

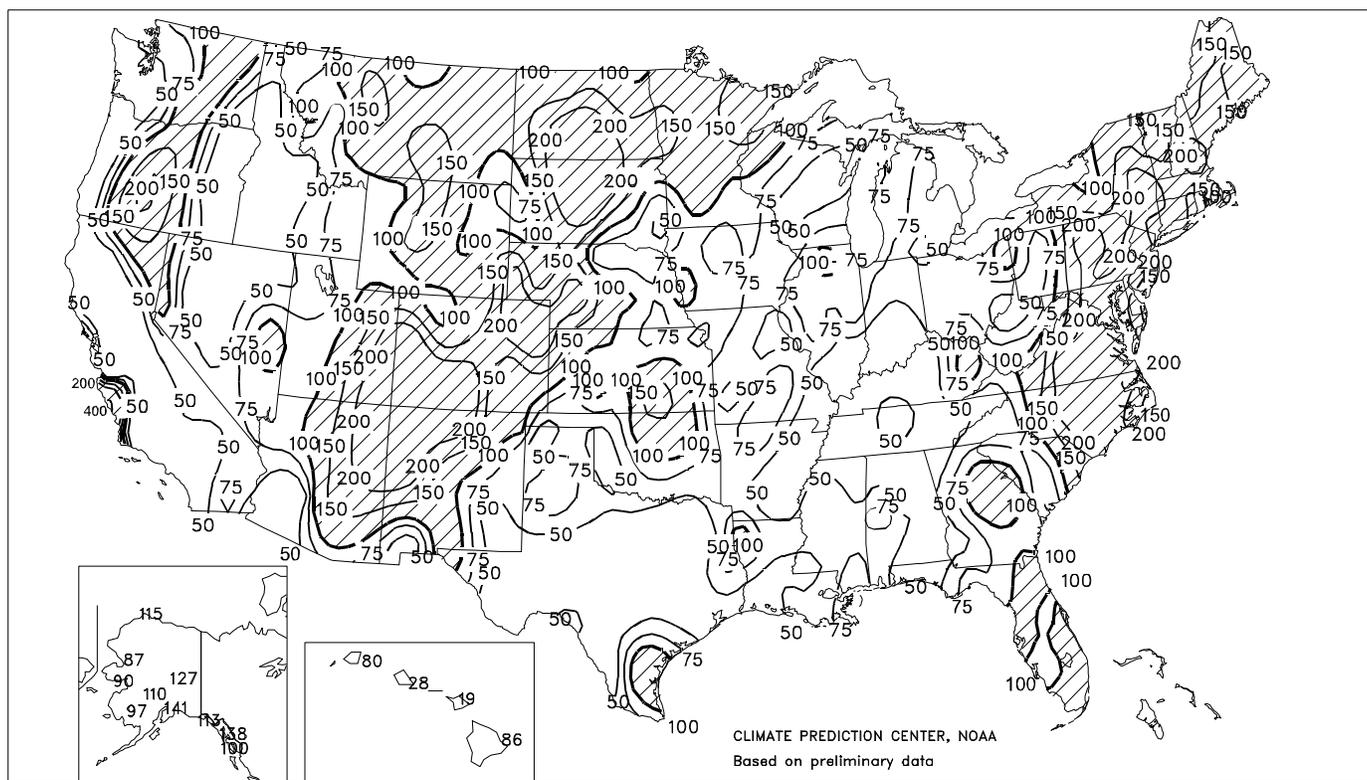
WEEKLY WEATHER AND CROP BULLETIN

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

Percent of Normal Precipitation

AUG 1-SEP 30 1999



HIGHLIGHTS

October 3 - 9, 1999

Significant rain fell from the **central Gulf Coast** northward to the **Ohio Valley**, easing long-term drought and improving prospects for pastures and fall-sown crops. However, the rain adversely affected unharvested cotton in the **lower Mississippi Valley**. Weekly rainfall exceeded 4 inches at a few locations in the **lower Ohio Valley, southern Appalachians, and southern portions of Louisiana, Mississippi, and Alabama**. Meanwhile, mostly dry weather aided flood-recovery efforts in **eastern North Carolina** and **southeastern Virginia**, although wet soils continued to slow fieldwork. From the **western Corn Belt** and the **Plains** westward, mild, mostly dry weather favored

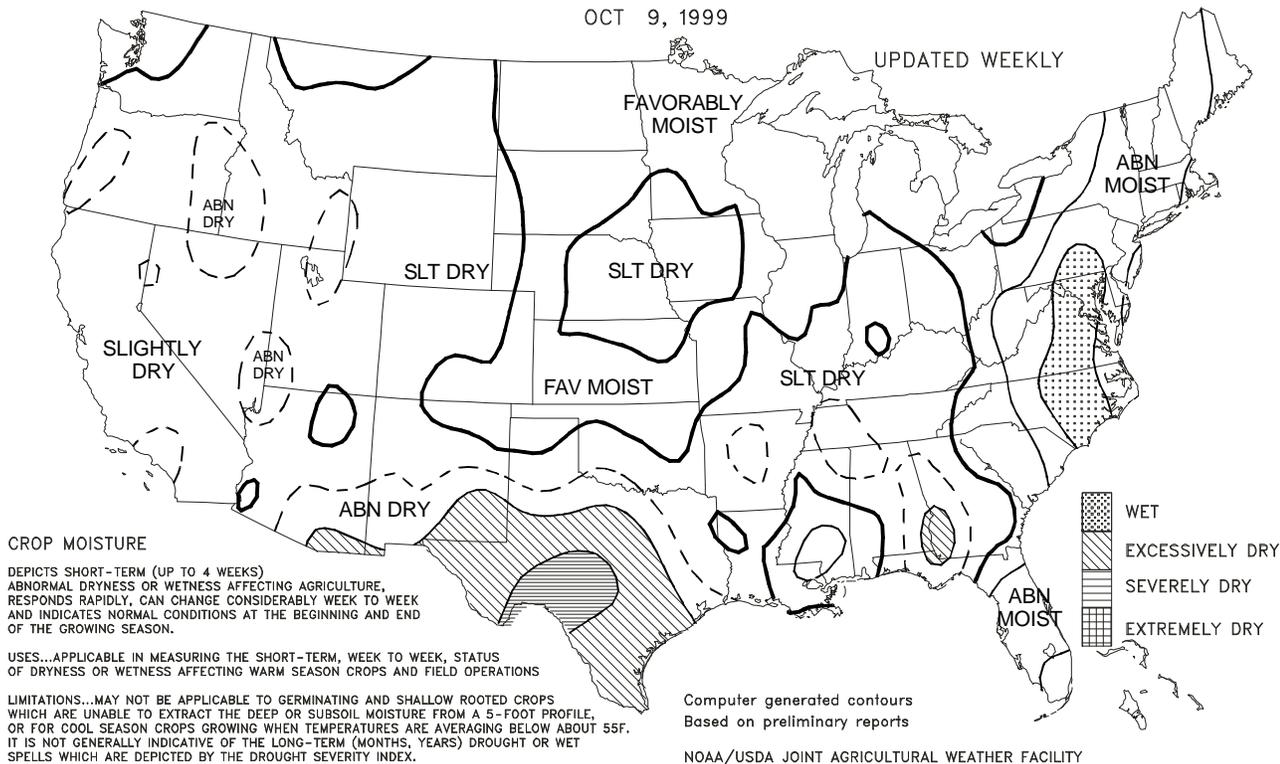
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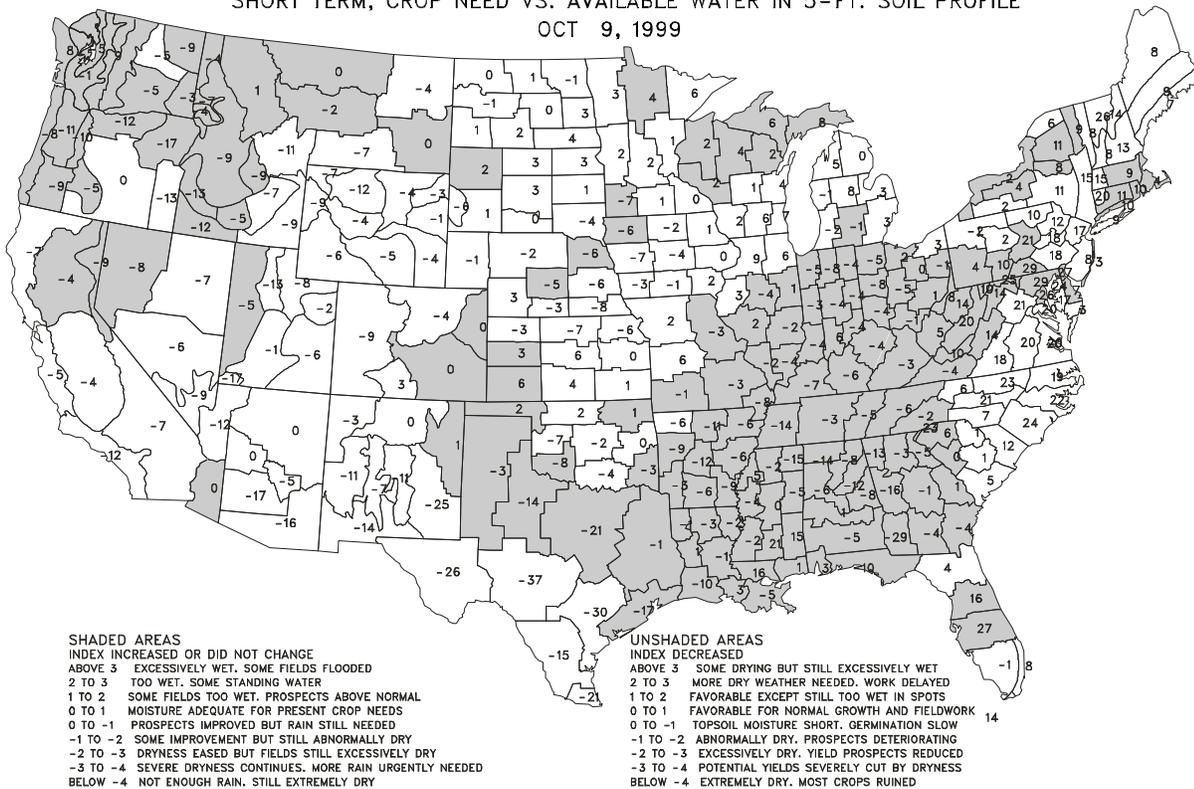
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Crop Moisture
SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE
OCT 9, 1999

UPDATED WEEKLY



Crop Moisture Index
SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE
OCT 9, 1999



Weather Data for Selected Locations in the Delta

Weather Data for the Week Ending October 9, 1999

Data provided by the Mississippi State Delta Research and Extension Center (DREC) and the Southern Regional Climate Center (SRCC).

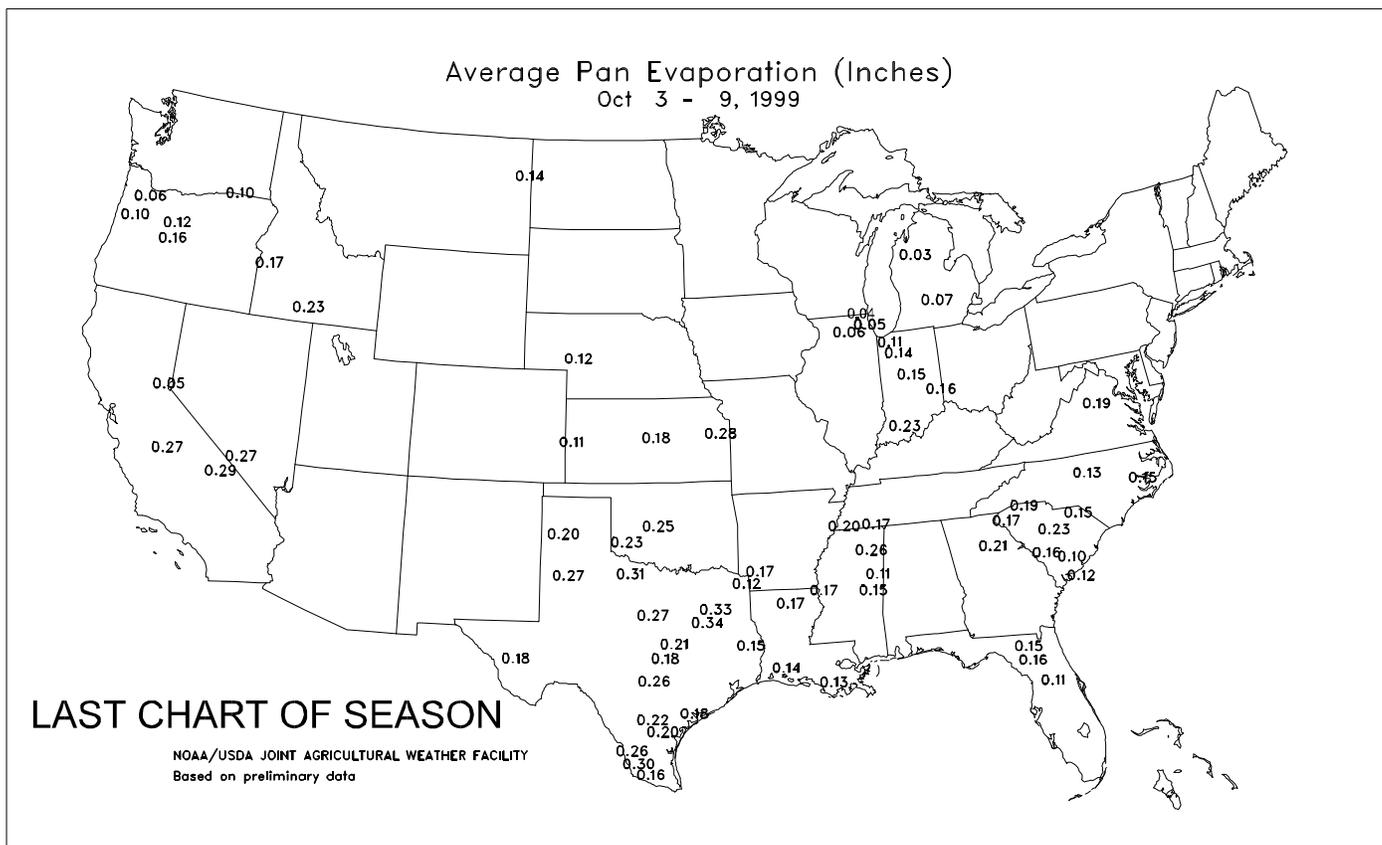
STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						4-INCH SOIL TEMP, °F		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Sep 1	PCT. NORMAL SINCE Sep 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP	
																90 AND ABOVE	32 AND BELOW	0.1 INCH OR MORE	5.0 INCH OR MORE
MS BATESVILLE ^x	79	51	87	38	65	2	1.32	0.43	1.12	2.99	68	--	--	--	--	0	0	2	1
BELZONI ^x	82	53	91	39	68	1	--	--	--	--	--	--	--	--	--	1	0	--	--
CLARKSDALE ^x	78	56	84	47	67	1	5.60	4.90	4.48	7.90	228	--	--	--	--	0	0	3	2
CLEVELAND ^x	79	48	90	40	64	3	0.86	0.37	0.83	1.47	53	--	--	--	--	1	0	2	1
GREENVILLE ^x	81	53	88	43	67	-1	--	--	--	--	--	--	--	--	--	0	0	--	--
GREENWOOD ^x	79	54	88	39	67	0	1.23	0.46	0.66	3.21	84	--	--	--	--	0	0	3	1
INDIANOLA 1S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
INVERNESS 5E	78	56	90	47	67	--	1.95	--	1.75	3.59	--	34.61	73	62	1	0	2	1	
LYON	78	51	88	40	65	--	1.15	--	0.92	4.35	--	--	--	--	--	0	0	3	1
MOORHEAD ^x	79	57	90	47	68	0	1.57	0.96	1.57	6.00	151	--	--	--	--	1	0	1	1
ONWARD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ROLLING FORK ^x	81	53	90	45	67	0	0.14	-0.53	0.13	0.57	16	--	--	--	--	1	0	2	0
SIDON	79	57	89	45	68	--	0.73	--	0.62	2.93	--	--	76	70	0	0	3	1	
TUNICA ^x	78	53	85	43	66	1	1.22	0.59	1.15	5.23	164	--	--	--	--	0	0	3	1
VICKSBURG ^x	80	54	87	43	67	-2	0.52	-0.24	0.50	2.76	72	--	--	--	--	0	0	2	1
YAZOO CITY ^x	83	53	88	41	68	-1	--	--	--	--	--	--	--	--	--	0	0	--	--
STONEVILLE [*]	82	54	88	43	68	2	1.08	0.38	1.08	2.80	67	39.36	101	79	64	0	0	1	1

Compiled by USDA/OCE/WAOB's Stoneville Field Office.

* Based on 1964-93 normals.

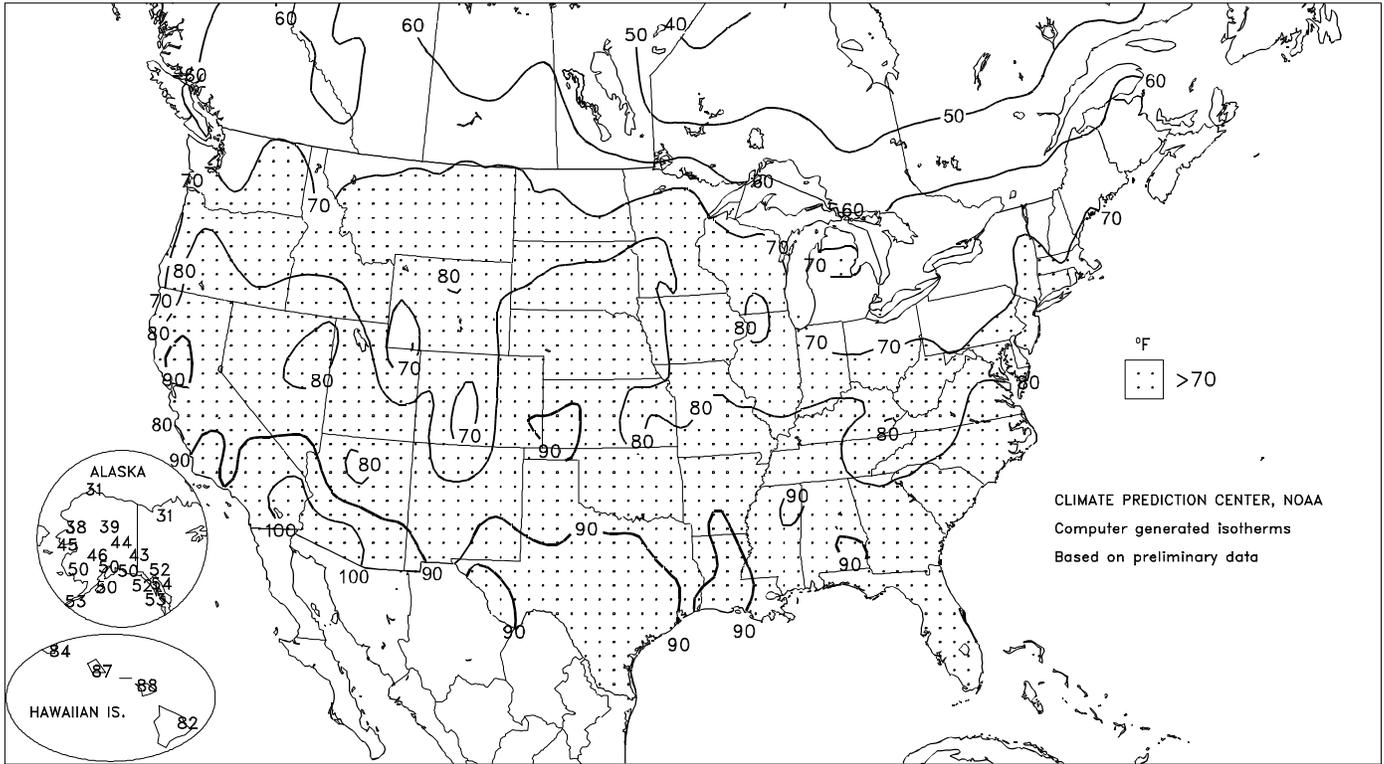
x Based on 1961-90 normals.

Delta Weather and Crop Summary: Harvesting conditions were favorable early in the week. By week's end, however, fieldwork was again halted by light to moderated showers sweeping across the South. Some locally heavy showers were reported in the northern Mississippi Delta. Weekly temperatures were near normal, with some daily maxima reaching the 90°F mark. Soil moisture was generally adequate for winter wheat.



