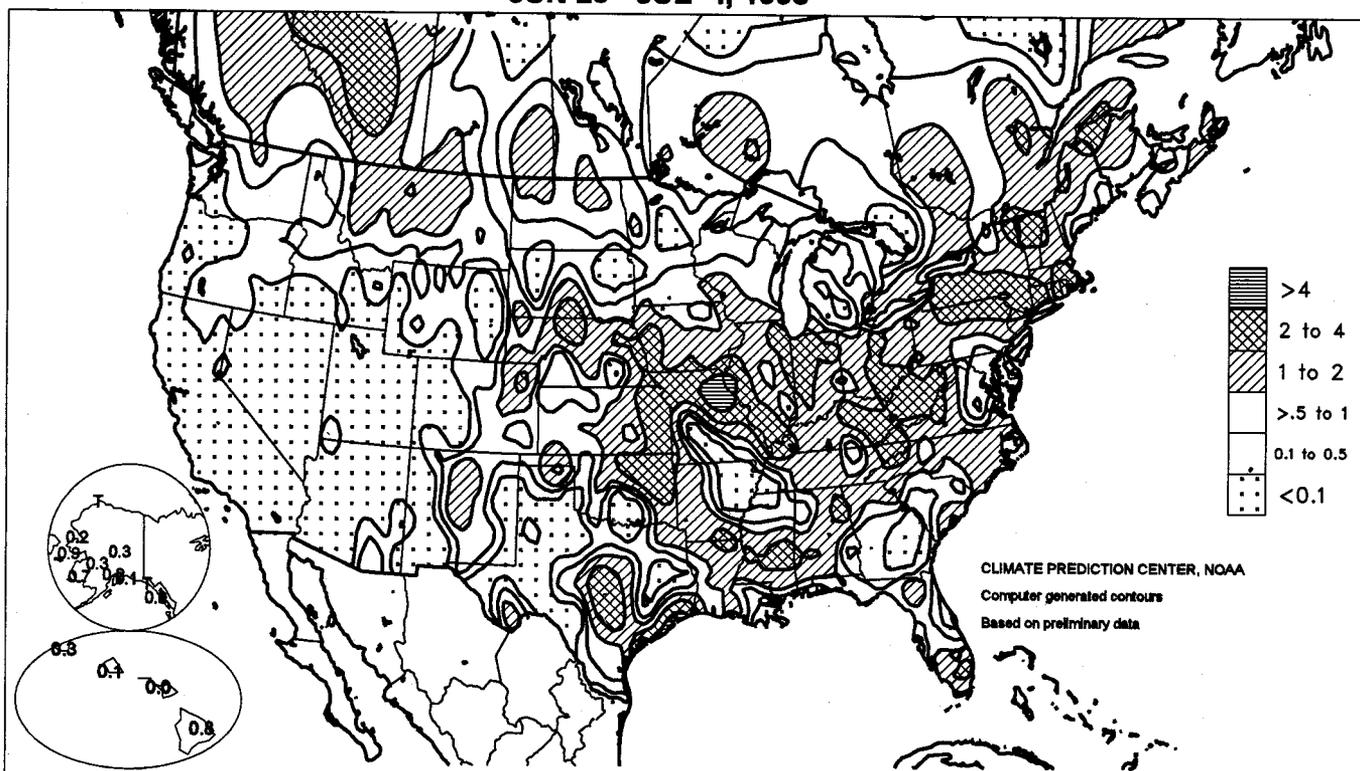


WEEKLY WEATHER AND CROP BULLETIN

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

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

Total Precipitation (Inches)
JUN 28 - JUL 4, 1998



CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

HIGHLIGHTS

June 28 - July 4, 1998

Scattered showers and thunderstorms delivered limited relief from the 3½-month dry spell to areas from **central Texas** to the **central Gulf Coast States**. Although thunderstorms dampened a few areas in **Florida**, wildfires flared in the eastern part of the State. Farther north, a fourth consecutive week of wet weather maintained adequate to surplus soil moisture across the **northern Plains** and **Midwest**. Heavy rain fell in parts of the **Northeast** for the fifth week in a row. In the **West**, favorably dry weather continued in **California**, while seasonal (monsoonal) showers developed at week's end in the **Southwest**.

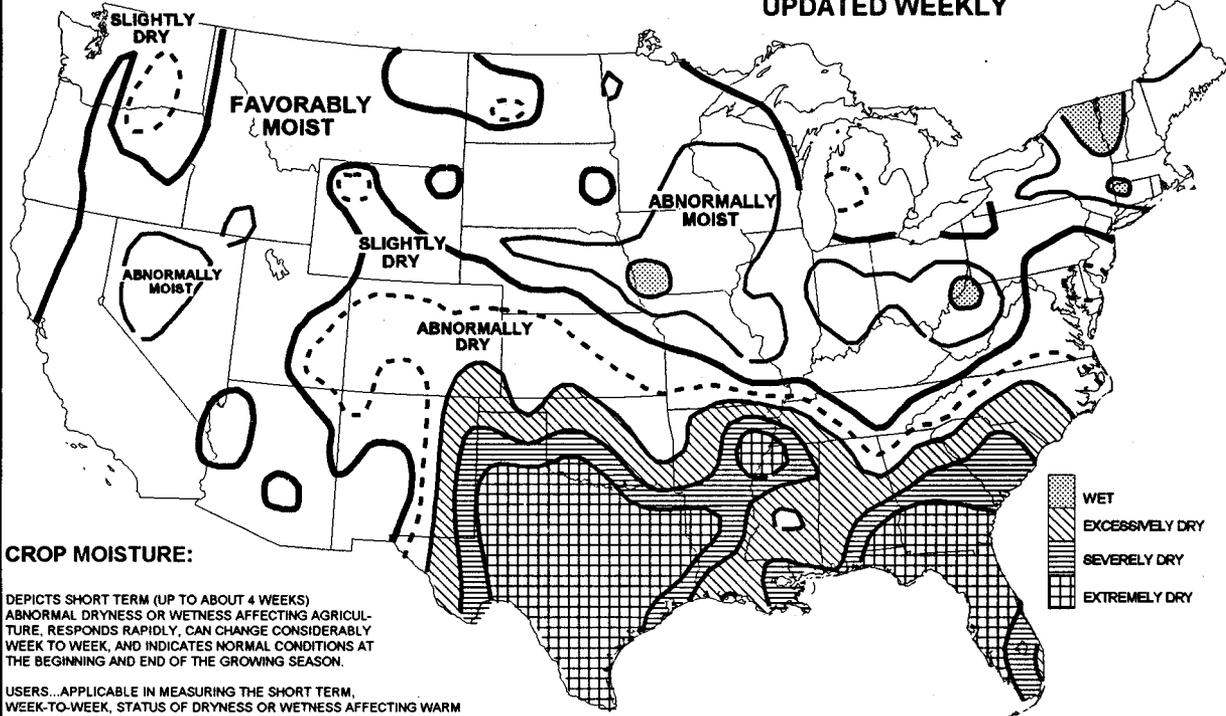
(Continued on page 5)

Contents

Crop Moisture Maps	2
Palmer Drought Maps	3
Precipitation Needed to End Drought & Pan Evaporation Maps	4
Temperature Departure & Extreme Maximum Temperature Maps	5
Growing Degree Day Maps	6
National Weather Data for Selected Cities	7
June Weather & Crop Summary	10
June Precipitation & Temperature Maps	12
June Weather Data for Selected Cities	13
National Agricultural Summary	14
Crop Progress and Condition Tables	15
State Agricultural Summaries	17
International Weather and Crop Summary & June Temperature/Precipitation Table	23
Subscription Information	28

CROP MOISTURE
(SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE)
July 4, 1998

UPDATED WEEKLY



CROP MOISTURE:

DEPICTS SHORT TERM (UP TO ABOUT 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.

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

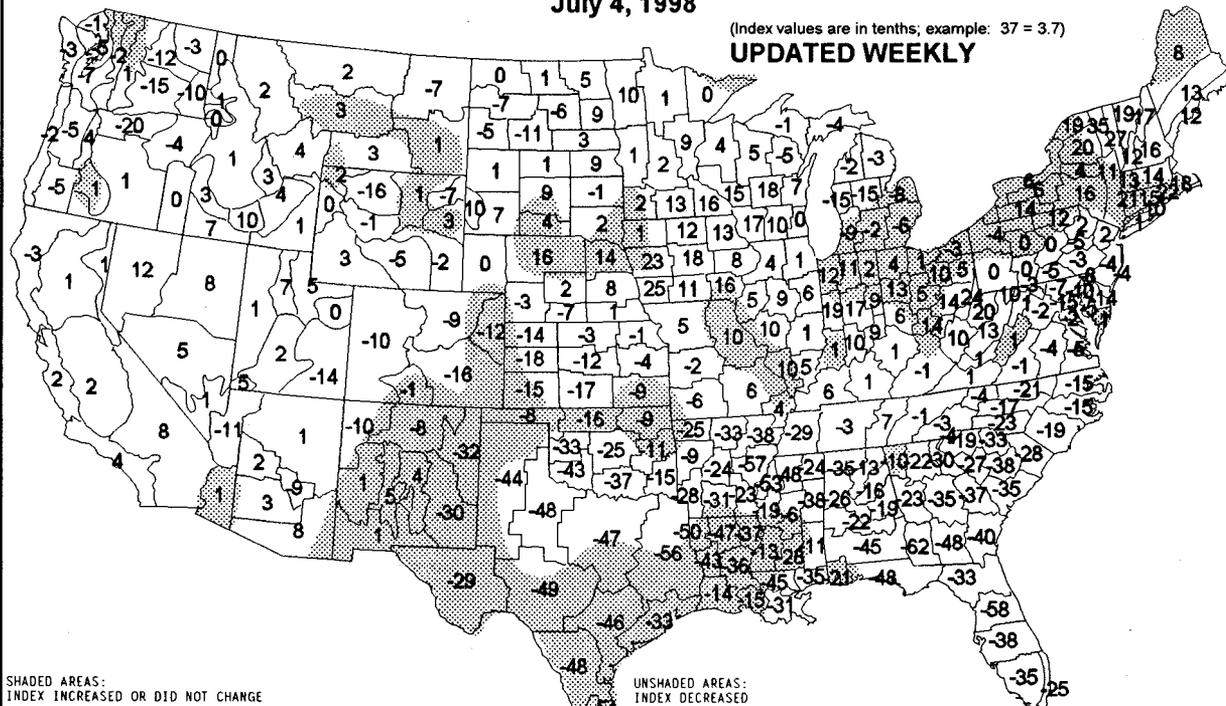
LIMITATIONS...MAY NOT BE APPLICABLE TO GERMINATING AND SHALLOW ROOTED CROPS WHICH ARE UNABLE TO EXTRACT THE DEEP OR SUBSOIL MOISTURE FROM A 5-FOOT PROFILE, OR FOR COOL SEASON CROPS GROWING WHEN TEMPERATURES ARE AVERAGING BELOW ABOUT 55 DEG F. IT IS NOT GENERALLY INDICATIVE OF THE LONG TERM (MONTHS, YEARS)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

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY Based on preliminary reports

CROP MOISTURE INDEX
(SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE)
July 4, 1998

(Index values are in tenths; example: 37 = 3.7)

UPDATED WEEKLY



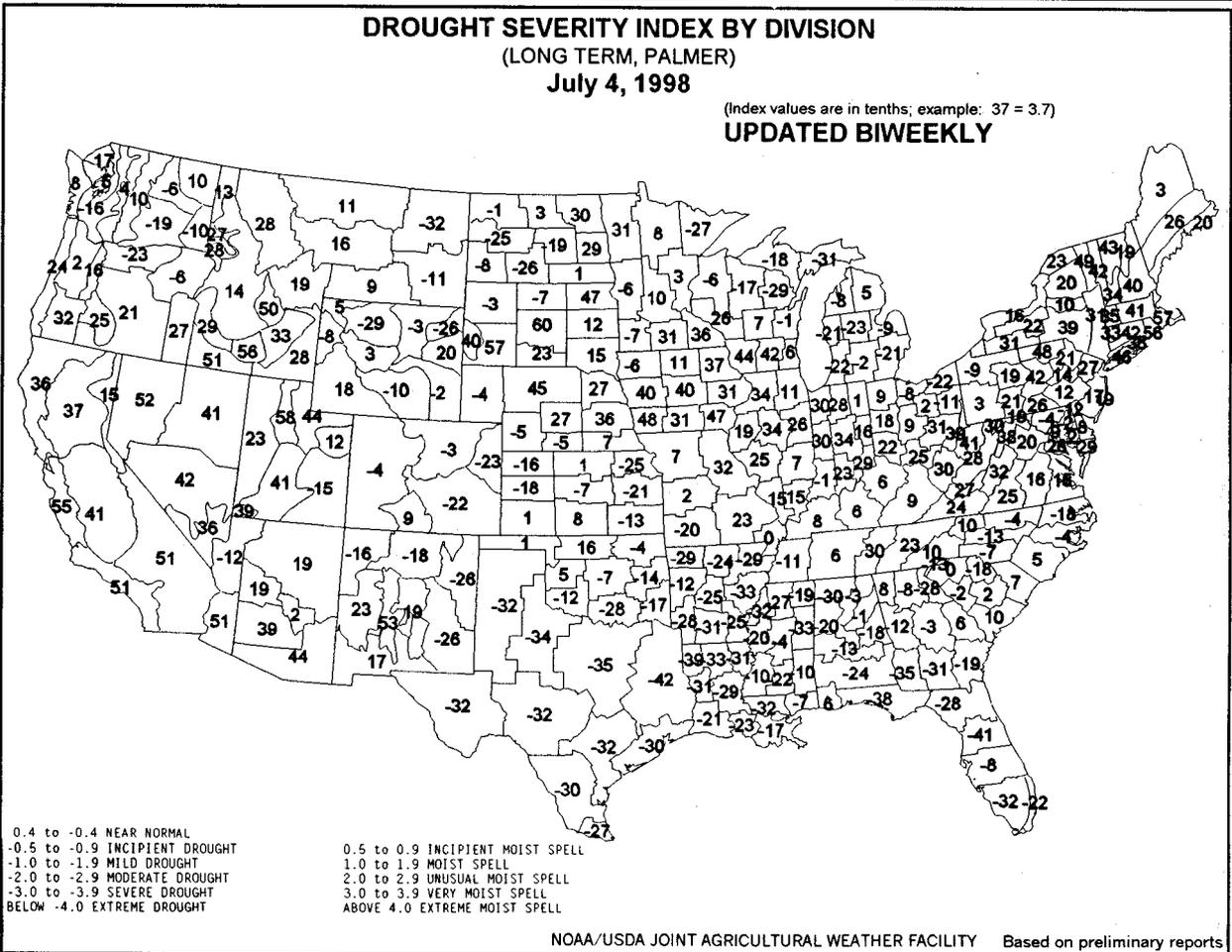
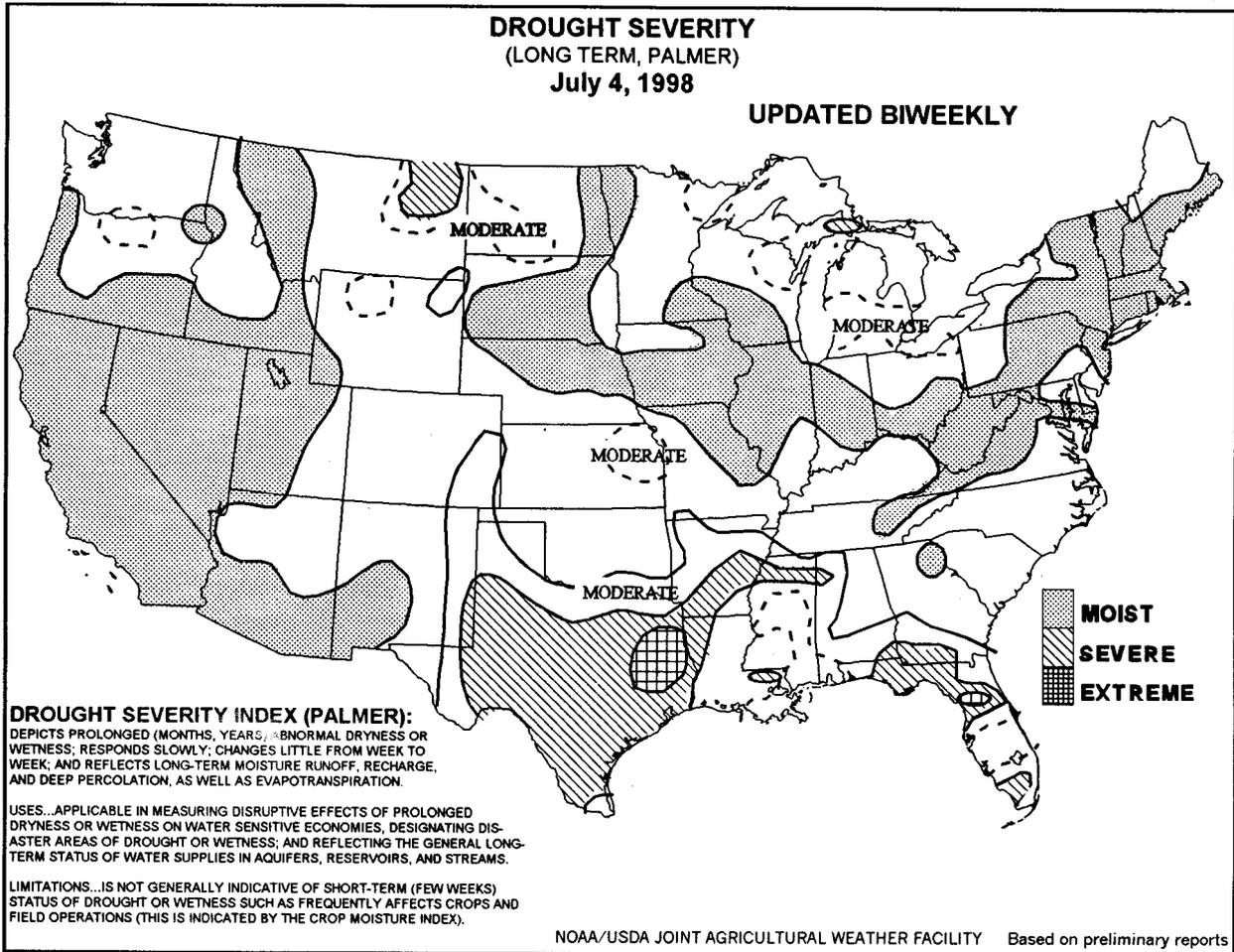
SHADED AREAS:
INDEX INCREASED OR DID NOT CHANGE

UNSHADED AREAS:
INDEX DECREASED

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

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

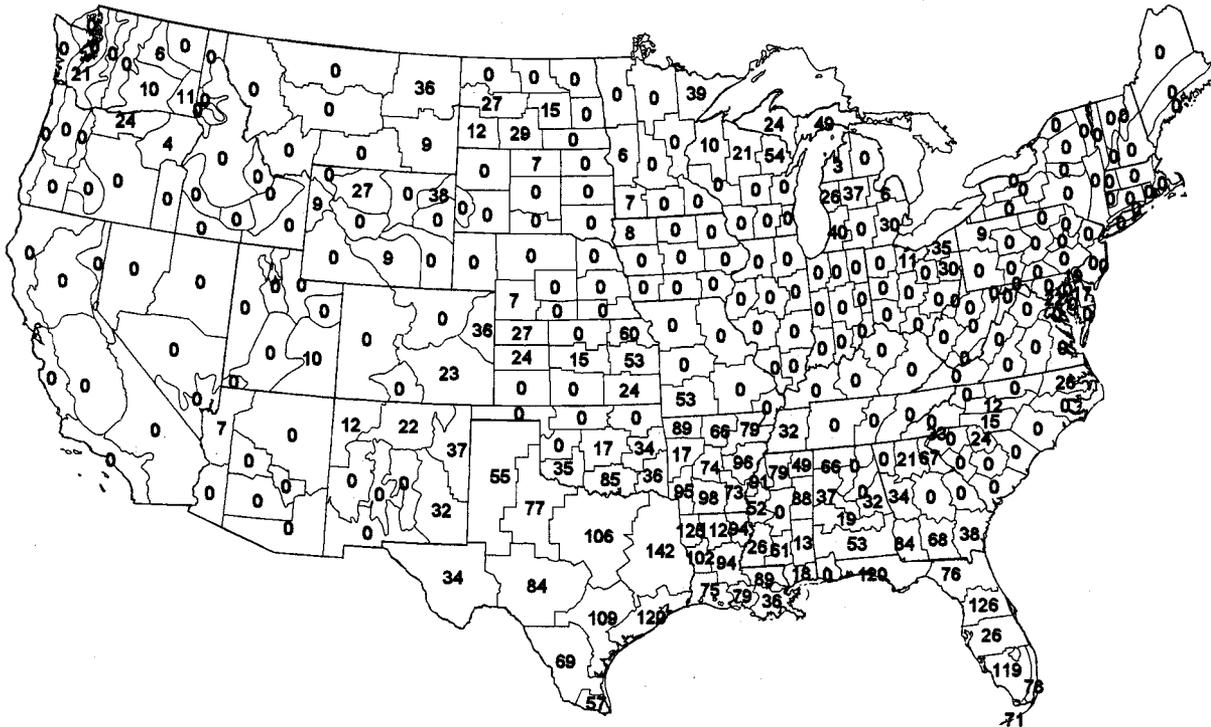
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY Based on preliminary reports



ADDITIONAL PRECIPITATION NEEDED TO BRING INDEX NEAR ZERO
(LONG TERM, PALMER)
July 4, 1998

(Index values are in tenths; example: 37 = 3.7)

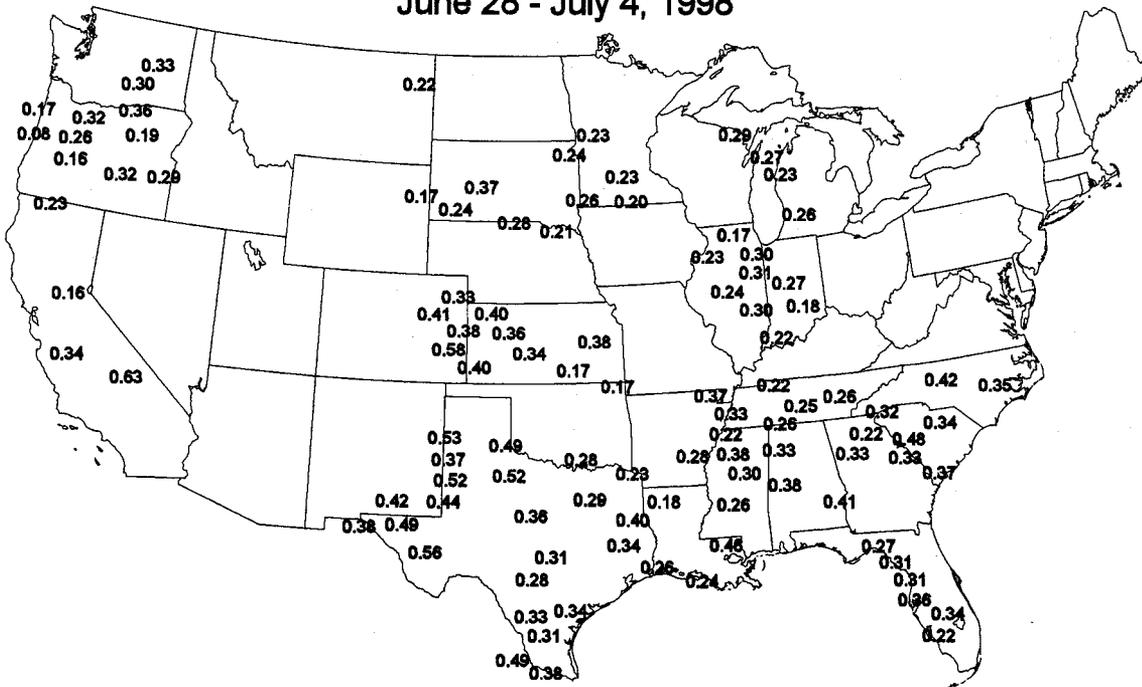
UPDATED BIWEEKLY



NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY Based on preliminary reports

Average Pan Evaporation (Inches/Day)

June 28 - July 4, 1998



NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary data

(Continued from front cover)

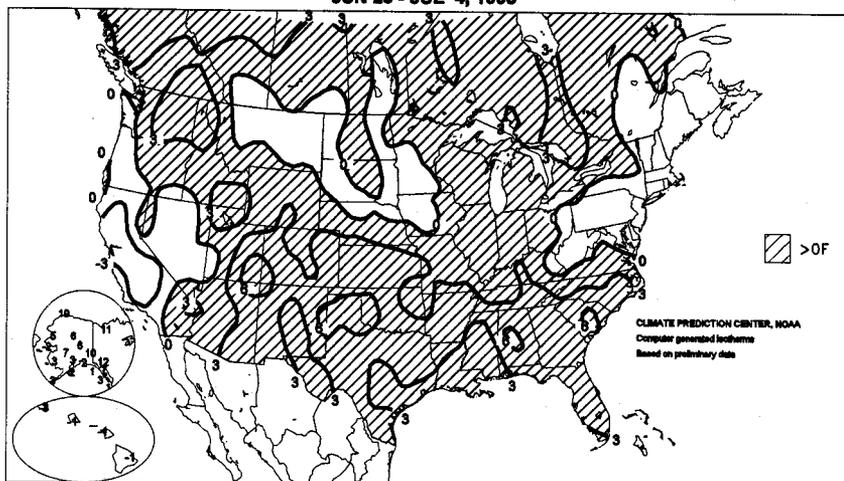
Weekly temperatures averaged 2 to 7°F above normal from the central and southern Plains into the Southeast, setting at least six dozen daily-record highs and further stressing dryland crops. On the Plains, highs topped 100°F as far north as northern Kansas, favoring final winter wheat harvesting. Near-normal temperatures across the northern Plains and Midwest spurred crop development. Warm weather returned to the Northwest, where weekly departures reached +5°F, but cooler-than-normal conditions (as much as 6°F below normal) prevailed for a ninth consecutive week in much of California.

