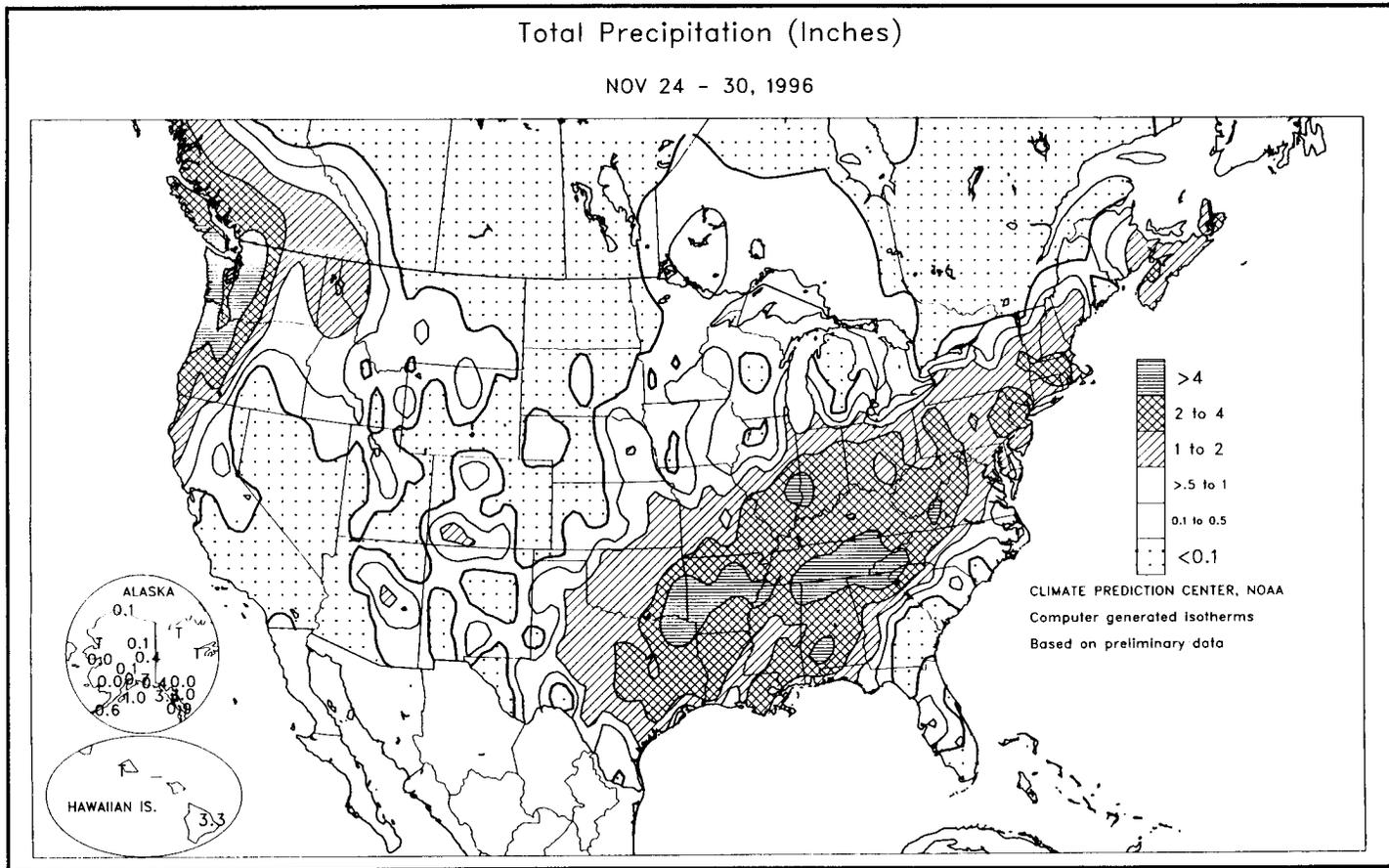


# WEEKLY WEATHER AND CROP BULLETIN

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

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



## HIGHLIGHTS

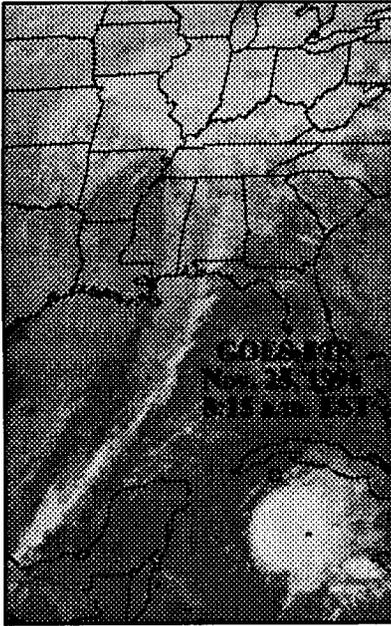
November 24 - 30, 1996

**E**nergetic storm systems continued to traverse the Nation, sparking significant precipitation from Texas to the Northeast and across the Northwest. Weekly totals topped 4 inches west of the Cascades and from northeastern Texas to the southern Appalachians. Late in the week, snowfall blanketed mountainous portions of the Four Corners States. Farther east, the season's first snowfall struck parts of the Northeast before Thanksgiving, while a narrow stripe of heavy snow affected areas from the southern High Plains to the Great Lakes States at week's end. Between storms, the last and strongest in a series of arctic high-pressure systems pushed through the northern Plains and Midwest before settling over the East Coast, resulting in more than two dozen daily-record lows. Meanwhile, the Southwest's recent warm spell came to an end.

(Continued on page 2)

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Tropical Storm Marco (lower right) takes a stand against an encroaching cold front. Marco dissipated less than 36 hours later.

(Continued from front cover)

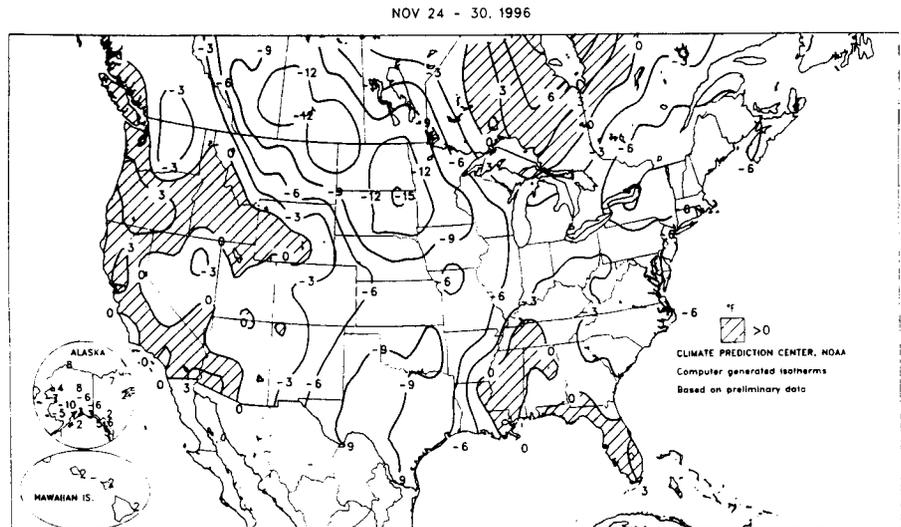
Early in the week, a storm tracked from the **southern Plains to New England**. Arctic air swept southward through the **Plains** in the storm's wake. In **Texas**, snowfall on Sunday locally topped 10 inches in parts of Edwards and Kerr Counties. Damaging amounts of freezing rain accumulated from **northeastern Texas to the Ozark Plateau**. Farther east, about a dozen tornadoes accompanied strong thunderstorms across the **Southeast**. In **eastern Oklahoma**, rainfall in excess of 4 inches lifted the **Poteau River** to record crests at **Poteau** and **Panama**. And in the **Northeast**, November snowfall records were established in **Cleveland, OH** (23.4 inches) and **Rochester, NY** (24.9 inches), as weekly totals reached 2.6 and 13.3 inches, respectively. In **New England**, totals reached 1.8 inches in **Boston, MA**, their first accumulation of the season, and 6.7 inches in **Burlington, VT**. Meanwhile, daily-record rainfalls dotted the **East** on Tuesday, including 2.17 inches in **Bridgeport, CT** and 1.91 inches in **New York City's Central Park**.

In **North Dakota**, **Williston** (-27°F) notched a November-record low on Sunday. The bitterly cold air persisted through midweek, when **Minneapolis, MN** recorded -11°F. A day earlier, daily records had been set in **Aberdeen, SD** (-24°F) and **Fargo, ND** (-19°F), as well as the **southern Texas** cities of **Victoria** (33°F) and **Del Rio** (32°F). Tuesday's low of -12°F in **Rochester, MN** was their lowest in November since 1977. Deep snow cover continued to protect winter wheat on the **northern Plains** from the extreme cold, but on the **central High Plains**--where a 2-month dry spell continued--lows dipped into the single digits on November 24-25.

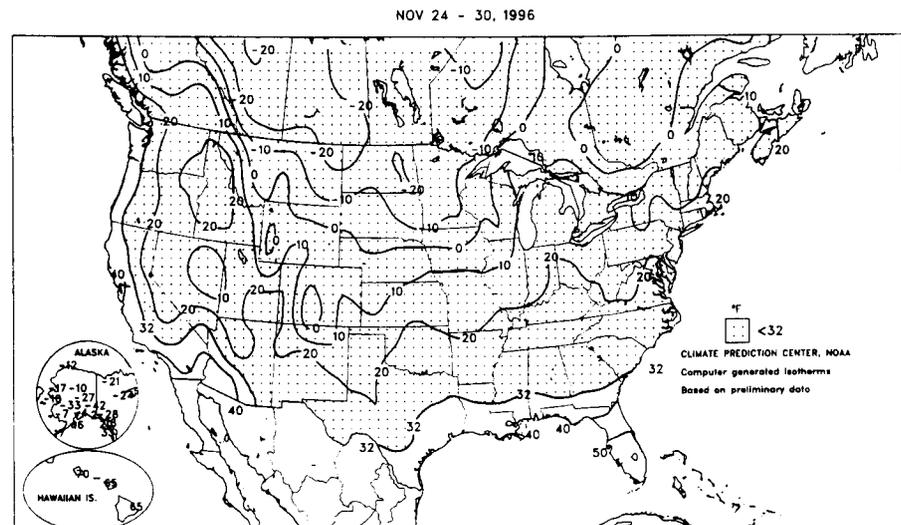
Snow continued to fall for much of the week in the **interior Northwest**. Another 14.2 inches buried **Kalispell, MT**, boosting their November snowfall to 48.5 inches. In **eastern Washington**, weekly totals included 4.5 inches in **Hanford** and 6.4 inches in **Spokane**. West of the **Cascades**, weekly rainfall reached 6.40 inches in **Quillayute, WA** and 4.80 inches in **Astoria, OR**. Farther south, heavy snow developed over parts of the **Southwest** toward week's end. The snow depth near **Wolf Creek Pass, CO**, rose to 75 inches by month's end, up from 36 inches a week earlier. In **southwestern Utah**, **Brian Head** received 31 inches in 24 hours on November 28-29.

Late in the week, the arctic high-pressure system exited the **East**. In a final flurry of daily records, lows on Thursday fell to 11°F in **Rochester, NY** and 21°F in **Asheville, NC**. Meanwhile, precipitation developed on the **southern Plains**, easing recent dryness in most locations. Rain quickly spread into the **East** at week's end, with snow confined to a narrow band from the **southern Plains** to the **western Great Lakes region**. On November 30, the month's first snowfall struck locations such as **Amarillo, TX** (8.0 inches), **Wichita, KS** (4.6 inches), and **Kansas City, MO** (4.8 inches). Enough precipitation fell in **Duluth, MN** to boost their monthly total to a November-record 5.38 inches. Farther south, rain returned to previously drenched areas, causing some additional flooding. In **Memphis, TN**, 6.03 inches of their 7.87-inch weekly total fell on November 29-30.

