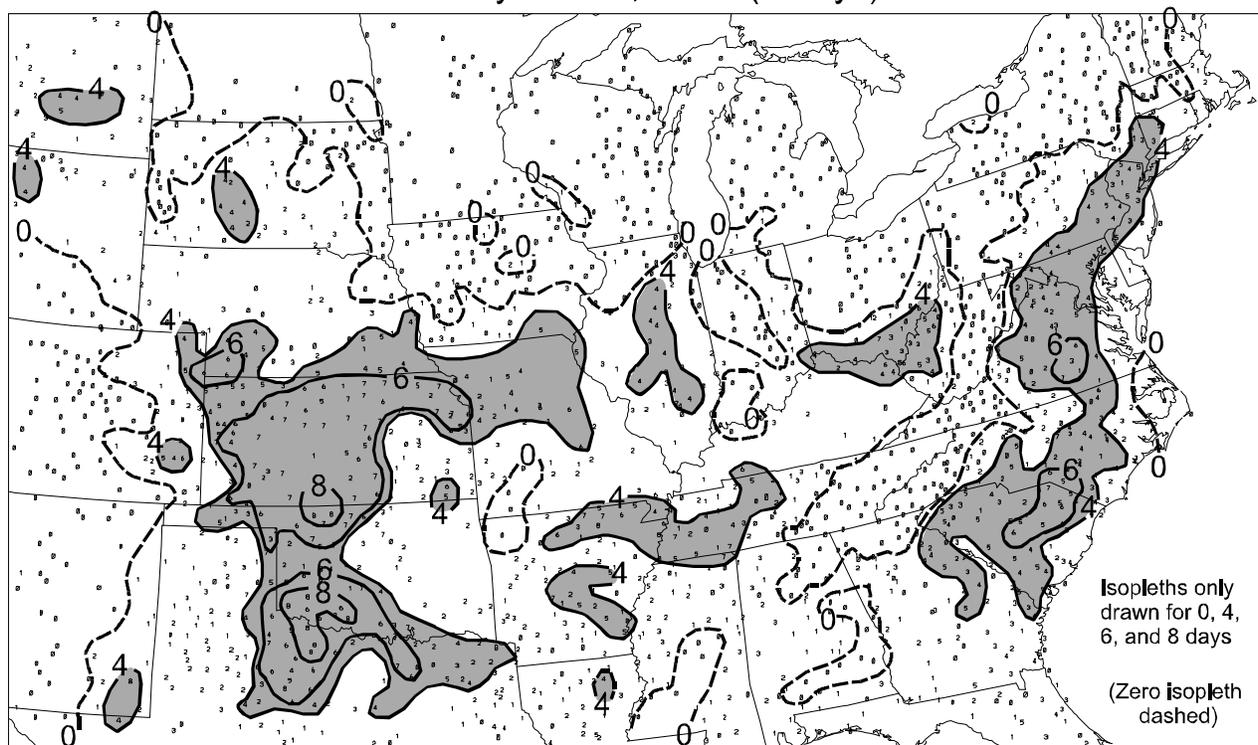


WEEKLY WEATHER AND CROP BULLETIN

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

Number of Days Maximum Temperature $\geq 95^{\circ}\text{F}$ July 17 - 24, 1999 (8 Days)



Data obtained from Coop Data Network

Climate Prediction Center, NCEP, NOAA

HIGHLIGHTS

July 18 - 24, 1999

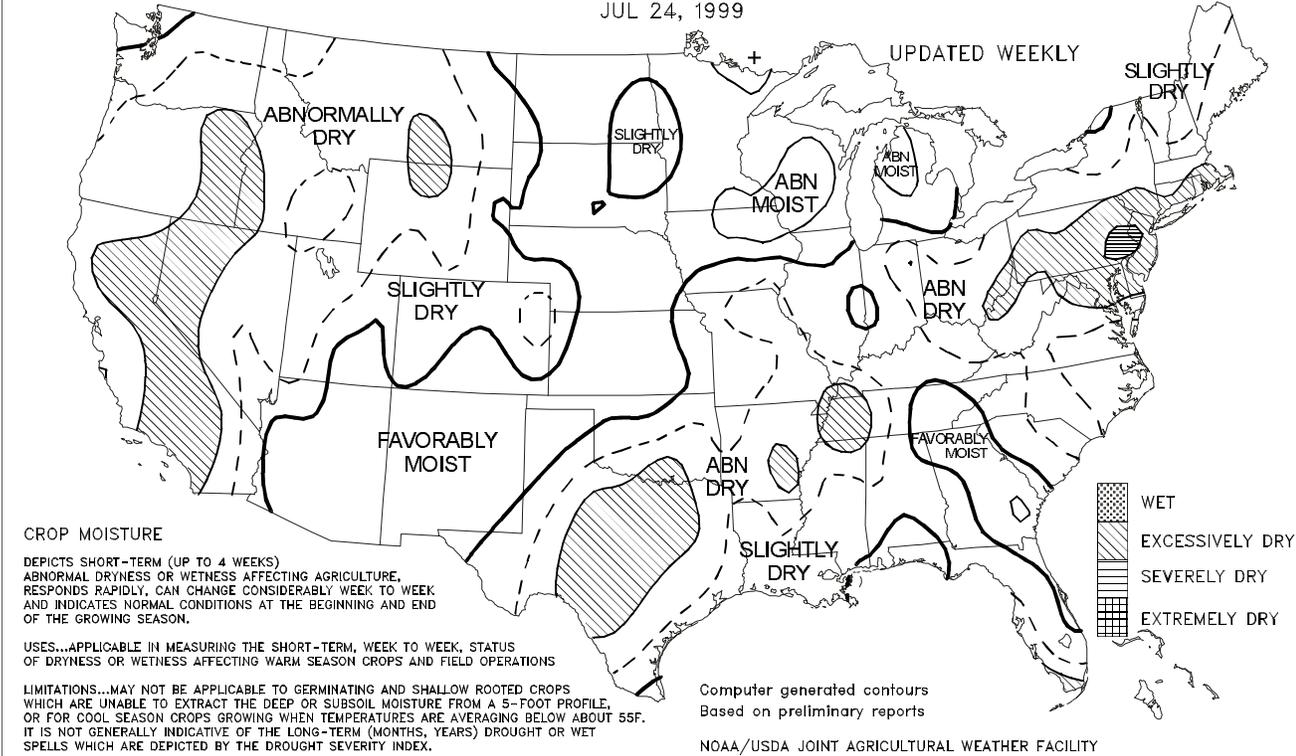
Heat suddenly intensified across the **northern and central Plains** and the **Corn Belt**, increasing stress on reproductive summer crops. Weekly temperatures ranged from 2 to 8°F above normal in these areas, and highs reached or exceeded 95°F on 4 days or more from the **southwestern Corn Belt** and **central Plains** southwestward into **north-central Texas**. Late-week temperatures briefly soared above 100°F as far north as **eastern Montana** and the **western Dakotas**. Hot weather also returned to the **Southeast**, ending a favorable period of cool, wet weather that had stabilized crop conditions. From the **easternmost Corn Belt** and **middle Ohio Valley** into the **Northeast**, scattered showers and thunderstorms

(Continued on page 5)

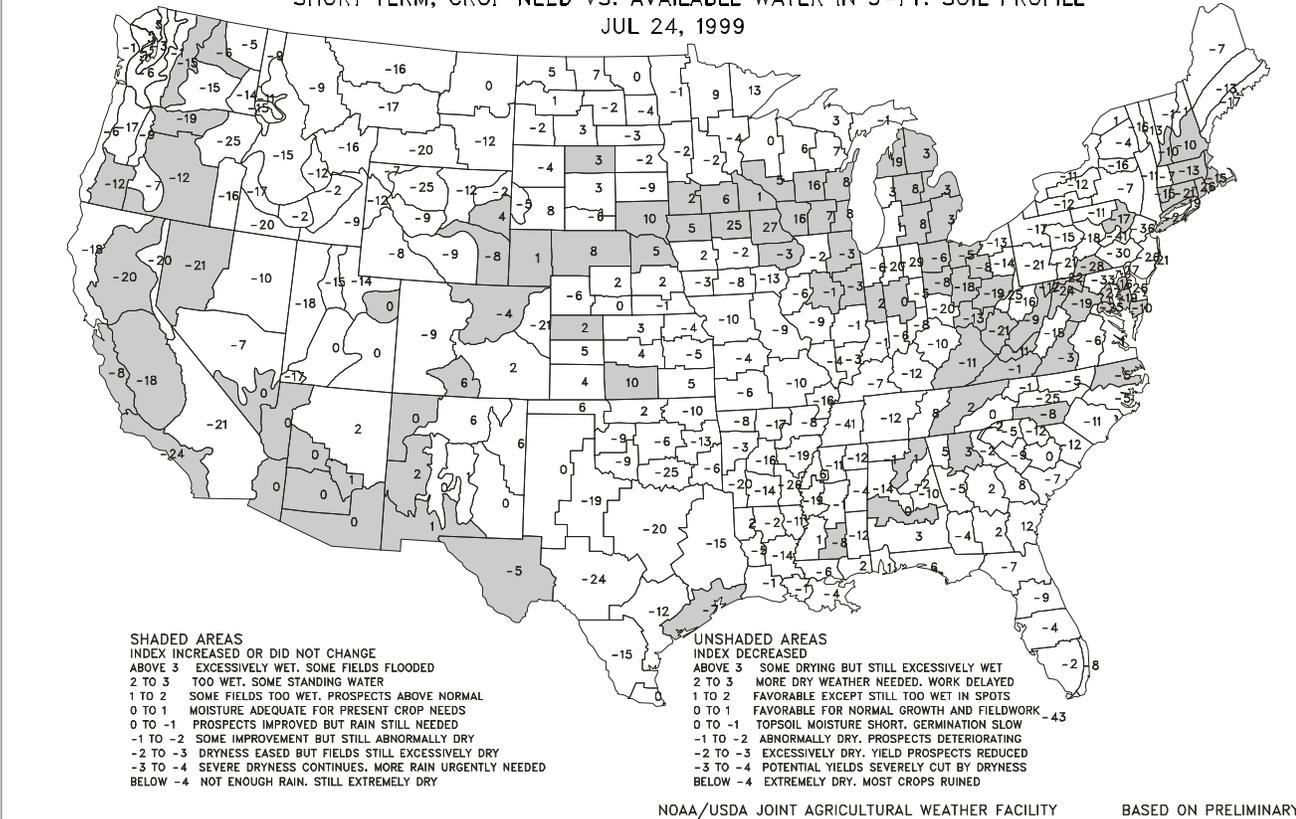
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Crop Moisture
SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE
JUL 24, 1999

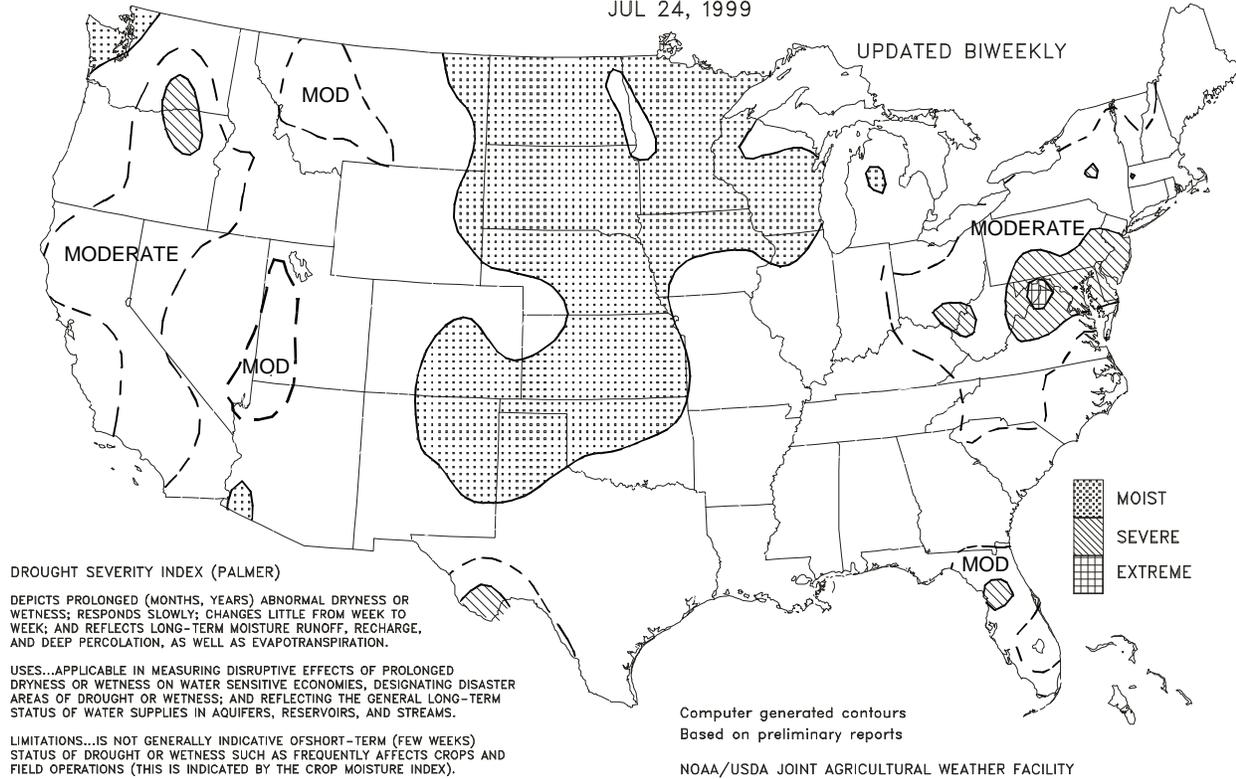


Crop Moisture Index
SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE
JUL 24, 1999



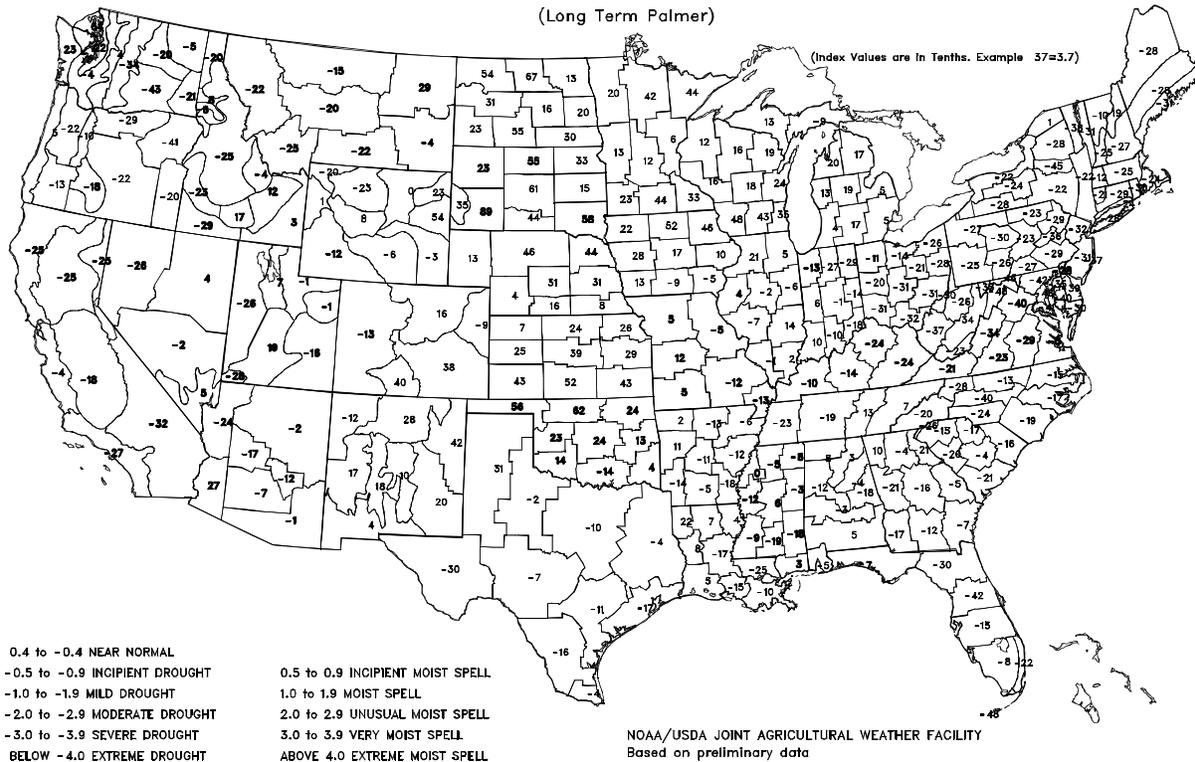
DROUGHT SEVERITY
LONG TERM PALMER
JUL 24, 1999

UPDATED BIWEEKLY



Drought Severity Index by Division
JUL 24, 1999
(Long Term Palmer)

(Index Values are in Tenths. Example 37=3.7)



Weather Data for Selected Locations in the Delta

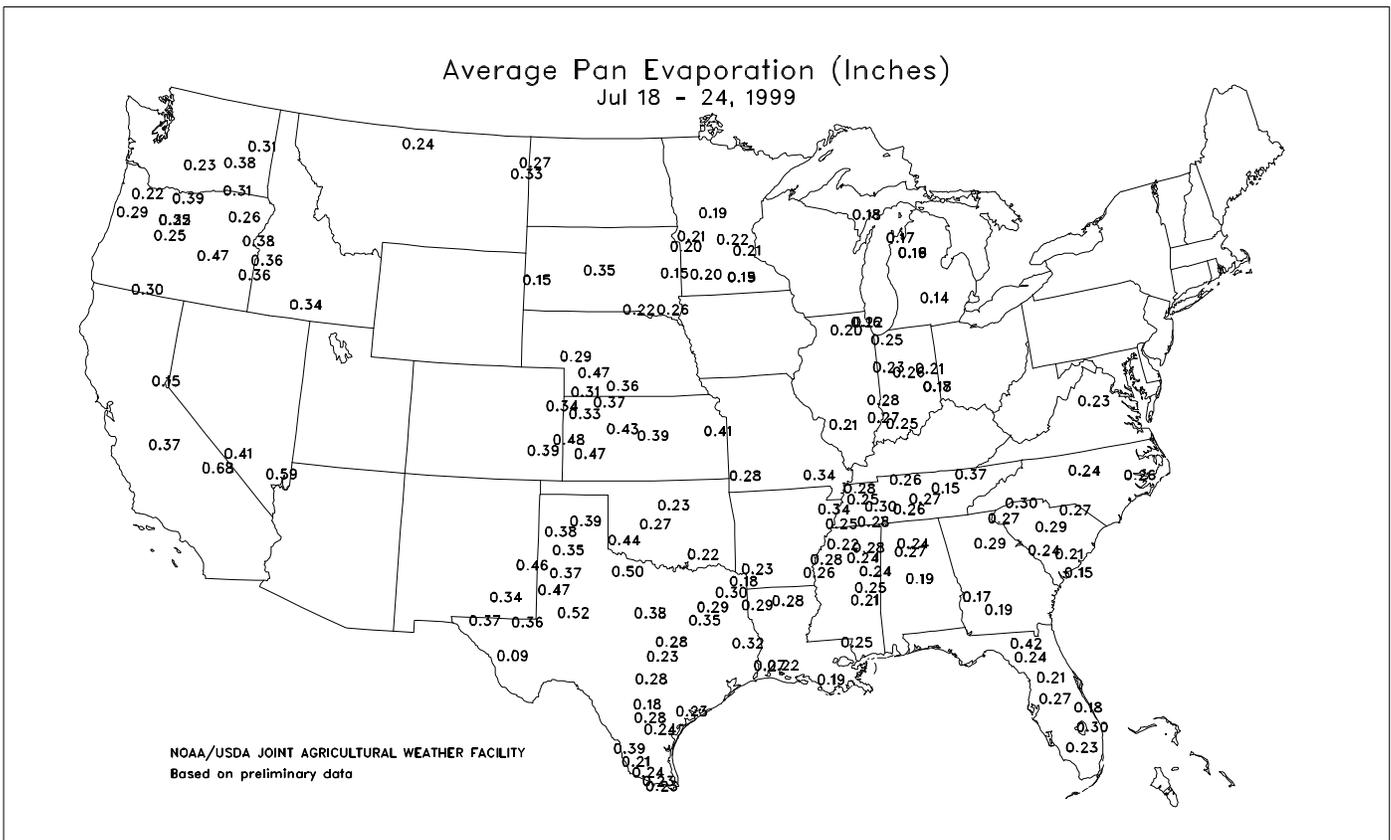
Weather Data for the Week Ending July 24, 1999

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

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								4-INCH SOIL TEMP, °F		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN. SINCE Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL IN. SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP.		
																90 AND ABOVE	32 AND BELOW	0.1 INCH OR MORE	5.0 INCH OR MORE	
MS BATESVILLE	91	72	93	71	82	--	0.00	-1.03	0.00	--	--	--	--	--	--	6	0	0	0	
BELZONI	95	71	96	70	83	--	0.00	-1.08	0.00	--	--	--	--	--	--	7	0	0	0	
CLARKSDALE	93	73	96	68	83	--	0.00	-1.09	0.00	--	--	--	--	--	--	7	0	0	0	
CLEVELAND	92	72	95	71	82	--	0.10	-0.72	0.10	--	--	--	--	--	--	6	0	1	0	
GREENVILLE	93	74	95	71	84	--	1.39	0.55	1.39	--	--	--	--	--	--	7	0	1	1	
GREENWOOD	92	72	97	69	82	--	0.03	-0.81	0.03	--	--	--	--	--	--	6	0	1	0	
INDIANOLA 1S	93	72	97	70	83	--	0.92	--	0.48	4.61	--	31.98	--	85	80	7	0	3	0	
INVERNESS 5E	93	74	97	73	84	--	0.62	--	0.62	5.04	--	30.16	--	85	80	7	0	1	1	
LYON	95	73	99	72	84	--	0.00	--	0.00	6.48	--	--	--	--	--	7	0	0	0	
MOORHEAD	95	75	99	74	85	--	0.00	-1.15	0.00	--	--	--	--	--	--	7	0	0	0	
ONWARD	93	73	97	71	83	--	0.00	--	0.00	8.01	--	36.17	--	83	81	7	0	0	0	
ROLLING FORK	94	72	97	71	83	--	0.00	-0.91	0.00	--	--	--	--	--	--	7	0	0	0	
SIDON	94	72	98	70	83	--	0.06	--	0.05	2.53	--	27.74	--	95	85	7	0	0	0	
TUNICA	94	75	96	72	85	--	0.00	-0.74	0.00	--	--	--	--	--	--	7	0	0	0	
VICKSBURG	91	74	95	73	83	--	0.17	-0.69	0.17	--	--	--	--	--	--	5	0	1	0	
YAZOO CITY	93	72	96	70	83	--	0.45	-0.64	0.45	--	--	--	--	--	--	7	0	1	0	
STONEVILLE*	94	73	98	71	84	2	0.42	-0.35	0.42	3.94	61	35.04	111	98	83	7	0	1	0	

* Based on 1964-93 normals.