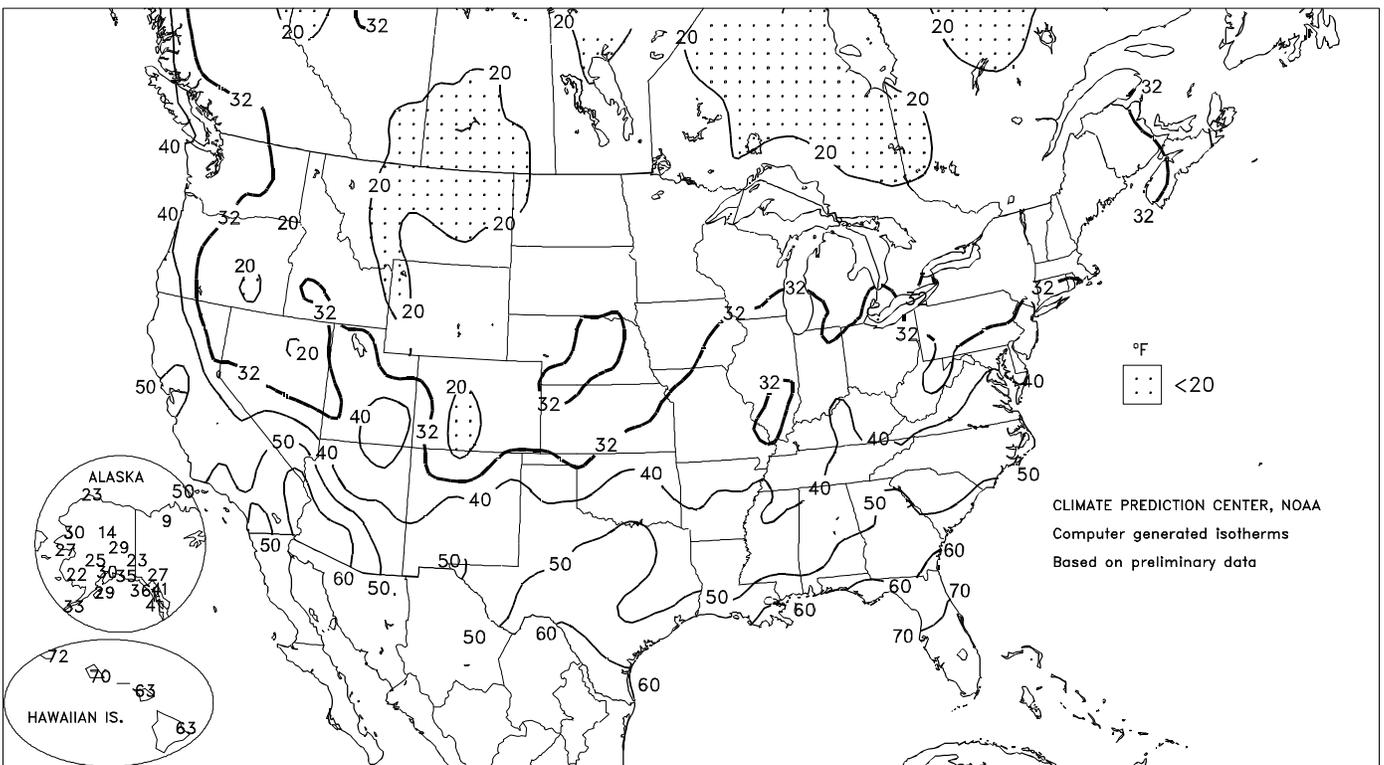
Extreme Maximum Temperature (°F)

OCT 3 - 9, 1999



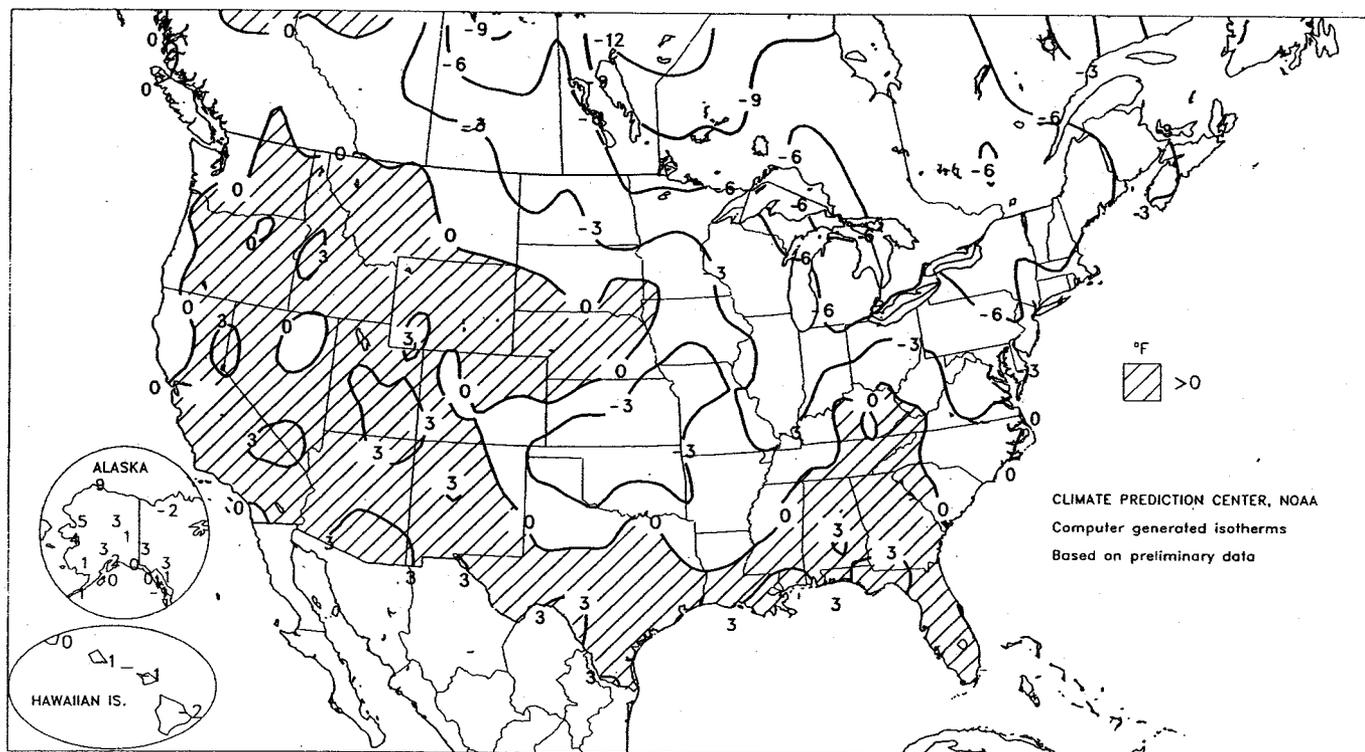
Extreme Minimum Temperature (°F)

OCT 3 - 9, 1999



Departure of Average Temperature from Normal (°F)

OCT 3 - 9, 1999



(Continued from front cover)

planting. Despite scattered showers in the **Northwest**, soil moisture remained limited for dryland winter wheat establishment. Sub-freezing temperatures (below 32°F) were reported north and west of a line from the **Oklahoma Panhandle** to the **southern portions of Wisconsin and Michigan**, causing additional winter wheat burn back, but having minimal effects on nearly mature or mature summer crops. Hard freezes (at or below 28°F) ended the growing season in **New England** and the **northern Mid-Atlantic region**. In contrast, a late-week warming trend pushed temperatures above 80°F as far north as **South Dakota** and **southern Minnesota**. Weekly temperatures averaged as much as 7°F below normal from **Michigan** to **New England**, but up to 3°F above normal in the **Southwest**.

Early in the week, very cool air spread from the **Northwest** onto the **Plains**, resulting in more than four dozen daily-record lows. On Sunday, daily records included 25°F in **LaGrande, OR**, 17°F in **Glasgow, MT**, and 13°F in **Williston, ND**. In the **Corn Belt**, rain accompanied highs that reached only 39°F in **Dubuque, IA** and 43°F in **Rockford, IL**. A day later, widespread frost and near-to sub-freezing temperatures were noted as far south as **Kansas**, where daily records were established in locations such as **Russell (28°F)**, **Kinsley (29°F)**, and **Scott City (30°F)**. Farther north, lows on Monday dipped to daily-record levels in **Marquette, MI (21°F)** and **Green Bay, WI (25°F)**. On October 5, scattered frosts coated the **interior Southeast**, where lows included 32°F in **Fayetteville, AR** and 33°F in **Jackson, TN**.

In contrast, record warmth dotted the **Southwest**. Highs reached 99°F in **Utah's Zion National Park** (on Monday) and **Safford, AZ** (on Tuesday). Warm air spread gradually eastward thereafter, reaching the **Rocky Mountain States** by week's end. In **southern California**, **Vista (96 and 100°F)** and **Escondido (97 and 96°F)**

closed the week with consecutive daily-record highs. Meanwhile in **Wyoming**, daily-record highs were tied on Saturday in **Casper (80°F)** and **Rock Springs (73°F)**.

Cool air settled into the **Northeastern States** at midweek, preceded by rain and snow. On Monday, snow depths reached 7 inches at **Jay Peak, VT** and 2 inches in **Lake Placid, NY**. On Thursday, daily-record lows were reported at **Youngstown, OH (26°F)**, **Binghamton, NY (27°F)**, and **Scranton, PA (28°F)**. Farther west, locally heavy rain developed on the **central High Plains**. In **Colorado Springs**, a daily-record rainfall (0.90 inch) on October 7 boosted their year-to-date total to 26.17 inches, eclipsing their previous annual record of 25.43 inches, set in 1965. On October 8, measurable rain fell in **Spokane, WA** for the first time since August 31, ending their longest dry spell since 1994 at 37 days. However, **Spokane's** weekly rainfall totaled only 0.09 inch, while nearby **Lewiston, ID** received only a trace.

Farther east, much-needed rain soaked the **Ohio Valley** on October 8-9. On Saturday, **Louisville's** daily-record rainfall of 2.71 inches exceeded their record-low July-September total of 2.01 inches. Similarly, storm-total (October 9-10) rainfall in **Tennessee** reached 2.97 inches in **Chattanooga** and 1.90 inches in **Knoxville**, surpassing the stations' record-low August-September totals of 1.07 and 1.67 inches, respectively. In **Mississippi**, **Tupelo's** month-to-date rainfall reached 1.65 inches, following their record-dry September (0.05 inch). In **Little Rock, AR** measurable rain (0.55 inch) fell on Thursday for the first time since September 13. A day later, **Little Rock's** 1.02-inch total represented their first day with more than 1 inch of rain since April 26. Farther west, however, very dry conditions persisted in **central and eastern Texas**. In **Houston**, August 1 - October 11 rainfall totaled 1.87 inches (19 percent of normal), leaving their year-to-date total at 23.80 inches (66 percent).

National Weather Data for Selected Cities

Weather Data for the Week Ending October 9, 1999

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

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN. SINCE 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	80	57	87	43	69	3	1.42	0.78	0.90	2.09	44	40.00	93	91	42	0	0	5	1
HUNTSVILLE	79	54	86	41	66	2	0.85	0.13	0.73	1.77	35	39.40	89	91	49	0	0	2	1
MOBILE	83	65	89	54	74	3	3.05	2.29	1.51	7.46	108	45.00	86	97	63	0	0	3	2
AK MONTGOMERY	81	62	91	51	72	2	1.42	0.85	0.75	2.80	58	35.81	84	91	49	1	0	3	2
ANCHORAGE	47	35	50	30	41	2	0.18	-0.35	0.09	4.08	121	14.06	114	98	69	0	1	5	0
BARROW	30	26	31	23	28	9	0.01	-0.10	0.01	0.38	52	3.36	92	87	69	0	7	1	0
FAIRBANKS	38	30	44	29	34	1	0.06	-0.13	0.04	1.92	161	8.73	101	93	70	0	7	3	0
JUNEAU	49	43	54	41	46	1	2.29	0.45	0.69	13.42	148	52.68	133	98	83	0	0	7	1
KODIAK	48	38	50	29	43	-1	1.12	-0.56	0.31	13.37	146	53.81	108	95	67	0	2	6	0
NOME	40	32	45	27	36	4	0.11	-0.26	0.08	4.13	142	13.71	113	96	74	0	5	4	0
AZ FLAGSTAFF	70	32	75	28	51	0	0.00	-0.37	0.00	4.55	181	16.19	93	83	20	0	4	0	0
PHOENIX	96	69	101	64	82	4	0.00	-0.17	0.00	1.31	121	6.65	119	41	14	6	0	0	0
TUCSON	94	62	100	52	78	4	0.00	-0.28	0.00	0.97	48	10.02	104	36	13	6	0	0	0
YUMA	98	68	102	61	83	3	0.00	-0.06	0.00	0.00	0	4.11	182	55	15	7	0	0	0
AR FORT SMITH	78	48	83	39	63	-3	0.44	-0.36	0.39	4.48	105	35.26	113	95	38	0	0	3	0
LITTLE ROCK	78	53	88	44	66	-1	1.68	0.88	1.01	2.77	54	24.65	65	92	47	0	0	3	2
CA BAKERSFIELD	82	55	88	52	69	-3	0.00	-0.05	0.00	0.08	36	6.15	148	68	31	0	0	0	0
EUREKA	61	51	70	49	56	0	0.28	-0.09	0.24	0.33	25	28.10	123	92	76	0	0	3	0
FRESNO	84	56	90	51	70	1	0.00	-0.08	0.00	0.00	0	6.29	86	81	29	1	0	0	0
LOS ANGELES	77	60	88	58	69	0	0.01	-0.02	0.01	0.01	3	7.41	90	87	49	0	0	1	0
REDDING	82	51	91	48	67	-1	0.10	-0.23	0.10	0.10	8	17.26	83	85	30	2	0	1	0
SACRAMENTO	80	53	90	51	67	-1	0.00	-0.15	0.00	0.00	0	9.04	80	88	33	1	0	0	0
SAN DIEGO	77	61	89	59	69	0	0.00	-0.03	0.00	0.03	11	5.25	80	91	49	0	0	0	0
SAN FRANCISCO	73	55	81	52	64	2	0.02	-0.15	0.02	0.26	65	14.67	116	89	51	0	0	1	0
CO ALAMOSA	68	29	74	20	49	1	0.14	-0.03	0.13	1.23	111	7.96	129	78	18	0	5	2	0
CO SPRINGS	68	38	79	27	53	0	0.90	0.68	0.90	1.42	88	24.55	166	83	27	0	2	1	1
DENVER	72	43	82	33	57	2	0.00	-0.24	0.00	1.18	76	19.66	149	72	23	0	0	0	0
GRAND JUNCTION	76	44	83	39	60	1	0.17	-0.05	0.17	1.18	106	8.15	123	54	15	0	0	1	0
PUEBLO	77	36	86	24	57	-1	0.02	-0.12	0.02	0.33	31	13.76	139	80	20	0	2	1	0
CT BRIDGEPORT	62	45	73	36	54	-5	0.69	0.03	0.68	7.58	193	33.36	104	93	59	0	0	2	1
HARTFORD	61	41	72	29	51	-5	1.05	0.25	0.92	12.27	256	34.06	101	96	52	0	2	3	1
DC WASHINGTON	67	50	79	44	58	-5	0.57	-0.12	0.52	10.83	258	35.31	117	91	56	0	0	3	1
DE WILMINGTON	65	45	77	36	55	-5	1.28	0.62	1.22	13.96	325	40.21	125	96	55	0	0	2	1
FL DAYTONA BEACH	82	73	84	71	78	2	1.73	0.64	1.43	9.13	118	34.76	87	90	71	0	0	4	1
JACKSONVILLE	82	68	87	62	75	2	0.53	-0.35	0.51	13.53	165	38.51	86	94	66	0	0	3	1
KEY WEST	87	78	89	75	82	1	1.25	0.12	0.60	9.90	135	33.06	104	91	75	0	0	5	1
MIAMI	87	76	88	74	82	2	2.14	0.66	1.12	9.56	100	48.37	101	92	68	0	0	6	1
ORLANDO	82	72	86	70	77	0	6.37	5.65	2.76	12.78	183	46.17	109	97	74	0	0	5	3
PENSACOLA	81	68	86	60	75	2	1.36	0.34	0.53	2.13	32	35.21	68	97	70	0	0	4	1
TALLAHASSEE	83	69	87	63	76	4	0.31	-0.43	0.26	6.13	94	43.87	80	94	63	0	0	3	0
TAMPA	84	73	88	72	79	1	2.51	1.88	1.49	8.56	125	31.63	82	99	73	0	0	6	2
WEST PALM BEACH	87	77	88	75	82	3	1.27	-0.39	0.62	6.33	59	41.90	85	90	67	0	0	5	1
GA ATHENS	76	59	83	52	67	2	1.43	0.71	1.21	4.73	111	35.82	90	97	63	0	0	3	1
ATLANTA	74	58	84	53	66	1	0.42	-0.26	0.33	4.61	107	34.28	85	95	57	0	0	2	0
AUGUSTA	79	55	86	47	67	0	1.36	0.70	1.35	6.79	175	34.41	94	99	55	0	0	2	1
COLUMBUS	80	62	89	54	71	2	0.62	0.12	0.36	1.78	46	23.35	57	91	46	0	0	2	0
MACON	80	60	87	49	70	1	1.56	1.06	1.56	4.90	143	31.36	87	98	62	0	0	1	1
SAVANNAH	81	62	87	56	71	1	0.67	0.04	0.67	7.19	136	45.97	108	97	58	0	0	1	1
HI HILO	81	66	82	63	74	-2	0.78	-1.12	0.28	6.81	62	92.14	97	94	64	0	0	6	0
HONOLULU	86	73	87	70	79	-1	0.03	-0.40	0.03	0.23	18	7.82	58	82	55	0	0	1	0
KAHULUI	85	69	88	63	77	-1	0.00	-0.19	0.00	0.03	5	6.12	44	81	52	0	0	0	0
LIHUE	83	73	84	72	78	0	0.56	-0.30	0.23	2.55	74	22.17	76	82	58	0	0	6	0
ID BOISE	73	45	80	39	59	3	0.00	-0.14	0.00	0.00	0	7.57	87	58	20	0	0	0	0
LEWISTON	68	45	74	35	56	0	0.00	-0.19	0.00	0.00	0	7.67	81	67	31	0	0	0	0
POCATELLO	70	35	78	26	53	1	0.00	-0.19	0.00	0.02	2	10.81	118	66	20	0	3	0	0
IL CHICAGO/O'HARE	62	44	73	36	53	-4	0.80	0.21	0.79	4.13	90	33.46	116	90	51	0	0	2	1
MOLINE	67	43	77	37	55	-3	0.49	-0.23	0.49	4.94	99	27.41	85	95	49	0	0	1	0
PEORIA	65	46	75	35	55	-3	1.00	0.34	0.92	2.66	56	27.66	94	94	50	0	0	4	1
ROCKFORD	63	39	74	33	51	-4	0.56	-0.14	0.55	5.89	125	33.70	113	95	49	0	0	2	1
SPRINGFIELD	66	44	77	32	55	-5	1.56	0.94	0.73	4.09	99	26.50	94	96	51	0	1	5	2
IN EVANSVILLE	72	46	82	34	59	-2	2.84	2.23	2.56	3.23	86	32.75	97	94	44	0	0	3	1
FORT WAYNE	60	41	66	32	51	-6	1.37	0.82	1.06	2.41	71	23.83	87	99	62	0	1	4	1
INDIANAPOLIS	65	47	74	37	56	-3	1.36	0.78	0.65	2.12	59	27.66	88	94	52	0	0	4	2
SOUTH BEND	61	44	67	36	52	-4	0.85	0.14	0.75	2.13	47	25.52	84	93	54	0	0	2	1
IA BURLINGTON	70	49	80	39	60	1	0.67	-0.07	0.67	5.66	111	30.11	101	80	42	0	0	1	1
CEDAR RAPIDS	65	41	76	35	53	-3	0.32	-0.28	0.30	1.70	36	20.19	71	93	46	0	0	3	0
DES MOINES	67	44	78	29	56	-2	0.37	-0.29	0.37	2.70	62	25.81	91						

Weather Data for the Week Ending October 9, 1999

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN. SINCE 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	71	47	79	35	59	-4	0.00	-0.59	0.00	10.69	251	40.63	162	91	47	0	0	0	0
KY JACKSON	71	50	80	42	61	0	2.02	1.32	1.60	3.15	69	33.39	86	92	49	0	0	4	1
KY LEXINGTON	72	49	81	40	60	0	1.58	1.00	1.56	2.98	75	27.47	78	93	49	0	0	3	1
KY LOUISVILLE	73	52	82	44	63	1	2.39	1.80	2.30	2.93	75	28.99	83	89	43	0	0	2	1
KY PADUCAH	76	45	84	33	61	-2	3.85	3.18	2.04	4.52	99	35.51	93	96	42	0	0	3	2
LA BATON ROUGE	83	64	90	50	73	2	4.35	3.53	2.47	8.43	142	37.89	78	94	54	1	0	3	2
LA LAKE CHARLES	86	64	91	54	75	3	0.66	-0.31	0.58	2.63	38	32.41	76	90	50	2	0	3	1
LA NEW ORLEANS	83	71	88	63	77	5	3.88	3.12	2.08	6.74	104	40.73	82	94	61	0	0	5	2
LA SHREVEPORT	80	57	88	45	69	-1	2.00	1.21	1.04	6.90	167	48.93	140	91	44	0	0	2	2
ME CARIBOU	49	31	63	26	40	-7	0.30	-0.39	0.17	8.94	206	29.26	106	91	50	0	5	4	0
ME PORTLAND	57	36	69	26	46	-6	0.61	-0.18	0.49	8.98	220	29.19	92	91	50	0	3	2	0
MD BALTIMORE	67	44	79	37	55	-5	0.81	0.13	0.71	12.31	288	37.94	119	97	57	0	0	2	1
MA BOSTON	60	44	73	37	52	-6	0.78	0.09	0.70	10.64	269	31.03	101	88	52	0	0	2	1
MA WORCESTER	56	37	67	30	47	-7	0.18	-0.77	0.17	9.01	172	31.40	87	91	56	0	4	2	0
MI ALPENA	56	34	70	25	45	-6	0.16	-0.35	0.08	2.70	71	17.15	74	94	51	0	3	4	0
MI GRAND RAPIDS	58	40	68	34	49	-5	0.32	-0.37	0.32	3.55	69	28.04	100	95	58	0	0	1	0
MI HOUGHTON LAKE	55	31	70	24	43	-7	0.14	-0.40	0.06	3.57	86	25.39	112	98	52	0	3	4	0
MI LANSING	57	36	66	31	47	-6	0.70	0.18	0.56	2.76	65	27.68	114	99	66	0	4	3	1
MI MARQUETTE	51	30	66	19	40	-7	0.00	-0.87	0.00	3.09	59	30.35	111	92	51	0	4	0	0
MI MUSKEGON	59	37	70	32	48	-6	0.19	-0.48	0.19	2.79	59	26.33	108	97	58	0	1	1	0
MN DULUTH	53	33	72	22	43	-5	0.61	-0.04	0.55	6.41	137	30.43	120	91	48	0	3	3	1
MN INT'L FALLS	51	27	69	18	39	-8	0.24	-0.29	0.11	6.17	160	29.30	139	94	47	0	6	4	0
MN MINNEAPOLIS	65	40	78	33	53	-1	0.09	-0.45	0.08	2.95	87	25.91	107	86	37	0	0	2	0
MN ROCHESTER	61	37	74	25	49	-3	0.17	-0.43	0.16	0.91	21	31.00	122	94	44	0	2	2	0
MS ST. CLOUD	64	34	79	24	49	-2	0.45	-0.12	0.44	3.07	79	24.95	105	90	38	0	3	2	0
MS JACKSON	79	57	87	42	68	0	1.69	1.00	1.40	4.17	94	35.60	84	95	53	0	0	3	1
MS MERIDIAN	80	58	90	42	69	2	3.87	3.21	3.09	6.22	142	34.45	78	96	51	1	0	3	2
MS TUPELO	80	53	89	40	66	0	1.66	0.92	0.96	1.71	38	44.80	106	91	41	0	0	3	2
MO COLUMBIA	69	46	81	34	58	-3	0.80	0.03	0.51	2.73	56	23.36	74	95	52	0	0	4	1
MO KANSAS CITY	68	46	77	35	57	-4	0.13	-0.74	0.13	5.65	94	36.41	114	89	51	0	0	1	0
MO SAINT LOUIS	71	49	80	38	60	-3	1.83	1.22	0.92	3.08	79	32.00	109	97	53	0	0	3	2
MO SPRINGFIELD	74	46	81	36	60	-2	1.02	0.17	0.59	2.83	49	32.75	97	94	44	0	0	3	1
MT BILLINGS	68	39	76	25	54	1	0.02	-0.26	0.02	2.80	161	13.41	105	70	25	0	1	1	0
MT BUTTE	66	30	74	20	48	3	0.02	-0.17	0.02	0.47	31	11.93	111	79	23	0	4	1	0
MT GLASGOW	65	35	75	17	50	-1	0.04	-0.13	0.03	1.11	91	14.50	147	81	27	0	1	2	0
MT GREAT FALLS	66	36	72	19	51	0	0.00	-0.20	0.00	1.97	130	11.99	91	78	28	0	2	0	0
MT KALISPELL	61	30	69	18	46	0	0.39	0.19	0.28	0.68	45	12.22	95	91	38	0	5	3	0
MT MILES CITY	67	36	79	24	52	-1	0.00	-0.24	0.00	1.05	66	12.65	103	80	27	0	2	0	0
MT MISSOULA	64	35	74	23	49	1	0.24	0.05	0.16	0.67	50	10.05	91	79	30	0	3	3	0
NE GRAND ISLAND	73	43	81	33	58	2	0.05	-0.34	0.04	0.61	18	24.09	108	89	32	0	0	2	0
NE LINCOLN	73	40	83	29	57	-1	0.03	-0.54	0.03	1.25	30	26.40	107	88	33	0	1	1	0
NE NORFOLK	73	42	81	34	57	2	0.19	-0.24	0.19	0.86	29	23.98	107	81	29	0	0	1	0
NE NORTH PLATTE	73	39	82	30	56	2	0.14	-0.12	0.14	1.34	69	19.66	112	92	29	0	1	1	0
NE OMAHA	71	42	79	30	57	-1	0.03	-0.58	0.03	1.67	37	30.72	119	91	42	0	1	1	0
NE SCOTTSBLUFF	75	33	87	26	54	0	0.03	-0.17	0.03	2.42	178	16.53	122	83	20	0	2	1	0
NE VALENTINE	73	35	88	27	54	0	0.00	-0.24	0.00	3.39	183	19.64	118	86	30	0	3	0	0
NV ELY	73	33	79	27	53	0	0.00	-0.22	0.00	0.55	43	6.48	80	62	14	0	4	0	0
NV LAS VEGAS	88	63	92	60	76	3	0.00	-0.03	0.00	0.35	109	4.23	136	36	17	4	0	0	0
NV RENO	77	41	85	35	59	5	0.18	0.12	0.18	0.25	58	4.96	93	72	17	0	0	1	0
NV WINNEMUCCA	76	29	83	23	53	0	0.03	-0.08	0.03	0.15	29	5.55	93	67	20	0	5	1	0
NH CONCORD	57	35	70	25	46	-5	0.77	0.08	0.64	9.90	269	34.93	128	92	45	0	3	2	1
NJ NEWARK	65	47	76	39	56	-5	0.83	0.15	0.81	10.21	225	36.60	106	91	53	0	0	2	1
NM ALBUQUERQUE	78	51	83	43	64	3	0.00	-0.22	0.00	0.54	42	8.01	110	52	18	0	0	0	0
NY ALBANY	57	37	72	29	47	-7	0.73	0.10	0.44	11.79	313	31.04	111	92	49	0	2	4	0
NY BINGHAMTON	53	37	66	27	45	-7	3.30	-0.36	0.17	7.25	173	28.07	98	92	52	0	3	4	0
NY BUFFALO	56	41	67	30	48	-6	1.01	0.32	0.40	4.95	113	27.02	93	88	52	0	1	6	0
NY ROCHESTER	56	41	69	34	49	-6	0.44	-0.11	0.29	3.85	105	27.09	110	94	53	0	0	5	0
NY SYRACUSE	56	38	69	31	47	-7	1.03	0.29	0.84	6.39	135	24.86	84	87	49	0	1	4	1
NC ASHEVILLE	69	49	76	44	59	0	1.60	0.77	0.96	3.80	77	34.26	90	100	63	0	0	4	1
NC CHARLOTTE	73	53	80	47	63	-2	0.24	-0.53	0.24	4.50	100	27.69	81	98	61	0	0	1	0
NC GREENSBORO	71	52	79	45	61	-1	0.17	-0.64	0.16	8.78	191	38.57	114	96	60	0	0	2	0
NC HATTERAS	75	64	81	57	69	1	0.31	-0.82	0.31	6.16	92	40.48	94	82	61	0	0	1	0
NC RALEIGH	74	50	81	42	62	-2	0.00	-0.66	0.00	21.80	540	48.40	146	100	54	0	0	0	0
NC WILMINGTON	79	57	89	50	68	0	0.45	-0.24	0.37	23.86	401	67.31	147	92	52	0	0	6	0
ND BISMARCK	62	35	73	26	49	-2	0.00	-0.24	0.00	1.31	72	26.43	190	86	38	0	4	0	0
ND DICKINSON	61	34	69	25	48	-3	0.00	-0.27	0.00	2.62	128	15.85	108	88	40	0	3	0	0
ND FARGO	58	33	74	25	46	-5	0.04	-0.39	0.04	6.54	256	17.38	103	89	41	0	4	1	0
ND GRAND FORKS	56	30	68	23	43	-6	0.02	-0.34	0.02	2.57	94	15.93	98	88	41	0	5	1	0
ND JAMESTOWN	58	34	70	27	46	-4	0.01	-0.26	0.01	2.68	126	21.93	143	89	46	0	4	1	0
ND WILLISTON	62	29	72	13	45	-4	0.02	-0.19	0.02	1.60	99	14.64	120	91	37	0	4	1	0
OH AKRON-CANTON	60	43	67	31	52	-5	0.70	0.15	0.44	4.33	107	28.93	99	95	64	0	1	3	0
OH CINCINNATI	68	48	76	39	58	-1	2.23	1.62	1.87	3.09	84	27.42	84	91	46	0	0	4	1
OH CLEVELAND	60	47	66	38	54	-3	0.62	0.03	0.31	2.55	60	23.87	84	89	56	0	0	4	0
OH COLUMBUS	66	49	72	40	57	0	0.38	-0.09	0.24	2.29	64	22.73	75	92	50	0	0	3	0
OH DAYTON	64	46	72	37	55	-3	0.85	0.33	0.40	1.91	60	24.54	85	90	53	0	0	5	0
OH MANSFIELD	60	42	66	33	51	-5	1.36	0.84	0.76	3.00	74	26.17	83	97	64	0	0	4	1