Departure of Average Temperature from Normal (°F)



Extreme Minimum Temperature (°F)



# National Weather Data for Selected Cities

Weather Data for the Week Ending November 30, 1996

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN., SINCE Sep 1	PCT. NORMAL SINCE Sep 1	TOTAL IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																		01 INCH OR MORE	05 INCH OR MORE		
AL BIRMINGHAM	80	39	67	28	50	0	1.18	0.06	0.88	13.48	122	58.46	120	90	62	0	3	4	1	0	
MOBILE	86	46	74	34	56	-1	0.74	-0.37	0.38	9.22	71	56.20	98	90	57	0	0	3	0	0	
MONTGOMERY	82	41	70	29	52	0	1.20	0.16	0.69	11.76	116	58.88	118	85	49	0	1	4	1	0	
AK ANCHORAGE	21	10	28	-4	15	-3	0.87	0.46	0.36	5.93	102	14.22	98	87	79	0	7	3	0	0	
BARROW	4	-2	12	-12	1	8	0.08	0.01	0.06	1.18	89	3.50	81	85	79	0	7	2	0	0	
FAIRBANKS	-2	-17	2	-27	-10	-8	0.43	0.24	0.22	3.33	126	11.26	112	79	73	0	7	4	0	0	
JUNEAU	38	31	42	18	35	8	-	-	-	-	-	-	97	98	77	0	4	-	-	-	
KODIAK	35	28	43	16	30	-2	1.01	-0.38	0.67	19.86	99	48.83	80	82	60	0	6	4	1	0	
NOME	11	-1	18	-10	5	-7	0.00	-0.22	0.00	4.28	89	16.10	115	79	68	0	7	0	0	0	
AZ PHOENIX	89	50	74	38	58	2	0.16	-0.04	0.14	1.16	63	4.28	64	56	23	0	0	2	0	0	
PRESCOTT	49	28	57	19	38	-2	0.26	-0.13	0.17	1.48	31	6.98	39	88	39	0	6	2	0	0	
TUCSON	86	42	76	31	54	-1	0.09	-0.09	0.07	5.63	166	10.48	96	71	26	0	1	2	0	0	
YUMA	73	54	77	48	63	3	0.00	-0.07	0.00	0.00	0	0.93	34	42	19	0	0	0	0	0	
AR FORT SMITH	48	33	56	27	40	-6	4.27	3.39	2.76	19.64	179	56.17	146	94	69	0	3	4	3	0	
LITTLE ROCK	-	-	-	-	-	-	4.19	3.01	-	18.26	142	47.94	108	-	-	-	-	-	-	-	
CA BAKERSFIELD	58	44	62	37	51	0	0.02	-0.14	0.01	2.30	198	6.50	128	92	58	0	0	2	0	0	
EUREKA	57	43	63	38	50	0	1.21	-0.39	0.66	9.87	99	39.31	125	95	51	0	0	6	1	0	
FRESNO	57	42	63	35	49	0	0.04	-0.31	0.03	3.87	181	12.01	131	97	46	0	0	2	0	0	
LOS ANGELES	70	50	76	44	60	1	0.00	-0.46	0.00	3.31	137	12.03	116	77	27	0	0	0	0	0	
REDDING	61	42	69	33	51	3	0.12	-1.21	0.08	4.74	67	32.41	117	85	42	0	0	2	0	0	
SACRAMENTO	61	43	66	34	52	3	0.01	-0.86	0.01	2.26	63	18.62	124	93	49	0	0	1	0	0	
SAN DIEGO	68	52	72	46	60	0	0.00	-0.38	0.00	2.68	126	6.53	78	78	27	0	0	0	0	0	
SAN FRANCISCO	62	47	67	43	54	2	0.07	-0.86	0.06	3.21	76	21.67	130	90	67	0	0	2	0	0	
CO DENVER	43	20	58	10	31	-3	0.00	-0.19	0.00	1.61	62	8.08	66	92	42	0	7	0	0	0	
GRAND JUNCTION	43	27	50	22	35	-2	0.12	-0.07	0.12	3.74	118	9.33	96	81	52	0	7	1	0	0	
PUEBLO	42	18	62	4	30	-6	0.36	0.24	0.17	2.31	122	12.92	120	96	57	0	7	4	0	0	
CT BRIDGEPORT	43	28	54	19	36	-5	0.84	-0.06	0.81	14.64	146	48.36	127	80	50	0	4	2	1	0	
HARTFORD	39	26	43	13	33	-4	1.61	0.86	1.56	16.08	141	49.15	122	78	47	0	7	3	1	0	
DC WASHINGTON	48	33	63	28	40	-6	0.84	0.10	0.42	16.41	163	46.62	128	82	62	0	3	3	0	0	
FL PANAMA CITY	89	50	75	37	59	2	-	-	-	-	-	-	-	93	61	0	0	-	-	-	
DAYTONA BEACH	74	54	79	48	64	1	0.18	-0.42	0.18	16.07	121	58.64	129	91	55	0	0	1	0	0	
JACKSONVILLE	69	48	79	40	58	-3	0.23	-0.34	0.17	17.03	129	62.90	113	96	61	0	0	2	0	0	
KEY WEST	79	71	83	64	75	1	0.00	-0.64	0.00	16.12	123	37.32	99	79	64	0	0	0	0	0	
MIAMI	80	67	85	58	74	2	0.00	-0.46	0.00	16.20	102	54.13	100	72	62	0	0	0	0	0	
ORLANDO	78	56	83	60	65	0	0.39	-0.16	0.38	9.93	93	54.22	118	93	54	0	0	2	0	0	
TALLAHASSEE	70	46	77	38	58	1	0.17	-0.88	0.17	10.83	88	47.01	77	93	53	0	0	1	0	0	
TAMPA	77	58	82	51	67	2	0.47	0.01	0.46	9.44	97	43.86	105	89	53	0	0	2	0	0	
WEST PALM BEACH	80	66	85	53	73	2	0.02	-0.64	0.01	11.77	64	38.26	87	73	50	0	0	2	0	0	
GA ATLANTA	80	39	70	30	50	1	0.47	-0.49	0.47	8.07	78	40.27	87	95	50	0	1	1	0	0	
AUGUSTA	64	34	78	23	49	-2	0.08	-0.67	0.04	5.56	67	33.24	81	91	45	0	3	2	0	0	
MACON	64	38	76	28	51	-2	0.36	-0.43	0.32	7.68	100	33.17	82	91	45	0	3	2	0	0	
SAVANNAH	66	42	77	31	54	-1	0.02	-0.65	0.02	7.13	79	29.98	66	95	53	0	1	1	0	0	
HI HILO	82	68	84	66	75	2	3.29	-0.10	1.06	28.68	88	111.64	96	93	71	0	0	6	4	0	
HONOLULU	83	73	85	70	78	2	0.03	-0.76	0.03	18.63	324	31.08	171	79	59	0	0	1	0	0	
KAHULUI	84	69	85	66	77	2	-	-	-	-	-	-	-	81	63	0	0	-	-	-	
LIHUE	-	74	-	73	-	-	-	-	-	-	-	-	-	86	72	0	0	-	-	-	
ID BOISE	44	30	48	25	37	2	0.48	0.13	0.37	2.89	85	10.54	98	89	51	0	6	3	0	0	
LEWISTON	43	34	50	29	38	1	0.13	-0.16	0.13	4.39	166	15.86	141	90	66	0	4	1	0	0	
POCATELLO	39	24	46	18	32	1	0.15	-0.12	0.07	2.83	97	10.37	94	89	58	0	7	3	0	0	
IL CHICAGO	37	23	46	14	30	-4	0.41	-0.27	0.34	6.50	71	29.94	90	88	68	0	8	4	0	0	
MOULINE	35	20	44	9	27	-6	0.43	-0.13	0.36	3.71	39	26.73	70	90	66	0	7	2	0	0	
PEORIA	37	22	47	11	29	-6	0.87	0.04	0.53	5.01	54	26.81	79	86	70	0	6	3	1	0	
QUINCY	37	22	46	11	30	-7	-	-	-	-	-	-	-	95	65	0	7	-	-	-	
ROCKFORD	31	18	42	6	24	-7	0.36	-0.21	0.30	6.11	66	40.71	119	92	70	0	7	3	0	0	
SPRINGFIELD	38	24	48	13	31	-6	0.74	0.12	0.39	5.17	61	29.52	91	88	65	0	6	3	0	0	
IN EVANSVILLE	44	32	56	20	38	-5	3.26	2.27	2.16	17.63	171	58.82	135	96	72	0	4	4	2	0	
FORT WAYNE	37	28	52	21	32	-4	1.14	0.46	0.34	9.30	117	40.70	128	94	78	0	5	6	0	0	
INDIANAPOLIS	41	28	63	16	35	-3	2.42	1.82	1.01	15.50	178	50.28	137	90	68	0	4	4	2	0	
SOUTH BEND	36	27	48	21	31	-4	0.64	-0.28	0.32	8.51	85	40.12	112	89	66	0	6	3	0	0	
IA DES MOINES	32	18	47	4	26	-7	0.62	0.16	0.62	9.28	109	33.71	103	89	68	0	6	1	1	0	
SIoux CITY	27	12	43	0	20	-10	0.29	0.09	0.27	5.36	91	31.66	126	88	72	0	7	2	0	0	
WATERLOO	27	12	38	0	20	-9	0.47	0.10	0.44	9.65	122	26.32	87	95	71	0	7	2	0	0	
KS CONCORDIA	36	21	54	11	29	-7	0.36	0.13	0.36	9.62	166	26.11	93	86	60	0	6	1	0	0	
DODGE CITY	38	21	53	13	30	-8	0.10	-0.07	0.10	9.51	237	32.43	156	88	59	0	6	1	0	0	
GOODLAND	41	18	54	5	29	-4	0.01	-0.12	0.01	1.32	42	19.14	108	89	52	0	7	1	0	0	
TOPEKA	37	23	50	14	30	-7															

Weather Data for the Week Ending November 30, 1996

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Sep 1	PCT. NORMAL SINCE Sep 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	92 AND BELOW	TEMP. °F		
																		01 INCH OR MORE	05 INCH OR MORE	
ME CARIBOU	23	8	27	0	18	-8	0.08	-0.74	0.08	7.20	71	36.08	105	88	70	0	7	1	0	
ME PORTLAND	34	19	43	12	27	-7	0.61	-0.70	0.38	19.08	157	48.18	121	89	58	0	7	2	0	
MD BALTIMORE	46	26	61	18	38	-6	0.87	0.17	0.66	13.67	141	48.57	130	91	52	0	6	3	1	
MD SALISBURY	50	28	65	21	38	-6	1.29	0.53	1.16	11.71	114	49.77	119	93	41	0	6	2	1	
MA BOSTON	38	26	48	20	32	-8	1.75	0.74	1.63	17.71	167	45.19	121	82	57	0	6	3	1	
MA CHATHAM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MI ALPENA	33	22	43	13	27	-3	0.12	-0.40	0.03	9.18	124	24.63	92	82	75	0	6	6	0	
MI DETROIT	36	24	49	16	30	-6	0.47	-0.20	0.18	7.72	101	22.87	77	93	86	0	6	3	0	
MI FLINT	34	23	48	14	29	-6	0.15	-0.46	0.08	7.28	87	23.25	83	90	86	0	6	4	0	
MI GRAND RAPIDS	34	24	47	20	29	-4	0.28	-0.50	0.14	6.65	84	24.86	74	88	87	0	6	5	0	
MI HOUGHTON LAKE	31	21	43	9	28	-4	0.13	-0.39	0.06	8.38	107	31.80	121	92	89	0	6	4	0	
MI LANSING	34	23	47	8	28	-4	0.21	-0.36	0.09	6.50	71	25.74	88	88	80	0	6	4	0	
MI MARQUETTE	30	19	38	13	24	0	0.32	-0.31	0.22	9.08	86	38.01	116	89	88	0	7	3	0	
MI MUSKEGON	35	26	48	22	31	-4	0.39	-0.35	0.19	6.98	71	24.38	83	88	88	0	6	3	0	
MI SAULT ST. MARIE	32	22	40	10	27	0	0.34	-0.44	0.17	14.37	138	38.97	124	92	88	0	6	5	0	
MN ALEXANDRIA	18	2	34	-16	10	-12	-	-	-	-	-	-	-	91	78	0	7	-	-	
MN DULUTH	22	7	34	-10	14	-7	0.45	0.09	0.23	11.82	145	33.81	118	87	68	0	7	2	0	
MN INT'L FALLS	20	2	32	-15	11	-6	0.49	0.27	0.34	8.77	140	27.08	115	88	89	0	7	2	0	
MN MINNEAPOLIS	26	6	38	-11	15	-11	0.66	0.36	0.57	9.31	144	24.22	98	88	88	0	7	3	1	
MN ROCHESTER	23	6	35	-12	14	-11	0.47	0.16	0.37	8.78	118	28.40	99	90	75	0	7	3	0	
MS GREENWOOD	62	42	78	29	52	1	-	-	-	-	-	-	-	93	48	0	3	-	-	
MS JACKSON	62	43	78	30	53	2	1.48	0.17	0.76	8.02	72	51.74	108	94	80	0	1	4	1	
MS MERIDIAN	64	42	76	31	53	1	0.79	-0.46	0.43	9.58	87	52.02	103	82	54	0	2	3	0	
MO CAPE GIRARDEAU	47	32	61	22	39	-3	2.74	1.72	1.27	13.74	130	39.04	93	95	68	0	4	4	3	
MO COLUMBIA	40	24	47	15	32	-6	1.04	0.34	0.47	13.86	131	38.49	107	93	67	0	7	3	0	
MO KANSAS CITY	37	22	50	13	30	-8	0.86	0.48	0.87	4.73	47	32.51	90	90	58	0	6	2	1	
MO SAINT LOUIS	41	28	52	18	34	-7	2.52	1.72	1.05	12.13	134	41.82	121	90	68	0	5	5	2	
MO SPRINGFIELD	40	24	50	16	32	-9	2.34	1.51	1.11	20.48	167	41.33	101	98	74	0	6	4	1	
MT BILLINGS	32	15	43	-1	24	-6	0.15	-0.04	0.10	3.05	91	11.81	83	87	63	0	8	2	0	
MT GLASGOW	17	1	34	-19	9	-13	0.03	-0.03	0.03	4.50	238	9.87	93	90	73	0	7	1	0	
MT GREAT FALLS	27	12	40	-5	20	-9	0.00	-0.17	0.00	2.28	85	8.94	82	87	71	0	7	0	0	
MT HAVRE	29	3	47	-15	16	-8	0.07	-0.03	0.07	2.57	123	10.73	101	88	80	0	7	1	0	
MT HELENA	32	13	42	-7	22	-4	0.13	0.02	0.07	1.34	60	9.32	85	90	86	0	7	2	0	
MT KALISPELL	32	24	40	19	28	1	1.28	0.92	0.41	6.40	187	22.48	152	98	81	0	6	7	0	
MT MILES CITY	28	5	40	-14	16	-9	0.22	0.11	0.10	2.80	103	12.94	96	94	68	0	7	3	0	
MT MISSOULA	32	23	40	18	27	0	0.37	0.15	0.15	3.00	112	14.67	119	93	81	0	7	5	0	
NE GRAND ISLAND	32	17	46	8	24	-7	0.46	0.23	0.39	7.04	134	30.96	128	88	89	0	7	3	0	
NE LINCOLN	32	17	50	7	25	-8	0.44	0.19	0.44	7.20	105	35.78	131	94	68	0	7	1	0	
NE NORFOLK	29	14	44	4	21	-8	0.38	0.19	0.36	7.14	141	25.28	104	86	68	0	7	2	0	
NE NORTH PLATTE	36	14	48	5	25	-5	0.18	0.02	0.16	6.28	193	24.76	131	87	58	0	7	1	0	
NE OMAHA	31	18	51	7	25	-8	0.86	0.36	-	8.98	120	31.20	108	88	72	0	6	-	-	
NE SCOTTSBLUFF	42	17	58	5	30	-2	0.06	-0.08	0.08	3.75	148	16.31	111	92	48	0	7	1	0	
NE VALENTINE	28	9	47	-6	19	-12	0.02	-0.15	0.02	6.17	138	16.88	77	90	70	0	7	1	0	
NV ELY	40	18	47	0	28	-2	0.03	-0.11	0.03	2.00	78	6.89	73	86	43	0	7	1	0	
NV LAS VEGAS	59	44	84	37	51	1	0.00	-0.11	0.00	0.88	98	1.78	48	82	26	0	0	0	0	
NV RENO	47	23	62	16	35	-1	0.02	-0.20	0.02	1.80	98	9.04	138	89	42	0	7	1	0	
NV WINNEMUCCA	45	23	53	14	34	0	0.07	-0.15	0.06	1.51	77	7.64	104	91	50	0	6	2	0	
NH CONCORD	32	19	38	5	25	-6	1.19	0.36	0.96	12.50	129	39.83	120	87	54	0	7	2	1	
NJ ATLANTIC CITY	48	25	59	15	38	-6	0.41	-0.43	0.41	11.82	125	43.96	119	86	55	0	6	1	0	
NM ALBUQUERQUE	47	31	51	26	39	-1	0.37	0.29	0.29	3.93	169	9.76	116	84	48	0	5	2	0	
NM CLOVIS	48	24	55	19	35	-8	-	-	-	-	-	-	-	88	42	0	5	-	-	
NM ROSWELL	51	29	64	23	40	-6	-	-	-	-	-	-	-	79	40	0	5	-	-	
NY ALBANY	33	18	40	7	25	-9	0.95	0.20	0.53	9.86	109	39.37	118	95	89	0	7	4	1	
NY BINGHAMTON	32	20	43	9	28	-7	1.12	0.36	0.50	12.40	131	41.54	122	94	74	0	7	5	1	
NY BUFFALO	32	23	43	15	28	-8	0.88	-0.25	0.39	14.71	141	44.14	126	94	70	0	7	6	0	
NY NEW YORK	45	34	58	24	39	-3	2.03	1.14	1.92	12.65	124	41.28	107	72	49	0	3	3	1	
NY ROCHESTER	32	21	40	11	26	-9	1.37	0.68	0.88	14.63	178	42.22	144	98	72	0	7	4	1	
NY SYRACUSE	33	23	41	15	28	-8	0.93	0.08	0.46	12.09	112	35.67	100	91	71	0	7	5	0	
NC ASHEVILLE	52	29	80	21	41	-3	1.73	0.73	1.26	10.35	78	43.22	84	93	52	0	5	3	1	
NC CHARLOTTE	57	35	88	28	46	-2	0.29	-0.48	0.15	9.27	92	37.50	95	83	48	0	3	3	0	
NC GREENSBORO	54	32	86	25	43	-3	0.74	0.04	0.43	17.48	175	46.92	120	89	49	0	5	3	0	
NC HATTERAS	55	40	86	35	47	-6	0.53	-0.58	0.51	13.56	89	-	-	85	59	0	0	3	1	
NC NEW BERN	60	37	74	27	49	-3	0.26	-0.52	0.26	16.59	147	53.03	105	87	45	0	3	1	0	
NC RALEIGH	57	32	70	24	44	-3	0.72	0.01	0.32	24.35	270	54.66	143	89	49	0	3	3	0	
NC WILMINGTON	60	37	75	24	49	-3	0.08	-0.78	0.08	20.57	153	61.46	116	98	49	0	4	1	0	
ND BISMARCK	18	1	36	-11	10	-12	0.02	-0.09	0.02	6.24	217	19.99	134	84	89	0	7	1	0	
ND FARGO	16	0	27	-19	8	-12	0.03	-0.11	0.03	3.28	75	12.89	69	87	72	0	7	1	0	
ND GRAND FORKS	16	-2	29	-18	6	-12	0.05	-0.09	0.05	4.61	110	15.95	90	9						