Delta Weather and Crop Summary: Light to moderate showers fell early in the week across the southern Mississippi Delta region, improving soil moisture. However, high evaporation rates led to diminishing soil moisture in many other areas. High temperatures in the middle 90's F continued to favor cotton development, which remained in better condition (78 percent of the Mississippi crop is in good to excellent condition as of July 25) than at this time last year (71 percent good to excellent).



(Continued from front cover)

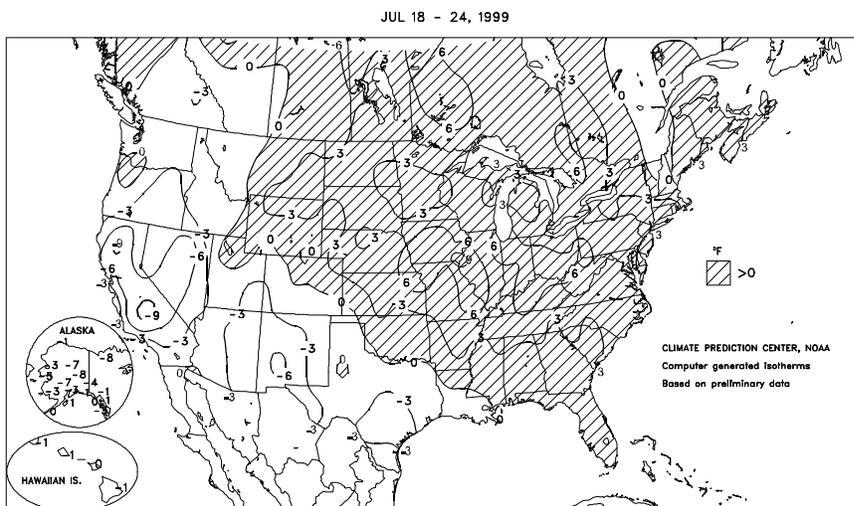
provided limited relief from long-term drought. Farther west, however, locally heavy rainfall (more than 4 inches) in the **northwestern Corn Belt** produced lowland flooding in **northeastern Iowa** and surrounding areas. In the **Southwest**, seasonal showers suppressed temperatures (as much as 4 degrees F below normal). Near-normal temperatures were observed in the **southern Plains** and the **Northwest**. Dry weather in the latter region favored winter wheat harvesting but further stressed spring-sown small grains. Cool (as much as 10°F below normal), dry conditions prevailed in **California**.

Early in the week, a cold front edged southward across the **Northeast**, while heat built across the **central Plains** and **middle Mississippi Valley**. On Sunday, before the front's passage, both **Hartford, CT** (100°F) and **Milton, MA** (96°F) posted their third consecutive daily-record high. With a maximum of 90°F on Sunday, **Portland, ME** logged their third consecutive high at or above 90°F for the first time since August 26-28, 1993. Farther south, **Harrisburg, PA** recorded record high of 101°F. A day later, **Wilmington, DE** (100°F) also notched a daily record. In contrast, several daily-record lows were observed on Sunday in the **Northwest**, including 37°F at **La Grande, OR** and 45°F in **Pendleton, OR**.

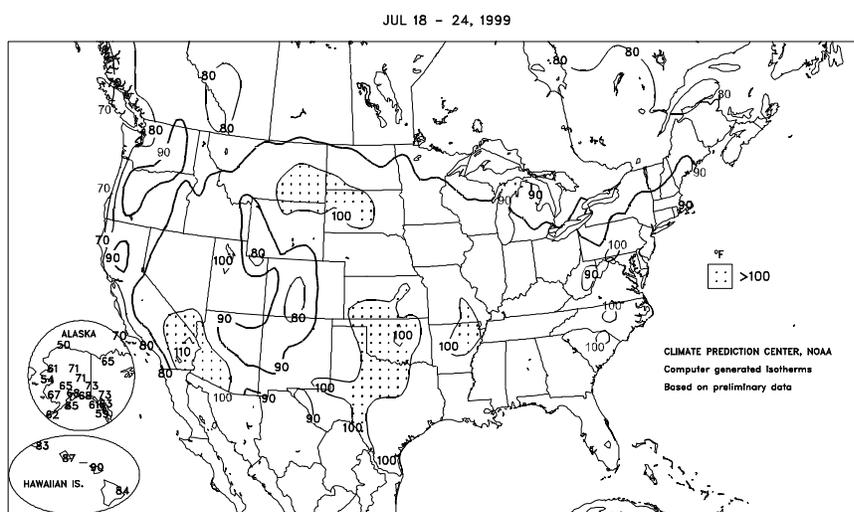
Meanwhile, moisture wrapped around the western and northern fringes of a developing ridge, supplying frequent showers and thunderstorms to areas from the **Four Corners region** northeastward to **Nebraska**, then eastward across the **northern Corn Belt**. A few areas in **northeastern Iowa** and nearby areas received in excess of 6 inches of rain, causing extensive lowland flooding. Some of the heaviest rain fell on July 18-19, when 24-hour totals reached 5.22 inches in **Grand Meadow, MN** and 5.75 inches in **Osage, IA**. Torrential rains returned on July 20-21, producing 7.10 inches in **New Hampton, IA** and an additional 5.00 inches in **Osage**. As a result, record flooding developed along the **upper Cedar River** and its tributaries. Crest records were established on the **Shell Rock River** at **Shell Rock, IA** (4.7 feet above flood stage on July 22, more than 5 inches above the record) and the **Cedar River** at **Janesville, IA** (6.1 feet above flood stage on July 22, more than 9 inches above the record). Previous records at both gauging stations had been established on March 28, 1961. A day later, the **Cedar River** at **Waterloo, IA** reached its third-highest level on record (nearly 9 feet above flood stage), slightly exceeding the 1993 crest.

In **Waterloo**, July 18-21 rainfall totaled 3.72 inches, boosting their month-to-date total to 9.54 inches. **Milwaukee, WI** received 4.15 inches from July 16-21. Farther south, however, **Springfield, MO** marked an 18th consecutive day (July 7-24) on Saturday without measurable rain, their longest such spell since a 22-day streak in November-December 1995. Elsewhere in **Missouri**, **St. Louis** noted a 10th consecutive day of 90-degree heat on Saturday, their longest such streak since July 12-22, 1997. Similarly, highs in **Indianapolis, IN** reached or exceeded 90°F on at least 6 consecutive days (July 19-24), their longest heat wave since a 12-day streak in August 1995. High temperatures reached triple digits for the first time this year in locations such as **Dallas-Ft. Worth, TX** (101°F on Friday), **Oklahoma City, OK** (100°F on Saturday), and **Waco, TX** (100°F on Saturday). Just last year, both **Dallas-Ft. Worth** (56 days) and **Waco** (61 days) registered a near-record number of 100-degree days. In **Kansas**, **Wichita** reached 100°F on July 23, their latest date for a first

Departure of Average Temperature from Normal (°F)



Extreme Maximum Temperature (°F)

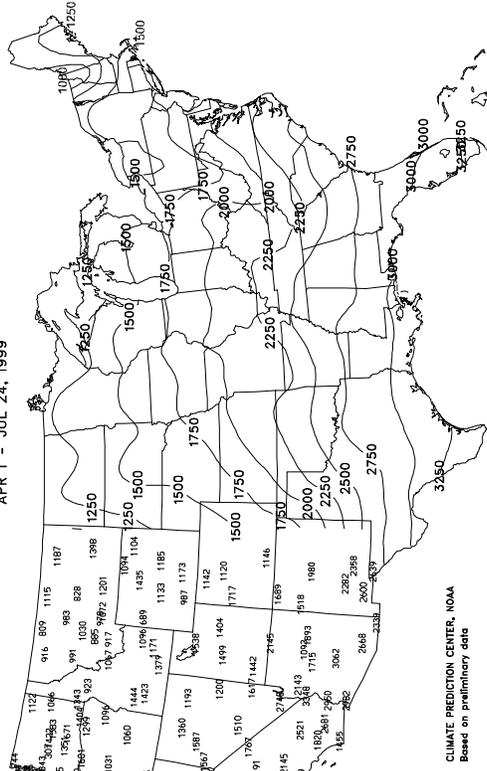


triple-digit reading since July 30, 1989. **Houston, TX** reached the 95-degree mark for the first time this year on July 22, breaking their record set on July 18, 1961. Last year, **Houston** first reached 95°F on May 28 en route to a May-July total of 56 days.

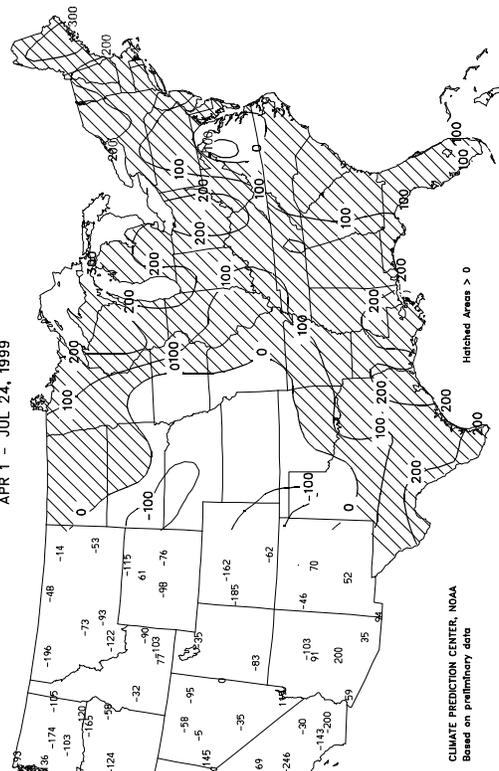
Heat surged northward through the **Plains** at week's end in advance of a cold front. On Saturday, **Billings, MT** recorded 105°F, their highest reading since 105°F on August 5, 1961. Farther south, however, unusually cool weather prevailed in **California** and surrounding areas. **Thousand Oaks, CA** logged a July-record low of 46°F on Saturday.

Sharply cooler air overspread **Alaska**, resulting in weekly temperatures as much as 8°F below normal in interior sections. **McGrath** logged daily-record lows on Sunday (38°F) and Thursday (35°F). On Tuesday, a storm centered along **Alaska's west coast** produced peak wind gusts to 54 mph in **Unalakleet (Norton Sound)** and 51 mph in **Healy** (southwest of **Fairbanks**).

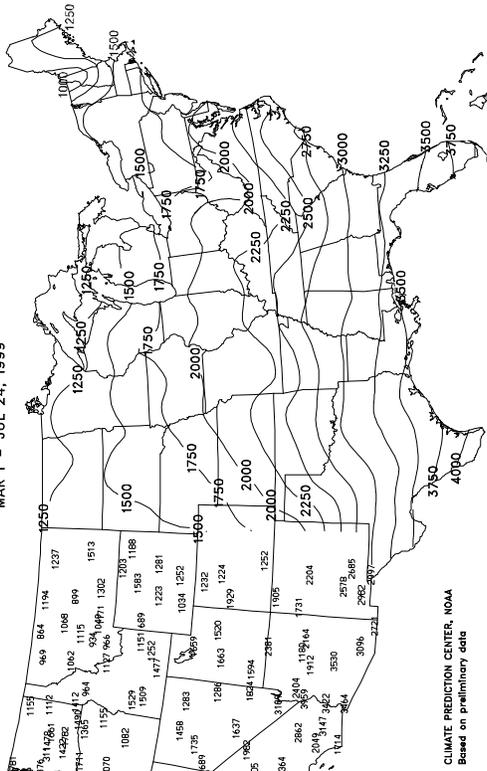
Total Growing Degree Days
APR 1 - JUL 24, 1999



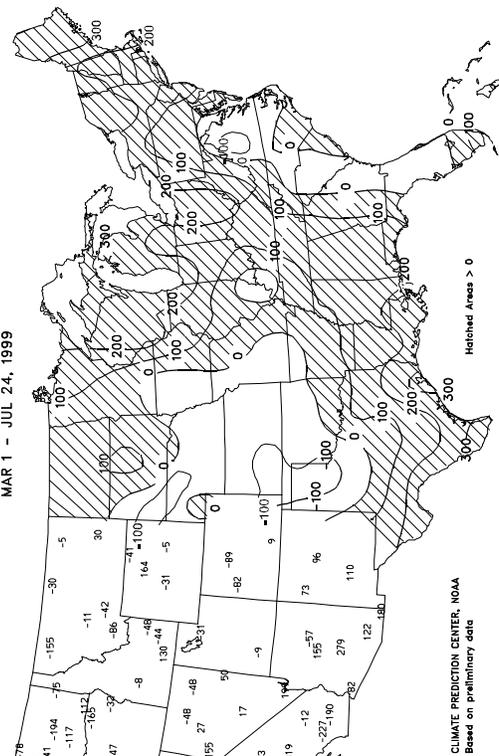
Departure From Normal Growing Degree Days
APR 1 - JUL 24, 1999



Total Growing Degree Days
MAR 1 - JUL 24, 1999



Departure From Normal Growing Degree Days
MAR 1 - JUL 24, 1999



National Weather Data for Selected Cities

Weather Data for the Week Ending July 24, 1999

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

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN. SINCE Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL IN. SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP.		
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
AL BIRMINGHAM	92	73	95	70	82	2	1.09	-0.12	0.61	11.52	148	36.54	109	95	58	6	0	4	1	
AL HUNTSVILLE	93	72	96	70	82	3	1.51	0.41	1.46	8.15	103	35.30	102	98	53	7	0	2	1	
AL MOBILE	91	73	95	70	82	-1	0.82	-0.79	0.43	11.23	110	31.75	86	99	63	5	0	3	0	
AL MONTGOMERY	93	72	96	69	82	1	3.04	1.85	2.13	13.61	171	31.30	95	97	57	7	0	5	1	
AK ANCHORAGE	62	50	68	47	56	-3	0.66	0.25	0.37	2.77	115	5.28	87	93	57	0	0	5	0	
AK BARROW	43	35	50	32	39	-1	0.00	-0.23	0.00	0.96	99	1.42	84	96	76	0	2	0	0	
AK FAIRBANKS	62	48	71	43	55	-8	0.39	-0.05	0.15	2.57	92	3.76	75	93	45	0	0	6	0	
AK JUNEAU	61	51	63	47	56	-1	1.19	0.21	0.46	4.94	79	31.41	131	99	68	0	0	4	0	
AK KODIAK	62	51	65	48	56	1	0.12	-0.70	0.11	11.94	157	34.58	100	90	59	0	0	2	0	
AK NOME	51	44	54	34	47	-5	1.98	1.45	0.79	3.07	113	6.44	108	97	75	0	0	6	1	
AZ FLAGSTAFF	76	50	79	47	63	-4	0.82	0.12	0.46	3.84	156	8.62	76	97	38	0	0	5	0	
AZ PHOENIX	102	81	105	75	91	-3	0.54	0.33	0.49	2.85	390	4.27	128	64	28	7	0	2	0	
AZ TUCSON	94	73	97	71	84	-3	0.06	-0.54	0.06	3.24	161	4.58	96	79	32	6	0	1	0	
AZ YUMA	106	83	107	79	94	0	0.00	-0.07	0.00	2.44	999	4.21	366	55	20	7	0	0	0	
AR FORT SMITH	92	73	95	72	83	1	0.00	-0.66	0.00	7.84	137	30.05	128	99	51	7	0	0	0	
AR LITTLE ROCK	95	75	99	73	85	3	0.00	-0.81	0.00	4.92	77	27.50	95	92	51	7	0	0	0	
CA BAKERSFIELD	90	60	96	57	75	-10	0.00	0.00	0.00	0.00	0	5.42	142	66	21	4	0	0	0	
CA EUREKA	61	52	64	51	57	0	0.03	0.00	0.02	0.18	30	27.22	130	91	72	0	0	2	0	
CA FRESNO	91	60	96	56	76	-7	0.00	0.00	0.00	0.20	286	5.96	86	76	21	4	0	0	0	
CA LOS ANGELES	75	64	76	62	70	0	0.00	0.00	0.00	0.98	999	7.18	93	90	62	0	0	0	0	
CA REDDING	91	56	95	54	74	-8	0.00	-0.03	0.00	0.41	60	16.93	89	67	16	5	0	0	0	
CA SACRAMENTO	81	53	90	51	67	-9	0.00	0.00	0.00	0.03	20	9.91	92	91	32	1	0	0	0	
CA SAN DIEGO	73	64	76	63	69	-3	0.00	0.00	0.00	0.04	44	5.08	82	88	66	0	0	0	0	
CA SAN FRANCISCO	67	55	71	50	61	-2	0.00	0.00	0.00	0.70	583	13.39	109	87	57	0	0	0	0	
CO ALAMOSA	78	50	82	46	64	-1	0.21	-0.07	0.14	0.59	38	3.09	84	97	34	0	0	2	0	
CO CO SPRINGS	84	58	87	56	71	0	0.01	-0.67	0.01	3.31	75	14.96	159	84	32	0	0	1	0	
CO DENVER	88	61	92	57	75	0	1.21	0.77	0.91	3.91	118	12.93	133	82	24	3	0	2	1	
CO GRAND JUNCTION	90	64	96	60	77	-2	0.00	-0.16	0.00	1.09	109	4.23	93	66	21	5	0	0	0	
CO PUEBLO	92	62	97	58	77	-1	0.32	-0.18	0.16	1.00	35	8.81	139	94	30	6	0	3	0	
CT BRIDGEPORT	85	71	93	66	78	3	0.25	-0.60	0.24	1.74	27	21.02	87	88	45	1	0	2	0	
CT HARTFORD	90	68	98	61	79	5	1.23	0.51	1.22	3.29	53	20.67	84	90	41	3	0	2	1	
DC WASHINGTON	93	75	99	74	84	4	0.48	-0.40	0.28	3.25	52	18.45	87	88	45	5	0	2	0	
DE WILMINGTON	92	71	100	66	82	5	0.60	-0.36	0.45	2.51	37	22.35	95	99	48	4	0	3	0	
FL DAYTONA BEACH	91	74	95	73	83	2	1.30	0.10	0.83	12.50	123	23.10	94	96	55	5	0	3	1	
FL JACKSONVILLE	93	73	96	71	83	2	0.00	-1.29	0.00	10.75	109	20.21	75	96	51	5	0	0	0	
FL KEY WEST	89	80	91	78	84	0	0.31	-0.47	0.27	6.62	84	15.63	84	87	67	3	0	3	0	
FL MIAMI	91	78	93	76	84	2	0.45	-0.74	0.45	14.52	105	24.25	83	86	55	7	0	1	0	
FL ORLANDO	93	74	95	73	84	1	3.47	1.86	1.95	18.17	140	29.82	111	96	50	6	0	3	3	
FL PENSACOLA	91	75	97	73	83	1	0.83	-0.87	0.44	12.97	107	30.51	85	94	57	4	0	3	0	
FL TALLAHASSEE	93	74	97	71	84	2	0.73	-1.30	0.37	13.56	99	30.52	79	98	52	6	0	2	0	
FL TAMPA	92	78	94	74	85	2	0.09	-1.43	0.09	8.49	81	14.46	64	89	55	7	0	1	0	
FL WEST PALM BEACH	91	77	93	73	84	2	0.00	-1.31	0.00	14.04	108	25.73	83	88	56	6	0	0	0	
GA ATHENS	94	71	97	69	83	3	0.37	-0.75	0.37	10.44	135	25.00	82	98	51	7	0	1	0	
GA ATLANTA	91	72	94	68	81	2	1.11	-0.05	0.69	9.32	125	25.52	81	95	54	5	0	4	1	
GA AUGUSTA	94	73	99	68	83	2	0.01	-0.95	0.01	10.15	138	24.17	88	95	53	7	0	1	0	
GA COLUMBUS	93	74	97	71	84	2	1.09	-0.18	0.73	5.22	62	17.82	56	92	50	7	0	2	1	
GA MACON	93	72	97	69	83	1	0.24	-0.75	0.24	10.26	148	23.19	83	98	55	6	0	1	0	
GA SAVANNAH	92	75	96	72	84	2	0.18	-1.30	0.18	21.44	205	34.99	124	96	55	5	0	1	0	
HI HILO	81	68	84	65	75	-1	1.26	-1.05	0.46	7.51	55	74.99	103	94	66	0	0	6	0	
HI HONOLULU	85	74	87	72	79	-1	0.14	0.00	0.09	0.67	68	6.92	60	88	55	0	0	4	0	
HI KAHULUI	86	71	90	69	79	0	0.02	-0.07	0.01	0.62	115	7.09	55	87	51	1	0	2	0	
HI LIHUE	83	73	83	72	78	-1	0.37	-0.13	0.21	3.87	116	17.97	77	87	64	0	0	5	0	
ID BOISE	90	57	96	51	74	-1	0.00	-0.06	0.00	4.47	43	6.29	87	59	16	4	0	0	0	
ID LEWISTON	88	58	94	51	73	-2	0.19	0.05	0.11	1.70	95	6.63	89	71	21	4	0	3	0	
ID POCATELLO	89	51	97	42	70	-1	0.00	-0.14	0.00	1.23	80	8.42	116	68	16	2	0	0	0	
IL CHICAGO/O'HARE	90	70	94	68	80	6	2.23	1.40	1.78	8.67	132	28.48	149	95	57	4	0	5	1	
IL MOLINE	93	72	98	63	82	7	0.73	-0.40	0.72	6.92	85	21.85	99	95	55	6	0	2	1	
IL PEORIA	92	71	94	64	82	6	2.12	1.19	1.35	6.01	82	20.42	99	96	54	7	0	5	2	
IL ROCKFORD	89	69	93	63	79	5	0.74	-0.17	0.25	8.41	109	24.94	125	98	66	4	0	6	0	
IL SPRINGFIELD	94	70	96	61	82	5	0.18	-0.62	0.09	3.53	57	16.10	81	95	51	7	0	4	0	
IN EVANSVILLE	92	73	94	66	82	4	0.64	-0.28	0.53	8.41	127	30.03	116	97	59	7	0	4	1	
IN FORT WAYNE	92	71	95	65	81	7	0.13	-0.64	0.13	1.66	27	18.47	94	97	50	5	0	1	0	
IN INDIANAPOLIS	92	72	94	68	82	6	1.32	0.29	0.86	5.38	77	24.85	107	96	56	6	0	3	1	
IN SOUTH BEND	90	72	96	69	81	8	0.00	-0.85	0.00	4.68	66	19.68	92	96	54	4	0	0	0	
IA BURLINGTON	98	74	99	69	86	10	1.72	0.76	1.64	9.41	128	24.69	124	86	48	7	0	3	1	
IA CEDAR RAPIDS	91	69	93	62	80	5	0.74	-0.17	0.46	9.02	116	23.72	125	99	64	5	0	3	0	
IA DES MOINES	94	75	96	72	84	7	0.13	-0.70	0.13	4.41	60	18.08	96	88	53	7	0	1	0	
IA DUBUQUE	88	69	91	63	78	6	4.07	3.16	2.36	10.51	146	25.61	124	97	67	3	0	4	2	
IA SIOUX CITY	90	72	92	70	81	5	1.96	1.24	1.69	11.25	179	23.15	150	96	63	5	0	6	1	
IA WATERLOO	90	70	92	66	80	7	3.02	1.93	1.93	14.78	179	30.35	153	96	66	3	0	5	1	
KS CONCORDIA	95	74	98	72	84	4	0.00	-0.80	0.00	4.60	63	20.10	115	83	44	7	0	0	0	
KS DODGE CITY	97	69	101	66	83	2	0.00	-0.73	0.00	4.58	81	14.73	110	82	31	7	0	0	0	
KS GOODLAND	94	64	96	59	79	3	0.00	-0.62	0.00	6.25	114	13.56	111	87	30	7	0	0	0	
KS TOPEKA	97	76	100	72	87	8	0.00	-0.75	0.00	6.55	78	24.65	121	83	42	7	0	0	0	