Based on 1961-9

Weather Data for the Week Ending October 9, 1999

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN. SINCE 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	
OK TOLEDO	60	41	66	33	50	-5	1.01	0.53	0.86	2.51	72	23.30	91	96	53	0	0	4	1	
OK YOUNGSTOWN	60	41	68	26	51	-4	0.89	0.28	0.67	5.17	121	34.69	118	92	54	0	1	4	1	
OK OKLAHOMA CITY	75	52	81	45	63	-2	0.27	-0.54	0.22	5.15	105	34.74	125	86	43	0	0	2	0	
OK TULSA	75	51	81	42	63	-3	0.00	-0.90	0.00	9.69	165	40.81	125	90	42	0	0	0	0	
OR ASTORIA	61	48	70	42	55	0	0.90	-0.10	0.37	1.18	28	57.18	138	99	67	0	0	7	0	
OR BURNS	69	29	78	20	49	1	0.00	-0.14	0.00	0.00	0	6.81	97	72	20	0	5	0	0	
OR EUGENE	66	44	77	32	55	-2	0.38	-0.12	0.17	0.39	17	29.00	98	96	47	0	1	4	0	
OR MEDFORD	74	44	82	40	59	1	0.23	-0.01	0.16	0.22	19	13.20	119	89	34	0	0	2	0	
OR PENDLETON	69	43	74	34	56	0	0.18	0.03	0.09	0.19	24	6.91	84	71	31	0	0	3	0	
OR PORTLAND	66	49	77	43	58	0	0.99	0.53	0.78	1.10	47	28.44	125	93	47	0	0	4	1	
OR SALEM	67	47	77	38	57	2	0.40	-0.09	0.16	0.49	23	32.83	138	93	46	0	0	4	1	
PA ALLENTOWN	63	41	72	30	52	-5	0.81	0.14	0.76	12.38	258	29.99	88	94	55	0	1	2	1	
PA ERIE	57	45	66	33	51	-6	0.90	0.03	0.38	6.05	110	24.62	79	91	60	0	0	4	0	
PA MIDDLETOWN	65	44	74	36	55	-4	0.74	0.07	0.64	9.85	226	31.57	100	92	54	0	0	2	1	
PA PHILADELPHIA	66	48	77	41	57	-3	1.20	0.60	1.13	14.27	341	43.11	131	92	54	0	0	3	1	
PA PITTSBURGH	62	43	70	32	53	-3	0.46	-0.08	0.26	2.44	66	30.37	103	92	46	0	1	2	0	
PA WILKES-BARRE	58	39	64	28	49	-7	0.58	-0.06	0.50	10.34	250	30.09	105	96	49	0	2	2	1	
PA WILLIAMSPORT	59	41	65	32	50	-5	0.88	0.16	0.71	13.48	311	37.35	118	95	54	0	2	2	1	
RI PROVIDENCE	62	43	73	33	53	-4	1.05	0.25	0.95	8.05	180	33.67	99	89	52	0	0	3	1	
SC BEAUFORT	79	61	84	54	70	-1	0.76	0.07	0.76	4.96	84	29.47	67	96	60	0	0	1	1	
SC CHARLESTON	79	60	84	51	70	0	0.18	-0.56	0.12	8.14	143	34.87	79	99	59	0	0	5	0	
SC COLUMBIA	78	57	86	47	68	1	0.55	-0.16	0.55	4.13	90	27.88	67	97	56	0	0	1	1	
SC GREENVILLE	73	56	79	51	65	1	2.12	1.21	1.92	5.16	101	29.76	73	94	63	0	0	5	1	
SD ABERDEEN	62	36	75	26	49	-3	0.11	-0.19	0.08	4.38	194	22.74	135	96	47	0	3	2	0	
SD HURON	68	39	86	30	54	0	0.11	-0.26	0.08	2.94	134	17.42	97	94	42	0	1	3	0	
SD RAPID CITY	71	37	79	28	54	1	0.00	-0.28	0.00	1.10	69	18.63	125	76	26	0	2	0	0	
SD SIOUX FALLS	71	40	81	33	55	2	0.10	-0.39	0.05	1.20	33	22.88	109	88	33	0	0	2	0	
TN BRISTOL	73	47	81	38	60	0	1.04	0.43	0.65	2.13	53	28.28	87	98	47	0	0	2	1	
TN CHATTANOOGA	78	54	82	47	66	1	2.78	2.06	2.14	3.40	67	40.98	99	93	50	0	0	3	2	
TN KNOXVILLE	74	50	79	43	62	0	1.25	0.63	0.72	2.08	54	44.72	122	98	50	0	0	3	2	
TN MEMPHIS	78	55	86	44	67	0	1.37	0.74	0.70	2.48	57	38.62	99	85	46	0	0	2	2	
TN NASHVILLE	75	51	84	39	63	-1	1.93	1.36	1.35	3.90	92	36.02	98	90	50	0	0	2	2	
TX ABILENE	84	56	92	51	70	0	0.20	-0.44	0.20	1.80	44	13.83	68	78	30	2	0	1	0	
TX AMARILLO	75	47	84	37	61	-1	0.21	-0.14	0.20	2.75	113	26.10	149	90	38	0	0	2	0	
TX AUSTIN	89	58	93	46	73	-1	0.19	-0.63	0.19	0.66	15	24.89	99	93	34	2	0	1	0	
TX BEAUMONT	83	64	91	51	74	1	3.28	2.23	2.36	6.54	85	30.53	68	93	52	2	0	5	2	
TX BROWNSVILLE	88	69	92	61	79	1	0.21	-0.64	0.17	4.20	59	19.63	88	97	55	2	0	2	0	
TX CORPUS CHRISTI	88	68	92	60	78	1	0.01	-0.86	0.01	3.89	58	27.20	107	96	51	2	0	1	0	
TX DEL RIO	91	66	94	61	78	4	0.02	-0.57	0.01	0.02	1	14.98	98	84	32	5	0	2	0	
TX EL PASO	85	57	90	51	71	3	0.00	-0.23	0.00	1.94	97	7.36	99	58	22	1	0	0	0	
TX FORT WORTH	84	60	92	54	72	2	0.39	-0.46	0.37	2.69	60	19.37	71	77	32	1	0	2	0	
TX GALVESTON	83	71	88	63	77	2	1.05	0.78	0.62	5.00	72	23.01	68	91	62	0	0	2	1	
TX HOUSTON	88	61	91	48	75	2	0.01	-1.01	0.01	1.38	22	24.94	69	95	41	3	0	1	0	
TX LUBBOCK	78	50	86	43	64	-1	0.10	-0.40	0.08	3.37	103	18.92	117	85	35	0	0	2	0	
TX MIDLAND	82	54	93	48	68	1	0.09	-0.39	0.09	1.04	32	7.47	59	77	23	1	0	1	0	
TX SAN ANGELO	85	57	92	50	71	1	0.16	-0.49	0.16	0.92	22	12.90	76	81	30	3	0	1	0	
TX SAN ANTONIO	89	63	93	52	76	3	0.00	-0.74	0.00	0.06	1	15.18	62	83	32	3	0	0	0	
TX VICTORIA	92	63	95	51	77	3	0.00	-0.94	0.00	3.78	55	23.81	78	98	36	6	0	0	0	
TX WACO	86	61	92	52	74	1	0.00	-0.81	0.00	0.51	11	13.70	54	78	35	1	0	0	0	
TX WICHITA FALLS	79	54	88	46	67	-2	1.47	0.75	1.08	3.24	68	26.42	109	91	42	0	0	3	1	
UT SALT LAKE CITY	74	45	84	39	60	2	0.00	-0.33	0.00	0.45	26	11.99	96	60	18	0	0	0	0	
VT BURLINGTON	54	35	70	28	44	-7	0.60	-0.05	0.51	10.87	263	28.17	105	90	44	0	3	5	1	
VA LYNCHBURG	68	47	78	39	57	-3	0.26	-0.57	0.11	12.32	287	34.14	107	99	60	0	0	5	0	
VA NORFOLK	73	55	83	46	64	0	0.10	-0.66	0.10	13.26	272	44.59	123	91	54	0	0	1	0	
VA RICHMOND	71	49	81	40	60	-2	0.06	-0.74	0.06	16.66	383	43.62	128	98	55	0	0	1	0	
VA ROANOKE	68	48	76	40	58	-2	0.40	-0.47	0.28	7.79	169	29.89	93	100	62	0	0	3	0	
VA WASH/DULLES	66	44	78	36	55	-4	0.96	0.24	0.81	10.27	240	37.30	119	99	56	0	0	3	1	
WA OLYMPIA	63	43	71	31	53	0	1.41	0.67	0.82	1.56	49	41.57	134	96	57	0	1	5	1	
WA QUILLAYUTE	59	43	69	31	51	-2	2.69	0.73	1.87	4.53	62	78.03	117	100	77	0	1	4	1	
WA SEATTLE-TACOMA	62	49	69	45	56	0	0.89	0.32	0.71	1.06	41	27.56	120	97	59	0	0	5	1	
WA SPOKANE	63	42	70	31	52	1	0.08	-0.09	0.06	0.08	9	10.61	95	73	32	0	1	3	0	
WA YAKIMA	69	37	71	30	53	-1	0.00	-0.08	0.00	0.00	0	5.18	100	81	26	0	2	0	0	
WV BECKLEY	64	44	72	35	54	-1	0.77	0.10	0.40	5.25	125	29.67	91	98	55	0	0	3	0	
WV CHARLESTON	70	47	78	39	58	-1	2.30	1.67	1.55	4.11	101	29.87	89	98	50	0	0	2	2	
WV ELKINS	65	37	74	30	51	-3	2.69	1.98	1.90	5.49	117	28.78	80	100	48	0	4	2	2	
WV HUNTINGTON	70	48	77	38	59	-1	0.26	-0.35	0.20	1.20	32	24.98	76	96	47	0	0	3	0	
WI EAU CLAIRE	62	36	75	25	49	-3	0.61	-0.04	0.33	1.72	36	27.09	99	95	39	0	3	2	0	
WI GREEN BAY	58	36	73	25	47	-5	0.03	-0.53	0.02	1.55	37	22.72	96	89	48	0	2	2	0	
WI LA CROSSE	63	39	76	29	51	-3	0.26	-0.33	0.24	2.65	58	18.60	71	92	42	0	2	3	0	
WI MADISON	61	37	74	29	49	-4	0.21	-0.33	0.17	2.11	52	29.80	117	91	46	0	2	2	0	
WI MILWAUKEE	61	44	72	38	53	-2	0.60	0.02	0.52	4.85	117	34.20	129	85	52	0	0	2	1	
WI CASPER	73	33	80	24	53	2	0.00	-0.22	0.00	1.32	107	9.98	96	71	14	0	3	0	0	
WI CHEYENNE	68	36	78	28	52	1	0.03	-0.17	0.03	2.14	140	16.04	124	78	28	0	2	1	0	
WI LANDER	70	37	77	29	54	3	0.02	-0.26	0.02	2.03	141	13.80	127	67	18	0	2	1	0	
WI SHERIDAN	70	35	76	23	53	2	0.00	-0.30	0.00	3.23	185	12.62	104	81	24	0	3	0	0	

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

September Weather and Crop Summary

Weather

Three tropical systems—Hurricane Floyd and Tropical Storms Dennis and Harvey—and several strong cold fronts contributed to drought-ending rains along the Atlantic Seaboard, but Floyd caused extensive flooding and widespread crop and property damage in the eastern Mid-Atlantic region. In contrast, mostly dry weather resulted in intensification of the Ohio Valley's 14-month drought, and a depletion of topsoil moisture from central Texas to the southern Appalachians. Farther north, mostly dry conditions favored rapid Midwestern corn and soybean harvesting, although a late-month storm system halted fieldwork from western Missouri to the vicinity of Lake Michigan. The same system dumped locally excessive rainfall in southern and eastern Kansas, washing out some newly planted winter wheat. Meanwhile, a mid- to late-month transition to drier weather aided final small grain harvesting on the northern Plains. Farther west, however, little or no rain fell across the drought-affected interior Northwest, causing some producers to postpone winter wheat seeding due to lack of moisture. In the Southwest, showers from a lingering monsoon and the remnants of eastern Pacific Hurricane Hilary yielded to seasonably dry conditions toward month's end. In California, warm weather promoted fieldwork and summer crop maturation. In contrast, several late-month frosts and freezes ended the growing season a few days earlier than normal north and west of a line from southeastern Colorado to central Wisconsin. The cold weather did not significantly affect mature or nearly mature summer crops, but burned back emerging winter wheat, especially in Colorado, Montana, South Dakota, western Nebraska, and eastern Washington.

Significantly above-normal temperatures were confined to New England (up to 8°F above normal in northern Maine) and the interior Far West (up to 5°F above normal near Lake Tahoe). In contrast, temperatures averaged as much as 5°F below normal on the Plains and 3°F below normal in the western Corn Belt.

Monthly rainfall topped 8 inches from eastern Florida northward to eastern New York and New England, and in a few areas across the eastern portions of Kansas and Oklahoma. Totals exceeded 16 inches in several locations from extreme northeastern South Carolina into southeastern Virginia. In contrast, less than 1 inch of rain fell in the middle and lower Ohio Valley, central and southwestern Texas, and portions of the northwestern Corn Belt. No rain fell in most areas from eastern Washington southward into the northern portions of California and Nevada, but more than 4 inches soaked parts of northern Arizona.

After meandering for nearly a week, pesky Tropical Storm Dennis finally made landfall on September 4 near Morehead City, NC, moving northwestward across the coast around 5 p.m. EDT. Dennis, a former Category 2 hurricane (with sustained winds of 100 to 105 mph), brushed North Carolina on August 29-30 as it passed within 80 miles of the coast. Once inland, Dennis produced localized wind damage and flooding (storm surge- and rainfall-related) and significant beach erosion, but also delivered drought-easing rains from North Carolina northward into the Mid-Atlantic States. Raleigh-Durham, NC noted consecutive daily-record rainfall totals on September 4 (1.78 inches) and 5 (4.84 inches). Storm-total rainfall in North Carolina reached 12.52 inches in Chapel Hill, 8.49 inches in Raleigh-Durham, and 8.23 inches in Goldsboro. In Pennsylvania, Williamsport (6.29 inches on September 7) netted their second-greatest single-day total, behind only the Hurricane Agnes-driven 8.66-inch sum on June 22, 1972.

Buffalo, NY received 1.52 inches on September 6-7, their heaviest 24-hour total since July 7-8, 1998. On September 8, Burlington, VT was inundated by 2.17 inches of rain in 1 hour and 2.24 inches in 2 hours, breaking their all-time records for both time periods. Heavy rain quickly returned to the Northeast in association with an approaching cold front. After collecting a daily-record total with Dennis (1.22 inches on September 7), Philadelphia, PA notched another record total (1.59 inches) on September 9. A day later, 4.71 inches drenched Boston, MA, their highest 1-day total since 5.69 inches fell on June 13, 1998. Also on September 10, Portland, ME recorded 3.22 inches after tallying only 4.10 inches during the entire meteorological summer (June-August).

Less than a week later, Hurricane Floyd roared toward the East Coast, passing within less than 150 miles of Florida's east coast before curving northward and slamming into North Carolina near Cape Fear. Floyd's preliminary death toll of 70 people, mostly from freshwater flooding, places it as the deadliest U.S. tropical system since Hurricane Agnes in June 1972. Floyd made landfall around 3 a.m. EDT on September 16, becoming the fourth hurricane in 4 years to strike on or near Cape Fear—following Bertha (July 1996), Fran (September 1996), and Bonnie (August 1998). Inundating rains fell along and just west of Floyd's track up the Eastern Seaboard, ending long-term drought by most measures and causing extensive flooding. By landfall, Floyd's maximum sustained winds were near 110 mph (Category 2), down from 155 mph (Category 4) a few days earlier. At Federal Point (Kure Beach) near Cape Fear, a peak wind gust was clocked to 112 mph at 2:20 a.m. on September 16. Gusts reached 86 mph in Wilmington, NC and 71 mph in Myrtle Beach, SC. Floyd's storm surge on the sound side of Masonboro Island (New Hanover County, NC) was just 10 inches less than observed during Fran. After making landfall, Floyd continued to produce gusty winds for another day. Peak gusts on September 16 reached 71 mph in Hyannis, MA; 67 mph in Goldsboro, NC; 55 mph in Washington, DC; and 49 mph in Albany, NY.

Floyd produced the wettest calendar day and wettest 24-hour period on record in several locations from Wilmington, near the point of landfall, into northern New England.

All-Time 24-Hour Rainfall Records (Inches)

Location	Total/Date	Former Record/Date
Rocky Mount, NC	15.15 on Sep. 15-16	not available
Wilmington, NC	14.84 on Sep. 15-16	9.52 on Sep. 29, 1938
Mt. Mansfield, VT	9.92 on Sep. 16-17	6.05 in Aug. 1995
Philadelphia, PA	6.63 on Sep. 16	5.89 on Aug. 3-4, 1898
Albany, NY	6.05 on Sep. 16-17	4.75 on Oct. 8-9, 1903

All-Time Single-Day Rainfall Records (Inches)

Location	Total/Date	Former Record/Date
Wilmington, NC	13.38 on Sep. 15	9.52 on Sep. 29, 1938
Philadelphia, PA	6.63 on Sep. 16	5.63 on Aug. 3, 1898
Albany, NY	5.60 on Sep. 16	not available

Wilmington's storm-total rainfall reached 19.06 inches, boosting their September total to an all-time-record 23.41 inches. Farther north, in Bertie County, NC, Lewiston unofficially received 29.14 inches during September, including 6.28 inches from Dennis and 18.13 inches from Floyd. Floyd's resultant flooding was most extensive in eastern North Carolina and southeastern Virginia, although nearly a dozen gauging stations in New Jersey—many of them in the Ruritan River basin—logged all-time record crests. The Raritan River at Manville, NJ crested 13.5 feet above flood stage on September 17, 3.7 feet above the previous record set on August 28,

1971, after Tropical Storm Doria's passage. The Blackwater River at Franklin, VA crested on September 20, an estimated 3 to 4 feet above the August 1940 high-water mark and 17 to 18 feet above flood stage. Catastrophic flooding was observed in several eastern North Carolina basins, including the Tar, Neuse, Waccamaw, and Cape Fear Rivers. The Tar River at Rocky Mount, NC surpassed the previous record (due to Fran in September 1996) by 5.8 feet, cresting about 16.7 feet above flood stage. Similarly, the Waccamaw River at Freeland, NC surpassed Fran's record crest by 2.3 feet. In the Neuse River basin, Contentnea Creek near Lucama, NC peaked 4.5 feet above Fran's flood level and about 3.0 feet above the 1987 record crest. On the mainstem Neuse River near Clayton, NC, runoff from Floyd's rainfall pushed the crest about 11.6 feet above flood stage and 0.5 foot above the September 1996 record.

Wettest Month (Inches) on Record

Location	Total	Normal	Previous Record/Year
Wilmington, NC	23.41	5.04	21.12 in July 1886
Raleigh, NC	21.79	3.19	16.65 in September 1996
Philadelphia, PA	13.07	3.42	12.10 in August 1911
Wilmington, DE	12.68	3.43	12.63 in July 1989

Record-High September Rainfall (Inches)

Location	Total	Normal	Previous Record/Year
Wilmington, NC	23.41	5.04	20.10 in 1887
Raleigh, NC	21.79	3.19	16.65 in 1996
Richmond, VA	16.60	3.34	10.98 in 1975
Philadelphia, PA	13.07	3.42	12.09 in 1882
Wilmington, DE	12.68	3.43	9.53 in 1960
Williamsport, PA	12.60	3.39	10.02 in 1975
Milton, MA	11.90	3.82	11.04 in 1933
Albany, NY	11.06	2.95	8.91 in 1890
Wichita, KS	10.69	3.49	10.58 in 1945
Burlington, VT	10.25	3.30	8.18 in 1945
Bangor, ME	9.88	3.42	9.03 in 1954
Caribou, ME	8.81	3.45	8.14 in 1954
St. Johnsbury, VT	8.59	3.10	not available
Fargo, ND	6.50	1.99	6.27 in 1889

Wettest Month (Inches) Since...

