

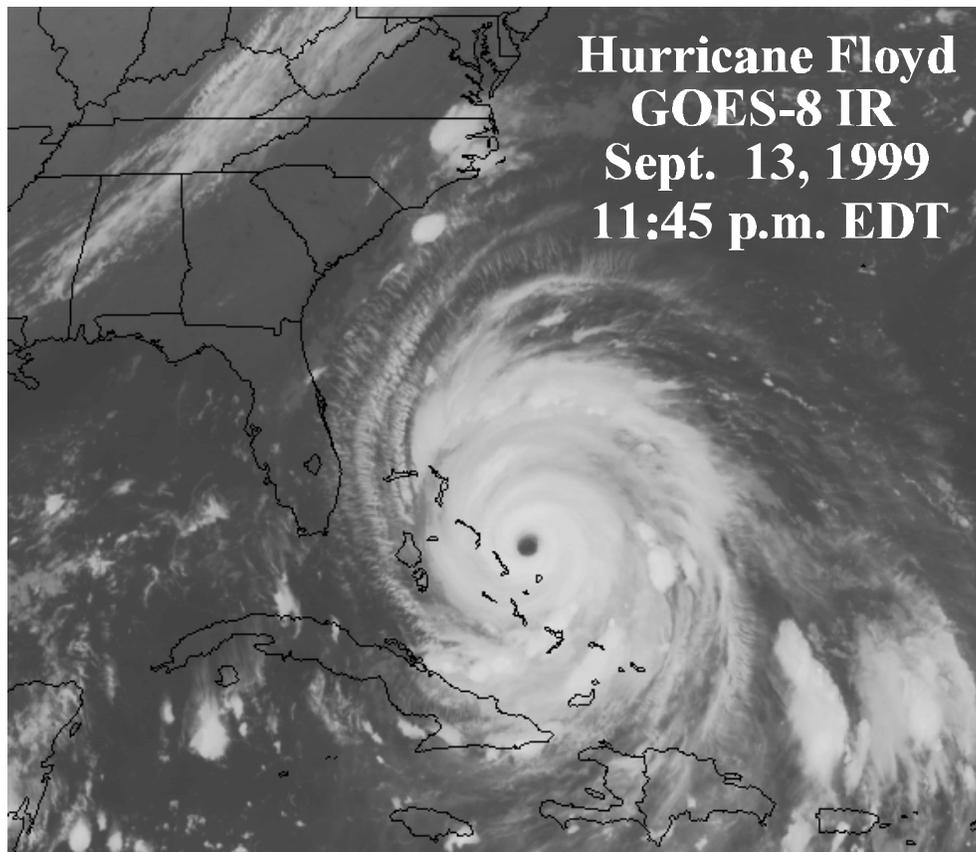
WEEKLY WEATHER AND CROP BULLETIN



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

Hurricane Floyd Threatens the Southeast: Shown near peak strength with maximum sustained winds near 155 mph, Hurricane Floyd bears down on the central and northern Bahamas and approaches the Southeastern U.S. During a 24-hour period on September 12-13 (5 a.m. to 5 a.m.), Floyd's central pressure dropped 39 millibars (1.15 inches of mercury), making the storm a strong Category 4 hurricane on the Saffir-Simpson Scale. A few hours before GOES-8 captured this image (right), Floyd's minimum central pressure reached 921 millibars (27.20 inches).



**Hurricane Floyd
GOES-8 IR
Sept. 13, 1999
11:45 p.m. EDT**

HIGHLIGHTS

September 5 - 11, 1999

The remnants of Hurricane Dennis and a subsequent cold front passage brought significant drought relief to the **Middle and Northern Atlantic States**, as weekly rainfall ranged from 2 to 7 inches. Meanwhile, much-needed rain also fell from the **southeastern Plains** to the **Delta**, aiding pastures and boosting topsoil moisture for winter grains. However, extremely dry conditions persisted in the **Tennessee and lower Ohio Valleys**. On the **northern Plains**, cool, showery conditions caused additional small grain harvest delays and quality concerns. Weekly temperatures ranged from 1 to 4°F below normal in the **northern Plains** and **upper Midwest**, but averaged up to 5°F above normal across the **South**. Unusually warm

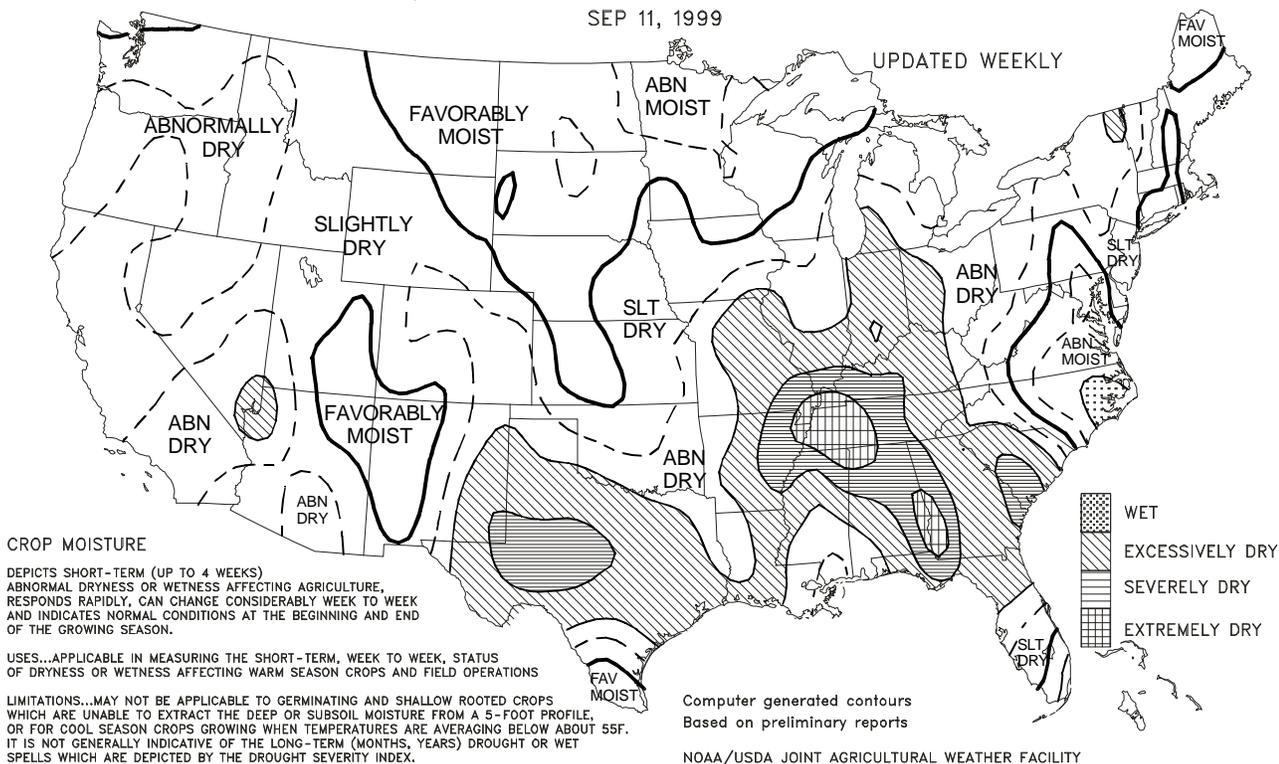
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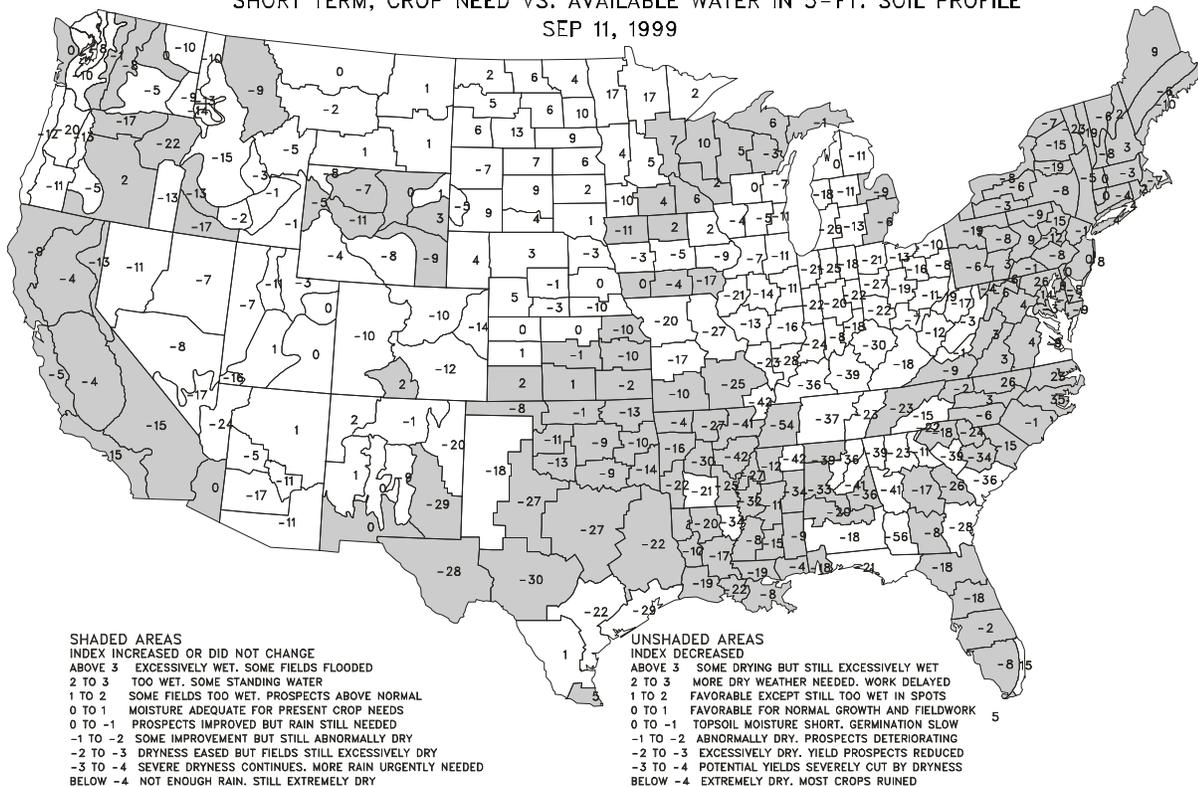
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Crop Moisture
SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE
SEP 11, 1999

UPDATED WEEKLY



Crop Moisture Index
SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE
SEP 11, 1999



U.S. Crop Production Highlights

The following information was released by USDA's Agricultural Statistics Board on September 10, 1999. Forecasts refer to September 1.

Corn production is forecast at 9.38 billion bushels, down 2 percent (%) from the last forecast and down 4% from 1998. Yields are expected to average 132.2 bushels per acre, down 2.5 bushels from August and 2.2 bushels from a year ago. If realized, this would be the fourth-largest production and third-highest yield on record. Acreage for grain harvest is estimated at 71.0 million acres, unchanged from August.

Soybean production is forecast at a record-high 2.78 billion bushels, down 3% from August 1, but up 1% from last year's record of 2.76 billion bushels. Yields are expected to average 37.9 bushels per acre, down 1.3 bushels from last month and down 1.0 bushel from 1998. Acreage for harvest is estimated at a record 73.3 million acres, unchanged from August 1, but up 3% from 1998.

All cotton production is forecast at 17.5 million 480-pound bales, down 4% from last month, but up 26% from 1998. If realized, this would be the eighth largest cotton crop on record. Yields are expected to average 621 pounds per harvested acre, down 28 pounds from last month. Condition of the crop has deteriorated since last month in most of the cotton-producing States. Dry soils and above-normal temperatures stressed dryland cotton. Harvested acreage, at 13.6 million acres, reflects an increase of 30,000 acres in Louisiana from last month.

All wheat production is placed at 2.31 billion bushels, down less than 1% from the August forecast and down 10% from 1998. The yield is forecast at 42.3 bushels per acre, down 0.3 bushel from last month.

Other spring wheat production is forecast at 508 million bushels, down 1% from last month and down 4% from last season. The final forecast of average yield is 33.9 bushels per acre, 0.3 bushel lower than a month ago. Hard Red Spring production is down 1% from August to 455 million bushels, because of heat-related yield declines in Montana and South Dakota. Improved Idaho yields have White Spring production up 1% to 52.5 million bushels.

Durum wheat production is forecast at 110 million bushels, down 3% from last month and 22% less than 1998. The yield is now forecast at 28.3 bushels per acre, down 0.9 bushel from August 1.

California Navel Oranges: Production for 1999-2000 is forecast at 40.0 million boxes, up 90% from last season's freeze-damaged production of 21.0 million boxes, but down 9% from the 1997-98 production. This initial forecast of the 1999-2000 season is based on an objective measurement survey conducted in California's Central Valley. The new crop navel oranges are maturing well, but sizes are slightly below the average of the last 12 non-freeze years.

(Continued from front cover)

weather prevailed in **New England**, where readings ranged from 6 to 16°F above normal. In the **Northwest**, cool (as much as 4°F below normal), dry weather favored small grain harvesting and winter wheat planting, while in **California**, late-season warmth aided immature summer crops, including cotton.

During the early- to midweek period, very hot weather persisted in the **Southeast**, resulting in more than a dozen daily-record highs. **Huntsville, AL** posted records on Sunday (101°F), Monday (100°F), and Wednesday (97°F). Meanwhile on **Mt. Washington, New England's** highest peak, daily-record warmth continued for a fifth consecutive day on Sunday (66°F) and a sixth day on Monday (62°F). Temperatures remained at or above 70°F for 3 consecutive days (September 7-9) in locations such as **Hartford, CT** and **Providence, RI**.

After Tropical Storm Dennis' September 4 landfall, the remnant circulation drifted northwestward into **northern North Carolina**, then generally northward into the **Northeast**. **Raleigh-Durham, NC** received a daily-record total (4.84 inches) on September 5. Storm-total (September 4-7) rainfall included 12.52 inches in **Chapel Hill, NC**, 8.49 inches in **Raleigh-Durham**, and 8.23 inches in **Goldsboro, NC**. In **Augusta County, VA**, totals reached 9.25 inches in **Upper Sherando** and 8.10 inches in **Toms Branch**. Most of **Upper Sherando's** rain (7.42 inches) fell in 24 hours on September 4-5. Farther north, very heavy rain soaked portions of **central Pennsylvania**. **Williamsport, PA** netted 6.29 inches on Tuesday, second only to an 8.66-inch total observed on June 22, 1972, during the passage of Hurricane Agnes' remnants. On September 6-7, **Buffalo, NY** received their heaviest 24-hour total (1.52 inches) since July 7-8, 1998. On Wednesday, **Burlington, VT** was inundated by 2.17 inches of rain in 1 hour and 2.24 inches in 2 hours, breaking their records for both time periods.

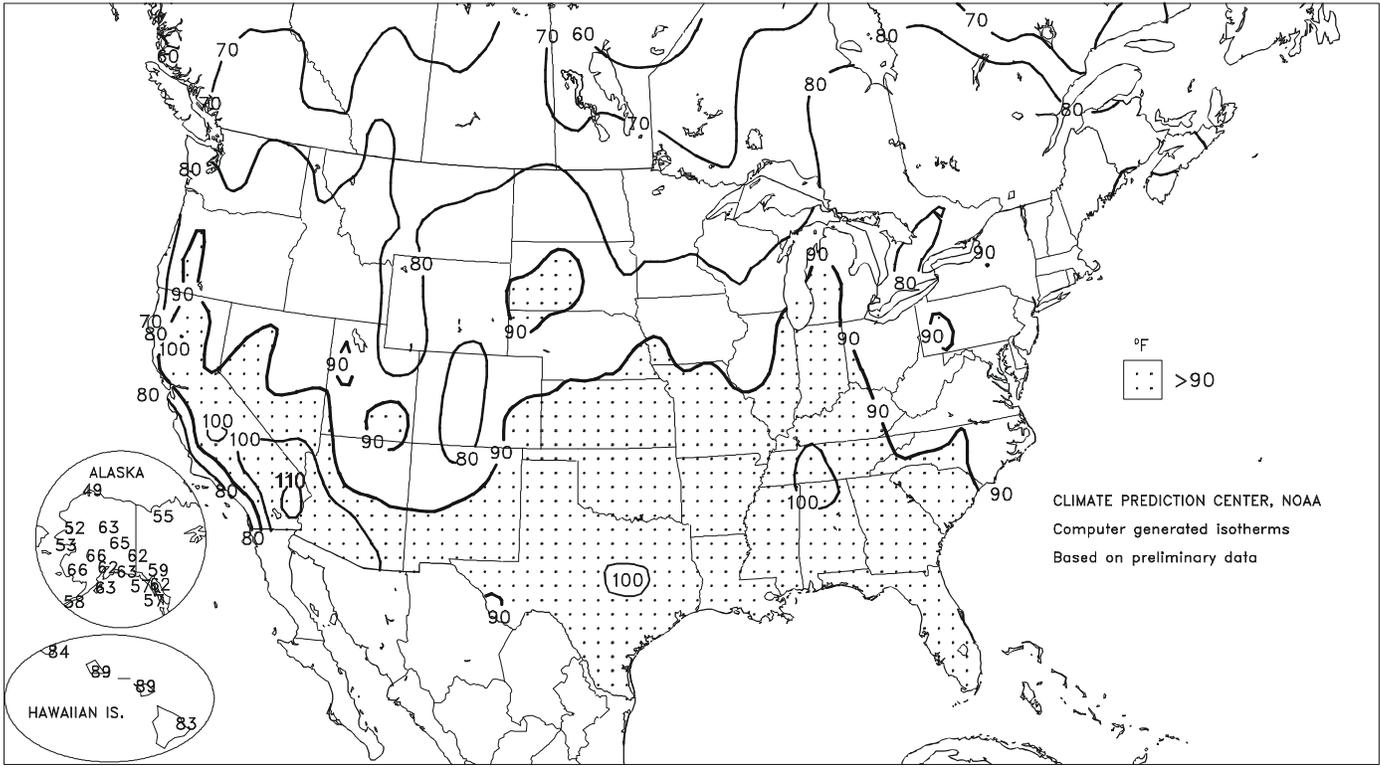
Meanwhile, the remnants of a tropical depression brought locally heavy rainfall (2 to 4 inches) to extreme **southern Texas**. The depression made landfall in **northeastern Mexico** on September 6 and dissipated by midweek. Farther north, much cooler air spread across the **Plains** and the **Midwest**. On Thursday, **St. Joseph, MO** (46°F) tallied a daily-record low. A day later, minimum temperatures dipped to 45°F in **Indianapolis, IN** and **Moline, IL**, the lowest in both cities since May 27.

In advance of the cooler weather, locally heavy rainfall erupted across the **southeastern Plains** and returned to the **Northeast**. **Philadelphia, PA** collected daily-record totals on September 7 (1.22 inches, associated with Dennis) and 9 (1.59 inches, with the cold front). On Friday, daily-record totals were observed in locations such as **Tulsa, OK** (3.10 inches) and 2.78 inches in **Windsor Locks, CT**. **Boston, MA** recorded 4.71 inches, their highest 1-day total since 5.69 inches fell on June 13, 1998. **Portland, ME** netted 3.22 inches on September 10 after receiving only 4.10 inches during the entire meteorological summer (June-August). Meanwhile, late-week rainfall topped 4 inches across a large area in **eastern Oklahoma**. Earlier in the week, a 56-day streak (July 11 - September 4) without measurable precipitation ended in **Dallas-Ft. Worth** on Sunday with a 0.35-inch rainfall. In the **Midwest**, mostly dry weather favored crop maturation and initial harvesting. **Milwaukee, WI** received 0.22 inch of rain on Sunday, September 12, their first measurable amount since August 24.

Warmer weather returned to **California**, then gradually overspread the **Northwest** toward week's end. Lingering coolness and dry air helped to produce daily-record lows in locations such as **Pocatello, ID** (30°F on Wednesday) and **Pendleton, OR** (41°F on Saturday).

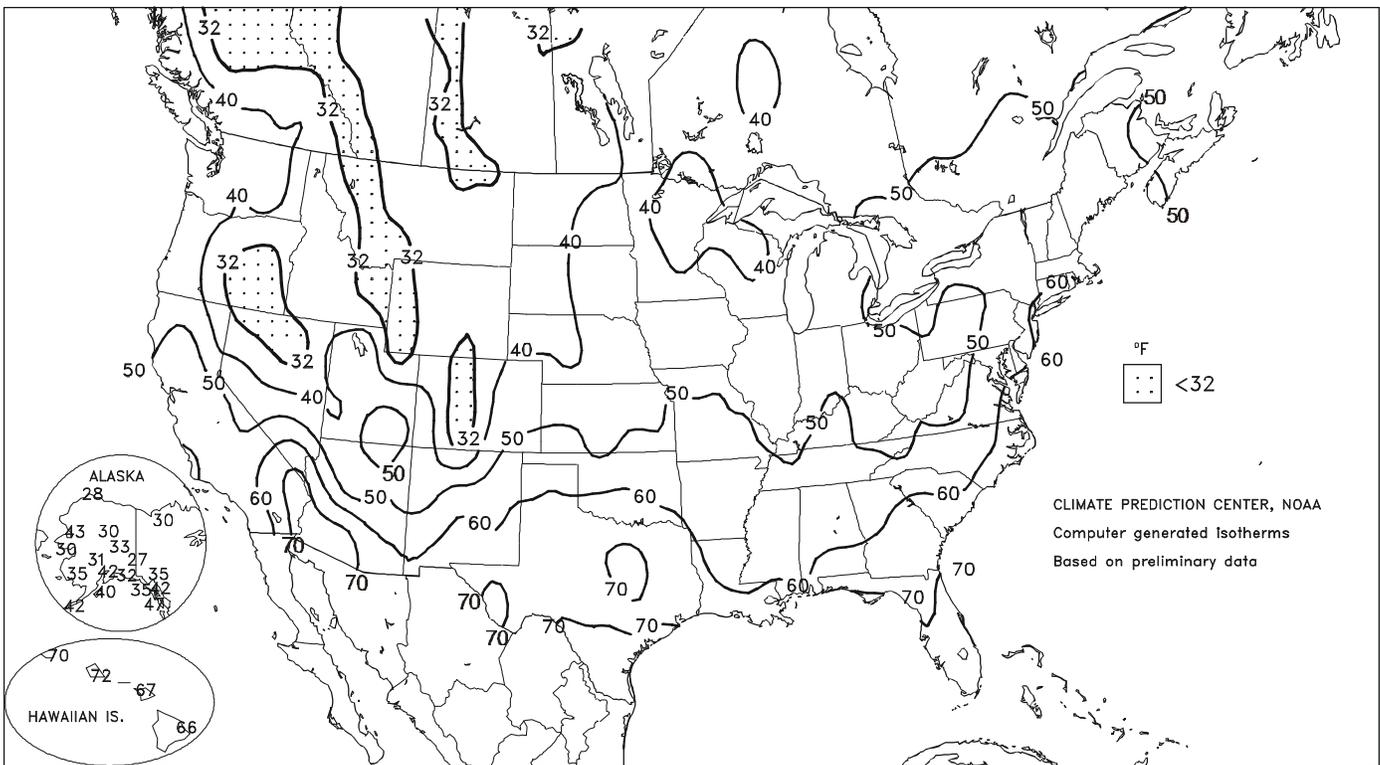
Extreme Maximum Temperature (°F)

