

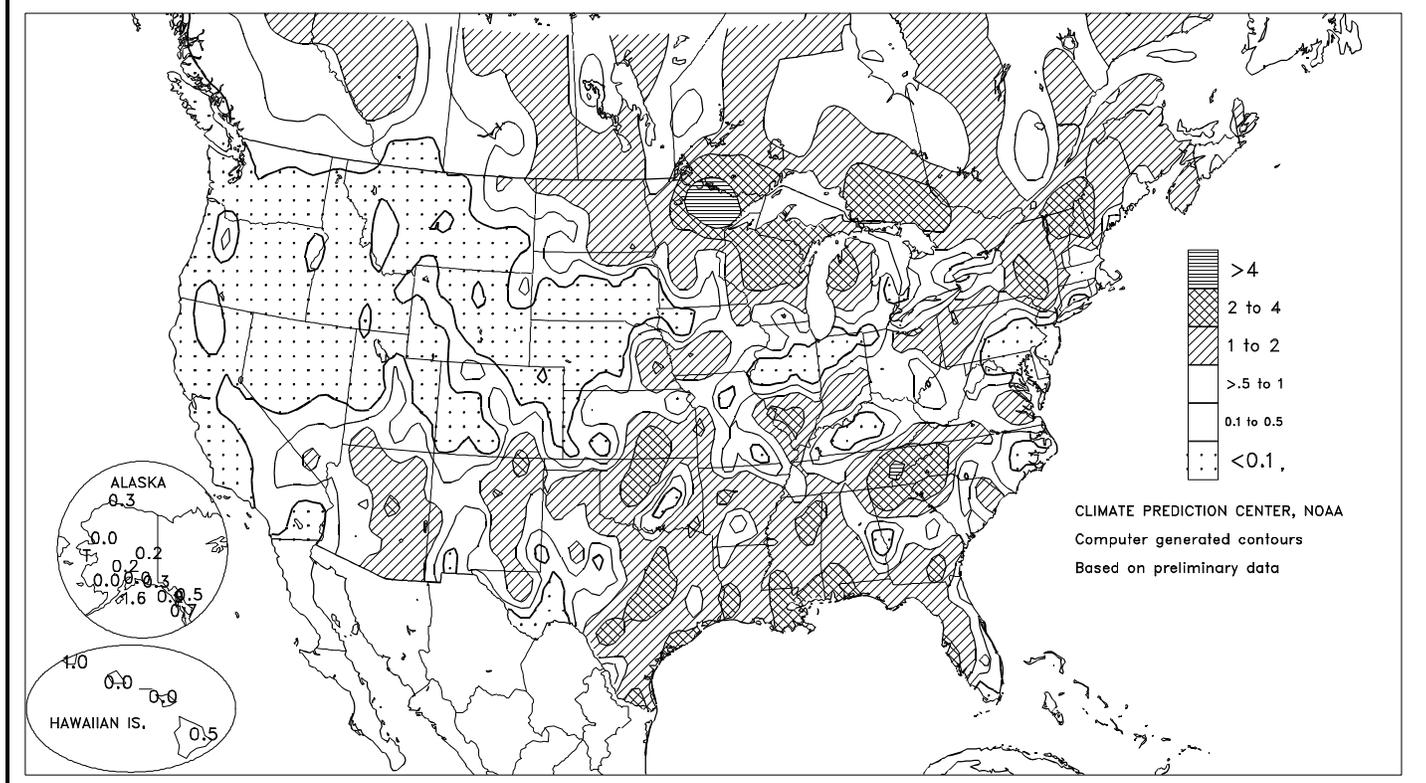
# WEEKLY WEATHER AND CROP BULLETIN

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

U.S. DEPARTMENT OF AGRICULTURE  
National Agricultural Statistics Service  
and World Agricultural Outlook Board

Total Precipitation (Inches)

JUL 4 - 10, 1999



## HIGHLIGHTS

July 4 - 10, 1999

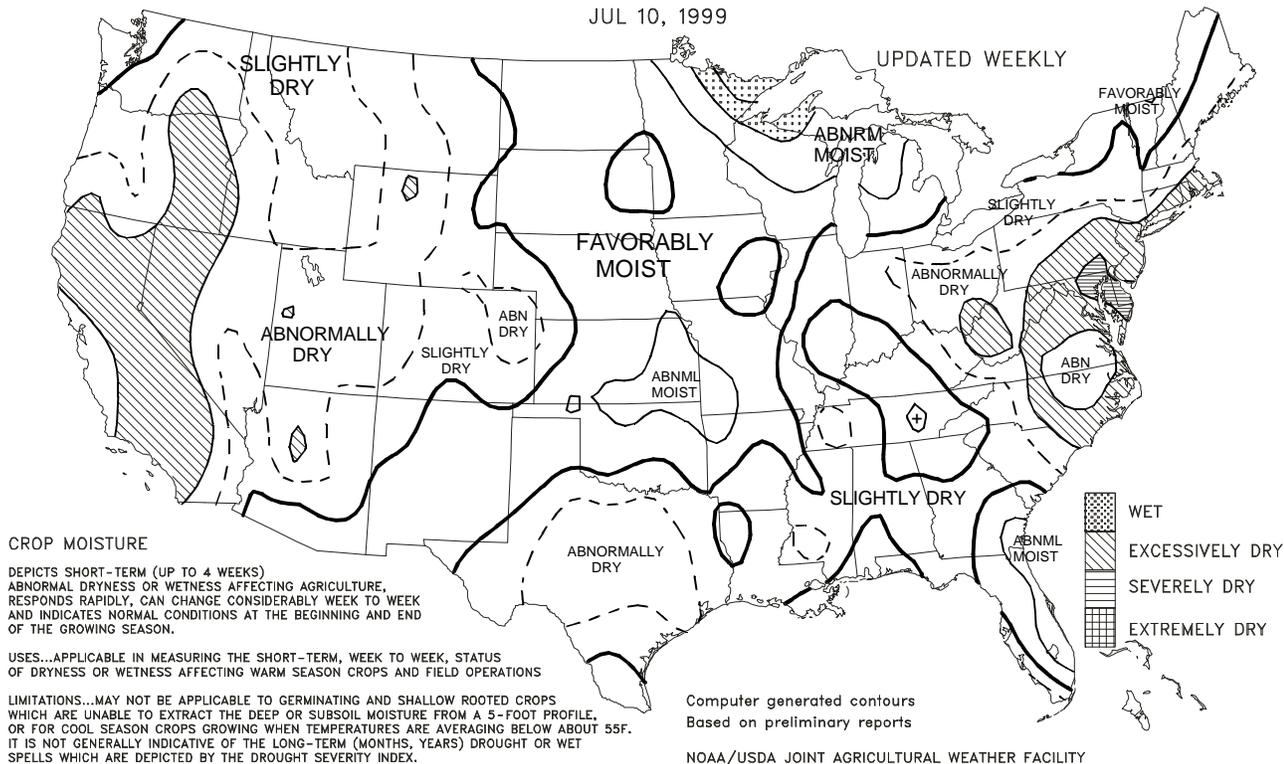
Hot weather gradually subsided across the **East**, but pastures and summer crops remained drought stressed from the **Mid-Atlantic States** into **southern New England**. From **northern Virginia** to **Long Island** and **southern Connecticut**, nearly dry weather accompanied weekly temperatures that averaged 5 to 10°F above normal. Meanwhile in the **Southeast**, occasional showers and near-normal temperatures continued to stabilize crop conditions. Farther north, scattered showers and cooler weather spread across the **Corn Belt**, following early-week high temperatures in the lower to middle 90's F. On the **central and southern Plains**, warm, mostly dry weather favored winter wheat harvesting until week's end, when showers

*(Continued on page 5)*

## Contents

Crop Moisture Maps .....	2
Palmer Drought Maps .....	3
Weather Data for the Delta & Pan Evaporation Map .....	4
Temperature Departure & Extreme Maximum Temperature Maps .....	5
Growing Degree Day Maps .....	6
National Weather Data for Selected Cities .....	7
<b>June Weather and Crop Summary .....</b>	<b>10</b>
<b>June Precipitation and Temperature Maps .....</b>	<b>12</b>
<b>June Weather Data for Selected Cities .....</b>	<b>13</b>
National Agricultural Summary .....	14
Crop Progress and Condition Tables .....	15
State Agricultural Summaries .....	18
International Weather and Crop Summary .....	24
Subscription Information & <b>June Maximum Temperature Map .....</b>	<b>28</b>

Crop Moisture  
SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE  
JUL 10, 1999



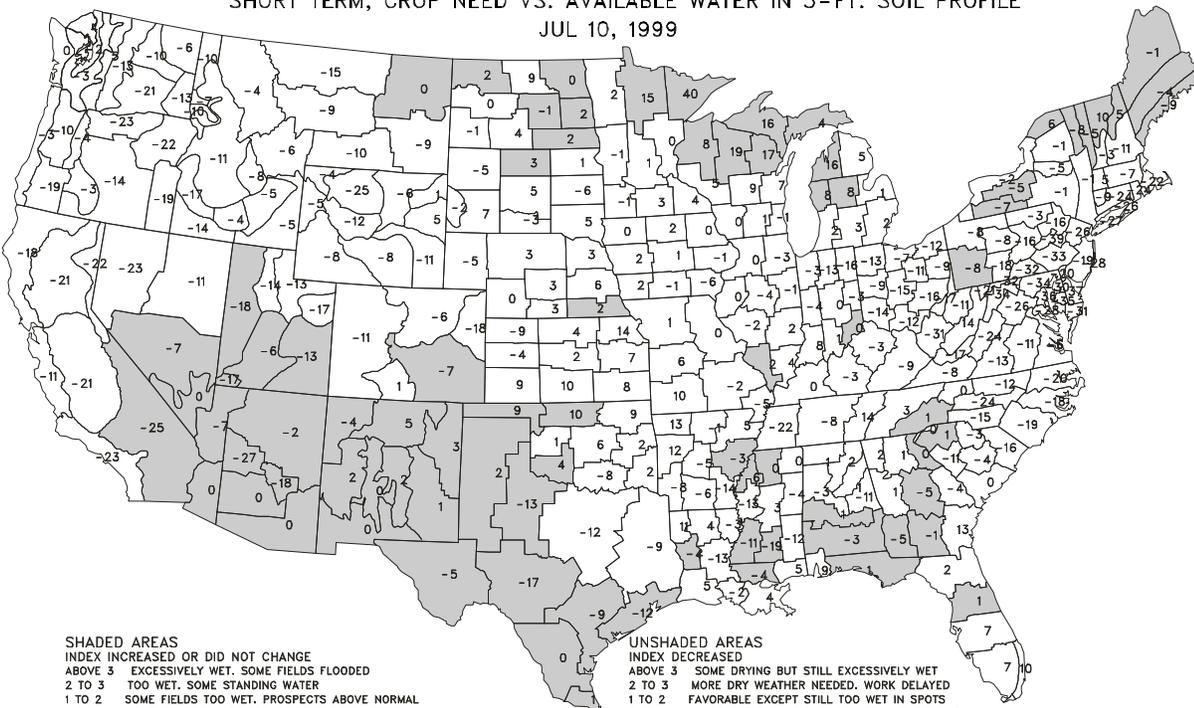
CROP MOISTURE

DEPICTS SHORT-TERM (UP TO 4 WEEKS) ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE, RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK AND INDICATES NORMAL CONDITIONS AT THE BEGINNING AND END OF THE GROWING SEASON.

USES...APPLICABLE IN MEASURING THE SHORT-TERM, WEEK TO WEEK, STATUS OF DRYNESS OR WETNESS AFFECTING WARM SEASON CROPS AND FIELD OPERATIONS

LIMITATIONS...MAY NOT BE APPLICABLE TO GERMINATING AND SHALLOW ROOTED CROPS WHICH ARE UNABLE TO EXTRACT THE DEEP OR SUBSOIL MOISTURE FROM A 5-FOOT PROFILE, OR FOR COOL SEASON CROPS GROWING WHEN TEMPERATURES ARE AVERAGING BELOW ABOUT 55F. IT IS NOT GENERALLY INDICATIVE OF THE LONG-TERM (MONTHS, YEARS) DROUGHT OR WET SPELLS WHICH ARE DEPICTED BY THE DROUGHT SEVERITY INDEX.

Crop Moisture Index  
SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE  
JUL 10, 1999



SHADED AREAS  
INDEX INCREASED OR DID NOT CHANGE

- ABOVE 3 EXCESSIVELY WET. SOME FIELDS FLOODED
- 2 TO 3 TOO WET. SOME STANDING WATER
- 1 TO 2 SOME FIELDS TOO WET. PROSPECTS ABOVE NORMAL
- 0 TO 1 MOISTURE ADEQUATE FOR PRESENT CROP NEEDS
- 0 TO -1 PROSPECTS IMPROVED BUT RAIN STILL NEEDED
- 1 TO -2 SOME IMPROVEMENT BUT STILL ABNORMALLY DRY
- 2 TO -3 DRYNESS EASED BUT FIELDS STILL EXCESSIVELY DRY
- 3 TO -4 SEVERE DRYNESS CONTINUES. MORE RAIN URGENTLY NEEDED
- BELOW -4 NOT ENOUGH RAIN. STILL EXTREMELY DRY

UNSHADED AREAS  
INDEX DECREASED

- ABOVE 3 SOME DRYING BUT STILL EXCESSIVELY WET
- 2 TO 3 MORE DRY WEATHER NEEDED. WORK DELAYED
- 1 TO 2 FAVORABLE EXCEPT STILL TOO WET IN SPOTS
- 0 TO 1 FAVORABLE FOR NORMAL GROWTH AND FIELDWORK
- 0 TO -1 TOPSOIL MOISTURE SHORT. GERMINATION SLOW
- 1 TO -2 ABNORMALLY DRY. PROSPECTS DETERIORATING
- 2 TO -3 EXCESSIVELY DRY. YIELD PROSPECTS REDUCED
- 3 TO -4 POTENTIAL YIELDS SEVERELY CUT BY DRYNESS
- BELOW -4 EXTREMELY DRY. MOST CROPS RUINED



**Weather Data for Selected Locations in the Delta**

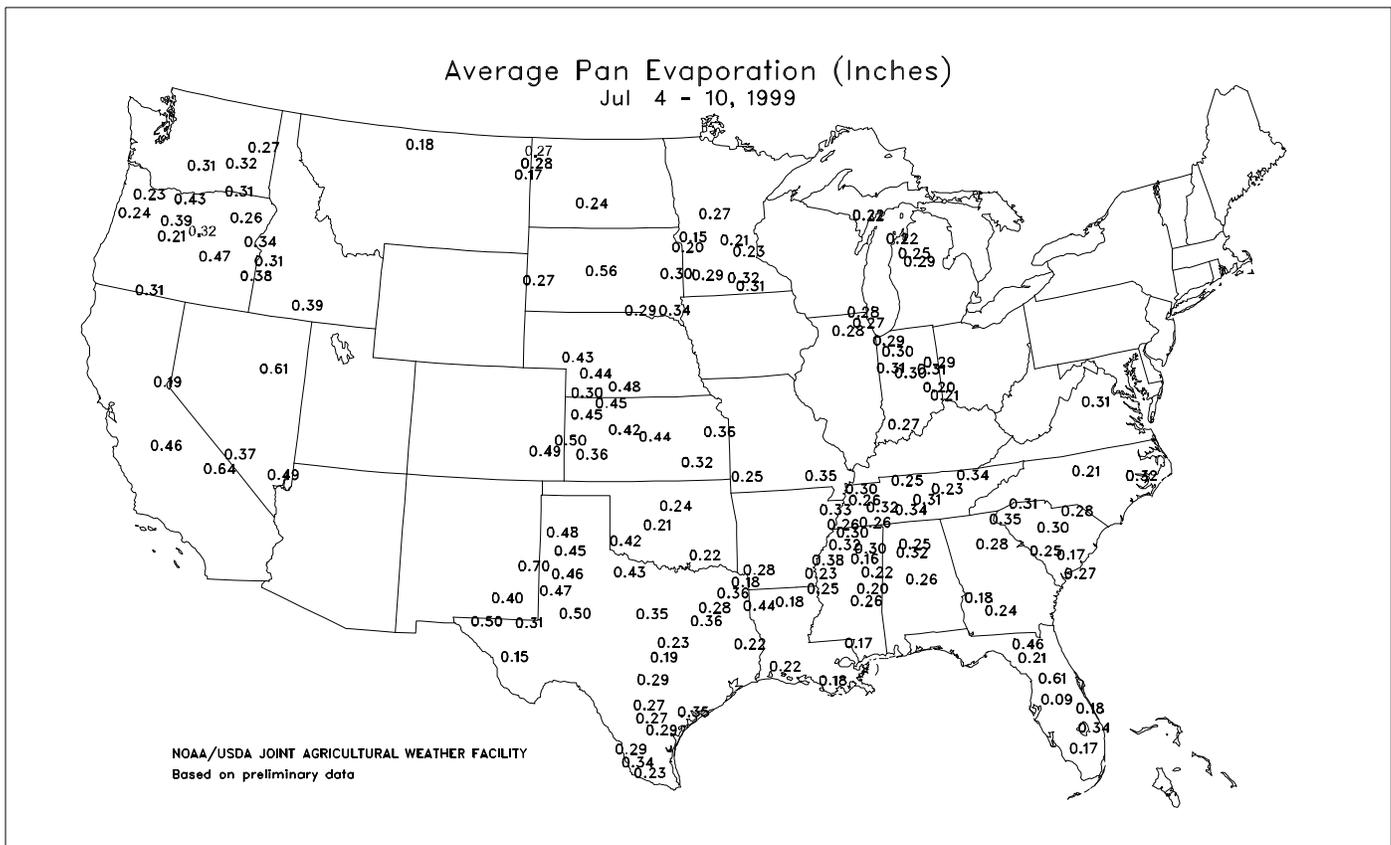
**Weather Data for the Week Ending July 10, 1999**

Data provided by the Mississippi State Delta Research and Extension Center and compiled by USDA/OCE/WAOB's Stoneville Field Office

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							4-INCH SOIL TEMP, °F		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	PRECIP	
																		.01 INCH OR MORE	.50 INCH OR MORE
MS BATESVILLE	92	74	97	72	83	--	0.74	0.04	0.41	--	--	--	--	--	--	6	0	2	0
BELZONI	94	74	99	72	84	--	--	--	--	--	--	--	--	--	--	7	0	--	--
CLARKSDALE	93	77	97	72	85	--	1.80	1.15	1.76	--	--	--	--	--	--	6	0	2	1
CLEVELAND	93	74	97	69	84	--	1.61	0.70	0.95	--	--	--	--	--	--	7	0	2	2
GREENVILLE	94	76	100	73	85	--	0.36	-0.37	0.33	--	--	--	--	--	--	7	0	2	0
GREENWOOD	92	72	95	71	82	--	0.32	-0.58	0.15	--	--	--	--	--	--	7	0	3	0
INDIANOLA 1S	93	73	96	74	83	--	0.39	--	0.30	2.79	--	30.16	--	85	80	7	0	4	0
INVERNESS 5E	92	74	94	73	83	--	0.79	--	0.79	4.34	--	29.46	--	85	80	7	0	1	1
LYON	94	74	97	73	84	--	1.08	--	0.95	6.17	--	--	--	--	--	7	0	2	1
MOORHEAD	93	75	94	73	84	--	0.71	0.15	0.66	--	--	--	--	--	--	7	0	2	1
ONWARD	92	72	95	70	82	--	0.24	--	0.23	6.56	--	34.72	--	83	81	7	0	2	0
ROLLING FORK	94	75	96	71	85	--	0.08	-0.81	0.08	--	--	--	--	--	--	7	0	1	0
SIDON	93	73	96	72	83	--	0.01	--	0.01	2.35	--	27.56	--	93	84	7	0	1	0
TUNICA	95	75	97	73	85	--	0.02	-0.82	0.02	--	--	--	--	--	--	7	0	1	0
VICKSBURG	91	73	93	71	82	--	2.05	1.08	0.87	--	--	--	--	--	--	7	0	6	2
YAZOO CITY	92	73	94	72	83	--	0.78	0.03	0.45	--	--	--	--	--	--	7	0	2	0
STONEVILLE *	93	74	97	72	84	2	0.51	-0.17	0.37	3.42	69	34.52	114	97	81	7	0	4	0

\* Based on 1964-93 normals.

**Delta Weather and Crop Summary:** Summery conditions continued across the Mississippi Delta. High temperatures averaged in the lower to middle 90's degrees F, favoring cotton development. Afternoon showers remained widespread, with locally heavy rainfall recorded near Vicksburg. All crops benefited from the much-needed rainfall, as most soils remained somewhat drier than normal.



(Continued from page 5)

and thunderstorms halted fieldwork but maintained generally adequate soil moisture for summer crops. Seasonal rains intensified in the **Southwest**, easing irrigation requirements but causing localized flash flooding. Warm, dry weather aided crop development in **California's Central Valley**. In the **Northwest**, the week featured a gradual warming trend, promoting winter wheat ripening but further stressing spring-sown small grains.

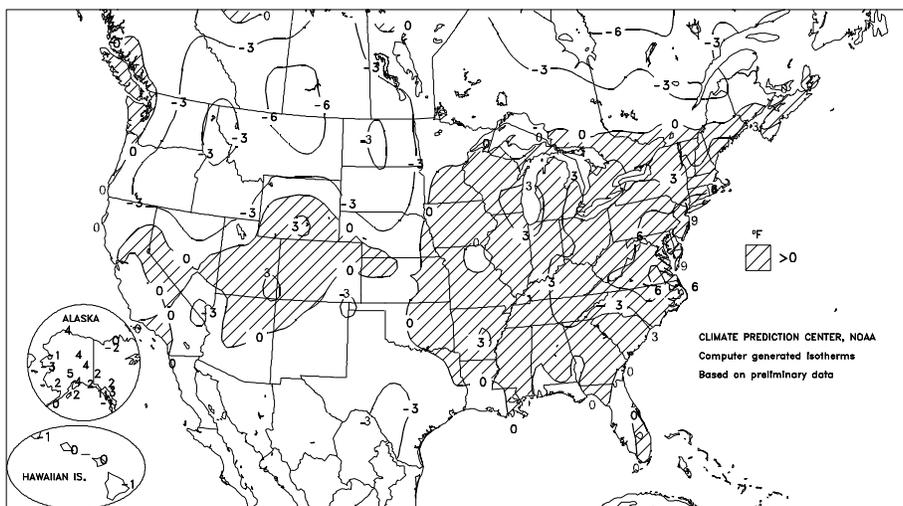
In the **Mid-Atlantic and Northeastern States**, about four dozen additional daily-record highs were set or tied from July 4-6. **New York City's Central Park** (101°F on July 5 and 6) and **Philadelphia, PA** (100°F on July 5) recorded triple-digit heat for the first time since July 15, 1995. On **Long Island, Islip, NY** posted an all-time record high of 102°F on July 5, breaking their 1991 record by 1°F. **Newark, NJ**, 103°F on Monday, also narrowly missed their all-time record (105°F on July 8 and 10, 1993). On July 5 and 6, **Martinsburg, WV** attained 103°F, then as a cold front approached on July 9, hit 104°F. In **Central Park**, the July 6 high represented only the 50<sup>th</sup> day of 100-degree heat during the 130-year period of record. **Philadelphia's** July 5 high was their 55<sup>th</sup> day at or above 100°F since records began about 125 years ago, and their 7 consecutive days of 90-degree heat (July 3-9) marked their longest such streak since August 11-18, 1995.

Meanwhile, more than a dozen daily-record lows were set in the **Northwest**. On Sunday in **Washington**, both **Yakima** and **Spokane** notched daily-record lows of 42°F. A day later, record lows in **Oregon** included 30°F in **Baker City** and 41°F in **Hermiston**. In **Idaho**, **Pocatello** posted three daily-record lows (37°F on Monday, 36°F on Friday, and 38°F on Saturday). Much warmer air arrived at week's end, however, in the **West Coast States**. On Saturday, **Klamath Falls, OR** logged a daily-record high of 95°F, just 6 days after a record low of 34°F.

In the **Midwest**, temperatures only briefly approached stressful levels for summer crops in or nearing reproduction. Early-week high temperatures remained generally at or below 95°F, even in the drier **eastern Corn Belt**. Some of the hottest weather occurred across the well-watered **northwestern Corn Belt**, where **Eau Claire, WI** registered a daily-record high (97°F on July 4). **LaCrosse, WI** experienced their hottest Independence Day (96°F) since 1982. Two days later, **Springfield, MO** recorded a high of 91°F, their first 90-degree reading of the year and latest such occurrence since July 12, 1943. After midweek, much cooler, less humid air overspread the **Midwestern States**, preceded by scattered showers and thunderstorms. By Saturday, several daily-record lows were reported on the **Plains**, including 46°F in **North Platte, NE**. A day later, on July 11, minima of 50°F in **Springfield, IL** and 44°F in **North Platte** were among nearly two dozen daily-record lows across the **Plains** and **Midwest**.

