	El Paso . . .	81	- 1	0	- . 2
Lakeland . . .	80	- 1	. 4	-1.4	Miles City . . .	71	+ 3	. 9	+ . 2	Fort Worth . . .	82	- 1	. 1	- . 5
Miami . . .	81	- 1	3.8	+ . 5	Missoula . . .	53	- 9	. 3	- . 1	Galveston . . .	80	- 2	2.1	+1.1
Orlando . . .	81	0	1.7	- . 2	NEBR. Grand Island . . .	75	+ 2	. 6	- . 4	Houston . . .	79	- 3	3.7	+2.7
Tallahassee . . .	80	- 1	. 9	- . 9	Lincoln . . .	78	+ 3	. 2	- . 9	Lubbock . . .	77	- 2	. 5	- . 1
Tampa . . .	82	0	1.8	0	Norfolk . . .	77	+ 4	. 1	-1.0	Midland . . .	80	- 2	. 6	+ . 2
W. Palm Beach . . .	78	- 2	4.0	+2.1	N. Platte . . .	72	+ 1	. 3	- . 5	San Angelo . . .	79	- 4	1.9	+1.5
GA. Atlanta . . .	76	- 1	1.0	0	Omaha . . .	79	+ 6	. 7	- . 4	San Antonio . . .	80	- 4	1.4	+ . 8
Augusta . . .	76	- 4	. 3	- . 7	Valentine . . .	73	+ 5	. 2	- . 6	Victoria . . .	83	0	6.0	+5.3
Macon . . .	77	- 4	. 4	- . 6	NEV. Ely . . .	57	- 4	0	- . 2	Waco . . .	78	- 6	2.1	+1.6
Savannah . . .	77	- 3	T	-1.6	Las Vegas . . .	83	- 3	0	- . 1	Wichita Falls . . .	80	- 4	. 1	- . 6
HAWAII. Hilo . . .	75	0	1.3	- . 3	Reno . . .	58	- 7	T	-1.1	UTAH. Blanding . . .	62	- 6	. 3	+ . 2
Honolulu . . .	---	---	---	---	Winnemucca . . .	57	- 8	. 2	0	Salt Lake City . . .	67	- 3	. 1	- . 2
Kahului . . .	75	- 3	. 1	0	N. H. Concord . . .	73	+ 6	. 3	- . 5	VT. Burlington . . .	74	+ 6	T	- . 8
Lihue . . .	78	0	. 1	- . 3	N. J. Atlantic City . . .	73	0	. 1	- . 7	VA. Lynchburg . . .	74	0	1.1	+ . 3
IDAHO. Boise . . .	62	- 6	1.1	- . 1	Trenton . . .	75	- 1	. 3	- . 5	Norfolk . . .	79	+ 2	. 1	- . 9
Lewiston . . .	59	- 8	. 3	- . 1	N. MEX. Albuquerque . . .	74	- 3	0	0	Richmond . . .	75	- 1	1.1	+ . 2
Pocatello . . .	62	- 3	T	- . 2	Roswell . . .	78	- 1	. 3	0	Roanoke . . .	75	+ 1	T	- . 8
ILL. Cairo . . .	84	+ 4	T	. 9	N. Y. Albany . . .	72	+ 2	. 5	- . 2	WASH. Colville . . .	55	- 9	. 1	- . 2
Chicago . . .	78	- 5	1.4	- . 4	Binghamton . . .	73	+ 6	T	. 8	Omak . . .	58	- 9	. 3	0
Moline . . .	79	+ 6	1.5	- . 4	Buffalo . . .	73	+ 5	T	. 5	Quillayute . . .	52	- 5	1.4	+ . 7
Peoria . . .	77	- 3	1.0	- . 1	New York . . .	74	0	. 4	- . 3	Seattle-Tacoma . . .	58	- 4	. 5	+ . 2
Rockford . . .	77	- 6	. 5	- . 6	Rochester . . .	72	- 3	. 4	- . 2	Spokane . . .	54	-11	. 6	+ . 3
Springfield . . .	79	+ 4	1.7	- . 7	Syracuse . . .	72	- 2	. 8	- . 1	Walla Walla . . .	60	-10	. 1	- . 1
IND. Evansville . . .	80	- 3	T	. 8	N. C. Asheville . . .	70	+ 2	T	1.0	Yakima . . .	59	- 8	T	- . 1
Ft. Wayne . . .	77	- 5	T	. 9	Charlotte . . .	76	- 2	- . 1	. 9	W. Va. Beckley . . .	71	+ 2	1.7	+ . 7
Indianapolis . . .	77	- 3	3.7	+2.7	Greensboro . . .	78	- 2	. 1	. 9	Charleston . . .	76	+ 2	1.6	+ . 7
South Bend . . .	75	+ 4	. 6	- . 3	Hatteras . . .	74	- 2	2.6	+1.4	Huntington . . .	77	+ 3	1.3	+ . 5
IOWA. Burlington . . .	78	- 4	. 7	- . 4	Raleigh . . .	75	- 1	. 5	. 5	Parkersburg . . .	77	+ 3	. 2	- . 8
Des Moines . . .	78	- 5	1.6	- . 5	Wilmington . . .	77	- 2	1.9	- . 4	WIS. Green Bay . . .	73	+ 6	0	- . 8
Dubuque . . .	78	+ 6	. 6	- . 8	N. DAK. Bismarck . . .	71	- 4	. 6	- . 2	La Crosse . . .	77	+ 6	. 6	- . 4
Sioux City . . .	75	+ 2	- . 1	- . 9	Fargo . . .	73	+ 5	4.5	+3.7	Madison . . .	75	+ 7	. 6	- . 4
KANS. Concordia . . .	77	- 2	. 7	- . 4	Williston . . .	69	- 3	. 6	- . 2	Milwaukee . . .	72	+ 5	. 2	- . 7
Dodge City . . .	76	0	1.9	-1.1	OHIO. Akron-Canton . . .	75	- 4	. 3	. 5	WYO. Casper . . .	65	0	. 1	- . 2
Goofland . . .	71	- 1	. 1	- . 6	Cincinnati . . .	77	- 3	. 2	- . 7	Cheyenne . . .	63	- 2	0	- . 5
Topeka . . .	79	- 3	T	-1.3	Cleveland . . .	74	- 4	. 4	- . 4	Lander . . .	63	- 2	0	- . 4
Wichita . . .	77	- 1	2.2	+1.1	Columbus . . .	78	- 5	. 8	- . 2	Sheridan . . .	64	- 1	. 1	- . 5
KY. Lexington . . .	79	+ 4	. 1	-1.0	Dayton . . .	77	- 3	T	. 9	P. R. San Juan . . .	83	+ 2	. 2	-1.1
Louisville . . .	80	+ 5	T	- . 9	Toledo . . .	74	- 3	. 7	- . 1					

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, NOAA.

**ALABAMA:** Dry early, scattered rainfall end of week. Temperatures below normal, coolest early.

Fieldwork: 5 days suitable. Corn 43% tasseled, 40% 1974. Soybeans 96% planted, virtually completed 1974. Cotton 60% squaring, 57% 1974; 6% setting bolls, 10% 1974. Peanuts 36% pegging, 39% 1974. Wheat 94% harvested, 89% 1974. First cutting hay 83% harvested.

**ALASKA:** Tanana Valley: Cooler and a little drier than normal. Matanuska Valley: Relatively cool and wet with up to 0.25 in. of rain falling on 22d. Continued cloudy with lighter amounts of rain through midweek. Daily maximum temperatures 8° above normal. Kenai Peninsula: Comparatively dry week. Only important rain fell on 22d. Temperatures averaged below normal. Kodiak: Driest week of the season. Temperatures averaged a little cooler than normal.

First crop hay harvest started in Tanana and Matanuska Valleys. Good yields on the first cutting. Weed control in most areas has been difficult due to frequent rain showers. Grain crop growth slower than normal due to the lack of intensive sunshine and warm weather.

**ARIZONA:** Temperatures warmed but stayed below normal. Low humidity, no precipitation.

Cotton made progress but behind normal. Harvest small grains full swing. Safflower nearing maturity. Early sorghum grain blooming. Planting still active. Harvest sugarbeets active. Fall beets good condition. Alfalfa hay cutting full swing all areas. Cantaloup, watermelon harvest full volume west, beginning central. Harvest mixed vegetables continued. Plum picking continues Salt River Valley. Grapes underway Salt River Valley, Yuma County. Valencia oranges, grapefruit harvest continued. Drought conditions desert valley ranges, mountain grazing good. Water supplies short except on forests. Cattle, calves good condition.

**ARKANSAS:** Temperatures deviated from 2° below to 3° above normal. Extremes: 96 and 61°. Precipitation occurred each day as thundershowers, ranging from 2.90 in. to a trace.