SEP 5 - 11, 1999



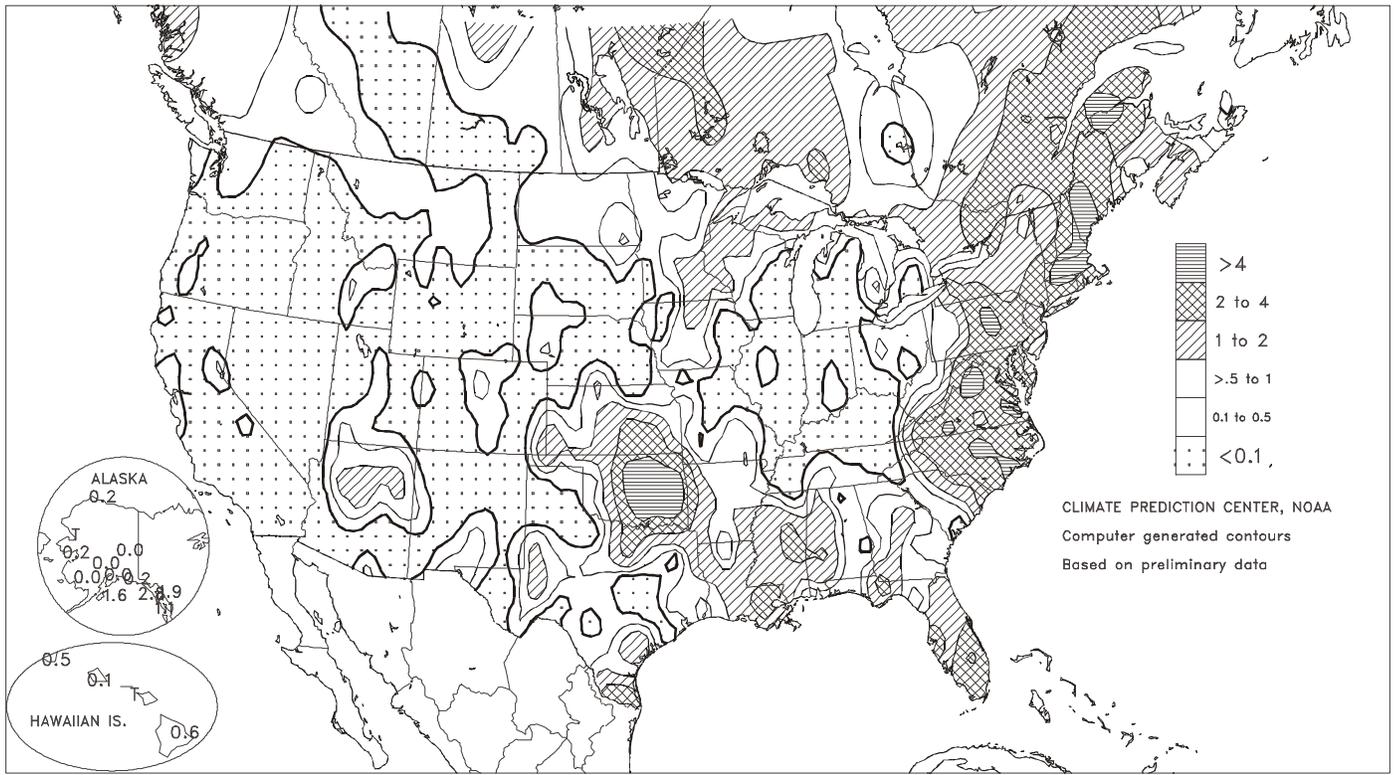
Extreme Minimum Temperature (°F)

SEP 5 - 11, 1999



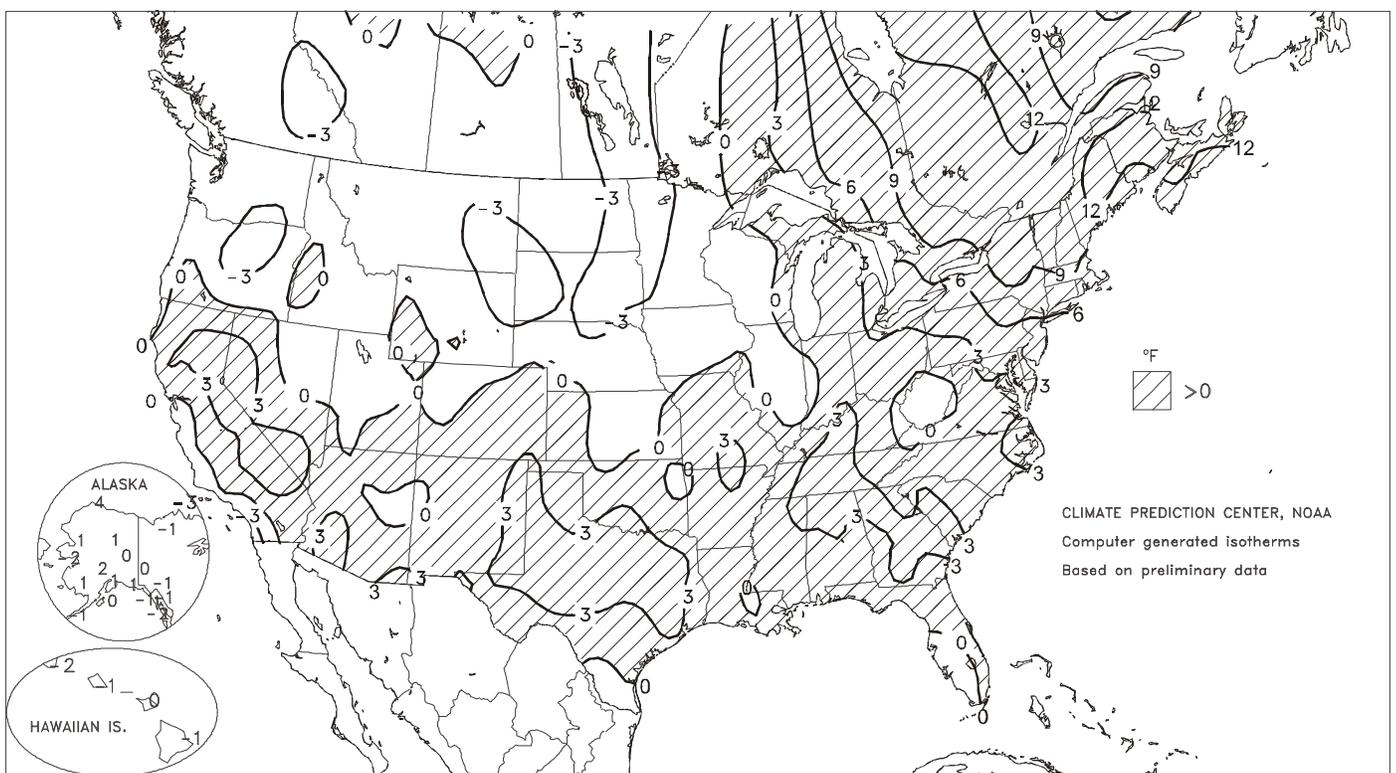
Total Precipitation (Inches)

SEP 5 - 11, 1999



Departure of Average Temperature from Normal (°F)

SEP 5 - 11, 1999



Weather Data for Selected Locations in the Delta

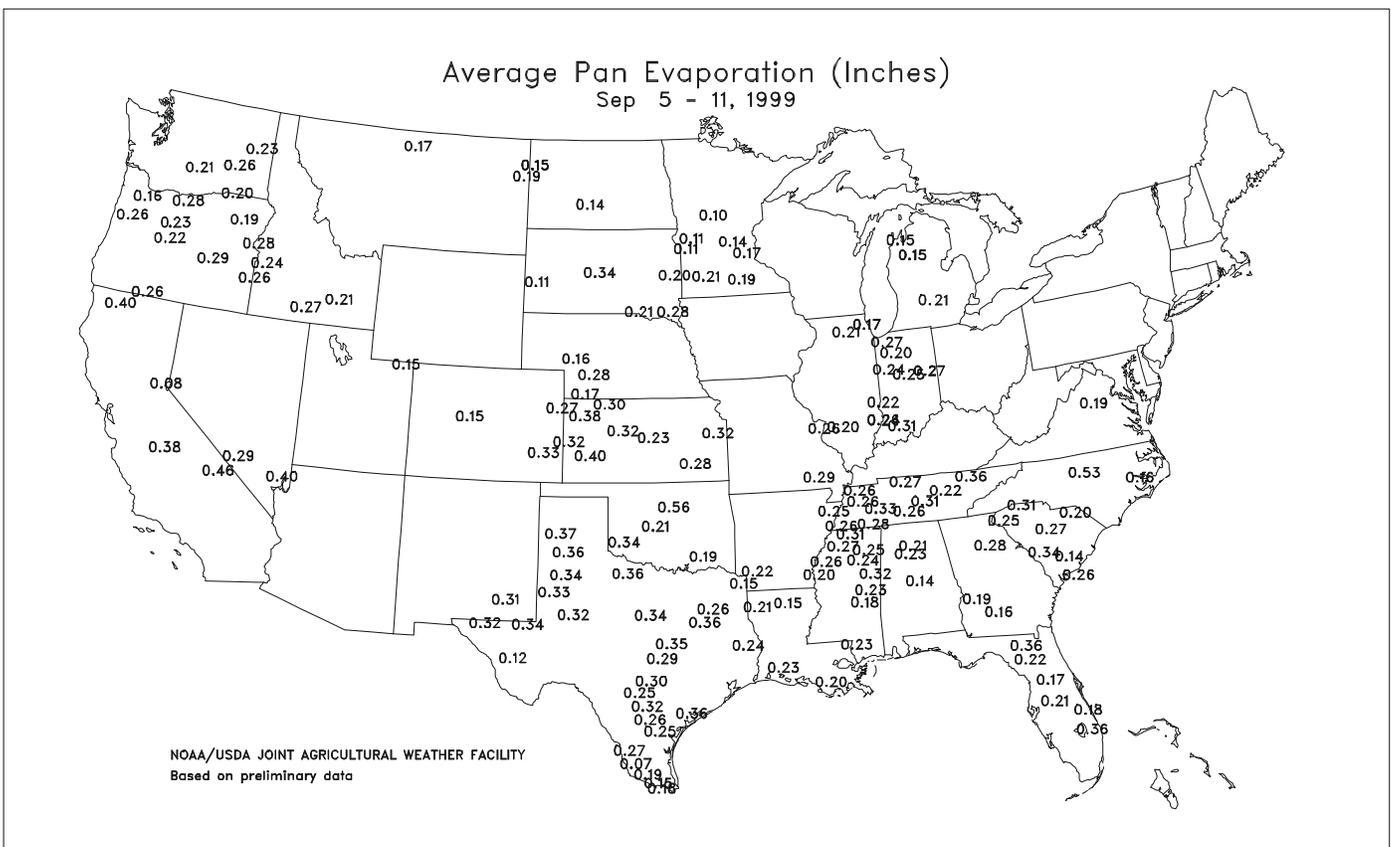
Weather Data for the Week Ending September 11, 1999

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 Sep 1	PCT. NORMAL SINCE Sep 1	TOTAL IN. SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
MS BATESVILLE	91	63	94	49	77	2	0.62	-0.01	0.62	0.62	63	--	--	--	--	5	0	1	1
BELZONI	92	66	95	56	79	-1	0.35	-0.39	0.35	0.35	31	--	--	--	--	6	0	1	0
CLARKSDALE	91	67	96	55	79	2	0.04	-0.52	0.04	0.04	5	--	--	--	--	5	0	1	0
CLEVELAND	92	66	97	53	79	1	0.01	-0.41	0.01	0.16	25	--	--	--	--	5	0	1	0
GREENVILLE	93	68	97	55	81	3	0.83	0.20	0.61	1.01	105	--	--	--	--	5	0	2	1
GREENWOOD	91	63	95	49	78	0	0.12	-0.51	0.12	0.18	18	--	--	--	--	5	0	1	0
INDIANOLA 1S	92	67	97	54	80	--	0.31	--	0.30	0.41	--	33.36	--	85	78	5	0	2	0
INVERNESS 5E	92	67	97	56	80	--	0.49	--	0.30	0.49	--	31.49	--	86	72	5	0	2	0
LYON	92	64	98	52	78	--	0.32	--	0.30	0.32	--	--	--	--	--	5	0	2	0
MOORHEAD	94	70	99	59	82	4	0.28	-0.38	0.28	0.28	28	--	--	--	--	7	0	1	0
ONWARD	92	66	97	55	79	--	0.39	--	0.39	0.39	--	41.13	--	80	78	5	0	1	0
ROLLING FORK	92	66	96	54	79	1	0.19	-0.56	0.19	0.19	16	--	--	--	--	5	0	1	0
SIDON	92	67	97	56	80	--	0.78	--	0.62	1.04	--	--	--	89	80	5	0	2	1
TUNICA	90	66	95	55	78	2	0.00	-0.49	0.00	0.00	0	--	--	--	--	5	0	0	0
VICKSBURG	89	70	92	58	80	2	0.82	0.04	0.70	0.82	68	--	--	--	--	4	0	2	1
YAZOO CITY	92	67	97	55	80	1	0.57	-0.15	0.57	1.60	138	--	--	--	--	5	0	1	0
STONEVILLE*	93	66	99	55	80	3	0.65	-0.17	0.41	1.23	98	36.50	101	92	78	5	0	2	0

* Based on 1964-93 normals.

Delta Weather and Crop Summary: Temperatures averaged near to above normal, but fell after midweek after a cold front passed through the Delta. Dryland cotton was being harvested, but rain showers caused the bolls to become ragged. Defoliation of cotton continued, although rain slowed the process.



National Weather Data for Selected Cities

Weather Data for the Week Ending 9/11/99

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 Sep 1	PCT. NORMAL SINCE Sep 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	94	67	99	57	80	5	0.05	-0.89	0.03	0.08	5	38.04	95	89	31	6	0	2	0
	HUNTSVILLE	96	64	101	51	80	5	0.12	-0.84	0.09	0.12	8	36.07	89	89	26	7	0	2	0
	MOBILE	91	68	94	59	80	0	0.62	-0.92	0.41	3.15	129	38.42	80	97	54	5	0	5	0
	MONTGOMERY	92	68	96	58	80	1	0.00	-0.99	0.00	0.00	0	31.71	81	94	44	5	0	0	0
AK	ANCHORAGE	59	44	62	42	52	0	0.00	-0.63	0.00	1.62	162	11.94	120	94	57	0	0	0	0
	BARROW	42	33	49	28	38	4	0.16	0.00	0.06	0.16	64	3.07	97	99	78	0	1	5	0
	FAIRBANKS	62	36	65	33	49	0	0.00	-0.26	0.00	0.49	114	7.04	89	94	41	0	0	0	0
	JUNEAU	54	47	62	42	51	-1	1.90	0.43	0.59	2.45	108	42.47	130	99	83	0	0	6	1
	KODIAK	58	46	63	40	52	0	1.64	0.08	1.55	2.57	107	42.56	99	90	55	0	0	2	1
	NOME	50	37	53	30	43	-2	0.21	-0.41	0.20	1.36	139	12.10	118	98	73	0	1	2	0
AZ	FLAGSTAFF	77	39	82	37	58	-1	1.29	0.78	1.29	1.35	163	12.64	82	83	22	0	0	1	1
	PHOENIX	102	79	105	75	90	3	0.02	-0.20	0.00	0.02	6	5.32	109	47	19	7	0	1	0
	TUCSON	98	69	102	66	84	1	0.12	-0.31	0.12	0.12	18	8.82	107	62	17	7	0	1	0
	YUMA	104	79	106	74	89	3	0.00	-0.08	0.00	0.00	0	4.34	214	64	23	7	0	0	0
AR	FORT SMITH	89	66	98	57	77	1	2.06	1.33	0.75	2.52	221	32.77	116	97	52	3	0	5	2
	LITTLE ROCK	89	68	95	57	79	2	0.92	-0.01	0.80	0.92	63	27.48	80	92	43	4	0	2	1
CA	BAKERSFIELD	94	66	97	61	80	1	0.00	-0.03	0.00	0.00	0	5.42	136	55	21	5	0	0	0
	EUREKA	62	50	65	46	56	-2	0.00	-0.15	0.00	0.00	0	27.53	127	94	75	0	0	0	0
	FRESNO	96	63	100	61	79	3	0.00	-0.05	0.00	0.00	0	5.97	85	73	21	7	0	0	0
	LOS ANGELES	72	64	75	60	68	-2	0.00	-0.08	0.00	0.00	0	7.18	89	86	65	0	0	0	0
	REDDING	98	61	102	53	79	3	0.00	-0.17	0.00	0.00	0	17.16	87	66	16	7	0	0	0
	SACRAMENTO	90	56	95	54	73	0	0.00	-0.06	0.00	0.00	0	9.91	91	88	28	4	0	0	0
	SAN DIEGO	71	64	73	62	68	-5	0.00	-0.06	0.00	0.00	0	5.08	80	86	66	0	0	0	0
	SAN FRANCISCO	71	54	76	50	63	-2	0.19	0.18	0.18	0.19	1900	13.07	106	94	59	0	0	2	0
CO	ALAMOSA	77	39	79	35	58	1	0.07	-0.15	0.06	0.13	37	6.34	117	90	22	0	0	2	0
	CO SPRINGS	79	50	85	42	65	2	0.37	-0.01	0.02	0.37	58	22.75	165	69	21	0	0	1	0
	DENVER	80	52	84	43	66	1	0.01	-0.29	0.01	0.27	56	19.02	157	69	23	0	0	1	0
	GRAND JUNCTION	84	53	89	46	69	-1	0.12	-0.07	0.11	0.70	233	7.17	123	59	16	0	0	2	0
	PUEBLO	88	53	94	44	71	2	0.00	-0.26	0.00	0.00	0	12.85	139	66	18	3	0	0	0
CT	BRIDGEPORT	78	69	82	63	74	6	2.19	1.47	1.69	2.19	194	27.56	94	98	73	0	0	5	1
	HARTFORD	81	68	85	59	74	8	3.80	2.92	2.81	3.80	273	27.16	90	97	62	0	0	5	2
DC	WASHINGTON	83	69	86	60	76	2	2.02	1.21	1.06	2.89	226	26.39	97	93	56	0	0	5	1
DE	WILMINGTON	82	69	85	58	75	5	1.21	0.38	0.70	1.23	95	27.84	96	96	62	0	0	5	1
FL	DAYTONA BEACH	90	72	96	70	81	1	0.25	-1.30	0.14	0.25	10	27.02	78	97	54	5	0	2	0
	JACKSONVILLE	91	70	98	67	81	1	1.36	-0.47	0.52	1.36	46	25.03	64	97	52	5	0	4	1
	KEY WEST	90	77	91	73	83	-1	2.30	0.91	1.31	2.62	120	28.80	108	89	61	3	0	4	2
	MIAMI	89	76	91	74	83	0	0.76	-1.08	0.28	2.51	87	41.23	100	93	59	4	0	5	0
	ORLANDO	91	73	94	70	82	0	0.13	-1.43	0.12	0.13	5	35.27	94	98	53	6	0	2	0
	PENSACOLA	90	72	93	70	81	1	0.07	-1.28	0.04	0.36	17	38.42	82	90	52	6	0	4	0
	TALLAHASSEE	92	71	96	70	82	2	2.55	1.09	2.38	2.55	109	40.40	80	99	49	6	0	2	1
	TAMPA	88	75	92	74	82	0	1.25	-0.35	0.51	1.37	53	23.99	69	94	67	2	0	4	1
	WEST PALM BEACH	91	73	94	71	82	0	1.80	-0.17	0.55	1.94	64	40.98	99	96	60	5	0	5	2
GA	ATHENS	91	65	96	58	78	3	0.71	-0.09	0.71	0.87	69	29.96	82	90	41	4	0	1	1
	ATLANTA	90	68	96	62	79	4	0.08	-0.74	0.08	0.08	6	26.82	72	85	35	4	0	1	0
	AUGUSTA	94	65	101	62	80	3	1.13	0.37	1.12	1.13	92	27.54	81	97	35	7	0	2	1
	COLUMBUS	92	70	97	65	81	3	0.01	-0.80	0.01	0.01	1	21.15	55	85	39	5	0	1	0
	MACON	93	66	99	61	80	2	1.62	0.92	1.62	1.62	145	27.67	82	99	45	5	0	1	1
	SAVANNAH	92	71	96	64	82	3	0.27	-0.94	0.21	0.27	14	39.52	101	94	46	6	0	2	0
HI	HILO	82	68	83	66	75	-1	0.59	-1.41	0.35	2.15	68	84.41	96	91	66	0	0	4	0
	HONOLULU	87	73	89	72	80	-1	0.12	0.00	0.12	0.12	71	7.19	58	79	49	0	0	1	0
	KAHULUI	87	70	89	67	79	0	0.01	-0.05	0.01	0.02	22	6.74	50	82	48	0	0	1	0
	LIHUE	83	72	84	70	78	-2	0.53	0.07	0.21	0.65	93	20.19	77	85	61	0	0	5	0
ID	BOISE	81	51	89	43	66	1	0.00	-0.19	0.00	0.00	0	6.58	82	52	15	0	0	0	0
	LEWISTON	79	51	88	44	65	-2	0.00	-0.19	0.00	0.00	0	7.69	88	52	19	0	0	0	0
	POCATELLO	79	43	87	30	61	-1	0.00	-0.19	0.00	0.02	7	9.48	113	59	15	0	1	0	0
IL	CHICAGO/O'HARE	80	53	92	48	67	0	0.00	-0.96	0.00	0.00	0	30.79	120	89	37	1	0	0	0
	MOLINE	81	53	86	45	67	0	0.00	-0.98	0.00	0.00	0	25.93	90	91	36	0	0	0	0
	PEORIA	80	54	86	47	67	-1	0.00	-0.92	0.00	0.00	0	24.61	95	90	36	0	0	0	0
	ROCKFORD	78	50	87	43	64	-2	0.01	-0.92	0.01	0.02	1	28.91	109	96	37	0	0	1	0
	SPRINGFIELD	83	52	87	43	67	-2	0.00	-0.80	0.00	0.00	0	22.24	88	89	36	0	0	0	0
IN	EVANSVILLE	88	57	97	47	73	1	0.00	-0.69	0.00	0.00	0	30.53	98	83	27	2	0	0	0
	FORT WAYNE	82	53	91	46	67	0	0.03	-0.62	0.03	0.04	4	22.09	89	96	41	1	0	1	0
	INDIANAPOLIS	85	54	94	45	70	1	0.00	-0.70	0.00	0.00	0	26.50	91	88	31	3	0	0	0
	SOUTH BEND	81	54	91	50	67	1	0.00	-0.86	0.00	0.00	0	24.12	89	84	35	1	0	0	0
IA	BURLINGTON	85	57	89	48	71	3	0.00	-0.99	0.00	0.00	0	27.90	106	82	35	0	0	0	0
	CEDAR RAPIDS	78	48	85	41	63	-3	0.03	-0.94	0.03	0.03	2	27.36	107	96	35	0	0	1	0
	DES MOINES	78	55	87	48	66	-2	0.56	-0.32	0.48	0.88	63	27.72	110	86	38	0	0	3	0
	DUBUQUE	74	50	82	43	62	-2	0.00	-1.17	0.00	0.29	16	30.89	110	93	44	0	0	0	0
	SIOUX CITY	77	50	85	39	63	-3	0.19	-0.51	0.08	0.56	50	28.31	140	92	44	0	0	3	0
	WATERLOO	78	49	87	41	64	-1	0.06	-0.79	0.04	0.06	4	40.15	155	92	37	0	0	3	0
KS	CONCORDIA	81	56	92	48	69	-1	0.06	-0.70	0.04	0.19	16	22.72	99	88	43	1	0	3	0
	DODGE CITY	84	60	95	51	72	0	1.59	1.10	1.16	1.72	218	19.79	113	85	41	1	0	3	1
	GOODLAND	82	52	90	46	67	0	0.00	-0.39	0.00	0.00	0	18.98	125	86	31	1	0	0	0
	TOPEKA	84	57	94	49	71	0	0.00	-0.91	0.00	0.67	47	26.65	101	90	41	1	0	0	0