Location	Total	Normal	Wettest Month Since...
Albany, NY	11.06	2.95	13.48 in October 1869
Baltimore, MD	11.50	3.41	12.41 in September 1934
Richmond, VA	16.60	3.34	18.87 in July 1945
Burlington, VT	10.25	3.30	11.54 in August 1955
Williamsport, PA	12.60	3.39	16.80 in June 1972
Washington, DC	10.27	3.31	12.36 in September 1975
Caribou, ME	8.81	3.45	12.09 in August 1981
Bangor, ME	9.88	3.42	11.61 in November 1983

During the afternoon of September 21, disorganized Tropical Storm Harvey crossed southern Florida, making landfall near Everglades City. Maximum sustained winds were near 50 mph, mainly in squalls displaced well to the southeast of the center. Harvey produced few adverse effects, although rainfall exceeded 4 inches in most locations south of Lake Okeechobee. Elsewhere in the East, extremely wet conditions were observed in some locations not directly affected by tropical activity. For example, monthly rainfall in Melbourne, FL totaled 17.10 inches (259 percent of normal), bolstered by a daily-record amount (7.98 inches) on September 25.

In contrast to wetness in the East, drought intensified from the Ohio Valley southward to the Gulf Coast. In Arkansas, Little Rock's July-September rainfall totaled only 2.45 inches (23 percent of normal), their driest 3-month period since only 1.35 inches fell in June-August 1980. Evansville, IN, netted 0.39 inch (13 percent of normal) during the month, their driest September since 1928. Tupelo's monthly sum of 0.05 inch (1 percent of normal) broke their September record set just last year. Several cities in Kentucky and Tennessee noted their driest July-September or August-September

periods on record:

Record-Low July-September Rainfall (Inches)

Location	Total	Normal	Previous Record/Year
Louisville, KY	2.01	11.21	3.80 in 1930
Lexington, KY	4.67	12.13	4.92 in 1903

Record-Low August-September Rainfall (Inches)

Location	Total	Normal	Previous Record/Year
Chattanooga, TN	1.07	7.68	1.83 in 1963
Knoxville, TN	1.67	6.20	2.07 in 1954

Extremely dry weather also prevailed in the Great Basin and the Northwest. For some areas in the interior Northwest, the dryness represented an intensification of a 7-month drought. In Nevada, July-September totals of 0.21 inch in Elko (13 percent of normal) and 0.29 inch (26 percent) in Winnemucca were the lowest since 1956 and 1993, respectively. West of the Cascades, however, September's dry weather was an anomaly in an otherwise very wet water year (October-September). For example, Astoria, OR tallied 0.27 inch (9 percent of normal) during September, concluding their second-wettest water year (98.43 inches, or 148 percent of normal) on record. Astoria's wettest water year was in 1996-97, when 100.44 inches fell. Similarly in Montana, Glasgow's September rainfall (1.06 inches, or 106 percent of normal) propelled their water-year precipitation to 17.65 inches (161 percent), behind only 19.37 inches in 1922-23 and 18.54 inches in 1926-27.

Record-Low September Rainfall (Inches)

Location	Total	Normal	Previous Record/Year
Medford, OR	0.00	0.86	0.00 in 1974, 1987
Boise, ID	0.00	0.80	0.00 in 1987
Lewiston, ID	trace	0.78	trace in 1975
Spokane, WA	trace	0.73	trace in 1990
Tupelo, MS	0.05	3.60	0.06 in 1998

The combination of dry soils and several cold front passages resulted in unusually low minimum temperatures across parts of the South and Northwest. Low temperatures averaged a record-setting 42.6°F in Eugene, OR, including a September-record low of 31°F on the 28th. A day later in Colorado, September records were tied in Alamosa (15°F) and Pueblo (21°F). In Texas, Austin-Bergstrom noted their third-driest September (0.47 inch, or 14 percent of normal), which contributed to cool nights (average low of 63.8°F, 5.6°F below normal). Elsewhere in Texas, Houston's monthly rainfall (1.37 inches, or 28 percent of normal) left their year-to-date total 10.77 inches below normal. Though September 4 marked the last of Dallas-Ft. Worth's near-record 56 consecutive days without measurable rainfall, their monthly total (2.30 inches, or 68 percent of normal) was below normal for the fourth month in a row.

Record-Low September Temperature (°F)

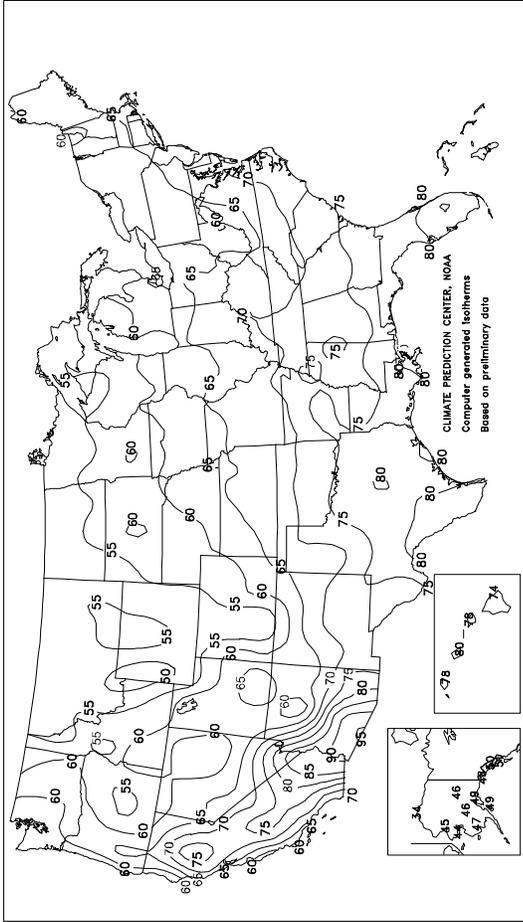
Location	Low/Date	Previous Record/Date
Alamosa, CO	15 on Sep. 29	15 on September 30, 1985
Pueblo, CO	21 on Sep. 29	27 on September 29, 1985
Eugene, OR	31 on Sep. 28	32 on September 28, 1945
Austin, TX	45 on Sep. 23	45 on September 29, 1967

In much of the Plains, Midwest, and Southeast, most of the month's rain fell in a very short time toward month's end. On September 26-27, rainfall records were established in Wichita, KS for 1-, 2-, and 3-hour periods (3.85, 4.89, and 5.63 inches, respectively). Wichita's 24-hour rainfall reached 7.93 inches, narrowly missing their record of 7.99 inches, set on September 6-7, 1911. Farther east, Asheville, NC noted 2.20 inches (57 percent of normal) for the month, 1.89 inches of which fell in 24 hours on September 27-28. Moline, IL registered a 24-hour total of 3.92 inches on the same days, boosting their monthly sum to 4.41 inches (110 percent of normal). In Indiana, Indianapolis' 0.68-inch total on September 29

(Continued on page 14)

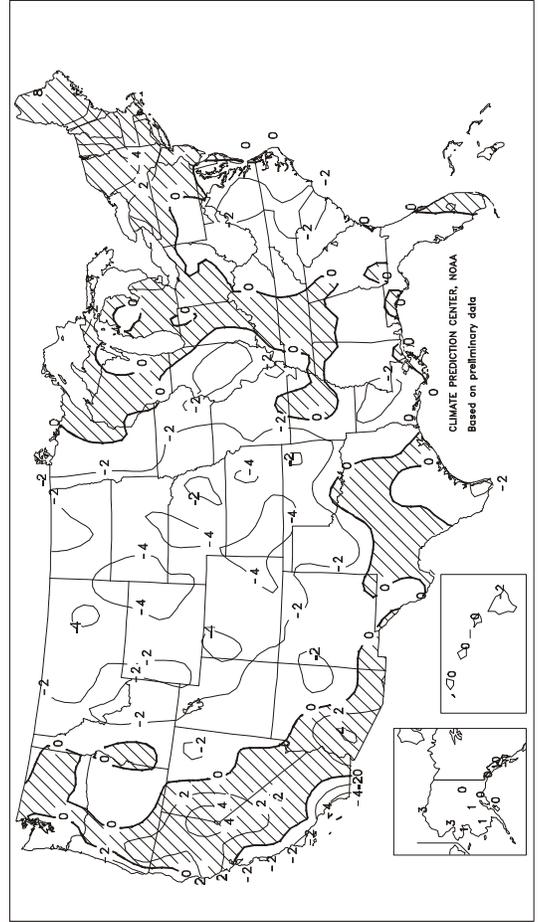
Average Temperature (°F)

SEP 1999



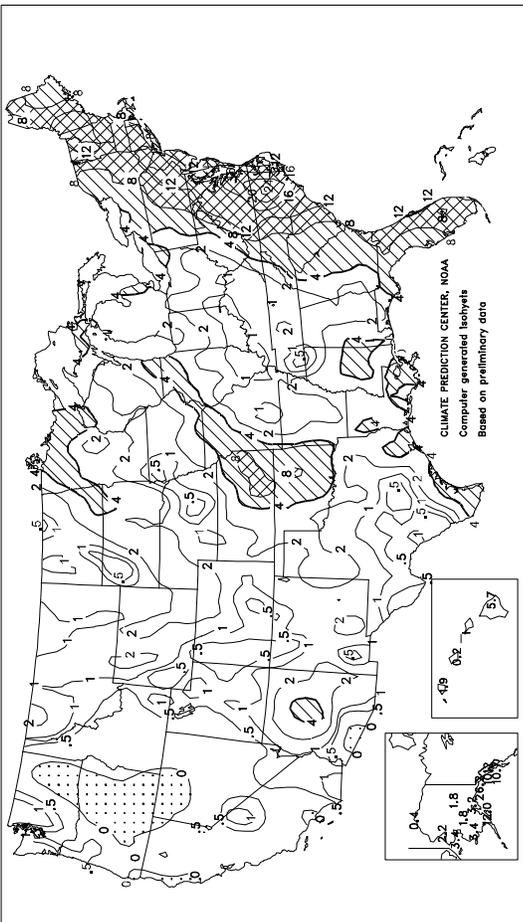
Departure of Average Temperature from Normal (°F)

SEP 1999



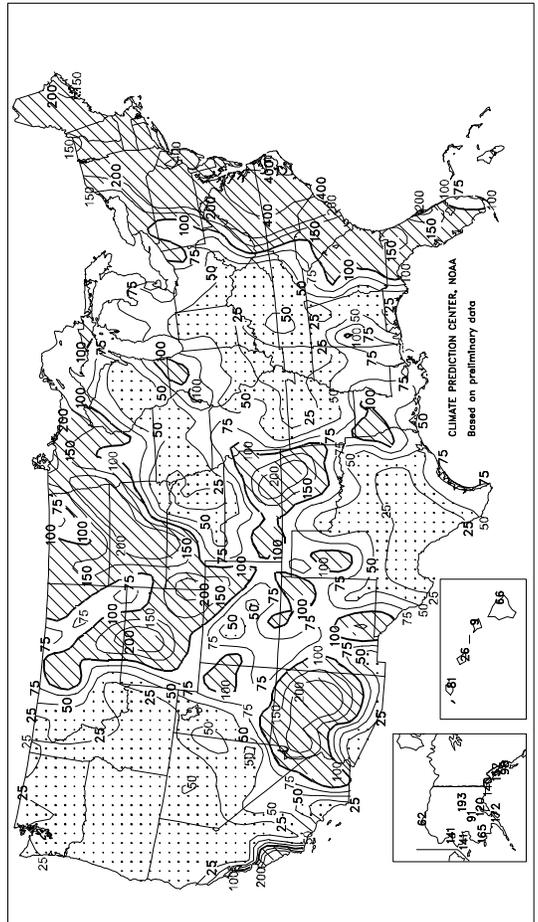
Total Precipitation (inches)

SEP 1999



Percent of Normal Precipitation

SEP 1999



TEMPERATURE AND PRECIPITATION SUMMARY

September 1999

STATES AND STATIONS	TEMP., °F		PRECIP.		STATES AND STATIONS	TEMP., °F		PRECIP.		STATES AND STATIONS	TEMP., °F		PRECIP.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AL BIRMINGHAM	75	1	0.65	-3.26	ME CARIBOU	62	8	8.60	5.15	RI WILKES-BARRE	64	1	9.76	6.48
AL HUNTSVILLE	74	2	0.92	-3.15	ME PORTLAND	63	4	8.37	5.28	RI WILLIAMSPORT	64	1	12.60	9.19
AL MOBILE	76	-2	4.41	-1.50	MD BALTIMORE	68	-1	11.50	8.09	RI PROVIDENCE	66	2	7.00	3.54
AL MONTGOMERY	74	-2	1.38	-2.69	MA BOSTON	67	2	9.86	6.79	RI SC BEAUFORT	75	-1	2.94	-2.04
AK ANCHORAGE	49	1	3.32	0.64	MA WORCESTER	65	4	8.83	4.82	RI SC CHARLESTON	74	-2	7.96	3.24
AK BARROW	34	3	0.41	-0.18	MI ALPENA	58	1	2.47	-0.64	RI SC COLUMBIA	73	-2	3.58	-0.09
AK FAIRBANKS	46	0	1.59	0.65	MI GRAND RAPIDS	62	1	3.21	-1.02	RI SC GREENVILLE	72	0	3.04	-0.92
AK JUNEAU	50	0	10.22	3.49	MI HOUGHTON LAKE	57	0	3.19	-0.23	SD ABERDEEN	56	-3	4.27	2.41
AK KODIAK	49	-1	11.99	5.00	MI LANSING	62	1	2.04	-1.52	SD HURON	59	-2	2.09	0.37
AK NOME	44	2	3.63	1.20	MI MARQUETTE	--	--	0.00	-9.99	SD RAPID CITY	56	-4	1.02	-0.22
AZ FLAGSTAFF	56	-1	4.55	2.54	MI MUSKEGON	61	0	2.57	-1.31	SD SIoux FALLS	60	-1	0.84	-2.18
AZ PHOENIX	87	2	1.31	0.44	MI DULUTH	55	0	5.80	1.96	SD BRISTOL	66	-2	1.09	-2.16
AZ TUCSON	82	1	0.97	-0.70	MN INT'L FALLS	52	-2	5.89	2.74	SD CHATTANOOGA	73	1	0.62	-3.53
AZ YUMA	90	4	0.02	-0.28	MN MINNEAPOLIS	61	1	2.73	0.02	SD KNOXVILLE	70	0	0.82	-2.24
AR FORT SMITH	73	-1	4.04	0.80	MN ROCHESTER	58	-1	0.74	-2.73	SD MEMPHIS	75	1	1.11	-2.43
AR LITTLE ROCK	76	0	1.09	-2.96	MN ST. CLOUD	57	0	2.61	-0.56	SD NASHVILLE	72	0	1.97	-1.50
CA BAKERSFIELD	77	0	0.08	-0.08	MS JACKSON	75	-1	2.48	-1.07	TX ABILENE	76	0	1.60	-1.62
CA EUREKA	55	-2	0.05	-0.84	MS MERIDIAN	74	-2	2.36	-1.16	TX AMARILLO	66	-3	2.54	0.56
CA FRESNO	77	3	0.00	-0.24	MO TUPELO	74	1	0.05	-3.56	TX AUSTIN	79	-2	0.47	-2.83
CA LOS ANGELES	68	-2	0.00	-0.33	MO COLUMBIA	67	-1	1.43	-2.42	TX BEAUMONT	78	0	3.25	-3.06
CA REDDING	76	2	0.00	-0.90	MO KANSAS CITY	66	-2	5.32	0.47	TX BROWNSVILLE	80	-1	3.99	-2.01
CA SACRAMENTO	72	1	0.00	-0.37	MO SAINT LOUIS	70	0	1.09	-2.04	TX CORPUS CHRISTI	80	-1	3.88	-1.64
CA SAN DIEGO	67	-5	0.02	-0.22	MO SPRINGFIELD	67	-2	1.80	-2.82	TX DEL RIO	81	1	0.00	-2.82
CA SAN FRANCISCO	63	-1	0.24	0.04	MT BILLINGS	56	-3	2.69	1.32	TX EL PASO	75	1	1.94	0.24
CO ALAMOSA	53	-2	1.09	0.20	MT BUTTE	51	0	0.45	-0.81	TX FORT WORTH	79	2	2.30	-1.09
CO CO SPRINGS	58	-3	0.52	-0.81	MT GLASGOW	54	-3	1.06	0.06	TX GALVESTON	80	0	3.95	-1.90
CO DENVER	60	-3	1.18	-0.06	MT GREAT FALLS	53	-4	1.83	0.59	TX HOUSTON	78	0	1.37	-3.53
CO GRAND JUNCTION	63	-4	1.01	0.18	MT KALISPELL	51	-2	0.29	-0.97	TX LUBBOCK	67	-1	3.27	0.66
CO PUEBLO	63	-3	0.31	-0.60	MT MILES CITY	56	-4	0.99	-0.29	TX MIDLAND	75	2	0.95	-1.67
CT BRIDGEPORT	67	1	6.89	3.82	MT MISSOULA	54	-2	0.42	-0.69	TX SAN ANGELO	77	2	0.76	-2.65
CT HARTFORD	66	2	11.22	7.45	NE GRAND ISLAND	63	-1	0.56	-2.28	TX SAN ANTONIO	80	1	0.06	-3.36
DC WASHINGTON	70	-1	10.27	6.96	NE LINCOLN	64	-1	1.22	-2.25	TX VICTORIA	79	-1	3.78	-1.82
DE WILMINGTON	68	0	12.68	9.24	NE NORFOLK	61	-2	0.66	-1.79	TX WACO	79	1	0.51	-3.07
FL DAYTONA BEACH	79	0	7.05	0.72	NE NORTH PLATTE	58	-3	1.20	-0.39	TX WICHITA FALLS	76	1	1.76	-2.05
FL JACKSONVILLE	76	-2	13.00	5.95	NE OMAHA	64	-1	1.64	-2.08	UT SALT LAKE CITY	64	-2	0.45	-0.83
FL KEY WEST	83	0	7.72	1.86	NE SCOTTSBLUFF	57	-4	2.39	1.33	VT BURLINGTON	64	6	10.25	6.95
FL MIAMI	82	0	7.01	-0.62	NE VALENTINE	58	-3	3.39	1.86	VA LYNCHBURG	66	-2	12.05	8.82
FL ORLANDO	80	-1	6.40	0.38	NV ELY	56	1	0.55	-0.48	VA NORFOLK	72	0	13.16	9.25
FL PENSACOLA	78	-1	0.76	-4.55	NV LAS VEGAS	82	1	0.35	0.07	VA RICHMOND	68	-2	16.60	13.27
FL TALLAHASSEE	78	0	5.82	0.25	NV RENO	66	5	0.07	-0.28	VA ROANOKE	66	-1	7.38	3.89
FL TAMPA	81	0	6.05	0.07	NV WINNEMUCCA	60	1	0.12	-0.26	VA WASH/DULLES	67	0	9.32	5.96
GA WEST PALM	82	0	5.06	-3.46	NH CONCORD	63	4	9.13	6.33	WA OLYMPIA	57	-1	0.12	-2.14
GA ATHENS	72	-1	3.29	-0.06	NJ NEWARK	69	0	9.38	5.72	WA QUILLAYUTE	54	-2	1.81	-3.08
GA ATLANTA	73	0	4.19	0.76	NM ALBUQUERQUE	68	-1	0.54	-0.45	WA SEATTLE-TACOMA	60	0	0.17	-1.72
GA AUGUSTA	73	-2	5.43	2.41	NY ALBANY	65	3	11.06	8.10	WA SPOKANE	59	0	0.00	-0.71
GA COLUMBUS	76	0	1.16	-2.07	NY BINGHAMTON	62	3	6.95	3.62	WA YAKIMA	59	-1	0.00	-0.38
GA MACON	73	-2	3.34	0.56	NY BUFFALO	64	2	3.95	0.45	WV BECKLEY	62	-1	4.48	1.13
GA SAVANNAH	76	-1	6.52	2.06	NY ROCHESTER	64	2	3.41	0.45	WV CHARLESTON	66	-2	1.81	-1.43
HI HILO	74	-2	6.27	-2.05	NY SYRACUSE	64	3	5.35	1.55	WV ELKINS	60	-2	2.80	-0.96
HI HONOLULU	80	-1	0.20	-0.58	NC ASHEVILLE	65	-1	2.20	-1.67	WV HUNTINGTON	66	-2	0.94	-1.99
HI KAHULUI	78	0	0.06	-0.27	NC CHARLOTTE	69	-3	4.26	0.77	WV EAU CLAIRE	59	0	1.04	-2.87
HI LIHUE	78	-1	1.93	-0.44	NC GREENSBORO	68	-2	8.62	5.07	WI GREEN BAY	59	0	1.24	-2.22
ID BOISE	64	2	0.00	-0.80	NC HATTERAS	74	0	5.85	0.61	WI LA CROSSE	62	0	2.39	-1.41
ID LEWISTON	64	0	0.00	-0.83	NC RALEIGH	69	-2	21.79	18.60	WI MADISON	60	1	1.55	-1.82
ID POCATELLO	57	-2	0.02	-0.83	NC WILMINGTON	74	-1	23.41	18.37	WI MILWAUKEE	64	2	4.16	0.78
IL CHICAGO/O'HARE	64	-1	3.27	-0.55	ND BISMARCK	55	-2	1.31	-0.18	WY CASPER	55	-3	1.28	0.34
IL MOLINE	63	-1	4.41	0.38	ND DICKINSON	53	-4	2.62	0.94	WY CHEYENNE	54	-3	2.11	0.84
IL PEORIA	64	-2	1.54	-2.33	ND FARGO	55	-3	6.50	4.52	WY LANDER	55	-3	2.01	0.92
IL ROCKFORD	61	-2	5.29	1.49	ND GRAND FORKS	53	-3	2.55	0.31	WY SHERIDAN	55	-2	2.69	1.32
IL SPRINGFIELD	65	-3	2.42	-0.91	ND JAMESTOWN	54	-3	2.67	0.91					
IN EVANSVILLE	68	-1	0.39	-2.58	ND WILLISTON	53	-3	1.57	0.23					
IN FORT WAYNE	64	-1	1.03	-1.64	OH AKRON-CANTON	63	0	3.63	0.31					
IN INDIANAPOLIS	67	0	0.75	-2.12	OH CINCINNATI	67	-1	0.86	-2.03					
IN SOUTH BEND	65	1	1.25	-2.37	OH CLEVELAND	65	1	1.93	-1.52					
IA BURLINGTON	67	2	4.95	0.83	OH COLUMBUS	68	2	1.91	-1.05					
IA CEDAR RAPIDS	61	-3	1.36	-2.55	OH DAYTON	67	1	1.05	-1.49					
IA DES MOINES	63	-2	2.33	-1.20	OH MANSFIELD	63	-1	1.63	-1.75					
IA DUBUQUE	60	-1	1.70	-2.97	OH TOLEDO	65	2	1.50	-1.35					
IA SIOUX CITY	61	-2	0.52	-2.37	OH YOUNGSTOWN	62	0	4.28	0.81					
IA WATERLOO	61	0	1.12	-2.40	OK OKLAHOMA CITY	71	-2	4.88	1.03					
KS CONCORDIA	65	-2	1.14	-1.88	OK TULSA	70	-3	9.69	4.99					
KS DODGE CITY	65	-3	2.05	0.14	OR ASTORIA	58	0	0.27	-2.64					
KS GOODLAND	60	-4	0.84	-0.73	OR BURNS	54	-1	0.00	-0.59					
KS TOPEKA	66	-2	4.43	0.63	OR EUGENE	62	-1	0.01	-1.66					
KS WICHITA	67	-3	10.69	7.20	OR MEDFORD	68	2	0.00	-0.86					
KY JACKSON	68	0	1.13	-2.53	OR PENDLETON	63	0	0.01	-0.59					
KY LEXINGTON	69	1	1.39	-1.81	OR PORTLAND	65	1	0.12	-1.63					
KY LOUISVILLE	72	2	0.53	-2.63	OR SALEM	63	2	0.09	-1.47					
KY PADUCAH	69	-1	0.66	-3.03	PA ALLENTOWN	65	0	11.57	7.73					
LA BATON ROUGE	76	-2	4.08	-0.77	PA ERIE	64	0	5.15	0.75					
LA LAKE CHARLES	78	0	1.97	-3.72	PA MIDDLETOWN	68	2	9.11	5.61					
LA NEW ORLEANS	78	0	2.87	-2.64	PA PHILADELPHIA	70	2	13.07	9.65					
LA SHREVEPORT	75	-1	4.90	1.79	PA PITTSBURGH	64	0	1.97	-1.00					

Based on 1961-90 normals.