Main activities cultivating cotton and soybeans. Fieldwork: 5.3 days suitable. Soil moisture adequate to surplus. Cotton crop making excellent progress; weed control very effective, no insect problems. Few early fields blooming. Rice prospects good. Mid-season nitrogen application continues. Soybean planting 91% complete, 83% 1974, average 88%. Fields relatively weed-free; early soybeans knee high, late beans up to good stands. Wheat harvest 96% complete. Sorghum planting almost complete. Early milo heading, setting grain. Corn growth excellent. Much hay baled. Pastures good. Cattle in good condition although ticks, flies plentiful. Early peach harvest continued. Tomato marketing continues. Watermelons sizing well.

**CALIFORNIA:** Very cool moist air early in week. Several inches snow higher mountains. Precipitation ranged from near 1.00 in. northern mountains to light amounts along central coast. Warming end of period with highs near 90° Central Valley and over 100° Desert southeast. Averages near

normal south coast but mostly 3 to 8° below elsewhere.

Almonds, apples, walnuts, continue to develop. Cherries near completion, valencias active. Free-stones, nectarines, plums continue, high cullage. Clings sizing, harvest in 2 to 3 weeks. Pears normal, second cover sprays applied. Warm weather problem to lemons, benefit avocados. Desert grape harvest continues; perlettes ending. Thompsons beginning. Leafhopper, mite, mildew control in vineyards, grapes progressing. Small grain harvest continues. Rice shows normal growth. Sugarbeets growing well. Dry beans planted. Cotton irrigated, chopped, fertilized. Alfalfa harvest active. Corn still planted. Broccoli strong, good quality. Cauliflower good supplies good quality. Cantaloups active, celery increasing quality variable. Lettuce shipments curtailed due to market condition. Market tomatoes beginning, processing tomatoes began 22nd. Range feed dry. Livestock good condition. Sheep San Joaquin Valley grazing oat, barley stubble. Good honey crop. Stock water supplies ample.

**COLORADO:** Scattered showers east 23d. Windy, hot 24th and 25th. Showers and local flooding 27th southeast. Warm weather weekend. Temperatures average 0 to 4° below normal except southeast. Temperatures southeast over 100° 24th, 25th and 29th.

Winter wheat good condition except southeast poor; 54% turning color; harvest began Baca County. Severe hail damage east central, light elsewhere. Other small grains good condition. Row crops good condition. Sugarbeets 84% thinned. Dry beans 94% seeded, 98% average, 1974 97%; 71% emerged. Sorghum 86% planted, 1974 and average 95%; 68% emerged. First cutting alfalfa 48% complete. Lettuce harvest active. Light hail damage cherries. Range and pasture good condition except southeast fair. Livestock condition good.

**FLORIDA:** Temperatures averaged a little below normal. Rainfall, near or a little below normal. Panhandle, Gulf Coast, above normal along east coast.

Soil moisture mostly adequate. Corn, peanuts, soybeans good condition. Soybean planting continues. Early corn harvest slow because of rain. Growth. Pastures showing marked improvement, good to excellent condition. Cattle, calves beginning to pick up, generally in good condition. Citrus trees excellent condition. New bloom showing in groves that received insufficient rainfall to flush out new growth earlier. Nearly all vegetables completed for the season. Watermelon harvest moving to north, west, supplies steady. Sweet corn declining, quality good. Celery near end of season, light volume. Eggplant steady.

**GEORGIA:** Temperatures averaged 6° below normal northeast, 2 to 4° below normal elsewhere. Averages 70° in mountains to 80° extreme south. Scattered showers throughout week. Amounts near 2.00 in. several sections east, traces upwards to 1.00 in. elsewhere. Spotty showers mainly north 28th and 29th.

Soil moisture variable but mostly adequate except short southwest. Fieldwork very active, 5 days suitable. Soybean and sorghum planting continued, now 95% and 85% complete, near average and

1974. Corn good, some needing rain. Peanuts good, leafspot control extremely active, landplastering and insect controls continued; 81% now blooming, 56% pegging. Cotton good and improving, 70% squaring, 32% setting bolls. Tobacco topping and harvest active, fair to good condition; 20% harvested, average 25%, 1974 22%. Peaches fair to mostly good; 63% harvested, average 48%, 1974 61%. Small grains 95% harvested, near average, 1974 98%. Watermelons 18% harvested, volume increasing daily. Pastures and cattle declined slightly, still mostly good.

**HAWAII:** Cloudy and rain in Kona, Hawaii.

Dry weather Hamakua Coast affecting sugarcane progress. Other sections crop progress fair to good with irrigation. Frequent spraying continuing to curb insect infestation. Vegetable and melon supplies adequate. Banana supplies light. Papaya supplies adequate. Pastures lowland area and north Kauai approaching critical stage, need moisture immediately. Pineapple harvesting active. Sugar harvesting steady.

**IDAHO:** Temperatures averaged 5 to 10° below normal. Precipitation above normal. Heaviest precipitation north and southeast.

Cool, wet weather slowed crop development and growth. However, range grasses excellent forage growing conditions. Sunshine needed crop improvement. New cut alfalfa heavily damaged from recent rains. Alfalfa seed fields boot to bloom stage, cool weather limited activity. Mixed grain 30% headed. Spring barley and oats 10% headed, 50% and 55%, respectively, 1974. Blocking and thinning sugarbeets 80% complete, 95% 1974. First cutting alfalfa 35% complete, 65% 1974. Potato crop progressing, although late; 75% emerged, 95% previous year. Some potato fields closing middles southwest. Dry beans 90% emerged, complete 1974. Spring wheat 35% headed, 55% 1974. Pasture range grasses good to excellent condition, forage growth almost normal. Livestock excellent condition most localities.

**ILLINOIS:** Temperatures averaged 5 to 6° above normal north, 3 to 4° above normal elsewhere. Precipitation 0.50 to 1.75 in.

Corn good to excellent. Average height all fields 45 in., 17 in. 1974, average 25 in.; most advanced 60 in., 34 in. 1974, average 41 in. Soybeans good to excellent, 90% full stand. Winter wheat good to excellent; 100% ripe, 100% 1974 and average, 45% combined, 50% 1974, average 49%. Most advanced south. Oats good to excellent; 85% filling, 84% 1974, average 85%; 25% turned yellow; 26% 1974, average 30%. Barley harvest 50% complete. Hay crops good to excellent; second crop alfalfa 10% cut. First crop red clover 92% cut, 71% 1974, average 76%. Pastures good to excellent. Soil moisture 13% short, 63% adequate, 24% surplus. Fieldwork: 4 days suitable.

**INDIANA:** Hot and humid. Highest temperature 93°. Daily highs averaged 90° extreme southwest. Humidity 10% above normal except in extreme south. Showers locally heavy north and central, 1.50 to 4.00 in. No rain in much of the south.

Fieldwork averaged 4 days. Topsoil and subsoil mostly adequate to surplus. Wheat 45% ripe; 15% combined, 5% in 1974, 10% average. Oats 95% headed, 75% in 1974. Corn 32 in. high, 15 in. in 1974, 22 in. average. Soybeans 9 in. high, 4 in. in 1974. Alfalfa hay 90% cut first time, 80% in 1974. Clover hay 70% cut, 55% in 1974. Pastures fair to mostly good.

**IOWA:** Temperatures 4 to 8° above normal, greatest departures north. Rainfall from 0.60 in. below normal, northwest, north central, to 1.70 in. above central.

Fieldwork slow as warm, humid, wet weather continued. Days suitable 3.5. Crops growing at rapid rate, but cultivation slowdown allowed rapid weed growth. Corn mostly good to excellent condition, yellowing in low areas. Average corn height 2.5 ft., average of tallest over 3.5 ft., some corn already 6 ft. tall. Stands of late corn uneven. Soybean condition mostly good. Later beans have uneven stands and some disease and insect problems. Weed problems greater in soybeans from herbicide ineffectiveness, also some herbicide damage. Oats 85% headed, uneven and yellowing in low areas. First cutting alfalfa 88% complete. First cutting red clover 55% complete. Topsoil 1% short, 45% adequate, 54% surplus.

**KANSAS:** Temperatures 1 to 3° above normal in all but central and south central, where averages were normal. Rainfall persisted mostly during 1st of the week. Larger totals 4.93 in. Harvey County, 4.33 in. Reno, and 4.49 in. Russell County.

Wet fields continued to slow harvest. Wheat 10% harvested, 75% 1974, 45% normal; 60% ripe, 95% 1974, 75% normal. Soybeans 70% planted, 90% 1974, 85% normal. Sorghum 80% planted, 90% 1974 and average. Some replanting from washed fields. Alfalfa first cutting completed. Second cutting 20% compared with 40% 1974 and 35% normal. Pastures in very good condition.

**KENTUCKY:** Warm, humid weather prevailed. Daily average temperatures were in mid to upper 70's. Rainfall amounts ranged from 1.00 to 2.00 in. east to less than 0.50 in. elsewhere on 26th and 27th.