Based on 1961-90 normals

Weather Data for the Week Ending 9/11/99

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 Sep 1	PCT. NORMAL SINCE Sep 1	TOTAL IN. SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP.	
																90 AND ABOVE	32 AND BELOW	0.1 INCH OR MORE	5.0 INCH OR MORE
KY WICHITA	83	63	91	51	73	0	1.21	0.36	0.91	1.40	106	30.49	137	91	47	1	0	3	1
KY JACKSON	84	61	90	53	72	2	0.00	-0.88	0.00	0.00	0	30.69	86	83	33	1	0	0	0
KY LEXINGTON	89	58	93	50	73	3	0.00	-0.79	0.00	0.00	0	24.54	75	80	30	3	0	0	0
KY LOUISVILLE	91	63	98	56	77	5	0.00	-0.77	0.00	0.00	0	30.44	94	76	35	4	0	0	0
KY PADUCAH	90	58	100	48	74	2	0.00	-0.88	0.00	0.00	0	31.56	90	83	26	3	0	0	0
LA BATON ROUGE	91	68	96	58	80	0	1.43	0.21	0.69	1.59	82	33.10	74	96	46	6	0	3	2
LA LAKE CHARLES	92	71	93	65	81	2	0.44	-0.94	0.43	1.39	64	30.03	79	96	48	7	0	2	0
LA NEW ORLEANS	90	72	93	65	81	1	0.98	-0.43	0.68	1.93	86	35.78	79	94	54	4	0	5	1
LA SHREVEPORT	90	69	93	62	79	1	1.79	1.11	1.46	4.69	451	47.26	149	93	47	4	0	3	1
ME CARIBOU	79	64	84	56	71	15	4.68	3.84	1.50	4.68	349	25.65	104	97	61	0	0	5	4
ME PORTLAND	77	65	81	61	71	10	3.39	2.70	3.20	3.39	314	27.29	95	100	75	0	0	5	1
MD BALTIMORE	82	66	85	55	74	3	2.58	1.75	1.70	3.24	245	28.29	98	98	62	0	0	5	2
MA BOSTON	80	69	85	66	74	7	5.47	4.75	4.72	5.47	484	25.56	91	98	66	0	0	4	1
MA WORCESTER	78	66	82	60	72	9	3.29	2.38	2.35	3.29	230	26.31	81	99	64	0	0	4	1
MI ALPENA	76	49	85	43	62	3	0.07	-0.71	0.06	0.07	6	14.31	69	96	43	0	0	2	0
MI GRAND RAPIDS	77	54	91	50	66	2	0.00	-1.02	0.00	0.00	0	25.05	102	89	40	1	0	0	0
MI HOUGHTON LAKE	74	47	88	41	60	1	0.01	-0.84	0.01	0.04	3	20.73	105	97	47	0	0	1	0
MI LANSING	79	53	89	46	66	3	0.01	-0.87	0.01	0.02	1	22.24	104	92	49	0	0	1	0
MI MARQUETTE	67	47	75	41	57	0	0.58	-0.36	0.31	0.58	39	27.83	118	92	48	0	0	5	0
MI MUSKEGON	76	55	91	50	65	2	0.01	-0.93	0.01	0.01	1	23.34	110	90	49	1	0	1	0
MN DULUTH	64	47	75	39	56	-1	0.66	-0.29	0.18	2.32	155	32.15	145	95	59	0	0	6	0
MN INT'L FALLS	61	44	74	35	53	-4	0.57	-0.20	0.26	4.45	368	26.85	145	98	68	0	0	6	0
MN MINNEAPOLIS	73	52	84	45	62	-1	0.52	-0.16	0.22	0.75	69	26.55	121	90	48	0	0	4	0
MN ROCHESTER	71	49	80	42	60	-2	0.00	-0.86	0.00	0.01	1	34.37	152	94	52	0	0	0	0
MS ST. CLOUD	69	46	80	37	58	-2	0.68	-0.12	0.33	1.43	112	23.13	109	93	51	0	0	4	0
MS JACKSON	92	68	97	56	80	2	0.80	-0.05	0.43	0.94	70	31.32	80	93	40	6	0	3	0
MS MERIDIAN	93	66	95	54	79	1	0.93	0.09	0.40	0.95	72	27.78	68	98	40	6	0	3	0
MS TUPELO	95	66	99	55	80	4	0.00	-0.83	0.00	0.00	0	42.55	109	89	29	7	0	0	0
MO COLUMBIA	88	57	94	51	73	2	0.03	-0.87	0.03	0.03	2	21.16	76	85	32	3	0	1	0
MO KANSAS CITY	83	59	91	51	71	1	0.22	-0.93	0.20	1.28	71	31.62	114	87	43	1	0	3	0
MO SAINT LOUIS	87	61	91	55	74	1	0.00	-0.74	0.00	0.00	0	28.33	107	73	32	1	0	0	0
MO SPRINGFIELD	84	61	91	50	72	1	0.62	-0.47	0.62	1.10	65	30.81	104	98	46	1	0	1	1
MT BILLINGS	73	48	89	42	61	-1	0.36	0.05	0.20	1.67	348	10.83	94	73	27	0	0	2	0
MT BUTTE	71	36	81	28	54	0	0.00	-0.31	0.00	0.36	72	10.77	111	93	24	0	4	0	0
MT GLASGOW	71	45	80	34	58	-2	0.61	0.36	0.31	1.11	271	13.38	147	85	30	0	0	2	0
MT GREAT FALLS	70	42	80	35	56	-3	0.29	-0.03	0.17	1.52	298	10.86	89	83	29	0	0	4	0
MT KALISPELL	73	37	79	29	55	-1	0.07	-0.25	0.07	0.12	24	9.60	81	89	23	0	2	1	0
MT MILES CITY	73	47	87	39	60	-3	0.30	0.00	0.15	0.80	167	10.38	93	82	31	0	0	4	0
MT MISSOULA	74	42	82	33	58	-1	0.00	-0.28	0.00	0.29	67	8.81	87	73	19	0	0	0	0
NE GRAND ISLAND	80	51	87	44	65	-1	0.17	-0.55	0.12	0.25	22	24.78	123	94	45	0	0	3	0
NE LINCOLN	80	53	92	46	67	-1	0.12	-0.73	0.01	0.99	74	25.53	117	94	43	1	0	2	0
NE NORFOLK	78	49	86	39	64	-2	0.15	-0.46	0.00	0.46	48	23.09	114	94	42	0	0	1	0
NE NORTH PLATTE	77	47	84	38	62	-2	0.03	-0.36	0.01	0.78	128	18.51	114	97	44	0	0	2	0
NE OMAHA	79	54	91	45	67	-1	0.12	-0.79	0.12	1.30	92	36.67	161	93	46	1	0	1	0
NE SCOTTSBLUFF	78	45	89	41	62	-2	0.02	-0.23	0.02	1.02	291	14.98	120	91	28	0	0	1	0
NE VALENTINE	79	45	91	38	62	-2	0.13	-0.27	0.00	2.91	448	18.66	121	92	33	1	0	1	0
NV ELY	--	--	--	--	--	--	M	M	M	M	--	M	M	--	--	0	0	0	0
NV LAS VEGAS	100	73	102	68	86	3	0.00	-0.08	0.00	0.00	0	3.38	115	27	14	7	0	0	0
NV RENO	88	49	92	44	68	5	0.00	-0.08	0.00	0.00	0	3.87	77	58	13	2	0	0	0
NV WINNEMUCCA	88	38	92	30	63	0	0.00	-0.08	0.00	0.00	0	4.73	85	52	14	2	1	0	0
NH CONCORD	80	64	86	56	72	11	3.29	2.63	2.72	3.29	313	27.68	112	99	60	0	0	3	2
NJ NEWARK	81	71	83	65	76	5	1.51	0.63	0.76	1.51	108	28.16	90	96	68	0	0	6	1
NM ALBUQUERQUE	85	61	88	58	73	2	0.00	-0.26	0.00	0.30	71	7.75	120	64	23	0	0	0	0
NY ALBANY	79	65	84	55	72	8	2.30	1.59	0.87	2.30	202	23.95	94	95	57	0	0	5	2
NY BINGHAMTON	79	61	85	51	70	8	5.34	-0.26	0.38	0.54	43	20.45	79	99	55	0	0	5	0
NY BUFFALO	75	63	84	57	69	5	1.94	1.08	0.92	1.94	141	23.59	91	90	56	0	0	4	2
NY ROCHESTER	77	62	87	53	69	5	1.02	0.29	0.51	1.03	88	23.73	107	96	54	0	0	4	1
NY SYRACUSE	83	63	92	54	73	9	0.52	-0.38	0.32	0.52	37	18.99	72	94	49	2	0	5	0
NC ASHEVILLE	83	57	89	47	70	2	0.02	-0.92	0.02	0.02	1	29.09	84	94	40	0	0	1	0
NC CHARLOTTE	86	64	91	55	75	0	1.00	0.17	0.75	1.00	77	22.95	74	100	48	2	0	3	1
NC GREENSBORO	81	64	89	56	73	1	2.43	1.60	1.42	3.44	265	31.06	102	98	56	0	0	3	2
NC HATTERAS	83	74	85	70	78	-2	0.89	-0.37	0.50	4.53	809	40.60	109	94	72	0	0	5	1
NC RALEIGH	83	65	89	55	74	1	6.89	6.11	4.94	8.67	694	31.55	104	99	60	0	0	4	2
NC WILMINGTON	87	73	91	65	80	3	2.09	0.77	1.26	2.14	100	41.32	99	91	60	1	0	5	2
ND BISMARCK	70	47	84	39	59	-1	0.25	-0.12	0.21	1.00	169	25.39	200	91	46	0	0	3	0
ND DICKINSON	70	44	86	37	57	-3	0.56	0.15	0.39	2.37	376	17.23	130	93	40	0	0	3	0
ND FARGO	66	50	76	45	58	-3	0.53	0.05	0.53	5.57	723	19.39	128	91	60	0	0	1	1
ND GRAND FORKS	65	45	77	41	55	-4	0.34	-0.21	0.31	1.18	134	19.91	138	92	56	0	0	2	0
ND JAMESTOWN	67	47	78	43	57	-3	0.52	0.08	0.52	2.49	351	21.76	157	92	49	0	0	1	1
ND WILLISTON	71	44	83	33	58	-2	0.06	-0.27	0.05	1.20	235	14.33	130	89	34	0	0	1	0
OH AKRON-CANTON	77	58	84	49	68	2	0.97	0.16	0.97	0.97	76	25.43	96	95	60	0	0	1	1
OH CINCINNATI	87	55	93	46	71	1	0.00	-0.69	0.00	0.00	0	24.11	80	90	29	3	0	0	0
OH CLEVELAND	78	59	84	51	69	3	0.06	-0.77	0.04	0.06	5	20.74	81	94	51	0	0	3	0
OH COLUMBUS	83	61	88	50	72	4	0.16	-0.59	0.16	0.16	13	20.19	72	91	42	0	0	1	0
OH DAYTON	85	57	90	47	71	3	0.00	-0.62	0.00	0.00	0	23.34	88	86	34	1	0	0	0
OH MANSFIELD	79	56	83	47	67	1	0.07	-0.79	0.04	0.07	5	25.27	88	93	45	0	0	3	0

Based on 1961-90 normals

Weather Data for the Week Ending 9/11/99

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 Sep 1	PCT. NORMAL SINCE Sep 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
OK TOLEDO	82	57	89	49	69	4	0.47	-0.24	0.43	0.48	42	22.78	97	92	40	0	0	2	0
OK YOUNGSTOWN	78	58	85	49	68	3	0.81	-0.02	0.64	0.81	62	29.64	112	94	53	0	0	3	1
OK OKLAHOMA CITY	89	66	97	63	78	2	4.18	3.31	2.08	4.34	324	32.72	135	87	42	3	0	5	2
OK TULSA	86	66	96	60	76	0	4.90	3.82	3.10	5.74	344	36.07	126	94	43	2	0	5	3
OR ASTORIA	70	48	80	41	59	0	0.09	-0.46	0.07	0.12	15	55.31	146	92	51	0	0	3	0
OR BURNS	78	35	86	28	57	-1	0.00	-0.14	0.00	0.00	0	5.92	91	62	13	0	2	0	0
OR EUGENE	80	47	89	45	63	-1	0.00	-0.34	0.00	0.01	2	28.21	101	88	25	0	0	0	0
OR MEDFORD	89	50	93	46	69	1	0.00	-0.18	0.00	0.00	0	11.95	117	82	20	2	0	0	0
OR PENDLETON	79	47	86	42	63	-3	0.00	-0.14	0.00	0.00	0	5.59	73	67	23	0	0	0	0
OR PORTLAND	79	53	88	49	66	0	0.00	-0.37	0.00	0.01	2	25.90	123	86	27	0	0	0	0
OR SALEM	80	48	89	42	64	1	0.00	-0.31	0.00	0.00	0	31.58	143	87	26	0	0	0	0
PA ALLENTOWN	81	64	86	54	73	5	1.83	0.86	1.43	1.78	141	20.99	68	96	58	0	0	4	1
PA ERIE	77	63	87	55	70	4	0.25	-0.80	0.25	0.25	15	24.41	89	86	55	0	0	1	0
PA MIDDLETOWN	84	68	87	59	76	7	0.92	0.09	0.72	0.92	71	23.81	83	92	52	0	0	4	1
PA PHILADELPHIA	83	71	87	62	77	6	3.56	2.72	1.65	3.60	271	30.17	100	96	68	0	0	5	3
PA PITTSBURGH	79	60	85	50	69	3	0.35	-0.37	0.33	0.35	30	27.31	102	91	49	0	0	2	0
PA WILKES-BARRE	81	63	85	50	72	7	1.78	0.98	1.65	1.83	119	22.33	87	96	51	0	0	3	1
PA WILLIAMSPORT	81	63	85	52	72	6	5.29	4.49	4.52	5.30	421	30.74	108	97	55	0	0	4	1
RI PROVIDENCE	79	69	82	62	74	7	3.00	2.18	2.28	3.00	231	28.61	93	97	72	0	0	5	2
SC BEAUFORT	92	72	96	68	82	4	0.00	-1.35	0.00	0.00	0	36.76	91	93	47	6	0	0	0
SC CHARLESTON	91	71	98	66	81	3	0.08	-1.17	0.08	0.08	4	22.66	56	93	46	5	0	1	0
SC COLUMBIA	93	66	97	59	80	3	0.32	-0.64	0.24	0.32	20	22.46	59	93	36	7	0	2	0
SC GREENVILLE	90	65	94	57	78	4	0.52	-0.39	0.16	0.52	36	22.25	60	93	34	3	0	4	0
SD ABERDEEN	70	47	80	40	58	-4	0.25	-0.22	0.21	3.39	458	21.09	138	96	48	0	0	2	0
SD HURON	75	48	85	40	62	-2	0.00	-0.41	0.00	1.35	208	15.21	93	94	47	0	0	0	0
SD RAPID CITY	76	42	91	37	59	-4	0.14	-0.16	0.05	0.84	175	17.63	128	85	33	1	0	1	0
SD SIOUX FALLS	75	49	82	43	62	-2	0.00	-0.74	0.00	0.65	56	21.14	115	90	44	0	0	0	0
TN BRISTOL	83	57	90	45	70	-1	0.53	-0.24	0.35	0.53	44	27.79	93	96	39	2	0	3	0
TN CHATTANOOGA	95	63	101	56	79	4	0.08	-0.90	0.08	0.08	5	37.08	98	86	25	6	0	1	0
TN KNOXVILLE	89	60	94	52	75	2	0.01	-0.71	0.01	0.01	1	41.80	123	93	32	4	0	1	0
TN MEMPHIS	92	68	97	58	80	3	0.41	-0.44	0.28	0.41	31	36.19	100	89	41	4	0	2	0
TN NASHVILLE	92	63	99	53	77	3	0.04	-0.81	0.04	0.04	3	31.93	94	78	25	4	0	1	0
TX ABILENE	94	71	97	68	82	4	1.22	0.46	1.22	1.23	103	14.40	83	85	36	6	0	1	1
TX AMARILLO	85	61	93	60	73	2	0.02	-0.50	0.02	1.19	138	24.33	153	87	37	2	0	1	0
TX AUSTIN	98	69	99	67	83	1	0.00	-0.72	0.00	0.08	7	21.98	100	94	34	7	0	0	0
TX BEAUMONT	93	71	95	67	82	1	0.00	-1.52	0.00	0.03	1	24.36	62	97	46	7	0	0	0
TX BROWNSVILLE	89	74	93	73	81	-2	2.44	1.03	1.28	2.64	123	17.91	104	97	64	4	0	6	1
TX CORPUS CHRISTI	91	75	94	73	83	1	0.64	-0.67	0.24	0.64	32	23.37	113	99	62	6	0	4	0
TX DEL RIO	94	73	96	70	84	2	0.00	-0.63	0.00	0.00	0	14.92	118	92	45	7	0	0	0
TX EL PASO	90	69	93	67	80	3	0.94	0.51	0.88	0.96	143	5.98	98	81	34	5	0	2	1
TX FORT WORTH	94	73	99	71	84	4	0.37	-0.37	0.35	0.37	33	16.54	69	81	36	7	0	2	0
TX GALVESTON	90	78	91	72	84	2	0.67	-0.79	0.60	1.24	54	20.50	71	85	59	5	0	2	1
TX HOUSTON	96	70	98	67	83	4	0.00	-1.11	0.00	0.28	16	22.72	72	99	40	7	0	0	0
TX LUBBOCK	90	65	96	61	77	4	0.01	-0.62	0.01	0.01	1	15.29	110	83	35	3	0	1	0
TX MIDLAND	92	68	97	66	80	4	0.92	0.31	0.71	0.92	99	7.29	71	84	35	5	0	3	1
TX SAN ANGELO	95	69	98	67	82	4	0.45	-0.33	0.24	0.45	38	12.18	87	87	35	7	0	3	0
TX SAN ANTONIO	95	72	98	70	84	2	0.01	-0.77	0.01	0.03	2	14.74	69	92	40	7	0	1	0
TX VICTORIA	93	71	96	67	82	1	1.55	0.26	1.04	2.97	151	23.71	92	99	52	7	0	2	2
TX WACO	98	74	100	72	86	5	0.00	-0.76	0.00	0.00	0	14.96	68	83	37	7	0	0	0
TX WICHITA FALLS	95	69	98	66	82	4	0.49	-0.40	0.29	0.49	36	23.96	115	84	34	7	0	2	0
UT SALT LAKE CITY	82	54	88	47	68	0	0.00	-0.28	0.00	0.40	95	10.83	96	62	16	0	0	0	0
VT BURLINGTON	82	66	87	55	74	12	3.60	2.79	2.24	3.60	277	19.77	82	94	50	0	0	5	2
VA LYNCHBURG	80	60	87	47	70	0	2.30	1.56	0.82	4.07	348	25.73	89	99	56	0	0	6	2
VA NORFOLK	83	71	87	66	77	3	2.94	1.98	1.45	5.51	358	36.38	110	94	62	0	0	5	2
VA RICHMOND	82	66	87	57	74	2	5.31	4.51	2.40	7.06	552	33.68	108	98	63	0	0	6	3
VA ROANOKE	81	61	88	50	71	1	3.24	2.42	2.12	3.92	299	26.97	93	98	56	0	0	3	2
VA WASH/DULLES	84	63	86	50	73	4	2.25	1.44	1.34	3.25	252	30.56	107	99	55	0	0	4	2
WA OLYMPIA	73	42	83	38	58	-2	0.10	-0.34	0.10	0.11	16	39.91	140	95	34	0	0	1	0
WA QUILLAYUTE	69	43	81	37	56	-2	0.80	-0.07	0.77	0.83	63	74.83	123	99	52	0	0	2	1
WA SEATTLE-TACOMA	71	52	81	48	61	-1	0.02	-0.36	0.02	0.02	3	24.94	119	94	43	0	0	1	0
WA SPOKANE	75	46	82	37	60	-1	0.00	-0.17	0.00	0.00	0	9.57	91	67	20	0	0	0	0
WA YAKIMA	77	42	85	37	60	-4	0.00	-0.09	0.00	0.00	0	4.80	99	80	22	0	0	0	0
WV BECKLEY	74	56	80	47	65	0	2.02	1.22	1.95	2.02	160	27.11	91	97	52	0	0	4	1
WV CHARLESTON	81	58	86	47	70	0	0.61	-0.18	0.43	0.61	48	25.33	83	100	51	0	0	4	0
WV ELKINS	76	50	82	36	63	-1	0.66	-0.26	0.46	0.89	61	25.52	78	100	48	0	0	3	0
WV HUNTINGTON	81	58	86	48	69	-1	0.06	-0.65	0.03	0.07	6	22.84	76	99	45	0	0	4	0
WI EAU CLAIRE	71	50	80	42	61	-1	0.16	-0.82	0.13	0.24	15	26.34	109	91	44	0	0	2	0
WI GREEN BAY	74	49	87	42	62	0	0.00	-0.85	0.00	0.01	1	19.49	94	92	43	0	0	0	0
WI LACROSSE	74	54	84	48	64	0	1.13	0.18	1.09	1.28	85	29.09	126	91	44	0	0	2	1
WI MADISON	74	51	81	44	63	1	0.08	-0.77	0.08	0.08	6	27.50	121	90	45	0	0	1	0
WI MILWAUKEE	75	56	85	52	65	1	0.00	-0.83	0.00	0.00	0	30.81	130	82	43	0	0	0	0
WY CASPER	76	40	86	32	58	-2	0.12	-0.08	0.01	0.92	297	7.85	83	83	17	0	1	2	0
WY CHEYENNE	74	44	83	36	59	-1	0.30	-0.03	0.02	1.56	300	14.85	125	79	27	0	0	1	0
WY LANDER	76	44	84	38	60	-2	0.21	-0.02	0.13	0.84	240	11.47	117	78	18	0	0	4	0
WY SHERIDAN	75	41	89	36	58	-2	0.30	-0.01	0.16	2.81	598	11.78	108	85	23	0	0	2	0

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

Summer Weather Review

Highlights: Summer precipitation contrasted sharply in parallel bands. One—from the Southwest to the northern Plains and upper Midwest—featured frequent heavy rain. The other—from northern Texas into the Northeast—had well-below-normal rainfall. The culprit for the pattern, an upper level ridge that developed over the Midwest in mid-July and shifted into the South during August, also governed summer temperature patterns. As a result, summer temperatures averaged as much as 3°F above normal in the South and East, but slightly below normal throughout much of the West. In a continuation of a long-term trend, California's Central Valley was especially cool, with summer readings as much as 4°F below normal. Aside from abundant seasonal rains in the Southwest, tropical activity was confined to Hurricanes Bret (southern Texas) and Dennis (North Carolina) in late August.

June: Frequent heavy rainfall disrupted winter wheat harvesting on the central and southern Plains until month's end, when warmer, drier air overspread the region. In the Southeast, widespread rains improved soil moisture and stabilized crop conditions. In contrast, drought worsened from the Mid-Atlantic region into southern New England. Drought also continued to adversely affect dryland crops in the interior Northwest, where late-June showers provided only localized relief. Across the northern Plains and western Corn Belt, showers and thunderstorms maintained adequate to locally surplus soil moisture for developing summer crops. Meanwhile in the easternmost Corn Belt, warm and often dry weather reduced soil moisture to unfavorable levels, although late-month rains benefited corn and soybeans.

July: A late July heat wave brought the highest temperatures in 4 to 11 years across much of the Midwest and Ohio Valley,

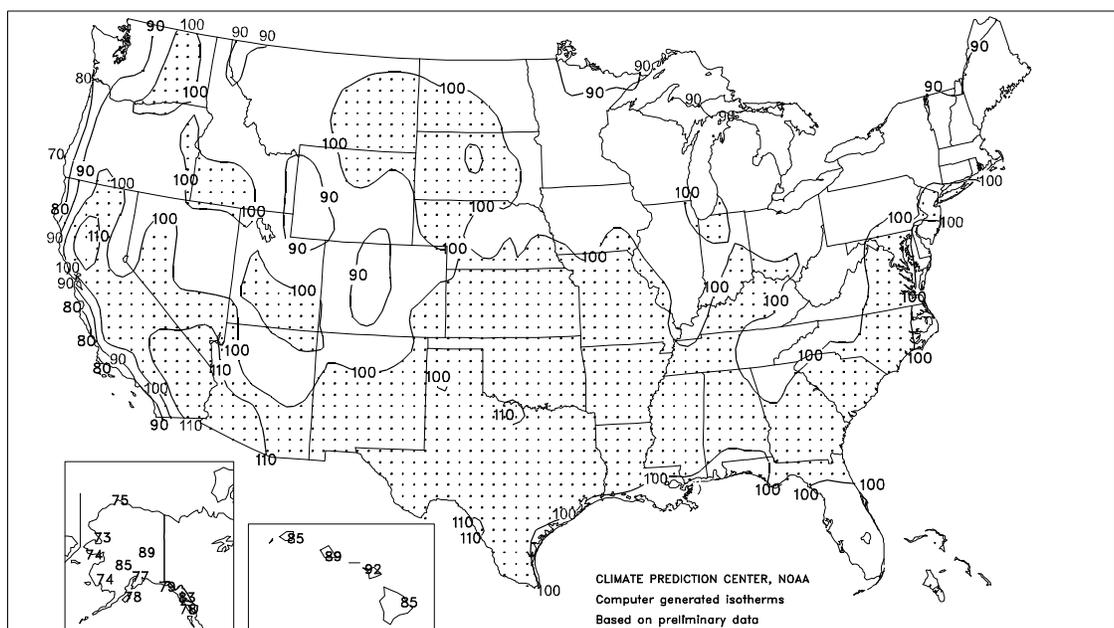
stressing livestock, pastures, and reproductive summer crops. Record-setting heat overspread the Southeast toward month's end, negating the benefits of late June and early July rainfall that had stabilized crop conditions. In the Mid-Atlantic region, where 13-month moisture deficits topped 18 inches in a few areas, the focus of extreme drought remained centered on an area that included eastern West Virginia, northern Virginia, and Maryland. Drought also intensified across the interior Northwest, where moisture deficits mounted in most areas for the fifth consecutive month. In contrast, a banner start to the summer rainy season across the Southwest improved water supplies and eased long-term drought, but caused localized flooding. In California, below-normal temperatures slowed crop development.