Early in the week, record heat gripped the central and southern Plains. On Sunday, highs soared to 113°F in Carlsbad, NM and an all-time record-tying 108°F in Amarillo, TX. A day later, Wichita, KS notched 105°F, the last of 7 consecutive days with highs at or above 100°F, tying their June record set in 1980. Amarillo noted triple-digit heat for a June-record 13th day and record-tying eighth consecutive day. Dodge City, KS registered 110°F, eclipsing their all-time record of 109°F, set in August 1936. Slightly cooler air arrived across the Plains on Tuesday, but extremely hot conditions persisted in the Southeast.

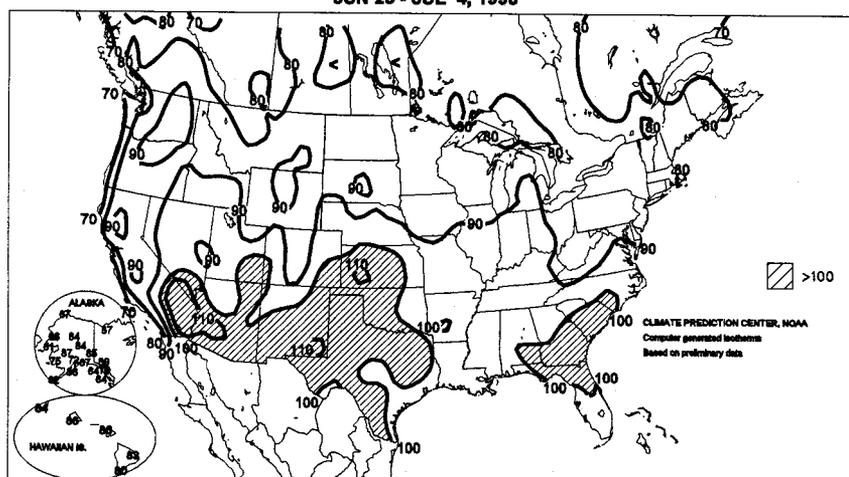
In Florida, the week featured seven daily-record highs in Orlando (97, 99, 99, 99, 101, 100, and 97°F). During June, record highs were set or tied on 22 days in Melbourne, 14 in Daytona Beach, and 13 in Orlando. On Wednesday, Tallahassee logged 100°F, their 13th day of triple-digit heat in 1998, breaking the 1931 record. On Friday, Miami posted an all-time record-tying high of 98°F, last observed on August 1, 1990. Farther north, highs soared above 100°F, setting daily records, in locations such as Florence, SC (103°F on Sunday) and Augusta, GA (103°F on Tuesday).

Hot weather also spread into the Southwest, signaling the approach of seasonal rains. Daily-record highs were set or tied in locations such as Douglas, AZ (106°F on Monday), Socorro, NM (107°F on Tuesday), and Hanksville, UT (105°F on Wednesday). During a 24-hour period on

Departure of Average Temperature from Normal (°F)
JUN 28 - JUL 4, 1998



Extreme Maximum Temperature (°F)
JUN 28 - JUL 4, 1998



July 4-5, rainfall totaled 0.39 inches in Tucson, AZ and 0.64 inches in Roswell, NM. No measurable rain fell in Tucson from April 27 to July 2 (67 days), their second-longest streak this decade, but well behind the 110-day dry spell from March-July 1996.

Meanwhile in California, Bakerfield's highs again failed to reach 100°F. Their latest occurrence of the year's first triple-digit heat was on July 5, 1965. In addition, Bakersfield tallied a daily-record low of 56°F on Friday. Farther east, locally torrential rain swept from the Midwest into the Northeast on June 29-30. On Monday in Kentucky, Lexington's rainfall of 5.04 inches broke their single-day record for June. A day later, daily-record totals were established in Rochester, NY (1.87 inches) and Hartford, CT (2.70 inches). June 30 - July 1 rainfall reached 3.11 inches in Burlington, VT. Scattered heavy rain showers returned or arrived in several areas at week's end. Rochester, NY netted another daily-record total (2.61 inches) on July 4. A tropical disturbance moved ashore along the western Gulf Coast on Friday, dropping beneficial rain as far inland as central Texas. During a 24-hour period on July 3-4, 3.29 inches soaked Burnett, TX.

Very warm weather returned to Alaska, boosting weekly departures 2 to 10°F above normal. Barrow collected a daily-record high (67°F) on Monday. A day later, McGrath's daily-record high reached 88°F.

National Weather Data for Selected Cities

Weather Data for the Week Ending July 4, 1998

Data Provided by Climate Prediction Center (301-763-8000 EXT. 7511) and the Southern Regional Climate Center

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 JAN 1	PCT. NORMAL SINCE JAN 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	98	73	98	71	84	6	0.50	-0.56	0.36	3.70	86	37.73	126	95	47	7	0	3	0
AL HUNTSVILLE	96	72	97	71	83	5	0.53	-0.52	0.44	1.86	39	27.28	87	93	42	7	0	4	0
AL MOBILE	96	73	98	70	84	2	1.32	-0.02	1.31	4.19	72	43.27	133	97	50	7	0	2	1
AL MONTGOMERY	96	74	99	72	85	4	1.02	-0.07	1.02	5.20	114	30.28	103	89	45	7	0	1	1
AK ANCHORAGE	67	53	72	50	60	3	0.24	-0.09	0.19	2.75	207	4.48	89	88	55	0	0	2	0
AK BARROW	57	39	67	36	48	10	0.08	-0.06	0.03	0.22	59	0.61	56	87	65	0	0	2	0
AK FAIRBANKS	80	58	84	53	69	6	0.28	-0.11	0.23	1.39	87	1.88	49	87	35	0	0	3	0
AK JUNEAU	78	49	79	45	62	7	0.00	-0.81	0.00	3.00	83	15.85	74	89	45	0	0	0	0
AK KODIAK	53	48	56	47	51	-2	5.16	4.23	1.86	10.31	198	58.44	181	100	83	0	0	7	3
AK NOME	53	43	61	38	48	-2	0.88	0.50	0.55	2.34	175	9.52	207	99	77	0	0	2	1
AZ FLAGSTAFF	86	43	89	40	64	0	0.00	-0.37	0.00	0.00	0	10.11	106	53	12	0	0	0	0
AZ PHOENIX	109	80	111	78	95	3	0.12	0.01	0.10	0.10	50	5.18	184	33	11	7	0	2	0
AZ PRESCOTT	94	80	98	57	77	6	0.00	-0.43	0.00	0.00	0	7.24	103	37	13	7	0	0	0
AZ TUCSON	105	76	108	71	90	4	0.73	0.42	0.73	0.73	152	6.13	190	35	12	7	0	1	1
AZ YUMA	108	78	111	75	93	1	0.00	-0.03	0.00	0.00	0	1.59	167	53	20	7	0	0	0
AR FORT SMITH	92	73	96	69	83	3	1.32	0.84	1.07	4.54	120	23.96	112	96	58	5	0	3	1
AR LITTLE ROCK	97	77	99	72	87	6	0.04	-0.76	0.04	2.12	52	22.84	86	88	43	7	0	1	0
CA BAKERSFIELD	91	60	98	58	75	-7	0.00	0.00	0.00	0.30	273	11.68	305	74	24	4	0	0	0
CA EUREKA	63	53	82	52	58	2	0.06	-0.01	0.03	1.27	231	31.00	149	100	82	0	0	3	0
CA FRESNO	90	60	95	57	75	-5	0.00	0.00	0.00	1.93	2757	15.97	230	79	28	4	0	0	0
CA LOS ANGELES	73	61	74	60	67	-1	0.00	0.00	0.00	0.09	301	23.84	308	91	66	0	0	0	0
CA REDDING	90	60	94	55	75	-5	0.00	-0.06	0.00	1.71	290	47.24	261	84	25	4	0	0	0
CA SACRAMENTO/CCLELL	88	58	93	55	73	-6	0.00	---	0.00	0.14	---	24.07	---	88	30	2	0	0	0
CA SAN DIEGO	70	62	73	61	66	-3	0.00	0.00	0.00	0.10	111	14.07	227	86	67	0	0	0	0
CA SAN FRANCISCO	65	54	70	54	60	-3	0.00	-0.01	0.00	0.03	25	28.58	233	93	67	0	0	0	0
CO ALAMOSA	86	48	92	41	67	3	0.11	-0.10	0.08	0.38	48	1.53	53	79	18	2	0	2	0
CO CO SPRINGS	87	59	95	56	73	4	0.80	0.01	0.33	1.61	62	6.51	86	81	23	1	0	4	0
CO DENVER	91	58	95	52	74	3	0.16	-0.27	0.08	0.90	44	6.31	74	74	22	4	0	2	0
CO GRAND JUNCTION	98	64	101	53	81	4	0.00	-0.12	0.00	0.55	95	3.80	92	36	15	7	0	0	0
CO PUEBLO	94	60	103	54	77	2	0.37	-0.02	0.20	0.91	62	5.84	117	80	20	6	0	4	0
CT BRIDGEPORT	77	63	81	60	70	-2	0.53	-0.31	0.53	5.08	129	31.44	145	93	59	0	0	1	1
CT HARTFORD	80	60	86	58	70	-2	2.93	2.16	2.70	7.21	173	29.76	133	98	54	0	0	3	1
DC WASHINGTON	85	67	90	64	78	-3	0.07	-0.74	0.06	4.42	115	28.47	151	83	47	1	0	2	0
DE WILMINGTON	84	63	88	58	73	-2	0.08	-0.83	0.04	4.87	114	24.35	118	91	43	0	0	3	0
FL DAYTONA BEACH	97	73	100	70	85	5	0.13	-1.21	0.07	0.89	13	16.74	79	97	44	7	0	2	0
FL JACKSONVILLE	97	73	100	70	85	5	0.96	-0.41	0.83	3.81	80	26.91	114	93	44	7	0	2	1
FL KEY WEST	91	80	93	77	85	1	0.09	-0.89	0.08	0.87	18	13.16	81	85	60	6	0	2	0
FL MIAMI	94	76	98	72	85	3	0.34	-1.36	0.15	6.85	67	24.52	95	86	50	7	0	4	0
FL ORLANDO	99	75	101	72	87	5	0.00	-1.76	0.00	1.58	19	22.22	100	95	37	7	0	0	0
FL TAMPA	94	78	98	74	86	4	0.34	-1.08	0.29	2.85	42	25.64	138	90	52	7	0	1	0
FL VALPARAISO/EGLIN	94	76	99	72	85	5	0.41	-1.35	0.00	0.40	8	25.94	87	87	44	7	0	2	0
FL WEST PALM BEACH	94	77	97	75	86	4	1.25	-0.42	1.24	2.15	24	26.68	98	87	48	7	0	2	1
GA ATHENS	96	72	99	69	84	5	0.06	-0.98	0.05	1.97	43	34.57	126	90	38	7	0	2	0
GA ATLANTA	92	71	94	69	81	3	0.55	-0.46	0.38	4.02	96	29.61	106	91	48	6	0	4	0
GA AUGUSTA	99	70	103	67	85	5	0.00	-0.96	0.00	2.31	49	31.46	127	93	33	7	0	0	0
GA COLUMBUS	97	76	101	73	86	5	0.02	-1.14	0.02	3.77	79	21.03	74	87	41	7	0	1	0
GA MACON	98	73	101	70	85	5	1.52	0.80	1.52	4.45	108	29.44	117	91	39	7	0	1	1
GA SAVANNAH	98	72	102	71	85	4	0.70	-0.68	0.61	2.54	40	28.57	118	97	41	7	0	3	1
HI HILO	81	68	83	65	75	-1	1.28	-0.52	0.55	12.02	168	42.34	64	89	65	0	0	5	0
HI HONOLULU	85	73	86	72	79	-1	0.06	-0.07	0.05	0.27	45	2.28	20	80	49	0	0	2	0
HI KAHULUI	86	69	86	64	78	-1	0.00	-0.06	0.00	0.04	13	2.44	19	86	51	0	0	0	0
HI LIHUE	81	71	82	69	76	-2	0.82	0.40	0.07	1.09	56	8.39	38	92	69	0	0	7	0
ID BOISE	86	57	92	52	72	1	0.08	-0.04	0.08	1.29	148	11.61	166	78	26	3	0	1	0
ID LEWISTON	88	59	93	53	74	2	0.39	0.17	0.27	1.13	83	9.14	129	77	26	4	0	3	0
ID POCATELLO	89	50	95	39	70	2	0.20	0.02	0.20	1.28	115	8.74	127	89	24	4	0	1	0
IL CHICAGO/O'HARE	84	64	88	59	74	2	0.67	-0.18	0.24	3.14	74	18.38	110	89	50	0	0	2	0
IL MOLINE	84	64	89	57	74	0	2.08	1.01	1.14	7.72	158	26.68	142	97	55	0	0	3	2
IL PEORIA	85	66	92	61	76	1	0.00	-0.98	0.00	5.19	114	25.66	144	92	56	1	0	0	0
IL ROCKFORD	82	62	86	58	72	0	0.40	-0.60	0.18	6.48	128	21.93	127	96	53	0	0	3	0
IL SPRINGFIELD	86	67	93	64	77	1	1.84	1.04	1.45	8.89	229	28.37	160	95	60	1	0	4	1
IN EVANSVILLE	89	71	93	68	80	2	0.88	0.02	0.64	5.43	136	25.86	111	93	57	2	0	3	1
IN FORT WAYNE	84	63	93	52	73	0	2.99	2.18	1.28	6.56	162	24.12	138	93	49	1	0	3	3
IN INDIANAPOLIS	85	66	91	62	78	1	1.53	0.61	0.92	11.19	276	31.38	155	90	51	1	0	3	2
IN SOUTH BEND	83	62	89	53	72	0	1.05	0.11	0.92	4.96	107	20.88	109	95	54	0	0	4	1
IA BURLINGTON	89	68	96	62	79	4	0.00	-0.96	0.00	7.18	156	27.75	162	83	51	2	0	0	0
IA CEDAR RAPIDS	82	63	87	59	73	-1	0.44	-0.58	0.37	8.20	161	24.56	150	98	57	0	0	2	0
IA DES MOINES	83	66	85	63	75	-1	0.39	-0.55	0.29	9.99	202	23.07	141	95	58	0	0	3	0
IA DUBUQUE	80	63	85	60	71	0	1.88	0.87	1.54	7.98	172	25.76	143	94	58	0	0	4	1
IA SIOUX CITY	84	63	87	60	73	-1	0.79	-0.01	0.63	5.83	140	20.12	151	97	53	0	0	3	1
IA WATERLOO	82	63	85	60	73	1	0.23	-0.88	0.09	10.41	204	25.90	158	99	57	0	0	4	0
KS CONCORDIA	83	69	101	65	81	3	0.12	-0.81	0.08	3.90	78	14.00	93	95	63	5	0	4	0
KS DODGE CITY	98	69	110	65	84	5	1.34	0.59	0.57	1.85	53	9.43	84	83	28	6	0	4	1
KS GOODLAND	93	62	98	57	77	4	0.41	-0.29	0.36	1.66	47	5.20	51	85	31	5	0	3	0
KS TOPEKA	91	72	97	66	82	4	1.85	0.61	0.89	7.30	120	15.98	88	93	51	4	0	5	2

Based on 1961-90 normals

Weather Data for the Week Ending July 4, 1998

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	96	73	105	69	85	6	1.11	0.24	0.18	0.68	14	11.28	74	86	38	5	0	2	0
JACKSON	81	66	89	61	73	0	3.20	2.09	2.13	179	36.11	140	96	57	0	0	5	2	0
LEXINGTON	84	66	90	59	76	0	5.33	4.33	3.96	10.66	264	33.21	144	94	59	1	0	3	1
LOUISVILLE	88	71	92	66	79	3	1.04	0.12	0.66	7.16	178	27.28	116	87	52	1	0	4	1
LA PADUCAH	88	71	92	69	79	1	4.38	3.38	2.81	13.70	298	32.68	123	96	58	2	0	3	3
BATON ROUGE	93	74	95	71	84	2	0.26	-1.06	0.16	2.76	62	32.74	108	97	50	7	0	2	0
LAKE CHARLES	90	78	93	74	83	1	0.86	-0.28	0.65	5.26	93	26.64	102	96	62	6	0	4	1
NEW ORLEANS	93	76	95	73	84	3	0.09	-1.31	0.09	3.47	52	37.81	119	94	51	6	0	1	0
SHREVEPORT	97	75	102	72	86	4	1.01	0.09	0.44	2.27	47	20.52	81	94	44	7	0	5	0
ME CARIBOU	75	62	82	44	64	-1	2.44	1.86	1.29	4.36	129	20.22	129	96	54	0	0	4	2
PORTLAND	74	57	81	62	65	-1	0.71	-0.04	0.31	9.38	242	31.35	142	97	64	0	0	2	0
MD BALTIMORE	87	63	90	57	75	-1	0.23	-0.61	0.16	3.24	78	27.33	133	90	44	2	0	4	0
MA BOSTON	77	62	82	57	69	-2	2.04	1.36	1.67	11.74	340	36.63	173	91	55	0	0	3	1
WORCESTER	75	59	80	56	67	-1	2.24	1.36	1.62	10.02	228	32.80	138	93	59	0	0	4	1
MI ALPENA	79	54	86	49	67	1	0.87	0.19	0.31	3.28	95	18.71	139	96	45	0	0	5	0
GRAND RAPIDS	84	61	91	53	72	2	0.48	-0.31	0.40	2.57	62	19.59	119	90	41	1	0	4	0
HOUGHTON LAKE	80	51	89	40	66	0	0.31	-0.32	0.16	2.40	71	12.93	101	98	45	0	0	4	0
LANSING	82	56	89	49	69	0	0.98	0.27	0.77	3.41	84	17.06	117	95	40	0	0	4	1
MARQUETTE	73	50	83	43	62	-2	0.39	-0.35	0.36	3.04	79	25.15	155	92	40	0	0	2	0
MUSKEGON	82	59	87	49	70	1	0.47	0.01	0.35	1.69	65	13.70	95	93	46	0	0	4	0
MN DULUTH	78	55	81	47	65	1	0.53	-0.33	0.33	6.22	145	16.15	120	95	50	0	0	5	0
INTL FALLS	77	55	82	47	66	0	0.72	-0.19	0.43	4.40	99	11.94	108	98	49	0	0	4	0
MINNEAPOLIS	81	62	84	58	71	-1	0.62	-0.25	0.28	7.09	157	20.06	142	93	48	0	0	4	0
ROCHESTER	78	61	81	59	70	0	1.08	0.16	1.07	6.69	155	18.31	134	96	61	0	0	2	1
ST. CLOUD	81	58	83	54	70	1	0.33	-0.55	0.30	4.56	90	12.70	95	94	45	0	0	2	0
MS JACKSON	94	72	99	70	83	2	1.16	0.29	0.91	4.42	119	30.77	102	95	50	6	0	3	1
MERIDIAN	92	70	97	67	81	1	1.53	0.49	1.51	6.33	149	34.86	111	97	52	5	0	3	1
TUPELO	95	72	97	69	84	4	0.17	-0.75	0.16	1.62	37	26.66	86	91	44	7	0	2	0
MO COLUMBIA	87	69	91	65	78	2	2.57	1.87	2.36	9.46	196	26.33	131	95	59	2	0	4	1
KANSAS CITY	88	71	93	66	79	2	1.55	0.51	1.36	9.23	174	18.82	102	91	62	2	0	3	1
SAINT LOUIS	89	71	95	69	80	2	2.21	1.31	1.14	8.50	201	28.58	149	89	55	3	0	4	2
SPRINGFIELD	90	69	94	64	80	3	1.17	0.26	0.95	4.25	77	24.17	110	97	54	3	0	4	1
MT BILLINGS	84	57	89	50	70	1	0.31	0.00	0.10	3.84	179	8.56	93	87	32	0	0	4	0
BUTTE	79	46	82	35	62	2	0.47	0.08	0.18	3.37	143	10.03	147	95	31	0	0	5	0
GLASGOW	79	57	87	62	68	0	1.83	1.38	0.77	5.69	241	9.28	158	97	49	0	0	6	2
GREAT FALLS	75	49	78	42	62	-4	0.88	0.49	0.64	6.04	233	11.89	131	97	49	0	0	4	1
KALISPELL	77	51	83	43	64	3	0.46	0.09	0.44	3.98	167	12.96	144	93	41	0	0	3	0
MILES CITY	86	59	94	53	72	0	1.80	1.29	0.99	4.41	145	7.65	92	88	32	2	0	3	2
MISSOULA	81	50	84	39	66	1	1.40	1.11	0.96	5.62	291	13.85	180	89	38	0	0	3	1
NE GRAND ISLAND	89	65	94	60	77	1	0.00	-0.76	0.00	5.26	122	17.73	129	90	45	2	0	0	0
LINCOLN	89	66	95	60	77	1	0.09	-0.71	0.09	5.16	119	17.98	125	92	55	2	0	1	0
NORFOLK	85	63	88	57	74	0	2.59	1.68	1.70	10.01	202	19.35	138	93	48	0	0	4	2
NORTH PLATTE	88	61	92	53	74	2	0.12	-0.65	0.12	4.96	130	10.53	94	91	41	2	0	1	0
OMAHA	86	67	89	63	78	1	0.99	0.16	0.71	9.21	212	23.98	159	95	55	0	0	2	1
SCOTTSBLUFF	89	58	95	48	73	1	0.88	0.30	0.83	3.18	107	8.31	89	83	30	3	0	3	1
VALENTINE	85	58	89	48	71	-1	4.41	3.72	2.37	9.48	289	16.07	163	96	43	0	0	3	3
NV ELY	88	44	90	40	66	2	0.00	-0.17	0.00	1.94	198	7.19	132	54	9	3	0	0	0
LAS VEGAS	108	77	109	74	92	2	0.00	-0.04	0.00	0.03	20	4.39	221	21	11	7	0	0	0
RENO	88	63	89	51	71	1	1.53	1.45	1.53	1.39	273	8.70	199	60	14	0	0	1	1
WINNEMUCCA	91	43	95	40	67	-2	0.00	-0.12	0.00	0.90	99	10.26	216	75	17	5	0	0	0
NH CONCORD	77	55	84	52	66	-2	0.81	0.10	0.26	7.98	222	23.96	137	96	53	0	0	2	0
NJ NEWARK	83	65	86	63	74	-3	1.73	0.84	1.65	6.06	162	32.59	148	84	48	0	0	2	1
NM ALBUQUERQUE	95	66	102	63	80	3	0.97	0.75	0.85	1.14	156	4.93	157	54	22	5	0	3	1
NY ALBANY	79	61	82	56	70	-1	0.75	-0.02	0.47	7.07	175	25.69	143	91	53	0	0	3	0
BINGHAMTON	75	58	83	55	66	-1	1.89	1.07	1.15	6.81	143	27.09	150	100	61	0	0	3	2
BUFFALO	78	60	86	54	69	-1	1.69	0.95	0.87	3.74	96	21.76	123	95	51	0	0	2	2
ROCHESTER	78	59	85	54	69	0	4.56	3.92	2.55	9.78	291	25.69	169	96	51	0	0	3	2
SYRACUSE	78	60	86	53	69	0	1.80	0.91	0.94	5.74	133	21.16	116	95	54	0	0	5	1
NC ASHEVILLE	87	64	91	60	75	4	1.10	0.11	0.72	4.36	90	35.33	145	98	47	2	0	3	1
CHARLOTTE	94	70	98	65	82	3	0.52	-0.31	0.17	3.86	100	24.15	108	90	40	6	0	4	0
GREENSBORO	90	69	93	63	79	3	0.86	-0.11	0.83	3.56	81	29.01	135	89	44	4	0	2	1
HATTERAS	86	71	88	68	78	1	1.57	0.55	0.67	4.57	97	34.82	134	92	61	0	0	3	1
RALEIGH	93	68	98	64	80	3	2.57	1.70	1.54	4.98	119	32.48	150	97	40	5	0	4	1
WILMINGTON	83	74	98	70	83	4	0.59	-1.10	0.59	3.93	56	34.83	135	92	47	5	0	1	1
ND BISMARCK	81	58	85	53	69	1	0.00	-0.57	0.00	2.90	96	6.81	80	91	45	0	0	0	0
DICKINSON	80	56	85	51	68	1	0.12	-0.51	0.12	6.83	186	12.25	130	93	50	0	0	1	0
FARGO	79	60	83	57	70	0	0.92	0.27	0.91	7.54	237	18.77	195	90	51	0	0	2	1
GRAND FORKS	79	58	85	51	69	1	0.22	-0.44	0.22	6.69	208	12.04	138	95	51	0	0	1	0
JAMESTOWN	79	57	87	54	68	-1	0.01	-0.70	0.01	3.08	91	9.35	107	93	46	0	0	1	0
WILLISTON	79	58	86	53	68	-1	1.82	1.10	1.42	4.51	175	8.03	107	95	44	0	0	3	1
OH AKRON-CANTON	78	60	83	52	69	-2	2.35	1.50	0.96	6.85	159	23.28	127	92	61	0	0	3	1
CINCINNATI	85	65	91	56	75	1	0.95	0.01	0.49	10.06	230	34.77	159	97	53	1	0	3	0
CLEVELAND	81	62	87	57	72	1	0.21	-0.63	0.20	2.96	72	20.02	112	95	56	0	0	2	0
COLUMBUS	85	65	92	60	75	3	1.82	0.86	1.42	7.31	159	23.56	121	90	46	1	0	3	1
DAYTON	84	65	91	60	75	1	2.35	1.51	1.42	7.78	181	26.66	138	89	48	1	0	2	2
MANSFIELD	80	61	87	57	71	0	1.83	0.93	0.84	7.39	186	21.58							