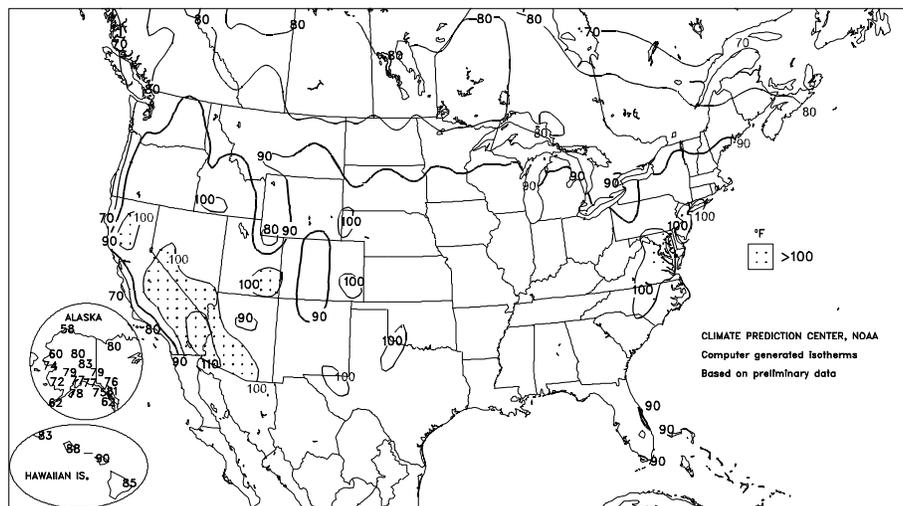
Departure of Average Temperature from Normal (°F)

JUL 4 - 10, 1999



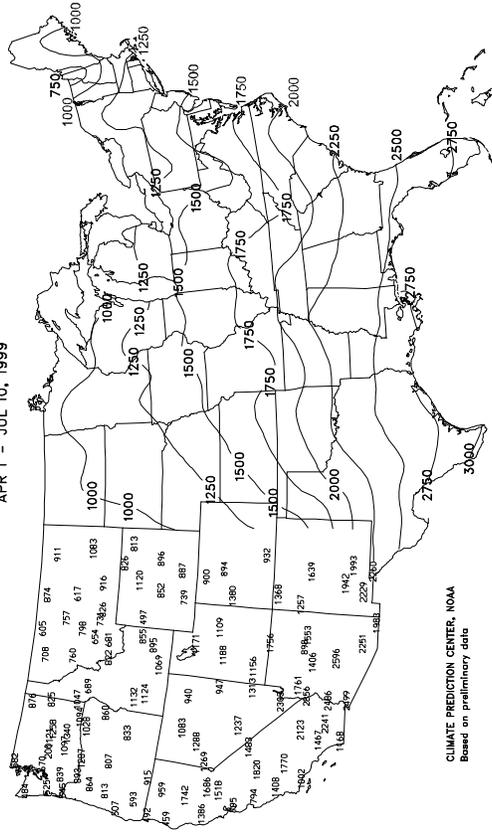
Extreme Maximum Temperature (°F)

JUL 4 - 10, 1999

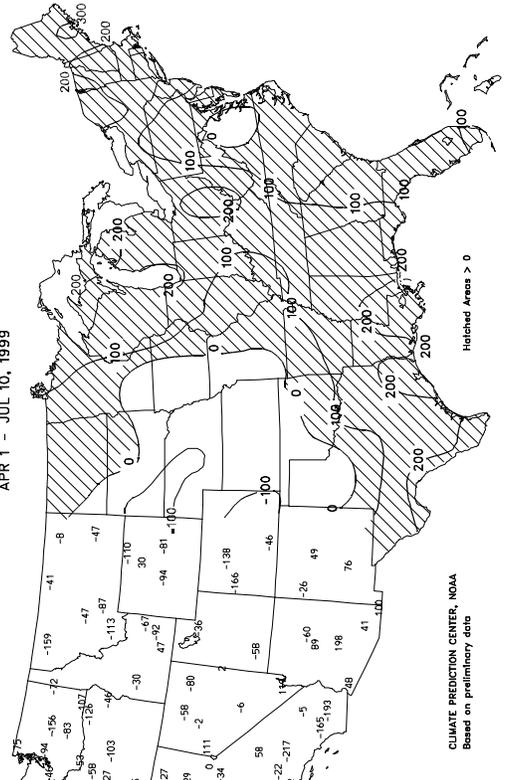


For most of the week, heavy thunderstorms were focused across the **North** and the **Southwest**. Shower activity shifted into the **South** toward week's end. A few areas in **northern Minnesota** received as much as 4 to 9 inches of rain during the week. In **Duluth, MN**, July 1-10 rainfall reached 4.95 inches (413 percent of normal), aided by a 2.90-inch total on Monday. In the **Southwest**, severe flash flooding struck on Thursday in **Las Vegas, NV**, where 1.29 inches of rain (31 percent of their normal annual total) officially fell. In **southern California**, 24-hour (July 7-8) rainfall reached 2.46 inches in **Big Bear City**, near **San Bernardino**. Localized 1- to 2-inch totals were also reported in **Arizona**, **southern Utah**, **New Mexico**, and along the **Colorado Front Range**. Farther east, **Austin (Bergstrom Airport), TX** received 3.62 inches of rain during the first 11 days of the month (including 2.27 inches on Saturday), their highest July total since 1990. In **southern Kansas**, 3.01 inches soaked **Wichita** during the first 10 days of July, boosting their year-to-date precipitation to 27.38 inches (173 percent of normal). Normal in **Wichita** for an entire year is 29.33 inches.

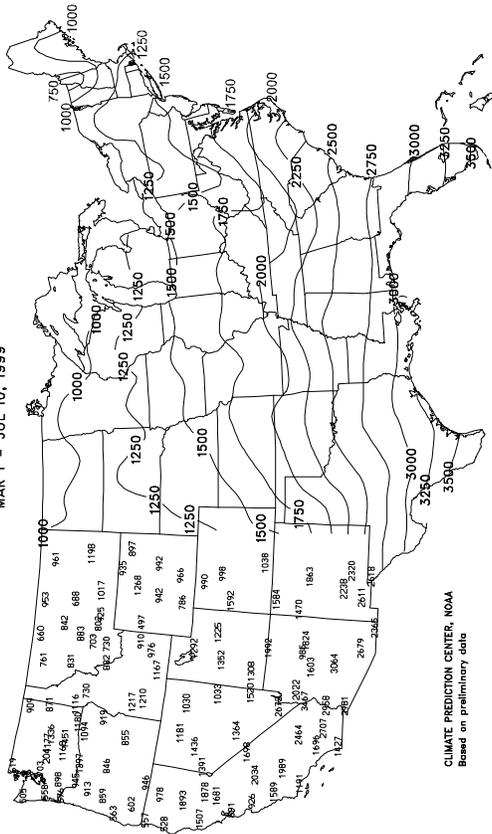
Total Growing Degree Days  
APR 1 - JUL 10, 1999



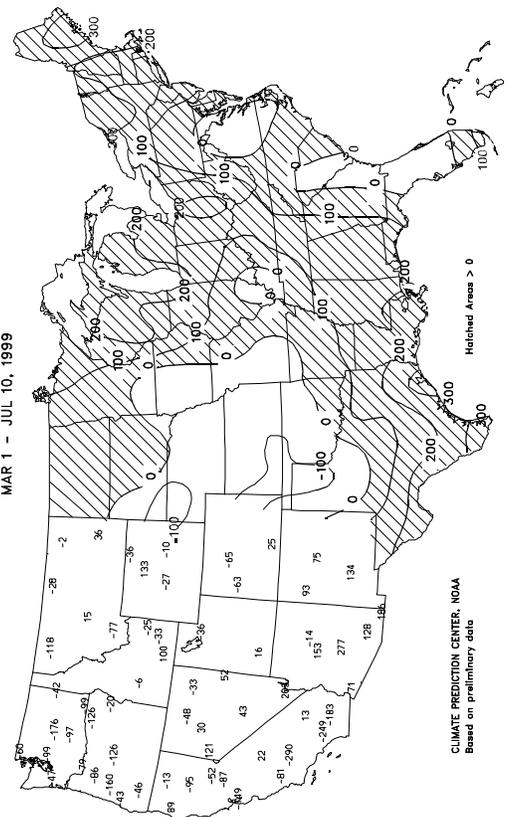
Departure From Normal Growing Degree Days  
APR 1 - JUL 10, 1999



Total Growing Degree Days  
MAR 1 - JUL 10, 1999



Departure From Normal Growing Degree Days  
MAR 1 - JUL 10, 1999



National Weather Data for Selected Cities

Weather Data for the Week Ending July 10, 1999

Data Provided by Climate Prediction Center (301-763-8000 EXT. 7503)

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN. SINCE Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL IN. SINCE Jun 1	PCT. NORMAL SINCE Jun 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP.	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	91	73	93	70	82	2	0.76	-0.43	0.47	9.79	182	34.81	111	93	56	5	0	3	0
AL HUNTSVILLE	90	71	94	70	81	2	0.09	-1.03	0.09	5.73	100	32.88	102	98	56	4	0	1	0
AL MOBILE	88	73	91	72	81	-1	1.45	0.00	1.14	9.09	128	29.61	87	100	67	4	0	5	1
AL MONTGOMERY	90	72	95	69	81	0	1.07	-0.11	0.56	9.54	171	27.23	90	96	58	5	0	4	1
AK ANCHORAGE	69	55	77	52	62	4	0.00	-0.34	0.00	1.10	68	3.62	68	82	47	0	0	0	0
AK BARROW	49	36	58	31	43	4	0.31	0.12	0.17	0.67	126	1.13	90	94	77	0	1	4	0
AK FAIRBANKS	78	56	83	50	67	4	0.24	-0.16	0.12	1.57	81	2.77	66	81	29	0	0	2	0
AK JUNEAU	67	51	81	43	59	3	0.53	-0.33	0.33	3.22	74	29.68	134	91	50	0	0	2	0
AK KODIAK	59	52	78	49	55	2	1.64	0.81	1.33	11.42	191	34.05	103	90	66	0	0	5	1
AK NOME	53	42	74	38	47	-3	0.01	-0.42	0.01	0.68	40	4.05	81	97	77	0	0	1	0
AZ FLAGSTAFF	79	53	85	50	66	1	0.81	0.28	0.73	1.76	157	6.27	63	84	37	0	0	4	1
AZ PHOENIX	103	82	110	74	93	0	0.33	0.18	0.23	0.33	100	1.75	60	64	29	7	0	2	0
AZ TUCSON	97	73	103	69	85	-2	0.79	0.34	0.55	1.28	147	2.62	73	82	31	7	0	5	1
AZ YUMA	101	85	110	80	93	0	0.00	-0.02	0.00	0.00	0	1.77	174	73	33	7	0	0	0
AR FORT SMITH	92	73	95	70	83	2	0.06	-0.63	0.04	7.82	179	30.03	136	96	54	6	0	2	0
AR LITTLE ROCK	92	75	94	73	84	2	0.30	-0.53	0.30	2.92	61	25.50	93	95	59	6	0	1	0
CA BAKERSFIELD	94	66	101	58	80	-3	0.00	0.00	0.00	0.00	0	5.42	142	53	22	6	0	0	0
CA EUREKA	62	53	63	51	58	1	0.00	-0.03	0.00	0.15	27	27.19	130	91	72	0	0	0	0
CA FRESNO	97	65	101	57	81	-1	0.00	0.00	0.00	0.20	286	5.96	86	57	18	6	0	0	0
CA LOS ANGELES	77	66	83	63	71	3	0.00	0.00	0.00	0.98	999	7.18	93	94	63	0	0	0	0
CA REDDING	99	63	109	60	81	0	0.00	-0.04	0.00	0.41	66	16.93	90	46	14	6	0	0	0
CA SACRAMENTO	92	54	97	50	73	-2	0.00	-0.02	0.00	0.03	20	9.91	92	85	20	5	0	0	0
CA SAN DIEGO	73	64	78	61	68	-1	0.00	0.00	0.00	0.04	44	5.08	82	89	63	0	0	0	0
CA SAN FRANCISCO	71	52	73	50	61	-1	0.52	0.52	0.52	0.70	583	13.39	109	91	50	0	0	1	1
CO ALAMOSA	81	49	87	42	65	0	0.00	-0.25	0.00	0.36	36	2.86	92	90	29	0	0	0	0
CO CO SPRINGS	85	59	93	52	72	1	0.37	-0.25	0.21	1.74	56	13.39	166	86	29	1	0	3	0
CO DENVER	87	61	95	52	74	1	0.00	-0.44	0.00	2.57	107	11.59	131	71	24	2	0	0	0
CO GRAND JUNCTION	94	65	100	59	80	2	0.08	-0.06	0.08	0.68	97	3.82	90	55	17	6	0	1	0
CO PUEBLO	93	59	101	52	76	0	0.00	-0.43	0.00	0.19	10	8.01	149	84	24	4	0	0	0
CT BRIDGEPORT	90	70	100	63	80	7	0.04	-0.81	0.04	1.43	31	20.70	92	84	40	4	0	1	0
CT HARTFORD	88	66	99	58	77	4	1.05	0.33	0.61	2.03	42	19.41	84	88	42	3	0	4	1
DC WASHINGTON	97	77	103	73	87	8	0.05	-0.78	0.05	2.50	55	17.70	91	77	36	7	0	1	0
DE WILMINGTON	93	71	99	63	82	7	0.00	-0.96	0.00	1.91	39	21.75	101	77	39	6	0	0	0
FL DAYTONA BEACH	89	73	91	70	81	0	1.29	0.06	0.94	10.27	132	20.87	94	93	61	2	0	3	1
FL JACKSONVILLE	91	71	94	70	81	0	0.07	-1.12	0.04	7.85	107	17.31	70	96	53	5	0	3	0
FL KEY WEST	88	80	89	76	84	-1	0.12	-0.71	0.12	5.95	94	14.96	88	86	69	0	0	1	0
FL MIAMI	89	78	91	76	83	1	0.39	-0.99	0.17	13.37	118	23.10	86	83	56	3	0	4	0
FL ORLANDO	91	73	93	70	82	0	0.42	-1.26	0.28	14.33	147	25.98	110	96	53	6	0	4	0
FL PENSACOLA	88	74	91	72	81	-1	4.34	2.70	3.04	10.37	119	27.91	86	95	63	2	0	4	2
FL TALLAHASSEE	90	72	96	71	81	0	1.78	-0.18	0.64	9.54	98	26.50	76	99	57	5	0	5	1
FL TAMPA	90	74	93	72	82	0	0.77	-0.64	0.39	7.16	96	13.13	66	94	59	2	0	5	0
FL WEST PALM BEACH	88	77	90	74	82	0	0.04	-1.46	0.02	14.00	136	25.69	90	86	60	2	0	3	0
GA ATHENS	91	70	94	69	80	1	0.80	-0.30	0.59	7.75	141	22.31	79	99	57	5	0	3	1
GA ATLANTA	87	71	91	69	79	1	0.64	-0.48	0.37	6.47	126	22.67	78	93	55	2	0	2	0
GA AUGUSTA	92	70	95	68	81	1	0.29	-0.65	0.27	7.73	141	21.75	85	99	51	6	0	2	0
GA COLUMBUS	91	73	95	71	82	0	0.09	-1.17	0.09	3.00	51	15.59	53	92	49	6	0	1	0
GA MACON	91	71	94	70	81	0	0.45	-0.51	0.24	7.95	161	20.87	80	99	55	6	0	3	0
GA SAVANNAH	91	73	94	71	82	1	2.01	0.65	1.38	16.96	223	30.51	120	99	55	5	0	2	2
HI HILO	83	67	85	64	75	-1	0.53	-1.51	0.20	5.41	60	72.89	107	90	57	0	0	5	0
HI HONOLULU	87	73	88	71	80	0	0.00	-0.14	0.00	0.11	15	6.36	56	83	48	0	0	0	0
HI KAHULUI	87	69	90	60	78	0	0.00	-0.08	0.00	0.59	159	7.05	55	86	51	1	0	0	0
HI LIHUE	82	72	83	71	77	-1	1.02	0.55	0.28	2.81	120	16.90	75	90	65	0	0	6	0
ID BOISE	87	54	98	45	71	-2	0.00	-0.09	0.00	0.47	49	6.29	89	55	16	3	0	0	0
ID LEWISTON	85	55	97	49	70	-3	0.00	-0.17	0.00	1.50	100	6.43	89	63	19	3	0	0	0
ID POCATELLO	84	45	97	37	65	-4	0.00	-0.17	0.00	0.84	67	8.03	115	72	16	1	0	0	0
IL CHICAGO/O'HARE	86	69	94	54	77	5	0.79	-0.01	0.79	6.24	127	26.05	149	83	41	2	0	1	1
IL MOLINE	88	66	93	57	77	2	0.12	-1.00	0.12	6.19	106	21.13	107	91	46	3	0	1	0
IL PEORIA	86	66	92	59	76	1	0.00	-0.99	0.00	3.69	68	18.10	97	91	48	2	0	0	0
IL ROCKFORD	86	65	92	57	75	2	0.28	-0.67	0.28	6.44	110	22.97	127	92	42	2	0	1	0
IL SPRINGFIELD	87	64	92	55	76	-1	0.02	-0.78	0.01	3.30	72	15.87	86	91	51	2	0	2	0
IN EVANSVILLE	88	68	92	61	78	-1	0.82	-0.10	0.64	7.50	157	29.12	121	95	55	4	0	3	1
IN FORT WAYNE	89	64	95	56	76	3	0.24	-0.54	0.24	1.53	33	18.34	101	91	39	3	0	1	0
IN INDIANAPOLIS	88	67	94	60	77	2	0.87	-0.13	0.87	3.80	77	23.28	110	95	46	3	0	1	1
IN SOUTH BEND	85	66	92	57	76	3	0.00	-0.88	0.00	4.68	87	19.68	100	89	45	2	0	0	0
IA BURLINGTON	89	68	94	60	78	3	0.05	-0.91	0.05	7.67	141	22.95	128	81	45	4	0	1	0
IA CEDAR RAPIDS	84	63	91	56	74	0	0.78	-0.17	0.73	8.26	140	22.96	134	95	49	2	0	2	1
IA DES MOINES	87	67	94	58	77														

Weather Data for the Week Ending July 10, 1999

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP.	
																90 AND ABOVE	32 AND BELOW	0.1 INCH OR MORE	5.0 INCH OR MORE
KY WICHITA	91	70	95	62	81	0	2.85	2.09	1.96	10.57	195	27.39	173	94	46	6	0	2	2
KY JACKSON	89	70	92	63	80	5	0.27	-0.90	0.21	2.97	50	21.67	81	89	50	6	0	2	0
KY LEXINGTON	88	68	91	61	78	3	0.27	-0.84	0.25	5.86	112	21.74	90	91	48	4	0	2	0
KY LOUISVILLE	90	73	94	67	82	5	0.02	-0.98	0.02	8.35	171	29.33	119	92	55	4	0	1	0
KY PADUCAH	90	70	94	62	80	1	0.27	-0.69	0.27	9.27	171	31.04	113	95	52	6	0	1	0
LA BATON ROUGE	89	73	91	72	81	-1	2.59	1.14	1.42	9.35	144	27.84	87	100	60	4	0	5	3
LA LAKE CHARLES	89	74	92	72	81	-1	1.29	0.13	0.42	11.27	170	26.20	97	98	65	3	0	5	0
LA NEW ORLEANS	89	75	91	73	82	0	0.55	-0.83	0.34	13.76	176	26.15	80	94	65	2	0	3	0
LA SHREVEPORT	92	73	95	71	82	0	1.00	0.10	0.49	8.98	161	39.30	151	97	55	6	0	5	0
ME CARIBOU	71	52	80	47	61	-4	1.09	0.24	0.91	4.73	115	15.87	97	98	50	0	0	3	1
ME PORTLAND	82	62	94	56	72	4	0.54	-0.18	0.48	1.68	38	21.48	95	87	45	1	0	2	0
MD BALTIMORE	97	71	102	63	84	8	0.00	-0.83	0.00	2.32	48	17.12	81	84	34	7	0	0	0
MA BOSTON	86	70	98	63	78	5	0.41	-0.22	0.31	1.45	36	16.71	77	83	43	2	0	4	0
MA WORCESTER	81	64	91	55	72	3	1.08	0.20	0.60	3.21	62	20.42	83	92	51	2	0	4	1
MI ALPENA	79	58	92	50	69	2	0.79	0.16	0.35	4.79	121	12.23	87	96	49	2	0	4	0
MI GRAND RAPIDS	83	65	91	56	74	3	0.79	0.06	0.79	5.31	112	20.45	119	93	50	2	0	1	1
MI HOUGHTON LAKE	80	58	90	48	69	2	2.03	1.45	1.41	8.58	223	16.23	122	97	49	1	0	4	1
MI LANSING	84	62	92	50	73	3	0.63	0.03	0.62	6.78	148	18.48	122	95	55	2	0	2	1
MI MARQUETTE	72	54	88	43	63	-2	2.20	1.54	0.95	6.61	149	23.68	141	93	54	0	0	4	2
MI MUSKEGON	81	64	88	56	73	3	1.28	0.84	0.93	4.88	164	18.29	123	94	51	0	0	2	1
MN DULUTH	73	54	85	50	64	-2	5.26	4.45	3.28	10.47	209	19.51	137	93	54	0	0	4	2
MN INT'L FALLS	73	53	79	44	63	-3	2.37	1.52	1.55	5.72	111	15.86	135	95	50	0	0	5	1
MN MINNEAPOLIS	85	63	93	50	74	1	0.52	-0.29	0.50	4.80	92	19.72	133	85	42	1	0	3	1
MN ROCHESTER	83	61	89	50	72	1	0.59	-0.35	0.33	4.92	97	20.59	142	92	50	0	0	2	1
MS ST. CLOUD	82	59	91	51	70	1	0.52	-0.22	0.50	5.55	98	14.41	103	90	47	1	0	2	1
MS JACKSON	93	72	96	71	83	1	0.73	-0.25	0.45	5.19	114	25.11	81	97	50	7	0	3	0
MS MERIDIAN	92	71	95	69	81	1	0.51	-0.65	0.43	3.91	74	23.05	71	98	51	6	0	2	0
MS TUPELO	91	73	94	71	82	2	1.95	0.96	0.91	8.91	170	41.72	131	94	58	5	0	5	2
MO COLUMBIA	89	67	93	61	78	1	1.52	0.65	1.51	4.96	89	20.08	96	95	56	5	0	2	1
MO KANSAS CITY	87	70	94	61	78	0	0.07	-0.95	0.07	8.74	141	28.33	149	89	56	3	0	1	0
MO SAINT LOUIS	90	71	94	65	81	1	1.89	0.98	1.22	9.48	189	26.43	132	89	49	5	0	2	2
MO SPRINGFIELD	88	70	91	67	79	2	0.31	-0.43	0.31	5.09	82	27.73	123	98	58	3	0	1	0
MT BILLINGS	81	52	95	48	67	-4	0.00	-0.25	0.00	2.26	95	7.41	79	67	21	2	0	0	0
MT BUTTE	80	41	90	31	61	-1	0.05	-0.27	0.05	2.10	80	7.56	107	79	19	1	1	1	0
MT GLASGOW	76	53	83	51	64	-5	0.97	0.55	0.71	3.88	143	10.15	163	90	38	0	0	3	1
MT GREAT FALLS	77	45	86	39	61	-6	0.15	-0.16	0.15	2.22	78	7.13	76	80	23	0	0	1	0
MT KALISPELL	77	42	87	35	60	-3	0.03	-0.26	0.03	2.21	84	7.84	85	90	26	0	0	1	0
MT MILES CITY	83	55	95	49	69	-5	0.02	-0.40	0.02	2.27	67	7.22	84	78	24	2	0	1	0
MT MISSOULA	79	46	89	39	62	-3	0.10	-0.13	0.10	2.89	136	6.37	81	81	23	0	0	1	0
NE GRAND ISLAND	87	64	97	54	75	-1	0.31	-0.38	0.29	6.87	140	17.64	123	85	41	3	0	2	0
NE LINCOLN	88	68	96	57	78	0	1.19	0.45	0.52	6.88	139	20.21	135	92	50	3	0	3	1
NE NORFOLK	86	64	95	55	75	0	0.22	-0.59	0.21	5.67	100	16.79	114	88	46	3	0	2	0
NE NORTH PLATTE	85	60	93	46	73	0	0.00	-0.75	0.00	5.58	125	11.57	97	87	41	3	0	0	0
NE OMAHA	88	68	97	60	78	2	0.86	0.04	0.79	4.63	92	20.90	132	90	51	3	0	3	1
NE SCOTTSBLUFF	89	59	101	50	74	0	0.00	-0.52	0.00	3.72	109	9.97	102	83	27	2	0	0	0
NE VALENTINE	84	55	95	46	69	-5	0.00	-0.72	0.00	5.31	137	12.30	118	88	36	2	0	0	0
NV ELY	86	52	90	45	69	3	0.16	-0.01	0.16	1.82	163	4.24	76	67	19	1	0	1	0
NV LAS VEGAS	98	76	106	71	87	-3	1.33	1.27	1.29	1.47	735	2.28	112	56	25	5	0	2	1
NV RENO	93	55	99	50	74	3	0.00	-0.06	0.00	0.06	11	2.95	67	44	10	6	0	0	0
NV WINNEMUCCA	91	46	100	40	69	-2	0.00	-0.08	0.00	1.21	123	4.56	95	48	15	5	0	0	0
NH CONCORD	85	61	96	48	73	4	0.53	-0.19	0.29	3.33	79	18.00	100	93	43	2	0	4	0
NJ NEWARK	94	74	103	63	84	7	0.00	-0.98	0.00	0.69	15	20.40	89	74	36	4	0	0	0
NM ALBUQUERQUE	88	67	91	65	77	-1	0.44	0.18	0.40	1.16	121	3.51	104	77	29	1	0	3	0
NY ALBANY	84	65	95	55	74	3	1.57	0.85	1.15	4.15	89	18.04	97	94	50	3	0	3	1
NY BINGHAMTON	81	62	91	52	72	3	1.10	0.30	0.85	4.44	93	17.37	92	95	54	3	0	3	1
NY BUFFALO	80	65	86	56	72	2	0.17	-0.50	0.08	2.11	47	16.44	90	89	55	0	0	4	0
NY ROCHESTER	83	64	92	55	73	4	0.65	0.04	0.44	3.41	88	16.09	103	91	51	2	0	4	0
NY SYRACUSE	82	66	93	58	74	4	1.25	0.37	0.72	4.01	79	17.12	90	85	54	3	0	5	1
NC ASHEVILLE	84	65	88	63	74	2	1.17	0.18	0.57	6.48	114	23.94	95	100	66	0	0	7	1
NC CHARLOTTE	90	71	95	67	81	2	1.80	0.93	1.42	5.83	126	18.94	82	97	58	4	0	3	1
NC GREENSBORO	91	72	94	68	81	5	0.91	-0.10	0.48	6.10	116	20.32	91	94	53	5	0	2	0
NC HATTERAS	85	78	86	76	82	4	0.00	-1.05	0.00	3.85	69	25.08	93	90	66	0	0	0	0
NC RALEIGH	99	72	102	69	86	8	0.68	-0.20	0.60	2.00	40	17.54	78	94	41	7	0	2	1
NC WILMINGTON	94	76	97	70	85	5	0.33	-1.47	0.25	4.42	52	27.05	99	89	52	7	0	3	0
ND BISMARCK	79	56	82	49	67	-2	0.49	-0.03	0.25	5.04	145	15.38	171	91	40	0	0	2	0
ND DICKINSON	77	54	82	46	65	-4	0.00	-0.54	0.00	2.92	73	10.42	105	93	40	0	0	0	0
ND FARGO	76	59	82	50	67	-3	0.54	0.00	0.47	3.39	93	11.08	110	85	46	0	0	2	0
ND GRAND FORKS	77	56	82	49	66	-2	0.92	0.29	0.79	4.53	121	13.70	147	95	45	0	0	3	1
ND JAMESTOWN	75	57	80	49	66	-4	0.45	-0.21	0.32	4.18	106	13.88	149	95	51	0	0	5	0
ND WILLISTON	78	53	86	45	65	-5	0.60	0.08	0.23	3.63	121	9.94	125	93	38	0	0	3	0
OH AKRON-CANTON	86	65	92	55	75	4	1.03	0.12	0.79	3.40	76	18.03	95	97	57	4	0	2	1
OH CINCINNATI	89	67	94	60	78	3	0.67	-0.29	0.67	4.04	78	19.21	85	93	47	4	0	1	1
OH CLEVELAND	87	67	95	59	77	5	2.22	1.42	1.54	3.85	80	16.64	90	93	46	4	0	2	2
OH COLUMBUS	90	67	96	58	79	6	0.61	-0.38	0.57	2.10	39	16.06	79	91	42	4	0	2	1
OH DAYTON	87	66	91	59	77	3	1.07	0.25	1.07	5.31	106	20.33	101	88	47	4	0	1	1
OH MANSFIELD	83	62	89	51	73	1	0.64	-0.27	0.38	3.40	65	19.31	94	93	52	0	0	2	0