Based on 1961-90 normals

Weather Data for the Week Ending July 24, 1999

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP.	
																90 AND ABOVE	32 AND BELOW	0.1 INCH OR MORE	5.0 INCH OR MORE
KY WICHITA	96	73	100	71	84	2	0.08	-0.59	0.08	10.85	159	27.67	161	89	40	7	0	1	0
KY JACKSON	89	69	92	66	79	4	2.13	0.96	0.74	5.27	64	23.97	82	99	64	3	0	6	2
KY LEXINGTON	93	71	95	64	82	6	1.70	0.54	1.00	7.56	100	23.43	89	95	50	7	0	3	2
KY LOUISVILLE	96	76	98	71	86	9	0.01	-1.04	0.01	8.38	120	29.36	110	84	45	7	0	1	0
KY PADUCAH	96	74	98	73	85	6	0.00	-0.94	0.00	9.27	126	31.04	106	93	51	7	0	0	0
LA BATON ROUGE	91	72	94	70	81	-1	0.57	-1.02	0.31	12.21	127	30.70	87	99	59	5	0	4	0
LA LAKE CHARLES	90	74	94	73	82	0	0.80	-0.39	0.68	13.66	152	28.59	97	98	59	3	0	2	1
LA NEW ORLEANS	89	74	94	73	82	0	1.09	-0.29	0.76	16.29	154	28.68	81	95	62	4	0	3	1
LA SHREVEPORT	92	73	95	71	83	0	0.41	-0.39	0.28	10.57	146	40.90	148	96	51	7	0	3	0
ME CARIBOU	80	53	84	45	67	1	0.49	-0.45	0.28	5.45	91	16.58	91	95	41	0	0	3	0
ME PORTLAND	83	60	90	50	71	2	0.91	0.22	0.63	2.60	44	22.40	93	93	45	1	0	4	1
MD BALTIMORE	91	72	98	69	82	4	1.35	0.52	1.09	3.84	59	18.65	81	91	42	5	0	3	1
MA BOSTON	85	67	97	61	76	2	1.28	0.65	0.49	2.82	54	18.08	79	91	51	2	0	4	0
MA WORCESTER	83	65	90	59	74	4	0.57	-0.31	0.57	3.78	55	20.99	80	90	46	1	0	1	1
MI ALPENA	83	58	90	54	71	3	0.48	-0.18	0.31	5.44	103	12.88	84	98	51	1	0	6	0
MI GRAND RAPIDS	85	67	92	62	76	4	0.95	0.23	0.51	6.64	107	21.78	117	96	64	1	0	4	1
MI HOUGHTON LAKE	80	60	88	53	70	2	1.74	1.16	0.99	10.72	214	18.37	127	100	58	0	0	6	2
MI LANSING	84	64	89	60	74	3	0.99	0.45	0.37	7.98	141	19.67	121	99	74	0	0	4	0
MI MARQUETTE	80	57	90	48	69	3	0.15	-0.48	0.11	6.81	119	23.87	132	93	45	1	0	2	0
MI MUSKEGON	83	67	88	63	75	4	1.61	1.13	1.13	6.57	168	19.98	127	99	67	0	0	5	1
MN DULUTH	80	59	87	52	69	3	0.43	-0.38	0.41	11.04	167	20.08	127	97	53	0	0	2	0
MN INT'L FALLS	83	58	87	45	71	4	0.22	-0.57	0.12	8.55	126	18.69	139	97	49	0	0	2	0
MN MINNEAPOLIS	85	68	98	63	77	2	0.48	-0.29	0.32	5.39	79	20.31	124	94	52	3	0	2	0
MN ROCHESTER	83	66	91	62	75	3	2.72	1.76	1.98	8.62	123	24.29	148	100	73	1	0	5	2
MS ST. CLOUD	87	61	96	56	74	3	0.15	-0.51	0.08	5.72	82	14.63	96	95	49	3	0	2	0
MS JACKSON	93	72	97	69	82	1	1.24	0.19	1.10	7.26	110	27.18	82	97	51	7	0	3	1
MS MERIDIAN	93	70	96	67	82	1	1.89	0.70	0.98	6.33	83	25.47	73	100	51	6	0	5	2
MS TUPELO	94	75	97	72	85	4	0.20	-0.78	0.20	9.26	128	42.07	124	93	50	7	0	1	0
MO COLUMBIA	95	72	98	70	84	6	0.00	-0.81	0.00	5.17	72	20.28	90	93	45	7	0	0	0
MO KANSAS CITY	96	74	99	71	85	6	0.00	-0.97	0.00	9.08	111	28.67	136	90	48	7	0	0	0
MO SAINT LOUIS	96	78	98	73	87	7	0.00	-0.86	0.00	9.48	140	26.43	122	82	45	7	0	0	0
MO SPRINGFIELD	93	71	97	70	82	3	0.00	-0.59	0.00	5.09	69	27.73	117	97	49	7	0	0	0
MT BILLINGS	95	58	105	53	77	3	0.01	-0.18	0.01	2.39	87	7.54	77	71	18	6	0	1	0
MT BUTTE	85	42	91	40	64	0	0.02	-0.24	0.02	2.12	67	7.58	99	82	15	1	0	1	0
MT GLASGOW	90	59	97	52	74	3	0.96	0.59	0.80	4.84	139	11.11	159	86	28	5	0	2	1
MT GREAT FALLS	87	49	92	44	68	-1	0.07	-0.18	0.06	2.59	77	7.50	76	77	17	2	0	2	0
MT KALISPELL	81	45	88	41	63	-1	0.35	0.13	0.21	2.84	92	8.47	87	93	23	0	0	2	0
MT MILES CITY	98	64	106	60	81	5	0.00	-0.31	0.00	4.36	107	9.31	100	73	20	7	0	0	0
MT MISSOULA	85	50	90	44	68	0	0.02	-0.17	0.02	2.96	118	6.44	78	74	15	1	0	1	0
NE GRAND ISLAND	94	71	98	69	83	5	0.13	-0.48	0.13	7.80	127	18.57	119	92	50	7	0	1	0
NE LINCOLN	95	74	97	70	84	6	0.12	-0.60	0.12	7.45	117	20.78	127	90	50	7	0	1	0
NE NORFOLK	90	71	94	69	81	5	1.87	1.19	1.08	8.24	117	19.36	120	98	62	4	0	2	2
NE NORTH PLATTE	92	64	97	61	78	3	0.66	0.00	0.52	6.25	107	12.24	92	98	42	5	0	3	1
NE OMAHA	94	74	97	71	84	7	1.43	0.65	1.34	6.43	97	22.70	131	91	53	7	0	4	1
NE SCOTTSBLUFF	92	62	99	59	77	2	0.31	-0.12	0.30	4.38	101	10.63	99	94	31	4	0	2	0
NE VALENTINE	93	64	98	61	79	3	2.72	2.03	1.99	8.13	154	15.12	128	98	41	5	0	4	1
NV ELY	86	47	90	41	67	-2	0.00	-0.17	0.00	2.05	141	4.47	75	41	12	1	0	0	0
NV LAS VEGAS	101	77	104	73	89	-2	0.00	-0.08	0.00	2.37	658	3.18	145	24	14	7	0	0	0
NV RENO	87	54	93	48	71	-2	0.00	-0.06	0.00	0.06	9	2.95	65	53	15	1	0	0	0
NV WINNEMUCCA	90	46	95	38	68	-5	0.00	-0.06	0.00	1.22	112	4.57	93	46	17	4	0	0	0
NH CONCORD	86	57	94	45	72	2	2.08	1.34	0.88	5.42	96	20.08	103	96	43	1	0	3	2
NJ NEWARK	91	73	100	70	82	4	0.75	-0.30	0.67	1.45	22	21.17	85	85	43	4	0	2	1
NM ALBUQUERQUE	85	64	90	60	74	-4	0.69	0.35	0.41	1.96	122	4.31	107	86	32	1	0	3	0
NY ALBANY	86	64	93	53	75	3	0.16	-0.56	0.16	4.31	71	18.20	91	93	45	3	0	1	0
NY BINGHAMTON	82	62	87	55	72	2	0.64	-0.14	0.32	5.09	80	18.03	89	90	53	0	0	4	0
NY BUFFALO	83	66	87	61	75	3	0.66	-0.04	0.43	2.77	47	17.10	87	93	54	0	0	4	0
NY ROCHESTER	85	63	90	56	74	3	0.23	-0.38	0.20	3.64	72	16.32	97	95	43	1	0	3	0
NY SYRACUSE	86	64	91	54	75	4	0.16	-0.69	0.16	4.22	62	17.33	84	89	44	1	0	1	0
NC ASHEVILLE	88	67	92	63	77	4	0.76	-0.28	0.55	8.06	104	25.52	93	97	54	1	0	3	1
NC CHARLOTTE	93	71	96	69	82	2	1.24	0.33	1.24	7.40	115	20.52	82	97	49	6	0	1	1
NC GREENSBORO	91	71	94	68	81	4	0.64	-0.40	0.51	7.47	102	21.69	89	92	53	7	0	3	1
NC HATTERAS	87	78	90	76	82	4	0.09	-1.08	0.09	5.21	66	26.44	91	95	73	1	0	1	0
NC RALEIGH	95	73	100	71	84	6	0.09	-0.82	0.07	4.11	61	19.64	81	97	49	7	0	2	0
NC WILMINGTON	95	77	99	74	86	5	0.64	-1.23	0.44	8.02	66	30.65	99	90	54	7	0	2	0
ND BISMARCK	87	63	96	59	75	4	0.85	0.39	0.41	6.19	140	16.53	166	97	54	3	0	4	0
ND DICKINSON	91	62	102	60	77	6	0.52	0.09	0.40	3.49	71	10.99	102	93	33	5	0	2	0
ND FARGO	87	63	94	57	75	3	0.19	-0.42	0.17	3.60	74	11.29	100	95	50	3	0	2	0
ND GRAND FORKS	85	60	90	54	73	3	0.45	-0.16	0.41	5.09	102	14.26	136	96	51	2	0	3	0
ND JAMESTOWN	85	62	91	58	73	1	0.77	0.17	0.52	5.44	105	15.14	144	98	57	3	0	2	1
ND WILLISTON	88	58	94	55	73	2	1.58	1.12	1.18	5.80	146	12.10	136	94	37	4	0	5	1
OH AKRON-CANTON	89	66	93	64	77	5	1.18	0.24	0.94	4.58	72	19.21	92	98	56	4	0	5	1
OH CINCINNATI	93	70	96	63	82	6	0.75	-0.21	0.28	4.79	67	19.96	81	97	49	6	0	3	0
OH CLEVELAND	86	68	92	64	77	5	0.78	-0.01	0.29	4.63	72	17.42	86	96	58	1	0	4	0
OH COLUMBUS	93	72	96	70	83	9	0.18	-0.79	0.12	2.28	31	16.24	73	95	49	5	0	3	0
OH DAYTON	91	72	96	67	81	7	0.67	-0.12	0.47	6.10	93	21.12	98	93	55	5	0	5	0
OH MANSFIELD	84	64	86	62	74	2	2.13	1.22	1.38	5.53	78	21.45	96	100	61	0	0	4	2

Based on 1961

Weather Data for the Week Ending July 24, 1999

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP.	
																90 AND ABOVE	32 AND BELOW	0.1 INCH OR MORE	50 INCH OR MORE
OK TOLEDO	89	67	94	64	78	5	0.89	0.17	0.47	4.02	64	20.08	110	97	61	3	0	3	0
OK YOUNGSTOWN	88	66	94	63	77	6	0.65	-0.26	0.44	4.58	64	21.54	102	97	46	2	0	4	0
OK OKLAHOMA CITY	95	71	100	70	83	0	0.00	-0.54	0.00	10.57	165	27.05	137	91	44	7	0	0	0
OK TULSA	96	77	102	72	86	3	0.00	-0.66	0.00	5.35	78	29.92	129	81	41	7	0	0	0
OR ASTORIA	66	54	70	52	60	0	0.08	-0.14	0.04	4.39	131	54.24	152	96	71	0	0	4	0
OR BURNS	82	44	88	33	63	-5	0.08	0.00	0.08	0.31	27	5.36	97	73	14	0	0	1	0
OR EUGENE	82	51	90	46	66	-2	0.00	-0.10	0.00	0.94	51	27.27	104	92	33	1	0	0	0
OR MEDFORD	89	55	92	50	72	-1	0.08	0.02	0.03	0.08	10	9.96	106	78	19	4	0	4	0
OR PENDLETON	88	54	92	46	71	-3	0.00	-0.08	0.00	0.51	55	5.06	74	63	22	3	0	0	0
OR PORTLAND	81	57	89	52	69	0	0.08	-0.04	0.08	2.26	114	25.16	131	88	36	0	0	1	0
OR SALEM	83	54	92	50	69	2	0.00	-0.11	0.00	1.63	91	30.95	150	94	33	1	0	0	0
PA ALLENTOWN	92	68	97	67	80	5	0.22	-0.73	0.12	1.43	21	17.27	72	88	39	3	0	3	0
PA ERIE	83	70	85	67	76	5	0.05	-0.71	0.04	3.36	50	19.31	92	89	55	0	0	2	0
PA MIDDLETOWN	95	73	101	70	84	7	2.26	1.46	2.05	4.62	69	18.59	80	90	42	5	0	3	1
PA PHILADELPHIA	91	73	97	68	82	5	2.88	1.90	1.73	4.41	62	23.28	97	95	51	4	0	3	2
PA PITTSBURGH	89	68	94	64	79	6	0.00	-0.75	0.09	3.53	53	20.35	94	92	43	4	0	1	0
PA WILKES-BARRE	86	64	82	62	75	4	1.24	0.40	0.79	4.48	64	18.26	90	91	49	2	0	5	1
PA WILLIAMSPORT	88	67	97	63	78	5	1.76	0.88	1.40	5.25	70	20.20	88	86	49	3	0	4	1
RI PROVIDENCE	88	67	98	61	78	4	0.58	-0.14	0.33	1.18	20	22.50	89	89	47	2	0	3	0
SC BEAUFORT	93	77	96	73	85	3	0.53	-0.94	0.51	18.08	165	30.94	107	94	56	5	0	2	1
SC CHARLESTON	93	76	96	72	84	3	1.36	-0.20	1.02	6.37	54	19.76	67	96	55	6	0	5	1
SC COLUMBIA	95	74	99	71	84	3	0.33	-0.94	0.29	7.22	80	20.87	71	94	50	6	0	3	0
SC GREENVILLE	94	72	98	69	83	5	0.00	-1.03	0.00	6.64	79	20.96	68	92	45	7	0	0	0
SD ABERDEEN	86	64	94	61	75	2	0.98	0.38	0.77	7.82	147	14.30	121	100	61	3	0	2	1
SD HURON	91	69	97	64	80	5	0.53	-0.04	0.37	4.13	75	11.13	84	99	55	4	0	4	0
SD RAPID CITY	89	61	100	59	75	2	0.44	0.01	0.43	6.89	147	14.21	127	95	47	2	0	2	0
SD SIOUX FALLS	87	69	92	67	78	3	3.14	2.56	1.23	7.44	136	19.74	143	98	63	3	0	4	3
TN BRISTOL	87	68	91	64	78	3	3.33	2.35	1.28	9.81	142	24.96	102	100	64	1	0	5	4
TN CHATTANOOGA	93	73	96	70	83	4	1.68	0.56	1.20	9.80	134	36.57	115	97	56	7	0	4	1
TN KNOXVILLE	89	71	93	69	80	3	1.57	0.51	1.25	17.50	228	40.21	140	97	59	2	0	3	1
TN MEMPHIS	94	76	97	72	85	2	0.00	-0.85	0.00	5.44	84	34.00	112	90	52	7	0	0	0
TN NASHVILLE	93	75	95	71	84	4	0.65	-0.26	0.64	6.54	98	28.65	102	90	50	6	0	2	1
TX ABILENE	95	72	100	70	84	-1	0.00	-0.46	0.00	4.66	104	12.77	99	79	31	7	0	0	0
TX AMARILLO	89	66	94	64	77	-2	0.04	-0.52	0.04	6.38	112	21.00	187	86	39	2	0	1	0
TX AUSTIN	90	71	94	69	81	-4	1.51	1.10	0.66	9.75	182	21.94	119	100	54	4	0	4	1
TX BEAUMONT	91	75	94	73	83	0	0.04	-1.17	0.03	11.68	119	23.52	77	98	54	5	0	2	0
TX BROWNSVILLE	92	74	96	73	83	-1	0.18	-0.23	0.11	4.19	100	12.69	107	97	45	6	0	5	0
TX CORPUS CHRISTI	90	72	94	69	81	-3	1.10	0.58	0.55	9.04	173	15.13	102	100	61	5	0	4	1
TX DEL RIO	94	74	100	71	84	-2	0.01	-0.39	0.01	7.10	197	12.50	127	90	41	6	0	1	0
TX EL PASO	88	68	93	65	78	-4	0.63	0.26	0.55	3.45	189	3.61	105	90	43	2	0	3	1
TX FORT WORTH	97	75	102	74	86	0	0.00	-0.50	0.00	1.79	37	16.20	81	85	38	7	0	0	0
TX GALVESTON	87	77	92	73	82	-1	1.52	0.64	0.72	9.35	125	18.46	87	89	67	1	0	3	2
TX HOUSTON	91	73	95	70	82	-1	1.37	0.61	0.80	10.41	133	21.96	86	99	55	5	0	4	1
TX LUBBOCK	91	69	98	67	80	0	0.00	-0.52	0.00	5.31	115	14.63	149	74	36	5	0	0	0
TX MIDLAND	94	70	100	69	82	0	0.01	-0.38	0.01	2.91	101	5.74	79	74	29	7	0	1	0
TX SAN ANGELO	95	71	100	69	83	0	0.00	-0.22	0.00	5.35	169	11.69	110	82	31	7	0	0	0
TX SAN ANTONIO	92	73	95	71	82	-3	0.30	-0.14	0.28	5.34	97	12.60	73	94	45	6	0	2	0
TX VICTORIA	89	71	92	67	80	-4	1.29	0.60	0.55	6.89	91	19.63	97	100	60	5	0	4	1
TX WACO	95	74	100	73	84	-2	0.01	-0.39	0.01	3.39	69	14.10	75	94	46	6	0	1	0
TX WICHITA FALLS	100	74	105	72	87	1	0.00	-0.34	0.00	4.62	94	22.11	133	77	31	7	0	0	0
UT SALT LAKE CITY	95	69	100	64	82	3	0.00	-0.19	0.00	0.85	53	9.51	97	48	13	6	0	0	0
VT BURLINGTON	85	61	90	50	73	2	0.19	-0.64	0.14	3.70	59	13.69	77	95	42	2	0	2	0
VA LYNCHBURG	91	67	95	62	79	3	1.41	0.45	0.83	5.31	79	18.48	80	96	48	5	0	2	2
VA NORFOLK	90	75	95	73	82	4	1.08	-0.10	0.71	9.63	125	26.27	103	96	61	4	0	3	1
VA RICHMOND	91	72	97	69	82	3	0.11	-1.07	0.10	9.06	121	24.62	101	97	53	5	0	2	0
VA ROANOKE	91	71	93	65	81	5	2.62	1.71	1.50	5.92	96	19.51	87	90	50	5	0	3	2
VA WASH/DULLES	92	69	97	66	81	5	0.60	-0.18	0.35	4.88	74	21.23	95	96	46	5	0	4	0
WA OLYMPIA	76	49	83	47	63	-1	0.03	-0.14	0.03	2.46	108	38.96	148	97	47	0	0	1	0
WA QUILLAYUTE	66	50	71	42	58	-1	0.14	-0.43	0.08	6.35	124	72.74	129	99	72	0	0	5	0
WA SEATTLE-TACOMA	72	54	79	52	63	-3	0.02	-0.15	0.02	3.33	158	24.28	127	97	55	0	0	1	0
WA SPOKANE	83	53	87	46	68	-1	0.01	-0.13	0.01	1.51	84	8.52	91	74	23	0	0	1	0
WA YAKIMA	85	52	90	46	68	-2	0.07	0.04	0.06	0.82	124	4.08	96	82	25	1	0	2	0
WV BECKLEY	85	67	89	63	76	6	0.69	-0.38	0.41	4.12	55	20.47	85	97	55	0	0	3	0
WV CHARLESTON	92	70	96	67	81	6	0.90	-0.26	0.33	2.70	36	17.81	73	96	50	5	0	5	0
WV ELKINS	86	62	89	57	74	5	0.23	-0.79	0.13	2.74	34	21.76	84	99	52	0	0	3	0
WV HUNTINGTON	93	71	97	68	82	7	0.66	-0.41	0.35	2.46	35	16.85	70	96	47	6	0	4	0
WI EAU CLAIRE	84	66	94	61	75	3	1.07	0.18	0.51	7.17	99	21.69	125	98	55	3	0	5	1
WI GREEN BAY	82	63	90	59	73	2	1.11	0.42	0.68	9.33	161	17.84	117	100	64	1	0	5	1
WI LACROSSE	85	70	94	64	78	4	2.20	1.35	1.10	6.72	98	21.49	128	99	64	3	0	4	2
WI MADISON	84	67	91	61	75	4	0.96	0.19	0.49	9.13	147	23.24	141	96	69	2	0	5	0
WI MILWAUKEE	85	68	94	65	77	5	2.35	1.55	1.44	12.38	209	28.97	161	96	65	2	0	5	2
WI CASPER	91	57	95	48	74	2	0.00	-0.27	0.00	1.91	77	6.70	81	64	13	6	0	0	0
WI CHEYENNE	84	56	88	51	70	1	1.42	0.95	1.05	3.72	101	11.72	127	83	28	0	0	4	1
WI LANDER	89	57	94	53	73	1	0.00	-0.17	0.00	1.13	53	9.99	114	57	16	3	0	0	0
WI SHERIDAN	93	54	99	49	74	3	0.00	-0.15	0.00	1.71	57	8.56	90	73	19	5	0	0	0

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

National Agricultural Summary

July 19-25, 1999

HIGHLIGHTS

Crop conditions deteriorated in many areas east of the Rocky Mountains due to increasing moisture shortages. Several days of record and near-record high temperatures contributed to the stressful conditions in many areas, except along the northern Corn Belt where daily storms provided ample moisture for crop development. Some crops were

damaged by isolated flooding in northern Iowa. The heat quickly dried ripening small grains in the Corn Belt and northern Great Plains, and dry weather in most areas aided wheat, barley, and oat harvest progress. Seasonally mild temperatures in the southern Great Plains benefited crops, but more heat is still needed in the Southwest.