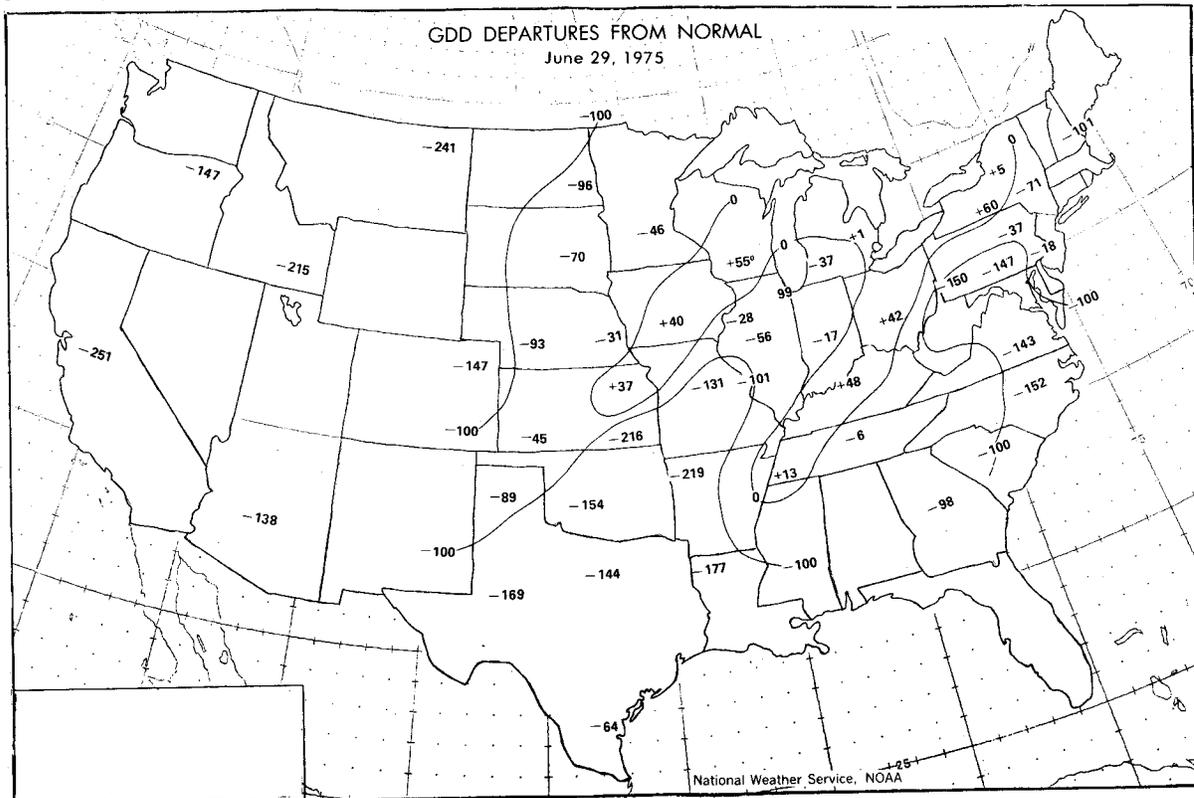
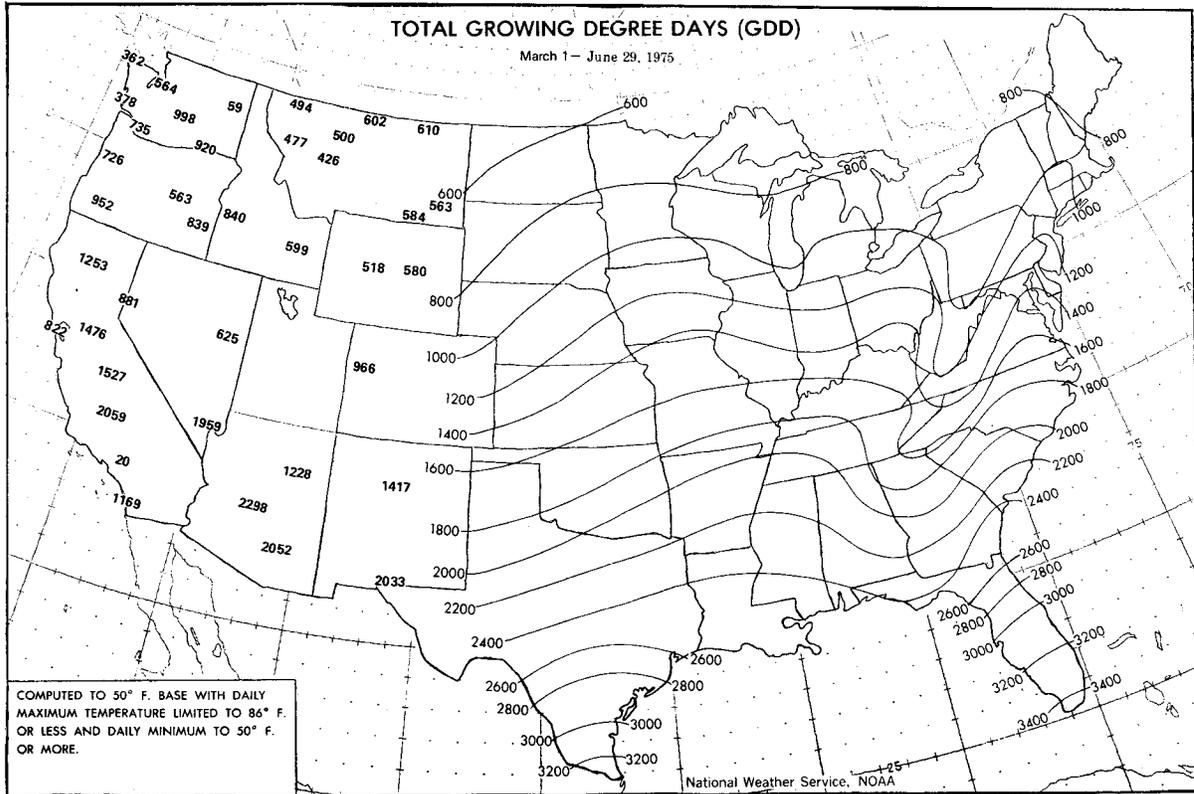
Fieldwork favorable 5.5 days. Soil moisture 58% short, 42% adequate. Activities consisted of harvesting small grains, planting soybeans, baling hay, and cultivating tobacco, corn and soybeans. Wheat harvest 71% complete, 69% 1974, 39% average. Corn growth rapid, 9% tasseled, 4% 1974, 3% average. Tobacco good condition, 13% over 12 in. high, 11% 1974, 10% average. Condition most crops good, but rain needed.

**LOUISIANA:** Temperatures normal northeast, 2 to 5° below elsewhere. Extremes: 95° Alexandria and 66° Homer on 26th. Rain 4 to 6 days south and west, 1 to 2 northeast. Greatest 1-day total 2.53 in. New Orleans 29th.

Cultivation, chemical application, planting, and haying main activities. Soil moisture surplus. Fieldwork possible 2.9 days. Soybeans 75% planted, 99% 1974, and 98% average. Stands and growth fair to good, cultivation needed. Some replanting statewide. Cotton condition fair; weed control continued. Corn and sorghum good condition. Sorghum 66% planted. Sugarcane growth and condition good. Borer infestation moderate. Fallow plowing general. Rice mostly good condition; some weeds and red rice apparent; early fields heading. Transplanting sweetpotatoes 85% complete; stands good, vining well. Irish potato harvest winding up. Small grain harvest virtually complete. Haying active; prospects fair to good. Pastures average. Livestock generally good.

**MARYLAND AND DELAWARE:** Temperatures near normal. Highs low 80's to low 90's; lows upper 40's to mid-60's. Precipitation ranged trace to 2.99 in. Heaviest north central Maryland. Weekend mild with showers.

Barley harvest 85%, 75% 1974, average 60%; wheat 25%, same as 1974, average 15%; rye 15%



same as 1974 and oats underway. Second crop soybean planting continues, crop 90% planted. Tobacco transplanting 90%. Hay harvest active. Cucumber harvest underway, snap beans continue; sweet corn and cantaloups to start July 2d.

**MICHIGAN:** Temperatures averaged 3 to 7° above normal. Local thunderstorms caused highly variable precipitation over southern Lower Peninsula ranging from 3.30 in. at Coldwater to 0.15 in. at Saginaw, but only light precipitation fell over Upper and northern Lower Peninsula.

Rapid growth of all crops on better drained soils. Soil moisture surplus to adequate. Fieldwork: 3.7 days. Corn growth exceptional, some over 5 ft. high. Average height 19 in., 10 in. 1974. Soybeans 95% planted, 97% in 1974, average 95%. Dry beans nearly 90% planted, average 88%; some replanting. Sugarbeet blocking nearly finished. Wheat 40% turned yellow, 28% in 1974, average 41%. Oats 35% headed, 23% in 1974, average 38%. Hay 50% harvested same as average. Pasture feed above average. All fruit developing rapidly. Hot weather pushed growth of vegetables.

