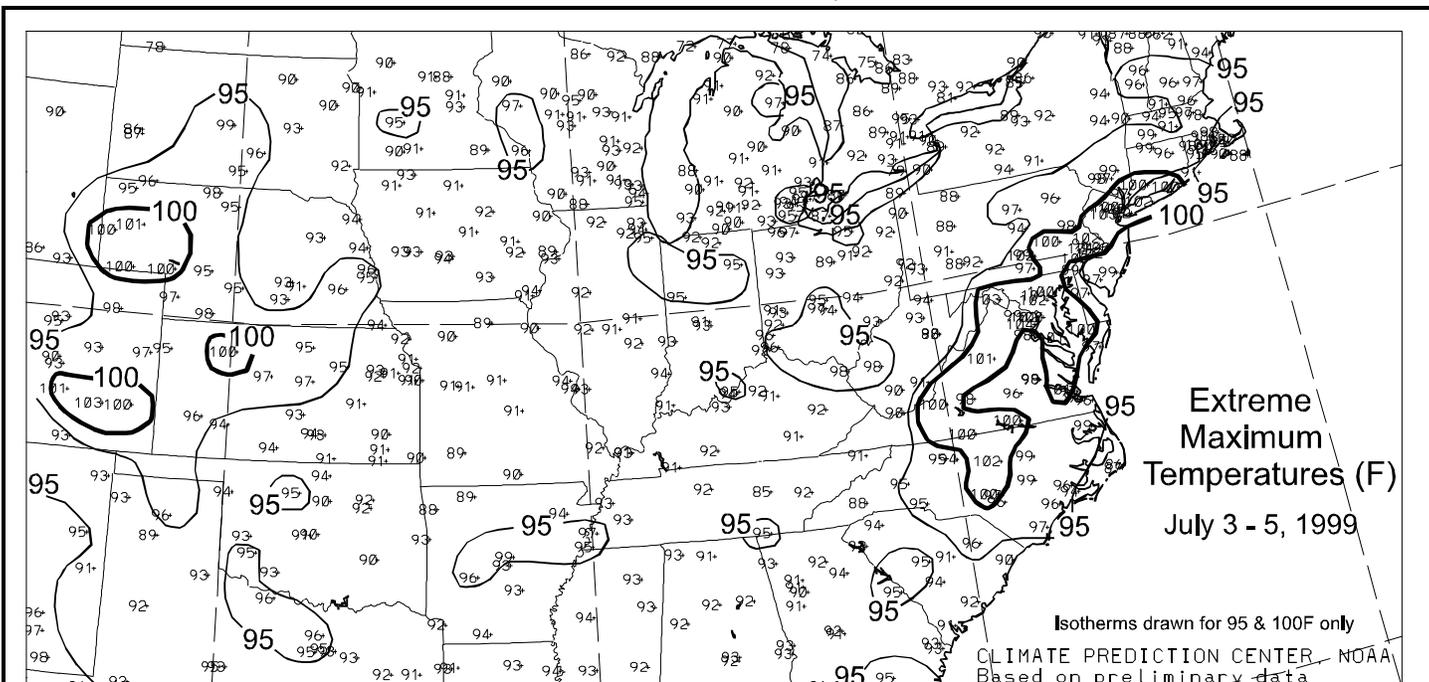


WEEKLY WEATHER AND CROP BULLETIN

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



Temperatures soared across the Plains, Midwest, and East in early July, as the core of an upper-level high pressure system temporarily shifted northeastward from the Southwest. In the Midwest, however, temperatures did not rise high enough to cause significant stress on corn, beginning to silk in some areas, or soybeans, entering the blooming phase of development. More extreme heat covered the Mid-Atlantic States, where 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

HIGHLIGHTS June 27 - July 3, 1999

Although hot weather overspread the **Plains, Midwest, and East** toward week's end, severe crop stress was confined to already drought-stricken areas from the **Mid-Atlantic region** into **southern New England**. High temperatures in the **Midwest** remained generally at or below 95°F, favoring reproductive corn and soybeans. In addition, widespread showers boosted topsoil moisture across the **eastern Corn Belt** prior to the onset of hot weather. Weekly temperatures averaged up to 8°F above normal in the **Southwest**, where heat continued for a third consecutive week. Elsewhere, temperatures ranged from 7°F above normal in the **Northeast** to as much as 7°F below normal in the **upper Midwest** and 10°F below normal in

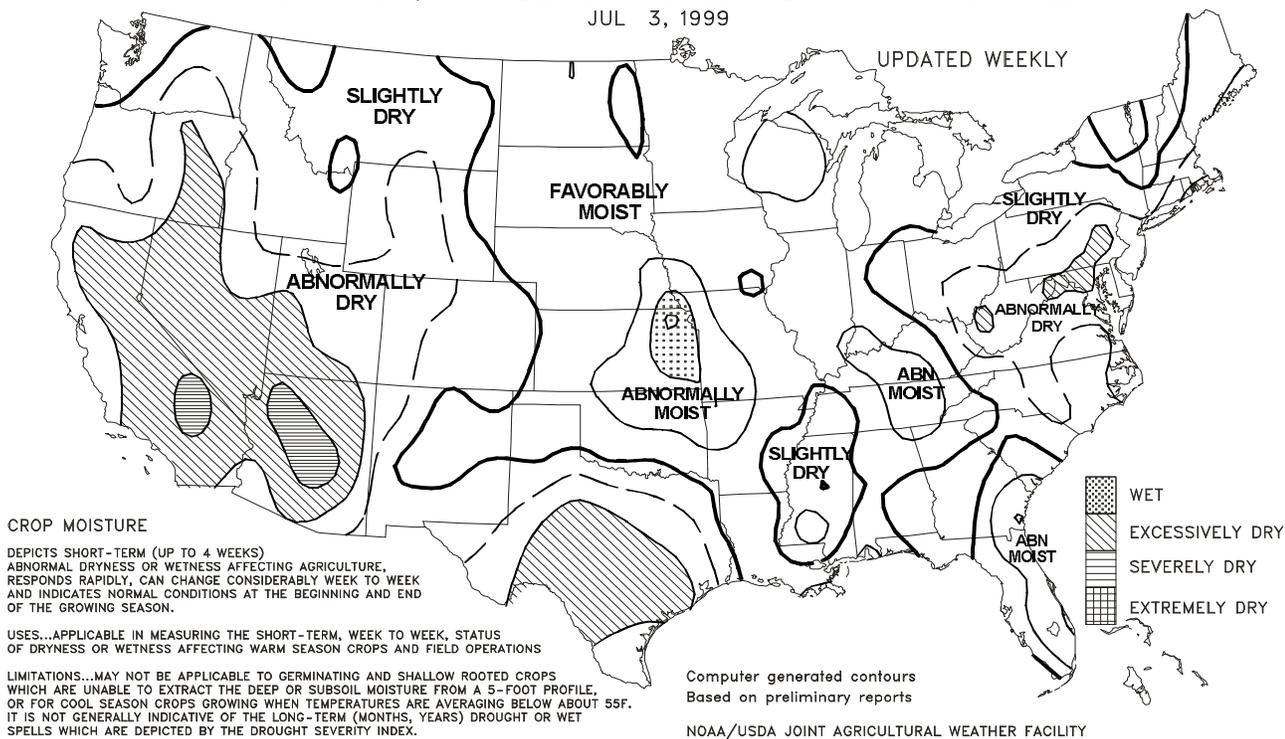
(Continued on page 5)

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Crop Moisture
SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE
JUL 3, 1999

UPDATED WEEKLY



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.

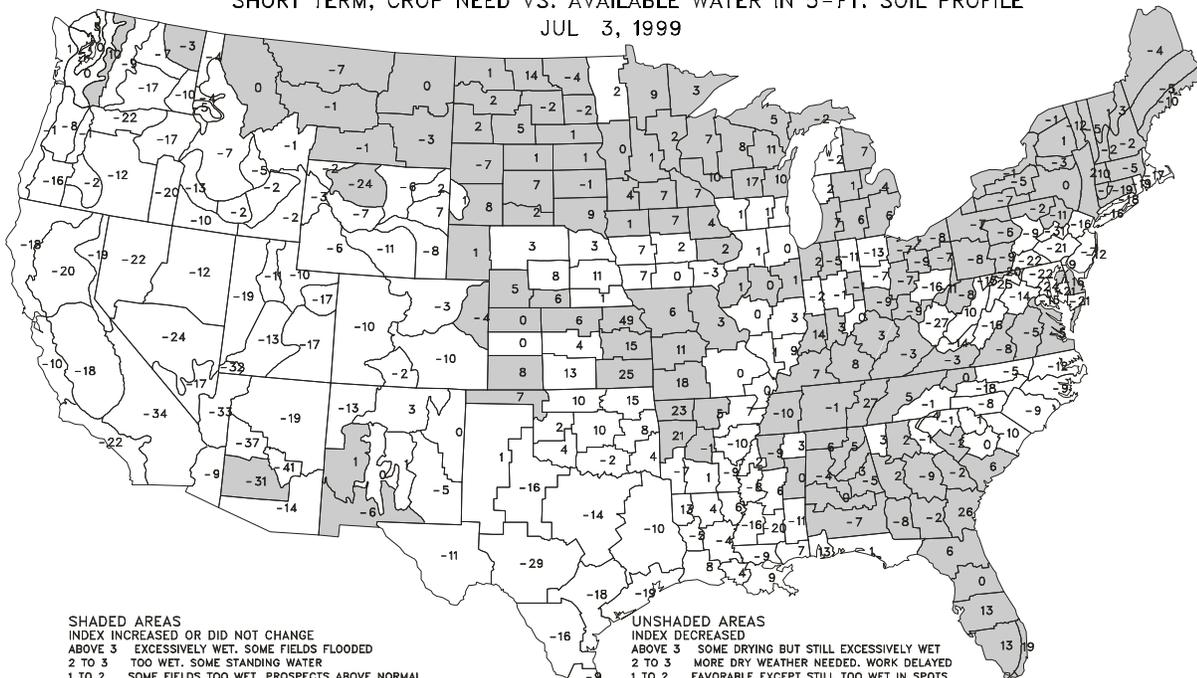
USES...APPLICABLE IN MEASURING THE SHORT-TERM, WEEK TO WEEK, STATUS OF DRYNESS OR WETNESS AFFECTING WARM SEASON CROPS AND FIELD OPERATIONS

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.

Computer generated contours
Based on preliminary reports

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

Crop Moisture Index
SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE
JUL 3, 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

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

BASED ON PRELIMINARY DATA

Weather Data for Selected Locations in the Delta

Weather Data for the Week Ending July 3, 1999

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

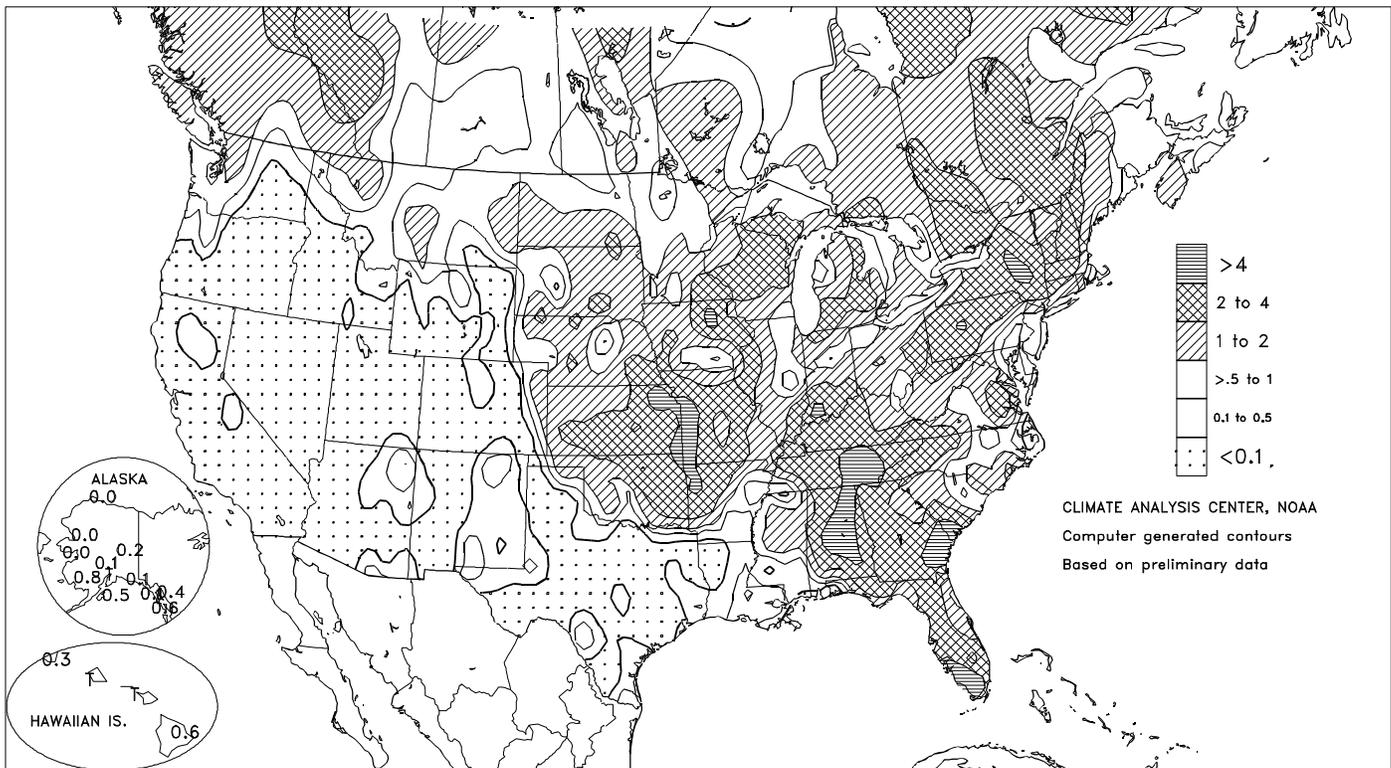
STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						4-INCH SOIL TEMP, °F		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
MS BATESVILLE	89	72	95	69	81	--	3.42	--	3.24	--	--	--	--	--	--	2	0	2	1
BELZONI	91	73	95	69	82	--	0.43	--	0.40	--	--	--	--	--	--	5	0	2	0
CLARKSDALE	93	75	98	70	84	--	0.85	--	0.75	--	--	--	--	--	--	6	0	4	1
CLEVELAND	89	73	92	69	81	--	0.07	--	0.07	--	--	--	--	--	--	4	0	1	0
GREENVILLE	89	75	91	71	82	--	0.94	--	0.54	--	--	--	--	--	--	4	0	2	1
GREENWOOD	90	74	94	70	82	--	0.37	--	0.29	--	--	--	--	--	--	5	0	3	0
INDIANOLA 1S	91	74	96	69	83	--	0.09	--	0.03	2.40	--	29.77	--	84	79	5	0	5	0
INVERNESS 5E	90	75	93	70	83	--	0.17	--	0.16	3.55	--	--	--	83	79	4	0	2	0
LYON	91	74	96	70	83	--	1.73	--	0.86	5.09	--	28.67	--	--	--	5	0	4	2
MOORHEAD	91	75	96	71	83	--	0.79	--	0.57	--	--	--	--	--	--	6	0	3	1
ONWARD	91	75	93	72	83	--	0.52	--	0.48	6.32	--	34.47	--	81	79	5	0	2	0
ROLLING FORK	91	75	94	72	83	--	0.26	--	0.15	--	--	--	--	--	--	6	0	2	0
SIDON	90	75	93	71	83	--	0.66	--	0.32	2.34	--	27.55	--	89	81	5	0	4	0
TUNICA	90	75	95	71	83	--	0.44	--	0.44	--	--	--	--	--	--	3	0	1	0
VICKSBURG	88	77	91	74	83	--	0.16	--	0.11	--	--	--	--	--	--	2	0	2	0
YAZOO CITY	90	75	92	72	83	--	1.79	--	0.59	--	--	--	--	--	--	5	0	3	2
STONEVILLE *	89	75	91	69	82	1	1.17	0.29	0.96	2.81	67	33.91	115	90	79	4	0	3	1

* Based on 1964-93 normals.

Delta Weather and Crop Summary: Hot weather prevailed, with highs consistently from 90 to 95°F and lows mostly in the lower to middle 70's F. Intense solar heating created unstable conditions most afternoons, resulting in scattered thunderstorms. Most areas received some rain during the week. All crops continued to develop well, with no irrigation needed.

Total Precipitation (Inches)

JUN 27 - JUL 3, 1999



(Continued from front cover)

the **Northwest**. Except in the **Mid-Atlantic States** and **interior Northwest**, soil moisture remained adequate in most areas for normal summer-crop development. By week's end, however, drier conditions overspread all but the **Nation's northern and southern tiers**. On the **Plains**, the very warm, dry pattern favored winter wheat maturation and harvesting.

Early in the week, hot conditions prevailed in the **Northeast**, while cool weather settled in across the **northern Plains** and **upper Midwest**. On Sunday, high temperatures reached daily-record levels in locations such as **Burlington, VT** (96°F) and **Syracuse, NY** (95°F). Meanwhile in **North Dakota**, daily-record lows included 34°F in **Williston** and 41°F in **Dickinson**. **Williston** also posted a daily-record low (38°F) on Monday. By midweek, cooler weather reached the **East**, where **Youngstown, OH** (44°F) notched a daily record.

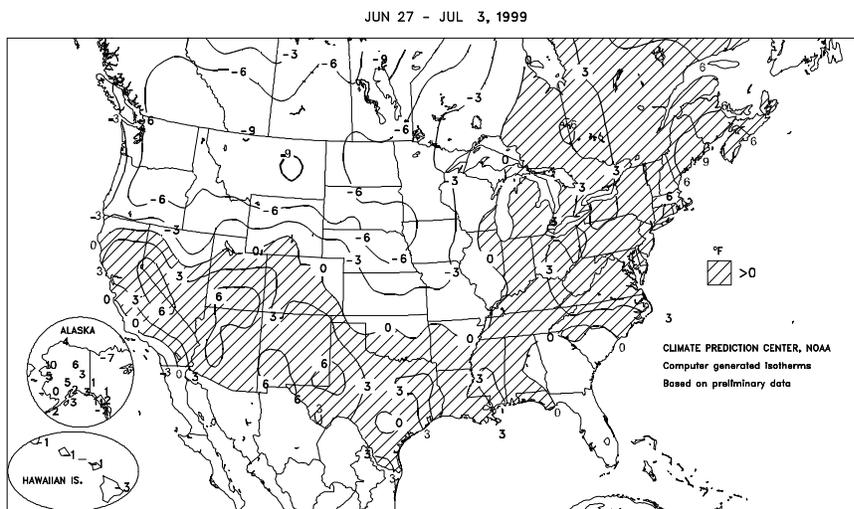
Warm weather dominated **California** and the **Southwest** for most of the week, along with an increase in seasonal (monsoon) rainfall across the latter region. On Monday, downtown **Sacramento, CA** recorded their first triple-digit heat of the year, 1 week later than their normal first occurrence. In **Bakersfield, CA**, another cool month (4.6°F below normal in June) came to an end, despite the late-June warmth (weekly maximum temperatures averaged 97.6°F, including highs of 102°F on June 30 and 104°F on July 1).

Weekly rainfall totaled generally 2 to 4 inches, with locally high amounts, in the **east-central Plains**, **Southeast**, **central and northern Appalachians**, and portions of the **northern Corn Belt**. Except across the **North** and **South**, most of the rain fell by midweek. On Tuesday, a daily-record total (6.60 inches) pelted **Savannah, GA**. In **southern Florida**, June rainfall reached 25.03 inches in Coral Springs and 19.65 inches in **Ft. Lauderdale**. **Hollywood, FL** netted 18.89 inches (194 percent of normal), a June-record total. **Atlanta, GA** measured rain on 8 consecutive days (June 23-30), tying their June record most recently noted in 1927. **Atlanta's** 8-day 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).

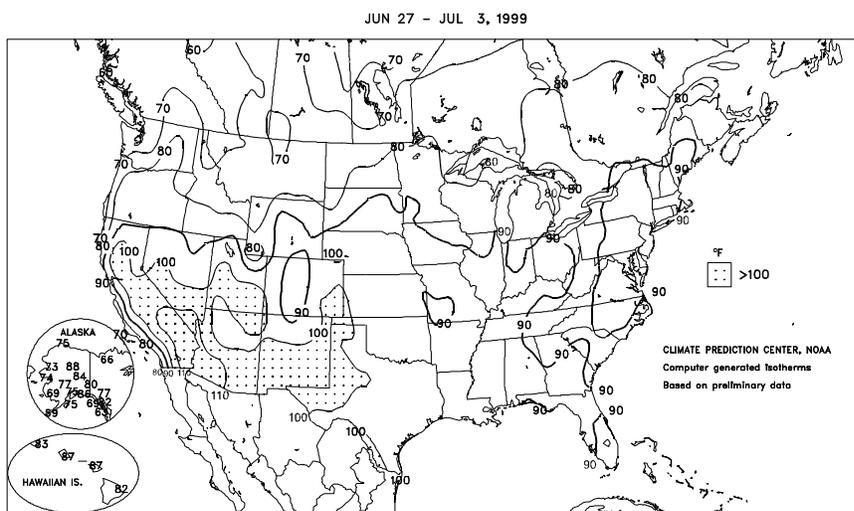
Meanwhile, much-needed rain fell in the **interior Northeast**, although extremely dry conditions persisted closer to the coast. In **Massachusetts**, June rainfall was the lowest on record in locations such as **Worcester** (0.32 inch, or 8 percent of normal) and **Boston** (a trace). **Boston's** 37-day (May 25 - June 30) streak without measurable precipitation—their longest since a 44-day spell in October-November 1924—ended with a 1.03-inch rainfall on July 1. In **Maryland**, **Baltimore's** June rainfall totaled 2.04 inches (56 percent of normal), leaving their 1-year (July 1998 - June 1999) precipitation at 23.90 inches (59 percent).