Based on 1961-90 normals

Weather Data for the Week Ending July 10, 1999

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	PRECIP	
																		0.1 INCH OR MORE	50 INCH OR MORE
OK TOLEDO	89	66	96	55	78	6	0.13	-0.63	0.13	1.99	41	18.05	107	82	39	4	0	1	0
OK YOUNGSTOWN	86	64	92	55	75	5	0.79	-0.15	0.55	3.93	74	20.89	109	94	44	4	0	2	1
OK OKLAHOMA CITY	92	71	97	67	81	0	1.96	1.30	1.39	10.57	200	27.05	145	95	48	6	0	2	2
OK TULSA	92	74	94	66	83	0	0.01	-0.74	0.01	5.35	97	29.92	137	90	49	6	0	1	0
OR ASTORIA	69	51	74	47	60	1	0.41	0.10	0.16	4.31	151	54.16	154	95	60	0	0	5	0
OR BURNS	81	39	92	29	60	-5	0.00	-0.09	0.00	0.23	24	5.28	99	68	16	2	2	0	0
OR EUGENE	79	49	92	45	64	-3	0.03	-0.10	0.01	0.94	58	27.27	105	93	35	1	0	3	0
OR MEDFORD	89	53	98	47	71	-1	0.00	-0.06	0.00	0.00	0	9.88	106	75	21	4	0	0	0
OR PENDLETON	85	50	98	44	68	-4	0.00	-0.08	0.00	0.51	67	5.06	76	72	21	3	0	0	0
OR PORTLAND	80	55	92	50	67	0	0.24	0.08	0.17	2.16	126	25.06	132	92	40	1	0	4	0
OR SALEM	80	51	91	47	65	0	0.05	-0.10	0.05	1.63	104	30.95	151	96	37	2	0	1	0
PA ALLENTOWN	93	67	100	58	80	6	0.23	-0.68	0.12	1.23	24	17.07	100	82	35	5	0	1	0
PA ERIE	83	68	89	61	76	5	0.25	-0.53	0.16	3.31	64	19.26	99	85	48	0	0	3	0
PA MIDDLETOWN	97	72	102	63	84	9	0.12	-0.71	0.10	2.36	47	16.33	76	79	32	6	0	2	0
PA PHILADELPHIA	94	74	100	67	84	8	0.00	-0.96	0.00	1.53	30	20.40	93	70	38	6	0	0	0
PA PITTSBURGH	86	65	92	55	76	4	0.75	-0.10	0.47	3.44	70	20.26	101	89	45	3	0	2	0
PA WILKES-BARRE	88	65	96	51	76	5	0.35	-0.53	0.26	3.26	62	17.01	91	87	43	3	0	2	0
PA WILLIAMSPORT	90	65	97	54	77	5	0.48	-0.46	0.39	3.48	61	18.43	87	93	40	3	0	2	0
RI PROVIDENCE	88	69	98	63	78	6	0.12	-0.60	0.03	0.35	8	21.67	91	86	43	3	0	2	0
SC BEAUFORT	91	74	93	72	82	1	0.03	-1.34	0.00	15.14	188	28.00	108	93	58	5	0	1	0
SC CHARLESTON	90	72	93	69	81	0	0.32	-1.20	0.32	3.40	40	16.80	64	97	58	4	0	1	0
SC COLUMBIA	93	72	95	70	83	2	0.75	-0.44	0.70	5.40	83	19.04	71	94	50	7	0	2	1
SC GREENVILLE	90	71	94	68	80	3	1.47	0.40	0.64	6.14	97	20.47	72	95	55	5	0	3	2
SD ABERDEEN	81	57	88	52	69	-3	1.32	0.65	1.26	6.56	160	13.04	123	98	47	0	0	3	1
SD HURON	84	57	93	46	71	-3	0.09	-0.57	0.09	3.57	83	10.57	88	94	47	1	0	1	0
SD RAPID CITY	81	55	92	46	68	-3	0.00	-0.52	0.00	5.24	138	12.56	122	84	41	1	0	0	0
SD SIOUX FALLS	84	61	92	53	72	-1	0.00	-0.63	0.00	3.40	79	15.70	124	89	46	2	0	0	0
TN BRISTOL	89	68	92	66	79	5	0.84	-0.15	0.67	5.33	108	20.48	91	98	55	4	0	4	1
TN CHATTANOOGA	92	72	95	71	82	4	0.49	-0.60	0.47	7.61	150	34.37	117	96	56	5	0	3	0
TN KNOXVILLE	88	71	92	69	80	3	6.88	5.80	2.48	13.09	237	35.80	134	95	61	4	0	4	4
TN MEMPHIS	94	76	96	73	85	3	2.68	1.83	2.01	5.10	106	33.65	117	89	52	7	0	2	2
TN NASHVILLE	92	72	94	71	82	3	0.41	-0.48	0.28	4.72	98	26.83	102	90	51	5	0	2	0
TX ABILENE	91	71	95	68	81	-2	0.08	-0.40	0.08	4.66	131	12.77	107	85	39	6	0	1	0
TX AMARILLO	88	65	92	60	77	-2	0.54	-0.07	0.45	4.15	91	18.77	186	86	39	2	0	2	0
TX AUSTIN	92	71	95	70	82	-2	2.58	2.05	2.27	6.11	136	18.30	104	99	49	7	0	6	1
TX BEAUMONT	90	74	93	72	82	-1	0.81	-0.43	0.60	11.05	150	22.89	82	99	61	4	0	2	1
TX BROWNSVILLE	91	74	94	71	83	-2	1.20	0.75	1.18	3.78	112	12.29	111	97	60	5	0	3	1
TX CORPUS CHRISTI	90	74	93	73	82	-2	0.92	0.36	0.79	7.30	174	13.39	97	99	65	5	0	4	1
TX DEL RIO	91	74	94	72	82	-2	0.65	0.20	0.61	6.27	226	11.67	130	93	53	5	0	2	1
TX EL PASO	93	71	98	67	82	0	0.28	-0.03	0.21	1.74	157	1.90	70	78	32	6	0	3	0
TX FORT WORTH	94	75	98	72	85	0	0.80	0.25	0.75	1.79	47	16.20	86	89	46	6	0	3	1
TX GALVESTON	87	76	90	72	82	-1	4.10	3.19	2.32	6.45	112	15.56	80	89	67	1	0	5	3
TX HOUSTON	91	74	94	72	82	0	1.76	0.88	1.63	7.03	113	18.58	78	95	57	5	0	3	1
TX LUBBOCK	89	67	97	62	78	-1	0.00	-0.55	0.00	4.52	127	13.84	158	81	38	5	0	0	0
TX MIDLAND	92	70	98	66	81	-1	0.01	-0.38	0.01	2.88	136	5.72	87	78	30	5	0	1	0
TX SAN ANGELO	92	69	97	65	81	-2	0.30	0.04	0.30	5.00	184	11.35	111	85	37	5	0	1	0
TX SAN ANTONIO	90	72	93	71	81	-3	0.65	0.11	0.36	4.54	98	11.80	72	94	50	5	0	2	0
TX VICTORIA	90	72	92	71	81	-3	0.71	-0.14	0.46	5.56	91	18.30	97	100	60	4	0	4	0
TX WACO	96	73	98	70	84	0	2.65	2.13	2.26	3.15	78	13.87	78	97	44	7	0	3	1
TX WICHITA FALLS	96	71	101	65	84	-1	0.00	-0.44	0.00	4.62	111	22.11	139	89	42	6	0	0	0
UT SALT LAKE CITY	90	62	95	57	76	0	0.02	-0.17	0.02	0.84	70	9.50	101	63	22	5	0	1	0
VT BURLINGTON	83	64	93	57	74	3	1.37	0.57	0.41	3.51	76	13.50	84	92	47	3	0	7	0
VA LYNCHBURG	94	68	98	64	81	6	0.57	-0.36	0.57	2.53	53	15.70	74	93	38	6	0	1	1
VA NORFOLK	94	76	99	71	85	7	1.37	0.28	0.74	4.96	92	21.61	93	86	50	6	0	2	2
VA RICHMOND	93	72	98	70	83	5	0.90	-0.19	0.55	7.47	145	23.03	105	93	48	6	0	2	1
VA ROANOKE	97	71	100	65	84	9	0.06	-0.78	0.05	1.31	30	14.91	72	81	32	7	0	2	0
VA WASH/DULLES	95	68	99	60	81	6	0.39	-0.39	0.21	4.12	82	20.47	98	95	39	6	0	4	0
WA OLYMPIA	77	47	89	41	62	0	0.03	-0.17	0.01	2.09	108	38.59	148	96	42	0	0	3	0
WA QUILLAYUTE	72	45	80	42	58	0	0.28	-0.33	0.25	5.61	141	72.01	130	98	56	0	0	2	0
WA SEATTLE-TACOMA	75	53	86	50	64	0	0.00	-0.19	0.00	2.21	124	23.16	124	89	40	0	0	0	0
WA SPOKANE	79	49	90	42	64	-3	0.03	-0.14	0.03	1.39	91	8.40	92	81	24	1	0	1	0
WA YAKIMA	83	47	94	40	65	-4	0.00	-0.04	0.00	0.17	28	3.43	81	77	22	2	0	0	0
WV BECKLEY	87	64	90	56	75	6	0.25	-0.82	0.25	1.63	30	17.98	82	89	44	1	0	1	0
WV CHARLESTON	93	66	98	58	79	5	0.35	-0.75	0.33	1.80	35	16.91	77	95	41	6	0	2	0
WV ELKINS	86	57	90	47	71	3	0.35	-0.67	0.35	2.40	41	21.42	90	100	43	1	0	1	0
WV HUNTINGTON	91	68	98	60	80	6	0.39	-0.64	0.39	1.79	36	16.18	73	91	38	5	0	1	0
WI EAU CLAIRE	85	61	97	49	73	2	0.93	0.05	0.47	5.68	104	20.19	130	91	45	2	0	2	0
WI GREEN BAY	82	60	91	50	71	2	1.41	0.71	0.82	5.94	135	14.45	104	95	53	2	0	3	1
WI LACROSSE	87	65	96	54	76	3	0.59	-0.26	0.53	3.87	75	18.63	123	89	42	2	0	2	1
WI MADISON	84	64	91	54	74	3	0.41	-0.33	0.24	6.30	133	20.41	136	89	46	2	0	3	0
WI MILWAUKEE	85	68	93	58	77	6	1.09	0.32	0.98	8.08	186	24.68	150	85	43	2	0	3	1
WY CASPER	89	51	99	45	70	1	0.01	-0.30	0.01	1.83	96	6.62	86	84	17	4	0	1	0
WY CHEYENNE	83	57	91	49	70	2	0.08	-0.41	0.08	2.21	80	10.21	123	78	26	2	0	1	0
WY LANDER	86	56	90	50	71	1	0.01	-0.21	0.01	1.09	61	9.95	118	67	15	2	0	1	0
WY SHERIDAN	83	51	92	43	67	-2	0.00	-0.26	0.00	1.71	65	8.56	94	80	30	1	0	0	0

NOTE: These data are preliminary and subject to change. In the past, precipitation totals from a number of stations have been incomplete.

## June Weather and Crop Summary

### Weather

Frequent heavy rainfall disrupted winter wheat harvesting on the central and southern Plains until month's end, when warmer, drier air overspread the region. In addition, strong thunderstorms and hail damaged cotton on parts of the southern Plains. In the Southeast, however, widespread rains improved soil moisture and stabilized crop conditions. In contrast, drought worsened from the Mid-Atlantic region into southern New England, as monthly rainfall totaled less than 50 percent of normal in many areas and 1-year precipitation deficits topped 15 inches at some locations. Drought also continued to adversely affect dryland crops in the interior Northwest, where late-June showers provided only localized relief from the 4-month dry spell. The Southwest experienced several seasons compressed into a single month, as early June featured very cool weather and winter-like storm systems, and late June showcased hot weather and the gradual onset of seasonal (monsoon) thunderstorms. Across the northern Plains and western Corn Belt, occasional showers and thunderstorms maintained adequate to locally surplus soil moisture for developing summer crops. Meanwhile in the easternmost Corn Belt, warm and often dry weather reduced soil moisture to unfavorable levels, although late-month rains benefited corn and soybeans.

Following June's very cool start in the Southwest, temperatures soared well above normal. The region's overall monthly temperature departures varied widely, ranging from -5°F in California's San Joaquin Valley to +2°F in parts of Arizona. Elsewhere, monthly temperatures averaged as much as 4°F below normal in the Plains and Northwest. Near-normal temperatures prevailed in the Southeast, while readings ranged from 1 to 4°F above normal in the Great Lakes region.

During the first 12 days of June, cool weather in the West resulted in more than six dozen daily-record lows. East of the Rockies, a similar number of daily-record highs were set during the same period. A mid-month weather change brought a brief hot spell to the Northwest (about a dozen record highs on June 14 and 15), while cool weather settled in from the Plains to the East Coast (more than five dozen record lows from June 14-20). Very cool weather returned to northern Plains and the Northwest late in the month (a half dozen record lows after June 25), but near- to above-normal temperatures prevailed elsewhere toward month's end.

On June 3-4, southern California's Mt. Laguna (elevation 5,760 feet) received 3 inches of snow, their latest measurable snowfall on record (previously May 28, 1971). Although the Los Angeles Civic Center received its third-heaviest single-day June rainfall on record (0.58 inch on June 2), its seasonal (July 1998 - June 1999) precipitation totaled only 9.09 inches (62 percent of normal), far below the El Niño-driven 1997-98 sum of 31.01 inches. On the 3<sup>rd</sup>, high temperatures of 47°F in Winnemucca, NV and 38°F on Mt. Wilson, CA (18 miles northeast of Los Angeles) were the stations' lowest on record during June. A day later in Nevada, Las Vegas' high of 67°F was also a June record.

#### Lowest June Maximum Temperatures (°F)

Location	High/Date	Previous Record/Date
Mt. Wilson, CA	38 on June 3	43 on June 7, 1968
Winnemucca, NV	47 on June 3	48 on June 6, 1993
Las Vegas, NV	67 on June 4	68 on June 7, 1995

In the Northwest, Yakima, WA notched 32°F on June 9, 27 days later than their normal last spring freeze. Similarly, Pocatello, ID recorded 31°F on the 9<sup>th</sup>, 20 days after their normal last freeze. In Oregon, Eugene's low of 34°F on June 9 was their second-lowest June temperature on record, behind 32°F on June 13, 1976.

Klamath Falls, OR registered three consecutive daily-record lows (27, 25, and 30°F) from June 7-9. Farther south, Eureka, CA posted a June record-tying low of 40°F on June 8. Just days later, however, record warmth briefly visited the Northwest. On June 15, daily-record highs in Washington included 101°F in Kennewick and 102°F in Hanford. Meanwhile, cool air briefly spread across areas east of the Rockies. Embarrass, MN recorded 26°F on June 15, followed by 23°F a day later. On the same days, Grand Forks, ND logged consecutive daily-record lows (37 and 36°F). On the latter date, daily-record lows included 37°F in Montpelier, VT and 39°F in Youngstown, OH.

Despite a late-month warm-up in Bakersfield, CA, including a high of 102°F on June 30, another cool month (4.6°F below normal in June) came to an end. Bakersfield's monthly temperatures have averaged below normal 16 times in the last 17 months, and were last above normal during 2 consecutive months in December 1996 and January 1997. Farther east, long-running warm spells continued in parts of the western Great Lakes region. In Wisconsin, June temperatures averaged above normal by 2.1°F in Madison and 2.2°F in Milwaukee. As a result, Madison's streak of at- or above-normal monthly temperatures reached 19 months (December 1997 - June 1999), well above their previous record of 11 months, set in 1920-21. Milwaukee's streak of above-normal monthly readings stretched to 19 months, easily surpassing their former record (16 months, from December 1937 to March 1939). Meanwhile in Houston, TX, another warm month (1.5°F above normal in June) kept alive a streak dating to May 1998, a 14-month span. However, this month's warmth in Houston (temperatures averaged 81.9°F) was not comparable to last June's record-setting average of 85.5°F.

High temperatures reached the 90-degree mark for the first time this year on June 3 in Little Rock, AR; June 22 in Albuquerque, NM; and June 23 in Amarillo, TX. Little Rock's occurrence was 12 days later than normal and 22 days later than last year, when highs reached or exceeded 90°F on 110 days (second only to 1954's 115-day total). Amarillo's previous record for the latest 90-degree heat occurred on June 16, 1949. Just last year, Amarillo weathered a near-record 41 consecutive days of 90-degree heat from June 16 - July 26. Albuquerque missed their latest 90-degree reading, which remains June 23, 1921, by 1 day. In New York, an early-month heat wave produced the first 90-degree weather in Albany (95°F on June 7) since August 16, 1997, and in Buffalo (90°F on June 11 and 12) since August 19, 1995. Elsewhere in the Northeast, the June 7 maximum of 95°F in Portland, ME was their highest temperature since a 96-degree reading on July 14, 1995. Farther south, Raleigh-Durham, NC noted 100°F on June 8, their earliest triple-digit heat on record and first 100-degree reading since August 14, 1995. Highs reached or exceeded 90°F on 8 consecutive days (June 6-13) in Charleston, WV—including a high of 98°F on June 10—their longest such streak since June 13-21, 1994.

Very dry conditions accompanied the occasionally hot weather in the Mid-Atlantic and Northeastern States, including record dryness in parts of New England.

#### Record-Low June Precipitation (Inches)

Location	Total	Normal	Former Record/Year
Boston, MA	trace	3.09	0.27 in 1912
Milton, MA	0.14	3.30	0.53 in 1912
Worcester, MA	0.32	3.88	0.66 in 1912

During Boston's 128-year period of record, a span of more than 1,500 months, no measurable rain fell only in the months of June 1999 and March 1915. In addition, Boston's 37-day spell (May 25 - June 30) without measurable rain was their longest since a 44-day streak in October-November 1924. Meanwhile in Ohio, monthly

amounts of 1.19 inches (37 percent of normal) in Akron-Canton and 1.66 inches (42 percent) in Mansfield were both the fifth-lowest June totals on record. In Virginia, Roanoke's total of 0.86 inch (27 percent of normal) was their fourth-lowest June rainfall. Philadelphia, PA saw an 18-day streak (May 25 - June 11) without measurable rainfall end on June 12, but still only received 1.16 inches (31 percent of normal) during the month.

On June 29 in West Virginia, the Pocatalico River at Sissonville (northern Kanawha County) was flowing at a rate of about 60 gallons per second and had a stage near 2.0 feet. Exactly 1 year earlier, a record crest of 35.5 feet was established at the gauging station, with a flow exceeding 100,000 gallons per second. One-year (July 1, 1998 - June 30, 1999) precipitation totals stood at 23.90 inches (59 percent of normal) in Baltimore, MD and 24.91 inches (64 percent) in Washington, DC. Late in the month, however, scattered showers and thunderstorms provided limited and localized relief from the year-long drought. In Richmond, VA, June rainfall totaled 6.29 inches (174 percent of normal), aided by a 2.46-inch deluge on the 29<sup>th</sup> and a 1.93-inch rainfall on the 30<sup>th</sup>.

Meanwhile, soil moisture improved dramatically, especially late in the month, across much of the Southeast. Atlanta, GA measured rain on 8 consecutive days to end the month, tying their June record, most recently noted in 1927. Atlanta's June 23-30 total, 3.49 inches, boosted their June sum to 5.83 inches (164 percent of normal). Farther north, measurable rainfall dampened Paducah, KY on 14 days during June, totaling 8.97 inches (221 percent of normal).

Especially wet conditions affected most of Florida, a marked contrast from just 2 months earlier, when drought and wildfires highlighted the State's weather. A June-record 18.89 inches of rain (194 percent of normal) soaked Hollywood, breaking their 1966 standard of 18.62. A total of 19.65 inches (205 percent) drenched Ft. Lauderdale, aided by a total of 8.28 inches on June 8. However, Ft. Lauderdale's June record remained 24.40 inches, set in 1992. Elsewhere across southern Florida, monthly totals reached 25.03 inches in Coral Springs and 11.08 inches in Miami. Despite the significant rainfall, year-to-date rainfall in Miami and many other locations across the South remained well below normal. Miami's January-June total reached 20.80 inches, or 84 percent of normal. January-June rainfall in Tampa, FL totaled only 10.62 inches, or 60 percent of normal. In New Orleans, LA, June rainfall (12.20 inches, or 209 percent of normal), boosted their year-to-date total to 24.59 inches (80 percent of normal).

Significant June rainfall was not confined to the Southeast, as many other areas between the Rockies and Appalachians also reported impressive totals. In Del Rio, TX, a monthly total of 5.62 inches (266 percent of normal) represented their sixth-highest June total and greatest amount in June since 1987. Farther north, Milwaukee, WI (6.96 inches, or 215 percent) recorded their wettest June since 1969. Meanwhile in the Northwest, showers on June 24-25 provided localized relief from an other-wise dry month. In Spokane, WA, a daily-record rainfall (0.85 inch) on June 25 boosted their June precipitation slightly above normal. However, the rainfall largely bypassed locations such as Medford, OR (a trace during June, 0.58 inch below normal) and Wenatchee, WA (0.02 inch during June, 4 percent of normal).

On the Alaskan mainland, warm weather prevailed for most of the month, following a cool start. June temperatures averaged as much as 2°F above normal. Barrow topped the 40-degree mark for the first time this year on June 11, then reached 54°F on June 30. On the 13<sup>th</sup>, both Bettles and Fairbanks recorded highs of 89°F. Across southeastern Alaska, precipitation diminished to below-normal levels after a wet spring. In Juneau, rainfall during June was 2.69 inches (85 percent of normal), boosting their April-June total to a

record-setting 15.86 inches (170 percent). The previous record, 15.81 inches, was established in 1992. Farther west in Kodiak, however, the monthly precipitation of 9.77 inches was 204 percent of normal and their sixth-highest June total.

## Fieldwork

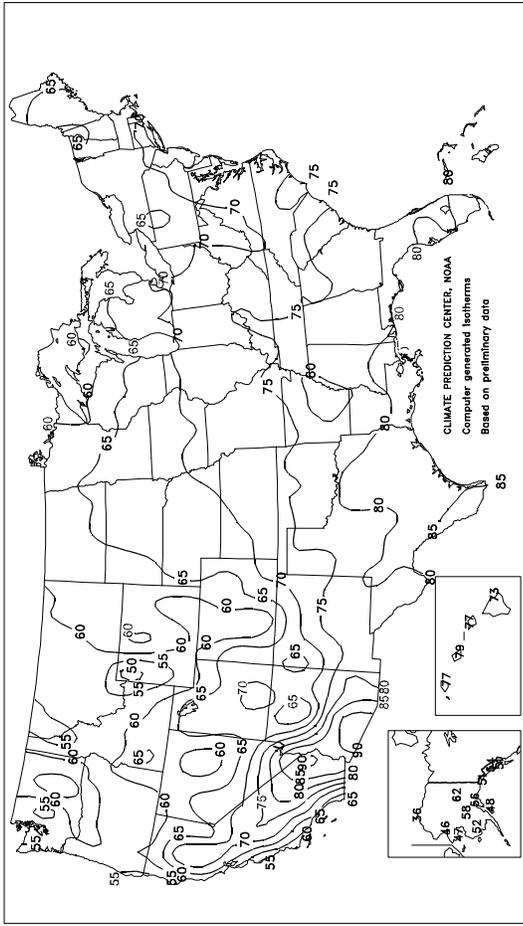
Numerous storm systems provided ample rain to maintain soil moisture levels and support crop development in most areas of the Corn Belt, parts of the central and southern Great Plains, lower Mississippi Valley, and adjacent areas of the Southeast. Some pockets within these areas received excessive rainfall and experienced hail, wind, and flood damage. Field activities were hampered throughout the month in eastern areas of Oklahoma and Kansas due to persistent rain and muddy soils. The winter wheat harvest fell behind the 5-year average early in the month and continued to lag through the end of June, mostly due to slow progress in Oklahoma and Kansas. Sorghum planting was also hampered by rain in Oklahoma and Kansas. In Iowa, heavy rains eroded soils, and standing water damaged some corn and soybean fields. A few isolated corn fields were yellow due to lingering soil wetness. Rain partially eased drought conditions in some areas of the Atlantic Coastal Plains. Soils remained short of moisture in many areas, however, and crops were increasingly stressed as temperatures steadily climbed during the month. Soil moisture ranged from slightly dry to favorably moist across most of the northern Great Plains during most of the month.