Weather Data for the Week Ending November 30, 1996

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				
																80 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.05 INCH OR MORE	
OK TOLEDO	38	24	50	14	30	-5	0.98	0.24	0.35	8.92	88	27.00	90	98	88	0	6	5	0	
OK YOUNGSTOWN	38	27	50	17	32	-4	0.97	0.23	0.84	12.37	134	38.25	111	96	98	0	4	4	1	
OK OKLAHOMA CITY	44	27	64	21	38	-9	0.83	0.48	0.88	11.78	130	37.90	118	90	80	0	6	3	1	
OR TULSA	43	28	60	21	35	-9	1.13	0.48	0.82	17.87	166	31.10	81	92	84	0	5	3	1	
OR ASTORIA	53	42	57	38	47	2	4.80	2.27	2.73	26.02	139	72.48	130	98	86	0	0	7	3	
OR BURNS	41	25	48	17	33	3	0.33	0.03	0.21	2.74	108	10.94	124	97	86	0	7	2	0	
OR MEDFORD	51	37	57	32	44	4	0.67	-0.15	0.39	8.72	121	21.42	138	98	87	0	1	4	0	
OR PENDLETON	46	32	58	28	38	1	0.20	-0.21	0.09	3.48	114	12.31	118	91	73	0	4	4	0	
OR PORTLAND	51	39	58	33	45	2	1.89	0.28	0.78	18.87	173	48.94	182	98	78	0	0	8	1	
OR SALEM	52	41	57	39	47	5	1.97	0.34	0.81	16.72	165	51.97	181	98	77	0	0	4	2	
PA ALLENTOWN	41	25	53	16	33	-5	2.00	1.08	1.75	16.70	155	49.17	123	88	68	0	6	3	1	
PA ERIE	37	29	48	19	33	-5	0.63	-0.30	0.44	17.06	140	48.86	123	94	87	0	4	3	0	
PA HARRISBURG	42	33	52	25	38	-2	1.00	0.18	-	11.49	115	46.46	126	88	67	0	4	-	-	
PA PHILADELPHIA	44	29	58	21	37	-4	1.72	0.79	1.48	12.50	111	45.28	107	83	60	0	4	3	1	
PA PITTSBURGH	42	28	52	19	35	-3	0.78	0.07	0.29	11.31	138	42.58	125	93	88	0	4	5	0	
PA SCRANTON	38	25	49	13	31	-5	0.41	-0.28	0.28	12.43	136	43.08	128	88	86	0	5	3	0	
RI PROVIDENCE	43	27	59	19	36	-5	1.46	0.38	1.40	14.21	123	42.21	103	83	64	0	4	3	1	
SC CHARLESTON	64	43	78	31	54	-2	0.03	-0.58	0.02	10.09	100	37.09	77	86	50	0	1	2	0	
SC COLUMBIA	82	36	78	25	49	-3	0.03	-0.88	0.02	6.33	86	30.93	67	88	48	0	4	2	0	
SC FLORENCE	80	37	73	27	49	-3	-	-	-	-	-	-	-	88	47	0	3	-	-	
SC GREENVILLE	57	36	71	28	48	-2	1.44	0.57	0.87	9.78	84	47.35	100	88	60	0	3	3	2	
SD ABERDEEN	18	-8	28	-24	6	-18	0.02	-0.12	0.02	10.10	246	24.09	117	88	78	0	7	1	0	
SD HURON	22	5	32	-12	13	-12	0.00	-0.12	0.00	5.23	134	19.22	93	86	78	0	7	0	0	
SD RAPID CITY	30	11	47	-2	21	-9	0.00	-0.11	0.00	3.84	133	18.98	117	88	82	0	7	0	0	
SD SIOUX FALLS	22	5	36	-13	14	-13	0.37	0.16	0.37	7.32	124	19.36	84	90	78	0	7	1	0	
TN CHATTANOOGA	55	35	65	28	45	-1	2.24	1.08	1.12	13.94	116	51.27	108	90	60	0	3	3	2	
TN KNOXVILLE	51	33	61	25	42	-3	2.04	1.08	1.38	12.11	125	45.78	107	96	82	0	5	3	2	
TN MEMPHIS	55	38	73	28	47	-2	2.87	0.53	4.48	24.36	209	69.55	150	93	67	0	3	4	3	
TN NASHVILLE	55	38	68	23	45	0	2.18	1.11	1.70	13.80	135	44.38	104	91	59	0	3	3	1	
TX ABILENE	48	30	84	24	38	-11	1.83	1.38	0.90	10.99	153	27.78	119	96	61	0	4	3	1	
TX AMARILLO	48	22	61	16	34	-7	0.49	0.38	0.37	4.00	98	20.52	107	91	46	0	6	3	0	
TX AUSTIN	59	39	73	34	49	-7	2.03	1.58	1.03	7.74	85	28.08	87	92	58	0	0	4	1	
TX BEAUMONT	61	44	77	37	53	-5	0.99	-0.18	0.58	19.88	129	45.88	88	91	86	0	0	2	1	
TX BROWNSVILLE	73	49	81	37	61	-5	0.20	-0.10	0.15	20.72	201	27.94	110	94	65	0	0	2	0	
TX CORPUS CHRISTI	85	46	74	38	55	-7	0.78	0.48	0.58	5.00	49	17.90	82	94	82	0	0	3	1	
TX DEL RIO	58	39	67	32	48	-9	0.88	0.48	0.43	3.81	54	10.88	46	96	68	0	2	4	0	
TX EL PASO	54	34	65	27	44	-4	0.18	0.05	0.14	1.42	49	9.12	111	87	31	0	3	2	0	
TX FORT WORTH	53	34	69	29	43	-7	2.47	1.98	1.54	11.28	101	30.32	86	96	83	0	4	4	2	
TX GALVESTON	61	48	75	37	55	-8	0.88	-0.18	0.43	7.89	86	29.84	76	93	71	0	0	2	0	
TX HOUSTON	80	41	74	35	51	-7	3.88	2.85	2.80	14.01	91	35.78	73	93	86	0	0	3	2	
TX LUBBOCK	48	25	61	16	37	-8	0.38	0.24	0.27	1.30	26	13.57	75	87	41	0	5	3	0	
TX MIDLAND	49	30	61	25	40	-10	1.07	0.94	0.91	2.59	49	9.08	82	93	67	0	5	3	1	
TX SAN ANGELO	50	30	65	18	40	-11	1.96	1.78	0.81	7.71	112	22.41	114	98	81	0	4	5	2	
TX SAN ANTONIO	60	38	72	30	49	-7	1.79	1.29	0.99	6.79	74	15.58	53	92	47	0	2	4	2	
TX VICTORIA	83	43	75	33	63	-8	1.41	0.83	1.15	7.41	52	24.33	57	96	53	0	0	6	1	
TX WACO	55	36	70	30	45	-8	3.19	2.70	2.29	7.64	82	24.54	82	98	83	0	3	4	2	
TX WICHITA FALLS	48	31	60	25	40	-8	1.48	1.15	0.86	9.90	120	22.83	83	93	58	0	4	5	1	
UT CEDAR CITY	45	21	54	12	33	-2	0.23	0.01	0.23	3.40	116	11.80	108	93	43	0	7	1	0	
UT SALT LAKE CITY	45	27	51	21	36	1	0.27	-0.04	0.12	4.22	106	15.61	106	88	52	0	7	3	0	
VT BURLINGTON	28	20	39	12	24	-7	0.27	-0.42	0.23	9.32	100	38.16	119	83	83	0	7	2	0	
VA NORFOLK	52	33	71	29	43	-8	0.46	-0.22	0.38	9.72	98	48.02	116	86	58	0	4	2	0	
VA RICHMOND	52	29	69	22	41	-5	1.17	0.46	0.78	17.59	174	49.25	123	92	51	0	5	3	1	
VA ROANOKE	49	28	61	21	39	-5	1.77	1.07	1.10	12.98	123	49.02	128	84	53	0	8	3	1	
WA QUILLAYUTE	50	41	52	38	45	3	8.40	2.78	3.49	30.94	103	82.74	92	97	94	0	0	7	5	
WA SEATTLE-TACOMA	50	40	55	36	45	2	2.06	0.59	1.29	12.58	115	40.41	129	98	78	0	0	5	1	
WA SPOKANE	34	24	39	14	29	-2	1.47	0.90	1.02	8.06	208	20.97	149	98	87	0	7	4	1	
WA YAKIMA	32	19	41	11	25	-9	0.58	0.28	-	3.66	189	9.19	139	93	83	0	7	-	-	
WV BECKLEY	48	27	58	19	38	-2	1.53	0.81	0.88	12.82	139	52.25	138	88	58	0	5	3	2	
WV CHARLESTON	48	28	58	21	38	-5	1.81	0.78	0.89	14.13	146	53.74	137	98	85	0	5	4	2	
WV HUNTINGTON	50	29	57	21	39	-1	1.72	0.84	0.92	10.59	107	47.77	120	83	59	0	5	4	2	
WV PARKERSBURG	48	28	58	20	38	-2	1.21	0.55	0.57	10.59	126	45.40	120	97	58	0	5	3	1	
WI GREEN BAY	30	12	39	0	21	-7	0.40	-0.08	0.29	5.08	85	23.50	88	91	88	0	6	3	0	
WI LACROSSE	28	14	40	1	21	-8	0.58	0.22	-	9.08	117	28.51	97	92	81	0	7	-	-	
WI MADISON	28	15	38	-1	21	-9	0.33	-0.13	0.23	5.15	82	28.78	94	92	70	0	7	3	0	
WI MILWAUKEE	35	22	44	12	29	-3	0.30	-0.29	0.28	5.31	84	21.05	89	85	59	0	8	2	0	
WI WAUSAU	28	14	35	0	21	-5	0.53	0.12	0.32	8.24	92	33.51	107	88	58	0	7	3	0	
WY CASPER	37	16	48	5	26	-2	0.31	0.14	0.24	3.10	116	10.04	85	88	57	0	7	2	0	
WY CHEYENNE	39	20	52	13	29	-2	0.07	-0.04	0.07	3.26	128	15.70	112	87	49	0	7	1	0	
WY LANDER	41	19	51	9	30	4	0.17	0.01	0.18	1.91	83	8.30	87	88	45	0	7	2	0	
WY SHERIDAN	33	13	38	-4	23	-4	0.17	0.00	0.12	2.98	88	12.40	90	88	85	0	7	3	0	
PR SAN JUAN	-	76	-	74	-	-	1.11	-0.20	-	-	-	63.97	138	92	79	-	-	-	-	