Late in the week, a storm system entered the **Northwest**, bringing unseasonably cool conditions. In addition, the system helped to dislodge heat—which had been building for 3 weeks—from the **Southwest**. From July 1-3, more than a half-dozen daily-record

Departure of Average Temperature from Normal (°F)



Extreme Maximum Temperature (°F)



lows were established in the **Northwest**, while a similar number of record highs were set or tied on the **High Plains**. (From July 4-6, an additional four dozen record highs were broken, primarily from the **Mid-Atlantic States** into **New England**.) On Friday in **Colorado**, highs reached daily-record levels in **Grand Junction** (101°F) and **Pueblo** (104°F). A day later in **Utah**, low temperatures were the highest on record in **Provo** (77°F, tying their July 1, 1990, standard) and **Heber City** (73°F, tying their July 24, 1929, mark). In **Wyoming**, **Casper** notched a daily record-tying high (98°F), just 5 days after a record-tying low of 40°F. Farther northwest, however, record lows on July 3 included 31°F in **Baker City, OR** and 36°F in **Yakima, WA**.

Warm weather (2 to 10°F above normal) continued on much of **mainland Alaska** for a fourth consecutive week. On Wednesday, **Barrow's** high (54°F) reached the 50-degree mark for the first time since September 18, 1998. A day later, **Barrow** logged a daily-record high of 75°F.

National Weather Data for Selected Cities

Weather Data for the Week Ending July 3, 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 Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP.		
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
AL	BIRMINGHAM	88	72	90	71	80	2	4.90	3.88	3.51	9.03	215	34.05	113	97	66	1	0	4	2
	HUNTSVILLE	87	71	89	70	79	1	2.24	1.20	1.62	5.64	123	32.79	105	97	67	0	0	3	2
	MOBILE	90	75	92	74	83	1	0.06	-1.26	0.06	7.64	136	28.16	87	98	64	5	0	1	0
	MONTGOMERY	89	72	91	69	80	0	4.19	3.12	3.20	8.47	193	26.16	90	96	62	4	0	3	2
AK	ANCHORAGE	67	52	75	49	60	2	0.02	-0.30	0.01	1.12	88	3.63	73	86	52	0	0	2	0
	BARROW	49	34	75	30	42	4	0.00	-0.14	0.00	0.36	106	0.82	77	94	64	0	3	0	0
	FAIRBANKS	76	54	84	51	65	3	0.21	-0.18	0.16	1.35	88	2.54	67	71	29	0	0	2	0
	JUNEAU	67	48	82	43	57	2	0.39	-0.41	0.17	2.69	77	29.15	137	98	53	0	0	4	0
	KODIAK	61	49	75	45	55	3	0.46	-0.47	0.31	9.77	190	32.41	101	86	56	0	0	3	0
	NOME	61	47	74	43	54	5	0.00	-0.37	0.00	0.65	51	4.02	89	91	56	0	0	0	0
AZ	FLAGSTAFF	85	50	89	47	68	4	0.00	-0.34	0.00	0.95	610	5.46	58	0	0	0	0	0	0
	PHOENIX	108	86	111	85	97	5	0.00	-0.10	0.00	0.00	0	1.42	51	41	18	7	0	0	0
	TUCSON	103	78	107	75	91	4	0.33	0.05	0.20	0.49	117	1.83	58	51	16	7	0	2	0
	YUMA	109	82	113	81	95	4	0.00	-0.03	0.00	0.00	0	1.77	177	55	20	7	0	0	0
AR	FORT SMITH	89	74	93	68	81	1	3.61	2.93	2.62	7.76	210	29.97	140	93	61	3	0	3	2
	LITTLE ROCK	89	74	92	69	81	0	0.37	-0.42	0.37	2.62	67	25.20	95	95	66	3	0	1	0
CA	BAKERSFIELD	98	71	104	64	84	3	0.00	-0.01	0.00	0.00	0	5.42	142	45	20	7	0	0	0
	EUREKA	61	50	62	47	56	-1	0.00	-0.04	0.00	0.15	29	27.19	130	89	68	0	0	0	0
	FRESNO	100	68	106	61	84	4	0.00	0.00	0.00	0.20	286	5.96	86	61	17	7	0	0	0
	LOS ANGELES	73	64	74	63	68	1	0.00	0.00	0.00	0.98	--	7.18	93	92	70	0	0	0	0
	REDDING	99	70	106	62	85	5	0.00	-0.07	0.00	0.41	71	16.93	90	40	14	6	0	0	0
	SACRAMENTO	95	61	103	55	78	4	0.00	-0.03	0.00	0.03	23	9.91	92	74	21	5	0	0	0
	SAN DIEGO	68	61	72	60	65	-4	0.00	0.00	0.00	0.04	44	5.08	82	87	70	0	0	0	0
	SAN FRANCISCO	76	53	87	51	65	2	0.00	-0.02	0.00	0.18	150	12.87	105	85	44	0	0	0	0
CO	ALAMOSA	87	46	91	40	66	3	0.04	-0.16	0.04	0.36	47	2.86	100	77	15	1	0	1	0
	CO SPRINGS	85	56	94	47	70	2	0.01	-0.57	0.01	1.37	55	13.02	175	84	28	2	0	1	0
	DENVER	87	57	95	48	72	1	0.05	-0.37	0.05	2.58	131	11.59	138	73	26	2	0	1	0
	GRAND JUNCTION	97	64	101	56	80	4	0.00	-0.12	0.00	0.60	107	3.74	91	39	14	7	0	0	0
	PUEBLO	94	60	104	51	77	2	0.00	-0.37	0.00	0.19	13	8.01	162	79	20	6	0	0	0
CT	BRIDGEPORT	82	69	87	65	76	4	1.03	0.20	0.43	1.39	36	20.66	96	95	62	0	0	4	0
	HARTFORD	89	66	97	59	77	5	0.33	-0.45	0.19	0.97	24	18.35	82	93	47	4	0	4	0
DC	WASHINGTON	88	74	93	70	81	2	0.36	-0.45	0.16	2.45	66	17.65	94	92	62	3	0	4	0
DE	WILMINGTON	86	72	92	69	79	4	0.29	-0.61	0.16	1.91	48	21.75	106	93	61	2	0	3	0
FL	DAYTONA BEACH	87	73	91	72	80	-1	2.06	0.69	0.83	8.98	137	19.58	93	92	62	1	0	4	2
	JACKSONVILLE	87	71	90	69	79	-2	1.54	0.24	0.55	7.79	126	17.25	74	97	64	2	0	7	1
	KEY WEST	89	78	90	72	83	-1	1.07	0.05	0.87	5.83	106	14.85	92	88	71	3	0	4	1
	MIAMI	87	74	89	72	80	-2	3.21	1.42	1.66	12.99	130	22.71	89	91	64	0	0	5	2
	ORLANDO	87	72	89	71	79	-3	0.65	-1.13	0.50	13.91	173	25.56	117	97	59	0	0	5	1
	PENSACOLA	89	77	91	76	83	1	0.30	-1.34	0.12	6.03	85	23.57	77	94	61	2	0	5	0
	TALLAHASSEE	89	72	92	71	81	0	2.83	0.95	1.35	7.76	100	24.72	75	98	58	3	0	7	2
	TAMPA	88	74	90	72	81	-1	2.46	1.05	1.57	6.39	105	12.36	67	94	60	1	0	3	2
	WEST PALM BEACH	86	73	89	71	79	-2	1.25	-0.45	0.60	13.99	160	25.67	95	95	66	0	0	6	1
GA	ATHENS	86	71	90	69	78	0	0.58	-0.44	0.29	6.95	159	21.51	79	100	68	1	0	4	0
	ATLANTA	83	70	87	68	77	-1	1.68	0.70	1.07	5.83	145	22.03	79	100	71	0	0	4	1
	AUGUSTA	88	70	91	68	79	0	1.59	0.62	1.00	7.44	164	21.46	87	98	61	2	0	6	1
	COLUMBUS	87	72	91	71	80	-1	1.45	0.32	0.69	2.91	63	15.50	55	95	63	4	0	3	2
	MACON	87	71	92	69	79	-2	4.90	3.99	1.61	7.50	188	20.42	81	100	68	3	0	6	3
	SAVANNAH	85	71	88	69	78	-3	9.49	8.10	6.59	14.96	241	28.50	119	100	72	0	0	7	4
HI	HILO	81	65	82	64	73	-3	0.60	-1.12	0.20	4.87	69	72.35	109	90	60	0	0	6	0
	HONOLULU	85	72	87	70	79	-1	0.02	-0.10	0.01	0.11	19	6.36	57	82	50	0	0	2	0
	KAHULUI	86	68	87	61	77	-2	0.01	-0.05	0.00	0.59	203	7.05	56	83	47	0	0	1	0
	LIHUE	83	72	83	70	77	-1	0.31	-0.10	0.10	1.79	95	15.88	72	84	62	0	0	6	0
ID	BOISE	80	53	85	47	66	-5	0.00	-0.13	0.00	0.47	55	6.29	90	62	19	0	0	0	0
	LEWISTON	74	54	81	45	64	-7	0.00	-0.22	0.00	1.50	113	6.43	91	69	28	0	0	0	0
	POCATELLO	80	49	84	38	64	-3	0.00	-0.18	0.00	0.84	77	8.03	117	63	22	0	0	0	0
IL	CHICAGO/O'HARE	84	65	92	55	75	3	0.57	-0.29	0.48	5.45	133	25.26	152	94	54	1	0	5	0
	MOLINE	84	63	91	56	74	-1	0.97	-0.10	0.85	6.07	128	21.01	113	96	55	1	0	4	1
	PEORIA	83	66	91	58	75	0	0.66	-0.32	0.47	3.69	84	18.10	102	92	58	1	0	5	0
	ROCKFORD	81	63	88	53	72	0	0.67	-0.35	0.28	6.16	125	22.69	132	94	59	0	0	5	0
	SPRINGFIELD	83	65	91	58	74	-2	0.57	-0.23	0.32	3.28	87	15.85	90	96	59	1	0	5	0
IN	EVANSVILLE	84	69	90	61	76	-1	2.52	1.68	1.34	6.69	173	28.30	122	95	62	1	0	4	2
	FORT WAYNE	83	66	92	59	74	1	0.52	-0.29	0.27	1.29	33	18.10	104	93	52	1	0	3	0
	INDIANAPOLIS	83	69	91	60	76	1	0.69	-0.22	0.36	2.93	75	22.41	111	96	64	1	0	3	0
	SOUTH BEND	81	65	89	56	73	1	2.21	1.26	2.08	4.68	104	19.68	105	93	55	0	0	4	1
IA	BURLINGTON	86	66	94	57	76	1	1.35	0.39	0.78	7.62	171	22.90	135	87	55	3	0	6	1
	CEDAR RAPIDS	80	59	89	50	70	-3	0.42	-0.60	0.29	7.48	151	22.18	137	98	60	0	0	3	0
	DES MOINES	80	63	93	53	72	-4	0.27	-0.69	0.15	3.28	68	16.95	104	92	59	1	0	5	0
	DUBUQUE	79	60	88	51	70	-1	0.65	-0.26	0.43	5.12	114	20.22	113	96	60	0	0	4	0
	SIoux CITY	77	58	93	49	67	-7	2.19	1.38	1.36	8.69	215	20.59	156	96	61	1	0	6	2
	WATERLOO	80	60	89	51	70	-2	5.90	4.80	5.49	11.11	225	26.67	162	95	58	0	0	6	1
KS	CONCORDIA	82	64	94	57	73	-4	1.40	0.46	0.72	3.32	68	18.81	125	93	55	2	0	4	2
	DODGE CITY	87	66	94	55	76	-2	1.77	1.03	1.46	4.43	130	14.58	131	94	46	3	0	4	1
	GOODLAND	85	61	98	54	73	0	0.97	0.27	0.67	6.17	176	13.48	132	90	37	2	0	3	1
	TOPEKA	83	66	91	57	75	-2	2.93	1.85	1.69	6.28	106	24.38	136	93	60	2	0	4	2

Weather Data for the Week Ending July 3, 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	88	70	95	61	79	-1	1.08	0.20	0.75	7.71	165	24.53	163	92	54	3	0	3	1
KY JACKSON	84	68	89	62	76	2	1.01	-0.08	0.66	2.70	57	21.41	83	94	64	0	0	4	1
KY LEXINGTON	83	68	89	60	76	1	2.65	1.67	1.64	5.59	136	21.46	94	95	67	0	0	4	2
KY LOUISVILLE	85	71	93	62	78	2	3.20	2.31	2.42	8.33	215	29.31	124	96	66	1	0	5	1
KY PADUCAH	87	70	93	64	79	1	1.80	0.85	1.69	9.00	202	30.77	116	97	59	2	0	5	1
LA BATON ROUGE	91	76	93	73	84	2	0.09	-1.19	0.09	6.76	134	25.25	83	96	56	7	0	1	0
LA LAKE CHARLES	90	78	91	75	84	2	0.16	-0.98	0.16	9.97	183	24.90	96	94	62	4	0	1	0
LA NEW ORLEANS	90	76	92	75	83	2	1.01	-0.40	0.92	13.21	205	25.60	81	93	60	6	0	3	1
LA SHREVEPORT	92	76	93	73	84	2	0.00	-0.92	0.00	7.98	170	38.30	153	94	57	6	0	0	0
ME CARIBOU	78	58	88	51	68	4	1.38	0.60	0.65	3.64	112	14.78	95	96	52	0	0	3	1
ME PORTLAND	80	64	86	61	72	6	0.68	-0.08	0.38	1.14	30	20.94	95	96	50	0	0	4	0
MD BALTIMORE	87	71	92	68	79	3	0.49	-0.35	0.26	2.32	58	17.12	84	96	61	2	0	4	0
MA BOSTON	86	70	93	63	78	7	1.04	0.37	1.03	1.03	31	16.29	77	86	50	3	0	2	1
MA WORCESTER	82	65	90	60	74	6	2.00	1.12	1.44	2.13	50	19.33	82	92	53	1	0	4	1
MI ALPENA	74	55	81	46	65	0	1.54	0.85	0.91	3.96	119	11.40	85	97	59	0	0	4	1
MI GRAND RAPIDS	80	62	86	57	71	1	2.64	1.84	1.20	4.52	113	19.66	120	99	59	0	0	3	3
MI HOUGHTON LAKE	76	56	84	47	66	0	1.47	0.83	0.67	6.55	200	14.20	111	98	59	0	0	3	2
MI LANSING	81	60	89	56	71	1	3.62	2.88	1.69	6.15	155	17.85	123	99	60	0	0	4	3
MI MARQUETTE	71	52	82	44	62	-2	2.25	1.51	0.74	4.41	117	21.47	133	90	53	0	0	4	3
MI MUSKEGON	78	61	85	52	69	1	1.41	0.93	0.83	3.60	142	17.01	118	99	53	0	0	4	1
MN DULUTH	69	51	75	47	60	-4	0.94	0.07	0.39	5.07	121	14.11	105	98	61	0	0	5	0
MN INT'L FALLS	73	48	84	40	61	-4	0.85	-0.08	0.52	3.35	78	13.49	123	98	51	0	0	6	1
MN MINNEAPOLIS	77	58	91	49	68	-4	1.18	0.29	0.57	4.27	97	19.20	137	94	51	1	0	4	1
MN ROCHESTER	75	56	86	48	65	-4	2.09	1.17	1.29	4.33	105	20.00	148	97	60	0	0	5	1
MS ST. CLOUD	75	54	89	44	64	-4	1.50	0.59	0.64	5.03	102	13.89	105	96	53	0	0	5	1
MS JACKSON	92	76	94	74	84	3	0.84	0.00	0.72	4.46	125	24.38	81	94	54	5	0	2	1
MS MERIDIAN	90	74	93	72	82	2	0.36	-0.65	0.28	3.40	83	22.54	72	99	59	5	0	2	0
MS TUPELO	89	74	93	72	82	2	0.66	-0.24	0.58	6.96	163	39.78	129	93	61	4	0	4	1
MO COLUMBIA	83	65	91	57	74	-1	0.99	0.08	0.47	3.44	73	18.56	93	98	66	2	0	6	0
MO KANSAS CITY	81	64	91	55	73	-4	3.89	2.85	2.30	8.67	168	28.26	157	97	66	1	0	3	2
MO SAINT LOUIS	85	69	94	62	77	-2	2.38	1.49	2.22	7.59	185	24.54	129	92	57	2	0	3	1
MO SPRINGFIELD	84	67	89	58	76	-1	2.60	1.65	1.42	4.78	88	27.41	126	100	67	0	0	5	2
MT BILLINGS	73	51	76	44	62	-8	0.64	0.32	0.28	2.26	107	7.41	81	87	27	0	0	5	0
MT BUTTE	67	41	75	32	54	-6	0.16	-0.25	0.07	2.05	89	7.51	111	88	30	0	1	4	0
MT GLASGOW	71	50	75	42	60	-8	0.63	0.17	0.20	2.93	127	9.20	159	90	36	0	0	5	0
MT GREAT FALLS	68	45	73	40	57	-9	0.70	0.29	0.38	2.02	80	6.93	77	89	36	0	0	3	0
MT KALISPELL	65	41	72	32	53	-8	0.93	0.54	0.38	2.18	93	7.81	87	98	41	0	1	6	0
MT MILES CITY	74	53	80	45	64	-8	0.55	0.02	0.28	2.24	75	7.20	88	90	29	0	0	5	0
MT MISSOULA	68	44	73	39	56	-8	0.50	0.20	0.28	2.79	148	6.27	82	87	32	0	0	2	0
NE GRAND ISLAND	78	60	93	53	69	-6	1.66	0.88	0.76	6.56	155	17.33	127	96	58	2	0	5	2
NE LINCOLN	81	63	94	52	72	-5	4.07	3.26	2.03	5.69	135	19.02	134	96	57	2	0	5	2
NE NORFOLK	76	57	93	49	67	-7	0.84	-0.09	0.71	5.45	113	16.57	119	96	58	1	0	3	1
NE NORTH PLATTE	79	57	95	51	68	-3	2.45	1.68	0.90	5.58	151	11.57	104	96	52	1	0	6	3
NE OMAHA	80	62	94	54	71	-4	1.37	0.54	0.87	3.76	89	20.04	134	97	60	1	0	4	1
NE SCOTTSBLUFF	84	55	100	48	70	-2	1.36	0.80	1.27	3.72	129	9.97	108	93	35	1	0	2	1
NE VALENTINE	78	55	98	48	67	-5	2.53	1.85	0.91	5.31	168	12.30	127	92	46	1	0	5	2
NV ELY	90	47	94	38	69	4	0.00	-0.17	0.00	1.66	175	4.08	75	53	13	5	0	0	0
NV LAS VEGAS	108	82	112	75	95	6	0.00	-0.04	0.00	0.14	100	0.95	48	22	11	7	0	0	0
NV RENO	92	59	97	51	76	6	0.00	-0.08	0.00	0.06	12	2.95	68	48	14	5	0	0	0
NV WINNEMUCCA	91	46	95	39	68	-1	0.00	-0.13	0.00	1.21	134	4.56	96	55	15	5	0	0	0
NH CONCORD	85	63	94	56	74	6	1.77	1.04	0.83	2.80	80	17.46	101	97	48	2	0	5	2
NJ NEWARK	89	73	95	69	81	5	0.28	-0.58	0.28	0.69	19	20.40	93	91	58	4	0	1	0
NM ALBUQUERQUE	96	67	100	64	82	4	0.20	-0.01	0.12	0.72	103	3.06	98	47	16	6	0	2	0
NY ALBANY	86	62	93	55	74	4	1.58	0.80	0.66	2.57	65	16.46	92	95	56	1	0	5	1
NY BINGHAMTON	82	61	89	50	71	4	2.69	1.86	2.23	3.34	84	16.28	90	93	57	0	0	6	1
NY BUFFALO	82	62	91	51	72	3	0.72	-0.03	0.59	1.94	50	16.28	93	92	54	1	0	4	1
NY ROCHESTER	84	60	94	50	72	4	1.35	0.70	0.59	2.78	85	15.46	103	95	52	1	0	5	1
NY SYRACUSE	86	61	95	53	73	5	1.45	0.55	0.84	2.75	66	15.86	88	93	51	2	0	6	1
NC ASHEVILLE	83	66	87	64	74	3	1.73	0.74	0.91	5.31	113	22.78	94	100	64	0	0	6	2
NC CHARLOTTE	87	71	89	69	79	1	0.11	-0.72	0.11	4.02	107	17.14	77	98	63	0	0	1	0
NC GREENSBORO	87	71	89	69	79	3	2.91	1.95	1.89	5.19	122	19.41	91	96	59	0	0	3	2
NC HATTERAS	84	76	85	74	80	3	0.21	-0.80	0.20	3.85	85	25.08	97	89	74	0	0	2	0
NC RALEIGH	91	72	95	68	82	5	0.21	-0.66	0.16	1.32	33	16.85	78	96	57	5	0	4	0
NC WILMINGTON	88	74	91	70	81	2	1.20	-0.47	0.78	4.08	61	26.71	105	89	62	1	0	3	1
ND BISMARCK	74	53	82	47	63	-5	1.61	1.02	0.71	4.55	154	14.89	176	94	50	0	0	7	1
ND DICKINSON	72	51	78	41	61	-6	1.39	0.74	0.52	2.92	84	10.42	111	95	48	0	0	5	1
ND FARGO	75	55	91	50	65	-4	0.61	-0.04	0.28	2.85	92	10.54	110	94	54	1	0	5	0
ND GRAND FORKS	74	53	87	48	64	-4	0.29	-0.38	0.11	3.61	116	12.78	148	95	52	0	0	4	0
ND JAMESTOWN	74	54	86	49	64	-5	1.54	0.82	1.21	3.72	113	13.43	155	94	50	0	0	4	1
ND WILLISTON	75	45	79	34	60	-8	1.26	0.74	0.87	3.04	122	9.34	126	93	37	0	0	4	1
OH AKRON-CANTON	84	62	90	51	73	3	1.51	0.68	0.91	2.36	66	16.99	94	97	61	1	0	4	1
OH CINCINNATI	82	66	90	56	74	0	1.15	0.22	0.62	3.37	79	18.54	85	97	64	1	0	3	1
OH CLEVELAND	84	63	92	51	74	3	0.62	-0.22	0.21	1.63	41	14.42	81	97	57	1	0	4	0
OH COLUMBUS	87	69	95	58	78	6	1.14	0.18	0.84	1.49	33	15.45	80	95	49	3	0	4	1
OH DAYTON	82	67	90	58	75	2	2.01	1.16	0.88	4.24	101	19.26	100	96	60	1	0	4	3
OH MANSFIELD	82	62	88	50	72	1	1.24	0.34	1.08	2.76	64	18.67	95	98	54	0	0	5	1