Weather Data for the Week Ending July 4, 1998

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 JAN 1	PCT. NORMAL SINCE JAN 1	TOTAL IN. SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP, °F			
																90 AND ABOVE	82 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
OK TOLEDO	86	64	83	59	75	4	0.28	-0.54	0.19	1.95	47	18.81	116	92	41	1	0	4	0
OK YOUNGSTOWN	78	58	83	50	68	-1	0.39	-0.68	0.17	3.48	78	22.28	121	99	58	0	0	4	0
OK OKLAHOMA CITY	97	74	101	72	88	6	0.00	-0.78	0.00	2.87	57	18.98	106	85	41	7	0	0	0
OR TULSA	91	74	98	69	83	1	2.73	1.90	1.51	4.30	88	22.42	108	88	53	4	0	3	2
OR ASTORIA	80	62	86	45	58	-3	0.11	-0.28	0.04	1.79	89	44.99	129	99	86	0	0	5	0
OR BURNS	83	45	86	39	64	1	0.08	-0.05	0.05	1.11	125	11.56	220	89	24	0	0	3	0
OR EUGENE	71	54	78	45	62	-3	0.00	-0.19	0.00	0.79	52	27.82	108	84	49	0	0	0	0
OR MEDFORD	83	58	91	52	71	0	0.00	-0.07	0.00	0.87	108	17.96	194	82	33	1	0	0	0
OR PENDLETON	89	57	95	50	73	3	0.03	-0.06	0.03	0.79	114	8.39	128	75	27	4	0	1	0
OR PORTLAND	72	57	84	55	64	-2	0.29	0.08	0.22	2.02	127	24.71	131	94	59	0	0	3	0
OR SALEM	73	54	83	50	63	-1	0.01	-0.19	0.01	1.00	89	28.38	140	95	58	0	0	1	0
PA ALLENTOWN	82	61	88	55	71	-2	0.44	-0.45	0.39	5.00	118	25.93	121	94	48	0	0	2	0
PA ERIE	79	63	84	55	71	1	1.15	0.30	1.06	2.73	80	19.89	106	91	56	0	0	2	1
PA MIDDLETOWN	84	64	87	61	74	0	0.45	-0.39	0.41	5.82	134	31.26	158	88	47	0	0	2	0
PA PHILADELPHIA	85	65	88	62	75	-1	0.60	-0.33	0.33	5.16	121	23.15	109	88	48	0	0	3	0
PA PITTSBURGH	78	61	82	54	69	-2	1.20	0.33	0.71	6.81	182	22.30	116	94	56	0	0	4	1
PA SCRANTON	79	59	82	55	69	-2	0.98	0.07	0.78	4.31	96	23.19	130	94	51	0	0	2	1
PA WILLIAMSPORT	81	60	85	54	70	-1	0.90	-0.07	0.64	5.59	115	31.06	152	96	51	0	0	3	1
RI PROVIDENCE	77	62	82	56	69	-2	1.86	0.93	1.48	9.61	257	38.83	168	98	63	0	0	2	1
SC BEAUFORT	99	74	102	73	86	6	0.28	-1.14	0.17	2.46	38	30.97	125	89	43	7	0	3	0
SC CHARLESTON	97	75	100	72	86	5	2.99	1.43	1.90	4.37	60	36.28	145	92	44	7	0	6	2
SC COLUMBIA	99	73	102	69	86	6	0.13	-1.05	0.13	2.19	40	27.94	108	84	31	7	0	1	0
SC GREENVILLE	93	70	97	67	82	4	0.18	-0.93	0.13	3.93	73	32.86	119	92	39	7	0	2	0
SD ABERDEEN	81	60	83	54	70	0	0.04	-0.67	0.04	6.51	184	15.53	154	97	51	0	0	1	0
SD HURON	84	61	87	56	72	0	0.38	-0.33	0.22	3.39	90	12.77	112	93	47	0	0	2	0
SD RAPID CITY	81	58	86	49	69	0	0.28	-0.31	0.20	5.87	174	10.46	106	87	47	0	0	3	0
SD SIOUX FALLS	81	58	87	52	70	-3	0.18	-0.51	0.11	4.70	125	15.46	128	96	49	0	0	2	0
TN BRISTOL	84	64	88	59	74	0	2.39	1.46	1.34	7.88	193	30.96	143	99	59	0	0	6	2
TN CHATTANOOGA	92	71	95	68	82	4	0.73	-0.25	0.47	6.07	147	35.11	123	92	47	7	0	2	0
TN KNOXVILLE	91	70	95	65	80	5	0.31	-0.73	0.15	8.13	177	35.12	138	94	48	5	0	4	0
TN MEMPHIS	96	75	99	72	86	4	0.00	-0.82	0.00	1.09	27	29.45	106	85	44	7	0	0	0
TN NASHVILLE	89	71	92	67	80	2	0.83	-0.02	0.71	11.05	271	32.45	127	91	50	3	0	2	1
TX ABILENE	96	75	100	72	85	2	0.09	-0.45	0.08	2.06	66	8.17	71	80	33	6	0	1	0
TX AMARILLO	99	68	108	64	84	6	0.16	-0.56	0.16	0.28	7	7.00	73	71	20	7	0	1	0
TX AUSTIN	94	77	99	75	85	2	1.28	0.66	0.61	2.39	59	12.89	75	95	48	5	0	4	1
TX BEAUMONT	90	78	95	75	83	1	3.23	1.98	3.01	4.28	68	25.36	94	95	62	5	0	2	1
TX BROWNSVILLE	96	80	99	75	88	4	0.00	-0.50	0.00	0.30	10	3.06	29	92	52	7	0	0	0
TX CORPUS CHRISTI	94	79	96	75	87	3	0.35	-0.28	0.35	0.61	18	6.85	51	91	55	7	0	1	0
TX DEL RIO	100	79	102	77	90	5	0.02	-0.45	0.00	1.37	58	2.91	34	80	32	7	0	1	0
TX EL PASO	99	72	107	68	85	3	0.53	0.28	0.29	0.80	96	1.22	50	68	27	6	0	3	0
TX FORT WORTH	99	79	103	74	89	5	0.11	-0.45	0.11	1.86	56	18.24	99	78	41	7	0	1	0
TX GALVESTON	87	79	89	74	83	0	7.53	6.54	7.34	9.53	191	24.37	130	91	78	0	0	3	2
TX HOUSTON	93	75	99	73	84	2	0.94	-0.03	0.59	3.00	55	16.86	73	98	53	5	0	5	1
TX LUBBOCK	96	72	105	69	84	5	0.00	-0.58	0.00	1.31	43	4.94	59	68	24	7	0	0	0
TX MIDLAND	99	75	106	71	86	5	0.00	-0.37	0.00	0.30	17	1.48	24	68	24	7	0	0	0
TX SAN ANGELO	97	74	101	70	86	4	0.39	0.05	0.39	1.28	51	6.11	61	80	29	6	0	1	0
TX SAN ANTONIO	95	77	99	75	86	2	0.43	-0.22	0.21	1.04	25	10.88	68	91	40	7	0	3	1
TX VICTORIA	94	78	99	73	85	2	0.63	-0.33	0.52	0.67	12	8.51	47	96	49	6	0	3	1
TX WACO	98	78	101	75	88	4	0.06	-0.51	0.05	1.22	34	15.22	87	90	41	6	0	2	0
TX WICHITA FALLS	100	78	103	74	88	5	0.00	-0.56	0.00	2.25	59	12.67	81	78	33	7	0	0	0
UT SALT LAKE CITY	92	62	97	53	77	-2	0.00	-0.18	0.00	3.84	369	16.44	178	59	20	5	0	0	0
VT BURLINGTON	77	58	82	53	67	-2	1.74	2.93	2.29	11.75	299	27.95	181	99	80	0	0	5	3
VA LYNCHBURG	86	61	88	57	74	-1	3.44	0.57	0.00	3.27	82	32.51	160	96	45	0	0	4	1
VA NORFOLK	87	71	94	69	79	2	2.78	1.78	2.37	4.96	112	31.63	142	87	45	2	0	3	1
VA RICHMOND	86	69	91	65	78	1	0.99	-0.01	0.69	4.70	112	32.09	153	92	49	2	0	4	1
VA ROANOKE	87	64	91	60	76	1	0.41	-0.38	0.16	2.16	59	32.37	162	88	43	1	0	4	0
VA WASH/DULLES	83	63	88	56	73	-1	0.45	-0.38	0.33	5.88	134	30.16	149	97	51	0	0	2	0
WA HANFORD	91	69	100	64	80	-	0.00	-	0.00	0.70	-	4.18	-	54	18	4	0	2	0
WA OLYMPIA	72	52	83	43	62	1	0.25	-0.01	0.20	1.64	93	26.39	102	98	56	0	0	2	0
WA QUILLAYUTE	63	50	72	43	57	-1	0.02	-0.59	0.01	1.50	43	46.12	84	100	74	0	0	2	0
WA SEATTLE-TACOMA	72	55	82	53	63	0	0.21	-0.03	0.10	1.31	81	18.72	101	95	54	0	0	3	0
WA SPOKANE	85	56	90	48	71	5	0.24	0.03	0.12	1.07	78	9.91	111	82	28	2	0	2	0
WA YAKIMA	88	57	93	46	73	4	0.47	0.40	0.47	0.57	100	6.73	161	77	30	3	0	1	0
WV BECKLEY	78	59	83	53	68	0	1.86	0.64	0.80	7.58	171	33.26	158	100	63	0	0	7	1
WV CHARLESTON	81	63	87	58	72	-2	3.43	2.42	1.80	11.02	262	32.13	153	100	62	0	0	4	3
WV ELKINS	77	58	81	53	68	0	2.04	1.00	1.01	10.48	208	29.69	130	100	58	0	0	7	2
WV HUNTINGTON	83	65	91	61	74	1	1.84	0.70	1.25	7.03	172	28.66	136	96	57	1	0	5	1
WI EAU CLAIRE	83	62	85	58	72	2	0.50	-0.42	0.40	4.88	99	19.81	134	92	43	0	0	2	0
WI GREEN BAY	81	59	86	54	70	2	0.30	-0.44	0.22	6.25	164	16.98	128	94	49	0	0	2	0
WI MADISON	81	62	85	55	72	2	1.65	0.85	0.94	8.09	198	25.91	180	97	51	0	0	3	2
WI MILWAUKEE	81	65	87	61	73	3	0.82	0.04	0.60	3.03	82	18.86	118	90	52	0	0	3	1
WY CASPER	87	51	89	44	69	1	0.38	0.06	0.24	3.05	186	6.35	86	84	25	0	0	2	0
WY CHEYENNE	83	63	87	49	68	2	0.07	-0.40	0.04	1.69	72	6.18	78	82	34	0	0	3	0
WY LANDER	83	63	87	43	68	0	0.03	-0.21	0.03	3.71	232	9.72	118	72	22	0	0	1	0
WY SHERIDAN	82	62	85	38	67	0	0.63	0.28	0.51	4.30	178	8.26	93	90	40	0	0	2	1

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

June Weather and Crop Summary

Weather

Under a hot, dry regime, drought intensified from eastern New Mexico to the southern Atlantic Coast. Monthly rainfall was less than 25 percent of normal on the southern Plains and in parts of eastern Texas and Florida. Wildfires spread quickly in parts of Florida, becoming especially severe in east-central parts of the State. Disorganized tropical moisture delivered late-month rainfall to Texas' Upper Coast and southern Louisiana, but failed to boost soil moisture elsewhere. Toward month's end, dryness and heat also edged into the central High Plains.

Very wet weather prevailed in the Great Basin, northern Rockies, northern Plains, Midwest, and Northeast, maintaining adequate to excessive soil moisture. Monthly totals topped 200 percent of normal at many locations in these areas. Localized flooding struck some low-lying areas in the Corn Belt, Ohio Valley, and Northeast. In California, where June temperatures ranged from 2 to 8°F below normal in inland areas, drier weather finally arrived in early June. Monthly temperatures also averaged more than 2°F below normal across the Great Basin, northern Plains, upper Midwest, and northern Rockies, with departures reaching -8°F in the latter area. In contrast, monthly temperatures ranged from 2 to 6°F above normal from the southern Plains into the Southeast.

In early June, sharply contrasting air masses clashed across the Central and Eastern States. On June 4, Williston, ND notched a monthly record low of 26°F, while highs struggled to only 45°F in North Platte, NE and Goodland, KS. June 2-3 snowfall totaled 3.0 inches in Rapid City, SD, and June 3-4 amounts in Wyoming reached 2.0 inches in Casper and 6.8 inches in Riverton. By June 6, lows dipped below freezing as far south as Laramie, WY (29°F) and North Platte (30°F). Farther south, Oklahoma City logged 105°F on June 2, their highest reading since July 7, 1996, while Altus, OK recorded 113°F. Maxima in Melbourne, FL soared to 101°F on June 2 and 5, their highest readings since June 26, 1950.

Heat intensified again at mid-month across the South, setting several June and all-time records. In Houston, TX, a high of 102°F on June 14 was their second-earliest triple-digit heat behind June 12, 1978. Elsewhere in Texas, June records were established in Austin (108°F) and College Station (107°F). Orange Grove, TX reported 117°F, and an all-time-record high was established in Corpus Christi,

TX (106°F). In Florida, daily-record highs were tied or broken on 22 days during June in Melbourne (including 15 in a row from June 11-25), 14 days in Daytona Beach, and 13 days in Orlando.

A final wave of heat at month's end resulted in a few more all-time-record highs, including 108°F (on June 27 and 28) in Amarillo, TX and 110°F (on June 28) in Dodge City, KS. June-record-tying streaks of 100-degree heat reached 7 days (June 23-29) in Wichita, KS and 8 days (June 22-29) in Amarillo. Amarillo's 13 days of 100-degree heat during the month broke their record of 12, set in 1953 and 1990. Elsewhere in Texas, Midland's string of highs at or above 100°F reached an all-time-record 14 days (June 16-29). In Florida, Tallahassee logged 12 days of triple-digit heat during the month, breaking their June record of 8 days, set in 1944, and tying their all-time record for an entire year, set in 1931.

All-Time-Record Highest Temperature (°F)

Location	High/Date	Former Record/Date
Bergstrom AFB, TX	109, June 14	not available
Randolph AFB, TX	108, June 14	not available
Corpus Christi, TX	106, June 14	105 on July 24, 1934
Amarillo, TX	108, June 27, 28	107 on 6/24/90, 6/24/53
Dodge City, KS	110, June 28	109 in August 1936

Highest June Average Temperature (°F)

Location	Average	Former Record/Year
Brownsville, TX	87.3	86.9 in 1980
Corpus Christi, TX	85.8	85.8 in 1953
Tampa, FL	85.6	83.7 in 1977, 1985
Miami, FL	85.4	84.2 in 1987
Melbourne, FL	85.1	81.9 in 1980
Orlando, FL	85.0	83.2 in 1981
Hollywood, FL	84.8	82.9 in 1963
Ft. Lauderdale, FL	84.7	82.5 in 1952
W. Palm Beach, FL	84.5	83.4 in 1981
Daytona Beach, FL	84.5	82.3 in 1977
Columbus, GA	83.6	83.3 in 1981
Miami Beach, FL	82.6	82.6 in 1994
Huntsville, AL	80.5	79.2 in 1969

In contrast, highs in Arizona hit 100°F for the first time this year in Phoenix and Tucson on June 2, the latest such occurrence since 1971 and 1987, respectively. Las Vegas, NV finally notched a triple-digit high on June 26, their second-latest date on record behind June 30, 1965. Elko, NV reported the year's first high at or above 80°F on June 28, easily surpassing their former record (June 16, 1971). In Montana, Miles City's average temperature of 60.5°F was 6.5° below normal and their lowest June value on record.

In California, the season (July 1 - June 30) ended with a record number of days with measurable precipitation in locations such as downtown San Francisco (119 days), downtown Sacramento (103), and at UCLA (63). Records had stood since 1982-83 at Sacramento and UCLA, but since 1889-90 in San Francisco. San Francisco's seasonal rainfall of 47.22 inches was second only to a 49.27-inch total in 1861-62. Bakersfield total (14.66 inches) was 256 percent of normal and well above the former record of 11.73 inches, set in 1977-78.

Elsewhere in the West, Salt Lake City's monthly rainfall of 3.84 inches was not only a record for June, but also their wettest summer month on record (3.66 inches in August 1968). Despite continued cool weather in the Sierra Nevada, the snowpack's water equivalent dropped from 32 inches at the end of May to 7 inches on June 30, according to California's Department of Water Resources. In Fresno, CA, thunderstorms on June 6 dumped 1.80 inches of rain, breaking their monthly record. Salt Lake City measured 1.48 inches on the 17th, their second-wettest June day on record. On June 16-17, 22 inches of snow blanketed nearby Alta, UT. In Montana, Billings noted rain on 19 of the month's first 20 days, while Missoula observed their greatest June total (4.23 inches) since 1907.

Several locations in the Midwest, Ohio Valley, and Northeast also reported monthly record or near-record rainfall. Rainfall of 9.91 inches in Des Moines, IA and 9.01 inches in Portland, ME were the greatest June totals since 1947 and 1922, respectively. Elsewhere in Maine, June totals reached 16.95 inches in Hartford and 15.34 inches in Rumsford. In Milton, MA, the Blue Hill Observatory had its second-wettest month on record (17.32 inches), behind August 1955 (18.78 inches). A significant portion of the Northeast's rain fell from June 12-14, causing significant flooding in several drainage basins, including along the Saco River. Storm-total rainfall reached 10.30 inches in Sharon, MA, 9.28 inches in Ephratah, NY, 8.58 inches in Portsmouth, NH, and 8.46 inches in Hartford, ME. Boston, MA had their wettest 24-hour period in June on record (5.99 inches on June 13-14). Meanwhile in Iowa, Atlantic was inundated with an all-time State-record 13.18 inches of rain on June 14. A few days later, on June 17, the Nishnabotna River crested at a record 15.18 feet above flood stage at Hamburg, IA.

Record-High June Rainfall (Inches)

Location	Total	Former Record/Year
Blue Hill Obs., MA	17.32	13.73 in 1982
North Foster, RI	14.79	12.62 in 1982
Nashville, TN	11.95	11.64 in 1928
Paducah, KY	10.98	not available
Charleston, WV	10.67	8.61 in 1910
Elkins, WV	10.05	8.35 in 1939
Salt Lake City, UT	3.84	2.93 in 1947
Fresno, CA	1.93	1.66 in 1939

In contrast, Melbourne, FL received only 0.16 inches during the month, breaking their June record of 1.30 inches, set in 1993. In Corpus Christi, TX, April-June rainfall (0.31 inches) was the lowest on record, eclipsing their 1923 record of 1.23 inches. March 18 - June 30 rainfall in Victoria, TX totaled only 0.96 inches (8 percent of normal). Victoria's total for the first half of 1998 was 7.99 inches, compared with more than 42 inches during January-June 1997. April-June rainfall in Shreveport, LA was 2.29 inches, their third-lowest for any 3-month period behind 1.39 inches in September-November 1924 and 2.09 inches in June-August 1934. Along the western Gulf Coast, however, 6.75 inches of rain pelted Galveston, TX on June 28, easing dryness.

Fieldwork

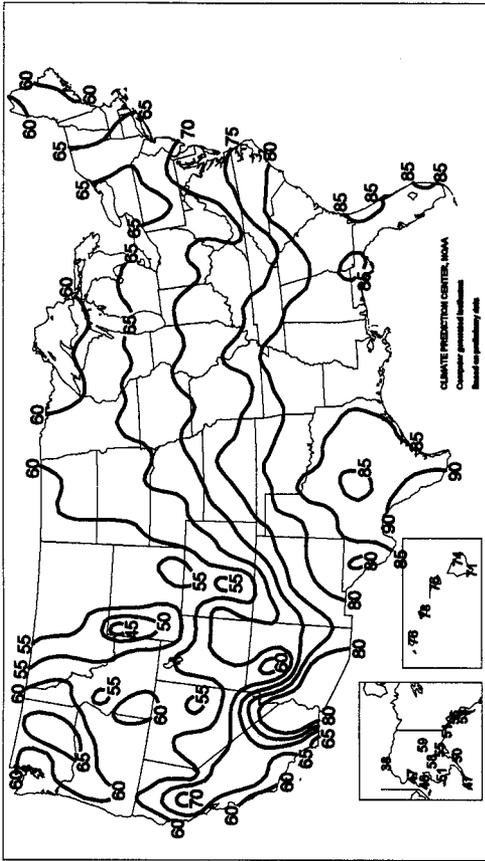
Frequent thunderstorms provided above-normal rainfall to most of the Corn Belt, allowing crops to develop well ahead of normal. Locally heavy downpours flooded low-lying fields and eroded hillsides and waterways. As the month ended, many corn fields exhibited uneven stands. Plants in low-lying and poorly drained areas exhibited stunted growth and were discolored from extended periods of standing water and soggy soils. Several storm cells produced hail and strong winds that caused isolated crop damage across the Corn Belt.

Warm weather ripened the winter wheat well ahead of normal in most winter wheat-producing States. Dry weather in the central and southern Plains allowed farmers to make rapid progress in harvesting most winter wheat by the end of the month. In the southern and eastern Corn Belt, harvest began earlier than normal, and as the month ended, progress was 1 week ahead of the 5-year average. Across the northern Plains and Great Lakes region, the crop rapidly matured, aided by above-normal temperatures and adequate soil moisture.

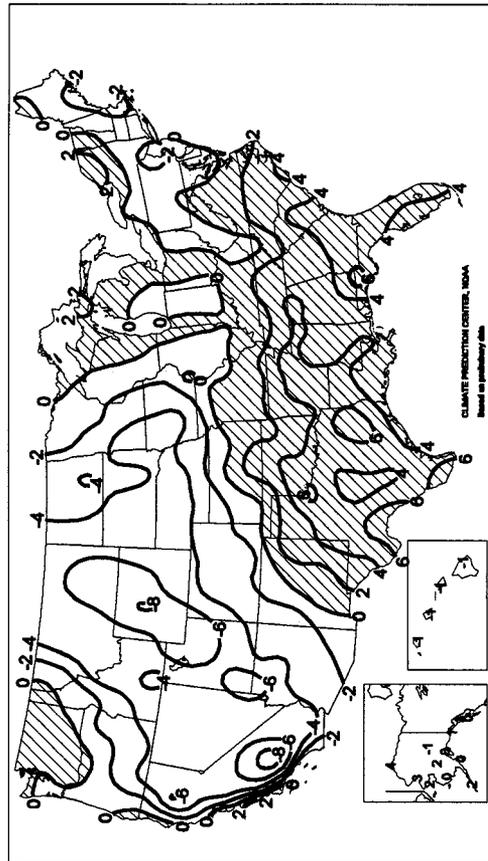
Hot, dry weather stressed cotton in the Southeast, Mississippi Delta, and southern Plains. Scattered showers and thunderstorms provided temporary relief from dry conditions in some cotton producing areas, but conditions in most cotton fields deteriorated from the previous month.

Southwestern States continued to experience below-normal temperatures that slowed crop development, especially in California, which was 1 to 4 weeks behind normal in most areas.