August: Extreme heat and dryness persisted through August and into early September across the South, stressing pastures and immature summer crops, including cotton and soybeans. However, heat did not return to the Corn Belt after late July, aiding corn and soybeans. Unfavorably dry weather continued, however, across the southern and eastern Corn Belt. In contrast, wet weather prevailed from the Southwest to the northern Plains and upper Midwest. Beneficial rain fell in the Northwest, but dry conditions and lightning strikes sparked wildfire activity in California and the Great Basin. Much-needed rain also fell in the northern Mid-Atlantic region, easing the 14-month drought. In the tropics, Hurricane Bret arrived in a sparsely populated area of southern Texas on August 22. Hurricane Dennis brushed the coastal Carolinas on August 29-31, then returned to North Carolina as a tropical storm on September 4-5, with generally beneficial rainfall that eventually spread into the Northeast.

Summer Extreme Maximum Temperature (°F)

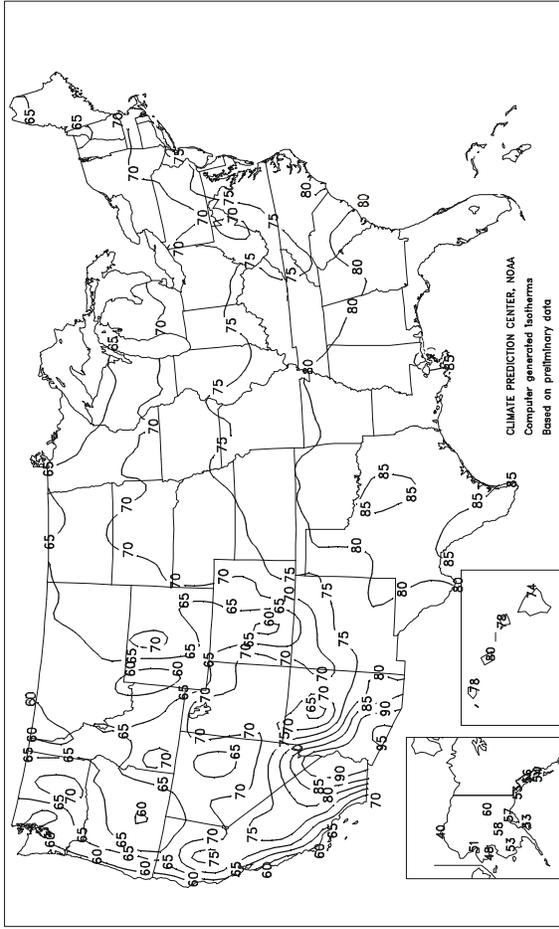
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While Columbus, OH endured their hottest June-August (75.9°F, or 4.5°F above normal) since 1936, San Diego, CA experienced their coolest summer (66.4°F, or 3.7°F below normal) since 1933. The last days of July and first days of August featured a few all-time-record highs in the Midwest and Southeast, including 104°F (on July 30) in Kenosha, WI; 101°F (on July 30 and 31) in London, KY; 104°F (on July 31) in Greenville-Spartanburg, SC; and 105°F (on August 1) in Charleston, SC. In Raleigh-Durham, NC, 12 days of 100°F heat surpassed their previous record of 8, set in 1952.



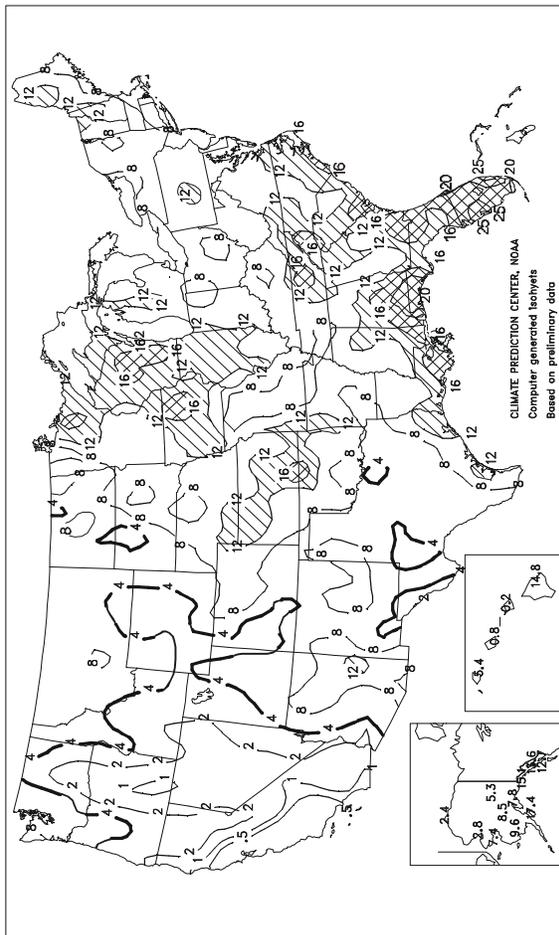
Summer Average Temperature (°F)

JUN - AUG 1999



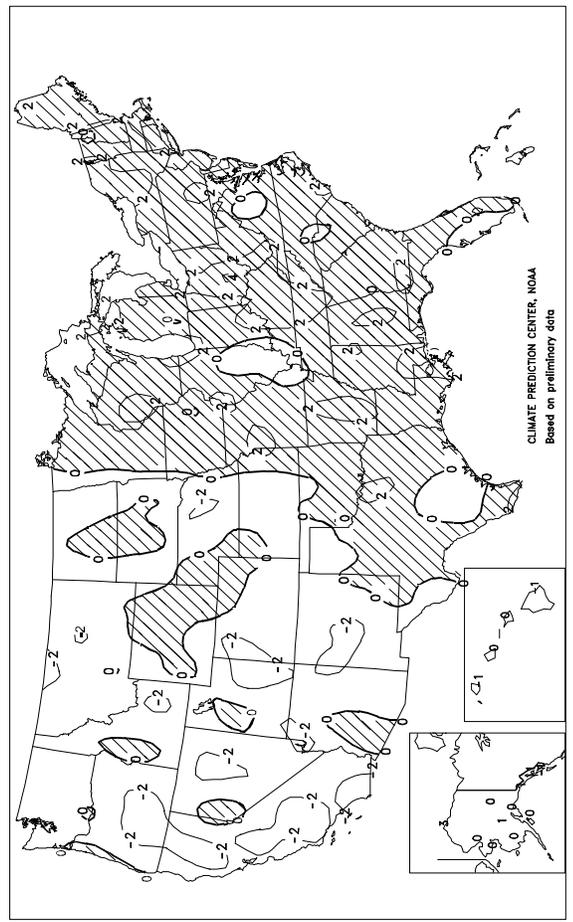
Summer Total Precipitation (Inches)

JUN - AUG 1999



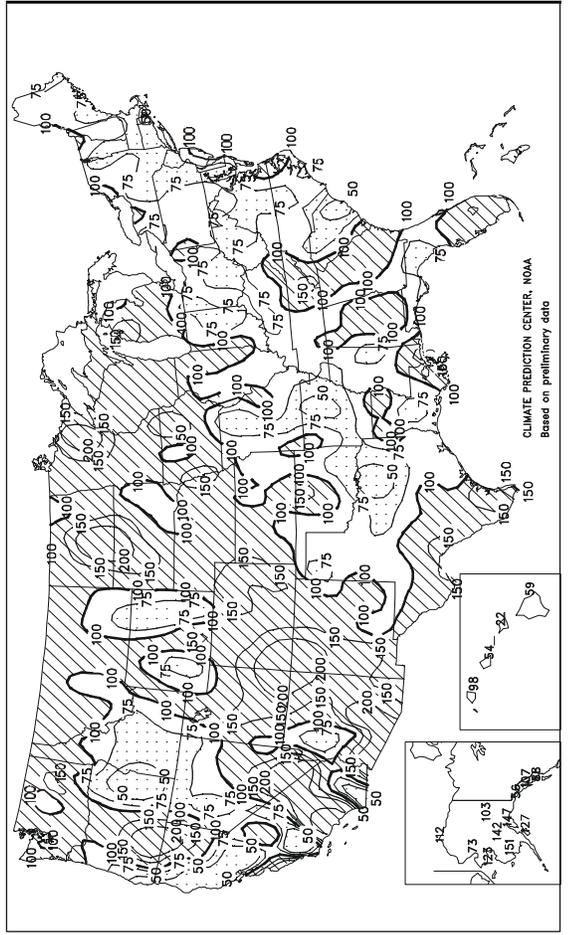
Summer Departure from Normal Average Temperature (°F)

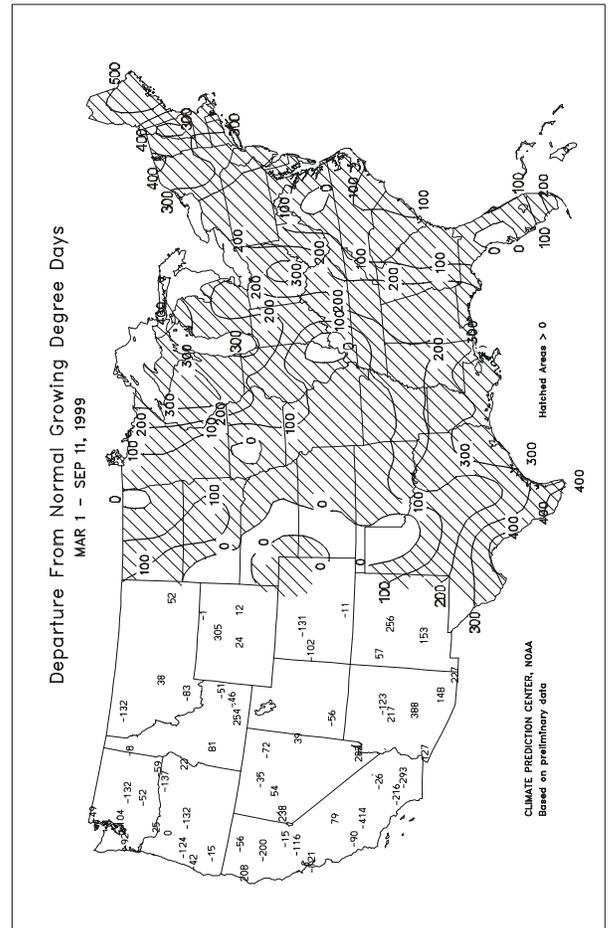
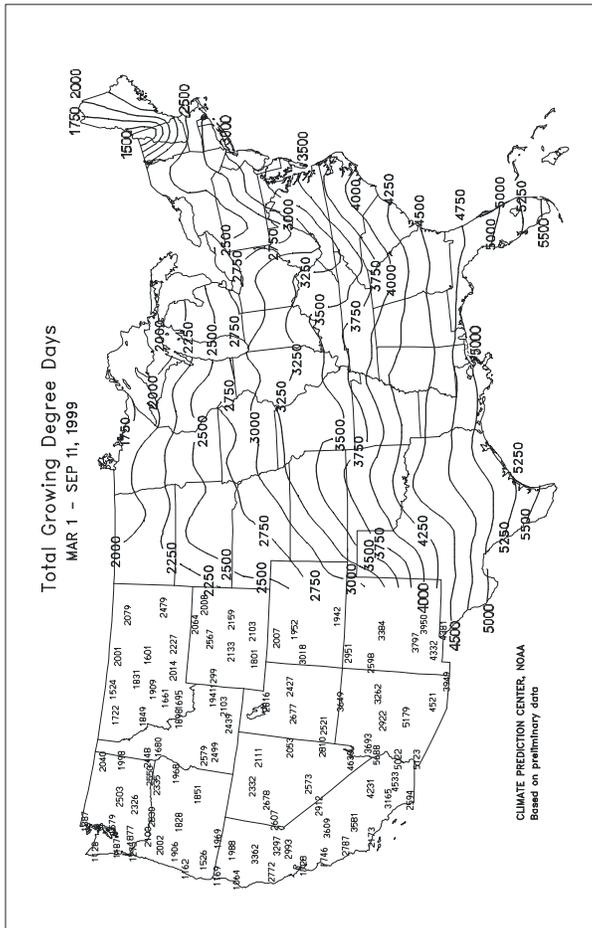
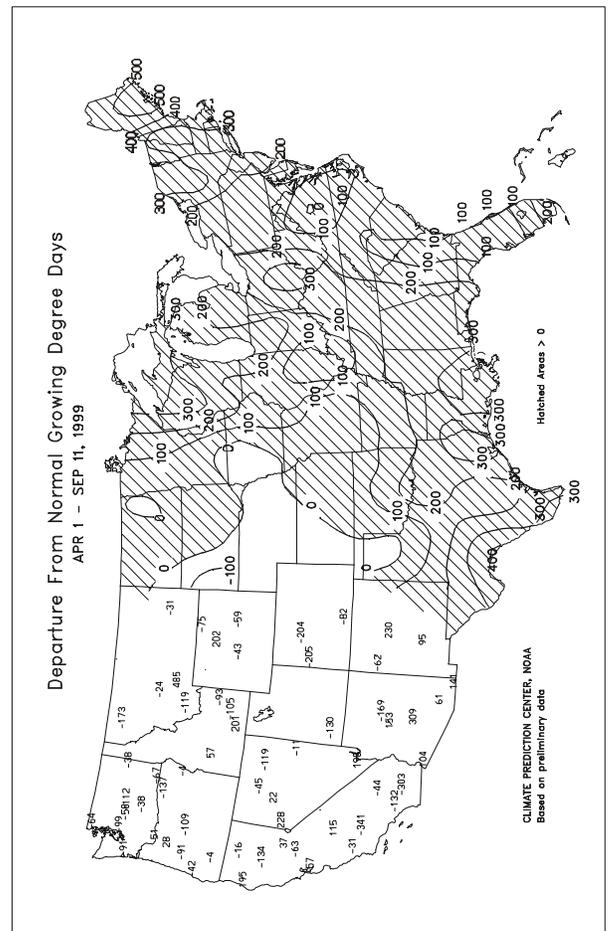
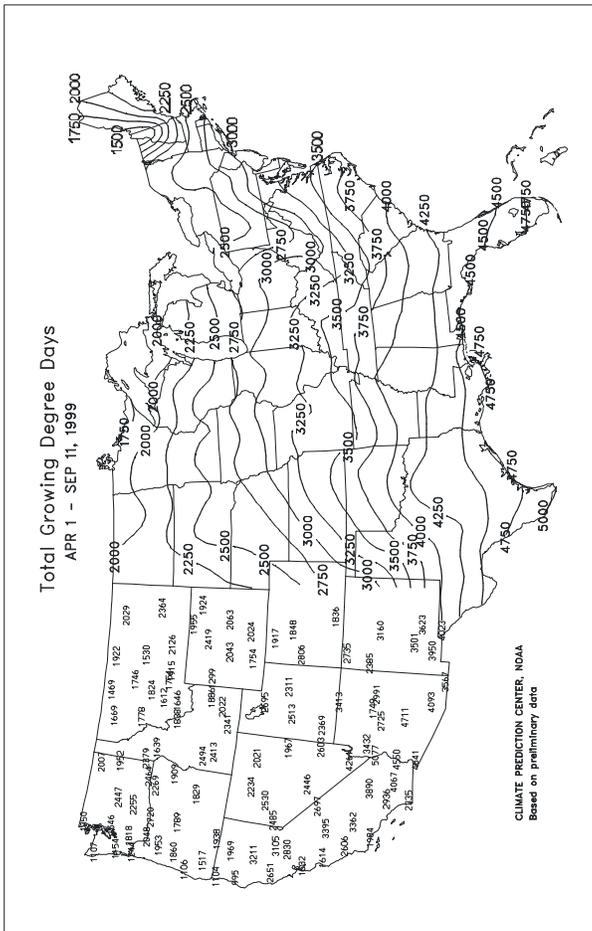
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Summer Percent of Normal Precipitation

JUN - AUG 1999





National Agricultural Summary

September 6 - 12, 1999

HIGHLIGHTS

Crops rapidly approached maturity in the Southern and Eastern States, where temperatures averaged above normal. As crops ripened, the harvest pace accelerated in the southern Corn Belt, lower Mississippi Valley, and Southeast. Heavy rains halted winter wheat seeding in parts of the central and southern Great Plains but recharged depleted soil

moisture supplies. Small grain harvest and winter wheat seeding were aided by dry weather in the northern Great Plains and Pacific Northwest. Tropical Storm Dennis provided much-needed moisture in the Northeast, but areas around the lower Great Lakes remained dry.

Corn: Ninety-two percent of the acreage was at the dent stage or beyond, slightly ahead of last year's pace, and 1 week ahead of the average. Despite cooler-than-normal temperatures, progress rapidly approached completion in most areas of the Corn Belt, well ahead of normal in Indiana, Michigan, Ohio, and Wisconsin. Denting progress was less advanced in South Dakota, Colorado, and Pennsylvania. The crop was 43 percent mature, behind last year's 47-percent progress, but well ahead of the 29-percent average. Fields quickly ripened east of the Mississippi River, with more than 25 percent of the acreage reaching maturity in Illinois, Indiana, and Michigan during the week. In Ohio and Wisconsin, corn mature advanced 20 percentage points. In the western Corn Belt, progress was slightly slower. Seven percent of the acreage was harvested, equal to last year and slightly ahead of the normal 5-percent pace. Dry weather aided harvest progress in the southern Corn Belt, especially along the Ohio River Valley. In Kentucky, more than half of the acreage was harvested, four times the normal rate. In Missouri, progress was 2 weeks ahead of normal and neared completion in the Bootheel. Conditions slightly deteriorated due to moisture shortages in many areas of the Corn Belt.

Soybeans: Twenty-nine percent of the acreage was dropping leaves, compared with 35 percent last year and 22 percent normally by this date. Fields rapidly approached maturity in the central and eastern Corn Belt, as soybeans dropping leaves advanced more than 25 percentage points in Illinois, Indiana, Michigan, and Ohio. In Indiana and Ohio, more than half of the acreage was dropping leaves, twice the normal rate. Development was also well ahead of normal in Mississippi, where two-thirds of the crop was dropping leaves. Two percent of the acreage was harvested, equal to last year and slightly ahead of the 5-year average. Dry weather permitted rapid progress in the lower Mississippi Delta soybean-producing areas. Harvest began in the eastern Corn Belt, slightly ahead of normal in Illinois, Indiana, and Ohio. Fields were stressed by lack of moisture in many areas, but conditions slightly improved in Nebraska, South Dakota, and along the Atlantic Coastal Plains.

Cotton: Bolls opening advanced to 59 percent, behind last year's 61-percent progress, but 7 percentage points ahead of the 5-year average. Above-normal temperatures quickly ripened fields in the southern Great Plains and Southeast. Bolls were opening on nearly 90 percent of the acreage in most of the Mississippi Delta States. Harvest progress advanced to 8 percent complete, compared with 10 percent last year and the 7-percent average for this date. In Texas, harvest continued in the Coastal Bend, Blacklands, and Central regions and harvest began in the Plains. In Louisiana, growers quickly applied defoliants and harvest accelerated with few rain

delays. Harvest began in interior areas of the Mississippi Delta and Southeast, but cool weather delayed ripening and harvest in the Southwest.

Winter Wheat: Winter wheat seeding progressed to 10 percent, 2 percentage points behind last year and the average. Planting rapidly advanced in Washington and slowly gained momentum in the Great Plains. Widespread rains soaked dry soils and halted planting in parts of Kansas and most of Oklahoma. Planting accelerated in Texas, Colorado, Nebraska, and South Dakota, despite pockets of moisture shortages and scattered areas of excessive wetness.

Other small grains: The spring wheat harvest advanced to 76 percent complete, well behind last year's 98-percent pace, and 14 percentage points behind the average. The barley crop was 79 percent harvested, 13 percentage points behind the average, and well behind last year's 98-percent pace. Dry weather aided harvest efforts in the northern High Plains and Pacific Northwest. Cool weather delayed ripening and limited harvest progress in North Dakota.

Rice: Forty-seven percent of the acreage was harvested, compared with 48 percent last year and the average 40-percent pace. Progress accelerated in interior areas of the lower Mississippi Valley, where ideal harvest weather prevailed. Along the western Gulf Coast, the harvest pace slowed as progress neared completion. In California, harvest slowly gained momentum.

Sorghum: Sorghum turning color advanced to 82 percent, compared with 89 percent last year, and 80 percent normally turning color by this date. Warm weather accelerated development in the Great Plains, especially in New Mexico, where half of the acreage entered the coloring stage. Forty-four percent of the crop was mature, slightly behind last year, but ahead of the average for this date. Ripening rapidly accelerated in Illinois, advancing more than 40 percentage points to nearly half of the acreage mature. Nearly all of the acreage was mature in the lower Mississippi Valley. Twenty-seven percent of the acreage was harvested, slightly ahead of last year and the average. Harvest was most advanced in the Mississippi Delta and Texas, where rain delays were minimal and harvest rapidly progressed.

Peanuts: Nine percent of the peanut acreage was harvested, equal to the 5-year average and ahead of last year. Digging slowly gained momentum along the eastern Gulf Coast. Wet soils hindered progress in the Mid-Atlantic States. Heavy rains and low-land flooding from Tropical Storm Dennis damaged some fields in North Carolina and Virginia.