Seasonal temperatures promoted near-normal crop development across most of the Nation during June. Corn and soybeans developed slightly ahead of normal in most areas of the Corn Belt. By mid-month, nearly all of the corn and more than 80 percent of the soybeans were emerged. Corn silking and soybeans blooming were slightly ahead of the 5-year average on July 4. Cool weather hindered small-grain development in the northern Great Plains and Pacific Northwest until mid-month, when warmer weather accelerated growth. On July 4, spring wheat was 49 percent headed, 2 percentage points ahead of the average and barley was 43 percent headed, 4 percentage points behind the average.

Despite dry soils that hindered planting in the Atlantic Coastal Plains early in the month, nearly all of the cotton was planted by mid-month. Growth was aided by near-normal temperatures and adequate soil moisture in the lower Mississippi Valley and eastern Texas. Development, however, progressed slightly behind normal due to below-normal temperatures in the Southeast and southern High Plains. As of July 4, cotton squaring or beyond was at 66 percent and cotton setting bolls or beyond was at 16 percent. Both stages were 3 percentage points behind the 5-year average. Rice developed ahead of normal along the western Gulf Coast, but lagged slightly behind the 5-year average in interior areas of the lower Mississippi Valley. Sixteen percent of the acreage was headed on July 4, slightly behind last year, but ahead of the normal pace. In Texas and Louisiana, more than one-half of the crop was headed.

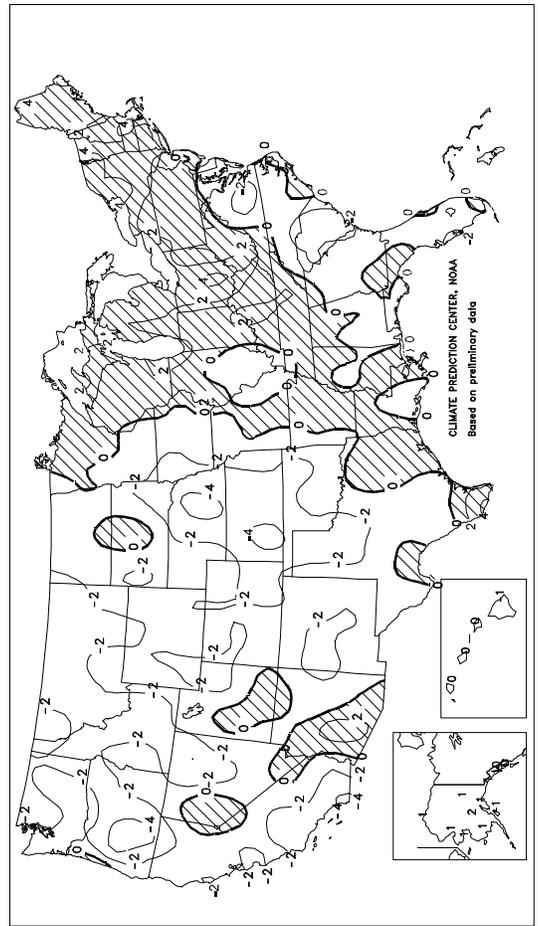
Average Temperature (°F)

JUN 1999



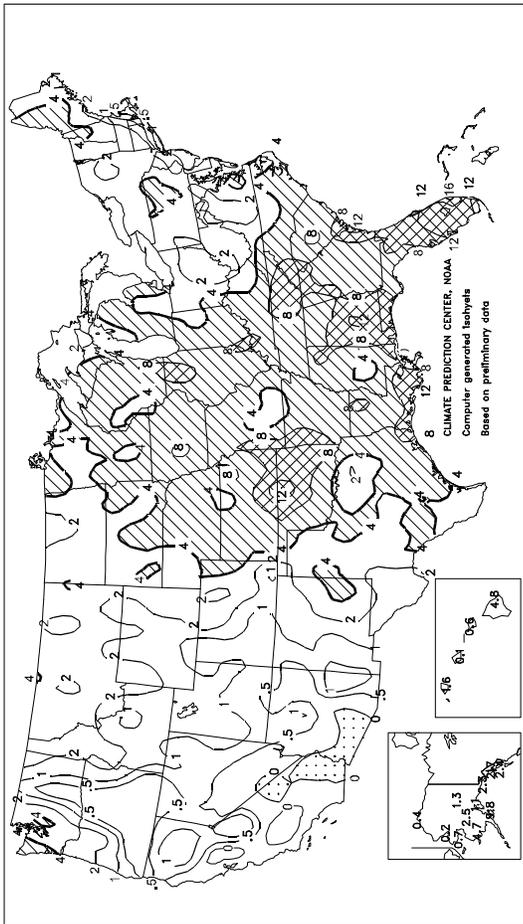
Departure of Average Temperature from Normal (°F)

JUN 1999



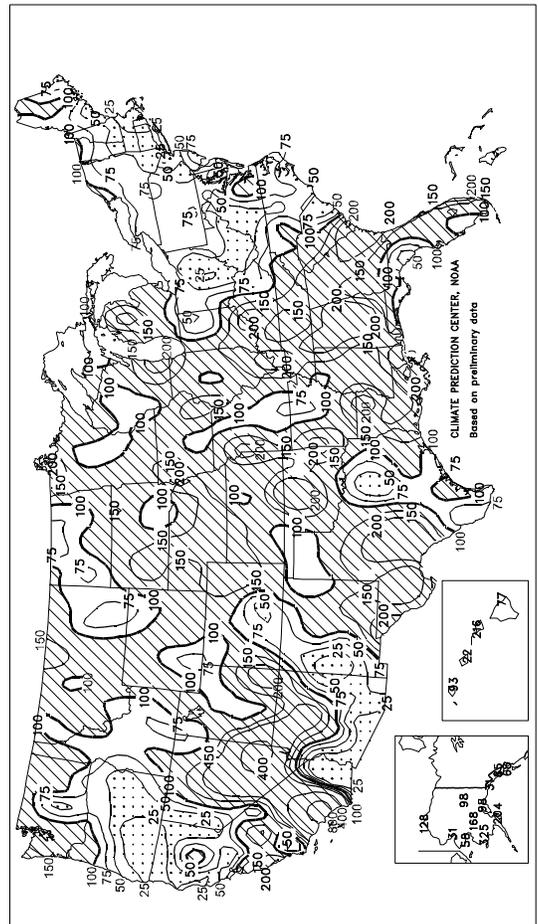
Total Precipitation (Inches)

JUN 1999



Percent of Normal Precipitation

JUN 1999



# TEMPERATURE AND PRECIPITATION SUMMARY

## June 1999

STATES AND STATIONS	TEMP, °F		PRECIP.		STATES AND STATIONS	TEMP, °F		PRECIP.		STATES AND STATIONS	TEMP, °F		PRECIP.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AL BIRMINGHAM	77	1	9.03	5.31	ME CARIBOU	64	3	3.20	0.29	RI WILKES-BARRE	69	1	2.89	-1.09
AL HUNTSVILLE	76	0	5.61	1.49	ME PORTLAND	66	4	0.95	-2.49	RI WILLIAMSPORT	69	1	2.95	-1.38
AL MOBILE	79	-1	7.58	2.55	MD BALTIMORE	71	-1	2.04	-1.63	RI PROVIDENCE	70	3	0.17	-3.16
AL MONTGOMERY	78	0	8.47	4.57	MA BOSTON	71	3	0.00	-3.09	RI SC BEAUFORT	76	-2	15.00	8.89
AK ANCHORAGE	56	1	1.10	-0.05	MA WORCESTER	68	4	0.32	-3.56	RI SC CHARLESTON	76	-2	2.32	-4.11
AK BARROW	36	2	0.35	0.08	MI ALPENA	65	3	3.39	0.33	RI SC COLUMBIA	77	-1	4.63	-0.17
AK FAIRBANKS	62	2	1.34	-0.03	MI GRAND RAPIDS	69	2	3.81	0.12	SD GREENVILLE	74	-1	4.67	-0.12
AK JUNEAU	54	1	2.69	-0.46	MI HOUGHTON LAKE	65	2	6.32	3.30	SD ABERDEEN	66	0	5.23	2.09
AK KODIAK	48	-1	9.77	4.99	MI LANSING	69	3	4.46	0.76	SD HURON	67	0	3.00	-0.36
AK NOME	47	2	0.67	-0.44	MI MARQUETTE	61	1	3.05	-0.43	SD RAPID CITY	63	-2	5.24	2.18
AZ FLAGSTAFF	59	-1	0.95	0.49	MI MUSKOGON	67	2	3.31	0.96	SD SIOUX FALLS	67	-1	2.57	-0.83
AZ PHOENIX	89	1	0.00	-0.13	MN DULUTH	60	1	4.90	1.07	TN BRISTOL	72	1	4.30	0.77
AZ TUCSON	84	0	0.16	-0.10	MN INT'L FALLS	61	0	3.32	-0.62	TN CHATTANOOGA	77	2	6.97	3.44
AZ YUMA	87	0	0.00	-0.02	MN MINNEAPOLIS	67	-1	3.68	-0.38	TN KNOXVILLE	75	2	5.58	1.60
AR FORT SMITH	77	1	7.76	4.37	MI ROCHESTER	66	-1	3.76	0.04	TX MEMPHIS	80	1	2.42	-1.15
AR LITTLE ROCK	79	0	2.62	-0.95	MI ST. CLOUD	66	1	4.00	-0.59	TX NASHVILLE	76	1	3.54	-0.03
CA BAKERSFIELD	74	-4	0.00	-0.11	MS JACKSON	79	1	4.34	1.17	TX ABILENE	79	-2	4.58	1.73
CA EUREKA	55	-1	0.15	-0.36	MS MERIDIAN	78	0	3.40	-0.23	TX AMARILLO	72	-2	3.61	-0.08
CA FRESNO	76	-1	0.20	0.13	MO TUPELO	78	1	6.94	3.10	TX AUSTIN	81	0	3.37	-0.35
CA LOS ANGELES	65	-1	0.98	0.98	MO COLUMBIA	72	0	3.31	-1.00	TX BEAUMONT	81	0	10.04	4.45
CA REDDING	75	-1	0.41	-0.15	MO KANSAS CITY	71	-2	8.67	3.95	TX BROWNSVILLE	84	1	2.30	-0.43
CA SACRAMENTO	70	-2	0.03	-0.09	MO SAINT LOUIS	75	-1	5.26	1.55	TX CORPUS CHRISTI	83	1	5.98	2.60
CA SAN DIEGO	63	-4	0.04	-0.05	MO SPRINGFIELD	72	-1	3.80	-1.28	TX DEL RIO	83	1	5.62	3.51
CA SAN FRANCISCO	60	-2	0.18	0.06	MT BILLINGS	63	-2	2.02	0.03	TX EL PASO	80	0	1.44	0.77
CO ALAMOSA	58	-1	0.32	-0.35	MT BUTTE	55	-1	2.04	-0.11	TX FORT WORTH	82	1	0.99	-1.99
CO CO SPRINGS	63	-2	1.36	-0.88	MT GLASGOW	62	-2	2.51	0.40	TX GALVESTON	83	2	2.35	-2.08
CO DENVER	65	-2	2.52	0.74	MT GREAT FALLS	58	-3	1.73	-0.66	TX HOUSTON	82	1	5.26	0.29
CO GRAND JUNCTION	71	-1	0.60	0.10	MT KALISPELL	56	-1	1.88	-0.33	TX LUBBOCK	75	-2	4.52	1.76
CO PUEBLO	69	-2	0.19	-1.05	MT MILES CITY	65	-1	2.02	-0.76	TX MIDLAND	79	0	2.87	1.31
CT BRIDGEPORT	70	2	0.98	-2.48	NE MISSOULA	58	-2	2.51	0.73	TX SAN ANGELO	79	0	4.70	2.37
CT HARTFORD	71	2	0.73	-3.02	NE GRAND ISLAND	68	-3	6.48	2.57	TX SAN ANTONIO	82	0	3.37	-0.44
DC WASHINGTON	75	-1	2.26	-1.11	NE LINCOLN	70	-2	5.68	1.79	TX VICTORIA	81	-1	4.83	-0.06
DE WILMINGTON	71	0	1.63	-1.92	NE NORFOLK	67	-3	5.45	0.98	TX WACO	82	1	0.50	-2.71
FL DAYTONA BEACH	80	0	8.54	2.55	NE NORTH PLATTE	67	-1	5.32	1.95	UT WICHITA FALLS	79	-1	4.62	1.10
FL JACKSONVILLE	78	-1	7.16	1.49	NE OMAHA	71	-1	3.75	-0.12	UT SALT LAKE CITY	69	0	0.82	-0.11
FL KEY WEST	83	0	5.63	0.54	NE SCOTTSBLUFF	67	0	3.72	1.07	VT BURLINGTON	70	5	1.79	-1.68
FL MIAMI	81	-1	11.08	1.76	NE VALENTINE	67	-1	4.40	1.53	VA LYNCHBURG	70	-2	1.57	-1.89
FL ORLANDO	80	-1	13.84	6.52	NV ELY	60	0	1.66	0.78	VA NORFOLK	74	0	3.59	-0.24
FL PENSACOLA	80	0	5.99	-0.41	NV LAS VEGAS	85	0	0.14	0.02	VA RICHMOND	72	-2	6.29	2.68
FL TALLAHASSEE	80	0	7.49	0.56	NV RENO	67	2	0.06	-0.40	VA ROANOKE	72	1	0.86	-2.33
FL TAMPA	81	0	4.65	-0.83	NV WINNEMUCCA	63	-2	1.21	0.35	VA WASH/DULLES	71	0	3.00	-0.93
FL WEST PALM BEACH	80	-1	13.62	5.53	NH CONCORD	68	4	1.94	-1.25	VA OLYMPIA	57	-1	1.84	0.21
GA ATHENS	76	-1	6.95	3.03	NJ NEWARK	74	2	0.41	-2.81	VA QUILLAYUTE	54	-2	4.42	1.30
GA ATLANTA	75	-1	5.83	2.26	NM ALBUQUERQUE	73	-1	0.60	0.00	VA SEATTLE-TACOMA	58	-2	1.86	0.36
GA AUGUSTA	77	-1	6.43	2.30	NY ALBANY	70	3	2.07	-1.54	VA SPOKANE	60	-2	1.36	0.10
GA COLUMBUS	79	-1	2.91	-1.16	NY BINGHAMTON	66	2	3.28	-0.34	VA YAKIMA	63	-2	0.16	-0.38
GA MACON	78	-1	5.96	2.39	NY BUFFALO	68	2	1.93	-1.63	WV BECKLEY	68	2	1.26	-2.57
GA SAVANNAH	77	-2	14.25	8.60	NY ROCHESTER	68	3	2.52	-0.49	WV CHARLESTON	73	1	1.30	-2.29
HI HILO	73	-2	4.76	-1.44	NY SYRACUSE	70	4	1.78	-2.01	WV ELKINS	65	0	1.84	-2.61
HI HONOLULU	79	-1	0.11	-0.41	NC ASHEVILLE	69	0	4.39	0.14	WV HUNTINGTON	74	3	1.37	-2.15
HI KAHULUI	77	0	0.59	0.32	NC CHARLOTTE	73	-3	4.02	0.64	WV EAU CLAIRE	67	1	3.84	-0.36
HI LIHUE	77	-1	1.57	-0.12	NC GREENSBORO	73	0	4.26	0.44	WI GREEN BAY	65	1	3.98	0.59
ID BOISE	66	0	0.47	-0.34	NC HATTERAS	75	1	3.65	-0.47	WI LACROSSE	70	2	2.43	-1.49
ID LEWISTON	64	-3	1.50	0.25	NC RALEIGH	74	0	1.16	-2.52	WI MADISON	68	2	5.57	1.92
ID POCATELLO	60	-2	0.84	-0.18	NC WILMINGTON	77	1	3.66	-2.32	WI MILWAUKEE	67	2	6.96	3.72
IL CHICAGO/O'HARE	71	2	4.95	1.19	ND BISMARCK	64	0	3.61	0.90	WY CASPER	62	-1	1.78	0.32
IL MOLINE	71	0	5.98	1.72	ND DICKINSON	62	-1	1.98	-1.24	WY CHEYENNE	60	-1	2.13	0.05
IL PEORIA	72	1	3.21	-0.77	ND FARGO	66	1	2.83	0.02	WY LANDER	61	-2	1.08	-0.38
IL ROCKFORD	70	1	5.74	1.22	ND GRAND FORKS	63	-1	3.48	0.63	WY SHERIDAN	60	-2	1.71	-0.54
IL SPRINGFIELD	72	-1	2.95	-0.48	ND JAMESTOWN	64	-1	2.51	-0.49					
IN EVANSVILLE	74	0	6.27	2.79	ND WILLISTON	62	-2	1.89	-0.38					
IN FORT WAYNE	71	1	1.07	-2.51	OH AKRON-CANTON	69	2	1.19	-1.98					
IN INDIANAPOLIS	74	2	2.57	-0.93	OH CINCINNATI	73	2	3.16	-0.67					
IN SOUTH BEND	71	2	2.60	-1.52	OH CLEVELAND	70	2	1.43	-2.24					
IA BURLINGTON	75	4	7.53	3.48	OH COLUMBUS	74	5	0.65	-3.40					
IA CEDAR RAPIDS	69	-1	7.37	2.82	OH DAYTON	72	2	3.70	-0.12					
IA DES MOINES	71	-1	3.25	-1.19	OH MANSFIELD	69	2	1.66	-2.29					
IA DUBUQUE	68	1	4.98	0.85	OH TOLEDO	71	3	1.86	-1.88					
IA SIOUX CITY	69	-2	7.90	4.20	OH YOUNGSTOWN	67	1	2.78	-1.16					
IA WATERLOO	70	1	5.33	0.86	OK OKLAHOMA CITY	76	-1	8.61	4.30					
KS CONCORDIA	71	-3	3.24	-1.23	OR TULSA	75	-2	4.93	0.49					
KS DODGE CITY	71	-4	2.97	-0.12	OR ASTORIA	57	0	3.46	1.06					
KS GOODLAND	68	-1	5.50	2.31	OR BURNS	57	0	0.23	-0.60					
KS TOPEKA	73	0	6.20	0.66	OR EUGENE	58	-4	0.66	-0.77					
KS WICHITA	73	-3	7.55	3.23	OR MEDFORD	65	-1	0.00	-0.58					
KY JACKSON	72	1	2.66	-1.58	OR PENDLETON	64	-2	0.51	-0.13					
KY LEXINGTON	73	1	5.38	1.72	OR PORTLAND	61	-2	1.73	0.25					
KY LOUISVILLE	76	3	7.98	4.52	OR SALEM	60	-1	1.43	0.09					
KY PADUCAH	76	0	8.97	4.92	PA ALLENTOWN	70	1	0.98	-2.76					
LA BATON ROUGE	80	0	6.67	2.19	PA ERIE	69	3	3.00	-1.08					
LA LAKE CHARLES	80	0	9.81	4.84	PA MIDDLETOWN	73	2	2.06	-1.79					
LA NEW ORLEANS	81	1	12.20	6.37	PA PHILADELPHIA	73	1	1.16	-2.59					
LA SHREVEPORT	80	1	7.98	3.69	PA PITTSBURGH	69	1	1.67	-2.04					

Based on 1961-90 normals.

## National Agricultural Summary

July 5 - 11, 1999

### HIGHLIGHTS

**Warmer weather aided winter wheat harvest and crop development across the Eastern United States. However, dry conditions, accompanied by excessively high temperatures, stressed crops in parts of the eastern Corn Belt, Atlantic Coastal Plains, and Northeast. Seasonal**

**temperatures aided development in the southern Great Plains and Southwest, but crops needed more heat to accelerate growth. Despite below-normal temperatures in the Pacific Northwest, crops made good progress. Welcomed showers brought relief to dry soils in the Southeast.**

**Corn:** Sixteen percent of the acreage was at the silking stage or beyond, compared with 23 percent last year and the 5-year average progress of 14 percent. Above-normal temperatures accelerated development in the eastern Corn Belt, especially in Illinois and Indiana, where one-fourth of the acreage entered the silking stage during the week. Despite scattered showers, dry conditions stressed corn in Indiana, Ohio, Pennsylvania, and the mid-Atlantic States. Warmer weather provided much-needed heat and enabled corn fields in the western Corn Belt and adjacent areas of the Great Plains to develop at a good pace. Excessive moisture and hail damaged some fields in Iowa during the week, but overall conditions were better than the previous week.

**Soybeans:** Thirty-five percent of the acreage was blooming and 5 percent was setting pods, compared with 33 percent blooming and 4 percent setting pods by this date last year. Normally, 23 percent of the crop would be blooming and 3 percent would be setting pods. Warmer weather aided development throughout the Corn Belt. In Indiana, development was far ahead of normal, but dry soils stressed the crop. Needed showers in the Southeast brought relief to dry soybean fields. Progress in the Lower Mississippi Valley remained well ahead of the average pace. Soybeans in most States were beginning to set pods.

**Winter Wheat:** The winter wheat harvest rapidly advanced to 70 percent complete, just behind last year's 74 percent, but 4 percentage points ahead of the average for this date. Kansas growers, aided by continued hot, dry weather, reaped nearly one-half of their acreage by week's end. Dry weather also aided rapid harvest progress in the eastern Corn Belt. In Ohio, nearly two-thirds of the crop was harvested, and in Michigan, over half of the acreage was combined. The Indiana wheat harvest was only 1 percentage point behind the record pace set in 1988. Harvest rapidly accelerated in the central Plains as one-third of the acreage was cut in Colorado, Nebraska, and Missouri. None of the crop was harvested in the northern Great Plains or Pacific Northwest due to slow ripening.

**Cotton:** Seventy-seven percent of the acreage was at the squaring stage or beyond, 3 percentage points behind last

year and the average for this date. Twenty-seven percent was setting bolls, behind last year's 42 percent and the normal progress of 32 percent. In the Southeast, widespread rain benefited most cotton fields. However, wet conditions hindered weed and insect control in some areas. In Texas, much-needed heat accelerated growth. Warmer weather boosted the cotton crop condition in California.

**Small grains:** Spring wheat was 63 percent headed, well behind the rapid pace last year, and slightly behind the 5-year average. Barley headed was at 58 percent, behind last year's 79 percent and the 68 percent average for the date. Eighty-three percent of the oat acreage was headed, 2 percentage points ahead of the 5-year average, but 9 percentage points behind last year's rapid development. Development of small grains advanced in the northern Great Plains, despite below-normal temperatures. Barley condition improved in Minnesota due to warm temperatures and plentiful sunshine.

**Rice:** Twenty-one percent of the rice acreage was headed, behind 27 percent this date a year ago but 3 percentage points ahead of normal. Gulf Coast rains slowed development in Louisiana and Texas, but heading progress remained well ahead of normal. Fields in inland areas of the Mississippi Delta were just beginning to develop heads. Heavier-than-normal weed infestations in some areas of California caused rice condition to decline.

**Other crops:** The sorghum acreage was 21 percent headed, 5 percentage points behind last year and 7 points behind the average. Heading progress in Kansas and Oklahoma was limited due to wet weather earlier in the growing season. Fifty-seven percent of the peanuts were pegging, slightly behind last year's pace. Progress advanced but remained behind normal in the major peanut-producing areas of Georgia and Texas. Needed showers aided peanut development in Florida.

# Crop Progress and Condition

## Week Ending July 11, 1999

Soybeans Percent Blooming				
	Jul 11 1999	Prev Week	Prev Year	5-Yr Avg
AL	16	7	28	16
AR	23	13	25	16
GA	28	24	20	21
IL	39	14	24	21
IN	53	24	25	18
IA	41	12	43	32
KS	13	5	47	28
KY	25	17	7	11
LA	59	40	69	43
MI	39	20	25	11
MN	24	6	44	27
MS	84	66	74	50
MO	19	8	26	17
NE	24	6	22	19
NC	10	8	14	10
OH	55	26	40	24
SC	8	6	24	17
SD	26	20	34	21
TN	22	9	11	8
19 Sts	35	16	33	23

These 19 States planted 93% of last year's soybean acreage.

Soybeans Percent Setting Pods				
	Jul 11 1999	Prev Week	Prev Year	5-Yr Avg
AL	3	NA	10	3
AR	5	NA	6	6
GA	9	NA	3	4
IL	3	NA	2	1
IN	6	NA	0	0
IA	3	NA	0	4
KS	2	NA	5	4
KY	5	NA	0	1
LA	30	NA	37	19
MI	0	NA	0	0
MN	0	NA	3	2
MS	55	NA	42	16
MO	3	NA	0	0
NE	1	NA	0	1
NC	0	NA	0	0
OH	6	NA	4	1
SC	2	NA	9	3
SD	3	NA	10	2
TN	4	NA	1	0
19 Sts	5	NA	4	3

These 19 States planted 93% of last year's soybean acreage.