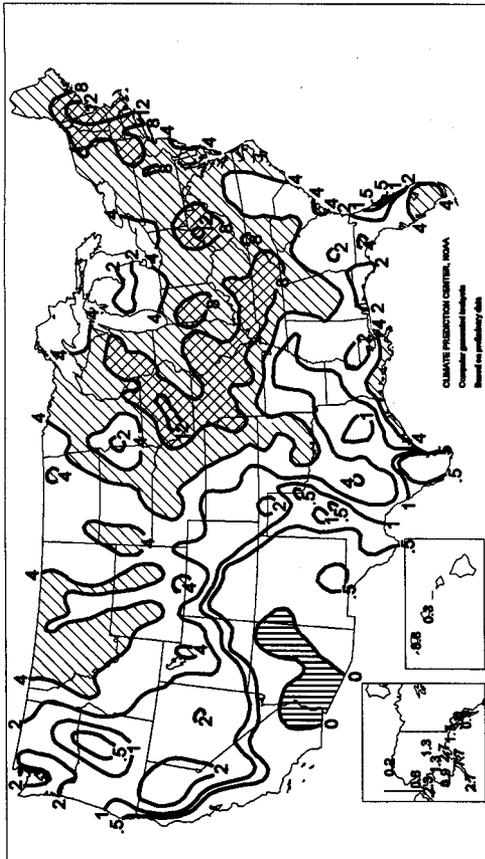
Average Temperature (°F)
June 1998



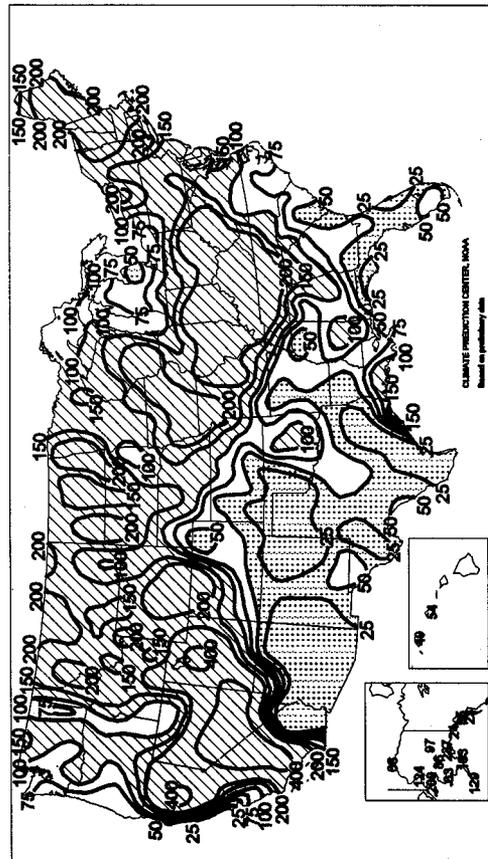
Departure of Average Temperature from Normal (°F)
June 1998



Total Precipitation (Inches)
June 1998



Percent of Normal Precipitation
June 1998



TEMPERATURE AND PRECIPITATION SUMMARY

June 1998

STATES AND STATIONS	TEMP. °F		PRECIP.		STATES AND STATIONS	TEMP. °F		PRECIP.		STATES AND STATIONS	TEMP. °F		PRECIP.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AL BIRMINGHAM	80	4	3.20	-0.52	ME CARIBOU	61	0	3.22	0.31	RI SCRANTON	66	-2	4.16	0.18
AL HUNTSVILLE	80	5	1.40	-2.72	ME PORTLAND	60	-2	9.01	5.57	RI WILLIAMSPORT	67	-1	5.36	1.03
AL MOBILE	82	2	2.87	-2.18	MD BALTIMORE	72	-1	3.23	-0.44	RI PROVIDENCE	68	-1	9.81	8.28
AK MONTGOMERY	82	4	4.18	0.28	MA BOSTON	66	-3	11.58	8.49	SC BEAUFORT	83	4	2.27	-3.84
AK ANCHORAGE	66	0	2.51	1.36	MA WORCESTER	63	-1	9.68	5.80	SC CHARLESTON	83	4	3.41	-3.02
AK BARROW	38	4	0.19	-0.08	MI ALPENA	62	1	2.91	-0.15	SC COLUMBIA	83	5	2.06	-2.74
AK FAIRBANKS	59	-1	1.33	-0.04	MI GRAND RAPIDS	67	0	2.11	-1.58	SD GREENVILLE	77	2	3.80	-0.89
AK JUNEAU	58	3	3.00	-0.15	MI HOUGHTON LAKE	63	0	2.24	-0.78	SD ABERDEEN	63	-4	6.47	3.33
AK KODIAK	50	1	7.77	2.99	MI LANSING	66	-1	3.36	-0.34	SD HURON	66	-3	3.02	-0.34
AK NOME	48	2	2.34	1.23	MI MARQUETTE	60	0	3.06	-0.42	SD RAPID CITY	59	-6	5.59	2.53
AZ FLAGSTAFF	66	-5	0.00	-0.40	MI MUSKEGON	65	0	1.34	-1.01	SD SIOUX FALLS	63	-5	4.52	1.12
AZ PHOENIX	86	-3	0.00	-0.13	MN DULUTH	59	-1	6.15	2.32	TN BRISTOL	71	0	7.39	3.86
AZ PRESCOTT	68	-1	0.00	-0.46	MN INT'L FALLS	60	-1	4.33	0.39	TN CHATTANOOGA	78	3	5.82	2.29
AZ TUCSON	82	-2	0.00	-0.26	MN MINNEAPOLIS	65	-3	6.52	2.46	TN KNOXVILLE	76	3	7.97	3.99
AZ YUMA	85	-3	0.00	-0.02	MI ROCHESTER	64	-2	5.52	1.80	TX MEMPHIS	83	4	1.09	-2.48
AR FORT SMITH	80	3	3.22	-0.17	MI ST. CLOUD	63	-2	4.23	-0.36	TX NASHVILLE	78	2	10.93	7.36
AR LITTLE ROCK	83	6	2.08	-1.49	MS JACKSON	82	3	3.26	0.09	TX ABILENE	84	3	1.97	-0.68
CA BAKERSFIELD	71	-7	0.30	0.19	MS MERIDIAN	80	2	4.80	1.17	TX AMARILLO	78	3	0.12	-3.57
CA EUREKA	57	1	0.33	-0.15	MO TUPELO	81	4	1.81	-2.23	TX AUSTIN	86	5	1.58	-2.16
CA FRESNO	72	-6	1.83	1.86	MO COLUMBIA	73	1	7.05	2.74	TX BEAUMONT	84	3	4.06	-1.53
CA LOS ANGELES	65	-1	0.09	0.09	MO KANSAS CITY	74	0	9.22	4.50	TX BROWNSVILLE	87	4	0.30	-2.43
CA REDDING	70	-6	1.71	1.15	MO SAINT LOUIS	75	0	6.90	3.19	TX CORPUS CHRISTI	86	4	0.26	-3.12
CA SACRAM/MCCLELL	70	-	0.14	-	MO SPRINGFIELD	74	1	3.16	-1.92	TX DEL RIO	89	7	1.35	-0.78
CA SAN DIEGO	66	-1	0.10	0.01	MT BILLINGS	58	-7	3.63	1.64	TX EL PASO	82	2	0.27	-0.40
CA SAN FRANCISCO	62	0	0.03	-0.09	MT BUTTE	52	-4	3.05	0.90	TX FORT WORTH	85	4	1.75	-1.23
CA ALAMOSA	58	-1	0.27	-0.40	MT GLASGOW	80	-5	4.11	2.00	TX GALVESTON	84	3	9.43	5.01
CA CO SPRINGS	64	-1	1.27	-0.97	MT GREAT FALLS	56	-6	5.16	2.77	TX HOUSTON	85	6	2.73	-2.24
CA DENVER	63	-3	0.74	-1.04	MT KALISPELL	57	-1	3.53	1.32	TX LUBBOCK	81	4	1.31	-1.46
CA GRAND JUNCTION	68	-4	0.55	0.05	MT MILES CITY	61	-6	2.61	-0.17	TX MIDLAND	85	6	0.30	-1.26
CA PUEBLO	67	-4	0.68	-0.56	MT MISSOULA	58	-2	4.23	2.45	TX SAN ANGELO	84	5	0.88	-1.45
CT BRIDGEPORT	87	-1	5.08	1.82	NE GRAND ISLAND	68	-3	5.26	1.35	TX SAN ANTONIO	86	4	0.81	-3.00
CT HARTFORD	67	-2	7.17	3.42	NE LINCOLN	70	-2	5.16	1.27	TX VICTORIA	86	4	0.15	-4.74
DC WASHINGTON	73	-3	4.42	1.05	NE NORFOLK	67	-3	7.42	2.95	TX WACO	86	5	1.16	-2.12
DE WILMINGTON	70	-1	4.66	1.11	NE NORTH PLATTE	64	-4	4.84	1.47	UT WICHITA FALLS	84	4	2.25	-1.27
FL DAYTONA BEACH	84	5	0.83	-6.16	NE OMAHA	70	-3	8.22	4.35	UT SALT LAKE CITY	63	-6	3.84	2.91
FL JACKSONVILLE	84	5	2.95	-2.72	NE SCOTT'S BLUFF	62	-5	2.32	-0.33	VT BURLINGTON	66	1	8.66	5.19
FL KEY WEST	85	2	0.86	-4.23	NV VALENTINE	63	-5	5.07	2.20	VA LYNCHBURG	72	0	2.85	-0.81
FL MIAMI	85	4	6.67	-2.65	NV ELY	55	-4	1.94	1.08	VA NORFOLK	76	2	4.56	0.73
FL ORLANDO	85	4	1.58	-5.74	NV LAS VEGAS	80	-5	0.03	-0.09	VA RICHMOND	74	0	4.41	0.80
FL TAMPA	85	4	2.65	-2.83	NV RENO	61	-2	1.39	0.93	VA ROANOKE	73	2	2.03	-1.16
FL VALPARAISO/EGLIN	83	4	0.66	-4.85	NH WINNEMUCCA	59	-6	0.90	0.04	VA WASH/DULLES	70	-1	5.88	1.95
FL WEST PALM BEACH	84	4	2.15	-5.94	NH CONCORD	64	0	7.94	4.75	WA HANFORD	72	-	0.48	-
GA ATHENS	80	4	1.97	-1.95	NJ NEWARK	70	-3	5.98	2.78	WA OLYMPIA	59	0	1.39	-0.24
GA ATLANTA	79	3	3.59	0.02	NM ALBUQUERQUE	74	1	0.17	-0.43	WA QUILLAYUTE	55	0	1.50	-1.62
GA AUGUSTA	81	4	2.31	-1.82	NY ALBANY	66	-1	6.59	2.98	WA SEATTLE-TACOMA	80	-1	1.11	-0.39
GA COLUMBUS	83	4	3.75	-0.32	NY BINGHAMTON	63	-1	5.22	1.80	WA SPOKANE	82	1	0.84	-0.42
GA MACON	82	3	2.93	-0.84	NY BUFFALO	66	-1	2.87	-0.69	WA YAKIMA	86	1	0.10	-0.44
GA SAVANNAH	83	4	1.93	-3.72	NY ROCHESTER	68	0	7.11	4.10	WV BECKLEY	67	0	6.50	2.67
HI HILO	74	-1	-	-	NY SYRACUSE	66	1	4.82	0.83	WV CHARLESTON	70	-1	10.67	7.08
HI HONOLULU	78	-1	0.27	-0.25	NC ASHEVILLE	72	2	3.84	-0.61	WV ELKINS	65	1	10.05	5.80
HI KAHULUI	78	-1	-	-	NC CHARLOTTE	81	5	3.56	0.18	WV HUNTINGTON	71	0	6.88	3.34
HI LIHUE	78	-2	-	-	NC GREENSBORO	75	2	3.53	-0.29	WI EAU CLAIRE	85	-1	4.18	-0.04
ID BOISE	63	-3	1.21	0.40	NC HATTERAS	76	2	3.67	-0.46	WI GREEN BAY	85	0	6.17	2.78
ID LEWISTON	85	-1	0.77	-0.48	NC RALEIGH	77	3	3.45	-0.23	WI MADISON	68	0	7.48	3.81
ID POCATELLO	68	-5	1.27	0.25	ND WILLINGTON	81	4	3.93	-2.05	WI MILWAUKEE	67	2	2.82	-0.42
IL CHICAGO/O'HARE	69	1	2.90	-0.86	ND BISMARCK	61	-3	2.90	0.19	WY CASPER	58	-6	2.67	1.21
IL MOLINE	70	-1	7.18	2.92	ND DICKINSON	59	-5	6.51	3.29	WY CHEYENNE	57	-4	1.63	-0.45
IL PEORIA	71	-1	5.19	1.21	ND FARGO	63	-2	6.62	3.81	WY LANDER	55	-8	3.68	2.22
IL ROCKFORD	68	-1	6.27	1.75	ND GRAND FORKS	61	-3	6.47	3.62	WY SHERIDAN	56	-7	3.67	1.42
IL SPRINGFIELD	72	-1	8.81	5.38	ND JAMESTOWN	61	-4	3.07	0.07	PR SAN JUAN	83	1	3.25	-0.53
IN EVANSVILLE	75	0	5.31	1.83	OH WILLISTON	59	-5	3.01	0.74					
IN FORT WAYNE	70	-1	4.83	1.25	OH AKRON-CANTON	67	-1	5.81	2.64					
IN INDIANAPOLIS	71	-1	10.26	6.78	OH CINCINNATI	71	0	9.61	5.78					
IN SOUTH BEND	68	-1	4.02	-0.10	OH CLEVELAND	68	1	2.97	-0.70					
IA BURLINGTON	73	2	7.18	3.13	OH COLUMBUS	72	2	6.99	2.94					
IA CEDAR RAPIDS	67	-3	7.83	3.28	OH DAYTON	70	0	6.35	2.53					
IA DES MOINES	68	-4	9.91	5.47	OH MANSFIELD	67	0	7.29	3.34					
IA DUBUQUE	67	-1	7.85	3.72	OH TOLEDO	70	2	1.73	-2.01					
IA SIOUX CITY	67	-4	5.67	1.97	OH YOUNGSTOWN	65	-1	3.45	-0.48					
IA WATERLOO	68	-1	10.36	5.89	OK OKLAHOMA CITY	81	4	2.67	-1.64					
KS CONCORDIA	74	0	3.87	-0.80	OR TULSA	80	2	3.37	-1.07					
KS DODGE CITY	75	1	1.58	-1.53	OR ASTORIA	58	-1	1.69	-0.71					
KS GOODLAND	68	-2	1.63	-1.56	OR BURNS	56	-2	1.04	0.21					
KS TOPEKA	74	0	7.22	1.68	OR EUGENE	60	-2	0.79	-0.64					
KS WICHITA	78	3	0.40	-3.82	OR MEDFORD	68	0	0.67	0.09					
KY JACKSON	71	0	8.29	4.05	OR PENDLETON	66	-1	0.78	0.12					
KY LEXINGTON	73	1	10.81	7.15	OR PORTLAND	63	0	1.73	0.25					
KY LOUISVILLE	75	2	6.80	3.34	OR SALEM	62	0	0.98	-0.36					
KY PADUCAH	78	1	10.98	6.83	PA ALLENTOWN	68	-1	4.95	1.21					
LA BATON ROUGE	83	3	2.51	-1.97	PA ERIE	67	1	2.64	-1.44					
LA LAKE CHARLES	83	3	5.05	0.08	PA MIDDLETOWN	71	0	5.82	1.97					
LA NEW ORLEANS	84	4	3.38	-2.45	PA PHILADELPHIA	71	0	4.92	1.17					
LA SHREVEPORT	85	5	1.35	-2.94	PA PITTSBURGH	67	-1	6.71	3.00					

Based on 1961-90 normals.

National Agricultural Summary

June 29 - July 5, 1998

HIGHLIGHTS

Most of the Corn Belt experienced above-normal precipitation, keeping some already saturated low-lying fields under standing water. Severe flooding drowned crops in isolated areas of the eastern and southern Corn Belt. Extremely dry conditions continued to stress crops in the southern Piedmont and the adjacent Coastal Plains and eastern Gulf Coast regions. Tropical showers

brought much-needed moisture to crops along the western Gulf Coast, but most inland areas of the southern Plains and Mississippi Delta remained dry. Moderate temperatures provided ideal growing conditions in the Pacific Northwest. Cool weather kept crop development well behind normal in California, but seasonably dry weather allowed field activities to accelerate.

Corn: Eight percent of the Nation's corn has progressed to the silking stage. Development was most advanced in the Southeast, but only slightly ahead of normal. In the heart of the Corn Belt, a small percentage of the crop had entered the silking stage. Along the southern perimeter of the Corn Belt, plentiful moisture supplies and warm weather allowed nearly one-fourth of the crop to progress into the silking stage. Above-normal rainfall slightly improved crop conditions across most of the Corn Belt, but isolated flooding and high winds caused some localized damage. Hot, dry weather rapidly dried down fields along the western Gulf Coast, with some fields ripening prematurely. In the Southeast, many fields were severely damaged by the heat and dry soils.

Soybeans: Nearly all of the crop has emerged, but progress lagged in the lower Ohio Valley and along the Atlantic Coastal Plains, where planting delays occurred. Soybeans blooming advanced to 17 percent, several days ahead of last year and the 5-year average. Good moisture supplies and early planting allowed one-fourth of the crop to begin blooming in Iowa. Progress was most advanced in the lower Mississippi Valley, where over half of the crop was blooming. Adequate topsoil moisture and warm weather contributed to slightly improved conditions across most of the Corn Belt. In the western Gulf Coast and Mississippi Delta, hot, dry weather caused rapid drying and poor pod filling.

Winter Wheat: Harvest progress advanced to 69 percent complete, more than a week ahead of the normal pace for this date. Hot, dry weather allowed the harvest to approach completion well ahead of normal in the central and southern Plains. Despite above-normal precipitation, harvesting continued at a rapid pace in the southern Corn Belt and accelerated in the eastern Corn Belt, well ahead of normal for both areas. Harvesting began much earlier than normal in the Great Lakes region, where warm, dry weather ripened the crop well ahead of normal. In the Pacific Northwest, hot weather

rapidly ripened the crop, but isolated severe storms caused some lodging.

Cotton: Dryland fields in the southern Plains made slow progress, and plants continued to lose squares and small bolls due to prolonged dry conditions. Along the western Gulf Coast, bolls were rapidly opening and some fields were beginning to defoliate. Crop progress remained well behind the 5-year average in California, where temperatures remained slightly below normal.

Rice: Seventeen percent of the crop has entered the heading stage, compared with 9 percent normally headed by this date. Fields along the western Gulf Coast progressed rapidly, with nearly half of the crop headed. The crop was less advanced in the northern Mississippi Delta, but development was slightly ahead of normal. Hot, dry weather stressed rice paddies in the southern rice-producing states, where farmers struggled to maintain flood levels.

Small grains: Seasonable temperatures aided development of spring wheat, barley, and oat crops and allowed conditions to improve across most northern small grain-producing areas. Heading progress continued ahead of normal for all three crops, except in Idaho, where wet weather has slowed barley and spring wheat development. The impact of rust in barley and spring wheat was expected to be minor in the Pacific Northwest due to advanced crop development and dry weather.

Other crops: Soil moisture remained too dry to finish sorghum planting in the southern Great Plains. Early-planted sorghum fields suffered from extreme heat and dry soils. Fields turning color were too advanced to benefit from the late-week rain. Some sorghum fields were ripe, and harvest was underway along the western Gulf Coast. Irrigated peanuts made good progress in the southern High Plains, but some dryland fields remained unplanted due to dry soil conditions.

Crop Progress and Condition

Week Ending July 5, 1998

Soybeans Percent Emerged				
	Jul 5 1998	Prev Week	Prev Year	5-Yr Avg
AL	89	85	NA	NA
AR	92	87	NA	NA
GA	85	69	NA	NA
IL	94	91	NA	NA
IN	93	89	NA	NA
IA	100	100	NA	NA
KS	97	95	NA	NA
KY	80	57	NA	NA
LA	98	95	NA	NA
MI	97	95	NA	NA
MN	99	99	NA	NA
MS	98	94	NA	NA
MO	93	87	NA	NA
NE	100	100	NA	NA
NC	80	75	NA	NA
OH	100	97	NA	NA
SC	86	83	NA	NA
SD	100	98	NA	NA
TN	82	75	NA	NA
ALL	96	93	NA	NA

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

Soybeans Percent Blooming				
	Jul 5 1998	Prev Week	Prev Year	5-Yr Avg
AL	13	6	6	8
AR	17	11	5	20
GA	18	5	6	12
IL	7	2	10	9
IN	9	0	5	6
IA	25	0	12	11
KS	27	12	19	9
KY	6	0	0	0
LA	60	35	30	22
MI	20	2	0	4
MN	16	5	3	7
MS	60	42	34	29
MO	11	4	7	5
NE	6	0	4	6
NC	10	5	5	4
OH	17	7	9	9
SC	20	13	16	15
SD	18	6	4	6
TN	5	1	3	3
ALL	17	5	9	9

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

Winter Wheat Percent Harvested				
	Jul 5 1998	Prev Week	Prev Year	5-Yr Avg
AR	100	98	89	94
CA	50	40	94	82
CO	35	10	9	20
GA	100	99	98	99
ID	0	0	0	0
IL	88	57	32	46
IN	73	26	13	27
KS	97	68	58	59
MI	10	1	0	0
MO	88	55	50	52
MT	0	0	0	0
NE	26	4	3	14
NC	96	85	94	88
OH	30	5	0	7
OK	100	99	88	91
OR	0	0	0	0
SD	2	0	0	0
TX	95	87	73	83
WA	0	0	0	0
ALL	69	52	46	50

These 19 States harvested 92% of last year's winter wheat acreage.

Corn Percent Silking				
	Jul 5 1998	Prev Week	Prev Year	5-Yr Avg
CO	0	0	0	0
GA	97	83	90	93
IL	5	2	1	3
IN	4	0	0	2
IA	0	0	0	1
KS	31	10	20	15
KY	30	8	0	20
MI	0	0	0	0
MN	3	0	0	1
MO	40	13	14	15
NE	1	0	0	3
NC	60	45	47	57
OH	2	0	0	0
PA	1	0	0	2
SD	0	0	0	0
TX	57	54	54	62
WI	0	0	0	0
ALL	8	4	4	6

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

Cotton Percent Squaring				
	Jul 5 1998	Prev Week	Prev Year	5-Yr Avg
AL	83	68	41	70
AZ	82	76	92	95
AR	96	92	82	90
CA	40	15	82	66
GA	87	70	76	85
LA	97	92	77	88
MS	96	94	67	87
MO	95	75	50	78
NM	80	51	72	62
NC	65	55	53	56
OK	48	13	36	38
SC	67	46	75	73
TN	90	80	63	83
TX	61	48	58	58
ALL	72	59	65	70

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

Cotton Percent Setting Bolls				
	Jul 5 1998	Prev Week	Prev Year	5-Yr Avg
AL	28	9	2	10
AZ	18	9	56	55
AR	35	9	4	13
CA	2	1	14	7
GA	40	28	14	29
LA	51	24	11	34
MS	52	23	22	29
MO	30	4	2	9
NM	8	0	7	7
NC	10	2	3	13
OK	0	0	0	2
SC	17	8	20	17
TN	20	7	1	6
TX	21	20	12	18
ALL	26	16	12	19

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

Spring Wheat Percent Headed				
	Jul 5 1998	Prev Week	Prev Year	5-Yr Avg
ID	34	21	64	52
MN	90	56	45	64
MT	69	35	57	42
ND	60	34	36	35
SD	86	78	64	68
ALL	69	43	47	45

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

Crop Progress and Condition

Week Ending July 5, 1998

Oats Percent Headed

	Jul 5 1998	Prev Week	Prev Year	5-Yr Avg
IA	94	87	96	89
MI	97	90	88	67
MN	91	75	77	77
NE	99	96	94	98
ND	57	28	30	31
OH	97	93	87	88
PA	90	80	82	83
SD	84	*72	70	67
WI	97	93	83	68
ALL	84	70	69	66

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

Peanuts Percent Pegging

	Jul 5 1998	Prev Week	Prev Year	5-Yr Avg
AL	56	40	36	38
FL	50	43	67	NA
GA	66	49	39	58
NC	45	40	21	15
OK	59	32	51	35
SC	40	15	46	NA
TX	26	19	24	12
VA	60	28	9	NA
ALL	52	37	35	37

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

Barley Percent Headed

	Jul 5 1998	Prev Week	Prev Year	5-Yr Avg
ID	33	25	57	51
MN	90	57	39	61
MT	53	22	49	38
ND	53	31	33	40
SD	80	73	63	62
WA	99	95	95	87
ALL	59	37	47	48

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

Rice Percent Headed

	Jul 5 1998	Prev Week	Prev Year	5-Yr Avg
AR	8	6	0	1
CA	0	0	0	0
LA	40	38	20	31
MS	16	10	14	8
TX	50	22	13	29
ALL	17	13	6	9

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

Soybeans Crop Condition by Percent

	VP	P	F	G	EX
AL	4	23	47	25	1
AR	5	20	36	32	7
GA	27	27	33	13	0
IL	5	11	32	43	9
IN	4	7	28	51	10
IA	3	8	26	48	15
KS	0	3	23	62	12
KY	1	5	23	57	14
LA	6	21	41	31	1
MI	6	10	29	44	11
MN	3	5	35	49	8
MS	5	14	34	42	5
MO	1	12	34	45	8
NE	1	4	18	65	12
NC	1	9	22	65	3
OH	2	8	28	49	13
SC	6	14	40	40	0
SD	0	3	15	60	22
TN	0	5	30	53	12
ALL	3	9	29	48	11
Prev Wk	3	8	29	50	10
Prev Yr	1	5	26	56	12

Spring Wheat Crop Condition by Percent

	VP	P	F	G	EX
ID	0	0	4	68	28
MN	2	5	28	58	7
MT	2	11	40	40	7
ND	1	4	25	54	16
SD	0	1	16	56	27
ALL	1	5	27	52	15
Prev Wk	2	7	30	48	13
Prev Yr	3	13	36	41	7

Corn Crop Condition by Percent

	VP	P	F	G	EX
CO	0	3	26	58	13
GA	41	20	19	18	2
IL	6	11	29	43	11
IN	4	9	28	46	13
IA	2	8	22	50	18
KS	1	7	24	57	11
KY	1	4	21	58	16
MI	2	9	30	46	13
MN	3	3	24	52	18
MO	1	7	30	47	15
NE	0	4	19	62	15
NC	10	16	29	42	3
OH	2	7	26	49	16
PA	2	3	23	60	12
SD	1	2	12	55	30
TX	21	21	29	26	3
WI	0	2	13	47	38
ALL	3	7	24	50	16
Prev Wk	3	7	23	51	16
Prev Yr	1	4	20	57	18

Cotton Crop Condition by Percent

	VP	P	F	G	EX
AL	7	17	49	26	1
AZ	3	15	34	32	16
AR	0	9	35	46	10
CA	10	65	20	5	0
GA	20	27	28	22	3
LA	3	12	40	44	1
MS	1	7	20	55	17
MO	0	14	39	34	13
NM	0	12	39	27	22
NC	0	6	35	57	2
OK	0	11	35	46	8
SC	3	10	35	48	4
TN	0	4	22	51	23
TX	25	20	28	24	3
ALL	14	20	30	30	6
Prev Wk	11	18	31	35	5
Prev Yr	2	11	27	49	11

Rice Crop Condition by Percent

	VP	P	F	G	EX
AR	1	3	27	54	15
CA	0	10	40	50	0
LA	1	4	38	47	10
MS	0	9	35	50	6
TX	0	2	38	51	9
ALL	1	5	33	51	10
Prev Wk	0	7	29	53	11
Prev Yr	0	2	31	54	13

(Continued on back cover)

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/oce/waob/jawf>.

ALABAMA: Days suitable for fieldwork 6.7. Topsoil 41% very short, 51% short, 8% adequate. Scattered showers continued to fall around the State, not enough to reverse the effects of the prevalent dry weather. Wheat harvested 99%, 82% 1997, 88% avg. Peanuts pegging 56%, 36% 1997, 38% avg. Hay harvested 100%, 88% 1997, 95% avg. Cotton 7% very poor, 17% poor, 49% fair, 26% good, 1% excellent. Livestock 7% very poor, 8%, poor, 59% fair, 24% good, 2% excellent. Pasture feed 20% very poor, 30% poor, 40% fair, 10% good. Hay harvest 1st cutting has been completed, prospects are poor for second cuttings. Potato digging is in full swing.

