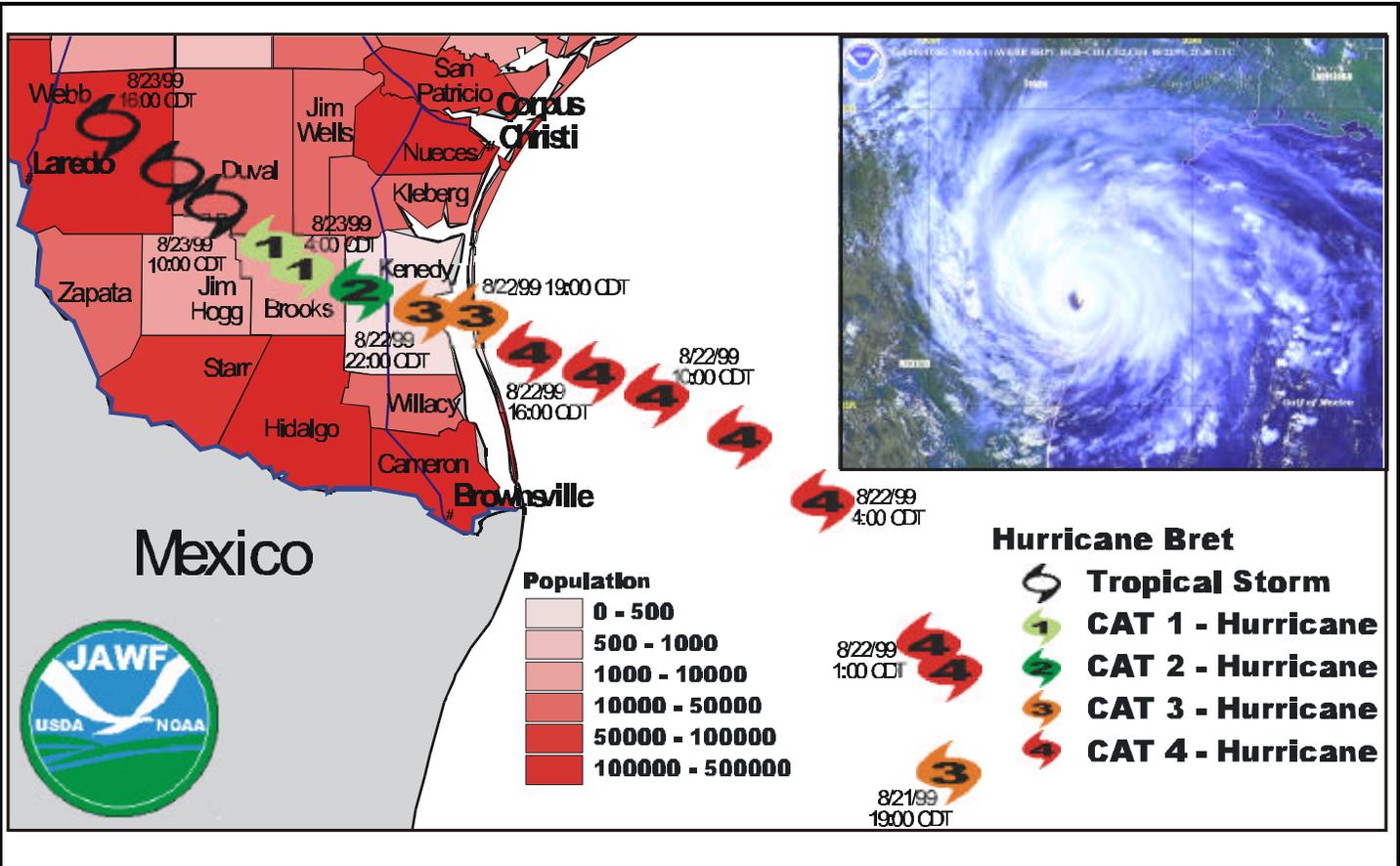


WEEKLY WEATHER AND CROP BULLETIN

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



HIGHLIGHTS August 15 - 21, 1999

Bret became the first hurricane to strike the **Texas coast** this decade when it crossed **Padre Island** on Sunday evening, August 22. Maximum sustained winds were estimated near 125 mph at landfall, but once inland, the storm's primary effect in the sparsely populated region was heavy rainfall and localized flooding. Meanwhile, extreme heat persisted through a fourth consecutive week across the remainder of the **South**, further stressing livestock, pastures, and immature summer crops, including cotton and soybeans. The region's weekly temperatures averaged up to 5°F above normal and highs regularly exceeded 100°F. In contrast, favorable temperatures (as much as 5°F below normal) prevailed for the third week in

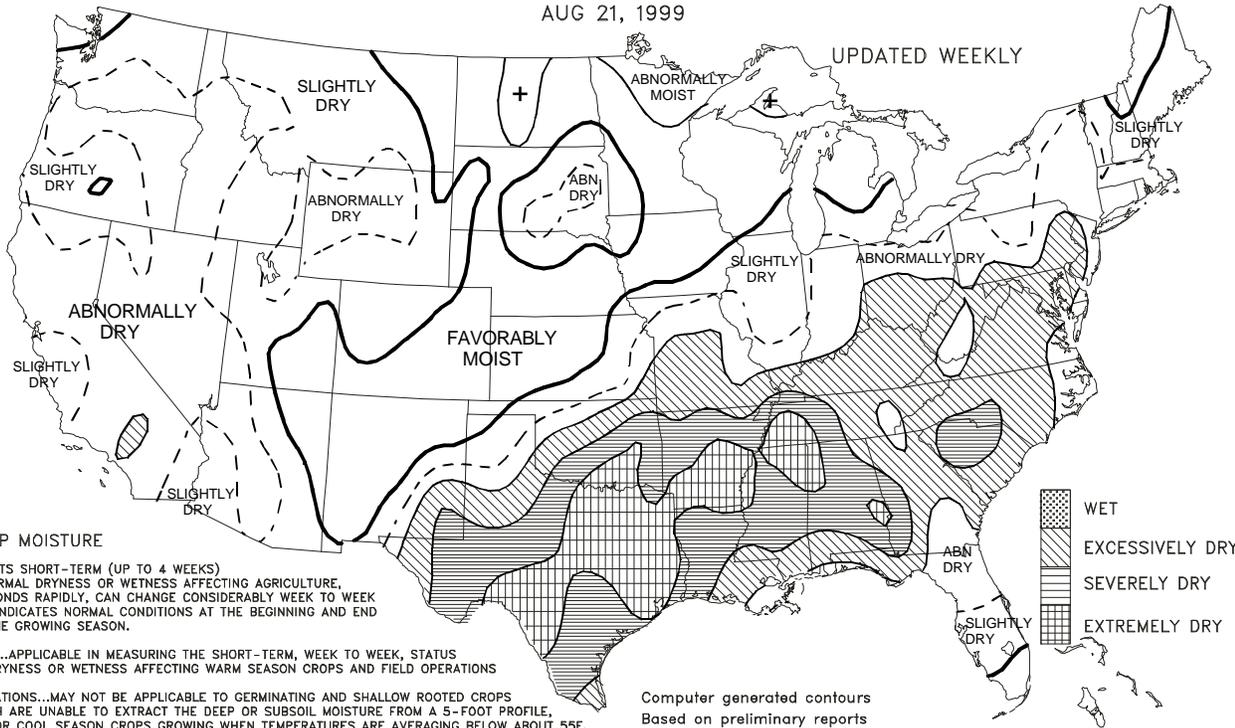
(Continued on page 5)

Contents

Crop Moisture Maps	2
Palmer Drought Maps	3
Weather Data for the Delta & Pan Evaporation Map	4
Temperature Departure & Extreme Maximum Temperature Maps	5
Growing Degree Day Maps	6
National Weather Data for Selected Cities	7
National Agricultural Summary	10
Crop Progress and Condition Tables	11
State Agricultural Summaries	14
International Weather and Crop Summary	20
Subscription Information & Total Precipitation Map	24

Crop Moisture
SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE
AUG 21, 1999

UPDATED WEEKLY



CROP MOISTURE

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

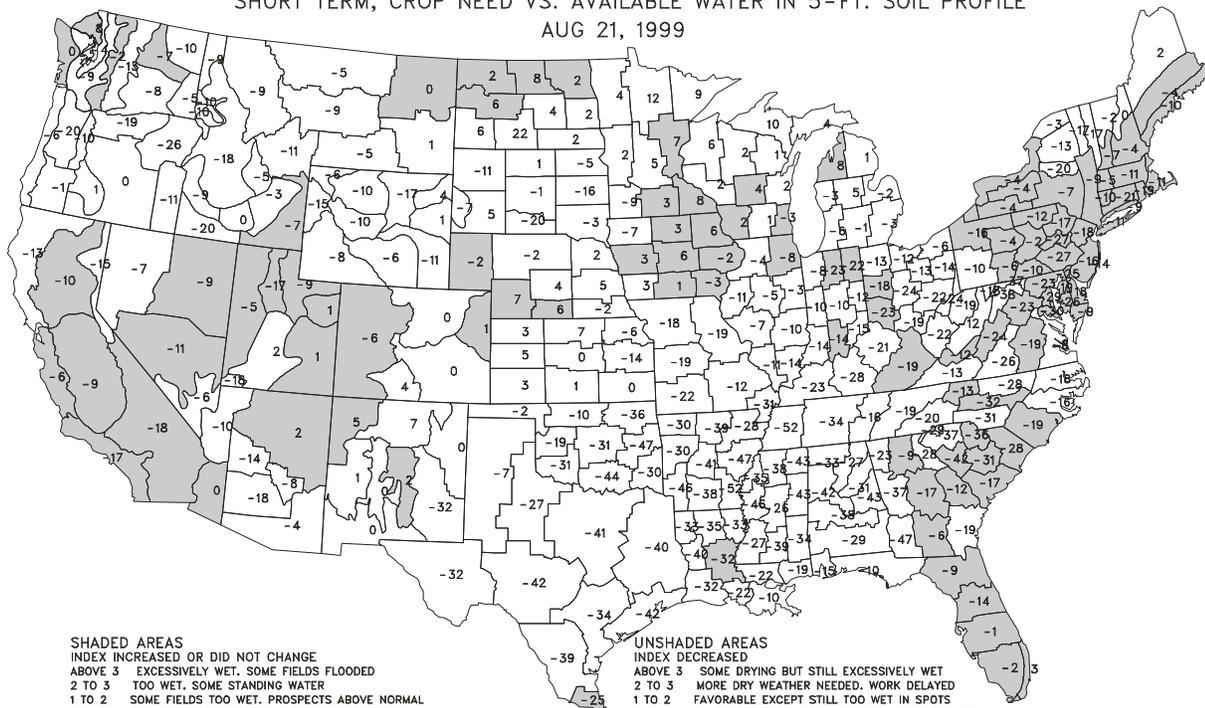
USES...APPLICABLE IN MEASURING THE SHORT-TERM, WEEK TO WEEK, STATUS OF DRYNESS OR WETNESS AFFECTING WARM SEASON CROPS AND FIELD OPERATIONS

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

Computer generated contours
Based on preliminary reports

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

Crop Moisture Index
SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE
AUG 21, 1999



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

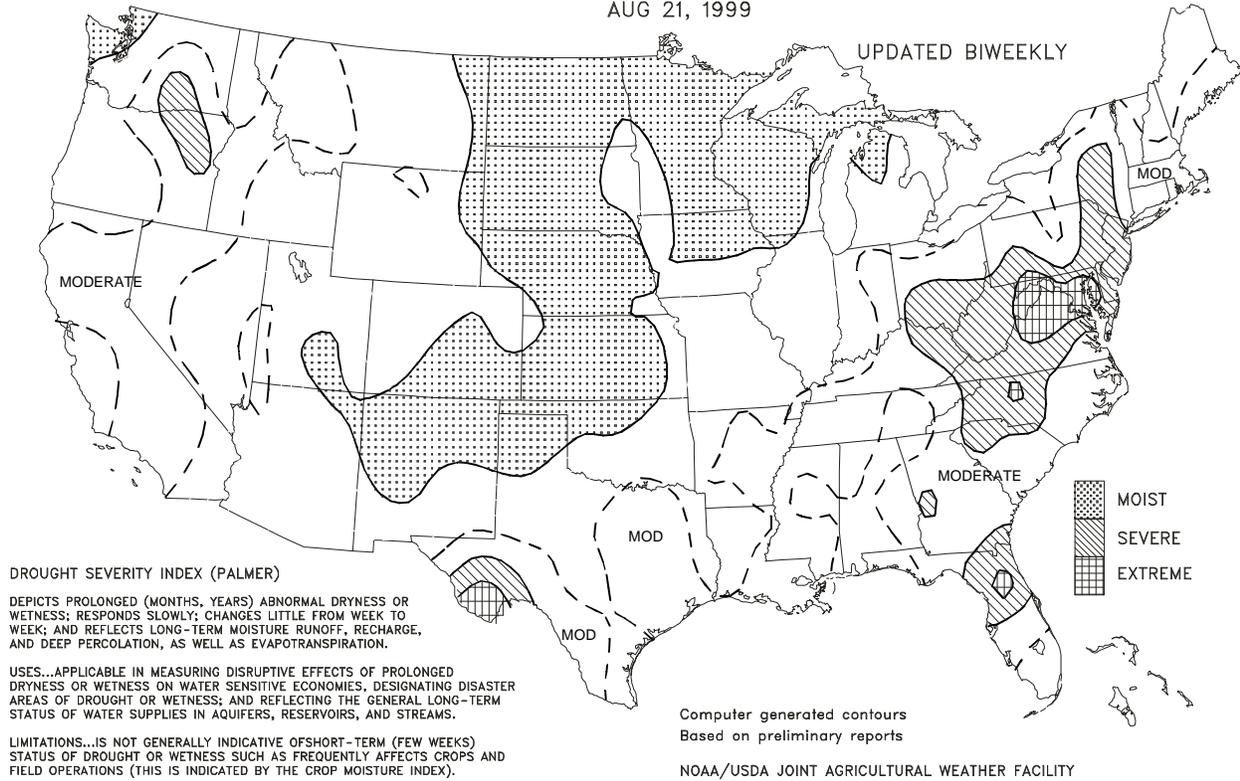
UNSHADED AREAS
 INDEX DECREASED
 ABOVE 3 SOME DRYING BUT STILL EXCESSIVELY WET
 2 TO 3 MORE DRY WEATHER NEEDED. WORK DELAYED
 1 TO 2 FAVORABLE EXCEPT STILL TOO WET IN SPOTS
 0 TO 1 FAVORABLE FOR NORMAL GROWTH AND FIELDWORK
 0 TO -1 TOPSOIL MOISTURE SHORT. GERMINATION SLOW
 -1 TO -2 ABNORMALLY DRY. PROSPECTS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

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

BASED ON PRELIMINARY DATA

DROUGHT SEVERITY
LONG TERM PALMER
AUG 21, 1999

UPDATED BIWEEKLY



DROUGHT SEVERITY INDEX (PALMER)

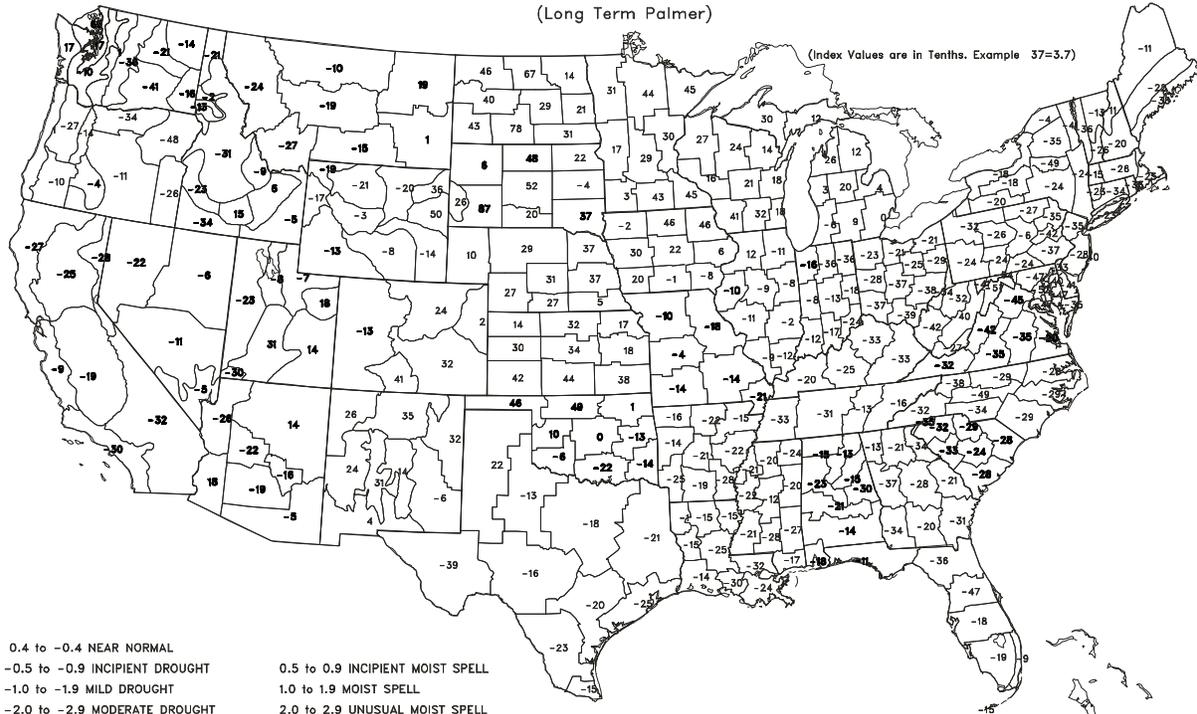
DEPICTS PROLONGED (MONTHS, YEARS) ABNORMAL DRYNESS OR WETNESS; RESPONDS SLOWLY; CHANGES LITTLE FROM WEEK TO WEEK; AND REFLECTS LONG-TERM MOISTURE RUNOFF, RECHARGE, AND DEEP PERCOLATION, AS WELL AS EVAPOTRANSPIRATION.

USES...APPLICABLE IN MEASURING DISRUPTIVE EFFECTS OF PROLONGED DRYNESS OR WETNESS ON WATER SENSITIVE ECONOMIES, DESIGNATING DISASTER AREAS OF DROUGHT OR WETNESS; AND REFLECTING THE GENERAL LONG-TERM STATUS OF WATER SUPPLIES IN AQUIFERS, RESERVOIRS, AND STREAMS.

LIMITATIONS...IS NOT GENERALLY INDICATIVE OF SHORT-TERM (FEW WEEKS) STATUS OF DROUGHT OR WETNESS SUCH AS FREQUENTLY AFFECTS CROPS AND FIELD OPERATIONS (THIS IS INDICATED BY THE CROP MOISTURE INDEX).

Drought Severity Index by Division
AUG 21, 1999
(Long Term Palmer)

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



0.4 to -0.4 NEAR NORMAL
-0.5 to -0.9 INCIPIENT DROUGHT
-1.0 to -1.9 MILD DROUGHT
-2.0 to -2.9 MODERATE DROUGHT
-3.0 to -3.9 SEVERE DROUGHT
BELOW -4.0 EXTREME DROUGHT

0.5 to 0.9 INCIPIENT MOIST SPELL
1.0 to 1.9 MOIST SPELL
2.0 to 2.9 UNUSUAL MOIST SPELL
3.0 to 3.9 VERY MOIST SPELL
ABOVE 4.0 EXTREME MOIST SPELL

Weather Data for Selected Locations in the Delta

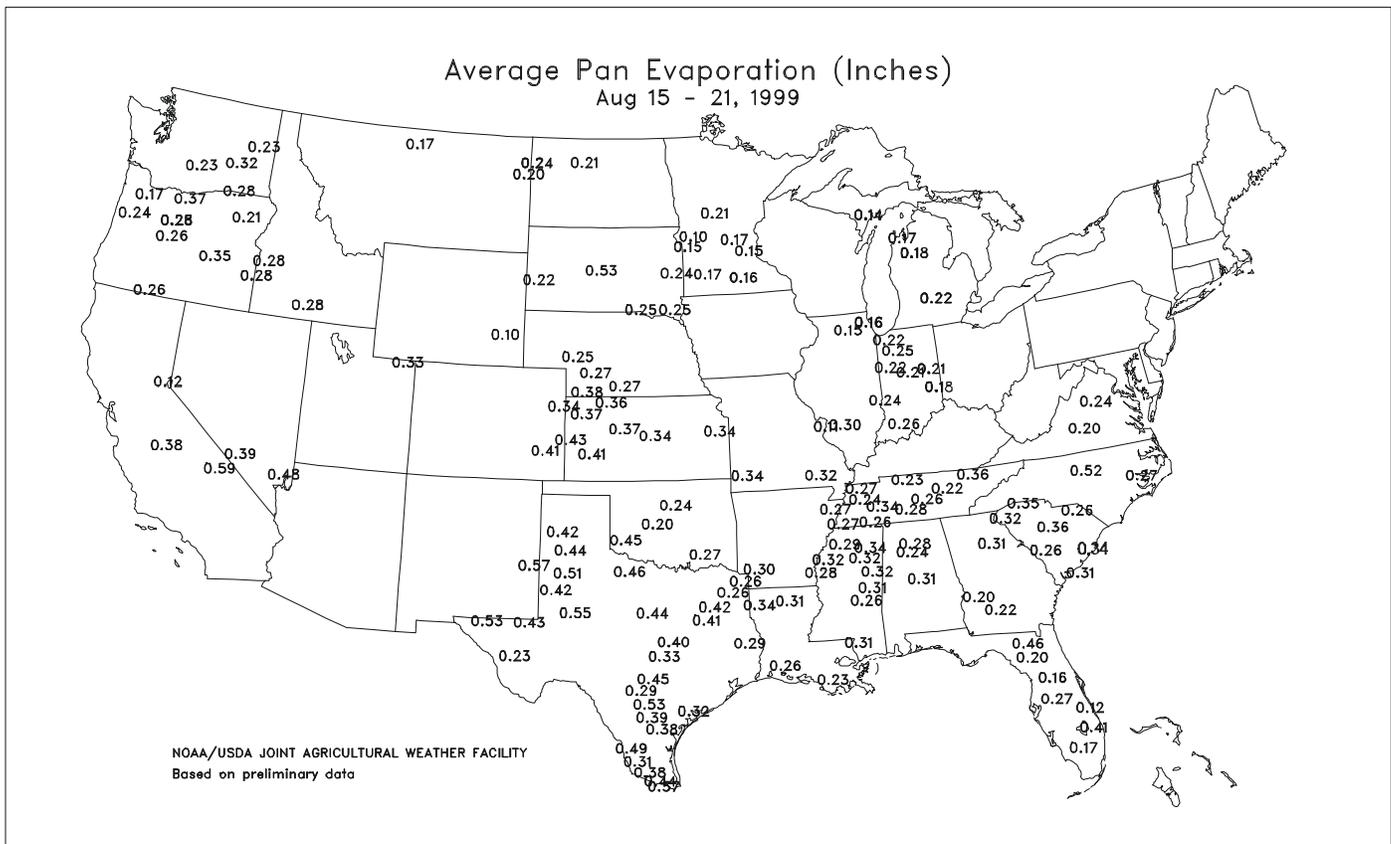
Weather Data for the Week Ending August 21, 1999

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

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								4-INCH SOIL TEMP, °F		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	PRECIP		
																		.01 INCH OR MORE	.50 INCH OR MORE	
MS BATESVILLE	92	63	99	59	79	0	0.00	-0.56	0.00	--	--	--	--	--	--	5	0	0	0	
BELZONI	97	65	104	60	81	0	0.00	-0.52	0.00	--	--	--	--	--	--	7	0	0	0	
CLARKSDALE	94	66	100	64	80	0	0.00	-0.56	0.00	--	--	--	--	--	--	6	0	0	0	
CLEVELAND	94	64	102	61	79	-1	0.00	-0.10	0.00	--	--	--	--	--	--	5	0	0	0	
GREENVILLE	93	67	104	66	80	-1	0.00	-0.35	0.00	--	--	--	--	--	--	5	0	0	0	
GREENWOOD	95	63	102	58	80	-1	0.00	-0.49	0.00	--	--	--	--	--	--	6	0	0	0	
INDIANOLA 1S	94	66	103	61	82	--	0.28	--	0.28	4.97	--	32.34	--	89	80	6	0	1	0	
INVERNESS 5E	95	68	104	63	84	--	0.00	--	0.00	5.40	--	30.52	--	89	76	6	0	0	0	
LYON	95	63	102	58	80	--	0.00	--	0.00	6.71	--	--	--	--	--	6	0	0	0	
MOORHEAD	96	70	104	65	83	-1	0.00	-0.37	0.00	--	--	--	--	--	--	6	0	0	0	
ONWARD	96	67	102	61	82	--	0.00	--	0.00	12.13	--	40.29	--	82	79	6	0	0	0	
ROLLING FORK	96	65	103	60	81	0	0.00	-0.42	0.00	--	--	--	--	--	--	6	0	0	0	
SIDON	97	67	105	62	84	--	0.00	--	0.00	--	--	--	--	98	88	6	0	0	0	
TUNICA	91	68	99	63	80	1	0.00	-0.55	0.00	--	--	--	--	--	--	4	0	0	0	
VICKSBURG	92	68	97	63	80	1	0.00	-0.51	0.00	--	--	--	--	--	--	5	0	0	0	
YAZOO CITY	95	65	101	60	80	-2	0.00	-0.63	0.00	--	--	--	--	--	--	5	0	0	0	
STONEVILLE *	95	65	104	61	83	3	0.00	-0.43	0.00	4.01	45	35.11	103	97	83	5	0	0	0	

* Based on 1964-93 normals.