Based on 1961-90 normals

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

## National Agricultural Summary

November 25 - December 1, 1996

### HIGHLIGHTS

Harvest activity and small grain seeding was slowed by another week of low temperatures and wet weather across the Eastern States. Heavy snowfall across the southern and central Great Plains brought much-needed moisture for the small grains, but prevented producers from completing the row-crop harvest. The lateness of small-grain seedings combined with early snow accumulation raised producers' concerns in the Northern States. In the Dakotas, deep snow restricted grazing and access to hay in the fields, forcing producers to begin using feed supplies earlier than normal. The continued

cool, wet weather slowed the dry down of Midwestern row crops remaining in the field. Excessive rainfall in the Delta caused harvest activity to fall behind schedule. Showers over the mid-Atlantic restricted harvesting but improved small grains and pastures. Heavy rains in the Pacific Northwest slowed tree pruning and caused some flooding. Wet fields in California from the previous week's storm prevented some growers from planting field crops. Christmas tree producers in the Great Lakes and Northeast were busy harvesting and hauling trees to market.

**Winter wheat** ended the season in mostly good to fair condition. Snow across the central and southern Great Plains brought much-needed moisture, but more was needed. In the Mountain States, late-planted wheat was slow to emerge due to the low temperatures, but was protected by the adequate snowpack. Producers in the Great Lakes region and eastern Corn Belt were concerned that late-planted wheat was susceptible to damage from heaving and the freezing temperatures that followed the midweek rains. Low temperatures in the southern Great Plains reduced insect problems.

**Corn** harvested at 96% complete was up 3 points from last week, 1 point ahead of normal. The harvest was virtually complete in the Corn Belt except for isolated fields. The cool, wet weather slowed the dry down of corn remaining for harvest in the Corn Belt, while wet conditions and lodging slowed harvest progress in the eastern Corn Belt. Corn harvested in Ohio, at 85% complete, was up 9 points from last week, but 7 points behind the average.

**Cotton** acreage harvested was estimated at 87%, up 5 points from last week. Cotton growers in Arizona had harvested 82% of their acreage, up 4 points from the previous week, but 14 points behind the average. In Oklahoma, the cotton harvest crossed the halfway mark, but was 16 points behind schedule. The cotton harvest in Texas at 75% complete was slowed by damp mornings and wet conditions. In the Texas High Plains, producers welcomed the freezing temperatures, which should aid the harvest. In California, second picking was underway except for fields that had lint stained by rain. Plowdown in California for pink bollworm control was delayed by wet fields.

**Soybean** acreage harvested, at 96%, was up 2 points from last week but 2 points less than the average. In Tennessee, the soybean harvest was 77% complete, over 2 weeks behind normal, due to delays from persistent rainy weather. In North Carolina, the harvest was 73% complete, up 15 points from last week. Harvest activity was slowed in the Delta by widespread rainstorms.

**Corn Percent Harvested**

	Dec 1 1996	Prev Week	Prev Year	5-Yr Avg
CO	100	98	97	95
GA	100	100	100	100
IL	97	96	100	96
IN	93	90	100	93
IA	97	95	100	96
KS	99	99	100	98
KY	98	97	99	99
MI	93	85	100	82
MN	98	97	99	96
MO	95	92	99	96
NE	97	95	100	95
NC	100	100	100	100
OH	85	76	100	92
PA	89	79	99	84
SD	94	93	100	93
TX	100	100	100	100
WI	90	85	100	89
ALL	96	93	100	95

These 17 States produced 93% of the 1995 corn crop.

**Cotton Percent Harvested**

	Dec 1 1996	Prev Week	Prev Year	5-Yr Avg
AL	93	91	97	94
AZ	82	78	89	96
AR	95	95	100	100
CA	95	90	94	98
GA	91	86	87	87
LA	100	100	100	100
MS	100	99	100	99
MO	95	88	99	98
NM	90	81	82	78
NC	90	85	86	86
OK	51	41	74	67
SC	95	92	83	89
TN	97	96	98	98
TX	75	69	76	74
ALL	87	82	87	87

These 14 States produced 99% of the 1995 cotton crop.



(Continued on page 10)

## 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/oc/waob/jawf>.*

**ALABAMA:** Wheat planted was 70%, compared with 74% in 1995 and the 81% avg. Pecan harvest pace was brisk. Late soybean fields were combined. Cotton harvest wound down in most localities. Some fields were scrapped.

**ARIZONA:** Cotton progress remained behind normal. Small-grain planting continues. Alfalfa was 45% fair to 46% good, and 9% excellent. Harvest activity was 60% light, 6% moderate, 2% active, and 32% finished or not active. Sheeping off was light. Early reports indicate that cooler weather, with some light frost, over the weekend inflicted very little to no damage to the State's vegetable crops. Harvest of iceberg lettuce was increasing rapidly in western fields, continuing steady in the central areas. Boston, leaf, Romaine, and various specialty lettuces were available in both areas. Cantaloupe and honeydew harvests were near completion, with only a limited volume was shipped during the past week. Broccoli, bok choy, cabbage, endive, escarole, kale, leeks, napa, and spinach were shipped from central and western areas, along with cilantro and parsley. Central producers also harvested mixed greens, Swiss chard, green onions, turnips, radishes, dandelions. Western growers also shipped their first cauliflower. Chile peppers harvest continued in eastern fields. Lemons, grapefruit, and navel orange harvests were active in the western and central production areas. A limited volume of tangerines and tangelos was also available. Harvest of the State's pecan crop continued to gain momentum. Eastern apple harvest was steady. Grazing conditions across State were downgraded slightly from last month's report as weather turned cooler, precipitation was limited primarily to higher elevation areas. Just under two-thirds of the reports showed pastures to be in fair or better condition. Only a third of the reports, primarily in the low to mid-elevation pastures, showed poor to very poor grazing conditions, unchanged from October. Cattle and calves remain in mostly fair condition. Stock water supplies continued to be short to adequate. Run-off is needed to fill tanks again. Soil moisture supplies remained mostly short. No insect damage was reported.

**ARKANSAS:** Main farming activity: Ginning cotton. Excessive rainfall continued to detain fieldwork. Harvest continued to fall behind schedule. No crops were harvested due to weather conditions. Some soybeans remain under water. Approximately 75% of beans have been harvested, compared with 100% in 1995 and the 98% avg. Cotton ginning progressed in several counties. Approximately 95% of cotton has been harvested, compared with 100% in 1995 and the 100% avg. Livestock remain in good condition across the State.

**CALIFORNIA:** Fieldwork resumed in most areas as drier conditions prevailed. Wet soils from earlier rains prevented some growers from planting and harvesting field crops. Cotton harvest was nearing completion in the San Joaquin Valley. Second picking was underway in some fields. Lint staining from the rain and fog continued to be a problem in Kings and Tulare Counties. Some growers abandoned plans to second pick, due to inferior lint condition and quality. Plowdown of harvested fields for pink bollworm control was curtailed by wet soils. Harvests of grain sorghum, and corn for grain and silage were virtually complete. Small grains, new alfalfa, and winter forages were seeded where conditions permitted. Emerging wheat, barley, alfalfa, and forage crops grew rapidly in the Sacramento Valley. Growth was slowed by persistent fog in some San Joaquin Valley fields. Wheat fields in the Imperial Valley were prepared for planting, sugar beets were treated for armyworms. New crop sugar beets were emerging in Fresno County. Established alfalfa was sprayed for grasses in the southern San Joaquin Valley. Grape growers planted cover crops and pruned vines. Red Crimson and Emperor table grape harvests neared completion in San Joaquin County. Stone fruit and nut orchards were pruned where conditions permitted. Harvest of persimmons continued. Avocado harvest continued, but was slowed by wet weather and soggy soils. Picking of lemons, mandarins, grapefruit and pummelos continued. Navel orange harvest gained momentum. Maturation was generally 10

to 15 days ahead of schedule in the San Joaquin Valley, with large sizes reported. Broccoli and cauliflower were harvested in the Salinas-Watsonville area and San Joaquin Valley. Lettuce harvest continued in the San Joaquin Valley, and Santa Maria-Oceano area. Carrots were harvested in Fresno and Kern Counties. Green beans were harvested in Tulare County, as weather permitted. Spring potato planting continued in Kern County. Harvesting of brussel sprouts progressed in Monterey County. Cabbage was harvested in Fresno County. Onion harvesting continued in the Antelope Valley and Monterey County. Harvest of squash continued in the San Joaquin Valley. Garlic planting continued in the San Joaquin Valley. Cooler weather slowed growth of newly germinated rangeland grasses. Cattle continued to be moved from higher elevation pastures. Supplemental feeding continued. Range and pasture was in fair to good condition. Water supplies were adequate. Sheep were grazing on sudan grass and alfalfa.

**COLORADO:** Much-needed moisture occurred from snowstorms on the 26th and 29th. This benefited the winter wheat crop since stands are good, but moisture is needed for root development. However, more snow and moisture is needed to further enhance the crop and provide a good cover to protect it from the elements. Farmers are still busy preparing equipment for winter storage and fencing harvested crop fields for livestock to forage. Some are also busy delivering marketed crop to elevators.

**DELAWARE:** Soybeans were 85% harvested, compared with 86% in 1995 and the 94% avg. Winter wheat condition was 11% fair, 87% good, and 2% excellent. Range and pasture feed condition was 9% fair, 90% good, and 1% excellent. Activities: Harvesting soybeans and preparing some corn remaining in the field for winter.

**FLORIDA:** Mostly mild weather permitted fieldwork to normally progress. Topsoil moisture is short to adequate throughout the State, with scattered areas of surplus moisture. Cotton harvest was winding down. Sugarcane harvest and planting were active. Winter wheat planting was delayed by dry soil conditions. Mostly dry weather aided recovery of plants from recent wind damage. Yields were low for some vegetables due to grade-out of scarred fruit. Volume leaders were tomatoes, peppers, cucumbers, snap beans, sweet corn, squash, radishes, eggplant, endive/escarole, and parsley. The State experienced cool, dry weather, with some clouds and sunny conditions in the citrus areas. Many producers are irrigating. Early fresh harvest was increasing for the holiday trade. Caretakers were cutting cover crops, few were spraying and fertilizing, while other were continuing to remove dead trees. Pasture feed condition was poor 20%, fair 35%, good 40%, and excellent 5%. Panhandle pasture was helped by early-week rain. Frost hurt the condition of permanent pasture in some northern counties. Winter small-grain pasture almost ready for grazing. Pasture grass growth slowed due to dry conditions in the central and southern areas. Condition of cattle herds was fair 45% to good 55%.

**GEORGIA:** Days suitable for fieldwork 5.2. Soil moisture was 2% very short, 20% short, 62% adequate, and 16% surplus. Cotton condition was 2% very poor, 7% poor, 41% fair, 38% good, and 12% excellent. Rye was 93% planted, compared with 96% in 1995 and the 92% avg. Sorghum was 88% harvested for grain, compared with 98% in 1995 and the 97% avg. Soybeans were 1% very poor, 6% poor, 44% fair, 43% good, and 6% excellent. Wheat was 67% planted, compared with 75% in 1995 and the 61% avg.; 40% was emerged, compared with 48% in 1995 and the 41% avg. Other small grains were 87% planted, compared with 91% in 1995 and the 85% avg. Onions were 15% fair, 83% good, and 2% excellent; 57% were transplanted, compared with 55% in 1995 and the 53% avg. Pecans were 1% very poor, 7% poor, 38% fair, 45% good, and 9% excellent; 76% were harvested, compared with 77% in 1995 and the 74% avg. Pasture feed was 3% very poor, 14% poor, 42% fair, 40% good, and 1% excellent. Another week of

rainfall caused delays in fieldwork in many areas. Harvest and fall planting were able to progress in most areas outside the heavier rains. Activities: Picking cotton, harvesting soybeans, planting wheat, mowing cotton stalks, preparing tobacco beds, taking soil samples, spreading lime, and harvesting fall vegetables.