Crop Progress and Condition

Week Ending September 12, 1999

Soybeans Percent Dropping Leaves				
	Sep 12 1999	Prev Week	Prev Year	5-Yr Avg
AL	28	15	21	15
AR	15	8	15	11
GA	20	16	28	19
IL	32	6	20	16
IN	57	28	59	29
IA	12	3	30	19
KS	28	18	55	31
KY	42	22	17	13
LA	47	38	61	37
MI	39	11	41	22
MN	19	6	47	24
MS	67	55	52	41
MO	19	8	24	13
NE	9	4	22	19
NC	10	8	14	10
OH	65	36	45	27
SC	8	5	7	4
SD	32	18	57	44
TN	30	17	22	14
19 Sts	29	13	35	22

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

Soybeans Percent Harvested				
	Sep 12 1999	Prev Week	Prev Year	5-Yr Avg
AL	4	NA	1	0
AR	4	NA	3	3
GA	0	NA	0	0
IL	2	NA	1	1
IN	3	NA	3	1
IA	0	NA	0	0
KS	1	NA	4	2
KY	0	NA	0	0
LA	21	NA	23	13
MI	0	NA	1	0
MN	0	NA	1	0
MS	27	NA	16	12
MO	0	NA	1	0
NE	0	NA	1	1
NC	0	NA	0	0
OH	4	NA	1	1
SC	0	NA	0	0
SD	0	NA	1	0
TN	2	NA	0	0
19 Sts	2	NA	2	1

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

Winter Wheat Percent Planted				
	Sep 12 1999	Prev Week	Prev Year	5-Yr Avg
AR	0	0	0	1
CA	0	0	0	0
CO	19	7	22	23
GA	0	0	0	0
ID	4	1	6	9
IL	0	0	0	0
IN	0	0	1	1
KS	5	1	5	6
MI	7	0	4	6
MO	0	0	0	1
MT	3	1	7	6
NE	16	3	30	27
NC	0	0	0	1
OH	0	0	0	0
OK	7	2	3	10
OR	0	0	1	2
SD	14	4	27	27
TX	18	5	24	20
WA	45	28	52	42
19 Sts	10	4	12	12

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

Cotton Percent Bolls Opening				
	Sep 12 1999	Prev Week	Prev Year	5-Yr Avg
AL	68	46	60	46
AZ	80	60	78	91
AR	72	56	63	56
CA	15	10	5	61
GA	63	46	67	57
LA	88	85	91	84
MS	93	87	94	80
MO	86	73	74	52
NM	55	52	48	57
NC	36	30	67	49
OK	37	*20	73	31
SC	43	31	57	46
TN	89	75	67	56
TX	53	39	56	41
14 Sts	59	46	61	52

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

Cotton Percent Harvested				
	Sep 12 1999	Prev Week	Prev Year	5-Yr Avg
AL	4	NA	3	1
AZ	0	NA	3	4
AR	2	NA	1	2
CA	0	NA	0	0
GA	5	NA	6	3
LA	21	NA	6	4
MS	9	NA	7	5
MO	0	NA	0	1
NM	0	NA	0	0
NC	0	NA	0	0
OK	0	NA	1	0
SC	3	NA	3	1
TN	6	NA	2	2
TX	14	NA	25	19
14 Sts	8	NA	10	7

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

Peanuts Percent Harvested				
	Sep 12 1999	Prev Week	Prev Year	5-Yr Avg
AL	9	6	9	15
FL	22	14	10	10
GA	11	4	4	13
NC	5	2	0	1
OK	0	0	0	1
SC	6	5	13	12
TX	9	7	11	5
VA	0	0	1	2
8 Sts	9	5	6	9

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

Barley Percent Harvested				
	Sep 12 1999	Prev Week	Prev Year	5-Yr Avg
ID	76	63	93	87
MN	89	82	99	94
MT	82	72	98	88
ND	71	68	100	95
SD	100	100	100	100
WA	96	80	100	98
6 Sts	79	71	98	92

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

Crop Progress and Condition

Week Ending September 12, 1999

Corn Percent Dented				
	Sep 12 1999	Prev Week	Prev Year	5-Yr Avg
CO	59	35	75	67
GA	100	100	100	100
IL	95	81	85	83
IN	99	93	84	75
IA	92	85	95	84
KS	93	85	99	91
KY	100	99	94	93
MI	90	74	91	56
MN	93	79	99	81
MO	100	95	99	91
NE	93	75	98	83
NC	98	95	89	96
OH	94	78	83	68
PA	64	50	49	60
SD	75	63	90	75
TX	94	90	100	98
WI	91	70	92	65
17 Sts	92	80	91	80
These 17 States planted 90% of last year's corn acreage.				

Corn Percent Mature				
	Sep 12 1999	Prev Week	Prev Year	5-Yr Avg
CO	6	5	26	13
GA	100	100	100	99
IL	57	29	41	26
IN	52	27	43	25
IA	46	27	60	34
KS	56	40	79	52
KY	83	79	66	56
MI	41	11	43	15
MN	22	7	37	15
MO	81	62	72	57
NE	21	9	42	21
NC	87	78	83	90
OH	38	18	17	10
PA	25	15	15	16
SD	14	11	33	21
TX	83	76	91	80
WI	33	13	32	19
17 Sts	43	25	47	29
These 17 States planted 90% of last year's corn acreage.				

Corn Percent Harvested				
	Sep 12 1999	Prev Week	Prev Year	5-Yr Avg
CO	0	0	0	0
GA	86	75	84	77
IL	6	0	3	1
IN	7	2	4	2
IA	1	0	3	2
KS	16	8	20	10
KY	54	36	24	13
MI	2	0	4	1
MN	0	0	0	0
MO	32	20	24	15
NE	1	0	2	1
NC	36	28	47	40
OH	3	1	3	1
PA	9	2	1	2
SD	0	0	0	0
TX	58	54	67	62
WI	0	0	2	0
17 Sts	7	4	7	5
These 17 States planted 90% of last year's corn acreage.				

Sorghum Percent Coloring				
	Sep 12 1999	Prev Week	Prev Year	5-Yr Avg
AR	100	99	94	97
CO	72	52	69	58
IL	88	82	70	66
KS	85	64	91	75
LA	100	100	100	100
MS	100	100	100	97
MO	88	77	93	82
NE	68	49	90	75
NM	77	27	32	38
OK	61	46	90	77
SD	77	58	83	75
TX	84	78	91	88
12 Sts	82	68	89	80
These 12 States planted 99% of last year's sorghum acreage.				

Sorghum Percent Mature				
	Sep 12 1999	Prev Week	Prev Year	5-Yr Avg
AR	90	83	78	75
CO	8	4	16	7
IL	49	8	20	14
KS	26	12	36	21
LA	100	99	100	93
MS	99	96	91	89
MO	50	40	49	36
NE	2	*1	26	14
NM	0	0	2	4
OK	10	6	30	20
SD	15	9	30	21
TX	75	70	69	69
12 Sts	44	36	48	40
These 12 States planted 99% of last year's sorghum acreage.				

Sorghum Percent Harvested				
	Sep 12 1999	Prev Week	Prev Year	5-Yr Avg
AR	59	NA	56	47
CO	0	NA	0	0
IL	2	NA	1	0
KS	8	NA	10	5
LA	88	NA	88	71
MS	85	NA	67	58
MO	0	NA	16	9
NE	0	NA	0	0
NM	0	NA	0	0
OK	1	NA	12	5
SD	0	NA	6	1
TX	67	NA	57	61
12 Sts	27	NA	25	23
These 12 States planted 99% of last year's sorghum acreage.				

Crop Progress and Condition

Week Ending September 12, 1999

Rice Percent Harvested				
	Sep 12 1999	Prev Week	Prev Year	5-Yr Avg
AR	37	20	38	27
CA	3	1	1	5
LA	90	81	87	79
MS	32	18	55	46
TX	96	91	88	81
5 Sts	47	35	48	40
These 5 States planted 96% of last year's rice acreage.				

Spring Wheat Percent Harvested				
	Sep 12 1999	Prev Week	Prev Year	5-Yr Avg
ID	80	64	94	89
MN	86	81	99	93
MT	81	69	98	88
ND	64	59	98	87
SD	100	100	100	100
5 Sts	76	70	98	90
These 5 States planted 96% of last year's spring wheat acreage.				

Soybeans Crop Condition by Percent					
	VP	P	F	G	EX
AL	52	16	16	15	1
AR	9	18	30	32	11
GA	28	25	33	14	0
IL	5	14	38	36	7
IN	11	24	43	20	2
IA	2	8	24	47	19
KS	4	18	39	37	2
KY	29	33	29	8	1
LA	11	18	40	26	5
MI	1	13	26	48	12
MN	3	8	29	50	10
MS	14	20	30	30	6
MO	30	28	26	14	2
NE	5	9	29	46	11
NC	1	8	24	63	4
OH	7	16	34	38	5
SC	12	25	44	19	0
SD	1	5	20	56	18
TN	41	34	20	5	0
19 Sts	9	15	31	36	9
Prev Wk	8	15	31	36	10
Prev Yr	4	10	26	44	16

Corn Crop Condition by Percent					
	VP	P	F	G	EX
CO	1	2	11	55	31
GA	13	18	31	33	5
IL	5	15	38	36	6
IN	9	21	45	23	2
IA	4	7	21	48	20
KS	1	4	29	58	8
KY	8	15	36	35	6
MI	3	13	24	48	12
MN	2	6	27	50	15
MO	24	21	25	24	6
NE	2	5	17	56	20
NC	1	9	41	44	5
OH	9	17	33	36	5
PA	17	33	28	18	4
SD	1	4	21	54	20
TX	0	2	16	59	23
WI	0	3	11	54	32
17 Sts	5	10	27	44	14
Prev Wk	5	10	26	43	16
Prev Yr	3	8	24	47	18

Cotton Crop Condition by Percent					
	VP	P	F	G	EX
AL	20	25	25	28	2
AZ	2	13	36	36	13
AR	1	8	34	41	16
CA	0	0	5	80	15
GA	16	22	34	24	4
LA	5	11	43	33	8
MS	4	15	35	42	4
MO	16	19	41	20	4
NM	2	7	21	61	9
NC	2	5	37	53	3
OK	3	9	23	37	28
SC	10	29	38	22	1
TN	14	36	37	13	0
TX	7	21	31	33	8
14 Sts	7	18	31	36	8
Prev Wk	8	19	31	35	7
Prev Yr	12	18	37	28	5

Sorghum Crop Condition by Percent					
	VP	P	F	G	EX
AR	3	12	38	40	7
CO	0	2	10	63	25
IL	6	19	56	19	0
KS	2	5	30	57	6
LA	0	5	32	58	5
MS	5	10	20	45	20
MO	14	27	45	13	1
NE	0	7	29	54	10
NM	0	0	28	71	1
OK	0	3	12	81	4
SD	0	1	22	70	7
TX	3	18	31	36	12
12 Sts	2	11	30	48	9
Prev Wk	3	11	32	48	6
Prev Yr	7	15	26	43	9

Peanuts Crop Condition by Percent					
	VP	P	F	G	EX
AL	4	15	35	35	11
FL	0	4	23	73	0
GA	11	18	41	26	4
NC	0	3	51	43	3
OK	0	10	35	43	12
SC	12	18	44	20	6
TX	8	7	20	46	19
VA	0	0	11	55	34
8 Sts	7	11	33	39	10
Prev Wk	7	11	34	36	12
Prev Yr	6	12	39	36	7

Rice Crop Condition by Percent					
	VP	P	F	G	EX
AR	1	4	24	47	24
CA	0	0	25	75	0
LA	0	3	18	59	20
MS	1	4	28	52	15
TX	0	0	6	62	32
5 Sts	1	3	22	54	20
Prev Wk	1	3	21	55	20
Prev Yr	0	6	25	55	14

State Agricultural Summaries

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

ALABAMA: Days suitable for fieldwork 6.4. Topsoil 49% very short, 33% short, 18% adequate. Soil moisture supplies increased slightly from previous week's precipitation. Corn 98% dough; 95% dented, 100% 1998, 100% avg.; 88% mature, 99% 1998, 96% avg.; 62% harvested, 68% 1998, 56% avg. Soybeans 87% blooming, 99% 1998, 97% avg.; 84% setting pods, 96% 1998, 91% avg.; 28% dropping leaves, 21% 1998, 15% avg.; 2% very poor, 3% poor, 23% fair, 48% good, 24% excellent. Soybean 52% very poor, 16% poor, 16% fair, 15% good, 1% excellent. Pasture feed 27% very poor, 31% poor, 25% fair, 16% good, 1% excellent. Livestock 4% very poor, 11% poor, 46% fair, 31% good, 8% excellent. Despite recent rainfall, cotton, soybeans, pastures are still in poor condition. Some soybeans are being cut for hay.

ALASKA: Days suitable for fieldwork 5.0. Topsoil 100% adequate. Subsoil 5% short, 95% adequate. Weather conditions for the week were mostly dry with daytime high temperatures mostly in the sixties. Nighttime lows were mostly in the thirties, dropped into the twenties in the Kenny Lake, Sawmill Creek areas. Oats 85% ripe or earlier, 5% swathed, 10% harvested. Barley 35% ripe or earlier, 30% swathed, 35% harvested. Hay 45% 2nd cutting harvest. Winter hay 15% short, 75% adequate, 10% surplus. Commercial storage potato 35% harvest. Wind damage to grains 100% none. Major activities included: Cutting hay, harvesting vegetables, grains, hay, killing vines, digging potato fields.

ARIZONA: Cotton harvest has begun in southern areas. Alfalfa harvest activity was reported as 15% not being harvested, 4% light, 38% moderate, 43% active. Alfalfa 2% poor, 9% fair, 81% good, 8% excellent. Last week, central area producers shipped a light volume of watermelons, mangoes. Eastern producers harvested apples, chili.

ARKANSAS: Days suitable for fieldwork 6. Topsoil 31% very short, 49% short, 20% adequate. Rainfall late in the week brought some relief to the western half of the State, while the eastern and south-central portions of the state continue to be below normal. Daytime highs in the first part of the week were higher than normal. A lack of moisture in the atmosphere allowed for a great fluctuation between the daily highs and lows. Overall, average daytime temperatures were near to slightly above normal. Livestock were reported in fair condition; hot, humid weather and lack of grazing were causing deaths in poultry and livestock. Many farmers were feeding supplemental hay early this year because of the drought. Main farm activities: Harvesting rice, irrigating soybeans, defoliating cotton. Other activities included planting winter wheat, preparing land for planting of annual forages such as rye, ryegrass, liming pastures, finishing harvesting hay, planning for fall pastures. Other activities: brush hogging, spraying fields for insects, weeds, started cotton, soybean harvesting and continued corn, sorghum, pea, rice harvesting, scouting for and treating webworms in soybeans, treating crop lands for armyworms, tree fruit, small fruit harvesting, dusting and ear tagging cattle for external parasites, fall calving, giving Brucellosis vaccinations, pregnancy checking spring bred cows, selling cull cows, weaning calves. Corn 85% harvest; 7% poor 28% fair 50% good 15% excellent. Cotton 72% opening bolls; 2% harvested; 1% very poor 8% poor 34% fair 41% good 16% excellent. Soybeans 97% setting pods; 15% shedding; 4% harvested; 9% very poor 18% poor 30% fair 32% good 11% excellent. Sorghum 100% turning color; 90% mature; 59% harvested; 3% very poor 15% poor 39% fair 35% good 8% excellent. Alfalfa 6% very poor 28% poor 38% fair 28% good. Other hay 13% very poor, 37% poor, 37% fair, 13% good. Range, pastures feed 19% very poor 40% poor 31% fair 10% good.

CALIFORNIA: Field activities progressed normally under favorable conditions in most areas. Seedbed preparations for fall-seeded small grains and forage crops continued. Winter forage planting was ongoing. Short grain rice was harvested on a limited basis in the Sacramento Valley. Medium and long grain rice fields were still being drained, as crop development remained 7 to 10 days behind normal. Cotton growth gained momentum as temperatures warmed, although most fields were still 1 to 2 weeks behind normal. Cotton growers in the San Joaquin Valley were actively treating for late-season aphid and armyworm infestations. Imperial Valley cotton harvest was just getting underway. Black eye, garbanzo beans were harvested in the central valleys. Safflower, vineseed harvests were winding down in the Sacramento Valley. Seed alfalfa harvest was virtually complete. Sugar beet harvest was ongoing in the central valleys; less mature fields were sprayed for mites, worms. Corn silage harvest was in full swing, harvest of corn for grain was slowly increasing as more fields matured. Sunflower fields were treated with defoliants in preparation for harvest. Alfalfa, sudan grass were cut for hay or green chopped. Some alfalfa fields were not sprayed for insects due to continued depressed prices. The harvest of grapes for fresh use gained momentum in the San Joaquin Valley. Varieties picked included Red Globe, Flame Seedless, Thompson Seedless. Most grapes harvested for raisins were laid; some trays were rolled. Wine grape harvest was gaining momentum. Prune harvest was nearing completion. Picking of apples was active. Granny Smith apples reached required maturity for harvest. Bartlett pears were harvested in Sacramento, Lake, Mendocino Counties. Pomegranate harvest was underway; very good color was noted. Harvest of almonds continued. Walnut harvest was expected to begin soon. Valencia oranges, lemons were picked in southern areas. Strawberry growers were weeding, irrigating fields. The processing tomato harvest continued, with good yields being reported. Late blight, black mold pressure were increasing along with powdery mildew. An increase in armyworms was noted; growers were treating the infestation. The cantaloupe, melon harvests advanced. Sweet potato, lima bean harvests continued. Fall vegetable planting moved ahead. Established lettuce, broccoli fields were growing well. Some growers were using hazing techniques to limit bird damage to young lettuce seedlings. Pumpkin, carrot fields were treated for worms, aphids. Among the vegetables harvested were eggplant, cilantro, chives, cucumbers, garlic, sweet corn, onions, peppers, squash and yam leaves. Irrigated pastures were in fair to good condition, while non-irrigated pastures were in poor to fair condition. Cattle continued to be shipped from higher elevation pastures where feed was short. Beef cows were calving in central, northern areas. Due to overgrazing or grasshopper damage, hay was being stockpiled by some central area operators for fall livestock feeding. Fire danger remained high in foothill, mountain areas. Some feeder cattle shipped from non-irrigated, higher elevation pastures in northwestern counties had below-normal weight gains.

COLORADO: Days suitable for fieldwork 6.3. Topsoil 6% very short, 14% short, 73% adequate, 7% surplus. Subsoil 7% very short, 24% short, 66% adequate, 3% surplus. Mostly warm and dry days, with widely scattered thunderstorms, some accompanied by hail. Harvest of small grains finally nearing completion, later row crops advanced toward maturity. Winter wheat 19% seeded, 22% 1998, 23% avg. Spring wheat 64% harvested, 71% 1998, 73% avg. Spring barley 97% harvested, 95% 1998, 89% avg. Oats 93% harvested, 88% 1998, 82% avg. Corn silage 19% harvested, 25% 1998, 26% avg. Dry onions 58% harvested, 61% 1998, 64% avg. Sugar beets 2% poor, 11% fair, 60% good, 27% excellent. Dry beans 36% cut, 59% 1998, 51% avg.; 19% harvested, 28% 1998, 31% avg; condition 2% poor, 11% fair, 68%

good, 19% excellent. Summer potatoes 82% harvested, 70% 1998, 62% avg. Fall potatoes 10% harvested, 17% 1998, 14% avg.; 11% poor, 18% fair, 44% good, 27% excellent. Alfalfa 65% 3rd cutting, 59% 1998, 50% avg.; 1% very poor, 8% poor, 21% fair, 58% good, 12% excellent. Pasture feed, range mostly good.

DELAWARE: Days suitable for fieldwork 4.3. Topsoil 43% short, 54% adequate, 3% surplus. Subsoil 15% very short, 64% short, 21% adequate. Field corn 8% very poor, 32% poor, 42% fair, 17% good, 1% excellent; 85% dented, 84% 1998, 89% avg.; 44% mature, 42% 1998, 44% avg.; 18% harvested for grain, 17% 1998, 12% avg.; 71% harvested for silage, 57% 1998, 59% avg. Soybeans 4% very poor, 29% poor, 39% fair, 26% good, 2% excellent; 90% setting pods, 81% 1998, 86% avg.; 17% turned, 23% 1998, 18% avg.; 10% shedding leaves, 8% 1998, 6% avg. Sorghum 14% poor, 51% fair, 35% good; 40% turned, 43% 1998, 42% avg.; 10% mature, 7% 1998, 10% avg. Sweet corn 85% harvested, 81% 1998, 93% avg. Snap beans 85% harvested, 79% 1998, 86% avg. Cucumbers 87% harvested, 82% 1998, 94% avg. Lima beans 66% harvested, 54% 1998, 56% avg. Tomatoes 86% harvested, 80% 1998, 91% avg. Apples 5% fair, 75% good, 20% excellent; 45% harvested, 52% 1998, 49% avg. Clover and other hay 90% 3rd cutting, 90% 1998, 86% avg. Alfalfa hay 51% 4th cutting, 43% 1998, 37% avg. Hay supplies 2% very short, 38% short, 60% adequate. Pasture feed 3% very poor, 32% poor, 41% fair, 24% good. Activities: Continued vegetable, hay harvesting, grain corn harvesting picking up steam.

FLORIDA: Topsoil moisture throughout State mostly short to adequate. Almost daily showers, many Peninsula areas. Some southwestern parts received over 7.00 in.; some Dade County areas, over 5.00 in.; Palmetto-Ruskin region, about 1.75 to 5.00 in.; Ft. Pierce, about 1.50 in. Rainfall, major stations, ranged from traces at Pensacola to almost 3.00 in. at Tallahassee. Weekly temperatures averaged normal to 2 degrees above. Daytime highs 80s, 90s; nighttime lows 70s. Tobacco marketing active. Cotton, soybean, sugarcane condition normal. Haying active. Cotton starting to cut out, bolls starting to open. Twenty-two percent peanuts harvested. Peanut 4% poor, 23% fair, 73% good. Frequent showers delayed some vegetable fieldwork, most growers able to keep to planting schedules. Currently, most vegetable growers, especially along southeastern coast, preparing for expected bad weather from Hurricane Floyd. Citrus groves very good condition, moisture adequate to surplus. Abundant new growth. New crop fruit progressing well. Several fresh fruit packing houses starting to open. Caretakers cutting cover crops, spraying, fertilizing, herbiciding, cleaning ditches. Pasture feed 5% poor, 30% fair, 60% good, 5% excellent. Cattle 20% fair, 75% good, 5% excellent. Due to dry soil conditions, pasture, range conditions worse than previous week in most locations, Panhandle, north. Condition of most pasture fair to good, south; armyworms active, most cattle in State in good condition.

GEORGIA: Days suitable for fieldwork 6.4. Soil moisture 41% very short, 40% short, 18% adequate, 1% surplus. Soil moisture conditions changed slightly. Scattered showers fell last week, but more rain is necessary. Some limbs were broken from the scattered storms. Hay 24% very poor, 34% poor, 30% fair, 12% good. Peanuts 20% dug, 9% 1998, 23% avg. Rye 2% planted, 3% 1998, 2% avg. Sorghum 17% very poor, 26% poor, 38% fair, 18% good, 1% excellent; 47% harvested for grain, 44% 1998, 35% avg. Soybeans 96% setting pods, 97% 1998, 96% avg. Tobacco 97% harvested, 86% 1998, 96% avg. Other small grains 1% planted, 0% 1998, 1% avg. Apples 4% very poor, 8% poor, 42% fair, 44% good, 2% excellent; 32% harvested, 42% 1998, 39% avg. Pecans 8% very poor, 17% poor, 33% fair, 36% good, 6% excellent. Dry soils continued to affect pastures and crops. Insects were a problem in soybeans. Soybean condition declined. Pod set was nearly complete. Leaf drop was slightly ahead of the 5-year average pace. Sorghum harvest continued ahead of the 5-year average pace. White flies appeared in cotton fields last week. Cotton was being defoliated. Boll opening and harvesting were ahead of the 5-year average pace. Peanut digging continued ahead of last year's pace. Crop matured faster in some fields due to the hot, dry conditions. Farmers were

controlling velvetbean caterpillars in peanuts. Pastures, hayfields continued to suffer last week. Pasture, hay condition declined. Army worms continued to be present in some hayfields. Rye, oat planting occurred at the 5-year average pace. There was concern about having adequate soil moisture for planting. Apple harvest continued behind 1998, average pace. Pecan condition changed slightly.

HAWAII: Days were partly to mostly sunny. Weather conditions were fair for agriculture. Trade winds diminished as the week progressed. Rainfall was generally light, limited to windward areas. Heavy irrigation ensure normal crop progress in most areas. A few areas remained very dry. Bananas were in fair to good condition. Harvesting is expected to remain steady. Papaya orchards were in mostly good condition. A favorable mixture of sunshine and showers enabled papaya trees to make good growth. Head cabbage plantings were in fair to good condition. Warm weather lowered yields in some areas. Sweet corn harvesting very active, supplies at moderate to heavy levels. Crop conditions were mostly good.

IDAHO: Days suitable for fieldwork 6.9. Topsoil 7% very short, 37% short, 55% adequate, 1% surplus. Cool weather, minimal precipitation created ideal harvest conditions. Irrigation supply 54% excellent, 40% good, 6% fair. Alfalfa hay 65% 3rd cutting, 66% 1998, 53% avg. Oats 75% harvested for grain, 86% 1998, 78% avg. Mint 79% harvested, 91% 1998, 91% avg. Dry peas 95% harvested, 100% 1998, 93% avg. Dry beans 44% harvested, 19% 1998, 33% avg. Corn 23% harvested for silage, 9% 1998, 14% avg. Sweet corn 69% harvested, 67% 1998, 74% avg. Lentils 92% harvested, 95% 1998, 78% avg. Onions 27% harvested, 20% 1998, 32% avg. Peaches 68% harvested, 70% 1998, 80% avg. Prunes, plums 50% harvested, 30% 1998, 57% avg. Apples 6% harvested, 9% 1998, 11% avg. Hops 60% harvested, 52% 1998, 54% avg. Potatoes with vines 34% dead/kill, 32% 1998, 52% avg.; 10% harvested, 7% 1998, 9% avg. Winter wheat 98% harvested, 100% 1998, 98% avg.; 4% planted, 6% 1998, 9% avg. Activities: Monitoring for disease, harvesting cereal grains, potatoes, hay, mint, lentils, dry peas, oats, onions, hops sweet corn, and fruit, beginning fall fieldwork.