Based on 1961-90 normals

Weather Data for the Week Ending July 3, 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	50 INCH OR MORE
OK TOLEDO	84	63	91	56	74	3	0.86	0.02	0.86	1.86	46	17.92	112	94	52	1	0	1	1
OK YOUNGSTOWN	83	59	88	44	71	2	1.40	0.45	0.71	3.14	72	20.10	110	96	55	0	0	4	1
OK OKLAHOMA CITY	88	73	91	67	80	1	0.19	-0.59	0.10	8.61	186	25.09	139	91	61	4	0	2	0
OK TULSA	87	73	93	64	80	-1	0.89	0.05	0.41	5.33	112	29.91	142	91	60	3	0	4	0
OR ASTORIA	63	52	67	48	57	-1	0.65	0.24	0.22	3.93	154	53.78	154	95	66	0	0	7	0
OR BURNS	76	39	84	33	58	-5	0.00	-0.13	0.00	0.23	26	5.28	101	80	33	0	0	0	0
OR EUGENE	72	48	85	42	60	-5	0.24	0.04	0.15	0.90	60	27.24	105	87	36	0	0	2	0
OR MEDFORD	82	53	91	45	67	-3	0.00	-0.08	0.00	0.00	0	9.88	107	74	22	2	0	0	0
OR PENDLETON	76	52	84	44	64	-6	0.00	-0.10	0.00	0.51	76	5.06	77	73	27	0	0	0	0
OR PORTLAND	67	54	78	51	61	-5	0.21	-0.02	0.16	1.92	122	24.82	132	91	53	0	0	4	0
OR SALEM	70	51	82	45	61	-4	0.10	-0.11	0.10	1.53	109	30.85	152	92	49	0	0	1	0
PA ALLENTOWN	87	68	93	63	78	5	0.05	-0.83	0.05	1.00	24	16.84	79	3	0	1	1	1	0
PA ERIE	83	64	89	51	73	4	1.06	0.19	0.71	3.06	69	19.01	102	90	51	0	0	3	1
PA MIDDLETOWN	90	72	96	66	81	7	0.18	-0.67	0.18	2.24	53	16.21	78	87	53	4	0	1	0
PA PHILADELPHIA	87	72	91	69	79	4	0.41	-0.52	0.27	1.53	37	20.40	97	90	61	3	0	3	0
PA PITTSBURGH	84	64	88	50	74	3	2.16	1.29	0.59	2.69	66	19.52	102	96	52	0	0	5	3
PA WILKES-BARRE	84	66	90	56	75	5	1.74	0.83	0.94	2.91	66	16.66	94	1	0	2	2	1	1
PA WILLIAMSPORT	85	65	90	54	75	4	1.50	0.52	0.88	3.00	63	17.95	88	95	60	2	0	6	1
RI PROVIDENCE	87	69	94	65	78	7	0.12	-0.61	0.07	0.22	6	21.55	94	93	52	3	0	4	0
SC BEAUFORT	85	71	89	69	78	-3	2.09	0.65	1.44	8.65	129	21.52	87	98	73	0	0	4	2
SC CHARLESTON	84	71	90	70	78	-3	2.44	0.87	0.76	3.08	44	16.47	66	98	69	1	0	5	3
SC COLUMBIA	88	72	91	70	80	0	0.43	-0.76	0.17	4.65	88	18.29	71	97	61	1	0	4	0
SC GREENVILLE	88	71	90	69	79	2	0.18	-0.93	0.16	4.67	89	19.00	69	94	58	1	0	2	0
SD ABERDEEN	76	55	90	49	65	-5	1.82	1.10	1.12	5.24	152	11.72	118	97	53	1	0	4	2
SD HURON	76	56	93	51	66	-6	1.31	0.59	0.37	3.48	95	10.48	92	98	56	1	0	7	0
SD RAPID CITY	73	52	81	46	62	-7	0.36	-0.25	0.19	5.24	159	12.56	128	95	54	0	0	3	0
SD SIOUX FALLS	75	56	91	47	66	-6	1.73	1.02	0.59	3.40	92	15.70	131	97	54	1	0	6	1
TN BRISTOL	85	67	89	65	76	3	1.75	0.83	0.73	4.49	114	19.64	92	99	59	0	0	5	2
TN CHATTANOOGA	86	71	91	67	79	1	2.71	1.75	1.02	7.11	179	33.88	119	98	64	2	0	5	3
TN KNOXVILLE	86	69	90	64	77	1	2.96	1.94	1.58	6.21	140	28.92	113	97	60	1	0	4	2
TN MEMPHIS	90	75	94	70	82	1	0.10	-0.71	0.05	2.42	62	30.97	111	92	61	2	0	2	0
TN NASHVILLE	87	71	91	65	79	1	2.05	1.21	0.89	4.31	109	26.43	104	93	57	1	0	4	2
TX ABILENE	95	75	98	73	85	2	0.04	-0.51	0.04	4.58	149	12.69	111	87	42	7	0	1	0
TX AMARILLO	90	68	96	62	79	2	0.00	-0.74	0.00	3.61	91	18.23	192	85	37	4	0	0	0
TX AUSTIN	93	76	94	71	84	1	0.16	-0.48	0.15	3.53	89	15.72	92	94	54	7	0	2	0
TX BEAUMONT	90	77	91	76	84	1	0.21	-1.05	0.19	10.24	167	22.08	83	95	63	4	0	3	0
TX BROWNSVILLE	92	78	93	76	85	1	0.29	-0.23	0.28	2.59	88	11.09	105	93	60	6	0	2	0
TX CORPUS CHRISTI	91	78	92	77	85	2	0.39	-0.26	0.21	6.37	175	12.46	94	96	66	7	0	2	0
TX DEL RIO	95	78	97	75	86	2	0.00	-0.47	0.00	5.62	243	11.02	129	88	46	7	0	0	0
TX EL PASO	102	78	106	73	90	8	0.28	0.02	0.26	1.46	185	1.62	67	51	21	7	0	2	0
TX FORT WORTH	95	78	96	77	87	3	0.03	-0.53	0.03	0.99	31	15.40	84	85	48	7	0	1	0
TX GALVESTON	90	82	91	81	86	3	0.00	-0.98	0.00	2.35	49	11.46	62	83	64	5	0	0	0
TX HOUSTON	93	78	94	75	85	3	0.02	-0.97	0.02	5.28	98	16.83	73	93	53	7	0	1	0
TX LUBBOCK	96	73	101	69	84	5	0.18	-0.41	0.17	4.52	151	13.84	168	81	32	7	0	2	0
TX MIDLAND	100	75	104	73	88	6	0.00	-0.37	0.00	2.87	167	5.71	93	77	26	7	0	0	0
TX SAN ANGELO	95	76	98	74	85	4	0.00	-0.36	0.00	4.70	191	11.04	111	84	41	7	0	0	0
TX SAN ANTONIO	92	76	94	75	84	0	0.51	-0.16	0.51	3.88	96	11.14	70	90	54	7	0	1	1
TX VICTORIA	91	76	92	74	83	0	0.01	-0.97	0.01	4.83	91	17.57	98	99	60	7	0	1	0
TX WACO	98	78	99	76	88	4	0.00	-0.59	0.00	0.51	14	11.22	65	7	0	0	0	0	0
TX WICHITA FALLS	94	76	96	73	85	2	0.05	-0.54	0.03	4.62	124	22.11	143	89	59	6	0	2	0
UT SALT LAKE CITY	89	59	100	55	74	0	0.00	-0.18	0.00	0.82	81	9.48	103	64	21	3	0	0	0
VT BURLINGTON	87	65	96	59	76	7	1.37	0.56	0.40	2.14	56	12.13	79	89	39	1	0	6	0
VA LYNCHBURG	88	69	93	65	78	4	1.32	0.45	0.70	1.96	51	15.13	75	95	52	3	0	4	1
VA NORFOLK	90	75	92	74	83	6	0.16	-0.85	0.16	3.59	84	20.24	92	90	55	5	0	1	0
VA RICHMOND	87	72	92	70	80	3	4.64	3.66	2.46	6.57	162	22.13	106	96	64	2	0	4	2
VA ROANOKE	89	71	94	67	80	6	0.40	-0.38	0.24	1.26	36	14.85	75	87	49	3	0	2	0
VA WASH/DULLES	86	69	92	66	78	4	1.40	0.56	0.71	3.73	87	20.08	100	95	61	2	0	3	2
WA OLYMPIA	63	49	69	44	56	-5	0.35	0.08	0.16	2.07	120	38.58	149	94	58	0	0	4	0
WA QUILLAYUTE	60	48	64	42	54	-3	1.68	1.07	0.45	5.70	169	72.10	132	100	79	0	0	7	0
WA SEATTLE-TACOMA	63	51	65	48	57	-6	0.42	0.16	0.32	2.21	139	23.16	125	93	60	0	0	5	0
WA SPOKANE	70	47	75	40	59	-7	0.01	-0.21	0.01	1.36	101	8.37	94	78	29	0	0	1	0
WA YAKIMA	76	48	82	36	62	-6	0.01	-0.07	0.01	0.18	32	3.44	82	75	28	0	0	1	0
WV BECKLEY	83	66	86	63	75	6	0.88	-0.12	0.32	1.38	32	17.73	85	95	57	0	0	6	0
WV CHARLESTON	88	67	92	60	78	4	0.78	-0.20	0.30	1.45	36	16.56	79	99	54	4	0	4	0
WV ELKINS	83	62	87	58	73	5	0.73	-0.31	0.40	2.05	42	21.07	93	99	57	0	0	4	0
WV HUNTINGTON	90	70	94	59	80	6	0.97	0.05	0.78	1.39	35	15.78	75	93	51	5	0	5	1
WI EAU CLAIRE	77	56	91	47	67	-3	1.93	1.00	0.82	4.75	104	19.26	132	93	50	1	0	6	2
WI GREEN BAY	77	56	87	49	66	-1	1.42	0.66	0.57	4.53	122	13.04	99	98	62	0	0	5	1
WI LACROSSE	80	59	90	49	69	-2	1.20	0.30	0.89	2.63	61	17.40	122	92	54	1	0	4	1
WI MADISON	79	60	86	51	70	0	1.47	0.66	0.72	5.89	148	20.00	140	93	55	0	0	4	1
WI MILWAUKEE	78	64	89	54	71	2	0.61	-0.18	0.59	6.98	196	23.58	151	94	58	0	0	2	1
WI CASPER	85	48	98	42	67	-1	0.26	-0.05	0.21	1.82	114	6.61	90	84	20	2	0	3	0
WY CHEYENNE	80	51	93	43	65	0	0.02	-0.45	0.01	2.13	93	10.13	129	79	28	1	0	2	0
WY LANDER	82	48	91	40	65	-3	0.00	-0.25	0.00	1.08	69	9.94	122	76	17	2	0	0	0
WY SHERIDAN	74	46	79	40	60	-6	0.30	-0.07	0.17	1.71	72	8.56	97	91	41	0	0	3	0

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

National Agricultural Summary

June 28 - July 4, 1999

HIGHLIGHTS

Below-normal temperatures hindered crop development in the western Corn Belt, central Great Plains, and across the Northern United States from the Great Lakes region to the Pacific Coast. Seasonal temperatures aided development in the lower Mississippi Valley, southern Great Plains, and

Southwest, but crops needed more heat to accelerate growth. Parts of the Atlantic Coastal Plains and Northeast received much-needed precipitation as hot conditions dominated late in the week. Heavy rains hindered harvest progress and other fieldwork in parts of the central Great Plains.

Corn: Seven percent of the acreage was at the silking stage or beyond, compared with 8 percent last year and the 5-year average progress of 6 percent. Above-normal temperatures accelerated development in the eastern Corn Belt, especially in Kentucky, where more than half of the acreage was silking. Rains eased moisture shortages in parts of Ohio, but fields in most areas of the State continued to be stressed by dry soils. Development was slower in the western Corn Belt and adjacent areas of the Great Plains, where below-normal temperatures hindered development. Excessive moisture continued to hinder weed control efforts in parts of Iowa, and some fields continued to appear yellow. Fields rapidly matured in central and southern Texas, where harvest activity slowly gained momentum.

Soybeans: Ninety-seven percent of the acreage was emerged and 16 percent was blooming, compared with 95 percent emerged and 15 percent blooming by this date last year. Normally, 10 percent of the crop would be blooming. Cool weather hindered development in the western Corn Belt and central Great Plains. Emergence lagged behind last year in Kansas, and blooming progress was slightly behind normal in Iowa, Minnesota, and Kansas. Warmer weather aided development in the eastern Corn Belt and lower Mississippi Valley. In the Atlantic Coastal Plains, emergence was hindered by dry soils in some areas, but emerged fields rapidly developed due to warm weather. Rain boosted emergence and growth in the Southeast.

Winter Wheat: The harvest was 45 percent complete, well behind last year's 66 percent and 8 percentage points behind the average for this date. Rain hindered harvesting in Kansas and Oklahoma early in the week, but progress rapidly accelerated late in the week, as warm weather quickly dried wet soils. Kansas growers reaped more than one-third of their acreage, and one-fourth of the acreage in Oklahoma was harvested. Some fields in Kansas were damaged by hail and strong winds. Dry weather aided rapid progress in Texas and the eastern Corn Belt, especially in Illinois, where nearly three-fourths of the crop was harvested. Harvest began in Nebraska, but none of the crop was harvested in the northern Great Plains and Pacific Northwest due to slow ripening.

Cotton: Sixty-six percent of the acreage was at the squaring stage or beyond, 3 percentage points behind last year and the average for this date. Sixteen percent was squaring, behind last year's 24 percent and the normal progress of 19 percent. Seasonal temperatures and dry weather aided development and improved crop conditions in most areas of the lower Mississippi Valley. In the Southeast, widespread rain benefited crops, especially in Georgia, where soils had been very dry. Fields were stressed by excessive moisture in parts of Alabama and Mississippi. In Texas, dry weather boosted conditions, but development lagged due to a lack of heat. Warmer weather boosted development in California.

Small grains: Spring wheat was 49 percent headed, well behind the rapid pace last year, but slightly ahead of the 5-year average. Barley headed was at 43 percent, behind last year's 56 percent and the 47-percent average for the date. Seventy-two percent of the oat acreage was headed, 5 percentage points ahead of the 5-year average, but 9 percentage points behind last year's rapid development. Small grain development accelerated in the northern Great Plains, despite below-normal temperatures.

Rice: Seventeen percent of the rice acreage was headed, equal to this date a year ago and 5 percentage points ahead of normal. Above-normal temperatures accelerated development in the western Gulf Coast region, where more than half of the acreage was headed. Fields in inland areas of the Mississippi Delta were just beginning to develop heads. Hot weather stimulated development in California, but none of the crop was headed.

Other crops: Sorghum planting was 95 percent complete, 2 percentage points behind last year and the average. Progress in Oklahoma was halted by heavy rains and persistent muddy field conditions. Forty-one percent of the peanut acreage was pegging, well behind last year's pace and behind normal in the major peanut-producing areas of Georgia and Alabama.

Crop Progress and Condition

Week Ending July 4, 1999

Soybeans Percent Emerged				
	Jul 4 1999	Prev Week	Prev Year	5-Yr Avg
AL	90	84	88	NA
AR	90	82	91	88
GA	92	82	83	NA
IL	99	97	94	NA
IN	100	100	92	NA
IA	100	99	100	100
KS	86	80	97	NA
KY	90	85	77	81
LA	100	99	98	95
MI	100	100	97	97
MN	99	98	99	99
MS	99	97	97	95
MO	91	86	90	NA
NE	100	94	100	100
NC	78	65	79	NA
OH	100	100	100	94
SC	86	65	86	NA
SD	99	96	100	NA
TN	93	83	81	NA
19 Sts	97	94	95	NA

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

Winter Wheat Percent Harvested				
	Jul 4 1999	Prev Week	Prev Year	5-Yr Avg
AR	97	88	100	94
CA	75	45	49	77
CO	11	0	31	25
GA	100	99	100	99
ID	0	0	0	0
IL	74	46	84	54
IN	51	36	66	34
KS	44	7	93	66
MI	3	0	9	2
MO	58	36	83	61
MT	0	0	0	0
NE	1	0	23	16
NC	88	75	94	87
OH	20	6	26	10
OK	86	59	100	94
OR	0	0	0	0
SD	0	0	2	1
TX	81	58	94	84
WA	0	0	0	0
19 Sts	45	24	66	53

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

Sorghum Percent Planted				
	Jul 4 1999	Prev Week	Prev Year	5-Yr Avg
AR	100	100	100	100
CO	100	94	99	96
IL	99	98	81	91
KS	96	90	99	98
LA	100	100	99	99
MS	100	100	100	100
MO	100	94	100	98
NE	100	99	100	100
NM	97	90	70	93
OK	89	89	95	92
SD	98	92	98	96
TX	93	86	95	97
12 Sts	95	90	97	97

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

Sorghum Percent Headed				
	Jul 4 1999	Prev Week	Prev Year	5-Yr Avg
AR	16	NA	39	20
CO	0	NA	0	0
IL	0	NA	0	0
KS	0	NA	3	2
LA	65	NA	41	37
MS	44	NA	41	41
MO	1	NA	0	0
NE	0	NA	0	0
NM	0	NA	0	0
OK	4	NA	3	4
SD	1	NA	0	0
TX	46	NA	51	58
12 Sts	19	NA	22	24

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

Soybeans Percent Blooming				
	Jul 4 1999	Prev Week	Prev Year	5-Yr Avg
AL	7	2	12	8
AR	13	7	16	9
GA	24	10	16	13
IL	14	8	6	8
IN	24	8	8	6
IA	12	2	23	14
KS	5	0	25	13
KY	17	2	5	4
LA	40	19	56	30
MI	20	2	17	5
MN	6	0	14	9
MS	66	50	57	39
MO	8	4	10	6
NE	6	0	5	6
NC	8	5	9	5
OH	26	10	16	8
SC	6	5	19	11
SD	20	3	16	9
TN	9	2	4	3
19 Sts	16	6	15	10

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

Corn Percent Silking				
	Jul 4 1999	Prev Week	Prev Year	5-Yr Avg
CO	0	0	0	0
GA	94	90	95	94
IL	5	2	5	3
IN	5	0	3	2
IA	0	0	0	0
KS	7	1	28	17
KY	55	*25	27	20
MI	0	0	0	0
MN	0	0	3	1
MO	25	12	36	19
NE	0	0	1	2
NC	48	35	58	58
OH	1	0	2	0
PA	4	0	1	2
SD	0	0	0	0
TX	62	57	57	61
WI	0	0	0	0
17 Sts	7	4	8	6

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

Crop Progress and Condition

Week Ending July 4, 1999

Cotton Percent Squaring				
	Jul 4 1999	Prev Week	Prev Year	5-Yr Avg
AL	64	50	81	73
AZ	90	74	81	92
AR	97	85	95	92
CA	50	45	19	55
GA	77	64	85	84
LA	93	86	96	92
MS	95	87	96	90
MO	100	98	92	80
NM	65	55	76	67
NC	65	42	64	56
OK	30	3	43	35
SC	59	46	64	68
TN	95	84	89	82
TX	49	29	59	57
14 Sts	66	50	69	69

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

Cotton Percent Setting Bolls				
	Jul 4 1999	Prev Week	Prev Year	5-Yr Avg
AL	9	3	25	12
AZ	19	2	17	46
AR	9	1	31	16
CA	2	1	2	6
GA	24	12	38	30
LA	36	7	47	36
MS	37	22	48	34
MO	45	33	26	13
NM	4	0	7	6
NC	10	8	9	11
OK	0	0	0	2
SC	6	5	16	17
TN	12	1	19	9
TX	13	12	21	18
14 Sts	16	10	24	19

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

Peanuts Percent Pegging				
	Jul 4 1999	Prev Week	Prev Year	5-Yr Avg
AL	42	23	54	43
FL	62	58	49	NA
GA	51	36	64	59
NC	30	10	44	20
OK	24	14	55	40
SC	35	17	36	25
TX	29	10	25	16
VA	34	7	55	17
8 Sts	41	24	49	NA

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

Oats Percent Headed				
	Jul 4 1999	Prev Week	Prev Year	5-Yr Avg
IA	100	96	93	93
MI	90	76	96	74
MN	76	63	89	79
NE	92	*87	99	97
ND	32	12	53	31
OH	99	93	96	89
PA	89	86	89	80
SD	72	50	82	67
WI	90	69	96	78
9 Sts	72	57	81	67

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

Spring Wheat Percent Headed				
	Jul 4 1999	Prev Week	Prev Year	5-Yr Avg
ID	35	26	32	51
MN	65	54	85	65
MT	43	15	64	46
ND	38	17	56	36
SD	83	64	85	69
5 Sts	49	28	65	47