Corn: Acreage silking or beyond was at 75 percent, slightly behind last year's 77-percent pace, but well ahead of the 57-percent average. Hot weather promoted rapid development in the western Corn Belt, as over half of the acreage entered the silking stage in Iowa, Nebraska, and Minnesota. Corn in the dough stage or beyond was at 11 percent, equal to last year's pace and slightly ahead of the 5-year average. Progress was most advanced in the Southeast and southern Great Plains, especially in Georgia where nearly all of the acreage was at the dough stage or beyond. Acreage in the dough stage accelerated in the southern and eastern Corn Belt, and was ahead of normal in Illinois, Indiana, Kentucky, Ohio, and Pennsylvania. Conditions continued to deteriorate in many areas due to moisture shortages and several days of excessive heat. Fields in Kentucky, Missouri, and southern Illinois suffered most, while rain aided many fields in Iowa, Minnesota, and Wisconsin. Scattered rains relieved excessive dryness in parts of Illinois, Indiana, and Ohio, but moisture shortages persisted in most areas. Isolated flooding damaged some fields in northern Iowa, while southern areas of the State were too dry.

Soybeans: Seventy-four percent of the acreage was blooming, ahead of last year's 72-percent progress and 14 percentage points ahead of the average. Above-normal temperatures promoted rapid blooming in the western Corn Belt, but development lagged in Kansas, Minnesota, and Missouri, and to a lesser extent in Iowa and Nebraska. Soybeans setting pods advanced to 27 percent, slightly behind last year, but ahead of the normal for this date. Progress was most advanced in the lower Mississippi Valley, especially in Mississippi, where three-fourths of the acreage was setting pods. Pod setting was well ahead of normal in the eastern Corn Belt and slightly ahead of the average in most areas of the western Corn Belt. About one-fourth of the acreage began setting pods in Iowa, Michigan, and Kentucky. Heat and dry soils stressed soybeans in many areas of the Corn Belt, especially southern areas near the Ohio and Missouri Valleys. Some fields were flooded by heavy rains in Iowa.

Cotton: Ninety-three percent of the acreage was at the squaring stage or beyond, compared with 92 percent last year and the average of 94 percent. Squaring progress accelerated in Oklahoma due to warmer weather, but remained well behind last year and the average. Fields steadily advanced to the squaring stage in the Atlantic Coastal Plains, while virtually all cotton was squaring in the Mississippi Delta States. Sixty-one percent of the acreage was setting bolls, 10 percentage points behind last year, but only 4 percentage points behind the average. Progress was substantially behind normal in South Carolina, and lagged in the Southwest due to cool weather. Increasing dryness stressed fields in Missouri and Tennessee.

All Wheat: Spring wheat was 88 percent headed, well behind last year's 98-percent pace, but just 5 percentage points behind the 5-year average. Warm weather accelerated ripening in North Dakota and

eastern Idaho. One percent of the acreage was harvested, equal to the normal pace, but slightly behind last year. Dry weather allowed the harvest season to begin in South Dakota, but late crop development delayed the opening of the harvest season in Minnesota. Hot, dry weather stressed ripening fields in the northern Great Plains, especially in Montana. The winter wheat harvest advanced to 86 percent complete, equal to a year ago, but 4 percentage points ahead of the 5-year average. Aided by dry weather, growers rapidly harvested winter wheat in the central and northern Great Plains. The harvest pace accelerated in the Pacific Northwest, but lagged behind the 5-year average in Washington.

Other small grains: The barley crop was 90 percent headed, behind last year's 97-percent pace and the 94-percent average for this date. Crop development lagged in North Dakota, despite above-normal temperatures that quickly ripened fields. One percent of the acreage was harvested, compared with 3 percent last year and 2 percent normally harvested by this date. Ripening fields were stressed by hot weather and dry soils in the northern Great Plains. Oats headed reached 95 percent, behind last year and the average, while harvest progress advanced to 20 percent, 6 percentage points behind last year, but ahead of the 5-year average. Hot weather accelerated crop development in the Corn Belt and North Dakota. The harvest rapidly progressed in most of the Corn Belt. Excessive rainfall hindered progress in parts of Iowa and Wisconsin. Late fields were stressed by hot, dry weather in Michigan and Ohio.

Rice: Thirty-eight percent of the rice acreage was headed, equal to the 5-year average, but behind the 43-percent pace a year ago. Development remained ahead of normal along the Gulf Coast, but continued to lag in inland areas of the Mississippi Delta, despite warmer weather in Arkansas and Mississippi. Water supplies rapidly diminished in Mississippi, and cool weather hindered crop progress in California.

Other crops: Sorghum was 33 percent headed, and 19 percent of the acreage was turning color. Development lagged behind last year, when 44 percent was headed and 21 percent was turning color. Normally, 41 percent would be headed and 23 percent turning color. Fields rapidly advanced into the heading stage in the Corn Belt and central Great Plains, while fields in the lower Mississippi Valley rapidly turned color. Eighty-seven percent of the peanuts were pegging, slightly ahead of last year's pace and ahead of normal in most peanut-producing States.

Crop Progress and Condition

Week Ending July 25, 1999

Soybeans Percent Blooming				
	Jul 25 1999	Prev Week	Prev Year	5-Yr Avg
AL	36	23	39	39
AR	48	35	54	41
GA	65	46	57	50
IL	82	62	68	57
IN	92	80	65	58
IA	87	65	88	78
KS	48	29	78	58
KY	59	40	38	34
LA	91	72	92	77
MI	77	54	66	44
MN	81	50	91	74
MS	93	90	91	72
MO	46	32	59	47
NE	73	44	78	64
NC	23	15	38	29
OH	88	77	75	62
SC	22	14	30	29
SD	58	39	70	58
TN	49	35	38	35
19 Sts	74	55	72	60

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

Winter Wheat Percent Harvested				
	Jul 25 1999	Prev Week	Prev Year	5-Yr Avg
AR	100	99	100	100
CA	97	95	91	97
CO	95	75	94	84
GA	100	100	100	100
ID	1	1	4	5
IL	100	99	99	98
IN	100	100	100	93
KS	100	99	100	99
MI	98	91	96	58
MO	100	99	100	100
MT	3	0	12	5
NE	93	72	89	80
NC	100	99	100	98
OH	100	99	100	90
OK	100	99	100	100
OR	19	7	8	18
SD	67	41	74	41
TX	99	97	100	99
WA	8	2	20	15
19 Sts	86	81	86	82

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

Corn Percent Silking				
	Jul 25 1999	Prev Week	Prev Year	5-Yr Avg
CO	28	3	55	36
GA	100	100	99	99
IL	86	65	77	65
IN	92	70	67	51
IA	73	20	79	54
KS	77	52	96	78
KY	92	88	80	71
MI	73	36	62	32
MN	80	29	93	66
MO	78	61	86	70
NE	77	22	84	61
NC	88	80	84	92
OH	85	46	53	36
PA	58	38	50	40
SD	27	3	49	26
TX	80	69	94	89
WI	59	20	72	36
17 Sts	75	40	77	57

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

Corn Percent Dough				
	Jul 25 1999	Prev Week	Prev Year	5-Yr Avg
CO	0	0	1	0
GA	94	89	91	94
IL	19	8	16	10
IN	15	6	14	5
IA	0	0	0	0
KS	16	4	29	23
KY	33	15	21	18
MI	0	0	0	0
MN	0	0	0	0
MO	32	21	35	24
NE	4	0	3	5
NC	55	50	59	67
OH	10	2	7	2
PA	17	6	2	1
SD	2	0	7	2
TX	62	59	75	67
WI	0	0	0	1
17 Sts	11	6	11	9

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

Soybeans Percent Setting Pods				
	Jul 25 1999	Prev Week	Prev Year	5-Yr Avg
AL	18	5	24	15
AR	15	9	17	14
GA	29	15	24	23
IL	26	11	18	15
IN	38	22	20	11
IA	40	12	46	31
KS	14	6	29	18
KY	33	10	16	12
LA	62	42	61	46
MI	28	5	25	9
MN	16	5	36	20
MS	75	61	66	43
MO	11	6	18	12
NE	15	4	18	14
NC	10	4	9	6
OH	30	15	23	13
SC	6	4	14	13
SD	23	5	30	20
TN	26	13	16	11
19 Sts	27	12	28	19

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

Barley Percent Headed				
	Jul 25 1999	Prev Week	Prev Year	5-Yr Avg
ID	92	82	88	93
MN	98	94	99	97
MT	95	91	98	95
ND	82	62	98	91
SD	99	96	100	98
WA	100	98	100	100
6 Sts	90	80	97	94

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

Barley Percent Harvested				
	Jul 25 1999	Prev Week	Prev Year	5-Yr Avg
ID	0	NA	3	2
MN	0	NA	3	2
MT	0	NA	1	0
ND	0	NA	3	1
SD	4	NA	15	7
WA	5	NA	10	9
6 Sts	1	NA	3	2

These 6 States planted 84% of last year's barley acreage.

Crop Progress and Condition

Week Ending July 25, 1999

Cotton Percent Squaring				
	Jul 25 1999	Prev Week	Prev Year	5-Yr Avg
AL	95	92	96	94
AZ	99	97	99	100
AR	100	100	100	100
CA	90	85	54	90
GA	97	94	98	98
LA	100	100	100	100
MS	100	100	100	99
MO	100	100	100	99
NM	88	85	95	95
NC	85	75	92	88
OK	60	41	91	89
SC	95	85	98	96
TN	100	100	100	99
TX	90	82	91	91
14 Sts	93	88	92	94

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

Cotton Percent Setting Bolls				
	Jul 25 1999	Prev Week	Prev Year	5-Yr Avg
AL	72	48	77	66
AZ	77	56	86	87
AR	90	70	95	85
CA	40	25	8	51
GA	74	59	88	84
LA	87	80	97	95
MS	96	77	99	91
MO	95	90	95	76
NM	60	30	66	65
NC	60	30	59	60
OK	18	6	59	34
SC	33	20	68	62
TN	87	64	80	75
TX	45	22	65	51
14 Sts	61	41	71	65

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

Rice Percent Headed				
	Jul 25 1999	Prev Week	Prev Year	5-Yr Avg
AR	22	7	32	27
CA	5	0	0	3
LA	83	75	82	68
MS	30	22	48	49
TX	84	78	89	79
5 Sts	38	27	43	38

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

Sorghum Percent Headed				
	Jul 25 1999	Prev Week	Prev Year	5-Yr Avg
AR	79	61	82	67
CO	5	2	4	6
IL	25	2	8	10
KS	18	3	30	21
LA	96	89	81	84
MS	86	74	93	85
MO	30	14	56	36
NE	10	5	14	13
NM	8	0	1	4
OK	8	6	15	23
SD	20	10	14	11
TX	55	51	70	72
12 Sts	33	24	44	41

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

Sorghum Percent Coloring				
	Jul 25 1999	Prev Week	Prev Year	5-Yr Avg
AR	13	2	16	19
CO	0	0	0	0
IL	0	0	0	1
KS	0	0	0	0
LA	38	18	27	27
MS	28	11	31	31
MO	2	0	3	1
NE	0	0	0	0
NM	0	0	0	0
OK	2	0	4	6
SD	8	5	0	0
TX	48	44	54	58
12 Sts	19	17	21	23

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

Peanuts Percent Pegging				
	Jul 25 1999	Prev Week	Prev Year	5-Yr Avg
AL	88	77	84	80
FL	93	91	78	NA
GA	91	82	94	96
NC	90	70	79	57
OK	75	68	91	82
SC	73	60	69	48
TX	78	60	68	41
VA	95	73	93	49
8 Sts	87	74	84	NA

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

Oats Percent Headed				
	Jul 25 1999	Prev Week	Prev Year	5-Yr Avg
IA	100	100	100	100
MI	100	97	100	97
MN	99	97	99	99
NE	100	100	100	100
ND	81	61	99	87
OH	100	100	100	100
PA	100	99	100	98
SD	100	97	100	98
WI	100	100	100	99
9 Sts	95	89	100	96

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

Oats Percent Harvested				
	Jul 25 1999	Prev Week	Prev Year	5-Yr Avg
IA	58	27	59	41
MI	19	0	36	10
MN	5	0	23	9
NE	63	34	64	62
ND	0	0	3	1
OH	62	28	31	24
PA	33	15	19	19
SD	18	6	27	15
WI	6	2	29	11
9 Sts	20	8	26	16

These 9 States planted 69% of last year's oat acreage.

Spring Wheat Percent Headed				
	Jul 25 1999	Prev Week	Prev Year	5-Yr Avg
ID	93	80	90	95
MN	96	91	99	96
MT	90	89	98	96
ND	82	67	97	88
SD	99	98	100	98
5 Sts	88	80	98	93

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

Spring Wheat Percent Harvested				
	Jul 25 1999	Prev Week	Prev Year	5-Yr Avg
ID	0	NA	0	0
MN	0	NA	3	2
MT	0	NA	1	0
ND	0	NA	1	0
SD	4	NA	12	5
5 Sts	1	NA	3	1

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

Crop Progress and Condition

Week Ending July 25, 1999

Soybeans Crop Condition by Percent					
	VP	P	F	G	EX
AL	0	2	25	52	21
AR	1	7	34	44	14
GA	3	7	32	51	7
IL	2	7	29	49	13
IN	2	6	34	46	12
IA	3	6	18	47	26
KS	0	9	23	57	11
KY	0	5	26	54	15
LA	0	5	19	65	11
MI	1	9	16	51	23
MN	2	8	31	51	8
MS	1	5	19	56	19
MO	4	16	39	37	4
NE	1	3	20	62	14
NC	1	5	18	66	10
OH	3	9	32	45	11
SC	1	5	28	61	5
SD	2	3	12	57	26
TN	3	8	27	51	11
19 Sts	2	7	26	50	15
Prev Wk	2	6	25	51	16
Prev Yr	3	8	25	48	16

Sorghum Crop Condition by Percent					
	VP	P	F	G	EX
AR	1	7	38	47	7
CO	0	1	16	69	14
IL	0	11	35	52	2
KS	0	2	17	70	11
LA	0	4	25	64	7
MS	0	2	14	61	23
MO	4	10	41	41	4
NE	0	2	15	79	4
NM	0	1	50	48	1
OK	0	0	13	84	3
SD	0	0	17	62	21
TX	1	7	25	50	17
12 Sts	1	4	22	61	12
Prev Wk	1	2	19	61	17
Prev Yr	9	15	28	42	6

Rice Crop Condition by Percent					
	VP	P	F	G	EX
AR	0	2	21	52	25
CA	0	0	10	90	0
LA	0	1	19	63	17
MS	1	5	23	54	17
TX	0	0	10	38	52
5 Sts	0	2	18	59	21
Prev Wk	0	1	19	58	22
Prev Yr	1	3	35	52	9

Corn Crop Condition by Percent					
	VP	P	F	G	EX
CO	0	1	12	52	35
GA	13	15	26	37	9
IL	2	7	26	50	15
IN	2	8	34	44	12
IA	3	6	18	46	27
KS	1	4	17	64	14
KY	1	8	22	49	20
MI	1	8	12	50	29
MN	1	6	21	57	15
MO	5	15	39	36	5
NE	1	5	16	57	21
NC	1	6	29	54	10
OH	6	12	34	38	10
PA	17	36	25	19	3
SD	2	2	12	54	30
TX	1	2	13	60	24
WI	1	2	10	47	40
17 Sts	2	7	21	50	20
Prev Wk	2	6	20	51	21
Prev Yr	3	7	22	49	19

Cotton Crop Condition by Percent					
	VP	P	F	G	EX
AL	0	2	22	58	18
AZ	1	14	32	38	15
AR	0	3	26	49	22
CA	0	0	10	90	0
GA	2	6	23	50	19
LA	0	2	27	54	17
MS	0	3	19	57	21
MO	2	14	30	43	11
NM	1	6	32	45	16
NC	1	9	22	61	7
OK	0	0	39	53	8
SC	1	4	33	55	7
TN	1	3	26	53	17
TX	4	16	35	36	9
14 Sts	2	10	28	48	12
Prev Wk	4	10	26	48	12
Prev Yr	13	20	32	30	5

Spring Wheat Crop Condition by Percent					
	VP	P	F	G	EX
ID	0	1	12	70	17
MN	6	15	40	34	5
MT	5	15	27	46	7
ND	1	5	23	56	15
SD	1	3	16	61	19
5 Sts	3	8	25	52	12
Prev Wk	2	6	23	54	15
Prev Yr	2	5	29	52	12

Oats Crop Condition by Percent					
	VP	P	F	G	EX
IA	1	6	19	51	23
MI	1	5	18	54	22
MN	3	12	31	48	6
NE	0	1	11	68	20
ND	1	2	24	60	13
OH	1	5	45	44	5
PA	2	18	40	34	6
SD	0	1	12	68	19
WI	0	2	14	61	23
9 Sts	1	5	22	56	16
Prev Wk	2	4	21	57	16
Prev Yr	1	5	29	53	12

Peanuts Crop Condition by Percent					
	VP	P	F	G	EX
AL	0	1	15	61	23
FL	0	0	15	66	19
GA	0	4	17	56	23
NC	0	1	13	73	13
OK	0	0	27	62	11
SC	0	5	26	56	13
TX	0	5	19	52	24
VA	0	0	5	69	26
8 Sts	0	3	17	58	22
Prev Wk	0	3	17	56	24
Prev Yr	6	15	32	40	7

Barley Crop Condition by Percent					
	VP	P	F	G	EX
ID	0	2	10	68	20
MN	8	19	39	30	4
MT	6	15	33	38	8
ND	0	4	26	54	16
SD	0	1	8	73	18
WA	9	26	44	21	0
6 Sts	3	10	28	47	12
Prev Wk	3	10	27	50	10
Prev Yr	1	7	30	48	14

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

* - Revised

State Agricultural Summaries

These summaries, issued weekly through the summer growing season, provide brief descriptions of crop and weather conditions important on a national scale. More detailed data are available in Weather and Crop Bulletins published each Monday by NASS State Statistical Offices in cooperation with the National Weather Service. The crop weather reports are also available on the Internet through the NASS Home Page on the World Wide Web at <http://www.usda.gov/nass/> or from JAWF at <http://www.usda.gov/oce/waob/jawf>.

ALABAMA: Days suitable for fieldwork 5.7. Topsoil 3% very short, 18% short, 70% adequate, 9% surplus. Most of the state experienced a hotter, drier week. Corn 74% doughed, 50% dented, 67% 1998, 64% avg.; 17% mature, 34% 1998, 24% avg.; 2% poor, 17% fair, 46% good, 35% excellent. Pasture feed 3% poor, 18% fair, 58% good, 21% excellent. Livestock 1% poor, 13% fair, 50% good, 36% excellent.

ALASKA: Days suitable for fieldwork 1.5. Topsoil 20% short, 80% adequate. Subsoil 30% short, 70% adequate. Cool, cloudy, rainy conditions slowed the producers hay harvest. Daytime high temperatures were mostly in the sixties with lows mostly in the forties. Oats 5% boot earlier, 70% headed, 25% in dough. Barley, 50% headed, 50% in dough. Oat 5% poor, 15% fair, 60% good, 20% excellent. Barley 10% poor, 30% fair, 40% good, 20% excellent. Hay harvested 75%. Potato plants 30% bloomed, 19 in. height; 30% fair, 60% good, 10% excellent. Crop growth 10% slow, 85% moderate, 5% rapid. Wind damage to small grain fields 85% none, 5% light, 5% moderate, 5% severe. Major activities included: Harvesting lettuce, greens, radishes, squash, broccoli, peas, beets, Chinese vegetables, weed control, cutting hay, harvesting hay when conditions allowed, machinery repair.

