

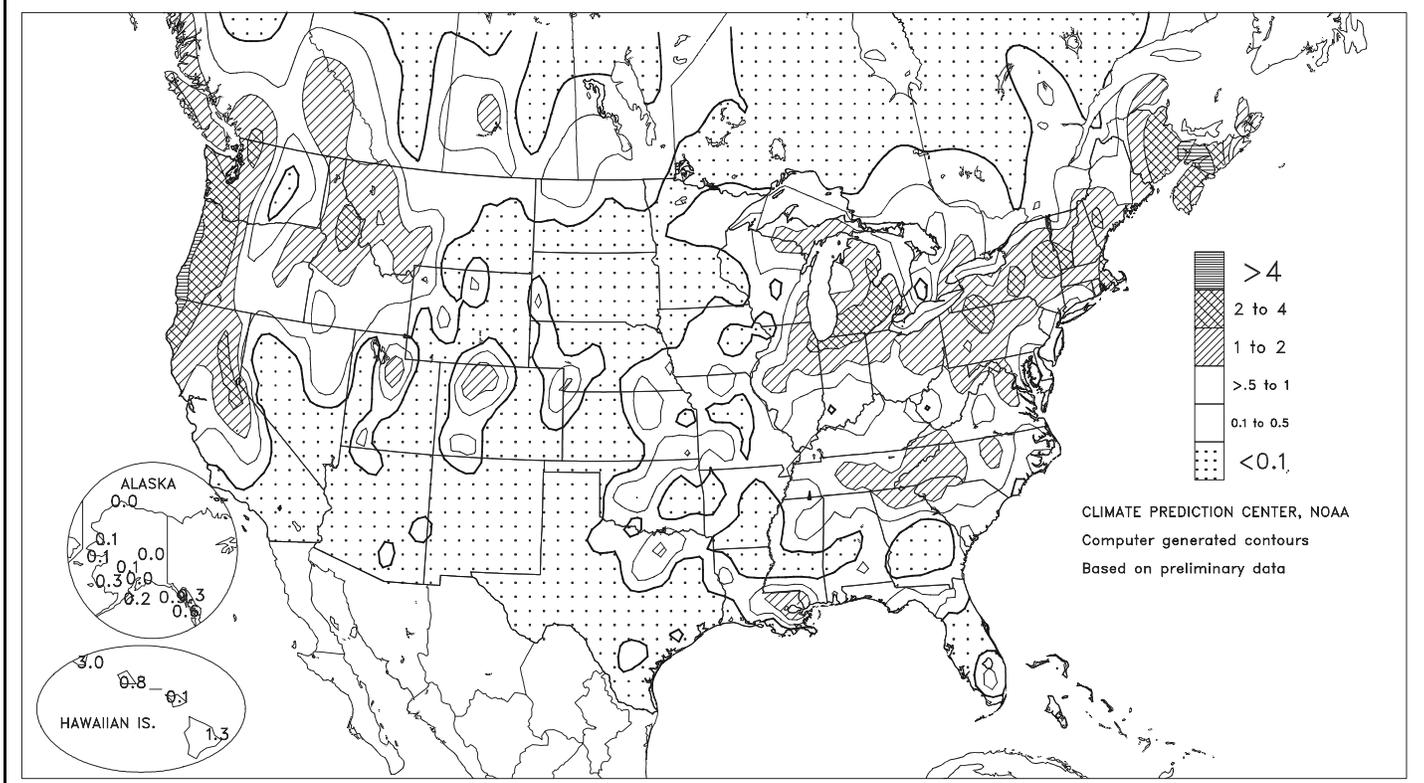
WEEKLY WEATHER AND CROP BULLETIN

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

Total Precipitation (Inches)

MAR 30 - APR 5, 2003



HIGHLIGHTS

March 30 - April 5, 2003

Highlights provided by USDA/WAOB

Showery weather continued in the **Northwest**, one of the few **Western** areas not facing water-supply concerns due to low reservoir levels and prospects for below-normal spring and summer runoff. Elsewhere from the **Rockies westward**, mild, breezy, mostly dry weather favored spring fieldwork. Meanwhile on the **northern and central Plains**, generally light precipitation locally boosted topsoil moisture but provided little relief from long-term drought. Winter wheat was only beginning to break dormancy on the **northern Plains**, but rapidly developed on the **central and southern Plains**, where weekly temperatures averaged 4 to 8°F above normal and peaked

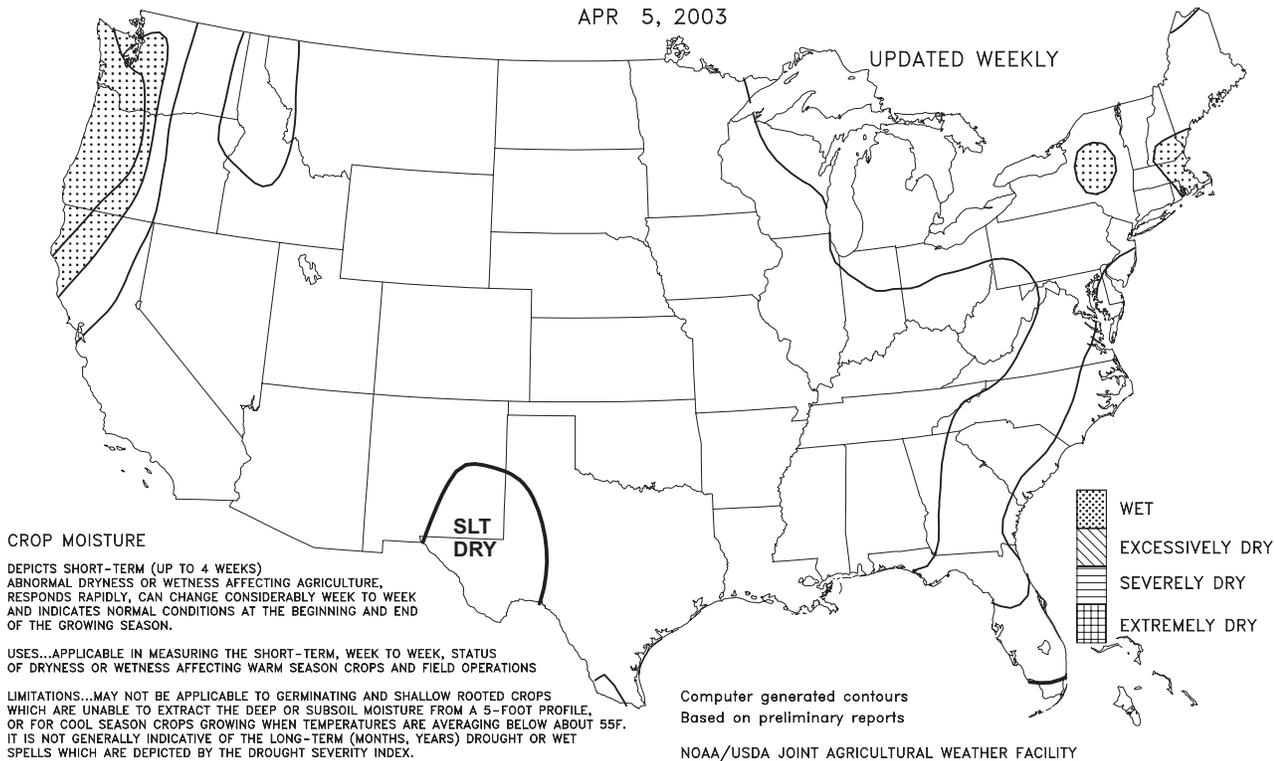
(Continued on page 5)

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Crop Moisture
 SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE
 APR 5, 2003

UPDATED WEEKLY



CROP MOISTURE

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

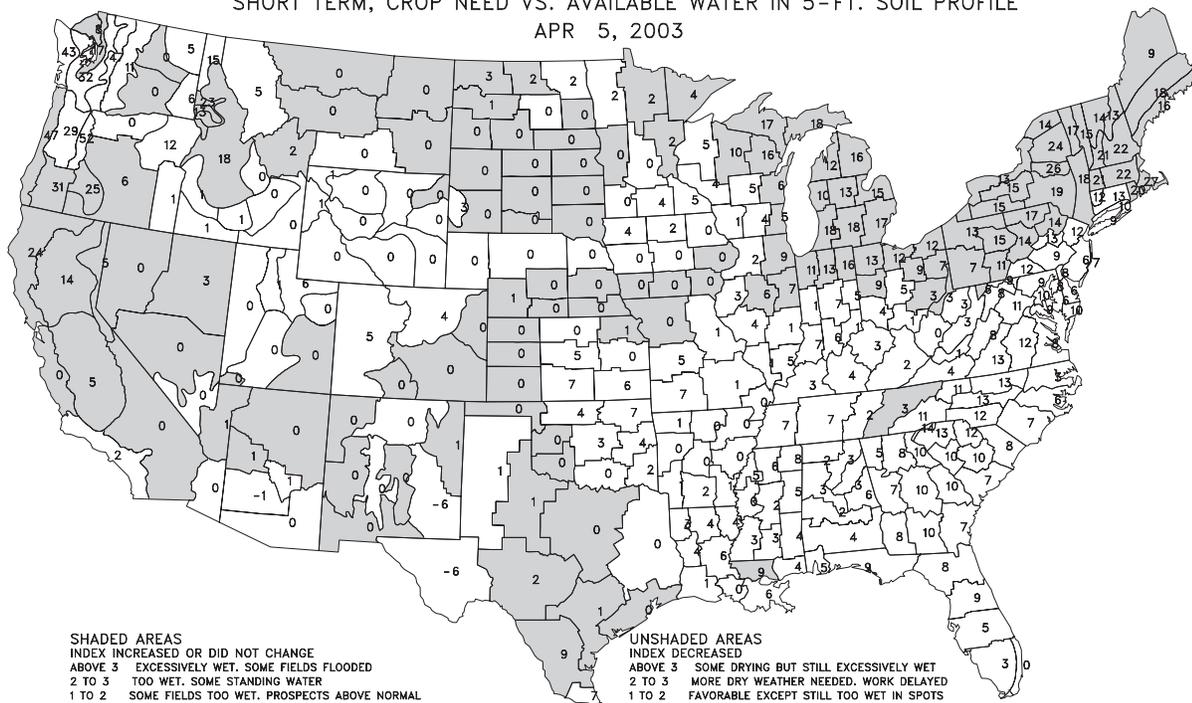
USES...APPLICABLE IN MEASURING THE SHORT-TERM, WEEK TO WEEK, STATUS OF DRYNESS OR WETNESS AFFECTING WARM SEASON CROPS AND FIELD OPERATIONS

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

Computer generated contours
 Based on preliminary reports

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

Crop Moisture Index
 SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE
 APR 5, 2003



SHADED AREAS

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

UNSHADED AREAS

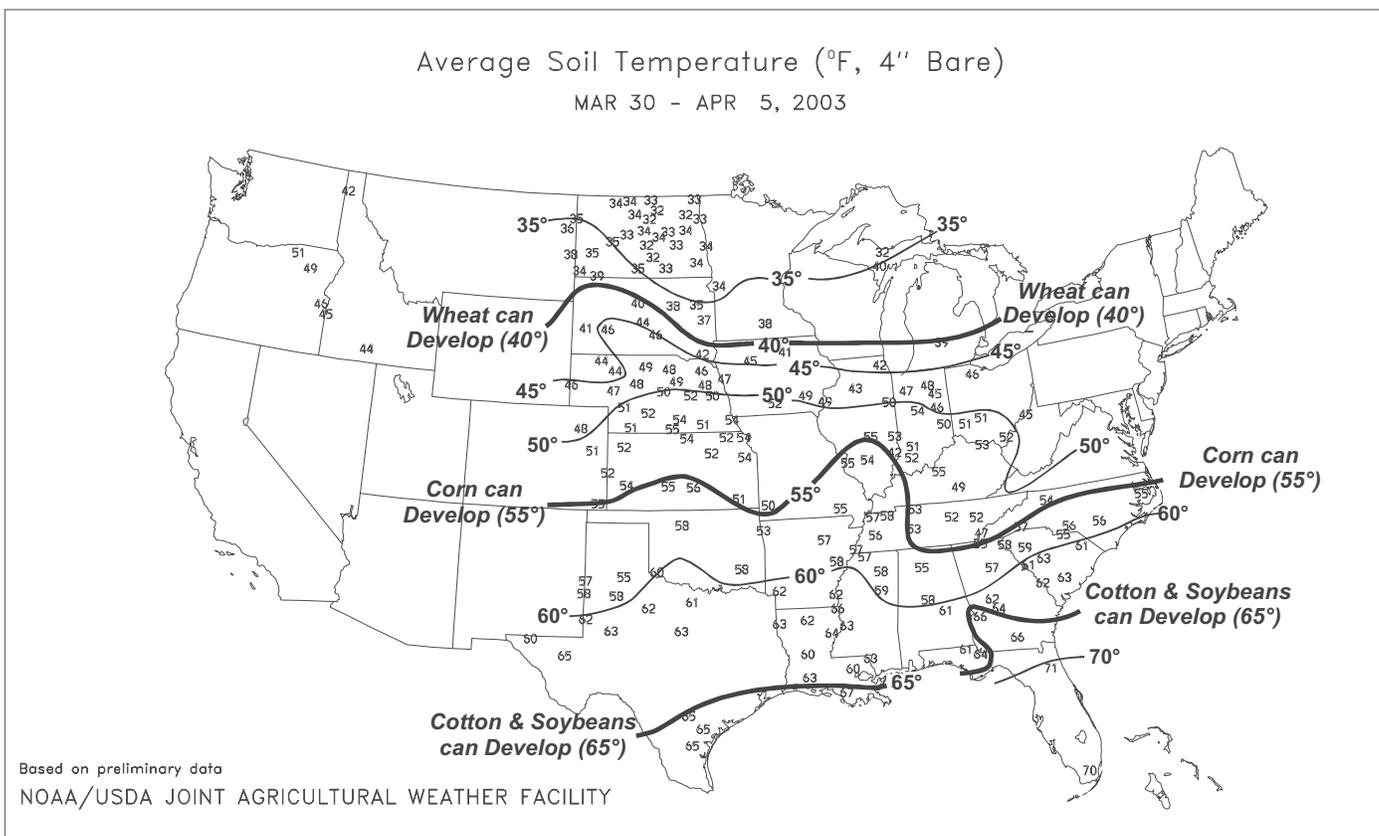
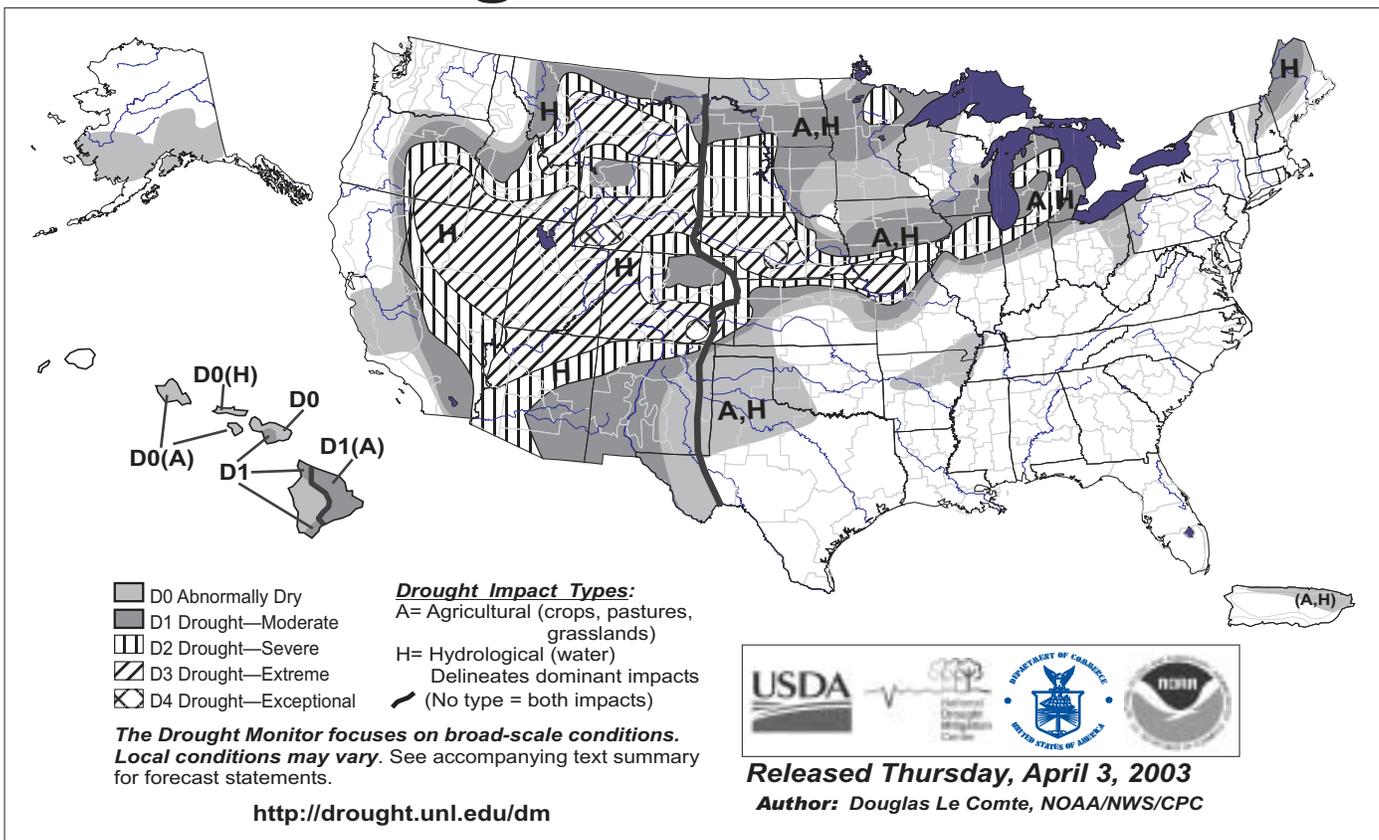
INDEX DECREASED
 ABOVE 3 SOME DRYING BUT STILL EXCESSIVELY WET
 2 TO 3 MORE DRY WEATHER NEEDED. WORK DELAYED
 1 TO 2 FAVORABLE EXCEPT STILL TOO WET IN SPOTS
 0 TO 1 FAVORABLE FOR NORMAL GROWTH AND FIELDWORK
 0 TO -1 TOPSOIL MOISTURE SHORT. GERMINATION SLOW
 -1 TO -2 ABNORMALLY DRY. PROSPECTS DETERIORATING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