(Continued from page 11)

lifted their monthly rainfall to 0.75 inch (26 percent or normal), averting a record-dry September. Impressive 24-hour rainfall amounts also soaked the northern Plains early in the month and the southeastern Plains on September 10-11. In South Dakota, 2.81 inches pelted Aberdeen on September 2-3. In Oklahoma, September 10-11 totals reached 3.68 inches in Oklahoma City and 3.11 inches in Tulsa. Impressive rains also continued in parts of the Southwest. On Arizona's Mongollon Rim, Flagstaff received 4.55 inches (224 percent of normal) for the month, including 1.50 inches on September 14. Late in the month, snow developed in portions of the Rockies and High Plains. In Denver, 2.2 inches of snow fell on the 28th, their 23rd occurrence of measurable snowfall in September this century. Late-month snowfall totaled 7.9 inches in Lander, WY.

Despite the late-month showers in the interior Southeast, long-term rainfall deficits continued to mount. Fifteen-month (July 1998 - September 1999) deficits grew to 15.99 inches in Asheville, NC and 19.78 inches in Greenville-Spartanburg, NC. In contrast, the rainfall deficit in Baltimore, MD since July 1, 1998, diminished to 8.18 inches, down from 18.49 inches at the end of July 1999. In Kentucky, Lexington's 14-month deficit reached 17.58 inches.

Meanwhile in the West, warmth returned after a long absence. Downtown Sacramento, CA, 1.4°F above normal during September, had above-normal monthly temperatures for the first time since September 1998. Bakersfield, CA, 0.2°F above normal for the month, experienced above-normal monthly temperatures for only the second time in the past 20 months (February 1998 to date). Meanwhile in New England, Burlington, VT experienced 90°F heat on three consecutive days in September (from the 2nd to the 4th) for the first time since September 2-4, 1953. Farther south, early-month highs occasionally topped 100°F, including 101°F in Augusta, GA on September 6.

Mild weather prevailed in Alaska, where monthly temperatures averaged up to 3°F above normal. Fairbanks' first freeze occurred on September 20, ending their third-longest growing season at 131 days (May 12 - September 19). Wet conditions were observed primarily across southern and western areas. Measurable rain fell on 27 of the month's 30 days in Juneau, totaling 10.62 inches (158 percent of normal). Meanwhile in Hawaii, the 2-year drought continued, affecting the islands to varying degrees. On Maui, one of the most drought-affected islands, monthly rainfall totaled 0.03 inch (8 percent of normal) in Kahului, leaving their year-to-date total at 6.92 inches (50 percent).

Fieldwork

Tropical Storm Dennis delivered heavy rains to parts of the middle Atlantic Coastal Plains early in the month, recharging moisture levels and revitalizing late-summer crops. A cold front delivered rain to parts of the northern Great Plains and extreme western Corn Belt, and cooler temperatures for the rest of the Corn Belt. Crops benefited from the moisture but the small grain harvest was delayed in parts of the upper Mississippi Valley and adjacent areas in the northern Great Plains. Farther west, in the High Plains and Pacific Northwest, dry weather aided small grain harvest progress. Harvest gained momentum in the southern Corn Belt, where warm, dry weather quickly ripened row crops. Field preparations continued in most areas of the Great Plains, but many growers delayed winter wheat seeding due to dry soils. Crop development slowly progressed in the Southwest due to below-normal temperatures.

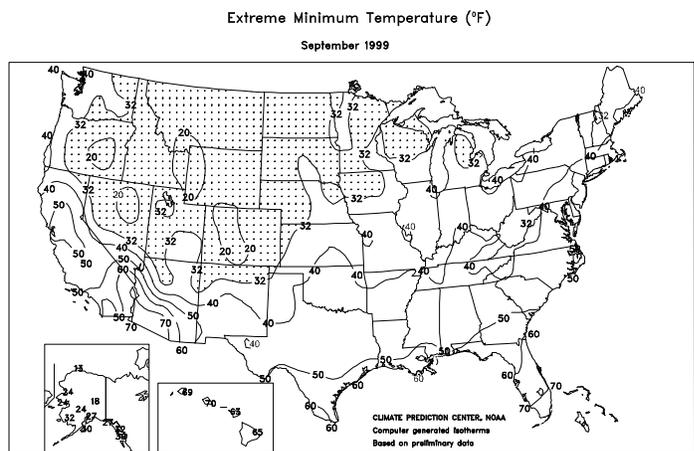
As mid-month approached, above-normal temperatures quickly ripened crops in the Southern and Eastern States. As crops matured, the harvest pace accelerated in the southern Corn Belt, lower Mississippi Valley, and Southeast. Heavy rains halted winter wheat seeding in parts of the central and southern Great Plains, but recharged depleted soil moisture supplies. Small grain harvesting 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.

As mid-month passed, crops along the Atlantic Coast from South Carolina to New England were damaged by Hurricane Floyd's strong winds and heavy rainfall. The worst damage was in North Carolina and Virginia. In the Corn Belt and Southeast, warm daytime temperatures promoted ripening and dry weather aided harvest progress. In the Great Plains, fieldwork and winter wheat seeding progressed with virtually no rain delays. Adequate soil moisture and cool weather aided emergence and growth in early-planted wheat fields. In the Pacific Northwest, recently seeded winter wheat emerged, despite dry soils. Crop development and harvest progress continued to lag behind normal in the Southwest.

Near the end of the month, freezing temperatures halted crop development in the upper Mississippi Valley, and frost nipped the tops of green soybeans in parts of the northern Corn Belt. However, crop damage was minimal. Dry weather prevailed over most of the Nation, providing nearly ideal harvest conditions in the Corn Belt, Great Plains, and lower Mississippi Valley. In the Great Plains and Pacific Northwest, field tillage and winter wheat seeding also benefited from dry weather. Moisture supplies remained mostly adequate for germinating seeds, even though rainfall was below normal in most areas. A pocket of showers improved soil moisture levels in eastern Oklahoma. Additional rain and lingering wetness stressed crops and hindered harvest progress along the Atlantic Coastal Plains. A heat wave accelerated crop development in California, but maturity and harvest progress continued to lag behind the 5-year average.

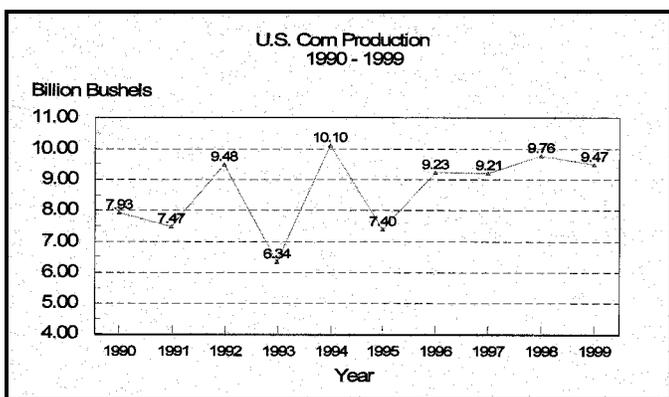
Toward month's end, harvest progress accelerated in most areas east of the Rocky Mountains, as dry conditions prevailed in most areas. A narrow band of heavy rainfall extending from Kansas to the Great Lakes delayed harvest activities in parts of the Corn Belt. Harvest rapidly progressed in the Mississippi Delta, with only isolated rain delays. In the Atlantic Coastal Plains, a wet weather pattern continued to limit harvest progress. Winter wheat seeding was aided by favorably dry weather in most of the Great Plains, although some areas needed moisture to germinate recently planted fields. In the Pacific Northwest, growers delayed planting because of soil moisture shortages. Warm weather ripened crops in California, where the harvest pace accelerated due to favorably dry conditions.



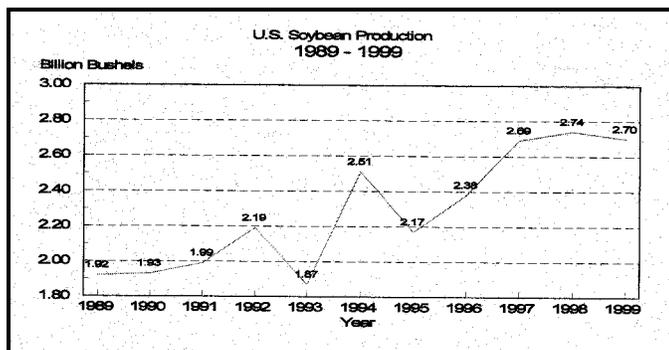
U.S. Crop Production Highlights

The following information was released by USDA's Agricultural Statistics Board on October 8, 1999. Forecasts refer to October 1.

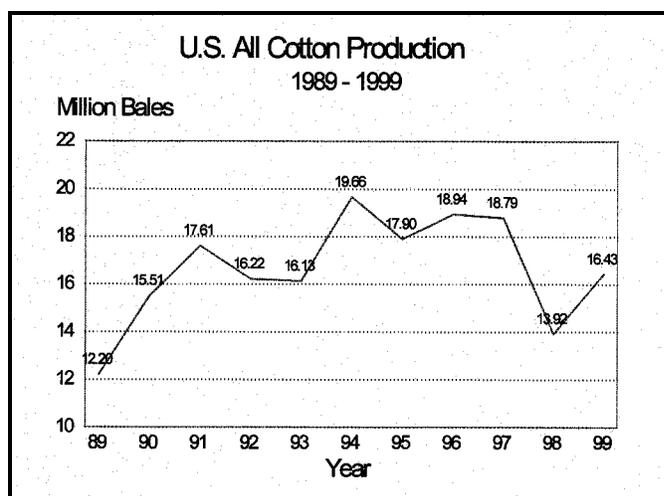
Corn grain production is forecast at 9.47 billion bushels, up 1 percent from last month but down 3 percent from 1998. Yields are expected to average 133.5 bushels per acre, up 1.3 bushels from last month but down 0.9 bushel from a year ago. If realized, this would be the fourth-largest production and third-highest yield on record. Acreage for harvest is estimated at 70.9 million acres, down 30,000 acres from last month due to flooding in North Carolina.



Soybean production is forecast at 2.70 billion bushels, down 3 percent from September 1 and down 2 percent from last year's record of 2.74 billion bushels. The yield forecast, at 37.0 bushels per acre, decreased 0.9 bushel from last month and is 1.9 bushels below the 1998 final yield. Acreage for harvest is estimated at a record 72.8 million acres, down 1 percent from September 1 but up 3 percent from 1998. Acres expected for harvest were decreased by 475,000 acres in nine States due to abandonment or harvesting for hay. The States with the largest acreage reductions are North Carolina, Kentucky, Ohio, and Tennessee.



All cotton production is forecast at 16.4 million 480-pound bales, down 6 percent from last month, but up 18 percent from 1998. Yield is expected to average 588 pounds per harvested acre, down 37 pounds from last year. If realized, this would be the tenth largest cotton crop on record. Upland harvested acreage was revised downward in Missouri, North Carolina, Tennessee, and Oklahoma, but increased in Arkansas. Texas' Pima harvested acreage was revised to 32,000 acres. In addition to the increased abandonment in North Carolina, a significant decrease in yield potential resulted from Hurricane Floyd.



All oranges: The initial forecast of the 1999-2000 all orange crop is 12.1 million tons, up 22 percent from last year's crop of 9.89 million tons. Florida's all orange forecast is 211 million boxes (9.50 million tons), 14 percent more than the 186 million boxes (8.36 million tons) produced last season. Early and midseason varieties in Florida are forecast at 124 million boxes (5.58 million tons), 11 percent higher than last season. Florida's Valencia forecast of 87 million boxes (3.92 million tons) is 18 percent above last season's final utilization. California's all orange production is forecast at 67 million boxes (2.51 million tons), 76 percent above last season's freeze-damaged crop. The Navel orange forecast of 40 million boxes (1.50 million tons) was carried forward from September, and is 90 percent higher than the previous year's utilization. The initial California Valencia forecast for the 1999-2000 season is 27 million boxes (1.01 million tons), 59 percent higher than a year ago.

National Agricultural Summary

October 4 - 10, 1999

HIGHLIGHTS

Winter wheat seeding and row crop harvest rapidly advanced, as dry weather prevailed across the Nation most of the week. Rain halted harvest activity along the Ohio River Valley and parts of the lower Mississippi Valley and Southeast late in the week. Harvest activity slowly gained momentum in the

Atlantic Coastal Plains, where excessive wetness gradually diminished. In parts of the Pacific Northwest, wheat seedings were delayed by severe soil moisture shortages. Warm weather quickly ripened crops and accelerated the harvest pace in California.

Corn: Ninety-seven percent of the acreage was mature, slightly behind last year's 98-percent pace. Harvest progress, at 43 percent, was 2 percentage points ahead of last year. Maturation and harvest progress were more than 1 week ahead of normal. Seasonal temperatures aided ripening in Colorado and South Dakota, where 19 and 12 percent, respectively, matured during the week. Most of the crop was mature in the Corn Belt, well ahead of normal in Michigan and Ohio. Acreage mature lagged behind the 5-year average in Pennsylvania due to below-normal temperatures. Growers took advantage of nearly ideal weather in the Corn Belt, harvesting 10 to 20 percent of the corn crop in most areas. Late-week rains halted harvest activity along the Ohio River Valley, limiting progress in parts of Illinois, Indiana, Ohio, and Kentucky. However, harvest progress remained well ahead of normal in most areas of the Corn Belt east of the Mississippi River.

Soybeans: Ninety-four percent of the acreage was dropping leaves, slightly ahead of last year's 93-percent pace and 4 percentage points ahead of the average for this date. Above-normal temperatures aided progress in the Southeast and promoted development in the middle Atlantic States, as well as Arkansas, Kansas, and Missouri. Fifty-four percent of the acreage was harvested, compared with 51 percent last year, and ahead of the 45-percent average. Dry weather aided progress in most of the Corn Belt, especially in Iowa, Minnesota, and Nebraska, where growers harvested more than a third of their acreage. Late-week rains halted combines near the Ohio River Valley in the eastern Corn Belt, but progress remained far ahead of normal in Ohio and Kentucky. Harvest was also active in the Mississippi Delta before rain interrupted progress near the end of the week.

Cotton: Bolls opening advanced to 91 percent complete, slightly behind last year's 92-percent progress, but more than 1 week ahead of the 5-year average. Development continued to lag behind normal in California, even though above-normal temperatures accelerated ripening. Warm weather also aided development in North and South Carolina, where bolls opening advanced 7 percentage points. Thirty-six percent of the acreage was harvested, behind last year's 42 percent, but 4 percentage points ahead of the average for this date. Harvest rapidly advanced in the lower Mississippi Valley before late-week rains halted progress.

Winter Wheat: Winter wheat seeding advanced to 68 percent, nearly 1 week ahead of last year when 56 percent was seeded, and 4 percentage points ahead of the 5-year average. Seeding of soft red winter wheat progressed between 20 and 30 percentage points in the eastern Corn Belt before late-week rains halted progress. Dry weather also aided progress in the Great Plains and northern Rocky Mountains, but planting fell farther behind normal in Oregon due to excessively dry soils. Only 5 percent of the Oregon crop was planted, compared with the normal pace of 50 percent. Thirty-nine percent of the acreage was emerged, ahead of last year's 34 percent and slightly ahead of the 38-percent average for this date. Seasonal temperatures and adequate soil moisture aided emergence and growth in most areas of the Great Plains. Late-week rains provided much-needed moisture for germinating recently planted wheat in the eastern Corn Belt.

Rice: Ninety percent of the crop was harvested, compared with 88 percent last year and the 87-percent average. Dry weather aided harvest efforts in California, where progress advanced 30 percentage points. In the Mississippi Delta, the harvest season neared completion, as rain delays were minimal.

Sorghum: Eighty-five percent of the crop was mature, equal to the 5-year average but behind last year's rapid progress. Above-normal temperatures quickly ripened fields in the Great Plains, but development lagged behind normal in Nebraska and South Dakota due to cold nighttime temperatures. Forty-seven percent of the acreage was harvested, the same as a year ago and slightly ahead of the average. Harvest advanced 30 percentage points in Illinois before late-week rains temporarily interrupted progress. In the Great Plains, harvest gained momentum as mostly dry weather prevailed.

Peanuts: Harvest progressed to 50 percent, slightly ahead of the 47-percent average for this date, and well ahead of last year when just 37 percent was harvested by this date. Digging rapidly advanced in Florida and Georgia, but rain interfered with progress in parts of Alabama. In the Atlantic Coastal Plains, soils slowly dried and digging gained momentum, but progress lagged well behind normal in the Carolinas and Virginia. Dry weather aided digging in Oklahoma.

Crop Progress and Condition

Week Ending October 10, 1999

Soybeans Percent Dropping Leaves				
	Oct 10 1999	Prev Week	Prev Year	5-Yr Avg
AL	71	61	78	70
AR	61	47	68	54
GA	66	58	68	71
IL	98	90	94	93
IN	100	100	98	97
IA	100	96	100	97
KS	91	77	98	94
KY	89	82	83	75
LA	93	91	95	85
MI	100	100	99	93
MN	99	98	99	99
MS	98	93	96	84
MO	89	79	89	82
NE	99	96	100	99
NC	48	38	48	45
OH	100	100	100	96
SC	24	19	17	20
SD	99	93	100	99
TN	86	74	88	76
19 Sts	94	88	93	90

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

Soybeans Percent Harvested				
	Oct 10 1999	Prev Week	Prev Year	5-Yr Avg
AL	30	20	26	15
AR	31	20	29	21
GA	12	9	7	7
IL	51	34	47	55
IN	70	52	54	52
IA	67	32	62	58
KS	28	11	30	33
KY	52	44	30	17
LA	75	61	72	56
MI	46	29	42	28
MN	67	32	79	56
MS	68	62	71	52
MO	36	19	28	26
NE	64	27	50	49
NC	10	8	5	5
OH	74	51	68	47
SC	5	5	3	2
SD	36	16	53	42
TN	38	26	24	12
19 Sts	54	32	51	45

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

Winter Wheat Percent Planted				
	Oct 10 1999	Prev Week	Prev Year	5-Yr Avg
AR	9	2	5	12
CA	2	1	0	1
CO	96	87	94	91
GA	2	1	4	3
ID	66	40	71	65
IL	36	7	16	30
IN	42	20	41	39
KS	79	60	51	70
MI	61	36	57	56
MO	26	13	16	28
MT	81	72	76	75
NE	97	92	94	95
NC	15	10	19	19
OH	62	34	60	47
OK	74	55	42	61
OR	5	1	51	50
SD	92	80	92	93
TX	59	50	60	64
WA	84	79	88	85
19 Sts	68	53	56	64

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

Winter Wheat Percent Emerged				
	Oct 10 1999	Prev Week	Prev Year	5-Yr Avg
AR	1	0	2	4
CA	0	0	0	0
CO	75	55	77	73
GA	0	0	1	1
ID	21	13	31	30
IL	3	0	5	6
IN	7	2	16	11
KS	45	25	30	39
MI	26	5	30	30
MO	7	0	5	10
MT	43	30	46	39
NE	79	62	77	77
NC	4	2	0	0
OH	10	2	17	12
OK	33	22	15	23
OR	1	0	31	22
SD	71	47	76	76
TX	35	29	35	42
WA	63	58	74	67
19 Sts	39	26	34	38

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

Corn Percent Mature				
	Oct 10 1999	Prev Week	Prev Year	5-Yr Avg
CO	91	72	95	87
GA	100	100	0	80
IL	99	98	98	94
IN	100	99	98	92
IA	100	100	100	97
KS	99	91	100	98
KY	100	100	100	95
MI	96	94	99	75
MN	98	95	99	97
MO	100	97	99	97
NE	96	91	100	96
NC	100	100	100	100
OH	99	93	97	76
PA	64	58	69	69
SD	90	78	98	94
TX	100	99	100	99
WI	98	91	97	83
17 Sts	97	94	98	93

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

Corn Percent Harvested				
	Oct 10 1999	Prev Week	Prev Year	5-Yr Avg
CO	15	10	32	23
GA	99	97	97	95
IL	59	43	44	31
IN	55	40	28	22
IA	33	18	29	20
KS	52	40	70	56
KY	92	88	83	64
MI	28	16	31	16
MN	28	9	44	21
MO	69	56	61	51
NE	32	17	42	23
NC	75	65	94	82
OH	42	26	21	13
PA	20	18	22	19
SD	19	12	30	16
TX	91	84	92	89
WI	28	16	26	15
17 Sts	43	29	41	28

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

Crop Progress and Condition

Week Ending October 10, 1999

Cotton Percent Bolls Opening				
	Oct 10 1999	Prev Week	Prev Year	5-Yr Avg
AL	93	88	92	86
AZ	100	100	97	99
AR	98	96	96	94
CA	90	80	88	97
GA	89	85	85	85
LA	100	100	100	99
MS	100	100	100	98
MO	100	100	100	95
NM	85	80	88	91
NC	95	88	98	95
OK	97	96	98	70
SC	87	80	93	88
TN	100	100	100	99
TX	87	82	89	76
14 Sts	91	87	92	86

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

Cotton Percent Harvested				
	Oct 10 1999	Prev Week	Prev Year	5-Yr Avg
AL	42	32	47	32
AZ	13	9	16	25
AR	62	43	43	36
CA	3	1	1	12
GA	24	18	22	22
LA	83	66	73	63
MS	68	52	76	56
MO	82	59	29	37
NM	2	0	5	6
NC	5	1	29	20
OK	21	6	49	18
SC	23	12	40	25
TN	59	47	55	38
TX	28	24	48	31
14 Sts	36	28	42	32

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

Rice Percent Harvested				
	Oct 10 1999	Prev Week	Prev Year	5-Yr Avg
AR	93	87	92	89
CA	60	30	51	57
LA	100	99	99	98
MS	94	84	96	94
TX	100	100	98	98
5 Sts	90	82	88	87

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

Sorghum Percent Mature				
	Oct 10 1999	Prev Week	Prev Year	5-Yr Avg
AR	100	100	100	99
CO	64	43	72	55
IL	91	89	83	78
KS	86	74	97	86
LA	100	100	100	100
MS	100	100	100	99
MO	91	80	94	87
NE	87	74	97	92
NM	32	20	45	37
OK	77	69	70	51
SD	84	70	94	93
TX	87	84	91	90
12 Sts	85	77	92	85

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

Sorghum Percent Harvested				
	Oct 10 1999	Prev Week	Prev Year	5-Yr Avg
AR	99	96	97	92
CO	15	10	6	10
IL	51	21	28	19
KS	28	18	41	33
LA	100	99	100	97
MS	100	99	100	97
MO	58	50	54	47
NE	21	7	20	22
NM	9	2	1	3
OK	24	16	23	17
SD	19	14	34	22
TX	83	80	66	71
12 Sts	47	40	47	45

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

Peanuts Percent Harvested				
	Oct 10 1999	Prev Week	Prev Year	5-Yr Avg
AL	68	59	33	61
FL	86	71	37	38
GA	67	52	41	63
NC	15	10	37	31
OK	30	8	17	25
SC	28	19	38	48
TX	21	18	32	24
VA	49	34	55	65
8 Sts	50	39	37	47

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

Peanuts Crop Condition by Percent					
	VP	P	F	G	EX
AL	5	18	45	25	7
FL	4	8	60	27	1
GA	11	17	41	27	4
NC	14	17	35	30	4
OK	1	10	21	44	24
SC	1	12	46	29	12
TX	3	7	19	48	23
VA	2	4	34	53	7
8 Sts	7	13	36	34	10
Prev Wk	7	14	34	36	9
Prev Yr	NA	NA	NA	NA	NA

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

State Agricultural Summaries

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

ALABAMA: Days suitable for fieldwork 6.0. Topsoil moisture 31% very short, 37% short, 32% adequate, 0% surplus. Corn 97% mature, 100% 1998, 100% average. Corn 85% harvested, 99% 1998, 91% average. Cotton bolls 93% opening, 92% 1998, 86% average. Cotton 42% harvested, 47% 1998, 32% average. Soybeans blooming 96%, 100% 1998, 100% average. Soybeans setting 94% pods, 100% 1998, 100% average. Soybeans dropping 71% leaves, 78% 1998, 70% average. Wheat planted 5%, 10% 1998, 13% average. Soybean 52% very poor, 15% poor, 18% fair, 15% good, 0% excellent. Pasture feed 18% very poor, 33% poor, 29% fair, 19% good, 1% excellent. Livestock feed 10% very poor, 19% poor, 35% fair, 32% good, 4% excellent.