Winter Wheat Percent Harvested				
	Jul 11 1999	Prev Week	Prev Year	5-Yr Avg
AR	98	97	100	97
CA	85	75	71	89
CO	44	11	64	45
GA	100	100	100	100
ID	0	0	0	0
IL	92	74	91	83
IN	94	51	89	61
KS	92	44	98	85
MI	57	3	53	12
MO	92	58	94	85
MT	0	0	0	0
NE	36	1	35	33
NC	97	88	99	93
OH	87	20	75	39
OK	96	86	100	98
OR	0	0	0	2
SD	3	0	5	3
TX	93	81	98	93
WA	0	0	3	2
19 Sts	70	45	74	66

These 19 States planted 91% of last year's winter wheat acreage.

Corn Percent Silking				
	Jul 11 1999	Prev Week	Prev Year	5-Yr Avg
CO	0	0	5	3
GA	98	94	98	97
IL	28	5	27	14
IN	30	5	16	9
IA	2	0	11	6
KS	25	7	47	37
KY	71	55	39	37
MI	10	0	10	3
MN	5	0	33	11
MO	39	25	57	36
NE	3	0	21	12
NC	60	48	69	75
OH	10	1	8	4
PA	11	4	8	7
SD	0	0	0	1
TX	65	62	71	69
WI	2	0	3	2
17 Sts	16	7	23	14

These 17 States planted 90% of last year's corn acreage.

Cotton Percent Squaring				
	Jul 11 1999	Prev Week	Prev Year	5-Yr Avg
AL	88	64	89	82
AZ	96	90	91	97
AR	100	97	99	98
CA	60	50	24	70
GA	90	77	90	92
LA	98	93	100	97
MS	97	95	99	95
MO	100	100	99	90
NM	70	65	86	77
NC	70	65	74	68
OK	32	30	58	51
SC	67	59	78	81
TN	100	95	95	93
TX	65	49	76	72
14 Sts	77	66	80	80

These 14 States planted 98% of last year's cotton acreage.

Cotton Percent Setting Bolls				
	Jul 11 1999	Prev Week	Prev Year	5-Yr Avg
AL	30	9	43	26
AZ	46	19	21	56
AR	32	9	66	38
CA	5	2	4	11
GA	38	24	61	49
LA	61	36	83	65
MS	61	37	73	55
MO	72	45	62	29
NM	17	4	17	22
NC	15	10	23	23
OK	2	0	0	6
SC	9	6	28	29
TN	40	12	33	21
TX	17	13	36	26
14 Sts	27	16	42	32

These 14 States planted 98% of last year's cotton acreage.

Barley Percent Headed				
	Jul 11 1999	Prev Week	Prev Year	5-Yr Avg
ID	57	37	56	67
MN	75	43	95	78
MT	53	47	79	64
ND	46	31	79	60
SD	86	72	93	81
WA	96	85	100	95
6 Sts	58	43	79	68

These 6 States planted 83% of last year's barley acreage.

# Crop Progress and Condition

Week Ending July 11, 1999

Sorghum Percent Headed				
	Jul 11 1999	Prev Week	Prev Year	5-Yr Avg
AR	36	16	56	34
CO	0	0	0	0
IL	1	0	2	2
KS	1	0	8	6
LA	78	65	59	53
MS	65	44	65	58
MO	12	1	17	8
NE	3	0	0	0
NM	0	0	0	0
OK	4	4	6	9
SD	6	1	0	0
TX	48	46	54	62
12 Sts	21	19	26	28

These 12 States planted 99% of last year's sorghum acreage.

Oats Percent Headed				
	Jul 11 1999	Prev Week	Prev Year	5-Yr Avg
IA	100	100	97	98
MI	95	90	99	89
MN	89	76	97	92
NE	100	92	100	100
ND	50	32	76	53
OH	100	99	100	99
PA	96	89	94	88
SD	89	72	93	83
WI	99	90	100	90
9 Sts	83	72	92	81

These 9 States planted 57% of last year's oat acreage.

Peanuts Percent Pegging				
	Jul 11 1999	Prev Week	Prev Year	5-Yr Avg
AL	59	42	64	52
FL	73	62	56	NA
GA	70	51	69	74
NC	40	30	54	31
OK	26	24	71	57
SC	53	35	49	34
TX	45	29	42	24
VA	50	34	69	26
8 Sts	57	41	59	NA

These 8 States planted 99% of last year's peanut acreage.

Spring Wheat Percent Headed				
	Jul 11 1999	Prev Week	Prev Year	5-Yr Avg
ID	50	35	56	70
MN	84	65	96	81
MT	55	43	90	71
ND	53	38	77	57
SD	92	83	96	85
5 Sts	63	49	85	68

These 5 States planted 96% of last year's spring wheat acreage.

Rice Percent Headed				
	Jul 11 1999	Prev Week	Prev Year	5-Yr Avg
AR	1	0	16	7
CA	0	0	0	0
LA	71	*57	55	43
MS	10	8	29	19
TX	67	57	63	51
5 Sts	21	17	27	18

These 5 States planted 96% of last year's rice acreage.

Soybeans Crop Condition by Percent					
	VP	P	F	G	EX
AL	0	0	25	59	16
AR	0	6	30	50	14
GA	4	9	40	44	3
IL	1	4	19	54	22
IN	1	3	20	55	21
IA	2	4	17	54	23
KS	0	3	26	60	11
KY	1	3	16	50	30
LA	0	3	20	67	10
MI	1	6	18	51	24
MN	2	6	32	49	11
MS	1	4	20	56	19
MO	1	10	34	49	6
NE	0	1	17	67	15
NC	1	5	32	60	2
OH	3	7	27	48	15
SC	2	4	31	60	3
SD	3	5	18	53	21
TN	0	3	21	57	19
19 Sts	1	5	23	54	17
Prev Wk	1	5	23	55	16
Prev Yr	3	9	27	47	14

Corn Crop Condition by Percent					
	VP	P	F	G	EX
CO	0	3	5	46	46
GA	9	17	36	32	6
IL	1	2	14	52	31
IN	1	3	18	53	25
IA	2	4	16	51	27
KS	0	3	17	66	14
KY	1	3	13	56	27
MI	1	3	10	55	31
MN	0	3	21	59	17
MO	1	9	29	51	10
NE	1	2	14	60	23
NC	5	9	28	53	5
OH	3	9	26	46	16
PA	3	18	46	29	4
SD	1	3	15	54	27
TX	0	3	19	59	19
WI	1	3	11	48	37
17 Sts	1	4	17	54	24
Prev Wk	1	4	18	53	24
Prev Yr	3	8	21	49	19

Cotton Crop Condition by Percent					
	VP	P	F	G	EX
AL	0	4	23	56	17
AZ	1	8	42	36	13
AR	0	3	23	60	14
CA	0	0	15	85	0
GA	3	8	28	47	14
LA	0	1	11	67	21
MS	2	4	17	50	27
MO	0	10	20	61	9
NM	1	2	50	46	1
NC	2	8	20	69	1
OK	0	5	43	38	14
SC	1	5	33	52	9
TN	0	1	25	51	23
TX	7	16	30	38	9
14 Sts	4	10	26	48	12
Prev Wk	6	10	24	49	11
Prev Yr	14	21	31	29	5

Rice Crop Condition by Percent					
	VP	P	F	G	EX
AR	0	2	20	56	22
CA	0	0	35	65	0
LA	0	0	18	61	21
MS	1	2	19	60	18
TX	0	0	8	64	28
5 Sts	0	1	21	59	19
Prev Wk	0	1	21	59	19
Prev Yr	1	3	34	53	9

# Crop Progress and Condition

Week Ending July 11, 1999

Sorghum Crop Condition by Percent					
	VP	P	F	G	EX
AR	0	3	29	58	10
CO	0	2	14	59	25
IL	0	2	19	72	7
KS	0	3	17	68	12
LA	0	1	14	77	8
MS	0	1	10	60	29
MO	0	6	30	56	8
NE	0	1	21	67	11
NM	0	0	50	50	0
OK	0	0	11	85	4
SD	0	0	10	73	17
TX	1	4	25	52	18
12 Sts	0	3	21	62	14
Prev Wk	0	4	21	62	13
Prev Yr	10	14	28	43	5

Spring Wheat Crop Condition by Percent					
	VP	P	F	G	EX
ID	0	0	10	65	25
MN	5	11	41	37	6
MT	1	7	30	48	14
ND	1	4	24	57	14
SD	0	2	13	56	29
5 Sts	1	5	26	53	15
Prev Wk	2	4	23	56	15
Prev Yr	1	6	26	52	15

Oats Crop Condition by Percent					
	VP	P	F	G	EX
IA	1	3	16	55	25
MI	0	7	18	56	19
MN	6	9	24	49	12
NE	0	4	13	69	14
ND	0	2	21	64	13
OH	2	5	32	54	7
PA	2	14	44	37	3
SD	0	0	8	69	23
WI	0	1	15	60	24
9 Sts	1	4	19	59	17
Prev Wk	2	3	20	57	18
Prev Yr	0	4	22	59	15

Peanuts Crop Condition by Percent					
	VP	P	F	G	EX
AL	0	2	22	48	28
FL	0	0	1	74	25
GA	1	5	25	51	18
NC	0	0	10	85	5
OK	0	9	31	46	14
SC	0	3	19	60	18
TX	0	7	21	48	24
VA	0	0	9	65	26
8 Sts	0	4	20	56	20
Prev Wk	0	5	21	58	16
Prev Yr	9	17	36	35	3

Barley Crop Condition by Percent					
	VP	P	F	G	EX
ID	0	1	9	67	23
MN	7	14	49	27	3
MT	2	7	46	36	9
ND	0	3	27	57	13
SD	0	0	6	70	24
WA	7	38	44	11	0
6 Sts	2	8	32	46	12
Prev Wk	2	7	28	52	11
Prev Yr	1	6	23	52	18

VP - Very Poor  
 P - Poor  
 F - Fair  
 G - Good  
 EX - Excellent

\* - Revised

## State Agricultural Summaries

*These summaries, issued weekly through the summer growing season, 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 NASS State Statistical Offices in cooperation with the National Weather Service. The crop weather reports are also available on the Internet through the NASS Home Page on the World Wide Web at <http://www.usda.gov/nass/> or from JAWF at <http://www.usda.gov/occe/waob/jawf>.*

**ALABAMA:** Days suitable for fieldwork 4.3. Topsoil 7% short, 59% adequate, 34% surplus. Corn 82% silked, 95% 1998, 88% avg. Crop good to excellent. Wet weather conditions continue to make weed, insect control difficult. Corn 47% doughed; 25% dented, 48% 1998, 34% avg.; 7% mature, 19% 1998. Cotton 88% squaring, 89% 1998, 82% avg.; 30% setting bolls, 43% 1998, 26% avg. Soybeans 93% emerged, 93% 1998; 16% blooming, 28% 1998, 16% avg.; 3% setting pods, 10% 1998, 3% avg. Peanuts 59% pegged, 64% 1998, 52% avg. Wheat 95% harvested, 100% 1998, 95% avg. Hay 97% harvested, 100% 1998, 97% avg. Corn 1% very poor, 2% poor, 18% fair, 50% good, 29% excellent. Cotton 4% poor, 23% fair, 56% good, 17% excellent. Soybean 25% fair, 59% good, 16% excellent. Peanut 2% poor, 22% fair, 48% good, 28% excellent. Pasture feed 1% very poor, 2% poor, 19% fair, 53% good, 25% excellent. Livestock 2% poor, 16% fair, 45% good, 37% excellent.

**ALASKA:** Days suitable for fieldwork 5.5. Topsoil 15% short, 80% adequate, 5% surplus. Subsoil 15% short, 70% adequate, 15% surplus. Warm, sunny, dry conditions warmed soil temperatures, allowed fieldwork, planting to advance across the State. Daytime high temperatures were mostly in the sixties, with most stations reporting at least one high in the seventies. Lows were mostly in the thirties. Oats planting 15% complete, 65% 1998. Barley 25% planting progress, 75% 1998. Potatoes 5% planted, 10% 1998. Vegetable 10% planting, 5% 1998. Progress of farm work 3.5 to 4 days behind. State livestock 5% poor, 15% fair, 60% good, 20% excellent.

**ARIZONA:** Cotton squaring is ahead of last year but is slightly behind the average. Small grains harvest is virtually complete. Alfalfa harvest activity 59% not being harvested, 4% light, 8% moderate, 29% active. Alfalfa 5% poor, 16% fair, 63% good, 16% excellent. Central producers shipped a variety of vegetables, melons including cabbage, canary melons, cantaloupes, crenshaw melons, golden honeydew, honeydew, orange flesh melons, Santa Claus melons, parsley, sweet corn, watermelons. Grape shipments included beauty seedless, currants, flame seedless, thompsons. Eastern producers shipped greenhouse tomatoes, dry onions. Western producers harvested a variety of grapes, melons. Grape shipments included beauty seedless, flame seedless, perlettes, thompsons while melon shipments included canary, cantaloupes, honeydew, watermelons. Central, western area citrus producers shipped grapefruit last week.

**ARKANSAS:** Days suitable for fieldwork 6. Topsoil 2% very short, 33% short, 63% adequate, 2% surplus. Typical July weather all week with temperatures only 2 to 3° above normal. Scattered afternoon showers most days increased through mid week. Stalled front kept temperatures down slightly into the weekend. Rain was more widespread 9th to 11th. Sunday produced the heaviest rainfall amounts of the week. Livestock were reported in good condition. Main farm activities: Finishing planting soybeans, fertilizing cotton, corn, rice, harvesting wheat, hay. Other activities: Irrigating corn, soybeans, cotton, rice, cultivating cotton, spraying cotton, fields for insects, weeds, scouting for sheath blight in rice, harvesting tomatoes, peaches, spraying of rice, cotton, soybean fields for weeds, applying mid-season nitrogen applications to rice, treating cattle for external parasites for summer insect control, ear tagging cattle, vaccinating cattle, weaning calves. Cotton 100% squared; 3% poor 23% fair 60% good 14% excellent. Soybeans 23% bloomed; 5% setting pods; conditions 6% poor 30% fair 50% good 14% excellent. Sorghum 100% planted; 100% emerged; 36% headed; 3% poor 29% fair 58% good 10% excellent. Wheat 98% harvested. Oats 95% harvested.

**CALIFORNIA:** Field activities progressed normally under favorable conditions in most areas. Grain harvests of wheat, barley and oats were rapidly winding down, except at higher elevations. Rice growth was good in most fields, although growers in the Sacramento Valley were battling heavier-than-normal weed infestations. Some rice fields were treated for weevils. Cotton bloom continued in earlier planted fields; squares were developing in the San Joaquin, Sacramento valleys. Cotton fields were irrigated, thinned, weeded, sprayed for aphids, armyworms, leafhoppers, lygus, mites. Seed alfalfa was treated for aphids, lygus, weevils. Safflower was sprayed for lygus; fields were drying for harvest in the southern San Joaquin Valley. Sunflowers were treated for head moth in the Sacramento Valley. New crop sugar beets were sprayed for mildew in central counties. Dry beans were blooming in the Sacramento Valley; fields were treated for aphids, stink bugs in the San Joaquin Valley. Corn silage harvest was active in the southern

San Joaquin Valley. Alfalfa, Sudan grass were cut, baled for hay. Alfalfa, turf grass were sprayed for weeds. Grape growers were applying sulfur, insecticides to control powdery mildew, insects. Harvest of grapes for fresh use began in the San Joaquin Valley. Early grape picking in Kern County included the Perlette, Flame Seedless varieties. Picking of fresh use grapes in the Coachella Valley continued; Flame Seedless, Thompson Seedless were the primary varieties picked there. Other cultural activities last week included extensive weed control, irrigation of vineyards, orchards. Harvest of apricots, nectarines, freestone peaches, plums continued. Fruit quality was good. Warm weather has accelerated maturity. Black Mission fig harvest began in Merced County. Apple trees were treated for codling moth. Olive trees were exhibiting a good fruit set, maturing well. Tree limbs in almond orchards were propped up to bear the heavy nut set. Pistachio trees were sprayed with fungicides. Walnut trees were treated for blight. Valencia oranges, lemons were picked in southern areas. Most vegetable crops were progressing very well with the warmer temperatures. Cantaloupe, honeydew, watermelon harvest greatly accelerated in the southern San Joaquin Valley. Disease problems, including mildew, vine decline, have appeared in watermelons. Sweet corn was harvested in a few locations. Some sweet corn was treated for earworms, while melons, carrots, bell peppers were treated for armyworms, thrips, mites, aphids. Harvest of fresh market tomatoes continued in the San Joaquin Valley; volume was heavy. A few growers were beginning to harvest in the Sacramento Valley. Other crops harvested last week included beans, broccoli, carrots, celery, cilantro, cucumbers, garlic, leeks, squash, turnips, onions, peppers, potatoes, various greens, herbs. State pasture, range conditions were seasonally normal. Rangeland forage at upper elevations was in good condition, although drying rapidly. Stock water was readily available at higher elevations, but in the central area foothills, creek, stream, reservoir levels were down. Vegetation at lower elevations was very dry, with high danger of range fires. In some areas, grasshopper infestations were damaging foothill pastures. Livestock were in good to fair condition, with some stress from high temperatures. Milk cows suffered in the extreme heat. Bees were pollinating safflower fields in Sutter County, seed crops, melons in the San Joaquin Valley.

**COLORADO:** Days suitable for fieldwork 6.3. Topsoil 6% very short, 26% short, 67% adequate, 1% surplus. Subsoil 6% very short, 18% short, 75% adequate, 1% surplus. Continued warm temperatures have favored growth, development of all crops, allowed producers to make good progress in harvesting winter wheat. Winter wheat 94% turning color, 99% 1998, 93% avg.; 76% ripe, 84% 1998, 69% avg. Spring wheat 73% headed, 80% 1998, 82% avg.; 23% turning color, 42% 1998, 24% avg.; 6% poor, 20% fair, 51% good, 23% excellent. Spring barley 99% headed, 98% 1998, 93% avg.; 38% turning color, 29% 1998, 33% avg.; 3% poor, 15% fair, 54% good, 28% excellent. Sorghum 100% emerged, 99% 1998, 94% avg. Oats 85% headed, 94% 1998, 83% avg.; 31% turning color, 44% 1998, 32% avg.; 1% poor, 19% fair, 67% good, 13% excellent. Dry onions 1% very poor, 5% poor, 11% fair, 57% good, 26% excellent. Sugar beets 3% poor, 9% fair, 53% good, 35% excellent. Dry beans 13% flowered, 5% 1998, 4% avg.; 2% poor, 8% fair, 65% good, 25% excellent. Summer potatoes 1% very poor, 2% poor, 3% fair, 54% good, 40% excellent. Fall potatoes 4% poor, 10% fair, 56% good, 30% excellent. Alfalfa 97% 1<sup>st</sup> cutting, 100% 1998, 94% avg.; 28% 2<sup>nd</sup> cutting, 18% 1998, 25% avg.; 1% very poor, 3% poor, 17% fair, 61% good, 18% excellent. Pasture, range feed in mostly good.

**DELAWARE:** Days suitable for fieldwork 6.7. Topsoil 77% short, 23% adequate. Subsoil 4% very short, 33% short, 63% adequate. Winter wheat 85% harvested, 92% 1998, 79% avg. Field corn 1% poor, 24% fair, 68% good, 7% excellent; 25% silked, 31% 1998, 20% avg.; 5% dough, 4% 1998, 2% avg. Soybeans 2% poor, 49% fair, 45% good, 4% excellent; 88% planted, 93% 1998, 89% avg.; 5% bloomed, 8% 1998, 6% avg. Sorghum 1% poor, 14% fair, 82% good, 3% excellent; 5% headed, 4% 1998, 2% avg. Sweet corn 6% harvested, 17% 1998, 12% avg. Snap beans 10% harvested, 11% 1998, 19% avg. Cucumbers 16% harvested, 17% 1998, 18% avg. Lima beans 10% harvested, 9% 1998, 2% avg. Potatoes 14% harvested, 16% 1998, 12% avg. Clover, other hay 48% 2<sup>nd</sup> cutting, 83% 1998, 59% avg.; 45% 3<sup>rd</sup> cutting, 47% 1998, 10% avg. Alfalfa hay 82% 2<sup>nd</sup> cutting harvested, 74% 1998, 73% avg.; 18% 3<sup>rd</sup> cutting harvested, 23% 1998, 7% avg. Hay supplies 20% short, 80% adequate. Pasture feed 2% very poor, 13% poor, 38% fair, 47% good. Apples 16% fair, 73% good, 11% excellent. Peaches 20% fair, 74% good, 6% excellent; 8% harvested, 11% 1998, 7% avg. Activities: Small grain harvest continued, dry weather continued to take toll on soil moisture levels, veggie harvest started.

**FLORIDA:** Topsoil throughout State mostly adequate to surplus. Scattered rains, hot temperatures continued. Rainfall less than 0.10 in. West Palm Beach, Jacksonville; to over 4.00 in. Pensacola. Temperatures lows in 60s, 70s to highs in 80s, 90s. Tobacco harvest active. Cotton in good condition. Cotton starting bloom. Digging green peanuts. Weeds becoming problem in some cotton, peanut fields. Sugarcane growth normal. Haying between showers. Peanut fair 1%, good 74%, excellent 25%; 73% pegged. Vegetable growers around Quincy have laid most plastic for fall crop tomatoes; transplanting to start within next 7 to 10 days. Few northern producers picking watermelons. Southern growers preparing land for fall crop vegetable planting. Dade County producers harvesting okra. Rains most citrus areas, some groves have excessive moisture problems, abundant new growth, new crop fruit making good progress. Valencia, grapefruit harvest over for season except for few fresh juice plants that plan to run late bloom fruit as long as supplies last. Caretakers cutting cover crops, spraying, fertilizing, pushing dead trees, replanting. Pasture feed poor 5%, fair 20%, good 60%, excellent 15%. Condition of cattle poor 5%, fair 20%, good 70%, excellent 5%. Pastures, cattle in mostly good condition throughout State. Recent rains permitted good grass growth. North, central areas; haying begun, yield, quality good.

**GEORGIA:** Days suitable for fieldwork 5.1. Soil moisture 2% very short, 14% short, 74% adequate, 10% surplus. Topsoil conditions changed slightly, however almost three-quarters of the State's cropland had adequate soil moisture. Corn, sorghum, soybean conditions continued to improve last week. Scattered showers continued over much of State last week which provided temporary relief to crops, pastures. Corn 85% dough, 80% 1998, 82% avg.; 58% dent, 49% 1998, 48% avg.; 13% mature, 9% 1998, 8% avg. Hay 1% very poor, 5% poor, 33% fair, 52% good, 9% excellent. Peanuts 93% blooming, 93% 1998, 96% avg. Sorghum 3% very poor, 9% poor, 37% fair, 46% good, 5% excellent; 98% planted, 93% 1998, 95% avg. Soybeans 98% planted, 96% 1998, 98% avg.; 95% emerged, 88% 1998. Tobacco 8% very poor, 16% poor, 37% fair, 33% good, 6% excellent; 13% harvested, 16% 1998, 27% avg. Watermelons 78% harvested, 81% 1998, 73% avg. Apples 19% fair, 52% good, 29% excellent. Peaches 1% poor, 26% fair, 36% good, 37% excellent; 63% harvested, 75% 1998, 82% avg. Pecans 3% very poor, 10% poor, 34% fair, 45% good, 8% excellent. Corn progress remained ahead of the five year average pace. Sorghum planting neared completion. Soybean progress remained ahead of last year's pace in the blooming, setting pod stages with the crop almost completely emerged. There were isolated reports of insect pressure on cotton fields last week. Other cotton farmers were controlling weeds. Overall condition of the crop remained in fair to good condition. Tobacco harvest continued last week with slightly changed condition. Peanut condition changed slightly as progress remained behind the average pace in the blooming, pegging stages. Diseases affected some watermelon fields last week. Harvest remained ahead of the average pace. Peach condition remained steady last week as harvest continued to lag behind 1998, average pace. Pastures continued to improve with the rainfall. Haying operations continued as weather permitted. Other activities included applying fungicides to peanuts and growth regulators for cotton as well as the routine care of livestock.

**HAWAII:** Crop progress was fair. Irrigation remained heavy under generally dry conditions. Water conservation measures affected parts of Maui, Hawaii islands. Head cabbage harvesting to remain steady. Crop in good condition. Harvesting of sweet corn, tomato, cucumber active. Irrigation maintaining normal progress. Banana harvesting active. Summer weather benefitting crop. Papaya orchards in good to poor condition. Disease remains a problem in some fields. Overall, harvesting active at moderate to heavy volume.

**IDAHO:** Days suitable for fieldwork 6.8. Topsoil, 2% very short, 28% short, 68% adequate, 2% surplus. Warm temperatures across the State are helping crops grow rapidly. Northern counties report blight presence in some pea fields. Grasshoppers continue to cause damage throughout the State. Irrigation supply 73% excellent, 25% good, 2% fair. Alfalfa hay 91% 1st cutting, 84% 1998, 91% avg.; 13% 2<sup>nd</sup> cutting, 19% 1998, 15% avg. Oats 65% headed. Mint 2% harvested, 2% 1998, 2% avg. Cherries 46% harvested, 40% 1998, 76% avg. Potatoes 69% 12" high, 76% 1998, 79% avg.; 24% closing middles, 34% 1998, 44% avg. Barley 57% headed, 56% 1998, 67% avg.; 93% jointed; 79% booting; 3% turning color. Spring wheat 50% headed, 56% 1998, 70% avg.; 96% jointed; 78% booting; 2% turning color. Winter wheat 99% headed, 95% 1998, 98% avg.; 19% turning color. Activities: Irrigating, spraying weeds, cultivating, harvesting, applying insecticides.