Delta Weather and Crop Summary: Corn harvesting continued as conditions remained hot and dry throughout the region. In addition, the heat spurred cotton development, with bolls opening on more than half of Mississippi's crop by week's end. However, the drought continues to adversely affect soybeans, since soil moisture remains inadequate.



(Continued from front cover)

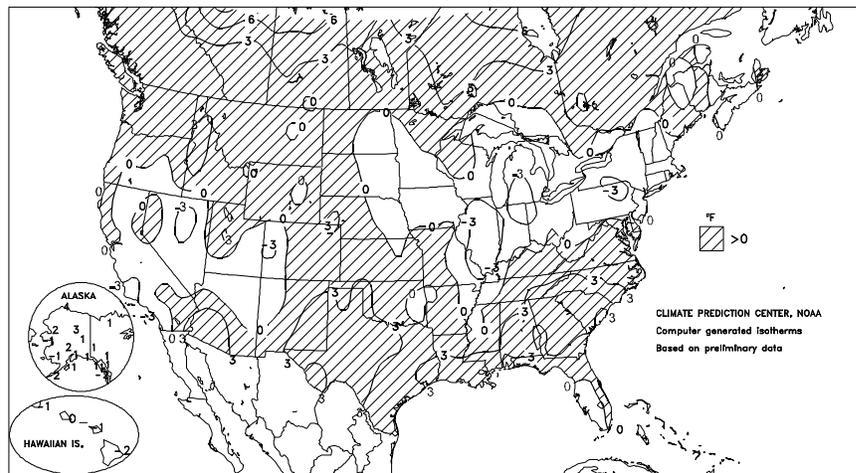
a row across the **Corn Belt**. Despite the cool weather, significant rainfall was confined to the **northwestern Corn Belt**, leaving soils unfavorably dry in many southeastern areas. Farther east, widespread rainfall dampened the **Atlantic Coast States**, improving topsoil moisture and providing limited relief from the 14-month drought. In the **northern Plains** and **Northwest**, warm, mostly dry weather favored small grain harvesting. Following 4 weeks of unusually cool weather in **California**, beneficial warmth promoted the development of summer crops, including cotton. Seasonal showers continued in the **Southwest**.

During the week, more than three dozen daily-record highs were established from **Texas** to the **southern Atlantic Coast**. On Sunday, **Del Rio, TX** posted a high of 104°F, their third daily record in 4 days. Heat intensified across the **South** after midweek, resulting in an August-record high (104°F on Thursday) in **Pinson, AL** and the highest temperature since 1980 (105°F on Friday) in **Houston, TX**. **Houston** first reached the 95-degree mark this year on July 22, their latest such occurrence on record, but currently has a 26-day streak (July 27 - August 21) with highs at or above 95°F. **Houston's** only longer such streaks occurred in 1993 (41 days), 1980 (37 days), and 1998 (32 days). Farther east, **El Dorado, AR** registered 108°F on August 19. The last time **El Dorado's** mercury exceeded that level was on July 15, 1939, when their high was 109°F. Marginally cooler air arrived across the **South** toward week's end. In **Dallas-Ft. Worth, TX**, a 24-day streak (July 28 - August 20) with highs at or above 100°F ended with a maximum of 99°F on Saturday. In **Greenville-Spartanburg, SC**, a 33-day streak (July 18 - August 19) with highs at or above 90°F ended on Fri-day. Their longest such streak on record was 38 days in 1993.

However, rainfall remained scarce, continuing a 6-week trend, in a broad area from **central and northeastern Texas** to the **Tennessee and lower Ohio Valleys**. August 21 marked **Dallas-Ft. Worth's** 42nd consecutive day without measurable rainfall. In **Tennessee**, August 1-21 rainfall totaled just 0.01 inch in **Chattanooga**, 0.31 inch in **Memphis**, and 0.42 inch in **Knoxville**. Elsewhere across the **South**, month-to-date precipitation included none in **Shreveport, LA**; a trace in **Montgomery, AL**; 0.08 inch in **Ft. Smith, AR**; 0.10 inch in **Baton Rouge, LA**; 0.12 inch in **Little Rock, AR**; 0.14 inch in **Birmingham, AL**; 0.19 inch in **Tupelo, MS**; and 0.24 inch in **Tulsa, OK**. In contrast, beneficial rain fell along the **East Coast**, with more than 1 inch reported in many areas from **eastern Georgia** to **New York** and **southern New England**. In **Buffalo, NY**, Friday's rainfall of 1.18 inches was their greatest single-day total since 1.31 inches fell on July 8, 1998. Rainfall locally topped 4 inches in **western New York**, including a 4.15-inch total in **Hilton, near Rochester**. Earlier in the week, locally heavy thunderstorms occurred in the **central Plains** and **upper Midwest**. On Tuesday, a thunderstorm produced 2.06 inches of rain and a wind gust to 75 mph in **North Platte, NE**.

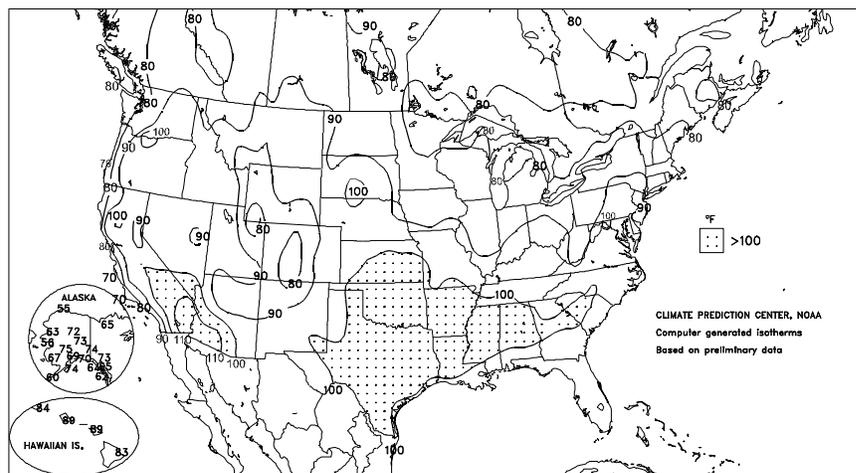
Departure of Average Temperature from Normal (°F)

AUG 15 - 21, 1999



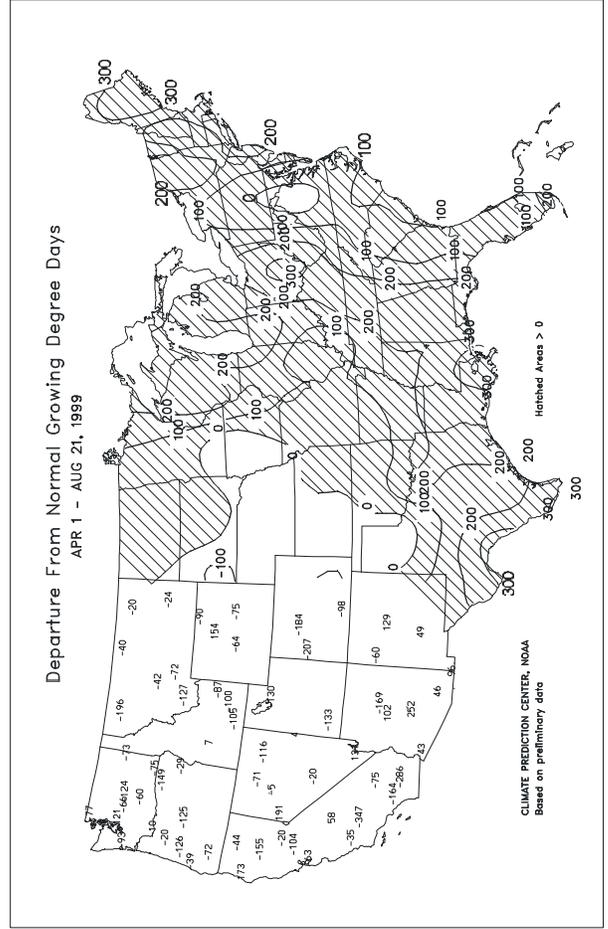
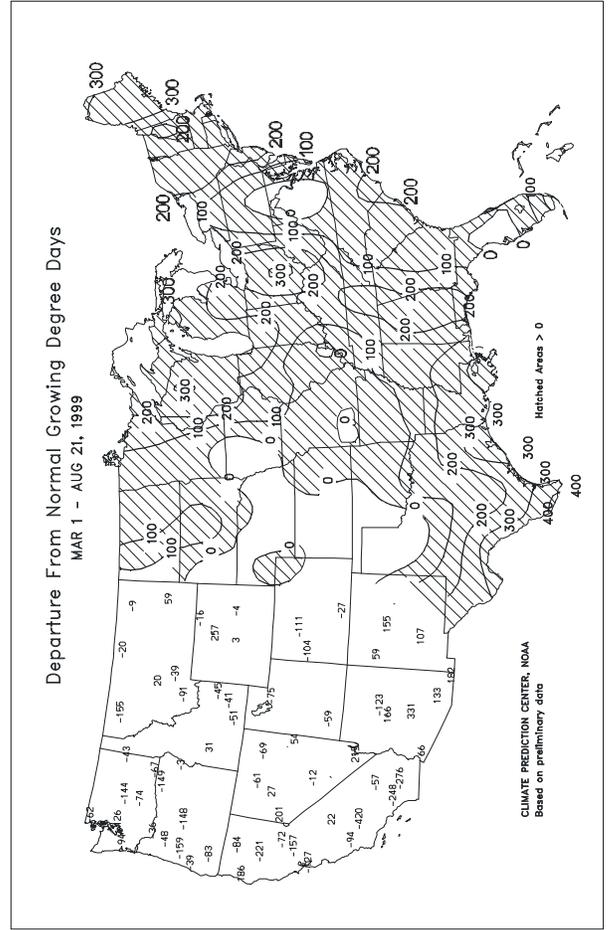
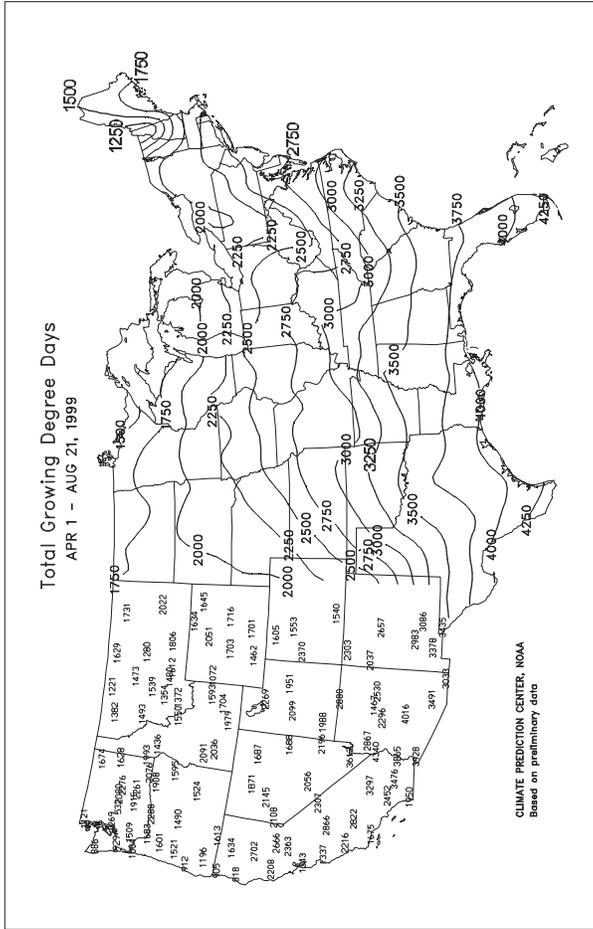
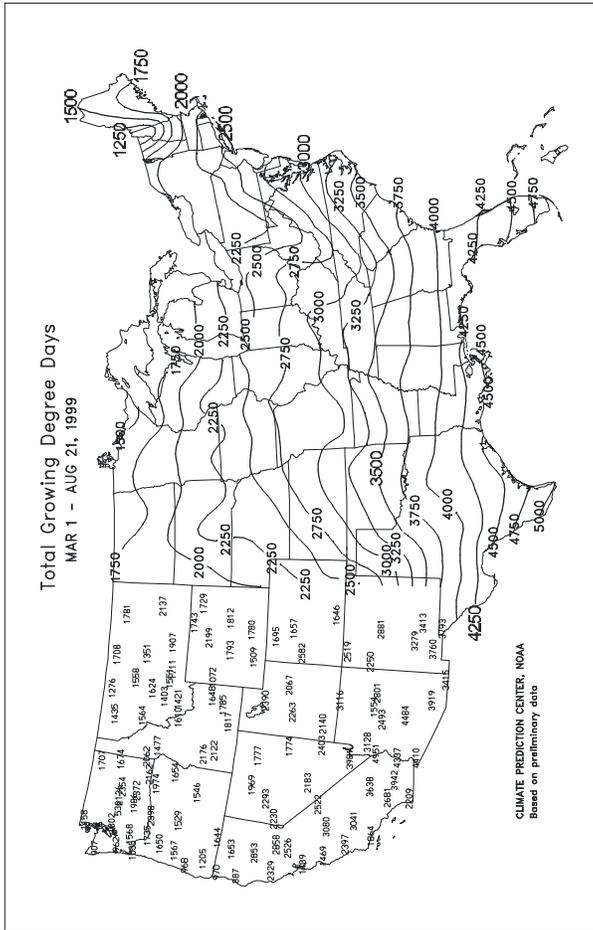
Extreme Maximum Temperature (°F)

AUG 15 - 21, 1999



Despite a warming trend in **California** and the **Great Basin**, temperatures rose only to near-normal levels. In **Sacramento, CA**, the summer of 1999 may become the coolest since 1980, when June 1 - August 31 temperatures averaged 73.2°F. Through August 19, this year's summer readings averaged 73.4°F. Farther east, daily-record lows were reported on August 15 in **Burns, OR** (32°F) and **Elko, NV** (35°F).

Bret made landfall in **Kenedy County, TX** as a Category 3 hurricane with maximum sustained winds estimated at 125 mph. The last hurricane to cross the **Texas coast** was Jerry, which arrived near **Galveston** as a minimal hurricane on October 15, 1989. **Texas's** previous longest stretch on record without hurricane activity was just under 9 years, from Hurricane Fern in September 1971 to Hurricane Allen in August 1980. During the 24 hours ending at 7 a.m. CDT on Monday, August 23, **Sarita (Kenedy County), TX** reported 8.20 inches of rain. About 60 miles north of the landfall position, **Corpus Christi, TX** netted consecutive daily-record rainfalls on August 22 (4.56 inches) and August 23 (2.04 inches). The storm continued a west-northwestward drift after moving inland and was downgraded to a tropical depression late on August 23 before crossing the **lower Rio Grande River** into **northeastern Mexico**, north of **Laredo, TX**.



National Weather Data for Selected Cities

Weather Data for the Week Ending August 21, 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	98	69	103	65	84	4	0.00	-0.78	0.00	12.30	107	37.31	100	90	34	7	0	0	0
AL HUNTSVILLE	95	64	101	59	80	1	0.39	-0.36	0.39	8.81	78	35.96	95	98	33	7	0	1	0
AL MOBILE	95	74	97	71	85	3	1.67	0.10	1.63	14.56	87	35.08	81	96	57	7	0	2	1
AL MONTGOMERY	97	72	102	67	84	4	0.00	-0.80	0.00	13.82	119	31.51	86	92	39	7	0	0	0
AK ANCHORAGE	63	50	69	48	57	0	0.34	-0.22	0.20	5.92	133	8.44	104	95	63	0	0	5	0
AK BARROW	46	38	55	35	42	4	0.86	0.64	0.35	2.21	116	2.68	102	98	88	0	0	5	0
AK FAIRBANKS	68	47	73	43	58	1	0.01	-0.44	0.01	4.89	105	6.09	89	96	46	0	0	1	0
AK JUNEAU	62	50	65	45	56	1	1.08	-0.14	0.37	10.34	96	36.80	129	100	75	0	0	7	0
AK KODIAK	62	51	74	44	57	1	1.04	-0.15	0.58	16.71	142	39.34	102	91	56	0	0	3	1
AK NOME	52	45	56	36	49	-1	0.38	-0.25	0.23	7.36	144	10.72	128	100	86	0	0	4	0
AZ FLAGSTAFF	78	49	80	46	64	0	0.52	-0.10	0.29	5.46	107	10.24	73	96	39	0	0	4	0
AZ PHOENIX	106	83	109	81	95	3	0.03	-0.19	0.02	3.07	191	4.49	107	54	23	7	0	2	0
AZ TUCSON	99	73	103	72	86	2	0.30	-0.19	0.26	5.04	121	6.38	92	73	24	7	0	4	0
AZ YUMA	107	85	112	80	96	3	0.00	-0.16	0.00	2.49	341	4.26	252	58	21	7	0	0	0
AR FORT SMITH	98	65	104	63	82	1	0.00	-0.66	0.00	7.92	95	30.13	116	84	24	7	0	0	0
AR LITTLE ROCK	95	67	103	64	81	0	0.00	-0.72	0.00	3.52	38	26.10	82	86	31	5	0	0	0
CA BAKERSFIELD	93	65	96	61	79	-4	0.00	-0.03	0.00	0.00	0	5.42	139	62	25	6	0	0	0
CA EUREKA	66	56	68	54	61	3	0.03	-0.08	0.02	0.49	53	27.53	129	93	72	0	0	2	0
CA FRESNO	95	62	99	58	79	-1	0.00	0.00	0.00	0.21	300	5.97	86	71	19	7	0	0	0
CA LOS ANGELES	72	63	74	62	68	-3	0.00	-0.03	0.00	0.98	1225	7.18	92	88	62	0	0	0	0
CA REDDING	94	59	102	56	76	-3	0.00	-0.11	0.00	0.64	65	17.16	89	63	14	6	0	0	0
CA SACRAMENTO	90	56	96	53	73	-2	0.00	-0.02	0.00	0.03	18	9.91	92	91	23	5	0	0	0
CA SAN DIEGO	72	63	75	62	68	-5	0.00	-0.03	0.00	0.04	27	5.08	81	92	67	0	0	0	0
CA SAN FRANCISCO	71	55	78	53	63	-1	0.00	0.00	0.00	0.24	200	12.93	105	91	59	0	0	0	0
CO ALAMOSA	77	49	81	42	63	1	0.93	0.68	0.75	3.17	121	5.67	120	95	36	0	0	4	1
CO CO SPRINGS	82	58	88	53	70	2	0.21	-0.48	0.21	10.58	145	22.23	181	78	32	0	0	1	0
CO DENVER	85	59	88	56	72	1	0.24	-0.09	0.22	8.28	173	17.30	154	76	28	0	0	2	0
CO GRAND JUNCTION	84	62	89	58	73	-3	0.78	0.59	0.35	3.08	180	6.22	118	74	32	0	0	4	0
CO PUEBLO	92	57	95	53	74	0	0.42	-0.03	0.20	4.77	100	12.59	152	85	26	6	0	4	0
CT BRIDGEPORT	77	65	87	57	71	-2	0.54	-0.18	0.50	5.77	61	25.04	92	91	61	0	0	3	1
CT HARTFORD	79	61	90	57	70	-2	1.38	0.55	0.90	5.83	62	23.20	84	96	49	1	0	3	1
DC WASHINGTON	89	71	99	67	80	2	0.28	-0.60	0.12	3.93	40	19.13	77	86	43	3	0	3	0
DE WILMINGTON	84	67	94	63	76	1	1.81	1.06	1.80	4.62	46	24.46	91	94	47	2	0	2	1
FL DAYTONA BEACH	92	73	95	71	82	1	2.25	0.84	1.28	16.08	104	26.69	89	97	56	6	0	4	2
FL JACKSONVILLE	93	72	95	71	83	1	1.23	-0.61	0.80	13.97	85	23.43	69	96	55	7	0	5	1
FL KEY WEST	88	79	91	74	84	-1	1.61	0.44	0.65	16.69	140	25.70	113	88	69	2	0	3	2
FL MIAMI	89	77	92	75	83	0	3.10	1.34	1.60	24.19	121	33.92	95	88	62	3	0	5	2
FL ORLANDO	91	73	95	72	82	0	2.15	0.63	1.01	22.30	116	33.95	103	97	56	5	0	7	2
FL PENSACOLA	91	76	92	73	84	2	0.52	-1.15	0.52	18.65	98	36.19	85	92	61	7	0	1	1
FL TALLAHASSEE	93	74	95	72	83	2	0.48	-1.19	0.31	19.87	94	36.83	80	98	55	5	0	4	0
FL TAMPA	91	75	94	74	83	1	3.30	1.56	1.92	16.11	93	22.09	75	93	60	5	0	6	2
FL WEST PALM BEACH	88	75	92	73	82	-1	2.97	1.61	1.11	20.72	114	32.40	89	94	66	3	0	6	2
GA ATHENS	96	70	101	66	83	4	2.01	1.20	2.00	13.01	114	27.57	80	91	41	7	0	2	1
GA ATLANTA	94	71	98	64	83	5	0.13	-0.67	0.13	9.50	85	25.70	73	84	35	6	0	1	0
GA AUGUSTA	97	71	102	66	84	4	1.83	0.81	0.85	11.95	104	25.97	82	98	43	7	0	4	1
GA COLUMBUS	93	73	102	69	83	2	0.18	-0.62	0.13	6.41	52	19.01	53	88	46	5	0	2	0
GA MACON	97	72	101	68	85	4	1.62	0.81	1.42	11.82	113	24.74	78	98	44	7	0	2	1
GA SAVANNAH	93	73	96	69	83	2	1.07	-0.64	1.07	24.13	140	37.68	108	95	55	7	0	1	1
HI HILO	80	68	83	67	74	-2	2.57	0.48	1.38	11.58	52	79.06	97	96	69	0	0	7	1
HI HONOLULU	88	74	89	71	81	0	0.00	-0.08	0.00	0.76	53	7.01	58	76	46	0	0	0	0
HI KAHULUI	87	71	89	65	79	-1	0.02	-0.09	0.02	0.17	17	6.64	50	82	50	0	0	1	0
HI LIHUE	84	72	84	70	78	-1	0.34	-0.05	0.17	5.38	107	19.47	78	88	62	0	0	4	0
ID BOISE	92	60	98	48	76	3	0.00	-0.10	0.00	0.74	52	6.57	87	53	18	5	0	0	0
ID LEWISTON	91	62	98	55	76	3	0.00	-0.18	0.00	1.71	70	6.64	82	65	25	4	0	0	0
ID POCATELLO	89	51	96	41	70	1	0.00	-0.15	0.00	1.86	89	9.05	115	69	16	4	0	0	0
IL CHICAGO/O'HARE	79	58	86	52	69	-3	0.65	-0.31	0.61	10.00	98	29.81	131	94	48	0	0	2	1
IL MOLINE	80	59	88	54	69	-3	0.40	-0.54	0.40	9.30	77	24.24	93	95	53	0	0	1	0
IL PEORIA	79	60	87	53	70	-3	0.08	-0.60	0.08	9.49	92	23.90	101	94	54	0	0	1	0
IL ROCKFORD	78	56	85	50	67	-4	0.14	-0.80	0.10	10.29	90	26.82	113	99	53	0	0	4	0
IL SPRINGFIELD	81	59	88	52	70	-3	0.07	-0.67	0.04	8.33	91	20.90	91	92	51	0	0	4	0
IN EVANSVILLE	88	58	94	53	73	-3	0.03	-0.65	0.02	8.98	93	30.60	106	94	37	3	0	2	0
IN FORT WAYNE	80	55	88	48	67	-4	0.40	-0.36	0.39	3.37	36	20.18	88	95	45	0	0	2	0
IN INDIANAPOLIS	82	60	89	55	71	-2	0.04	-0.76	0.04	6.81	65	26.28	98	89	43	0	0	1	0
IN SOUTH BEND	79	58	86	52	69	-2	0.62	-0.21	0.54	7.00	67	22.00	89	92	45	0	0	3	1
IA BURLINGTON	85	64	94	57	75	2	0.20	-0.67	0.19	10.68	98	25.95	111	84	47	2	0	2	0
IA CEDAR RAPIDS	79	58	86	54	68	-3	0.75	-0.16	0.73	12.52	110	27.22	120	98	60	0	0	3	1
IA DES MOINES	82	62	88	57	72	-2	1.29	0.33	1.21	10.28	93	23.94	106	92	55	0	0	2	1
IA DUBUQUE	76	59	82	54	67	-2	0.19	-0.88	0.19	14.14	126	29.24	118	93	59	0	0	1	0
IA SIOUX CITY	84	58	88	52	71	-2	0.72	0.06	0.71	12.58	140	24.48	135	97	52	0	0	2	1
IA WATERLOO	79	58	84	53	68	-2	1.24	0.44	1.12	21.48	181	37.04	158	95	64	0	0	5	1
KS CONCORDIA	89	66	98	59	78	1	0.04	-0.76	0.04	6.99	66	22.49	109	87	42	3	0	1	0
KS DODGE CITY	95	64	100	53	79	1	0.00	-0.61	0.00	7.51	91	17.66	110	78	29	6	0	0	0
KS GOODLAND	89	60	94	55	75	2	0.28	-0.11	0.16	9.95	135	17.26	123	87	35	3	0	4	0
KS TOPEKA	92	64	100	57	78	2	0.03	-0.86	0.03	7.64	65	25.74	109	87	37	5	0	1	0