ALASKA: DATA NOT AVAILABLE

ARIZONA: Cotton harvest continues to progress throughout most of Areas with good harvesting conditions. Alfalfa harvest activity was reported as 30% not being harvested, 7% light, 24% moderate, 39% active. Alfalfa condition was reported as 5% poor, 26% fair, 58% good, 11% excellent. Range, Pasture feed remained in good to excellent condition last week despite the lack of rain. Central Areas producers shipped a light volume of cantaloupes, green onions, watermelons. Eastern Areas producers shipped apples, chile peppers, pumpkins. Central, Western citrus groves harvested lemons last week.

ARKANSAS: Days suitable for fieldwork: 6. Topsoil moisture 37% very short, 39% short, 23% adequate, 1% surplus. Temperatures were near normal with some areas of North Central Areas reporting freezing temperatures early in the week. The main story was the first statewide general rainfall in weeks. Most of the state was above normal for the week in rainfall. Livestock were reported in fair condition. Many farmers were feeding supplemental hay early this year because of the drought. The main farm activities were: Harvesting rice, sorghum, cotton, soybean, preparing land for planting of annual forages such as rye, ryegrass. Other activities included: Liming pastures, land leveling, planning for fall pastures, spraying fields for insects, weeds, defoliating cotton, continued pumpkin harvesting, wheat planting, treating crop lands for armyworms, fields were being subsoiled plowed, tree fruit, small fruit harvesting, dusting, ear tagging cattle for external parasites, planning for Brucellosis vaccinations, fall calving, giving vaccinations, pregnancy checking spring bred cows, selling cull cows, weaning calves. Corn 100% harvest, Cotton 98% opening bolls, 62% harvested, 1% very poor 10% poor 41% fair 35% good 13% excellent; Soybeans 100% setting pods, 61% shedding, 31% harvested, 11% very poor 19% poor 31% fair 30% good 9% excellent; Sorghum 100% mature, 99% harvested; Wheat 9% planted, 1% emerged; Alfalfa 4% very poor 21% poor 45% fair 30% good 0% excellent; Other Hay 27% very poor 33% poor 26% fair 14% good 0% excellent; Range, pastures feed 30% very poor 37% poor 24% fair 8% good 1% excellent.

CALIFORNIA: Field activities progressed normally under favorable conditions in most areas. Seedbed preparations for fall-seeded small grains, forage crops were ongoing. Planting of wheat, barley, winter forages, new alfalfa continued in central, southern counties. Rice harvest began to wind down in the Sacramento Valley, but remained in full swing in the northern San Joaquin Valley. Some rice fields still showed the blanketing that was attributed to cool temperatures during pollination. Defoliation of Upland cotton varieties gained momentum, harvest activity slowly increased. Some early fields of American Pima cotton received first defoliant applications. Corn harvest for grain, silage remained active in the San Joaquin Valley. The San Joaquin Valley seed alfalfa harvest was virtually complete. Seed alfalfa stubble was burned, fields readied for winter forage planting. Dry beans, sugarbeets were harvested in the San Joaquin Valley, planting of new crop sugarbeets continued in the Imperial Valley. Grain sorghum was heading in Tulare County. New alfalfa, sugarbeets were treated for armyworms, cutworms. Sunflower harvest was virtually complete in the Sacramento Valley. Alfalfa, bermuda grass, sudangrass were cut for hay or greenchopped. The harvest of grapes for fresh use continued in the San Joaquin Valley. Varieties picked included Red Globe, Emperor, Thompson Seedless. Raisin grape activities were winding down. Approximately 2% remained on open trays, 18% were rolled, 80% picked up. Picking of wine grapes continued. Harvesting of the late variety stone fruits was active. Fig harvest continued. Apple, olive harvests were active. Asian pear, pomegranate harvests were also active in the San Joaquin Valley. The prune harvest was making progress. Harvesting of almonds, walnuts continued. Pistachio harvest was also active. Valencia oranges, lemons were picked in southern areas. New crop navel oranges were maturing well. A few fall crop strawberries were being picked, but volume was limited. Harvest of processing fresh market tomatoes continued, but was winding down. Worm, fungicide sprays were applied to some tomato fields. Aphid sprays were applied to asparagus fields. Pumpkins were harvested, prepared for sale at

roadside stands, farmers' markets. Cantaloupe, honeydew melon harvests were winding down, but sugar levels remain good. Occasional fields of fall lettuce were thinned, treated to control worms. Fall-winter broccoli, radicchio and cauliflower continued normal growth. Several fields of broccoli were treated for loopers. Warm weather has extended harvest for most summer vegetables, but cool morning temperatures were slowing the growth. Sweet peas were nearing bloom stage. Carrots were being planted in the western part of the Tulare Lake bed area. Some of the many crops being harvested were peppers, squash, beans, gourds, eggplant, sweet corn, cucumbers, green beans, oyster mushrooms, sugar peas, radishes, zucchini, cherry tomatoes, onions, garlic. Higher elevation pastures were deteriorating rapidly. Remaining cattle were expected to be shipped in the coming weeks to market or to lower elevation pastures. Supplemental feeding of livestock on foothill pastures continued. Some ranchers in central areas were stockpiling hay for winter feeding. Dry conditions, above normal temperatures persisted in most areas. Fire danger remained high in central, northern areas, especially where dry range grass was more plentiful. Lambing, calving continued. Imperial Valley sheep were moving to sudangrass pastures, lambs continued to arrive for winter alfalfa grazing.

COLORADO: Days suitable for fieldwork 6.2. Topsoil moisture 2% very short, 17% short, 74% adequate, 7% surplus. Subsoil moisture 3% very short, 18% short, 72% adequate, 7% surplus. Indian summer weather prevailed during the week allowing good progress to be made in harvesting late season crops. Corn for grain harvest has slowed as producers wait for the crop the field dry. Spring wheat 98% harvested, 100% 1998, 97% avg. Corn silage 99% harvested, 97% 1998, 95% avg. Dry onions 86% harvested, 90% 1998, 94% avg. Sugar beets 15% harvested, 19% 1998, 14% avg.; 1% very poor, 4% poor, 9% fair, 64% good, 22% excellent. Dry beans 98% cut, 98% 1998, 93% avg.; 86% harvested, 94% 1998, 85% avg. Summer potatoes 98% harvested, 97% 1998, 94% avg. Fall potatoes 81% harvested, 86% 1998, 82% avg. Alfalfa 89% 3rd cutting, 93% 1998, 88% avg.; 34% 4th cutting, 36% 1998, 37% avg.; 8% poor, 17% fair, 59% good, 16% excellent. Pasture, range feed in mostly good condition.

DELAWARE: Days suitable for fieldwork 4.3. Topsoil moisture 91% adequate, 9% surplus. Subsoil moisture 4% short, 93% adequate, 3% surplus. Field corn 75% harvested for grain, 65% 1998, 59% avg.; 82% harvested for silage, 100% 1998, 94% avg. Soybeans 3% very poor, 19% poor, 29% fair, 46% good, 3% excellent; 60% turned, 75% 1998, 75% avg.; 38% shedding leaves, 49% 1998, 56% avg.; 7% harvested, 8% 1998, 8% avg. Sorghum 70% mature, 62% 1998, 61% avg.; 5% harvested, 20% 1998, 13% avg. Apples 83% harvested, 92% 1998, 87% avg. Clover, other hay 60% 4th cutting, 62% 1998, 53% avg. Alfalfa hay 85% 4th cutting, 90% 1998, 84% avg.; 26% 5th cutting, 13% 1998, 14% avg. Hay supplies 2% very short, 27% short, 71% adequate. Pasture 3% very poor, 12% poor, 38% fair, 47% good. Barley 4% poor, 3% fair, 93% good; 45% seeded, 25% 1998, 33% avg. Wheat 100% good; 12% seeded, 7% 1998, 7% avg. Activities: Continued corn, soybean harvesting.

FLORIDA: Scattered showers to heavy rainfall occurred over almost all areas October 3 through October 9. The Palmetto-Ruskin area received from one, one half to four inches. The southwest had from a trace to over four inches, while Dade County received over an inch of rain. Rainfall at the major stations varied from a third of an inch in Tallahassee to over six inches in Orlando. Temperatures averaged from normal to four degrees above normal at major stations. Daytime highs 80s. Nighttime lows 60s, 70s. Topsoil moisture throughout State mostly short to adequate with some areas very short or surplus. Tobacco marketing active. Soybean harvest gaining. Sugarcane mills start opening week of Oct. 11-17. Sugarcane condition normal. Haying active. Forage growth improving with increased moisture. Cotton harvest active. Eighty-six percent of peanuts harvested. Peanut very poor 4%, poor 8%, fair 60%, good 27%, 1% excellent. Frequent showers delayed some vegetable fieldwork, planting this past week. Harvesting underway for cucumbers, okra, peppers, squash, tomatoes, watermelons. Rain all citrus areas most of week, excessive moisture many low land groves. Some splitting in early fruit, some color break starting in early fruit. Packers testing fruit for early shipments. Navel, grapefruit, Ambersweet oranges, a few tangerines being shipped. Caretakers re-working roads that were washed out by rains, few sprays being applied due to daily rain. Pasture feed; 5% poor, 35% fair, 50% good, 10% excellent. Condition of cattle; 25% fair, 70% good, 5% excellent.

GEORGIA: Days suitable for field work 5.1. Soil moisture 7% very short, 25% short, 60% adequate, 8% surplus. Cotton 15% very poor, 25% poor, 35% fair, 22% good, 3% excellent. Hay 11% very poor, 26% poor, 40% fair, 22% good, 1% excellent. Peanuts 82% dug, 60% 1998, 78% avg. Rye 29% planted, 30% 1998, 30% avg. Sorghum 73% harvested for grain, 67% 1998, 61% avg. Soybeans 26% very poor, 22% poor, 34% fair, 17% good, 1% excellent. Other small grains 21% planted, 15% 1998, 17% avg. Apples

66% harvested, 72% 1998, 83% avg. Pecans 7% very poor, 15% poor, 31% fair, 40% good, 7% excellent; 3% harvested, 5% 1998, 4% avg. Widespread rains during the weekend were sufficient to increase soil moisture. The rains helped small grains, winter pastures. Soil moisture conditions continued to improve last week. Corn harvest was virtually complete. Soybean leaf drop continued, slightly behind 1998 pace. The crop condition changed slightly from the previous week. Harvest was ahead of 1998, the five year average pace. Sorghum harvest continued ahead of 1998 pace. Farmers continued harvesting peanut, cotton. Open, sunny weather is needed to finish both harvests. Cotton harvest continued ahead of the five year average pace with slightly changed condition. There were reports of whitefly infestations on some very late maturing cotton. Peanut digging continued ahead of the five year average pace. Small grain planting occurred last week. Rye planting was slightly behind 1998, the five year average pace. Other small grain planting was ahead of 1998, the five year average pace. Some wheat was planted last week with continued preparation for further wheat planting. Pasture feed condition improved last week. Hay cutting occurred last week as the condition improved. Apple harvest was behind 1998 pace. Pecan condition changed slightly from the previous week with limited harvesting activity. Squash was being picked. Some vegetables were being sprayed because of whitefly infestations. White fly infestations have been especially heavy in snapbeans. Other activities included: Baling peanut hay.

HAWAII: DATA NOT AVAILABLE

IDAHO: Days suitable for fieldwork 6.9. Topsoil 12% very short, 52% short, 36% adequate. Most areas have received no precipitation since early September. Dry conditions have speeded harvest. Irrigation supply 49% excellent, 44% good, 5% fair, 2% poor. Alfalfa hay 3rd cutting 97%, 1998 95%, avg. 92%. Dry beans 97% harvested, 90% 1998, 92% avg. Corn harvested 87% for silage, 76% 1998, 83% avg. Corn harvested 9% for grain, 10% 1998, 9% avg. Onions 88% harvested, 65% 1998, 85% avg. Apples 26% harvested, 32% 1998, 46% avg. Potatoes 62% harvested, 62% 1998, 62% avg. Sugarbeets 19% harvested, 20% 1998, 21% avg. Winter wheat 66% planted, 71% 1998, 65% avg.; 21% emerged, 31% 1998, 30% avg. Activities: Preparing seedbeds, planting fall grains, chopping corn silage, picking apples, harvesting potatoes, sugarbeets, other row crops.

ILLINOIS: Days suitable for fieldwork 5.1. Topsoil moisture 9% very short, 33% short, 59% adequate, 2% surplus. Harvest progressed steadily last week. Progress continues to vary across the state with farmers nearest completion in the southern portion of the state. Other activities for last week include: Hauling grain, spreading fertilizer, applying for LDP's.

INDIANA: Days suitable for fieldwork 5.3. Topsoil 33% very short, 34% short, 33% adequate, 0% surplus. Subsoil 48% very short, 40% short, 12% adequate, 0% surplus. Corn, soybean harvest made good progress. Corn harvest still 17 days ahead of average. Soybean harvest 6 days ahead of average. Harvested corn moisture averaging around 17%, soybeans 11% moisture content. Weekend showers slowed harvesting activities but helped pasture, dry soil conditions. Range, pasture feed 49% very poor, 31% poor, 17% fair, 3% good. Feeding hay continued. Tobacco harvest virtually complete. Activities: Applying fertilizer, seeding winter wheat, tillage of soils, chopping stalks, hauling grain, harvesting tobacco, stripping tobacco, feeding hay, caring for livestock.

IOWA: Days suitable for field work 6.1. Topsoil moisture: 17% very short, 40% short, 42% adequate, 1% surplus. Subsoil moisture: 16% very short, 42% short, 42% adequate, 0% surplus. Harvest is progressing rapidly due to ideal weather. There have been several fields lost to fires and some combine fires reported in the northwest, west central, central districts. In the northern districts, some of 1998 corn crop is being stored on the ground to make room for this year's grain. Corn 33% harvested, 29% 1998, 20% avg. Percent moisture of all field corn 20% averaged.; harvested corn 18% averaged. Corn lodging: 42% none, 44% light, 12% moderate, 2% heavy. Corn 50% ear droppage none, 39% light, 10% moderate, 1% heavy. Corn 1% very poor, 5% poor, 21% fair, 51% good, 22% excellent. Soybeans 67% harvested, 62% 1998, 58 avg. Soybean 52% lodging none, 39% light, 8% moderate, 1% heavy. Soybeans shattering 40% none, 41% light, 16% moderate, 3% heavy. Winter wheat 62% planted, 51% 1998, 59% avg. Range, pasture feed 9% very poor, 24% poor, 39% fair, 24% good, 4% excellent.

KANSAS: Days suitable for fieldwork 5.9. Topsoil moisture 6% very short, 24% short, 68% adequate, and 2% surplus. Subsoil moisture 5% very short, 23% short, 71% adequate, and 1% surplus. Fair weather last week enabled wheat seeding to progress rapidly. Scattered showers near the end of the week did slow seeding in some areas. However, wheat seeding remains ahead of normal progress for this time of year. Corn condition 5% poor, 28% fair, 57% good, and 10% excellent. Soybean condition 2% very poor, 15% poor, 46% fair, 34% good, and 3% excellent. Sorghum condition 1% very poor, 6% poor, 29% fair, 55% good, and 9% excellent. Wheat condition 3% poor, 22% fair, 61% good, and 14% excellent. Sunflower condition 3% poor, 17% fair, 67% good, and 13% excellent. Sunflowers mature 86%, 92% 1998, NA average. Sunflowers harvested 22%, 61% 1998, NA average. Hay, forage supplies 4% short, 87% adequate and 9% surplus. Stock water supplies 2% very short, 12% short, 84% adequate, 2% surplus. Ranchers were busy moving cattle from pastures to feedlots or crop residue. Other

activities included fall calving, weaning, marketing calves, buying calves to place on wheat pasture.

KENTUCKY: Day suitable for fieldwork 5.0. Topsoil moisture 71% very short, 24% short, 5% adequate. Subsoil moisture 78% very short, 21% short, 1% adequate. For the week, temperatures averaged 61° near normal, 4° cooler than previous week. Widespread, heavy rainfall, the most since January, fell across the Commonwealth on Friday, Saturday. Rainfall Statewide was 2.42 inches. Late tobacco was being harvested last week. Condition of housed tobacco was 7% very poor, 18% poor, 39% fair, 30% good, 6% excellent. Burley not ready for stripping 59%, ready for stripping 34%, stripped 7%. Wheat 17% seeded, 22% in 1998, 24% average. Pasture feed 51% very poor, 29% poor, 15% fair, 4% good, 1% excellent. Harvesting efforts diverted from corn toward soybeans. Farmers feeding hay to livestock, transporting water due to summer drought.

LOUISIANA: Days suitable for fieldwork 5.7. Soil moisture 15% very short, 39% short, 38% adequate, 8% surplus. Cotton harvest continued. Hay 95% final cutting, 85% 1998, 92% avg. Pecans 4% very poor, 11% poor, 34% fair, 46% good, 5% excellent; 7% harvested, 7% 1998, 4% avg. Soybeans 100% leaves turning, 98% 1998, 95% avg. Sugarcane 3% poor, 16% fair, 54% good, 27% excellent; 15% harvested, 3% 1998, 5% avg. Sugarcane grinding continued to get underway. Sweet potatoes 72% harvested, 58% 1998, 61% avg. Wheat 5% planted, 20% 1998, 13% avg.; 0% emerged, 9% 1998, 3% avg. Livestock 2% very poor, 9% poor, 35% fair, 46% good, 8% excellent. Vegetables 10% very poor, 15% poor, 42% fair, 29% good, 4% excellent.

MARYLAND: Days suitable for fieldwork 4.7. Subsoil moisture 10% very short, 9% short, 73% adequate, 8% surplus. Topsoil moisture 5% short, 79% adequate, 16% surplus. Corn 65% harvested for grain, 59% 1998, 52% avg.; 91% harvested for silage, 92% 1998, 90% avg. Soybeans 5% very poor, 13% poor, 34% fair, 39% good, 9% excellent; 76% turned, 88% 1998, 85% avg.; 52% shedding leaves, 75% 1998, 68% avg.; 12% harvested, 18% 1998, 14% avg. Sorghum 70% mature, 57% 1998, 78% avg.; 28% harvested, 29% 1998, 26% avg. Apples 49% harvested, 72% 1998, 67% avg. Clover, other hays 82% 4th cutting, 86% 1998, 67% avg. Alfalfa 70% 4th cutting, 90% 1998, 87% avg.; 21% 5th cutting, 33% 1998, 25% avg. Wheat 3% fair, 37% good, 60% excellent; 13% seeded, 17% 1998, 14% avg. Barley 2% fair, 85% good, 13% excellent; 41% seeded, 41% 1998, 49% avg. Rye 6% fair, 81% good, 13% excellent; 28% seeded, 24% 1998, 33% avg. Pasture feed 1% very poor, 12% poor, 21% fair, 58% good, 8% excellent. Hay supplies 13% very short, 51% short, 35% adequate, 1% surplus. Activities: Continued small grain seeding, corn, soybean harvesting.

MICHIGAN: Days suitable for fieldwork 5.0. Topsoil 2% very short, 19% short, 74% adequate, 5% surplus; subsoil 9% very short, 46% short, 43% adequate, 2% surplus. Hay 3% very poor, 13% poor, 21% fair, 47% good, 16% excellent. Corn 2% very poor, 12% poor, 24% fair, 46% good, 16% excellent. Soybeans 1% very poor, 9% poor, 30% fair, 45% good, 15% excellent. Winter Wheat 1% very poor, 3% poor, 27% fair, 51% good, 18% excellent. Hay fourth cutting 72%, 51% 1998, 45% avg. Silage harvested 97%, 99% 1998, 84% avg. Crop conditions improved in past two weeks as rain has replenished soil moisture in crop fields across State. Temperatures remained cooler than normal for third straight week. Soybean harvest went into overdrive. Corn for grain harvest has been steady and progress ahead of normal. Corn silage harvest wrapping up as most farmers more occupied with soybean and corn for grain harvest. Dry bean harvest almost complete as only a few navy bean fields left to harvest. For those farmers who had a fourth cutting of hay, quality has been poor. Rain last week and the small amount received this week continued to help sugarbeet fields as most farmers preparing for harvest. Winter wheat planting continued and a quarter of crop has now emerged. Potato harvest continuing. Late season apple varieties being harvested. If weather cooperates, harvest will be complete in two weeks. Harvest has been completed for most vegetables.

MINNESOTA: Days suitable for fieldwork 5.2. Topsoil 1% very short, 12% short, 77% adequate, 10% surplus. Soybeans 97% mature, 99% 1998, 96% avg.; 12% moisture content, 12% 1998, 13% avg.; 28% stubble worked, 40% 1998, 28% avg. Corn 21% moisture content, 19% 1998, 24% avg.; 11% stubble worked, 14% 1998, 7% avg. Winter Wheat 97% seeded, 99% 1998, 99% avg. Dry beans 76% harvested, 96% 1998, 87% avg. Sugarbeets 81% harvested, 57% 1998, 43% avg. Sunflowers 26% harvested, 27% 1998, 34% avg. Potatoes 73% harvested, 86% 1998, 78% avg. Pasture feed 3% very poor, 11% poor, 27% fair, 49% good, 10% excellent. The weather started out cool, but became warmer, drier as the week progressed, providing a boost to harvesting, fall tillage, other field activities. Precipitation was generally light, but even some light rains were enough to halt activities again on saturated soils in the areas of the Northwest, North Central Districts which were most affected by excess rainfall this growing season. These areas experienced prevented plantings on many acres, prevented harvesting of forages, difficulty preparing fallow fields for next year's crops. Over half the sugarbeet crop was harvested in a single week, as growers capitalized on near-ideal harvest conditions in the main growing areas.

MISSISSIPPI: Days suitable for fieldwork 5.5. Soil moisture 20% very short, 32% short, 41% adequate, 7% surplus. Cotton 68% harvested, 76% 1998, 56% avg. Rice 94% harvested, 96% 1998, 94% avg. Soybeans 98%

shedding leaves, 96% 1998, 84% avg.; 68% harvested, 71% 1998, 52% avg. Sweet potatoes 60% harvested, 49% 1998, 62% avg.; 1% very poor, 10% poor, 42% fair, 46% good, 1% excellent. Wheat 17% planted, 33% 1998, 22% avg.; 7% emerged, 13% 1998, 5% avg. Hay (warm-season) 97% harvested, 100% 1998, 100% avg. Cattle 3% very poor, 12% poor, 38% fair, 43% good, 4% excellent. Pasture 21% very poor, 24% poor, 34% fair, 19% good, 2% excellent. Many parts of the state received rain, delaying harvest in some parts of the state.