**HAWAII:** Partly to mostly sunny skies helped farmers recover from earlier rains. Farmwork concentrated on clean up and field preparation. Gusty winds during second half of week hampered agriculture. Banana production to decrease in some major areas. Papaya production to continue its seasonal decline. Head cabbage supplies were moderate to heavy and head size was variable. Tomato production is expected to increase in coming weeks. Ginger root harvesting was slowed by wet conditions; production is expected to increase sharply.

**IDAHO:** Days suitable for fieldwork 2.9. Most areas experienced temperatures a few degrees above normal. Heavy snow fell in the Panhandle. Topsoil condition was 11% short, 88% adequate, and 1% surplus. Winter wheat emerged ws 96%, compared with 96% in 1995 and the 96% avg. Remaining winter wheat was slow to emerge due to cool weather. Corn harvested for grain was 93%. Hay and roughage supply ws 2% short, 93% adequate, and 5% surplus. Activities: Repairing equipment and caring for livestock.

**ILLINOIS:** Topsoil was 32% surplus, 52% adequate, 15% short, and 1% very short. Harvest was virtually complete throughout the State, with only isolated fields remaining to be harvested in the northern districts. Fall tillage was placed on hold, with the recent snow and rain. Other activities included caring for livestock, winterizing equipment, applying fertilizer and anhydrous. Sorghum was 96% harvested, compared with 100% in 1995 and the 98% avg.

**INDIANA:** Days suitable for fieldwork 2.2. Topsoil condition was 44% adequate, and 56% surplus. Subsoil was 5% short, 64% adequate, and 31% surplus. Rain and cold, cloudy weather continues. Corn harvest is slow in many fields because of wet soil conditions and lodged stocks. Dry-down of corn has been slow because of cool, wet weather and lack of sunshine during November. Moisture content of harvested corn was 23%. A few scattered fields of soybeans remained to be harvested. Livestock to be in mostly good condition. Roughage supplies are becoming short in some areas. Activities: Chopping stalks, spreading fertilizer and lime, fall tillage, hauling grain, tilling, winterizing equipment, and caring for livestock.

**IOWA:** Another cold week across the State along with the Thanksgiving holiday greatly reduced work completed on farms. Livestock farms were busy with the usual chores. Operations with fieldwork were slowly finishing harvest operations and other preparations for winter. Most operations are starting end-of-the-year bookkeeping duties.

**KANSAS:** Days suitable for fieldwork 2.6. Topsoil was 5% short, 65% adequate, and 30% surplus. Subsoil was 5% short, 80% adequate, and 15% surplus. Many areas received substantial rain late in the week. Wet weather and muddy fields have limited progress of wheat seeding and slowed fall crop harvest. Corn and sorghum harvest are about on par with the average, harvest of soybeans is somewhat behind average progress. Pastures are in good condition for this time of year, supplemental feeding is necessary as weather became colder and forage diminishes. Stockmen continue to move cattle to crop stubble and wheat pasture. Activities: Weaning calves and fall harvest.

**KENTUCKY:** Temperatures were normal. Rain general through the week. Topsoil and subsoil moisture was adequate to surplus. Relative humidities favorable for tobacco stripping. Stripping and transporting to markets was active. Wet fields were delaying final corn and soybean harvests. Winter wheat and pasture conditions were good to fair going into winter. Cattle conditions were mostly good. Feed supplies were adequate in most areas.

**LOUISIANA:** Days suitable for fieldwork 3.4. Soil moisture 3% short, 58% adequate, 39% surplus. Pecans 73% harvested, 78% 1995, 76% avg. Pecan harvest made little progress, with many producers reporting

poor quality. Sugarcane 61% harvested, 66% 1995, 71% avg. Cooler weather raised the sucrose content in sugarcane. Sweetpotatoes 99% harvested, 96% 1995, 97% avg. Sweetpotato harvest made little progress, with fields still muddy from the previous week's rains. Wheat 88% planted, 90% 1995, 87% avg.; 71% emerged, 81% 1995, 80% avg. Planting of winter wheat was delayed by wet conditions. Livestock 1% very poor, 6% poor, 34% fair, 56% good, 3% excellent. Livestock producers began supplemental feeding. Crawfish producers continued to set out a few test traps. Vegetables 9% poor, 39% fair, 50% good, 2% excellent. Strawberry growers sprayed to control disease. Pasture feed 1% very poor, 11% poor, 36% fair, 49% good, 3% excellent. Winter pastures were fertilized between rains.

**MARYLAND:** Soybeans 91% harvested, 87% 1995, 89% avg. Winter wheat 4% poor, 25% fair, 66% good, 5% excellent. Range, pasture feed 3% poor, 27% fair, 65% good, 5% excellent. Activities: Harvesting soybeans; preparation for winter.

**MICHIGAN:** Snow, rain hindered much fieldwork again this week. Farmers were worried about their winter wheat, alfalfa freezing after the rains. Topsoil 4% short, 80% adequate, 16% surplus. Subsoil 1% very short, 13% short, 75% adequate, 11% surplus.

**MINNESOTA:** Corn 98% harvested, 99% 1995, 96% avg. Soybeans 99% harvested, 99% 1995, 99% avg.

**MISSISSIPPI:** Days suitable for fieldwork 3.2. Soil moisture 10% short, 57% adequate, 34% surplus. Soybeans 99% harvested, 100% 1995, 96% avg.; wheat 99% planted, 99% 1995, 94% avg.; 98% emerged, 92% 1995, 87% avg.; 1% poor, 32% fair, 63% good, 4% excellent. Pecans 73% harvested, 81% 1995, 71% avg.; 3% very poor, 14% poor, 39% fair, 37% good, 7% excellent. Main farming activity: Harvesting soybeans. Rain in the latter part delayed most farming activities. Livestock producers are feeding hay, preparing herds for the winter months. Soil moisture 10% short, 57% adequate, 34% surplus.

**MISSOURI:** Topsoil moisture supply, 1% short, 42% adequate, 57% surplus. Cold weather mixed with wintry precipitation continued to limit row-crop harvesting progress during the past week. As weather and field conditions permitted, particular effort was made harvesting cotton, soybeans in the Bootheel, which has been delayed considerably due to wet conditions during the past month. Corn harvest progress ranges from 89% northwest, to complete in southern districts. Soybean harvest ranges from 86% southeast, compared with 97% in the northeast and west-central. Sorghum harvested 95%, 100% 1995, 96% avg. Sorghum harvest varies from 84% central to virtual completion southern third of State. Supply of hay and other roughage, 4% very short, 13% short, 76% adequate, 7% surplus. Stock water supplies, 1% short, 85% adequate, 14% surplus. General condition of livestock, 1% poor, 12% fair, 78% good, 9% excellent.

**MONTANA:** Days suitable for fieldwork 0.0. Topsoil 7% very short, 27% short, 56% adequate, 10% surplus. Subsoil 19% very short, 39% short, 39% adequate, 3% surplus. Temperatures continued to be below normal. A few areas receiving more snow fall. Protectiveness of snow cover on winter wheat 0% poor, 49% fair, 41% good, 10% excellent. Wind damage to date on winter wheat 73% none, 24% light, 3% moderate. Cattle, calves moved from summer ranges, 99%. Sheep, lambs moved from summer ranges, 99%. Cattle, calves receiving supplemental feed, 75%. Sheep, lambs receiving supplemental feed, 77%. Grazing 10% open, 50% difficult, 40% closed.

**NEBRASKA:** Fall harvest, tillage operations continued to be slowed last week due wet field conditions. As a result, many producers with crops still out will need soil to freeze before harvest can be completed. Corn 97% harvested, 100% 1995, 95% avg. Wheat 2% poor, 27% fair, 64% good, 7% excellent. Activities: Fencing stalks, delivering grain, working cattle.

**NEVADA:** Growth of fall seeded grain crops was halted by the colder weather. Winter wheat and barley remain in fair to good condition; no major losses to freeze reported. Winter feed, forage supplies adequate statewide. Dismal cattle prices resulting in deferred marketing of some

calves. Main farm, ranch activities: Working livestock, equipment maintenance, attending association meetings.

**NEW ENGLAND:** Major farm activities: Tending livestock. Farmers cleaning up after first big snow, ice storm of the season. Christmas tree growers selling trees, wreaths at both retail stands, wholesale outlets.

**NEW JERSEY:** Days suitable for fieldwork 5. Limited harvesting of some fall vegetables continues. Pastures remain in good condition.

**NEW MEXICO:** Days suitable for fieldwork 5.3. Soil 9% very short, 26% short, 64% adequate, 1% surplus. Winter wheat 1% very poor, 42% fair, 53% good, 4% excellent; 65% of the crop being grazed. Corn 11% fair, 65% good, 24% excellent; harvest completion for grain is 96%, 98% 1995. Cotton 2% poor, 25% fair, 52% good, 21% excellent; cotton harvested 90%, 82% 1995, 78% avg. Sorghum 36% poor, 46% fair, 18% good; harvested 99%, 92% 1995, 85% avg. Chile 1% very poor, 8% poor, 14% fair, 53% good, 24% excellent; red chile harvest is 80% complete. Onion 2% fair, 41% good, 57% excellent. Planting 100% complete. Pecan 1% poor, 48% fair, 35% good, 16% excellent; harvest 40% complete. Cattle 1% very poor, 4% poor, 27% fair, 66% good, 2% excellent; sheep 6% very poor, 9% poor, 27% fair, 55% good, 3% excellent. Range, pasture feed 4% very poor, 12% poor, 41% fair, 40% good, 3% excellent.

**NEW YORK:** Potato, apple, onion growers grading, packing products. Outside activities limited due to snow, cold weather. Machinery, equipment being readied for winter storage. Producers attending meetings and trade shows.

**NORTH CAROLINA:** Days suitable for fieldwork 4.1. Soil moisture 51% adequate, 49% surplus. Continuing rain, cold weather kept farmers out of the fields for almost 3 days this week. Despite the bad weather, small-grain seedings remain ahead of average, almost completely seeded. Oats planted 97%, 84% 1995, 91% avg.; barley planted 98%, 93% 1995, 95% avg.; rye planted 95%, 95% 1995, 93% avg. Crop conditions: Oats 1% poor, 22% fair, 76% good, 1% excellent; barley 17% fair, 78% good, 5% excellent; rye 1% poor, 16% fair, 76% good, 7% excellent; pasture 16% poor, 46% fair, 37% good, 1% excellent; soybeans 1% very poor, 9% poor, 29% fair, 56% good, 5% excellent. Activities for the week included: Harvesting Christmas trees; seeding small grains; defoliating, harvesting cotton; harvesting soybeans; maintaining pastures; tending livestock; repairing equipment; general farm maintenance.

**NORTH DAKOTA:** Early arrival of cold weather, heavy snow accumulation have raised concerns of possible feed shortages later this winter. They have also hampered the accessibility of hay still in the fields, have forced ranchers to use feed supplies earlier than normal. State average snow depth was 14.1 in., up from 2.5 in. 1995. Snow cover sufficient to protect 98% of alfalfa. Corn, sunflower harvests were both 98% complete when snow ended fieldwork. Livestock mostly good condition. Cattle 2% poor, 16% fair, 76% good, 6% excellent. Sheep 1% poor, 12% fair, 81% good, 6% excellent. Hay, forage supplies were none very short, 8% short, 87% adequate, 5% surplus. Almost all livestock receiving supplemental feed: 97% of cattle, 98% of sheep. Cattle sales: 13% below normal, 83% normal, 4% above normal.

**OHIO:** Days suitable for fieldwork 5.0. Topsoil mostly surplus; some adequate. Field activities continued at moderate pace. Corn harvest 85% complete; 92% normal. Soybean harvest is 99% complete; 100% normal. Winter wheat crop enters winter in mostly good condition but a substantial percentage will be susceptible to extended periods of extremely cold weather, especially if the snow cover is below normal. Also, several cycles of freezing, thawing would easily heave small plants out of the ground.

**OKLAHOMA:** Days suitable for fieldwork 2.2. Topsoil 76% adequate, 24% surplus. Subsoil 90% adequate, 10% surplus. Wet field conditions continue to slow the harvesting of row crops, small-grains planting. Wheat 29% grazed, 8% 1995, 21% avg.; Oats 80% up-to-stand, 67% 1995, 73% avg.; Soybeans 91% harvested, 94% 1995, 89% avg.; Peanuts 95% combined, 95% 1995, NA avg.; Livestock 1% poor, 16%

fair, 77% good, 6% excellent. Feeder steers, heifers were steady to \$1/cwt higher.

**OREGON:** Activities: Fall nursery digging, container movement continued. Domestic Christmas tree sales full swing. Winter orchard pruning underway statewide. Cattle, sheep continued good/excellent. Eastern cattle mostly in winter quarters, supplemental feed. Western pastures very wet conditions, supplemental feed.

**PENNSYLVANIA:** Days suitable for fieldwork 4.0. Soil moisture 72% adequate, 28% surplus. Fair week for fieldwork. Snow, rain over much of the State. In many areas the fields were covered with snow. If ground was frozen, corn harvest continued, some areas temperatures were too high to freeze ground. Soybeans harvested 93% complete, 89% 1995, 90% avg. Activities: Harvesting corn and soybeans; fixing fences; hauling manure; caring for livestock; cleaning and storing equipment.

**SOUTH CAROLINA:** Days suitable for fieldwork 4.9. Soil moisture 1% very short, 8% short, 80% adequate, 11% surplus. Soybeans 100% mature, 98% 1995, 99% avg.; 71% harvested, 54% 1995, 62% avg.; 4% very poor, 3% poor, 30% fair, 56% good, 7% excellent. Sweetpotatoes 99% harvested, 72% 1995, 85% avg.; 6% poor, 68% fair, 26% good. Small grains, winter grazing planting ahead of normal; fair to good condition. Pastures and livestock fair to mostly good condition.