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

BASED ON PRELIMINARY DATA

U.S. Drought Monitor

April 1, 2003
Valid 7 a.m. EST



Weather Data for Mississippi and the Missouri Bootheel

Weather Data for the Week Ending April 5, 2003

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

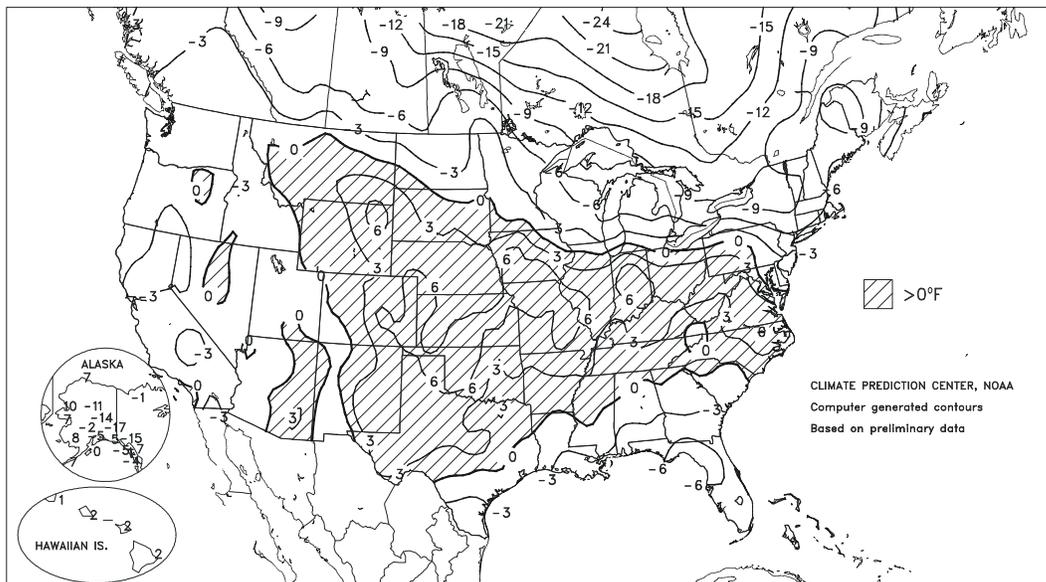
STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								4-INCH SOIL TEMP. °F		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN. SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL IN. SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F				
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
MS BATESVILLE X	68	49	78	34	58	1	0.20	-1.08	0.20	2.92	43	12.75	81	-	-	0	0	1	0	
MS BELZONI X	76	49	82	36	62	2	0.03	-1.38	0.03	3.03	41	14.57	83	-	-	0	0	1	0	
MS CLARKSDALE X	68	46	78	35	57	-2	0.00	-1.20	0.00	2.00	32	10.75	66	-	-	0	0	0	0	
MS CLEVELAND X	68	47	78	31	58	-3	0.00	-1.40	0.00	2.67	38	11.92	73	-	-	0	1	0	0	
MS GREENVILLE X	69	50	79	35	59	-1	0.00	-1.28	0.00	-	-	-	-	-	-	0	0	0	0	
MS GREENWOOD X	72	49	79	30	61	-0	0.04	-1.30	0.04	1.61	24	10.43	64	-	-	0	1	1	0	
MS INDIANOLA 1S	73	50	79	34	61	-	0.00	-	0.00	2.37	-	9.81	-	63	56	0	0	0	0	
MS INVERNESS 5E	73	52	79	36	62	-	0.00	-	0.00	1.87	-	10.52	-	62	57	0	0	0	0	
MS LYON	71	49	79	35	60	-	0.00	-	0.00	2.64	-	8.73	-	66	52	0	0	0	0	
MS MACON	73	48	80	31	60	-	0.17	-	0.17	3.21	-	13.56	-	67	56	0	1	1	0	
MS MOORHEAD X	68	50	78	36	59	-2	0.01	-1.33	0.01	1.85	27	12.70	75	-	-	0	0	1	0	
MS ONWARD	73	50	81	33	62	-	0.08	-	0.08	2.19	-	11.00	-	65	59	0	0	1	0	
MS PERTHSHIRE	72	48	79	31	60	-	0.00	-	0.00	1.90	-	8.56	-	70	54	0	1	0	0	
MS ROLLING FORK X	67	48	82	36	58	-2	0.14	-1.26	0.14	2.23	31	12.25	70	-	-	0	0	1	0	
MS SCOTT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MS SIDON	73	51	80	33	62	-	0.02	-	0.02	1.49	-	9.26	-	71	56	0	0	1	0	
MS STARKVILLE	71	48	78	32	59	1	0.24	-1.16	0.24	3.62	51	15.01	85	68	54	0	1	1	0	
MS TUNICA X	69	47	79	35	58	-1	0.00	-1.33	0.00	3.69	57	-	-	-	-	0	0	0	0	
MS TUNICA 1W	71	49	79	33	60	-	0.00	-	0.00	-	-	-	-	64	55	0	0	0	0	
MS VANCE	70	48	77	32	59	-	0.00	-	0.00	2.98	-	8.98	-	57	53	0	1	0	0	
MS VERONA	71	48	78	30	59	-	0.20	-	0.20	3.07	-	11.39	-	68	53	0	1	1	0	
MS VICKSBURG X	68	50	81	38	59	-3	0.00	-1.42	0.00	2.68	36	13.86	75	-	-	0	0	0	0	
MS YAZOO CITY X	69	47	80	32	58	-3	0.30	-1.20	0.30	1.60	20	10.60	55	-	-	0	1	1	0	
MS STONEVILLE X	70	48	80	35	59	0	0.00	-1.40	0.00	2.54	36	11.59	66	70	56	0	0	0	0	
MO DELTA	68	42	78	27	55	2	0.08	-1.01	0.08	1.58	28	5.21	39	61	47	0	2	1	0	
MO STEELE	69	47	78	32	58	4	0.64	-0.70	0.64	2.17	37	9.53	71	61	53	0	1	1	1	
MO GLENNONVILLE	68	45	76	30	57	3	0.00	-1.42	0.00	1.53	28	6.74	58	62	49	0	2	0	0	
MO PORTAGEVILLE LF	68	48	77	32	59	5	0.48	-0.92	0.48	2.02	26	8.77	69	66	50	0	0	1	0	
MO CLARKTON	69	44	79	30	57	3	0.04	-1.38	0.04	1.51	28	7.45	64	64	50	0	2	1	0	
MO CARDWELL	69	47	77	31	58	3	0.83	-0.68	0.83	3.37	56	10.06	76	62	52	0	1	1	1	
MO CHARLESTON	66	46	75	28	57	3	0.32	-1.07	0.32	2.46	46	8.29	68	62	50	0	2	1	0	
MO PORTAGEVILLE DC	68	47	78	32	58	4	0.28	-1.12	0.28	2.23	40	8.57	67	64	52	0	0	1	0	

Compiled by USDA/OCE/WAOB's Stoneville Field Office. X Based on 1971-2000 normals. - Sufficient data not available.

Weather and Crop Summary: Farmers took advantage of good weather conditions for extensive tilling and planting. Rice, corn, and soybeans were planted without hesitation until week's end, when forecasts indicated the likelihood of a return to cool, wet weather. Wheat was in the stem extension stage, and corn and soybean stages ranged from emerging to leafing.

Departure of Average Temperature from Normal (°F)

MAR 30 - APR 5, 2003



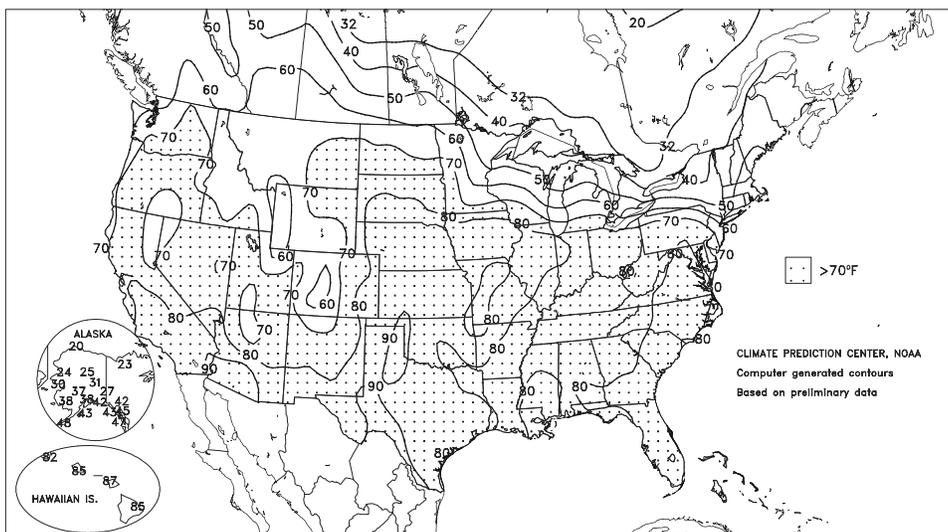
(Continued from front cover)

near or above 90°F. Stress on winter wheat increased, however, across much of **Texas** and **Oklahoma**, due to recent topsoil moisture depletion and large temperature swings. In the **Corn Belt**, unfavorably dry conditions across the **upper Midwest** contrasted with showery weather in the **Great Lakes region**. The Midwestern precipitation slowed pre-planting fieldwork but aided winter wheat and eased long-term drought, especially from **northern Illinois to Lower Michigan**. Farther south, spring planting operations accelerated and progressed northward under cool, mostly dry conditions across the **western Gulf Coast region, Delta, and Southeast**. Early-week freezes briefly threatened **Southern peaches** and other tree blooms, but temperatures were not low enough to cause widespread problems. Weekly temperatures averaged as much as 8°F below normal in **Florida**. Even colder weather, relative to normal, prevailed from the **upper Great Lakes region into the Northeast**, holding weekly readings 6 to 12°F below normal and lowering temperatures in some locations below 0°F.

Early-week warmth in the **West** resulted in several monthly record highs, including 78°F (on March 30) in **Eugene, OR**, and 82°F (also on March 30) in **Whitman Mission, WA**. It was also the earliest 80-degree warmth in several locations, including **Whitman Mission** (previously, 82°F on April 3, 1992). Farther south, among two dozen **Western** daily records on the last day of the month were highs of 90°F in **Bakersfield, CA**, and 75°F in **Orem, UT**. Record warmth shifted across the **Plains** and **Midwest** in early April, producing another three dozen record highs. April opened with consecutive daily-record highs in several locations, including **Waterloo, IA** (88 and 83°F), and **Omaha, NE** (90 and 87°F). However, markedly cooler air overspread the **West, Plains, and Midwest** by week's end, accompanied in some areas by rain and snow. In **California, San Luis Obispo** notched a daily-record low of 36°F on April 5, just 6 days after a daily-record high of 84°F. Farther east, snowfall in **Omaha** totaled 0.2 inch on April 4 and 2.2 inches on April 6. **Rhineland, WI**, measured a daily-record snowfall (4.0 inches) on April 4, while daily-record rainfall totals included 1.89 inches in

Extreme Maximum Temperature (°F)

MAR 30 - APR 5, 2003

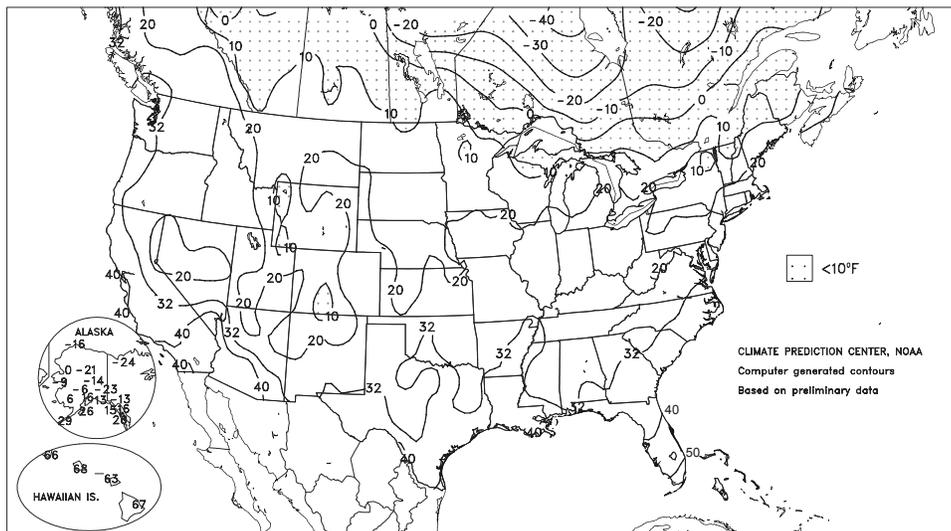


South Bend, IN, 1.54 inches in **Lansing, MI**, and 1.02 inches in **Peoria, IL**. Severe thunderstorms accompanied the rain across the **lower Midwest** on April 4, resulting in more than 200 reports of damaging winds or hail at least 0.75 inch in diameter.

Meanwhile across the **South and East**, temperatures climbed following an early-week chill. The exception was the **Northeast**, where cold weather lingered all week. The last day of March featured daily-record lows in locations such as **McAlester, OK** (24°F), **Meridian, MS** (28°F), **Atlanta, GA** (29°F), and **Del Rio, TX** (31°F). A day later in **Florida**, daily records included 32°F in **Archbold** and 33°F in **Gainesville**. Farther north, **Houlton, ME**, set daily-record lows on April 2 and 5 (-2 and 2°F). Snow fell in parts of the **East** on March 30, totaling 7.1 inches in **Binghamton, NY**, 2.6 inches in **Baltimore, MD**, and 2.0 inches in **Asheville, NC**. Meanwhile, **Lynchburg, VA**, collected 1.03 inches of rain on Sunday, a daily-record total. Farther north, weekly snowfall totaled 10.3 inches in **Burlington, VT**, including 6.2 inches on March 30. Heavy snow also blanketed other areas along the **Nation's northern tier**, including **Marquette, MI**, where 20.0 inches fell from April 2-5.

Extreme Minimum Temperature (°F)

MAR 30 - APR 5, 2003



Two episodes of locally heavy rainfall struck **Hawaii**, primarily across the western islands early in the week and again on April 3-4. On March 31 - April 1, 24-hour totals on **Kauai** included 3.14 inches in **Kokee**. Another 2.26 inches of rain soaked **Kokee** in 24 hours on April 3-4. Elsewhere, April 3-4 totals included 1.27 inches in **Mountain View**, on the **Big Island**, and 1.42 inches along the **southern coast of Oahu** at **Kalaeola Airport**. Meanwhile, cold weather across **interior Alaska** (weekly temperatures as much as 14°F below normal) contrasted sharply with mild weather (up to 10°F above normal) in **northern and westernmost parts of the State**. Among the daily temperature records set or tied in **Alaska** were a high of 47°F in **Cold Bay** on April 1, followed 2 days later by a low of 16°F in **Juneau**. Only scattered, mostly light rain and snow showers were noted across **Alaska**.