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

Barley Percent Headed				
	Jul 4 1999	Prev Week	Prev Year	5-Yr Avg
ID	37	30	32	49
MN	43	37	85	61
MT	47	17	49	39
ND	31	11	50	36
SD	72	54	79	62
WA	85	61	98	90
6 Sts	43	24	56	47

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

Rice Percent Headed				
	Jul 4 1999	Prev Week	Prev Year	5-Yr Avg
AR	0	0	8	3
CA	0	0	0	0
LA	52	47	40	32
MS	8	3	15	10
TX	57	35	46	35
5 Sts	16	13	17	12

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

Winter Wheat Crop Condition by Percent					
	VP	P	F	G	EX
AR	0	4	11	74	11
CA	0	0	10	60	30
CO	3	4	8	51	34
GA	14	19	26	34	7
ID	0	2	16	64	18
IL	0	3	25	55	17
IN	2	3	15	57	23
KS	2	5	26	56	11
MI	1	3	17	64	15
MO	2	14	34	44	6
MT	2	7	35	40	16
NE	3	7	21	56	13
NC	0	8	18	70	4
OH	0	2	16	58	24
OK	0	7	21	65	7
OR	25	25	32	16	2
SD	1	1	14	56	28
TX	3	6	20	46	25
WA	6	16	41	35	2
19 Sts	2	6	22	55	15
Prev Wk	3	7	24	51	15
Prev Yr	3	8	26	47	16

Soybeans Crop Condition by Percent					
	VP	P	F	G	EX
AL	0	0	23	63	14
AR	0	3	30	54	13
GA	6	12	39	40	3
IL	1	4	20	61	14
IN	0	2	17	58	23
IA	2	4	23	48	23
KS	0	4	26	58	12
KY	1	2	16	52	29
LA	1	3	23	64	9
MI	1	4	19	60	16
MN	2	8	34	47	9
MS	1	4	23	54	18
MO	1	10	29	53	7
NE	0	2	17	64	17
NC	1	8	26	61	4
OH	2	7	27	50	14
SC	2	4	34	59	1
SD	2	4	14	58	22
TN	0	3	21	53	23
19 Sts	1	5	23	55	16
Prev Wk	1	5	25	54	15
Prev Yr	3	9	29	48	11

Crop Progress and Condition

Week Ending July 4, 1999

Corn Crop Condition by Percent					
	VP	P	F	G	EX
CO	1	4	8	44	43
GA	15	17	31	31	6
IL	1	3	14	58	24
IN	0	1	12	56	31
IA	2	5	20	45	28
KS	1	3	16	63	17
KY	1	1	14	52	32
MI	1	2	14	60	23
MN	1	4	26	55	14
MO	1	9	34	49	7
NE	1	3	14	53	29
NC	1	5	30	59	5
OH	2	7	26	51	14
PA	1	12	33	47	7
SD	1	2	15	56	26
TX	0	3	18	57	22
WI	1	3	10	55	31
17 Sts	1	4	18	53	24
Prev Wk	1	3	19	55	22
Prev Yr	3	7	24	50	16

Cotton Crop Condition by Percent					
	VP	P	F	G	EX
AL	0	2	24	57	17
AZ	1	6	40	38	15
AR	0	1	19	63	17
CA	0	0	30	70	0
GA	3	10	29	47	11
LA	0	2	20	71	7
MS	0	3	24	51	22
MO	0	1	20	70	9
NM	0	6	30	53	11
NC	1	11	27	58	3
OK	0	5	28	56	11
SC	3	6	37	48	6
TN	0	1	26	48	25
TX	12	18	22	39	9
14 Sts	6	10	24	49	11
Prev Wk	5	11	29	45	10
Prev Yr	14	20	30	30	6

Sorghum Crop Condition by Percent					
	VP	P	F	G	EX
AR	0	4	27	58	11
CO	0	1	16	58	25
IL	0	4	27	62	7
KS	0	3	16	69	12
LA	0	1	12	79	8
MS	0	1	15	61	23
MO	0	4	35	53	8
NE	0	1	18	67	14
NM	0	0	29	70	1
OK	0	3	20	70	7
SD	0	7	9	70	14
TX	1	7	27	49	16
12 Sts	0	4	21	62	13
Prev Wk	NA	NA	NA	NA	NA
Prev Yr	8	15	33	40	4

Oats Crop Condition by Percent					
	VP	P	F	G	EX
IA	1	3	18	53	25
MI	1	2	16	67	14
MN	7	4	25	53	11
NE	0	4	23	55	18
ND	0	1	24	62	13
OH	2	7	29	54	8
PA	2	13	42	39	4
SD	2	0	9	63	26
WI	0	3	12	57	28
9 Sts	2	3	20	57	18
Prev Wk	0	5	21	59	15
Prev Yr	0	4	21	60	15

Peanuts Crop Condition by Percent					
	VP	P	F	G	EX
AL	0	1	19	55	25
FL	0	0	14	77	9
GA	1	6	24	54	15
NC	0	0	7	90	3
OK	0	10	31	47	12
SC	0	3	23	58	16
TX	0	8	23	50	19
VA	0	0	12	72	16
8 Sts	0	5	21	58	16
Prev Wk	1	6	24	53	16
Prev Yr	9	20	34	33	4

Barley Crop Condition by Percent					
	VP	P	F	G	EX
ID	0	1	12	66	21
MN	12	23	23	36	6
MT	1	3	32	55	9
ND	0	2	29	58	11
SD	1	1	7	59	32
WA	7	31	46	16	0
6 Sts	2	7	28	52	11
Prev Wk	2	7	26	53	12
Prev Yr	1	6	24	52	17

Rice Crop Condition by Percent					
	VP	P	F	G	EX
AR	0	2	20	56	22
CA	0	0	30	70	0
LA	0	1	20	50	29
MS	0	2	19	64	15
TX	0	0	18	64	18
5 Sts	0	1	21	59	19
Prev Wk	0	1	22	60	17
Prev Yr	1	5	33	51	10

Spring Wheat Crop Condition by Percent					
	VP	P	F	G	EX
ID	0	1	6	65	28
MN	12	11	25	45	7
MT	1	3	25	58	13
ND	1	3	26	57	13
SD	0	1	13	54	32
5 Sts	2	4	23	56	15
Prev Wk	1	4	21	59	15
Prev Yr	1	5	27	52	15

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 2.6. Topsoil 1% short, 65% adequate, 34% surplus. Continued rainfall kept major crop condition ratings mostly good to excellent. Conditions made weed, insect control difficult. Vegetables suffered from increased disease pressure. Corn silked 77%, 86% 1998, 76% avg.; 33% doughed; 17% dented, 27% 1998, 20% avg.; 2% mature. Cotton 64% squaring, 81% 1998, 73% avg.; 9% setting bolls, 25% 1998, 12% avg. Soybeans 90% emerged, 88% 1998; 7% blooming, 12% 1998, 8% avg. Peanuts 42% pegged, 54% 1998, 43% avg. Wheat 92% harvested, 99% 1998, 91% avg. Hay 94% harvested, 100% 1998, 95% avg. Corn 2% poor, 13% fair, 64% good, 21% excellent. Cotton 2% poor, 24% fair, 57% good, 17% excellent. Soybean 23% fair, 63% good, 14% excellent. Peanut 1% poor, 19% fair, 55% good, 25% excellent. Pasture feed 1% poor, 16% fair, 62% good, 20% excellent. Livestock 2% poor, 17% fair, 54% good, 27% excellent. Summer season tomato harvest underway.

ALASKA: Days suitable for fieldwork 5.1. Topsoil 40% short, 60% adequate. Subsoil 45% short, 55% adequate. Hot, sunny conditions by the end of the week allowed hay harvest to start rapidly. Daytime high temperatures mostly in the 70s, many 80s were recorded by the end of the week. Lows in the 40s and 50s. Oats 50% pre-boot, 50% boot. Barley 20% pre-boot, 80% boot; 20% poor, 60% fair, 10% good, 10% excellent. Small grain 13.7 height, 14.6 1998. Hay crop 5% poor, 30% fair, 55% good, 10% excellent. Hay harvested 35% complete. Potatoes 90% emerged, 85% 1998. Crop growth 5% slow, 50% moderate, 45% rapid. Wind, rain damage to crops, 75% none, 25% light. Major activities included: Spraying fields for weeds, cutting hay, harvesting hay, irrigating crops, machinery repair.

ARIZONA: Cotton squaring is ahead of 1998, still remains behind average. As of July 4, 90% cotton squared compared to 81% 1998, 92% avg. Small grains harvest continues. As of July 4, 93% durum wheat, 90% other wheat, 95% barley, all of the other small grains had been harvested. Alfalfa harvest activity 61% not being harvested, 3% light, 4% moderate, 32% active. Alfalfa 5% poor, 17% fair, 60% good, 18% excellent. Range, pasture feed 15% very poor, 58% poor, 27% fair. Central areas producers shipped a variety of vegetables, melons including cabbage, canary melons, cantaloupes, crenshaw melons, golden honeydew, honeydew, orange flesh melons, Santa Claus melons, parsley, specialty melons, sweet corn, watermelons. Grape shipments included beauty seedless, currants, flame seedless, perletttes, thompsons. Eastern areas producers shipped green onions, greenhouse tomatoes, dry onions. Western producers harvested a variety of grapes, melons. Grape shipments included beauty seedless, flame seedless, perletttes, thompsons while melon shipments included cantaloupes, honeydew, watermelons. Central, western areas citrus producers shipped grapefruit last week.

ARKANSAS: Days suitable for fieldwork 4. Topsoil 8% short, 70% adequate, 22% surplus. Temperatures were at or slightly above normal for most of the State except northern areas which had temperatures slightly below normal. Heavy rains occurred over parts of the north and west central areas during the first part of the week. Southern areas had below normal rainfall for the week. Livestock were reported in good condition. Main farm activities were: Finishing planting soybean, fertilizing cotton, corn, rice, harvesting wheat, hay. Other activities: Irrigating corn, rice, cultivating cotton, spraying cotton, fields for insects, weeds, 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 97% squared; 1% poor 19% fair 63% good 17% excellent. Soybeans 90% emerged 13% bloomed; 3% poor 30% fair 54% good 13% excellent. Sorghum 100% planted 100% emerged; 4% poor 27% fair 58% good 11% excellent. Wheat 97% harvested; 4% poor 11% fair 74% good 11% excellent. Oats 93% harvested; 60% fair 40% good.

CALIFORNIA: Field activities progressed normally under favorable conditions in most areas. Grain harvests of wheat, barley, oats were nearing completion in the Imperial, San Joaquin valleys, were in full swing in the Sacramento Valley. Rice showed good growth; some fields fertilized, treated for weeds, weevils. Corn, cotton, dry beans, sugar beets grew rapidly with the continued warmer temperatures. Some cotton fields in the San Joaquin Valley were blooming. Cotton fields were irrigated, thinned, weeded, sprayed for armyworms, leafhoppers, lygus, mites. Seed alfalfa bloom continued in the San Joaquin Valley, some fields were treated for aphids, lygus, weevils. Safflower, sunflowers were in full bloom in the Sacramento Valley. Safflower

was sprayed for lygus in central counties. Harvest of old crop sugar beets was ongoing in the Imperial Valley, virtually complete in the San Joaquin Valley. Dry beans were treated for aphids, stink bugs. Corn was still being planted following small grain harvest. Silage harvest of early planted single crop corn was underway in the southern San Joaquin Valley. Alfalfa, Sudan grass were cut, baled for hay. Some alfalfa fields were sprayed for weeds. Grape growers treated vineyards for powdery mildew, insects. Flame Seedless, Thompson Seedless grapes were picked in the Coachella Valley. Other cultural activities last week included extensive weed control, irrigation of vineyards, orchards. Harvest continued in apricots, nectarines, freestone peaches, plums. Warm weather last week enhanced maturity levels. Apple trees were treated for codling moth. Olive trees showed a good fruit set, maturing well. Tree limbs in almond orchards were propped due to the heavy nut set. Pistachio trees were sprayed with fungicides. Walnut trees were treated for blight. Valencia oranges, lemons were picked in southern areas. Fresh market tomato harvest accelerated in the San Joaquin Valley. Processing tomatoes were developing rapidly due to the warm temperatures. Few early cantaloupe, watermelon fields were harvested in the San Joaquin Valley. Squash harvest neared completion. Some squash varieties had severe mosaic virus problems. Sweet corn fields were treated for earworm. Watermelon was treated for mildew, thrips. Harvest of honeydew, mixed melon varieties ended in the Imperial Valley, cantaloupe, watermelon, sweet corn harvests were winding down. Other crops harvested last week included beans, broccoli, carrots, celery, cilantro, cucumbers, garlic, leeks, turnips, onions, peppers, potatoes, various greens, herbs. Higher elevation summer pastures continued in good to excellent condition. Livestock were in good condition. Ample water supplies were still available in most areas. In some central areas, grasshoppers were eating dry grass on foothill pastures, but Yellow Star Thistle was also being eaten. Few fires were reported in foothill, mountain locations.

COLORADO: Days suitable for fieldwork 6.3. Topsoil 9% very short 20% short, 71% adequate. Subsoil 5% very short, 15% short, 80% adequate. Hot weather has favored growth, development of all crops, localized thunderstorms, some with hail, have slowed winter wheat harvest, have damaged numerous fields just prior to harvest. Winter wheat 84% turning color, 96% 1998, 87% avg.; 45% ripe, 54% 1998, 42% avg. Spring wheat 65% headed, 59% 1998, 68% avg.; 17% turning color, 35% 1998, 19% avg.; 2% very poor, 8% poor, 20% fair, 48% good, 22% excellent. Spring barley 91% headed, 89% 1998, 81% avg.; 14% turning color, 19% 1998, 24% avg.; 2% poor, 15% fair, 58% good, 25% excellent. Sorghum 97% emerged, 93% 1998, 90% avg. Oats 75% headed, 84% 1998, 68% avg.; 11% turning color, 35% 1998, 23% avg.; 2% poor, 19% fair, 64% good, 15% excellent. Dry onions 1% very poor, 4% poor, 13% fair, 50% good, 32% excellent. Sugar beets 1% very poor, 3% poor, 12% fair, 54% good, 30% excellent. Dry beans 95% emerged, 91% 1998, 88% avg.; 2% poor, 7% fair, 57% good, 34% excellent. Summer potatoes 1% very poor, 2% poor, 8% fair, 49% good, 40% excellent. Fall potatoes 100% emerged, 100% 1998, 98% avg.; 7% poor, 16% fair, 60% good, 17% excellent. Alfalfa 95% 1st cutting, 96% 1998, 85% avg.; 20% 2nd cutting, 8% 1998, 11% avg.; 1% very poor, 3% poor, 18% fair, 63% good, 15% excellent. Pasture, range feed in mostly good condition. Seasonal drying of forage has increased the fire danger, especially on western slope.

DELAWARE: Days suitable for fieldwork 5.8. Topsoil 42% short, 58% adequate. Subsoil 7% very short, 29% short, 64% adequate. Winter wheat 50% harvested, 71% 1998, 47% avg. Barley 97% harvested, 95% 1998, 95% avg. Field corn 3% poor, 29% fair, 49% good, 19% excellent; 10% silked, 9% 1998, 4% avg. Soybeans 4% poor, 60% fair, 32% good, 4% excellent; 77% planted, 77% 1998, 78% avg. Sorghum 2% poor, 5% fair, 78% good, 15% excellent; 92% planted, 74% 1998, 85% avg. Sweet corn 5% harvested, 2% 1998, 4% avg. Snap beans 5% harvested, 10% 1998, 12% avg. Cucumbers 11% harvested, 12% 1998, 11% avg. Lima beans 5% harvested, 4% 1998, 1% avg. Green peas 74% harvested, 89% 1998, 90% avg. Potatoes 10% harvested, 13% 1998, 7% avg. Clover, other hay 40% 2nd cutting, 74% 1998, 48% avg.; 35% 3rd cutting, 25% 1998, 5% avg. Alfalfa hay 65% 2nd cutting harvested, 60% 1998, 51% avg.; 15% 3rd cutting harvested, 19% 1998, 4% avg. Hay supplies 20% short, 80% adequate. Pasture feed 3% very poor, 25% poor, 36% fair, 35% good, 1% excellent. Apples 26% fair, 55% good, 19% excellent. Peaches 34% fair, 52% good, 14% excellent; 5% harvested, 3% 1998, 2% avg. Activities: Some early planted, early variety sweet corn harvested, barley finished, wheat harvest active.

FLORIDA: Topsoil throughout Panhandle adequate to surplus. Peninsula adequate, scattered areas surplus. Warm week with high temperatures ranging high 80s to low 90s. Low temperatures mostly low 70s. Scattered afternoon thunderstorms with heavy rain in some areas. Most severe storms Tampa, south areas. Tobacco harvest active. Cotton good condition, starting to bloom. Digging green peanuts. Daily rain hampering application of post emergence herbicide some peanut fields. Sugarcane growth normal. Hay growth responding to rainfall. Haying between showers. Peanut 14% fair, 77% good, 9% excellent; 62% pegged. Most vegetable growers shipped last tomatoes, sweet corn, watermelons during week, harvesting virtually finished. Producers continue to pick small summer crop for local markets. Rain all citrus areas, surplus moisture some groves. Lakes, ponds, canals, water reservoirs refilling. Abundant new growth, new crop fruit sizing well. Valencia, grapefruit harvest almost over for this season. Major processors closed. Caretakers cutting cover crops, spraying, herbiciding, pushing dead trees, some replanting in larger groves. Pasture feed 25% fair, 60% good, 15% excellent. Cattle 10% fair, 80% good, 10% excellent. Pastures, range continued to improve following seasonal rains. Almost daily rains delayed hay baling. Panhandle, north; livestock ponds still low. Central counties; pastures progressing well following scattered rains. West central pasture grass growing. Statewide cattle, calves mostly good condition.

GEORGIA: Days suitable for fieldwork 3.5. Soil 1% very short, 9% short, 74% adequate, 16% surplus. Corn 75% dough, 74% 1998, 70% avg.; 36% dent, 36% 1998, 32% avg.; 5% mature, 0% 1998, 2% avg. Hay 3% very poor, 8% poor, 38% fair, 44% good, 7% excellent. Peanuts 84% blooming, 91% 1998, 90% avg. Sorghum 6% very poor, 14% poor, 34% fair, 39% good, 7% excellent; 96% planted, 92% 1998, 92% avg. Soybeans 96% planted, 91% 1998, 95% avg.; 3% setting pods, 0% 1998, 2% avg. Tobacco 7% very poor, 19% poor, 36% fair, 35% good, 3% excellent; 10% harvested, 9% 1998, 17% avg. Watermelons 4% very poor, 9% poor, 30% fair, 49% good, 8% excellent; 67% harvested, 69% 1998, 56% avg. Apples 22% fair, 55% good, 23% excellent. Peaches 1% poor, 26% fair, 36% good, 37% excellent; 46% harvested, 74% 1998, 76% avg. Pecans 5% very poor, 9% poor, 32% fair, 46% good, 8% excellent. Continued rainfall benefitted many counties this week. Showers slowed some field activities, helped crop, pasture conditions improve. More rain is needed to prevent soils from drying due to rising temperatures. Corn, soybean, sorghum conditions improved last week. Corn development was ahead of the five year averages for the dough, dent, mature stages. Soybean progress remained ahead of 1998 in the emerging, blooming, setting pod stages. Sorghum planting neared conclusion. Cotton, peanut, tobacco conditions improved last week. Some farmers were side-dressing cotton. Cotton crop trailed the five year average pace for squaring, setting bolls. Peanut blooming, pegging remained behind last year's pace. Tomato Spotted Wilt Virus continued to be a concern in some peanut fields. Tobacco harvest continued ahead of 1998, but behind the average pace. Peach harvest continued last week with improved condition. There were reports of sizing problems because of insufficient thinning. Watermelon harvest sped ahead of the average pace with improved condition, isolated reports of powdery mildew appeared. Many counties reported weed problems last week. Other activities included spraying pecans for insects and leaf disease as well as applying boron to peanuts.

HAWAII: Warm temperatures, mostly sunny skies, light winds enabled crops to make fair progress. Rainfall was generally light with increased showers in western islands during second half of week. Banana orchards in fair to good condition. Summer weather benefitting crop development. Harvesting activity expected to increase seasonally. Papaya fields were in variable condition. Harvesting activity varied from heavy to light. Head cabbage plantings remained in mostly good condition. Harvesting will remain steady. Chinese cabbage crop making rapid growth due to warmer weather. Harvesting at moderate volumes. Dry onion crop condition was fair to good. Harvesting is steady.

IDAHO: Days suitable for fieldwork 6.5. Topsoil 1% very short, 26% short, 71% adequate, 2% surplus. Second consecutive week below normal temperatures. Cereal leaf beetle infesting grain in eastern areas. Irrigation supply 72% excellent, 26% good, 2% fair. Alfalfa hay 86% 1st cut, 75% 1998, 82% avg.; 8% 2nd cutting, 7% 1998, 6% avg. Oat 55% headed. Dry beans 96% emerged, 96% 1998, 97% avg. Cherries 13% harvested, 17% 1998, 52% avg. Potatoes 12" high 46%, 60% 1998, 63% avg.; 11% closing middles, 19% 1998, 26% avg. Barley 37% headed, 32% 1998, 49% avg.; 89% jointed; 64% booted. Spring wheat 35% headed, 32% 1998, 51% avg.; 94% jointed; 68% booted. Winter wheat 89% headed, 92% 1998, 93% avg.; 98% booted; 13% turning color. Activities: Irrigating, spraying weeds, monitoring for disease.