**MINNESOTA:** A warm wet and stormy week. Temperatures 4 to 7° above normal. Upper 80's to mid-90's common. Precipitation averages 2.00 to 2.50 in. northwest and north central, 1.25 in. central, east central, and northeast. Driest over southwest with only 0.50 in. Excessive rainfall of 7 to 11 in. from just east of Fargo to Pelican Rapids on 28 to 29th.

Small grain development hastened by warmer temperatures, but wet soils preventing planting or replanting of row crops in some southern counties. Weekend heavy rains caused considerable damage to potatoes, sugarbeets, small grains, corn, soybeans, in southern Red River Valley. Continued wet conditions preventing effective weed control, causing yellowing of corn and soybeans and lowering quality of hay. Corn height 19 in., 1974 16 in., average 21 in. Soybeans 8 in., 1974 7 in., average 8 in. Spring wheat 26% heading, 1974 20%, average 44%. Oats 37% heading, 1974 35%, average 53%. Barley 30% heading, 1974 20%, average 44%. First crop alfalfa 74% cut, 1974 80%, average 84%. Soil moisture adequate to surplus.

**MISSISSIPPI:** Rainfall averaged less than 1.00 in. Temperatures 1 to 3° subnormal. Extremes: 94 and 58°. Greatest 24-hour rainfall was 1.92 in. at Picayune on 27th.

Soil moisture adequate. Fieldwork: 5.2 days suitable. Cotton 44% squaring, 56% 1974, 54% average; 4% blooming. Soybeans 85% planted, 62% 1974, 89% average; 65% up to stand, 53% 1974. Sorghum 89% planted, 71% 1974, 86% average. Sweet potatoes 90% planted. Wheat 93%, oats 90%, Irish potatoes 66%, peaches 31%, cucumbers 53% and hay 28% harvested. All crops and pastures in mostly fair to good condition.

**MISSOURI:** Average temperatures above normal, ranging from 1° above in west central plains to 4° above in Bootheel. Precipitation light, ranging from 0.10 in. Bootheel to 1.00 in. northeast and west Ozark areas. A few isolated storms from 3.00 to 4.50 in.

Four days suitable for fieldwork. Soybeans 93% planted, 85% 1974, 81% average. Sorghum 92% planted, 90% 1974, 82% average. Wheat 45% harvested, 59% 1974, 49% average. Second cutting alfalfa 24% harvested, 30% 1974, average. Clover-timothy 57% harvested, 52% 1974, 57% average. Corn mostly good condition, cotton mostly fair to good condition with 53% squared, 5% 1974.

**MONTANA:** Cool wet variety of weather. Temperatures averaged 5 to 10° below normal except slightly above east. Highest maximums early week. Freezing temperatures end of week west and southwest. Precipitation mostly below normal except above east. Large amounts up to 2.00 in. end of week east, due severe thunderstorms producing some hail and two tornadoes.

Crop growth slow due cool weather. Winter wheat 40% headed, 45% boot and 15% preboot. Normal is 70% headed, 25% boot and 5% preboot. Spring wheat and oats 15% boot, 85% preboot. Barley 10% boot, 90% preboot. Condition small grain crops good. Potatoes, sugarbeets, corn fair to good. First cutting alfalfa 10% done, 35% 1974 and normal 30%. Sugarbeets 65% thinned. Range feed adequate most areas.

**NEBRASKA:** Cool temperatures 26th, rest above normal. Rained several days, mostly on 26th, amounts to 3.25 in.

Fieldwork: 4.0 days suitable. Winter wheat mostly good condition. Some wheat leaf rust, also lodging caused by wind and rain. Wheat 60% turned, 95% 1974, normal 85%. Corn good to excellent condition. Cultivation and ditching for irrigation late due to wet fields. Sorghum and soybeans in good condition. Alfalfa and wild hay good condition; 95% of first cutting alfalfa harvested. Topsoil moisture supplies 76% adequate, 21% surplus, 3% short. Subsoil moisture supplies 66% adequate, 6% surplus, 28% short; 22% short a year ago. Pasture and range feed supplies 81% adequate.

**NEVADA:** Cold air mass brought record cold and snow 24th and 25th. Temperatures averaged 2 to 11° below normal. Precipitation generally light north, none south. Snow as low as 4 to 5 thousand feet mountains.

Alfalfa harvest continues. Ranges generally good condition.

**NEW ENGLAND:** Weather notable for warmth and dryness. Temperatures above normal throughout. No significant rainfall.

Hot, clear weather over New England permitted widespread haying and pushed development all crops rapidly. Early planted corn fields southern areas tasseling. Maine's potato crop growing well, southern areas entering full bloom. Strawberry harvest peaking north, tapering off south. Cranberries full bloom, crop prospects good. Apples sizing 15 days ahead of 1974.

**NEW JERSEY:** Temperatures averaged near normal. Extremes: 54° at Freehold on 26th, 94° at Toms River and Bridgeton on 24th. Weekly rainfall averaged 1.07 in. north, 0.69 in. central, 0.95 in. south. Heaviest 24-hour total was 1.74 in. at Glassboro 29th and 30th. Estimated soil moisture % of field capacity averaged 86% north, 67% central and 78% south.

Soil moisture continues mostly adequate to surplus depending on the area. Considerable wheat lodged because of wind and heavy rains. Snap bean, cucumber, sweet corn and tomato harvest increasing. Cabbage and blueberry harvest heavy. Lettuce supplies declining rapidly. Apples and peaches are sizing well. Considerable hay cuttings have been rained on because of frequent rainfall. Forage, hay and pastures are growing well.

**NEW MEXICO:** Widely scattered shower activity eastern plains and south central mountains. Amounts generally light to around 0.75 in. Sacramento Mountains. Continue dry over remainder.

Very little day-to-day trend in temperatures with weeklong averages within 2° of normals.

Soil moisture short to adequate. Cotton fair, almost all emerged. Alfalfa 2nd cut expected north within next 2 weeks, 70% done south, 80% south in 1974. Lygus bugs yellowing fields southwest. Sorghum fair to good, some greenbug concern southwest. Irrigated wheat 65% combined, dryland 85%, nearly done in 1974. High moisture delaying some harvests. Barley 70% combined, nearly done in 1974. Corn fair with fairly good stands. Majority onions shipped from Mesilla Valley. North lettuce harvest completion expected next week. Portales broomcorn fair, 85% emerged. Peanuts good east side. Sunflowers, safflower good Carlsbad. Livestock good. Ranges fair.

NEW YORK: Temperatures mostly above normal. Precipitation below normal except central where slightly above normal. Lack of precipitation evident north and south central extending dry conditions which began midmonth.

Fieldwork picked up with haying and late plantings. Alfalfa over 65% harvested, Clover-Timothy 55% and grass silage 75%. Corn and wheat good to excellent condition. Dry bean planting 80% complete. Soil moisture adequate most areas. Long Island potatoes look excellent, hilling and spraying continues. Upstate potatoes growing well, some in blossom. Onion, celery, tomato prospects good. Excellent quality iceberg lettuce being harvested all areas. Finishing snap bean and sweet corn plantings. Strawberry harvest at peak.

NORTH CAROLINA: Hot dry weather continues. Temperatures near normal. Rainfall below average, isolated thundershowers.

Fieldwork: 4.8 days suitable. Soil moisture 53% very short, 30% short, 15% adequate, 2% surplus. Most growing crops under some stress, especially corn. Flue-cured tobacco crop mostly fair to good. Limited harvest of type 12 and 13. Burley tobacco 100% transplanted, 1974 100%. Soybeans look good, 89% planted, 1974 87%. Peanuts and cotton developing well, stands excellent. Sorghum 87% sown, 1974 80%. Sweetpotatoes 92% transplanted, 1974 89%. Ideal weather for small grain harvest. Wheat 81% harvested, 1974 74%, average 51%. Oats 87% harvested, 1974 79%, average 68%. Barley 90% harvested, 1974 81%, average 77%. Rye 81% harvested, 1974 77%, average 57%. Hay 63% cut, 1974 51%. Irish potatoes 51% dug, 1974 56%. Peaches 26% harvested, 1974 29%.

NORTH DAKOTA: Temperatures above normal, ranging from 6° above normal north central and east central to 1° above normal southwest and south central. Extremes: 92° at Watford City, 47° at Amidon. Precipitation above normal central and northeast. Most precipitation at McHenry with 1.54 in. Greatest 24-hour rainfall at McHenry with 1.40 in. on 22d. Weekend near average temperature with scattered thundershowers west to severe thunderstorms; heavy rains, high winds and tornadoes east. Heaviest rainfall during weekend in Lamoure County with nearly 12.00 in.