MISSOURI: Days suitable for fieldwork 5.5. Topsoil moisture supply continued to improve to 20% very short, 36% short, 40% adequate, 4% surplus. Only north-central, northeast, west-central districts show moisture ratings of over 50% adequate. Several days of sunny weather kept harvesting of row crops well ahead of normal. Harvesting of corn is 69% complete, about a week ahead of the same date 1998, two weeks ahead of the normal of 51%. Corn harvest ranges from virtually complete in the southern 3rd of the State to 56% or less complete in the northwest, northeast districts. Eighty-nine percent of the soybeans are dropping leaves or beyond, 73% have reached maturity. The maturing process is similar to 1998, but about 4 days ahead of both 1998 year, the 5-year average of 28%. Thirty-six percent of the crop is harvested, slightly ahead of 1998, 4 days ahead of the 5-year average. Ninety-one percent of the sorghum crop was mature, about 2 days behind 1998, but a week ahead of the 47% normal for this date. Fifty-eight percent of the crop is harvested, 2 days ahead of 1998, about a week ahead of normal. Harvesting progress varies from about one-third complete in the northern half of the State to 95% harvested in the Bootheel. Eighty-two percent of the cotton was harvested, almost 3 weeks ahead of both 1998, the 5-year average. The rapid cotton harvest equals 1987 as the earliest in the past 20 years. Winter wheat seeding is 26% complete, 4 days ahead of a year ago, but close to normal for this date. Seven percent of the crop has emerged, a few days behind the normal of 10%. Although many areas are still short of moisture, the recent rains have been beneficial to new seedings. Pasture, range condition was rated at 35% very poor, 33% poor, 25% fair, 6% good, 1% excellent. Pastures in the southern part of the State have the lowest ratings, with over 95% in very poor to poor condition. Supplemental hay feeding is common in much of the State due to limited pasture growth. Some producers are still concerned with low stock water supplies. Precipitation for week ending October 10, 1999 avg. 0.89 inch.

MONTANA: There were 6.4 days suitable for fieldwork. The week was slightly warmer, much drier across much of the state. The only exception to this was in the Northwest part of the state where much needed moisture was received. Topsoil moisture 15% very short, 47% short, 37% adequate, 1% surplus. Subsoil moisture 17% very short, 45% short, 37% adequate, 1% surplus. Barley 98% harvested, 100% 1998, 99% avg. Spring wheat 97% harvested, 100% 1998, 99% avg. Sugar beets 51% harvested, 29% 1998, 33% avg. Sugar beet harvest is reported to be going smoothly with no problems. Yields are reported to be above normal with good sugar content. Oats harvested 99%, 100% 1998, 99% avg. Corn for silage harvested 95%, 96% 1998, 94% avg. Potatoes 70% harvested, 47% 1998, 48% avg. Dry beans 95% harvested, 98% 1998, 98% avg. Cattle, calves moved from summer ranges 62%, 54% 1998, 45% avg. Sheep, lambs moved from summer ranges 63%, 63% 1998, 52% avg. Late harvest of small grains in the north central, central, northeast parts of the state was almost completed last week as only a few fields remain to be cut. However, there are reports of frost damage occurring to those remaining fields. The extent of the damage has not yet been determined and won't be until producers are able to cut their crops.

NEBRASKA: Days suitable for field activities 6.9. Temperatures were near normals across areas. Precipitation across the State averaged from traces to twenty-two hundredths in the Southwest District. Topsoil moisture rated 21% very short, 40% short, 38% adequate, 1% surplus. Subsoil moisture 12% very short, 35% short, 53% adequate. Corn condition rated 2% very poor, 6% poor, 24% fair, 47% good, 21% excellent. Corn mature 96% rated, behind 100% 1998, but same as average. Corn harvest was at 32%, below 42% 1998, but above 23% average. Soybean condition rated 8% very poor, 10% poor, 26% fair, 45% good, 11% excellent. Soybean harvest jumped to 64%, ahead of 50% 1998, 49% average. Sorghum mature was at 87%, behind 97% 1998, 92% average. Harvest was 21% complete, near 20% 1998, 22% average. Sorghum condition rated 5% poor, 34% fair, 54% good, 7% excellent. Dry beans harvest moved ahead to 97%, just ahead of 91% 1998, 92% average. Alfalfa condition rated 2% very poor, 6% poor, 41% fair, 45% good, 6% excellent. Alfalfa 4th cutting was at 91% complete, ahead of 82% 1998, 79% average. Wheat seeded rated 97%, ahead of 94% 1998, 95% average. Wheat was 79% emerged, above 77% 1998 average. Proso Millet harvest was near complete at 79%. Pasture, range conditions rated 4% very poor, 16% poor, 34% fair, 38% good, 8% excellent. Producer activities included: Harvesting of crops, building electric fences, shredding corn stalks, discing.

NEVADA: Temperatures cooled early in the week as rain storm passed across the State. Precipitation totaled .17 inch in Reno, but lesser amounts were recorded in the east. Warmer weather returned following the storm, temperatures averaged well above normal the latter half of the week. The 3rd cutting of alfalfa was complete, 4th cutting continued. Harvest activities continued to wind down. Some corn chopping continued in Churchill County. Digging of potatoes progressed in Humboldt County. Alfalfa seed harvest was well along. Fall planting of winter wheat, winter barley, new alfalfa fields continued. Rains improved winter range conditions. Rehabilitation efforts

on range lost to wild fires were underway. Cattle were being gathered for weaning, pregnancy checks, moved to winter range. Main farm and ranch activities: Irrigation, planting, harvest of 4th cutting of alfalfa, working livestock, harvest of potatoes.

NEW ENGLAND: Days suitable for fieldwork 5.6. Topsoil 2% very short, 4% short, 88% adequate, 6% surplus. Subsoil 3% very short, 17% short, 79% adequate, 1% surplus. Pasture feed 2% very poor, 4% poor, 23% fair, 69% good, 2% excellent. Maine potatoes 85% harvested, 90% 1998, 85% average.; condition excellent to good. Massachusetts potatoes 85% harvested, 85% 1998, 90% average.; condition good to fair. Rhode Island potatoes 90% harvested, 90% 1998, 85% average.; condition fair to poor. Oats in Maine 99% harvested, 99% 1998, 95% average.; condition good to excellent. Field corn 90% harvested, 80% 1998, 75% average.; condition good to fair. Sweet corn 99% harvested, 99% 1998, 99% average.; condition good to fair. Second cut hay 95% harvested, 95% 1998, 95% average.; condition good to fair. Third cut hay 90% harvested, 70% 1998, 80% average.; condition fair. Apples 80% harvested, 80% 1998, 80% average.; size average to below average, condition good. Peaches 100% harvested, 100% 1998, 100% average.; size average to below average, condition fair. Pears 65% harvested, 90% 1998, 90% average.; size below average, condition fair to poor. Cranberries 55% harvested, 50% 1998, 55% average, size average, condition good to excellent. Major farm activities included: Harvesting potatoes, field corn, final cutting of hay, picking apples, pears, clean fields, spreading manure, plowing harvested fields.

NEW JERSEY: Days suitable for fieldwork averaged 6 days. Temperatures averaged below normal. Extremes were 75 at several locations on the 10th, 26^o at Charlotteburg on the 8th. Weekly rainfall averaged 1.29 inches North, 1.32 inches Central, 0.92 inches South. The heaviest 24 hour total was 1.17 inches at Long Branch on the 4th to the 5th. Estimated soil moisture, in percent of field capacity, this past week averaged 99% North, 95% Central, 77% South. Four inch soil temperatures averaged 59^o North, 60^o Central, 62^o South. Irrigation water supply is adequate in most areas. Planting of small grains, cover crops continued across the state. Harvest of grain corn is underway with below average yields reported. Corn silage is being harvested in the northern counties, low yields, poor quality have been reported. Several silage fields will not be harvested due to the high levels of nitrates in the plant stalks. Early planted soybeans are in poor condition while the late planted crop is in fair condition. Several soybean fields are ready for harvest in South Areas. Most hay farmers are working on their 3rd cutting. The alfalfa, other hay is between good, fair condition. Harvest of tomatoes, cucumbers, snap beans is near completion in most areas of the state. Some frost damage was reported in the remaining tomato, pepper fields. Some disease has been reported in pepper fields. Harvest of fall cabbage, lettuce, spinach is in full swing, their condition is between good, fair in most areas. The production of several vegetables has been reduced by excess moisture related problems such as diseases, insects. Pumpkin harvest is picking up rapidly. Sweet potato harvest is underway, the overall quality is good, although some farmers have reported smaller than usual sizes. Harvest of peaches is virtually finished. Harvest of apples is in full swing, good quality has been reported. Harvest of cranberries is also underway. Frost control measures to protect cranberries had to be implemented in some areas.

NEW MEXICO: Days suitable for fieldwork averaged 6.7 days. Most of the areas experienced a warm, dry week. The only precipitation was associated with a storm system that brushed the north, northeast on Thursday. Clayton picked up 2.28 inches of rain, Red River, Raton collected at least half an inch of rain. Temperatures for the week were above normal just about everywhere, with a statewide average 4^o above normal. Farmers continued the fall harvesting of crops, while ranchers were busy moving and shipping cattle. Most alfalfa farmers were nearing completion of harvest for the year. Green chile harvest was winding down as red chile harvest increased. Corn silage harvest was nearly complete. Sorghum, wheat conditions remained in fair to good condition. Pasture, Range feed conditions were reported at 1% very poor, 5% poor, 30% fair, 54% good, 10% excellent. Cattle, sheep conditions remained in mostly fair to good condition.

NEW YORK: Days suitable: 5.0. Soil moisture 18% short, 74% adequate, 8% surplus. Pasture condition good, rainfall beneficial. Hay condition 71% good, 29% excellent. Alfalfa 3rd cutting 99% finished, 91% 1998, 93% average. Corn condition 30% fair, 50% good, 20% excellent. Silage corn 93% harvested, 84% 1998, 73% average. Potato harvest continued. Grape harvest in Lake Erie region 75% complete. Frost damaged some grapes still on vines. Lake Ontario apples 80% picked. Harvest of Macintosh, Red Delicious, Empire apples complete. Golden Delicious, Rome harvest underway. Killing frost ended growing season for most vegetable crops. Pumpkin harvest in full swing.

NORTH CAROLINA: Statewide, 4.7 days were suitable for fieldwork compared to 3.3 last week. North Areas had a mild week with typical temperatures, only limited rainfall. Many extremely dry areas in the west received good rainfall, but the majority of the Mountain region soil moisture continues to be rated short. Across the State, soil showed signs of drying out as moisture levels are rated 1% very short, 14% short, 50% adequate, 35% surplus. Harvesting of cotton, soybeans are gearing up with both crops behind schedule. Peanut threshing is accelerating but running a couple of weeks behind the five-year average. As areas continue to dry out, harvest activities will become intense. Other activities during the week included:

Hurricane clean-up, tobacco harvesting, marketing, harvesting of sweetpotatoes, corn for grain, silage harvest, apple harvesting, baling hay, small grain planting.

NORTH DAKOTA: Days suitable for fieldwork 7. Another week of mostly dry weather allowed producers to nearly complete the small grain harvest, make good progress on the late season crop harvest. Head rot continues to be a major problem in sunflowers by lowering yields. Topsoil 1% very short, 17% short, 76% adequate, 6% surplus. Subsoil 1% very short, 13% short, 76% adequate, 10% surplus. Durum wheat 90% combined, 100% 1998, 98% avg. Canola 98% combined, 100% 1998. Corn for grain 96% ripe, 100% 1998, 96% avg.; 10% harvested, 44% 1998, 22% avg. Corn for silage 88% chopped, 96% 1998, 90% avg. Dry edible beans 93% cut, 100% 1998, 97% avg.; 84% combined, 100% 1998, 89% avg. Flaxseed 87% combined, 100% 1998, 90% avg. Potatoes 91% dug, 91% 1998, 88% avg. Soybeans 46% harvested, 77% 1998, 67% avg. Sugarbeets 88% lifted, 60% 1998, 44% avg. Sunflowers 93% bracts turned brown, 99% 1998, 96% avg.; 6% harvested, 26% 1998, 21% avg. Condition ratings for row crops were virtually unchanged from last week. Emerged crop condition: corn for grain 2% very poor, 5% poor, 20% fair, 62% good, 11% excellent; soybeans 3% very poor, 8% poor, 25% fair, 53% good, 11% excellent; sugarbeets 1% very poor, 3% poor, 11% fair, 58% good, 27% excellent; sunflower 1% very poor, 9% poor, 26% fair, 52% good, 12% excellent. Ranchers were busy weaning calves, hauling hay in preparation for winter. Stockwater supplies rated 0% very short, 1% short, 94% adequate, 5% surplus.

OHIO: Days suitable for fieldwork 5.9. Topsoil moisture 24% very short, 44% short, 31% adequate, 1% surplus. Soybeans 74% harvested, 68% 1998, 47% avg. Alfalfa hay 4th cutting 95%. Corn mature 99%, 95% 1998, 75% avg. Corn harvested for silage, 93%, 79% 1998, 73% avg. Corn harvested for grain 42%, 21% 1998, 13% avg. Winter wheat 62% planted, 60% 1998, 47% avg. Winter wheat 10% emerged, 17% 1998, 12% avg. Fall, winter apples 71% harvested, 74% 1998, 60% avg. Grapes 80% harvested, 83% 1998. Tobacco 95% harvested, 99% 1998. Tobacco 4% stripped, 5% 1998. Pasture 22% very poor, 33% poor, 32% fair, 12% good, 1% excellent. Activities for the week include: Harvesting corn, soybeans, planting wheat, fall tillage, hauling grain, baling hay, picking pumpkins, zucchini, winter squash, tomatoes, controlling weeds, spreading lime, developing new water systems, chopping silage, shelling corn, repairing machinery, cutting tobacco. Frost was reported in Geauga, Lake, Medina, Portage, Wayne counties. 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 on potatoes, corn borers, stink bugs on pumpkins, squash, beetles in cucumbers, soybeans, corn. Reported diseases include sudden death syndrome, white mold in soybeans, gray leaf spot, sun dust syndrome, fungus on corn, brown stem rot, Stewart's wilt in corn; fusarium belly rot, mildew on pumpkins. Fruit, vegetable growers are busy harvesting fall crops such as pumpkins, squash, apples, Indian corn, sweet corn, peppers. In Harrison county, one reporter mentioned that apples are abundant but smaller than normal. A good crop of pumpkins was reported in Columbiana county. Poor pasture conditions still prevail, although rain has helped certain parts of the state. Pastures are greening but they need rain to start regrowth for next year. Livestock is reported in mostly good condition. Cows, hogs are thinner than usual; hay is being fed as a supplement by some producers.

OKLAHOMA: Days suitable for fieldwork 6.1. Subsoil moisture 8% very short, 38% short, 54% adequate. Topsoil moisture 9% very short, 35% short, 56% adequate. Dry weather prevailed over most of state. Topsoil, subsoil moisture supplies dwindle for third straight week. Oats 31% planted, 50% 1998, 41% avg.; 7% up-to-stand, 12% 1998, 9% avg.; Corn 93% harvested, 96% 1998, 84% avg.; Soybeans 1% very poor, 7% poor, 42% fair, 50% good; 76% mature, 85% 1998, 75% avg.; 42% harvested, 47% 1998, 34% avg. Peanuts 59% mature, 82% 1998, 70% avg.; 14% combined, 13% 1998, 12% avg. Alfalfa Hay 2% very poor, 7% poor, 31% fair, 57% good, 3% excellent; 88% 4th cutting, 73% 1998, 88% avg.; 20% 5th cutting, 13% 1998, 31% avg. Other Hay 74% 2nd cutting, 33% 1998, 80% avg. Livestock 3% poor, 26% fair, 67% good, 4% excellent. Feeder steer prices just less than \$80 per cwt.

OREGON: Days suitable for fieldwork 7. Topsoil 56% short, 30% short, 14% adequate. Subsoil 60% very short, 25% short, 15% adequate. Barley Planted 21%, 13% 1998, 18% average. Winter Wheat 5% planted, 51% 1998, 50% average. Winter Wheat 1% emerged, 31% 1998, 22% average. Range, pasture 11% very poor, 40% poor, 21% fair, 28% good. Activities: Most areas of state busy seeding grains, grass seed & majority of Counties reported barley harvest complete. Rain in North Willamette Valley during week improved tillage conditions, settled some of surface dust; fields still dry, however. Further south in Willamette Valley, fields without irrigation quite dry. In Eastern Areas planting continued to be slow as fields still very dry. High winds, frost caused some damage to recently seeded crops. Sugarbeet harvest underway in Malheur, Union Counties. Irrigation still required at nurseries because of the dry, summer-type weather. Greenhouses busy with fall plants, Christmas poinsettias. On southern areas coast Easter Lily growers digging commercial bulbs, processing bulb materials, sow cover crops in between showers. Onion, potato harvest mostly complete all across state. Some late potatoes in Malheur County were still being harvested for storage. Processed carrot harvest started in Umatilla County, should continue until November. Cole, salad crop harvest continued in North Willamette Valley area. Onions at the sorting sheds, potatoes being

processed, delivered to retail stores. Sweet corn mostly finished, pumpkin harvest in full swing, moving to market. Jackson County reported a light frost on Oct. 4th slightly frosted vine crops, tomatoes. In Willamette Valley, berry harvest ending, hazelnut sweeping, pickup underway. The recent rainfall helped settle the dust for hazelnut harvest. Apple harvest continued. In Rogue River, pear harvest continued, grape harvest had started. On south coast cranberry harvest began. In Hood River Valley, pear, apple harvest continued. Livestock mostly good, some poor to fair on driest ranges, pastures. Most range operations in east have gathered their livestock. Weaning of calves began in Harney County. Recent light rains not sufficient to restart grass growth in most parts of state. Only irrigated pastures, some higher ranges that haven't frosted have significant forage available.

PENNSYLVANIA: Days suitable for field work 5.0. Soil moisture 7% very short, 23% short, 64% adequate, 6% surplus. Ensilage corn 91% harvested, complete, 83% 1998, 76% avg. Soybeans harvested 8% complete, 11% 1998, 10% avg. Soybean crop condition 15% very poor, 27% poor, 33% fair, 19% good, 6% excellent. Potato harvest 79% complete, 72% 1998, 72% avg. Fall plowing 63% complete, 61% 1998, 63% avg. Wheat planted 38% complete, 28% 1998, 48% avg. Wheat emerged 29% complete, 16% 1998, average not available. Barley planted 69% complete, 66% 1998, 70% avg. Barley emerged 46% complete, 26% 1998, average not available. Alfalfa 3rd cutting 94% complete, 95% 1998, 92% avg. Alfalfa 4th cutting 70% complete, 66% 1998, 60% avg. Timothy clover 2nd cutting 94% complete, 97% 1998, 99% avg. Quality of hay made 7% very poor, 10% poor, 37% fair, 31% good, 15% excellent. Grape harvest 70% complete, 59% 1998, 61% avg. Apple harvest 57% complete, 68% 1998, 68% avg. Activities include: Harvesting corn, soybeans, fruits, vegetables, potatoes, corn silage, tobacco, planting barley, wheat, cover crops, machinery maintenance, filling silos, fixing fences; hauling, pumping, spreading manure, spreading lime, caring for livestock, cutting hay, plowing for the fall.

SOUTH CAROLINA: Days suitable for fieldwork 5.7. Soil moisture 3% very short, 18% short, 68% adequate, 11% surplus. Apples 68% harvested, 83% 1998, 80% avg.; 28% poor, 63% fair, 9% good. Corn 100% harvested, 100% 1998, 97% avg. Livestock Condition 7% poor, 33% fair, 48% good, 12% excellent. Grapes 30% poor, 50% fair, 20% good. Pasture feed 5% very poor, 18% poor, 45% fair, 31% good, 1% excellent. Sorghum 85% matured, 81% 1998, NA avg.; 60% harvested, 55% 1998, 61% avg.; 13% very poor, 20% poor, 53% fair, 14% good. Sweet Potatoes 30% harvested, 53% 1998, 38% avg.; 11% very poor, 17% poor, 67% fair, 5% good. Tobacco 92% stalks destroyed, 93% 1998, 89% avg. Winter Grazings 45% planted, 48% 1998, 44% avg.; 31% emerged, 31% 1998, 28% avg.; 2% poor, 54% fair, 41% good, 3% excellent. Winter Wheat 10% planted, 18% 1998, 11% avg.; 6% emerged, 8% 1998, 4% avg. Barley 22% planted, 16% 1998, 14% avg.; 12% emerged, 8% 1998, 10% avg. Oats 20% planted, 13% 1998, 20% avg.; 2% emerged, 5% 1998, 12% avg. Rye 26% planted, 28% 1998, 28% avg.; 18% emerged, 16% 1998, 16% avg.; 3% poor, 40% fair, 48% good, 9% excellent.

SOUTH DAKOTA: Days suitable for fieldwork, 5.2. Topsoil moisture 2% very short, 21% short, 68% adequate, 9% surplus. Subsoil moisture 2% very short, 14% short, 71% adequate, 13% surplus. Alfalfa is 1% poor, 17% fair, 67% good, 15% excellent; 3rd cutting complete 88%, 99% 1998, avg. unavailable. Sorghum is 32% fair, 61% good, 7% excellent; harvested for silage 74%, 88% 1998, 77% avg. Soybean 1% very poor, 4% poor, 18% fair, 60% good, 17% excellent; mature 88%, 99% 1998, 92% avg. Corn 3% poor, 17% fair, 57% good, 23% excellent; harvested for silage 95%, 97% 1998, 90% avg. Sunflower 2% poor, 21% fair, 60% good, 17% excellent; ray flowers dry 99%, 100% 1998, 100% avg.; bracts yellow 95%, 98% 1998, 99% avg.; mature 73%, 97% 1998, 92% avg.; harvested 16%, 48% 1998, 30% avg. Winter rye seeded 91%, 95% 1998, 94% avg.; emerged 70%, 72% 1998, 82% avg. Stock water supplies 6% short, 83% adequate, 11% surplus. Cattle feed 7% fair, 68% good, 25% excellent. Sheep condition is 7% fair, 62% good, 31% excellent.

TENNESSEE: Days suitable for fieldwork 6.0. Topsoil moisture 52% very short, 27% short, 21% adequate. Subsoil moisture 63% very short, 28% short, 9% adequate. Burley 17% stripped, 23% 1998, 18% avg. Pasture 55% very poor, 29% poor, 14% fair, 2% good. Winter wheat 9% seeded, 16% 1998, 20% avg. Most parts of Areas received significant rainfall amounts this past weekend, the first for some areas in several months. Rainfall totals for the week were actually above normal, with totals ranging from 1.35 inches in Memphis to 3.57 inches in Chattanooga. Even though the rain came too late for most of the State's major row crops, newly seeded winter wheat fields, pastures will benefit from the moisture. Several areas reported scattered light frost. Farmers will be busy this upcoming week sowing winter wheat, overseeding pastures, both of which had fallen behind schedule due to the dry conditions. Beef producers continued feeding hay, hauling water, moving animals to market due to poor pasture feeds.