ALASKA: Days suitable for fieldwork 5.5. Topsoil moisture 60% short, 40% adequate. Subsoil moisture 45% short, 55% adequate. Scattered showers in Tanana Valley early in week, showers throughout the State at week's end. Daytime high temperatures mostly ranged from the high-60's to the low-80's degrees F. Barley conditions 75% poor, 20% fair, 5% good. Average height of grain crops 14.6 in. Commercial potato crop 85% emerged. General crop growth for the week 25% slow, 50% moderate, 25% rapid. Hay condition 40% poor, 30% fair, 25% good, 5% excellent. Wind, rain damage to crops 75% none, 25% light.

ARIZONA: Pasture condition was generally unchanged this month, but it is beginning to decline. An unseasonably wet spring caused pasture conditions to remain as good as they are. Wind and lack of rain have caused soil moisture to decline. Many ranchers are reporting hauling water. High, mid-elevation pastures were mainly in good condition. Low-elevation pastures were in fair to excellent condition. Livestock were reported in good condition. Soil moisture was short in most areas of the State, while stock water was short to adequate. Insect damage was light. Northern grazing conditions in high-elevation pastures were in good condition, while mid-, low-elevation pastures were in fair condition. Cattle were reported in fair to good condition. Stock water supplies were mostly adequate and soil moisture was short. Insect damage was light to moderate. Conditions in central areas declined from last month. All elevations were in good to fair condition. Livestock conditions were good, stock water was adequate, while soil moisture was short. Insect damage was light. Southern grazing conditions were mixed. In low elevations, pastures were mostly fair to good; mid and high elevations were mostly good. Livestock conditions were good. Stock water was adequate, while soil moisture was short. Insect damage was light. Cotton progress still lags behind normal. Alfalfa harvest activity was reported as 21% not being harvested, 31% moderate, 48% active. Alfalfa condition declined again last week. Condition was reported as 3% poor, 11% fair, 50% good, 36% excellent. Small grains harvested 97%, 95% 1997, 96% avg. Central, western areas continued harvesting its vegetables, melons, potatoes, grape crops last week. Growers in central areas shipped a variety of vegetables, melons, potatoes. Grape shipments consisted of seedless flames, perletttes. Vegetable shipments included carrots, dry onions, sweet corn, manufacturing potatoes and a small volume of currants, green onions, parsley, while melon shipments involved cantaloupe, honeydew, watermelon, a very light volume of canary, orange flesh, sharilyn melons. Western areas harvested an assortment of melons, grapes. Melon shipments included canary, cantaloupe, casaba, crenshaw, honeydew, sharilyn, watermelons. Grape shipments from western areas included seedless flames, perletttes, a light volume of seedless beauties. A small volume of grapefruit were shipped from central, western areas last week.

ARKANSAS: Days suitable for fieldwork 7. Soil moisture 38% very short, 49% short, 13% adequate. Few showers were reported during the week. Main farming activities: Irrigating crops, applying nitrogen to rice, harvesting hay. Corn 2% very poor, 11% poor, 33% fair, 41% good, 13% excellent. Alfalfa 6% poor, 35% fair, 59% good. Other hay 1% very poor, 16% poor, 38% fair, 42% good, 3% excellent. Range, pasture feed 3% very poor, 20% poor, 40% fair, 34% good, 3% excellent.

CALIFORNIA: Weather conditions were conducive to field crop activities in most areas. Grain harvests of wheat, barley and oats were declining in the Imperial, San Joaquin Valleys. Yields were variable. Some harvested field stubble was plowed under or burned in preparation for planting other crops.

Dry edible beans, corn for grain, silage were planted, following small grain harvest; some corn fields were treated for mites. Early-planted corn, dry bean fields showed good growth, emergence. Rice planting was nearly complete. Some Sacramento County rice fields damaged by high winds last month were reflooded; the extent of the crop loss sustained was still unknown. Progress of cotton in most areas was still 3 to 4 weeks behind normal. Growers were cultivating, fertilizing, irrigating, treating cotton fields for lygus. A few marginal fields in Fresno County were disced under for replanting to other crops. Many cotton fields in the Imperial Valley were setting bolls. Seed alfalfa was in full bloom in the San Joaquin Valley; some fields were sprayed for lygus, mites. Safflower bloom continued in the San Joaquin Valley. Sacramento Valley safflower crop was progressing well. A few safflower fields in Sutter County were beginning to bloom. Old crop sugar beets were harvested, while new crop fields were being planted. Alfalfa, oats, pasture grasses, sudangrass were cut for hay. Some alfalfa growers were one cutting behind normal. Warmer weather helped maturity of grapes, stone fruit advance. Grape growers continued to apply sulfur for control of powdery mildew. Other activities in vineyards included weed control, application of insecticides for leafroller. Table grape growers in the San Joaquin Valley were girdling vines, tipping bunches. Coachella Valley grapes were picked for fresh use. Main varieties harvested were Perlette, Thompson Seedless. San Joaquin Valley stone fruit growers were actively picking nectarines, plums, freestone peaches, apricots. Brown rot, mold, split pits were causing some concerns. Strawberry harvest was active in the coastal areas, declining in the San Joaquin Valley. Harvest of lemons in the south coast area, grapefruit, Valencia oranges remained active. Harvests of melons, sweet corn continued in the Imperial Valley. Sweet corn harvest was slowly progressing up the San Joaquin Valley. Tulare County sweet corn growers noted outstanding quality. Melons were growing well in the San Joaquin Valley; some fields were weeded, sprayed for aphids. Sacramento Valley melons were blooming; some fields were still being planted. Fresh market, processing tomato growers were treating for insects, weeds, fungal diseases in the San Joaquin, Sacramento Valleys. Warmer weather was expected to slow the progress of diseases. Fresno County tomatoes were sizing well. Potato harvest was winding down in Kern County. The spring potato crop had quality problems, reduced yields. Sweet potatoes were planted in Merced County. Broccoli, cauliflower were harvested in the coastal valleys, San Joaquin Valley. Harvest of red, white, yellow, green onions continued. Garlic was harvested in the San Joaquin Valley. Other crops harvested included zucchini, snap beans, carrots, eggplant, bell peppers. Pasture, rangeland remained in good to excellent condition, with rangeland grasses drying in the warmer weather. Some pastures were irrigated. Fire danger was high as abundant rangeland grasses were drying. Livestock were in excellent condition. Calves continued to be shipped.

COLORADO: Days suitable for fieldwork 6.4. Topsoil 16% very short, 51% short, 33% adequate. Subsoil 11% very short, 40% short, 49% adequate. Continued hot, mostly dry weather hastened maturity of small grain crops but favored development of irrigated row crops. Windy conditions stressed dryland crops. Locally heavy thunderstorms brought needed moisture to some areas. Spring barley 93% headed, 93% 1997, 77% avg.; 20% turning color, 42% 1997, 24% avg.; 3% poor, 21% fair, 62% good, 14% excellent. Oats 88% headed, 71% 1997, 64% avg.; 39% turning color, 27% 1997, 19% avg.; condition 5% poor, 31% fair, 60% good, 4% excellent. Dry onions condition 2% poor, 7% fair, 88% good, 3% excellent. Sugar beets 2% poor, 13% fair, 82% good, 3% excellent. Summer potatoes 1% poor, 2% fair, 68% good, 29% excellent. Fall potatoes 9% poor, 32% fair, 31% good, 28% excellent. Dry beans 91% emerged, 98% 1997, 89% avg.; 32% fair, 35% good, 33% excellent. Alfalfa 98% 1st cutting, 92% 1997, 84% avg.; 9% 2nd cutting, 7% 1997, 12% avg.; 3% poor, 34% fair, 52% good, 11% excellent. Winter wheat 97% turning color, 90% 1997, 88% avg.; 59% ripe, 34% 1997, 40% avg. Spring wheat 60% headed, 82% 1997, 68% avg.; 36% turning color, 12% 1997, 11% avg.; 1% very poor, 9% poor, 24% fair, 45% good, 21% excellent. Livestock in mostly fair to good condition.

DELAWARE: Days suitable for fieldwork 6.0. Topsoil 22% short, 77% adequate, 1% surplus. Subsoil 20% short, 80% adequate. Winter wheat 77% harvested, 45% 1997, 49% avg. Barley 95% harvested, 98% 1997, 97% avg. Rye 70% harvested, 31% 1997, 39% avg. Soybeans 80%

planted, 80% 1997, 79% avg.; 12% fair, 73% good, 15% excellent. Apples 1% fair, 61% good, 38% excellent. Peaches 1% fair, 66% good, 33% excellent. Sorghum 87% planted, 75% 1997, 90% avg.; 95% good, 5% excellent. Sweet corn 2% harvested, 5% 1997, 5% avg. Cucumbers 13% harvested, 9% 1997, 10% avg. Snap beans 10% harvested, 10% 1997, 4% avg. Lima beans 5% harvested. Tomatoes 1% harvested, 1% 1997, 2% avg. Green peas 88% harvested, 82% 1997, 90% avg. Potatoes 15% harvested, 4% 1997, 5% avg. Field corn 10% silked, 5% avg. Other hay 51% 2nd cutting harvested, 67% 1997, 45% avg.; 27% 3rd cutting harvested. Alfalfa 80% 2nd cutting harvested, 80% 1997, 65% avg.; 20% 3rd cutting. Hay supplies 3% short, 97% adequate. Pasture feed 17% poor, 9% fair, 71% good, 3% excellent. Activities: Minimal rainfall allowed harvest activity. Some hay beginning third cutting.

FLORIDA: Topsoil moisture mostly very short to short with very few scattered areas adequate moisture. State in great need of rain. Some scattered showers have been little help to some local areas. Fires continue to be a problem in all areas. Record-high temperatures, lack of moisture have stressed all crops, especially dryland crops. Corn for grain being chopped for livestock feed, haying has stopped, almost all areas. Fifty percent of peanuts pegging. Peanut very poor 8%, poor 31%, fair 44%, good 17%. Several nurseries, nurseries threatened by nearby fires. Damage to date consists of some equipment losses, some saran singed by falling ash, with overhead sprinklers protecting most saran, one storage area burned. Fern growers using water tank trucks, fertilizer tanks filled with water to help fight blazes. Most vegetable growers shipped last tomatoes, sweet corn, watermelons to meet Independence Day demand, with harvesting virtually finished. Producers picking small summer vegetable acreage for local markets. Fires have caused no significant losses to vegetables. Citrus growers continue to irrigate all areas. Well-cared-for groves generally good condition, non-irrigated groves showing wilt. Valencia harvest about over. Grapefruit harvest complete. Caretakers cutting cover crops for fire protection. Some fertilizing, spraying, hedging, topping, pushing dead trees. Pasture feed very poor 15%, poor 45%, fair 40%. Cattle poor 20%, fair 75%, good 5%. Statewide, pastures improved slightly following rain, northeastern and southwestern counties, statewide condition of cattle worsened. Panhandle pastures very dry. Many pastures, northern counties received rain. However, cattle feeding remained active as grass short. West-central: hay being fed. Pastures improved in the south following recent rains.

GEORGIA: Days suitable for fieldwork 6.3. Soil moisture 52% very short, 36% short, 12% adequate. Corn 77% dough, 58% 1997, 67% avg.; 40% dent, 19% 1997, 31% avg. Hay 19% very poor, 31% poor, 32% fair, 17% good, 1% excellent. Peanuts 92% blooming, 82% 1997, 90% avg. Sorghum 17% very poor, 37% poor, 33% fair, 12% good, 1% excellent; 92% planted, 86% 1997, 92% avg. Soybeans 93% planted, 96% 1997, 96% avg. Tobacco 10% very poor, 20% poor, 43% fair, 27% good; 10% harvested, 23% 1997, 18% avg. Watermelons 13% very poor, 21% poor, 44% fair, 20% good, 2% excellent; 73% harvested, 50% 1997, 52% avg. Apples 4% very poor, 2% fair, 94% good. Peaches 21% very poor, 19% poor, 30% fair, 30% good; 75% harvested, 75% 1997, 76% avg. Pecans 11% very poor, 29% poor, 46% fair, 14% good. Hot, dry weather continues to cause crop deterioration. Soil moisture still mostly very short to short. Scattered rainfall some areas resulted in minimal relief. More rain needed in all areas. Severe heat stress most crops and livestock. Hot, dry weather causing deterioration of pastures and hay crops. Cattlemen feeding hay, some herd reduction necessary. Corn, cotton, peanut conditions suffering due to extremely dry conditions. Dry weather slowed tobacco harvesting. Massive irrigation continues. Weed, insect control active, insects increasing rapidly. Activities: Spraying fungicides, herbicides, insecticides to cotton; peanuts, harvesting watermelons, peaches, other vegetables, sidedressing, routine care of livestock.

HAWAII: Trade wind weather blew clouds, moisture from remnants of tropical depression Blas. Most crop-growing areas cloudy, showery. Vegetable regions at high elevations mostly dry. Spraying increased to prevent disease outbreaks due to wet weather. Clearer weather over weekend. Banana production steady, heavy. Papaya fields in fair to good condition, some improvement with advent of summer. Production steady. Watermelon fruit size, condition good. Supplies expected to decrease following Fourth of July. Head cabbage in mostly good condition. Quality, yield good. Tomato harvesting active on all major islands.

IDAHO: Days suitable for fieldwork 6.1. Topsoil 11% surplus, 77% adequate, 12% short. Above-normal temperatures for a change. Alfalfa hay 77% 1st cutting, 88% 1997, 85% avg.; 8% 2nd cutting, 7% 1997, 5% avg.

Irrigation supply 48% excellent, 51% good, 1% fair. Dry beans 99% emerged, 100% 1997, 97% avg. Cherries 19% harvested, 83% 1997, 57% avg. Potatoes 12" high 64%, 77% 1997, 61% avg.; closing 21% middles, 46% 1997, 27% avg. Barley 96% jointed; 69% booting 69%. Spring wheat 97% jointed; 76% booting. Winter wheat 94% headed; 18% turning color. Activities: Cultivating row crops, weed control, irrigation, spraying potatoes for late blight, and harvesting cherries.

ILLINOIS: Days suitable for fieldwork 3.5. Topsoil 1% short, 55% adequate, 44% surplus. Storms hit the State early last week and caused some damage to the crops. Rain continued to fall on saturated ground, causing low-lying areas to pond, some fields are flooded from rising creeks, rivers. Excess moisture this year has left corn fields spotty. Storms also produced severe winds, especially throughout the western part of the State, that left some corn with broken stalks. After the storms rolled through, activities included harvesting of wheat, potatoes, green beans, spraying, cultivating soybeans, baling hay, planting double crop soybeans. Corn height 46 in., 48 in. 1997, 41 in. avg. Sorghum planted 84%, 94% 1997, 93% avg. Winter wheat turning yellow 99%, 98% 1997, 98% avg.; ripe 98%, 75% 1997, 84% avg. Oats 2% poor, 20% fair, 57% good, 21% excellent; headed 98%, 94% 1997, 93% avg.; filled 84%, 58% 1997, 61% avg.; turning yellow 40%, 15% 1997, 24% avg.; ripe 10%, 2% 1997, 6% avg. Alfalfa hay 1% very poor, 3% poor, 25% fair, 52% good, 19% excellent; 2nd cutting 33%, 26% 1997, 28% avg. Red clover 4% very poor, 8% poor, 30% fair, 42% good, 16% excellent; cut 81%, 86% 1997, 88% avg.

INDIANA: Days suitable for fieldwork 5.0. Topsoil 1% very short, 6% short, 64% adequate, 29% surplus. Subsoil 4% short, 68% adequate, 28% surplus. Wheat harvest was in full swing all across State, with the best progress made in the southern two-thirds of the State. Wheat harvest is about 2 weeks ahead of average. Soybean planting made modest progress, although many southern areas remain too wet for tillage activities. Range, pasture feed 1% very poor, 2% poor, 22% fair, 61% good, 14% excellent. Alfalfa 33% 2nd cutting. Transplanting of tobacco 68% complete. Activities: Harvesting winter wheat, planting, replanting soybeans, side-dressing corn, applying post-emergence chemicals, cutting hay, caring for livestock.

IOWA: Days suitable for fieldwork 3.9. Topsoil very short 1%, short 2%, adequate 62%, surplus 35%. Subsoil short 1%, adequate 60%, surplus 39%. The majority of the State showed good crop progress due to warm weather. Strong storms did hit parts of the State, with high winds, rain, tornadoes. Crop damage from the storms was mostly to the corn as it was blown down, there were numerous reports of "green snap". Corn not yellow or under water showed ample growth, which has caused uneven stands. Damping off of replanted soybeans a problem in some areas. The 1998 row crops: Corn cultivated 69%, 87% 1997, 71% avg.; height tallest 64 in; average 49 in. Oats headed 94%, 96% 1997, 89% avg.; turning color 27%, 33% in 1997, 30% avg. Corn 2% very poor, 8% poor, 22% fair, 50% good, 18% excellent. Soybeans blooming 25%, 12% 1997, 11% avg.; 3% very poor, 8% poor, 26% fair, 48% good, 15% excellent. Oat headed 94%, 96% 1997, 89% avg.; turning color 27%, 33% 1997, 30% avg.; 5% poor, 21% fair, 53% good, 20% excellent. All hay 1% very poor, 6% poor, 22% fair, 52% good, 19% excellent. Pasture feed 1% very poor, 3% poor, 14% fair, 53% good, 29% excellent.

KANSAS: Days suitable for fieldwork 5.1. Topsoil 13% very short, 36% short, 46% adequate, 5% surplus. Subsoil 7% very short, 25% short, 66% adequate, 2% surplus. Wheat harvest is quickly coming to an end across the State. Scattered showers were received in some areas, many areas in the western half of the State remain extremely dry. Corn 2% dough, 8% 1997, 2% avg. Sorghum 97% emerged; 4% headed, 4% 1997, 2% avg. Soybeans 1% podding 2% 1997, 1% avg. Sunflowers 95% planted, 93% 1997; 83% emerged; 3% poor, 38% fair, 55% good, 4% excellent. Alfalfa hay 78% 2nd cutting, 59% 1997, 54% avg.; 5% 3rd cutting, 8% 1997, 3% avg. Major field activities were preparing for harvest, harvesting wheat, cultivating corn, planting fall crops, cutting alfalfa. Pasture range 1% very poor, 10% poor, 32% fair, 48% good, 9% excellent. Stockwater supplies 10% short, 88% adequate, 2% surplus.

KENTUCKY: Days suitable for fieldwork 3.9. Topsoil moisture 1% short, 58% adequate, 41% surplus. Subsoil moisture 1% short, 60% adequate, 39% surplus. Statewide precipitation above normal. Heavy rainfall in some areas, with dry conditions later in the week. River bottoms continue to be flooded. Limited disease, insect problems. Blue mold, black shank moderately present in tobacco. Soybeans total planted 91%. Remaining tobacco transplants continued to be set, virtually completed. Conditions of

set tobacco 2% very poor, 7% poor, 33% fair, 49% good, 9% excellent. Tobacco height 55% under 12 in., 33% between 12-24 in., 12% over 24 in. Winter wheat harvested 83%, 52% 1997, avg. 78%. Pastures feed 1% poor, 20% fair, 53% good, 26% excellent.

LOUISIANA: Days suitable for fieldwork 6.2. Soil moisture 40% very short, 41% short, 17% adequate, 2% surplus. Corn condition 14% very poor, 22% poor, 44% fair, 15% good, 5% excellent; 100% silked, 96% 1997, 96% avg.; 90% dough stage, 54% 1997, 71% avg.; 12% mature, 3% 1997, 8% avg. Cotton producers were spraying for worms. Hot weather is stressing the crop. Hay 97% 1st cutting, 94% 1997, 93% avg.; 9% final cutting, 14% 1997, 6% avg. More rain is needed for second cuttings of hay. Peaches 75% harvested, 77% 1997, 59% avg. Peach growers reported smaller size fruit than normal. Rice fields were being drained in the south, some rice was harvested in Vermillion parish. Sorghum 44% headed, 23% 1997, 35% avg.; 3% turning color, 1% 1997, 1% avg. Soybeans 99% planted, 96% 1997, 97% avg.; 25% setting pods, 8% 1997, 7% avg. Early varieties setting pods and late varieties are suffering from drought conditions. Sugarcane condition 2% very poor, 3% poor, 29% fair, 52% good, 14% excellent. Crop is shorter than normal. Fields were scouted for borers, fallow land rowed up for planting. Sweet potatoes 97% planted, 96% 1997, 90% avg. Livestock 5% very poor, 13% poor, 36% fair, 41% good, 5% excellent. Producers continued feeding hay. Vegetables 17% very poor, 18% poor, 33% fair, 28% good, 4% excellent. Some isolated rain helped to improve pasture conditions.

MARYLAND: Days suitable for fieldwork 6.0. Topsoil moisture 6% very short, 13% short, 78% adequate, 3% surplus. Subsoil moisture 3% very short, 12% short, 79% adequate, 6% surplus. Winter wheat condition 69% harvested, 43% 1997, 45% avg. Barley 97% harvested, 96% 1997, 90% avg. Rye 75% harvested, 42% 1997, 42% avg. Field corn 1% very poor, 3% poor, 20% fair, 47% good, 29% excellent; 30% silked, 2% dough. Soybeans 2% poor, 18% fair, 70% good, 10% excellent; 91% planted, 78% 1997, 80% avg.; 2% bloomed. Sorghum 20% fair, 71% good, 9% excellent; 100% planted, 99% 1997, 95% avg.; 0% headed. Tobacco 15% poor, 30% fair, 55% good; 2% bloomed. Sweet corn 8% harvested, 2% 1997, 3% avg. Snap beans 24% harvested, 7% 1997, 15% avg. Lima beans 40% harvested, 0% 1997, 0% avg. Cucumbers 21% harvested, 19% 1997, 22% avg. Pasture 7% poor, 21% fair, 60% good, 12% excellent. Apples 1% poor, 13% fair, 64% good, 22% excellent. Cantaloupe 6% harvested, 1% avg. Green peas 100% harvested, 96% 1997, 91% avg. Watermelons 10% harvested, 0% 1997, 1% avg. Potatoes 24% harvested, 7% 1997, 10% avg. Tomatoes 1% harvested, 2% 1997, 3% avg. Peaches 1% poor, 11% fair, 68% good, 20% excellent, 13% harvested. Other hay 32% 2nd cutting harvested, 20% 1997, 20% avg.; 30% 3rd cutting, 0% 1997, 0% avg. Alfalfa hay 69% 2nd cutting harvested, 57% 1997, 52% avg.; 7% 3rd cutting. Hay supplies 1% very short, 6% short, 82% adequate, 11% surplus. Activities: Early peach crop looking good. Soil is getting drier, needs rain.

MICHIGAN: Days suitable for fieldwork 6.0. Topsoil moisture 24% very short, 46% short, 29% adequate, 1% surplus. Subsoil moisture 21% very short, 57% short, 22% adequate. All hay 23% 2nd cutting. Corn height single 37 in., 23 in. 1997, 25 in. avg. Drybeans emerged 96%, 97% 1997. Wheat harvest getting underway, earliest start in years. Rain varied widely across the State. Most areas experienced scattered showers, with a few areas reporting localized heavy rain. Temperatures near normal across the State. Oats turning yellow 55%. Winter wheat turning yellow 97%, 35% 1997, 47% avg. Corn fields varied in maturity, height. Uneven stands reported within, between fields. However, most State corn was waist high by Fourth of July. Soybeans progressing well where moisture was adequate. Some fields did not have enough rain to activate herbicides. Sugar beets looked good. Dry bean emergence continued. First cutting of alfalfa was finishing in northern counties, second cutting was underway southern half of the State. Wheat harvest began with most activity reported in southern counties, Thumb area. This was one of the earliest starts to harvest in the State history. Potatoes progressing rapidly. Development of vegetables continues well ahead of last year and the average. Cabbage harvest continued; yields have been excellent and quality very good. High temperatures slowed carrot growth; leafhoppers at threshold some fields. Celery harvesting accelerated. Some growers nearly completed transplanting. Pickle harvest will begin about July 8. Slicing cucumber harvest is active. Summer squash harvest continued. Phytophthora showed up fields, on harvested fruit. Sweet corn harvesting will begin this week in southern areas. Onions looked good. Manganese, final nitrate applications made. Thrips near threshold in dry fields. Asparagus fern growth was excellent. Processing tomato prospects very good. Harvest will begin early August, about 1 month earlier than last year. Fruit crops remained 10-14 days ahead. Continued dry conditions have kept diseases at a low level. Codling moth

trap catches rose. Labor shortages evident. Sweet cherry harvest continued in the west-central region, began in the northwest. Shaking tart cherries ended in the southwest, began in the west-central area. Predicted beginning harvest dates for apple varieties announced: McIntosh, August 27; Jonathan, September 11; Red delicious, September 18. Harvest of early blueberry varieties continued. Bluecrop harvest will start soon. Concord grapes reached berry touch stage. Harbinger peaches harvested; PF1 and Candor harvest will begin this week.

MINNESOTA: Days suitable for fieldwork 3.9. Topsoil 1% very short, 6% short, 64% adequate, 29% surplus. Corn 47 in. height, 32 in. 1997, 32 in. avg. Soybeans 80% cultivated, 62% 1997, 53% avg.; 13 in. height, 11 in. 1997, 11 in. avg. Spring wheat 1% turning ripe, 0% 1997, 2% avg. Oats 11% turning ripe, 2% 1997, 10% avg. Barley 1% turning ripe, 0% 1997, 3% avg. Pasture feed 2% very poor, 7% poor, 24% fair, 55% good, 12% excellent. Sugar beets 1% very poor, 5% poor, 25% fair, 48% good, 21% excellent. Occasional rains preventing baling of hay, control of row crop weeds. Rains were not as heavy, allowing wet spots to shrink. Corn height is greatest since 1994.