Based on 1961-90 normals

Weather Data for the Week Ending August 21, 1999

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	PRECIP		
																		0.1 INCH OR MORE	5.0 INCH OR MORE	
KY WICHITA	94	67	103	62	81	1	0.44	-0.24	0.41	11.88	126	28.70	145	76	33	4	0	2	0	
KY JACKSON	85	64	94	60	74	1	0.01	-0.85	0.01	7.87	65	26.57	80	91	44	1	0	1	0	
KY LEXINGTON	89	62	97	57	76	1	0.05	-0.82	0.03	8.02	70	23.89	79	89	32	4	0	2	0	
KY LOUISVILLE	90	65	99	61	78	2	0.47	-0.31	0.47	9.58	92	30.56	101	82	33	3	0	1	0	
KY PADUCAH	91	58	97	53	75	-2	0.00	-0.74	0.00	9.79	93	31.56	97	96	33	4	0	0	0	
LA BATON ROUGE	96	73	100	66	85	3	0.00	-1.34	0.00	12.64	82	31.13	76	95	40	7	0	0	0	
LA LAKE CHARLES	96	75	101	70	86	4	0.00	-1.20	0.00	13.71	100	28.64	84	93	44	7	0	0	0	
LA NEW ORLEANS	93	77	95	76	85	4	1.65	0.24	1.64	21.22	131	33.61	82	93	55	7	0	2	1	
LA SHREVEPORT	99	70	105	61	84	2	0.00	-0.52	0.00	10.78	112	41.10	137	79	26	7	0	0	0	
ME CARIBOU	72	50	79	45	61	-2	0.04	-0.88	0.03	9.73	100	20.86	95	97	51	0	0	2	0	
ME PORTLAND	77	56	85	50	66	-1	0.40	-0.23	0.20	3.78	45	23.58	88	96	50	0	0	2	0	
MD BALTIMORE	85	66	96	63	76	0	0.96	0.08	0.96	6.06	60	20.86	79	95	50	2	0	1	1	
MA BOSTON	78	63	90	57	70	-1	0.24	-0.50	0.12	4.77	59	20.03	78	92	57	1	0	3	0	
MA WORCESTER	74	58	86	54	66	-2	0.37	-0.48	0.31	5.55	54	22.75	77	94	54	0	0	3	0	
MI ALPENA	75	51	80	43	63	-2	0.18	-0.59	0.18	6.82	83	14.26	78	97	49	0	0	1	0	
MI GRAND RAPIDS	77	57	82	51	67	-2	0.01	-0.80	0.01	8.98	97	24.12	112	94	49	0	0	1	0	
MI HOUGHTON LAKE	75	50	78	42	63	-2	0.05	-0.73	0.02	13.02	166	20.67	119	94	48	0	0	4	0	
MI LANSING	77	52	83	44	65	-4	0.02	-0.72	0.01	10.24	123	21.94	116	97	58	0	0	2	0	
MI MARQUETTE	71	47	81	39	59	-3	0.41	-0.37	0.29	10.05	117	27.11	129	92	50	0	0	2	0	
MI MUSKEGON	76	57	78	51	66	-2	0.13	-0.67	0.12	8.95	135	22.36	121	96	56	0	0	2	0	
MN DULUTH	72	55	77	49	64	0	1.98	1.07	1.48	19.05	188	28.09	145	97	60	0	0	4	1	
MN INT'L FALLS	73	54	80	49	64	0	0.62	-0.07	0.49	12.20	127	22.33	137	98	60	0	0	5	0	
MN MINNEAPOLIS	77	62	83	57	69	-1	0.50	-0.32	0.26	10.11	100	25.04	127	89	54	0	0	3	0	
MN ROCHESTER	74	57	82	51	66	-2	2.94	2.07	2.48	17.15	162	32.82	164	96	67	0	0	4	1	
MN ST. CLOUD	77	57	82	51	67	0	3.27	2.36	2.80	12.32	119	21.19	114	94	55	0	0	4	1	
MS JACKSON	98	67	104	61	83	2	0.00	-0.83	0.00	9.94	97	29.86	81	91	31	7	0	0	0	
MS MERIDIAN	100	67	104	60	84	3	0.00	-0.78	0.00	7.04	62	26.17	68	96	30	7	0	0	0	
MS TUPELO	96	67	104	61	82	2	0.00	-0.66	0.00	9.54	93	42.36	115	87	31	6	0	0	0	
MO COLUMBIA	87	61	95	56	74	-1	0.08	-0.66	0.05	5.88	58	21.00	82	96	45	2	0	2	0	
MO KANSAS CITY	88	66	98	60	77	1	0.29	-0.61	0.28	10.78	92	30.37	123	90	48	2	0	2	0	
MO SAINT LOUIS	85	63	92	58	74	-3	0.00	-0.62	0.00	11.30	118	28.24	115	85	42	2	0	0	0	
MO SPRINGFIELD	93	64	100	59	78	1	0.00	-0.81	0.00	5.76	56	28.39	107	87	30	3	0	0	0	
MT BILLINGS	87	57	93	49	72	1	0.05	-0.18	0.05	3.56	100	8.70	82	69	20	3	0	1	0	
MT BUTTE	82	46	88	39	64	3	0.03	-0.27	0.03	4.56	107	10.02	114	87	24	0	0	1	0	
MT GLASGOW	84	56	95	52	70	1	0.79	0.49	0.79	5.70	119	11.97	145	84	25	2	0	1	1	
MT GREAT FALLS	84	53	91	48	69	2	0.13	-0.23	0.13	4.13	88	9.04	81	76	22	3	0	1	0	
MT KALISPELL	79	48	91	42	64	1	0.24	-0.09	0.11	3.91	92	9.54	88	98	38	1	0	6	0	
MT MILES CITY	88	59	98	54	74	1	0.36	0.11	0.20	4.20	82	9.16	89	76	25	3	0	1	0	
MT MISSOULA	83	51	91	48	67	1	0.13	-0.15	0.11	5.01	143	8.49	92	88	28	2	0	2	0	
NE GRAND ISLAND	86	61	97	53	73	0	2.08	1.45	1.39	12.90	150	23.67	131	94	47	1	0	3	2	
NE LINCOLN	87	62	92	57	75	0	1.59	0.82	1.03	11.14	119	24.47	126	93	48	3	0	2	2	
NE NORFOLK	85	59	89	52	72	0	0.05	-0.52	0.04	11.56	122	22.67	122	92	44	0	0	2	0	
NE NORTH PLATTE	86	58	92	53	72	0	2.07	1.70	2.06	10.91	142	16.91	112	93	45	1	0	2	1	
NE OMAHA	85	63	88	57	74	0	0.64	-0.08	0.43	12.72	133	28.99	143	97	59	0	0	3	0	
NE SCOTTSBLUFF	91	56	96	53	74	2	0.20	-0.02	0.20	6.00	109	12.26	103	89	25	4	0	1	0	
NE VALENTINE	92	57	101	46	74	2	0.32	-0.18	0.29	8.70	115	15.69	111	88	26	4	0	2	0	
NE ELY	85	46	89	38	65	0	0.16	-0.03	0.14	2.61	121	5.03	76	58	17	0	0	2	0	
NE LAS VEGAS	99	77	101	69	88	-1	0.00	-0.11	0.00	2.54	317	3.35	127	38	19	7	0	0	0	
NE RENO	90	54	93	46	72	3	0.00	-0.08	0.00	0.82	88	3.72	78	56	15	6	0	0	0	
NE WINNEMUCCA	93	42	96	38	67	-2	0.00	-0.11	0.00	1.32	92	4.67	88	53	18	6	0	0	0	
NH CONCORD	76	55	88	49	66	-2	1.03	0.28	0.71	8.67	100	23.33	104	97	51	0	0	4	1	
NJ NEWARK	81	67	90	60	74	-2	0.51	-0.36	0.48	4.26	41	23.98	84	86	54	1	0	3	0	
NM ALBUQUERQUE	87	65	90	61	76	0	0.25	-0.13	0.19	4.39	141	6.74	122	73	29	1	0	3	0	
NY ALBANY	78	61	89	57	69	0	0.53	-0.27	0.22	7.06	77	20.94	90	94	51	0	0	4	0	
NY BINGHAMTON	73	57	89	53	65	-2	0.57	-0.17	0.24	6.91	74	19.85	85	94	55	0	0	4	0	
NY BUFFALO	76	58	82	53	67	-2	1.27	0.31	1.15	5.24	56	19.58	85	94	50	0	0	2	1	
NY ROCHESTER	76	57	86	52	66	-1	2.20	1.42	1.50	8.81	110	21.50	108	98	52	0	0	4	2	
NY SYRACUSE	79	57	90	53	68	0	0.00	-0.79	0.00	5.37	54	18.48	77	89	44	1	0	0	0	
NC ASHEVILLE	87	64	92	61	75	3	0.00	-1.06	0.00	8.66	72	26.12	83	96	46	2	0	0	0	
NC CHARLOTTE	91	69	100	64	80	2	0.52	-0.31	0.52	8.05	82	21.17	75	91	42	4	0	1	1	
NC GREENSBORO	86	69	93	65	78	2	0.87	0.01	0.75	11.15	101	25.37	90	89	49	2	0	3	1	
NC HATTERAS	84	75	86	70	79	1	0.96	-0.42	0.72	9.50	72	30.73	89	94	73	0	0	3	1	
NC RALEIGH	89	70	96	67	80	3	0.28	-0.63	0.16	6.33	60	21.87	78	96	52	3	0	4	0	
NC WILMINGTON	92	75	98	71	84	4	2.82	1.27	1.30	11.93	63	34.56	92	92	57	6	0	4	2	
ND BISMARCK	81	55	85	51	68	0	0.49	0.10	0.48	13.57	225	23.91	207	95	49	0	0	2	0	
ND DICKINSON	82	56	89	51	69	0	0.01	-0.30	0.01	5.98	95	13.48	111	92	38	0	0	1	0	
ND FARGO	79	57	83	48	68	-1	0.03	-0.52	0.02	6.00	83	13.69	100	93	52	0	0	2	0	
ND GRAND FORKS	77	53	83	49	65	-2	0.46	-0.08	0.45	7.22	100	16.39	129	98	57	0	0	2	0	
ND JAMESTOWN	78	54	84	51	66	-3	0.22	-0.24	0.19	8.55	119	18.25	145	97	52	0	0	2	0	
ND WILLISTON	84	54	94	46	69	0	0.50	0.23	0.35	6.97	133	13.27	130	93	35	2	0	3	0	
OH AKRON-CANTON	77	59	85	56	68	-2	0.03	-0.70	0.03	8.59	90	23.22	96	96	63	0	0	1	0	
OH CINCINNATI	84	59	93	54	71	-2	0.29	-0.45	0.29	8.04	77	23.22	83	93	40	1	0	1	0	
OH CLEVELAND	77	59	88	52	68	-2	0.03	-0.74	0.03	7.14	75	19.93	86	93	57	0	0	1	0	
OH COLUMBUS	83	61	94	56	72	1	0.15	-0.68	0.13	4.22	38	18.19	70	91	45	1	0	2	0	
OH DAYTON	83	57	92	53	70	-2	0.39	-0.33	0.39	7.00	73	22.02	89	89	42	1	0	1	0	
OH MANSFIELD	76	57	85	52	67	-4	0.03	-0.90	0.02	8.70	81	24.62	94	95	55	0	0	2	0	

Weather Data for the Week Ending August 21, 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
OK TOLEDO	79	57	89	50	68	-1	0.14	-0.60	0.14	5.85	63	21.91	103	90	43	0	0	1	0
OK YOUNGSTOWN	76	57	86	47	67	-2	0.24	-0.50	0.24	10.65	104	27.61	114	96	58	0	0	1	0
OK OKLAHOMA CITY	97	69	100	66	83	2	0.00	-0.59	0.00	11.79	137	28.27	129	72	28	7	0	0	0
OK TULSA	96	67	104	61	82	0	0.11	-0.60	0.11	5.67	60	30.24	117	78	26	7	0	1	0
OR ASTORIA	68	58	73	55	63	2	0.08	-0.22	0.04	5.08	117	54.93	150	95	71	0	0	4	0
OR BURNS	86	42	91	32	64	0	0.00	-0.17	0.00	0.89	53	5.94	98	71	14	2	1	0	0
OR EUGENE	82	53	89	45	67	0	0.01	-0.25	0.01	1.57	60	27.91	104	95	38	0	0	1	0
OR MEDFORD	90	56	94	49	73	0	0.00	-0.12	0.00	1.63	142	11.52	118	82	20	5	0	0	0
OR PENDLETON	89	58	98	52	74	2	0.00	-0.13	0.00	0.91	67	5.45	75	66	23	4	0	0	0
OR PORTLAND	80	60	89	58	70	2	0.00	-0.26	0.00	2.73	98	25.63	128	90	43	0	0	0	0
OR SALEM	83	55	90	50	69	2	0.00	-0.17	0.00	2.08	88	31.41	148	95	42	1	0	0	0
PA ALLENTOWN	80	61	91	59	71	-1	0.28	-0.68	0.28	2.03	19	17.87	64	91	49	1	0	1	0
PA ERIE	75	60	81	54	68	-2	0.74	-0.19	0.53	7.77	76	23.72	97	94	61	0	0	3	1
PA MIDDLETOWN	83	64	97	60	74	0	0.65	-0.09	0.65	8.33	86	22.30	85	89	50	1	0	1	1
PA PHILADELPHIA	84	69	92	62	77	1	1.14	0.29	1.06	5.13	48	24.00	87	97	58	2	0	2	1
PA PITTSBURGH	78	58	87	52	68	-2	0.11	-0.61	0.01	9.43	98	26.26	106	96	49	0	0	2	0
PA WILKES-BARRE	76	57	89	53	67	-3	0.43	-0.31	0.29	6.52	65	20.29	86	93	50	0	0	3	0
PA WILLIAMSPORT	79	58	91	53	69	-2	2.28	1.53	2.28	9.56	90	24.51	93	92	51	1	0	1	1
RI PROVIDENCE	79	62	88	55	70	-1	0.57	-0.26	0.41	2.41	27	23.73	84	91	52	0	0	3	0
SC BEAUFORT	94	74	98	69	84	4	0.96	-0.85	0.66	22.58	126	35.44	99	94	53	7	0	3	1
SC CHARLESTON	93	74	96	70	83	3	1.65	0.00	0.57	8.28	45	21.68	60	93	54	7	0	3	3
SC COLUMBIA	94	72	100	68	83	3	0.41	-0.98	0.20	8.42	58	22.06	63	91	47	6	0	4	0
SC GREENVILLE	94	71	100	65	82	5	0.26	-0.62	0.13	6.93	57	21.26	62	86	37	5	0	2	0
SD ABERDEEN	82	55	87	49	68	-2	0.12	-0.35	0.12	9.69	131	16.17	116	95	50	0	0	1	0
SD HURON	88	56	98	45	72	0	0.67	0.24	0.67	5.28	71	12.28	81	94	42	2	0	1	1
SD RAPID CITY	87	55	91	51	71	1	0.26	-0.11	0.24	9.69	155	17.01	133	82	33	1	0	2	0
SD SIOUX FALLS	84	58	88	53	71	0	0.07	-0.58	0.04	7.48	94	19.78	121	93	45	0	0	3	0
TN BRISTOL	89	61	95	57	75	2	0.64	-0.05	0.46	11.87	118	27.02	98	95	39	4	0	2	0
TN CHATTANOOGA	96	70	101	65	83	5	0.00	-0.77	0.00	9.80	91	36.57	104	86	30	7	0	0	0
TN KNOXVILLE	91	66	96	62	79	3	0.11	-0.56	0.09	18.66	172	41.37	129	92	38	4	0	2	0
TN MEMPHIS	93	69	100	64	81	0	0.00	-0.77	0.00	6.38	66	34.93	104	80	36	5	0	0	0
TN NASHVILLE	91	67	99	60	79	1	0.00	-0.77	0.00	8.77	88	30.88	98	85	37	4	0	0	0
TX ABILENE	101	74	102	69	87	4	0.00	-0.65	0.00	5.07	75	13.18	87	60	22	7	0	0	0
TX AMARILLO	94	64	97	60	79	3	0.00	-0.74	0.00	8.53	100	23.15	165	70	25	7	0	0	0
TX AUSTIN	101	71	105	67	86	1	0.00	-0.46	0.00	9.70	138	21.89	109	92	29	7	0	0	0
TX BEAUMONT	97	75	101	72	86	4	0.00	-1.20	0.00	12.49	86	24.33	69	93	42	7	0	0	0
TX BROWNSVILLE	95	74	99	72	85	0	1.40	0.76	0.91	5.69	92	14.19	102	95	46	6	0	3	1
TX CORPUS CHRISTI	96	73	100	70	84	0	0.79	0.03	0.79	9.84	127	15.93	91	97	45	7	0	1	1
TX DEL RIO	102	76	104	75	89	4	0.00	-0.32	0.00	7.10	145	12.50	112	71	25	7	0	0	0
TX EL PASO	95	71	97	70	83	3	0.00	-0.36	0.00	4.86	148	5.02	102	53	25	7	0	0	0
TX FORT WORTH	101	76	105	73	88	3	0.00	-0.50	0.00	1.76	26	16.17	74	64	24	7	0	0	0
TX GALVESTON	91	78	92	73	85	1	0.00	-1.02	0.00	9.91	89	19.02	76	91	60	6	0	0	0
TX HOUSTON	100	74	105	70	87	5	0.24	-0.54	0.24	10.66	99	22.20	78	93	38	7	0	1	0
TX LUBBOCK	97	67	99	64	82	4	0.00	-0.58	0.00	5.41	80	14.74	122	62	24	7	0	0	0
TX MIDLAND	99	72	101	69	85	4	0.00	-0.38	0.00	3.49	81	6.33	72	51	19	7	0	0	0
TX SAN ANGELO	101	71	104	68	86	4	0.00	-0.45	0.00	5.39	119	11.74	98	63	21	7	0	0	0
TX SAN ANTONIO	100	74	104	72	87	2	0.00	-0.58	0.00	5.57	73	12.83	66	80	28	7	0	0	0
TX VICTORIA	99	73	104	71	86	2	0.00	-0.67	0.00	7.02	70	19.76	87	100	39	7	0	0	0
TX WACO	102	75	105	69	88	2	0.00	-0.37	0.00	3.39	54	14.10	70	72	28	7	0	0	0
TX WICHITA FALLS	102	71	105	65	87	3	0.00	-0.58	0.00	6.07	90	23.56	127	61	20	7	0	0	0
UT SALT LAKE CITY	90	66	95	60	78	2	0.17	-0.02	0.15	1.44	62	10.10	96	55	16	5	0	2	0
VT BURLINGTON	79	56	87	51	68	0	0.70	-0.23	0.41	5.80	59	15.79	74	90	43	0	0	3	0
VA LYNCHBURG	88	65	96	61	76	2	0.78	-0.02	0.77	7.24	71	20.41	77	86	39	2	0	2	1
VA NORFOLK	86	74	93	70	80	3	1.05	-0.03	0.56	12.51	102	29.16	97	93	61	2	0	4	1
VA RICHMOND	89	68	97	66	78	2	1.05	0.07	0.92	10.60	90	26.16	92	98	49	3	0	2	1
VA ROANOKE	88	66	97	62	77	3	0.09	-0.85	0.09	7.13	72	20.72	79	85	41	2	0	1	0
VA WASH/DULLES	88	64	97	58	76	2	0.10	-0.81	0.10	6.11	60	22.46	87	93	41	3	0	1	0
WA OLYMPIA	76	54	83	47	65	1	0.09	-0.21	0.09	3.12	97	39.63	145	95	45	0	0	1	0
WA QUILLAYUTE	68	52	74	46	60	1	0.32	-0.24	0.09	7.13	98	73.53	125	100	73	0	0	4	0
WA SEATTLE-TACOMA	74	57	79	55	65	0	0.17	-0.09	0.17	3.97	133	24.92	125	96	54	0	0	1	0
WA SPOKANE	85	57	96	49	71	3	0.04	-0.13	0.02	2.41	99	9.41	94	77	26	2	0	2	0
WA YAKIMA	86	54	92	45	70	1	0.00	-0.10	0.00	1.43	152	4.69	103	85	29	4	0	0	0
WV BECKLEY	79	59	85	57	69	0	0.43	-0.30	0.39	7.21	66	23.56	85	94	51	0	0	2	0
WV CHARLESTON	83	62	90	59	72	-2	0.16	-0.73	0.16	8.55	75	23.66	84	99	55	1	0	1	0
WV ELKINS	81	55	88	51	68	0	0.09	-0.89	0.05	4.79	40	23.81	80	100	44	0	0	4	0
WV HUNTINGTON	86	63	98	58	75	1	0.52	-0.33	0.50	4.56	42	18.94	68	93	39	2	0	3	1
WI EAU CLAIRE	79	59	88	56	69	1	0.89	-0.13	0.83	10.62	95	25.13	118	92	52	0	0	4	1
WI GREEN BAY	77	54	82	48	65	-2	0.33	-0.47	0.24	10.85	123	19.37	106	97	59	0	0	2	0
WI LACROSSE	80	60	88	56	71	0	0.48	-0.40	0.27	12.43	120	27.19	134	94	54	0	0	2	0
WI MADISON	76	56	80	50	66	-2	0.51	-0.43	0.32	11.96	122	26.06	130	96	59	0	0	3	0
WI MILWAUKEE	76	60	83	54	68	-1	0.59	-0.21	0.42	13.86	152	30.45	144	89	59	0	0	2	0
WY CASPER	86	48	90	39	67	-1	0.08	-0.06	0.05	2.10	66	6.89	77	67	14	1	0	2	0
WY CHEYENNE	84	56	86	49	70	3	0.03	-0.34	0.03	5.11	96	13.11	120	64	24	0	0	1	0
WY LANDER	86	56	90	49	71	2	0.01	-0.10	0.01	2.11	81	10.97	119	60	16	2	0	1	0
WY SHERIDAN	88	49	99	42	69	1	0.00	-0.19	0.00	2.12	58	8.97	89	83	29	2	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