**SOUTH DAKOTA:** Days suitable for fieldwork 0.5. Topsoil 69% adequate, 31% surplus. Subsoil 79% adequate, 21% surplus. Freezing rain, snow were received again this week in eastern areas. Warmer weather are needed, to melt the ice, snow, before remaining row crops can be harvested. Deep snow in some areas will undoubtedly leave a small percentage of acres unharvested until Spring. There's good snowcover for the winter wheat. Livestock 1% poor, 14% fair, 72% good, 13% excellent. More producers are beginning to feed their cattle hay, silage, as field forage is depleting, pastures are getting covered with snow. Stock water supplies 3% short, 85% adequate, 11% surplus.

**TENNESSEE:** Rains have not let up, and kept farmers from fieldwork. When the rains temporarily stopped, the grounds were still too wet for farmers to get into fields, thus limiting activities to only 1 day. This has placed soybean harvest far behind schedule, by more than 2 weeks. An additional 9 percent of the soybean acreage was brought in; however, some farmers are rutting up beds in attempts to get harvest done. Cotton harvest is wrapping up, but some major areas along river beds and creek bottoms are too wet to work from temporary flooding. Wheat intentions are not going to be met, due to continuous rainfall. Eighty-eight percent of that which will be planted has been seeded, about a week behind the five-year average.

**TEXAS:** Fieldwork in many areas was slow for most of the week. A combination of the Thanksgiving holiday, reinforcement of cold, and wet conditions brought about by another cold front kept producers idle. South Texas and Rio Grande Valley were drier areas where some fieldwork occurred. Supplemental feeding activity increased rapidly, with cold, wet conditions. Livestock conditions remained good across State.

**Crops:** Small grain received moisture in the High Plains with two recent beneficial fronts; however, more moisture is needed. Across the central portions of the State, fields look good, with favorable moisture conditions. Insect problems have subsided with colder weather. Grain sorghum harvest operations were slowed by cold, wet conditions in the plains and north-central areas. Thanksgiving cold front brought more delays to later maturing fields in these areas. Cotton: Harvest slowed in the plains by damp mornings and cold, wet conditions at mid-week. The recent freezing temperatures should help producers in the north-central areas with their harvest. Statewide, 72% normal, compared with 57% in 1995. Peanut harvest moved ahead as weather permitted in the southern areas. Yields have improved in some areas. Sugar beet harvest progress in the plains slow for most of the week. Sugarcane harvest made good progress under mostly dry conditions in the Rio Grande Valley.

**Commercial Vegetables:** In the Rio Grande Valley, harvest operations moved ahead without much delay. Onions continued looking good. The San Antonio-Winter Garden harvested bell peppers, spinach, and cabbage, moving ahead as weather permitted. Late-week cooler weather slowed progress. In the east, cooler, wet conditions slowed

harvest of most winter vegetables. In the High Plains, cabbage harvest was slowed by wet conditions most of the week. In Trans-Pecos, chili pepper harvest continued. Pecan harvest in many areas was slowed by cold, wet conditions. Prices remained low. Peaches pruning, fall spraying activities continued some areas as weather permitted.

**Range and Livestock:** A big increase of supplemental feeding occurred in many areas as colder weather arrived and lingered. Growth of small-grain pastures has been good; however, many fields in High Plains could use additional moisture. Growth of cool-season grasses continued to improve. Livestock conditions continued to be good across the State.

**UTAH:** Major farm, ranch activities: fall tillage, cleaning corrals, general farm maintenance, shipping onions, feeding and moving livestock.

**VIRGINIA:** Days suitable for fieldwork 3.1. Topsoil 3% short, 40% adequate, 57% surplus. Subsoil 6% short, 40% adequate, 54% surplus. Corn 98% for grain harvested, 1995 98%, 99% avg. Cotton 78% harvested, 1995 96%, 90% avg. Soybeans 70% harvested, 1995 80%, 82% avg. Livestock 9% fair, 77% good, 14% excellent. Pasture feed 1% poor, 35% fair, 54% good, 10% excellent. Forage from pasture, winter grazing crops for beef cattle, 65%; dairy cattle, 12%; sheep, 75%. Barley 100% seeded, 99% 1995, 100% avg. Winter wheat 90% seeded, 1995 90%, 92% avg. Small-grain, winter grazing crops 2% poor, 19% fair, 61% good, 18% excellent. Activities: Wet conditions delayed field activity. Soybean, cotton harvests remain behind schedule. Corn for grain harvest finishing. Barley seeding complete, wheat nearing completion. Tobacco producers marketing crop.

**WASHINGTON:** Days suitable for fieldwork 1.0. Topsoil 75% adequate, 25% surplus; subsoil 5% short, 85% adequate, 10% surplus. Winter wheat, dryland 10% poor, 30% fair, 60% good; irrigated 100% good. Winter wheat mostly good considering late fall seedings, early winter conditions. Corn grain 70% harvested, 95% 1995, 94% avg. Hay, other roughage supplies, 20% short, 75% adequate, 5% surplus. Kittitas, Grant Counties reported widespread feeding of hay due to early, heavy snowfall which depleted hay stocks. Kittitas timothy hay producers also extremely concerned as early snow cover increased vole population. In western areas saturated pastures caused extremely muddy conditions for grazing. Heavy snow slowed fruit tree pruning in some areas.

**WEST VIRGINIA:** Days suitable for fieldwork 2.1. Topsoil 53% adequate, 47% surplus. Corn harvest winding down, wet field conditions, corn moisture hindered progress. Corn 76% harvested for grain, 98% 1995, 95% avg. Winter wheat 2% poor, 28% fair, 70% good; 98% planted, 99% 1995, 98% avg. Soybeans 71% harvested. Cattle 2% poor, 13% fair, 80% good, 5% excellent. Sheep 2% poor, 17% fair, 76% good, 5% excellent. Activities: Harvesting corn for grain, soybeans; seeding wheat; feeding livestock.

**WISCONSIN:** Farmers were harvesting corn rapidly during the beginning half of the week. Mid-week, misty rain, varied levels of snowfall slowed harvesting activities. Today there are still some corn fields yet to be harvested, statewide. Farmers were busy hauling manure as most dairy cattle are confined to the barns. Trucks in State were hauling Christmas trees to market.

**WYOMING:** Livestock producers were busy feeding along with other general duties. Farmers were maintaining machinery, working ground.

(Continued from page 6)

Soybeans Percent Harvested				
	Dec 1 1996	Prev Week	Prev Year	5-Yr Avg
AL	88	84	90	90
AR	75	75	100	98
GA	85	76	78	81
IL	100	99	100	100
IN	99	98	100	100
IA	100	100	100	100
KS	94	92	100	99
KY	95	92	99	99
LA	100	100	100	99
MI	99	98	100	97
MN	99	99	99	99
MS	99	97	100	96
MO	93	90	100	97
NE	100	100	100	100
NC	73	58	62	68
OH	99	93	100	100
SC	71	63	54	62
SD	100	100	100	100
TN	77	68	93	94
ALL	96	94	98	98

These 19 States produced 94% of the 1995 soybean crop.

Winter Wheat Crop Condition by Percent					
	VP	P	F	G	EX
AR	2	12	45	35	6
CA	0	0	30	60	10
CO	1	3	21	55	20
GA	0	1	15	80	4
ID	0	0	10	64	26
IL	0	3	19	63	15
IN	0	1	23	56	20
KS	0	1	9	73	17
MI	1	4	30	57	8
MO	0	3	36	53	8
MT	0	6	58	34	2
NE	0	2	27	64	7
NC	0	1	27	65	7
OH	1	4	26	54	15
OK	0	2	14	78	6
OR	0	0	43	50	7
SD	0	3	25	61	11
TX	3	9	26	52	10
WA	0	9	27	64	0
ALL	1	3	21	64	11
Prev Wk	0	3	24	62	11
Prev Yr	3	12	36	44	5

November 1996

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

International Weather and Crop Summary

November 24 - 30, 1996

HIGHLIGHTS

**FSU WESTERN:** Although the fourth consecutive week of unusually mild weather favored winter grains, most areas continued to lack a protective snow cover.

**EUROPE:** Cold, wet weather in northern and central Europe halted late-season harvesting and prevented further growth of winter grains.

**NORTHWESTERN AFRICA:** Dryness persisted in parts of Algeria and Tunisia, where topsoils remained too dry for winter grain planting.

**AUSTRALIA:** Dry weather benefited winter grain maturation and harvesting.

**SOUTH ASIA:** Seasonable dryness favored summer crop harvests and winter grain and oilseed plantings.

**SOUTH AFRICA:** Continuing rain improved early corn prospects.

**SOUTHEAST ASIA:** Drier weather eased excessive wetness across Thailand and most of Java, while an active northeast monsoon brought widespread showers to the northern Philippines and the rest of Indochina.

**EASTERN ASIA:** Light rain favored winter grains and oilseeds across the Yangtze Valley and most of the North China Plain.

**SOUTH AMERICA:** Rain benefited summer crops in Argentina, while drier weather eased wetness in southern Brazil.

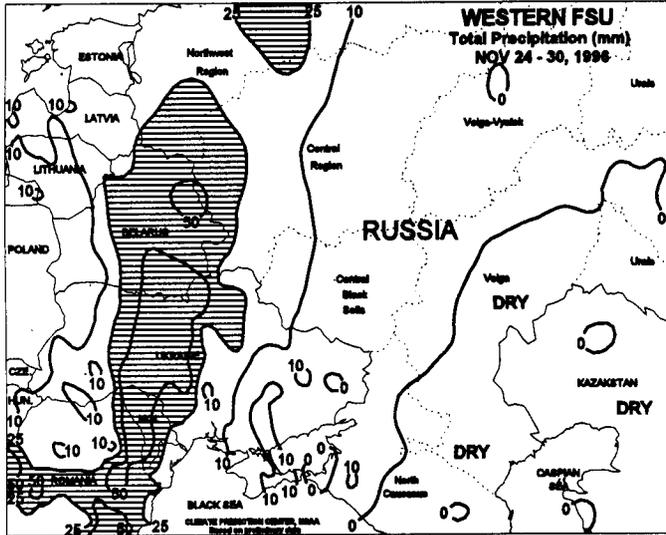
COUNTRY CITY	TEMPERATURE (C)				PRECIPITATION (MM)			
	AVG MAX	AVG MIN	HI MAX	LO MIN	AVG	DPART F/NRMM	TOTAL	DPART F/NRMM
NORWAY OSLO	0	-4	12	-14	-2	-0.8	111	21
SWEDEN STOCKHOLM	5	1	13	-8	3	0.5	82	29
FINLND HELSINKI	5	2	10	-5	3	3.1	215	144
U KING GLASGOW	8	2	14	-7	5	-1.8	132	18
EDINBURGH	8	2	18	-6	5	-0.8	98	33
BIRMINGHAM	8	3	17	-4	6	-0.5	88	11
LONDON	9	3	16	-8	6	-0.6	143	87
IRELND DUBLIN	9	4	16	-3	6	-1.1	98	34
ICELND REYKJAVIK	0	-4	8	-10	-2	-3.5	47	-26
DENMRK COPENHAGEN	7	3	15	-4	5	-0.3	53	5
LUXEMB LUXEMBOURG	6	3	13	-3	4	0.2	128	47
SWITZL ZURICH	8	3	20	-3	5	1.3	102	18
GENEVA	9	3	18	-3	6	1.1	163	71
FRANCE PARIS/ORLY	10	5	15	-1	7	***	86	**
STRASBOURG	9	4	18	-3	6	1.3	103	57
BOURGES	9	4	15	-3	7	0.3	148	90
BORDEAUX	13	8	19	-2	10	1.0	210	118
TOULOUSE	12	8	21	-4	9	0.1	133	85
MARSEILLE	14	8	20	1	11	0.6	104	48
SPAIN VALLADOLID	13	4	22	-1	9	1.1	36	-16
MADRID	15	5	24	-2	10	0.9	77	11
SEVILLE	20	11	27	5	18	0.5	52	-19
PORTUG LISBON	18	11	24	7	15	0.5	51	-48
GERMNY HAMBURG	7	3	15	-4	5	0.0	77	5
BERLIN	8	4	18	-3	6	0.6	34	-15
DUSSELDORF	8	4	15	-3	6	-0.4	79	16
LEIPZIG	7	4	15	-2	5	0.9	60	23
DRESDEN	7	4	18	-4	6	1.2	25	-17
STUTTART	8	3	19	-5	5	1.1	68	20
NURNBERG	7	3	16	-5	5	1.0	48	2
AUSTRI VIENNA	10	4	19	-5	7	2.8	17	-25
INNSBRUCK	9	2	19	-6	5	2.0	113	54
CZECH PRAGUE	7	2	16	-8	4	1.4	24	-7
POLAND WARSAW	8	4	18	-4	6	2.8	24	-17
LODZ	8	4	17	-3	6	3.5	24	-15
KATOWICE	9	3	18	-6	6	3.7	74	33
PRZEMYSL	10	5	20	-3	7	3.7	28	-15
HUNGAR BUDAPEST	11	5	19	-4	8	3.1	32	-20
F YUGO BELGRADE	15	7	26	0	11	3.7	63	8
ROMANI BUCHAREST	13	2	22	-2	7	1.5	67	19
BULGAR SOFIA	13	3	21	-5	8	3.0	34	-16
ITALY MILAN	13	7	18	-2	10	3.3	119	24
VERONA	12	6	22	-3	9	2.5	118	45
VENICE	13	7	20	-1	10	2.5	82	-3
GENOA	16	12	21	3	14	1.0	65	-94
ROME	18	8	23	-1	13	0.6	134	27
NAPLES	19	11	24	3	15	3.0	148	-6
GREECE THESSALONIKA	18	7	20	1	12	0.6	30	-28
LARISSA	17	5	21	0	11	0.2	30	-31
ATHENS	20	12	22	8	16	0.5	20	-38
TURKEY ISTANBUL	18	10	20	4	13	1.5	33	-55
ANKARA	14	-3	18	-8	6	0.0	8	-17
CYPRUS LARNACA	24	14	28	11	19	1.1	5	-33
ESTONI TALLINN	6	2	11	-2	4	2.9	114	50
FSU ST.PETERSBRG	5	2	11	-10	4	3.8	63	11
LITHUA KAUNAS	7	3	13	-3	5	2.6	44	-8
FSU MINSK	6	3	14	-2	5	3.9	61	10
KAZAN	2	-1	7	-5	1	3.8	61	17
MOSCOW	5	3	10	-2	4	5.1	53	-3
YEKATERINBURG	0	-4	10	-17	-2	3.4	8	-20
OMSK	-4	-9	2	-23	-8	0.9	11	-16
KUSTANAY	-3	-10	4	-21	-8	-1.0	14	-10
NOVOSTBIRSK	-8	-10	1	-21	-8	1.8	28	-2
BARNAUL	-8	-10	3	-28	-8	-1.4	44	9
KHABAROVSK	-5	-13	6	-23	-9	-1.2	77	56
VLADIVOSTOK	2	-3	14	-15	-1	0.4	12	-19
KIEV	9	5	17	-1	7	4.8	84	36
LVOV	9	3	19	-7	6	3.6	38	-8
KIROVOGRAD	9	4	17	-2	7	4.7	50	15
ODESSA	13	8	18	1	11	4.7	34	-5