**ILLINOIS:** Days suitable for fieldwork 6.2. Topsoil 2% very short, 23% short, 68% adequate, 7% surplus. Last week's drier weather allowed farmers to nearly complete wheat harvest but corn was showing some stress in areas of lighter soils. Most of the State went without precipitation last week, but a few areas in the south reported heavy rains. Soybeans are progressing well.

Northern districts are quickly catching up in wheat harvest due to drier conditions during the week. Other activities for last week included mowing hay, baling straw, hauling grain, spraying pesticides. Corn 68 in. height, 57 in. 1998, 53 in. avg.; 1% dough, 1% 1998, 0% avg. Winter wheat 99% ripe, 99% 1998, 95% avg. Oats 98% filled, 87% 1998, 84% avg.; 83% turning yellow, 57% 1998, 54% avg.; 20% ripe, 19% 1998, 17% avg.; 8% harvested, 2% 1998, 3% avg.; 1% poor, 14% fair, 68% good, 17% excellent. Alfalfa 68% 2nd cut, 44% 1998, 44% avg.; 3% 3rd cut, 1% 1998, 1% avg.; 2% poor, 18% fair, 65% good, 15% excellent. Red clover 92% cut, 90% 1998, 93% avg.

**INDIANA:** Days suitable for fieldwork 6.2. Topsoil 6% very short, 33% short, 55% adequate, 6% surplus. Subsoil 6% very short, 29% short, 60% adequate, 5% surplus. Very little precipitation. Soils dry, northern, central areas. Corn, soybean development far ahead of normal. Pastures deteriorating rapidly. Wheat harvest advanced sharply, aided by favorable weather conditions. Wheat harvest one day behind record pace established in 1988. Soybean double crop planting finished. Pastures 56% good to excellent. Alfalfa hay 70% 2nd cutting, 44% 1998, 36% avg. Activities: Harvesting wheat, applying post-emergence chemicals, planting double crop soybeans, selling grain, mowing roads, pastures, baling hay and straw, spraying, repairing equipment, monitoring fields for insects, caring for livestock.

**IOWA:** Days suitable for fieldwork 5.5. Topsoil 8% short, 80% adequate, 12% surplus. Subsoil 4% short, 81% adequate, 1% surplus. General crops looking a lot better this week; some fields damaged by hail, excessive water. Corn 85% cultivated, 79% 1998, 88% avg.; 6% tasseled, 19% 1998, 11% avg.; 2% silked, 11% 1998, 6% avg. Corn tallest 72 in. height; 57 in. avg. Corn 2% very poor, 4% poor, 16% fair, 51% good, 27% excellent. Soybeans 41% blooming, 43% 1998, 32% avg.; 3% setting pods, 0% 1998, 4% avg.; 2% very poor, 4% poor, 17% fair, 54% good, 23% excellent. Oats 90% turning, 61% 1998, 59% avg.; 3% harvested, 10% 1998, 6% avg.; 1% very poor, 3% poor, 16% fair, good 55%, excellent 25%. Winter wheat 29% harvested, 28% 1998, 30% avg. Livestock considered to be in good condition. Some pinkeye being reported in southern third of State. Range, pasture feed 1% very poor, 4% poor, 17% fair, 55% good, 23% excellent. Alfalfa 47% 2nd cutting, 17% 1998, 22% avg. Clover hay 90% 1st cutting, 83% 1998, 87% avg.; 13% 2nd cutting, 15% 1998, 11% avg. Hay 1% very poor, 3% poor, 15% fair, 55% good, 26% excellent.

**KANSAS:** Days suitable for fieldwork 5.9. Topsoil 13% short, 79% adequate, 8% surplus. Subsoil 3% short, 85% adequate, 12% surplus. Continued hot, dry weather across most of the State has allowed the wheat harvest to progress rapidly. Harvest was slowed in some areas due to rain showers, some low-lying muddy areas remain to be harvested. Corn 1% doughing, 7% 1998, 7% avg. Soybeans 96% planted, 100% 1998, 99% avg.; 90% emerged, 99% 1998. Sorghum 97% emerged, 99% 1998. Sunflower 3% poor, 17% fair, 64% good, 16% excellent; 98% planted, 96% 1998; 84% emerged, 93% 1998; 3% blooming, 7% 1998. Alfalfa 73% 2nd cutting, 87% 1998, 77% avg.; 6% 3rd cutting, 8% 1998, 8% avg. Major field activities: Harvesting wheat, cultivating corn, milo; working stubble, irrigating, applying herbicides, putting up hay, finishing up planting of fall crops. Hay, forage 1% short, 86% adequate, 13% surplus. Livestock producers are starting to move cattle from short-season pastures to feedlots. Pinkeye, flies are reported to be an increasing problem in some areas. Stock water supplies 2% short, 87% adequate, 11% surplus.

**KENTUCKY:** Days suitable for fieldwork 5.5. Topsoil 18% very short, 23% short, 56% adequate, 3% surplus. Subsoil 22% very short, 24% short, 52% adequate, 2% surplus. Temperatures above normal throughout the State, with high temperatures in the 90's. Rainfall below normal, with only scattered showers. Dry conditions are a concern especially in the Bluegrass, Eastern portions of the State. Burley tobacco, black shank is the leading problematic disease throughout the State, although blue mold is a problem in several areas. Tobacco 4% very poor, 13% poor, 27% fair, 40% good, 16% excellent; height 38% under 24 in., 41% 24-36 in., 21% over 36 in. Pasture feed 6% very poor, 19% poor, 30% fair, 37% good, 8% excellent. Pastures still need rain in northeastern, eastern areas. Winter wheat harvest 99% complete. Yields, test weights continue to look good. Hay crop was 4% very poor, 13% poor, 24% fair, 48% good, 11% excellent.

**LOUISIANA:** Days suitable for fieldwork 4.0. Soil moisture 1% very short, 7% short, 73% adequate, 19% surplus. Corn 1% very poor, 2% poor, 19% fair, 67% good, 11% excellent; 100% silked, 100% 1998, 99% avg.; 88% dough stage, 96% 1998, 88% avg.; 21% mature, 28% 1998, 18% avg. Hay 98% 1st cutting, 96% 1998, 96% avg.; 7% final cutting, 12% 1998, 15% avg. Hay harvest was slow due to the rains. Peaches 96% harvested, 80% 1998, 70% avg. Rice 5% ripe, 5% 1998, 3% avg. Rice began to ripen. Sorghum 6% turning color, 7% 1998, 6% avg. Sugarcane 10% fair, 63% good, 27% excellent. Sugarcane continued to look good. Sweet potatoes 100%

planted, 98% 1998, 97% avg. Livestock 2% poor, 20% fair, 66% good, 12% excellent. Vegetables 1% very poor, 10% poor, 34% fair, 48% good, 7% excellent. Tomatoes, eggplants, and melons were being harvested.

**MARYLAND:** Days suitable for fieldwork 6.5. Subsoil 26% very short, 64% short, 10% adequate. Topsoil 35% very short, 46% short, 19% adequate. Winter wheat 85% harvested, 88% 1998, 73% avg. Rye 89% harvested, 78% 1998, 62% avg. Corn 3% very poor, 16% poor, 33% fair, 45% good, 3% excellent; 30% silked, 39% 1998, 18% avg. Soybeans 1% very poor, 12% poor, 34% fair, 50% good, 3% excellent; 91% planted, 94% 1998, 84% avg; 9% bloomed, 14% 1998, 5% avg; 5% setting pods, 13% 1998, 3% avg. Sorghum 1% poor, 49% fair, 40% good, 10% excellent. Tobacco 3% very poor, 10% poor, 53% fair, 34% good; 8% bloomed, 8% 1998, 5% avg. Snap beans 30% harvested, 25% 1998, 26% avg. Cucumbers 40% harvested, 28% 1998, 30% avg. Potatoes 31% harvested, 89% 1998, 32% avg. Sweet corn 22% harvested, 14% 1998, 13% avg. Tomatoes 22% harvested, 4% 1998, 4% avg. Cantaloupes 15% harvested, 10% 1998, 9% avg. Peaches 1% poor, 20% fair, 56% good, 23% excellent; 18% harvested, 17% 1998, 7% avg. Apples 4% fair, 68% good, 28% excellent. Clover and other hays 55% 2<sup>nd</sup> cutting harvested, 49% 1998, 36% avg.; 30% 3<sup>rd</sup> cutting, 39% 1998, 9% avg. Alfalfa 90% 2<sup>nd</sup> cutting harvested, 83% 1998, 69% avg.; 12% 3<sup>rd</sup> cutting harvested, 14% 1998, 7% avg. Pasture feed 10% very poor, 33% poor, 41% fair, 15% good, 1% excellent. Hay 2% very short, 32% short, 65% adequate, 1% surplus. Activities: Small grain harvesting continued, barley harvest completed, veggie harvest continued, dry weather persists.

**MICHIGAN:** Days suitable for fieldwork 5.0. Topsoil 7% very short, 8% short, 73% adequate, 12% surplus. Subsoil 2% very short, 26% short, 66% adequate, 6% surplus. Heat died down to more normal temperatures through State. Rain also came through as scattered showers. Crops seem to be doing well as one optimist from the thumb reported, "If rains keep coming as it has, beets and corn should have record yields." Another observer from the Northwest part agrees saying, "We are looking at the best crops in years." Warm weather, adequate rain has kept most field crops ahead of normal. All hay 1% very poor, 6% poor, 15% fair, 51% good, 27% excellent. Winter wheat 1% very poor, 5% poor, 14% fair, 61% good, 19% excellent. Hay 95% 1st cutting, 100% 1998, 95% avg.; 32% 2nd cutting, 32% 1998, 21% avg. Corn 50 in. height, 38 in. 1998, 38 in. avg. Drybeans 5% blooming, 2% 1998, 1% avg. Oats 54% turning yellow, 64% 1998, 32% avg. Good alfalfa yields reported in the south, west as 2nd cutting started. Potato leafhoppers active throughout the State with high grasshopper counts in the north. Early planted corn began to tassel in the south, central areas. Earliest planted soybeans beginning to bloom. Some fields with poor stands have been replanted. Farmers deciding viability of double cropping as wheat harvest was nearing completion in south. Timely rains, lots of sunshine have put sugar beets in excellent condition. Drybeans in generally good condition after struggling to establish although potato leafhoppers exerting pressure in some areas. Potatoes doing well with good tuber set in early fields. Warm temperatures, adequate rainfall continued to push vegetable growth. Cabbage harvest continued with good size and quality reported. Growth was slowed with warmer temperatures. Celery harvest started for many growers. No serious disease problems have been reported. Cucumber volume was very heavy. No significant disease or insect problems noted. Pea harvest continued with yields holding up well in spite of heat. Some blossom drop occurred on peppers last week. Snap bean growth accelerated with heat. Summer squash development was very rapid with harvest continuing. Early sweet corn fields fully silked with harvest already underway in some areas. Market tomatoes harvested with volume increasing. Processing tomatoes continued to make great growth. Fruit development continued ahead of normal. Southwest tart cherry harvest was almost completed with fruit quality reported being excellent. West central tart cherry harvest was underway with most early harvest graded good or excellent. Northwest tart cherry harvest was getting started. Windwhip damage, disease a concern in the northwest. Apples 2.25 in. diameter. Peaches 2.0 to 2.5 in. diameter. Apricot harvest had started. Plum harvest will start this week. Grape berries growing rapidly with clusters approaching berry touch. Blueberry harvest was in full swing, about two weeks ahead of normal. Quality and volume reported to be good. Sweet Cherry harvest was almost complete in the west central and continued in northwest. Quality was reported as excellent in west central. Some cracking was reported in northwest, damage was limited.

**MINNESOTA:** Days suitable for fieldwork 3.9. Topsoil 1% short, 67% adequate, 32% surplus. After another week of above normal precipitation, the State could use some warmer, drier conditions, especially in the northern part of the State. Weekly precipitation for the State has been above normal for eight of the last ten weeks. Dry weather is needed so any further cultivating or spraying can be finished. Also, it has been difficult to bale hay because of the frequent rains over the last few weeks. Corn 50 in. height, 62 in. 1998, 49 in. avg. Soybeans 14 in height, 17 in. 1998, 15 in. avg. Spring wheat 12% turning ripe, 18% 1998, 11% avg. Oats 22% turning ripe, 38% 1998, 27% avg. Barley 9% turning ripe, 15% 1998, 11% avg. Pasture feed

4% poor, 14% fair, 68% good, 14% excellent. Sugar beet 1% very poor, 7% poor, 16% fair, 65% good, 11% excellent. In general, it seems that the earlier the small grains were planted, the better condition the crop is in.

**MISSISSIPPI:** Days suitable for fieldwork 4.3. Soil moisture, 1% very short, 10% short, 61% adequate, 28% surplus. Corn 99% silked, 97% 1998, 91% avg.; 84% dough, 78% 1998, 62% avg.; 40% dent, 49% 1998, 25% avg.; 3% poor, 19% fair, 58% good, 20% excellent. Cotton 97% squaring, 99% 1998, 95% avg.; 61% setting bolls, 73% 1998, 55% avg.; 2% very poor, 4% poor, 17% fair, 50% good, 27% excellent. Rice 10% heading, 29% 1998, 19% avg.; 1% very poor, 2% poor, 19% fair, 60% good, 18% excellent. Sorghum 65% heading, 65% 1998, 58% avg.; 1% poor, 10% fair, 60% good, 29% excellent. Soybeans 84% blooming, 74% 1998, 50% avg.; 55% setting pods, 42% 1998, 16% avg.; 1% very poor, 4% poor, 20% fair, 56% good, 19% excellent. Sweet potatoes 97% planted, 100% 1998, 97% avg.; 1% poor, 30% fair, 65% good, 4% excellent. Hay (warm-season) 60% harvested, 61% 1998, 59% avg.; 1% very poor, 6% poor, 33% fair, 47% good, 13% excellent. Watermelons 49% harvested, 37% 1998, 33% avg.; 10% fair, 70% good, 20% excellent. Blueberries, 10% poor, 5% fair, 75% good, 10% excellent. Cattle, 3% poor, 21% fair, 57% good, 19% excellent. Pasture feed 3% poor, 27% fair, 53% good, 17% excellent. Rice development is progressing slightly behind the five-year. However, the cotton, corn, soybean crops are progressing ahead of normal. Scattered rainfall has been beneficial to many areas.

**MISSOURI:** Days suitable for fieldwork 5.9. Topsoil 2% very short, 19% short, 72% adequate, 7% surplus. Precipitation 0.48 in. Corn 39% silking, 89% Bootheel. Double-crop soybean 83% planting complete. Soybeans 19% blooming, 23% Bootheel. Soybean 1% very poor, 10% poor, 34% fair, 49% good, 6% excellent. Sorghum 12% headed, 32% Bootheel. Winter wheat 92% harvested; 1% very poor, 12% poor, 26% fair, 51% good, 10% excellent. Pasture feed 5% poor, 24% fair, 61% good, 10% excellent.

**MONTANA:** Days suitable for fieldwork 5.9. Topsoil 12% very short, 36% short, 48% adequate, 4% surplus. Subsoil 13% very short, 34% short, 50% adequate, 3% surplus. Majority of the State did not receive precipitation, excluding some locations in the northeastern part of the State. Sugar beets 4% poor, 13% fair, 59% good, 24% excellent. Winter wheat 38% turning, 69% 1998, 43% avg. Winter wheat 0% ripe, 2% 1998, 1% avg.; 2% very poor, 12% poor, 40% fair, 36% good, 10% excellent. Spring wheat 80% in boot, 99% 1998, 96% avg.; 4% turning, 9% 1998, 5% avg. Barley 79% in boot, 100% 1998, 95% avg.; 2% turning, 6% 1998, 5% avg. Oats 80% in boot, 99% 1998, 95% avg.; 52% headed, 78% 1998, 67% avg.; 5% turning, 10% 1998, 6% avg.; 1% very poor, 3% poor, 18% fair, 63% good, 15% excellent. Corn 7% fair, 80% good, 13% excellent. Potatoes 87% fair, 13% good. Dry beans 3% fair, 91% good, 6% excellent. Alfalfa 58% 1st cutting, 55% 1998, 65% avg.; 1% 2nd cutting, 1% 1998, 0% avg. Other hay 42% harvested, 29% 1998, 48% avg. Only other fieldwork being done is spraying of summer fallow.

**NEBRASKA:** Days suitable for fieldwork 6.0. Topsoil 11% short, 85% adequate, 4% surplus. Subsoil 4% short, 93% adequate, 3% surplus. Statewide, temperatures near normals, except in the Valentines' area where temperatures 4° below normal. Precipitation traces to over a half inch in the southeast. Corn 1% very poor, 2% poor, 14% fair, 60% good, 23% excellent. Irrigated corn 81%, dryland corn 87% in good or excellent. European corn borer infestation in some fields were noted to need treatment. Soybean 24% blooming, 22% 1998, 19% avg.; 1% poor, 17% fair, 67% good, 15% excellent. Sorghum 3% headed, just above 1998, average; 1% poor, 21% fair, 67% good, 11% excellent. Dry beans 1% very poor, 1% poor, 25% fair, 72% good, 1% excellent. Wheat 6% very poor, 5% poor, 21% fair, 50% good, 18% excellent; 51% ripe, 67% 1998, 57% avg.; 36% harvest, 35% 1998, 33% avg. Oats 11% harvest, 6% 1998, 10% avg.; 4% poor, 13% fair, 69% good, 14% excellent. Alfalfa 47% 2nd cutting, 32% 1998, 30% avg.; 1% very poor, 1% poor, 17% fair, 69% good, 12% excellent. Pasture feed, range 2% poor, 13% fair, 63% good, 22% excellent. Wild hay 1% very poor, 2% poor, 9% fair, 70% good, 18% excellent. Pastures were providing excellent grazing. Because of hot temperatures, livestock experienced some stress. Producers were busy using water to keep animals cool. Flies were a problem, control was necessary. Producer activities; irrigating, cultivating soybeans, applying herbicide, fertilizer, measuring weed control, insect scouting, harvesting wheat, alfalfa, oats, marketing of crops.

**NEVADA:** Weather varied greatly throughout the State. Las Vegas reported 1.33 inches of precipitation for the week; all but 0.04 inches fell on the 8<sup>th</sup>. Ely also received some rainfall at 0.15 inches for the week. Rest of the State had no precipitation. Only the central parts of the State experienced above normal temperatures for the week, while the northern and southern parts of Nevada had below normal temperatures for the majority of the week. Though temperatures were below normal in much of the State, the range conditions decreased due to the hot temperatures and isolated

precipitation. The majority of irrigation water supply remained adequate. First cutting of alfalfa is nearly completed and second cutting is well underway. Other hay is also being cut. Warm weather was good for the row crops. Livestock continued to graze the summer ranges. Main farm, ranch activities: irrigating, haying, spraying weeds, putting out bees for alfalfa.

**NEW ENGLAND:** Days suitable for fieldwork 5.6. Topsoil 10% very short, 27% short, 61% adequate, 2% surplus. Subsoil 10% very short, 40% short, 48% adequate, 2% surplus. Maine potatoes 100% emerged; excellent to good. Massachusetts potatoes 100% emerged; good. Rhode Island potatoes 100% emerged; good to fair. Oats in Maine 100% emerged; good to excellent. Barley in Maine 100% emerged; good to excellent. Field corn 100% emerged; good to excellent. Sweet corn 100% planted, 99% 1998, 99% avg.; 99% emerged; <5% harvested, <5% 1998, <5% avg.; good to fair. Shade tobacco 10% harvested, <5% 1998, <5% avg.; good. Broadleaf tobacco 100% planted, 100% 1998, 100% avg.; good. First cut hay 90% harvested, 75% 1998, 80% avg.; good to fair. Second cut hay 20% harvested, 15% 1998, 15% avg.; fair to good. Pasture feed 2% very poor, 11% poor, 48% fair, 31% good, 8% excellent. Apples set average, size average, condition good. Peaches set average, size average, condition good to fair. Pears set average to below average, size average to below average, condition good to fair. Strawberries 99% harvested, 99% 1998, 85% average, set average, size average, condition good. Cranberries petal fall, condition good to excellent. Highbush blueberries 10% harvested, <5% 1998, <5% average, set average, size average, condition fair to good. Wild Blueberries set average, size average, condition good. Major farm activities included: Harvesting early season vegetables, strawberries; shade tobacco, sweet corn harvest just starting; cultivating, hoeing; scouting for pest, applying pesticides when necessary; second cut hay harvest underway; irrigating where possible; side dressing fields, successive planting.

**NEW JERSEY:** Days suitable for fieldwork 7. Temperatures much above normal. Extremes 44°; 104°. Rainfall 0.05 in. north, 0.00 in. central, 0.00 in. south. Heaviest 24 hour total was 0.08 in. Charlotteburg on the 9<sup>th</sup> to the 10<sup>th</sup>. Estimated soil moisture, in percent of field capacity, this past week averaged 56% north, 43% central, 32% south. Four inch soil temperatures 77° north, 80° central, 81° south. Harvest of wheat, barley is picking up rapidly in the southern counties. Second cutting of hay is also under way but quality may have been affected by the dry conditions. It has been reported that some areas may not have a second cutting. Demand for hay is increasing due to the poor pasture conditions. Field corn condition is still between fair, good in most of the State, but yields are expected to be affected if no rain is received soon. Single crop soybeans condition is similar. Irrigation continues extensively across the State for vegetables, most fields have been rated in good condition. Some exceptions are pumpkins and sweet corn in northern areas, where many fields are not being irrigated. Some insect problems have been reported on snap beans fields. Harvest of tomatoes continued in south, central areas. Most tomato fields are between good and excellent condition. Hot temperatures have been favorable for sweet potato fields. Potato harvest has started in southern area and the quality seems to be good. Harvest for squash, cabbage, snap beans, sweet corn and peppers continued. Peach condition in southern areas is still in good and excellent condition. The condition of peaches in northern areas has been rated between good and fair. Some early varieties of peaches are being harvested now. Apple conditions are between fair and good. Blueberry harvest is at its peak. Cranberries are sizing up nicely.

**NEW MEXICO:** Days suitable for fieldwork 5.8. State experienced active weather, with scattered to numerous showers, thunderstorms. Cold front plunged southward late in the week, dropping Carlsbad's high temperature from 104° on Friday to 72° on Saturday. Clouds, precipitation kept temperatures a little below normal at most locations. Greatest precipitation included 3.13" at Des Moines, 2.93" at Raton, 2.70" at Roswell. Farmers continued to harvest hay, wheat, onions along with cultivating, thinning, spraying, irrigating other crops. Harvesting of summer potatoes started in Roosevelt county. Ranchers were still moving cattle and branding. Although rains have helped there were still a few locations reporting supplemental feeding, hauling of water. Range, pasture feed 6% very poor, 9% poor, 33% fair, 37% good, 15% excellent. Cattle, sheep again showed little change with cattle in mostly good condition, sheep mostly fair to good condition.

**NEW YORK:** Days suitable for fieldwork 4.6. Soil moisture 9% very short, 39% short, 52% adequate. Rainfall beneficial. Hay condition 7% poor, 61% fair, 32% good. Alfalfa 97% 1st cutting harvested, 92% 1998, 94% avg.; 2nd cutting well underway. Dry beans 96% planted, 100% 1998, 97% avg. Wheat condition improved to 21% fair, 79% good. Sweet corn harvest underway. Pasture feed 9% very poor, 14% poor, 73% fair, 4% good. Strawberry picking finishing up. Onion crop in good condition. Apples in good condition. Sprays being applied. Irrigation needed. Sweet cherry harvest winding down, tart cherry harvest began. Grapes in good condition.

Peaches in good condition, early varieties being harvested. Livestock stressed by heat.

**NORTH CAROLINA:** Days suitable for fieldwork 5.4 compared to 4.9 last week. Soil moisture levels dipped a little 10% very short, 35% short, 45% adequate, 10% surplus. Although the heat was nearly unbearable, the weather did allow farmers to get into the fields. Crop conditions remained mostly good, rainfall this coming week should prove beneficial. Week was highlighted by extreme hot weather across the State. Most areas in the Mountain region received good rainfall; however, the rest of State was burning up with temperature above 100° in many areas, especially in the Piedmont. Small grain harvest is nearly complete with only limited acres of wheat, rye unharvested. Good progress was made in soybean planting as the double cropped acreage is almost finished. Potato farmers made good gains this week in Irish potato harvest. Other activities included: Weed control in all crops, sucker control, topping in tobacco, planting sweet potatoes, wrapping up sorghum planting, making hay, tending livestock.

**NORTH DAKOTA:** Days suitable for fieldwork 5. Topsoil 6% short, 80% adequate, 14% surplus. Subsoil 3% short, 80% adequate, 17% surplus. Warm, dry weather is needed to aid the development of row crops, allow producers to finish the hay harvest. Isolated grasshopper outbreaks reported in the southeast district. Spraying for scab, rust in the northeast district. Durum wheat 41% boot, 80% 1998, 66% avg.; 20% heading, 53% 1998, 40% avg.; 3% milk, 13% 1998, 8% avg. Canola 69% blooming, 92% 1998. Dry edible beans 7% blooming, 42% 1998, 20% avg. Flaxseed 35% blooming, 62% 1998, 31% avg. Potatoes 26% blooming, 55% 1998, 42% avg. Soybeans 6% blooming, 14% 1998, 12% avg. Sunflowers 2% blooming, 1% 1998, 0% avg. Emerged crop condition: durum 5% poor, 28% fair, 58% good, 9% excellent; canola 3% poor, 20% fair, 59% good, 18% excellent; corn 1% very poor, 4% poor, 21% fair, 63% good, 11% excellent; dry edible beans 7% poor, 23% fair, 57% good, 13% excellent; flaxseed 4% poor, 25% fair, 59% good, 12% excellent; potatoes 5% poor, 12% fair, 50% good, 33% excellent; soybeans 7% poor, 28% fair, 54% good, 11% excellent; sugar beets 5% poor, 17% fair, 53% good, 25% excellent; sunflower 3% poor, 26% fair, 62% good, 9% excellent. Pasture feed 3% poor, 12% fair, 68% good, 17% excellent. Stock water 1% short, 90% adequate, 9% surplus. Broadleaf, wild oat spraying 92%, 97% complete, respectively. Hay 6% above normal.