ILLINOIS: Days suitable for fieldwork 6.9. Topsoil 38% very short, 47% short, 15% adequate. Dry weather allowed corn harvest to commence last week. Southeast district leads the way in corn harvest. Corn condition remains stable. Soybean crop continues to rapidly develop. Pasture continued to deteriorate because of dry conditions, causing more livestock producers to feed hay. Other activities for last week included hauling grain, chopping silage, preparing machinery, bins for harvest. Soybeans 70% turning yellow, 55% 1998, 47% avg. Alfalfa 96% 3rd cut, 91% 1998, 85% avg.

INDIANA: Days suitable for fieldwork 7.0. Topsoil 62% very short, 32% short, 6% adequate. Subsoil 54% very short, 39% short, 7% adequate. Topsoil, subsoil extremely dry, most areas of State. Corn, soybeans rapidly advancing toward maturity. Light precipitation, some areas. Corn, soybean harvest gaining momentum. Corn, soybean condition declined. Corn 25% good to excellent. Soybean 22% good to excellent. Pastures dried up, most areas. Range, pasture feed 45% very poor, 33% poor, 17% fair, 5% good. Feeding hay continues. Tobacco 78% harvest, 61% 1998, 48% avg. Activities: Seeding winter wheat, cleaning and repairing grain bins, preparing harvest equipment, purchasing wheat seed, harvesting tobacco, tillage of soils, baling hay, feeding hay, caring for livestock.

IOWA: Days suitable for fieldwork 6.1. Topsoil 18% very short, 26% short, 55% adequate, 1% surplus. Subsoil 15% very short, 26% short, 57% adequate, 2% surplus. Rain would be beneficial in many areas of State; northwest, north-central, southeast, south-central areas still short on moisture. Soybeans not filling out, some plants aborting pods. In dry areas, corn also impacted: smaller-than-normal ears, kernels. Crops continue to mature, some corn, soybeans harvested. Corn 99% dough stage, 100% 1998, 97% avg.; 92% dent stage, 95% 1998, 84% avg.;

46% mature stage, 60% 1998, 34% avg.; 1% harvested, 3% 1998, 2% avg.; 4% very poor, 7% poor, 21% fair, 48% good, 20% excellent. Soybeans 45% leaves changing color, 73% 1998, 60% avg.; 12% leaves dropping, 30% 1998, 19% avg.; 2% very poor, 8% poor, 24% fair, 47% good, 19% excellent. Livestock generally good condition; reports of pink eye in south-central areas. Range, pasture feed 9% very poor, 17% poor, 31% fair, 33% good, 10% excellent. Alfalfa 87% 3rd cutting, 76% 1998, 78% avg.; 3% very poor, 13% poor, 22% fair, 46% good, 16% excellent.

KANSAS: Days suitable for fieldwork 6.2. Topsoil 18% very short, 45% short, 37% adequate. Subsoil 10% very short, 36% short, 53% adequate, 1% surplus. Wheat seeding continues, little progress was made the past week mainly due to dry conditions. Sunflower 1% very poor, 2% poor, 17% fair, 66% good, 14% excellent. Ray flowers 79% dry, 93% 1998. Bracts 51% turning yellow, 71% 1998. Sunflowers 10% mature, 24% 1998; 2% harvested, 6% 1998. Alfalfa 68% 4th cutting, 72% 1998, 54% avg. Hay, forage supplies 6% short, 88% adequate 6% surplus.

KENTUCKY: Days suitable for fieldwork 6.0. Topsoil 84% very short, 14% short, 2% adequate. Subsoil 85% very short, 14% short, 1% adequate. For week, above-normal temperatures Statewide, with no measurable rainfall. Conditions remain excessively dry in most areas. Soybeans desperately need moisture. Corn harvesting in full swing. Burley cut 84%, 76% 1998, 65% avg. Dark tobacco cut 79%, 74% 1998, 73% avg. Tobacco in field rated 28% very poor, 29% poor, 32% fair, 10% good, 1% excellent. Housed tobacco drying too fast. Pasture feed 57% very poor, 31% poor, 9% fair, 3% good. Hay continues to be fed due to poor pasture conditions. Hay 53% very poor, 29% poor, 14% fair, 4% good. Water for livestock being hauled. Drought conditions continue to stress livestock Statewide.

LOUISIANA: Days suitable for fieldwork 4.8. Soil moisture 8% very short, 32% short, 52% adequate, 8% surplus. Corn 100% harvested, 98% 1998, 94% avg. Cotton defoliation was in full swing. Hay 76% final cutting, 74% 1998, 81% avg. Rice 98% ripe, 98% 1998, 95% avg. Rice harvest edged closer to completion. Soybeans 76% leaves turning, 79% 1998, 59% avg. Sugarcane 17% fair, 57% good, 26% excellent; 92% planted, 58% 1998, 58% avg. Sweet potatoes 9% poor, 29% fair, 59% good, 3% excellent; 26% harvested, 26% 1998, 27% avg. Livestock 1% very poor, 7% poor, 31% fair, 54% good, 7% excellent. Vegetables 4% very poor, 23% poor, 42% fair, 27% good, 4% excellent. Pasture conditions were helped by scattered showers.

MARYLAND: Days suitable for fieldwork 5.3. Subsoil 25% very short, 42% short, 33% adequate. Topsoil 1% very short, 16% short, 82% adequate, 1% surplus. Corn 17% very poor, 28% poor, 39% fair, 14% good, 2% excellent; 83% dent, 80% 1998, 79% avg.; 43% mature, 50% 1998, 40% avg.; 14% harvested for grain, 14% 1998, 9% avg.; 50% harvested for silage, 42% 1998, 42% avg. Soybeans 5% very poor, 19% poor, 38% fair, 30% good, 8% excellent; 10% turned, 23% 1998, 21% avg.; 6% shedding leaves, 7% 1998, 8% avg. Sorghum 14% very poor, 35% poor, 41% fair, 10% good; 60% turning color, 49% 1998, 48% avg.; 10% mature, 0% 1998, 7% avg. Tobacco 72% harvested, 75% 1998, 79% avg. Snap beans 90% harvested, 92% 1998, 90% avg. Cucumbers 86% harvested, 90% 1998, 96% avg. Sweet corn 95% harvested, 94% 1998, 93% avg. Lima beans 41% harvested, 55% 1998, 49% avg. Apples 1% poor, 20% fair, 79% good; 40% harvested, 27% 1998, 31% avg. Clover, other hays 85% 3rd cutting, 81% 1998, 69% avg.; 45% 4th cutting, 37% 1998, 19% avg. Alfalfa 91% 3rd cutting harvested, 99% 1998, 94% avg.; 38% 4th cutting, 56% 1998, 55% avg. Pasture feed 5% very poor, 19% poor, 42% fair, 33% good, 1% excellent. Hay 16% very short, 49% short, 35% adequate. Activities: Some vegetable harvesting finished up, grain harvesting continued.

MICHIGAN: Days suitable for fieldwork 6.0. Topsoil 29% very short, 55% short, 16% adequate. Subsoil 28% very short, 56% short, 16%

adequate. Temperatures closer to normal this past week as crops relieved from hot weather. Besides a downpour, State received 6th, rest of State received little rain this past week. Hay 4% very poor, 12% poor, 24% fair, 44% good, 16% excellent. Dry beans 1% poor, 14% fair, 58% good, 27% excellent. Hay 76% 3rd cutting, 83% 1998, 63% avg.; 13% 4th cutting, 19% 1998, 9% avg. Dry beans 98% shedding leaves, 100% 1998, 68% avg.; 77% mature, 82% 1998, 35% avg.; 38% harvested, 28% 1998, 14% avg. Silage 54% harvested, 50% 1998, 20% avg. Soybeans 85% turning leaves, 79% 1998, 53% avg.; 10% mature, 11% 1998, 6% avg. Dry bean harvest in full swing with many splits reported. Corn drying out as farmers with early-planted corn expect to harvest this week. Corn silage harvest in overdrive as farmers trying to harvest silage before it is too dry. Third-cutting hay finishing, some farmers will not have a 4th cutting this year. Early-planted soybeans being harvested as they continued to mature. Sugar beets desperate for rain as expected yields lower with each week without rain. Cantaloupe harvest continued. Carrot harvest moving quickly, with excellent yields, quality. Cauliflower and broccoli harvests continued, with some heads smaller than normal. Celery harvest continued. Cucumbers for pickle harvest continued, with good yields, quality. Onion harvest in full swing, with some good yields reported. Pepper harvest continued, with good quality. Pumpkin harvest underway. Snap beans maturing ahead of normal, lack of rainfall affecting yields. Zucchini, summer squash harvest slowing down, finished in some areas. Yields, quality outstanding this year. Sweet corn harvest winding down. Fresh market tomatoes in good supply. Processing tomato harvest continued. Gala, McIntosh apple harvests continued. Peach harvest wrapped up. Stanley plum harvest ended, while late-season plum harvest started. Niagara grape harvest neared completion. Concord harvest will begin this week. Bartlett pear harvest wound down, harvest of later varieties started. Blueberry harvest ended, fall red raspberry harvest continued.

MINNESOTA: Days suitable for fieldwork 4.2. Topsoil 2% very short, 15% short, 60% adequate, 23% surplus. Soybeans 63% turning yellow, 86% 1998, 69% avg. Corn 47% silage cut, 69% 1998, 25% avg. Winter wheat 39% seeded, 64% 1998, 63% avg. Rye 47% seeded, 68% 1998, 57% avg. Dry beans 21% harvested, 71% 1998, 36% avg. Sweet corn 87% harvested, 92% 1998, 82% avg. Potatoes 31% harvested, 26% 1998, 22% avg. Grain, hay 49% stubble plowed, 66% 1998, 53% avg. Pasture feed 5% very poor, 11% poor, 27% fair, 47% good, 10% excellent. Sugar beets 1% very poor, 5% poor, 23% fair, 60% good, 11% excellent. Sunflowers 1% very poor, 9% poor, 31% fair, 53% good, 6% excellent. Dry beans 3% very poor, 10% poor, 40% fair, 41% good, 6% excellent. Days and nights turned cooler during the week, crops are in their final stages of development. Soybeans vary widely in maturity at this point. A few fields have been harvested in the west-central district, for many producers, several weeks of maturing will be required before their fields are ready. In portions of the northwest, north-central districts that have had daily rains for the past 2 weeks, progress on the small grains, hay harvest has slowed to a standstill.

MISSISSIPPI: Days suitable for fieldwork 6.0. Soil moisture 39% very short, 31% short, 29% adequate, 1% surplus. Some areas of the State received beneficial rainfall. Corn 88% harvested, 88% 1998, 65% avg.; 99% silage harvested, 93% 1998, 93% avg. Cotton 93% open bolls, 94% 1998, 80% avg.; 9% harvested, 7% 1998, 5% avg.; 4% very poor, 15% poor, 35% fair, 42% good, 4% excellent. Rice 76% mature, 85% 1998, 82% avg.; 32% harvested, 55% 1998, 46% avg.; 1% very poor, 4% poor, 28% fair, 52% good, 15% excellent. Sorghum 99% mature, 91% 1998, 89% avg.; 85% harvested, 67% 1998, 58% avg.; 84% silage harvested, 84% 1998, 74% avg. Soybeans 85% turning color, 79% 1998, 64% avg.; 67% shedding leaves, 52% 1998, 41% avg.; 27% harvested, 16% 1998, 12% avg.; 14% very poor, 20% poor, 30% fair, 30% good, 6% excellent. Sweet potatoes 25% harvested, 24% 1998, 28% avg.; 1% very poor, 6% poor, 37% fair, 55% good, 1% excellent. Hay (warm-season) 90% harvested, 94% 1998, 94% avg. Cattle, 1% very poor, 11% poor, 43% fair, 37% good, 8% excellent. Pasture feed 15% very poor, 22% poor, 36% fair, 23% good, 4% excellent.

MISSOURI: Days suitable for fieldwork 6.7. Topsoil 65% very short, 26% short, 9% adequate. Precipitation 0.41 in. All reporters indicated very short or short as the most common ratings. Driest districts are the northeast, south-central, southeast. Several weeks without significant rainfall is affecting all crops, especially soybeans. With pastures in distress and ponds low, producers are feeding hay, hauling water to livestock. Corn 81% mature; 32% harvested, about 6 days ahead of 1998, 2 weeks ahead of normal. Harvesting in the Bootheel is nearing completion, with 89% harvested. Ninety-eight percent of all soybeans were setting pods, 46% turning color, 19% dropping leaves. Development is normal for this time of year, 3 days behind 1998. Sorghum 88% turning color, 50% maturity. Crop is about 7 days ahead of normal for this date. Bootheel leads all districts, with 85% of the crop matured. Cotton 86% opened bolls, about 5 days ahead of 1998, 2 weeks ahead of average. Pasture feed, range 49% very poor, 27% poor, 17% fair, 7% good. Most districts reported pastures as poor to very poor. Northeast, south-central, southeast districts reported almost 80% of pastures in very poor condition.

MONTANA: Days suitable for fieldwork 4.7. Topsoil 15% very short, 35% short, 49% adequate, 1% surplus. Subsoil 18% very short, 39% short, 43% adequate. Cooler than recent weeks, only small amounts of moisture were recorded at most locations across the State. Sugar beets 4% harvested, 0% 1998, 1% avg. Sugar beets 1% poor, 19% fair, 56% good, 24% excellent. Winter wheat harvested 98%, 100% 1998, 98% avg. Spring wheat 95% ripe, 99% 1998, 97% avg. Barley 96% ripe, 99% 1998, 97% avg. Oats 95% ripe, 99% 1998, 97% avg.; 82% harvested, 97% 1998, 88% avg. Corn for silage 19% harvested, 50% 1998, 30% avg.; 1% poor, 17% fair, 71% good, 11% excellent. Potatoes 4% poor, 19% fair, 57% good, 20% excellent. Dry beans 56% harvested, 59% 1998, 49% avg.; 3% poor, 24% fair, 61% good, 12% excellent. Alfalfa 83% 2nd cutting, 94% 1998, 91% avg. Other hay 96% harvested, 98% 1998, 98% avg. Cattle, calves 17% moved from summer ranges, 19% 1998, 12% avg. Sheep, lambs 24% moved from summer ranges, 18% 1998, 13% avg.

NEBRASKA: Days suitable for fieldwork 5.8. Topsoil 12% very short, 24% short, 63% adequate, 1% surplus. Subsoil 9% very short, 24% short, 66% adequate, 1% surplus. Temperatures 2° below normals for the week. Precipitation occurred across the State, ranged from traces to one and four hundredths inches at Brewster. Corn 2% very poor, 5% poor, 17% fair, 56% good, 20% excellent. Dryland corn 58%, irrigated corn 87% good and excellent. Corn 93% dented, 98% 1998, 83% avg.; 21% matured, 42% 1998, 21% avg. Soybeans 5% very poor, 9% poor, 29% fair, 46% good, 11% excellent; 51% coloring, 70% 1998, 55% avg.; 9% dropping leaves, 22% 1998, 19% avg. Sorghum 68% turning color, 90% 1998, 75% avg.; 2% mature, 26% 1998, 14% avg.; 7% poor, 29% fair, 54% good, 10% excellent. Dry beans 85% dropping leaves, 68% 1998, 61% avg.; 2% poor, 23% fair, 72% good, 3% excellent. Alfalfa 1% very poor, 9% poor, 27% fair, 56% good, 7% excellent; 99% 3rd cutting, 94% 1998, 92% avg. Pasture feed, range 4% very poor, 13% poor, 25% fair, 53% good, 5% excellent. Pastures were starting to dry up, to lack of moisture. Some farmers started to precondition and wean calves. Producer activities included moving grain, cutting silage, getting combines ready for harvest, tillage of wheat stubble, spraying ecofallow, preparing fields for wheat planting, marketing of yearlings.

NEVADA: Temperatures slightly above normal through most of the State, except for Elko where temperatures were slightly below normal for the majority of the week. Once again, Ely had the most precipitation for the week, with 0.18 in. Las Vegas received 0.04 in., Reno received only a trace of precipitation. Irrigation water supply remained adequate throughout most of the State. Alfalfa hay harvest continued, with 3rd cutting well along, 4th cutting beginning. Alfalfa seed harvest continued. Grain harvest was wrapping up. Onion harvest gained momentum. Potato harvest began; frost from the previous week had halted potato development. Main farm, ranch activities: Irrigating, harvesting alfalfa, digging potatoes, alfalfa seed harvest, onion harvest, working cattle.

NEW ENGLAND: Days suitable for fieldwork 5.7. Topsoil 12% very short, 39% short, 48% adequate, 1% surplus. Subsoil 34% very short, 34% short, 31% adequate, 1% surplus. Pasture feed 25% very poor, 40% poor, 26% fair, 9% good. Maine potatoes 10% harvested, 5% 1998, 5% avg.; condition excellent to good. Massachusetts potatoes 55% harvested, 55% 1998, 55% avg.; condition good to fair. Rhode Island potatoes 50% harvested, 35% 1998, 45% avg.; condition fair to poor. Oats in Maine 95% harvested, 75% 1998, 60% avg.; condition good to excellent. Barley in Maine 99% harvested, 90% 1998; condition good to excellent. Field corn 50% harvested, 10% 1998, 10% avg.; condition good to fair. Sweet corn 90% harvested, 85% 1998, 85% avg.; condition good to fair. Shade tobacco 95% harvested, 100% 1998, 100% avg., condition good. Broadleaf tobacco 99% harvested, 99% 1998, 99% avg.; condition good. Second cut hay 95% harvested, 85% 1998, 85% avg.; condition good to fair. Third cut hay 65% harvested, 45% 1998, 50% avg.; condition fair. Apples 25% harvested, 20% 1998, 20% avg.; size average to below average, condition good. Peaches 85% harvested, 95% 1998, 95% avg.; size average to below average, condition fair. Pears 20% harvested, 35% 1998, 40% avg.; size below average to average, condition fair. Cranberries size average, condition good to excellent. Highbush blueberries 99% harvested, 100% 1998, 99% avg.; size average, condition good to fair. First significant rainfall in most parts of the region since May 23. Major farm activities included: Harvesting tree fruits, potatoes, late-season vegetables; chopping silage corn; disking down harvested fields.

NEW JERSEY: Days suitable for fieldwork 5. Temperatures above normal. Extremes 45°; 89°. Rainfall 1.17 in. north, 1.05 in. central, 1.38 in. south. Recent rains arrived at the critical pod set stage, many fields were able to recover after months of extreme dryness. Heaviest 24-hour total 1.49 in. at Atlantic City Marina on the 7th to the 8th. Estimated soil moisture, percent of field capacity, this past week averaged 84% north, 68% central, 65% south. Four inch soil temperatures 71° north, 73° central, 74° south. Irrigation water supply is now adequate in most areas. Preparation of fields for small grains, hay, grass seeding occurred during the week. Field corn is in poor condition across the State. Cutting of corn silage is in full swing. Soybeans between poor to fair in most areas. Alfalfa, other hay fields is improving with the recent rains, delayed 2nd cutting might occur in some areas. Prospects for a 3rd cutting are improving if rains continue. Pasture condition continued to improve; however, supplemental feeding of cattle is still needed in most areas. Some farmers are turning their cattle out to hay fields. Harvest of summer vegetable crops is in full swing. Over 70% of the tomato, pepper, cucumber crops have already been harvested. Excess moisture is causing disease problems in the remaining tomato fields across southern areas. This, in addition to the skin cracking problems reported earlier, have affected the quality of the late-planted tomatoes. Some peppers fields are being affected by insect problems also due to the excess moisture. Potato harvest is winding down in southern areas. Smaller-than-usual sizes have been reported. Sweet potato harvest has already started in the southern counties. Harvesting of fall spinach, lettuce have also started. Disease, insect problems have been reported in fall cabbage fields planted recently. Harvest of peaches is near completion, while harvest of apples is picking up. Quality of both crops has been reported to be from excellent to good, especially in terms of flavor, texture, color. Some farmers have reported sizes smaller than usual for both fruits. However, the overall quality is still considered as good.

NEW MEXICO: Days suitable for fieldwork 6.8. Temperatures a little above normal most locations. Some measurable precipitation fell at about two-thirds of the reporting stations. Conditions continued favorable across most of the State for harvest of hay, vegetable crops. Fall planting of wheat was rapidly progressing. Planting new alfalfa fields has started. Chile, corn silage harvest remained active. Ranchers reported good weight gains, with no supplemental feeding. Pasture feed, range 1% very poor, 5% poor, 26% fair, 56% good, 10% excellent. Cattle, sheep conditions remained in mostly good to excellent condition.

NEW YORK: Days suitable for fieldwork 5.6. Soil moisture 29% very short, 52% short, 19% adequate. Pasture feed 27% very poor, 58% poor, 15% fair. Hay 11% poor, 45% fair, 44% good. Alfalfa 82% 3rd cutting, 72% 1998, 67% avg. Corn 11% poor, 11% fair, 67% good, 11% excellent. Silage corn 37% chopped, 19% 1998, 9% avg. Oat harvest complete. Early dry beans harvested. Potato digging continued. Onion harvest in full swing. Sweet corn, snap bean, cucumber, cabbage harvest continued. Apple harvest in full swing. Size, quality excellent. Jona Macs, Macintosh being picked. Finger Lakes grape harvest underway. Dairy farmers dealing with water supply problems. New, deeper wells being drilled.

NORTH CAROLINA: Days suitable for fieldwork 4.2, 5.7 last week. Soil moisture levels have nearly recovered, 8% very short, 9% short, 53% adequate, 30% surplus. Although the hurricane rains were widespread, the Mountain region received very little rainfall, still extremely dry. One week after Hurricane Dennis moved through the State, official estimate of \$37 million worth of damage has been associated with the tropical disturbance. Tobacco sustained estimated damages totaling nearly \$14 million, the most costly. However, corn, soybeans, cotton each had damage estimates of over \$6.5 million. Over 475,000 acres suffered losses, with soybean acres accounting for more than half of the total. Tobacco harvesting and marketing are still the major activities along with corn for grain and silage harvest. Other activities included sorghum, sweet potato harvest, weed control in all crops, baling hay, harvesting apples, peaches, vegetables, crop scouting, tending livestock.

NORTH DAKOTA: Days suitable for fieldwork 3. Topsoil 1% very short, 5% short, 75% adequate, 19% surplus. Subsoil 1% very short, 8% short, 74% adequate, 17% surplus. Poor weather conditions once again added to farm stress as rain, cool temperatures further delayed small grain harvest, fall tillage, slowed row crop development. Durum wheat 33% combined, 92% 1998, 71% avg. Canola 94% swathed, 100% 1998; 52% combined, 92% 1998. Corn for grain 11% ripe, 38% 1998, 22% avg.; silage 2% chopped, 19% 1998, 16% avg. Dry edible beans 68% mature, 99% 1998, 92% avg.; 20% cut, 80% 1998, 48% avg.; 4% combined, 64% 1998, 33% avg. Flaxseed 93% turning, 100% 1998, 97% avg.; 29% combined, 82% 1998, 44% avg. Potatoes 62% vines killed, 83% 1998, 75% avg.; 8% dug, 12% 1998, 19% avg. Soybeans 46% lower leaves yellowing, 88% 1998, 85% avg.; 21% mature, 45% 1998, 43% avg. Sugar beets 5% lifted, 4% 1998 2% avg. Sunflowers 35% bracts turned yellow, 82% 1998, 71% avg.; 7% bracts turned brown, 25% 1998, 26% avg. Dry beans, flax, soybeans declined in condition ratings. Emerged crop condition: durum 4% very poor, 12% poor, 44% fair, 36% good, 4% excellent; corn for grain 2% very poor, 7% poor, 26% fair, 56% good, 9% excellent; corn for silage 3% poor, 29% fair, 56% good, 12% excellent; dry edible beans 14% poor, 31% fair, 40% good, 15% excellent; flaxseed 5% poor, 29% fair, 54% good, 12% excellent; potatoes 7% poor, 11% fair, 42% good, 40% excellent; soybeans 4% very poor, 11% poor, 26% fair, 50% good, 9% excellent; sugar beets 1% very poor, 7% poor, 11% fair, 49% good, 32% excellent; sunflower 1% very poor, 6% poor, 27% fair, 53% good, 13% excellent. Stockwater 82% adequate, 18% surplus. Hay condition rated 8% above normal.