National Weather Data for Selected Cities

Weather Data for the Week Ending April 5, 2003

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 Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL IN. SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	0.1 INCH OR MORE	
																			0.1 INCH OR MORE	5.0 INCH OR MORE
AL	BIRMINGHAM	70	48	77	29	59	1	0.54	-0.70	0.54	4.83	69	12.85	77	87	37	0	1	1	1
	HUNTSVILLE	69	45	77	27	57	0	0.28	-0.96	0.28	2.12	28	11.40	63	80	46	0	2	1	0
	MOBILE	72	50	81	31	61	-2	0.23	-1.14	0.22	4.53	56	10.65	56	87	50	0	1	2	0
	MONTGOMERY	72	46	82	30	59	-2	0.12	-1.05	0.11	3.89	54	8.68	49	99	46	0	1	2	0
AK	ANCHORAGE	35	18	38	16	26	-5	0.00	-0.11	0.00	0.34	47	1.48	69	61	48	0	7	0	0
	BARROW	6	-10	20	-16	-2	6	0.00	0.00	0.00	0.01	11	0.21	64	84	80	0	7	0	0
	FAIRBANKS	23	-6	31	-14	8	-14	0.00	-0.03	0.00	0.02	7	1.09	89	77	52	0	7	0	0
	JUNEAU	39	23	45	16	31	-6	0.33	-0.32	0.19	3.56	90	10.68	83	84	54	0	6	2	0
	KODIAK	41	30	43	26	35	0	0.21	-0.97	0.12	6.31	104	29.76	149	71	60	0	6	3	0
	NOME	26	14	30	-9	20	7	0.11	-0.03	0.10	0.61	87	1.91	81	87	79	0	7	2	0
AZ	FLAGSTAFF	52	25	63	17	39	-1	0.01	-0.38	0.01	1.14	39	4.03	53	67	22	0	7	1	0
	PHOENIX	80	56	93	50	68	2	0.00	-0.12	0.00	0.51	44	4.25	155	35	16	2	0	0	0
	TUCSON	79	49	90	41	64	1	0.00	-0.07	0.00	0.51	59	1.61	59	31	16	1	0	0	0
	YUMA	79	55	90	46	67	-3	0.00	-0.03	0.00	0.24	83	1.35	142	41	27	1	0	0	0
AR	FORT SMITH	75	48	84	29	62	5	0.00	-0.85	0.00	1.99	44	5.69	60	77	35	0	1	0	0
	LITTLE ROCK	72	48	79	32	60	2	0.05	-1.19	0.05	1.84	32	7.55	59	82	40	0	1	1	0
CA	BAKERSFIELD	72	46	90	40	59	-1	0.24	0.04	0.20	0.61	40	2.26	58	78	43	1	0	4	0
	FRESNO	69	47	85	39	58	0	0.80	0.48	0.41	1.43	59	3.08	46	83	54	0	0	4	0
	LOS ANGELES	69	52	88	46	61	2	0.00	-0.28	0.00	1.79	69	6.61	76	86	55	0	0	0	0
	REDDING	63	42	78	33	53	-2	0.25	-0.58	0.14	4.04	71	13.05	74	86	54	0	0	4	0
	SACRAMENTO	64	44	78	35	54	-2	0.38	-0.01	0.28	2.26	74	4.93	47	93	45	0	0	3	0
	SAN DIEGO	67	55	82	50	61	0	0.00	-0.34	0.00	1.36	55	6.24	92	66	49	0	0	0	0
	SAN FRANCISCO	60	47	75	42	54	-1	0.84	0.37	0.51	2.01	56	5.91	49	84	61	0	0	3	1
	STOCKTON	65	43	81	37	54	-3	0.48	0.13	0.21	1.60	63	3.28	43	89	60	0	0	3	0
CO	ALAMOSA	57	17	67	10	37	0	0.00	-0.11	0.00	0.51	94	0.80	80	63	20	0	7	0	0
	CO SPRINGS	61	33	75	18	47	5	0.12	-0.18	0.12	1.14	89	1.73	91	66	21	0	3	1	0
	DENVER INTL	62	35	74	26	49	7	0.02	-0.12	0.02	3.07	310	3.57	246	73	21	0	3	1	0
	GRAND JUNCTION	61	37	74	24	49	2	0.13	-0.06	0.07	0.87	76	2.02	90	44	26	0	1	2	0
	PUEBLO	69	35	83	20	52	6	0.00	-0.26	0.00	0.81	70	1.63	93	60	22	0	3	0	0
CT	BRIDGEPORT	44	33	53	28	39	-6	0.25	-0.71	0.13	4.25	88	9.80	85	81	65	0	3	3	0
	HARTFORD	42	30	49	26	36	-8	0.54	-0.36	0.23	3.99	88	9.55	84	86	65	0	5	5	0
DC	WASHINGTON	62	40	83	31	51	-1	0.47	-0.20	0.47	4.20	103	12.05	122	88	45	0	2	1	0
DE	WILMINGTON	56	36	76	28	46	-2	0.37	-0.44	0.36	4.78	105	11.82	110	92	55	0	2	2	0
FL	DAYTONA BEACH	73	50	84	42	62	-5	0.19	-0.59	0.19	10.57	241	16.25	158	95	44	0	0	1	0
	JACKSONVILLE	73	46	84	35	60	-4	0.28	-0.57	0.28	10.73	237	15.48	136	93	38	0	0	1	0
	KEY WEST	77	66	83	57	71	-4	0.13	-0.34	0.13	3.11	142	4.90	83	82	60	0	0	1	0
	MIAMI	79	63	88	53	71	-3	0.08	-0.65	0.08	3.89	126	5.15	73	76	47	0	0	1	0
	ORLANDO	75	52	85	44	64	-6	0.05	-0.67	0.05	5.28	130	7.65	87	91	49	0	0	1	0
	PENSACOLA	70	51	82	33	61	-3	0.05	-1.16	0.03	6.84	94	12.74	74	87	55	0	0	2	0
	TALLAHASSEE	72	42	81	32	57	-7	0.78	-0.37	0.65	7.54	104	14.73	85	93	44	0	1	3	1
	TAMPA	74	54	83	43	64	-5	0.07	-0.43	0.07	3.94	124	6.96	86	80	42	0	0	1	0
	WEST PALM	77	59	84	50	68	-4	0.01	-0.89	0.01	7.09	164	9.02	85	80	49	0	0	1	0
GA	ATHENS	68	45	77	31	57	-1	0.29	-0.62	0.16	5.84	104	12.12	82	82	51	0	1	2	0
	ATLANTA	68	45	76	29	57	-1	0.41	-0.56	0.25	7.25	120	12.79	81	83	48	0	1	3	0
	AUGUSTA	72	45	81	31	59	0	0.37	-0.51	0.21	7.24	139	12.97	94	85	46	0	2	2	0
	COLUMBUS	72	46	79	33	59	-2	0.68	-0.40	0.25	6.31	97	14.13	90	90	36	0	0	3	0
	MACON	72	44	80	32	58	-2	0.14	-0.76	0.14	8.11	147	14.74	98	88	36	0	1	1	0
	SAVANNAH	75	47	88	33	61	-1	0.34	-0.53	0.30	7.91	186	11.98	108	90	42	0	0	2	0
HI	HILO	81	68	85	67	74	2	1.26	-2.17	0.31	2.63	16	9.33	26	87	77	0	0	7	0
	HONOLULU	83	71	85	68	77	2	0.82	0.53	0.44	2.41	115	4.72	66	84	75	0	0	4	0
	KAHULUI	86	65	87	63	76	2	0.09	-0.42	0.09	1.02	38	8.78	100	90	76	0	0	1	0
	LIHUE	80	69	82	66	75	2	3.00	2.27	1.67	7.77	190	14.28	119	89	79	0	0	6	2
ID	BOISE	55	37	72	32	46	-1	0.18	-0.12	0.07	1.67	102	4.15	100	82	52	0	1	4	0
	LEWISTON	56	39	76	32	48	0	0.17	-0.10	0.08	2.34	177	6.03	177	83	65	0	1	4	0
	POCATELLO	52	30	71	20	41	-1	0.27	0.00	0.24	0.84	54	2.27	61	68	50	0	5	3	0
IL	CHICAGO/O'HARE	53	31	81	23	42	-1	1.80	1.00	1.22	3.56	110	4.10	62	86	58	0	4	3	2
	MOLINE	63	35	84	21	49	4	0.24	-0.59	0.12	1.96	56	2.86	43	79	50	0	4	2	0
	PEORIA	64	38	81	23	51	5	1.02	0.30	1.01	2.99	89	4.59	70	81	43	0	3	2	1
	ROCKFORD	54	31	81	20	42	-1	0.71	-0.05	0.59	2.16	73	2.66	47	87	59	0	4	2	1
	SPRINGFIELD	65	41	82	23	53	5	0.41	-0.33	0.41	2.20	60	4.10	58	76	52	0	3	1	0
IN	EVANSVILLE	65	44	76	27	55	4	0.08	-0.91	0.08	2.68	54	8.74	79	72	49	0	2	1	0
	FORT WAYNE	58	36	76	24	47	3	1.68	0.91	1.60	4.04	118	6.73	91	87	52	0	3	3	1
	INDIANAPOLIS	65	43	76	26	54	7	0.32	-0.48	0.32	4.04	101	8.75	98	75	47	0	3	1	0
	SOUTH BEND	59	36	78	20	47	3	2.17	1.36	1.87	3.57	103	5.70	74	85	56	0	3	4	1
IA	BURLINGTON	63	39	81	22	51	4	0.33	-0.43	0.28	1.65	47	3.31	52	81	46	0	4	2	0
	CEDAR RAPIDS																			

Weather Data for the Week Ending April 5, 2003

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 Mar 1	PCT. NORMAL SINCE Mar 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	69	43	81	25	56	5	0.00	-0.59	0.00	3.53	113	5.59	112	82	47	0	1	0	0
KY JACKSON	66	44	79	25	55	3	0.46	-0.39	0.42	1.89	38	11.86	97	77	40	0	2	2	0
KY LEXINGTON	65	43	76	24	54	3	0.44	-0.42	0.43	2.88	57	8.68	75	77	56	0	2	2	0
KY LOUISVILLE	68	47	78	31	58	6	0.35	-0.54	0.34	2.39	47	7.65	66	70	43	0	2	2	0
KY PADUCAH	66	45	76	28	56	3	0.23	-0.80	0.23	2.18	44	9.93	80	78	40	0	2	1	0
LA BATON ROUGE	73	50	82	33	62	-2	0.99	-0.25	0.99	3.13	53	10.91	63	96	47	0	0	1	1
LA LAKE CHARLES	74	52	80	37	63	-1	0.03	-0.75	0.02	3.79	93	10.35	80	10	65	0	0	2	0
LA NEW ORLEANS	73	53	83	38	63	-2	1.18	-0.06	1.18	5.64	92	10.40	60	88	53	0	0	1	1
LA SHREVEPORT	74	49	78	34	62	0	0.02	-0.92	0.01	2.21	46	10.30	75	89	47	0	0	2	0
ME CARIBOU	30	9	45	0	20	-12	0.41	-0.17	0.25	2.65	89	6.75	84	82	51	0	7	3	0
ME PORTLAND	39	27	52	21	33	-6	1.12	0.10	0.72	4.05	83	8.53	70	91	59	0	5	5	1
MD BALTIMORE	60	37	80	27	48	-1	0.44	-0.30	0.44	4.17	94	13.47	123	93	63	0	2	1	0
MA BOSTON	42	32	55	28	37	-7	1.79	0.91	1.18	4.60	103	10.50	90	93	68	0	4	7	1
MA WORCESTER	38	26	50	21	32	-8	1.19	0.24	0.35	4.90	100	11.69	97	98	69	0	7	6	0
MI ALPENA	33	21	50	17	27	-8	1.11	0.59	0.72	2.68	107	3.18	57	93	67	0	7	7	1
MI GRAND RAPIDS	43	29	63	21	36	-5	0.86	0.10	0.49	2.36	75	3.87	58	95	65	0	5	4	0
MI HOUGHTON LAKE	35	22	54	15	29	-7	1.30	0.76	0.66	2.10	86	2.45	46	93	68	0	7	5	1
MI LANSING	44	29	69	18	37	-3	1.80	1.08	1.18	3.34	117	3.90	66	94	72	0	4	4	1
MI MUSKOGON	44	30	61	20	37	-3	4.88	-0.17	0.34	1.84	65	2.36	66	91	70	0	5	4	0
MI TRAVERSE CITY	35	23	45	16	29	-8	0.90	0.28	0.45	2.48	102	3.18	44	96	63	0	7	5	0
MN DULUTH	33	21	45	14	27	-5	0.09	-0.38	0.02	1.10	54	1.53	39	90	68	0	6	3	0
MN INT'L FALLS	34	18	46	12	26	-6	0.09	-0.19	0.05	0.55	47	0.74	28	83	46	0	7	2	0
MN MINNEAPOLIS	46	29	63	21	37	-3	0.01	-0.51	0.01	1.45	65	2.23	55	82	55	0	5	1	0
MN ROCHESTER	45	27	71	15	36	-2	0.04	-0.57	0.03	2.31	100	3.27	82	89	68	0	5	2	0
MS ST. CLOUD	42	24	60	14	33	-3	0.02	-0.47	0.02	1.49	81	2.25	70	89	59	0	6	1	0
MS JACKSON	72	49	81	30	61	1	0.11	-1.30	0.10	4.17	62	14.59	86	90	41	0	1	2	0
MS MERIDIAN	72	45	81	28	59	-2	0.14	-1.30	0.13	3.88	49	12.25	64	95	48	0	2	2	0
MS TUPELO	70	46	78	29	58	1	0.43	-0.81	0.43	3.29	46	12.53	74	91	48	0	1	1	0
MO COLUMBIA	69	41	81	26	55	5	0.00	-0.83	0.00	2.82	74	5.09	66	75	41	0	3	0	0
MO KANSAS CITY	69	44	83	26	57	7	0.15	-0.44	0.15	1.42	50	2.63	49	73	44	0	2	1	0
MO SAINT LOUIS	71	46	84	28	58	6	0.10	-0.73	0.10	2.90	69	5.84	68	67	45	0	1	1	0
MO SPRINGFIELD	68	43	79	24	56	5	0.00	-0.99	0.00	2.85	63	6.89	77	75	44	0	2	0	0
MT BILLINGS	56	34	72	23	45	3	0.05	-0.26	0.03	0.88	66	2.09	77	76	39	0	4	2	0
MT BUTTE	43	25	59	13	34	-1	0.71	0.52	0.41	1.09	112	2.64	134	88	46	0	5	4	0
MT GLASGOW	49	28	71	19	38	0	0.14	0.03	0.06	0.57	104	0.97	84	88	69	0	5	4	0
MT GREAT FALLS	51	29	66	8	40	2	0.35	0.10	0.25	0.84	71	1.57	66	83	41	0	4	3	0
MT HAVRE	51	31	71	19	41	2	0.08	-0.06	0.03	0.26	33	0.62	38	84	62	0	4	3	0
MT KALISPELL	49	32	67	23	41	2	0.25	0.00	0.10	1.80	140	2.87	73	87	68	0	5	4	0
MT MISSOULA	50	34	69	29	42	0	0.21	0.02	0.09	1.88	171	4.52	154	88	62	0	3	5	0
NE GRAND ISLAND	65	35	88	19	50	5	0.17	-0.35	0.17	0.74	31	2.38	66	73	45	0	3	1	0
NE LINCOLN	66	35	91	19	50	4	0.14	-0.44	0.14	0.98	37	3.01	76	76	42	1	3	1	0
NE NORFOLK	61	34	88	21	47	3	0.03	-0.49	0.03	0.73	31	1.84	50	79	46	0	3	1	0
NE NORTH PLATTE	65	28	84	18	47	4	0.22	-0.11	0.16	1.50	101	2.34	98	91	38	0	5	2	0
NE OMAHA	66	37	90	24	52	6	0.28	-0.28	0.28	0.78	31	2.45	60	71	44	1	3	1	0
NE SCOTTSBLUFF	61	30	80	26	46	4	0.01	-0.31	0.01	1.33	96	2.04	81	83	43	0	4	1	0
NE VALENTINE	59	28	85	14	44	3	0.00	-0.31	0.00	1.17	88	1.75	83	82	50	0	4	0	0
NV ELY	52	24	68	14	38	-1	0.45	0.26	0.26	0.86	72	1.56	58	74	40	0	6	4	0
NV LAS VEGAS	71	50	83	45	61	-1	0.00	-0.04	0.00	0.33	53	2.46	129	32	19	0	0	0	0
NV RENO	56	33	75	23	45	-1	0.04	-0.05	0.03	0.35	38	0.74	24	62	32	0	3	2	0
NH WINNEMUCCA	56	29	74	24	43	-1	0.08	-0.11	0.08	0.71	71	2.60	106	77	40	0	5	1	0
NH CONCORD	38	25	51	17	31	-8	1.72	1.00	0.74	4.47	126	10.37	117	97	67	0	7	5	1
NJ NEWARK	49	36	57	29	42	-6	0.28	-0.63	0.14	4.17	86	11.03	93	82	60	0	2	4	0
NM ALBUQUERQUE	69	39	78	31	54	2	0.00	-0.11	0.00	1.45	210	2.47	152	34	11	0	1	0	0
NY ALBANY	37	25	44	13	31	-10	1.64	0.87	0.67	3.67	101	9.28	112	92	71	0	7	6	1
NY BINGHAMTON	38	25	52	16	32	-7	1.24	0.48	0.37	3.30	94	8.02	94	93	82	0	6	7	0
NY BUFFALO	37	25	49	20	31	-9	0.55	-0.17	0.35	3.29	94	8.26	91	93	73	0	6	5	0
NY ROCHESTER	37	25	44	19	31	-9	0.93	0.29	0.44	2.81	92	6.80	92	86	75	0	6	4	0
NY SYRACUSE	37	24	47	15	30	-10	2.26	1.49	0.90	4.81	135	8.85	107	95	73	0	7	7	2
NC ASHEVILLE	65	36	78	26	51	0	0.86	-0.04	0.50	4.70	90	10.35	79	86	53	0	3	2	1
NC CHARLOTTE	70	43	80	28	57	0	1.32	0.52	1.13	7.25	146	12.83	103	80	44	0	1	2	1
NC GREENSBORO	70	44	82	32	57	3	1.26	0.47	1.02	6.95	158	14.22	129	77	40	0	1	2	1
NC HATTERAS	65	54	70	39	60	4	0.16	-0.80	0.16	5.92	105	11.47	74	79	61	0	0	1	0
NC RALEIGH	71	44	83	31	57	1	0.97	0.26	0.87	5.34	118	11.87	99	78	50	0	2	2	1
NC WILMINGTON	73	49	81	33	61	2	0.28	-0.46	0.26	5.36	113	11.08	86	91	46	0	0	2	0
ND BISMARCK	45	26	75	16	35	-2	0.01	-0.24	0.01	0.44	43	0.94	47	81	67	0	6	1	0
ND DICKINSON	45	26	71	20	36	-1	0.10	-0.21	0.10	2.13	232	2.28	133	91	60	0	6	1	0
ND FARGO	43	26	73	18	35	-1	0.07	-0.21	0.07	0.70	51	1.16	43	87	49	0	6	1	0
ND GRAND FORKS	38	22	63	7	30	-4	0.17	-0.06	0.07	0.64	60	1.04	45	92	56	0	7	3	0
ND JAMESTOWN	40	24	72	18	32	-4	0.05	-0.20	0.05	0.26	24	0.41	19	95	58	0	6	1	0
ND WILLISTON	42	26	72	18	34	-2	0.62	0.43	0.24	2.41	274	3.37	186	85	69	0	6	5	0
OH AKRON-CANTON	56	36	73	21	46	3	0.98	0.26	0.69	3.71	101	7.42	88	89	66	0	4	4	1
OH CINCINNATI	65	44	75	27	55	6	0.30	-0.61	0.16	2.83	62	8.08	79	73	57	0	2	2	0
OH CLEVELAND	51	32	75	24	42	-1	1.60	0.85	1.35	3.90	112	8.62	104	90	59	0	3	4	1
OH COLUMBUS	62	42	75	26	52	4	0.69	0.00	0.37	2.91	86	7.52	93	77	52	0	2	3	0
OH DAYTON	63	42	75	27	52	6	0.44	-0.45	0.44	3.09	79	6.38	72	74	48	0	3	1	0
OH MANSFIELD	57	34	74	21	46	4	1.05	0.12	0.72	3.68	91	6.96	79	95	59	0	3	4	1