**OHIO:** Days suitable for fieldwork 6.3. Topsoil 25% very short, 37% short, 37% adequate, 1% surplus. Soybeans 55% blooming, 40% 1998, 24% avg.; 6% setting pods, 4% 1998, 1% avg. Winter wheat 99% ripe, 99% 1998, 65% avg.; 87% harvested, 75% 1998, 39% avg. Oats 44% ripe, 38% 1998, 38% avg.; 6% harvested, 7% 1998, 3% avg. Alfalfa 70% 2<sup>nd</sup> cutting, 43% 1998, 32% avg. Other hay 42% 2<sup>nd</sup> cutting, 25% 1998, 17% avg. Corn 10% silked, 8% 1998, 4% avg. Summer apples 16% harvested, peaches 7% harvested. Pasture feed 15% very poor, 23% poor, 35% fair, 23% good, 4% excellent. Corn 3% very poor, 9% poor, 26% fair, 46% good, 16% excellent. Soybeans 3% very poor, 7% poor, 27% fair, 48% good, 15% excellent. Activities: Making hay; combining wheat; spraying for weeds; working on machinery; planting double crop soybeans; mowing ditches, waterways; baling straw; scouting for pests, disease; fixing fences; cultivating corn, soybeans, tobacco; chopping oatlage; harvesting barley; picking, shipping tomatoes in Meigs county; hauling water to livestock; feeding hay to livestock; reporting crops to FSA; harvesting cucumbers. Reported weed pressures include Canadian thistle, morning glory, sourdock, velvetleaf, buttonweed, foxtail, ragweed, hemp dogbane, milkweed, quack grass, poison ivy, broadleaf, chickweed, lambsquarter, Johnsongrass. Reported insects were potato leafhopper, alfalfa weevil in alfalfa; cutworms, European corn borer, armyworms, western corn beetle, root worms, corn flea beetles in corn; spotted spidermite, beetles in soybeans; cicada, Japanese beetles on fruit trees. Reported diseases were phytophthora, rhizoctonia in soybeans, smut in wheat, blight on vegetables. Fruit, vegetable producers are busy picking raspberries, blueberries, squash, beans, tomatoes, sweet corn. Irrigated crops in the southern part of the State are doing well but non-irrigated crops are drying up, doing poorly. A Huron county reporter mentioned peaches are of excellent quality. A Pike county reporter commented that soybeans appear stunted, some corn is maturing at a height of 3 ft. In Highland county, some soybeans are dying due to drought. Pastures are good to adequate in the northern half of the State, dry and dormant in much of the southern half. Many producers are feeding hay, hauling water. Livestock are suffering from heat, humidity.

**OKLAHOMA:** Days suitable for fieldwork 5.4. Subsoil 4% short, 88% adequate, 8% surplus. Topsoil 14% short, 77% adequate, 9% surplus. Sunshine, hot weather aided harvesting activities for hay, wheat, other small grains. Temperature eclipse 100° southwest. Wheat 46% plowed, 59% 1998, 67% avg. Oats 89% harvested, 100% 1998, 93% avg.; 34% plowed, 56% 1998, 57% avg. Corn 1% poor, 4% fair, 91% good, 4% excellent; 25% tasseled, 22% 1998, 49% avg.; 9% milk-to-soft, 9% 1998, 15% avg.;

Sorghum 97% planted, 98% 1998, 95% avg.; 92% up-to-stand, 91% 1998, 88% avg.; Soybeans 6% poor, 50% fair, 34% good, 10% excellent; 75% planted, 97% 1998, 94% avg.; 55% up-to-stand, 94% 1998, 87% avg.; 13% flowering, 23% 1998, 25% avg. Peanuts 6% setting pods, 16% 1998, 20% avg. Watermelons 57% fruit set, 96% 1998, 72% avg; 2% harvested, 9% 1998, 6% avg. Alfalfa hay 1% poor, 20% fair, 64% good, 15% excellent; 83% 2<sup>nd</sup> cutting, 93% 1998, 90% avg.; 24% 3<sup>rd</sup> cutting, 37% 1998, 25% avg. Other hay 78% 1<sup>st</sup> cutting, 83% 1998, 84% avg.; 12% 2<sup>nd</sup> cutting, 2% 1998, 14% avg. Livestock 1% poor, 12% fair, 75% good, 12% excellent. Feeder cattle prices down \$1.00 to \$1.50 per cwt. from last week.

**OREGON:** Days suitable for fieldwork 6.8. Topsoil 16% very short, 53% short, 30% adequate, 1% surplus. Subsoil 15% very short, 48% short, 36% adequate, 1% surplus. Range, pasture feed 2% very poor, 8% poor, 35% fair, 47% good, 8% excellent. Activities: Westside haying continued. Grain crops turning color. Grass seed harvest underway. Crimson clover seed swathed, threshed. Mint fields look good, red clover in full bloom. East side, spring cereal at risk of drought damage. Hay cuttings continued, second cutting alfalfa yields normal. Grass seed harvest ongoing, summer fallow fertilizing started. Summer maintenance, irrigation occupy nursery activity. Christmas trees look good. East side pea harvest continued, yields reported poor except for irrigated. Potato cultivation, irrigation continued. Warmer temperatures on Westside boosted vegetable growth. Cucumber harvest underway, onions being weeded, growing well. Willamette Valley needs irrigation on sweet corn, green bean acreage; late corn plantings emerged. Willamette Valley, strawberry harvest winding down, raspberry harvest beginning. Blackberries ripening, some picking. Sweet cherry harvest underway, hazelnuts continued to size. Rogue River Valley pears sizing, strawberry harvest complete. South coast growers applying fertilizer on cranberries. Hood River Valley sweet cherry harvest underway in lower valley, pear, apple growers thinning fruit, irrigating orchards. Wasco County sweet cherry harvest continued. Livestock good throughout most State. Pastures good to excellent in Willamette Valley & on coast. Rains in Willamette Valley expected to extend grazing on dryland pastures.

**PENNSYLVANIA:** Days suitable for fieldwork 6.0. Soil moisture 42% very short, 43% short, 15% adequate. Corn silked 11% complete, 8% 1998, 7% avg.; 42 in. height, 37 in. 1998, 38 in. avg.; 3% very poor, 18% poor, 46% fair, 29% good, 4% excellent. Soybean 1% very poor, 8% poor, 54% fair, 30% good, 7% excellent. Winter wheat 97% turning yellow, 98% 1998, 93% avg.; 88% ripe, 80% 1998, 64% avg.; 47% harvested, 50% 1998, 28% avg.; 1% poor, 11% fair, 71% good, 17% excellent. Oats heading or headed 96% complete, 94% 1998, 88% avg.; 56% turning yellow, 59% 1998, 44% avg.; 30% ripe, 4% 1998, 9% avg.; 2% very poor, 14% poor, 44% fair, 37% good, 3% excellent. Alfalfa 2<sup>nd</sup> cutting 64% complete, 47% 1998, 41% avg. Timothy clover 1<sup>st</sup> cutting 94% complete, 84% 1998, 81% avg.; 22% 2<sup>nd</sup> cutting complete, 4% 1998, 4% avg. Quality of hay made 5% poor, 23% fair, 51% good, 21% excellent. Peach 1% poor, 28% fair, 40% good, 31% excellent. Apple 2% poor, 20% fair, 49% good, 29% excellent. Activities included: Planting soybeans; harvesting barley, wheat, oats, some vegetables; picking apples and peaches; machinery maintenance; filling silos; hauling manure; spreading fertilizers; caring for livestock; building/repairing fences; cutting hay; making haylage; applying pesticides; irrigating crops.

**SOUTH CAROLINA:** Days suitable for fieldwork 5.7. Soil moisture 1% very short, 6% short, 84% adequate, 9% surplus. Barley 100% harvested, 100% 1998, 97% avg. Cantelopes 73% harvested, 83% 1998, 78% avg.; 2% very poor, 16% poor, 64% fair, 18% good. Corn 43% doughed, 63% 1998, 66% avg.; 8% very poor, 14% poor, 34% fair, 39% good, 5% excellent. Cucumbers 99% harvested, 97% 1998, 86% avg. Hay 2% very poor, 9% poor, 29% fair, 54% good, 6% excellent. Peaches 54% harvested, 50% 1998, 47% avg.; 10% poor, 24% fair, 40% good, 26% excellent. Rye 100% harvested, 100% 1998, 99% avg. Snapbeans 75% harvested, 91% 1998, 69% avg. Sorghum 100% planted, 99% 1998, 93% avg.; 4% very poor, 6% poor, 3% fair, 87% good. Sweet potatoes 3% poor, 17% fair, 79% good, 1% excellent. Tomatoes 91% harvested, 94% 1998, 85% avg. Watermelons 70% harvested, 83% 1998, 74% avg.; 2% very poor, 13% poor, 47% fair, 38% good.

**SOUTH DAKOTA:** Topsoil 2% short, 75% adequate, 23% surplus. Subsoil 75% adequate, 25% surplus. Weather conditions across the State allowed crops to advance with development still ahead of the average. Warm, dry weather enabled producers to make great progress in haying, cultivating, spraying. Corn 35 in. height., 46 in. 1998, 36 in. avg.; 92% 1st cultivation, 96% 1998, 93% avg.; 43% 2nd cultivation, 71% 1998, 57% avg. 0% tasseled, 8% 1998, 4% avg. Winter rye 28% excellent, 54% good, 17% fair, 1% poor. Flaxseed 19% excellent, 63% good, 17% fair, 1% poor. Alfalfa 22% excellent, 60% good, 16% fair, 2% poor. Sunflower 12% excellent, 70% good, 15% fair, 3% poor. Winter wheat 25% excellent, 59% good, 15% fair, 1% poor; 94% turning color, 94% 1998, 79% avg.; 29% ripe, 48% 1998, 24% avg.; 3% combined, 5% 1998, 3% avg. Spring wheat 100% in boot stage,

100% 1998, 96% avg.; 33% turning color, 44% 1998, 23% avg.; 0% ripe, 17% 1998, 4% avg. Oats 99% in boot stage, 98% 1998, 95% avg.; 23% turning color, 48% 1998, 28% avg.; 8% ripe, 20% 1998, 10% avg. Barley 100% in boot stage, 99% 1998, 94% avg.; 19% turning color, 57% 1998, 29% avg.; 0% ripe, 13% 1998, 4% avg.; 89% turning color, 79% 1998, 65% avg.; 6% ripe, 49% 1998, 20% avg.; 0% combined, 1% 1998, 1% avg. Flaxseed 54% blooming, 67% 1998, 43% avg. Sunflower 0% blooming, 27% 1998, 6% avg.; 93% 1st cutting, 92% 1998, 93% avg.; 19% 2nd cutting, 24% 1998, 13% avg. Other hay 50% harvested, 48% 1998, 46% avg. Cattle 30% excellent, 66% good, 4% fair. Sheep 39% excellent, 58% good, 3% fair. Stock water supplies 22% surplus, 77% adequate, 1% short.

**TENNESSEE:** Days suitable for fieldwork 5.0. Topsoil 2% very short, 13% short, 71% adequate, 14% surplus. Subsoil 1% very short, 12% short, 74% adequate, 13% surplus. Corn 84% tasseled, 77% 1998, 76% avg.; 2% poor, 16% fair, 56% good, 26% excellent. Tobacco 6% topped, 3% 1998, 7% avg.; 2% very poor, 6% poor, 25% fair, 54% good, 13% excellent. Pasture feed 2% very poor, 11% poor, 33% fair, 47% good, 7% excellent. Alfalfa 55% 2nd cutting, 65% 1998, 73% avg.; 4% poor, 28% fair, 55% good, 13% excellent. State's tobacco crop remained in mostly good condition last week, even though numerous locations reported low lying fields were showing signs of stress due to excess moisture caused by heavy rains. Growers in these areas are hoping for a few warm sunny days to allow their crop to recover. Tobacco producers continued to report problems with diseases, Black Shank, Tomato Spotted Wilt Virus, insects. State's corn crop continues to respond well to recent moisture, currently rated in mostly good condition. Rains received over the weekend should further help crop development. Pastures, hay fields throughout the State have responded very well to recent moisture.

**TEXAS:** Rainfall scattered across State, however where rain occurred amounts significant many cases. Fieldwork in areas of heavier rainfall slow. Temperatures again summer like, helping crops to rapidly mature. Ranges, pastures continued enjoy favorable conditions. Haying activity sporadic during week depending on where rain fell. Livestock conditions remained good across State.

**Crops:** Small Grains: Harvest moved rapidly where field conditions allowed High Plains. Yields continued very good most fields. Scattered rainfall kept progress to minimum some areas. Corn: Early planted fields in High Plains continued to make good progress, silking. Irrigation activity remained steady. Fields continued rapidly mature in Blacklands, Central. Harvest slowed by wet conditions part week in Coastal Bend, along Upper Coast. Wet fields in Rio Grande Valley also kept harvest to minimum. Some fields have received excessive rain, may cause some loss. 58% doughing, 53% 1998, 52% avg. 46% dented, 46% 1998, 37% avg. 17% mature, 23% 1998, 12% avg. 3% harvested, 6% 1998, 2% avg. Cotton: Hot temperatures in Plains provided much needed heat units for fields to make good progress. Aphid, boll weevil populations have increased, spraying operations underway where field conditions allowed. Fields continued make good progress with good soil moisture conditions, hot temperatures Central, Blacklands. Bolls continued to open in Coastal Bend, Rio Grande Valley, additional rain these areas could hurt quality at this point. 4% open bolls, 8% 1998, 5% avg. Peanuts: Plants began to peg in Plains, most look very good. Irrigation remained steady in Low Plains where some fields still need moisture despite recent rains. Fields made good progress other areas of state under warm temperatures, adequate rainfall. Rice: Harvest began in few fields, however wet conditions kept progress minimal. Disease problems continue show up many fields. 1% harvested, 0% 1998, 0% avg. Sorghum: Most planted fields up, making good growth in Plains. Some cultivation occurred. Planting completed as conditions allowed many fields. Fields rapidly matured under hot temperatures in Blacklands, Central, harvest will begin as soon as conditions allow. Harvest Coastal Bend, along Upper Coast slowed by wet conditions. Harvest in Rio Grande Valley slowed by rain. 39% turning color, 45% 1998, 50% avg. 30% mature, 35% 1998, 31% avg. 21% harvested, 21% 1998, 15% avg. Soybeans: Growth good in Plains, irrigation remained steady. Progress also good along Upper Coast, Northern Blacklands. Open conditions now needed for a while.

**Commercial Vegetables:** Rio Grande Valley, minimum activity occurred. San Antonio-Winter Garden, a few more watermelon fields harvested between rain showers. East, good watermelon production reported, however harvest continued to be hampered by scattered rain. High Plains, onion, potato harvest began despite wet conditions some fields. Trans Pecos, onion, cantaloup harvest continued. Peaches: Scattered rain slowed picking some groves East, Hill Country. Pecans: Recent, continued rainfall lessened nut drop many areas. Spraying programs continued as weather conditions allowed.

**Range and Livestock:** Range, pasture conditions continued very favorable across State. Grasshopper populations remained high many areas. Haying activity active as weather allowed with good yields reported good most areas. Livestock conditions remained good across State. Prices a little better at some auctions.

**UTAH:** Days suitable for field work 7. Topsoil 4% very short, 33% short, 62% adequate, 1% surplus. Subsoil 4% very short, 23% short, 72% adequate, 1% surplus. Range, pasture feed 1% very poor, 7% poor, 36% fair, 55% good, 1% excellent. Corn height 29 in., 22 in. 1998, 30 in. avg. Winter wheat 1% harvested, 0% 1998, 4% avg. Spring wheat 93% headed, 84% 1998, 91% avg. Barley 94% headed, 75% 1998, 90% avg. Alfalfa hay 9% 2nd cutting, 15% 1998, 20% avg. Other hay 56% 1st cutting, 46% 1998, 51% avg. Oats 74% headed, 63% 1998, 67% avg.; 34% harvested for hay or silage, 33% 1998, 35% avg. Sweet cherries 51% picked, 39% 1998, 45% avg. Tart cherries 0% picked, 19% 1998, 14% avg. Irrigation water 1% very short, 16% short, 82% adequate, 1% surplus. Stockwater 11% short, 88% adequate, 1% surplus. Major activities: Harvesting alfalfa hay, irrigating crops, spraying for weeds, insects.

**VIRGINIA:** Days suitable for fieldwork 6.0. Topsoil 37% very short, 30% short, 30% adequate, 3% surplus. Subsoil 39% very short, 35% short, 26% adequate. Rainfall was variable across the Commonwealth this past week with regards to quantity and frequency. Crop conditions were equally varied. Pasture feed 31% very poor, 30% poor, 27% fair, 12% good. Livestock 2% very poor, 12% poor, 36% fair, 46% good, 4% excellent. Hay, other 46% very poor, 30% poor, 16% fair, 8% good. Hay, alfalfa 13% very poor, 20% poor, 46% fair, 19% good, 2% excellent. Corn for grain 33% silked, 34% 1998, 28% avg.; 3% dough, 0% 1998, 3% avg.; 13% very poor, 26% poor, 35% fair, 22% good, 4% excellent. Soybeans 75% planted, 93% 1998, 88% avg.; 68% emerged, 84% 1998; 1% blooming, 0% 1998, 0% avg.; 4% very poor, 11% poor, 47% fair, 33% good, 5% excellent. Winter wheat 83% harvested, 89% 1998, 81% avg. Barley 97% harvested, 97% 1998, 94% avg. Tobacco, flue cured 5% poor, 30% fair, 47% good, 18% excellent. Tobacco, burley 3% very poor, 11% poor, 14% fair, 41% good, 31% excellent. Tobacco, dark fire cured 9% poor, 47% fair, 34% good, 10% excellent. Tobacco, sun cured 25% poor, 25% fair, 50% good. Peanuts 50% pegged, 69% 1998; 9% fair, 65% good, 26% excellent. Cotton 85% squaring, 78% 1998; 0% setting bolls, 4% 1998, 4% avg.; 1% poor, 21% fair, 53% good, 25% excellent. Summer potatoes 39% harvested, 32% 1998, 31% avg.; 1% very poor, 3% poor, 31% fair, 53% good, 12% excellent. Apples, all 13% poor, 38% fair, 40% good, 9% excellent. Peaches 10% very poor, 19% poor, 42% fair, 23% good, 6% excellent. Pastureland, hay acreage remains the hardest hit by the hot, dry conditions. Sixty-one percent of pastureland was reported in poor or very poor condition, as well as, 43% of alfalfa, 76% of all other hay. Livestock producers are aggressively reducing their herd size as forage conditions, water, feed supplies continue to decline. Corn condition diminished only slightly from the previous week. Progress remains on a normal schedule. Soybean condition remains virtually unchanged. Producers are actively planting double crop acres as small grain harvest nears completion. Several isolated soybean producers have reported blooms showing in full season acreage. Tobacco condition diminished slightly from the previous week. Some producers have reported black shank problems and the spread of blue mold. Neither plant disease is believed to be a serious concern at this time. Producers are currently in the process of topping plants. Peanut, cotton condition improved greatly from the previous week. Majority of peanut plants are setting pegs at this time. Eighty-five percent of cotton plants have begun squaring, are expected to begin setting bolls within the next couple of weeks. Producers of potatoes, tomatoes, snap beans, sweet corn, cucumbers, squash, peppers, other vegetables are busy harvesting their crops. Dry, hot conditions continue to affect yield, fruit size in orchards.

**WASHINGTON:** Days suitable for fieldwork 6.6. Topsoil 19% very short, 46% short, 35% adequate. Subsoil 18% very short, 60% short, 22% adequate. Increased temperatures accelerated winter wheat maturity as the crop started to ripen. Hot weather, lack of precipitation has been detrimental to the quality of both spring wheat, barley although the weather conditions may move up projected harvest dates. Harvest is projected to begin next week in the far eastern part of the State. Winter wheat, dryland 7% very poor, 19% poor, 55% fair, 17% good, 2% excellent. Irrigated 100% good. Spring wheat, dryland 12% very poor, 38% poor, 47% fair, 3% good. Irrigated 100% good. Headed, 99%, 99% 1998, 94% avg. Barley, dryland 8% very poor, 41% poor, 48% fair, 3% good. Irrigated, 100% good. Headed 96%, 100% 1998, 95% avg. Hay, other roughage 3% very short, 16% short, 51% adequate, 30% surplus. Range, pasture feed 34% poor, 50% fair, 13% good, 3% excellent. Livestock producers were baling hay as 2nd cutting of alfalfa harvest was winding down. Warmer weather was also beneficial to the silage, sweet corn. Raspberry harvest was started and strawberry harvest continued with some reports of mold. Warm weather was also helpful for the fruit crops. Cherries, apricots, early varieties of peaches were all being harvested. Variety of vegetables were being harvested.

**WEST VIRGINIA:** Days suitable for fieldwork 5.9. Topsoil 49% very short, 45% short, 6% adequate. Despite some rain this past week, inadequate moisture supplies continue to affect crop, livestock, pasture conditions throughout the State. Some farmers are feeding hay, selling off livestock as a result of the drought. Wheat 3% very poor, 7% poor, 51% fair, 39% good; 65% harvested, 52% 1998, 41% avg. Hay 21% very poor, 43% poor, 27%

fair, 8% good, 1% excellent; 96% 1<sup>st</sup> cut, 87% 1998, 88% avg.; 21% 2<sup>nd</sup> cut, 14% 1998, 12% avg. Corn 21% very poor, 48% poor, 27% fair, 4% good; 9% silked, 33% 1998, 13% avg. Oats 24% very poor, 26% poor, 35% fair, 15% good; 90% headed, 95% 1998; 3% harvested, 14% 1998. Soybeans 8% very poor, 27% poor, 60% fair, 5% good; 23% bloomed, 10% 1998, 15% avg. Tobacco 31% very poor, 28% poor, 22% fair, 19% good. Apples 7% poor, 45% fair, 48% good. Peaches 43% fair, 57% good. Cattle 1% very poor, 8% poor, 55% fair, 33% good, 3% excellent. Sheep 15% poor, 58% fair, 22% good, 5% excellent.

**WISCONSIN:** Days suitable for fieldwork 4.9. Soil moisture 13% short, 76% adequate, 11% surplus. Insect population has been steadily growing with the recent warm, wet weather we have been receiving. Where the insects have not been sprayed, crops are struggling, sprayed fields, the crops are reported as doing very well. Insects have had a fairly large effect on the second crop hay according to many reporters. Some reported spraying hayfields multiple times for potato leafhoppers. Quantity, quality of second crop have been reported as good to excellent in sprayed fields, both are reduced in fields left unsprayed. According to a reporter in Buffalo County, recent rains have turned second crop into haylage rather than bales. Second Crop Harvested: 48% 1999, 38% 1998, 15% avg. Small grain crop also hasn't been able to escape pest problems. Manitowoc County reporter noted that he saw winter wheat fields that had as much as 25% scab. Most small grains are headed, turning color. Winter wheat 3% harvest, 2% 1998, 1% avg.; 1% poor, 10% fair, 52% good, 37% excellent. Yields have been reported as good with an expected crop similar to last year. Some lodging resulted from recent storms. Corn crop has been reported as good to excellent with a few exceptions. Dunn County reporter noticed one field had to be replanted due to a corn borer infestation. Other problems include excess moisture on low ground, a moisture shortage on high, light soils, uneven growth. Soybean good to excellent, some fields are beginning to blossom. Soybean 1% very poor, 4% poor, 13% fair, 55% good, 27% excellent. Potatoes began blossoming, good crop is expected. Blackberries, raspberries are beginning to be picked. Canning peas are being harvested with yields well above average. Pasture feed 1% poor, 25% fair, 55% good, 19% excellent.

**WYOMING:** Days suitable for fieldwork 6.9. Topsoil 5% very short, 42% short, 53% adequate. Warmer weather, below normal precipitation for most of the week. Winter wheat 12% fair, 65% good, 23% excellent; 94% turning color, 89% 1998, 84% avg.; mature 28%, 26% 1998, 36% avg.; harvested 2%, 0% 1998, 3% avg. Spring wheat 1% poor, 32% fair, 63% good, 4% excellent; 78% boot, 99% 1998, 93% avg.; headed 67%, 89% 1998, 74% avg.; 8% turning color, 37% 1998, 31% avg. Barley 2% fair, 76% good, 22% excellent; 73% headed, 79% 1998, 83% avg.; 28% turning color, 24% 1998, 29% avg. Oats 1% very poor, 3% fair, 90% good, 6% excellent; 48% headed, 76% 1998, 69% avg.; 7% turning color, 20% 1998, 18% avg. Sugar beet 9% fair, 66% good, 25% excellent. Corn 1% poor, 4% fair, 74% good, 21% excellent; 3% tasseled, 0% 1998, 4% avg.; 32 in. average height, 26 in. 1998, 31 in. avg. Dry bean 4% fair, 83% good, 13% excellent.; 14% bloom, 10% 1998, 17% avg. Alfalfa 77% 1st cutting, 68% 1998, 74% avg. Other hay 31% cut, 39% 1998, 37% avg. Range, pasture feed 6% fair, 72% good, 22% excellent.