TEXAS: Temperatures were generally warm, mild over the state while little moisture fell. Windy conditions occurred in some locations, slight frost damage became evident in scattered areas of the Plains. Harvest remained active, land preparation remained slow in most locations due to continued dry conditions. Livestock conditions continued to decline as available pasture forage began to enter the dormant season. Supplemental feeding continued to increase. Water available for livestock continued to decline, low pond levels became a widening concern. Some herd reduction continued, markets weakened slightly. Field Crops: Small Grains: Seeding of wheat, oats

slowed as a result of continued dry conditions. Irrigation continued where possible. Oats, Published 42%, 1998 57%, Average 42%. Corn: Harvest continued on the High Plains, but neared completion. Markets continued to be weak. Cotton: Harvest continued to expand on the High Plains but cooler temperatures slowed development of later cotton. Dry land fields continued to mature but limited shredding of late cotton occurred where yield prospects were poor. Harvest was mostly complete in the Coastal Bend where gins are expected to remain open through October. Harvest continued in the Blacklands and Central Areas but was beginning to wind down. Cotton stalk destruction continued in South Areas. Statewide cotton condition was rated at 60% of normal compared with 48% 1998. Peanuts: Harvest activities were active in the Plains, Central, South Areas. Some plowing, baling continued in Central Areas as a result of the continued dry conditions. Statewide peanut condition was rated at 82% of normal compared with 54% 1998. Rice: Flooding for the second crop was completed, the crop was progressing. Harvest of the second crop began. Sorghum: Harvest was active on the High Plains under generally mild open conditions. Yields were favorable. Turning Color, Published, 97%, 1998 100%, Average, 99%. Soybeans: Early harvest began in some locations on the High Plains where yields was expected to be average. Published 78%, 1998 93%, Average 70%.

Commercial Vegetables, Fruit and Pecans: Rio Grande Valley, Peppers, tomatoes continued with good progress. Planting continued for carrots, cabbage, onions. San Antonio-Winter Garden, Cabbage, onion planting continued, preparation for other fall vegetables was in full swing. East Areas Planting of fall crops, gardens continued but slowed as dry weather continued. High Plains, pumpkin harvest continued with a good yield reported. Pecans: The Pecan crop continued to mature, however stress from lack of moisture was becoming more evident. Shuck split was occurring, harvest began in a few locations. Published 6%, 1998 0%, Average 2%.

Range and Livestock: Livestock water continued to decline, pond pollution from low water levels increased. Most pastures were rated as short to very short as the fall dormant period begun. Supplemental feeding, culling of herds continued. The burn bans remained in effect in most locations.

UTAH: Days suitable for field work 7. Top soil moisture 13% very short, 22% short, 64% adequate, 1% surplus. Subsoil moisture 11% very short, 23% short, 66% adequate. Pasture, range condition 2% very poor, 11% poor, 33% fair, 48% good, 6% excellent. Corn: in dent stage 87%, 88% 1998, 63% avg.; mature 64%, 68% 1998, 63% avg.; harvested for grain 5%, 8% 1998, 17% avg. Corn silage harvested 88%, 73% 1998, 77% avg. Winter wheat planted 82%, 94% 1998, 86% avg.; 44% emerged, 61% 1998, 53% avg. Alfalfa hay 4th cutting 67%, 73% 1998, 62% avg. Alfalfa seed 44% harvested, 87% 1998, 67% avg. Peaches 100% picked, 99% 1998, 100% avg. Apples 77% picked, 37% 1998, 52% avg. Potatoes 62% harvested, 69% 1998, 57% avg. Onions 79% harvested, 69% 1998, 76% avg. Dry beans 90% harvested, 100% 1998, 97% avg. Cattle moved from summer range 58%, 62% 1998, 64% avg. Sheep moved from summer range 67%, 66% 1998, 68% avg. Major activities included: Harvesting fourth crop hay, corn silage, moving livestock to winter ranges, planting winter grain.

VIRGINIA: Days suitable for fieldwork 5.2. Topsoil moisture 5% very short, 8% short, 72% adequate, 15% surplus. Subsoil moisture 12% very short, 17% short, 65% adequate, 6% surplus. Pastures 6% very poor, 17% poor, 27% fair, 38% good, 12% excellent. Livestock 5% poor, 27% fair, 58% good, 10% excellent. Corn for Grain 92% mature, 100% 1998, 97% avg.; 60% harvested, 73% 1998, 61% avg. Soybeans 51% dropping leaves, 57% 1998, 54% avg.; 2% harvested, 9% 1998, 8% avg.; 5% very poor, 14% poor, 31% fair, 40% good, 10% excellent. Winter Wheat 6% seeded, 12% 1998, 11% avg. Barley 25% seeded, 18% 1998, 27% avg. Tobacco, Flue Cured 89% harvested, 87% 1998, 91% avg. Peanuts 49% dug, 55% 1998, 65% avg.; 25% combined, 36% 1998, 44% avg.; 2% very poor, 4% poor, 34% fair, 53% good, 7% excellent. Cotton 87% bolls opening, 100% 1998, 83% avg; 6% harvested, 49% 1998, 22% avg.; 3% very poor, 8% poor, 41% fair, 44% good, 4% excellent. Apples, All 2% very poor, 12% poor, 34% fair, 42% good, 10% excellent. Apples, Fall 65% harvested, 58% 1998, 65% avg. Apples, Winter 35% harvested, 27% 1998, 34% avg. Cooler temperatures, scattered rainfall continued across much of the Commonwealth this past week. Field work was possible in many areas previously saturated or completely flooded by Hurricane Floyd. Pasture feed continued to improve. Some producers, particularly in central Areas, have reported the best fall grazing season, stockpiling of cool season grasses in several years. Producers in the western part of the Commonwealth where rain was less plentiful have not been as fortunate. Many alfalfa, pasture acres in the southeastern portion of Areas were flooded by the hurricane and will have to be reestablished. Hay producers continue to cut, bale their crop. Curing is slow in some areas due to cooler temperatures. Corn producers made little progress in harvesting their crop this past week with harvest lagging well behind 1998 but only slightly behind the five-year average. Lodging of stalks combined with wet field conditions has slowed progress. Soybean harvest began this past week slightly behind schedule. Some acres damaged by the hurricane have been cut for hay or plowed under. Producers are preparing land, seeding wheat, barley for grain. Rye is currently being planted mostly as a cover crop or for grazing. Peanut acreage remains in mostly fair to good condition. Producers made great progress during the past week in digging and combining their crop. Cotton condition improved slightly. Bolls have been opening slower than 1998 but at a normal rate when compared to the five-year average. Producers continue to defoliate using aircraft due to wet field conditions. Harvest of cotton acreage is well behind the five-year average. Many producers which grow both peanuts, cotton have been forced to concentrate on peanut harvest. Harvest of apples, vegetables continues.

WASHINGTON: Days suitable for fieldwork 5.7. Topsoil moisture was 22% very short, 41% short, 37% adequate, subsoil moisture 21% very short, 54% short, 25% adequate. Winter wheat 84% planted, 88% 1998, 85% avg.; 63% emerged, 74% 1998, 67% avg. Planting for winter wheat continued, but dry conditions continued to prevail. Early seedings in western Whitman Co. on summer fallow and/or with deep furrow drills look good, are emerging well. Potatoes 85% harvested, 68% 1998, 68% avg. Potatoes 10% fair, 40% good, 50% excellent. Hay, other roughage supplies were 6% short, 69% adequate, 25% surplus. Range, pasture, 16% very poor, 35% poor, 33% fair, 14% good, 2% excellent. Potato harvest progressed ahead of both 1998, the five-year average. Sugar beet harvest progressed. Buckwheat was being swathed. Sweet corn, carrot and pumpkin harvests continued. Apple harvest was in full swing, but occasionally slowed by labor shortages. Grape harvest continued with wineries reporting excellent quality. Alfalfa producers were starting 4th and some 5th cuttings.

WEST VIRGINIA: Days suitable for fieldwork 4.4. Rainfall across the State brought relief to topsoil moisture supplies, improved crop, pasture conditions. Topsoil moisture 15% very short, 41% short, 43% adequate, 1% surplus. Hay condition 18% very poor, 38% poor, 36% fair, 8% good; Hay 2nd cut 92%; 3rd cut 59%, 83% 1998, 80% 5-yr avg. Corn condition 12% very poor, 26% poor, 36% fair, 23% good, 3% excellent; Corn dent 97%, 86% 1998; Corn mature 77%, 77% 1998, 86% 5-yr avg; Corn harvested 33%, 35% 1998, 42% 5-yr avg. Soybeans condition 7% very poor, 13% poor, 35% fair, 45% good; Dropping leaves 89%, 92% 1998, 93% 5-yr avg; Harvested 16%, 34% 1998, 14% 5-yr avg. Tobacco harvested 92%, 99% 1998, 99% 5-yr avg. Apples harvest 60%, 82% 1998. Wheat 16% planted, 38% 1998, 39% 5-yr avg. Wheat 5% emerged, 5% 1998. Cattle 3% very poor, 10% poor, 45% fair, 40% good, 2% excellent. Sheep 1% very poor, 5% poor, 66% fair, 25% good, 3% excellent.

WISCONSIN: Days suitable for fieldwork: 5.4. Soil Moisture 6% very short, 23% short, 70% adequate, 1% surplus. Areas farmers were busy harvesting corn, soybeans last week. Killing frosts were more widespread in the northern half of the state, sped dry down. Soybean harvest took priority over corn where fields were ready, pushed ahead of average. Soybeans harvested 39% 1999, 35% 1998, 30% avg. Some excellent 4th crop was harvested last week, but some producers have more forage than they can use, are leaving a good crop in the field due to lack of storage. Fourth crop hay harvested 62% 1999, 63% 1998. Early-sowed winter wheat reached 3 to 4 inches in height. Fall tillage completed 22% 1999, 18% 1998, 16% avg. Potato harvest neared completion in central areas. Cranberry harvest was in full swing. Fruit size, color, quality were reported to be good. Pasture feed 1% very poor, 12% poor, 54% fair, 31% good, 2% excellent.

WYOMING: Days suitable for fieldwork 6.7. Topsoil moisture 2% very short, 37% short, 61% adequate. Subsoil moisture 36% short, 64% adequate. Dry beans combined 93%, 95% 1998, 95% avg. Corn 92% mature, 95% 1998, 96% avg.; 5% harvested, 14% 1998, 24% avg. Corn harvested 97% for silage, 92% 1998, 96% avg. Sugarbeets 39% harvested, 23% 1998, 28% avg. Alfalfa 85% 3rd cutting, 82% 1998, 83% avg. Winter wheat 95% emerged, 96% 1998, 92% avg. Range, pasture feed 2% poor, 17% fair, 71% good, 10% excellent. Cattle moved from summer ranges 72%, 67% 1998, 62% avg. Sheep moved from summer ranges 83%, 70% 1998, 67% avg. Stock water supplies 11% short, 89% adequate. Temperatures were mixed with light precipitation in a few areas of the State. Very warm over weekend.

International Weather and Crop Summary

October 3 - 9, 1999

HIGHLIGHTS

EUROPE: Drier weather eased into northwestern Europe, helping summer crop harvesting and winter grain planting.

FSU-WESTERN: Chronic dryness continued in the eastern half of Ukraine and southern Russia, favoring summer crop harvesting but hampering winter wheat germination and establishment.

FSU-NEW LANDS: Light to moderate showers in Western Siberia, Russia delayed spring grain harvesting, while continued dry weather in Kazakstan favored final harvest efforts.

EASTERN ASIA: In the North China Plain, showers boosted topsoil moisture for germinating winter wheat. Typhoon Dan brushed east-central China, causing only minor rice harvest delays.

SOUTHEAST ASIA: Typhoon Dan brought torrential showers to the northern Philippines, slowing rice harvesting and possibly damaging unharvested crops.

SOUTH ASIA: Late-season showers increased moisture reserves over central and southern India.

AUSTRALIA: Showers brought some relief to winter grains in the southeast.

CANADA: Prairie harvests progressed toward completion.

MEXICO: In east-central Mexico, showers hampered flood recovery efforts and corn harvesting.

SOUTH AMERICA: In central Argentina, freezing temperatures possibly damaged vegetative to reproductive winter wheat. In southern Brazil, showers boosted topsoil moisture for soybean planting.



EUROPE

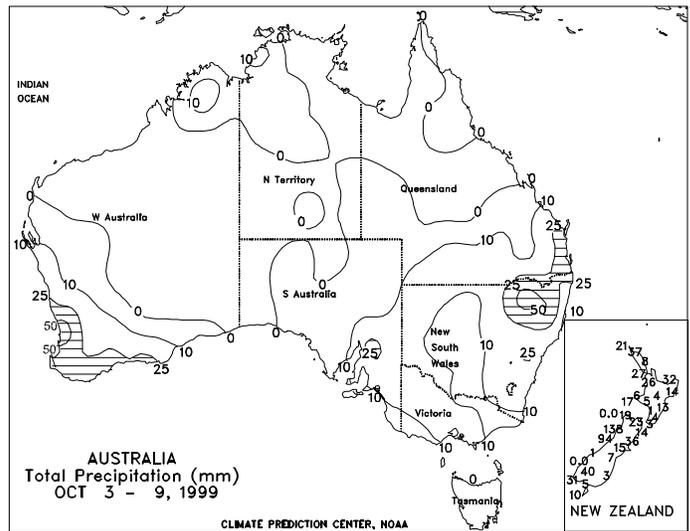
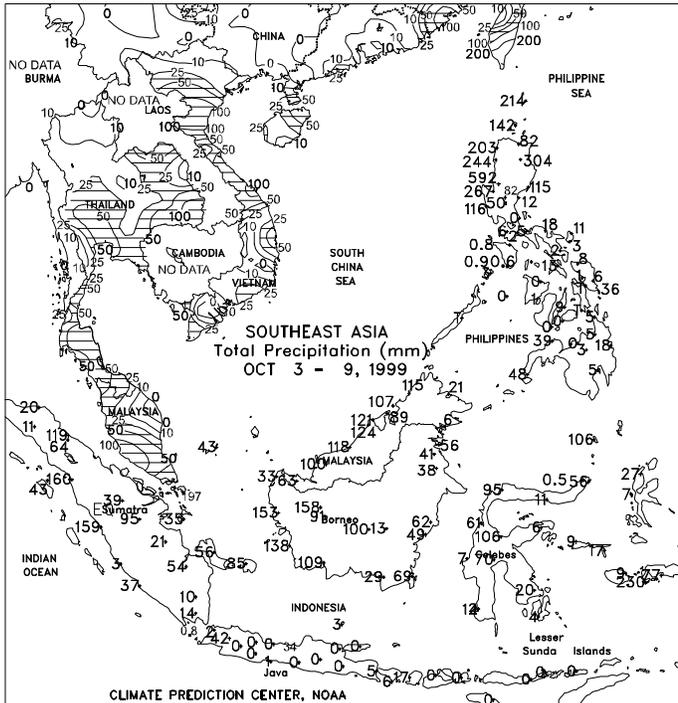
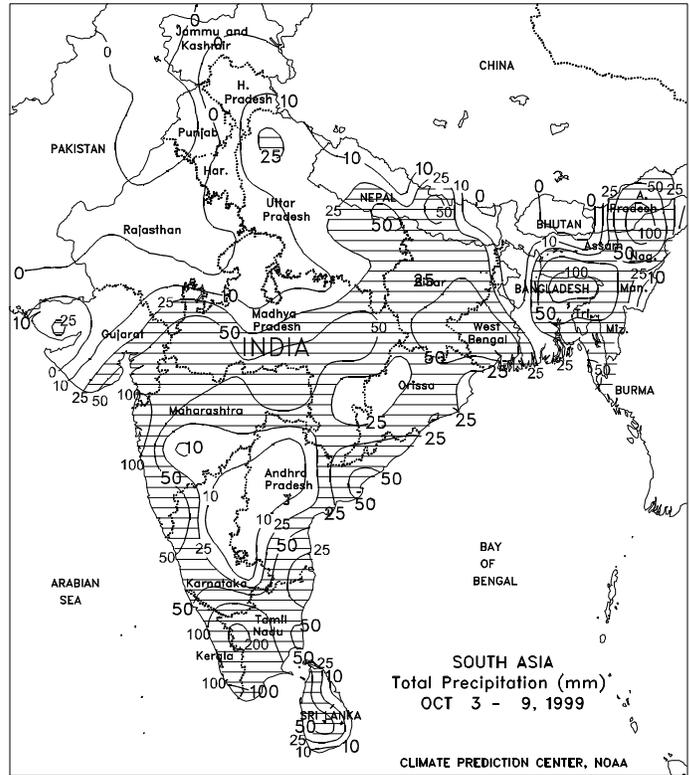
Early in the week, scattered showers (10-40 mm) in England, France, the Benelux countries, Germany, and northern Italy continued to delay fieldwork. By midweek, however, cooler, drier weather slid into these areas, allowing summer crop harvesting and winter grain planting to resume. Unseasonably early, but light, frosts (temperatures near -2 degrees C) were observed in parts of England and France between September 5 and 7. Although the first frost in these areas typically does not occur until late November, these frosts had little if any impact on maturing summer crops. In eastern Europe, scattered showers (15-60 mm) benefited germinating to emerging winter grains in Poland, the Czech Republic, Slovakia, Austria, and the northern Balkans. Farther south, lighter showers (5-20 mm) fell across Romania, Bulgaria, and the southern Balkans. During the past 4 weeks, unseasonably warm, dry weather has blanketed this region, aiding harvesting but slowing winter wheat development. As a result, more rain is needed in southeastern Europe to help winter wheat establishment. In southern and eastern Spain, widely scattered showers (5-30 mm) during the latter half of the week caused brief harvest delays, while the remainder of the Iberian peninsula experienced dry weather. Average temperatures were near normal in Spain, Portugal, and England. In the remainder of western Europe, temperatures averaged 2 to 5 degrees C below normal. In contrast, near- to above-normal (2-4 degrees C) temperatures occurred in Scandinavia and eastern Europe.

SOUTH ASIA

Monsoon activity remained strong across central and southern India, bringing beneficial rain to cotton and other late-season crops while increasing irrigation reserves for winter-grown oilseeds. Unseasonably heavy showers (10-50 mm or more) covered cotton and sugarcane areas of Madhya Pradesh and Maharashtra but came too late for most soybeans, groundnuts, and coarse grains. Rainfall was light (25 mm or less) over much of the southern interior but locally heavy rain (50-100 mm or more) covered rice areas of the southern tip, extending northeastward along the coast of Andhra Pradesh. Continuing monsoon rain (25-50 mm or more) maintained generally favorable conditions for rice in Bangladesh and eastern and northern India. In the northwest, warm, dry weather favored maturing cotton and rice.

SOUTHEAST ASIA

Typhoon Dan hit the northern Philippine Island of Luzon on October 5, with sustained winds of 100 knots (115 mph). The storm helped to produce torrential showers (200-600 mm) across northern and western Luzon Island, slowing rice harvesting and possibly damaging unharvested crops. Variable showers (40-150 mm) fell across Indochina, maintaining moisture supplies for immature rice, but caused minor harvesting delays. Showers (10-125 mm) maintained moisture supplies for oil palm across peninsular Malaysia. Sunny, dry weather continued across Java, Indonesia, aiding second-crop rice harvesting. However, rains are needed to increase moisture supplies for main-season rice transplanting.



AUSTRALIA

Beneficial showers swept across the nation's winter grain belts. In the southeast, light rain (5-25 mm) brought needed relief from unseasonable warmth and dryness to South Australia and western Victoria. Prior to the rainfall, temperatures in the lower to middle 30's degrees C stressed reproductive wheat and barley. However, the rain failed to significantly improve long-term moisture levels. Elsewhere

in the east, heavier showers (10-25 mm, locally exceeding 50 mm) maintained mostly favorable prospects for winter grains in New South Wales. The moisture extended northward into the Darling Downs, but light rain (10 mm or less) in Queensland's northern winter grain areas allowed harvesting to progress. Scattered showers (5-25 mm or more) lingered over grazing lands and the western sorghum and cotton areas of Queensland and New South Wales, favoring spring growth. Temperatures throughout the east averaged 2 to 6 degrees C above normal, with the largest departures occurring in South Australia and western Victoria. In Western Australia, widespread showers (5-35 mm, most areas) and seasonable warming spurred winter grain development, although highs in the middle 30's degrees C may have stressed reproductive to filling crops on the fringe of the winter grain belt. In New Zealand, scattered showers (5-25 mm) moistened small grains and pastures.

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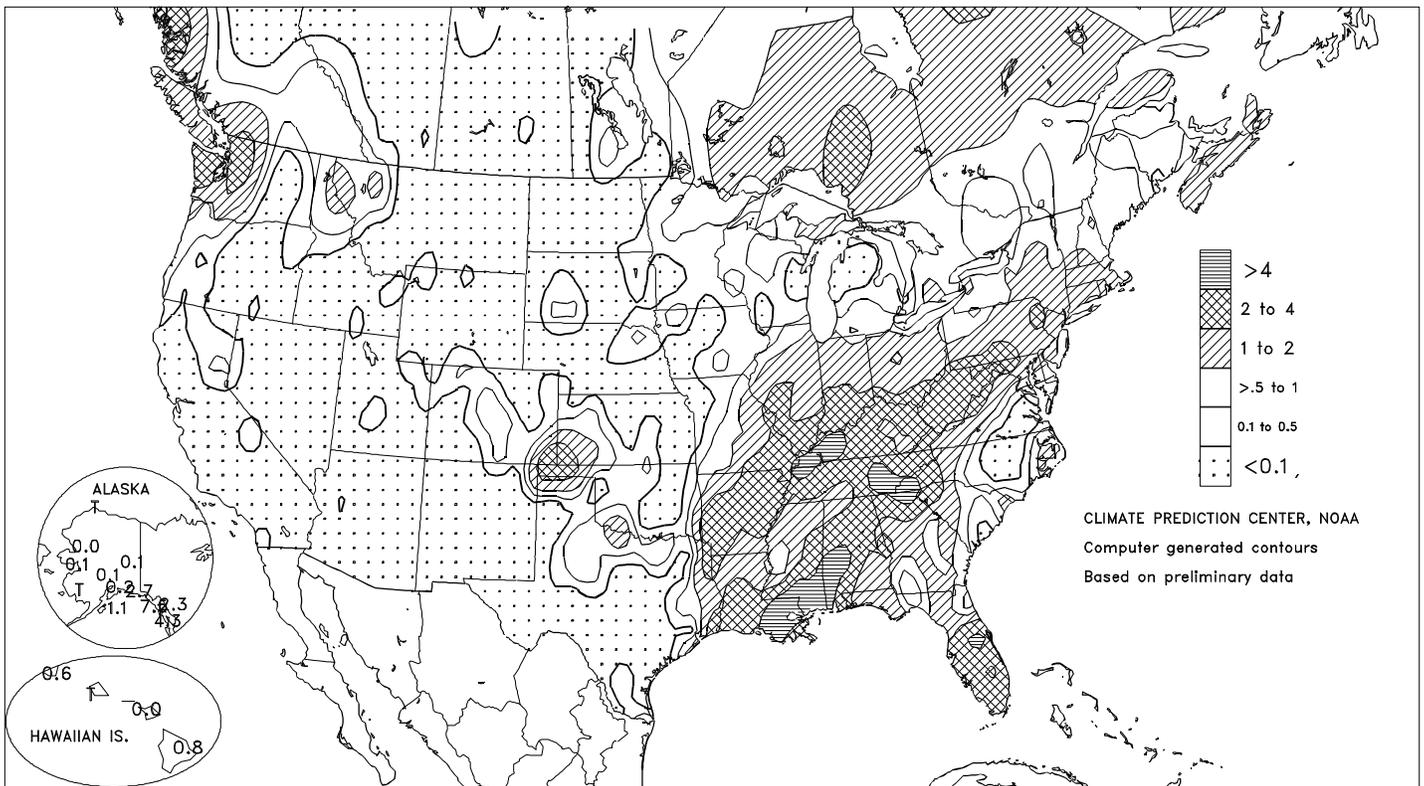
National Oceanic and Atmospheric Administration
National Weather Service/Climate Prediction Center
Managing Editor **David Miskus** (202) 720-7919
Meteorologists **Clinton Wallace, Brad Pugh,**
..... **Eric Luebehusen, and Chester Schmitt**
Subscriptions ... **John Kopman** (301) 763-8000 ext 7534
.....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

U.S. DEPARTMENT OF AGRICULTURE

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OCT 3 - 9, 1999



Climate Prediction Center, W/NP52
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NOAA/NWS/NCEP/CPC
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WWB, Room 605
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