ILLINOIS: Days suitable for fieldwork 4.7. Topsoil 1% very short, 10% short, 68% adequate, 21% surplus. Scattered showers across the northern part of the State welcome for the corn, soybean crops, rains slowed down wheat harvest in other areas. With the good growing weather, corn averaged more than a foot taller than 1998 and average at this time. There is a wide difference in soybean progress across the State. Between rains, winter

wheat harvest continued. Oat harvest is off to an early start this year compared to the last five years. Other activities for last week included cultivating soybeans, replanting drowned spots, mowing, baling hay, spraying pesticides. Corn height 57 in., 44 in. 1998, 41 in. avg. Winter wheat 99% turning yellow, 99% 1998, 98% avg.; 97% ripe, 97% 1998, 85% avg. Oats 90% filled, 79% 1998, 63% avg.; 41% turning yellow, 35% 1998, 26% avg.; 10% ripe, 9% 1998, 5% avg.; 4% harvested, 0% 1998, 0% avg.; 1% poor, 15% fair, 71% good, 13% excellent. Alfalfa 42% 2nd cut, 30% 1998, 27% avg.; 1% poor, 14% fair, 73% good, 12% excellent. Red clover 88% cut, 79% 1998, 87% avg.; 12% fair, 71% good, 17% excellent.

INDIANA: Days suitable for fieldwork 3.1. Topsoil 2% very short, 11% short, 65% adequate, 22% surplus. Subsoil 3% very short, 14% short, 70% adequate, 13% surplus. Precipitation across the north, central part of the State was spotty, helped to relieve dry soil conditions, while areas in southern areas received excessive rainfall during the week. Wheat 80% good to excellent; soybeans 81%; corn 87%. Wheat 51% harvest, 66% 1998, 34% avg. Soybean double crop planting virtually completed. Soybeans 24% blooming, 8% 1998, 6% avg. Corn 5% silking, 3% 1998, 2% avg. Pasture feed 55% good to excellent. Alfalfa hay 44% 2nd cut complete, 31% 1998. Activities: Applying post-emergence chemicals, planting double crop soybeans, harvesting wheat, second cutting of alfalfa, side-dressing corn, mowing roads, baling hay, spraying, repairing equipment, monitoring fields for insects, caring for livestock.

IOWA: Days suitable for fieldwork 4.0. Topsoil 4% short, 71% adequate, 25% surplus. Subsoil 2% short, 72% adequate, 26% surplus. Corn 73% cultivated, 67% 1998, 77% avg.; 0% tasseled, 1% 1998, 2% avg. Corn stand compared to normal 93%. Corn height tallest 57 in.; 43 in. avg.; 2% very poor, 5% poor, 20% fair, 45% good, 28% excellent. Soybeans 12% blooming, 23% 1998, 14% avg.; 2% very poor, 4% poor, 23% fair, 48% good, 23% excellent. Oats 53% turning, 24% 1998, 31% avg.; 1% very poor, 4% poor, 17% fair, 53% good, 25% excellent. Winter wheat 4% harvested, 12% 1998, 17% avg.; 2% very poor, 1% poor, 24% fair, 55% good, 18% excellent. Livestock generally in good condition. Few producers indicated flies starting to be a problem. Range, pasture feed 1% very poor, 2% poor, 15% fair, 56% good, 26% excellent. Alfalfa 95% 1st cut, 87% 1998, 94% avg.; 17% 2nd cut, 9% 1998, 12% avg. Clover hay 77% 1st cut, 66% 1998, 74% avg.; 3% 2nd cut, 8% 1998, 5% avg. Hay 3% poor, 19% fair, 52% good, 26% excellent.

KANSAS: Days suitable for fieldwork 3.0. Topsoil 2% short, 56% adequate, 42% surplus. Subsoil 2% short, 72% adequate, 26% surplus. Wheat harvest, aided by hot, dry weather near the end of the week, made excellent progress across the State. Rainy weather earlier in the week, along with hail, high winds in western areas, kept combines out of the fields. However, by the weekend, a heatwave moved across the State, allowing harvest to make rapid progress. Sorghum 92% emerged, 97% 1998. Soybeans 89% planted, 99% 1998, 96% avg. Sunflower 1% very poor, 4% poor, 18% fair, 68% good, 9% excellent. Sunflowers 91% planted, 94% 1998. Sunflowers 75% emerged, 83% 1998. Sunflowers 1% blooming, 2% 1998. Alfalfa 38% 2nd cut, 75% 1998, 58% avg.; 1% 3rd cut, 4% 1998, 4% avg. Major field activities included: Harvesting wheat, putting up hay, spraying weeds, planting fall crops, cultivating corn, working stubble. Hay, forage supplies 2% short, 86% adequate, 12% surplus. Stock water 3% short, 67% adequate, 30% surplus.

KENTUCKY: Days suitable for fieldwork 2.4. Topsoil 7% very short, 15% short, 54% adequate, 24% surplus. Subsoil 12% very short, 24% short, 50% adequate, 14% surplus. Temperatures were above normal throughout the State, with high temperatures in the mid to upper 90s. Rainfall throughout the State was above normal. Crops in good to excellent condition where moisture is adequate. Despite rain in some drier eastern regions, crops, pastures still need more rain. Seeding of double crop soybeans 93% complete, 70% 1998, 68% avg.; single crop planting complete. Black shank is the leading problematic disease for burley tobacco, throughout the State, although scalding was a problem in several areas. Tobacco 2% very poor, 7% poor, 29% fair, 45% good, 17% excellent; height 34% under 12 in., 43% 12-24 in., 23% over 24 in. Pasture feed 4% very poor, 12% poor, 36% fair, 40% good, 8% excellent. Pastures which received rain are doing better in central, eastern areas. Winter wheat harvest 91% complete. Yields, test weights continue to look good.

LOUISIANA: Days suitable for fieldwork 3.8. Soil moisture 5% short, 64% adequate, 31% surplus. Corn 1% very poor, 2% poor, 19% fair, 73% good, 5% excellent; 99% silked, 100% 1998, 98% avg.; 78% dough stage, 88% 1998, 76% avg.; 2% mature, 11% 1998, 9% avg. Corn conditions continued to improve. Cotton growers continued to spray for aphids. Hay 95% 1st cut, 96% 1998, 93% avg.; 4% final cut, 7% 1998, 7% avg. In the south, hay harvest was slow due to the rains. Peaches 71% harvested, 71% 1998, 61% avg. Sorghum 0% turning color, 2% 1998, 1% avg. Soybeans 10% setting pods, 22% 1998, 10% avg. Sugarcane 9% fair, 53% good, 38% excellent;

conditions continued to improve. Sweet potatoes 99% planted, 95% 1998, 93% avg. Livestock 2% poor, 23% fair, 61% good, 14% excellent. Vegetables 2% very poor, 12% poor, 32% fair, 46% good, 8% excellent.

MARYLAND: Days suitable for fieldwork 5.3. Subsoil 17% very short, 64% short, 19% adequate. Topsoil 19% very short, 45% short, 36% adequate. Winter wheat 57% harvested, 63% 1998, 43% avg. Barley 98% harvested, 95% 1998, 89% avg. Rye 60% harvested, 74% 1998, 46% avg. Corn 2% very poor, 11% poor, 34% fair, 50% good, 3% excellent; 25% silked. Soybeans 1% very poor, 8% poor, 43% fair, 46% good, 2% excellent; 84% planted, 89% 1998, 80% avg. Sorghum 60% fair, 32% good, 8% excellent; 97% planted, 100% 1998, 95% avg. Tobacco 10% poor, 20% fair, 70% good. Snap beans 26% harvested, 21% 1998, 16% avg. Cucumbers 26% harvested, 21% 1998, 22% avg. Potatoes 25% harvested, 21% 1998, 13% avg. Sweet Corn 17% harvested, 7% 1998, 4% avg. Tomatoes 20% harvested, 1% 1998, 1% avg. Cantaloupes 10% harvested, 5% 1998, 4% avg. Peaches 1% poor, 20% fair, 76% good, 3% excellent; 13% harvested, 12% 1998, 4% avg. Apples 10% fair, 75% good, 15% excellent. Clover, other hays 45% 2nd cutting harvested, 31% 1998, 20% avg.; 20% 3rd cutting. Alfalfa 65% 2nd cutting harvested, 64% 1998, 53% avg.; 8% 3rd cutting harvested, 6% 1998, 3% avg. Pasture feed 17% very poor, 25% poor, 36% fair, 21% good, 1% excellent. Hay supplies 3% very short, 35% short, 62% adequate. Activities: Received some showers this past week to help relieve conditions, grain harvesting still very active, veggie, fruit harvesting continued.

MICHIGAN: Days suitable for fieldwork 4.0. Topsoil 1% very short, 7% short, 75% adequate, 17% surplus. Subsoil 2% very short, 22% short, 73% adequate, 3% surplus. Hay 1% very poor, 2% poor, 17% fair, 60% good, 20% excellent; 92% 1st cut, 99% 1998, 89% avg.; 8% 2nd cut, 23% 1998. Corn 36 in. height, 37 in. 1998, 27 in. avg. Oats 36% turning yellow, 55% 1998. Wheat 98% turning yellow, 96% 1998, 54% avg. High temperatures dominated throughout week as humidity started to rise. Much needed rain came through this past week. Although rains were needed by field crops, hay harvesting stopped. Hard rain came through some areas as one observer from the thumb said, "We had 2.3 inches of rain in six hours." Another reporter from the Southwest commented on rain saying, "About four inches in the past week has relieved the dry conditions." Field crops benefitted from rains that passed through on Thursday. Corn responded well to heat after receiving adequate moisture. Rain germinated last of soybeans in the southeast. In more advanced fields, Roundup Ready beans were sprayed. Sugar beets in good condition with canopy covering 85% of rows. Some late planted dry beans were hurt by heavy rains. Hay curing came to a standstill with rain, humid weather that followed. Alfalfa growth continued to advance nicely. Wheat harvest began this past weekend as fields dried out. Some fields were flattened by locally heavy rains. Earliest planted potatoes were full bloom while later fields were filling rows. Heat following a soaking rain have pushed vegetable crop growth rapidly. Cabbage harvest was going strong with good head size, quality reported. Carrots growing well in spite of heat. Celery hearts, full size celery being harvested. Harvest of cucumbers advanced ahead of normal for both market and pickles. Harvest of leaf lettuce, turnips was underway with good quality. Peppers put on remarkable vegetative growth. Snap bean stands looked good. Summer squash, zucchini were producing abundantly. Sweet corn harvest was just getting started in early fields. Market tomatoes were harvested with volume increasing. Processing tomatoes made great growth. Fruit development was still about a week ahead of normal. Progress has been slowed in west central region by dry conditions. Tart cherry harvest continued in the southwest, will get underway shortly in other regions. Apples 1.50 in. diameter. Significant drop occurred in some areas. Peaches had 1.50 to 2.00 in. fruit. Oriental fruit moth catches were up. Grape berries in southwest 0.20 to 0.40 in. diameter. Hot, humid weather resulted in infection periods for black rot, powdery mildew. Red raspberry harvest was underway; summer black raspberry picking will start this week. Sweet cherry harvest began in west central, northwest regions. Plums had 1 to 1.50 in. fruit.

MINNESOTA: Days suitable for fieldwork 3.9. Topsoil 4% short, 76% adequate, 20% surplus. Corn 90% cultivated, 95% 1998, 87% avg.; 37 in. height, 45 in. 1998, 36 in. avg. Soybeans 61% cultivated, 78% 1998, 63% avg.; 11 in height, 13 in. 1998, 11 in. avg. Spring Wheat 97% jointed, 99% 1998, 91% avg.; 1% turning ripe, 1% 1998, 1% avg. Oats 97% jointed, 99% 1998, 96% avg.; 8% turning ripe, 10% 1998, 10% avg. Barley 95% jointed, 98% 1998, 92% avg.; 0% turning ripe, 1% 1998, 2% avg. Pasture feed 1% very poor, 5% poor, 21% fair, 60% good, 13% excellent. Sugar beet 2% very poor, 8% poor, 24% fair, 54% good, 12% excellent. After a mostly cool week, high temperatures with high humidity at the end of the week pushed crop development forward, detrimental effects from the long period of excessively wet conditions are evident. Weeds are a severe problem for many producers, since wet ground has hindered cultivating, pesticide spraying.

MISSISSIPPI: Days suitable for fieldwork 3.8. Soil moisture 11% short, 66% adequate, 23% surplus. Corn 96% silked, 92% 1998, 85% avg.; 64%

dough, 61% 1998, 46% avg.; 25% dent, 25% 1998, 11% avg.; 5% poor, 22% fair, 56% good, 17% excellent. Cotton 95% squaring, 96% 1998, 90% avg.; 37% setting bolls, 48% 1998, 34% avg.; 3% poor, 24% fair, 51% good, 22% excellent. Rice 8% heading, 15% 1998, 10% avg.; 2% poor, 19% fair, 64% good, 15% excellent. Sorghum 44% heading, 41% 1998, 41% avg.; 1% poor, 15% fair, 61% good, 23% excellent. Soybeans 99% emerged, 97% 1998, 95% avg.; 66% blooming, 57% 1998, 39% avg.; setting pods 37%; 1% very poor, 4% poor, 23% fair, 54% good, 18% excellent. Sweet potatoes 94% planted, 99% 1998, 89% avg.; 2% poor, 28% fair, 65% good, 5% excellent. Hay (warm-season) 54% harvested, 54% 1998, 53% avg.; 1% very poor, 10% poor, 34% fair, 49% good, 6% excellent. Watermelons 30% harvested, 26% 1998, 22% avg.; 2% poor, 22% fair, 55% good, 21% excellent. Wheat 99% harvested, 100% 1998, 97% avg. Blueberries, 3% poor, 4% fair, 81% good, 12% excellent. Cattle, 5% poor, 19% fair, 63% good, 13% excellent. Pasture feed 1% very poor, 4% poor, 24% fair, 61% good, 10% excellent. Cotton, corn, soybean crop development is progressing ahead of normal. All row crops are mostly good condition.

MISSOURI: Days suitable for fieldwork 2.7. Topsoil 2% very short, 9% short, 64% adequate, 25% surplus. Precipitation 1.74 in. Corn 25% silking, 88% Bootheel. Double-crop soybean 48% planting complete; 91% emerged. Soybeans 8% blooming, Bootheel 13%. Soybean 1% very poor, 10% poor, 29% fair, 53% good, 7% excellent. Sorghum 1% headed, Bootheel 4%. Winter wheat 58% harvested, Bootheel 98%. Winter wheat 2% very poor, 14% poor, 34% fair, 44% good, 6% excellent. Pasture feed 1% very poor, 6% poor, 26% fair, 66% good, 12% excellent.

MONTANA: Days suitable for fieldwork 4.8. Topsoil 7% very short, 31% short, 58% adequate, 4% surplus. Subsoil 9% very short, 28% short, 60% adequate, 3% surplus. Majority of the State received some amounts of precipitation, but not enough to slow progress or delay fieldwork. Sugar beets 4% poor, 13% fair, 52% good, 31% excellent. Winter wheat 97% headed, 97% 1998, 92% avg.; 37% turning, 16% 1998, 14% avg. Spring wheat 67% in boot, 94% 1998, 85% avg.; 1% turning, 1998, 1% avg. Barley 64% in boot; 93% 1998, 83% avg.; 1% turning, 1% 1998, 1% avg. Oats 59% in boot, 88% 1998, 82% avg.; 36% headed, 48% 1998, 39% avg.; 3% turning, 1% 1998, 2% avg.; 2% poor, 17% fair, 65% good, 16% excellent. Corn 9% fair, 46% good, 45% excellent. Potatoes 96% emerged, 98% 1998, 98% avg.; 32% fair, 58% good, 10% excellent. Dry beans 10% fair, 80% good, 10% excellent. Alfalfa 48% 1st cutting, 32% 1998, 43% avg. Other hay 31% harvested, 16% 1998, 30% avg. The only other fieldwork being done is spraying of summer fallow.

NEBRASKA: Days suitable for fieldwork 2.4. Topsoil 1% short, 77% adequate, 22% surplus. Subsoil 2% short, 84% adequate, 14% surplus. Statewide, temperatures 3 to 8° below normals across State. Precipitation occurred across State with averages ranging from one inch in north central, southeast areas to one and three-fourth inches in the southwest area. Corn 5% very poor, 3% poor, 14% fair, 53% good, 29% excellent. Irrigated corn 79%, dryland corn 86% in good or excellent. Green-snap damage was noted in central, south central regions. European corn borer infestation was low, most producers didn't have to treat it. Soybean blooming 6%, above 1998 5%, same as average; 2% poor, 17% fair, 64% good, 17% excellent. Sorghum emerged 98%, compared to 100% 1998, 100 avg.; 1% poor, 18% fair, 67% good, 14% excellent. Dry beans 1% very poor, 2% poor, 28% fair, 59% good, 10% excellent. Wheat 3% very poor, 7% poor, 21% fair, 56% good, 13% excellent; wheat turning color was 96%, compared to 94% 1998, 89% avg. Wheat ripe 32% below 42% 1998, 35% avg. Oats headed 92% complete compared to 99% 1998, 97% avg. Oats 4% poor, 23% fair, 55% good, 18% excellent. First cutting of alfalfa 98%, compared to 99% 1998, 99% avg. Second cutting of alfalfa 16%, above 15% 1998, 14% avg. Alfalfa 1% very poor, 4% poor, 22% fair, 61% good and 12% excellent. Pasture, range feed 1% very poor, 2% poor, 15% fair, 53% good, 29% excellent. Wild hay 2% poor, 12% fair, 69% good, 17% excellent. Pastures were providing excellent grazing. Feedlots were muddy from recent rain causing weight gain to decline. Producer activities; laying irrigation pipes, spraying soybeans, corn, cultivating corn, applying herbicides to crops, moving grain.

NEVADA: Northern areas had below normal temperatures throughout most of the week, with only a trace amount of precipitation in the Elko area, a trace in the Winnemucca area. In the central, southern portions of the State, above normal temperatures persisted except on the 4th, there was no precipitation. Irrigation water supply remains adequate. First cutting of alfalfa was completed throughout the majority of the State, 2nd cutting had begun. Second cutting looks good. Majority of wheat, oats had begun turning color. Grasshoppers were spotted in some alfalfa fields, on some of the range lands in the Ely, Winnemucca areas. In spite of this, the range condition remains in the good range. Majority of livestock were on summer range. Main farm, ranch activities: Irrigating, repairing, maintaining equipment, second cutting of alfalfa, grasshopper patrol, some movement of livestock.

NEW ENGLAND: Days suitable for fieldwork 5.7. Topsoil 13% very short, 47% short, 40% adequate. Subsoil 23% very short, 45% short, 32% adequate. Pasture feed 9% very poor, 19% poor, 43% fair, 25% good, 4% excellent. Maine potatoes 100% emerged, condition good to excellent. Massachusetts potatoes 100% emerged, condition good. Rhode Island potatoes 100% emerged, condition good to fair. Oats in Maine 100% emerged, condition good to excellent. Barley in Maine 100% emerged, condition good to excellent. Field corn 100% emerged, condition good. Sweet corn 99% planted, 95% 1998, 99% avg.; 99% emerged, condition good to fair; <5% harvested. Shade tobacco <5% harvested, condition good. Broadleaf tobacco 95% planted, 99% 1998, 95% avg.; condition good. First cut hay 90% harvested, 60% 1998, 70% avg.; condition good to fair. Second cut hay 10% harvested, 10% 1998, 10% avg.; condition fair. Apples set average, size average, condition good to fair. 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 95% harvested, 90% 1998, 70% avg.; set average, size average, condition good. Cranberries petal fall to full bloom, condition good to excellent. Highbush blueberries 5% harvested 0%, 1998, 0% avg., set average, size average, condition good to fair. Wild Blueberries set above average, size average, condition good to excellent. Major farm activities included: Irrigating where it's available; side dressing vegetable, corn fields; cultivating; scouting for pest, applying pesticides when necessary; cutting hay; harvesting strawberries, vegetables; hilling potatoes; harvesting shade tobacco.

NEW JERSEY: Days suitable for fieldwork 6. Temperatures much above normal. Extremes 58°; 101°. Rainfall 0.42 in. north, 0.53 in. central, 0.85 in. south. Heaviest 24 hour total 0.99 in. at Seabrook on the 29th to the 30th. Estimated soil moisture, in percent of field capacity, this past week 61% north, 50% central, 50% south. Four inch soil temperatures 76° north, 77° central, 77° south. Farmers continued to harvest hay, wheat, barley, other small grains. Field corn was reported to be in fair, dry condition in all regions. First harvest of Alfalfa hay is almost complete, reported to be in good condition. Second harvest is beginning although lower yields have resulted because of the dry weather. Rye, wheat, barley are in good to fair condition, being harvested. Soybeans are in good condition in the north. In the south, soybeans are in fair condition, double cropped soybeans are growing slower due to the hot weather. Irrigation is occurring on many vegetable fields to help deal with heat stress. Most vegetables had a rating of good except for lettuce, which had a rating of fair. Harvest for squash, cabbage, snap beans, sweet corn, peppers is underway. Tomatoes continue to be harvested, good to excellent condition. Apples, peaches were in fair condition in the north, good condition in the south. Peach harvest started in some places this week. Early harvesting of blueberries continued. Cranberries, also reported to be in good condition, are reaching full bloom.

NEW MEXICO: Days suitable for fieldwork 6.7. Hottest weather of the summer affected State, but an increase in moisture helped alleviate the situation late in the week. Statewide about 4" above normal with many locations below 6000 feet hitting 100° at least once. Over half the reporting locations received some measurable rainfall during the week, but no locations reported as much as an inch. Greatest totals reported included 0.90" at Quemado, 0.75" at Des Moines. Farmers continued to harvest hay, wheat, onions along with cultivating, irrigating other crops. Ranchers were still moving cattle, branding. Although rains have helped there were still reports of supplemental feeding, hauling water in a few locations. Grasshoppers continued to be reported, no reports of grass damage at this time. Range, pasture feed 8% very poor, 11% poor, 32% fair, 39% good, 10% excellent. Cattle, sheep showed little change with cattle in mostly good condition, sheep mostly fair to good condition.