Many parts of southeast flooded and large acreages under water. Crops generally progressing well with development behind normal. Alfalfa cutting hampered by wet weather. Broadleaf weed spraying continuing, where possible. Livestock good condition. Pastures excellent.

OHIO: Temperatures above normal with highs in the 80's and lows in 60's. Precipitation varied from thunderstorms. Greatest amount was 1.29 in. southeast, least 0.03 in. west central.

Average height: Corn 35 in., 22 in. 1974 and normal; soybeans 12 in., 8 in. 1974 and normal. Wheat 25% ripe, 20% 1974 and normal. Wheat harvest started. Oats virtually all headed, 90% 1974 and 85% normal. Barley 25% harvested, 15% normal. Alfalfa first cutting over 90% complete, 90% 1974 and 85% normal. Clover-timothy first cutting 75% done, 70 1974 and normal. Crop conditions good to excellent. Soil moisture 10% short, 65% adequate, and 25% surplus. Five days favorable for fieldwork.

OKLAHOMA: Temperatures averaged from 1° above normal to 3° below normal. Precipitation averaged from 0.12 to 3.09 in. Weekend very warm with few showers eastern half.

Rains and humid weather slowed wheat harvest to afternoon cutting; 79% crop combined, 96% 1974, equal to late harvest of 1973. Yields vary over wide range. Some acreage being lost to water holes and weeds. Corn growing well, some tasseling in east. Most sorghums planted, need cultivation. Heavy rains and wind caused extensive damage to cotton southwest. Some acreage loss as replant date passes. Peanuts and soybeans good condition. Some soybeans planted on wheat ground. Hay cuttings slow because rain. Range grasses making good growth.

OREGON: Temperatures 3 to 10° below normal. Maximums averaged in 70's, minimums in 30's and 40's. Precipitation along coast ranged from 0.49 to 1.61 in., western valleys averaged 0.80 in., east 0.90 in. or less.

Fall grains fair to good. Dryland grains, spring seed crops improved with recent rains. Barley, grass seed harvest beginning. Hay showing good regrowth. Mint, dry beans developing well. Strawberries hurt by excessive rain. Cherry harvest beginning, some splitting problems. Filberts look good. Raspberry harvest to start next week. Green pea harvest continuing. Most vegetable growth slowed by cool weather. Late bean plantings delayed by weather. Potatoes look good most areas. Range and pasture forage improved by rains. Cattle in mountain pastures.

PENNSYLVANIA: Warm and humid through 26th, seasonably mild but humid remainder of period. Temperatures near normal. Extremes: 93 and 53°. Cloudy with numerous thundershowers 25th through 27th west and through weekend east. Heavy rains of 1.00 to 2.00 in. common 25th, 26th, 27th eastern two-thirds. Weekly totals from nearly 3.50 in. lower and middle Susquehanna Valleys and to near 0.75 in. or less extreme north.

Soil moisture adequate. Major activities: Hay making, tobacco transplanting, barley harvest, filling silos, spraying, cultivating, and orchard work. Tobacco transplanting catching up, 90% transplanted. Barley 60% turning, 20% ripe, 9% harvested, 6 days ahead of 1974. Wheat 53% turning, slightly behind 1974. Oats 69% headed, 4 days ahead 1974. Corn height 17 in., 1974 13 in., 4 days ahead of 1974. First cutting alfalfa hay 74%, second cutting has begun. Clo-tim first cut 57%. Hay quality fair. Feed from pastures average. Sweet cherry harvest active.

PUERTO RICO: Island average rainfall 0.21 in. Highest weekly total 3.03 in. at Hacienda Constanza. Highest 24-hour total 1.50 in. at Hacienda Constanza. Temperatures averaged about 81° on coasts and 76° interior. Extremes: 94 and 60°.

Drought conditions have intensified in all areas except the west where rainshowers were sufficient to allow pasture improvement and limited planting.

In all other areas, lack of rain delayed planting schedules and retarded the development of young sugarcane and coffee beans. Good progress was made in tobacco harvesting and drying operations. Pastures in south are seriously damaged by severe drought.

**SOUTH CAROLINA:** Temperatures 3 to 5° below normal. Rainfall varied widely as showers and thundershowers. Below normal most areas.

Cotton, corn, tobacco fair, good condition. Tobacco 13% harvested, 22% 1974. Soybeans good, 94% planted, 93% 1974, 88% average. Wheat 94% harvested, 97% 1974, 80% average. Oats 98% harvested, 98% 1974, 98% average. Barley 98% harvested, 98% 1974, 98% average. Sweetpotatoes 95% planted, 94% 1974, 92% average. Peaches 28% harvested, 22% 1974, 18% average. Pasture fair, good. Vegetables, watermelons and grapes fair to good.

**SOUTH DAKOTA:** Temperatures average 2 to 8° above normal. Precipitation varied from a trace east of river to 1.56 in. west of river. Precipitation departure from normal for the year ranged from 7.84 in. above at Pierre to 2.89 in. below at Yankton.

Small grain development continues to lag.

Spring wheat, oats, and barley 83%, 93% and 86% in or past boot stage, both 1974 and normal 100%. Spring wheat 44% headed, 1974 74%, normal 69%. Oats 66% headed, 1974 82%, normal 78%. Barley 61% headed, 1974 77%, normal 81%. Rye 21% turning, 1974 67%, normal 60%. Winter wheat 38% turning, 1974 83%, normal 56%. Flax 8% in bloom, 1974 51%. Corn 93% cultivated 1st time. Corn 44% cultivated second time. Average height of corn over 16 in., 1974 16 in., normal 19 in. First cutting alfalfa 76% complete, normal 87%. Wild hay 9% harvested. Livestock and pastures most in good condition. Stock water supplies mostly adequate.

**TENNESSEE:** Rainfall averaged 0.25 to 0.50 in. with locally heavier amounts. Temperatures averaged 1° above normal east and 2° above west.

Corn, late soybeans and pasture beginning to suffer from dry weather. Soybeans 90% planted, 69% 1974, 89% average. Corn 21% silked, 8% 1974, 15% average. Cotton 45% squared, 18% 1974, 43% average. Small grains nearly all ripe. Wheat 84% harvested, 76% 1974, 56% average. Oats 72% harvested, 66% 1974, 52% average. Barley 84% harvested, 82% 1974, 68% average. Pasture condition dropped sharply.

**TEXAS:** Above normal rainfall over large portion. Rainfall totals 1.00 to 2.00 in. above normal upper Coast, north, southern High Plains. Rainfall generally confined to small areas. Temperatures generally below normal.

Wheat, barley harvest suffered delays result high winds, rain, hail. However, harvest resumed toward end of week. Planting cotton, sorghum, peanuts, soybeans continue on schedule with 1974. Extensive replanting cotton, sorghum necessary High Low Plains because wind, rain, hail damage. Harvest sorghum moving ahead Lower Rio Grande Valley. Sunflowers excellent progress, harvest started south. Heavy rains, high wind, scattered hail stopped wheat harvest High, Low Plains early week, but resumed some localities by end of week. Harvest nearing completion on dry land wheat crop most areas but just getting started on irrigated crop. Boll weevil, bollworm problems developing on cotton in Blacklands, South Central to Lower Rio Grande Valley. Sorghum planting essentially complete Blacklands southward, rapidly nearing com-

pletion High, Low Plains were extensive replanting necessary. Major crops percent harvested: Wheat 69, 1974 96, average 87; oats 96, 1974 100, average 98; barley 85, 1974 100, average 97; sorghum 6. Major crops percent planted: Cotton 100, 1974 94, average 87; sorghum 98, 1974 94, average 94; peanuts 90, 1974 80, average 85; soybeans 94, 1974 91, average 88. Lower Rio Grande Valley: Cantaloup, honeydew, watermelon harvest rapidly nearing completion. Green peppers, tomatoes, okra available fair volume. Coastal Bend: Watermelon harvest nearing completion, tomato picking virtually complete. San Antonio-Winter Garden: Cabbage, cantaloup, cucumber, onion harvest active. Watermelon harvest continues most areas. East: Tomatoes, cucumbers being harvested. Watermelon crop looks good, harvest expected mid-July. Few late watermelons still being planted. Sweetpotatoes continue make good progress. Trans-Pecos: Onions, melons extensive hail damage at Presidio. Onions, cabbage being harvested El Paso. High Plains: Onions, potatoes continue make good progress most areas. Some onions received hail damage Deaf Smith County, will be harvested early. Green peppers, cucumbers both making good progress. Peaches continue to come from central, east and north. Supplies expected remain adequate throughout July. Pecans continue to show good growth as recent rains have kept most trees in excellent condition. Some damage to crop by casebearer, walnut caterpillars; losses much lighter than previous two years. Citrus continues size well as good fruit crop has been set. Ranges, pastures excellent condition. Abundant grazing helping maintain livestock. Hay baling rapid progress in spite of losses to wet weather.