Based on Preliminary Reports

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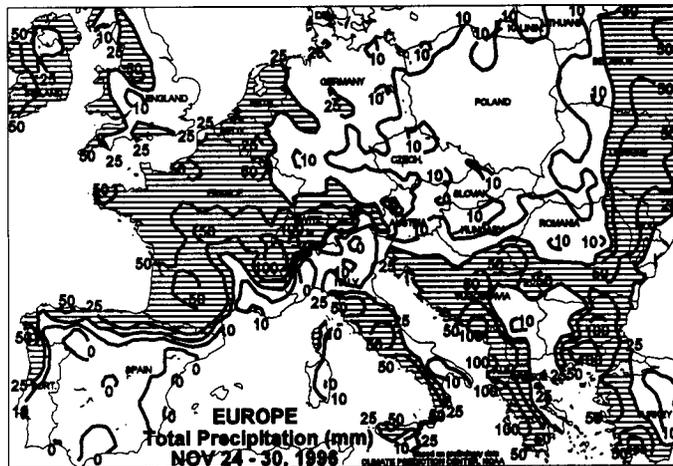
COUNTRY	CITY	TEMPERATURE (C)					PRECIPITATION (MM)		COUNTRY	CITY	TEMPERATURE (C)					PRECIPITATION (MM)			
		AVG MAX	AVG MIN	HI MAX	LO MIN	AVG DPART F/NRMM	TOTAL	DPART F/NRMM			AVG MAX	AVG MIN	HI MAX	LO MIN	AVG DPART F/NRMM	TOTAL	DPART F/NRMM		
FSU	YALTA	18	10	19	8	13	3.3	8	-53	KENYA	NAIROBI	24	14	30	9	19	-0.1	120	-1
	SARATOV	4	0	10	-8	2	3.6	55	15	TANZAN	DAR ES SALAAM	31	21	33	19	28	-0.5	81	-35
	KHARKOV	7	3	14	-4	5	3.5	28	-15	GABON	LIBREVILLE	**	**	30	20	**	**	314	-208
	VOLGOGRAD	7	1	13	-5	4	4.0	18	-18	TOGO	LOME	32	**	34	24	**	**	9	-13
	ROSTOV	9	4	15	-3	6	2.7	13	-35	B FASO	OUAGADOUGOU	35	19	38	18	27	-0.9	0	-2
	ASTRAKHAN	10	2	17	-3	6	2.7	22	5	IVRY C	ABIDJAN	31	25	33	23	28	1.0	227	85
	KRASNODAR	14	3	20	-4	8	1.9	35	-25	MOZAMB	MAPUTO	30	21	37	18	28	2.0	32	-40
	ORENBURG	2	-5	8	-14	-1	1.8	11	-27	ZAMBIA	LUSAKA	**	**	35	15	**	**	**	**
	TSELINOGRAD	-2	-8	8	-19	-5	3.3	31	19	ZIMBAB	HARARE	29	17	32	15	23	2.1	78	-23
	KARAGANDA	-2	-10	5	-19	-8	-0.8	9	-18	S AFRI	PRETORIA	27	18	33	9	21	0.3	68	-33
SYRIA	TBILISI	14	4	18	-3	9	0.5	1	-31	JOHANNESBURG	24	13	31	5	18	0.5	83	-34	
	TASHKENT	13	2	18	-2	7	-0.8	5	-38	BETHAL	24	12	31	4	18	0.0	89	-58	
	ASHKHABAD	16	3	23	-3	9	-0.5	10	-11	DURBAN	28	19	32	15	22	0.7	73	-35	
	DAMASCUS	20	5	25	-4	13	0.3	25	0	CAPE TOWN	21	12	30	7	16	-1.6	34	18	
	JERUSALEM	20	11	25	8	16	0.7	5	-58	CANADA	TORONTO	4	-2	19	-9	1	-2.3	30	-40
	KARACHI	31	17	35	11	**	**	0	-2	MONTREAL	3	-4	20	-14	0	-2.0	181	87	
	AMRITSAR	27	7	32	2	17	-0.6	0	-7	WINNIPEG	-7	-17	11	-29	0	-7.2	25	4	
	NEW DELHI	28	11	33	6	20	-0.9	0	-8	REGINA	-8	-17	13	-35	-12	-6.8	**	**	
	AHMEDABAD	32	18	34	10	24	-0.9	0	-11	SASKATOON	-8	-18	9	-34	-13	-6.7	18	4	
	INDORE	31	14	33	10	22	0.4	1	-20	LETHBRIDGE	-3	-13	14	-34	-8	-7.0	17	0	
ISRAEL	CALCUTTA	31	18	34	14	24	0.7	0	-18	CALGARY	-5	-14	17	-31	-10	-6.6	31	19	
	VERAVAL	32	19	36	14	28	-0.7	0	-26	EDMONTON	-7	-14	10	-31	-11	-6.4	25	9	
	BOMBAY	33	20	35	18	27	0.0	0	-7	VANCOUVER	8	3	18	-7	5	-1.0	225	55	
	POONA	30	13	32	10	21	-1.0	4	-19	MEXICO	GUADALAJARA	24	9	30	4	17	-0.8	17	3
	BEGAMPET	30	17	33	13	23	0.4	58	35	MEXICO CITY	22	9	27	3	18	1.8	0	-14	
	VISHAKHAPATNAM	30	23	33	19	27	**	48	**	ACAPULCO	33	23	35	21	28	0.7	3	-41	
	MADRAS	31	23	34	20	27	0.8	357	17	BERMUD	ST. GEORGES	22	19	25	12	20	-1.4	190	71
	MANGALORE	33	23	36	20	28	1.0	1	-70	BAHAMA	NASSAU	27	21	31	16	24	0.1	21	-34
	KINGS PEAK	26	20	31	15	23	**	3	**	JAMAIC	KINGSTON	31	24	35	23	28	0.6	84	3
	PYONGYANG	8	-2	18	-11	3	-1.0	16	-33	P RICO	SAN JUAN	**	**	**	**	**	**	**	**
S KREA	SEOUL	10	3	19	-6	7	0.3	77	40	GUADEL	RAIZET	31	23	31	20	27	0.9	72	-70
	SAPPORO	7	2	15	-5	4	0.0	89	-29	MARTINQ	LAMENTIN	30	24	32	22	27	1.3	133	-57
	NAGOYA	18	9	23	2	13	1.1	89	19	BARBAD	BRIDGETOWN	30	25	30	23	27	0.3	48	-86
	TOKYO	17	11	24	8	14	1.0	87	-3	TRINID	PORT OF SPAIN	31	23	32	22	27	1.0	81	-117
	YOKOHAMA	18	11	23	7	13	1.2	102	-2	COLOMB	BOGOTA	20	7	23	2	14	0.3	28	-82
	KYOTO	17	9	23	3	13	1.7	78	2	VENEZU	CARACAS	31	24	32	23	28	0.8	85	13
	OSAKA	17	11	24	5	14	1.2	75	10	F GUIA	CAYENNE	31	23	33	21	27	0.8	318	181
	PHETCHABUN	31	22	34	19	26	1.3	58	36	BRAZIL	FORTALEZA	30	25	31	23	27	-0.2	14	2
	BANGKOK	32	25	34	22	29	1.3	112	59	RECIFE	BELO HORIZONTE	29	24	30	20	26	0.0	57	12
	KUALA LUMPUR	32	24	34	22	28	1.7	168	-111	BELO HORIZONTE	25	18	30	16	22	-1.0	379	136	
MALAYS	HANOI	28	21	31	17	24	1.8	301	258	CAMPO GRANDE	31	21	33	17	26	0.9	85	-119	
	HARBIN	-2	-10	7	-28	-6	0.8	48	40	FRANCA	28	18	30	16	22	3.2	235	34	
	HAMI	7	-5	14	-11	1	0.9	2	1	RIO DE JANEIRO	**	**	30	19	**	**	**	91	-7
	LANCHOW	8	-1	15	-8	3	1.4	1	-4	LONDRINA	29	19	33	15	24	1.1	223	72	
	BEIJING	9	0	18	-7	4	0.1	3	-4	SANTA MARIA	28	18	36	11	23	1.9	87	-85	
	TIENTSIN	9	0	17	-8	5	-0.9	3	-7	PORTO ALEGRE	27	17	34	11	22	1.0	88	13	
	LHASA	15	-3	21	-9	6	2.8	0	-2	PERU	LIMA	21	16	24	18	19	-0.4	0	0
	KUNMING	18	10	24	4	14	2.5	88	48	BOLIVI	LA PAZ	14	3	17	1	9	-1.7	83	13
	CHENGCHOW	12	3	20	-3	8	-0.3	20	-5	CHILE	SANTIAGO	28	10	34	4	19	1.6	0	-8
	YEHCHANG	14	8	23	4	11	-1.4	127	80	ARGENT	IGUAZU	30	19	34	13	24	**	107	**
VIETNM	HANKOW	14	8	19	3	11	-0.1	75	20	FORMOSA	30	20	36	13	25	0.7	100	-83	
	CHUNGKING	15	12	22	7	14	**	94	**	CERES	29	15	37	10	22	-0.3	57	-42	
	CHIHKIANG	15	10	20	1	12	-0.4	18	-50	CORDOBA	28	15	38	8	22	0.9	70	-30	
	WU HU	15	8	22	2	12	**	58	**	RIO CUARTO	28	15	37	9	22	2.1	228	107	
	SHANGHAI	17	11	25	3	14	**	48	**	ROSARIO	28	18	36	9	22	1.9	141	43	
	NANCHANG	17	11	28	3	14	0.5	27	-27	BUENOS AIRES	28	15	35	7	21	1.6	74	-24	
	TAIPEI	24	21	29	16	22	2.1	82	-2	SANTO ROSA	29	14	35	7	21	1.7	112	12	
	CANTON	26	18	33	13	22	2.7	0	-41	TRES ARROYOS	25	12	33	3	18	2.0	241	186	
	NANNING	28	18	31	11	22	3.3	2	-43	N CALD	NOUMEA	27	21	33	17	24	0.5	99	25
	LAS PALMAS	25	19	29	15	22	1.8	3	-18	FJI	NAUSORI	28	22	32	19	25	0.5	228	-30
MOROCC	CASABLANCA	21	13	31	9	17	1.1	55	-17	SAMOA	PAGO PAGO	31	26	32	22	29	1.8	157	-119
	MARRAKECH	23	11	32	7	17	1.3	48	9	TAHITI	PAPEETE	31	24	33	24	27	1.4	84	-77
	ALGER	21	10	30	5	15	0.5	24	-81	PA N G	PORT MORESBY	31	24	33	21	27	-0.2	46	-8
	BATNA	18	5	28	-3	12	2.1	2	-34	AUSTRAL	DARWIN	33	28	35	21	29	-0.2	107	-24
	TUNIS	22	13	30	8	18	1.7	10	-46	BRISBANE	27	17	33	13	22	-0.8	119	9	
	NIAMEY	35	19	37	16	27	-1.1	0	0	PERTH	25	14	36	10	19	0.2	50	28	
	TIMBUKTU	34	20	38	11	27	1.0	0	0	CEDUNA	24	11	34	8	17	-2.2	8	-13	
	BAMAOKO	35	20	37	13	28	0.9	0	-3	ADELAIDE	21	13	29	8	17	-1.8	0	-22	
	DAKAR	31	23	38	18	27	1.5	0	0	MELBOURNE	19	9	30	5	14	-1.7	26	-23	
	DIEGO GARCIA	**	**	31	28	**	**	**	**	WAGGA	22	9	32	4	16	-2.7	59	18	
LIBYA	TRIPOLI	23	13	32	7	18	0.5	34	-12	CANBERRA	20	7	28	0	13	-2.5	79	13	
	BENHAZI	22	13	28	11	18	-0.3	22	-13	INDONE	DJAKARTA	31	24	33	22	28	0.4	169	**
	CAIRO	25	15	30	11	20	1.1	0	-4	PHILIP	MANILA	30	25	33	23	28	0.7	216	88
	ASWAN	29	17	36	14	23	1.4	0	0										
	ADDIS ABABA	23	8	30	3	15	-0.8	4	-4										

Based on Preliminary Reports



**FSU-WESTERN**

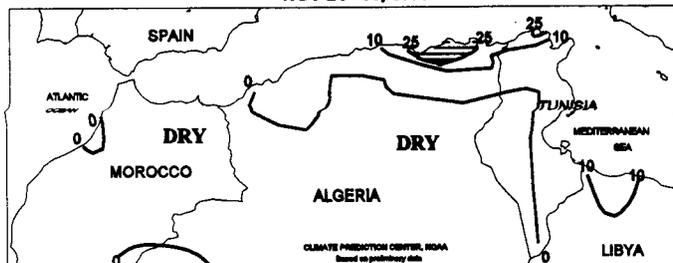
The fourth consecutive week of unseasonably warm weather continued to favor winter grains over most of the region. However, most areas continued to lack a protective snow cover, leaving crops vulnerable to potential extreme cold. Winter grains were in or entering dormancy in the Baltics, Belarus, western Ukraine, and northern and central Russia. In central and southern Ukraine and the western portion of the North Caucasus region in Russia, winter grains continued vegetative growth later than usual. Significant precipitation (25-50 mm) fell in a narrow band that stretched northward from Moldova, through central Ukraine, into Belarus and adjacent areas in Russia. Elsewhere in Ukraine and Russia, precipitation was light and scattered (mostly below 10 mm). Weekly temperatures averaged 3 to 8 degrees C above normal over most of Russia and Ukraine and 1 to 4 degrees C above normal over Belarus and the Baltics.