NEW YORK: Days suitable for fieldwork 5.2. Soil 19% very short, 50% short, 31% adequate. Much needed rains fell on most of the State, helping to replenish soil moisture supplies, stimulate crop development, rejuvenate hay fields, pastures. Pasture feed 7% very poor, 50% poor, 37% fair, 6% good. Hay 19% poor, 44% fair, 37% good. Alfalfa 1st cut 97% complete, 90% 1998, 90% avg. Clo-tim 85% cut, 95% 1998, 85% avg. Corn greening up nicely. Cultivating where possible. Wheat combining active in some areas. Potential sprouting a major concern due to high humidity. Wheat 7% fair, 80% good, 13% excellent. Oats maturing nicely, filling out after rains. Last of dry bean planting emerged. Earlier plantings doing better. Soybean growth accelerated. Most beans have filled the row. Strawberry harvest winding down with good yields reported. Sweet corn picking began. Apples in good condition statewide. Tart cherry harvest underway. Sweet cherries show some splitting due to rains.

NORTH CAROLINA: Days suitable for fieldwork 4.9. Topsoil 3% short, 82% adequate, 15% surplus. Subsoil 1% short, 81% adequate, 18% surplus. Soil moisture levels 2% very short, 20% short, 66% adequate, 12% surplus. Lingering precipitation early in the week was replaced by hot, dry weather in much of State. Most crops benefitted from the rainfall early in the week, more precipitation is needed, particularly in the Piedmont, Coastal Plains. Despite the return of dry weather, crop conditions continue to be

mostly good. Small grain harvest is winding down at or ahead of the five-year average. Soybean planting and weed control in all crops were among the major activities during the week. Other activities included planting sweet potatoes, sorghum, making hay, tending livestock. As tobacco topping begins there are concerns of scattered blue mold in areas that have received more rainfall. Additionally, there were widespread reports of weather fleck in tobacco, which is associated with high ozone levels.

NORTH DAKOTA: Days suitable for fieldwork 5. Topsoil 3% short, 82% adequate, 15% surplus. Subsoil 0% very short, 1% short, 81% adequate, 18% surplus. Continued showers, wet fields across the State slowed the hay harvest, row crop cultivation. Wheat midge was reported across the State, scab in the eastern districts. Hail, wind damage to crops, farm buildings were reported in the east central, southern districts. Durum wheat 62% jointed, 83% 1998, 72% avg.; 25% boot, 54% 1998, 44% avg.; 11% heading, 23% 1998, 18% avg. Canola 90% rosette, 97% 1998; 55% blooming, 74% 1998. Dry edible beans 2% blooming, 13% 1998, 6% avg. Flaxseed 17% blooming, 32% 1998, 15% avg. Potatoes 12% blooming, 27% 1998, 17% avg. Emerged crop condition: durum 3% poor, 27% fair, 61% good, 9% excellent; canola 4% poor, 24% fair, 61% good, 11% excellent; corn 2% very poor, 4% poor, 19% fair, 65% good, 10% excellent; dry edible beans 2% very poor, 7% poor, 22% fair, 60% good, 9% excellent; flaxseed 3% poor, 27% fair, 60% good, 10% excellent; potatoes 5% poor, 12% fair, 51% good, 32% excellent; soybeans 1% very poor, 6% poor, 26% fair, 58% good, 9% excellent; sugar beets 5% poor, 15% fair, 55% good, 25% excellent; sunflower 2% poor, 25% fair, 64% good, 9% excellent. Pasture feed 1% very poor, 3% poor, 10% fair, 65% good, 21% excellent. Stock water supplies 89% adequate, 11% surplus. Broadleaf and wild oat spraying 84%, 95% complete, respectively. Hay 4% above normal.

OHIO: Days suitable for fieldwork 5.3. Topsoil 20% very short, 40% short, 39% adequate, 1% surplus. Soybeans 26% blooming, 16% 1998, 8% avg.; 1% setting pods, 0% 1998, 0% avg. Winter wheat 83%, 83% 1998, 35% avg.; 20% harvested, 26% 1998, 10% avg. Oats 13% ripe, 15% 1998, 27% avg.; 3% harvested, 0% 1998, 0% avg. Alfalfa 51% 2nd cutting, 21% 1998, 17% avg. Other hay 23% 2nd cutting, 12% 1998, 10% avg. Corn 1% silked, 0% 1998, 0% avg. Summer apples 3% harvested, 0% avg. Pasture feed 11% very poor, 24% poor, 34% fair, 26% good, 5% excellent. Winter wheat 2% poor, 16% fair, 58% good, 24% excellent. Corn 2% very poor, 7% poor, 26% fair, 51% good, 14% excellent. Soybeans 2% very poor, 7% poor, 27% fair, 50% good, 14% 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; planting garden crops; cutting firewood; picking raspberries; resetting tobacco; tying tomatoes; spreading manure. Farmers in Meigs county have been irrigating vegetable crops, hauling water to cattle due to scattered rainfall. Reported weed pressures include Canadian thistle, morning glory, buttonweed, foxtail, ragweed, hemp dogbane, milkweed, quack grass, poison ivy, broadleaf, chickweed, Johnsongrass. Reported insects were potato leafhopper, alfalfa weevil in alfalfa; cutworms, European corn borer, armyworms, corn flea beetles in corn; spotted spidermite in soybeans; cucumber beetles in vine crops. Reported diseases were phytophthora root rot in soybeans, smut in wheat, blight on vegetables, scab on young corn. Pasture conditions range from excellent to poor. Although most pastures have improved since last week, some are still dormant, brown. A Meigs county reporter mentioned that hay production has been about 50 to 60% of last year's production. Winter stocks are being fed to many livestock operations particularly in the southern part of the State. Livestock have been stressed from hot, humid conditions, an increase in the fly population.

OKLAHOMA: Days suitable for fieldwork 4.0. Subsoil 2% short, 77% adequate, 21% surplus. Topsoil 3% short, 74% adequate, 23% surplus. Wheat harvest accelerates as hot, dry conditions replace wet weather. Moisture at beginning of week boosts row crop, pasture growth. Wheat 34% plowed, 54% 1998, 54% avg. Oats 80% harvested, 97% 1998, 84% avg.; 25% plowed, 49% 1998, 44% avg. Corn 1% poor, 10% fair, 84% good, 5% excellent; 20% tasseled, 19% 1998, 36% avg.; 8% milk to soft, 6% 1998, 11% avg. Sorghum 73% up to stand, 88% 1998, 79% avg. Soybeans 10% poor, 38% fair, 43% good, 9% excellent; 68% planted, 94% 1998, 90% avg.; 53% up to stand, 86% 1998, 79% avg.; 8% flowering, 11% 1998, 13% avg. Peanuts 98% up to stand, 98% 1998, 95% avg.; 6% setting pods, 7% 1998, 8% avg. Cotton 100% up to stand, 93% 1998, 97% avg. Watermelons 53% fruit set, 75% 1998, 59% avg. Alfalfa hay 2% poor, 22% fair, 61% good, 15% excellent; 73% 2nd cutting, 86% 1998, 80% avg.; 12% 3rd cutting, 26% 1998, 17% avg. Other hay 73% 1st cutting, 78% 1998, 78% avg.; 8% 2nd cutting, 1% 1998, 10% avg. Livestock 2% poor, 14% fair, 70% good, 14% excellent. Feeder cattle prices up 50 cents per cwt. from last week.

OREGON: Days suitable for fieldwork 6.8. Topsoil 18% very short, 40% short, 42% adequate. Subsoil 18% very short, 38% short, 44% adequate. Winter wheat 25% very poor, 25% poor, 32% fair, 16% good, 2% excellent. Range, pasture feed 1% very poor, 11% poor, 26% fair, 55% good, 7%

excellent. Activities: Westside haying continued. Some hay down, rained on.

Alfalfa 2nd cutting underway. Willamette Valley Crimson clover being swathed, red clover nearing full bloom. Cutting of tall fescue, annual ryegrass underway. Rogue River Valley grains maturing, spring grain suffering from dry conditions. On East side, Alfalfa, other hay harvest underway. Harvest preparation continued for grains. Severe crop damage from hail storm in northeast. Mid-Columbia Basin approximately 1500 acres of spring crops destroyed due to lack of moisture. On Westside some nurseries working on fall plants, Christmas trees. Willamette Valley vegetables were being harvested, new plantings going in. Rouge River Valley, onions growing well, corn looking good. Willamette Valley onions looking better, sweet corn is leaf stage. Newer plantings of sweet corn up, potatoes being cultivated. Potatoes 1.5 weeks behind in Klamath Basin. Malheur County, the north coast, most vegetables look good, growing fast. Northeastern vegetables damaged by hail storm, heavy damage to vegetable transplant crops, should recover but harvest delayed. First melon crop damaged to the extent not market due to bruising. Some onion fields severely hit. Little long term damage done to potatoes. In the Willamette Valley, strawberry harvest nearing peak, some areas harvesting raspberries, blackberries. Sweet cherry harvest continued. Hazelnuts sizing. Rogue River Valley second cover sprays on pears nearly completed. Strawberry harvest winding down, cherries being picked. Caneberries starting to ripen. South coast early blueberry varieties starting to ripen. Cranberries blooming. North coast blackberries blooming. Mid-Columbia Basin Royal Anne, Bing cherries being harvested. Livestock mostly good throughout most of the State. Rains in Willamette Valley expected to extend grazing on dryland pastures. Northeast received rain which should improve pasture, range growth. Klamath Basin, Central State reporting most livestock good.

PENNSYLVANIA: Days suitable for fieldwork 4.8. Soil moisture 27% very short, 51% short, 22% adequate. Corn 28 in. height, 26 in. 1998, 26 in. avg.; 1% very poor, 12% poor, 33% fair, 47% good, 7% excellent. Soybeans 97% emerged complete, 89% 1998; 1% very poor, 4% poor, 42% fair, 47% good, 6% excellent. Barley 81% ripe, 94% 1998, 82% avg.; 87% harvested, 83% 1998, 60% avg. Wheat 96% turning yellow, 92% 1998, 85% avg.; 76% ripe, 48% 1998, 31% avg.; 11% harvested, 17% 1998, 8% avg.; 1% poor, 20% fair, 71% good, 8% excellent. Oats heading or headed 89% complete, 89% 1998, 80% avg.; 39% turning yellow, 31% 1998, 20% avg.; 5% ripe, 0% 1998, 2% avg. Oat 2% very poor, 13% poor, 42% fair, 39% good, 4% excellent. Alfalfa 44% 2nd cutting complete, 30% 1998, 29% avg. Timothy clover 91% 1st cutting complete, 70% 1998, 70% avg. Timothy clover 12% 2nd cutting complete, 0% 1998, 1% avg. Quality of hay made 2% very poor, 9% poor, 21% fair, 52% good, 16% excellent. Peach 1% very poor, 1% poor, 16% fair, 55% good, 27% excellent. Apple 1% very poor, 4% poor, 20% fair, 52% good, 23% excellent. Activities included: Planting soybeans, some vegetables; machinery maintenance; hauling manure; spreading fertilizers; caring for livestock; building, repairing fences; cutting hay; making haylage; applying pesticides; sowing beans; harvesting barley, wheat, some vegetables; irrigating crops.

SOUTH CAROLINA: Days suitable for fieldwork 5.5. Soil moisture 1% very short, 15% short, 74% adequate, 10% surplus. Barley 99% harvested, 100% 1998, 95% avg. Cantaloupes 59% harvested, 70% 1998, 65% avg.; 1% very poor, 16% poor, 49% fair, 33% good, 1% excellent. Corn 29% doughed, 46% 1998, 52% avg.; 9% very poor, 16% poor, 37% fair, 33% good, 5% excellent. Cucumbers 95% harvested, 85% 1998, 75% avg.; 18% poor, 59% fair, 23% good. Hay 3% very poor, 10% poor, 33% fair, 51% good, 3% excellent. Peaches 42% harvested, 31% 1998, 35% avg.; 10% poor, 15% fair, 55% good, 20% excellent. Rye 99% harvested, 97% 1998, 96% avg.. Snapbeans 70% harvested, 72% 1998, 54% avg.; 35% fair, 65% good. Sorghum 98% planted, 89% 1998, 87% avg.; 5% very poor, 6% poor, 2% fair, 87% good. Sweet potatoes 100% planted, 100% 1998, 93% avg.; 4% poor, 19% fair, 77% good. Tomatoes 79% harvested, 71% 1998, 71% avg.; 23% fair, 77% good. Watermelons 49% harvested, 55% 1998, 57% avg.; 2% very poor, 15% good, 39% fair, 41% good, 3% excellent. Winter wheat 100% harvested, 100% 1998, 96% avg.

SOUTH DAKOTA: Topsoil 3% short, 64% adequate, 33% surplus. Subsoil 2% short, 66% adequate, 32% surplus. Continued wet conditions hamper fieldwork, as most producers are fighting weed problems. Crops continue to progress although many fields are showing signs of too much water. Many counties across the State have suffered significant hail damage. Corn 26 in. height, 29 in. 1998, 25 in. avg.; 75% 1st cultivation, 87% 1998, 82% avg.; 21% 2nd cultivation, 45% 1998, 35% avg.; 0% tasseled, 4% 1998, 1% avg. Winter rye 3% poor, 14% fair, 47% good, 36% excellent. Flaxseed 1% good, 17% fair, 65% good, 17% excellent. Alfalfa 3% poor, 15% fair, 54% good, 28% excellent. Sunflower 1% very poor, 4% poor, 21% fair, 57% good, 17% excellent. Winter wheat 100% headed, 99% 1998, 98% avg.; 78% turning color, 75% 1998, 53% avg.; 6% ripe, 23% 1998, 8% avg. Spring wheat 97% in boot stage, 96% 1998, 88% avg. Spring wheat 27% turning color, 35% 1998, 13% avg. Oats 91% in boot stage, 96% 1998, 88% avg.; 14% turning color, 24% 1998, 13% avg. Barley 95% in boot stage, 95% 1998, 86% avg.; 17% turning color, 40% 1998, 15% avg. Winter rye 99% headed, 100%

1998, 99% avg.; 45% turning color, 55% 1998, 41% avg.; 0% ripe, 38% 1998, 13% avg. Flaxseed 22% blooming, 52% 1998, 29% avg. Sunflower 99% seeded, 99% 1998, 98% avg. Alfalfa 82% 1st cutting, 81% 1998, 82% avg.; 12% 2nd cutting, 16% 1998, 6% avg. Other hay 39% harvested, 36% 1998, 34% avg. Cattle 32% excellent, 62% good, 6% fair. Sheep 51% excellent, 46% good, 3% fair. Stock water 70% adequate, 30% surplus.

TENNESSEE: Days suitable for fieldwork 3. Topsoil 2% very short, 5% short, 67% adequate, 26% surplus. Subsoil 1% very short, 8% short, 71% adequate, 20% surplus. Corn 69% tasseled, 65% 1998, 58% avg.; 1% very poor, 2% poor, 15% fair, 55% good, 27% excellent. Tobacco 2% very poor, 6% poor, 34% fair, 43% good, 15% excellent. Pasture feed 3% very poor, 11% poor, 32% fair, 49% good, 5% excellent. Alfalfa 35% 2nd cutting, 44% 1998, 55% avg.; 3% poor, 25% fair, 59% good, 13% excellent. Other hay 1% very poor, 7% poor, 33% fair, 50% good, 9% excellent. Cattle 1% very poor, 5% poor, 25% fair, 60% good, 9% excellent. Crop conditions throughout the State continue to improve as crops respond well to recent widespread showers. All major row crops, pasture land, hay fields improved from the previous week. Recent moisture has been especially beneficial to the corn crop during the critical tasseling stage. Tobacco was rated in mostly good condition despite problems with both disease and insects. Producers mainly used the three days suitable for fieldwork last week to apply herbicides, as weeds have become more of a problem. Some crops grown in low lying fields were beginning to show signs of stress due to the heavy rains over the last week to ten days.

TEXAS: Summer weather across State with hot, humid conditions, only scattered light showers. Combined with recent rain over past couple of weeks, crops made excellent progress. Haying activity very active. Livestock remained good condition across State. Ranges, pastures made good progress, although grasshoppers continued to cause damage.

Crops: Small Grains: Harvest moved rapidly in High Plains as fields dried out quickly from recent wet weather. Yields continued good levels, however scattered fields had lower yields due to hail damage. Most harvest completed in low plains, north central. Corn: High Plains corn continued to show very good progress. Irrigation active as hot temperatures caused quick drying. Fields matured rapidly in Blacklands, central, prospects good. Grasshoppers have caused some damage to leaves on stalks. Fields have dried down along Upper Coast, Coastal Bend where harvest will begin very soon. Harvest increased into additional fields in the Rio Grande Valley. 56% doughing, 49% 1998, 47% avg. 42% dented, 37% 1998, 28% avg. 12% mature, 7% 1998, 4% avg. 1% harvested, 1% 1998, 0% avg. Cotton: Stands in Plains recovering from hail, high winds, made good progress last week. Warmer temperatures aided progress. Most fields squaring. Recent rains have been beneficial, more open, hot weather needs to continue. Progress also good in Blacklands, Central where bolls were setting. Insect problems light to moderate; some spraying occurred. Fields in Trans Pecos off to slow start but made good progress last week. Few fields defoliated in Coastal Bend while bolls most fields continued to open rapidly. Harvest should begin soon in the Rio Grande Valley where first bale of 1999 crop U.S. cotton picked. Bolls continued open rapidly along Upper Coast, some small bolls, late squares shedding. 3% open bolls, 5% 1998, 3% avg. Peanuts: Fields grew well in Plains, North Central, need continued open, sunny conditions for further improvement. Late planted fields emerged good stands. Irrigation active parts South Central where fields made good progress except for scattered disease problems. Spraying fungicides occurred in some fields. Rice: Disease increased many fields along Upper Coast due recent rains; producers busy spraying fungicides. Some early planted fields were drained in preparation for harvest. Sorghum: Planting winding down High Plains. Growth on early planted fields active. Fields began head out in Low Plains. Progress good in Blacklands, Central where fields rapidly matured. Harvest again full swing in Coastal Bend, Rio Grande Valley as fields dried from previous rain. Fields continued turn color along Upper Coast where few early fields harvested. 35% turning color, 39% 1998, 43% avg. 23% mature, 26% 1998, 22% avg. 16% harvested, 6% 1998, 6% avg. Soybeans: Late planted fields in Plains emerged to good stands. Early planted fields made good progress. Few fields of early variety beans harvested with many fields defoliating in preparation for harvest. Other Crops: Oats 89% harvested, 84% 1998, 82% avg. Sunflowers 89% planted, 85% 1998, 84% avg.

Commercial Vegetables: Rio Grande Valley, land preparations continued under open conditions. San Antonio-Winter Garden area, a few fields of watermelons harvested. East, harvest resumed most fields after lengthy delays due wet conditions. Disease problems increased many fields. High Plains, most fields escaped recent hail damage, made good progress. Trans Pecos, onion harvest continued, cantaloupe harvest should begin soon. Peaches: Production early varieties in Hill Country continued, however sizes remained small. East production remained low. Pecans: Spraying occurred for second generation casebearers South, Central. Rains have been beneficial all areas, minimized normal June nut drop. Irrigation activity light to this point. Progress remained good across State.

Range and Livestock: Native ranges, pastures continued good for this time of year. Haying activity rapidly increased with open, hot weather.

Grasshoppers continued to plague grasses, plants. Livestock conditions remained good, prices showed some strength.

UTAH: Days suitable for fieldwork 7. Topsoil 3% very short, 38% short, 57% adequate, 2% surplus. Subsoil 2% very short, 27% short, 69% adequate, 2% surplus. Range, pasture feed 1% very poor, 7% poor, 36% fair, 55% good, 1% excellent. Corn 21 in. height, 17 in. 1998, 22 in. avg. Spring wheat 90% headed, 72% 1998, 85% avg. Barley 87% headed, 65% 1998, 85% avg. Alfalfa hay 95% 1st cutting, 87% 1998, 92% avg.; 2% 2nd cutting, 3% 1998, 10% avg. Other hay 46% 1st cutting, 40% 1998, 40% avg. Oats 54% headed, 57% 1998, 57% avg.; harvested for hay or silage 16%, 17% 1998, 21% avg. Sweet cherries 14% picked, 21% 1998, 23% avg. Irrigation water supply 12% short, 86% adequate, 2% surplus. Stock water 4% very short, 10% short, 85% adequate, 1% surplus. Major activities included: Harvesting alfalfa hay, irrigating crops, spraying for weeds, insects. Weather again this week was conducive for crop growth, harvesting of alfalfa. Most counties reported that crops looked good, but weeds, insects seemed to be a major problem this year. Counties continued to complain about the grasshoppers, crickets, as well as other insects, weeds, disease.