Based on 1971-2000 normals

*** Not Available

Weather Data for the Week Ending April 5, 2003

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 Mar 1	PCT. NORMAL SINCE Mar 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	51	31	77	22	41	-2	1.62	0.89	1.54	3.69	117	6.86	99	88	58	0	4	3	1
	YOUNGSTOWN	53	31	73	17	42	-1	1.08	0.32	0.87	3.36	93	7.29	91	86	66	0	4	4	1
	OKLAHOMA CITY	71	45	80	25	58	2	0.03	-0.56	0.03	2.33	70	3.20	52	78	41	0	1	1	0
	TULSA	73	47	82	26	60	3	0.00	-0.80	0.00	3.25	79	5.17	67	73	48	0	1	0	0
OR	ASTORIA	51	39	63	36	45	-2	2.57	1.15	0.89	15.31	183	32.82	127	93	78	0	0	6	1
	BURNS	49	29	72	21	39	-1	1.06	0.86	0.51	2.02	146	3.37	92	91	61	0	5	5	1
	EUGENE	55	40	78	37	48	0	1.16	0.10	0.47	6.81	104	16.27	79	93	77	0	0	7	0
	MEDFORD	56	38	78	34	47	-2	1.13	0.80	0.49	3.16	152	7.38	111	92	52	0	0	6	0
	PENDLETON	57	39	77	29	48	0	0.49	0.24	0.34	2.01	140	6.00	146	78	54	0	1	3	0
	PORTLAND	54	41	72	37	48	-1	0.87	0.18	0.19	6.44	154	16.80	125	89	74	0	0	7	0
	SALEM	55	40	74	37	47	-1	1.48	0.74	0.37	6.11	130	16.27	104	90	81	0	0	6	0
PA	ALLENTOWN	52	33	74	21	42	-2	0.51	-0.27	0.22	3.91	95	8.42	81	84	70	0	3	5	0
	ERIE	42	28	60	22	35	-7	0.95	0.15	0.71	3.89	105	9.78	115	96	83	0	6	5	1
	MIDDLETOWN	56	35	78	25	46	-1	0.71	0.02	0.43	4.69	124	11.23	118	95	58	0	3	3	0
	PHILADELPHIA	56	38	76	30	47	-1	0.18	-0.64	0.13	4.23	96	11.20	105	97	76	0	2	3	0
	PITTSBURGH	61	39	78	20	50	5	0.92	0.22	0.56	2.43	66	7.46	85	80	46	0	3	4	1
	WILKES-BARRE	48	30	73	20	39	-5	1.14	0.44	0.45	2.81	88	5.84	76	89	56	0	3	6	0
	WILLIAMSPORT	54	33	78	22	43	-1	0.90	0.11	0.29	3.74	99	8.75	95	92	76	0	3	5	0
RI	PROVIDENCE	44	32	55	27	38	-6	1.97	0.92	1.54	5.58	108	11.38	88	88	73	0	4	7	1
SC	BEAUFORT	73	48	84	37	61	0	0.20	-0.67	0.18	3.73	87	7.75	68	92	40	0	0	2	0
	CHARLESTON	74	48	86	37	61	0	0.29	-0.53	0.28	7.23	158	10.71	91	89	42	0	0	2	0
	COLUMBIA	73	46	82	31	60	0	0.40	-0.51	0.38	7.45	142	12.41	90	79	50	0	1	2	0
	GREENVILLE	70	45	79	29	57	1	1.13	0.20	0.57	7.29	122	13.24	91	79	42	0	1	2	2
SD	ABERDEEN	49	27	77	16	38	0	0.00	-0.39	0.00	0.57	35	1.26	49	84	62	0	5	0	0
	HURON	55	28	81	17	42	2	0.02	-0.46	0.02	0.29	14	1.55	51	80	43	0	5	1	0
	RAPID CITY	58	29	81	19	44	4	0.07	-0.24	0.04	1.12	89	1.66	79	81	44	0	5	2	0
	SIoux FALLS	54	29	79	18	42	2	0.02	-0.53	0.02	0.24	11	1.20	37	80	55	0	4	1	0
TN	BRISTOL	64	37	74	26	50	-1	0.81	0.07	0.46	3.21	72	12.00	106	91	37	0	3	2	0
	CHATTANOOGA	68	43	77	29	56	0	1.13	-0.04	1.13	4.69	67	15.10	87	78	48	0	1	1	1
	KNOXVILLE	66	44	74	27	55	1	0.68	-0.31	0.44	2.51	43	14.39	100	80	44	0	1	2	0
	MEMPHIS	71	51	78	33	61	3	0.00	-1.32	0.00	2.95	45	12.07	80	77	43	0	0	0	0
	NASHVILLE	67	46	77	27	57	2	0.73	-0.21	0.73	3.03	55	13.07	99	78	42	0	2	1	1
TX	ABILENE	80	51	86	31	65	4	0.00	-0.33	0.00	0.48	29	1.62	43	66	37	0	1	0	0
	AMARILLO	73	40	86	23	57	5	0.00	-0.28	0.00	0.88	66	1.12	45	56	18	0	1	0	0
	AUSTIN	78	50	84	31	64	-1	0.01	-0.40	0.01	0.56	23	6.12	97	82	46	0	1	1	0
	BEAUMONT	75	55	81	36	65	-1	0.00	-0.86	0.00	1.99	46	9.41	70	95	54	0	0	0	0
	BROWNSVILLE	79	59	86	43	69	-3	0.00	-0.33	0.00	0.56	47	1.82	49	90	49	0	0	0	0
	CORPUS CHRISTI	78	56	82	36	67	-2	0.00	-0.37	0.00	1.29	65	3.65	67	90	54	0	0	0	0
	DEL RIO	84	53	92	31	68	0	0.02	-0.25	0.02	0.71	61	1.48	55	76	41	2	1	1	0
	EL PASO	76	45	85	31	61	0	0.00	-0.03	0.00	0.18	64	1.55	138	41	16	0	2	0	0
	FORT WORTH	76	51	81	34	64	3	0.68	0.10	0.55	1.53	44	4.84	63	82	42	0	0	2	1
	GALVESTON	72	60	77	48	66	-1	0.00	-0.60	0.00	0.65	20	3.54	36	93	66	0	0	0	0
	HOUSTON	76	55	85	36	66	0	0.00	-0.79	0.00	2.07	53	8.24	78	91	49	0	0	0	0
	LUBBOCK	78	43	90	29	61	5	0.00	-0.21	0.00	0.25	27	0.35	17	56	23	1	1	0	0
	MIDLAND	82	46	88	33	64	4	0.00	-0.06	0.00	0.17	37	1.17	75	42	23	0	0	0	0
	SAN ANGELO	82	47	88	27	64	3	0.00	-0.22	0.00	1.25	109	3.14	100	70	39	0	1	0	0
	SAN ANTONIO	78	53	84	30	66	0	0.00	-0.44	0.00	0.77	35	3.91	70	85	43	0	1	0	0
	VICTORIA	76	55	81	33	66	-1	0.00	-0.54	0.00	1.10	42	4.80	67	92	54	0	0	0	0
	WACO	79	52	85	29	66	4	0.00	-0.50	0.00	1.38	49	4.53	63	84	54	0	1	0	0
	WICHITA FALLS	78	47	87	32	63	4	0.09	-0.44	0.08	0.52	20	1.43	27	77	48	0	1	2	0
UT	SALT LAKE CITY	57	37	73	27	47	0	0.50	0.09	0.23	1.89	86	3.58	73	69	37	0	4	3	0
VT	BURLINGTON	34	23	44	15	29	-9	0.61	0.00	0.27	2.43	88	4.40	66	92	55	0	7	4	0
VA	LYNCHBURG	70	42	84	29	56	5	1.09	0.30	1.03	4.23	96	11.50	104	74	34	0	3	2	1
	NORFOLK	73	46	82	35	59	6	0.58	-0.25	0.47	3.02	65	10.59	89	76	44	0	0	2	0
	RICHMOND	70	43	85	30	57	4	1.23	0.44	1.18	5.97	128	12.35	110	79	55	0	1	3	1
	ROANOKE	68	45	83	28	57	5	1.11	0.29	0.94	3.69	83	10.94	102	70	51	0	3	2	1
	WASH/DULLES	64	37	81	27	51	2	0.68	-0.07	0.65	3.74	92	11.56	117	92	63	0	3	2	1
WA	OLYMPIA	52	36	69	29	44	-1	1.37	0.36	0.54	9.01	150	20.79	105	95	73	0	2	6	1
	QUILLAYUTE	47	36	57	29	42	-3	3.14	1.12	0.93	16.99	137	34.18	89	99	83	0	1	7	4
	SEATTLE-TACOMA	52	39	66	34	46	-2	0.91	0.19	0.26	7.13	167	16.88	124	96	73	0	0	6	0
	SPOKANE	51	34	66	28	43	0	0.41	0.13	0.33	2.52	146	6.43	127	87	52	0	4	4	0
	YAKIMA	59	34	78	21	46	0	0.00	-0.14	0.00	0.36	45	2.84	103	74	43	0	3	0	0
WV	BECKLEY	61	37	77	20	49	2	0.71	-0.03	0.44	1.72	41	8.57	83	80	59	0	3	3	0
	CHARLESTON	66	43	81	28	54	4	0.40	-0.36	0.20	1.98	45	11.25	103	81	45	0	2	3	0
	ELKINS	61	32	78	22	46	1	1.14	0.34	0.84	2.65	59	9.22	83	94	44	0	3	5	1
	HUNTINGTON	67	45	81	29	56	5	0.46	-0.30	0.36	1.87	43	9.06	85	64	33	0	2	3	0
WI	EAU CLAIRE	44	25	64	17	34	-4	0.29	-0.31	0.21	2.31	100	3.27	79	89	47	0	6	3	0
	GREEN BAY	37	25	51	18	31	-7	0.09	-0.50	0.05	2.41	97	3.56	76	95	75	0	7	3	0
	LA CROSSE	47	28	74	20	37	-5	0.11	-0.59	0.11	2.57	102	3.66	78	86	49	0	5	1	0
	MADISON	46	26	74	17	36	-4	0.39	-0.33	0.27	2.09	75	2.94	55	89	61	0	5	3	0
	MILWAUKEE	43	29	66	22	36	-4	0.70	-0.13	0.64	2.29	72	3.08	46	90	72	0	4	3	1
WY	CASPER	57	27	71	14	42	3	0.00	-0.22	0.00	0.97	92	1.59	70	78	33	0	5	0	0
	CHEYENNE	54	32	70	21	43	5	0.03	-0.24	0.03	0.72	58	1.01	47	60	33	0	4	1	0
	LANDER	55	31	68	19	43	3	0.00	-0.37	0.00	0.95	63	2.36	92	61	34	0	4	0	0
	SHERIDAN	59	32	70	18	45	5	0.09	-0.22	0.09	1.44	117	2.61	102	73	38	0	3	1	0

March Weather and Crop Summary

Weather

Weather summary provided by USDA/WAOB

Stormy weather across much of the West boosted soil moisture reserves and improved high-elevation snowpacks. Perhaps most noteworthy was the tremendous, but fairly localized, storm system that struck the central Rockies and adjacent High Plains from March 17-19. Nevertheless, Western water-supply concerns persisted due to the combination of near- to below-normal reservoir levels and prospects for below-normal spring and summer runoff in most watersheds. Farther east, a variety of conditions existed on the Plains. In winter wheat areas on the southern Plains, short-term precipitation deficits (3 months or less) were superimposed on mostly favorable long-term moisture conditions. As a result, topsoil moisture depletion was apparent in parts of northern Texas and western and central Oklahoma, although subsoil moisture remained generally adequate. Meanwhile, long-term drought persisted on the northern and central High Plains, despite near- to above-normal precipitation during March. Similar variability was noted in the Midwest. Drier-than-normal weather in the Ohio Valley followed previously wet conditions, while late-month precipitation elsewhere in the Corn Belt moistened topsoils but failed to reverse long-term precipitation deficits. By month's end, Midwestern drought was most severe in a band from northern Missouri and southern Iowa to Lower Michigan, but was also worsening across parts of the upper Midwest. Farther south, drier-than-normal weather favored an acceleration of spring planting operations from the western Gulf Coast region to Tennessee Valley, including the Delta. In contrast, frequently heavy showers slowed fieldwork and caused lowland flooding in the southern Atlantic States.

Significantly cooler-than-normal March weather (as much as 7°F below normal) was confined to the Nation's northern tier from Montana to Maine. In contrast, monthly temperatures generally ranged from 3 to 7°F above normal in Florida, where near-record to record warmth prevailed. Elsewhere, March temperatures were slightly above normal in the Southeast and in a broad area from the West Coast to the central High Plains, but near to slightly below normal from the Southwest to the Delta.