MISSISSIPPI: Days suitable for fieldwork 6.5. Soil moisture 39% very short, 38% short, 23% adequate. Corn development 94% sicked, 68% 1997, 77% avg.; 64% dough, 30% 1997, 39% avg.; 28% dent; 7% very poor, 17% poor, 34% fair, 37% good, 5% excellent. Rice 16% heading, 14% 1997, 8% avg.; 9% poor, 35% fair, 50% good, 6% excellent. Soybeans 100% planted, 91% 1997, 94% avg.; 98% emerged, 86% 1997, 91% avg.; 60% blooming, 34% 1997, 29% avg.; 5% very poor, 14% poor, 34% fair, 42% good, 5% excellent. Peanuts 100% planted, 100% 1997, 100% avg.; 52% pegging, 24% 1997; 2% poor 1% fair, 49% good, 48% excellent. Sweet potatoes 100% planted, 78% 1997, 90% avg.; 4% poor, 6% fair, 75% good, 15% excellent. Hay 55% harvested 52% 1997, 54% avg.; 6% very poor, 17% poor, 40% fair, 34% good, 3% excellent. Peaches 40% harvested, 46% 1997, 51% avg.; 3% very poor, 28% poor, 32% fair, 34% good, 3% excellent. Watermelons 28% harvested; 6% very poor, 11% poor, 34% fair, 41% good, 8% excellent. Blueberries 22% poor, 35% fair, 38% good, 5% excellent. Cattle 1% very poor, 9% poor, 32% fair, 50% good, 8% excellent. Pasture feed 7% very poor, 26% poor, 32% fair, 31% good, 4% excellent. Crops are suffering in many areas of the State due to continued hot, dry conditions.

MISSOURI: Days suitable for fieldwork 4.9. Topsoil 1% very short, 15% short, 55% adequate, 29% surplus. Several warm, sunny days early in the week were favorable for wheat and hay harvesting before rain again stopped progress. Wheat harvest ranges from about 65% northwest, northeast, to virtual completion southern third of State. Most crops are developing well, except for fields in some wettest areas of northern counties, where both corn, soybeans have poor stands, lack of vigor. Some soybean fields will still be replanted if fields dry soon enough. Oats harvested 41%, 11% 1997, 16% avg. Double-crop soybean planting 70%, 50% 1997, 57% avg. Second-crop alfalfa cut 60%, 34% 1997, 37% avg. Other hay cut 77%, 71% 1997, 71% avg. Precipitation 1.64 in., varying from 0.37 in., south-central, southeast, 3.07 in. north-central, 4.04 in. southeast. Pasture feed condition 1% very poor, 3% poor, 28% fair, 61% good, 7% excellent.

MONTANA: Days suitable for fieldwork 4.2. Topsoil 2% very short, 22% short, 73% adequate, 3% surplus. Subsoil 9% very short, 39% short, 50% adequate, 2% surplus. Many areas received precipitation from thunderstorms during the week. Weather conditions across the State warm, sunny. Hay cut much higher due to good weather. Oats boot stage 91%, 91% 1997, 83% avg.; headed 51%, 53% 1997, 39% avg.; 1% very poor, 6% poor, 32% fair, 52% good, 9% excellent. Alfalfa 34% 1st cutting, 41% 1997, 47% avg. Other hay 17% 1st cutting, 29% 1997, 34% avg.

NEBRASKA: Days suitable for fieldwork 4.8. Topsoil 7% very short, 23% short, 68% adequate, 2% surplus. Subsoil 6% very short, 17% short, 75% adequate, 2% surplus. Temperatures near normal with rapid crop development. Lower southwestern, south central counties continued under drought conditions. Winter wheat 2% very poor, 12% poor, 25% fair, 51% good, 10% excellent; 26% harvested, 3% 1997, 14% avg.; 96% turning color, 90% 1997, 90% avg.; 46% ripe, 25% 1997, 33% avg. Harvest active in southern counties. Corn 4% poor, 19% fair, 62% good, 15% excellent; silking 1%, 0% 1997, 3% avg. Soybean 1% very poor, 4% poor, 18% fair, 65% good, 12% excellent; 6% blooming, 4% 1997, 6% avg. Sorghum 1% very poor, 4% poor, 31% fair, 58% good, 6% excellent. Dry bean 8% poor, 43% fair, 38% good, 11% excellent. Oats 12% poor, 26% fair, 47% good, 15% excellent. Alfalfa 1% very poor, 6% poor, 26% fair, 59% good, 8% excellent, 17% 2nd cutting, 4% 1997, 15% avg.; limited 2nd cutting possible

in drought struck southern counties. Wild hay 1% very poor, 5% poor, 20% fair, 54% good, 20% excellent. Pasture feed 2% very poor, 7% poor, 20% fair, 58% good, 13% excellent. Cool season grasses moving into dormancy. Activities: Irrigation, working summer fallow, millet seeding, moving grain to market, livestock care.

NEVADA: Warm sunny days were the norm across the State. Temperatures averaged near normal all regions. Precipitation near nil. Irrigation water supplies remained plentiful with irrigation needs rising. Hay harvest making good progress with the mostly dry, sunny weather. First cutting of alfalfa nearing completion north, the second cutting completed in the extreme south. Alfalfa fair to mostly good. Other hay harvest underway. Small grains heading in the north. Some winter wheat fields beginning to turn color. Potatoes in good condition. Branding, movement of livestock to summer range continued. Main farm, ranch activities: hay harvest, irrigating, weed control, fertilizing, working livestock.

NEW ENGLAND: Days suitable for fieldwork 4. Topsoil 43% adequate, 57% surplus. Subsoil 48% adequate, 52% surplus. Pasture feed 1% poor, 17% fair, 63% good, 19% excellent. Maine potatoes 100% planted, 100% 1997, 100% avg.; 100% emerged, condition good to fair. Massachusetts potatoes 100% planted, 100% 1997, 100% avg.; 100% emerged, condition good. Rhode Island potatoes 100% planted, 100% 1997, 100% avg.; 100% emerged, condition fair to poor. Oats in Maine 100% planted, 100% 1997, 100% avg.; 100% emerged, condition good. Barley in Maine 100% planted, 100% 1997; 100% emerged, condition good. Field corn 99% planted, 100% 1997, 100% avg.; 99% emerged, condition good to fair. Sweet corn 95% planted, 95% 1997, 99% avg.; 95% emerged, condition fair to good. Shade Tobacco 100% planted, 100% 1997, 100% avg.; condition good to fair. Broadleaf Tobacco 100% planted, 95% 1997, 99% avg.; condition good. First cut hay 60% harvested, 80% 1997, 75% avg.; condition fair to good. Second cut hay 10% harvested, 10% 1997, 10% average; condition good. Apples set average to below average, size average; condition good to fair. Peaches set above average to average, size average; condition good. Pears set average, size average; condition good. Strawberries 95% harvested, 55% 1997, 70% avg.; set average, size average, condition very poor to good. Cranberries full bloom to petal fall, set average, size average, condition good. Highbush blueberries set average to above average, size average to above average; condition good to excellent. Wild blueberries set average, size average; condition good to excellent. The heavy rains subsided in many areas this week, allowing farmers to recover, assess any water damage. Major farm activities included: harvesting early season vegetables such as lettuce, peas, summer squash, zucchini, spraying herbicides, pesticides, side dressing corn, applying nitrogen to water damaged soils.

NEW JERSEY: Days suitable for fieldwork 6. Topsoil short to adequate. Farmers are irrigating, harvesting, planting spraying for disease, pests. Increasing volume of tomatoes, snap beans, fava beans, green beans, sweet corn, Italian eggplant. Good volume of green, yellow squash, cabbage, cucumbers, pickles. Moderate, declining volume of spring greens, spring spinach, escarole, lettuce (Bib, Boston and Iceberg). Late summer vegetables are being planted after the spring crops have been harvested. Apples, peaches are sizing well. Harvesting of early varieties of peaches occurring. Height of the blueberry harvest is occurring in southern areas. Harvesting of wheat reported with farmers planting soybeans afterwards. Second cutting of hay occurring throughout the State. Pastures are in good condition.

NEW MEXICO: Days suitable for fieldwork 6.3. Topsoil 27% very short, 50% short, 23% adequate. Winter wheat harvest continued; 89% harvested, 57% 1997, 75% avg.; 4% very poor, 15% poor, 29% fair, 51% good, 1% excellent. Cotton 12% poor, 39% fair, 27% good, 22% excellent; 80% squaring, 72% 1997, 62% avg. Corn 25% fair, 71% good, 4% excellent; 18% silked, 5% 1997 avg. Sorghum planting continued; 72% planted, 100% 1997, 94% avg.; 17% very poor, 44% poor, 29% fair, 10% good. Wet weather slowed alfalfa harvest, 2nd cutting 79% complete, 79% 1997; 3rd cutting 22% complete, 24% 1997; 3% poor, 35% fair, 53% good, 9% excellent. Chile crop continues to look good; 3% poor, 23% fair, 48% good, 26% excellent; pod set 96% avg. Onion harvest reached 50% complete; condition remained good to excellent. Apples, pecans remained in good condition. Cattle, sheep conditions were fair to good. Range, pastures had not yet responded to last week's weather. Condition fell again last week; 12% very poor, 35% poor, 42% fair, 10% good, 1% excellent.

NEW YORK: Days suitable for fieldwork 2.8. Soil moisture 11% short, 26% adequate, 63% surplus. Corn 13% fair, 80% good, 7% excellent. Yellowing in wetter fields. Little dry hay made. First cutting alfalfa 90% complete, 97% 1997, 90% avg. Second cutting underway. Hay 41% fair, 59% good. Oats headed. Wheat harvest to begin soon. Pasture feed 8% poor, 3% fair, 86% good, 3% excellent. Sweet cherry harvest winding down. Tart cherry harvest to begin this week. Hail damaged fruit along Lake Ontario. Grapes in good condition, Sweet corn harvest underway.

NORTH CAROLINA: Days suitable for fieldwork 6. Soil moisture 21% very short, 43% short, 35% adequate, 1% surplus. Hot, dry weather continues to linger over the entire southeast. Conditions have been favorable for afternoon thunder showers, any precipitation has been widely scattered. Crops are beginning to show symptoms of drought which is only amplifying insect, other disease pressure. Few reports of possible yield reductions in corn have been received. Weather conditions remain favorable for small grains with harvest nearing completion. Spraying for suckers on tobacco along with pest control for all crops continued this week. Other activities for the week included: harvesting vegetable crops; planting sorghum; transplanting sweet potatoes; tending livestock; repairing equipment. Tobacco irrigation continues.

NORTH DAKOTA: Days suitable for fieldwork 5. Topsoil 7% short, 75% adequate, 18% surplus. Subsoil 2% very short, 17% short, 66% adequate, 15% surplus. Excess precipitation continued to raise concerns of crop diseases throughout the State. Crop loss due to flooding, drown out, as well as lodging of small grains, was most common in the Red River Valley region. Small grain, late season crop development remained ahead of average. Durum wheat 59% boot, 49% 1997, 46% avg.; 26% heading, 23% 1997, 19% avg.; 6% milk, 2% 1997, 3% avg. Canola 78% blooming, 42% 1997. Dry edible beans 14% blooming, 5% 1997, 4% avg. Flaxseed 35% blooming, 24% 1997, 11% avg. Potatoes 29% blooming, 7% 1997, 19% avg. Soybeans 2% blooming, 2% 1997, 2% avg. Sunflower 1% blooming, 0% 1997, 0% avg. Durum, oat conditions showed the largest improvements due to showers. Canola, corn, soybean, potato conditions declined. Emerged crop condition: Durum 0% very poor, 4% poor, 23% fair, 61% good, 12% excellent; Canola 0% very poor, 4% poor, 23% fair, 55% good, 18% excellent; corn 5% very poor, 7% poor, 31% fair, 47% good, 10% excellent; dry edible beans 1% very poor, 7% poor, 32% fair, 42% good, 18% excellent; flaxseed 1% very poor, 5% poor, 21% fair, 57% good, 16% excellent; potatoes 1% very poor, 1% poor, 21% fair, 52% good, 25% excellent; soybeans 6% very poor, 16% poor, 36% fair, 35% good, 7% excellent; sugar beets 1% very poor, 4% poor, 14% fair, 43% good, 38% excellent; sunflower 5% poor, 24% fair, 51% good, 20% excellent. Stock water 7% short, 83% adequate, 10% surplus. Broadleaf, wild oat spraying 93%, 96% complete, respectively. Hay 65% of normal.

OHIO: Days suitable for fieldwork 4.0. Topsoil 1% very short, 3% short, 53% adequate, 43% surplus. Corn development stage for the State was 9 to 10 leaves; 7 to 8 leaves, 1997. Soybeans blooming 3 days ahead of 1997, avg. Winter wheat 90% ripe, 4% 1997. Oats headed 6 days ahead of the avg.; 15% ripe, 0% 1997; 97% headed, 87% 1997, 89% avg. Alfalfa hay 98% 1st cutting, 94% 1997, 97% avg.; 22% 2nd cutting, 8% 1997, 19% avg. Other hay 80% 1st cutting, 87% 1997, 91% avg.; 13% 2nd cutting, 5% 1997, 11% avg. Tobacco 90% transplanted. Cucumbers planted 97%. Hay 2% very poor, 6% poor, 25% fair, 50% good, 17% excellent. Farm activities throughout the State include first, second cutting of alfalfa, other hay; raking, baling straw, hay; harvesting wheat; double cropping soybeans; spraying post-emergence herbicides; hauling grain; cultivating corn, soybeans; reporting acreage, obtaining information on wheat loan deficiency payments to FSA; spreading manure; applying anhydrous ammonia; mowing weeds; replanting soybeans; cleaning up from flood and wind damage; repairing fences due to fallen trees; setting, resetting tobacco; shearing Christmas trees; assessing livestock, crop damage due to floods. Wayne county reporter mentioned fields of corn, soybeans, garden crops were destroyed by rain, hail, wind. River bottoms in Scioto county were flooded from the Ohio and Scioto rivers. Athens county, cattle drowned; hundreds of round bales were destroyed; crops were under water because of flooding. In the counties of Belmont, Monroe, tobacco was destroyed by heavy rain; oats, wheat were flattened by wind, water; buildings and fences were damaged by flooding. Rain has kept some farmers from spraying herbicides. Weeds are strong, out of control in areas. Reported weed problems: sourdock; Canadian thistles; hemp dogbane; common, giant ragweed; foxtail; broadleaf; Johnson grass; lambsquarters. Reported insect problems: leafhoppers in alfalfa; root worms, earworms, slugs in corn; tobacco worms; Japanese beetles. Diseases: blue mold, target mold in tobacco; black shank; scab, blight in wheat; potato blight. Hail, winds, heavy rainfall damaged fruit, vegetable crops in the northern part of the state. Southeastern State reported high

losses to the vegetable crops due to flooding. Early variety peaches were reported ripe in Athens county. Reports of healthy vegetable, fruit crops, particularly in central State. Pastures appear to be in good condition for most of State. Some pastures were water soaked, but most reporters commented on healthy pasture conditions. Field crops were not the only commodities damaged from the heavy rains, as some producers had cattle drown. In Meigs county, several thousand dollars worth of cattle were lost. Cattle are suffering from heat, humidity, face flies. Heat stressing poultry, sheep, hogs. Others mentioned fair to good conditions of livestock.

OKLAHOMA: Days suitable for fieldwork 5.7. Topsoil 38% very short, 46% short, 16% adequate. Subsoil 22% very short, 46% short, 32% adequate. Hot, dry weather continued to stress row crops. Wheat 55% plowed, 38% 1997, 52% avg. Oats 99% harvested, 67% 1997, 77% avg.; 51% plowed, 27% 1997, 39% avg. Corn 4% poor, 86% fair, 10% good; 20% tasseled, 17% 1997, 41% avg.; 7% milk to soft, 5% 1997, 11% avg. Sorghum 95% planted, 93% 1997, 93% avg.; 89% up-to-stand, 75% 1997, 80% avg.; 3% headed, 5% 1997, 5% avg. Soybeans 1% very poor, 9% poor, 53% fair, 35% good, 2% excellent; 97% planted, 89% 1997, 87% avg.; 88% up-to-stand, 75% 1997, 74% avg.; 12% flowering, 4% 1997, 13% avg. Peanuts 8% setting pods, 23% 1997, 8% avg. Alfalfa hay 2% very poor, 12% poor, 43% fair, 37% good, 6% excellent; 86% 2nd cutting, 78% 1997, 79% avg.; 28% 3rd cutting, 10% 1997, 15% avg. Other hay 79% 1st cutting, 72% 1997, 81% avg.; 1% 2nd cutting, 5% 1997, 15% avg. Livestock 1% very poor, 5% poor, 42% fair, 51% good, 1% excellent. Feeder cattle prices unchanged from the preceding week.

OREGON: Days suitable for fieldwork 6.2. Topsoil 8% short, 84% adequate, 8% surplus. Subsoil 2% short, 83% adequate, 15% surplus. Range, pasture feed 5% fair, 54% good, 41% excellent. Activities: On westside, cold drizzly weather hampered hay making & some fields totally lost due to rain damage. Willamette Valley grass seed & Crimson clover fields windrowed & grass silage harvested on South Coast. Barley stripe rust reported in Klamath & Mid-Columbia Basins. In Mid-Columbia, rust may not do much damage to barley, may cause impact in spring wheat. Harvest of barley started, was delayed by brief showers. Grass seed harvest underway in Northeast. Nurseries & Greenhouses starting clean up for fall, also still selling remainder of balled & container material. Some flowering pots & baskets remained available. Nursery plants growing slowly due to cooler week of weather. Northeast asparagus harvest completed & potatoes in Malheur County started to bloom. Growers were busy fertilizing, cultivating & applying fungicides to potato crop in Klamath Basin. Vegetable crops look good on westside. Most crops growing slowly due to cooler weather. Willamette Valley onions looking fair, potatoes blooming & weeds doing as well as the crops. Strawberries still being harvested in Willamette Valley. Raspberries, blueberries & blackberries beginning to be harvested. Apples & pears sizing. Raspberry and blackberry crops look the best in recent years. However, plum, cherry & peach crops suffering in this area. Hazelnuts & walnuts sizing well. Sweet cherries in Mid-Columbia continued to maintain excellent quality. Harvest will continue through July 7th in The Dalles & Mosier. Livestock in excellent to good condition. Range and pasture condition good to excellent. Rogue River Valley sheep & cattle turned out on harvested hay fields. Dryland pastures near end. Flood at Prineville caused minimal loss of livestock. Eastside lower elevation range maturing.

PENNSYLVANIA: Days suitable for fieldwork 4.6. Soil moisture 5% very short, 15% short, 70% adequate, 10% surplus. Fair week for fieldwork. Corn height 27 in., 26 in. 1997, 27 in. avg. Tobacco transplanted 100% complete, 99% 1997, 99% avg. Barley 95% ripe, 82% 1997, 76% avg.; 85% harvested, 61% 1997, 55% avg. Wheat 94% turning yellow, 82% 1997, 83% avg.; 52% ripe, 22% 1997, 30% avg.; 2% very poor, 4% poor, 20% fair, 67% good, 7% excellent. Oats 90% heading or headed, 82% 1997, 83% avg.; 35% turning yellow, 19% 1997, 19% avg.; 0% ripe, 0% 1997, 3% avg. Alfalfa 1st cutting 92% complete, 92% 1997, 90% avg.; 2nd cutting 32% complete, 32% 1997, 32% avg. Timothy clover 1st cutting 71% complete, 72% 1997, 75% avg. Quality of hay made 3% very poor, 11% poor, 34% fair, 44% good, 8% excellent. Peach 20% fair, 60% good, 20% excellent. Apple 2% very poor, 10% poor, 25% fair, 55% good, 8% excellent. Activities: Spraying field crops; cutting hay; making haylage, green chop; harvesting winter wheat, barley; machinery maintenance; hauling manure; caring for livestock.

SOUTH CAROLINA: Days suitable for fieldwork 6.1. Soil moisture 20% very short, 60% short, 20% adequate. Apples 24% poor, 47% fair, 29% good. Barley 100% harvested, 98% 1997, 91% avg. Cantaloupes 72% harvested, 74% 1997, 60% avg.; 2% very poor, 20% poor, 63% fair, 15%

good. Corn 91% silked, 92% 1997, 89% avg.; 48% doughed, 53% 1997, 49% avg.; 21% very poor, 27% poor, 37% fair, 15% good. Cucumbers 86% harvested, 76% 1997, 75% avg.; 12% very poor, 17% poor, 34% fair, 36% good, 1% excellent. Oats 100% harvested, 97% 1997, 95% avg. Peaches 32% harvested, 42% 1997, 34% avg.; 2% very poor, 6% poor, 24% fair, 56% good, 12% excellent. Rye 97% harvested, 98% 1997, 90% avg. Snap beans 73% harvested, 67% 1997, 47% avg.; 10% very poor, 18% poor, 31% fair, 37% good, 4% excellent. Sorghum 90% planted, 88% 1997, 84% avg.; 1% poor, 14% fair, 50% good, 35% excellent. Sweet potatoes 1% very poor, 6% poor, 58% fair, 35% good. Tobacco 64% topped, 75% 1997, 73% avg.; 5% harvested, 7% 1997, 8% avg.; 3% very poor, 10% poor, 37% fair, 50% good. Watermelons 57% harvested, 66% 1997, 57% avg.; 11% very poor, 18% poor, 52% fair, 18% good, 1% excellent. Winter wheat 100% harvested, 88% 1997, 97% avg. Early season worm pressure on conventional cotton. Recently planted, emerged soybeans need moisture.

SOUTH DAKOTA: Days suitable for fieldwork 5.0. Topsoil 5% short, 77% adequate, 18% surplus. Subsoil 3% short, 73% adequate, 24% surplus. Warm, humid weather bringing small grain, row crop development along rapidly. Winter wheat 1% poor, 13% fair, 58% good, 28% excellent; 100% headed, 95% 1997, 98% avg.; 80% turning color, 37% 1997, 50% avg.; 26% ripe, 1% 1997, 5% avg. Winter Rye 100% headed, 96% 1997, 99% avg.; 56% turning color, 29% 1997, 39% avg.; 44% ripe, 2% 1997, 5% avg. Spring wheat 97% boot, 83% 1997, 88% avg.; 35% turning color, 3% 1997, 8% avg. Oats 97% boot, 88% 1997, 88% avg.; 27% turning color, 4% 1997, 11% avg. Barley 96% boot, 91% 1997, 86% avg.; 40% turning color, 5% 1997, 9% avg. Sorghum 98% seeded, 96% 1997, 94% avg. Sunflower 100% seeded, 97% 1997, 98% avg. Alfalfa 2% very poor, 5% poor, 29% fair, 55% good, 9% excellent; 82% 1st cut, 83% 1997, 82% avg.; 17% 2nd cut, 2% 1997, 3% avg. Corn 89% 1st cultivated, 87% 1997, 74% avg.; 48% 2nd cultivation, 31% 1997, 32% avg.; 31 in. tall, 22 in. 1997, 23 in. avg.; 5% tasseled, 0% 1997, 0% average. Livestock 5% fair, 60% good, 35% excellent. Stock water supplies 2% short, 74% adequate, 24% surplus.

TENNESSEE: Days suitable for fieldwork 6.0. Topsoil 3% very short, 27% short, 68% adequate, 2% surplus. Subsoil 2% very short, 23% short, 71% adequate, 4% surplus. Corn 68% tasseled, 41% 1997, 54% avg.; 1% very poor, 5% poor, 22% fair, 53% good, 19% excellent. Tobacco 95% transplanted, 92% 1997, 98% avg.; 3% very poor, 9% poor, 30% fair, 51% good, 7% excellent. Wheat 98% harvested, 81% 1997, 92% avg. Alfalfa hay 44% 2nd cutting completed, 33% 1997, 64% avg. Pasture feed 8% poor, 26% fair, 54% good, 12% excellent. State farmers took advantage of 6 days suitable for fieldwork, harvested 98% of the State's 370,000 wheat acreage by week's end. Alfalfa hay growers were in full swing with their 2nd cutting last week, while tobacco growers got closer to finishing transplanting. Various localities reported short topsoil moisture, which hurt hill corn last week.

TEXAS: Generally hot, dry conditions continued most areas, however some parts state got rain over July 4th weekend. The rain should help parched hay fields, native pastures, but came too late for crops from Blacklands, southward. Harvest operations increased slowly southern, coastal areas as crops drying down rapidly. Livestock producers continued cull herds because dry pasture conditions, short hay prospects.

Crops: Corn water requirements remained high Plains where crop continued make fair to good progress. Isolated showers did little to alleviate irrigation needs. Elsewhere, crop continued dry down rapidly under hot temperatures with many ready for harvest prematurely. Some plants fallen over due weak stalks. Harvest continued expand Coastal Bend, Rio Grande Valley below average yields reported. Aflatoxin levels high some fields. 50% dough, 33% 1997, 45% avg. 38% dented, 11% 1997, 26% avg. 8% mature, 1% 1997, 4% avg. 1% harvested, 0% 1997, 0% avg. Cotton plants continued square Plains where dryland fields showing poor progress, many have failed. Irrigated fields holding on. Plants continued loose squares, small bolls Blacklands, Central due prolonged dry conditions. Some defoliation occurred Coastal Bend with harvest soon. Bolls continued open rapidly along Upper Coast, Central. The Rio Grande Valley dryland crop continued show poor progress, yield potential. 21% setting bolls, 12% 1997, 18% avg. 5% open bolls, 1% 1997, 3% avg. Grain Sorghum: Many high plains producers dusting seed dryland fields meet insurance requirements. Planting moisture remained very low. Irrigated fields made good progress although producers struggled keep up with water needs. Extreme heat, dry conditions continued stress crop most other areas. Late week rains provided little benefit as many fields turning color. Harvest increased Central, Southern, along Upper Coast. Remaining plants Rio Grande Valley also showed severe heat stress. 51% headed, 50% 1997, 59% avg. 39% turning color, 34% 1997, 43% avg. 27% mature, 4% 1997, 20% avg. 7% harvested,

1% 1997, 6% avg. Peanuts irrigated fields pegging in Plains, North Central, showing good progress. Some insect problems noted during week. Planting south central areas virtually completed, many dryland fields not planted due dry conditions. Rice fields along Upper Coast continued head. Steady watering also continued. Producers remained concerned blank heads may occur due extreme heat. Insects problems increased during week. Soybeans the irrigated crop in Plains continued look good. Rapid drying, poor pod filling Blacklands have left prospects dim. Along Upper Coast, late week rains did little to help early varieties, but may benefit later crop. Small Grains: Harvest continued wind down in High Plains under mostly open conditions. Yields continued good.