August 16 - 22, 1999

HIGHLIGHTS

Crop conditions continued to deteriorate in many areas of the Nation due to excessive dryness. Mild temperatures prevented serious crop deterioration in most of the Corn Belt, while scattered showers aided conditions in parts of the northern Corn Belt and central Great Plains. Dry weather aided small

grain harvest in the northern Great Plains and Pacific Northwest. Above-normal temperatures quickly ripened crops in the Southern States from Arizona to the Atlantic Coastal Plains. Rain eased drought conditions in the Atlantic Coastal Plains and parts of the Northeast.

Corn: Acreage in the dough stage or beyond advanced to 81 percent, slightly ahead of last year's 80-percent pace, and well ahead of the 65-percent average. More than 90 percent of the acreage was at or beyond the dough stage in most areas of the eastern Corn Belt. Corn rapidly entered the dough stage in the western Corn Belt and Great Plains. One-third of the acreage entered the dough stage in Colorado, while progress ranged from 20 to 30 percent across many areas of the northern Corn Belt. Forty-two percent of the crop was at the dent stage or beyond, compared with 36 percent last year and the average of 25 percent. Corn entering the dent stage accelerated, advancing 20 percentage points or more in Iowa, Illinois, Indiana, and Kansas. Harvest began in the Texas High Plains and accelerated in central Texas. Harvest neared completion in southern Texas. Dry soils continued to stress fields in most areas of the Corn Belt, but mild temperatures prevented serious crop deterioration. Scattered showers aided development in parts of Iowa, Minnesota, Wisconsin, Nebraska, Colorado, and Pennsylvania.

Soybeans: Ninety percent of the crop was at the pod setting stage or beyond, slightly ahead of a year ago, and 7 percentage points ahead of the 5-year average. Above-normal temperatures promoted rapid development in Kansas, the Southeast, and Atlantic Coastal Plains. Nearly all of the acreage in the Corn Belt was setting pods or beyond, but below-normal temperatures slightly hindered development. Soybeans dropping leaves, at 3 percent, was slightly ahead of last year and the average for this date. Warm weather quickly ripened fields in the lower Mississippi Valley, especially in Mississippi, where one-third of the crop was dropping leaves. Dry conditions hindered pod filling in parts of the Corn Belt.

Cotton: Bolls were opening on 23 percent of the Nation's cotton acreage, slightly ahead of the average, but 3 percentage points behind last year. Warm, sunny weather promoted rapid development in most cotton-producing

States. Development was most advanced in the lower Mississippi Valley, where about half of the acreage had bolls opening. Harvest continued in southern Texas. In the Texas High Plains, some bolls were aborted due to excessive heat.

All Wheat: The spring wheat harvest advanced to 42 percent complete, well behind last year's 76-percent pace, but only 6 percentage points behind the average. The harvest steadily progressed in most areas of the northern Great Plains and Pacific Northwest. Late ripening in many fields prevented faster progress. Field preparations for winter wheat seeding rapidly progressed in the central and southern Great Plains.

Other small grains: The barley crop was 35 percent harvested, 18 percentage points behind the average and well-behind last year's 75-percent progress. Warm, dry weather aided progress across most of the northern Great Plains and Pacific Northwest. The oat crop was 83 percent harvested, 10 percentage points behind last year, but ahead of the 79-percent average. Dry conditions aided harvest progress in North Dakota, and growers in Minnesota made good progress, despite brief rain delays.

Rice: Ninety-one percent of the acreage was headed, ahead of last year and equal to the average. Nearly all of the crop was headed in the lower Mississippi Valley. Development accelerated in California, where near-normal temperatures prevailed, but heading progress remained well behind normal. Nineteen percent of the acreage was harvested, ahead of the average and equal to last year. Harvest continued in the western Gulf Coast and began in inland areas of the Mississippi Delta.

Other crops: Sorghum was 89 percent headed and 40 percent was turning color. Development trailed last year, when 92 percent was headed and 47 percent was turning color. Normally, 88 percent is headed and 42 percent is turning color by this date.

Crop Progress and Condition

Week Ending August 22, 1999

Soybeans Percent Dropping Leaves				
	Aug 22 1999	Prev Week	Prev Year	5-Yr Avg
AL	4	NA	1	0
AR	3	NA	1	2
GA	4	NA	1	1
IL	0	NA	0	0
IN	7	NA	4	1
IA	0	NA	1	1
KS	1	NA	10	5
KY	1	NA	1	1
LA	16	NA	12	7
MI	0	NA	0	0
MN	0	NA	0	0
MS	34	NA	18	11
MO	0	NA	0	0
NE	0	NA	0	0
NC	0	NA	0	0
OH	4	NA	0	0
SC	2	NA	0	0
SD	10	NA	7	6
TN	0	NA	0	1
19 Sts	3	NA	2	1

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

Soybeans Percent Setting Pods				
	Aug 22 1999	Prev Week	Prev Year	5-Yr Avg
AL	63	44	74	63
AR	78	62	68	66
GA	71	66	71	72
IL	92	*84	85	83
IN	97	88	85	81
IA	100	93	98	96
KS	75	55	96	81
KY	74	63	60	54
LA	98	91	95	91
MI	97	87	96	84
MN	98	83	99	94
MS	100	98	96	88
MO	74	56	75	70
NE	92	77	96	90
NC	55	35	49	50
OH	100	97	95	84
SC	40	28	43	49
SD	89	72	91	89
TN	77	62	67	60
19 Sts	90	79	88	83

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

Corn Percent Dough				
	Aug 22 1999	Prev Week	Prev Year	5-Yr Avg
CO	48	15	52	47
GA	100	100	100	100
IL	91	81	81	72
IN	97	82	80	73
IA	72	52	71	55
KS	83	72	95	83
KY	95	85	85	84
MI	62	38	62	29
MN	68	38	91	51
MO	89	79	92	84
NE	84	70	84	72
NC	88	80	89	94
OH	87	83	73	66
PA	60	45	67	59
SD	72	60	77	55
TX	98	95	97	96
WI	75	56	68	51
17 Sts	81	65	80	65

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

Corn Percent Dented				
	Aug 22 1999	Prev Week	Prev Year	5-Yr Avg
CO	12	0	15	10
GA	99	97	97	98
IL	56	36	41	28
IN	60	30	32	20
IA	38	12	22	16
KS	49	26	48	45
KY	72	57	60	54
MI	24	6	20	7
MN	23	4	47	15
MO	70	52	67	57
NE	27	12	37	25
NC	70	65	69	81
OH	45	27	19	14
PA	25	10	13	13
SD	28	12	27	15
TX	70	63	90	83
WI	22	7	21	11
17 Sts	42	22	36	25

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

Cotton Percent Bolls Opening				
	Aug 22 1999	Prev Week	Prev Year	5-Yr Avg
AL	18	5	21	11
AZ	24	10	18	48
AR	22	2	8	9
CA	4	3	1	14
GA	20	15	30	22
LA	46	28	58	30
MS	54	26	50	32
MO	29	21	13	9
NM	20	1	7	13
NC	22	8	13	11
OK	2	0	8	4
SC	7	5	23	9
TN	15	2	9	6
TX	21	16	31	22
14 Sts	23	13	26	20

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

Oats Percent Harvested				
	Aug 22 1999	Prev Week	Prev Year	5-Yr Avg
IA	100	100	100	100
MI	96	87	96	79
MN	82	70	96	79
NE	99	97	100	100
ND	51	32	81	49
OH	100	100	99	97
PA	91	83	84	80
SD	96	87	97	93
WI	89	81	98	78
9 Sts	83	74	93	79

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

Barley Percent Harvested				
	Aug 22 1999	Prev Week	Prev Year	5-Yr Avg
ID	30	14	52	47
MN	52	38	95	61
MT	27	20	64	43
ND	37	21	86	55
SD	92	76	96	88
WA	28	17	78	69
6 Sts	35	22	75	53

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

Crop Progress and Condition

Week Ending August 22, 1999

Sorghum Percent Headed				
	Aug 22 1999	Prev Week	Prev Year	5-Yr Avg
AR	100	99	99	98
CO	92	81	90	74
IL	97	90	76	80
KS	90	83	93	88
LA	100	100	100	99
MS	100	99	100	100
MO	88	82	96	89
NE	88	71	96	89
NM	78	60	33	48
OK	85	75	85	76
SD	83	55	76	80
TX	89	83	95	93
12 Sts	89	81	92	88
These 12 States planted 99% of last year's sorghum acreage.				

Sorghum Percent Coloring				
	Aug 22 1999	Prev Week	Prev Year	5-Yr Avg
AR	89	64	61	65
CO	7	6	7	6
IL	36	34	15	16
KS	29	15	29	22
LA	100	100	98	87
MS	94	76	91	86
MO	42	20	55	43
NE	10	5	18	16
NM	5	3	10	5
OK	15	*12	38	25
SD	34	24	31	21
TX	59	56	74	72
12 Sts	40	32	47	42
These 12 States planted 99% of last year's sorghum acreage.				

Spring Wheat Percent Harvested				
	Aug 22 1999	Prev Week	Prev Year	5-Yr Avg
ID	29	16	49	43
MN	51	41	89	53
MT	22	16	70	45
ND	37	18	72	39
SD	93	82	95	84
5 Sts	42	29	76	48
These 5 States planted 96% of last year's spring wheat acreage.				

Rice Percent Headed				
	Aug 22 1999	Prev Week	Prev Year	5-Yr Avg
AR	96	88	89	91
CA	55	40	56	80
LA	99	98	97	95
MS	95	89	92	93
TX	98	97	99	98
5 Sts	91	84	87	91
These 5 States planted 96% of last year's rice acreage.				

Rice Percent Harvested				
	Aug 22 1999	Prev Week	Prev Year	5-Yr Avg
AR	2	0	1	2
CA	0	0	0	1
LA	68	61	65	52
MS	2	0	7	4
TX	53	42	62	47
5 Sts	19	16	19	16
These 5 States planted 96% of last year's rice acreage.				

Soybeans Crop Condition by Percent					
	VP	P	F	G	EX
AL	13	25	36	23	3
AR	5	16	32	34	13
GA	25	23	30	21	1
IL	5	13	39	37	6
IN	6	20	47	24	3
IA	3	6	17	47	27
KS	2	13	38	42	5
KY	16	32	39	13	0
LA	3	19	34	38	6
MI	3	9	26	45	17
MN	3	8	29	49	11
MS	12	17	32	31	8
MO	18	24	40	17	1
NE	2	7	25	53	13
NC	3	14	26	53	4
OH	8	15	35	35	7
SC	16	35	38	11	0
SD	2	7	30	48	13
TN	20	29	31	20	0
19 Sts	6	14	32	38	10
Prev Wk	5	12	32	39	12
Prev Yr	3	8	24	46	19

Corn Crop Condition by Percent					
	VP	P	F	G	EX
CO	1	3	10	58	28
GA	14	19	25	34	8
IL	6	15	42	31	6
IN	8	22	42	25	3
IA	3	6	20	44	27
KS	0	5	24	61	10
KY	5	20	38	34	3
MI	4	10	21	47	18
MN	2	6	25	51	16
MO	17	20	39	21	3
NE	1	4	20	58	17
NC	3	23	36	34	4
OH	9	18	35	32	6
PA	22	35	28	14	1
SD	2	6	28	48	16
TX	0	1	23	52	24
WI	0	2	10	52	36
17 Sts	4	10	28	43	15
Prev Wk	5	10	27	43	15
Prev Yr	3	7	22	48	20

Cotton Crop Condition by Percent					
	VP	P	F	G	EX
AL	8	27	38	25	2
AZ	1	8	38	36	17
AR	0	11	33	43	13
CA	0	0	5	75	20
GA	13	19	31	29	8
LA	3	19	43	31	4
MS	7	10	32	42	9
MO	11	25	25	34	5
NM	2	5	22	47	24
NC	1	12	40	38	9
OK	0	10	21	47	22
SC	9	25	41	25	0
TN	7	27	42	22	2
TX	5	19	30	35	11
14 Sts	5	17	31	37	10
Prev Wk	5	15	32	37	11
Prev Yr	14	18	32	31	5

Rice Crop Condition by Percent					
	VP	P	F	G	EX
AR	1	3	24	49	23
CA	0	0	25	75	0
LA	0	3	18	59	20
MS	1	5	22	56	16
TX	0	0	6	62	32
5 Sts	1	2	21	57	19
Prev Wk	1	3	20	59	17
Prev Yr	1	5	29	56	9

Crop Progress and Condition

Week Ending August 22, 1999

Sorghum Crop Condition by Percent					
	VP	P	F	G	EX
AR	2	11	42	38	7
CO	0	1	7	66	26
IL	4	11	28	57	0
KS	1	4	25	61	9
LA	0	5	32	58	5
MS	1	6	28	47	18
MO	18	20	42	19	1
NE	3	7	27	57	6
NM	0	1	7	91	1
OK	0	2	16	79	3
SD	0	2	20	70	8
TX	1	14	31	42	12
12 Sts	2	8	27	54	9
Prev Wk	1	7	26	56	10
Prev Yr	8	13	23	45	11

Barley Crop Condition by Percent					
	VP	P	F	G	EX
ID	0	3	20	58	19
MN	9	12	47	29	3
MT	6	25	37	27	5
ND	2	8	30	51	9
SD	0	2	12	66	20
WA	7	25	47	21	0
6 Sts	4	14	33	41	8
Prev Wk	5	13	32	41	9
Prev Yr	NA	NA	NA	NA	NA

Peanuts Crop Condition by Percent					
	VP	P	F	G	EX
AL	0	7	35	38	20
FL	0	0	36	43	21
GA	9	17	36	31	7
NC	0	1	36	59	4
OK	0	11	41	36	12
SC	10	24	42	18	6
TX	2	8	22	46	22
VA	0	0	5	44	51
8 Sts	4	10	31	39	16
Prev Wk	4	9	29	42	16
Prev Yr	4	10	37	41	8

Spring Wheat Crop Condition by Percent					
	VP	P	F	G	EX
ID	0	1	15	68	16
MN	2	19	37	40	2
MT	2	19	35	34	10
ND	1	9	30	50	10
SD	1	4	18	56	21
5 Sts	1	12	30	46	11
Prev Wk	2	10	30	47	11
Prev Yr	NA	NA	NA	NA	NA

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

Pasture and Range Crop Condition by Percent											
Week Ending August 22, 1999											
	VP	P	F	G	EX		VP	P	F	G	EX
AL	13	25	40	21	1	NH	7	20	43	30	0
AZ	0	7	23	43	27	NJ	40	60	0	0	0
AR	19	36	33	12	0	NM	1	5	33	52	9
CA	3	10	37	50	0	NY	13	45	21	21	0
CO	1	3	17	54	25	NC	15	34	37	13	1
CT	69	16	15	0	0	ND	1	6	24	60	9
DE	9	61	18	12	0	OH	30	28	27	13	2
FL	0	0	40	60	0	OK	2	16	38	41	3
GA	23	33	30	13	1	OR	3	26	48	20	3
ID	0	10	41	37	12	PA	49	32	16	3	0
IL	18	24	34	21	3	RI	59	21	20	0	0
IN	28	35	32	5	0	SC	26	37	32	5	0
IA	4	7	33	42	14	SD	2	6	27	48	17
KS	2	10	29	56	3	TN	24	37	28	11	0
KY	42	34	18	6	0	TX	9	25	42	21	3
LA	9	28	38	23	2	UT	2	10	34	50	4
ME	12	21	45	18	4	VT	20	38	33	9	0
MD	40	28	25	7	0	VA	37	25	26	11	1
MA	0	35	65	0	0	WA	12	33	37	13	5
MI	6	14	24	47	9	WV	45	38	17	0	0
MN	3	16	24	48	9	WI	0	2	14	64	20
MS	20	25	37	15	3	WY	0	1	23	66	10
MO	31	33	30	6	0	48 Sts	11	19	31	33	6
MT	8	25	29	31	7						
NE	2	6	19	60	13	Prev Wk	10	18	31	34	7
NV	2	7	25	65	1	Prev Yr	7	15	32	40	6

State Agricultural Summaries

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

ALABAMA: Days suitable for fieldwork 6.9. Topsoil 50% very short, 36% short, 14% adequate. Hot, dry weather continued to cause crop conditions to be mostly fair to good, although, soil moisture very short to short. Corn 89% dough; 86% dented, 95% 1998, 95% avg.; 65% mature, 77% 1998, 72% avg.; 25% harvested, 37% 1998, 24% avg.; 1% very poor, 3% poor, 31% fair, 47% good, 18% excellent. Pasture feed 13% very poor, 25% poor, 40% fair, 21% good, 1% excellent. Livestock 4% poor, 35% fair, 51% good, 10% excellent. Some farmers are preparing to defoliate cotton in the coming weeks.

ALASKA: Days suitable for fieldwork 4.4. Topsoil 5% short, 95% adequate. Subsoil 10% short, 90% adequate. Weather conditions for the week were mild, mostly dry. Daytime high temperatures ranged from the upper 50's to the mid-70's degrees F. Nighttime lows were mostly in the 30's, 40's degrees F. Oats 40% in dough or earlier, 60% turning color; 35% fair, 50% good, 15% excellent. Barley 10% in dough or earlier, 90% turning color. Barley 5% poor, 40% fair, 50% good, 5% excellent. Hay 2% 2nd cutting complete; 5% poor, 40% fair, 45% good, 10% excellent. Wind damage to small grain crops, 85% none, 10% light, 5% moderate. Major activities included: Harvesting vegetables, grains, hay, grass seeds.

ARIZONA: Cotton continues to progress. Alfalfa harvest activity was reported as 28% not being harvested, 5% light, 24% moderate, 43% active. Alfalfa 3% poor, 19% fair, 67% good, 11% excellent. Last week central producers shipped a variety of melons including cantaloupe, casaba, crenshaw, golden honeydew, honeydew, orange flesh santa claus, watermelon.

ARKANSAS: Days suitable for fieldwork 7. Topsoil 61% very short, 34% short, 5% adequate. Weak frontal passage caused a moderation in temperatures in some areas of the State, but little, to no rainfall was reported. Most areas were well below normal in rainfall. Rain was needed for pasture growth. Most crops were reported in good condition. Livestock fair condition, hot, humid weather and lack of grazing were causing deaths in poultry, livestock. Many farmers were having to feed hay, supplemental feeding because of the drought. Main farm activities were: Fertilizing cotton, corn, rice, warm season forages, finishing harvesting hay and planning for fall pastures. Other activities: Brush hogging; irrigating corn, soybeans, cotton, sorghum, rice; draining of rice; cultivating cotton; spraying cotton for insects, other fields for insects, weeds; starting corn harvesting; scouting for sheath blight in rice; scouting for and treating webworms in soybeans; treating crop lands for armyworms; spraying rice, cotton, soybean fields for weeds; spraying fruit trees; harvesting small fruit, melons; dusting and ear tagging cattle for external parasites; giving Brucellosis vaccinations; weaning calves. Cotton 22% opening bolls; 11% poor 33% fair 43% good 13% excellent. Soybeans 96% bloomed, 78% setting pods, 3% shedding; 5% very poor 16% poor 32% fair 34% good 13% excellent. Sorghum 100% headed, 89% turning color; 2% very poor 11% poor 42% fair 38% good 7% excellent. Alfalfa 10% very poor 20% poor 33% fair 35% good 2% excellent. Other hay 15% very poor 31% poor 37% fair 17% good. Range, pasture feed 19% very poor 36% poor 33% fair 12% good.