March is typically the wettest month of the year across parts of the interior Southeast, but this year's March rainfall was well below normal. In northern Alabama, Huntsville's monthly total of 1.84 inches was only 28 percent of normal and represented the fourth-lowest March total in the last 110 years. Elsewhere, monthly precipitation totaled only 1.39 inches (30 percent of normal) in London, KY, barely exceeding their March 1969 record low of 1.27 inches. Drier-than-normal weather also prevailed during March across the majority of the southern Plains, upper Midwest, and western Corn Belt. Among the locations reporting monthly totals ranging from 10 to 20 percent of normal were Wichita Falls, TX (0.43 inch), Kearney, NE (0.27 inch), and Sioux Falls, SD (0.22 inch). In the core belt of Midwestern drought, 5-month (November-March) precipitation totals were as low as 3.58 inches (33 percent of normal) in Moline, IL, and 4.03 inches (38 percent) in Burlington, IA.

In contrast, persistently showery weather affected the Northwest. Although March daily totals were all less than 1 inch in Portland, Oregon, the lower Columbia River city noted measurable rainfall on 16 consecutive days from March 12-27 and received at least 0.01 inch on 27 different days during the month, breaking its March 1961 record of 25 days. Northwestern monthly rainfall totals included 13.45 inches (182 percent of normal) in Astoria, OR, 6.49 inches (173 percent) in Seattle, WA, and 5.75 inches (155 percent) in Portland. Farther south, however, a warmer-and-drier-than-normal March capped a disappointing wet season in the Sierra Nevada. According to the California Department of Water Resources, the average water equivalent of the Sierra Nevada snowpack stood at 20 inches (about 70 percent of normal) on April 1, the typical date of peak accumulations. The snowpack's water equivalent had opened the month at 21 inches (82 percent of the March 1 normal) and had been 22 inches as late as March 27, but late-month warmth caused some melting.

Some locations on the Plains also received above-normal March precipitation, largely due to heavy rain or snow during the passage of the March 17-19 storm system. Williston, ND, measured 1.84 inches (249 percent of normal) for its fifth-wettest March on record, aided by a March-record daily total of 1.39 inches on the 17th. The same storm system deposited 31.8 inches of snow (2.80 inches of liquid equivalent) on Denver, CO, from March 17-19, ending the city's streak of below-normal monthly precipitation totals at 19 months (August 2001 - February 2003). The storm also propelled Denver to its snowiest March on record (35.2 inches, surpassing the March 1944 standard of 32.5 inches) and snowiest month since 42.6 inches fell in November 1946. Meanwhile in Kansas, all but 0.02 inch of Wichita's 3.53-inch monthly total (130 percent of normal) fell from March 17-19. Earlier in its life span, the same storm system had produced the second-highest daily rainfall during March in downtown Los Angeles. On March 15, Los Angeles' 4.10-inch sum exceeded its monthly normal of 3.14 inches, was its wettest day since 5.71 inches fell on January 26, 1956, and was its wettest March day behind a 5.88-inch total on March 2, 1938.

Wetness was much more persistent in the southern Atlantic region, where a few locations netted more than 10 inches of rain during March. Monthly totals ranged from 200 to 300 percent of normal in locations such as Jacksonville, FL (10.73 inches), Orangeburg, SC (10.48 inches), and Savannah, GA (7.84 inches). For Jacksonville, it was the second-wettest March on record behind 12.52 inches in 1948. Unusual warmth accompanied the wet weather in the southern Atlantic States, boosting monthly temperatures 2 to 6°F above normal. With an average temperature of 77.8°F (4.0°F above normal), Key West, FL, marked its warmest March since 1948 and second-warmest March on record. Elsewhere in Florida, it was also the second-warmest March in locations such as Sarasota-Bradenton (71.9°F, or 4.7°F above normal) and Fort Myers (74.8°F, or 4.9°F above normal), behind the 1997 records of 72.6 and 75.9°F, respectively. Record-setting, early-season heat gripped southeastern Florida, where Miami set or tied 15 daily-record highs from March 1-23. Among the records were Miami's earliest maximum temperature of 90°F or higher (90°F on March

2, breaking the 1964 mark by 3 days), and its highest March temperature (93°F on March 22, edging the standard of 92°F most recently attained on March 22, 1977). With an average temperature of 78.7°F (6.3°F above normal), Miami was one of several southern Florida cities posting their warmest March on record.

Cold weather was especially severe across the North during the first half of the month. Williston, ND, collected five daily-record minima during the first 8 days of March, including lows of -30°F on March 2, 5, and 8. Elsewhere in North Dakota, highs failed to reach 0°F on March 8 in locations such as Fargo (-1°F) and Devils Lake (-4°F). Farther east, March 3 highlights included a low of -31°F on Mt. Mansfield (Vermont's highest peak) and a March-record low of -30°F in Marquette, MI (previously, -27°F on March 1, 1962). Unofficially, Ewen, MI, on the western part of the Upper Peninsula, noted a March 3 low of -42°F. In contrast, late-month warmth in the West resulted in several monthly record highs, including 78°F (on March 30) in Eugene, OR, and 82°F (also on March 30) in Whitman Mission, WA. It was also the earliest 80-degree warmth in several locations, including Whitman Mission (previously, 82°F on April 3, 1992).

The Hawaiian Islands' rain-bearing trade winds were unusually weak during March, leaving many windward locations abnormally dry. Aside from heavy showers across the western islands on March 6, a relatively quiet weather pattern was broken only by the late-month passage of a cold front, followed by the approach of an upper-level disturbance. Relative to normal, conditions were driest on the Big Island, where Hilo (1.50 inches, or 10 percent of normal) had its lowest March rainfall since only 0.88 inch fell in 1972. In contrast, monthly rainfall totaled 7.07 inches (197 percent of normal) in Lihue, Kauai, aided by a 2.64-inch sum on March 6. Elsewhere on Kauai, a few northern and central locations noted more than 5 inches of rain on March 30-31.

In a change from persistently warmer-than-normal weather from September to February, Alaskan temperatures were mostly near normal to as much as 4°F below normal during March. Above-normal March temperatures were confined to the Arctic region, where Barrow's readings averaged -10.7°F (3.0°F above normal). Significant precipitation was largely confined to southern and western Alaska, where some heavy snow was reported. Monthly snowfall reached 36.8 inches in Kodiak and 18.3 inches in Juneau. Inland, however, precipitation totaled only 0.15 inch (19 percent of normal) in King Salmon and 0.02 inch (7 percent) in Fairbanks.

Fieldwork

Fieldwork summary provided by USDA/NASS

Temperatures fluctuated across the Nation during March, with record highs and lows. Temperatures in the northern Rockies, northern Great Plains, Great Lakes region, and Northeast were generally below normal, while temperatures in the rest of the country ranged from near to slightly above normal. Periods of

warmer-than-usual weather across much of the country were followed by ice storms in the southern Great Plains, and snow storms in the Rockies, Great Plains, Ohio Valley, and Northeast. Seasonally heavy precipitation in the low, coastal areas of the Pacific Northwest alleviated dry soil conditions. Abnormally dry soil conditions remained across much of the Southwest, Rocky Mountains, and Great Plains regions. Snowpack measurements were below normal in most locations, even though a significant mid-March storm greatly increased snowpack measurements in the central Rocky Mountains.

The northern and central Great Plains, upper and middle Mississippi Valley, and western Great Lakes experienced drier-than-normal conditions with little snow cover. Due to the lack of snow cover, winter wheat and alfalfa in the northern and central Great Plains were exposed to wind-blown soil and extreme temperature fluctuations. In the Corn Belt, conditions were warmer than average. Precipitation was below normal across most of the Corn Belt, the Ohio Valley, and eastern Great Lakes. Precipitation was above normal in Florida and the Southeast.

In California, warm weather and ample moisture supplies stimulated development of winter crops. Field and orchard work progressed with few interruptions. Pastures were in good overall condition, with the best conditions reported in the northern half of the State. Many Florida citrus growers irrigated on a rotating basis to maintain soil moisture and ensure good tree condition during the bloom cycle. Soil moisture supplies were rated short to mostly adequate. In southern Florida, the sugarcane harvest and work in vegetable fields continued with few delays.

The Nation's winter wheat condition was rated as 3 percent very poor, 11 percent poor, 35 percent fair, 43 percent good, and 8 percent excellent on March 30. Warmer weather and rain showers combined to help the wheat crop begin its spring greening in the middle Mississippi Valley. Warm weather in the northern Great Plains allowed the crop to progress ahead of last year's pace.

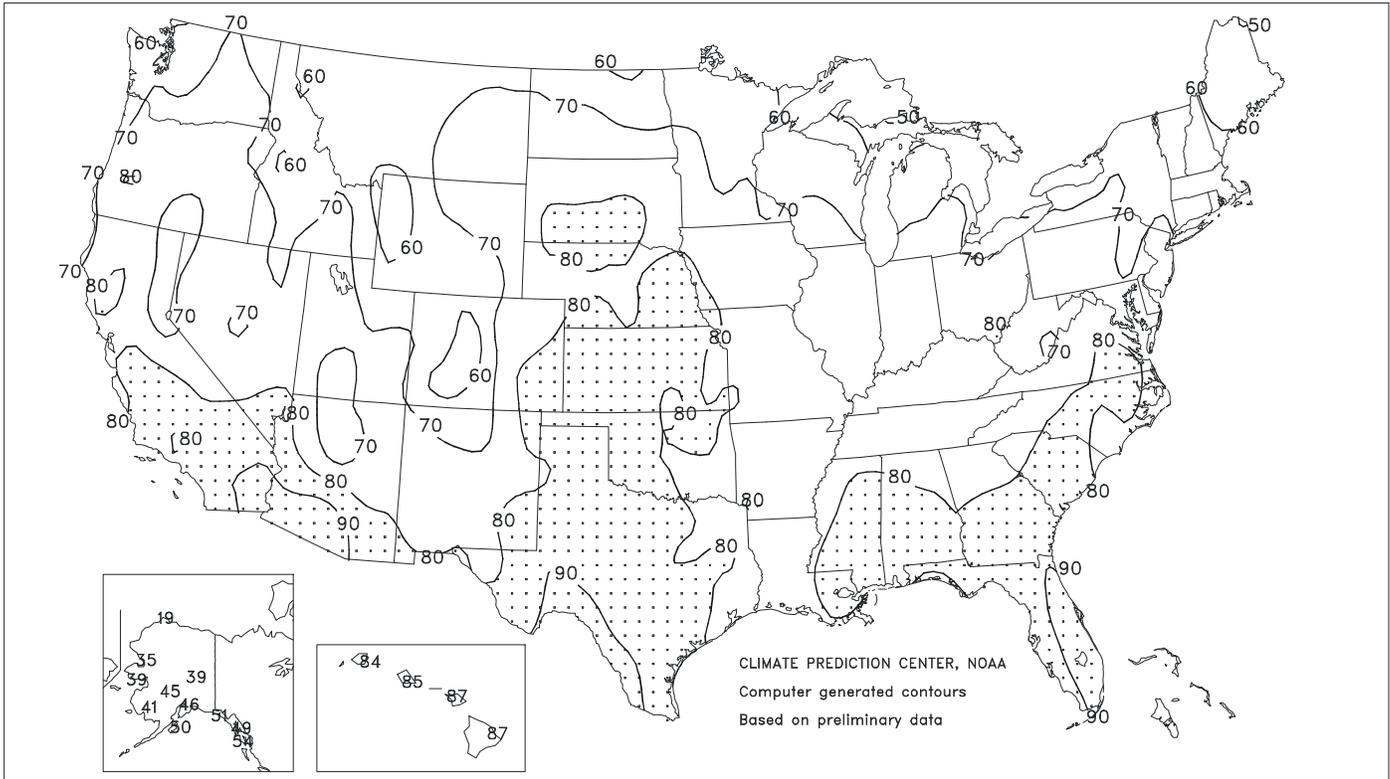
On March 30, one percent of the oat crop was planted, compared with 3 percent planted at this time last year and behind the 4 percent 5-year average. Dry weather favored seedbed preparation across the northern Corn Belt and adjacent parts of the Great Plains, but planting was just getting underway.

Seven percent of the rice crop was planted by the end of March, 1 percentage point behind last year and equal to the 5-year average. Rice planting progressed in Louisiana, advancing 16 points during the last week of March. Despite this progress, planting remained behind last year and the 5-year average. Wet weather delayed planting in interior areas of the Mississippi Delta. Planting progressed in Texas, but wet field conditions delayed some producers.

Ten percent of the sorghum acreage was planted, compared with 12 percent at this time last year and 1 percentage point behind the average for this date. In Texas, land preparations continued in drier locations but were slowed in areas with rain. Early-planted fields continued to emerge and benefit from good moisture levels.

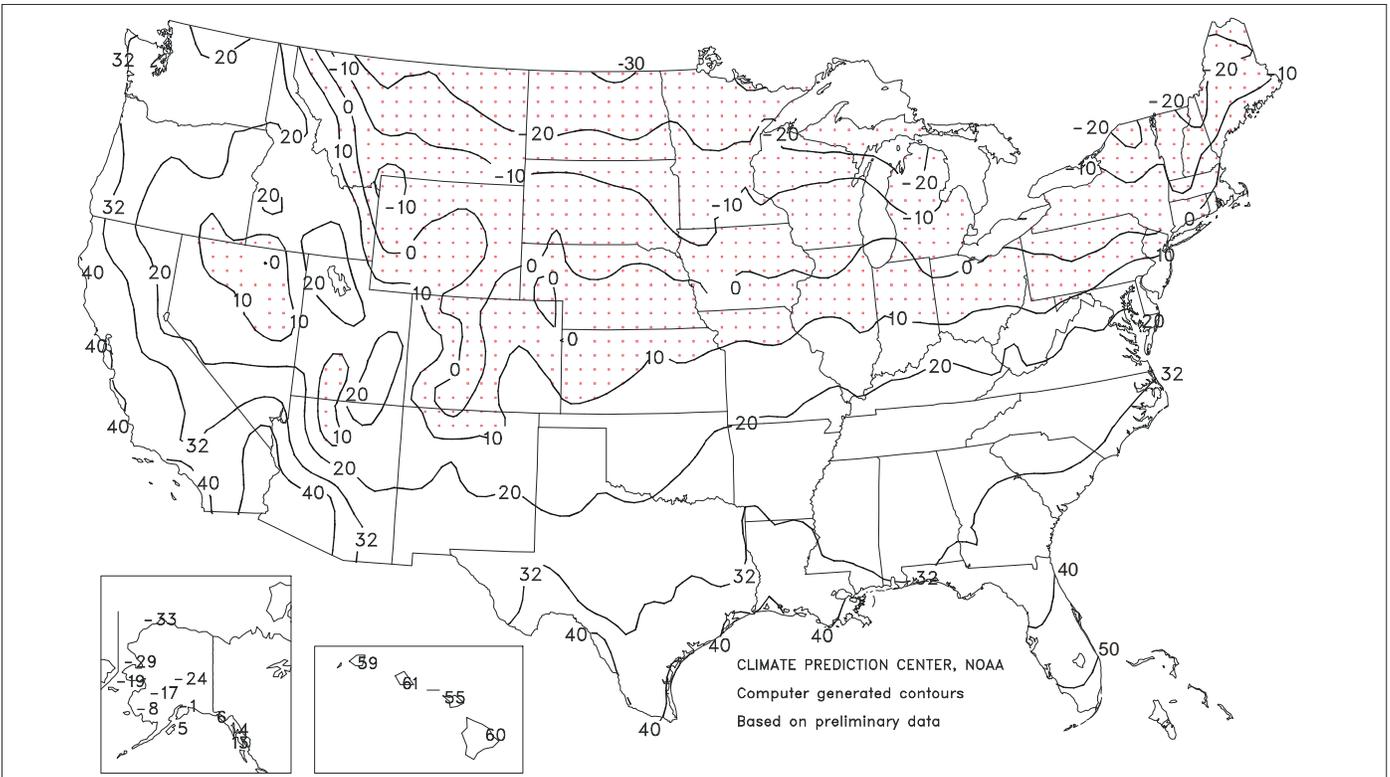
Extreme Maximum Temperature (°F)