Commercial Vegetables: Rio Grande Valley, carrot, watermelon harvest continued with delays late week due to rain. San Antonio- Winter Garden, onion, cantaloup harvest continued wind down. Watermelon harvest continued irrigated fields. East, sweet potato plants continued show stress from heat, dry conditions. Other vegetable production remained slow. High Plains, harvest early onion fields continued with later fields needing rain. Potato fields also need rain. Trans Pecos, cantaloup harvest continued. Peaches quality remained good on Hill Country, East crop, however sizes remained small. Rain needed for late varieties. Pecans prospects remained poor most areas as hot, dry weather, case bearers continued take a toll on remaining nuts.

Range and Livestock: Late week rains provided some relief parched range, pasture land, however much more needed. Haying operations continued slow with low production most areas. Increased sales calves, lambs occurred many area auctions. Producers also continued cull older cows, sheep with concern hay shortage.

UTAH: Days suitable for fieldwork 7. Topsoil 1% very short, 20% short, 79% adequate. Subsoil 15% short, 80% adequate, 5% surplus. Pasture feed, range 1% poor, 16% fair, 60% good, 23% excellent. Irrigation water supplies 1% very short, 1% short, 96% adequate, 2% surplus. Stockwater 1% very short, 4% short, 91% adequate, 4% surplus. Spring wheat headed 73%. Oats headed 59%; harvested for hay or silage 20%. Corn height 18 in., 28 in. 1997, 24 in. avg. Alfalfa hay 1st 87% cutting, 93% 1997, 95% avg.; 2nd cutting 4%, 11% 1997, 12% avg. Barley headed 67%. Other hay cut 43%, 50% 1997, 43% avg. Sweet cherries picked 24%, 61% 1997. Tart cherries picked 4%, 9% 1997. Cattle/calves moved to summer range 100%, 100% 1997, 100% avg. Favorable weather reported statewide.

VIRGINIA: Days suitable for fieldwork 5.6. Topsoil 20% short, 75% adequate, 5% surplus. Subsoil 11% short, 85% adequate, 4% surplus. Corn 98% emerged; 25% silked, 9% 1997, 14% avg.; 1% very poor, 3% poor, 18% fair, 59% good, 19% excellent. Cotton squaring 65%; 14% fair, 69% good, 17% excellent. Soybeans 85% planted, 71% 1997, 77% avg.; 74% emerged; 1% very poor, 6% poor, 14% fair, 65% good, 14% excellent. Flue-cured tobacco 1% poor, 16% fair, 48% good, 35% excellent. Dark fire cured tobacco 15% fair, 68% good, 17% excellent. Burley tobacco 99% transplanted, 99% 1997, 99% avg.; 3% very poor, 4% poor, 16% fair, 66% good, 11% excellent. Sun tobacco 15% fair, 85% good. Winter wheat 70% harvested, 59% 1997, 62% avg.; 3% very poor, 14% poor, 41% fair, 34% good, 8% excellent. Barley 95% harvested, 84% 1997, 88% avg.; 3% very poor, 10% poor, 55% fair, 28% good, 4% excellent. Summer potatoes 19% harvested, 19% 1997, 14% avg.; 2% poor, 18% fair, 57% good, 23% excellent. Apples 28% fair, 68% good, 4% excellent. Peaches 16% fair, 74% good, 10% excellent. Pasture feed 4% poor, 23% fair, 63% good, 10% excellent. Alfalfa 1% poor, 18% fair, 67% good, 14% excellent. Other hay 2% poor, 26% fair, 60% good, 12% excellent. Evening thundershowers in some localities offered relief to depleting soil moisture levels. Some Southwestern localities received as much as three inches of rainfall last week limiting field activities. Some Northern localities reported slight hail damage to some fruit trees. Other areas in the state are becoming dry as pastures and crops begin to show signs of stress. In the flue tobacco belt, concern with topsoil moisture supplies caused producers to begin widespread irrigation. Soybean producers are making great planting progress as their small grain harvest nears completion. Double cropped soybeans are in mostly good to excellent condition due to adequate rainfall and soil moisture. Leafhopper damage continued to plague alfalfa fields. Some producers in drier localities are harvesting their second crop of hay. Blue mold was still a problem in burley fields, particularly in the Southwest as continued rainfall aided in its spread. Some burley producers are also concerned with yellowing due to excess moisture. Other farming activities included vegetable harvesting, cantaloupe harvesting, and herbicide and insecticide application.

WASHINGTON: Days suitable for fieldwork 6.7. Topsoil 1% very short, 35% short; 64% adequate. Subsoil moisture 1% very short, 40% short, 59% adequate. Winter wheat, dryland 4% poor, 30% fair, 45% good, 21%

excellent; irrigated 98% good, 2% excellent. Spring wheat 99% headed, 85% 1997, 82% avg.; dryland 5% poor, 34% fair, 46% good, 15% excellent; irrigated 97% good, 3% excellent. Barley 99% headed, 95% 1997, 87% avg.; dryland, 10% poor, 35% fair, 40% good, 15% excellent; irrigated 100% good. Potatoes, 10% fair, 90% good. Hot, dry weather ripened winter wheat rapidly, isolated severe thunderstorms lodged some winter wheat. Spring grains have not lodged, benefitted from precipitation, some spring barley began to show moisture stress in eastern areas. Stripe rust was evident in spring cereal grains, rust was not expected to have much of an impact on yield due to the rapid maturation of crops, hot weather. Hay, other roughage supplies, 5% short, 65% adequate, 30% surplus. Hay production continued with reports that some 1st cutting alfalfa hay was of low quality due to rain damage. Range, pasture feed 10% poor, 30% fair, 37% good, 23% excellent. Cherry harvest continued at full speed with exceptional quality, great yields reported. Raspberry harvest progressed, whereas the blueberry crop was approaching harvest. Apple thinning continued with apples sizing nicely in western areas. Strawberry harvest began to wind down with harvest continuing on late varieties, very little fruit rot was reported. Vegetable truck farmers continued battling weeds, early vegetable harvest continued. Christmas tree growers began top work on fir trees, turf grass growers applied herbicides.

WEST VIRGINIA: Days suitable for fieldwork 3.9. Topsoil 70% adequate, 30% surplus. Flooding drowned some low-lying corn, tobacco, soybeans fields. Wheat harvested 42%, 19% 1997, 17% avg. Apple 15% poor, 77% fair, 8% good. Peach 16% poor, 66% fair, 18% good. Hay 1% very poor, 6% poor, 30% fair, 55% good, 8% excellent. Hay 1st cut 79%, 78% 1997, 83% avg.; 2nd cut 7%, 2% 1997, 7% avg. Corn 2% poor, 26% fair, 63% good, 9% excellent; silked 1%, 4% 1997, 1% avg. Oats 43% fair, 57% good; headed 90%, 83% 1997; 7% harvested, 5% 1997. Soybean 21% fair, 57% good, 22% excellent; planted 92%, 97% 1997, 97% avg.; 3% bloomed, 4% 1997. Tobacco 5% poor, 40% fair, 55% good; transplanted 99%, 98% 1997, 99% avg. Cattle 14% fair, 76% good, 10% excellent. Sheep 6% fair, 86% good, 8% excellent.

WISCONSIN: Days suitable for fieldwork 4.8. Soil moisture 1% short, 73% adequate, 26% surplus. Soybean 1% very poor, 3% poor, 12% fair, 47% good, 37% excellent. It's been hard to make first crop hay, with high humidity, frequent rain showers. Most first crop left to be made is in very poor shape, statewide. A Taylor County reporter noted there was still 15-20% of first crop still standing. In Waupaca County, second crop hay looked fair in quantity, excellent quality. Second crop hay harvest: 23%, 4% 1997, 2% avg. Reporters in the following counties observed corn on the verge of tasseling: Buffalo, Pierce, Waushara, Grant, Walworth. Last week, corn fields were hit by 60-90 mph winds in scattered areas of the state, with most surviving. High water, flooding took out some corn in Crawford County. Crops, overall, were in good to excellent condition, where there was no standing water or saturated soil. A Jackson County reporter commented that heavy rains, storms, last week, caused lots of erosion, some crops were flooded over, most corn looked good. Potato fields looked excellent in Washburn County. The cranberry crop in Wood County showed a good fruit set, with no damage to the beds during the storms last week. Winter wheat and rye have turned color in most areas. Some wheat in Dane County was flattened by storms last week. Oats were approaching harvest stage, statewide. Some sweet corn fields showed ears in Grant County. Pasture feed 3% poor, 12% fair, 63% good, 22% excellent.

WYOMING: Days suitable for fieldwork 6.5. Topsoil 1% very short, 26% short, 73% adequate. Subsoil 1% very short, 15% short, 84% adequate. Winter wheat turning color 82%, 76% 1997, 61% avg.; mature 5%, 9% 1997, 20% avg. Barley headed 70%, 73% 1997, 71% avg.; turning color 16%, 6% 1997, 14% avg. Oats headed 55%, 53% 1997, 48% avg.; turning color 8%, 5% 1997, 7% avg. Spring wheat headed 65%, 63% 1997, 54% avg.; turning color 27%, 12% 1997, 17% avg. Sugar beets thinned 94%, 98% 1997, 94% avg. Corn average height 21 in., 28 in. 1997, 23 in. avg. Dry beans bloom 2%, 14% 1997, 8% avg. Alfalfa 1st cutting 47%, 61% 1997, 58% avg. Other hay cut 24%, 24% 1997, 25% avg. Range, pasture feed 1% very poor, 7% poor, 34% fair, 52% good, 6% excellent. Livestock mostly good condition. Warm, dry weather continued last week.

June 1998

MONTHLY DATA FROM SELECTED FOREIGN CITIES
CLIMATE PREDICTION CENTER-NCEP-NWS-NOAA
*** DATA NOT AVAILABLE

International Weather and Crop Summary

June 28 - July 4, 1998

HIGHLIGHTS

FSU-WESTERN: Cooler weather and scattered showers brought some relief to drought-stressed crops in Russia's Volga Valley. Rain slowed early winter wheat harvesting in Ukraine but favored spring-sown crops.

FSU-NEW LANDS: Dry weather continued to stress spring grains in western Kazakstan, while farther east, light to moderate showers benefited crops in northern Kazakstan and adjacent areas in Russia.

EUROPE: Cool weather and scattered showers continued to favor crops in the north, while hot, dry weather increased stress on non-irrigated crops across the south.

AUSTRALIA: Moderate rain covered winter grains in Queensland and Western Australia.

CANADA: A second week of timely showers benefited reproductive grains and oilseeds across the Prairies.

SOUTH ASIA: Locally heavy monsoon showers reached important cotton and oilseed areas of western India in time for planting.

SOUTHEAST ASIA: Widespread showers increased moisture supplies for grains and sugarcane in Vietnam and the Philippines, but heavier showers caused local flooding in Thailand.

EASTERN ASIA: Scattered showers brought some relief to short-term dryness in the North China Plain, but more rain is needed for rainfed crops.

SOUTH AMERICA: In southern Brazil, rain provided abundant moisture for winter wheat development, but slowed planting progress.

MEXICO: Widespread showers covered the southern Plateau Corn Belt, boosting soil moisture for germinating corn.

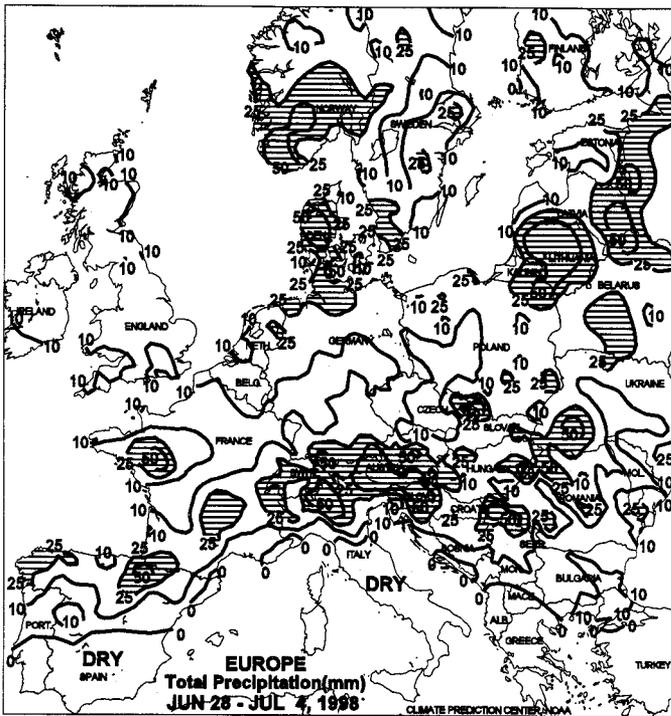
COUNTRY	CITY	TEMPERATURE (C)					PRECIPITATION (MM)		
		AVG MAX	AVG MIN	HI MAX	LO MIN	AVG	DPART F/NRM	TOTAL	DPART F/NRM
NORWAY	OSLO	16	9	23	3	12	-2.0	156	83
SWEDEN	STOCKHOLM	17	10	21	4	13	-2.1	0	-47
FINLAND	HELSINKI	19	11	27	5	15	-0.3	115	71
UKINGDO	GLASGOW	16	9	25	1	13	-1.3	83	18
	EDINBURGH	16	9	24	3	12	-0.8	83	33
	LONDON	19	11	28	6	15	0.7	86	30
IRELAND	DUBLIN	17	9	22	3	13	-0.4	114	58
ICELAND	REYKJAVIK	13	8	18	5	10	1.8	26	-24
DENMARK	COPENHAGEN	18	11	23	6	14	-1.2	58	11
LUXEMBO	LUXEMBOURG	21	12	31	4	16	1.1	48	-26
SWITZERL	ZURICH	23	13	31	6	18	2.5	132	5
	GENEVA	24	13	32	5	18	2.0	69	-18
FRANCE	PARIS/ORLY	23	13	32	8	18	***	43	**
	STRASBOURG	24	14	32	7	19	1.9	94	18
	BOURGES	24	12	34	8	18	1.2	43	-15
	BORDEAUX	24	14	36	8	19	1.5	61	4
	TOULOUSE	25	14	34	8	20	1.5	19	-40
	MARSEILLE	28	17	34	13	23	1.8	19	-10
SPAIN	VALLADOLID	27	12	36	4	19	1.7	44	9
	MADRID	30	14	36	8	22	1.4	26	-1
	SEVILLE	32	19	39	14	25	0.4	5	-4
PORTUGA	LISBON	25	16	35	12	20	0.3	9	-14
GERMANY	HAMBURG	20	12	30	5	16	0.8	124	50
	BERLIN	23	14	34	9	18	0.9	76	1
	DUSSELDORF	21	13	34	4	17	0.0	149	83
	LEIPZIG	23	13	33	6	18	1.3	58	-9
	DRESDEN	22	14	34	6	18	1.2	80	12
	STUTT GART	23	13	32	5	18	1.3	117	23
	NURNBERG	23	13	34	4	18	1.1	73	-2
AUSTRIA	VIENNA	25	14	34	6	20	1.3	52	-10
	INNSBRUCK	24	12	32	4	18	1.7	149	41
CZECHRE	PRAGUE	22	12	33	7	17	1.3	94	21
POLAND	WARSAW	23	13	32	8	18	1.2	113	41
	LODZ	22	12	32	6	17	1.2	68	-1
	KATOWICE	23	14	33	7	18	2.2	74	-14
	PRZEMYSL	23	14	38	9	19	2.3	91	-6
HUNGARY	BUDAPEST	26	15	34	9	21	2.0	54	-9
YUGOSLA	BELGRADE	28	17	34	10	23	2.6	70	-23
ROMANIA	BUCHAREST	28	14	33	6	21	0.8	75	-13
BULGARIA	SOFIA	25	13	32	9	19	1.5	108	22
ITALY	MILAN	29	18	32	12	23	2.7	43	-25
	VERONA	28	19	32	11	23	2.4	68	-21
	VENICE	26	18	30	11	22	1.6	70	-5
	GENOA	25	19	33	13	22	0.4	25	-24
	ROME	27	17	31	11	22	0.9	0	-21
	NAPLES	29	18	34	13	23	1.9	11	-24
GREECE	THESSALONIKA	31	19	35	14	25	0.7	0	-32
	LARISSA	32	18	36	13	25	0.1	9	-15
	ATHENS	31	21	36	18	26	0.6	0	-9
TURKEY	ISTANBUL	27	19	33	15	23	2.3	13	-11
	ANKARA	25	11	31	7	18	-2.3	37	-2
CYPRUS	LARNACA	30	20	35	17	25	0.6	0	-5
ESTONIA	TALLINN	18	11	26	4	15	0.1	103	53
LITHUANI	KAUNAS	22	12	30	7	17	1.1	61	-32
BELARUS	MINSK	23	14	31	8	18	2.0	177	99
RUSSIA	KAZAN	26	15	35	4	21	3.4	33	-35
	MOSCOW	25	15	34	5	20	3.1	58	-19
	YEKATERINBURG	23	14	33	5	19	2.0	122	51
	OMSK	24	12	34	6	18	0.5	37	-22
	NOVOSIBIRSK	22	11	32	3	17	0.5	77	24
	BARNAUL	24	12	32	5	18	0.1	48	5
	KHABAROVSK	25	14	33	4	19	1.8	89	10
	VLADIVOSTOK	15	11	27	7	13	0.0	117	4
	SARATOV	29	18	38	9	24	5.1	19	-24
	VOLGOGRAD	30	18	38	11	24	3.0	25	-2
	ASTRAKHAN	34	21	41	16	27	4.3	20	-2
	KRASNODAR	28	18	33	13	23	2.2	126	49
	ORENBURG	31	17	40	9	24	4.2	15	-23
KAZAKHS	TSELINOGRAD	28	15	38	8	22	2.7	47	12
	KARAGANDA	27	14	37	9	21	1.9	32	-4

Based on Preliminary Reports

June 1998

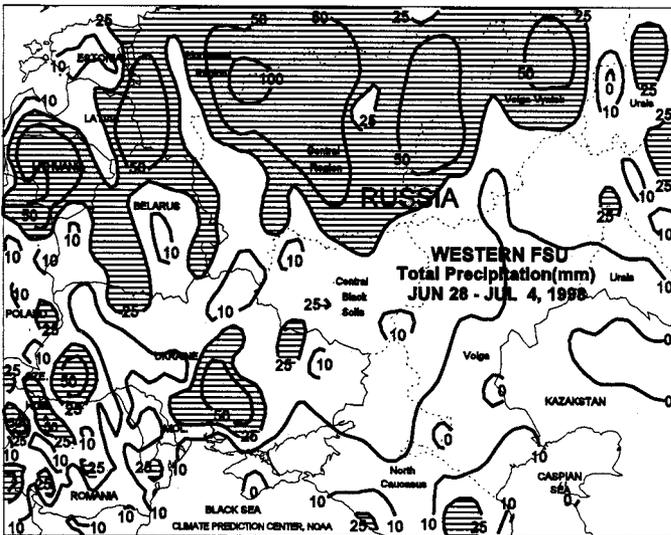
COUNTRY CITY	TEMPERATURE (C)					PRECIPITATION (MM)				COUNTRY CITY	TEMPERATURE (C)					PRECIPITATION (MM)			
	AVG MAX	AVG MIN	HI MAX	LO MIN	AVG	D PART F/NRM	TOTAL	D PART F/NRM	AVG MAX		AVG MIN	HI MAX	LO MIN	AVG	D PART F/NRM	TOTAL	D PART F/NRM		
GEORGIA TBILISI	32	19	38	15	25	3.8	123	54	S AFRICA PRETORIA	23	4	29	1	14	2.2	0	-7		
UZBEKIST TASHKENT	31	18	38	8	25	-1.0	43	36	JOHANNESBURG	19	5	24	-4	12	2.4	0	-10		
TURKMENI ASHKHABAD	37	22	41	15	30	1.1	4	0	BETHAL	20	-1	25	-5	10	1.2	0	-8		
SYRIA DAMASCUS	38	15	41	8	25	0.6	0	0	DURBAN	23	10	25	6	16	-0.3	0	-28		
ISRAEL JERUSALEM	28	16	34	13	22	0.5	0	0	CAPE TOWN	18	9	23	3	13	0.7	48	-48		
PAKISTAN KARACHI	36	30	44	27	33	1.2	18	13	CANADA TORONTO	24	13	33	3	19	1.5	90	21		
INDIA AMRITSAR	39	25	45	21	32	-0.3	4	-53	MONTREAL	24	15	31	7	20	1.6	68	-14		
NEW DELHI	38	28	44	23	33	-0.2	180	111	WINNIPEG	21	11	29	1	16	-1.2	63	-19		
AHMEDABAD	40	28	43	25	34	1.1	108	7	REGINA	20	8	29	-3	14	-2.3	128	60		
INDORE	38	26	44	21	32	1.6	175	39	SASKATOON	21	8	28	-1	15	-1.6	77	17		
CALCUTTA	36	28	41	22	32	1.6	152	-99	LETHBRIDGE	20	8	26	1	14	-2.1	135	68		
VERAVAL	33	28	35	21	30	0.9	284	86	CALGARY	18	7	24	1	13	-1.5	113	36		
BOMBAY	33	27	37	24	30	1.3	532	-116	EDMONTON	21	10	28	3	16	-0.1	107	27		
POONA	33	24	40	21	28	0.7	111	-14	VANCOUVER	20	13	28	10	17	1.4	32	-14		
BEGAMPET	36	26	43	22	31	2.0	45	-62	MEXICO GUADALAJARA	23	20	29	16	21	-1.4	15	-137		
VISHAKHAPATNAM	33	28	38	25	31	***	178	**	MEXICO CITY	26	16	32	14	21	3.5	25	-80		
MADRAS	39	28	42	24	34	1.3	28	-36	ACAPULCO	33	26	37	24	30	1.2	178	-68		
MANGALORE	30	24	35	22	27	0.5	1307	325	BERMUDA ST. GEORGES	27	23	29	19	25	-0.4	163	26		
HONGKO KINGS PEAK	30	26	32	21	28	***	836	**	BAHAMAS NASSAU	33	25	35	23	29	2.3	47	-174		
N KOREA PYONGYANG	23	15	29	9	**	***	110	-47	JAMAICA KINGSTON	34	27	35	23	30	2.0	20	-45		
S KOREA SEOUL	26	18	32	13	22	1.3	208	39	P RICO SAN JUAN	32	25	33	24	28	0.5	88	-8		
JAPAN SAPPORO	20	12	27	8	16	-0.1	79	11	GUADELO RAIZET	32	25	33	23	29	1.4	121	58		
NAGOYA	26	19	32	15	23	0.6	209	-11	MARTINIQ LAMENTIN	31	26	32	24	28	1.7	271	102		
TOKYO	25	19	34	14	22	0.1	155	-30	BARBADO BRIDGETOWN	30	26	31	24	28	0.5	148	66		
YOKOHAMA	24	19	33	13	21	0.1	192	-24	TRINIDAD PORT OF SPAIN	31	25	33	23	28	1.4	393	157		
KYOTO	27	20	34	15	23	1.1	279	31	COLOMBI BOGOTA	18	10	22	6	14	0.4	49	-18		
OSAKA	27	21	33	16	24	0.7	257	50	VENEZUE CARACAS	**	**	33	20	**	***	**	**		
THAILAND PHETCHABUN	35	26	37	24	30	2.3	128	-54	F GUIJANA CAYENNE	31	23	33	23	27	1.4	351	-101		
BANGKOK	35	27	36	25	31	1.4	224	77	BRAZIL RECIFE	29	22	29	20	25	0.7	157	-205		
MALAYSIA KUALA LUMPUR	34	25	36	23	30	2.5	122	-5	BELO HORIZONTE	24	15	28	12	20	0.7	3	-10		
VIETNAM HANOI	34	28	39	25	31	1.5	593	354	FRANCA	23	14	26	9	19	3.2	4	-23		
CHINA HARBIN	26	16	32	10	21	1.0	98	30	RIO DE JANEIRO	24	18	30	16	21	-0.8	40	-11		
HAMI	34	19	37	15	27	1.6	6	0	LONDRIINA	19	12	25	6	15	-1.9	28	-68		
LANCHOW	29	17	37	10	23	2.8	31	-6	SANTA MARIA	20	10	30	2	15	1.6	78	-66		
BEIJING	29	19	37	12	24	-0.4	157	87	PORTO ALEGRE	19	9	26	4	14	-1.0	86	-54		
TIENTSIN	29	20	37	13	25	0.1	71	6	PERU LIMA	22	18	25	16	20	2.0	1	0		
LHASA	26	12	30	8	19	2.5	85	14	BOLIVIA LA PAZ	**	**	16	-4	**	***	**	**		
KUNMING	24	18	29	11	21	1.3	475	306	CHILE SANTIAGO	16	3	22	-2	10	1.5	17	-50		
CHENGCHOW	31	20	38	15	26	0.0	5	-57	ARGENTIN IGUAZU	21	11	28	3	16	***	97	**		
YECHANG	30	22	34	17	26	2.3	133	-19	FORMOSA	22	13	30	4	18	1.1	40	-20		
HANKOW	30	23	34	18	27	1.0	89	-116	CERES	18	8	25	2	13	0.6	199	177		
CHUNGKING	28	22	34	18	25	***	367	**	CORDOBA	17	7	25	1	12	1.3	18	7		
CHIIKIANG	28	22	32	17	25	0.4	295	100	RIO CUARTO	16	7	23	3	11	1.8	17	-1		
WU HU	28	21	33	17	25	***	261	**	ROSARIO	17	7	21	0	12	1.8	11	-26		
SHANGHAI	27	22	34	18	24	***	144	**	BUENOS AIRES	16	7	20	-2	11	1.3	16	-34		
NANCHANG	28	23	33	20	25	-0.3	539	257	SANTA ROSA	15	5	21	0	10	2.1	18	2		
TAIPEI	32	25	35	21	29	2.0	317	1	TRES ARROYOS	14	5	20	-3	10	2.1	15	-14		
CANTON	31	25	34	21	28	0.5	368	110	NEW CAL NOUMEA	26	20	29	18	23	2.0	60	-69		
NANNING	31	26	36	23	28	0.4	309	93	FIJI NAUSORI	27	21	29	16	24	0.7	33	-108		
CANARY I LAS PALMAS	26	20	28	17	23	1.2	4	4	SAMOA PAGO PAGO	30	27	32	25	29	2.1	120	-69		
MOROCC CASABLANCA	24	19	33	16	21	1.2	7	1	TAHITI PAPEETE	30	22	32	17	26	1.0	81	22		
MARRAKECH	34	19	43	15	27	2.7	0	-5	AUSTRALI DARWIN	31	22	33	17	27	1.5	0	-1		
ALGERIA ALGER	28	16	32	9	22	0.2	1	-20	BRISBANE	21	12	24	5	16	-0.1	12	-62		
BATNA	32	16	40	6	24	3.1	7	-17	PERTH	18	10	24	3	14	-0.3	133	-36		
TUNISIA TUNIS	32	21	44	16	27	3.6	6	-5	CEDUNA	17	8	25	1	13	0.4	31	0		
NIGER NIAMEY	38	27	41	23	32	1.0	99	32	ADELAIDE	15	8	23	3	12	0.0	66	15		
MAU TIMBUKTU	**	**	45	26	**	***	22	6	MELBOURNE	13	7	20	-1	10	0.1	57	20		
BAMAKO	34	27	39	22	30	1.4	83	-43	WAGGA	13	5	20	-4	9	0.8	102	60		
MAURITAN NOUAKCHOTT	34	23	44	18	28	1.1	7	7	CANBERRA	12	3	18	-5	7	0.8	115	86		
SENEGAL DAKAR	28	23	31	21	26	0.2	0	-13	INDONESI DJAKARTA	31	26	34	22	28	1.7	143	**		
CHAGOS DIEGO GARCIA	29	26	30	24	27	0.8	136	-22	PHILIPPI MANILA	33	28	36	24	30	1.6	106	-150		
LIBYA TRIPOLI	35	21	42	13	28	1.8	1	-1											
BENGHAZI	30	20	35	17	25	-1.0	0	0											
EGYPT CAIRO	34	21	43	19	28	0.2	0	0											
ASWAN	41	25	48	14	33	-0.2	0	0											
ETHIOPIA ADDIS ABABA	23	12	28	9	18	0.6	119	1											
KENYA NAIROBI	23	13	26	8	18	0.6	65	39											
TANZANIA DAR ES SALAAM	28	20	32	16	24	0.1	28	-8											
GABON LIBREVILLE	30	24	33	20	27	1.5	173	154											
TOGO LOME	32	25	35	22	28	2.1	49	-230											
BURKINA OUAGADOUGOU	35	26	39	22	31	1.3	47	-81											
COTE D'I ABIDJAN	30	24	33	21	27	1.2	161	-408											
MOZAMBI MAPUTO	27	15	33	11	21	1.8	0	-15											
ZAMBIA LUSAKA	23	**	30	5	**	***	0	-1											
ZIMBABW HARARE	24	9	28	6	16	3.1	0	-3											