ARIZONA: Widespread rains throughout the State last week continued to improve pasture conditions. Range, pasture feed 6% very poor, 45% poor, 34% fair, 15% good. Cotton squaring equal to 1998 but is slightly behind the average. As of July 25, 99% squared, the same as the 1998, 100% avg.; 77% setting bolls, 86% 1998, 87% avg.; 1% very poor, 14% poor, 32% fair, 38% good, 15% excellent. Alfalfa harvest 34% not being harvested, 12% light, 28% moderate, 26% active; 5% poor, 16% fair, 65% good, 14% excellent. Central producers shipped a variety of fruits, vegetables, melons last week. Grape shipments included beauty, black, flame seedless, thompsons. Vegetable shipments consisted of parsley. Melon shipments included cantaloupe, honeydew, watermelons. Eastern producers shipped greenhouse tomatoes. Western producers harvested a variety of grapes, melons. Melon shipments included cantaloupes, honeydew, watermelons while grape shipments included beauty seedless, flame seedless, thompsons.

ARKANSAS: Days suitable for fieldwork: 7. Topsoil moisture 13% very short, 52% short, 34% adequate, 1% surplus. Livestock were reported in good condition. Temperatures for the week were hot, dry. Most crops were reported in good condition. The main farm activities: Fertilizing cotton, corn, rice, warm season forages, finishing harvesting wheat, hay. Other activities: Irrigating corn, soybeans, cotton, sorghum, rice, cultivating cotton, spraying cotton for boll weevils, bullworms, fields for insects, weeds, putting down lime, scouting for sheath blight in rice, spraying of rice, cotton, soybean fields for weeds, applying mid-season nitrogen applications to rice, tree fruit, small fruit harvesting, treating cattle for external parasites for summer insect control by dusting, ear tagging cattle, vaccinating cattle, weaning calves. Cotton 100% squared, 90% setting bolls, 3% poor 26% fair 49% good 22% excellent; Soybeans 48% bloomed, 15% setting pods, 1% very poor 7% poor 34% fair 44% good 14% excellent; Sorghum 79% headed, 13% turning color, 1% very poor 7% poor 38% fair 47% good 7% excellent; Wheat 100% harvested; Oats 100% harvested; Alfalfa 27% fair 67% good 6% excellent; Other Hay 5% poor, 35% fair, 50% good, 10% excellent; Range, pastures, 7% poor 36% fair 49% good 8% excellent.

CALIFORNIA: Field activities progressed normally under ideal conditions in most areas. Grain harvests of wheat, barley, oats were virtually complete except at higher elevations. Harvested small grain, oat hay fields were burned or stubble was disced. Rice weed treatments were winding down; fields continued to exhibit excellent growth. Cotton fields were blooming, squaring, setting bolls in the San Joaquin, Sacramento valleys. Cotton growers were actively spraying for armyworms, leafhoppers, lygus, mites, fields were still being thinned, weeded. Seed alfalfa was treated for aphids, lygus, weevils in the San Joaquin Valley. Black eye beans were maturing rapidly, drying for harvest. Sunflowers were sprayed for head moth. Safflower bloom was approximately one half complete in the Sacramento Valley. Old crop sugar beet harvest continued in the San Joaquin Valley. Corn silage was harvested in southern counties. Alfalfa, sudangrass were cut for hay, greenchopped. Some alfalfa fields were treated for worms. Grape growers were applying

sulfur, insecticides to control powdery mildew, insects. The harvest of grapes for fresh use continued in the San Joaquin Valley. Early pickings included Perlette, Flame Seedless varieties. Fresh market grape harvest in the Coachella Valley was nearing completion. Other cultural activities: Included weed control, irrigation of vineyards, orchards. Harvest of apricots, nectarines, freestone peaches, plums continued. Good quality was noted. Apple trees were treated for codling moth. Picking of early variety apples began. Olive trees exhibited good set, were maturing well. Bartlett pear harvest began in the Sacramento river delta area. Tree limbs in almond orchards were supported to bear the heavy nut set. Pistachio trees were sprayed with fungicides. Walnut trees were treated for blight. Valencia oranges, lemons were picked in southern areas. Some strawberry fields have been plowed under, were being prepared for the next planting. Processing tomato harvest was underway in Fresno County. The crop was beginning to color in Tulare County. Hot weather forced growers to spray a few processing tomato fields with white wash to prevent sunburn. Less mature tomato fields were treated for tomato fruitworm, stink bugs, cabbage looper, thrips. Harvest of fresh market tomatoes was very active. All types of lettuce were harvested. Various melons were harvested in both the Imperial Valley, the San Joaquin Valley. Potatoes were being dug in the Stockton delta area. Garlic harvest was in full swing with smaller, good quality cloves. However, some of the later fields were still being treated for rust. Eggplants, peppers, other summer vegetables were thriving, but the heat has caused some blossom drop, may also affect the set. Among the crops harvested were squash, snap beans, broccoli, cauliflower, box Chay, leeks, onions, sweet corn. Producers irrigated pastures, both in the valleys, at higher elevations, were in good to excellent condition. Non-irrigated, higher elevation pastures were drying in some areas, but cool temperatures had slowed the maturation. High grasshopper populations on some foothill pastures in the central area were still causing loss of rangeland grass. Livestock were in generally good condition; cooler temperatures relieved the stress on milk cows. Bees were pollinating central areas seed alfalfa, melon fields.

COLORADO: Days suitable for fieldwork 5.6. Topsoil 7% very short, 34% short, 57% adequate, 2% surplus. Subsoil 5% very short, 37% short, 55% adequate, 3% surplus. Seasonal weather patterns prevailed last week with warm temperatures, widely scattered, afternoon thunderstorms. The weather allowed producers to make excellent progress in harvesting small grains. Winter wheat 99% ripe, 98% 1998, 96% avg. Spring wheat 56% turning color, 58% 1998, 47% avg.; 15% harvested, 11% 1998, 7% avg.; 5% poor, 19% fair, 53% good, 23% excellent. Spring barley 72% turning color, 75% 1998, 64% avg.; 10% harvested, 14% 1998, 13% avg.; 4% poor, 16% fair, 50% good, 30% excellent. Oats 66% turning color, 69% 1998, 67% avg.; 33% harvested, 32% 1998, 35% avg.; 2% poor, 27% fair, 60% good, 11% excellent. Dry onions 3% poor, 11% fair, 61% good, 25% excellent. Sugar beets 5% poor, 10% fair, 48% good, 37% excellent. Dry beans 37% flowered, 42% 1998, 42% avg.; 1% poor, 14% fair, 55% good, 30% excellent. Summer potatoes 1% poor, 5% fair, 70% good, 24% excellent. Fall potatoes 7% poor, 12% fair, 42% good, 39% excellent. Alfalfa 48% 2nd cutting, 44% 1998, 49% avg.; 4% poor, 22% fair, 55% good, 19% excellent. Pasture, range feed in mostly good condition.

DELAWARE: Days suitable for fieldwork 6.0. Topsoil 5% very short, 77% short, 18% adequate. Subsoil 3% very short, 79% short, 18% adequate. Winter wheat 98% harvested, 100% 1998, 99% avg. Field corn 16% poor, 30% fair, 43% good, 11% excellent; 74% silked, 68% 1998, 61% avg.; 14% dough, 13% 1998, 10% avg. Soybeans 14% poor, 29% fair, 53% good, 4% excellent; 23% bloomed, 18% 1998, 31% avg.; 11% setting pods, 9% 1998, 6% avg. Sorghum 1% poor, 45% fair, 51% good, 3% excellent; 13% headed, 17% 1998, 13% avg. Sweet corn 22% harvested, 24% 1998, 30% avg. Snap beans 39% harvested, 21% 1998, 32% avg. Cantaloupes 13% harvested, 15% 1998, 18% avg. Watermelons 13% harvested, 19% 1998, 12% avg. Cucumbers 25% harvested, 35% 1998, 40% avg. Lima beans 20% harvested, 19% 1998, 8% avg. Tomatoes 18% harvested, 11% 1998, 16% avg. Potatoes 33% harvested, 28% 1998, 27% avg. Clover, other hay 75% 2nd cutting, 94% 1998, 80% avg.; 65% 3rd cutting, 59% 1998, 21% avg. Alfalfa hay 90% 2nd cutting harvested, 97% 1998, 92% avg.; 58% 3rd cutting harvested, 35% 1998, 22% avg. Hay supplies 38% short, 62% adequate. Pasture feed 3% very poor, 41% poor, 28% fair, 28% good. Apples 16% fair, 75% good, 9% excellent. Peaches 21% fair, 72% good, 7% excellent; 26%

harvested, 27% 1998, 24% avg. Activities: Hay, vegetable harvests continue. Maintaining irrigation equipment.

FLORIDA: Topsoil moisture, Panhandle, mostly adequate, pockets of short, surplus supplies. Peninsula topsoil moisture short to adequate, a few localities very short. Afternoon, evening storms brought varying amounts of moisture to many localities. Rainfall, major stations, ranged from none at West Palm Beach, Jacksonville to about 3.50 in. Orlando. Temperatures mostly 2° above normal. Daytime highs mostly 90s; nighttime lows mostly 70s. Cotton, soybean, sugarcane, tobacco growth mostly normal. Peanut 15% fair, 66% good, 19% excellent. Peanuts pegged 93%. Tomato planting active, Quincy. Bell pepper planting continues, southeastern coast. Land preparation for vegetable planting active, central, southern Peninsula. Lots of rain all citrus areas, some excessive moisture, abundant new growth. New crop fruit, varying sizes, making good progress. Caretakers cutting cover crops, spraying, fertilizing, herbiciding, pushing, burning dead trees, some resetting in larger groves. Pasture feed 30% fair, 65% good, 5% excellent. Condition of cattle 15% fair, 80% good, 5% excellent. Condition of pastures, cattle decreased past week due to dry conditions. Hay making continued Panhandle between rain showers, increased east central. Northeast pastures dry, while west central pasture improved due to recent showers.

GEORGIA: Days suitable for field work 5.7. Soil moisture 3% very short, 18% short, 72% adequate, 7% surplus. Corn 79% dent, 77% 1998, 79% avg.; 41% mature, 32% 1998, 36% avg.; 4% harvested for grain, 3% 1998, 3% avg. Hay 1% very poor, 3% poor, 27% fair, 59% good, 10% excellent. Peanuts 99% blooming, 98% 1998, 99% avg. Sorghum 3% very poor, 8% poor, 34% fair, 47% good, 8% excellent. Tobacco 7% very poor, 15% poor, 36% fair, 40% good, 2% excellent; 42% harvested, 29% 1998, 47% avg. Watermelons 92% harvested, 93% 1998, 90% avg. Apples 14% fair, 56% good, 30% excellent; 1% harvested, 2% 1998, 2% avg. Peaches 83% harvested, 88% 1998, 92% avg. Pecans 1% very poor, 4% poor, 29% fair, 53% good, 13% excellent. Temperatures for the week were in the mid to high 90's, which is well above normal. Scattered afternoon showers, thunderstorms were also part of the weather pattern for the week. The showers did bring temporary relief from the heat. Despite the above normal temperatures, crop conditions remained stable. Corn development continues ahead of 1998 and average. Corn condition is fair to good. Soybean progress is ahead of 1998, five year average. Soybean condition is fair to mostly good. Cotton condition was fair to mostly good. Insect pressure was on the increase in the cotton crop. Development of the crop was slightly behind normal. Tobacco harvesting was active during the week, but behind normal. Tobacco condition was fair to good. Peanut development continued at a normal pace. Growers were kept busy during the week spraying fungicides, insecticides as well as irrigating the peanut crop. Peanut condition was mostly good to excellent. Watermelon harvest was winding down. Apple condition was mostly good to excellent. Apple harvesting just started. Harvesting of peaches was active last week, but remains behind 1998 and average. Weeds were becoming a problem in most row crops. Other activities: Include weed control, spraying fungicides, insecticides, harvesting vegetables, routine care of livestock and poultry.

HAWAII: Crop made fair progress under variable weather conditions. Trade winds brought light to moderate showers to windward, interior sections of most islands. Leeward areas were generally dry. Prolonged dry conditions are hampering crop development in areas dependent solely on rainfall. Banana orchards were in good condition due to favorable mixture of sunshine, showers. Most papaya orchards were in good to fair condition. Fields infected with the papaya ring spot virus were in poor condition. Head cabbage plantings were in fair to good condition. An increase in insect pressure was noticed. Harvesting of sweet corn, watermelons steady; crop conditions fair to good. Ginger root plantings made good progress.

IDAHO: Days suitable for fieldwork 6.7. Topsoil, 6% very short, 38% short, 56% adequate. Fourth consecutive week of minimal precipitation. Dry land cereals, summer range need rain. Irrigation 65% excellent, 25% good, 9% fair, 1% poor. Alfalfa hay 52% 2nd cutting, 43% 1998, 39% avg.; 3% 3rd cutting, 1% 1998. Oats 94% headed. Cherries 97% harvested, 100% 1998, 99% avg. Mint 5% harvested, 7% 1998, 15% avg. Peaches 2% harvested, 2% 1998, 12% avg. Dry Peas 9% harvested, 13% 1998, avg. 8%. Potatoes 12" high 97%, 93% 1998, 95% avg.; 84% closing middles, 74% 1998, 80% avg. Barley 92% headed, 88%, 1998 93% avg.; 37% turning color. Spring wheat 93% headed, 90% 1998, 95% avg.; 37% turning color. Winter wheat 1% harvested, 4% 1998, 5% avg.; 78% turning color. Activities: Irrigating, spraying weeds, harvesting, monitoring for disease, attending field tours.

ILLINOIS: Days suitable for fieldwork 6.1. Topsoil 16% very short, 49% short, 34% adequate, 1% surplus. The recent heat wave across the state,

joined with prolonged dryness in some areas, are causing stress on livestock, crop conditions to worsen. Oat harvest is staying ahead of schedule. Other activities: Included hauling grain, baling hay, straw, mowing weeds, scouting fields, spraying pesticides. Corn 1% dented, 1% 1998, 1% avg. Oats 99% turning yellow, 98% 1998, 93% avg. Oats 89% ripe, 83% 1998, 67% avg. Oats 52% harvested, 38% 1998, 33% avg. Alfalfa 94% 2nd cut, 87% 1998, 79% avg. Alfalfa 19% 3rd cut, 15% 1998, 10% avg. Alfalfa condition 1% very poor, 6% poor, 31% fair, 54% good, 8% excellent.

INDIANA: Days suitable for fieldwork 6.1. Topsoil 21% very short, 44% short, 34% adequate, 1% surplus. Subsoil 14% very short, 49% short, 37% adequate, 0% surplus. Continued hot weather, several 90° days. Showers helped some areas. Major crops under stress. Corn, soybean condition declined. Very dry conditions, northern region. Wheat harvest complete. Pastures, hay crops deteriorating rapidly. Second cutting alfalfa complete, 80% 1998, 67% avg. Livestock under stress. Activities: Harvesting wheat, irrigating crops, spraying, topping tobacco, selling grain, mowing roads, pastures, baling hay, straw, harvesting vegetables, repairing equipment, monitoring fields for insects, attending fairs, caring for livestock.

IOWA: Days suitable for field work 3.6. Topsoil 6% very short, 19% short, 57% adequate, 18% surplus. Subsoil 2% very short, 16% short, 64% adequate, 18% surplus. Heavy rains, wind, hail knocked down crops left some acres flooded. Some fields replanted for third time were lost. Crops looking good in areas not hit by flooding. Spotty rains in southern districts left most areas dry; crops beginning to show signs of heat stress. Potato leaf hoppers causing damage to alfalfa in south central, south eastern areas. Corn 88 tasseled%, 92% 1998, 70% avg.; 73% silken, 79% 1998, 54% avg.; 9% milk stage, 13% 1998, 10% avg. Corn 3% very poor, 6% poor, 18% fair, 46% good, 27% excellent. Soybeans 87% blooming, 88% 1998, 78% avg.; 40% setting pods, 46% 1998, 31% avg. Soybean 3% very poor, 6% poor, 18% fair, 47% good, 26% excellent. Oats 58% harvested, 59% 1998, 41% avg.; 1% very poor, 6% poor, 19% fair, 51% good, 23% excellent. Winter 97% wheat harvested, 87% 1998, 85% avg. Hot, humid weather stressed livestock; some losses occurred due to high heat. Some pinkeye reported, especially in west central, south central districts. Range, pasture condition: 3% very poor, 11% poor, 27% fair, 45% good, 14% excellent. 75% 2nd cutting of alfalfa, 69% 1998 avg.; 64% 2nd cutting, 45% clover hay, 29% 1998, 27% avg. Hay 1% very poor, 6% poor, 22% fair, 52% good, 19% excellent.

KANSAS: Days suitable for fieldwork 6.4. Topsoil moisture 5% very short, 30% short, 64% adequate, 1% surplus. Subsoil moisture 14% short, 82% adequate, and 4% surplus. Much of the state has had several days of temperatures in the upper 90's, with very little rainfall. In some areas, crops are beginning to show signs of stress, are in need of rain, cooler weather. Sunflower 1% very poor, 2% poor, 20% fair, 64% good, 13% excellent. Sunflowers blooming 15%, 40% 1998, 2nd 100% cutting alfalfa, 97% 1998, 97% avg. 3rd 30% cutting alfalfa, 48% 1998, 34% avg. Insect pressure is increasing in crops across the state. Insect infestation 9% moderate, 32% light, 59% no infestation. Common insects reported include corn borers, corn rootworms, grasshoppers, greenbugs, aphids, alfalfa weevils. Disease infestation remains at mostly minimal levels. Major field activities: Irrigating, cultivating row crops, working wheat stubble, summer fallow, putting up hay. Hay, forage supplies 1% short, 86% adequate, 13% surplus. Livestock producers continue to move cattle from short-season pastures. Pinkeye, flies remain a problem in some areas. Stock water supplies are mostly adequate to surplus.

KENTUCKY: Days suitable for fieldwork 5.4. Topsoil 31% very short, 46% short, 22% adequate, 1% surplus. Subsoil moisture 35% very short, 39% short, 25% adequate, 1% surplus. Above normal temperature dominated the weather throughout state. Rainfall provided much needed moisture to some areas in the Eastern sections of the state while only scattered showers fell in other areas. Black shank remains leading problematic disease in burley tobacco, with reports of blue mold in several areas. Burley tobacco 53% blooming or beyond, topped 27%. Dark tobacco was 57% topped. Tobacco 5% very poor, 13% poor, 32% fair, 40% good, 10% excellent. Pastures 10% very poor, 20% poor, 44% fair, 24% good, 2% excellent. Farmers continue to feed hay to livestock because of the declining pasture conditions. Hay 8% very poor, 16% poor, 43% fair, 27% good, 6% excellent.

LOUISIANA: Days suitable for fieldwork 5.6. Soil moisture 1% very short, 24% short, 63% adequate, 12% surplus. Corn 4% poor, 24% fair, 59% good, 13% excellent; 99% dough stage, 100% 1998, 97% avg.; 56% mature, 75% 1998, 51% avg.; 2% harvested, 7% 1998, 3% avg. Corn harvest was in full swing with high yields being reported. Cotton irrigation was underway. Hay 100% 1st cutting, 97% 1998, 98% avg.; 20% final cutting, 23% 1998, 34% avg. Hay producers continued with harvest. Peaches 100% harvested,

87% 1998, 81% avg. Rice 34% ripe, 30% 1998, 19% avg.; 18% harvested, 11% 1998, 8% avg. Sorghum 1% ripe, 3% 1998, 3% avg. Sweet potatoes 1% harvested, 0% 1998, 1% avg. Sugarcane 1% poor, 9% fair, 52% good, 38% excellent. Sugarcane growth was excellent due to great growing conditions. Livestock 2% poor, 22% fair, 61% good, 15% excellent. Vegetables 2% very poor, 8% poor, 34% fair, 51% good, 5% excellent.

MARYLAND: Days suitable for fieldwork 6.0. Subsoil 28% very short, 40% short, 32% adequate. Topsoil 38% very short, 49% short, 13% adequate. Winter wheat 97% harvested, 99% 1998, 97% avg. Rye 92% harvested, 98% 1998, 92% avg. Corn 10% very poor, 18% poor, 42% fair, 27% good, 3% excellent; 70% silked, 68% 1998, 58% avg.; 23% dough, 20% 1998, 11% avg. Soybeans 3% very poor, 14% poor, 33% fair, 48% good, 2% excellent; 45% bloomed, 33% 1998, 28% avg.; 16 setting pods, 17% 1998, 7% avg. Sorghum 35% poor, 37% fair, 28% good; 20% headed, 44% 1998, 16% avg. Tobacco 4% very poor, 14% poor, 45% fair, 37% good; 45% bloomed, 44% 1998, 42% avg. Snap beans 39% harvested, 46% 1998, 36% avg. Cucumbers 48% harvested, 44% 1998, 47% avg. Potatoes 57% harvested, 45% 1998, 53% avg. Sweet Corn 39% harvested, 46% 1998, 36% avg. Tomatoes 26% harvested, 20% 1998, 22% avg. Cantaloupes 34% harvested, 42% 1998, 40% avg. Lima beans 10% harvested, 15% 1998, 5% avg. Watermelons 17% harvested, 24% 1998, 21% avg. Peaches 35% fair, 52% good, 13% excellent; 21% harvested, 39% 1998, 20% avg. Apples 1% poor, 22% fair, 61% good, 16% excellent. Clover, other hays 78% 2nd cutting harvested, 74% 1998, 62% avg; 35% 3rd cutting, 44% 1998, 14% avg. Alfalfa 33% 3rd cutting harvested, 26% 1998, 22% avg. Pasture feed 20% very poor, 35% poor, 36% fair, 9% good. Hay 7% very short, 46% short, 47% adequate. Activities: Hay, vegetable harvests continue.