CALIFORNIA: Field activities progressed normally under ideal conditions in most areas. Seedbed preparations for fall-seeded small grains were ongoing. Rice heading continued, development was at least a week behind normal due to recent cool morning temperatures. Cotton growth was slowed by the cool weather, but improved as temperatures increased later in the week. Cotton fields were sprayed for aphids in the San Joaquin, Sacramento Valleys. Garbanzo, black eye beans were harvested in the San Joaquin Valley; late maturing black eye fields were treated for insects. Safflower harvest was active in the central valleys. Seed alfalfa harvest gained momentum; later developing fields were sprayed for lygus, mites. Sugar beets were harvested in the Imperial, San Joaquin Valleys. Less mature sugar beets were treated for armyworms, beet webworms, grasshoppers. Harvested sugar beet fields were immediately prepared for planting the next crop. Corn silage harvest was active in central, southern counties. Alfalfa was cut for hay or green chopped; some fields were sprayed for armyworms, alfalfa butterflies. Harvest of grapes for fresh consumption gained momentum in the San Joaquin Valley. Varieties picked included Perlette, Flame Seedless, Thompson Seedless. Vineyard floors were being prepared for the raisin harvest. Picking of early season wine grapes began last week. Other cultural activities in vineyards, orchards included extensive weed control, irrigation. Harvest of plums, nectarines, clingstone peaches, freestone peaches continued. Quality was good. Apple trees were treated

for codling moth. Picking of early variety apples was active. Bartlett pear harvest was active in Lake, Mendocino Counties. Asian pear harvest was active in the San Joaquin Valley. Harvest of early variety almonds began in a few areas. Valencia oranges, lemons were picked in southern areas. Olives were maturing well. Vegetable fieldwork continued; crops were irrigated, cultivated, sprayed for pests, harvested. Melon, cucumber, pumpkin, squash fields were treated for aphids. Lettuce, broccoli crops were harvested. Fall, winter broccoli, cauliflower planting continued, as previously planted fields emerged. Planting was underway for the fall crop of head lettuce. Sweet corn for seed, fresh consumption was treated to control earworms. Onions, potatoes were being dug. Bell peppers were harvested. Processing tomato harvest continued, while less mature tomato fields were treated to control worms and aphids. North Valley processing tomatoes were lagging in harvest, maturity because of the summer's cooler-than-normal weather. Fresh tomato harvest was in full swing. Honeydew, pink honeydew melons were picked, packed. Growing conditions were ideal for all melons. Imperial valley vegetable growers were planting fall melons, treating established stands for white fly. Strawberry growers were preparing, fumigating, planting fields. Among the various vegetable crops harvested were chives, eggplant, leeks, lemon grass, mushrooms, chili peppers, squash, gourds, garlic, sweet potatoes, cherry tomatoes, okra. Irrigated pastures continued to be in fair to good condition. Non-irrigated pastures were in poor to fair condition, depending on the location. Late-week high elevation rainfall, was too late to help many non-irrigated pastures. Some cattle have been shipped to market in recent weeks. Livestock were in good condition. Bees continued to pollinate seed alfalfa, melon fields in central areas.

COLORADO: Days suitable for fieldwork 5.8. Topsoil 4% very short, 14% short, 78% adequate, 4% surplus. Subsoil 4% very short, 16% short, 77% adequate, 3% surplus. Rain in the San Luis Valley hampered harvest of small grains, most other areas experienced warmer temperatures with widely scattered rain showers. Spring wheat 97% turning color, 82% 1998, 89% avg.; 44% harvested, 31% 1998, 48% avg.; 5% poor, 12% fair, 63% good, 20% excellent. Spring barley 98% turning color, 98% 1998, 91% avg.; 34% harvested, 55% 1998, 49% avg.; 1% very poor, 7% poor, 20% fair, 57% good, 15% excellent. Oats 90% turning color, 92% 1998, 92% avg.; 55% harvested, 56% 1998, 64% avg. Dry onions 16% harvested, 28% 1998, 25% avg.; 1% very poor, 4% poor, 13% fair, 57% good, 25% excellent. Sugar beets 1% very poor, 2% poor, 13% fair, 53% good, 31% excellent. Dry beans 89% flowered, 98% 1998, 93% avg.; 5% cut, 2% 1998, 3% avg.; 3% poor, 10% fair, 61% good, 26% excellent. Summer potatoes 31% harvested, 18% 1998, 26% avg.; 1% very poor, 5% poor, 11% fair, 60% good, 23% excellent. Fall potatoes 7% poor, 18% fair, 45% good, 30% excellent. Alfalfa 86% 2nd cutting, 95% 1998, 90% avg.; 25% 3rd cutting, 22% 1998, 20% avg.; 2% very poor, 8% poor, 24% fair, 53% good, 13% excellent. Pasture feed, range in mostly good condition.

DELAWARE: Days suitable for fieldwork 5.9. Topsoil 38% very short, 42% short, 20% adequate. Subsoil 43% very short, 50% short, 7% adequate. Field corn 23% very poor, 31% poor, 24% fair, 15% good, 7% excellent; 80% dough, 76% 1998, 72% avg.; 45% dented, 42% 1998, 41% avg.; 23% mature, 18% 1998, 9% avg.; 44% harvested for silage, 21% 1998, 16% avg. Soybeans 10% very poor, 25% poor, 26% fair, 39% good; 67% bloomed, 61% 1998, 71% avg.; 48% setting pods, 44% 1998, 48% avg.; 10% turned, 6% 1998, 2% avg.; 10% shedding leaves, 6% 1998, 2% avg. Sorghum 5% poor, 58% fair, 37% good; 78% headed, 61% 1998, 75% avg.; 18% turned, 14% 1998, 8% avg. Sweet corn 68% harvested, 60% 1998, 77% avg. Snap beans 61% harvested, 61% 1998, 71% avg. Cantaloupes 76% harvested, 75% 1998, 79% avg. Watermelons 69% harvested, 58% 1998, 65% avg. Cucumbers 68% harvested, 73% 1998, 79% avg. Lima beans 42% harvested, 37% 1998, 33% avg. Tomatoes 60% harvested, 60% 1998, 64% avg. Potatoes 72% harvested, 75% 1998, 79% avg. Apples 10% fair, 90% good; 18% harvested, 21% 1998, 24% avg. Peaches 10% fair, 90% good; 72% harvested, 70% 1998, 75% avg. Clover, other hay 87% 3rd cutting, 70% 1998, 61% avg.; 30% 4th cutting, 24% 1998, 29% avg. Alfalfa hay 94% 3rd cutting harvested, 91% 1998, 88% avg.; 18% 4th cutting, 23% 1998, 14% avg. Hay supplies 10% very short, 62% short, 28% adequate. Pasture feed 9% very poor, 61% poor, 18% fair, 12% good. Activities: Silage harvesting moving along quickly, vegetable harvesting continues despite market glut, farmers gearing up for grain harvest.

FLORIDA: Topsoil moisture throughout State mostly short to adequate. High temperatures continued with rain in many areas. Temperatures were down from last week but averaged high 80's to low 90's degrees F. Nighttime

lows averaged in 70's. Scattered rains from one-half inch to over 3 inches in many areas. Peanut harvesting starting. Tobacco harvest winding down. Tobacco marketing active. Cotton, soybean, sugarcane condition normal. Haying active. Peanut 36% fair, 43% good, 21% excellent. Land preparation, planting continues for fall crops. Activities in major growing areas follow: Quincy--Tomato transplanting finished. Palmetto-Ruskin--Tomatoes mostly good condition as planting increases. Staking active, heavy spraying for disease, insects. Workers making first ties on small amount of acreage. Planting steady for watermelons, cherry, and plum tomatoes, eggplant. Growers getting ready to plant peppers. East Coast--Wet conditions caused delays in field activities. Growers are laying plastic, planting peppers, planting tomatoes when weather permits. Spraying tomatoes, peppers continues to keep disease, insects in check. Southwest--Producers continue laying plastic for tomato transplanting. Dade--Okra harvesting continues with good quality available. Growers continue field preparations for planting tomatoes, snap beans, eggplant, squash. Frequent rains all citrus areas producing abundant new growth. New crop fruit sizing well, some later bloom fruit in heavy rain areas catching up to regular bloom fruit in size. Some testing of grapefruit for early shipments. Caretakers cutting cover crops, fertilizing, spraying, pushing out dead trees, resetting older groves. Pasture feed: fair 40%, good 60%. Condition of cattle fair 15%, good 85%. Most range pastures good condition. Adequate soil moisture. Hot weather good for grass growth at most locations. Central: some locations dry, which lowered pasture condition. Southwest: stock pond levels rose some. Cattle, calves condition mostly good.

GEORGIA: Days suitable for fieldwork 6.5. Soil moisture 45% very short, 36% short, 18% adequate, 1% surplus. Corn 94% mature, 94% 1998, 92% avg.; 49% harvested for grain, 48% 1998, 37% avg. Cotton 98% setting bolls, 100% 1998, 100% avg. Hay 18% very poor, 36% poor, 33% fair, 13% good. Peanuts 1% dug, 0% 1998, 1% avg. Sorghum 16% very poor, 26% poor, 29% fair, 28% good, 1% excellent; 11% harvested for grain, 13% 1998, 10% avg. Soybeans 87% blooming, 95% 1998, 93% avg. Tobacco 83% harvested, 67% 1998, 84% avg. Watermelons 98% harvested, 99% 1998, 98% avg. Apples 7% poor, 27% fair, 53% good, 13% excellent; 11% harvested, 12% 1998, 16% avg. Pecans 5% very poor, 13% poor, 32% fair, 42% good, 8% excellent. Hot, dry conditions continued over much of the State. Scattered showers provided short-term relief for the areas that received them. Irrigation continued over many areas of the State, there was concern over water levels of ponds, wells, streams. Soil moisture condition was steady. Corn harvest continued ahead of the 5-year average pace; last week the crop condition decreased slightly. Sorghum condition dropped slightly. Loopers showed up in soybeans, peanuts in isolated areas. Soybean condition improved. Leaf drop occurred ahead of the 1998 pace. Preparation for peanut harvest continued last week. Conditions declined slightly. Foliar cotton spraying occurred last week. Dry weather continued to hurt pastures and hayfields. Cattlemen continued supplemental feeding. Water has become short. Some selling of cattle occurred. Dairy cows were stressed. Pecans were in the kernel filling stage and need rain. Spraying continued last week. Watermelon harvest came to a close. Fall vegetable planting took place last week despite the heat. Other activities included harvesting tobacco and spraying fungicides on peanuts.

HAWAII: Variable weather conditions were fair for crops. Hurricane Dora passed safely south of State. Clear to partly cloudy skies throughout week. Weakened trade winds produced humid conditions during midweek. Rainfall light in most areas, irrigation remains heavy. Crops in most fair condition. Most banana fields in good condition. Harvesting very active. Warm weather, adequate showers have benefitted the crop. Papaya orchards in good to fair condition, few in poor condition. Harvesting is active. Head cabbage harvesting active. Fields in fair to good condition. Tomato harvesting expected to increase as new fields mature. Crop conditions were mostly good.

IDAHO: Days suitable for fieldwork 6.5. Topsoil 8% very short, 33% short, 58% adequate, and 1% surplus. Rain in northern areas delays harvest. Statewide 2% of potatoes have been harvested. Irrigation supply 65% excellent, 27% good, 7% fair, 1% poor. Alfalfa hay 91% 2nd cutting, 90% 1998, 87% avg.; 36% 3rd cutting, 26% 1998, 20% avg. Oats 40% harvested for grain, 37% 1998, 40% avg. Mint 69% harvested, 72% 1998, 77% avg. Peaches 23% harvested, 25% 1998, 48% avg. Dry Peas 42% harvested, 76% 1998, 60% avg. Dry beans 3% harvested, 2% 1998, 5% avg. Lentils 34% harvested, 39% 1998, 38% avg. Onions 4% harvested, 7% 1998, 7% avg. Prunes, plums 13% harvested, 6% 1998, 13% avg. Hops 4% harvested, 2% 1998, 2% avg. Sweet corn 37% harvested, 26% 1998, 22% avg. Potatoes with vines dead/kill 6%, 7% 1998, 12% avg. Barley 99% turning color. Spring wheat 99% turning color. Winter wheat 61% harvested, 81% 1998, 71% avg. Activities: Monitoring for disease, preparing for potato harvest, harvesting cereal grains, hay, mint, lentils, dry peas, oats, onions, hops sweet corn, peaches.

ILLINOIS: Days suitable for fieldwork 5.8. Topsoil 29% very short, 37% short, 33% adequate, 1% surplus. Below-normal temperatures, precipitation were recorded statewide last week. Lack of rain is most evident in the

southern districts. Rainfall is needed soon to help pod development in soybeans. Corn crop continues to develop well ahead of the 5-year average, with some reports of harvest beginning where fields were hit by high winds. Some corn fields are a total loss, while pick-up reels will be needed in many others for harvest. Other activities last week included attending fairs, scouting fields, baling hay, hauling grain. Alfalfa 62% 3rd cut 62%, 57% 1998, 46% avg.

INDIANA: Days suitable for fieldwork 6.4. Topsoil 33% very short, 45% short, 22% adequate. Subsoil 35% very short, 50% short, 15% adequate. Very little rain around the State. Corn drying down rapidly. Early corn harvest expected, some areas. Topsoil, subsoil remain very dry. Corn, soybean condition declined. Corn 28% good to excellent. Soybean 27% good to excellent. Pastures, hay crops continue to deteriorate. Range, pasture feed 28% very poor, 35% poor, 32% fair, 5% good. Feeding hay necessary, some areas. Alfalfa 87% 3rd cut complete, 63% 1998. Tobacco harvest 25% complete. Activities: Chopping silage, selling corn and soybeans, cleaning grain bins, harvesting tobacco, mowing roads, baling hay, harvesting vegetables, monitoring fields, painting buildings, attending State fair, caring for livestock.

IOWA: Days suitable for fieldwork 5.5. Topsoil 8% very short; 14% short, 73% adequate, 5% surplus. Subsoil 4% very short; 19% short, 72% adequate, 5% surplus. Rains fell across most of the State, but continue to miss the northwest and north-central districts. Very dry conditions continue in these two districts. Corn 94% milk stage, 95% 1998, 90% avg., 72% dough stage, 71% 1998, 55% avg., 38% dent stage, 23% 1998, 17% avg. Corn 3% very poor, 6% poor, 20% fair, 44% good, 27% excellent. Soybeans with leaves changing color 3%, 1% 1998, 1% avg.; 3% very poor, 6% poor, 17% fair, 47% good, 27% excellent. Mild temperatures continue to benefit livestock. Some cases of pinkeye continue to be reported. Range, pasture feed 4% very poor, 7% poor, 33% fair, 42% good, 14% excellent. Alfalfa 42% 3rd cutting, 32% 1998, 28% avg. Clover hay 86% 2nd cutting, 90% 1998, 82% avg. Hay 2% very poor, 5% poor, 29% fair, 45% good, 19% excellent.

KANSAS: Days suitable for fieldwork 6.6. Topsoil 13% very short, 43% short, 44% adequate. Subsoil 7% very short, 30% short, 62% adequate, 1% surplus. Continued hot, dry weather stressed crops across much of the State. Dryland crops, particularly in the southern, eastern tiers of the State, are badly in need of rain, cooler temperatures. Corn 9% mature, 12% 1998, 7% avg. Soybeans 93% blooming, 100% 1998, 96% avg. Sorghum 4% mature, 4% 1998, 2% avg. Sunflower 1% very poor, 3% poor, 17% fair, 65% good, 14% excellent; 96% blooming, 97% 1998. Ray flowers dry 31%, 35% 1998. Bracts 12% turning yellow, 10% 1998. Alfalfa 96% 3rd cut, 97% 1998, 93% avg.; 32% 4th cutting, 33% 1998, 23% avg. Crop insect populations continue to be rated at mostly light to none. Corn borers, grasshoppers, soybean stem borers, webworms, sunflower head moths are the most common insects reported. Last week producers were busy with seedbed preparation for wheat, rye, planting new alfalfa, fertilizing, spraying weeds, cultivating, irrigating, harvesting silage, putting up hay. In a few areas, farmers are harvesting corn, sorghum for grain. Hay, forage supplies, 11% short, 88% adequate, 1% surplus. With the hot, dry weather conditions, pastures are beginning to dry up. In some areas, supplemental feeding has begun. Stocker cattle continue to be moved off grass. Few ranchers have started weaning calves. Despite the dry weather, stock water supplies remain mostly adequate.

KENTUCKY: Days suitable for fieldwork 5.9. Topsoil 77% very short, 20% short, 3% adequate. Subsoil 72% very short, 25% short, 3% adequate. Scattered showers were not enough to relieve drought stress. Crops remain in desperate need of moisture. Harvest has begun for some early-planted corn, yields were reported as mostly good to fair with some low test weights. Unless it rains soon, soybeans that are at the critical pod fill stage will be unable to fill their pods, second crop soybeans will produce little to no beans. Burley tobacco cut 43%. Dark tobacco cut 50%. Tobacco 16% very poor, 29% poor, 36% fair, 17% good, 2% excellent. Blank shank continues to be a serious problem statewide. Drought conditions have produced short plants on all but early-planted or irrigated fields. Pasture feed 42% very poor, 34% poor, 18% fair, 6% good. Farmers continue to feed hay due to poor pasture conditions. Unless rain is received soon, fall hay harvest will be minimal. Hay 39% very poor, 35% poor, 20% fair, 6% good.

LOUISIANA: Days suitable for fieldwork 6.6. Soil moisture 43% very short, 29% short, 24% adequate, 4% surplus. Corn 2% poor, 26% fair, 62% good, 10% excellent; 81% harvested, 73% 1998, 57% avg. Corn harvest edged closer to completion. Hay 58% final cutting, 54% 1998, 65% avg. Rice 85% ripe, 84% 1998, 71% avg.; harvest was winding down. Sorghum 95% ripe, 75% 1998, 59% avg.; 58% harvested, 31% 1998, 22% avg. Soybeans 100% blooming, 100% 1998, 99% avg.; 33% leaves turning, 28% 1998, 16% avg. Sugarcane 1% poor, 17% fair, 58% good, 24% excellent; 45% planted, 6% 1998, 8% avg. Sweet potatoes 5% poor, 40% fair, 52% good, 3% excellent; 17% harvested, 6% 1998, 10% avg.; harvest was spotty due to the lack of

soil moisture. Livestock 2% very poor, 8% poor, 34% fair, 47% good, 9% excellent. Vegetables 7% very poor, 27% poor, 41% fair, 23% good, 2% excellent.

MARYLAND: Days suitable for fieldwork 6.2. Subsoil 60% very short, 30% short, 10% adequate. Topsoil 45% very short, 40% short, 15% adequate. Corn 19% very poor, 26% poor, 40% fair, 15% good; 60% dough, 62% 1998, 61% avg.; 32% dent, 37% 1998, 31% avg.; 17% mature, 18% 1998, 7% avg.; 5% harvested for grain, 3% 1998, 1% avg.; 15% harvested for silage, 21% 1998, 7% avg. Soybeans 13% very poor, 27% poor, 35% fair, 25% good; 90% bloomed, 92% 1998, 86% avg.; 66% setting pods, 73% 1998, 62% avg. Sorghum 7% very poor, 44% poor, 49% fair; 20% turning color, 16% 1998, 6% avg. Tobacco 15% very poor, 24% poor, 33% fair, 28% good; 70% topped, 83% 1998, 80% avg.; 25% harvested, 40% 1998, 38% avg. Snap beans 68% harvested, 76% 1998, 77% avg. Cucumbers 74% harvested, 87% 1998, 83% avg. Potatoes 84% harvested, 100% 1998, 96% avg. Sweet corn 86% harvested, 80% 1998, 76% avg. Tomatoes 80% harvested, 81% 1998, 72% avg. Cantaloupes 81% harvested, 86% 1998, 83% avg. Lima beans 25% harvested, 27% 1998, 19% avg. Watermelons 77% harvested, 78% 1998, 76% avg. Peaches 8% poor, 30% fair, 62% good; 70% harvested, 83% 1998, 74% avg. Apples 1% poor, 22% fair, 77% good; 10% harvested, 13% 1998, 11% avg. Clover, other hays 90% 2nd cutting harvested, 92% 1998, 90% avg.; 45% 3rd cutting, 53% 1998, 35% avg. Alfalfa 79% 3rd cutting harvested, 75% 1998, 75% avg.; 18% 4th cutting, 28% 1998, 14% avg. Pasture feed 40% very poor, 28% poor, 25% fair, 7% good. Hay supplies 18% very short, 46% short, 35% adequate, 1% surplus. Activities: Preparing for corn harvest, continued vegetable harvesting, hay becoming scarce.

MICHIGAN: Days suitable for fieldwork 6.0. Topsoil 13% very short, 38% short, 49% adequate. Subsoil 16% very short, 36% short, 48% adequate. Hay 2% very poor, 7% poor, 18% fair, 55% good, 18% excellent. Dry beans 1% very poor, 1% poor, 12% fair, 56% good, 30% excellent. Hay 90% 2nd cutting, 100% 1998, 89% avg.; 35% 3rd cutting, 41% 1998, 23% avg. Corn milk 97%, 94% 1998, 76% avg. Dry beans 99% setting pods, 93% 1998, 85% avg.; 26% turning, 42% 1998, 20% avg. Soybeans 8% turning leaves, 6% 1998, 4% avg. Rainfall is still needed in southern areas as crops are maturing fast. Cooler weather at midweek relieved typical hot weather. Northern portion has everything growing ahead of normal, expecting good yields. Drier conditions this week helped farmers on baling hay as 2nd cuttings continued in north, 3rd cuttings in south. Corn fields drying down as many stalks have two ears per stalk. Soybeans seem to be flourishing, filling pods nicely. Fields of dry beans, soybeans showing signs of leaves turning color. Sugar beets need more rain as fields are showing signs of stress. Cabbage for fall harvest looked good in spite of dry conditions. Cantaloupe harvest continued with good quality if moisture was adequate. Carrots developing well. Cucumber harvest progressed good quality, yields. Eggplant volume steady. Pepper harvest continued with excellent quality. Pumpkins slightly ahead of normal in development. Snap bean harvest was active with good yields, quality. Zucchini, summer squash harvest continued. Winter squash maturity was ahead of normal. Insect pressure was high on sweet corn. Processing tomato harvest began with average yields initially, good quality. Apple fruit 2.5 in. diameter. Harvest of Jersey mac, Earligold, Mollygold continued. Peach harvest continued. Stanley plum harvest was about to start. Concord grapes coloring. Few Bartlett pears were harvested. Blueberry harvest was winding down; growers harvested Elliott variety.