OHIO: Days suitable for fieldwork 6.6. Topsoil 39% very short, 39% short, 22% adequate. Soybeans 65% dropping leaves, 45% 1998, 27% avg.; 20% mature 20%, 9% 1998, 5% avg.; 4% harvested, 0% 1998, 0% avg. Alfalfa hay 95% 3rd cutting, 93% 1998, 81% avg.; 45% 4th cutting, 32% 1998. Other hay 70% 3rd cutting, 70% 1998, 54% avg. Corn 94% dented, 83% 1998, 68% avg.; 38% mature, 17% 1998, 9% avg.; 51% harvested for silage, 23% 1998, 14% avg.; 3% harvested for grain, 3% 1998, 1% avg. Fall, winter apples 23% harvested, 22% 1998. Grapes 25% harvested. Tobacco 100% topped, 96% 1998; 45% harvested, 58% 1998. Processing tomatoes 62% harvested, 57% 1998, 46% avg. Potatoes 60% harvested, 65% 1998, 44% avg. Pasture feed 20% very poor, 35% poor, 31% fair, 13% good, 1% excellent. Corn 9%

very poor, 17% poor, 33% fair, 36% good, 5% excellent. Soybeans 7% very poor, 16% poor, 34% fair, 38% good, 5% excellent. Activities include: Making hay; planting alfalfa, cover crops; mowing, seeding CRP; combining soybeans; chopping wheat stubble; harvesting grapes, apples; picking tomatoes, sweet corn; digging potatoes; chopping silage; plowing wheat ground; applying minerals; seeding filter strips; hauling grain; installing tile, waterways; leveling land; constructing, cleaning grain bins; hauling manure; pulling weeds in soybeans; scouting for insects, disease; preparing for harvest; selling livestock; spraying, topping, cutting tobacco; hauling water; inspecting Christmas trees; irrigating specialty crops; cutting firewood; and attending fairs. Reported weed pressures include yellow foxtail, pigweed, velvetleaf, lambs quarters, Canadian thistle, giant ragweed, Johnson grass, chickweed, mare's tail. Reported insects include spider mites on soybeans; leaf hoppers in potatoes; corn borers; stink bugs on pumpkins, squash; beetles in soybeans, corn. Reported diseases include sudden death syndrome, white mold in soybeans; gray leaf spot, aflatoxin, fungus on corn; brown stem rot; Stewart's wilt in corn; mildew on vegetables. Fruit, vegetable conditions are mostly good despite continuing dry conditions. In Richland County, local growers are harvesting fall tomatoes, sweet corn, apples. In Ashtabula County, the grape harvest is underway, pumpkins are ripening in Columbiana County. Wayne County reporter mentioned that vegetable quantity, quality is about average, apple size is slightly below average due to dry conditions. Athens County, apples are ripening for the fall harvest. Muskingum County reporter mentioned that fruit, vegetable yields are very low. Pasture grasses are reported in poor to very poor condition throughout most areas of the State. Rain has provided little relief for dry, dormant pastures. Regrowth is very slow. Wayne County reporter stressed the need for rain to generate pastures, grass for next year. Livestock are reported in good to poor condition. In the northern half of the State, livestock are in mostly good condition. In the southern half of the State, livestock are being fed hay. Livestock continue to show signs of heat stress.

OKLAHOMA: Days suitable for fieldwork 5.7. Subsoil 14% very short, 28% short, 58% adequate. Topsoil 17% very short, 38% short, 43% adequate, 2% surplus. Cool, wet weather produce excellent conditions for wheat seeding, aid row crop maturity. Wheat 75% seedbed prepared, 69% 1998, 77% avg. Oats 80% seedbed prepared, 55% 1998, 61% avg. Corn 2% very poor, 1% poor, 3% fair, 93% good, 1% excellent; 75% mature, 82% 1998, 60% avg.; 29% harvested, 60% 1998, 32% avg. Soybeans 1% very poor, 18% poor, 36% fair, 44% good, 1% excellent; 82% setting pods, 93% 1998, 94% avg.; 32% mature, 58% 1998, 38% avg.; 7% harvested, 18% 1998, 11% avg. Peanuts 16% mature, 39% 1998, 21% avg. Alfalfa hay 2% very poor, 7% poor, 43% fair, 46% good, 2% excellent; 67% 4th cutting, 34% 1998, 65% avg.; 11% 5th cutting, 2% 1998, 9% avg. Other hay 61% 2nd cutting, 20% 1998, 68% avg. Livestock 2% poor, 26% fair, 67% good, 5% excellent. Feeder steer prices stable to \$1 per cwt. higher.

OREGON: Days suitable for fieldwork 7. Topsoil 50% very short, 36% short, 14% adequate. Subsoil 53% very short, 30% short, 16% adequate, 1% surplus. Barley 73% harvested, 90% 1998, 84% avg. Spring wheat 95% harvested, 97% 1998. Winter wheat 99% harvested, 100% 1998, 100% avg. Range, pasture feed 5% very poor, 25% poor, 34% fair, 33% good, 3% excellent. Activities: Small grain harvest nearly completed. Klamath Basin, northeast still have grain to be harvested. Haying continued on east side. Mint harvest winding down. Fall field preparation underway on westside. Red clover, hay harvest continued. Willamette Valley reported field corn maturing fast. Irrigation, repotting of containers, rotation of containers main activity at nurseries. Greenhouses have fall mums, pansies for sale, working on fall, winter plant starts, plans. Willamette Valley harvest of processing green beans nearing completion. Onions being pulled, excellent drying weather. Sweet corn harvest ongoing, most potatoes dug. Half of potatoes Klamath Basin knocked down, potato harvest began. Northeast reported slow progress of fresh potato harvest, low prices, slow movement. Willamette Valley evergreen blackberry picking winding down, caneberries being pruned, trained. Peach, pear, apple harvest

continued. Hazelnuts ripening. Rogue River Valley pear harvest in full swing, apples also being picked. Gala picking in Milton-Freewater has ended, some early Red Delicious picking has started. Grapes need some more warm weather. South coast cranberry leaf tissue sampling winding down. Hood River Valley gala apple harvest began in lower valley, Bartlett pears being picked in upper valley. Livestock mostly good, some fair. Western pastures mostly reached summer dormancy except irrigated. Some cattle movement has started.

PENNSYLVANIA: Days suitable for fieldwork 4.3. Soil moisture 19% very short, 40% short, 32% adequate, 9% surplus. Corn 90% dough, 90% 1998, 90% avg.; 64% dent, 49% 1998, 60% avg.; 25% mature, 15% 1998, 16% avg. Ensilage corn 48% harvested, 21% 1998, 22% avg. Soybean 13% very poor, 22% poor, 48% fair, 16% good, 1% excellent. Wheat 5% planted, 5% 1998, 14% avg. Barley 22% planted, 17% 1998, 17% avg.; 15% emerged, 9% 1998, 6% avg. Tobacco 60% harvest, 84% 1998, 79% avg. Potato 32% harvest, 32% 1998, 37% avg. Alfalfa 81% 3rd cutting, 75% 1998, 72% avg.; 40% 4th cutting, 40% 1998, 33% avg. Timothy clover 88% 2nd cutting, 87% 1998, 87% avg. Quality of hay 14% very poor, 16% poor, 24% fair, 35% good, 11% excellent. Apple 32% harvest, 33% 1998, 31% avg.; 3% poor, 22% fair, 69% good, 6% excellent. Peach 94% harvest, 91% 1998, 88% avg.; 1% poor, 15% fair, 67% good, 17% excellent. Grape 5% harvest, 9% 1998, 21% avg. Fall 29% plowing, 28% 1998, 34% avg. Activities include: Harvesting fruits, vegetables, potatoes, barley, rye, oats, corn silage, tobacco; planting barley and wheat; machinery maintenance; filling silos; fixing fences; hauling manure; pumping and spreading manure; spreading lime; caring for livestock; cutting hay; plowing for the fall.

SOUTH CAROLINA: Days suitable for fieldwork 6.2. Soil moisture 21% very short, 47% short, 31% adequate, 1% surplus. Apples 45% harvested, 37% 1998, 43% avg.; 30% poor, 56% fair, 14% good. Corn 100% matured, 100% 1998, 100% avg.; 88% harvested, 84% 1998, 72% avg.; 7% very poor, 24% poor, 41% fair, 23% good, 5% excellent. Livestock 1% very poor, 11% poor, 40% fair, 38% good, 10% excellent. Grapes 33% poor, 53% fair, 14% good. Peaches 100% harvested, 100% 1998, 100% avg. Pasture feed 17% very poor, 33% poor, 41% fair, 9% good. Sorghum 99% headed, 100% 1998; 92% turned color, 92% 1998; 65% matured, 62% 1998; 40% harvested, 39% 1998, 35% avg.; 15% very poor, 38% poor, 41% fair, 6% good. Sweet potatoes 11% harvested, 14% 1998, 12% avg.; 7% poor, 34% fair, 59% good. Tobacco 93% harvested, 93% 1998, 94% avg.; 61% stalks destroyed, 52% 1998, 57% avg. Winter grazings 6% planted, 16% 1998, 14% avg. Winter wheat 1% planted.

SOUTH DAKOTA: Days suitable for fieldwork 4.0. Topsoil 1% very short, 11% short, 68% adequate, 20% surplus. Subsoil 12% short, 73% adequate, 15% surplus. Alfalfa 1% very poor, 2% poor, 20% fair, 58% good, 19% excellent; 95% 2nd cutting; 63% 3rd cutting, 68% 1998. Other hay 92% harvested. Sorghum 99% headed, 100% 1998, 99% avg.; 0% harvested, 6% 1998, 1% avg., 12% harvested for silage, 21% 1998, 10% avg. Soybeans 4% mature, 17% 1998, 14% avg.; 0% harvested, 1% 1998, 0% avg. Sunflower 3% poor, 22% fair, 58% good, 17% excellent; 77% ray flowers dry, 91% 1998, 91% avg.; 58% bracts yellow, 73% 1998, 69% avg.; 5% mature, 20% 1998, 16% avg. Flaxseed 1% very poor, 2% poor, 23% fair, 56% good, 18% excellent; 99% ripe, 100% 1998, 97% avg.; 79% harvested, 96% 1998, 83% avg. Corn 34% harvested for silage, 48% 1998, 19% avg. Winter rye 15% seeded, 41% 1998, 32% avg.; 3% emerged, 29% 1998, 16% avg. Winter wheat 2% emerged, 10% 1998, 9% avg. Range, pasture feed 1% very poor, 6% poor, 21% fair, 54% good, 18% excellent. Stock water 3% short, 82% adequate, 15% surplus. Cattle 7% fair, 66% good, 27% excellent. Sheep 4% poor, 6% fair, 59% good, 31% excellent.

TENNESSEE: Days suitable for fieldwork 7.0. Topsoil 75% very short, 21% short, 4% adequate. Subsoil 69% very short, 25% short, 6% adequate. Corn 97% mature, 83% 1998, 77% avg.; 76% harvested for grain, 47% 1998, 28% avg.; 89% silage harvested, 83% 1998, 76%

avg. Burley 80% harvested, 58% 1998, 64% avg. Dark air cured 91% harvested, 68% 1998, 74% avg. Dark fire cured 81% harvested, 68% 1998, 71% avg. Pasture feed 45% very poor, 38% poor, 18% fair, 8% good. Hay stocks 16% very short, 28% short, 50% adequate, 6% surplus. Drought conditions continued last week with only a few scattered showers on 8th, 9th. Pastures, livestock water supplies have also been hurt tremendously by the heat, dry conditions. Pastures are mostly poor to very poor, while water shortages are becoming more numerous. Hay continues to be fed, cattle marketings remain heavier than normal. Hay supplies have been depleted more rapidly than normal with only 56% of the counties reporting adequate or better levels. On a brighter note, corn harvest continued at a record pace last week, 76% of the crop had been harvested. This progression is a full three weeks ahead of the average.

TEXAS: Temperatures moderated during the week as widely scattered showers fell in the Plains, North, East Texas, along the Upper Coast. Numerous showers from a tropical storm fell across South Texas. Land preparation remained slow in many locations due to continued dry conditions. Mostly open weather allowed harvest activities to progress. Grain storage problems continued in some locations. Livestock conditions remained fair to good, as supplemental feeding continued.

Crops: Small Grains: Seeding of wheat, oats continued, however some wheat fields were being dry planted. Oat seeding continued where moisture was available. Irrigation began where possible to hasten crop emergence. Emerged 4%, 5% 1998, 4% avg. Oats 7% planted, 11% 1998, 7% avg. Corn harvest continued to expand on the High Plains. Silage harvest was completed. Harvest neared completion in the Blacklands, Central Texas, Upper Coast. Markets continue to be weak. Corn 89% of normal, 57% 1998. Cotton generally good growth, development continued in the Plains where moisture was available. Dry land fields need more rain as boll drop was still a problem. Fields were maturing rapidly. Boll weevil eradication spraying was in progress in some areas. Harvest continued in the Coastal Bend, Blacklands, Central Texas with good yields reported. Harvest began in the Plains. Cotton 63% of normal, 47% 1998. Peanuts harvest continued in central, south Texas began in the Plains. Fields continued to look good in the Plains, north central Texas. Irrigation was still active but beginning to wind down as the crop matured. Dryland fields need more rain, however some spotted showers were reported. Some spraying for diseases was still occurring. Peanut 76% of normal, 57% 1998. Pegging 100%, 100% 1998. Rice harvest neared completion along the Upper Coast with very good yields, excellent quality reported. Irrigation of the second crop was reported. Sorghum harvest continued to expand on the Plains under continued warm dry conditions as the crop matured. Harvest was mostly completed in other areas. Storage space continued to be a problem. Sorghum 69% of normal, 46% 1998. Headed 97%, 100% 1998, 99% avg. Soybeans progress, development was good in the High Plains as spotted showers occurred. Irrigation remained active but declined as fields neared maturity. Harvest was mostly completed in the Blacklands, Upper Coast. **Commercial Vegetables:** Rio Grande Valley, land preparation was limited as drying conditions were still needed. San Antonio-Winter Garden, some planting of fall vegetables continued. Some areas received scattered showers. East Texas, sweet potato, watermelon harvest continued but slowed. Harvest of vegetables, planting of fall crops remained slow due to continued dry conditions in most locations. High Plains, vegetable harvest was mostly completed. Trans Pecos, some vegetables remained to be harvested, most was complete. Some peaches continued to be available in the High Plains area. Pecans continued to drop nuts as showers have not been of much help. Insects were still a problem in most areas.

Range and Livestock: Production of hay continued to decline, however supplies remain good. Supplemental feeding continued as pastures declined. Grass fires continued to be a problem in Central Texas, the Edwards Plateau, High Plains. Poultry operations benefitted from the slightly cooler temperatures.

UTAH: Days suitable for fieldwork 6.6. Topsoil 12% very short, 21% short, 65% adequate, 2% surplus. Subsoil 12% very short, 22% short, 64% adequate, 2% surplus. Pasture feed, range 1% very poor, 9%

poor, 31% fair, 53% good, 6% excellent. Corn 75% dough stage, 73% 1998, 56% avg.; 17% dent stage, 30% 1998, 23% avg. Corn silage 11% harvested, 8% 1998, 7% avg. Alfalfa hay 79% 3rd cutting, 65% 1998, 62% avg. Alfalfa seed 20% harvested, 32% 1998, 25% avg. Oats 88% harvested for grain, 86% 1998, 84% avg. Peaches 75% picked, 48% 1998, 77% avg. Pears 62% picked, 46% 1998, 68% avg. Apples 14% picked, 3% 1998, 15% avg. Potatoes 10% harvested, 4% 1998, 11% avg. Onions 22% harvested, 24% 1998, 28% avg. Cattle 12% moved from summer range, 9% 1998, 17% avg. Sheep 11% moved from summer range, 4% 1998, 11% avg. Irrigation water supply 7% very short, 14% short, 72% adequate, 7% surplus. Stock water 3% very short, 18% short, 77% adequate, 2% surplus. Major activities included: Harvesting hay, fruit, vegetables, preparing land for fall planting, irrigating.

VIRGINIA: Days suitable for fieldwork 4.0. Topsoil 10% very short, 19% short, 53% adequate, 18% surplus. Subsoil 19% very short, 35% short, 36% adequate, 10% surplus. Topsoil, subsoil moisture levels greatly improved this past week as a result of Tropical Storm Dennis. Flash flooding was a problem in some localities as weather conditions changed from one extreme to another. Pasture feed 7% very poor, 29% poor, 37% fair, 25% good, 2% excellent. Livestock 9% poor, 41% fair, 42% good, 8% excellent. Hay, other 9% very poor, 26% poor, 44% fair, 21% good. Hay, alfalfa 3% very poor, 10% poor, 47% fair, 30% good, 10% excellent. Corn for grain 96% dough, 96% 1998, 95% avg.; 82% dented, 78% 1998, 78% avg.; 60% mature, 62% 1998, 59% avg.; 10% harvested, 33% 1998, 21% avg.; 13% very poor, 22% poor, 35% fair, 22% good, 8% excellent. Corn for silage 45% harvested, 69% 1998, 45% avg. Soybeans 97% blooming, 99% 1998, 98% avg.; 87% setting pods, 92% 1998, 87% avg.; 5% dropping leaves, 10% 1998, 4% avg.; 6% very poor, 15% poor, 39% fair, 31% good, 9% excellent. Tobacco, flue cured 60% harvested, 47% 1998, 57% avg.; 5% poor, 30% fair, 45% good, 20% excellent. Tobacco, burley 69% harvested, 59% 1998, 50% avg.; 4% very poor, 6% poor, 20% fair, 44% good, 26% excellent. Tobacco, dark fire cured 80% harvested, 82% 1998, 79% avg. Tobacco, sun cured 75% harvested, 85% 1998, 73% avg. Peanuts 0% dug, 1% 1998, 2% avg.; 0% combined, 0% 1998, 0% avg.; 11% fair, 55% good, 34% excellent. Cotton 40% bolls opening, 84% 1998, 53% avg.; 8% fair, 43% good, 49% excellent. Apples, all 3% very poor, 8% poor, 31% fair, 48% good, 10% excellent. Apples, fall 18% harvested, 12% 1998, 28% avg. Apples, winter 2% harvested, 0% 1998, 0% avg. Peaches 95% harvested, 98% 1998, 98% avg. Pastures continued to green up with adequate re-growth. The condition of hay acreage improved as well. Corn acreage is progressing on a normal schedule. Harvest of corn acres for grain, silage was brought to a halt in many areas due to wet field conditions. Soybean crop has caught up to a normal schedule with respect to plant development. Some plants were stunted earlier in the growing season, have not been able to recover. These acres will likely be cut for hay. Tobacco producers have been able to harvest this year's crop on schedule or even slightly ahead thus far. Progress slowed as a result of recent rains. Peanut acres remain in mostly good or excellent condition however disease pressure increased due to wet fields. Condition of cotton acreage remains virtually unchanged from the previous week. Harvest of fall, winter apples commenced across the fruit growing areas of the Commonwealth. Some splitting of the fruits was reported after last weeks rain. Peach harvest is nearly complete. Small grain producers are preparing fields for sowing.

WASHINGTON: Days suitable for fieldwork 7.0. Topsoil 20% very short, 48% short, 32% adequate. Subsoil 15% very short, 58% short, 27% adequate. Moisture was still too high in some fields to harvest. Winter wheat 100% harvested, 100% 1998, 99% avg.; 45% planted, 52% 1998, 42% avg. Due to the warm weather, winter wheat harvest was completed. Growers had almost one-half of the 2000 crop planted, it was starting to emerge. Some areas were being re-seeded due to rains that crusted the soil. Spring wheat 95% harvested, 100% 1998, 98% avg. Barley 96% harvested, 100% 1998, 98% avg. Potatoes 32% harvested, 33% 1998, 28% avg.; 9% fair, 51% good, 40% excellent. Hay, other roughage 2% short, 77% adequate, 21% surplus. Range, pasture feed 20% very poor, 36% poor, 26% fair, 14% good, 4%

excellent. Harvest for barley, spring wheat progressed throughout last week. Winter canola was being seeded, starting to emerge. Third cutting of alfalfa was almost completed, corn silage harvest continued. Sweet corn harvest continued while apples and peaches were still being harvested. Some apple producers were reporting scab in trees that were not sprayed in western areas. Grape producers were preparing for the late harvest to start, blueberries were still being harvested.

WEST VIRGINIA: Days suitable for fieldwork 6.0. Topsoil 29% very short, 53% short, 18% adequate. Producers made good harvest progress as cooler temperatures, dry weather conditions continued over most of the State. However, drought conditions continue to affect water supplies. Hay 30% very poor, 38% poor, 30% fair, 2% good; Hay 2nd cut 79%, 91% 1998, 88% avg.; 3rd cut 34%, 49% 1998, 52% avg. Corn 13% very poor, 49% poor, 34% fair, 4% good; doughing 91%, 89% 1998, 90% avg.; 60% dent, 56% 1998; 45% mature, 29% 1998, 33% avg. Oats 99% harvested, 100% 1998, 98% avg. Soybeans 4% very poor, 24% poor, 48% fair, 24% good; 96% setting pods, 90% 1998, 98% avg.; 31% dropping leaves, 53% 1998, 31% avg. Tobacco 12% very poor, 14% poor, 31% fair, 43% good; 93% topped, 84% 1998, 96% avg.; 20% harvested, 33% 1998, 57% avg. Apples 8% very poor, 24% poor, 52% fair, 16% good; 10% harvest, 45% 1998. Peaches 20% very poor, 30% poor, 40% fair, 10% good. Cattle 3% very poor, 14% poor, 49% fair, 32% good, 2% excellent. Sheep 1% very poor, 15% poor, 40% fair, 40% good, 4% excellent.

WISCONSIN: Days suitable for fieldwork 6.3. Soil moisture 12% very short, 29% short, 58% adequate, 1% surplus. Corn silage harvest was one of the main activities last week for farmers. Dry conditions continued to push maturity ahead of normal, dried the crop down rapidly. It was reported that corn may be drying down too fast in southern areas for farmers to have enough time to harvest at an optimal moisture content. Silage harvest was one week ahead of the five-year-average, slightly behind last year's pace. Some corn for grain fields in Dane County were testing 20 to 25% moisture. Dry conditions continued last week for most of the State; pasture growth has slowed. Third, 4th crop hay were harvested last week, quality was good. Moisture is now needed for good winter stands. Amount of 4th cutting hay could be diminished by the lack of rainfall. Hay 83% 3rd crop harvested, 91% 1998, 69% avg.; 20% 4th crop harvested, 32% 1998. Soybeans were rapidly turning, shedding leaves with the dry weather. Harvest of soybeans could start as early as next week. Soybean 75% leaves turned, 87% 1998, 52% avg.; 25% dropping leaves, 33% 1998, 14% avg.; 2% poor, 12% fair, 54% good, 32% excellent. Apple crop was reported as maturing two to three weeks ahead of normal. The apples are of good size and quality, which local deer have discovered. Potato harvest was in full swing in Oneida County last week, tobacco harvest was nearing 50% completion in Rock County. Some fall tillage was also completed last week. Pasture feed 1% very poor, 5% poor, 33% fair, 50% good, 11% excellent.