MICHIGAN: Days suitable for fieldwork 5.0. Topsoil 8% very short, 20% short, 67% adequate, 5% surplus. Subsoil 9% very short, 27% short, 60% adequate, 4% surplus. Hay 3% poor, 18% fair, 50% good, 29% excellent. Winter wheat 1% very poor, 3% poor, 12% fair, 59% good, 25% excellent. All hay 58% 2nd cutting 58%, 72% 1998, 51% avg. Corn height 69", 58" 1998, 59" avg. Dry beans 56% blooming, 40% 1998, 32% avg. Dry beans 13% setting pods, 9% 1998, 2% avg. Oats 93% turning, 88% 1998, 67% avg. Heat, humidity the norm for week with highs in nineties. Southeastern part much needed rain came through. Rest of State has less need for moisture since rains have stalled oat, hay harvesting. Timely rains, above normal temperatures have kept progress of field crops ahead of normal. Second alfalfa hay cutting was slowed due to rains. Soybeans in generally good condition with concern for white mold. Hot weather, rain have kept corn progress well ahead of normal. Wheat harvest was nearly complete with good yield, quality reported. Dry beans in good condition except for some pressure from leafhoppers, low lying spots stunted from recent saturating rains. Some sugar beet fields showing enough damage from cercospora leaf spot damage to warrant treatment. Early planted potato fields bulking well. Harvest of cabbage continued. Cantaloupe harvest began. Carrot growth was slowed by high temperatures. Hand-harvest of cucumbers for pickles started. Early melons were being harvested. Pea harvest beginning to wind down with good yields reported. Peppers continued to develop well, fruit set appeared heavier than unusual. Snap beans developing rapidly. Squash yields very good. Sweet corn harvest in full swing. Processing tomatoes continued to look good. Tart cherry harvest in west central nearly complete. Harvest continued in northwestern areas, should near completion this week. Apples 2.50 in. diameter. Harvest of early apples has begun in Southwest. Peaches 2.25 to 2.5 in. diameter. Japanese plum harvest has started. Concord grapes in Southwest were at cluster tightening. Blueberry harvest continued. Sweet cherry harvest finished in the northwest.

MINNESOTA: Days suitable for fieldwork 4.6. Topsoil 3% very short, 8% short, 68% adequate, 21% surplus. Corn 6% milking, 13% 1998, 6% avg. Spring Wheat 53% turning ripe, 77% 1998, 49% avg. Oats 76% turning ripe, 89% 1998, 73% avg. Barley 45% turning ripe, 78% 1998, 50% avg. Winter Wheat 4% harvested, 16% 1998, 12% avg. Rye 17% harvested, 42% 1998, 28% avg. Pasture feed 3% very poor, 7% poor, 27% fair, 55% good, 8% excellent. Sugar beets 2% very poor, 6% poor, 29% fair, 51% good, 12% excellent. Sunflowers 7% very poor, 21% poor, 33% fair, 33% good, 6% excellent. Dry beans 2% very poor, 27% poor, 28% fair, 35% good, 8% excellent. Heavy downpours were widespread along the southern border, scattered elsewhere. Many producers had flooding in the same low spots that had been replanted because of earlier heavy rains. More rain was urgently needed in parts of the Central and East Central Districts. Small grain harvest will not go full scale for at least a week or two in major areas.

MISSISSIPPI: Days suitable for fieldwork 6.4. Soil moisture 6% very short, 41% short, 51% adequate, 2% surplus. Corn 90% dough, 94% 1998, 85% avg.; 70% dent, 75% 1998, 53% avg.; 9% mature, 15% 1998, 9% avg.; 22% silage harvested, 51% 1998, 26% avg.; 4% poor, 15% fair, 59% good, 22%

excellent. Cotton 96% setting bolls, 99% 1998, 91% avg.; 3% poor, 19% fair, 57% good, 21% excellent. Rice 30% heading, 48% 1998, 49% avg.; 1% very poor, 5% poor, 23% fair, 54% good, 17% excellent. Sorghum 86% heading, 93% 1998, 85% avg.; 28% turning color, 31% 1998, 31% avg.; 2% poor, 14% fair, 61% good, 23% excellent. Soybeans 93% blooming, 91% 1998, 72% avg.; 75% setting pods, 66% 1998, 43% avg.; 1% very poor, 5% poor, 19% fair, 56% good, 19% excellent. Sweet potatoes 1% poor, 20% fair, 74% good, 5% excellent. Hay (warm-season) 69% harvested, 67% 1998, 69% avg. Watermelons 68% harvested, 67% 1998, 67% avg.; 13% fair, 62% good, 25% excellent. Cattle, 9% poor, 16% fair, 58% good, 17% excellent. Pasture feed 8% poor, 23% fair, 52% good, 17% excellent. Rain is needed in many parts of the State where continued warm temperatures have begun to stress some crops. Many reporters indicate light insect pressure.

MISSOURI: Days suitable for fieldwork 6.8. Topsoil 29% very short, 44% short, 26% adequate, 1% surplus. Precipitation 0.14 in. isolated showers provided little relief. Hot dry weather stressing crops, pasture and reducing soil moisture supplies. Soybeans 46% blooming, 11% setting pods. Sorghum 30% headed and 2% coloring, 5% coloring in Bootheel. Alfalfa 89% 2nd crop cut, 89% 1998, 84% avg.; 15% 3rd crop cut, 17% 1998, 12% avg. Other hay 88%, same as year ago and avg. Pasture feed 8% very poor, 22% poor, 39% fair, 29% good, 2% excellent.

MONTANA: Days suitable for fieldwork 6.2. Topsoil 26% very short, 50% short, 24% adequate. Subsoil 27% very short, 47% short, 25% adequate, 1% surplus. Majority of the State did not receive precipitation. Sugar beets 4% fair, 46% good, 50% excellent. Winter wheat 96% turning, 88% 1998, 88% avg.; 58% ripe, 32% 1998, 22% avg.; 1% very poor, 10% poor, 29% fair, 50% good, 10% excellent. Spring wheat 27% turning, 66% 1998, 42% avg.; 2% ripe, 3% 1998, 1% avg. Barley 43% turning, 49% 1998, 39% avg.; 4% ripe, 5% 1998, 3% avg. Oats 23% turning, 54% 1998, 38% avg.; 3% ripe, 16% 1998, 6% avg.; 3% very poor, 6% poor, 20% fair, 55% good, 16% excellent. Corn 2% fair, 52% good, 46% excellent. Potatoes 1% poor, 19% fair, 44% good, 36% excellent. Dry beans 4% fair, 72% good, 24% excellent. Alfalfa 94% 1st cutting, 92% 1998, 92% avg.; 9% 2nd cutting 9%, 11% 1998, 8% avg. Other hay 79% harvested, 66% 1998, 72% avg.

NEBRASKA: Days suitable for fieldwork 5.4. Topsoil 2% very short, 33% short, 61% adequate, 4% surplus. Subsoil 1% very short, 18% short, adequate. Temperatures 1 to 6° above normals. Precipitation averaged from ten hundredths in the east central district to nearly two inches in the north central district. Corn 1% very poor, 5% poor, 16% fair, 57% good, 21% excellent. Irrigated corn 78%, dryland corn 78% in good or excellent; silking 77%, 84% 1998, 61% avg. Some producers have light development of gray leaf spot lesions, rust, eye spot disease in some corn hybrids. Soybeans blooming was 73%, 78% 1998, 64% avg.; 15% setting pods, 18% 1998, 14% avg.; 1% very poor, 3% poor, 20% fair, 62% good, 14% excellent. Sorghum 10% headed, 14% 1998, 13% avg.; 2% poor, 15% fair, 79% good, 4% excellent. Dry beans 1% very poor, 5% poor, 16% fair, 70% good, 8% excellent; blooming 63%, 38% 1998, 51% avg. Wheat harvest 93%, 89% 1998, 80% avg. Wheat harvest was slowed where rains were received. Oats 63% harvest, 64% 1998, 62% avg. Second cutting of alfalfa 88%, 83% 1998, 78% avg.; 1% very poor, 1% poor, 18% fair, 68% good, 12% excellent. Range, pasture feed 1% very poor, 4% poor, 23% fair, 53% good, 19% excellent. Wild hay 1% poor, 13% fair, 67% good, 19% excellent. Pastures, as well as other dryland crops, were under some stress due to hot temperatures. Producer activities; irrigating, cutting hay, moving grain, marketing grain, livestock, harvesting crops.

NEVADA: Weather in the Silver State was dry and temperatures were slightly below normal. No precipitation was reported. In spite of this, irrigation water supply remains adequate in most parts of the State. Slightly cooler than normal temperatures were beneficial to pasture, range, hay, row crops. Majority of pasture, range was reported to be in good condition. Second cutting of alfalfa is nearing completion throughout the State. Dry weather has left the hay crop in good condition. Garlic harvest began in Douglas County. Over half of the grain crop had begun turning color, and was also in good condition. Corn had tasseled and sweet corn was ready for picking. Main farm and ranch activities: irrigating, haying, checking livestock, applying pesticides.

NEW ENGLAND: Days suitable for fieldwork 6.5. Topsoil 39% very short, 43% short, 18% adequate. Subsoil 37% very short, 40% short, 23% adequate. Pasture feed 13% very poor, 37% poor, 39% fair, 11% good. Maine potatoes <5% harvested, 0% 1998; condition excellent to good. Massachusetts potatoes <5% harvested, 5% 1998, 5% avg.; condition good. Rhode Island potatoes 5% harvested, 0% 1998; condition fair. Oats in Maine <5% harvested, 0% 1998; condition good to excellent. Barley in Maine 100% emerged, condition excellent to good. Field corn 100% emerged, condition

good to excellent. Sweet corn 25% harvested, 10% 1998, 10% average; condition good to fair. Shade tobacco 25% harvested, 50% 1998, 25% avg.; condition good. Broadleaf tobacco 5% harvested, 15% 1998, 5% avg.; condition good. First cut hay 95% harvested, 90% 1998, 95% avg.; condition good to fair. Second cut hay 45% harvested, 40% 1998, 30% avg.; condition good to fair. Third cut hay <5% harvested, 0% 1998, 0% avg.; condition fair to poor. Apples set average, size average, condition good. Peaches 10% harvested; set average, size average to below average, condition fair. Pears set average, size below average to average, condition fair to poor. Strawberries 100% harvested, 100% 1998, 99% average, set average, size average, condition good. Cranberries 99% petal fall, condition good to excellent. Highbush blueberries 25% harvested, 35% 1998, 30% average, set average, size average, condition good to fair. Wild Blueberries <5% harvested, 0% 1998, 0% average; set average, size average, condition good. Major farm activities: Harvesting vegetables including sweet corn, tomatoes; fruit including blueberries, raspberries, peaches; hay, tobacco. Irrigating where available. Monitoring for pest, applying pesticides where required. Spreading manure and mowing weeds. Preparing equipment, storage units for upcoming potato, barley, oat, silage corn harvests.

NEW JERSEY: Days suitable for fieldwork 7. Temperatures averaged much above normal. Extremes 60°; 103°. Rainfall 0.23 in. north, 0.36 in. central, 0.42 in. south. Heaviest 24 hour total was 0.62 in. at Pomona on the 22nd to the 23rd. Estimated soil moisture in percent of field capacity, this past week 58% north, 47% central, 44% south. Four inch soil temperatures 78° north, 78° central, 77° south. Harvest of wheat, barley, rye has been ahead of schedule across the State due to the extremely dry, hot weather conditions. Some fields in northern areas are still standing. Quality has been rated between good to fair. Corn is between good, fair condition in the south, between fair, poor in central, northern areas. Some fields are starting to tassel before they reach 30 in. height. Most fields are in the silk stage in south, central areas. Condition of single crop soybeans is similar to corn and most fields are in the bloom stage. Double crop soybean fields have been rated between fair and poor condition. Sporadic growth is occurring in some areas. Condition of the second hay crop is in poor condition. A second cutting is not occurring or expected in some areas. Pastures are very dry across the State. Cattle continue to suffer heat stress, supplemental feeding is occurring extensively. Most irrigated vegetable fields are in good condition. Non-irrigated vegetable fields are in poor condition. Some irrigation may occur soon in sweet potato fields, which are usually not irrigated. Harvest of early snap beans, early cabbage is winding down in the southern counties. Harvest of other vegetables such as tomatoes, squash, sweet corn, peppers, cucumbers, eggplant, potatoes continues. Good quality has been reported. Although some fields are being prepared for seeding of fall vegetables, some farmers are waiting to see if the conditions improve within the next few weeks. Volume of peaches from southern area is increasing. Good color, size, flavor have been reported. The condition of peaches in northern area has been rated as good with sizes being somewhat smaller. Apples are in good and fair condition but water is needed in non-irrigated orchards. Blueberry harvest is past its peak in south, it is picking up in central areas. The quality of the fruit is between good, excellent.

NEW MEXICO: Days suitable for fieldwork 6.3. Last week was typical for mid-summer, with scattered afternoon, evening thunderstorms each day. About 90 percent of the reporting stations measured rainfall. Some of the heaviest downpours of the season affected the southwest part of the State. Clouds and occasional precipitation kept temperatures a little below normal everywhere except the extreme east. Statewide 2° below normal. Activities remained about the same as most farmers got into their summer routine of cutting hay, cultivating, irrigating, weed, insect control, and fertilizing. Alfalfa conditions fell slightly as rains delayed cutting of mature fields and damaged hay on the ground. Ranch activities continued to center around maintenance. While many areas reported "looking the best they have in years" with favorable growth conditions, plenty of stock tank water the spotty rains continued to leave a few very dry areas causing supplemental feeding and hauling water. Range, pasture feed 5% very poor, 12% poor, 32% fair, 43% good, 8% excellent. Cattle, sheep were stable with cattle in mostly good condition, sheep mostly fair to good condition.

NEW YORK: Days suitable for fieldwork 6.3. Soil moisture 26 % very short, 44 % short, 30% adequate. Pasture feed 17 % very poor, 40 % poor, 12 % fair, 31 % good. Second cutting alfalfa 72%, 59% 1998, 47% avg.; 13 % poor, 50 % fair, 31 % good, 6 % excellent. Corn 6% poor, 19% fair, 44% good, 31% excellent. Development well ahead of normal. Wheat 80% combined, 84% 1998, 49% avg. Excellent yields reported. Dry beans showing stress. Yields expected to suffer. Sweet corn harvest continued ahead of normal. Non-irrigated vegetables in poor condition. Tart cherry harvest active. Apples, grapes in good condition.

NORTH CAROLINA: Days suitable for fieldwork 5.9, 3.4 last week. Soil moisture levels 3% very short, 20% short, 71% adequate, 6% surplus. Dry weather returned to most of State with the exception of a few scattered thunderstorms. Highs in the 90's were recorded throughout the State making this the hottest week of the year. Limited soil moisture is becoming a concern in some areas. Even though the weather enabled farmers to get into the fields, activities were limited. Tobacco topping, potato harvesting were among major activities conducted last week. Other activities included weed control in all crops, baling hay, harvesting peaches, sucker control, tending livestock.

NORTH DAKOTA: Days suitable for fieldwork 5. Topsoil 1% very short, 11% short, 76% adequate, 12% surplus. Subsoil 7% short, 76% adequate, 17% surplus. Hot, humid weather aided the development of row crops, allow producers to make progress on the hay harvest. Spraying for wheat midge, scab, rust was reported. Durum wheat 46% heading, 95% 1998, 80% avg.; 21% milk, 63% 1998, 39% avg.; 3% turning, 22% 1998, 9% avg. Canola 19% turning, 31% 1998. Corn 51% tasseling, 70% 1998, 47% avg. Dry edible beans 72% blooming, 94% 1998, 72% avg. Flaxseed 79% blooming, 93% 1998, 66% avg.; 3% turning, 13% 1998, 4% avg. Potatoes 81% blooming, 97% 1998, 87% avg.; 77% rows filled, 87% 1998, 67% avg. Soybeans 53% blooming, 82% 1998, 72% avg. Sunflowers 3% blooming, 10% 1998, 8% avg. Condition of small grains declined due to hot, humid weather. Emerged crop condition: durum 6% poor, 33% fair, 53% good, 8% excellent; canola 3% poor, 21% fair, 56% good, 20% excellent; corn 2% very poor, 5% poor, 18% fair, 65% good, 10% excellent; dry edible beans 7% poor, 22% fair, 52% good, 19% excellent; flaxseed 3% poor, 23% fair, 59% good, 15% excellent; potatoes 5% poor, 9% fair, 51% good, 35% excellent; soybeans 7% poor, 24% fair, 57% good, 12% excellent; sugar beets 1% very poor, 5% poor, 13% fair, 54% good, 27% excellent; sunflower 3% poor, 22% fair, 62% good, 13% excellent. Stock water supplies 1% short, 87% adequate, 12% surplus. Hay 4% above normal.

OHIO: Days suitable for fieldwork 6.0. Topsoil 35% very short, 40% short, 24% adequate, 1% surplus. Soybeans 88% blooming, 75% 1998, 62% avg.; 30% setting pods, 23% 1998, 13% avg. Oats 98% ripe, 80% 1998, 82% avg.; 62% harvested, 31% 1998, 24% avg. Alfalfa 92% 2nd cutting, 80% 1998, 69% avg.; 17% 3rd cutting, 9% 1998, 2% avg. Other hay 71% 2nd cutting, 55% 1998, 42% avg.; 5% 3rd cutting, 0% avg. Corn 85% silked, 53% 1998, 36% avg.; 10% in dough, 7% 1998, 2% avg. Summer apples 48% harvested, peaches 27% harvested. Tobacco 6% topped, 5% 1998. Potatoes 5% harvested, cucumbers 31% harvested. Pasture feed 23% very poor, 27% poor, 32% fair, 16% good, 2% excellent. Corn 6% very poor, 12% poor, 34% fair, 38% good, 10% excellent. Soybeans 3% very poor, 9% poor, 32% fair, 45% good, 11% excellent. Activities include: Baling straw, hay; mowing CRP ground; detasseling seed corn; spraying weeds; cultivating vegetable crops; repairing buildings, machinery; scouting crops; hauling grain; hauling manure; combining clover seed; hauling water for livestock; tiling; constructing waterways. Reported weed pressures include Canadian thistle, morning glory, sourdock, velvetleaf, buttonweed, foxtail, ragweed, hemp dogbane, milkweed, quack grass, poison ivy, broadleaf, chickweed, lambs quarter, Johnson grass. Reported insects include spider mites in soybeans; leaf hoppers in alfalfa; rootworms, earworms in corn; beetles in soybeans, corn, cucumbers, squash. Reported diseases include root rot in soybeans; Stewart's' wilt in popcorn; virus on melons, squash; dry rot on tomatoes; mildew on pumpkins; gray leaf spot on corn; black shank, sore shin, fusarium wilt on tobacco. Fruit, vegetable crop is fair to good in the northern part of the State. An Ashtabula county reporter mentioned that mildew was showing up in grapes due to humid weather. Crop losses are reported in the southern part of the State due to the drought. Reporters comment that berries are smaller than normal, sweet corn is short, irrigation sources are drying up. Pasture, grass conditions range from very poor to good. Much of the grass is dormant while some pastures have been slow to regrow. Harrison county reporter commented that 2nd, 3rd cuttings of hay are very poor, there are virtually no second cuttings of grass hay. Hot, humid conditions are affecting livestock as feed intake, milk production are declining. A Guernsey county reporter mentioned that cattle are stressed, calving early.

OKLAHOMA: Days suitable for fieldwork 6.8. Subsoil 2% very short, 13% short, 84% adequate, 1% surplus. Topsoil 4% very short, 37% short, 58% adequate, 1% surplus. Hot, dry weather sapped soil moisture supplies to lowest level since early March. High temperatures exceeded 100° in every district. Wheat 86% plowed, 76% 1998, 83% avg.; Oats 88% plowed, 77% 1998, 81% avg. Corn 2% fair, 94% good, 4% excellent; 70% tasseled, 96% 1998, 81% avg.; 12% milk-to-soft, 20% 1998, 30% avg. Sorghum 99% up-to-stand, 100% 1998, 98% avg. Soybeans 25% fair, 58% good, 17% excellent; 90% up-to-stand, 99% 1998, 97% avg.; 37% flowering, 57% 1998, 57% avg.; 19% setting pods, 18% 1998, 25% avg. Peanuts 25% setting pods, 41% 1998, 46% avg. Watermelons 90% fruit set, 100% 1998, 90% avg.; 40% harvested, 41% 1998, 22% avg. Alfalfa hay 1% poor, 19% fair,

70% good, 10% excellent; 98% 2nd cutting, 100% 1998, 99% avg.; 59% 3rd cutting, 58% 1998, 55% avg. Other hay 91% 1st cutting, 88% 1998, 92% avg.; 32% 2nd cutting, 3% 1998, 31% avg. Livestock 1% poor, 10% fair, 73% good, 16% excellent. Feeder cattle prices unchanged from last week.

OREGON: Days suitable for fieldwork 6.9. Topsoil 21% very short, 55% short, 23% adequate, 1% surplus. Subsoil 18% very short, 50% short, 30% adequate, 2% surplus. Barley 7% harvested, 10% 1998, 17% avg. Spring wheat 3% harvested, 2% 1998. Winter wheat 19% harvested, 8% 1998, 18% avg. Range, pasture feed 2% very poor, 10% poor, 35% fair, 47% good, 6% excellent. Activities: Grain harvest underway on east side. Reported yields below average to average, with quality generally good. Some spring wheat in the driest areas of Mid Columbia Basin will not be harvested. Haying continued. Canola harvest nearing completion in northeast, good yields reported. Klamath Basin sugar beets fair to good. West side grass seed harvest in full swing. Haying continued. Mint harvest proceeded, field corn close to tassel stage in Willamette Valley. Greenhouses, nurseries irrigating, doing summer maintenance work. Christmas tree shearing underway. Iris tuber digging started in Willamette Valley. On southern coast Easter Lilies left to bloom for market promotion. Early potato digging continued in Northeast, yields, quality looked excellent. Klamath basin potato rows 70% closed, Malheur County onions, potatoes doing well, with no threat of late blight. Onions on west side enjoying warmer temperatures, growth of other vegetables accelerated. Green beans almost ready, salad vegetable harvest active in Willamette Valley. Willamette Valley strawberry harvest completed, Marion berries being picked, evergreen blackberries continued to size. Apples, pears ripening, hazelnuts developing. Rogue River Valley most berries picked. On south coast cranberries sizing. Hood River Valley cherries being harvested throughout the mid valley. Northeast cherry harvest underway. Eastern ranges drying out rapidly limiting forage production. Southern dryland grass dried up, irrigated pastures remain good to excellent. Pastures in Willamette Valley still producing forage, drying out quickly. Irrigation working full time where available. Livestock condition mostly good.