MINNESOTA: Days suitable for fieldwork 4.7. Topsoil 3% very short, 18% short, 61% adequate, 18% surplus. Corn 98% milking, 99% 1998, 90% avg. Winter wheat 88% harvested, 99% 1998, 89% avg. Rye 93% harvested, 99% 1998, 93% avg. Sweet corn 49% harvested, 67% 1998, 43% avg. Pasture feed 3% very poor, 16% poor, 24% fair, 48% good, 9% excellent. Sugar beets 1% very poor, 4% poor, 22% fair, 55% good, 18% excellent. Sunflowers 2% very poor, 14% poor, 40% fair, 42% good, 2% excellent. Dry beans 3% very poor, 12% poor, 38% fair, 40% good, 7% excellent. Dry conditions in the southwest district have expanded into parts of the west-central, south-central districts. However, areas in the northern part of the State are still experiencing too much moisture.

MISSISSIPPI: Days suitable for fieldwork 6.8. Soil moisture, 53% very short, 35% short, 12% adequate. Corn 96% mature, 87% 1998, 70% avg.; 48% harvested, 50% 1998, 23% avg.; 65% silage harvested, 82% 1998, 70% avg.; 1% very poor, 7% poor, 25% fair, 47% good, 20% excellent. Cotton 54% open bolls, 50% 1998, 32% avg.; 7% very poor, 10% poor, 32% fair, 42% good, 9% excellent. Rice 95% heading, 92% 1998, 93% avg.; 27% mature, 27% 1998 30% avg.; 2% harvested, 7% 1998, 4% avg.; 1% very poor, 5% poor, 22% fair, 56% good, 16% excellent. Sorghum 94% turning color, 91% 1998, 86% avg.; 70% mature, 50% 1998, 47% avg.; 35% harvested, 19% 1998, 14% avg.; 35% silage harvested, 53% 1998, 34% avg.; 1% very poor, 6% poor, 28% fair, 47% good, 18% excellent. Soybeans 100% setting pods, 96% 1998, 88% avg.; 58% turning color, 38% 1998, 24% avg.; 34% shedding leaves, 18% 1998, 11% avg.; 8% harvested; 12% very poor, 17% poor, 32% fair, 31% good, 8% excellent. Sweet potatoes 15% harvested, 5% 1998, 9% avg.; 1% very poor, 8% poor, 24% fair, 67% good.

Hay (warm-season) 80% harvested, 80% 1998, 83% avg. Watermelons 92% harvested, 91% 1998, 93% avg. Cattle 2% very poor, 14% poor, 30% fair, 49% good, 5% excellent. Pasture feed 20% very poor, 25% poor, 37% fair, 15% good, 3% excellent. Above-average temperatures, dry conditions prevailed across most of the State. Row crop conditions continue to decline.

MISSOURI: Days suitable for fieldwork 6.7. Topsoil 55% very short, 32% short, 13% adequate. Precipitation for week ending August 22, 1999 avg. 0.22 in. Another week of dry weather, moderated by cooler weather, continued to stress crops, reduce soil moisture, shorten livestock water supplies. Corn harvesting began in most parts of the State, with the Bootheel most advanced with 11% harvested. Northwest district, which received rain in the early part of the week, reported over 80% of the soybeans in fair to good condition. Ninety-six percent of all soybeans have bloomed, 74% were setting pods. Soybeans are in a crucial stage in which rain is needed for normal development. Sorghum is well advanced in the Bootheel area, with 66% coloring. With 29% of the cotton crop opening bolls, it continues to be several days ahead of 1998, average. 3rd crop alfalfa is 73% cut. Pasture feed continue to decline 31% very poor, 33% poor, 30% fair, 6% good.

MONTANA: Days suitable for fieldwork 5.7. Topsoil 24% very short, 44% short, 31% adequate, 1% surplus. Subsoil 28% very short, 45% short, 27% adequate, and 0% surplus. Weather conditions were hot, dry for a majority of the State since only a few locations reported more than a trace of moisture. Sugar beets 22% fair, 53% good, 25% excellent. Winter wheat 97% ripe, 97% 1998, 97% avg.; 85% harvested, 90% 1998, 76% avg. Spring wheat 96% turning, 100% 1998, 98% avg.; 63% ripe, 88% 1998, and 76% avg. Barley 95% turning, 100% 1998, 98% avg.; 57% ripe, 89% 1998, 75% avg. Oats 94% turning, 100% 1998, 97% avg.; 61% ripe 61%, 84% 1998, 75% avg.; 29% harvested, 60% 1998, 41% avg.; 3% very poor, 14% poor, 24% fair, 46% good, 13% excellent. Corn for silage 6% harvested, 1% 1998, 2% avg.; 2% poor, 15% fair, 57% good, 26% excellent. Potatoes 20% fair, 52% good, 28% excellent. Dry beans 9% poor, 22% fair, 52% good, 17% excellent. Alfalfa 60% 2nd cutting, 61% 1998, 61% avg. Other hay 91% harvested, 92% 1998, 93% avg. There are reports of small grains being behind schedule, poor condition.

NEBRASKA: Days suitable for fieldwork 5.4. Topsoil 5% very short, 22% short, 71% adequate, 2% surplus. Subsoil 3% very short, 23% short, 73% adequate, 1% surplus. Statewide, temperatures averaged near normals. Regional precipitation averaged from 0.14 in. northwest to 1.34 in. southwest. Corn 1% very poor, 4% poor, 20% fair, 58% good, 17% excellent. Irrigated corn 80%, dryland corn 65% in good or excellent; corn 84% dough, 84% 1998, 74% avg.; corn 27% dent, behind 37% 1998, above 25% avg. Soybeans 92% setting pods, 96% 1998, 90% avg.; 2% coloring, 4% 1998, 4% avg.; 2% very poor, 7% poor, 25% fair, 53% good, 13% excellent. Sorghum 88% headed, 96% 1998, 89% avg.; 10% turning color, 18% 1998, 16% avg. Sorghum 3% very poor, 7% poor, 27% fair, 57% good, 6% excellent. Dry beans 1% very poor, 3% poor, 24% fair, 67% good, 5% excellent; 98% setting pods, ahead of 78% 1998, 92% avg. Alfalfa 62% 3rd cutting complete, behind 62% 1998, 53% avg.; 1% very poor, 5% poor, 21% fair, 60% good, 13% excellent. Pasture feed, range 2% very poor, 6% poor, 19% fair, 60% good, 13% excellent. Wild hay 4% poor, 17% fair, 62% good, 17% excellent. Cooler evening temperatures, lower humidity have lowered stress on fat cattle, resulting in improved gains. Producer activities; haying, moving grain to market, caring for livestock, preparations for fall seeded wheat.

NEVADA: Fires continue to rage through northern areas, with three new fires. As of Friday, August 20th there were eight fires still burning; four of which were contained. Bureau of Land Management reported that there have been 670 wildfires this year in the State. Temperatures varied throughout the State, but were no more than 7 degrees F above or below the normal temperature. Thunder showers continued throughout the State, but brought little precipitation. Trace amounts of precipitation were reported in Reno, Elko, and Las Vegas. Ely was the only station to report significant rainfall, with 0.17 in. The majority of the irrigation water supplies remained adequate. Third cutting of alfalfa continued as well as grain harvest. New alfalfa planting was underway. Harvest of sweet corn was completed; significant bird damage was reported. Cantaloupe harvest was in full swing. Garlic harvest continued. Main farm and ranch activities: Haying, combining grain, irrigating, fall planting of alfalfa, working calves, assessing of fire damage.

NEW ENGLAND: Days suitable for fieldwork 5.9. Topsoil 23% very short, 46% short, 31% adequate. Subsoil 32% very short, 36% short, 32% adequate. Pasture feed 24% very poor, 29% poor, 35% fair, 11% good, 1% excellent. Maine potatoes 5% harvested, <5% 1998, <5% avg.; condition good to excellent. Massachusetts potatoes 40% harvested, 40% 1998, 30% avg.; condition good to fair. Rhode Island potatoes 30% harvested, 15% 1998, 15% avg.; condition fair to poor. Oats in Maine 40% harvested, 20% 1998, 25% avg.; condition good to excellent. Barley in Maine 50% harvested, 35% 1998; condition good to excellent. Field corn <5% harvested; condition good to fair. Sweet corn 65% harvested, 60% 1998, 55% avg.; condition

good to fair. Shade Tobacco 85% harvested, 100% 1998, 85% avg., condition good. Broadleaf Tobacco 80% harvested, 80% 1998, 75% avg.; condition good. First cut hay 100% harvested, 99% 1998, 99% avg., condition good to fair. Second cut hay 85% harvested, 70% 1998, 70% avg.; condition good to fair. Third cut hay 25% harvested, 20% 1998, 20% avg.; condition fair to poor. Apples 10% harvested, 10% 1998, 10% avg.; size average to below average, condition good to fair. Peaches 55% harvested, 65% 1998, 55% avg.; size average to below average, condition fair. Pears <5% harvested, 10% 1998, 10% avg.; size below average to average, condition fair to poor. Cranberries size average, condition good to excellent. Highbush blueberries 85% harvested, 85% 1998, 80% avg., size average, condition good to fair. Wild Blueberries 65% harvested, 80% 1998, 75% avg.; size average, condition good to fair. Major farm activities included: Harvesting vegetables, tobacco, oats, barley, and potatoes. Picking fruit including early varieties of apples, peaches and pears. Potato farmers in Maine harvesting some early varieties and starting to apply vine killer on other varieties. Field corn harvest beginning in a few locations. Blueberry harvest continues. Cutting hay where it is available. Spreading manure, mowing weeds and irrigating where possible.

NEW JERSEY: Days suitable for fieldwork 5. Temperatures near normal. Extremes 48°; 93°. Rainfall 0.44 in. north, 0.87 in. central, 0.80 in. south. Heaviest 24 hour total was 1.89 inches at Pemberton on the 20th to the 21st. Estimated soil moisture, in percent of field capacity, this past week averaged 86% north, 79% central, 73% south. Four inch soil temperatures 72 degrees North, 74 degrees central, 76 degrees south. Irrigation water supply improved from very short to short in most areas and even to adequate in some areas. Rainfall arrived too late to help some field corn acreage. Yields are still expected to be well below average, some farmers have reported their corn for grain as a total loss. Harvesting of corn for silage continued, both yields, nutrient content are below normal. Soybeans between fair to poor condition. Farmers report the pods are falling off, there is insect damage. Condition of the second alfalfa cutting is between fair, poor. Some areas did not get a second alfalfa cutting. However, the recent rains have now raised hopes of better yields from the coming third cutting. Second cutting of other hay is occurring, the condition has been rated as poor in most areas. Some areas are not having a second cutting at all. Some improvement of pastures has occurred in some areas of the state because of the rain received. Supplemental feeding of cattle is still occurring extensively. Some farmers are already using their winter feed supplies. Most irrigated vegetable fields are in good, fair condition but heat stress has affected even irrigated fields. Tomato fields are good condition in most areas but total production is expected to be reduced due to blossom end rot, small fruit size. Pepper fields are between good, fair condition. Most snap beans fields have been rated in fair condition. Significant damage to the pumpkin crop is expected since the crop is mostly non-irrigated. Potato sizes have been reported to be somewhat smaller than normal, yields are down. Harvest of tomatoes, squash, sweet corn, peppers, snap beans, cucumbers, melons, eggplant, green beans, potatoes, other minor vegetables continued. The moisture received from the rains has allowed many farmers to finally seed their fall vegetable fields. Harvest of peaches is increasing rapidly with good quality being reported. Apples are also being harvested and the quality has also been rated as good. Water supply for cranberries is tight, there has been some scalding due to the sun.

NEW MEXICO: Days suitable for fieldwork 6.4. Thunderstorms favored north, northwest areas during the week, with most of the south, southeast on the dry side. Some clouds, scattered precipitation kept temperatures close to normal over the north, while more abundant sunshine helped produce temperatures above normal in the south. Statewide average was between 2° and 3° above normal. Farmers continued hay, vegetable harvest along with irrigating, spraying, preparing land for fall planting. Haying activities returned to normal with the only rain damage reported in the north central portion of the State. Chile, onion, silage harvest remained active in the southern part of the state while the high plains began to drill wheat. Ranchers continued to report good weight gains for livestock along with fair to good supplies of tank water. Forage production remains above normal in most areas which should provide adequate pasture for fall, winter grazing. Pasture feed, range 1% very poor, 5% poor, 33% fair, 52% good, 9% excellent. Cattle, sheep conditions dropped slightly but continued to report over half in good to excellent condition.

NEW YORK: Days suitable for fieldwork 5.9. Soil moisture 29% very short, 53% short, 18% adequate. Pasture feed 13% very poor, 45% poor, 21% fair, 21% good. Alfalfa 57% 3rd cut complete, 34% 1998, 36% avg. Condition of hay crops 23% poor, 45% fair, 32% good. Corn 25% poor, 29% fair, 29% good, 17% excellent. Corn condition varies greatly from area to area. Ear development affected by early maturing crop. Silage chopping began. Oats harvest 93% complete; 82% 1998, 59% avg. Orange County onions harvested with low yields, small sizes. Albany County sweet corn ears not filling out. Clinton, Essex County sweet corn harvest 40 percent finished. Hudson Valley apples 2.1-2.3 in. diameter with fruit due to ripen in next six weeks. Color was excellent. Capital District Paula Red apples picked. Lake Erie grapes received rain, helped size grapes, promote vine health. Livestock

heat stress problems greatly reduced. Most pastures greener than two weeks ago. Generally, driest areas received most rain.

NORTH CAROLINA: Days suitable for fieldwork 6.4 compared to 6.3 last week. Previous weekend rainfall gave way to hot weather again. Fields dried out quickly allowing good progress to be made in harvesting tobacco, cutting silage. Relief came later in the week as a cold front brought moisture to a majority of the State. Despite the precipitation, soil moisture levels rebounded only slightly, 35% very short, 36% short, 28% adequate, 1% surplus. Tobacco harvesting, marketing were among the major activities. Other activities included weed control in all crops, baling hay, harvesting peaches, vegetables, crop scouting, tending livestock. Apple harvest is just beginning. Cotton, soybean crops are slightly ahead of their respective five-year averages.

NORTH DAKOTA: Days suitable for fieldwork 5. Topsoil 2% very short, 12% short, 74% adequate, 12% surplus. Subsoil 2% very short, 10% short, 75% adequate, 13% surplus. Precipitation was scattered across the state which allowed small grain harvest to make good progress. Sprout damage to swathed wheat was reported in the central and eastern part of the State. Durum wheat 94% milk, 100% 1998, 98% avg.; 65% turning, 95% 1998, 82% avg.; 11% combined, 37% 1998, 19% avg. Canola 89% turning, 96% 1998; 59% swathed, 85% 1998; 12% combined, 38% 1998. Corn for grain 90% milk, 99% 1998, 92% avg.; 28% denting, 46% 1998, 21% avg. Dry edible beans 74% fully podded, 98% 1998, 89% avg.; 39% lower leaves yellowing, 84% 1998, 58% avg.; 17% mature, 55% 1998, 27% avg. Flaxseed 63% turning, 94% 1998, 74% avg.; 6% combined, 27% 1998, 8% avg. Potatoes 14% vines killed, 32% 1998, 17% avg. Soybeans 75% fully podded, 80% 1998, 77% avg.; 12% lower leaves yellowing, 17% 1998, 19% avg. Sunflowers 89% blooming, 98% 1998, 96% avg; 10% ray flowers dried, 35% 1998, 26% avg. Conditions of corn, soybeans, sunflowers increased during the past week. Emerged crop condition: durum 1% very poor, 7% poor, 39% fair, 48% good, 5% excellent; canola 4% poor, 23% fair, 57% good, 16% excellent; corn for grain 1% very poor, 5% poor, 19% fair, 64% good, 11% excellent; corn for silage 4% poor, 20% fair, 65% good, 11% excellent; dry edible beans 8% poor, 24% fair, 51% good, 17% excellent; flaxseed 4% poor, 25% fair, 57% good, 14% excellent; potatoes 5% poor, 12% fair, 49% good, 34% excellent; soybeans 3% very poor, 9% poor, 21% fair, 58% good, 9% excellent; sugar beets 1% very poor, 5% poor, 12% fair, 55% good, 27% excellent; sunflower 1% very poor, 5% poor, 25% fair, 54% good, 15% excellent. Stock water supplies 3% short, 90% adequate, 7% surplus. Hay 7% above normal.

OHIO: Days suitable for fieldwork 6.2. Topsoil 40% very short, 38% short, 22% adequate. Soybeans dropping leaves 4%, 0% 1998, avg. Alfalfa hay 3rd cutting 75%, 60% 1998, 38% avg. Alfalfa hay 4th cutting 10%, 8% 1998. Other hay 2nd cutting 91%, 89% 1998, 84% avg. Other hay 3rd cutting 38%, 26% 1998, 15% avg. Corn 87% dough, 73% 1998, 66% avg.; 45% dented, 19% 1998, 14% avg.; 3% mature, 0% 1998, avg. Corn 8% harvested for silage, 1% 1998, 1% avg. Summer apples 86% harvested, 79% 1998, 46% avg. Peaches 77% harvested, 79% 1998. Tobacco 61% topped, 53% 1998. Tobacco 17% harvested, 11% 1998. Processing tomatoes 21% harvested, 13% 1998, 10% avg. Potatoes 36% harvested, 50% 1998, 29% avg. Cucumbers 70% harvested. Pasture feed 30% very poor, 28% poor, 27% fair, 13% good, 2% excellent. Corn 9% very poor, 18% poor, 35% fair, 32% good, 6% excellent. Soybeans 8% very poor, 15% poor, 35% fair, 35% good, 7% excellent. Activities for the week include making hay; mowing, seeding CRP; chopping wheat stubble; picking tomatoes, digging potatoes; chopping silage; plowing wheat ground; applying minerals; seeding filter strips; hauling grain; installing tile; leveling land; painting, cleaning grain bins; hauling manure; pulling weeds in soybeans; scouting for insects, disease; preparing for harvest; selling livestock; spraying fence rows; spraying, topping, cutting tobacco; hauling water; irrigating specialty crops; attending fairs. Reported weed pressures include yellow foxtail, pigweed, velvetleaf, lambs quarters, Canadian thistle, giant ragweed, poison ivy, morning glory, sourdock, quack grass, Johnson grass, mare's tail, ironweed, wild carrot, smartweed. Reported insects include spider mites, nematodes on soybeans; leafhoppers in alfalfa; rootworms, earworms in corn; beetles in soybeans, corn. Reported diseases include sudden death syndrome, white mold, root rot in soybeans; gray leaf spot on corn, fungus on seed corn, blossom end rot, blight on tomatoes, soft rot on cabbage, scab on apples, mildew on vegetables. Fruit, vegetable conditions are fair to poor throughout the state. In Medina county, sweet corn, tomato, apple yields are good. A Wayne county reporter indicated that pumpkin, squash production are down five to ten percent. In Coshocton county, one reporter mentioned that soybean pods are not filling due to a lack of moisture. Pasture, grass conditions are fair to poor throughout the state. Spotty rains have provided some relief to dry, dormant grass, but growth is slow, pastures are still short, weedy. Pastures in the southern half of the state are in poor condition. One Licking county reporter stated that his pasture is completely gone. Cooler weather over the past two weeks has improved livestock conditions. Livestock in the northern half of the state are mostly reported in good condition. Milk production was reported up in Columbiana, Wayne counties. Reporters in several areas are still feeding hay, hauling water. Producers in southern parts of the state reported that livestock are heat stressed, hungry; herds continue to be liquidated.

OKLAHOMA: Days suitable for fieldwork 6.7. Subsoil 16% very short, 38% short, 43% adequate, 3% surplus. Topsoil 32% very short, 44% short, 24% adequate. Hot temperatures, lack of rainfall add stress to crops, south. Topsoil, subsoil moisture lowest since September, 1998. Wheat 40% seedbed prepared, 29% 1998, 42% avg. Oats 30% seedbed prepared, 23% 1998, 21% avg. Corn 2% very poor, 1% poor, 4% fair, 92% good, 1% excellent; 99% milk to soft, 100% 1998, 98% avg.; 10% mature, 23% 1998, 20% avg.; 3% harvested, 7% 1998, 4% avg. Sorghum 3% mature, 4% 1998, 7%, avg. Soybeans 2% very poor, 9% poor, 39% fair, 49% good, 1% excellent; 83% flowering, 92% 1998, 91% avg.; 68% setting pods, 71% 1998, 72% avg.; 7% mature, 6% 1998, 10% avg. Peanuts 91% setting pods, 95% 1998, 92% avg. Cotton 98% setting bolls, 97% 1998, 93% avg.; Watermelons 81% harvested, 89% 1998, 69% avg. Alfalfa hay 2% very poor, 8% poor, 37% fair, 49% good, 4% excellent; 95% 3rd cutting, 83% 1998, 90% avg.; 33% 4th cutting, 22% 1998, 30% avg.; Other hay 44% 2nd cutting, 7% 1998, 52% avg. Livestock 1% poor, 17% fair, 74% good, 8% excellent. Feeder steer prices 50 cents to \$1.00 per cwt. above last week.

OREGON: Days suitable for fieldwork 6.8. Topsoil 30% very short, 57% short, 13% adequate. Subsoil 30% very short, 52% short, 18% adequate. Barley 52% harvested, 69% 1998, 61% average. Spring wheat 77% harvested, 67% 1998. Winter wheat 89% harvested, 87% 1998, 89% avg. Range, pasture feed 3% very poor, 26% poor, 48% fair, 20% good, 3% excellent. Activities: East side grain & grass seed harvest continued. Grass seed yields look good. Mint harvest underway, most areas completed second cutting of alfalfa. Klamath Basin sugar beets fair to good. Westside grain & grass seed harvest almost finished or in advanced stages & second & third hay cuttings underway. Cloudy weather slowed combining. Sugar beet seed harvest also underway. Red clover good, third crop irrigated grass clover being cut. Nurseries & greenhouses doing summer maintenance. Easter lily transplanting underway on south coast. Insect spraying continued on Christmas trees. Christmas tree shearing continued. Fall mums in retail stores. In eastern areas potatoes reported full bloom & Klamath Basin mostly turned. Sweet corn being harvested in Northeast. Willamette Valley vegetable harvest in high gear as sweet corn, tomatoes, green beans, broccoli, cucumbers & melon harvest began. Truck gardens doing well, brisk sales of vegetables at road side stands. Potato vines dying & onions sizing. Willamette Valley potatoes being dug & hauled. Willamette Valley blackberry harvest in full swing, blueberry & peach harvest continued, & pear harvest started. Hazelnut orchards being readied for harvest. Rogue River Valley Red Clapp & Bartlett pear harvest underway & apple harvest started. On the south coast blueberry harvest continued & some cranberry growers hand weeding. Hood River Valley Red Clapp pear & Gravenstein apples harvest began in lower valley. Ranges & pastures continued to dry up. The best rangeland conditions at high elevations in Southeast. Only dry feed left in most Willamette Valley pastures. Livestock condition mostly good to excellent. Some supplemental hay feeding continued in western counties.