**UTAH:** Few isolated showers northeast middle of period. Accumulated amounts of moisture locally moderate. Temperatures continued cold with averages ranging between 4 and 11° below normal.

Winter wheat 42% headed out, a few fields turning color. Overall condition fair. Sugarbeet acreage 63% thinned. Labor shortages showing up as more acreage reaches thinning stage; still much behind schedule. Approximately 43% of first crop alfalfa hay in the bale. Yields light. Quality fair; about 20% received some rain damage. Spring planted small grains 16 to 24% headed out. Coming on fast, past 10 days. Soil moisture unirrigated range lands adequate. Range feed supplies fair to good.

**VIRGINIA:** Temperatures near normal. Extremes: 90 and 50°. Rainfall amounts ranged zero to 6.50 in. Scattered showers, thunderstorms end of week.

Fieldwork: 5.0 days favorable. Topsoil moisture: 55% short, 42% adequate, 3% surplus. Crops pasture conditions down. Corn 5% silked, continued stress from moisture shortage. Soybean planting continues, poor stands, not enough moisture for germination. Peanuts received fungicides, herbicides, landplaster. Small grain harvest progress: Barley 76%, 1974 79%; oats 55%, 1974 69%; wheat 36%, 1974 50%. Tobacco irrigation increased. Haying active. Hay supplemented grazing some areas. More cattle marketed, very good condition. Potato, snaps, cucumbers harvested.

**WASHINGTON:** West: Temperatures 3 to 5° below normal. Precipitation 0.50 to 1.50 in. above normal.

Strawberry harvest in full swing. Vegetables and berries maturing slowly due to cool temperatures. Hay and silage harvest continues. Some rain damage to hay.

East: Temperatures 3 to 9° below normal. Normal precipitation.

Cherry harvest begun. Harvesting onions, peas. Grain potential remains excellent. Potatoes showed rapid progress. Haying operations curtailed by rain.

WEST VIRGINIA: Temperatures above normal throughout. Rainfall 2.00 to 4.00 in. eastern panhandle and spotty elsewhere.

Fieldwork: 4.5 days favorable. Soil moisture 23% short, 68% adequate, 9% surplus. Main field activities: Haymaking, gardening and cultivating corn. Generally good growing and harvesting conditions for hay. Small grains in mostly good condition. Tobacco 98% set. Barley 27% turning yellow, 63% ripe. Wheat 49% turning yellow, 12% ripe. Oats 59% headed. Pasture in good to excellent condition. Face flies and pink eye bothering livestock.

WISCONSIN: A warm, humid week. Temperatures averaged 5° above normal. Highs mostly 80's, but low 90's on 29th. Scattered showers and thunderstorms most days. More general rainfall fell north and central, spotty south and light east.

First crop haying slowed by wet, humid weather. First crop hay 33% harvested, 1974 60%, normal 55%. Quality deteriorating as hay matures and harvest-

ing delayed. Some hay spoiled by prolonged wet weather. Corn crop growing very rapidly. Corn height averages 20 in., 1974 10 in., normal 15 in. Early corn nearly ready to tassel, weeds a problem where farmers not able to spray or cultivate. Corn on lowlands suffering from too much water. Oats and small grains heading out fast. Winter wheat well headed. Oats 20% headed, 1974 20%, normal 45%. Soybeans growing well except where too weedy. Pastures continue in very good condition. Tobacco planting moving along. Picking strawberries continues. Pea harvest underway with fair to good crop. Potatoes showing good growth. Sweet corn developing well. Soil moisture 60% adequate, 40% surplus. Hot, humid weather stimulating growth of plants, diseases, insects, and weeds.

WYOMING: Dry week with exception of Belle Fourche Drainage. Temperatures below seasonal normals.

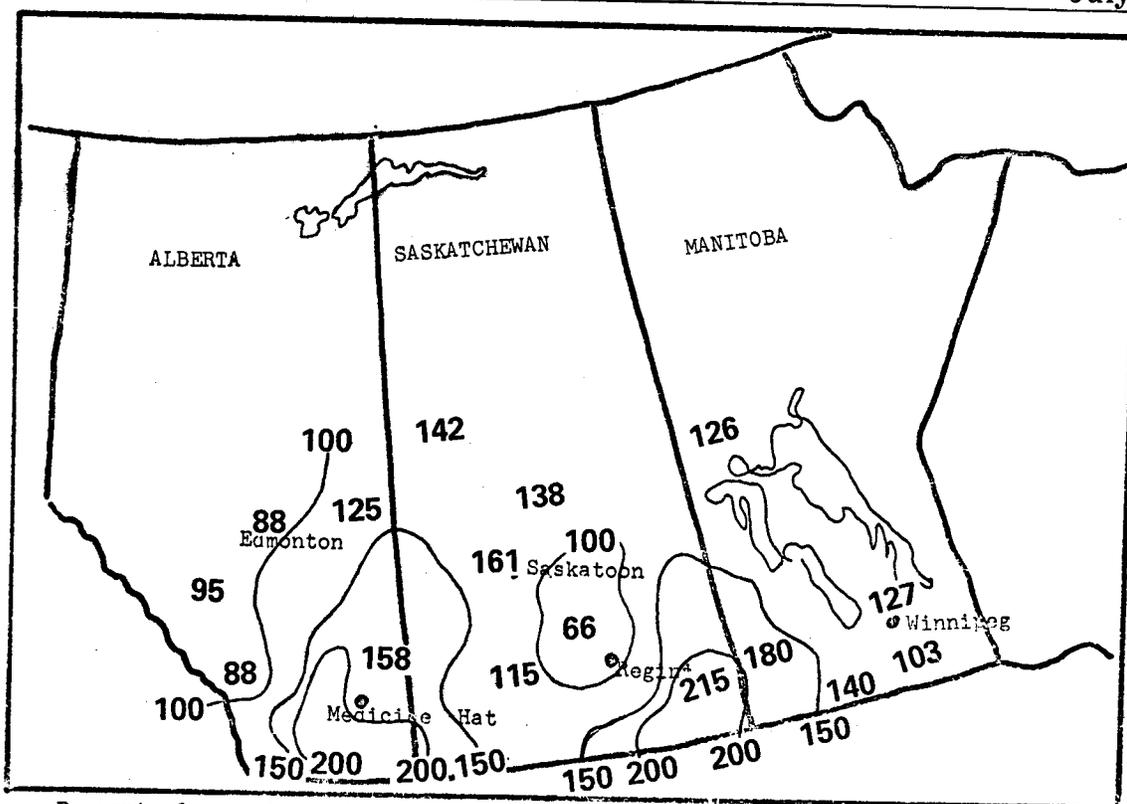
Winter wheat prospects good, 78% headed. Barley 35% headed, prospects good. Spring wheat, oats, potatoes, dry beans, alfalfa, prospects good. Corn fair to good. Potatoes, dry beans 90% emerged. Sugarbeet prospects good, 70% thinned. Topsoil moisture short to adequate southeast, adequate elsewhere. Hay harvested: Alfalfa 20%; other hay 5%. Working summer fallow common activity. Stockmen branding, docking, moving to summer range. Contracting livestock for fall delivery started.

1975 PLANTED ACREAGE

1,000 ACRES

COTTON			CORN		SOYBEANS			
	1974	1975	1974	1975	1974	1975		
ALA.	600.0	475.0	GA.	2,000	2,020	ARK.	4,400	4,750
ARIZ.	426.7	310.0	ILL.	10,520	11,000	ILL.	8,600	8,160
ARK.	1,200.0	800.0	IND.	5,760	5,850	IND.	3,960	3,600
CALIF.	1,250.3	925.2	IOWA	12,920	12,950	IOWA	7,200	7,000
GA.	423.0	210.0	KANS.	2,260	1,950	KY.	1,200	1,250
LA.	650.0	330.0	KY.	1,290	1,330	LA.	1,800	2,100
MISS.	1,780.0	1,200.0	MICH.	2,310	2,300	MINN.	4,080	3,720
MO.	400.0	260.0	MINN.	6,940	6,800	MISS.	2,630	3,300
N. C.	158.0	60.0	MO.	3,110	3,000	MO.	4,450	4,500
N. M.	165.6	128.0	NEB.	6,800	6,480	NEB.	1,210	1,250
OKLA.	570.0	420.0	N. C.	1,720	1,700	N. C.	1,475	1,500
S. C.	310.0	140.0	OHIO	3,950	3,750	OHIO	3,230	3,150
TENN.	540.0	360.0	S. DAK.	3,800	3,570	S. C.	1,290	1,450
TEX.	5,233.9	4,577.0	WIS.	3,490	3,500	TENN.	1,620	1,850
U. S.	13,729.4	10,205.3	U. S.	77,746	77,527	U. S.	53,580	54,586





Percent of normal precipitation in the wheat growing areas of the Canadian Prairie Provinces for the period April 1 to June 23, 1975. (Data taken from the Weekly Weather Summary for the Prairie Provinces, Atmospheric Environment Service, Winnipeg, Manitoba.)