**EUROPE**

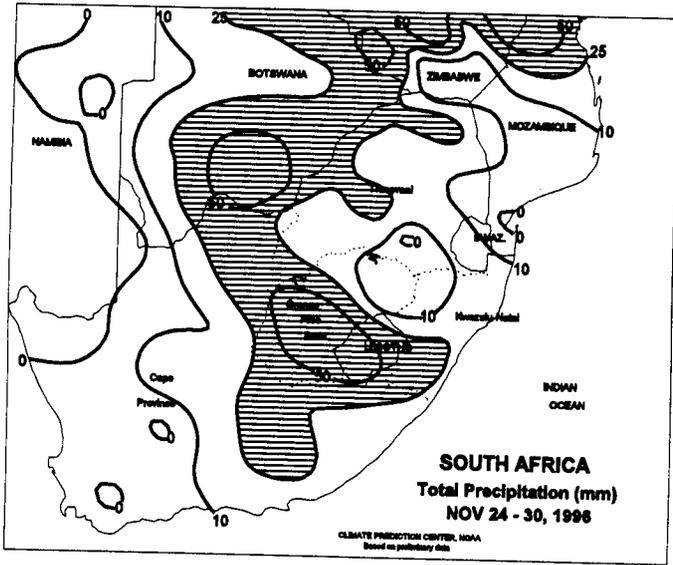
Cold, wet weather persisted over most of northern and central Europe, halting late-season harvest activities. Precipitation amounts ranged from 10 to 25 mm in England and Germany (mostly snow), and 25 to 80 mm in France. Lesser amounts of moisture (2-10 mm) fell as snow over Poland and the Czech Republic and Slovakia. Temperatures in northern and central Europe averaged 2 to 4 degrees C below normal, halting further vegetative growth of winter grains. In southeastern Europe, widespread rain (12-50 mm, with locally heavier amounts) and mild weather benefited winter wheat establishment in Romania, Bulgaria, and eastern former Yugoslavia. Elsewhere, dry weather helped winter wheat harvesting in southern Spain, while farther east, persistent rains in Italy kept soils waterlogged, causing further planting delays.

**NORTHWESTERN AFRICA Total Precipitation (mm) NOV 24 - 30, 1996**



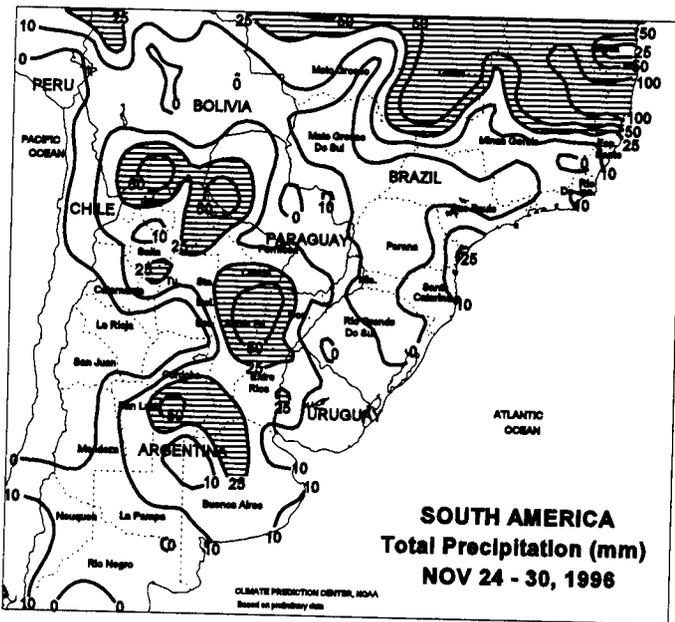
**NORTHWESTERN AFRICA**

Mostly dry weather prevailed over Morocco, helping winter grain planting. Farther east, light showers in northeastern Algeria and northern Tunisia followed persistent dryness, helping to condition topsoils for fieldwork. However, dryness persisted in western and central Algeria and southern Tunisia, where topsoil moisture remained insufficient for planting.



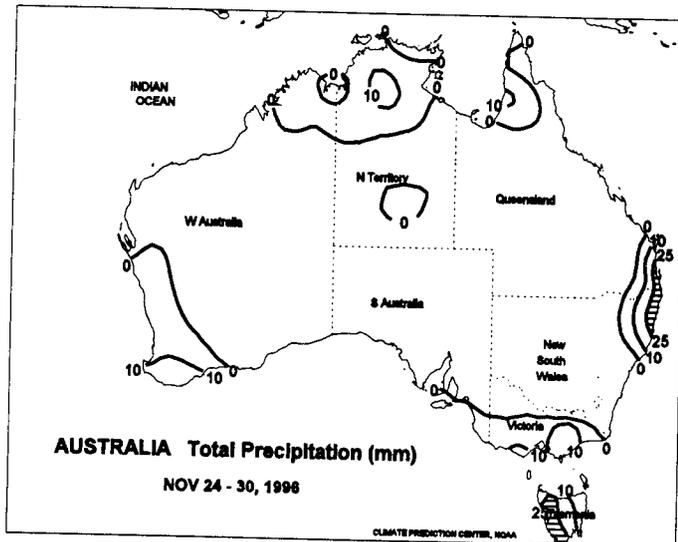
**SOUTH AFRICA**

Continuing moderate to heavy showers (25-65 mm) in western and southern sections of the corn belt improved prospects for early corn development. Rainfall totaled 15 mm or less elsewhere in the corn belt (central and eastern areas), favoring a resumption of fieldwork. Light rain (10-25 mm) also covered coastal crop areas of Eastern Cape and Kwazulu-Natal, including the primary sugarcane areas. Seasonably drier weather returned to Western Cape, bringing some relief to mature winter wheat following last week's heavy rain.



**SOUTH AMERICA**

In central Argentina, late-week rain (20-40 mm) reversed a drying trend across southern Santa Fe and northern Buenos Aires. The moisture benefited germinating to vegetative summer crops. Warm, dry weather (maximum temperatures 33-36 degrees C; 1-2 degrees C above normal) earlier in the week favored winter wheat maturation and harvesting in this region. In southern Buenos Aires, light to moderate rain (5-20 mm) favored summer crops and reproductive to filling winter wheat. In northern Argentina, moderate rain (30-60 mm) maintained moisture supplies for germinating cotton. In southern Brazil, as well as southern Paraguay, mostly dry weather favored soybean planting and eased wetness, especially in Sao Paulo and southern Minas Gerais. Moderate showers (15-60 mm) aided vegetative soybeans across Mato Grosso and Goias. Temperatures averaged near normal across most of southern Brazil.

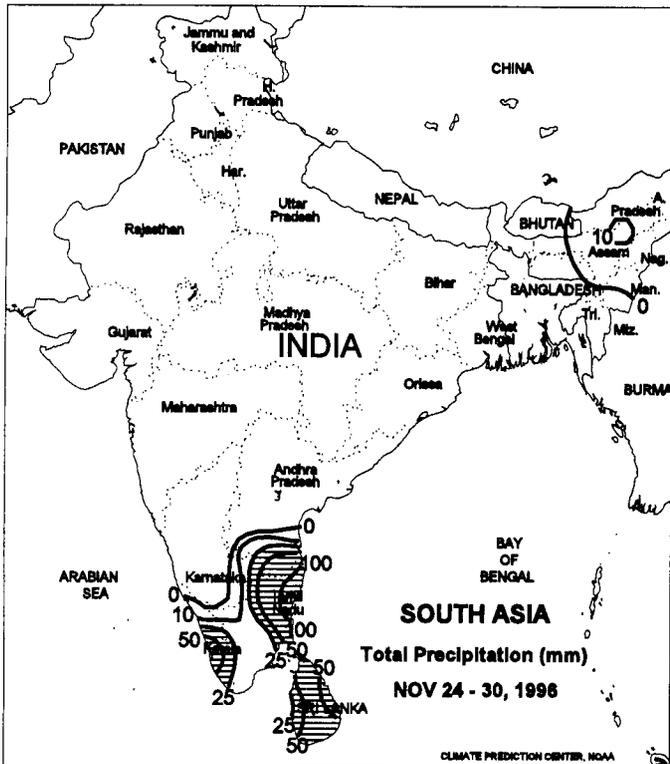


**AUSTRALIA**

Dry weather dominated Australia's primary agricultural areas. As a result, winter grain harvesting likely made good progress. The drier weather in the east (Queensland and northern New South Wales) allowed fieldwork to resume in the main sorghum, cotton, and sugarcane areas following last week's heavy rain. In New Zealand, moderate showers (25-60 mm) fell over central North Island and the west coast of South Island, but lighter rain (20 mm or less) was reported in eastern sections of both islands.

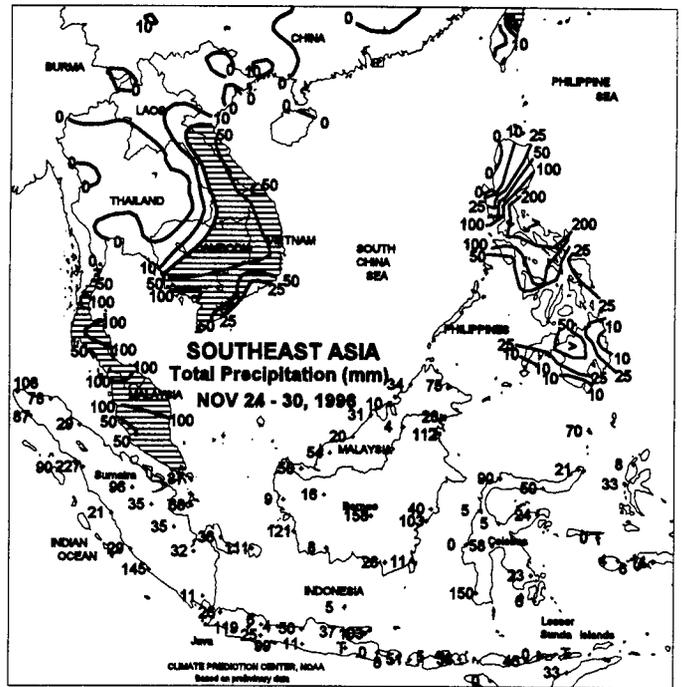
**SOUTH ASIA**

Seasonable dryness dominated the region, favoring coarse grain, oilseed, and cotton maturation and harvesting. Winter grain and oilseed planting progressed in the north. Heavy showers (50-100 mm or greater) continued at a few locations along the coast of India's southern tip (Tamil Nadu and Kerala), threatening local rice crops. Dry weather in Andhra Pradesh benefited rice and other crops that have suffered from excessive rain in recent months. However, as of December 3, another tropical cyclone had developed in the Bay of Bengal and was threatening to make landfall in the vicinity of Andhra Pradesh.



**SOUTHEAST ASIA:**

Moderate to heavy showers (60-120 mm) covered western Java, while lesser amounts (less than 30 mm) eased excessive wetness across central and eastern Java. Rainfall has been adequate to abundant so far this season across Java, maintaining favorable rice irrigation supplies. Seasonably dry weather eased wetness and favored rice harvesting across Thailand. An active northeast monsoon brought widespread showers to the rest of Indochina and the Philippines. In the Philippines, very heavy showers (150-350 mm, with isolated amounts greater than 600 mm) fell across southern Luzon and the central Islands, causing some flooding and slowing main-season rice harvesting. Moderate showers (30-80 mm) prevailed across central and southern Vietnam and peninsular Thailand and Malaysia.



**EASTERN ASIA**

Light rain (3-15 mm) fell across the Yangtze Valley and most of the North China Plain, aiding germinating and vegetative winter grains and oilseeds. Cooler weather (minimum temperatures ranged from 0 to -6 degrees C) helped to harden winter wheat across the North China Plain.