VIRGINIA: Days suitable for fieldwork 5.9. Topsoil 34% very short, 30% short, 36% adequate. Subsoil 43% very short, 32% short, 25% adequate. Rainfall was scattered across the Commonwealth last week bringing some relief to farmers. Crop conditions improved somewhat, however, signs of the recent dry weather remain visible. Extreme heat is now as much of a concern as lack of significant rainfall. Temperatures across the State 5 to 10° above normal. Pasture feed 28% very poor, 32% poor, 31% fair, 9% good. Livestock 10% poor, 28% fair, 57% good, 5% excellent. Hay, Other 39% very poor, 30% poor, 23% fair, 8% good. Hay, alfalfa 7% very poor, 27% poor, 45% fair, 19% good, 2% excellent. Corn for grain 98% emerged, 98% 1998; 19% silked, 21% 1998, 14% avg.; 12% very poor, 22% poor, 36% fair, 27% good, 3% excellent. Soybeans 68% planted, 83% 1998, 77% avg.; 57% emerged, 72% 1998; 5% very poor, 15% poor, 40% fair, 36% good, 4% excellent. Winter wheat 65% harvested, 66% 1998, 58% avg. Barley 97% harvested, 94% 1998, 86% avg. Tobacco, flue cured 22% fair, 52% good, 26% excellent. Tobacco, burley 3% very poor, 11% poor, 20% fair, 41% good, 25% excellent. Tobacco, dark fire cured 7% poor, 40% fair, 41% good, 12% excellent. Tobacco, sun cured 25% poor, 25% fair, 50% good. Peanuts 34% pegged, 55% 1998; 12% fair, 72% good, 16% excellent. Cotton 65% squaring, 61% 1998; 6% poor, 29% fair, 53% good, 12% excellent. Summer potatoes 23% harvested, 16% 1998, 14% avg.; 3% very poor, 2% poor, 31% fair, 52% good, 12% excellent. Apples, all 12% poor, 33% fair, 44% good, 11% excellent. Peaches 22% very poor, 9% poor, 26% fair, 33% good, 10% excellent. Corn acres are beginning to tassel, silk in most areas even though some producers have reported that the plants remain shorter than normal. Planting of soybean acreage remains slightly behind schedule. Progress will pick up as farmers finish harvesting small grains. Additional rainfall is needed for proper germination of soybeans. Producers are busy harvesting wheat, barley. Many producers continue to report higher than expected yields. Condition of tobacco acreage improved slightly from the previous week. Some tobacco producers have begun topping their plants. Cotton, peanut acreage remained in mostly good condition. Both crops are hardy by nature, able to withstand periods of dry, hot weather. Peanut plants are beginning to bloom with a few already showing pegs. Most cotton plants have begun to show squares. Hay production continues with most producers reporting low yields from the second cutting. Low yields, combined with reduced quality, have caused great concern among livestock producers who purchase hay. Pastures improved with scattered showers but are not adequate to sustain current livestock conditions. Surface water sources are being depleted at a faster rate than rainfall can replenish. An increase of well digging has been reported in many areas. Vegetable harvest is in full swing on irrigated acres. Some blossom end rot has been reported in tomatoes. Potatoes are being harvested with good yield, quality. Harvest of snap beans, sweet corn, cucumbers, squash, peppers are also underway. No major problems with yield or quality have been reported.

WASHINGTON: Days suitable for fieldwork 4.6. Topsoil 16% very short, 35% short, 49% adequate. Subsoil 13% very short, 55% short, 31% adequate, 1% surplus. Winter wheat farmers welcomed the precipitation that fell last week. Rainfall coupled with cooler temperatures continued to improve the condition of the crop. Winter wheat, dryland 7% very poor, 17% poor, 45% fair, 29% good, 2% excellent; irrigated 100% good. Spring wheat, dryland 12% very poor, 33% poor, 46% fair, 9% good; irrigated 100% good.; 85% headed, 98% 1998, 85% avg. Barley, dryland 8% very poor, 34% poor, 50% fair, 8% good; irrigated, 100% good; 85% headed, 98% 1998, 90% avg. Spring cereal grain conditions continued improved last week due to the rainfall, cooler weather. Growth and development progress was slightly behind 1998 and average. Hay, other roughage supplies 2% very short, 11% short, 53% adequate, 34% surplus. Range, pasture feed 9% very poor, 23% poor, 37% fair, 26% good, 5% excellent. Precipitation, cool temperatures across the State slowed the second cutting of alfalfa as the 1st cutting came to an end. Cool weather was also beneficial for the pasture conditions. Potato harvest begun, although it was slightly behind past years. Sweet corn

growth is slow due to the lack of heat units. Strawberry, raspberry harvests were both underway with raspberries slow to ripen. Blueberry growers were predicting a later harvest than normal. Cherries were still being harvested with some disappointing yields. Pears, apples continue to develop well.

WEST VIRGINIA: Days suitable for fieldwork 5.7. Topsoil 54% very short, 37% short, 9% adequate. Dry weather, low moisture supplies continue to deteriorate hay, pasture conditions throughout the State. Wheat 3% very poor, 7% poor, 42% fair, 48% good; 50% harvested, 42% 1998, 21% avg. Hay 14% very poor, 36% poor, 38% fair, 12% good; 1st cut 93%, 79% 1998, 81% avg.; 11% 2nd cut, 7% 1998, 6% avg. Corn 16% very poor, 43% poor, 30% fair, 11% good; 6% silked, 1% 1998, 1% avg. Oats 8% very poor, 16% poor, 67% fair, 9% good; 88% headed, 90% 1998. Soybeans 6% very poor, 22% poor, 62% fair, 10% good; 2% blooming, 3% 1998. Tobacco 20% very poor, 27% poor, 41% fair, 12% good. Apples 8% poor, 44% fair, 48% good. Peaches 43% fair, 57% good. Cattle 6% poor, 43% fair, 49% good, 2% excellent. Sheep 11% poor, 44% fair, 42% good, 3% excellent.

WISCONSIN: Days suitable for fieldwork 4.7. Soil moisture 1% very short, 10% short, 77% adequate, 12% surplus. Recent rains over most of the State teamed up with the warm temperatures to help shoot up the corn crop. Planting dates, soil moisture conditions have created a large variation in its height. A Fond du Lac County reporter stated corn varied from 4.00 to 72.00 in. his county. In many areas in the State the corn crop was being cultivated, fertilized between the showers. There were few pest, weed problems reported. Early planted soybeans are beginning to bloom. Soybean 1% poor, 16% fair, 57% good, 26% excellent. Second crop hay harvest continued last week. Humidity, frequent rains prevented farmers from making good quality dry hay. Many reports were that the quality was good, the quantity was average. One reason for the lack of quantity is the abundance of leafhoppers in the fields. First crop alfalfa 97% harvest, 99% 1998, 92% avg.; 2nd crop 19% harvest, 21% 1998, 6% avg. Oat, winter wheat crops are both doing well. There was some lodging reported from the past week's storms, yields are looking good for both. Both have also been reported as beginning to turn color. Winter wheat 7% fair, 55% good, 38% excellent. Oatlage was reported to have excellent quantity, quality. Cranberries as past full bloom with one of the best bloom periods in years. Some sweet corn reported as tasseling in Sauk county. Pasture feed 3% poor, 13% fair, 63% good, 21% excellent.

WYOMING: Days suitable for fieldwork 6.8. Topsoil 1% very short, 29% short, 70% adequate. Subsoil 1% very short, 20% short, 74% adequate, 5% surplus. Winter wheat 83% turning color, 77% 1998, 68% avg. Spring wheat 77% boot, 92% 1998, 81% avg.; 62% headed, 63% 1998, 55% avg.; 4% turning color, 25% 1998, 20% avg. Barley 65% headed, 68% 1998, 69% avg., 7% turning color, 15% 1998, 13% avg. Oats 33% headed, 54% 1998, 47% avg.; 5% turning color, 7% 1998, 7% avg. Dry bean 2% bloom, 2% 1998, 7% avg. Corn 24 in. height, 20 in. 1998, 22 in. avg. Alfalfa 56% 1st cutting, 45% 1998, 55% avg. Other hay 22% cut, 22% 1998, 24% avg. Range, pasture feed 2% fair, 63% good, 35% excellent. Stock water 98% adequate, 2% surplus. Livestock good to excellent. Below normal temperatures for most of the week.

International Weather and Crop Summary

June 27 - July 3, 1999

HIGHLIGHTS

EUROPE: Wet weather over England favored filling winter grains but slowed the onset of barley harvesting, while warmer, drier weather prevailed in areas of eastern Europe that experienced floods the previous week.

FSU-WESTERN: Cooler weather and light to moderate showers continued to bring some relief to drought-stressed crops in Russia's Volga Valley.

FSU-NEW LANDS: Although dry weather prevailed over spring grain areas in Russia and Kazakstan, unseasonably cool weather lowered crop-water requirements.

EASTERN ASIA: Heavy showers caused flooding in the eastern Yangtze Valley, while dry weather dominated the North China Plain.

AUSTRALIA: Rain helped winter crop establishment in Queensland and New South Wales.

SOUTH AMERICA: In central Argentina, rain boosted topsoil moisture for winter wheat development and continued to favor winter wheat in southern Brazil.

SOUTH ASIA: Warm, dry weather over much of India promoted planting of coarse grains, oilseeds, cotton, and sugarcane.

SOUTHEAST ASIA: Drier weather in western Thailand reduced moisture supplies for corn.

CANADA: Across the Prairies, drier weather allowed a resumption in fieldwork, but unseasonable coolness slowed crop growth.

MEXICO: Seasonal showers continued to benefit corn in the main corn belt and eased long-term drought in north-central Mexico.

June 1999

MONTHLY DATA FROM SELECTED FOREIGN CITIES CLIMATE PREDICTION CENTER-NCEP-NWS-NOAA

*** DATA NOT AVAILABLE

COUNTRY	CITY	TEMPERATURE (C)					PRECIPITATION (MM)		
		AVG MAX	AVG MIN	HI MAX	LO MIN	AVG	DPART F/NRM	TOTAL	DPART F/NRM
NORWAY	OSLO	13	3	24	-2	8	-1.0	49	-13
FINLAND	HELSINKI	12	3	21	-4	7	-2.5	12	-23
UKINGDOM	GLASGOW	**	**	**	7	**	**	**	**
	EDINBURGH	14	8	21	1	11	1.1	58	7
IRELAND	DUBLIN	15	8	19	3	12	1.1	38	-17
ICELAND	REYKJAVIK	10	5	14	1	7	0.7	68	24
DENMARK	COPENHAGEN	15	6	22	2	11	-1.3	37	-5
LUXEMBOR	LUXEMBOURG	19	10	29	5	15	2.5	32	-44
SWITZERL	ZURICH	19	11	29	7	15	3.0	287	181
	GENEVA	21	12	29	8	17	3.9	83	9
FRANCE	PARIS/ORLY	21	12	29	7	16	**	55	**
	STRASBOURG	22	11	31	7	16	2.7	74	-3
	BOURGES	21	12	28	7	16	3.1	69	-12
	BORDEAUX	23	14	29	9	18	3.8	90	14
	TOULOUSE	22	13	27	9	18	3.0	101	27
	MARSEILLE	24	15	31	10	20	2.7	26	-17
SPAIN	VALLADOLID	23	10	31	5	16	2.6	25	-22
	MADRID	24	11	32	6	18	1.0	27	-13
	SEVILLE	29	16	36	11	22	2.4	34	-5
PORTUGAL	LISBON	22	14	31	11	18	0.6	84	41
GERMANY	HAMBURG	18	8	29	0	13	0.8	45	-11
	BERLIN	20	9	31	3	15	0.6	26	-30
	DUSSELDORF	20	10	29	2	15	1.2	51	-9
	LEIPZIG	19	9	29	4	14	1.6	55	4
	DRESDEN	19	9	28	4	14	1.2	80	17
	STUTTGART	20	10	28	5	15	2.0	74	-5
	NURNBERG	20	9	29	3	15	1.3	75	10
AUSTRIA	VIENNA	20	11	31	3	15	0.3	89	27
	INNSBRUCK	21	10	29	5	16	2.3	199	108
CZECHREP	PRAGUE	19	8	28	2	14	1.0	42	-36
POLAND	WARSAW	18	7	28	1	12	-1.1	46	-11
	LODZ	18	7	29	1	13	-0.2	42	-9
	KATOWICE	19	7	28	0	13	0.4	30	-38
	PRZEMYSL	18	8	27	0	13	-0.6	63	-13
HUNGARY	BUDAPEST	21	11	30	5	16	0.2	101	47
YUGOSLAV	BELGRADE	22	13	30	6	18	0.3	61	-11
ROMANIA	BUCHAREST	22	9	31	0	16	-0.7	64	-7
BULGARIA	SOFIA	21	10	28	3	15	0.7	83	8
ITALY	MILAN	25	15	32	11	20	3.4	41	-56
	VERONA	23	15	30	11	19	2.2	56	-28
	VENICE	23	15	28	11	19	2.1	40	-26
	GENOA	22	17	26	14	19	1.7	13	-95
	ROME	23	14	29	9	19	1.7	85	50
	NAPLES	**	**	36	13	**	**	**	**
GREECE	THESSALONIKA	25	14	31	9	19	0.0	29	-18
	LARISSA	27	13	33	7	20	0.2	6	-31
	ATHENS	26	17	30	11	21	0.9	1	-23
TURKEY	ISTANBUL	22	14	30	8	18	2.4	5	-25
	ANKARA	23	5	28	-2	14	-2.9	10	-32
CYPRUS	LARNACA	28	17	37	13	23	2.0	0	-11
ESTONIA	TALLINN	12	3	23	-5	7	-2.6	6	-28
LITHUANI	KAUNAS	16	5	26	-1	10	-2.5	34	-21
BELARUS	MINSK	16	5	27	-3	10	-2.8	34	-27
RUSSIA	KAZAN	13	5	26	-4	9	-4.7	50	15
	MOSCOW	13	4	26	-4	9	-4.4	40	-14
	YEKATERINBUR	14	5	28	-3	9	-1.5	56	12
	OMSK	22	9	34	-1	15	3.6	8	-25
	NOVOSIBIRSK	23	10	32	-1	16	6.6	13	-20
	BARNAUL	24	8	33	-2	16	4.2	9	-29
	KHABAROVSK	15	5	23	0	10	-1.7	57	-1
	VLADIVOSTOK	14	7	22	5	11	1.0	142	73
	SARATOV	16	8	28	-2	12	-2.7	38	-12
	VOLGOGRAD	17	7	27	-3	12	-4.6	25	-7
	ASTRAKHAN	20	10	28	0	15	-3.4	18	-6
	KRASNODAR	20	10	26	1	15	-2.4	62	-1
	ORENBURG	19	7	31	-6	13	-2.3	65	36
KAZAKHST	TSELINOGRAD	22	8	35	0	15	1.8	21	-12
	KARAGANDA	21	8	34	1	15	1.5	23	-13
GEORGIA	TBILISI	21	11	28	3	16	-1.3	66	-12
UZBEKIST	TASHKENT	28	14	37	9	21	0.6	42	10

Based on Preliminary Reports

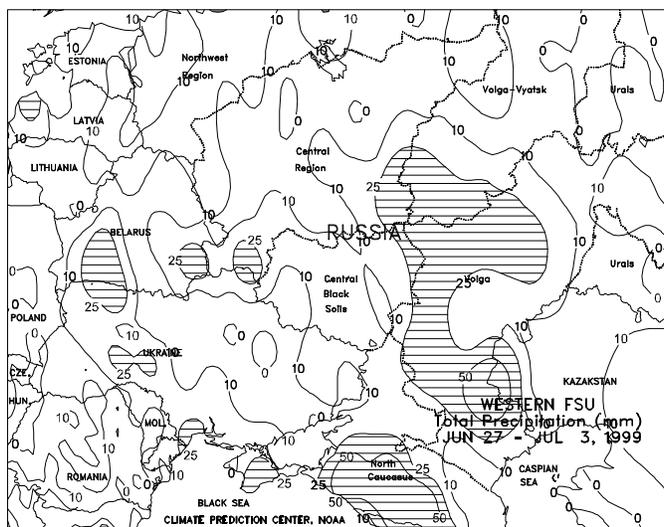
June 1999

COUNTRY	CITY	TEMPERATURE (C)					PRECIPITATION (MM)			COUNTRY	CITY	TEMPERATURE (C)					PRECIPITATION (MM)			
		AVG MAX	AVG MIN	HI MAX	LO MIN	AVG	DPART F/NRM	TOTAL	DPART F/NRM			AVG MAX	AVG MIN	HI MAX	LO MIN	AVG	DPART F/NRM	TOTAL	DPART F/NRM	
TURKMENI	ASHKhabad	29	17	40	10	23	-0.2	1	-28		BETHAL	20	5	26	-1	12	0.8	25	6	
SYRIA	DAMASCUS	33	13	38	7	23	2.5	0	-5		DURBAN	25	15	28	10	20	0.9	37	-24	
ISRAEL	JERUSALEM	28	15	37	9	21	2.2	0	-4		CAPE TOWN	21	11	29	4	16	1.7	32	-36	
PAKISTAN	KARACHI	35	28	43	26	31	0.7	4	4	CANADA	TORONTO	21	10	32	4	16	3.2	38	-28	
INDIA	AMRITSAR	37	27	44	21	32	2.1	9	-10		MONTREAL	23	10	32	1	16	3.4	45	-24	
	NEW DELHI	40	27	44	22	33	1.0	18	-6		WINNIPEG	18	6	31	-4	12	0.4	95	35	
	AHMEDABAD	40	27	44	23	33	-0.5	5	-10		REGINA	17	5	27	-2	11	-0.6	69	18	
	INDORE	41	25	44	23	33	0.6	1	-16		SASKATOON	17	5	29	-2	11	-0.7	117	74	
	CALCUTTA	35	26	40	22	30	-1.0	110	27		LETHBRIDGE	17	2	29	-4	10	-1.7	50	-1	
	VERAVAL	32	27	33	26	30	1.2	0	-2		CALGARY	15	2	27	-6	9	-1.1	54	1	
	BOMBAY	33	26	36	23	30	-0.1	42	22		EDMONTON	15	4	29	-2	10	-1.8	85	41	
	POONA	35	22	41	18	29	-1.1	36	-9		VANCOUVER	15	7	26	2	11	-1.0	64	2	
	BEGAMPET	37	25	43	21	31	-1.4	90	56	MEXICO	GUADALAJARA	30	15	35	11	22	-1.8	10	-17	
	VISHAKHAPATNA	33	28	36	22	30	***	69	**		MEXICO CITY	25	15	30	12	20	1.6	56	5	
	MADRAS	37	27	41	25	32	-0.8	56	27		ACAPULCO	33	24	35	20	29	0.5	0	-21	
	MANGALORE	31	24	34	22	27	-1.8	527	294		BERMUDA	ST. GEORGES	26	20	28	17	23	0.7	72	-31
HONGKON	KINGS PEAK	27	23	31	16	25	***	216	**		BAHAMAS	NASSAU	29	22	33	18	26	0.3	116	3
N KOREA	PYONGYANG	20	9	26	4	14	0.1	27	-50		CUBA	HAVANA	30	23	35	21	27	1.0	0	-115
S KOREA	SEOUL	23	13	33	10	18	1.5	110	24		JAMAICA	KINGSTON	31	26	33	24	28	0.7	3	-65
JAPAN	SAPPORO	16	8	29	4	12	0.1	97	42		P RICO	SAN JUAN	32	24	33	22	28	0.8	105	-40
	NAGOYA	25	15	30	9	20	1.3	180	22		GUADELOU	RAIZET	32	24	33	22	28	1.5	32	-66
	TOKYO	24	17	32	11	20	1.6	109	-29		MARTINIQ	LAMENTIN	31	24	33	21	28	1.5	32	-83
	YOKOHAMA	23	16	31	10	20	1.7	119	-45		BARBADOS	BRIDGETOWN	31	25	32	24	28	0.6	13	-39
	KYOTO	26	15	30	8	20	1.8	168	12		TRINIDAD	PORT OF SPAIN	33	24	34	22	29	1.5	10	-87
	OSAKA	25	17	29	11	21	1.4	113	-27		COLOMBIA	BOGOTA	19	**	23	6	**	***	34	-48
THAILAND	PHETCHABUN	32	24	36	22	28	-1.2	247	87		VENEZUEL	CARACAS	31	23	32	22	27	0.1	14	-22
	BANGKOK	33	26	34	24	29	-0.7	410	189		F GUIANA	CAYENNE	30	23	31	21	26	0.5	564	-45
MALAYSIA	KUALA LUMPUR	33	24	34	23	29	1.3	397	205		BRAZIL	RECIFE	29	23	30	19	26	0.3	304	-3
VIETNAM	HANOI	30	24	36	21	27	-0.6	169	-27		BELO	25	15	30	10	20	-0.3	4	-25	
CHINA	HARBIN	19	7	31	1	13	-0.6	44	8		FRANCA	23	14	27	6	18	1.7	22	-35	
	HAMI	28	14	36	8	21	0.6	8	5		RIO DE JANEIRO	32	18	**	**	**	**	**	**	
	LANCHOW	24	11	30	7	17	0.6	75	37		LONDRINA	23	12	30	5	18	-1.4	47	-55	
	BEIJING	25	13	32	6	19	-0.9	32	4		SANTA MARIA	20	11	32	3	15	-0.8	222	93	
	TIENTSIN	26	15	33	9	20	-0.3	47	14		PORTO ALEGRE	20	11	29	6	16	-1.6	89	-26	
	LHASA	20	8	26	4	14	1.6	63	37		PERU	LIMA	22	16	25	15	19	0.2	0	0
	KUNMING	22	14	28	7	18	-0.9	215	123		BOLIVIA	LA PAZ	14	1	17	-3	7	-0.3	7	-7
	CHENGCHOW	27	16	37	10	21	0.5	31	-21		CHILE	SANTIAGO	19	5	25	-1	12	1.1	0	-40
	YEHCHANG	27	18	33	15	22	0.5	162	39		ARGENTIN	IGUAZU	23	12	30	3	18	***	145	**
	HANKOW	27	19	34	16	23	1.2	178	29		FORMOSA	24	13	32	5	18	-0.7	84	-34	
	CHUNGKING	25	19	31	15	22	***	145	**		CERES	21	9	32	0	15	-0.6	1	-28	
	CHIHKIANG	26	18	32	12	22	0.8	320	112		CORDOBA	19	10	31	1	14	0.1	120	99	
	WU HU	27	18	32	12	22	***	110	**		RIO CUARTO	18	10	26	3	14	0.8	4	-20	
	SHANGHAI	24	18	30	13	21	***	105	**		ROSARIO	20	9	31	1	14	0.5	51	3	
	NANCHANG	26	19	32	15	23	0.3	329	74		BUENOS AIRES	18	9	28	2	13	0.5	42	-34	
	TAIPEI	27	21	35	15	24	-0.1	280	61		SANTA ROSA	17	6	26	-1	12	0.5	222	194	
	CANTON	28	21	33	16	25	-0.8	190	-76		TRES ARROYOS	16	7	23	0	11	0.5	36	-31	
	NANNING	28	22	34	16	25	-0.8	111	-77		NEW CAL	NOUMEA	27	22	30	19	24	2.0	144	53
CANARY I	LAS PALMAS	24	19	27	15	21	1.2	0	-2		FIJI	NAUSORI	28	22	32	18	25	0.8	146	-108
MOROCCO	CASABLANCA	22	16	26	13	19	1.3	8	-11		SAMOA	PAGO PAGO	29	24	32	23	27	-0.2	524	274
	MARRAKECH	30	16	41	10	23	2.6	6	-18		TAHITI	PAPEETE	30	24	32	22	27	1.1	149	55
ALGERIA	ALGER	26	14	31	9	20	2.3	2	-34		AUSTRALI	DARWIN	31	21	33	17	26	-1.6	0	-29
	BATNA	30	13	38	5	22	5.7	8	-31		BRISBANE	23	15	25	10	19	0.2	77	-20	
TUNISIA	TUNIS	29	17	37	13	23	3.6	7	-15		PERTH	21	14	27	8	18	1.5	113	9	
NIGER	NIAMEY	41	29	45	24	35	0.8	28	-7		CEDUNA	22	11	30	2	16	1.5	13	-21	
MALI	TIMBUKTU	42	28	46	21	35	0.8	0	-4		ADELAIDE	18	11	25	4	15	0.7	44	-13	
	BAMAKO	37	27	41	23	32	0.9	14	-39		MELBOURNE	18	9	24	1	14	0.8	40	-17	
MAURITAN	NOUAKCHOTT	32	21	46	17	26	0.6	0	0		WAGGA	18	7	22	-1	12	0.3	41	-19	
SENEGAL	DAKAR	26	21	31	17	24	0.8	0	0		CANBERRA	17	4	21	-4	10	0.9	24	-21	
CHAGOS A	DIEGO GARCIA	29	26	30	24	27	0.0	212	22		INDONESI	DJAKARTA	31	24	33	14	27	0.0	60	**
LIBYA	TRIPOLI	33	19	47	13	26	3.0	0	-4		PHILIPPI	MANILA	33	28	35	25	30	0.5	82	-43
	BENGHAZI	29	20	40	14	24	1.7	2	-1											
EGYPT	CAIRO	32	19	37	16	26	0.6	0	0											
	ASWAN	**	**	43	21	**	***	**	**											
ETHIOPIA	ADDIS ABABA	26	12	29	8	19	0.9	30	-47											
KENYA	NAIROBI	25	14	28	11	20	0.4	6	-105											
TANZANIA	DAR ES SALAAM	29	22	32	20	25	-0.1	192	38											
GABON	LIBREVILLE	30	24	32	21	27	0.6	535	267											
TOGO	LOME	31	25	35	13	28	0.2	140	-8											
BURKINA	OUAGADOUGOU	37	27	42	22	32	0.6	54	-18											
COTE DI	ABIDJAN	32	26	34	22	29	1.3	174	-102											
MOZAMBIQ	MAPUTO	27	17	34	14	22	0.7	35	5											
ZAMBIA	LUSAKA	26	12	31	7	19	-0.1	0	-2											
ZIMBABWE	HARARE	24	11	27	9	18	2.2	0	-10											
S AFRICA	PRETORIA	23	9	28	4	16	1.7													