#### CANADIAN PRAIRIE PROVINCES IN GOOD SHAPE

Moisture supplies are good throughout the Prairie Provinces with the exception of eastern Manitoba where there is some flooding and parts of north-central Alberta and the Peace River District where conditions are dry. The weather has been somewhat cool and higher temperatures are needed for crop development. However, all crops are progressing favorably and although development varies to a considerable degree, early sown cereals are now in the shot-blade stage or beyond. Farmers have started haying with better than average yields expected in most districts.

Cereal rusts have not been found to date in Western Canada.

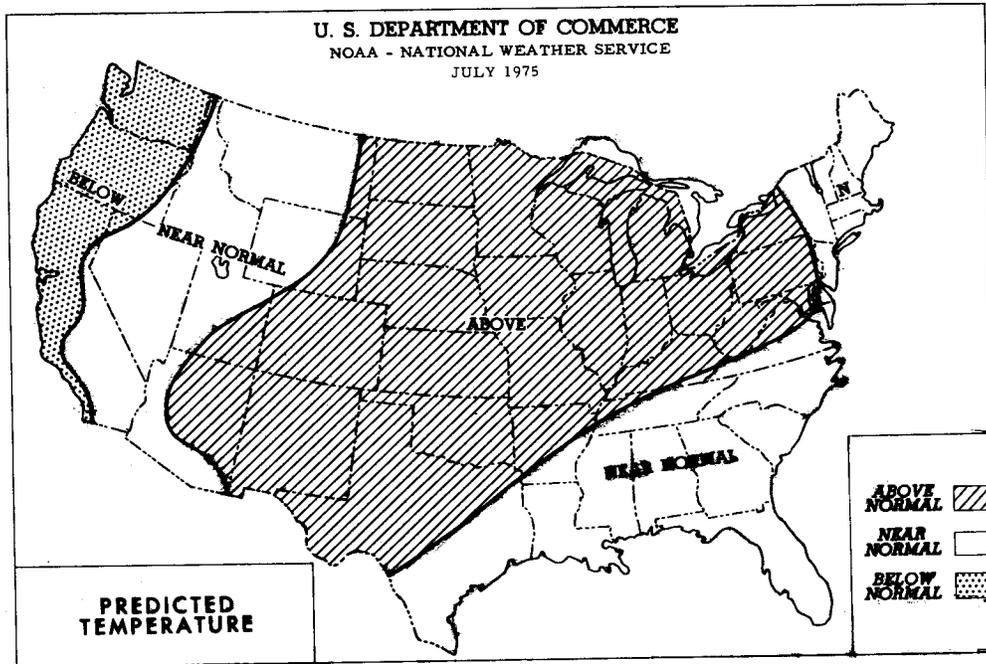
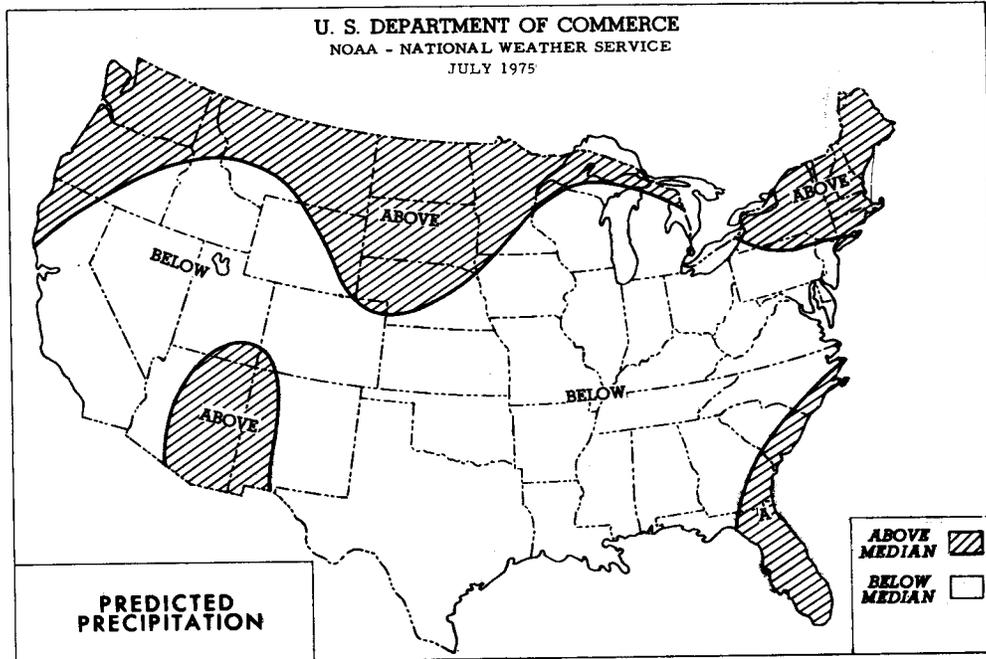
In Manitoba heavy rains have flooded low areas in the central and eastern regions. Moisture supplies are excellent in the remainder of the Province. All crops are progressing well with early sown cereals in the shotblade to heading stage.

Hot, dry weather during the latter part of June in Saskatchewan has rapidly advanced crops throughout the Province. Some spraying for grasshoppers has already been completed, but the recent weather will result in a significant grasshopper hatch. Reports indicate that warm weather is essential at this time for crop development.

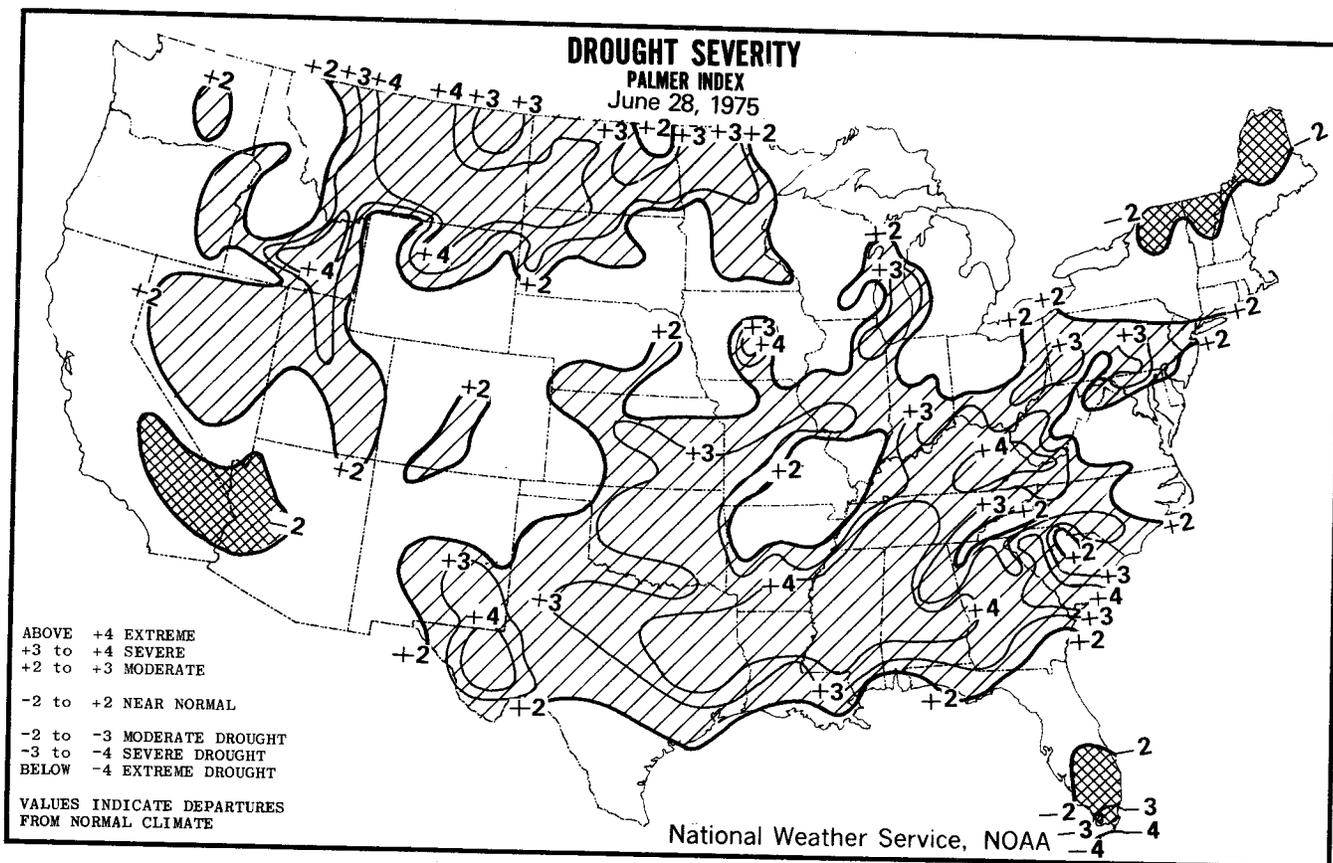
Soil surface and sub-surface moisture conditions throughout most of Alberta are good to excellent. Crops are good but hot weather is needed to promote growth. Grasshopper hatchings are light with only limited damage reported.