Based on Preliminary Reports



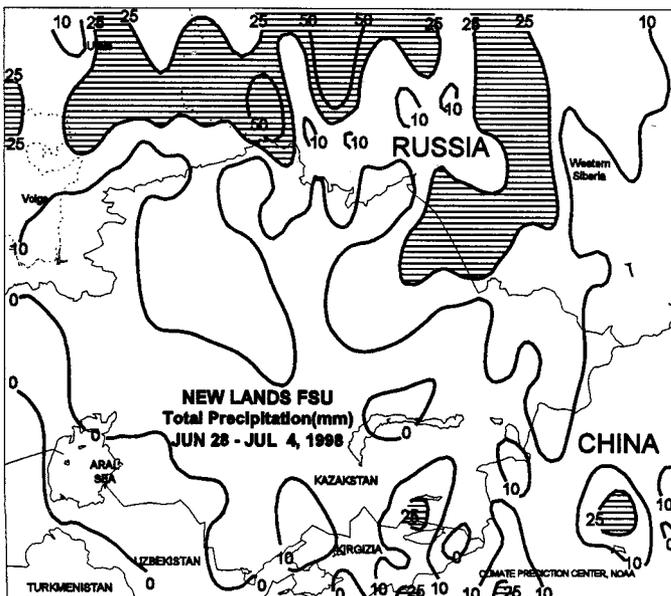
EUROPE

Occasional light showers (4-25 mm) were accompanied by cool weather in northern Europe, favoring immature winter grains and spring grains in the reproductive to filling stages of development. Reports indicated the winter wheat harvest was well underway in southern France. Although light showers (10-25 mm) in southern France may have caused some brief interruption in harvest activities, the precipitation benefited corn development. Elsewhere, hot, dry weather continued across southern Europe, favoring rapid winter grain harvesting. However, maximum temperatures soared into the middle to upper 30's degrees C in Spain, Italy, Greece, southern Serbia, and Bulgaria, increasing stress on non-irrigated crops. Elsewhere, light showers (10-25 mm) fell from Slovakia southeastward through Hungary into northern Serbia and western Romania, benefiting immature winter grains and spring-sown crops. Weekly temperatures averaged 1 to 3 degrees C below normal in northern Europe and 2 to 6 degrees C above normal in southern Europe.



FSU-WESTERN

In Russia, scattered showers (2-15 mm) and seasonable temperatures continued to bring some relief from persistent hot, dry weather conditions in eastern areas (eastern North Caucasus, Volga Valley, and the eastern Black Soils region). The precipitation in these areas caused only brief delays in winter wheat harvesting, just beginning in the south. Farther north, wet weather (25-70 mm or more) prevailed in the Northwest Region, the Central Region, and the Volga Vyatsk, providing abundant moisture for winter rye and spring grain crops. In Ukraine, wet weather (10-60 mm) slowed early winter wheat harvesting in the south, but provided generous moisture for summer crop development. Widespread showers also fell in northern and eastern Ukraine, improving moisture in those areas trending dry. Elsewhere, widespread rain (25-50 mm, with local amounts in excess of 50 mm) soaked crop areas in Belarus and the Baltics, providing abundant moisture for crop development. Seasonable temperatures prevailed in most of Russia, Ukraine, Belarus, and the Baltics, with extreme maximum temperatures ranging from 22 to 31 degrees C.

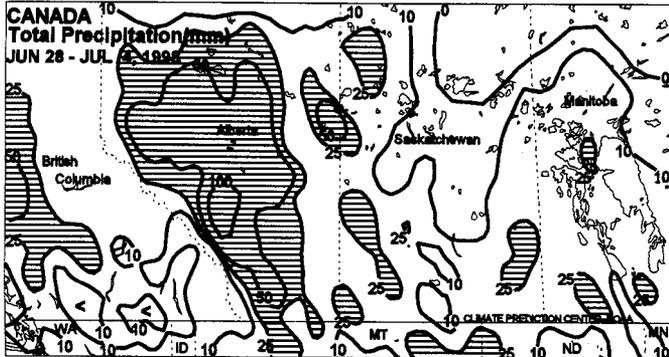


FSU-NEW LANDS

Cooler weather spread across the region during the week, easing heat stress on spring grains in the west. However, little, if any, precipitation (less than 5 mm) accompanied the cooler weather in the southern Urals region of Russia and western Kazakhstan, maintaining unfavorably dry conditions for spring grains nearing the heading stage. Rain is needed to halt further deterioration in crop conditions. Elsewhere, widespread showers (10-40 mm, with local amounts in excess of 40 mm) spread eastward from the northern Urals through the northern half of Kazakhstan and Western Siberia, favoring spring grain development. Weekly temperatures averaged near normal in most areas. In cotton-producing areas of Central Asia, above-normal temperatures (35-44 degrees C) promoted rapid cotton development and increased irrigation requirements.

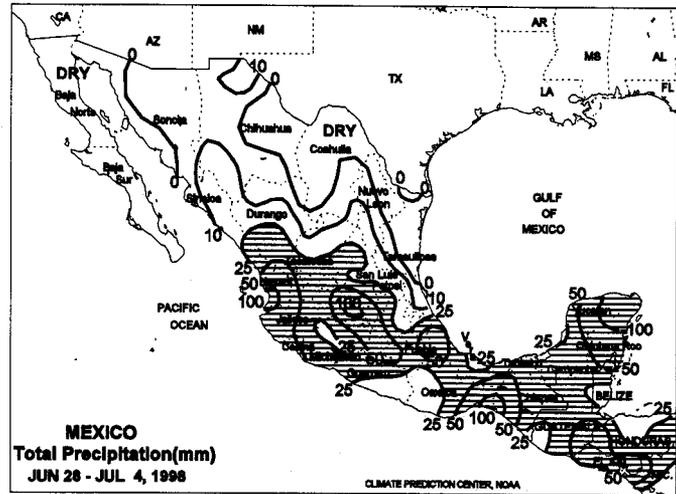
CANADA

Highly beneficial rain (10-25 mm or more) continued over most Prairie crop districts, improving prospects for reproductive spring grains and oilseeds. Temperatures were generally near normal, although above-normal temperatures were recorded in Alberta's northern crop areas, including the Peace River Valley. Daily highs from the mid- to upper-20's degrees C favored crop development across the region. In eastern Canada, scattered showers (10-25 mm or more, most locations) brought some relief to corn and soybeans in southern Ontario, but unseasonable warmth (highs reaching the lower 30's degrees C) increased crop moisture demands.



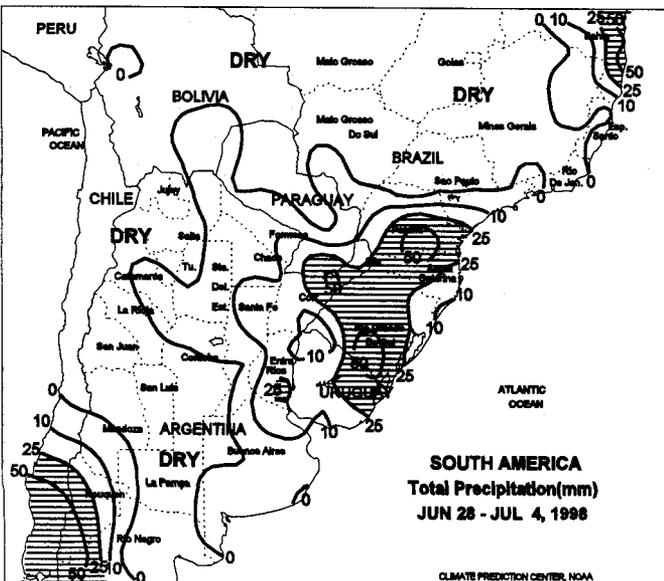
MEXICO

Widespread showers (35-70 mm) covered the Southern Plateau Corn Belt, boosting topsoil moisture for corn planting and germination. Scattered light rain (less than 10 mm) provided some relief to drought-stressed pastures, but more rain is needed. Northeastern Mexico remained dry, stressing rainfed crops. Temperatures averaging 1 to 3 degrees C above normal increased crop water use across most of Mexico, especially in the north.



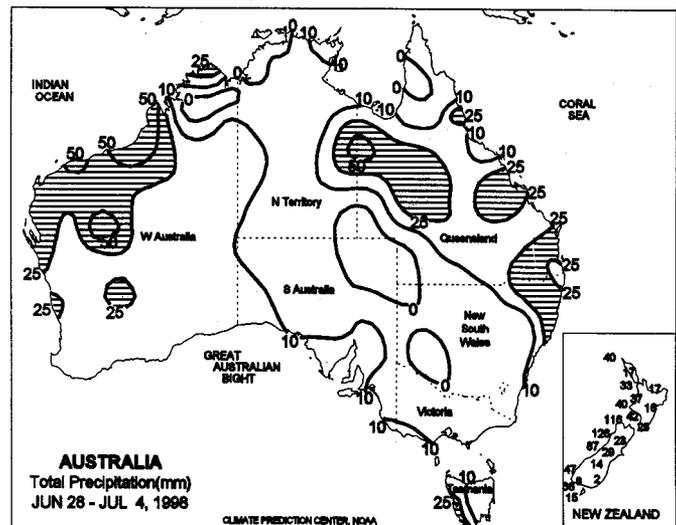
SOUTH AMERICA

In southern Brazil, rain (20-75 mm) continued to provide ample moisture for winter wheat development from southern Parana to southern Rio Grande do Sul. However, the persistent rain has slowed wheat planting in Rio Grande do Sul. Warm, dry weather continued to favor coffee maturation and harvesting in Minas Gerais and northern Sao Paulo. In northern Argentina, light rain (5-20 mm) slowed cotton harvesting. Mostly dry weather prevailed across central Argentina, where topsoils are becoming a little dry for wheat development. Subsoil moisture remains adequate due to the above-normal rainfall during the past few months. According to reports as of June 26, Argentine cotton, soybean, and corn crops were 70, 97, and 85 percent harvested, respectively. Last year at this time, cotton, soybean, and corn crops were 88, 99, and 95 percent harvested, respectively. Winter wheat planting was 37 percent complete, compared with 30 percent last year.



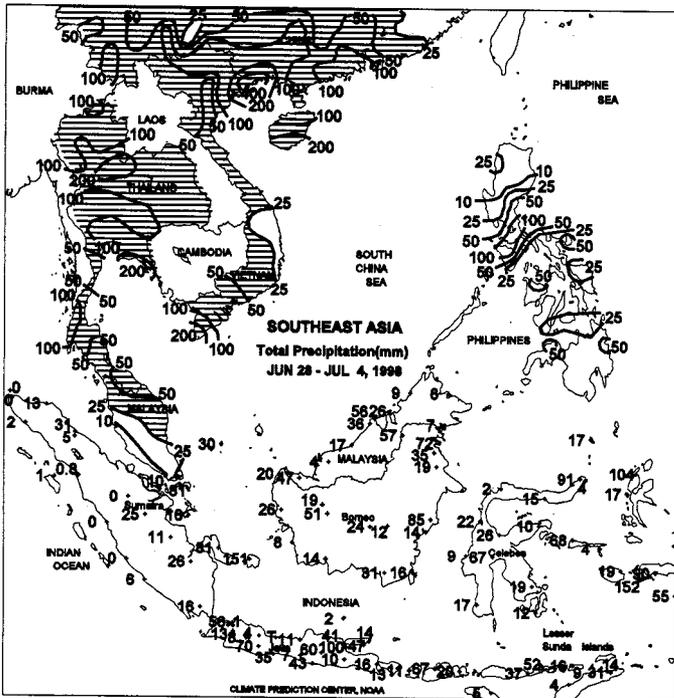
AUSTRALIA

Moderate rain (10-25 mm or more) swept across the western and northeastern winter grain belts. In Queensland, the widespread, beneficial moisture extended southward through the Darling Downs into northern New South Wales. Lighter rain (10 mm or less, most areas) returned to central and southern New South Wales and continued elsewhere in the southeast (South Australia and Victoria). Temperatures averaged about 1 degree C below normal in most crop areas, fostering slow growth rates in vegetative to semi-dormant wheat and barley. In New Zealand, moderate to heavy rain (25-50 mm or more) soaked the main agricultural areas, although a few spots along the east coast of South Island received less than 25 mm.



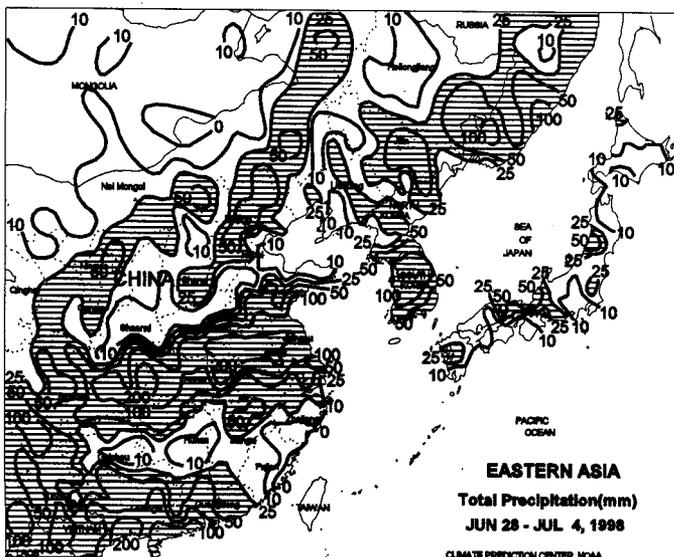
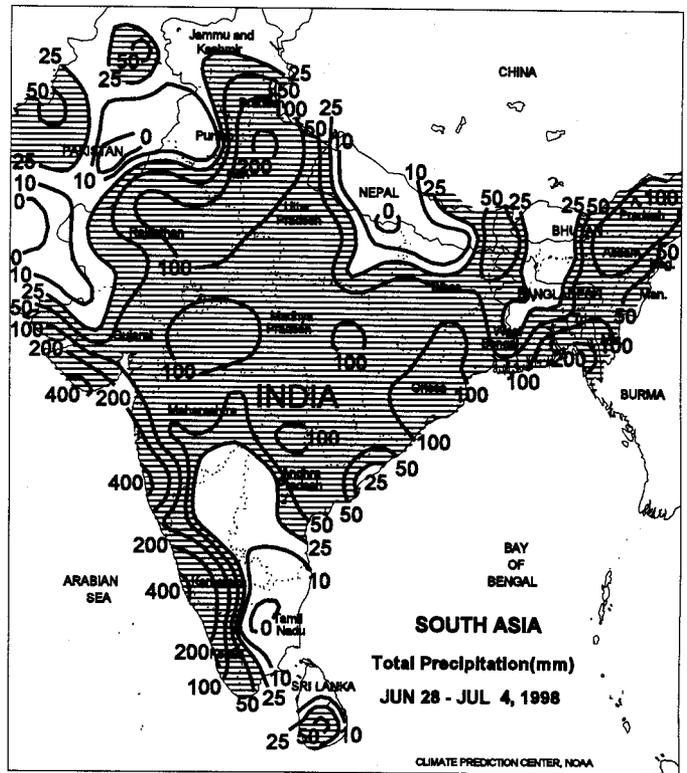
SOUTHEAST ASIA

Heavy showers (50-150 mm, with isolated amounts greater than 200 mm) boosted moisture supplies across Thailand, but caused some local flooding. Showers (40-100 mm) aided rainfed grains and sugarcane and increased irrigation supplies across Vietnam, the Philippines, and peninsular Malaysia. In Java, showers (15-70 mm) continued to increase irrigation supplies for second season crops.



SOUTH ASIA

A northward surge in the monsoon brought substantial rainfall (50-100 mm or more) to primary oilseed and cotton areas of western and northern India. The rains were the heaviest so far this season from Gujarat's groundnut basin northward through Rajasthan and Haryana, and should spur coarse grain, oilseed, and cotton planting. Rain aided fieldwork across northern India's heavily irrigated rice areas (Uttar Pradesh and Bihar), which also received their first significant rains of the season. Elsewhere, moderate to heavy rain (25-100 mm or more) continued over the eastern rice region, from the rainfed areas of east-central India through Bangladesh to Assam. Very heavy rains (100-400 mm) continued along India's southwest coast as drier weather (25 mm or less), typical of this time of year, descended over the southern interior. The southwest monsoon, as judged by this season's rainfall distributions, is progressing on schedule and would typically become established over Pakistan in about 1 week.



EASTERN ASIA

In the North China Plain, scattered showers (5-50 mm) brought some relief from short-term dryness, but more rain is needed for rainfed crops. The heaviest rain (75-200 mm) stretched from the Sichuan Basin northeastward into northern Anhui and Jiangsu, increasing soil moisture but causing local flooding. In Manchuria, light to moderate rain (10-50 mm) maintained adequate soil moisture for vegetative spring wheat and soybeans. Somewhat drier weather (10-40 mm) prevailed across southern China, easing flooding. However, heavier showers exacerbated flooding in northern Hunan (70-100 mm) and southern Guangxi (100-200 mm). Moderate rain (10-50 mm) and warmer weather (temperatures 2-5 degrees C above normal) favored rice development in Japan. Heavy rain (80-150 mm) possibly caused local flooding in South Korea, while moderate rain (5-40 mm) aided rainfed grains in North Korea.

The *Weekly Weather and Crop Bulletin* (ISSN 0043-1974) is published weekly and jointly prepared by the U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA) and the U.S. Department of Agriculture (USDA). Publication began in 1872 as the *Weekly Weather Chronicle*. It is issued under general authority of the Act of January 12, 1895 (44-USA 213), 53rd Congress, 3rd Session. NOAA is responsible for managing, printing, and distributing the bulletin. The contents may be reprinted freely, with proper credit.

Annual subscriptions: domestic first class \$45, foreign \$55 (in U.S. funds by international money order or check drawn on U.S. bank) payable to U.S. Department of Commerce, NOAA. POSTMASTER: Send address changes to: Climate Prediction Center, W/NP52, Attn: *Weekly Weather and Crop Bulletin*, NOAA/NWS/NCEP, 4700 Silver Hill Road, Stop 9910, Washington, DC 20233-9910. Order subscriptions from the office and address listed above. First-class postage paid at Washington, DC, and other mailing offices. Correspondence to the meteorologists should be directed to: *Weekly Weather and Crop Bulletin*, NOAA/USDA, Joint Agricultural Weather Facility, USDA South Building, Room 5844, Washington, DC 20250. Internet URL: <http://www.usda.gov/oce/waob/jawf>; E-mail address: wwcb@jawfsrv.wwb.noaa.gov

U.S. DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration
 National Weather Service/Climate Prediction Center
 Managing Editor (Acting) **A. James Miller**
 Meteorologists **David Miskus**
 **Jeff Savadel, Brian Morris, and James Brotherton**
 Special Requests (202) 720-7917
 Subscriptions **John Kopman** (301) 763-8227, ext. 7534
 fax: (301) 763-8125

U.S. DEPARTMENT OF AGRICULTURE

Economic Research Service
 E.R.S. Editor **Sharon Lee**
 National Agricultural Statistics Service
 Agricultural Statistician **Mark E. Miller** (202) 720-7621
 State Summaries Editor **Klara Haskins** (202) 720-8033
 World Agricultural Outlook Board
 International Editor **Tom Puterbaugh**
 U.S. Editor **Brad Rippey** (202) 720-1444
 Agricultural Weather Analysts **Ray Motha**
 **Mark Brusberg and Bob Stefanski**
 Secretary **Teresa Davis** (202) 720-9807

(Continued from page 16)

Sorghum Crop Condition by Percent					
	VP	P	F	G	EX
AR	1	16	39	40	4
CO	0	15	44	36	5
IL	10	11	39	40	0
KS	0	6	33	55	6
LA	4	21	38	31	6
MS	5	22	38	31	4
MO	1	4	26	60	9
NE	1	4	31	58	6
NM	17	44	29	10	0
OK	15	19	47	18	1
SD	0	2	9	79	10
TX	20	28	34	16	2
ALL	8	15	33	40	4
Prev Wk	6	12	35	42	5
Prev Yr	0	2	21	64	13

Peanuts Crop Condition by Percent					
	VP	P	F	G	EX
AL	22	35	39	4	0
FL	8	31	44	17	0
GA	13	21	37	26	3
NC	0	0	5	89	6
OK	0	9	46	44	1
SC	3	15	52	30	0
TX	5	21	32	34	8
VA	0	1	13	67	19
ALL	9	20	34	33	4
Prev Wk	7	15	36	36	6
Prev Yr	0	3	25	59	13

Barley Crop Condition by Percent					
	VP	P	F	G	EX
ID	0	0	3	60	37
MN	1	6	27	58	8
MT	1	12	42	39	6
ND	1	5	20	54	20
SD	0	1	18	63	18
WA	0	9	32	45	14
ALL	1	6	24	52	17
Prev Wk	1	6	27	49	17
Prev Yr	1	8	29	50	12

Oats Crop Condition by Percent					
	VP	P	F	G	EX
IA	0	5	21	54	20
MI	3	14	41	40	2
MN	1	3	25	56	15
NE	0	12	26	47	15
ND	0	3	24	63	10
OH	1	5	28	56	10
PA	1	2	31	56	10
SD	0	0	12	65	23
WI	0	3	13	66	18
ALL	0	4	21	60	15
Prev Wk	0	4	23	58	15
Prev Yr	3	10	29	48	10

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

* Revised

Climate Prediction Center, W/NP52
 Attn: *Weekly Weather & Crop Bulletin*
 NOAA/NWS/NCEP
 4700 Silver Hill Road
 Stop 9910
 Washington, DC 20233-9910

**WEEKLY NEWS BULLETIN
 FIRST CLASS**

FIRST CLASS MAIL
 POSTAGE & FEES PAID
 NOAA
 PERMIT NO. G-19

OFFICIAL BUSINESS
 PENALTY FOR PRIVATE USE, \$300