March 2003



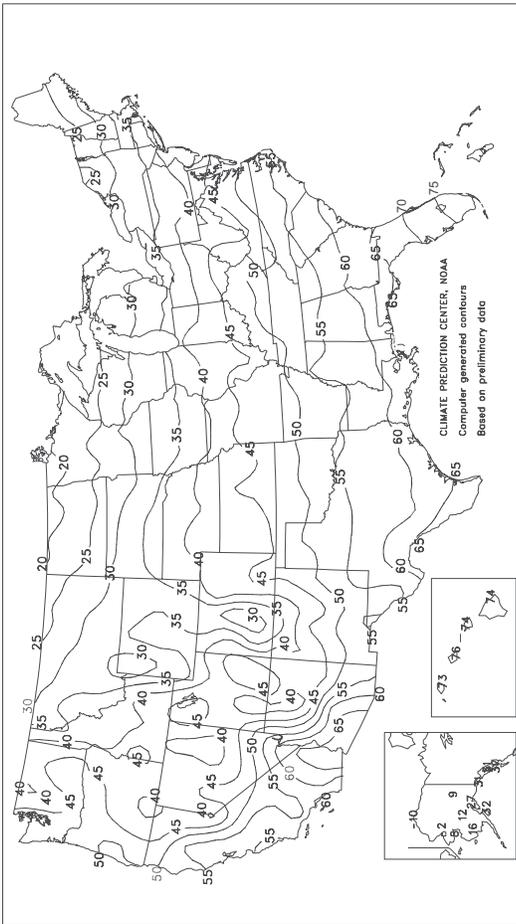
Extreme Minimum Temperature (°F)

March 2003



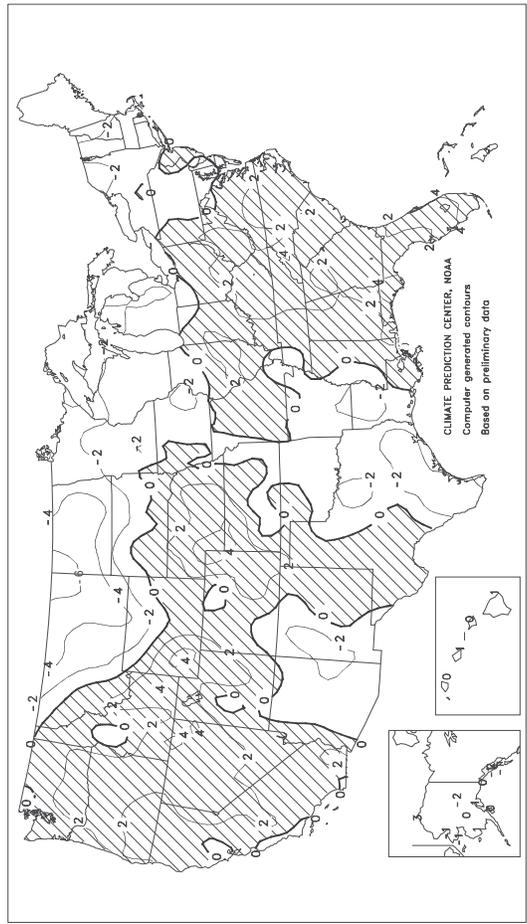
Average Temperature (°F)

March 2003



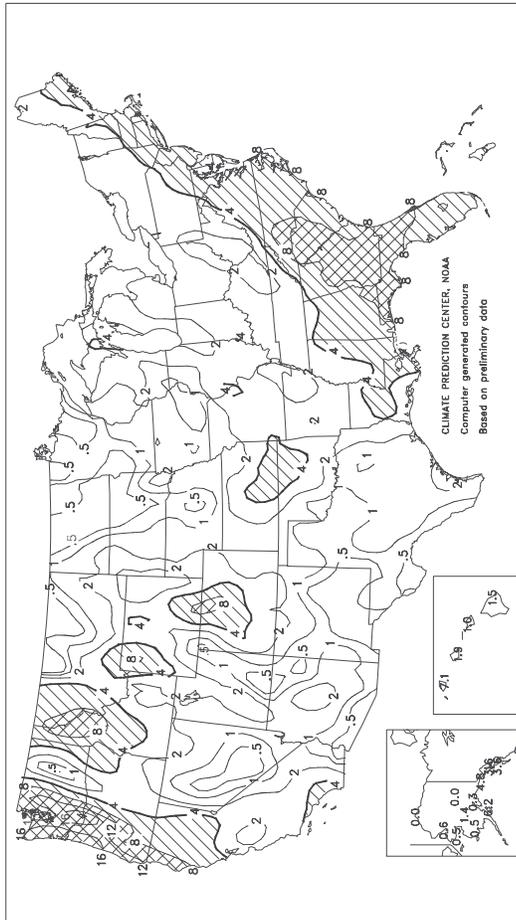
Departure of Average Temperature from Normal (°F)

March 2003



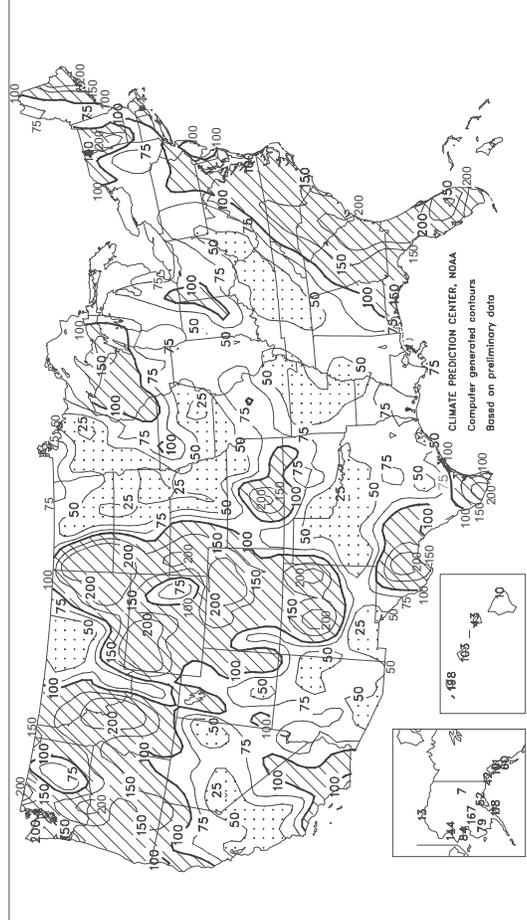
Total Precipitation (inches)

March 2003



Percent of Normal Precipitation

March 2003



TEMPERATURE AND PRECIPITATION SUMMARY

March 2003

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	57	2	4.29	-1.81	LEXINGTON	48	2	2.44	-1.97	COLUMBUS	43	1	2.22	-0.67
AL HUNTSVILLE	54	2	1.84	-4.84	LA LONDON-CORBIN	50	3	1.39	-3.22	DAYTON	42	2	2.65	-0.64
AL MOBILE	62	2	4.30	-2.90	LA LOUISVILLE	49	2	2.04	-2.37	MANSFIELD	40	3	2.67	-0.69
AL MONTGOMERY	60	2	3.78	-2.61	LA PADUCAH	48	0	1.95	-2.32	TOLEDO	36	-1	2.12	-0.50
AK ANCHORAGE	27	1	0.34	-0.31	LA BATON ROUGE	61	1	2.14	-2.93	YOUNGSTOWN	38	1	2.37	-0.68
AK BARROW	-10	4	0.01	-0.08	LA LAKE CHARLES	61	0	3.76	0.22	OK OKLAHOMA CITY	49	-2	2.30	-0.60
AK COLD BAY	30	0	2.23	-0.25	LA NEW ORLEANS	63	1	4.46	-0.78	OK TULSA	50	-1	3.25	-0.32
AK FAIRBANKS	9	-2	0.02	-0.26	ME SHREVEPORT	56	-2	2.19	-1.99	OR ASTORIA	48	2	13.45	6.08
AK JUNEAU	31	-3	3.56	0.05	ME BANGOR	28	-3	4.08	0.64	BURNS	40	3	1.47	0.23
AK KING SALMON	20	-4	0.15	-0.64	ME CARIBOU	21	-4	2.51	-0.06	EUGENE	49	3	5.68	-0.12
AK KODIAK	32	-1	6.15	0.93	ME PORTLAND	31	-3	3.65	-0.49	MEDFORD	49	2	2.52	0.67
AK NOME	8	-1	0.50	-0.10	MD BALTIMORE	44	0	4.17	0.24	PENDELTON	49	4	1.53	0.27
AZ FLAGSTAFF	37	0	1.13	-1.49	MA BOSTON	38	-1	4.00	0.15	PORTLAND	49	2	5.75	2.04
AZ PHOENIX	65	2	0.51	-0.56	MA WORCESTER	35	1	4.06	-0.17	SALEM	49	2	4.79	0.62
AZ TUCSON	60	1	0.51	-0.30	MI ALPENA	27	-1	1.61	-0.52	PA ALLENTOWN	40	1	3.62	0.06
AR FORT SMITH	52	-1	1.99	-1.95	MI DETROIT	35	-2	1.46	-1.06	ERIE	36	-1	2.95	-0.18
AR LITTLE ROCK	52	-1	1.79	-3.09	MI FLINT	33	-1	1.71	-0.51	MIDDLETOWN	40	-1	4.41	1.13
CA BAKERSFIELD	58	1	0.37	-1.04	MI GRAND RAPIDS	33	-2	1.58	-1.01	PHILADELPHIA	45	2	4.09	0.28
CA EUREKA	50	1	4.91	-0.64	MI HOUGHTON LAKE	28	-1	0.83	-1.22	PITTSBURGH	41	1	1.53	-1.64
CA FRESNO	58	2	0.63	-1.57	MI LANSING	32	-2	1.57	-0.76	WILKES-BARRE	37	-1	1.86	-0.83
CA LOS ANGELES	59	1	1.79	-0.61	MI MUSKEGON	33	-1	1.48	-0.88	WILLIAMSPORT	37	-1	3.12	-0.09
CA REDDING	54	1	3.79	-1.36	MI TRAVERSE CITY	28	-3	1.68	-0.30	PR SAN JUAN	80	2	1.48	-0.66
CA SACRAMENTO	56	1	1.88	-0.92	MN DULUTH	23	-2	1.03	-0.66	RI PROVIDENCE	38	-1	5.18	0.75
CA SAN DIEGO	60	0	1.36	-0.90	MN INT'L FALLS	21	-3	0.51	-0.45	SC CHARLESTON	61	3	7.22	3.22
CA SAN FRANCISCO	56	2	1.17	-2.09	MN MINNEAPOLIS	31	-1	1.44	-0.42	COLUMBIA	58	3	7.43	2.84
CA STOCKTON	56	1	1.12	-1.16	MT ROCHESTER	31	0	2.28	0.40	FLORENCE	57	1	5.13	1.13
CO ALAMOSA	34	1	0.51	0.05	MT ST. CLOUD	27	-1	1.47	-0.03	GREENVILLE	55	3	6.73	1.42
CO CO SPRINGS	41	3	1.02	-0.04	MS JACKSON	57	0	4.06	-1.68	MYRTLE BEACH	58	3	7.50	3.71
CO DENVER	40	2	3.05	2.16	MS MERIDIAN	58	1	3.74	-3.19	SD ABERDEEN	28	-3	0.57	-0.77
CO GRAND JUNCTION	45	2	0.74	-0.26	MO TUPELO	54	1	2.86	-3.44	HURON	32	-1	0.27	-1.40
CO PUEBLO	46	4	0.81	-0.16	MO COLUMBIA	45	1	2.82	-0.39	RAPID CITY	35	0	1.05	0.02
CT BRIDGEPORT	38	-2	4.13	-0.02	MO JOPLIN	49	1	2.97	-0.65	SIoux FALLS	33	0	0.22	-1.59
CT HARTFORD	37	-1	3.68	-0.20	MO KANSAS CITY	44	0	1.27	-1.17	TN BRISTOL	50	3	2.86	-1.05
DC WASHINGTON	47	0	4.20	0.60	MO SPRINGFIELD	46	0	2.85	-0.97	CHATTANOOGA	54	3	3.56	-2.63
DE WILMINGTON	43	0	4.77	0.80	MO ST JOSEPH	42	-2	0.58	-1.78	JACKSON	51	0	3.36	-1.77
FL DAYTONA BEACH	69	4	10.57	6.73	MO ST LOUIS	47	1	2.80	-0.80	KNOXVILLE	53	3	2.07	-3.10
FL FT LAUDERDALE	77	6	4.23	1.43	MT BILLINGS	34	-3	0.83	-0.29	MEMPHIS	54	1	2.95	-2.63
FL FT MYERS	75	5	3.46	0.72	MT BUTTE	32	2	0.38	-0.45	NASHVILLE	52	2	2.30	-2.57
FL JACKSONVILLE	65	3	10.73	6.80	MT GLASGOW	26	-5	0.44	-0.03	TX ABILENE	56	0	0.48	-0.93
FL KEY WEST	78	4	3.11	1.25	MT GREAT FALLS	31	-2	0.49	-0.52	AMARILLO	48	0	0.88	-0.25
FL MELBOURNE	72	6	3.06	0.14	MT HELENA	34	-1	0.75	0.12	AUSTIN	57	-5	0.55	-1.59
FL MIAMI	79	7	3.89	1.33	MT KALISPELL	35	0	1.55	0.44	BEAUMONT	62	0	1.99	-1.76
FL ORLANDO	72	5	5.28	1.74	MT MILES CITY	29	-6	1.18	0.60	BROWNSVILLE	68	-1	0.56	-0.37
FL PENSACOLA	63	2	6.81	0.41	MT MISSOULA	38	0	1.69	0.73	COLLEGE STATION	59	-3	1.72	-1.12
FL ST PETERSBURG	72	5	4.15	0.86	NE GRAND ISLAND	41	3	0.57	-1.47	CORPUS CHRISTI	64	-2	1.29	-0.44
FL TALLAHASSEE	65	4	6.85	0.38	NE HASTINGS	42	3	0.51	-1.57	DALLAS/F WORTH	56	-1	0.85	-2.21
FL TAMPA	72	5	3.94	1.10	NE LINCOLN	40	1	0.84	-1.37	DEL RIO	65	1	0.69	-0.27
FL WEST PALM BEACH	77	6	7.09	3.41	NE MCCOOK	43	3	1.36	-0.05	EL PASO	56	-1	0.18	-0.08
GA ATHENS	55	2	5.68	0.69	NE NORFOLK	39	2	0.70	-1.27	GALVESTON	62	-2	0.65	-2.11
GA ATLANTA	56	2	7.09	1.71	NE NORTH PLATTE	40	2	1.28	0.04	HOUSTON	61	-1	2.07	-1.29
GA AUGUSTA	58	2	7.03	2.42	NE OMAHA/EPPLEY	40	1	0.50	-1.63	LUBBOCK	53	2	0.25	-0.51
GA COLUMBUS	60	2	5.88	0.13	NE SCOTTSBLUFF	39	2	1.32	0.16	MIDLAND	57	1	0.17	-0.25
GA MACON	59	3	8.11	3.22	NE VALENTINE	36	1	1.17	0.06	SAN ANGELO	58	1	1.25	0.26
GA SAVANNAH	62	3	7.87	4.23	NV ELKO	40	1	0.48	-0.50	SAN ANTONIO	61	-1	0.77	-1.12
HI HILO	74	2	1.50	-12.8	NV ELY	37	1	0.41	-0.64	VICTORIA	62	-2	1.10	-1.15
HI HONOLULU	76	2	1.95	0.06	NV LAS VEGAS	60	2	0.33	-0.26	WACO	58	0	1.38	-1.10
HI KAHULUI	74	1	1.02	-1.33	NV RENO	47	4	0.31	-0.55	WICHITA FALLS	53	-1	0.43	-1.84
HI LIHUE	73	0	7.07	3.49	NH WINNEMUCCA	43	2	0.63	-0.23	UT SALT LAKE CITY	45	2	1.39	-0.52
ID BOISE	47	3	1.49	0.08	NH CONCORD	31	-2	3.16	0.12	VT BURLINGTON	30	-1	2.06	-0.26
ID LEWISTON	46	1	2.17	1.05	NJ ATLANTIC CITY	42	0	3.97	-0.09	VA LYNCHBURG	49	3	4.17	0.34
ID POCATELLO	41	3	0.57	-0.81	NJ NEWARK	43	1	3.98	-0.23	NORFOLK	51	2	2.91	-1.17
IL CHICAGO/O'HARE	37	0	1.82	-0.83	NM ALBUQUERQUE	48	0	1.45	0.84	RICHMOND	49	1	5.92	1.83
IL MOLINE	37	-2	1.72	-1.20	NY ALBANY	34	-1	2.26	-0.84	ROANOKE	49	2	3.52	-0.32
IL PEORIA	40	0	1.97	-0.86	NY BINGHAMTON	32	-1	2.30	-0.67	WASH/DULLES	44	1	3.71	0.16
IL ROCKFORD	35	-1	1.45	-0.94	NY BUFFALO	33	-1	2.81	-0.18	WA OLYMPIA	46	2	7.72	2.43
IL SPRINGFIELD	43	1	1.79	-1.36	NY ROCHESTER	34	0	1.95	-0.63	QUILLAYUTE	45	1	14.57	3.59
IN EVANSVILLE	47	1	2.60	-1.69	NY SYRACUSE	34	0	2.89	-0.13	SEATTLE-TACOMA	47	1	6.49	2.74
IN FORT WAYNE	37	-1	2.43	-0.43	NC ASHEVILLE	50	4	4.34	-0.25	SPOKANE	41	1	2.13	0.60
IN INDIANAPOLIS	43	1	3.72	0.28	NC CHARLOTTE	54	1	7.06	2.67	YAKIMA	46	4	0.36	-0.34
IN SOUTH BEND	38	0	1.52	-1.37	NC GREENSBORO	53	4	6.71	2.86	WV BECKLEY	45	3	1.45	-2.18
IA BURLINGTON	39	-1	1.32	-1.64	NC HATTERAS	55	3	5.92	0.97	CHARLESTON	48	3	1.78	-2.12
IA CEDAR RAPIDS	35	-2	0.52	-1.71	NC RALEIGH	53	2	5.24	1.21	ELKINS	42	2	2.38	-1.54
IA DES MOINES	38	0	0.96	-1.25	NC WILMINGTON	58	3	5.34	1.12	HUNTINGTON	49	3	1.49	-2.34
IA DUBUQUE	34	-1	0.90	-1.67	ND BISMARCK	25	-5	0.43	-0.42	WI EAU CLAIRE	31	0	2.05	0.19
IA SIOUX CITY	37	0	1.67	-0.33	ND DICKINSON	25	-5	2.03	1.34	GREEN BAY	30	-1	2.32	0.26
IA WATERLOO	35	0	1.44	-0.69	ND FARGO	25	-2	0.63	-0.54	LA CROSSE	33	-2	2.46	0.46
KS CONCORDIA	44	2	2.02	-0.33	ND GRAND FORKS	21	-5	0.47	-0.42	MADISON	32	-2	1.72	-0.56
KS DODGE CITY	44	0	2.31	0.47	ND JAMESTOWN	23	-5	0.21	-0.68	MILWAUKEE	34	-1	1.64	-0.95
KS GOODLAND	43	3	1.22	0.02	ND MINOT	23	-5	0.25	-0.80	WAUSAU	29	-1	1.81	-0.11
KS HILL CITY	43	4	1.22	-0.32	ND WILLISTON	22	-7	1.84	1.10	WY CASPER	36	1	0.97	0.07
KS TOPEKA	44	0	0.86	-1.70	OH AKRON-CANTON	39	1	2.77	-0.38	CHEYENNE	38	4	0.69	-0.36
KS WICHITA	46	0	3.53	0.82	OH CINCINNATI	45	1	2.53	-1.37	LANDER	37	2	0.95	-0.29
KY JACKSON	51	4	1.47	-2.91	OH CLEVELAND	38	0	2.33	-0.61	SHERIDAN	32	-3	1.35	0.35