# International Weather and Crop Summary

July 4 - 10, 1999

## HIGHLIGHTS

**EUROPE:** Heavy rains fell in eastern Europe, delaying winter grain harvesting, while lighter showers and slightly above-normal temperatures benefited spring-sown crops in western and central areas.

**FSU-WESTERN:** Scattered showers benefited winter grains and spring-sown crops. Unseasonably warm weather returned to the region, however, increasing crop water requirements.

**FSU-NEW LANDS:** Unseasonably warm weather and scattered showers influenced most major crop regions in Russia and Kazakhstan.

**EASTERN ASIA:** Showers benefited summer crops across the North China Plain, Manchuria, and North Korea.

**SOUTH ASIA:** Showers in central India brought some relief to emerging oilseeds.

**SOUTHEAST ASIA:** Showers increased moisture supplies for corn in western Thailand.

**AUSTRALIA:** Showers boosted moisture levels for emerging winter grains in Western Australia and sections of the southeast.

**CANADA:** Cool, rainy weather impeded fieldwork and slowed crop development throughout the Prairies.

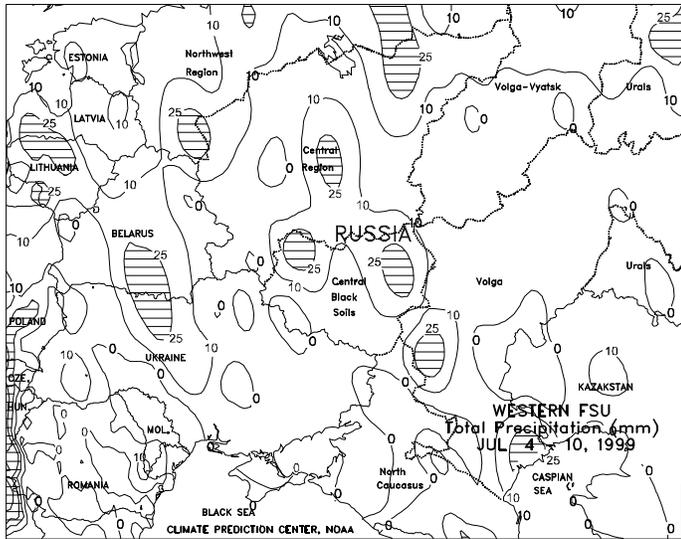
**MEXICO:** Showers continued to benefit corn in the main corn belt.

**SOUTH AMERICA:** Dry weather prevailed across central Argentina, and light showers continued to favor winter wheat development in southern Brazil.



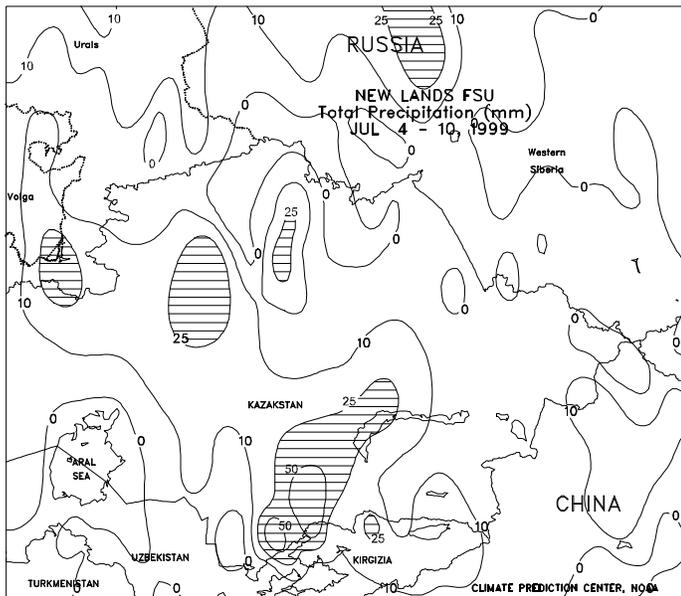
## EUROPE

Across major crop regions of western and central Europe, scattered showers (3-50 mm or more) and warm weather (temperatures averaging 1-3 degrees C above normal) benefited filling winter grains and spring-sown crop development. Although these showers likely delayed early winter grain harvesting in parts of northern and central France and western and southern Germany, most of these crops are still in the late stages of maturation. Farther east, heavy rain fell over much of eastern Europe, providing abundant moisture for spring-sown crops but raising concerns over winter grain quality. The heaviest rains (50-75 mm or more) fell in Austria, Hungary, Slovakia, and the Balkans, where localized flooding was reported and winter grain harvesting was delayed. Elsewhere in Europe, seasonably dry weather prevailed in Greece, extreme southern Italy, and over the drought-plagued Iberian peninsula. In contrast, beneficial showers (10-50 mm, with locally higher amounts) fell in northern and central Italy, benefiting spring-sown crop development.



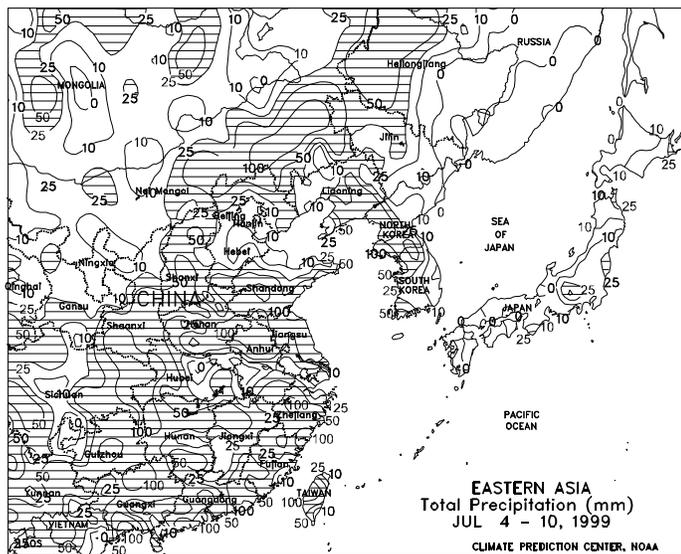
**FSU-WESTERN**

In Russia, scattered showers (15-40 mm or more) brought additional relief to the major crop regions in the east (southern North Caucasus, Volga Valley, and the Central Black Soils region). Warmer weather (temperatures 3-6 degrees C above normal) moved into this region, however, increasing crop water requirements. In northern Russia, lighter showers (5-20 mm or more) in Northwest Region, Central Region, and Volga Vyatsk favored maturing winter grains and reproducing spring grains. Unseasonably warm weather (temperatures 1-5 degrees C above normal) slid into this region as well, accelerating winter grain maturation and spring grain reproduction. In Ukraine and Belarus, scattered showers (4-37 mm, with locally heavier amounts) benefited filling spring grains and summer crop development. Similar to surrounding regions, temperatures were well above normal (4-6 degrees C), stressing those crops least exposed to the scattered showers. In the Baltics, widespread showers (3-34 mm or more) in Lithuania favored winter grains and spring-sown crops. Rainfall over the remainder of the Baltics was more widely scattered.



**FSU-NEWLANDS**

Unseasonably warm weather (temperatures 2-6 degrees C above normal) overspread much of southern Russia and northern Kazakhstan, ending a prolonged period of below-normal temperatures, and accelerating spring grain development. Scattered showers benefited spring-sown crops over much of central Kazakhstan and the Urals. Rainfall totals were highly variable, generally ranging between 5 and 50 mm, with locally heavier amounts. Additional showers (3-10 mm, with isolated higher amounts) occurred in the sugarbeet- and sunflowerseed-producing regions of Western Siberia, favoring crop development. In the major cotton-producing regions of Central Asia, near-normal temperatures and generally dry weather continued to favor cotton development but maintained high irrigation requirements. The exception was in southeastern Kazakhstan, northeastern Uzbekistan, and western Kyrgyzstan, where 10 to 50 mm of rain eased irrigation needs.

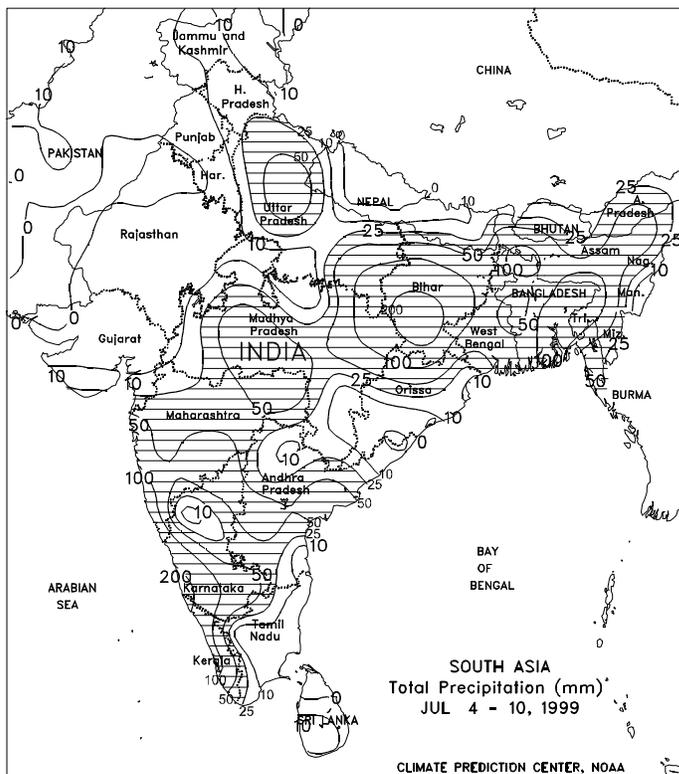


**EASTERN ASIA**

Widespread showers (25-75 mm, with scattered amounts greater than 125 mm) covered the North China Plain and Manchuria, benefiting vegetative summer crops in both regions and reproductive spring wheat in Manchuria. Mostly dry weather dominated the marginal crop areas of eastern Manchuria. Temperatures averaged 2 to 6 degrees C below normal in the North China Plain but 1 to 2 degrees C above normal in Manchuria. Somewhat drier weather prevailed across the eastern Yangtze Valley, although showers (10-70 mm) still hampered flood recovery efforts. Showers (25-90 mm) also covered all of southern China, increasing moisture supplies for sugarcane and filling early rice. Temperatures averaged 1 to 2 degrees C below normal across the Yangtze Valley and near normal along the southern coastal provinces. Rain (25-85 mm) boosted soil moisture and benefited summer crops across northwestern North Korea. Moderate showers (20-50 mm) maintained moisture supplies in South Korea. Drier weather eased wetness across Japan. Temperatures averaged near normal across North Korea and 1 to 3 degrees C below normal across South Korea and Japan.

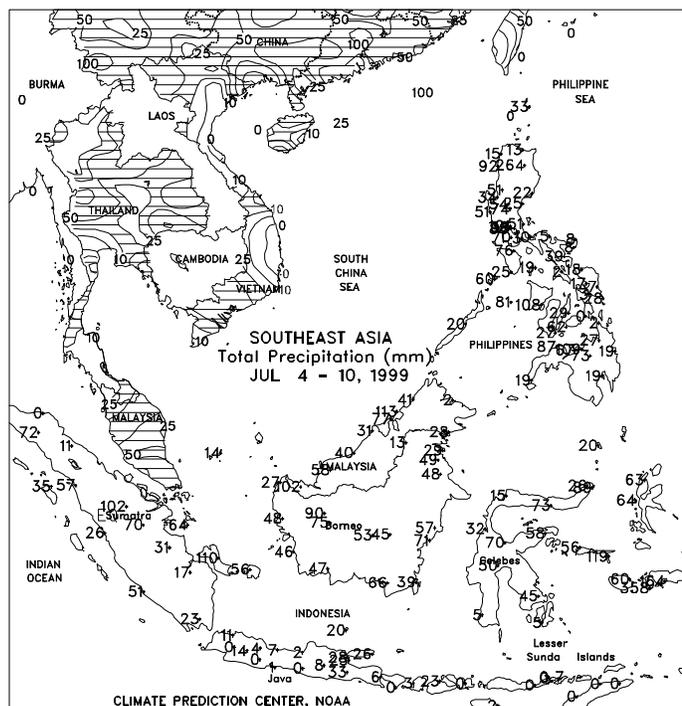
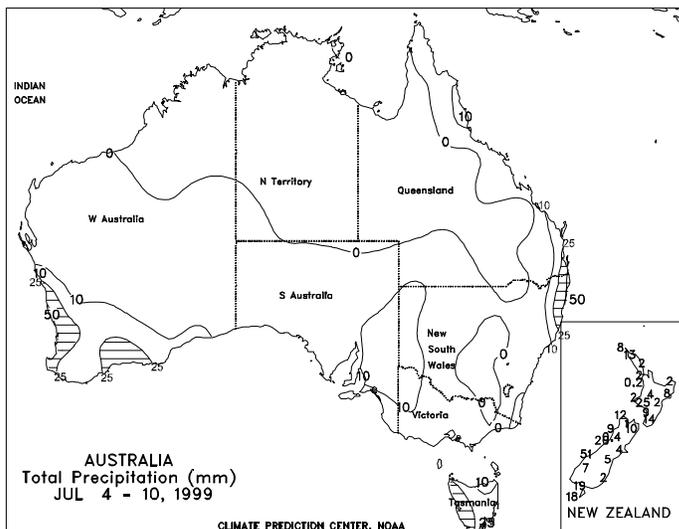
**SOUTH ASIA**

Scattered showers (10-50 mm or more) brought some relief to emerging oilseeds in central India and allowed a local resumption of planting. The rain also ended a stressful growing period in important soybean areas of western Madhya Pradesh, where temperatures reached the upper 30's degrees C early in the week. Unfortunately, showers were generally scattered and light (10 mm or less) over primary groundnut areas of Gujarat, with unfavorable warmth lasting through the week. In the eastern rice belt, moderate to heavy rain (25-100 mm or more) kept most crop areas of Bangladesh and eastern India well watered. In fact, many locations continued to receive rainfall below their typical inundating levels, keeping the instances of flooding to seasonal levels. In southern India, a resurgence of seasonal rains (10-50 mm) from Maharashtra southward improved crop prospects, following a break in the monsoon. The rain was welcomed in oilseed and cotton areas of Andhra Pradesh and Karnataka, especially in light of the current unfavorable conditions in the northwest. Hot, dry weather continued to dominate Pakistan and north-central India. Although the monsoon is typically not established in the far north until mid-July, rainfall has been sporadic in rice areas of the Gangetic Plain. In addition, highs reached the middle 30's to lower 40's degrees C from Punjab and Haryana eastward through Bihar, increasing evaporative losses. Rice and cotton are heavily irrigated, but long-term moisture reserves are dependent on monsoon rainfall.



**SOUTHEAST ASIA**

Showers (25-100 mm) eased dryness and aided corn in west-central Thailand. Moderate showers (25-65 mm) prevailed across eastern Thailand, maintaining moisture supplies for main-season rice. In the Red River Delta of northern Vietnam and along the central Vietnam coast, mostly dry weather reduced available moisture supplies for 10<sup>th</sup>-month rice transplanting, while showers (20-60 mm) maintained adequate moisture supplies for rice in the Mekong River Delta of southern Vietnam. Seasonal showers (50-150 mm or more) benefited main-season grains and sugarcane in the Philippines. Moderate showers (30-70 mm) favored oil palm across peninsular Malaysia. Seasonal rain (5-20 mm) prevailed across Java, Indonesia, aiding second-season rice.

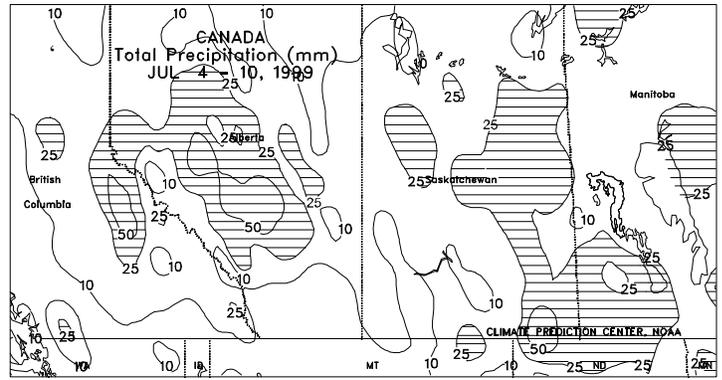


**AUSTRALIA**

Early-week showers (10-25 mm or more) boosted topsoil moisture levels across Western Australia's winter grain belt. The moisture helped maintain generally favorable prospects in the west for wheat and barley establishment, as seasonably mild, near-normal temperatures spurred vegetative development. Later in the week, the storm system that affected western areas brought limited relief to sections of the southeast. Highly beneficial rainfall (10 mm or greater) was recorded in some drier spots in northwestern Victoria and eastern South Australia, extending northward through western grazing areas as far north as southwestern Queensland. However, dry pockets persisted elsewhere in the southeast, where long-term moisture reserves are at best adequate. Dry, mild weather dominated the winter crop areas of New South Wales and Queensland, with patchy frost common at many locations. In July, winter crops typically experience a period of slow growth or semi-dormancy, and are generally unaffected by sub-freezing temperatures. In New Zealand, scattered, mostly light showers (15 mm or less, in most areas) benefited the main pasture and grain areas.

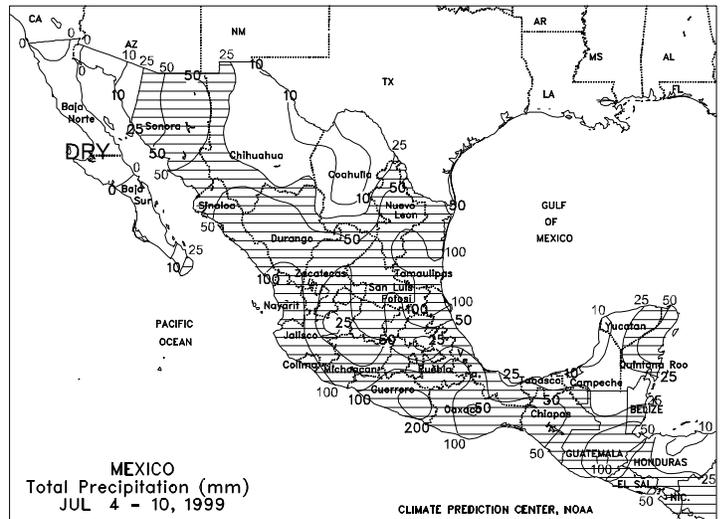
**CANADA**

Widespread, locally heavy showers and thunderstorms disrupted field operations across the Prairies. The heaviest rainfall (25-50 mm or more) was recorded in the southeast, renewing problems with standing water in parts of southeastern Saskatchewan and Manitoba. Rainfall was relatively lighter (2-15 mm) in crop areas of Alberta and western Saskatchewan. However, Prairie-wide temperatures remained well below normal (2-3 degrees C), delaying crop development even further. This season's spring crop, which was planted later than usual in many parts of the Prairies, was initially at a higher risk of heat stress at reproduction. Now, warmer, drier weather is urgently needed to accelerate crop growth and allay fears of autumn freeze damage. In eastern Canada, early-week warmth and dryness benefited maturing winter wheat and spurred development of corn and soybeans. Late-week showers (5-10 mm in Ontario, exceeding 25mm in Quebec) kept topsoils moist for summer crop development.



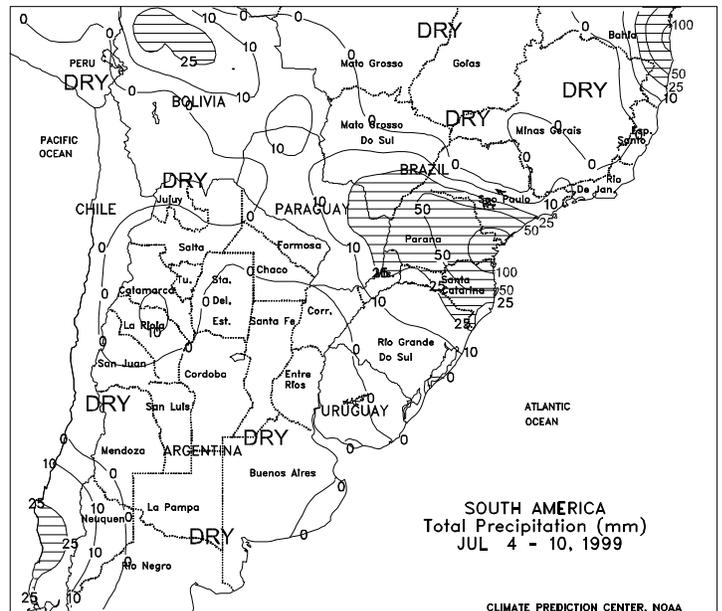
**MEXICO**

Widespread showers (20-80 mm) provided adequate moisture for vegetative corn across the Southern Plateau corn belt. Beneficial showers (40-100 mm) reached into north-central Mexico (Durango), the northeast (Tamaulipas and Nuevo Leon), and the northwest (Sonora), increasing reservoir supplies. Drier weather (less than 20 mm) prevailed in the extreme north (Chihuahua and Coahuila). Tropical showers (150-200 mm) possibly caused some flooding in southern Mexico (Guerrero). Widespread showers (20-75 mm) increased moisture supplies across the Yucatan Peninsula. Temperatures averaged 1 to 2 degrees C below normal across northern and central Mexico and near normal in the southeast (Chiapas and Yucatan).



**SOUTH AMERICA**

Dry weather dominated Argentina, favoring summer crop harvesting, nearing completion, and winter wheat planting. According to reports as of July 2, Argentine winter wheat planting was 61 percent complete, compared with the 3-year average of 58 percent. In southern Brazil, light to moderate rain (10-80 mm) covered northern Rio Grande do Sul and Parana, maintaining soil moisture for winter wheat development. Warm, dry weather in northern Sao Paulo and southern Minas Gerais aided coffee and citrus harvesting. Temperatures averaged 1 to 3 degrees C below normal across Argentina, near normal in extreme southern Brazil, and 2 to 4 degrees C above normal elsewhere in southern Brazil.



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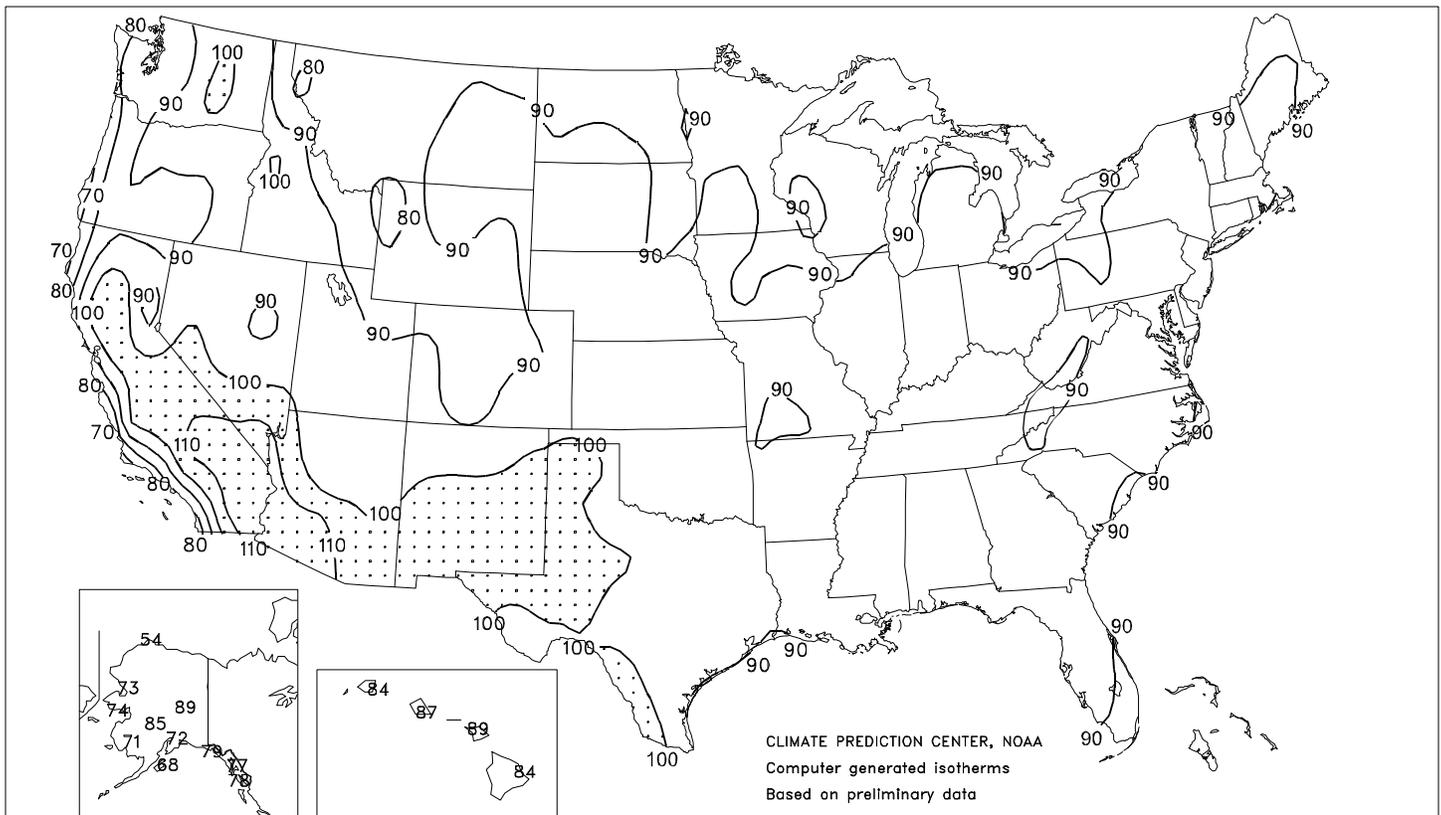
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June 1999



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