PENNSYLVANIA: Days suitable for fieldwork 6.0. Soil moisture 58% very short, 35% short, 7% adequate. Corn 58% silked, 50% 1998, 40% avg.; 17% dough, 2% 1998, 1% avg.; 57 in. height, 58 in. 1998, 57 in. avg. Corn 17% very poor, 36% poor, 25% fair, 19% good, 3% excellent. Soybean 6% very poor, 29% poor, 42% fair, 18% good, 5% excellent. Wheat 98% ripe, 100% 1998, 95% avg.; 93% harvested, 90% 1998, 76% avg. Oats 84% turning yellow, 87% 1998, 81% avg.; 54% ripe, 52% 1998, 45% avg.; 33% harvested, 19% 1998, 19% avg. Oat 2% very poor, 18% poor, 40% fair, 34% good, 6% excellent. Alfalfa 2nd cutting 78% complete, 73% 1998, 64% avg.; 19% 3rd cutting 19%, 14% 1998, 5% avg. Timothy clover 96% 1st cutting, 93% 1998, 94% avg.; 28% 2nd cutting, 30% 1998, 24% avg. Quality of hay 6% very poor, 9% poor, 32% fair, 35% good, 18% excellent. Peach 16% harvest, 28% 1998, 9% avg.; 1% poor, 14% fair, 73% good, 12% excellent. Apple 4% poor, 27% fair, 56% good, 13% excellent. Activities included: Harvesting wheat, oats, fruits, vegetables; machinery maintenance; filling silos; hauling manure; spreading fertilizers; caring for livestock; building, repairing fences; cutting hay; making haylage; irrigating crops.

SOUTH CAROLINA: Days suitable for fieldwork 6.2. Soil moisture 3% very short, 24% short, 70% adequate, 3% surplus. Cantaloupes 94% harvested, 93% 1998, 88% avg. Corn 73% doughed, 88% 1998, 87% avg.; 5% very poor, 16% poor, 33% fair, 41% good, 5% excellent. Hay 2% poor, 33% fair, 58% good, 7% excellent. Peaches 63% harvested, 69% 1998, 67% avg.; 6% poor, 30% fair, 34% good, 30% excellent. Snapbeans 98% harvested, 98% 1998, 83% avg. Sorghum 70% headed, 71% 1998; 1% very poor, 6% poor, 13% fair, 66% good, 14% excellent. Sweet potatoes 3% poor, 18% fair, 79% good.

SOUTH DAKOTA: Days suitable for fieldwork 4.4. Topsoil 8% short, 75% adequate, 17% surplus. Subsoil 5% short, 77% adequate, 18% surplus. Hot, humid weather quickly advanced row crop development this week. Producers report the humid conditions slowing winter wheat harvest with fog in the early mornings. Corn 66 in. height., 72 in. 1998, 59 in. avg.; 93% 2nd cultivation, 97% 1998, 93% avg.; 46% tasseled, 71% 1998, 46% avg.; 27% silked, 49% 1998, 26% avg. Winter rye 2% poor, 20% fair, 58% good, 20% excellent. Flaxseed 1% poor, 14% fair, 70% good, 15% excellent. Alfalfa 1% poor, 12% fair, 62% good, 25% excellent. Sunflower 2% poor, 24% fair, 57% good, 17% excellent. Winter wheat 1% poor, 12% fair, 65% good, 22% excellent; 97% ripe, 97% 1998, 80% avg. Winter rye 81% ripe, 89% 1998, 78% avg.; 13% combined, 55% 1998, 24% avg. Spring wheat 83% turning color, 92% 1998, 69% avg.; 28% ripe, 53% 1998, 23% avg. Oats 83% turning color, 93% 1998, 74% avg.; 41% ripe, 63% 1998, 40% avg. Barley 77% turning color, 90% 1998, 73% avg.; 28% ripe, 52% 1998, 28% avg. Flaxseed 63% blooming, 85% 1998, 77% avg.; 4% ripe, 54% 1998, 12% avg. Sunflower 7% blooming, 32% 1998, 14% avg. Alfalfa 51% 2nd cutting,

66% 1998, 51% avg. Other hay 69% harvested, 69% 1998, 67% avg. Cattle 7% fair, 64% good, 29% excellent. Sheep 4% fair, 61% good, 35% excellent. Stock water supplies 3% short, 77% adequate, 20% surplus.

TENNESSEE: Days suitable for fieldwork 6.0. Topsoil 7% very short, 28% short, 62% adequate, 3% surplus. Subsoil 5% very short, 24% short, 67% adequate, 4% surplus. Corn 96% tasseled, 94% 1998, 93% avg.; 52% dough stage, 45% 1998, 45% avg.; 10% dent, 16% 1998, 13% avg.; 3% poor, 22% fair, 55% good, 20% excellent. Tobacco 36% topped, 23% 1998, 28% avg.; 2% very poor, 8% poor, 22% fair, 54% good, 14% excellent. Pasture feed 1% very poor, 9% poor, 32% fair, 53% good, 5% excellent. Alfalfa 2nd cutting 88%, 92% 1998, 93% avg.; 2% poor, 27% fair, 61% good, 10% excellent. All other hay 8% poor, 33% fair, 51% good, 8% excellent. Hot, dry conditions prevailed last week with daily temperatures at or above normal levels, only scattered afternoon showers or thunderstorms. Crop conditions deteriorated slightly from the previous week due to the heat and lack of moisture, remained in mostly good condition. Most crops are beginning to show some signs of stress, rain is needed soon in order for them to reach their full yield potential. As of 25th, crop development for all major row crops was on a normal pace, or slightly ahead of the five-year average. Tobacco farmers topped an additional 16 percent of the State's acreage in addition to treating for insects, applying sucker control. Pasture conditions declined slightly from last week, remained in mostly good to fair condition.

TEXAS: Scattered showers continued across the State, kept some areas moist but slowed harvest progress. Daytime temperatures were in the 90's most of the week. Most dryland crops were doing well but will need more rain in the plains, north central. Irrigation in these areas increased as the need for moisture increased. Livestock were in good condition. Pastures continued to show good growth with ample moisture, but some areas of the state need additional moisture.

Crops: Small Grains: Harvest neared completion on remaining fields. Yields remained very good. Corn: Recent rains helped the crop to develop in the High Plains where irrigation has continued. Fields in the Blacklands have matured more rapidly than producers anticipated. Harvest continued on limited acres but was slowed by showers. Harvest was slowed in the Coastal Bend and Rio Grande Valley due to rainy weather conditions. Producers were waiting for fields in the Upper Coast to dry so they can harvest. Fields were drying by the end of the week. 52% dented, 58% 1998, 52% avg. 40% mature, 50% 1998, 36% avg. 9% harvested, 26% 1998, 12% avg. Cotton: Progress in the Plains improved slightly with help coming from the warm weather. Insects were putting some pressure on the fields, causing more spraying. Most fields were squaring, setting bolls. Blacklands, central the crop was actively blooming, setting bolls. Insect pressure remained manageable. Defoliation was expected to start along the Upper Coast, Coastal Bend, Rio Grande. Rice: Some fields were ready to harvest but needed more dry weather along the Upper Coast. Some rice lodged from recent thunderstorms. Heavy stem borer infestations were observed in some fields. Sorghum: Fields were making good progress in the Plains and North Central during the week. Some fields continued to head out. Fields were maturing quickly in the Blacklands, central where producers were harvesting at a rapid pace. Harvest continued in the Coastal Bend, Rio Grande Valley. Wet conditions along the Upper Coast kept harvest from progressing. 48% turning color, 54% 1998, 58% avg. 39% mature, 45% 1998, 46% avg. 36% harvested, 39% 1998, 33% avg. Soybeans: Over all conditions looked good in the Plains during the week. Fields were beginning to bloom and weed control had become a concern. Irrigation remained steady in most fields. In the Northern Blacklands most fields need to dry down for harvesting to begin. Along the Upper Coast the later beans looked very good. Other Crops: Sunflowers 97% planted, 97% 1998, 98% avg.

Commercial Vegetables: Rio Grande Valley, minimal activity occurred for week. San Antonio-Winter Garden, cantaloup harvest continued, rainfall caused insect, disease problems. East, the new crop of peas were being planted, grasshoppers were a problem in peas, tomatoes. High Plains, sweet corn, onion, potato harvest continued, beans, peas, squash, tomatoes, cucumbers were looking good. Trans Pecos, cucumber, cantaloup harvest continued, planting of cabbage got underway. Peaches: Harvest continued in Hill Country. Pecans: Heavy nut set remained thanks to good rainfall and moderate temperatures, powdery mildew has been a disease concern.

Range and Livestock: Conditions remained good most areas with good grass, water availability. Cattle, range were in good shape. Some areas were in need of additional moisture where moisture from June rains was mostly gone.

UTAH: Days suitable for fieldwork 7. Topsoil 9% very short, 29% short, 62% adequate. Subsoil 8% very short, 29% short, 63% adequate. Range, pasture feed 2% very poor, 8% poor, 34% fair, 55% good, 1% excellent. Corn height 56 in., 49 in. 1998, 50 in. avg.; 10% silked, 14% avg. Winter

wheat 23% harvested, 13% 1998, 29% avg. Spring wheat 3% harvested, 3% 1998, 15% avg. Barley 6% harvested (grain), 7% 1998, 19% avg. Alfalfa hay 53% 2nd cutting, 42% 1998, 47% avg. Other hay 77% 1st cutting, 60% 1998, 67% avg. Oats 88% headed, 80% 1998, 86% avg.; harvested for hay or silage 63%, 51% 1998, 60% avg. Sweet cherries 97% picked, 94% 1998, 75% avg. Tart cherries 23% picked, 40% 1998, 41% avg. Irrigation water supply 3% very short, 18% short, 79% adequate. Stock water supplies 2% very short, 15% short, 83% adequate. Major activities included: Harvesting alfalfa hay, irrigating crops, spraying for weeds, insects.

VIRGINIA: Days suitable for fieldwork 6.0. Topsoil 20% very short, 32% short, 47% adequate, 1% surplus. Subsoil 31% very short, 32% short, 35% adequate, 2% surplus. Heavy rains, thunderstorms fell across the Commonwealth this past week. Most of the rainfall was received on 24th with more than 3 inches falling in some localities while other areas received only a trace. These rains, however, were not enough to replenish overall soil moisture levels. More than half of the topsoil in the State was reported as short despite recent rains. Pasture land continued to show improvement due to recent showers, however growth is still limited. Pasture feed 20% very poor, 27% poor, 30% fair, 21% good, 2% excellent. Livestock 2% very poor, 10% poor, 37% fair, 47% good, 4% excellent. Hay, other 28% very poor, 37% poor, 23% fair, 12% good. Hay, alfalfa 4% very poor, 26% poor, 46% fair, 21% good, 3% excellent. Corn for grain 73% silked, 62% 1998, 60% avg.; 26% dough, 25% 1998, 23% avg.; 14% very poor, 23% poor, 33% fair, 22% good, 8% excellent. Soybeans 98% planted, 100% 1998, 99% avg.; 96% emerged, 97% 1998; 13% blooming, 25% 1998, 23% avg.; 6% very poor, 12% poor, 43% fair, 31% good, 8% excellent. Winter wheat 98% harvested, 100% 1998, 98% avg. Barley 99% harvested, 100% 1998, 100% avg. Tobacco, flue cured 1% poor, 10% fair, 68% good, 21% excellent. Tobacco, burley 2% very poor, 8% poor, 15% fair, 41% good, 34% excellent. Tobacco, dark fire cured 2% poor, 15% fair, 69% good, 14% excellent. Tobacco, sun cured 25% poor, 25% fair, 50% good. Peanuts 95% pegged, 93% 1998; 5% fair, 69% good, 26% excellent. Cotton 98% squaring, 98% 1998; 35% setting bolls; 9% fair, 54% good, 37% excellent. Summer potatoes 69% harvested, 64% 1998, 64% avg.; 1% very poor, 1% poor, 15% fair, 63% good, 20% excellent. Apples, all 12% poor, 64% fair, 21% good, 3% excellent. Peaches 26% harvested, 37% 1998, 24% avg.; 8% very poor, 14% poor, 53% fair, 21% good, 4%. Overall, the hay crop has improved but supplies remain short as producers are just starting the second cutting. Some producers are chopping corn to feed cattle due to limited hay supplies, short pastures. Tobacco remain virtually unchanged from previous week. Spread of blue mold continue to concern some tobacco producers as well as weather fleck, mosaic virus. Tobacco is about two weeks ahead in maturity as some producers have begun harvest. Timely rains have greatly improved peanut, cotton, late corn, soybean condition. Peanut producers are applying rootworm treatment as well as scouting fields for diseases following the recent rainfall. Producers of potatoes, tomatoes, snap beans, sweet corn, cucumbers, squash, peppers, other vegetables continue harvesting their crops.

WASHINGTON: Days suitable for fieldwork 7.0. Topsoil 18% very short, 40% short, 42% adequate. Subsoil 16% very short, 56% short, 28% adequate. Winter wheat harvest had a slow start, was well behind 1998 and average. Qualities of winter wheat that have been harvested were reportedly good, some yields were lower due to weed populations. Spring wheat, barley harvest started but was expected to pick up to full swing in the next couple of weeks. Both crops were slightly behind years before. Growers were forced to spray for aphid infestations that were reported in the immature spring wheat and barley crops. Winter wheat 8% harvested, 20% 1998, 15% avg. Winter wheat dryland 8% very poor, 19% poor, 43% fair, 27% good, 3% excellent; irrigated 100% good. Spring wheat dryland 15% very poor, 29% poor, 41% fair, 15% good; irrigated 100% good; 100% headed, 100% 1998, 100% avg. Barley dryland 10% very poor, 28% poor, 48% fair, 14% good; irrigated, 100% good; 100% headed, 100% 1998, 100% avg. Potatoes 6% harvested, 8% 1998, 7% avg.; 7% fair, 61% good, 32% excellent. Hay, other roughage 1% very short, 2% short, 77% adequate, 20% surplus. Range, pasture feed 10% very poor, 35% poor, 40% fair, 9% good, 6% excellent. Livestock producers were busy cutting hay with the 3rd cutting of alfalfa underway. Second cutting of alfalfa was finished, 3rd cutting was well ahead of the five-year average. Dry bean harvest began, potatoes, onions, strawberries, blackberries, raspberries were also all being harvested. Apricot, nectarine, peach harvest continued as well as harvesting for mint, vegetable seed crops.

WEST VIRGINIA: Days suitable for fieldwork 5.9. Topsoil 65% very short, 29% short, 6% adequate. Conditions for most of the State continue to be dry despite scattered rainfall throughout the State. Livestock producers in some localities continue marketing cattle as pastures, water and hay supplies remain short. Wheat 100% harvested, 78% 1998, 78% avg. Hay 41% very poor, 39% poor, 18% fair, 2% good; Hay 39% 2nd cut, 26% 1998, 29%

avg. Corn 27% very poor, 52% poor, 16% fair, 5% good; 50% silked, 46% 1998, 46% avg.; 3% doughing, 2% 1998, 9% avg. Oats 14% very poor, 32% poor, 48% fair, 6% good; 25% harvested, 38% 1998, 42% avg. Soybeans 8% very poor, 30% poor, 62% fair; Soybeans 55% bloomed, 21% 1998, 65% avg.; 17% setting pods, 10% 1998, 22% avg. Tobacco 48% very poor, 20% poor, 32% fair, 3% topped, 7% 1998. Apples 7% very poor, 19% poor, 59% fair, 15% good. Peaches 8% very poor, 16% poor, 60% fair, 16% good. Cattle 2% very poor, 13% poor, 48% fair, 33% good, 4% excellent. Sheep 2% very poor, 7% poor, 39% fair, 39% good, 13% excellent.

WISCONSIN: Days suitable for fieldwork 2.5 Soil moisture 1% very short, 10% short, 52% adequate, 37% surplus. Warm, wet weather has many farmers wondering when it will cool off, dry out. Hay harvest has been slowed by the wet weather. In some places, the frequent showers have resulted in farmers chopping the hay back onto the field. In areas that did not receive as much rain, the humidity prevented farmers from making much good, dry hay. Leafhoppers have remained widespread in the second and third cuttings. Hay 67% 2nd crop, 81% 1998, 49% avg. Farmers with small grains are also wondering when it will dry out. Many tried, but with a number of rainy days, very little harvesting was accomplished last week. Substantial number of small grain fields were completely lodged by last week's storms. Fond du Lac county reporter noted that the winter wheat crop was beginning to turn dark from the excessive rainfall. Winter wheat 51% harvested, 74% 1998, 26% avg. Weeds were also becoming a problem. Corn crop continued to mature rapidly with the warm weather. Many reported corn tasseling and silking over the past week. Soybean crop was mostly good to excellent, but the corn crop was rated slightly better. Soybeans haven't been handling the excessive moisture as well as the corn. Soybean 3% poor, 10% fair, 54% good, 33% excellent; 52% bloomed, 67% 1998; 19% setting pods, 30% 1998. Berries have had a good crop with most earlier than usual. Peas appear to be yielding above average. Snap beans yields have been lowered by leafhoppers. Apple yields may be lower than 1998 according to a Sauk County reporter. Pasture feed 1% very poor, 3% poor, 19% fair, 54% good, 23% excellent.

WYOMING: Days suitable for fieldwork 6.8. Topsoil 5% very short, 62% short, 33% adequate. Warm weather during most of the week with little precipitation. Winter wheat 1% very poor, 2% poor, 14% fair, 60% good, 23% excellent; 94% mature, 94% 1998, 80% avg.; 50% harvested, 49% 1998, 35% avg. Spring wheat 1% poor, 14% fair, 81% good, 4% excellent; 78% headed, 100% 1998, 87% avg.; 43% turning color, 71% 1998, 60% avg.; 16% mature, 33% 1998, 17% avg. Barley 2% fair, 70% good, 28% excellent; 85% headed, 93% 1998, 94% avg.; 67% turning color, 67% 1998, 73% avg.; 30% mature, 19% 1998, 20% avg. Oats 1% very poor, 12% fair, 80% good, 7% excellent; 73% headed, 91% 1998, 87% avg.; 19% turning color, 56% 1998, 50% avg.; 4% mature, 27% 1998, 17% avg. Sugar beet 1% poor, 5% fair, 72% good, 22% excellent. Corn 3% fair, 90% good, 7% excellent; 80% tasseled, 30% 1998, 42% avg.; 5% silked, 15% 1998, 16% avg. Dry bean 2% fair, 84% good, 14% excellent; 82% bloom, 69% 1998, 67% avg.; 18% setting pods, 26% 1998, 19% avg. Alfalfa 93% 1st cutting, 90% 1998, 93% avg.; 9% 2nd cutting, 6% 1998, 10% avg. Other hay 48% cut, 59% 1998, 57% avg. Range, pasture feed 1% poor, 20% fair, 67% good, 12% excellent.

International Weather and Crop Summary

July 18 - 24, 1999

HIGHLIGHTS

EUROPE: Moderate to locally heavy showers hampered winter grain harvesting in east-central Europe, while occasional showers and sunshine benefited spring-sown crops and winter-grain harvesting in central and western Europe.

FSU-WESTERN: Cooler weather was accompanied by light to moderate showers in Russia and parts of Ukraine, improving growing conditions for summer crops.

FSU-NEW LANDS: Light showers in Kazakstan maintained favorable moisture conditions for filling spring grains, while soaking rains boosted soil moisture for crop development in Altay Kray, Russia.

EASTERN ASIA: In the North China Plain, continued dry weather started to stress vegetative to reproductive summer crops, while rain benefited crops in Manchuria.

SOUTHEAST ASIA: Scattered, light showers continued across Thailand, but moisture supplies remain adequate.

SOUTH ASIA: Beneficial rain brought some relief to groundnut areas of west-central India.

AUSTRALIA: Showers increased topsoil moisture levels in the southeastern winter grain belt.

CANADA: Warmer weather improved conditions for growth of reproductive summer grains and oilseeds.

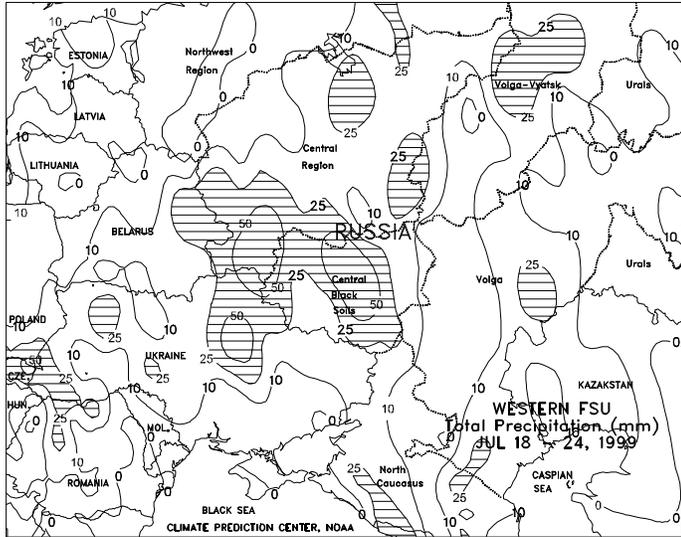
MEXICO: Widespread seasonal showers returned to main corn belt, benefiting corn.

SOUTH AMERICA: Drier weather returned to central Argentina, after last week's beneficial, but unseasonably heavy rain.