Based on 1971-2000 normals.

*** Not Available.

National Agricultural Summary

March 31 - April 6, 2003

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

Field tillage and seedbed preparations gained momentum across the Nation, as dry weather dominated most of the week. Planting also gained momentum, but progress was mostly confined to parts of the Southeast and Southwest. Growers planted corn and tobacco in the Southeast, although rain slowed activities after midweek. Planting continued in the southern Great Plains and began in the lower Mississippi Valley and along the southern edge of the Corn Belt, as above-normal temperatures prevailed and soils began to dry. Warm

weather, high winds, and lack of adequate moisture reduced soil moisture supplies in the southern Great Plains. Many areas continued to have snow on the ground in the northern Rockies, northern Great Plains, upper Mississippi Valley, and Great Lakes region. The surface soil thawed, but frost remained in the subsurface soil. The weather was dry and hot in Florida's citrus belt. Growers and caretakers irrigated to maintain good tree condition. Generally, groves, trees, and fruit remaining for harvest were in very good condition.

Winter Wheat: The Nation's winter wheat condition was rated as 3 percent very poor, 11 percent poor, 35 percent fair, 41 percent good, and 10 percent excellent. Twenty-six percent of Kansas wheat is jointed, compared with 13 percent last year and 27 percent for the 5-year average. Across the middle Mississippi and Ohio Valleys, wheat growth was slow earlier but greened rapidly during the last 2 weeks. Most fields on the central and northern Great Plains remained dormant or produced very little new growth due to low nighttime temperatures.

Cotton: Planting advanced to 5 percent complete, 1 percentage point behind last year but equal to the 5-year average. California cotton planting stopped temporarily in many areas as growers waited for better weather conditions. Preparation of a few cotton beds continued as field conditions allowed. Land preparation continued in the Texas Panhandle as producers pre-watered and applied herbicides. Planting was mostly completed in the Rio Grande Valley. High winds depleted topsoil moisture in some areas. Field preparations and planting were mostly stalled late in the week in the Southeast due to cool weather and wet soils.

Rice: Fifteen percent of the rice crop was planted, 2 percentage points ahead of last year and 3 points ahead of the 5-year average. The crop was 4-percent emerged, 2 points behind last year and 1 point behind the 5-year average. Louisiana rice producers continued planting, but high winds damaged rice and caused drift problems. Planting gained momentum in the interior Mississippi Delta. Planting continued in Texas as conditions improved. Some earlier planted fields began to emerge, but emergence lagged behind normal due to cool weather along the western Gulf Coast.

Sorghum: Twelve percent of the sorghum acreage was planted, compared with 14 percent at this time last year but 1 percentage point ahead of the 5-year average for this date. Most fields in the Rio Grande Valley emerged and benefited from good moisture levels. Planting began in the Delta, but cold weather and muddy fields limited progress.

Sugar beets: Planting was 7 percent complete in the four major sugar beet-producing States, 4 percentage points ahead of last year and 2 points ahead of the 5-year average. Planting accelerated in Idaho and progressed well ahead of normal. However, planting had not begun in Michigan, Minnesota, and North Dakota.

Small grains: The spring wheat crop was 5 percent planted, slightly ahead of last year's 2-percent pace and the 5-year average of 4 percent. The barley crop was 7 percent planted, 3 percentage points ahead of last year and 1 point ahead of the 5-year average. Eight percent of the oat crop was planted, the same as last year but behind the 5-year average of 10 percent.

Spring wheat and barley seeding in the Pacific Northwest progressed equal to or ahead of last year's pace. Small grains continued to be stressed from a lack of moisture in the Texas Panhandle. Oat planting was ahead of the 5-year average in Iowa but was behind average in most of the Corn Belt and Ohio Valley due to wet conditions. On the northern Great Plains, cold weather limited planting of small grains, although a few fields were seeded in Montana. Seed head development in California stands of wheat, barley, and oats was slowed by cool, rainy conditions.

Crop Progress and Condition

Week Ending April 6, 2003

Weekly U.S. Crop Progress and Condition Tables provided by USDA/NASS

Cotton Percent Planted				
	Apr 6 2003	Prev Week	Prev Year	5-Yr Avg
AL	2	NA	1	1
AZ	7	NA	18	15
AR	0	NA	0	0
CA	12	NA	13	13
GA	1	NA	3	2
LA	0	NA	0	0
MS	0	NA	0	0
MO	0	NA	0	0
NC	0	NA	0	0
OK	0	NA	0	0
SC	1	NA	0	1
TN	0	NA	0	0
TX	11	NA	11	10
VA	0	NA	0	0
14 Sts	5	NA	6	5
These 14 States planted 98% of last year's cotton acreage.				

Sorghum Percent Planted				
	Apr 6 2003	Prev Week	Prev Year	5-Yr Avg
AR	8	*3	3	6
CO	0	0	0	0
IL	0	0	0	0
KS	0	0	0	0
LA	2	0	3	2
MO	0	0	0	0
NE	0	0	0	0
NM	0	0	0	0
OK	0	0	0	0
SD	0	0	0	0
TX	33	29	39	37
11 Sts	12	10	14	13
These 11 States planted 97% of last year's sorghum acreage.				

Oats Percent Planted				
	Apr 6 2003	Prev Week	Prev Year	5-Yr Avg
IA	35	0	31	29
MN	0	0	4	5
NE	28	10	36	34
ND	0	0	0	0
OH	6	1	10	25
PA	10	2	16	14
SD	10	1	1	9
WI	2	0	1	7
8 Sts	8	1	8	10
These 8 States planted 53% of last year's oat acreage.				

Barley Percent Planted				
	Apr 6 2003	Prev Week	Prev Year	5-Yr Avg
ID	26	NA	9	15
MN	0	NA	0	1
MT	4	NA	3	4
ND	0	NA	0	0
WA	18	NA	18	25
5 Sts	7	NA	4	6
These 5 States planted 81% of last year's barley acreage.				

Spring Wheat Percent Planted				
	Apr 6 2003	Prev Week	Prev Year	5-Yr Avg
ID	31	NA	8	20
MN	0	NA	0	2
MT	1	NA	0	3
ND	1	NA	0	0
SD	11	NA	1	12
WA	39	NA	37	37
6 Sts	5	NA	2	4
These 6 States planted 99% of last year's spring wheat acreage.				

Rice Percent Planted				
	Apr 6 2003	Prev Week	Prev Year	5-Yr Avg
AR	9	2	1	2
CA	0	0	0	0
LA	43	23	51	47
MS	6	0	1	5
MO	0	0	0	0
TX	45	37	62	46
6 Sts	15	7	13	12
These 6 States planted 100% of last year's rice acreage.				

Rice Percent Emerged				
	Apr 6 2003	Prev Week	Prev Year	5-Yr Avg
AR	0	NA	0	0
CA	0	NA	0	0
LA	20	NA	24	24
MS	0	NA	0	1
MO	0	NA	0	0
TX	17	NA	31	22
6 Sts	4	NA	6	5
These 6 States planted 100% of last year's rice acreage.				

Sugar Beets Percent Planted				
	Apr 6 2003	Prev Week	Prev Year	5-Yr Avg
ID	39	NA	15	22
MI	0	NA	1	7
MN	0	NA	0	0
ND	0	NA	0	0
4 Sts	7	NA	3	5
These 4 States planted 81% of last year's sugar beet acreage.				

Winter Wheat Crop Condition by Percent					
	VP	P	F	G	EX
AR	0	10	30	49	11
CA	0	0	15	35	50
CO	7	11	38	40	4
ID	0	2	18	76	4
IL	0	2	22	54	22
IN	0	2	18	68	12
KS	4	14	42	33	7
MI	5	15	15	55	10
MO	1	3	39	46	11
MT	1	7	51	34	7
NE	6	18	42	33	1
NC	1	12	43	42	2
OH	1	3	18	57	21
OK	0	5	25	52	18
OR	0	17	62	19	2
SD	3	14	30	47	6
TX	8	15	34	34	9
WA	2	5	32	53	8
18 Sts	3	11	35	41	10
Prev Wk	3	11	35	43	8
Prev Yr	14	20	35	28	3

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

National crop conditions for selected States are weighted based upon the year 2002 planted acres.

State Agricultural Summaries

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

ALABAMA: Days suitable for fieldwork 6.2. Corn 33% planted, 31% 2002, 26% avg. Winter wheat 1% very poor, 3% poor, 31% fair, 53% good, 12% excellent. Pasture feed 1% very poor, 6% poor, 27% fair, 57% good, 9% excellent. Livestock condition 2% very poor, 7% poor, 24% fair, 63% good, and 4% excellent. Cotton planting is underway. Orchardists stayed on schedule with peach sprays. Freeze damage to peaches highly variable across varieties. A few pastures have been over grazed, frost burned pasture grasses slightly in some areas. Farmers are spreading lime, fertilizer, chicken litter. Activities: Ground preparation for planting, fertilizing, spraying pastures, general care of livestock, poultry, catfish.

ALASKA: DATA NOT AVAILABLE

ARIZONA: Temperatures for all stations were within 2° above or below normal for the week. Alfalfa conditions ranged from fair to mostly good. Sheep continued to graze on alfalfa fields for winter pasture. Small Grains emergence is virtually completed, while heading is underway. Range, Pasture feeds have improved due to the recent precipitation. There were 2 of the 17 reporting stations above normal percentage levels.

ARKANSAS: Days suitable for fieldwork 6. Soil 0% very short, 24% short, 65% adequate, 10% surplus. Sorghum 8% planted, 3% 2002, 6% 5 yr. avg. Corn 57% planted, 13% 2002, 32% 5 yr. avg. Soybeans 1% planted, 0% 2002, 0% 5 yr. avg. Cotton 0% planted, 0% 2002, 0% 5 yr. avg. Rice 9% planted, 1% 2002, 2% 5 yr. avg. Winter Wheat 0% headed, 0% 2002, 6% 5 yr. avg.; 0% very poor, 10% poor, 30% fair, 49% good, 11% excellent. Pasture, Range feed 1% very poor, 7% poor, 39% fair, 50% good, 3% excellent. Revisions: Corn 20% planted. FIELD CROPS: Considerable planting progress was made in the last week. In the eastern part of the state, row crops are being planted, fields are being prepped for cotton. Across the state, pastures, winter wheat are receiving fertilizer applications. Strip, leaf rust in nearby states has put wheat producers on watch with their crops. One county has reported both diseases in their wheat crops. Tomatoes are reported to be mostly planted, with only slight wind damage with last weekends storms. LIVESTOCK, PASTURE AND RANGE: Livestock were reported to be in generally good condition. Most producers halting hay feeding with adequate pasture growth available. Bangs vaccination, general cattle work is being done. A few cattle producers in Lafayette county lost cattle from anaplasmosis last week.

CALIFORNIA: Cotton planting stopped temporarily during the week in many areas, as growers waited for better weather conditions to resume planting. Preparations of a few cotton beds continued as field conditions allowed. Seed head development in stands of wheat, barley, oats were slowed by cool, rainy conditions. A small amount of lodging was reported in some wheat fields. Grain planted for hay or silage was cut, windrowed, drying, or green chopped for feed. A few harvested silage fields were disced to prepare for corn planting. Corn planting continued in other areas of the State. Early-planted corn was exhibiting good growth. Alfalfa for hay, seed continued to thrive. Recently planted alfalfa fields had emerged, were developing strong stands. Several alfalfa fields were treated with herbicides. Spraying for alfalfa weevils was almost complete. Rain, cold temperatures caused some damage to cut, windrowed alfalfa hay in a number of fields. Sugar beet fields showed steady growth, but wet soil conditions slowed field work. Harvesting began in certain early-planted sugar beet fields. Rice ground was being worked, spot burning was taking place on burn days. Safflower planting was ongoing. Sweet potato field fumigations continued. Orchards, vineyards were cultivated, irrigated, treated to prevent disease, insect damage. Bloom continued in cherry, apple orchards. Fruit in early cherry, apricot, and nectarine varieties began to show color. Growers applied copper spray to cherry trees. Fruit thinning was well underway in many stone fruit orchards. New shoots, leaves were growing rapidly in raisin, wine, and table grape vineyards. Vineyard removal continued in a number of locations. Removed vines were piled for eventual chipping or burning. Ground was prepared, new tree fruit orchards were planted in recently cleared open ground. Strawberry harvesting commenced in some parts of Fresno, Tulare counties. Good berry development continued in most fields. Olive blooms were developing on schedule. Growers continued to prune olive trees. Irrigation continued in many citrus orchards. Early citrus varieties were in bloom. Puff, rind breakdown increased in most orange lots. Fruit drop increased as local temperatures began to rise. Lane Late Navels were being picked early to avoid granulation problems. Picking, packing of Valencia oranges, lemons, grapefruit continued. Almond, walnut orchards were treated to control diseases, insect pests. Storm predictions during the week prompted growers to apply fungicides to almond trees. A good almond set was reported. Walnut trees continued to bloom in a few locations. Many orchards were leafing out, being treated for blight. Growth of young vegetable plants in open fields was slowed by erratic weather. Transplanting of processing tomatoes, red leaf lettuce, squash, melons, various peppers continued. Previously planted tomato fields were irrigated and treated to control insect pests, diseases. Plantings of onions, garlic continued to thrive. Warm weather vegetables growing under hot caps or plastic row covers showed good development. Most hot caps are expected to remain on vegetable crops until mid-April. Spring broccoli was harvested, with good crop quality reported. Harvesting of lettuce, asparagus continued. The following vegetables were also harvested: bok choy, cabbage, carrots, cauliflower, celery, cilantro, green onions, mustard greens, parsley, parsnips, radicchio, radishes, spinach. Winter pasture feeds were good to excellent overall. Some areas were

beginning to dry before the latest rain. Livestock were in good condition. Cattle weight gains were reported as good to excellent. Spring lambs were beginning to ship to market for the upcoming Easter holiday. A large number of old lambs in the Imperial Valley have shipped to market or to other areas for further feeding. Bees were active in blooming orange, cherry, and apple orchards in the central part of the State.