WYOMING: Days suitable for fieldwork 6.5. Topsoil 1% very short, 27% short, 71% adequate, 1% surplus. Subsoil 2% very short, 44% short, 54% adequate. Temperatures were cooler than normal with mainly light precipitation over the State. Spring wheat 88% harvested, 92% 1998, 90% avg. Barley 88% harvested, 87% 1998, 91% avg. Oats 78% harvested, 87% 1998, 84% avg. Corn 94% dough, 96% 1998, 97% avg.; 67% dented, 79% 1998, 71% avg.; 13% mature, 17% 1998, 32% avg. Corn 35% harvested for silage, 23% 1998, 32% avg. Dry beans 72% windrowed, 68% 1998, 76% avg.; 25% combined, 28% 1998, 41% avg. Alfalfa 92% 2nd cutting, 89% 1998, 92% avg.; 19% 3rd cutting, 21% 1998, 32% avg. Winter wheat 57% planted, 60% 1998, 67% avg.; 33% emerged, 23% 1998, 28% avg. Range, pasture feed 4% poor, 33% fair, 54% good, 9% excellent. Cattle moved from summer pastures 15%, 19% 1998, 15% avg. Sheep moved from summer pastures 11%, 17% 1998, 15% avg. Stock water 3% short, 97% adequate.

International Weather and Crop Summary

September 5 - 11, 1999

HIGHLIGHTS

EUROPE: Dry weather favored uninterrupted harvesting in the North, while scattered showers briefly delayed harvesting in the South.

FSU-WESTERN: Unseasonably warm, dry weather favored fieldwork for summer crop harvesting and winter grain planting in Russia, while light to moderate showers hampered fieldwork in southern Ukraine.

FSU-NEW LANDS: Unseasonably cool, showery weather delayed spring grain harvesting in Russia, while several days of dryness favored rapid spring grain harvesting in Kazakhstan.

EASTERN ASIA: In the North China Plain, rain increased topsoil moisture for winter wheat planting. Drier weather aided maturing summer crops across the Yangtze Valley and southern China.

SOUTHEAST ASIA: Widespread showers maintained adequate moisture supplies for rice across Thailand, Vietnam, and the Philippines.

SOUTH ASIA: Drought continued to stress oilseeds, cotton, and coarse grains in western India.

AUSTRALIA: Mostly dry, seasonably warm weather aided winter crop development.

CANADA: Showers hampered spring crop harvesting in Manitoba as the western Prairies incurred localized freeze damage.

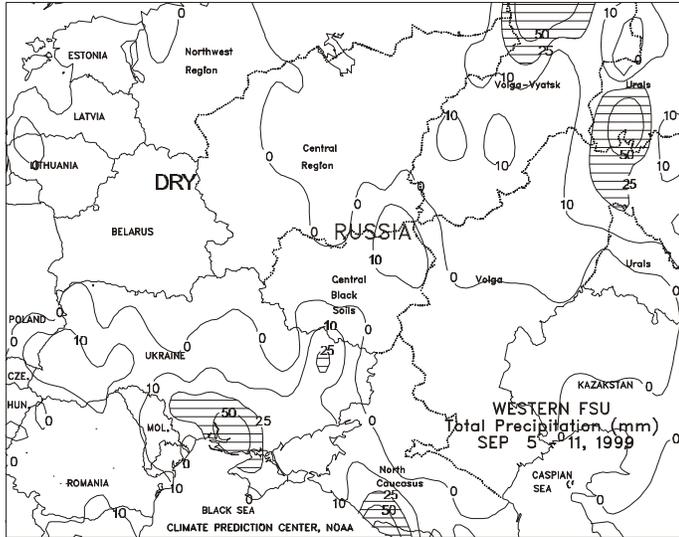
MEXICO: A tropical depression helped to ease long-term moisture deficits in northeastern Mexico.

SOUTH AMERICA: Rain boosted soil moisture for vegetative winter wheat in central Argentina and reproductive wheat, coffee and citrus flowering, and upcoming summer crop planting in southern Brazil.



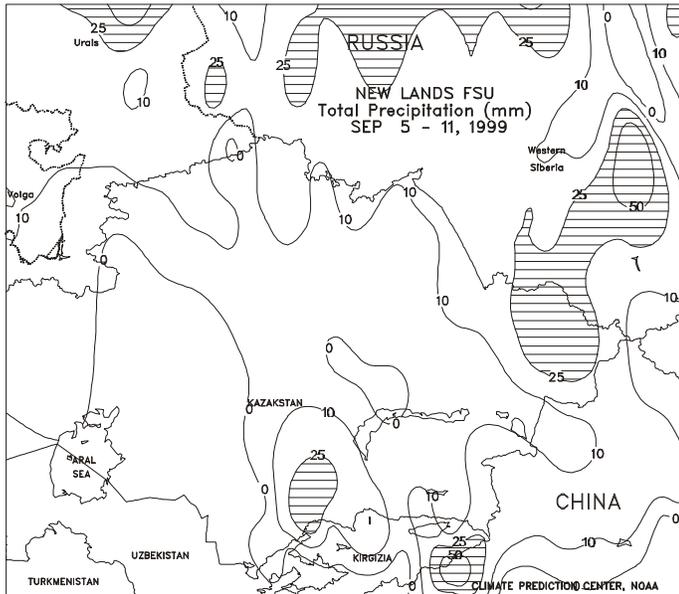
EUROPE

Dry weather in southern England, northwest France, the Benelux countries, Germany, and Poland promoted early summer crop harvesting and early winter grain planting. Early winter grain development was likely slow, however, because of the lack of rain. Farther north, dry weather in much of Scandinavia helped spring grain harvesting nearing completion. In eastern Europe, dry weather from the former Czechoslovakia southeastward through Romania favored summer crop harvesting. Scattered showers (10-20 mm) in the northern Balkans and Bulgaria slowed harvesting but increased topsoil moisture for winter crop planting. Farther west, showers (4-33 mm) briefly interrupted sunflower harvesting in central and southern Italy and corn harvesting in the northwest. Scattered light to moderate showers (15-50 mm) also delayed summer crop harvesting across much of France and eastern Spain. Average temperatures across Europe were generally 2 to 5 degrees C above normal, except in southeastern Europe where temperatures were near normal.



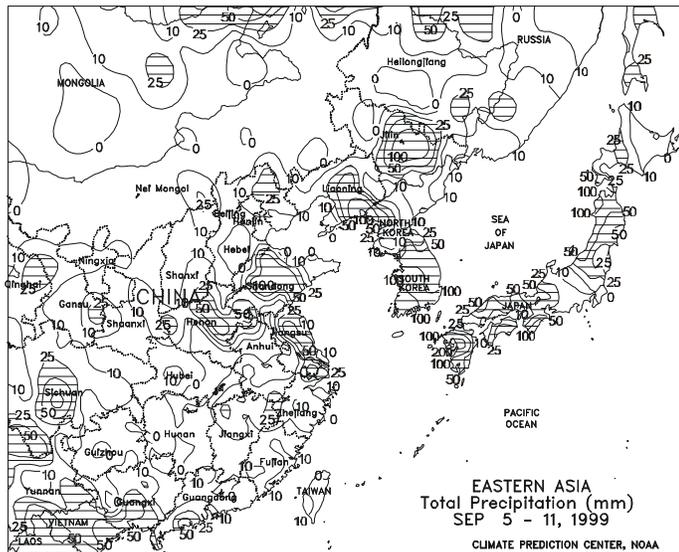
FSU-WESTERN

In Russia, dry weather continued to improve conditions for small grain harvesting in northern areas (Central Region, Volga Vyatsk, and upper Volga Valley). Furthermore, the combination of adequate soil moisture and above-normal temperatures favored rapid winter grain emergence and crop establishment. Farther south, unseasonably warm, dry weather prevailed from the central Black Soils Region southward through the lower Volga Valley into the North Caucasus, helping early summer crop harvesting and winter grain planting. Weekly temperatures averaged 2 to 5 degrees C above normal in Russia, promoting rapid maturity of summer crops. In Ukraine, dry weather in the north helped fieldwork for winter grain planting. Late-week showers (10-58 mm) in southern areas interrupted fieldwork for sunflower harvesting, but boosted topsoil moisture for winter wheat planting. Elsewhere, unseasonably warm (weekly temperatures averaged 2 to 5 degrees C above normal), dry weather prevailed in the Baltics and Belarus, helping fieldwork for summer crop harvesting and winter grain planting.



FSU-NEWLANDS

In Russia, unseasonably cool, showery weather prevailed from the Urals eastward through Western Siberia and Eastern Siberia, slowing spring grain maturation and harvesting. The greatest amounts of rain (15-45 mm, with local amounts in excess of 50 mm) fell in the Altay Kray region of Western Siberia. Lesser amounts of rain (10-33 mm) were observed in remaining areas. Weekly temperatures averaged 2 to 4 degrees C below normal in Russia, slowing evaporation from wet fields. Furthermore, sub-freezing temperatures (-1 to -4 degrees C) were reported at several locations in Western Siberia at week's end. Overall, the freeze was typical for this time of year and had little, if any, impact on mature spring grains. In Russia, reports as of September 6 indicated that the harvest of small grains and pulses, excluding corn, was about 61 percent completed, compared with about 55 percent last year. In Kazakstan, several days of dry weather allowed spring grain harvesting to rapidly progress. In cotton-producing areas of Central Asia, mild, dry weather continued to favor boll maturation and early cotton harvesting.

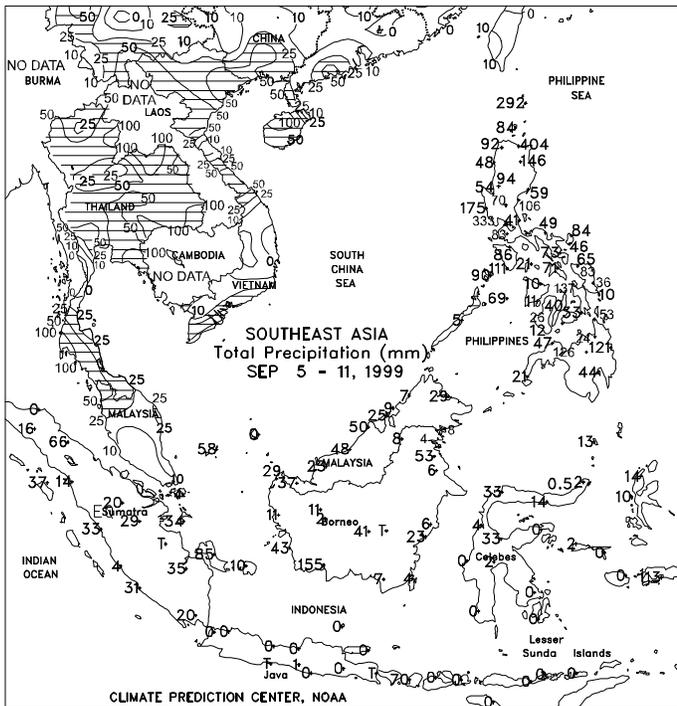


EASTERN ASIA

Midweek showers (25-80 mm) fell across most of the North China Plain, boosting topsoil moisture for upcoming winter wheat planting. The moisture, however, slowed early summer crop harvesting. In Manchuria, mostly dry weather favored maturing corn and soybeans. Isolated heavy showers (100-150 mm) caused local flooding in central Jilin. Across the Yangtze Valley and southern China, mostly dry weather (less than 20 mm) aided summer crop maturation and harvesting. Temperatures averaged 2 to 6 degrees C above normal across most of China, aiding summer crop maturation. Moderate to heavy rain (25-90 mm) fell across eastern North Korea, too late to reverse the impact of below-normal summer rainfall on summer crops. Moderate to heavy rain (25-80 mm) slowed early rice harvesting in South Korea and Japan. Temperatures averaged 2 to 4 degrees C above normal across Japan and the Korean Peninsula, favoring maturing summer crops.

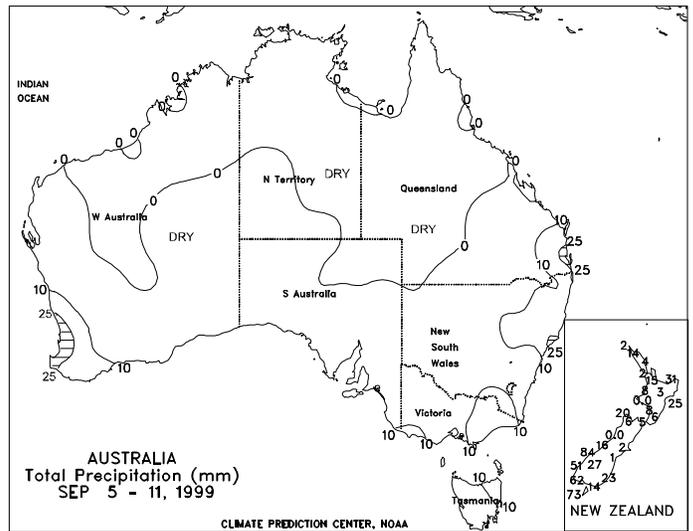
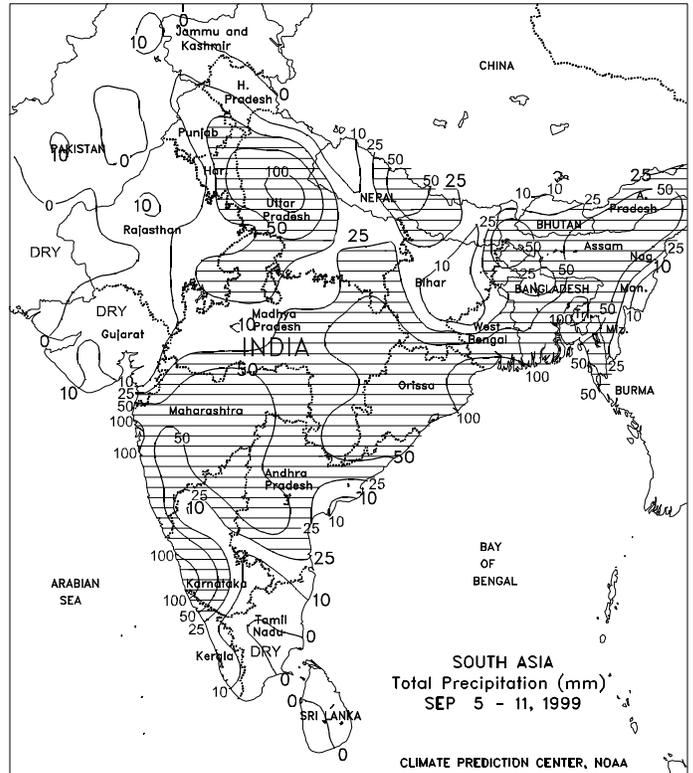
SOUTH ASIA

Drought continued to plague a broad section of western India. In Gujarat, the recent intensification of hot, mostly dry weather has ensured significant declines in the yield potential of summer-grown oilseeds, coarse grains, and cotton. Scattered showers (10-50 mm or more) helped to stabilize crops across the southern interior, but long-term moisture deficits necessitate an increase in seasonal rainfall to build irrigation levels for secondary cropping. In north-central India, rain (25-50 mm or more) boosted moisture reserves for immature rice but may have harmed open-boll cotton on the eastern fringe of the growing area. Elsewhere in the northwest, a continuation of unseasonable warmth and dryness increased crop irrigation demands. Showers (20-60 mm) maintained generally favorable moisture levels in primary rice areas of central and eastern India and Bangladesh. The southwest monsoon typically withdraws from Pakistan and northwestern India by mid-September. Most summer oilseeds and coarse grains are past the point of benefiting from late-season rains. However, if monsoon showers intensify over central and southern India during September and October, as has happened in recent years, local cotton prospects can still improve.



SOUTHEAST ASIA

Widespread showers (25-80 mm, with isolated amounts greater than 150 mm) covered most of Thailand and Vietnam, maintaining adequate moisture supplies for rice. Late in the week, a tropical depression, with sustained winds less than 40 mph, moved across northern Luzon, Philippines, producing heavy showers (100-400 mm) and flooding in the Cagayan Valley. This region is an important rice-producing area. The depression later intensified into Tropical Storm York in the South China Sea. Seasonal showers (10-140 mm) maintained moisture supplies for oil palm across peninsular Malaysia. Sunny, dry weather prevailed across Java, Indonesia, aiding second-crop rice development.

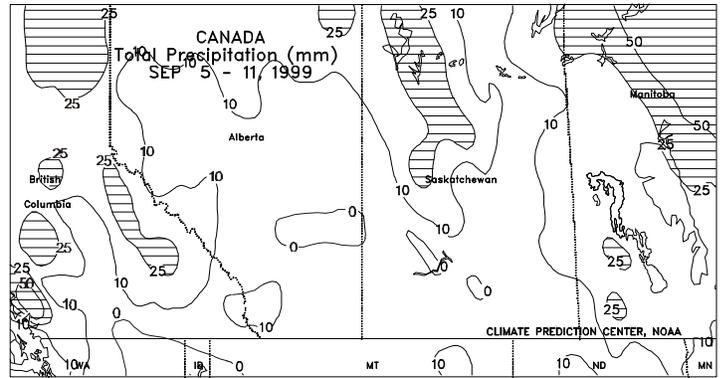


AUSTRALIA

Mostly dry weather, accompanied by seasonal warming, dominated the region. In western and southern crop districts, the mild spring pattern spurred vegetative development of winter grains and oilseeds. Scattered showers (5-15 mm) at week's end boosted topsoil moisture reserves in Western Australia's winter grain belt. Temperatures averaged near normal and remained above freezing, with just a few locations reporting minima of 2 degrees C or lower. In southern Queensland and northern New South Wales, light rain (5-15 mm) aided vegetative winter wheat. In east-central Queensland, early winter grain and oilseed harvesting continued to progress. Drier weather along the Queensland coast brought some relief to unharvested sugarcane. Across eastern Australia, field preparations have likely begun for the upcoming planting of cotton, sorghum, and other summer crops, which typically lasts through December. Additional moisture is needed throughout east-central Australia to ensure proper establishment of summer grains, oilseeds, and rainfed cotton, especially in the more northerly crop areas in Queensland. In New Zealand, unseasonable dryness continued across the main crop and pasture areas.

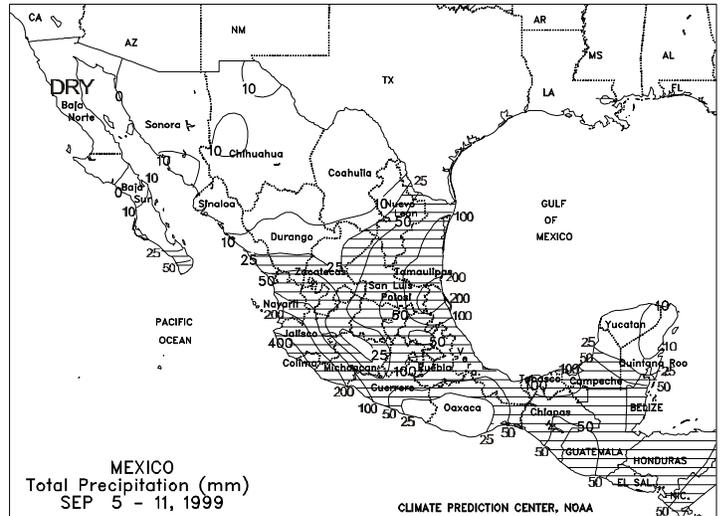
CANADA

For the second week, cold weather descended upon the western Prairies, causing localized frost and possible freeze damage to immature spring grains and oilseeds. However, a widespread, killing freeze has yet to develop over central Alberta and northwestern Saskatchewan, the areas reportedly at the greatest risk of potential damage. Dry weather across Alberta and Saskatchewan helped maturation and favored spring crops and swathed hay. In Manitoba, showers (10-25 mm or more) brought fieldwork to a standstill and raised concerns for the quality of unharvested grains. In eastern Canada, warm, showery weather (temperatures averaging 3-6 degrees C above normal, with rainfall totaling 5-50 mm or more) favored development of immature corn and soybeans.



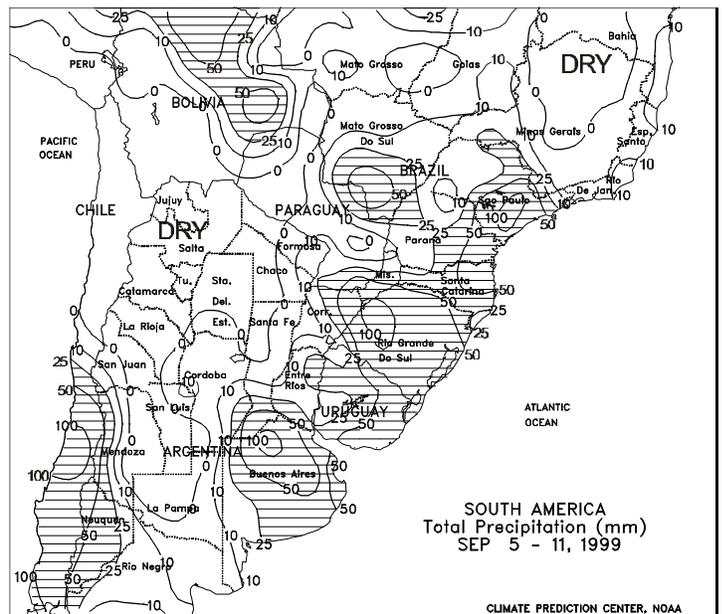
MEXICO

A weak tropical depression (sustained winds less than 40 mph) made landfall in northeastern Mexico on September 6, producing widespread showers (50-150 mm, with isolated amounts greater than 200 mm). This moisture helped to ease long-term moisture deficits accumulated during the past several years. Seasonal showers (10-70 mm, with isolated amounts greater than 100 mm) continued to favor corn across the Southern Plateau. Seasonably light showers (5-25 mm) prevailed across the Yucatan Peninsula, where adequate moisture supplies exist for corn. Monsoonal activity decreased in the northwest, producing only light showers (5-15 mm). Typically in this region, the monsoon starts in early July and ends in late September. Temperatures averaged across the Southern Plateau and 1 to 3 degrees across northern Mexico.



SOUTH AMERICA

Extensive showers (20-50 mm, with isolated amounts greater than 100 mm) covered central Argentina, greatly boosting soil moisture for germinating and vegetative winter wheat. The rain possibly caused some isolated flooding, but also improved soil moisture for upcoming summer crop planting. Showers (25-80 mm) spread across southern Brazil, boosting soil moisture for reproductive wheat, coffee and citrus flowering, and upcoming soybean planting. This was the first significant rain of the season across the coffee and citrus belt. Temperatures averaged near normal in central Argentina and 3 to 6 degrees C above normal in southern Brazil.



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Pasture and Range Crop Condition by Percent											
Week Ending September 12, 1999											
	VP	P	F	G	EX		VP	P	F	G	EX
AL	27	31	25	16	1	NH	26	37	37	0	0
AZ	0	3	8	42	47	NJ	0	25	50	25	0
AR	19	40	31	10	0	NM	1	5	26	56	12
CA	10	15	55	20	0	NY	27	58	15	0	0
CO	2	4	19	64	11	NC	9	14	36	36	5
CT	27	24	36	13	0	ND	1	3	27	58	11
DE	3	32	41	24	0	OH	20	35	31	13	1
FL	0	5	30	60	5	OK	5	15	41	38	1
GA	25	38	27	10	0	OR	5	25	34	33	3
ID	1	9	37	46	7	PA	27	28	15	29	1
IL	24	26	31	19	0	RI	0	45	50	5	0
IN	45	33	17	5	0	SC	17	33	41	9	0
IA	9	17	31	33	10	SD	1	6	21	54	18
KS	3	12	38	45	2	TN	45	38	14	3	0
KY	57	31	9	3	0	TX	15	31	37	15	2
LA	6	22	44	25	3	UT	1	9	31	53	6
ME	23	26	25	26	0	VT	27	60	11	2	0
MD	5	19	42	33	1	VA	7	29	37	25	2
MA	8	23	62	7	0	WA	20	36	26	14	4
MI	13	28	26	27	6	WV	35	37	23	5	0
MN	5	11	27	47	10	WI	1	5	33	50	11
MS	15	22	36	23	4	WY	0	4	33	54	9
MO	49	27	17	7	0	48 Sts	14	21	30	30	5
MT	6	16	37	31	10						
NE	4	13	25	53	5	Prev Wk	14	20	30	31	5
NV	8	5	29	57	1	Prev Yr	10	20	32	33	5

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