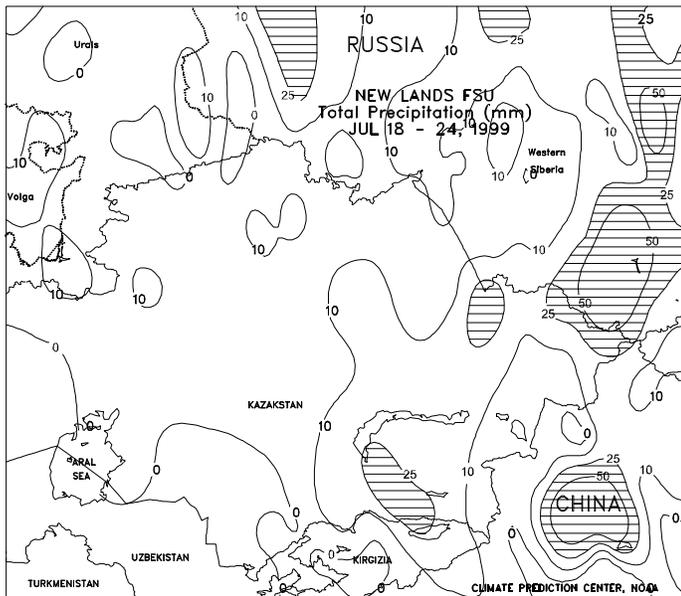
EUROPE

Generally dry weather prevailed in southern England, much of France, the Iberian Peninsula, southern and eastern Germany, and in much of the Czech Republic, Slovakia, and Poland, slowing spring-sown crop development. Precipitation amounts totaled less than 10 mm in these areas, with locally heavier amounts (up to 25 mm) in northeastern Spain, central France, and extreme eastern and southern Germany. Heavier showers (10-38 mm) in major crop growing regions of the Benelux countries, northwestern Germany, Denmark, and Scandinavia benefited spring-sown crops and maturing winter grains. Winter grain harvesting in western and central Europe progressed steadily northward, despite occasional showers. According to reports as of July 24, winter barley was nearly harvested in France and Germany and was approximately 45 percent (%) harvested in England. Similarly, winter wheat harvesting had begun in northern Spain and western and central France. Farther east, dry weather early in the week encompassed much of eastern Europe. By midweek, however, moderate to heavy showers (15-53 mm) overspread much of east-central Europe, with the heaviest rains (53-85 mm) confined mainly to Austria. As a result, winter grain harvesting was likely delayed once again in Austria, Slovakia, Hungary, and Croatia. Persistent wetness in this region has reportedly caused an outbreak of fusarium fungus in Hungary, and continues to raise concerns over winter grain quality. Elsewhere in southern and eastern Europe, dry weather favored winter grain harvesting. According to reports as of July 24, winter wheat was 25% harvested in Bulgaria, 57% in Serbia, 50% in Romania, and 70% in Croatia. Temperatures across Europe ranged from 0 to 3 degrees C above normal, except in Hungary, the Balkans, and Greece, where temperatures were 1 to 3 degrees C below normal, slowing crop development.



FSU-WESTERN

In Russia, light to moderate showers (4-50 mm or more) accompanied a cooling trend during the week, improving growing conditions for summer crops (corn, sunflowers, and sugar beets). However, moderate to heavy rain (25-84 mm) fell in the Central Black Soils Region and the southern portion of the Central Region, interrupting winter grain harvesting. Precipitation amounts in drought-stricken areas of the Volga Valley and the northern tip of the North Caucasus ranged from 4 to 16 mm, causing only brief interruptions in harvest activities. In Ukraine, light to moderate showers fell over the northern half of the country, providing moisture for summer crop development but causing some delays in winter wheat harvesting. Unfavorably warm, dry weather extended from Moldova across southern Ukraine, increasing stress on corn and sunflowers in the reproductive to filling stages of development. The warm, dry weather allowed winter wheat and spring grain harvesting to rapidly advance northward. Temperatures increased in southern Ukraine during the week, rising to about 35 degrees C at week's end. Elsewhere, light showers (10-25 mm) and mild weather prevailed in Belarus, favoring summer crop development and causing only brief delays in winter grain harvesting. Weekly temperatures averaged 1 to 3 degrees C above normal in Russia, Ukraine, and Belarus.



FSU-NEWLANDS

Crop progress for spring grains ranged from filling in Kazakstan and adjacent areas in Russia to reproductive in northern and easternmost areas in Russia. In Kazakstan, light showers and cool weather maintained favorable growing conditions for spring grains. Weekly temperatures averaged 1 to 2 degrees C below normal in principal grain-producing areas of central Kazakstan. In Russia, periodic light to moderate showers (5-25 mm or more) extended from the Urals eastward across Western Siberia and Eastern Siberia, benefiting spring grains in the reproductive to filling stages of development. Soaking rains (50-84 mm) fell in the Altay Kray region, ending a period of hot, dry weather that had persisted for 2 consecutive weeks. Weekly temperatures averaged 1 to 3 degrees C above normal in Russia. In cotton-producing areas of Central Asia, most of the cotton crop is irrigated. Seasonably dry weather prevailed in most areas. Weekly temperatures averaged 1 to 3 degrees C below normal, slowing cotton development but lowering irrigation requirements.

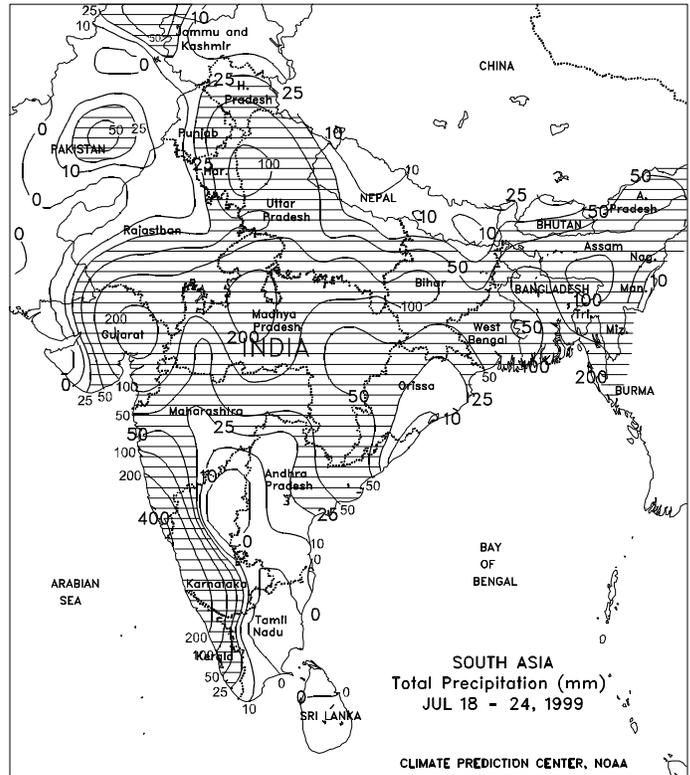


EASTERN ASIA

In the North China Plain, sparse rainfall for the past 2 weeks across Henan, southern Shandong, northern Anhui, and Jiangsu started to stress corn, soybeans, and cotton. These crops are in the weather-sensitive reproductive stage, and rain is needed to maintain current crop prospects. Scattered light to moderate rain (10-60 mm) provided some moisture across central and northern Shandong and southern Hebei. Near-normal temperatures maintained average crop water use. In Manchuria, rain (20-60 mm, with isolated amounts greater than 100 mm) benefited filling to maturing spring wheat and vegetative to reproductive soybeans across western Heilongjiang. Lesser amounts (2-15 mm) fell across Jilin and Liaoning. Temperatures averaged 1 to 3 degrees C above normal across Manchuria. Across the Yangtze Valley, drier weather (less than 25 mm) in Zhejiang and Jiangxi eased flooding. However, moderate to heavy showers (30-100 mm) in Hunan and the Sichuan Basin maintained high water levels across the Yangtze River, hampering flood recovery efforts. The wet conditions also slowed early rice harvesting and late rice transplanting. Cool weather (temperatures 1-2 degrees C below normal) slowed crop development across southern interior China. Light to moderate rain (15-50 mm) fell across the Korean Peninsula, maintaining moisture supplies in the south, but more rain is needed in the north. Widespread rain (25-60 mm) maintained moisture supplies for rice across Japan, while warm weather (temperatures 1-2 degrees C above normal) favored rice development.

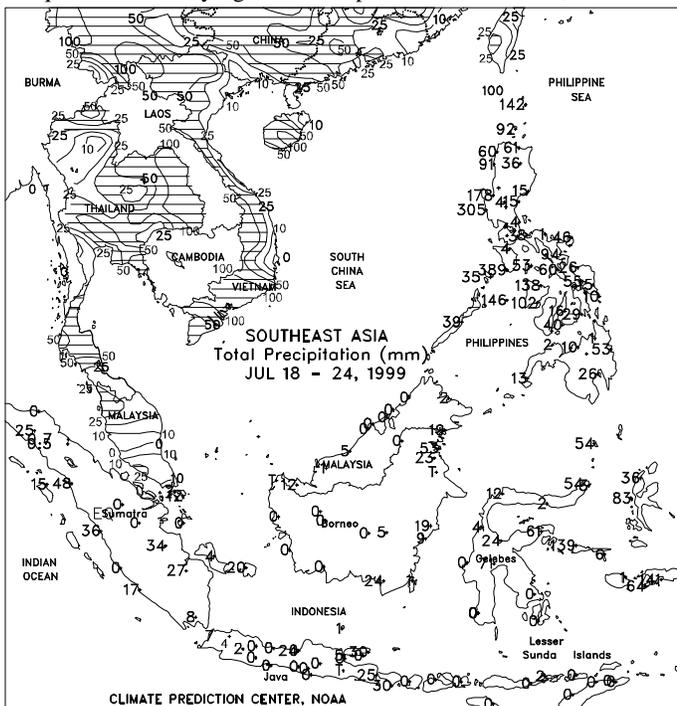
SOUTH ASIA

Widespread, locally heavy rain (25-100 mm or more, locally exceeding 200 mm) covered primary oilseed areas of west-central India as the southwest monsoon strengthened and surged into the northwest. The moisture improved prospects for groundnut and soybean establishment while allowing a resumption in planting in some of the driest areas. Beneficial rain (25-50 mm or more) also developed over important rice and cotton areas of northern India. In Pakistan, showers and thunderstorms (25 mm or greater) boosted irrigation reserves along the Indus River but missed most major farming areas. Farther east, heavy rain (50-100 mm or more) kept rice well watered in eastern India and Bangladesh but locally excessive flooding was reported. Heavy rain (100-200 mm or more) also continued in rice areas along India's southwestern coast. However, showers were generally scattered and light (10 mm or more) over sections of the southern interior (Karnataka and western and southern Andhra Pradesh). Above-normal temperatures accompanied the drying trend, reducing moisture reserves for coarse grains, oilseeds, and cotton. The southwest monsoon is usually fully established by now across the region. As a result, the rainy season typically peaks between now and early September over most major crop areas.



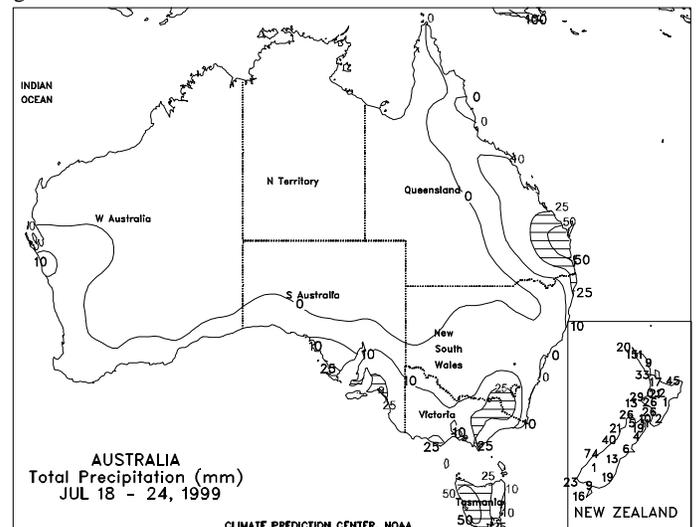
SOUTHEAST ASIA

Scattered showers (10-50 mm) prevailed across Thailand. While rainfall has been somewhat below normal the past few weeks, above-normal rainfall earlier in the season has provided adequate moisture supplies for rice and corn. Light showers (less than 20 mm) prevailed across the Red River Delta of northern Vietnam, and moderate to heavy showers (20-125 mm) maintained moisture supplies across the Mekong River Delta of southern Vietnam. Light showers (5-15 mm) provided some dryness relief to the south-central coast of Vietnam. Widespread tropical moisture swept across the Philippines, producing moderate to heavy showers (25-100 mm or more) across the island nation. Light, scattered showers (2-30 mm) fell across the oil palm areas of peninsular Malaysia, where moisture supplies remain adequate. Seasonably light showers prevailed across Java, Indonesia.



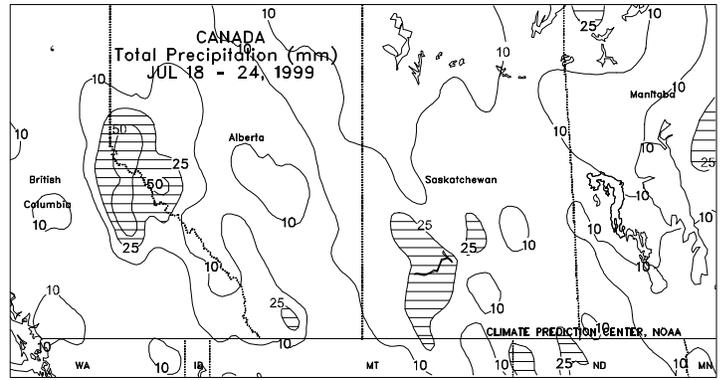
AUSTRALIA

Light to moderate showers (25 mm or less) swept across winter grain areas of South Australia, Victoria, and portions of southern New South Wales, boosting moisture reserves for the development of wheat and barley. However, less than 10 mm of rain fell in drought-stricken sections of northwestern Victoria, where long-term moisture reserves were still insufficient for normal development. Temperatures averaged 1 to 2 degrees C above normal in the southeast, providing favorable overwintering conditions. Cool, dry weather dominated the remainder of the east, with lows near zero producing patches of frost in Queensland and northern New South Wales. Coastal rain (10-50 mm) developed later in the week over Queensland's southern sugarcane areas, hampering fieldwork. However, the moisture benefited winter grains and oilseeds as it spread westward. In Western Australia, dry, mild weather covered the main agricultural districts. In New Zealand, light to moderate showers (10-25 mm or more) continued over most crop areas, further increasing moisture reserves for pastures and small grains.



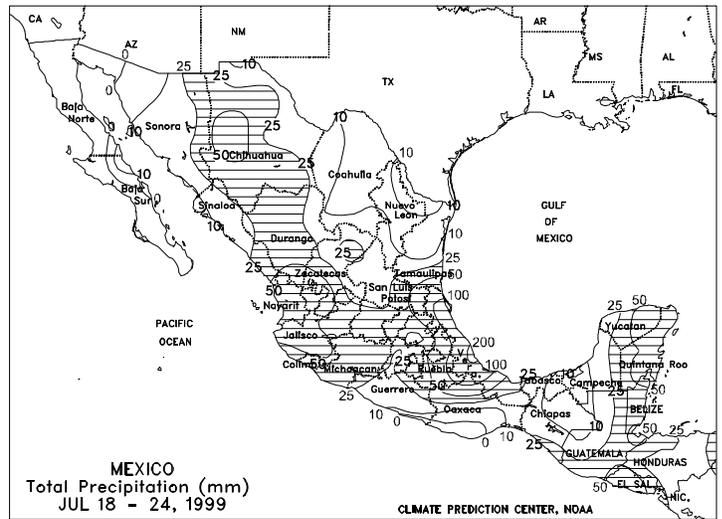
CANADA

Moderating temperatures gave Prairie grains and oilseeds a chance to recover somewhat from last week's unusual cold. Temperatures averaged near to slightly below normal over Alberta, but lows mostly stayed above 5 degrees C, posing no risk of damage to reproductive spring crops. Unfortunately, highs reached the middle 30's degrees C in the southwest later in the week, resulting in additional stress on crops in the driest districts. Farther east, temperatures averaged near to above normal, reaching as high as 3 degrees C above normal in the southeast. Rainfall was widely scattered across the Prairies, with sections of Saskatchewan reporting rainfall in excess of 25 mm. Dry pockets in southern Alberta raised further concern for yield potential of reproductive spring grains and oilseeds. In eastern Canada, mostly dry, warm weather favored wheat harvesting and hastened growth of reproductive corn and soybeans. Additional rain will be needed soon to ensure normal summer crop development.



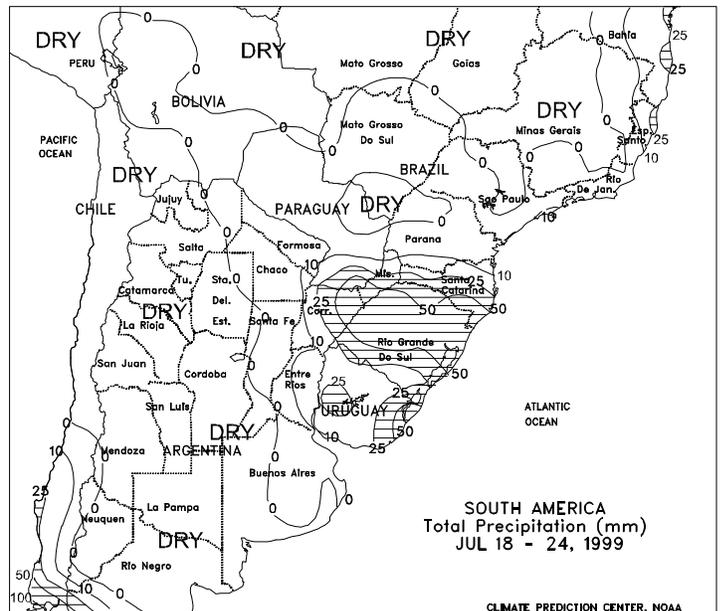
MEXICO

Widespread seasonal showers (25-60 mm) returned to the Southern Plateau corn belt, benefiting vegetative corn. Near-normal temperatures across the region favored corn development. Monsoonal showers (15-40 mm) continued to ease long-term moisture deficits across northwestern Mexico (Sonora and Chihuahua). Lighter showers (less than 15 mm) prevailed across northeastern Mexico. Cooler weather (temperatures averaging 1-3 degrees C below normal) across north-central and northeastern Mexico favored summer crop development.



SOUTH AMERICA

In central Argentina, drier weather returned to Buenos Aires province, the main wheat area of the country, after last week's beneficial, but unseasonably heavy rain. According to reports as of July 16, Argentine winter wheat was 72 percent planted, compared with 69 percent last year. In southern Brazil, moderate showers (20-70 mm) maintained favorable moisture supplies for vegetative winter wheat in Rio Grande do Sul. Seasonably warm, dry weather aided coffee and citrus harvesting from northern Parana northward into Minas Gerais. Cooler weather (temperatures 1-3 degrees C below normal) slowed wheat development in central Argentina and Rio Grande do Sul, Brazil.



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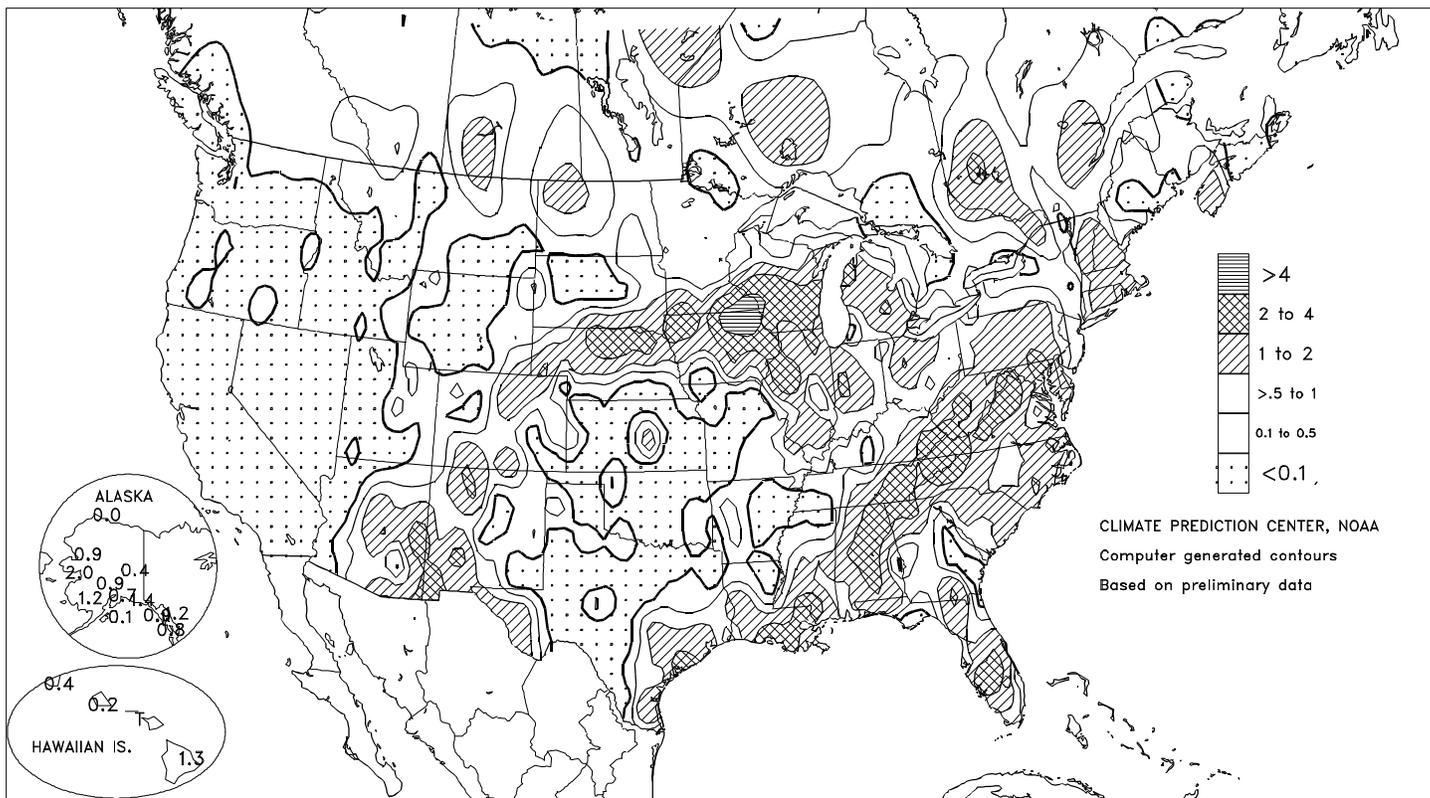
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