EUROPE

In England and the Benelux countries, periods of rain (15-45 mm) throughout the week favored filling winter grains, but slowed winter barley harvesting in southern England. In France, scattered showers and thundershowers early in the week raised concern about localized outbreaks of disease in winter grains. Unseasonably warm (maximum temperatures 28-34 degrees C) and drier weather during the latter half of the week accelerated winter grain maturation and favored harvesting, particularly in southern areas. Farther south, hot (temperatures averaging 2-4 degrees C above normal), dry weather persisted over most of the Iberian peninsula, further increasing crop-water requirements. Seasonably dry weather occurred over most of central and southern Italy, with 5 to 25 mm of rain early in the week benefiting spring-sown crops in the north. In Germany, Denmark, and Scandinavia, near- to slightly above-normal temperatures and scattered showers (5-60 mm) favored filling winter grains and spring-sown crops, but likely interrupted winter grain harvesting in parts of Germany. In eastern Europe, temperatures averaged 2 to 4 degrees C above normal for the week, with the greatest rainfall (generally 25-50 mm) in western Poland, Czechoslovakia, Bulgaria, and the Balkans. Despite somewhat drier weather, winter grain harvesting was likely delayed last week in those parts of Slovakia and Hungary that experienced floods the previous week.



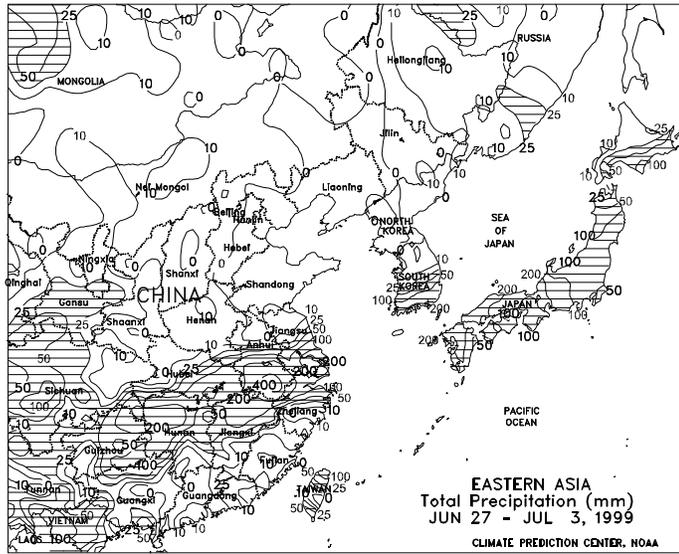
FSU-WESTERN

In Russia, light to moderate showers (10-40 mm or more) and seasonable temperatures continued to bring some relief from persistent hot, dry weather conditions in major crop producing areas in the east (North Caucasus, Volga Valley, and the Central Black Soils region). The precipitation in these areas caused only temporary delays in winter grain harvesting. Reports from Russia indicated winter grain harvesting started about 2 weeks earlier than usual. Farther north, light showers (2-10 mm or more) fell from Northwestern Region eastward through Volga Vyatsk, providing some moisture for winter grains in the filling stage and spring grains in or nearing reproduction. However, weekly temperatures averaged 3 to 7 degrees C above normal in these areas, accelerating crop development and increasing crop-water requirements. In Ukraine, variable amounts of precipitation (4-35 mm, with local amounts in excess of 50 mm) locally improved moisture conditions for spring grains in the filling stage and summer crops in the vegetative stage. The moisture caused only brief delays in winter wheat harvesting, typically advancing northward. Since soil moisture reserves remain limited throughout the country, timely rains will be needed in upcoming weeks as summer crops advance through the highly weather-sensitive reproductive phase of development. Elsewhere, light showers (10-25 mm) maintained favorable moisture conditions for winter grains and spring-sown crops in Belarus and the Baltics.



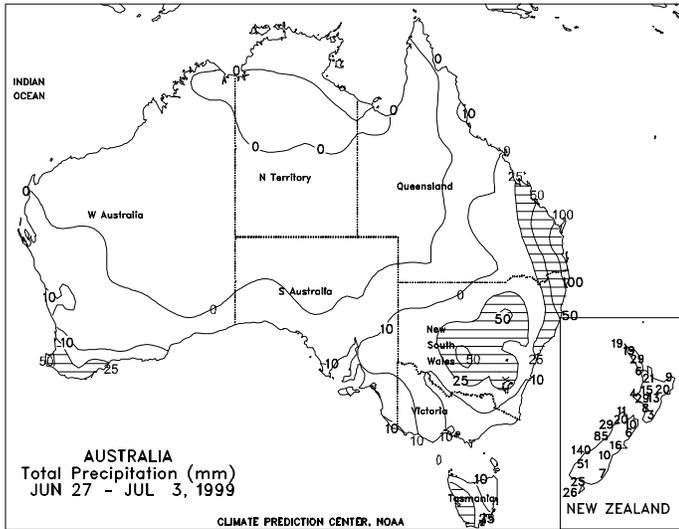
FSU-NEWLANDS

Spring grains were mostly in the jointing stage over the region. Dry weather prevailed over most spring grain areas in Russia and Kazakhstan. The dryness had little, if any, impact on spring grains, since most areas received generous rains the previous week. Light to moderate showers were confined to Altay Kray oblast in Russia and adjacent areas in eastern Kazakhstan. The third consecutive week of unseasonably cool weather (weekly temperatures averaging 1-3 degrees C below normal) prevailed over crop areas in Russia and Kazakhstan, slowing crop development but preventing heat stress. In cotton-producing areas of Central Asia, most of the cotton crop is irrigated. Seasonably hot, dry weather promoted rapid crop development but maintained high irrigation requirements.



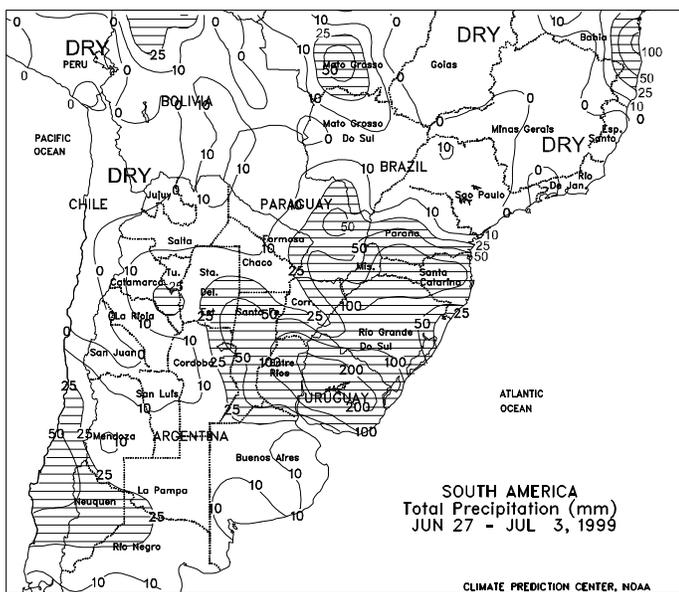
EASTERN ASIA

Mostly dry, warm weather prevailed across the North China Plain and most of Manchuria, reducing topsoil moisture for summer crops. Temperatures averaged 2 to 4 degrees C above normal, with highs ranging from 32 to 38 degrees C across the region. Rain is especially needed in Manchuria, where spring wheat is in or nearing reproduction. Farther south, torrential showers (150-350 mm) fell from northern Hunan eastward to southern Jiangsu, causing additional flooding and possible crop damage to early rice. Scattered showers (5-20 mm) were reported across the coastal provinces of southern China. Temperatures averaged 2 to 5 degrees C below normal across the Yangtze Valley and 1 to 2 degrees C above normal along the southern coastal provinces. Dry, warm weather reduced soil moisture in North Korea, where rainfall has been less than 20 percent of normal for the past 4 weeks. Heavy showers continued across South Korea (50-150 mm) and Japan (50-300 mm), causing additional flooding, but boosting moisture supplies. Temperatures averaged near normal across Japan and South Korea and 2 to 3 degrees C above normal in North Korea.



AUSTRALIA

Beneficial rain (15-50 mm or more) covered primary winter grain and oilseed areas of Queensland and New South Wales, improving prospects for crop establishment. Unfortunately, heavy rain (50-100 mm or greater) persisted in sugarcane areas along the coast of New South Wales and southern Queensland, keeping unharvested crops unfavorably wet. Farther south, generally light showers (15 mm or less) in winter grain areas of South Australia and Victoria stabilized emerged wheat and barley. However, more rain was needed to significantly improve crop prospects at the driest locations. Temperatures across the east averaged 1 to 2 degrees C above normal, aiding early crop growth. In Western Australia, mostly light showers (2-11 mm) kept topsoils moist in the main winter grain areas. In New Zealand, light to moderate showers (10-25 mm) covered the main grain and pasture lands.

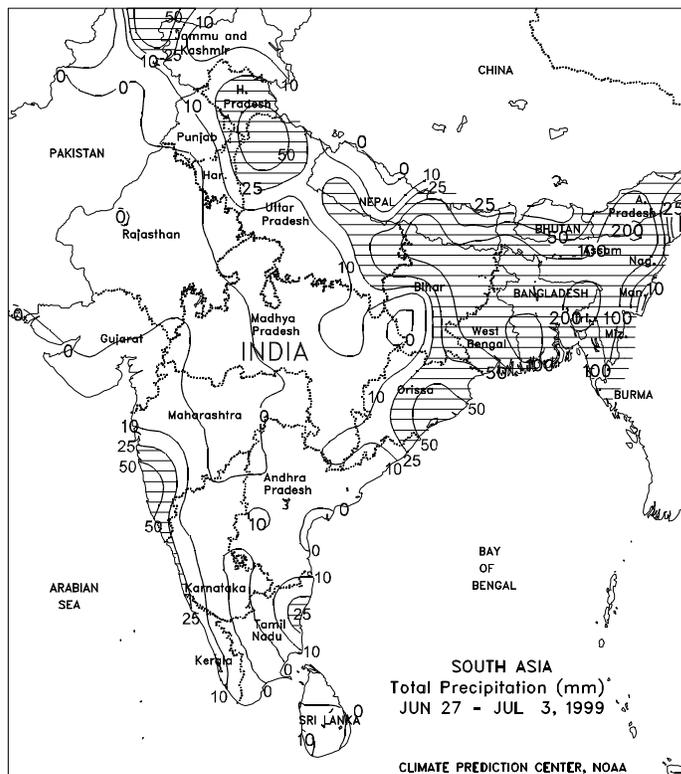


SOUTH AMERICA

In central Argentina, light to moderate rain (5-25 mm) fell across Buenos Aires, La Pampa, and southern Cordoba, increasing topsoil moisture for winter wheat development. More rain, however, is needed to ensure favorable crop prospects. Heavier amounts (20-65 mm) were reported in southern Santa Fe. In northern Argentina, light to moderate showers (10-35 mm) caused only minor delays to cotton harvesting. According to reports as of June 25, Argentine corn was 92 percent harvested, compared with 85 percent last year, soybeans were 98 percent harvested, compared with 97 percent last year, and cotton was 54 percent planted, compared with the 3-year average of 48 percent. In southern Brazil, moderate to heavy showers (25-80 mm), with scattered amounts greater than 150 mm) covered Rio Grande do Sul and southern Parana, maintaining soil moisture for winter wheat development but likely causing local flooding. Farther north, scattered light rain (less than 10 mm) prevailed, causing minor delays to coffee and citrus harvesting. Temperatures averaged near to slightly below normal across Argentina and 1 to 3 degrees C above normal across southern Brazil.

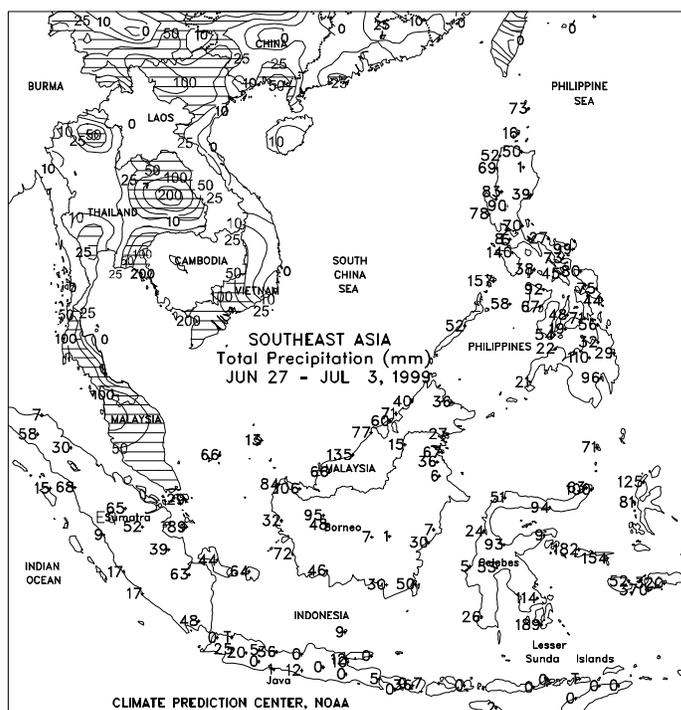
SOUTH ASIA

Warmer- and drier-than-normal weather enveloped much of India as a break in the monsoon circulation entered its second week. As a result, planting of coarse grains, oilseeds, cotton, and sugarcane progressed in interior crop areas, where moisture was available. Along the southwest coast, rainfall of 10 to 50 mm represented the lowest totals of the rainy season thus far. Periodic lulls in monsoon shower activity are expected in a typical season, but extended periods of heat and dryness would be harmful to crops such as central India's emerging soybeans and groundnuts. In fact, highs in the middle 30's degrees C over the main oilseed areas of Gujarat and Madhya Pradesh may have stressed emerging crops, necessitating a return to more seasonable weather. In the eastern rice belt, moderate to heavy rain (25-100 mm or more) maintained generally favorable moisture levels for crops from Orissa through Bangladesh to India's eastern states. In the far northwest, the main Pakistani crop areas were mostly dry. Monsoon showers typically arrive in the northwest by mid July.



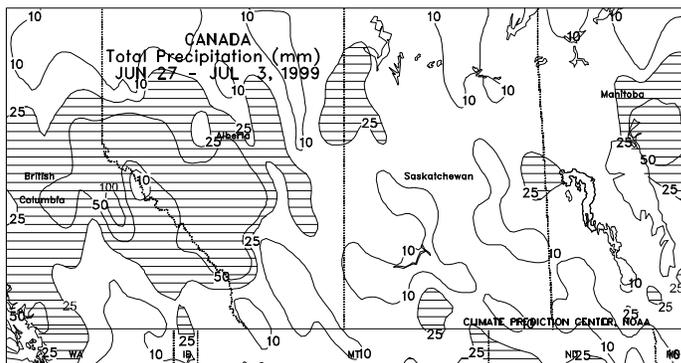
SOUTHEAST ASIA

In the western half of Thailand, drier weather (less than 15 mm) reduced moisture supplies for corn development. Temperatures averaged 2 to 3 degrees C above normal across this region, increasing crop-water use. More seasonable showers (25-100 mm, with isolated amounts greater than 200 mm) prevailed across eastern Thailand, maintaining moisture supplies for main-season rice. Seasonal showers (20-90 mm) maintained adequate moisture supplies for main-season grains in Vietnam and the Philippines. Moderate showers (25-50 mm) favored oil palm across peninsular Malaysia. Seasonably drier weather (5-25 mm) prevailed across Java, Indonesia, where adequate irrigation supplies exist for second-season rice.



CANADA

Rainfall tapered off across the Prairies, with just a few locations reporting rainfall in excess of 25 mm. Despite the presence of showery weather, periods of dryness during the week allowed fieldwork to resume. This included spraying for weeds and pests and treatment for disease, activities that had been interrupted by the chronic wetness. Unfortunately, unusually cool weather (temperatures averaging 3-4 degrees C below normal) further delayed development of late-planted grains and oilseeds. Although warmer weather is needed across the Prairies to help elevate growth rates, excessive heat would be unfavorable for crops, which typically advance through reproduction in July. Provincial reports indicate that crops are entering moisture- and temperature-sensitive phases of development across the region. In eastern Canada, rain (15-50 mm or more) and summer warmth favored growth and development of corn and soybeans. Winter wheat was reportedly beginning to ripen in parts of Ontario.



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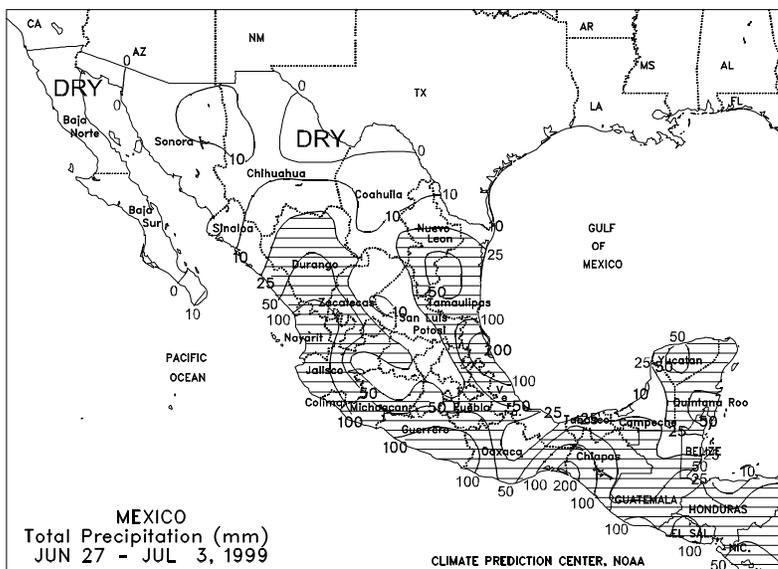
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U.S. DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration
 National Weather Service/Climate Prediction Center
 Managing Editor **David Miskus** (202) 720-7919
 Meteorologists **Clinton Wallace** and **David King**
 Special Requests (202) 720-7917
 Subscriptions . . . **John Kopman** (301) 763-8000 ext 7534
 fax: (301) 763-8125

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Economic Research Service
 E.R.S. Editor **Sharon Lee**
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MEXICO

Widespread showers (12-60 mm) continued to cover the Southern Plateau corn belt, aiding vegetative corn. Variable showers (10-70 mm) helped to boost reservoir levels and ease long-term drought across north-central Mexico. A weak tropical depression hit the eastern state of Veracruz, producing heavy showers (50-250 mm) and local flooding. Light to moderate showers (10-30 mm) signaled the start of the rainy season in northwestern Mexico. Temperatures averaged 1 to 2 degrees C above normal across northern and central Mexico and near normal in the south.

Climate Prediction Center, W/NP52
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