PENNSYLVANIA: Days suitable for fieldwork 6.0. Soil moisture 46% very short, 45% short, 9% adequate. Corn 98% silked complete, 96% 1998, 95% avg.; 60% dough complete, 67% 1998, 59% avg.; 25% dent, 13% 1998, 13% avg. Ensilage corn 18% harvested complete, 2% 1998, 3% avg. Soybean 26% very poor, 34% poor, 30% fair, 9% good, 1% excellent. Oats 91% harvested, 84% 1998, 80% avg. Tobacco 5% harvest complete, 46% 1998, 26% avg. Potato 22% harvest complete, 10% 1998, 17% avg. Alfalfa 95% 2nd cutting complete, 98% 1998, 91% avg. Alfalfa 61% 3rd cutting complete, 59% 1998, 51% avg. Alfalfa 20% 4th cutting complete, 19% 1998, 11% avg. Timothy clover 58% 2nd cutting complete, 72% 1998, 66% avg. Quality of hay made 7% very poor, 13% poor, 34% fair, 31% good, 15% excellent. Apple 21% harvest complete, 27% 1998, 19% avg. Apple 3% very poor, 8% poor, 26% fair, 30% good, 33% excellent. Peach 63% harvest complete, 83% 1998, 60% avg. Grape 5% harvest complete, 0% 1998, 6% avg. Fall plowing 15% complete, 14% 1998, 15% avg. Activities include: Harvesting oats, fruits, vegetables, potatoes, corn silage, tobacco; machinery maintenance; filling silos; hauling manure; spreading manure and lime; caring for livestock; cutting hay; attending county fairs; irrigating, hauling water.

SOUTH CAROLINA: Days suitable for fieldwork 6.1. Soil 33% very short, 54% short, 13% adequate. Apples 10% harvested, 16% 1998, 14% avg. Cantaloupes 100% harvested, 100% 1998, 97% avg. Corn 39% harvested, 51% 1998, 34% avg.; 9% very poor, 25% poor, 39% fair, 23% good, 4% excellent. Grapes 20% poor, 60% fair, 20% good. Hay 18% very poor, 26% poor, 40% fair, 15% good, 1% excellent. Peaches 95% harvested, 96% 1998, 96% avg. Sorghum 15% harvested, 24% 1998; 19% avg.; 15% very poor, 45% poor, 37% fair, 3% good. Sweet potatoes 3% harvested, 4% avg.; 6% poor, 66% fair, 28% good.

SOUTH DAKOTA: Days suitable for fieldwork 6.4. Topsoil 11% very short, 44% short, 43% adequate, 2% surplus. Subsoil 3% very short, 36% short, 59% adequate, 2% surplus. Progress of row crops, particularly soybean fill, is being hampered by low soil moisture. Alfalfa 9% excellent, 54% good, 34% fair, 3% poor. Sunflower 19% excellent, 56% good, 22% fair, 3% poor.

Flaxseed 21% excellent, 62% good, 17% fair. Barley 99% ripe, 100% 1998, 98% avg. Oats 99% ripe, 100% 1998, 98% avg. Spring wheat 99% ripe, 100% 1998, 97% avg. Flaxseed 91% ripe, 95% 1998, 62% avg. Sunflower 90% blooming, 90% 1998, 92% avg. Sunflower ray flowers dry 34%, 37% 1998, 35% avg. Sunflower bracts yellow 24%, 35% 1998, 21% avg. Corn silked 99%, 100% 1998, 96% avg. Alfalfa 88% 2nd cutting, 90% 1998, 83% avg.; 47% 3rd cutting, 34% 1998. Other hay 89% harvested, 87% 1998, 86% avg. Cattle 24% excellent, 64% good, 11% fair, 1% poor. Sheep 30% excellent, 55% good, 13% fair, 2% poor. Stock water 8% surplus, 80% adequate, 11% short, 1% very short.

TENNESSEE: Days suitable for fieldwork 7.0. Topsoil 47% very short, 39% short, 14% adequate. Subsoil 41% very short, 43% short, 16% adequate. Corn 95% dough, 95% 1998, 94% avg.; 88% dent, 78% 1998, 73% avg.; 36% mature, 24% 1998, 25% avg.; 8% harvested for grain, 3% 1998, 1% avg.; 61% silage harvested, 37% 1998, 34% avg.; 8% very poor, 23% poor, 37% fair, 30% good, 2% excellent. Tobacco 89% topped, 78% 1998, 78% avg.; 9% very poor, 19% poor, 38% fair, 29% good, 5% excellent. Burley 39% harvested, 23% 1998, 25% avg. Dark air-cured 46% harvested, 28% 1998, 31% avg. Dark fire-cured 45% harvested, 28% 1998, 29% avg. Pasture feed 24% very poor, 37% poor, 28% fair, 11% good. As of Sunday, 8% of the corn for grain had been harvested, nearly a week ahead of the five-year average. The early harvest is a direct result of the recent hot, dry conditions which led to the rapid drying down of the crop. Producers report early planted corn yields look fairly good because this corn was made before the recent dry spell set in. Late planted corn on the other hand has suffered recently due to the extreme conditions. Last week remained dry with daily temperatures well above normal during the first half of the week. Rainfall was again very scarce with much of the State receiving no moisture. A few areas did receive some rain from scattered thunderstorms which also caused some hail and wind damage. Crops throughout the State continue to suffer from the drought conditions. Nearly half of the State's soybean crop was rated in poor to very poor condition as of week's end. Soybean plants are struggling to set and fill pods due to the lack of moisture. Sixty-one percent of pasture land was rated in poor to very poor condition and many producers are being forced to feed hay and deliver water to their animals.

TEXAS: Conditions hot, dry over state last week with only widely scattered showers reported in Plains, North and East. Fall land preparation slowed due to lack of moisture. Hot temperatures (many days over 100 degrees) have caused range and pasture to decline in many areas. Grain storage problems have occurred due to good yields. Haying operations continued, however yields have diminished due to hot, dry weather. Livestock conditions remain fair to good across the State. Heavy rains from Hurricane Bret soaked lower valley as week ended.

Crops: Small Grains, first fields of wheat were seeded in scattered areas of Plains where moisture was available. Corn, The Plains crop continued to mature and harvest begin. Silage harvest was in progress. Harvest increased in the Black lands and Central Texas as well as in other areas. Yields have been good. Markets however were very weak. Harvest was winding down along the Upper Coast and was mostly complete in the Coastal Bend and Rio Grande Valley. Statewide corn condition was rated at 87% of normal compared with 62% 1998; 57% mature, 68% 1998, 59% avg.; 46% harvested, 52% 1998, 46% avg. Cotton: Good growth, development continued in the Plains, however hot temperatures caused some boll drop, especially in dry land areas. Irrigation remained active where possible. Dry land fields need more rain. Bolls continued to open in Black lands and Central. Harvest continued in coastal Bend, Upper Coast as Hurricane Bret approached, with good yields reported. Harvest also active in Rio Grande Valley. Statewide cotton 67% of normal compared, 44% 1998; 7% harvested 15% 1998, 11% avg. Peanuts: Fields continued to look good in the Plains, North Central and irrigation was very active. Dryland fields need more rain. Some diseases reported. Rice: Harvest continued along the Upper Coast with good yields and excellent quality. Statewide rice 95% of normal compared to 78% 1998. Sorghum: Fields matured rapidly in the Plains under hot conditions and harvest on early fields should begin soon. Dryland fields were beginning to stress in many areas. Harvest was virtually complete in the Black lands and Central areas. Lack of storage is still a problem. Statewide sorghum condition was rated at 73% of normal compared with 46% 1998; 54% mature, 54% 1998, 60% avg.; 50% harvested, 51% 1998, 53% avg. Soybeans: Progress, development was good in the plains, however dryland fields need rain. Irrigation remained active. Harvest in the Black lands continued with above average yields. Harvest of early varieties was winding down along the Upper Coast. 37% harvested, 62% 1998, 25% avg.

Commercial Vegetables: Rio Grande Valley, land preparation continued. San Antonio-Winter Garden, some planting of fall vegetables continued. East Texas, sweet potato, watermelon harvest continued, limited supplies of Okra, peas, other vegetables was available but suffered from lack of rain. High Plains, onion, potato harvest winding down many fields. Trans Pecos, a few fields cantaloups remained for harvest. Tomatoes will be ready soon. Peaches: Production continued to decline as harvest in Hill Country winding ends. Other peaches in East Texas were fair to good. Pecans: Hot, dry conditions continued take toll on a very good crop across state. Nut drop continued in many locations over the past few weeks. Shuck worms, weevils

increased in some areas. Spraying occurred where numbers high. Rainfall is needed to maintain the current expectations.

Range and Livestock: Hay production slowed due recent hot, dry conditions many areas. Supplies good across state however. Because slower grass growth, some producers have begun to supplement. Extremely hot temperatures continued to cause problems in poultry operations.

UTAH: Days suitable for fieldwork 6. Topsoil 12% very short, 21% short, 60% adequate, 7% surplus. Subsoil 11% very short, 22% short, 67% adequate. Pasture feed, range 2% very poor, 10% poor, 34% fair, 50% good, 4% excellent. Corn height 83 in., 79 in., 1998, 75 in., avg.; 89% silked, 93% 1998, 86% avg.; 19% dough stage, 32% 1998, 15% avg. Winter wheat 80% harvested, 91% 1998, 90% avg. Spring wheat 75% harvested, 85% 1998, 82% avg. Barley 79% harvested (grain), 80% 1998, 80% avg. Alfalfa hay 94% 2nd cutting, 96% 1998, 95% avg.; 22% 3rd cutting, 39% 1998, 32% avg. Other hay 98% 1st cutting, 91% 1998, 92% avg. Oats 91% harvested for hay or silage, 93% 1998, 94% avg.; 56% harvested for grain, 68% 1998, 60% avg. Peaches 30% picked, 26% 1998, 42% avg. Irrigation water supply 9% very short, 16% short, 73% adequate 2% surplus. Stock water supplies 2% very short, 21% short, 75% adequate, 2% surplus. Major activities included irrigating, harvesting small grains, hay, preparing land for fall planting.

VIRGINIA: Days suitable for fieldwork 6.1. Topsoil 37% very short, 32% short, 31% adequate. Subsoil 47% very short, 29% short, 24% adequate. Pasture feed 37% very poor, 25% poor, 26% fair, 11% good, 1% excellent. Livestock 1% very poor, 12% poor, 36% fair, 46% good, 5% excellent. Hay, other 41% very poor, 33% poor, 19% fair, 7% good. Hay, alfalfa 12% very poor, 26% poor, 44% fair, 15% good, 3% excellent. Corn for grain 75% dough, 64% 1998, 66% avg.; 50% dented, 41% 1998, 41% avg.; 20% mature, 22% 1998, 20% avg.; 15% very poor, 36% poor, 22% fair, 17% good, 10% excellent. Corn for Silage 17% harvested, 13% 1998, 9% avg. Soybeans 70% blooming, 81% 1998, 78% avg.; 45% setting pods, 57% 1998, 53% avg.; 8% very poor, 19% poor, 32% fair, 30% good, 11% excellent. Tobacco, flue cured 30% harvested, 24% 1998, 31% avg.; 1% poor, 30% fair, 50% good, 19% excellent. Tobacco, burley 15% harvested, 4% 1998, 6% avg.; 2% very poor, 2% poor, 22% fair, 48% good, 26% excellent. Tobacco, Dark Fire Cured 35% harvested, 27% 1998, 30% avg.; 10% poor, 33% fair, 41% good, 16% excellent. Tobacco, Sun Cured 10% harvested, 5% 1998, 21% avg.; 10% very poor, 30% poor, 30% fair, 30% good. Peanuts 5% fair, 44% good, 51% excellent. Cotton 100% setting bolls, 100% 1998, 100% avg.; 5% bolls opening, 11% 1998, 19% avg.; 6% fair, 38% good, 56% excellent. Summer potatoes 100% harvested, 100% 1998, 100% avg. Apples, Summer 85% harvested, 90% 1998, 68% avg. Apples, All 9% very poor, 21% poor, 34% fair, 34% good, 2% excellent. Peaches 67% harvested, 73% 1998, 71% avg. Moisture supplies across the Commonwealth improved somewhat as scattered showers and thunderstorms occurred during the past week. The scattered rainfall was not significant in most areas but helped to improve crop conditions. This years corn crop is progressing slightly ahead of schedule. A few producers have already begun to harvest their corn for silage as the stalks begin to dry down. Soybean progress remains slightly behind schedule. Late blooms are still developing and producers are hopeful that the plants will continue to set pods. Tobacco harvest is currently underway. Flue producers are progressing on schedule while growers of other types of tobacco are slightly ahead of normal. The cotton and peanut crops remain in mostly good to excellent condition and are progressing on or near normal. Surface water sources and wells remain drastically depleted as a result of the extended hot, dry conditions that have plagued Virginia since early to mid July. Livestock producers continue to provide supplemental water and feed to their herds. Some producers have been and continue to reduce livestock herds

WASHINGTON: Days suitable for fieldwork 6.9. Topsoil 7% very short, 38% short, 55% adequate. Subsoil 20% very short, 50% short, 30% adequate. Harvest was in full swing for winter wheat, spring wheat, barley by the weekend. Yields for the cereal grains were all being reported close to historical averages with good quality. Eastern area growers were happy to report less sprout problems in the winter wheat than experienced in the past due to more favorable weather conditions. Winter wheat 66% harvested, 91% 1998, 83% avg. Winter wheat dryland 3% very poor, 13% poor, 47% fair, 33% good, 4% excellent; irrigated 100% good. Spring wheat dryland 16% very poor, 27% poor, 46% fair, 11% good; irrigated 100% good; 35% harvested, 77% 1998, 69% avg. Barley dryland 8% very poor, 27% poor, 51% fair, 14% good; irrigated, 100% good; 28% harvested, 78% 1998, 69% avg. Potatoes 21% harvested, 17% 1998, 17% avg. Potatoes 3% fair, 63% good, 34% excellent. Hay, other roughage supplies 4% short, 78% adequate, 18% surplus. Range, pasture feed 12% very poor, 33% poor, 37% fair, 13% good, 5% excellent. Warm weather helped improve pasture conditions. Third cutting of alfalfa continued full swing. Grass silage was still being harvested. Picking continued for peaches, nectarines, some early apples. Blueberry growers were in the midst of harvest as raspberry harvest was winding down. Some softening was reported in the blueberries due to the rain received last week. Grapes were beginning to change color although it was later than normal. Sweet corn was being harvested across the State. Carrots, onions, artichokes, other vegetables were being harvested as well.

Dry pea, lentil harvest continued, yield reports were average. Christmas tree growers were already taking orders from wholesale buyers. Radish seed, potatoes were being harvested.

WEST VIRGINIA: Days suitable for fieldwork 6.1. Topsoil 47% very short, 46% short, 7% adequate. Crop, livestock conditions were aided by scattered rainfall over the State. However, drought conditions continue to plague producers throughout the State. Hay 37% very poor, 48% poor, 15% fair; Hay 2nd cut 60%, 67% 1998, 68% avg.; 3rd cut 13%, 17% 1998, 27% avg. Corn 29% very poor, 45% poor, 26% fair; 94% silked, 84% 1998, 91% avg.; Corn 70% doughing, 45% 1998, 49% avg.; 16% dent, 13% 1998. Oats 80% harvested, 95% 1998, 88% avg. Soybeans 17% very poor, 42% poor, 36% fair, 5% good; 95% bloomed, 71% 1998, 97% avg.; 73% setting pods, 45% 1998, 81% avg. Tobacco 31% very poor, 27% poor, 30% fair, 11% good, 1% excellent; 33% topped, 44% 1998, 81% avg. Apples 15% very poor, 22% poor, 52% fair, 11% good. Peaches 16% very poor, 25% poor, 51% fair, 8% good. Cattle 3% very poor, 26% poor, 50% fair, 21% good. Sheep 1% very poor, 32% poor, 57% fair, 10% good.

WISCONSIN: Days suitable for fieldwork 4.8. Soil moisture 10% short, 76% adequate, 14% surplus. With showers in the middle, latter part of the week, many farmers continued to have problems harvesting dry hay. Frequent rains also encouraged strong regrowth of 3rd and 4th crop hay. This created another problem for farmers: What to do with all of the hay? Some farmers chopped their hay back onto the field last week due to a lack of storage and/or rain damage. Between the showers there was nice sunshine which allowed for some harvest of hay. Third crop hay harvested 49% 1999, 55% 1998, 26% avg. Cooler weather and more than ample rainfall throughout much of the State has helped the corn, soybean crops to grow, mature well. Soybean 1% very poor, 2% poor, 8% fair, 54% good, 35% excellent; 89% setting pods, 87% 1998; 4% leaves turned, 7% 1998, 2% avg. One reporter in Grant County noted that the soybeans are the tallest he has ever seen. The excess height has created a lodging problem, as the plants were unable to hold up the weight of an excellent crop. In the southeastern part of the State, a shortage of moisture threatens to cut yields on both corn, soybeans by 60% if a substantial rainfall is not received soon. Harvest of oats continued last week between the showers. Harvesting the straw remained a problem as a large amount of weeds, showers have kept it from drying. Early apples and pears were being picked. Vegetable crops and the potato harvest continued with indications of good yields. The tobacco harvest moved into full swing. Some fall tillage began on harvested fields. Pasture feed 2% poor, 14% fair, 64% good, 20% excellent.

WYOMING: Days suitable for fieldwork 6.3. Topsoil 6% very short, 53% short, 41% adequate. Winter wheat 97% harvested, 96% 1998, 96% avg. Spring wheat 8% fair, 92% good.; 75% mature, 91% 1998, 82% avg.; 60% harvested, 54% 1998, 45% avg. Barley 3% fair, 97% good; 83% mature, 89% 1998, 87% avg.; 69% harvested, 59% 1998, 60% avg. Oats 6% fair, 91% good, 3% excellent; 68% mature, 86% 1998, 78% avg.; 33% harvested, 50% 1998, 42% avg. Corn 1% fair, 95% good, 4% excellent; 94% silked, 99% 1998, 95% avg.; milk 84%, 88% 1998, 81% avg.; dough 42%, 50% 1998, 52% avg. Dry bean 3% fair, 95% good, 2% excellent; 100% setting pods, 93% 1998, 96% avg.; 64% leaves turning, 22% 1998, 42% avg. Sugar beet 4% fair, 87% good, 9% excellent. Alfalfa 58% 2nd cutting, 59% 1998, 61% avg. Other hay 82% cut, 86% 1998, 85% avg. Range, pasture feed 1% poor, 23% fair, 66% good, 10% excellent. Irrigation water supplies 12% short, 86% adequate, 2% surplus. Temperatures remained warm with little precipitation over the State.

International Weather and Crop Summary

August 15 - 21, 1999

HIGHLIGHTS

EUROPE: Showers benefited immature summer crops in northern and central Europe, but slowed winter and spring grain harvesting. Hot, dry weather stressed summer crops in the south.

FSU-WESTERN: Hot, dry weather maintained unfavorable growing conditions for filling summer crops in eastern Ukraine and southern Russia, while wet weather caused further delays in grain harvesting in northern Russia.

FSU-NEW LANDS: Unseasonably warm, dry weather favored spring grain maturation and early harvest activities in Kazakstan.

EASTERN ASIA: In the North China Plain, scattered showers provided some relief, but below-normal rainfall during the past 8 weeks stressed filling summer crops.

SOUTHEAST ASIA: Typhoon Sam struck Luzon, Philippines, producing heavy showers across the country.

SOUTH ASIA: Hot, dry weather in western India further stressed oilseeds, grains, and cotton.

AUSTRALIA: Showers continued in Western Australia's winter grain belt, but mild, drier weather enveloped crop areas in the east.

CANADA: Warmer weather boosted growth rates of spring grains and oilseeds across the Prairies.

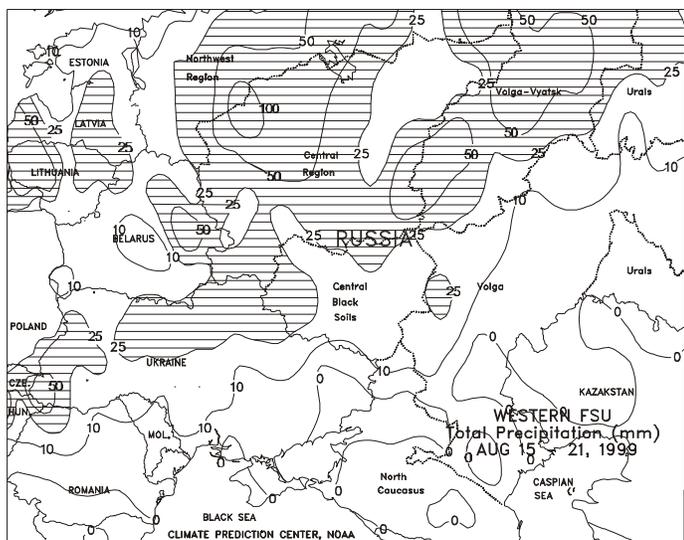
MEXICO: Hurricane Bret missed northeast Mexico, but widespread showers continued across the Southern Plateau.

SOUTH AMERICA: In portions of central Argentina, dry weather stressed germinating winter wheat.



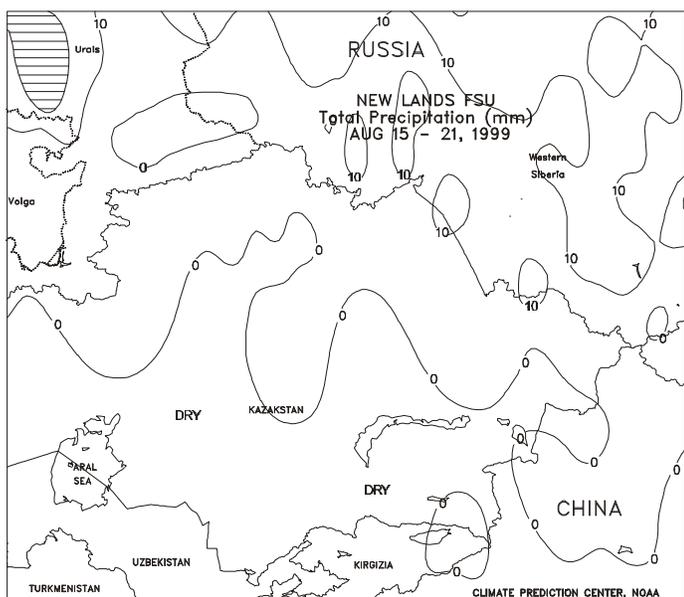
EUROPE

In England, periods of rain and drizzle (10-30 mm) through midweek benefited sugarbeets, but continued to delay winter wheat harvesting. Harvesting resumed late in the week, however, when drier weather overspread the area. Heavier rain (25-60 mm, with locally higher amounts) fell in the Benelux countries, northern Germany, and southern Scandinavia, delaying winter and spring grain harvesting, but maintaining adequate soil moisture for developing summer crops. Farther south, light to moderate showers (5-25 mm) fell across most major crop-producing regions from northern and central France eastward through Poland. In Austria, Slovakia, and Hungary, scattered moderate to locally heavy showers (20-80 mm) occurred, continuing the relatively wet weather pattern that has persisted since June. Temperatures throughout northern and central Europe were generally 1 to 3 degrees C below normal, slowing summer crop development. Nevertheless, crop development in many areas still remained 1 to 3 weeks ahead of schedule because of the persistent warmth earlier this summer. In southern Europe, hot, dry weather stressed non-irrigated summer crops from the Iberian peninsula and southern France east through most of Italy, the Balkans, Romania, Bulgaria, and Greece. The exception was northeastern Italy, where light to moderate showers (20-30 mm) benefited corn and soybeans. Average temperatures were generally 2 to 4 degrees C above normal in southern Europe, except near-normal in Portugal and western Spain.