(Taken from Statistics Canada 5-3102-508: June 26, 1975)

AVERAGE MONTHLY WEATHER OUTLOOK



**AGRICULTURAL IMPLICATIONS OF THE AVERAGE MONTHLY OUTLOOK:** The outlook is for below median precipitation across most of the Country with above normal temperatures across the Nation's midsection. The current soil moisture situation is good to excellent over much of the area. Dry, hotter weather in the central Great Plains would aid in harvesting a late, but potential record wheat crop. If temperatures would become as intense as last year, row crops would be affected in the area. In general the Corn Belt would also benefit from some hot dry weather unless it becomes intense. Above normal temperatures and precipitation in the northern Great Plains would provide a good boost to spring sown grains.



#### THE PALMER AND CROP MOISTURE INDICES

The Palmer Index was designed to evaluate 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; i.e. the effects of short periods of very dry weather. For this reason the Crop Moisture Index was developed to respond rapidly to changes in the soil moisture situation and take into account only those moisture aspects which affect vegetation and field operations.

If one is interested in the overall soil moisture situation, which will integrate the effects of the past weather over weeks and even months, the Palmer Index provides the best evaluation. However, if one is interested in the availability of moisture to meet current demands, the Crop Moisture Index is the most useful. For example, a recent rain might have replenished the soil sufficiently to meet the current demands. However if the Palmer Index is highly negative, one can interpret this to mean that the overall soil moisture situation is very poor.

A negative CMI value means that the demand for moisture, or the potential evapotranspiration, has been greater than available supplies so that actual transpiration has been reduced. On the other hand, positive CMI values mean that either actual evapotranspiration exceeded the expected amount, or

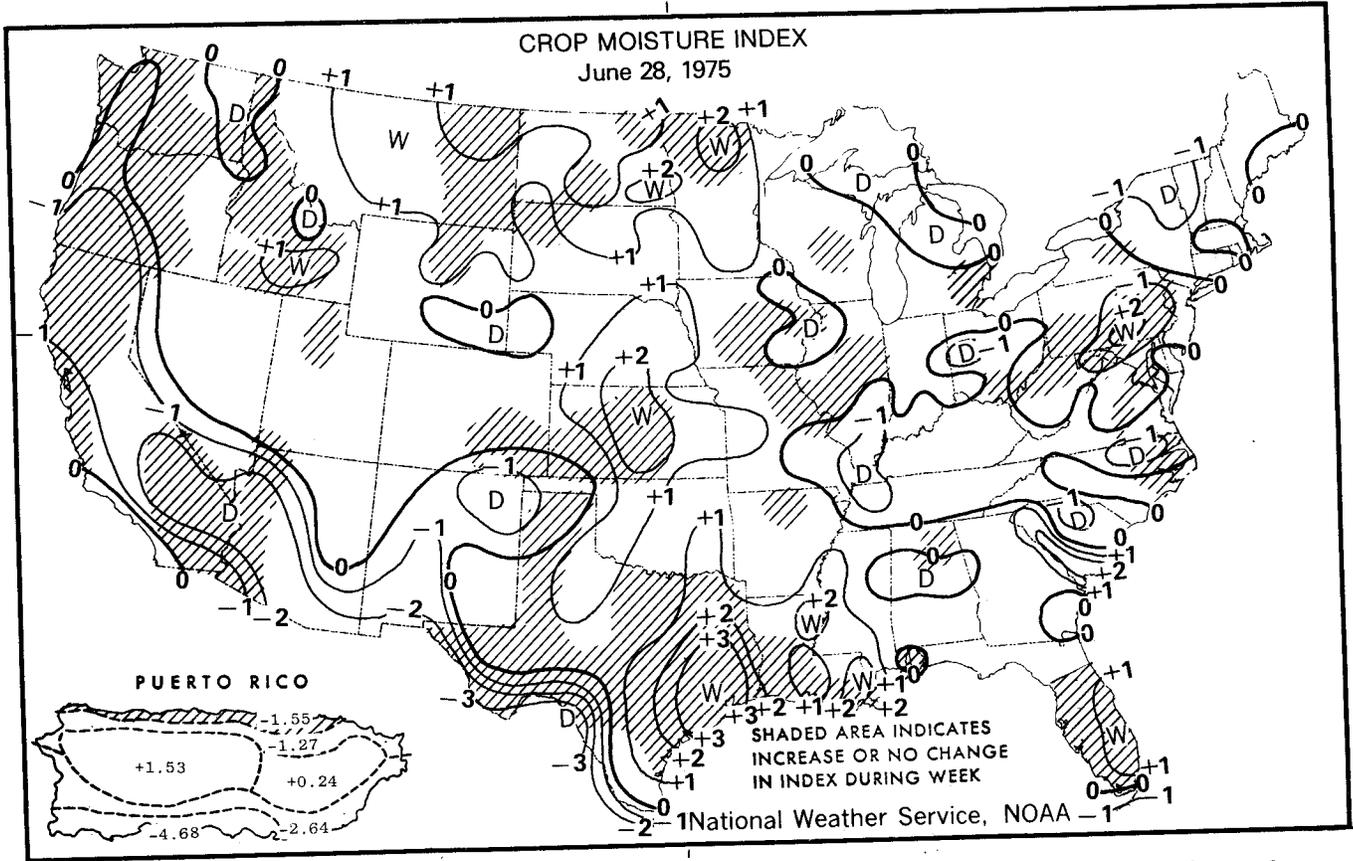
recent rainfall exceeded the moisture requirements of the crops and the additional moisture was added to the soil or was regarded as runoff.

Negative Palmer Index values imply negative abnormalities of either evapotranspiration, the amount of moisture stored in or added to the soil, or of runoff, or a combination of all these types of moisture shortages. In other words, negative PI values simply indicate that the weather has been abnormally dry, and do not specify the exact nature of the effects of the dry weather.

However, positive PI values indicate that the moisture supply either from current or antecedent rainfall exceeded the amount required to sustain soil moisture levels that would be considered as normal and appropriate for the climate of the area.

In brief summary, Palmer Index values are based on all aspects of the moisture situation, but the Crop Moisture values refer only to the crop moisture situation. In addition, the PI values are highly depended on antecedent moisture conditions, whereas CMI values are much more responsive to weekly or current rainfall, or the lack of it.

The CMI map will appear each week in the Bulletin during the season from now through October. The Palmer Index will be published only in the first issue of each month during the same period.



The map above gives a general picture of how wet or dry the nation was last week. The lines show the crop moisture situation according to an index computed from values of temperature and precipitation by areas. Previous weekly computations of soil moisture account for the effect of prior weather.

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

UNSHADED AREAS: INDEX DECREASED

ABOVE	3.0	SOME DRYING BUT STILL EXCESSIVELY WET
2.0 to	3.0	MORE DRY WEATHER NEEDED, WORK DELAYED
1.0 to	2.0	FAVORABLE, EXCEPT STILL TOO WET IN SPOTS
0 to	1.0	FAVORABLE FOR NORMAL GROWTH AND FIELDWORK
0 to	-1.0	TOPSOIL MOISTURE SHORT, GERMINATION SLOW
-1.0 to	-2.0	ABNORMALLY DRY, PROSPECTS DETERIORATING
-2.0 to	-3.0	TOO DRY, YIELD PROSPECTS REDUCED
-3.0 to	-4.0	POTENTIAL YIELDS SEVERELY CUT BY DROUGHT
BELOW	-4.0	EXTREMELY DRY, MOST CROPS RUINED

areas dried last week. The centers of wet or dry areas are marked: W for wet; D for dry. Use the legend to interpret.

Local variations caused by isolated rain or by soil differences are not shown. Any interpretation must consider the type of agriculture and the stage of crop development.

SHADED AREA: INDEX INCREASED OR DID NOT CHANGE

ABOVE	3.0	EXCESSIVELY WET SOME FIELDS FLOODED
2.0 to	3.0	TOO WET, SOME STANDING WATER
1.0 to	2.0	PROSPECTS ABOVE NORMAL, SOME FIELDS TOO WET
0 to	1.0	MOISTURE ADEQUATE FOR PRESENT NEEDS
0 to	-1.0	PROSPECTS IMPROVED BUT RAIN STILL NEEDED
-1.0 to	-2.0	SOME IMPROVEMENT BUT STILL TOO DRY
-2.0 to	-3.0	DROUGHT EASED BUT STILL SERIOUS
-3.0 to	-4.0	DROUGHT CONTINUES RAIN URGENTLY NEEDED
BELOW	-4.0	NOT ENOUGH RAIN STILL EXTREMELY DRY

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