FSU-WESTERN

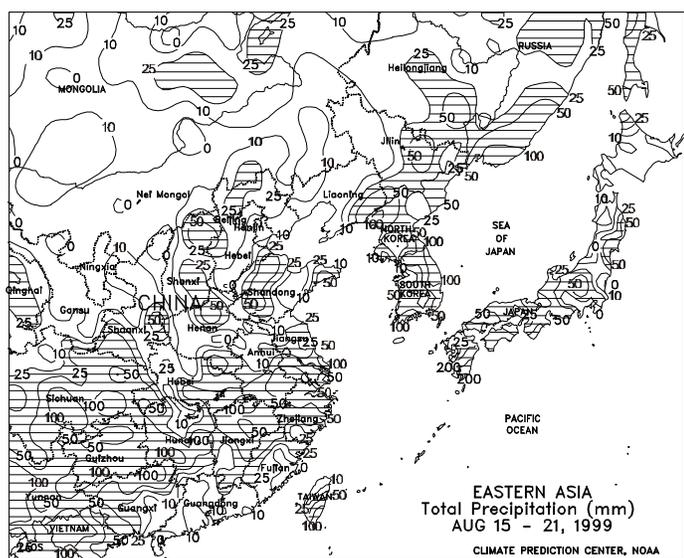
Heat and dryness maintained unfavorable growing conditions for corn, sunflowers, and sugar beets in eastern Ukraine and most of southern Russia (North Caucasus and lower Volga Valley). On several days during the week, maximum temperatures ranged from 33 to 37 degrees C, hastening the maturity of corn and sunflowers. Elsewhere, widespread rain (10-40 mm, with local amounts in excess of 40 mm) extended from the western two-thirds of Ukraine northeastward through northern Russia. The precipitation in Ukraine favored immature summer crops and boosted topsoil moisture for winter grain planting, which typically occurs in September. In northern Russia (Central Region and the Volga Vyatsk), soaking rains continued a wet weather pattern that has prevailed over the region since the middle of July, causing further delays in winter and spring grain harvesting. Furthermore, winter grain planting, typically underway during the latter half of August, was likely progressing slowly due to wet soils and harvest delays. Warmer, drier weather is needed in northern Russia for harvest completion so that the 2000 winter grain crop can be planted on time. In Belarus, drier weather helped harvest activities. Weekly temperatures averaged 1 to 3 degrees C above normal in Ukraine and southern Russia, and near normal over the remainder of the region.



FSU-NEWLANDS

In Kazakhstan, unseasonably warm, dry weather prevailed over the region, favoring spring grain maturation and early harvest activities. In Russia, spring grain harvest was likely underway in the southern Urals, helped by mostly dry weather. Scattered showers (2-13 mm) favored immature crops in Western Siberia, while unseasonably mild weather promoted crop development. Weekly temperatures averaged 2 to 5 degrees C above normal in Kazakhstan and Russia, with highest weekly temperatures ranging from 30 to 37 degrees C. In cotton-producing areas of Central Asia, unseasonably hot, dry weather promoted rapid cotton development. Reports indicated that cotton harvesting was just beginning in southernmost growing areas.

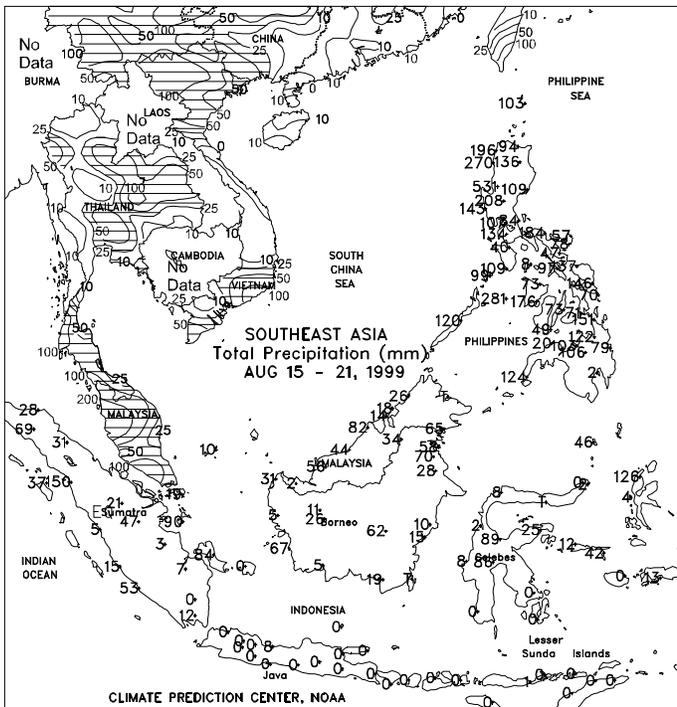
EASTERN ASIA



In the North China Plain, scattered showers (10-70 mm) brought limited drought relief to filling rainfed summer crops. Shandong received the best coverage of showers, while Henan continued to receive the least. Across the five provinces that make up the North China Plain (Hebei, Henan, Shandong, Anhui, and Jiangsu), rainfall has averaged about 40 to 60 percent of normal during the past 8 weeks. Mostly dry weather (less than 10 mm) favored spring wheat harvesting in central and southern Manchuria. Moderate rain (10-30 mm) favored filling soybeans and corn in Heilongjiang, but slowed spring wheat harvesting. Temperatures averaged 1 to 2 degrees C below normal across the North China Plain and Manchuria, reducing crop water use. Widespread showers (25-125 mm) covered most of the Yangtze Valley and southern China, maintaining adequate moisture supplies for single-crop and late double-crop rice. Drier weather (less than 25 mm) prevailed across extreme southern China (Guangdong and Fujian), where Typhoon Sam was approaching by week's end. Temperatures averaged near to slightly below normal across central and southern China. A weak tropical depression brought heavy showers (50-200 mm) to southern Japan and southeastern South Korea. Drier weather (less than 10 mm) favored filling rice in northern Japan. Temperatures averaged 2 to 4 degrees C above normal in northern Japan and near normal across the Korean Peninsula and the rest of Japan.

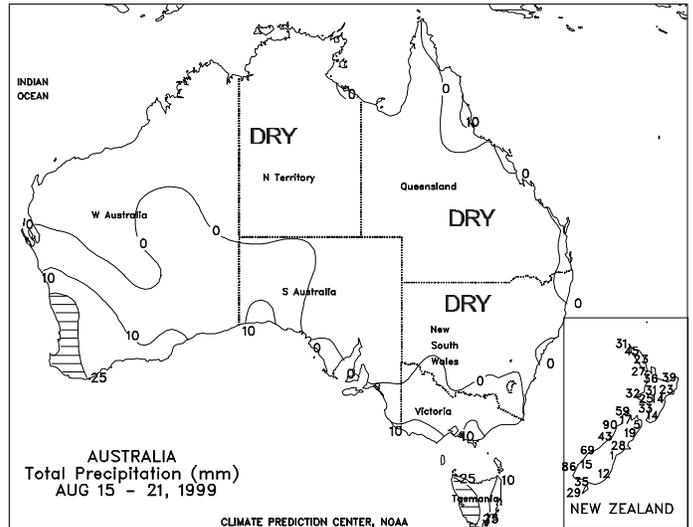
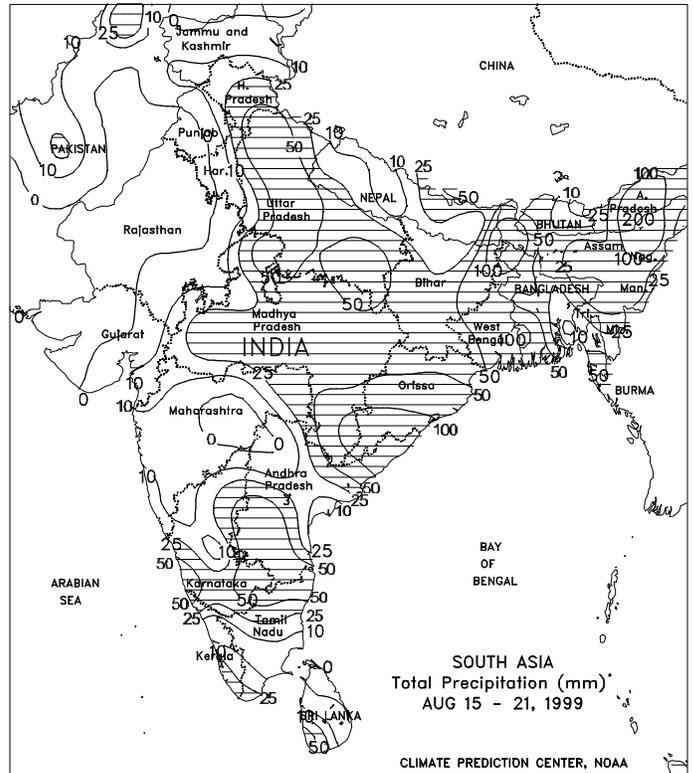
SOUTH ASIA

The southwest monsoon circulation remained weak over northwestern India and Pakistan. As a result, hot, dry weather stressed non-irrigated oilseeds, cotton, and coarse grains throughout Gujarat. Dry weather also covered a broad section of Maharashtra, an important coarse grain and sugarcane producer, and extended southward and eastward into northern growing areas of Karnataka and Andhra Pradesh. However, locally heavy rain (50 mm or greater) broke the dry spell in the more southerly interior crop areas (southern Karnataka, southern Andhra Pradesh, and northern Tamil Nadu), improving prospects for groundnuts and coarse grains. Moderate rain (25-50 mm or more) continued over much of central and eastern India and Bangladesh, increasing moisture reserves for rice. The beneficial showers extended as far west as the soybean belt of western Madhya Pradesh. In north-central India and Pakistan, the continuation of below-normal rainfall was unfavorable for the rainfed portion of the cotton and rice crops, which typically account for 5 to 20 percent of the total production.



SOUTHEAST ASIA

On August 21, Typhoon Sam hit northern Luzon, Philippines, with sustained winds of 65 knots (75 mph). Sam helped to produce widespread showers (50-150 mm or more) across the country, boosting moisture supplies for sugarcane and main-season grains. Wind damage to crops is likely to be minimal. In Thailand, moderate to heavy showers (50-90 mm or more) boosted moisture supplies for rice across the northeast. In the rest of Thailand, however, unseasonably light showers (10-40 mm) reduced moisture supplies. Variable showers (30-100 mm) fell across northern and southern Vietnam, maintaining moisture supplies, as sunnier weather favored rice development. Heavy showers (100-350 mm) along the western portion of peninsular Malaysia eased short-term dryness for oil palm but likely caused local flooding. Lighter showers (25-50 mm) also benefited oil palm along the east. Seasonably dry weather prevailed across Java, Indonesia, where moisture supplies are adequate for irrigated second-crop rice.

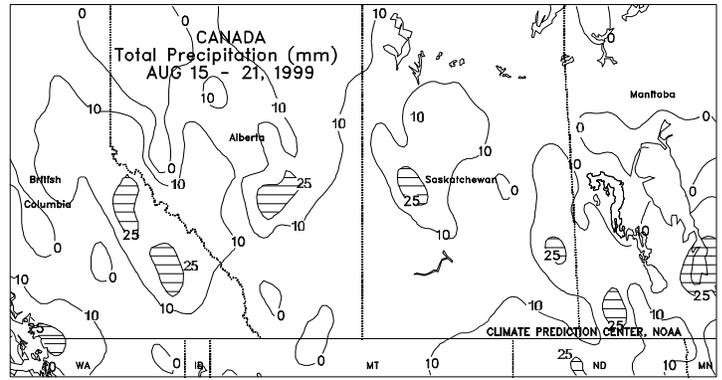


AUSTRALIA

In Western Australia, scattered showers (5-25 mm) maintained generally favorable topsoil moisture levels for vegetative wheat and barley. Temperatures averaging 1 to 2 degrees C above normal favored early crop development, but patches of frost were possible in some outlying areas. In the east, dry weather dominated the major agricultural districts. Temperatures averaged near to below normal throughout the area, with an outbreak of unseasonably low temperatures (-1 to -3 degrees C) early in the week over parts of southern Queensland. Barley typically advances through reproduction during August in the more northerly crop areas, though no problems due to the freeze have been reported thus far. Across New Zealand, showers (10-25 mm or more) benefited pastures and small grains.

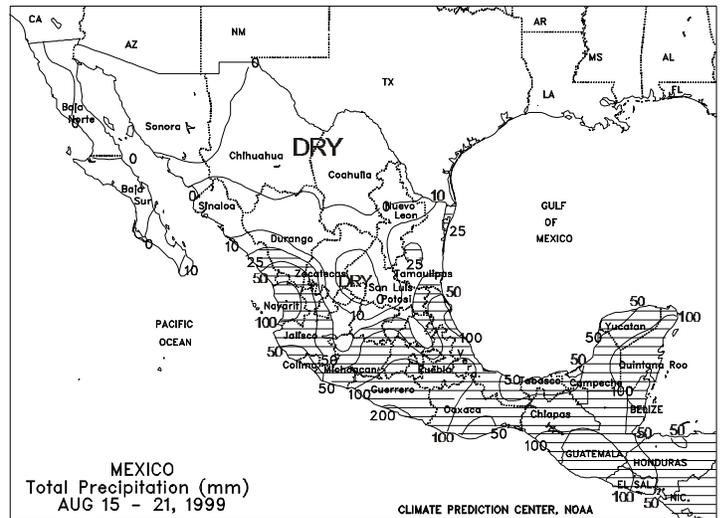
CANADA

Much-needed warmer weather (temperatures ranging from the upper 20's to the middle 30's degrees C) pushed into the Prairies, favoring late-developing spring grains and oilseeds. Temperatures averaged 2 to 3 degrees C above normal across the northern growing areas, including Alberta's Peace River Valley, helping to accelerate crop development. However, many districts still face a high risk of potential damage from the first autumn freeze due to the combination of late planting and below-normal accumulation of heating units. Showers were generally scattered and light (10 mm or less) over much of Alberta and Saskatchewan, aiding crop maturation and haying operations. Moderate showers (10-25 mm or more) disrupted fieldwork in Manitoba. In eastern Canada, drier weather favored a renewal of final winter wheat harvesting in most crop areas, although scattered showers (25 mm or greater) continued over districts just west of Lake Ontario.



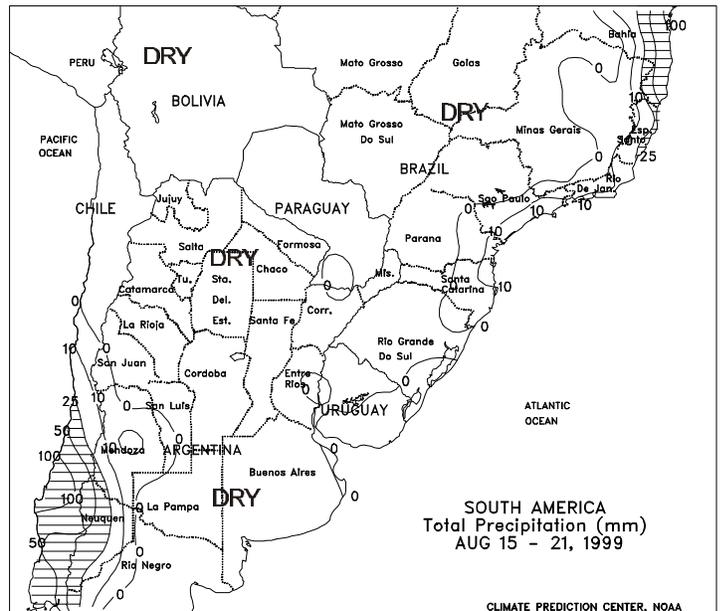
MEXICO

Widespread showers (30-60 mm) continued to favor corn across the Southern Plateau and Yucatan Peninsula. In northwestern Mexico, the monsoon was inactive for the second consecutive week. Dry weather prevailed across north-central areas. Light to moderate rain (15-30 mm) fell across the northeast coast, unrelated to Hurricane Bret. Widespread moisture is still needed across northeast Mexico to alleviate long-term drought. Temperatures averaged 1 to 2 degrees C above normal across northern Mexico and near normal elsewhere.



SOUTH AMERICA

Dry weather continued to prevail across central Argentina, stressing germinating winter wheat. Typically, the wheat regions of Argentina receive about 10 mm per week during mid-August. Therefore, one good shot of rain during the next several weeks should provide adequate moisture for wheat establishment. During the freeze last weekend, minimum temperatures ranged from -3 to -7 degrees C, burning back very early vegetative growth. According to reports as of August 13, Argentine winter wheat planting was 96 percent complete, compared with the 3-year average of 93 percent. Planting is complete in Santa Fe and Cordoba, while planting was 93 percent complete in Buenos Aires province. In southern Brazil, warmer weather prevailed later in the week, after the last weekend's frost. Mostly dry weather prevailed across the region, where adequate soil moisture existed for winter wheat.



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

Annual subscriptions: domestic first class \$45, foreign \$55 (in U.S. funds by international money order or check drawn on U.S. bank) payable to **U.S. Department of Commerce, NOAA**. POSTMASTER: Send address changes to: **Climate Prediction Center, W/NP52, Attn: *Weekly Weather and Crop Bulletin*, Room 605, WWBG, 5200 Auth Road, Camp Springs, MD 20746-4304**. Order subscriptions from the office and address listed above. First-class postage paid at Washington, DC, and other mailing offices. Correspondence to the meteorologists should be directed to: **Weekly Weather and Crop Bulletin, NOAA/USDA, Joint Agricultural Weather Facility, USDA South Building, Room 5844, Washington, DC 20250**. Internet URL: <http://www.usda.gov/oce/waob/jawf>; E-mail address: wcb@jawfsrv.wwb.noaa.gov

U.S. DEPARTMENT OF COMMERCE

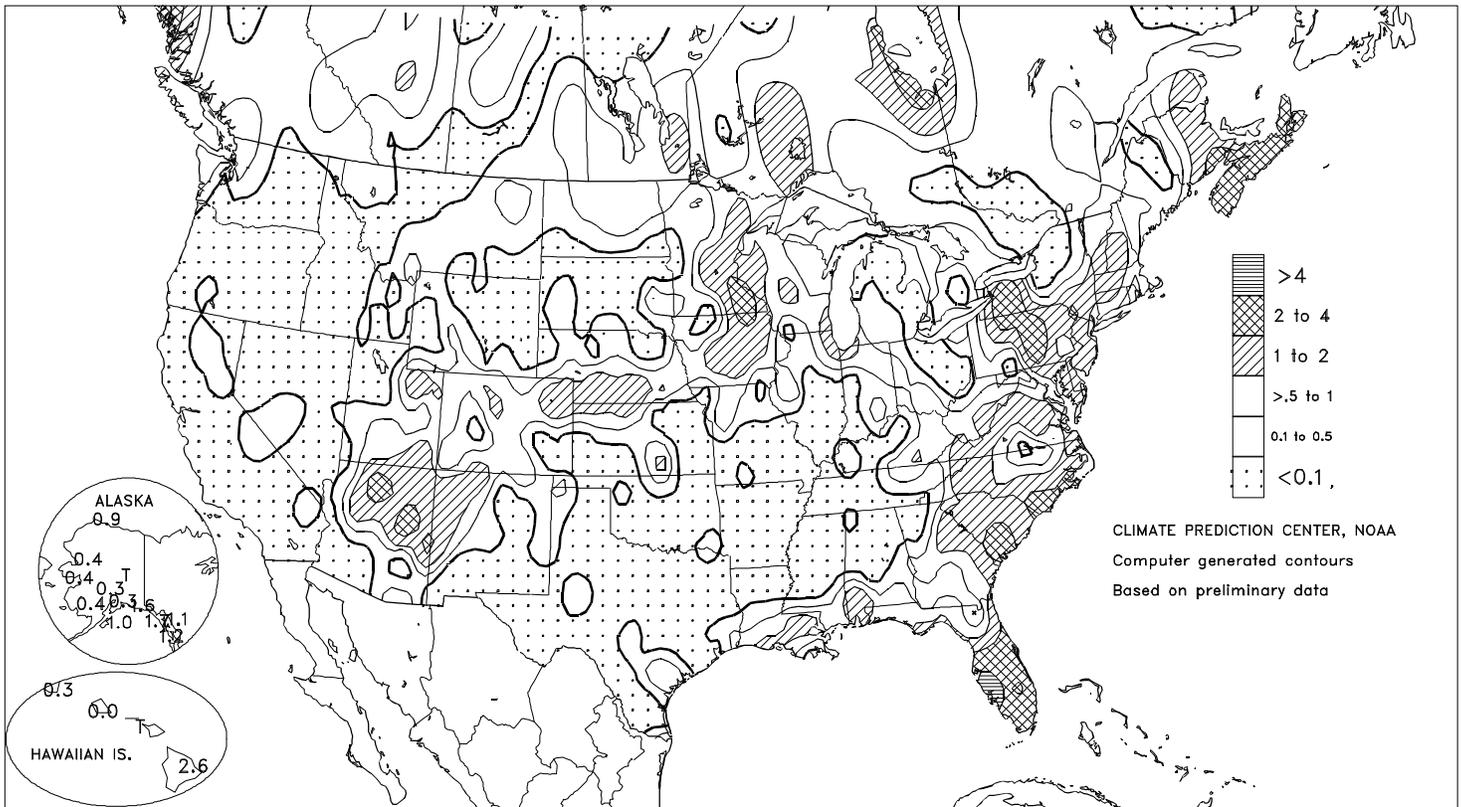
National Oceanic and Atmospheric Administration
National Weather Service/Climate Prediction Center
Managing Editor **David Miskus** (202) 720-7919
Meteorologists **Clinton Wallace, Brad Pugh,**
. **Eric Luebehusen** and **Chester Schmitt**
Subscriptions . . . **John Kopman** (301) 763-8000 ext 7534
. fax: (301) 763-8125

U.S. DEPARTMENT OF AGRICULTURE

Economic Research Service
E.R.S. Editor **Sharon Lee**
National Agricultural Statistics Service
Agricultural Statistician **Mark Miller** (202) 720-7621
State Summaries Editor . . . **Klara Greene** (202) 720-8033
World Agricultural Outlook Board
International Editor **Tom Puterbaugh**
U.S. Editor **Brad Rippey** (202) 720-2397
Agricultural Weather Analysts **Mark Brusberg**
. **Bob Stefanski, Brian Morris,** and **Harlan Shannon**
Stoneville **Michael Toth, Elizabeth Lord,** and **Paul Dixon**

Total Precipitation (Inches)

AUG 15 - 21, 1999



Climate Prediction Center, W/NP52
Attn: *Weekly Weather & Crop Bulletin*
NOAA/NWS/NCEP/CPC
5200 Auth Road
WWB, Room 605
Camp Springs, MD 20746-4304

**WEEKLY NEWS BULLETIN
FIRST CLASS**

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

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300