COLORADO: Days suitable for field work 5.5. Topsoil 8% very short, 31% short, 59% adequate, 2% surplus. Subsoil 41% very short, 37% short, 22% adequate, 0% surplus. Temperatures were slightly above average for the week with most of the state receiving limited moisture in the form of rain/or snow. Spring barley 23% seeded, 27% 2002, 33% avg.; 8% emerged, 2% 2002, 3% avg. Dry onions 40% planted, 38% 2002, 50% avg. Sugar beets 13% planted, 25% 2002, 21% avg. Spring wheat 18% planted, 17% 2002, 24% avg.; 4% emerged, 1% 2002, 6% avg. Winter wheat 6% pastured 1% 2002, 7% avg.; 1% jointed, 5% 2002, 7% avg.

DELAWARE: Days suitable for fieldwork 4.7. Topsoil 60% adequate, 40% surplus. Pasture feed 8% very poor, 8% poor, 17% fair, 67% good. Subsoil 67% adequate, 33% surplus. Corn 1% planted, 3% 2002, 3% avg. Barley 2% very poor, 2% poor, 30% fair, 60% good, 6% excellent. Winter wheat 3% very poor, 3% poor, 36% fair, 51% good, 7% excellent. Strawberries 1% bloomed, 2% 2002, 16% avg. Apples 4% bloomed, 8% 2002, 17% avg. Peaches 32% bloomed, 32% 2002, 44% avg. Snap beans 5% planted, 4% 2002, 4% avg. Sweet corn 1% planted, 4% 2002, 5% avg. Green peas 32% planted, 36% 2002, 25% avg. Potatoes 2% planted, 39% 2002, 30% avg. Hay 13% very short, 54% short, 33% adequate. Acreage prepared for spring planting 9%. Field preparation work increased last week. A few farmers were still having to work around standing water, wet spots in some fields. Peas, some potatoes were planted, a few peas were beginning to emerge. Top-dressing of winter wheat, manure spreading were some other activities going on last week.

FLORIDA: Topsoil 1% very short, 5% short, 84% adequate, 10% surplus. Subsoil 1% short, 89% adequate, 10% surplus. Temperature average 3 to 7° below normal. Daytime highs: mostly 70s. Nighttime lows: 40s, 50s, 60s; many localities reported at least one low in 30s, a few northern Peninsula, Panhandle areas in 20s. Frost in some Panhandle, northern, central areas. Rainfall range: traces several localities to .75 in. at Tallahassee. Avalon, Ft. Lauderdale, Okahumpka recorded no measurable rain. Some tomato leaves, other tender plant parts singed by frost around Quincy. Vegetable harvesting slowing seasonally, Dade County; gaining momentum, Palmetto-Ruskin, other central Peninsula localities. Watermelon growers, northern Peninsula, Panhandle areas started spring crop planting. Vegetables available: cabbage, carrots, celery, cucumbers, sweet corn, eggplant, peppers, potatoes, radishes, squash, tomatoes; very light supplies of endive, escarole, lettuce, okra. Hot, dry weather arrived in all citrus areas. Growers irrigating all areas to maintain good tree condition. Citrus trees in very good condition. Valencia harvest active all areas, most fruit being processed. Grapefruit movement slowing, supplies running low. Tangelo harvest generally complete, a few Temples still going to juice plants. Honey tangerines still being packed, processed. Caretakers cutting cover crops; hedging, topping; pushing out, burning dead trees. Postbloom nutritional spraying all areas. Resets planted in larger groves with irrigation. Pasture feed 10% fair, 90% good. Cattle 25% fair, 75% good. Panhandle, north, central: light damage to small grain forage by frost; warm season (Bahia) grass badly frosted some northern locations. Central: pasture feed generally good, some pasture damaged by standing water. South: grass improved following recent rains, pasture feed fair to good, cattle condition good. Statewide, cattle condition mostly good.

GEORGIA: Days suitable for field work 5.8. Soil 1% very short, 6% short, 79% adequate, 14% surplus. Corn 2% very poor, 4% poor, 28% fair, 59% good, 7% excellent; 41% planted, 75% 2002, 67% avg.; 16% emerged, 58% 2002, 50% avg. Hay 1% very poor, 6% poor, 44% fair, 46% good, 3% excellent. Sorghum 1% planted, 4% 2002, 3% avg. Tobacco 1% poor, 29% fair, 63% good, 7% excellent; 9% transplanted, 53% 2002, 38% avg. Wheat 88% jointing, 86% 2002, 86% avg.; 58% boot, 64% 2002, 60% avg.; 14% headed, 25% 2002, 24% avg. Onions 16% poor, 38% fair, 44% good 2% excellent; 1% harvested, 1% 2002, 1% avg. Watermelons 1% very poor, 4% poor, 55% fair, 32% good, 8% excellent; 35% planted 57% 2002, 50% avg. Apples 17% fair, 65% good, 18% excellent; 9% blooming, 17% 2002, 21% avg. Peaches 5% fair, 95% good; 85% blooming, 96% 2002, 92% avg. Dry weather allowed growers to plant some of their corn, tobacco last week. Frost earlier in the week caused some damage to crops. Some areas experienced temperatures in the mid 20's. Cooler temperatures stressed commercial vegetables. Wheat appeared in good condition despite some disease pressure. Producers prepared to plant peanuts. Growers sprayed tobacco, onion crops to control, prevent diseases. Cattlemen continued feeding hay. Activities: Fertilization of pastures, wheat fields, the routine care of livestock, poultry.

HAWAII: A storm system in the northwest brought variable weather to the State during the past week. East state banana harvest remained steady. Lower Pena papaya orchards were in fair condition with low production. Vegetables remained in mostly fair to good condition with beneficial showers, heavy irrigation.

IDAHO: Days suitable for fieldwork 3.0. Topsoil 5% very short, 15% short, 67% adequate, 13% surplus. Irrigation Water Supply is 4% very poor, 33% poor, 39% fair, 22% good, 2% excellent. Cool, damp weather conditions delayed planting of spring crops in some areas of the state last week. However, the much needed moisture was welcomed even though it slowed fieldwork. Hay, Roughage Supply is 2% very short, 3% short, 69% adequate, 26% surplus. Lambing, Calving are both 87% complete. Sugarbeets 39% Planted, 15% 2002, 22% avg.; 6% emerged 1% 2002, 2% avg. Oats 28% Planted, 14% 2002, 8% avg.; 7% emerged 0% 2002, 0% avg. Onions 91% Planted, 69% 2002, 58% avg.; 7% emerged 4% 2002, 6% avg. Dry Peas 7% Planted, 3% 2002, 8% avg. Potatoes 1% Planted, 2% 2002, 2% avg. Activities: Machine maintenance, setting up irrigation equipment, spreading fertilizer, branding, caring for livestock, field preparation, planting spring wheat, barley, oats, sugarbeets, potatoes, onions, dry peas.

ILLINOIS: Days suitable for fieldwork 3.7 last week with the East a little higher at 4.5 and the Southeast lower at 2.0. Spring fieldwork picked up during the early part of last week. Farmers were discing, fertilizing, planting fields. Later in the week however, temperatures turned cooler, along with rain kept many farmers out of the fields. Average temperature departure for the week was 3.6° above normal, with near normal precipitation. Oat seeding advanced to 40% compared to 35% 2002, 46% avg. Corn 1% planted. Concerns were reported that the cooler temperatures this weekend could retard growth of winter wheat, alfalfa, pastures. Alfalfa has "broken dormancy", 2% poor, 29% fair, 63% good, 6% excellent. Pasture 1% very poor, 7% poor, 38% 7% surplus. Activities: Hauling grain, spreading fertilizers, chemicals, mowing, preparing equipment for field work.

INDIANA: Days suitable for fieldwork 3.7. Topsoil 3% very short, 8% short, 66% adequate, 23% surplus. Subsoil 9% very short, 13% short, 67% adequate, 11% surplus. Warm, windy weather prevailed during most of the week allowing for fieldwork. Rain, strong thunderstorms in some areas during the weekend. Temperatures above normal until cold weather during weekend. Temperatures averaged 3° to 8° above normal for the week. Precipitation averaged 0.06 to 2.17 inches. Dry subsoil conditions remain in some northwestern areas. Tillage of soils made good progress until rain halted field activities during the weekend. Fertilizer, pre-plant anhydrous ammonia were being applied on many fields. Farmers were also spraying chemicals, preparing equipment for spring planting. Corn was planted in a few fields in the southwestern area. Winter wheat 80% good to excellent compared with 57% last year. Wheat 7% jointed, 6% 2002, 17% avg. Wheat greening up rapidly in the central, northern areas. Hay supplies 22% very short, 43% short, 34% adequate, 1% surplus. Hay prices remain high. Livestock are in mostly good condition. Spring calving, lambing active. Pastures are improving. Pastures 2% very poor, 17% poor, 42% fair, 37% good, 2% excellent. Activities: Hauling manure, repairing machinery, purchasing supplies, soil testing, cleaning fence rows, tiling fields, spreading lime, taking care of livestock.

IOWA: Days suitable for fieldwork 3.7. Topsoil 14% very short, 31% short, 52% adequate, 3% surplus. Concerns regarding dry soil moisture conditions have persisted through the winter, especially across southern state. Rain, sleet, snow occurring periodically Thursday through Sunday (April 3-6) in various parts of the state delayed fieldwork progress. The recent precipitation improved topsoil moisture. Oat plantings are 35% complete, ahead of the five-year average of 29%.

KANSAS: Days suitable for fieldwork 5.9. Subsoil moisture in Western, North Central state still remains very low. Topsoil 7% very short, 29% short, 62% adequate, 2% surplus. Subsoil 30% very short, 35% short, 34% adequate, 1% surplus. Wheat 4% very poor, 14% poor, 42% fair, 33% good, 7% excellent; jointed is 26%, 13% 2002, 27% avg. Most wheat looks pretty good to-date, but considerable precipitation will be needed to sustain wheat in the drier areas. Corn 6% planted, 3% 2002, 2% avg. Range, pasture feeds 23% very poor, 30% poor, 30% fair, 15% good, 2% excellent. Stockwater supplies 20% very short, 32% short, 48% adequate. Hay, forage 12% very short, 38% short, 49% adequate, 1% surplus. Feed grain supplies 4% very short, 19% short, 75% adequate, 2% surplus. Calving is winding down, preparation for planting continues.

KENTUCKY: Days suitable for fieldwork 4.8. Topsoil 5% short, 76% adequate, 19% surplus. Subsoil 3% short, 80% adequate, 17% surplus. For the week, temperatures averaged 57°, 5° above normal. Rainfall statewide was 0.71 inches, 0.29 inches below normal. Land prepared for planting corn, soybeans, tobacco 36%. Tobacco transplants seeded 68%. Roughage requirements livestock are getting from pastures 48%. Farms with livestock on winter feed 61%. Winter hay supply still on hand 19%. Cattle, calf loss was above average due to the cold wet winter. Winter damage to legume stand: Alfalfa 5%, Red clover 4%. Fall seeded acreage lost to winter kill: Wheat 4%, Barley 2%. Wheat condition 3% poor, 20% fair, 57% good, 20% excellent. Barley condition 1% poor, 20% fair, 52% good, 27% excellent. Pasture feed 1% very poor, 7% poor, 23% fair, 55% good, 14% excellent.

LOUISIANA: Days suitable for fieldwork 6.0. Soil 2% short, 80% adequate, 18% surplus. Cotton 0% planted, 0% last week, 0% 2002, 0% avg. Rice 43% planted, 23% last week, 51% 2002, 47% avg.; 20% emerged, 5% last week, 24% 2002, 24% avg. Sorghum 2% planted, 0% last week, 3% 2002, 2% avg. Spring plowing 60% plowing, 35% last week, 47% 2002, 59% avg.

MARYLAND: Days suitable for fieldwork 4.2. Topsoil 1% short, 48% adequate, 51% surplus. Pasture feed 13% poor, 29% fair, 46% good, 12% excellent. Subsoil 1% short, 72% adequate, 27% surplus. Corn 1% planted, 3% 2002, 2% avg. Strawberries 4% bloomed, 9% 2002, 15% avg. Apples 4% bloomed, 3% 2002, 12% avg. Peaches 25% bloomed, 22% 2002, 33% avg. Sweet Corn 5% planted, 7% 2002, 7% avg. Green peas 58% planted, 40% 2002, 37% avg. Potatoes 20% planted, 37% 2002, 30% avg. Tomatoes 1% planted, 6% 2002, 4% avg. Hay 34% very short, 29% short, 37% adequate. Acreage prepared for spring planting 17%. Barley 3% very poor, 8% poor, 41% fair, 36% good, 12% excellent. Winter Wheat

4% very poor, 9% poor, 44% fair, 32% good, 11% excellent. Farmers began spring plantings despite wet spots in some fields. Small grains are in good condition. Hay supplies are mostly short but pastures are in good condition. Peaches, strawberries, apples are beginning to bloom.

MICHIGAN: Agriculture remains largely dormant due to cold, snowy conditions across most of the State. A large storm system on Friday brought rain, freezing rain, sleet, snow. Weather conditions have prevented field work from occurring. There was ponding in some wheat fields. Fruit conditions are highly available across the State. In the Lower Peninsula there were reports of wine grape damage in the northwest, sweet cherry damage in the west central. Weather conditions have not been favorable for maple syrup production. Greenhouse operations continue to start vegetables for transplant.

MINNESOTA: Conditions for the week have been relatively cold. There was precipitation throughout the state for much of the week. There is a winter storm warning throughout the state. There are reports of the winter storm distributing 6 to 12 inches of snow throughout southern state. Farmers have not had the chance to begin spring fieldwork.

MISSISSIPPI: Days suitable for fieldwork 5.4. Soil 54% adequate, 46% surplus. Corn 70% planted, 38% 2002, 53% avg.; 23% emerged, 16% 2002, 28% avg. Rice 6% planted, 1% 2002, 5% avg. Sorghum 1% planted, NA 2002, 4% avg. Soybeans 9% planted, NA 2002, 5% avg.; 2% emerged, NA 2002, 1% avg. Wheat 75% jointing, 59% 2002, 76% avg.; 3% heading, 5% 2002, 15% avg.; 1% very poor, 7% poor, 45% fair, 43% good, 4% excellent. Hay Supply 19% short, 71% adequate, 10% surplus. Feed Grain 11% short, 85% adequate, 4% surplus. Cattle 2% very poor, 7% poor, 27% fair, 53% good, 11% excellent. Pasture 2% very poor, 15% poor, 34% fair, 43% good, 6% excellent. Watermelons 51% planted, 38% 2002, 29% avg. Severe thunderstorms with very heavy rain, scattered hail will halt field operations for a few days. A wide belt through central state was particularly hard hit.

MISSOURI: Days suitable for fieldwork 4.6, ranging from 3.8 days northeast district to 6.0 days south-central. Topsoil 10% very short, 25% short, 59% adequate, 6% surplus. Subsoil 26% very short, 30% short, 43% adequate, 1% surplus. Farmers were in the field in virtually all areas of the State. Ground worked at least once for spring crops 46%, 44% 2002, 44% avg. Corn planting ranges from 4% or less northwest and northeast districts to 58% southeast. Pasture feed 11% very poor, 23% poor, 39% fair, 24% good, 3% excellent. Supply of hay, roughages 13% very short, 29% short, 54% adequate, 4% surplus. Stockwater supplies 18% very short, 28% short, 53% adequate, 1% surplus. Rainfall for the week averaged 0.53 inches.

MONTANA: Days suitable for fieldwork 2.3. Topsoil 4% very short, 19% short, 69% adequate, 8% surplus. Subsoil 21% very short, 36% short, 41% adequate, 2% surplus. Winter wheat 1% very poor, 7% poor, 51% fair, 34% good, 7% excellent; breaking dormancy and is rated 15% still dormant, 68% greening, 17% green, growing. Barley 4% planted 1% ahead of 2002, 5-yr avg of 4% planted. Oats plantings 1% complete behind the 5-yr avg of 2%. Spring wheat 1% planted, d to the 5-yr avg of 3%. Livestock grazing 67% open, 15% difficult, 18% closed, with pasture feeds 19% very poor, 22% poor, 33% fair, 25% good, 1% excellent. Currently, 93% of the cattle, sheep are receiving supplemental feed compared to last year when 96% of cattle, sheep were receiving supplemental feed. Calving, lambing are at 68% and 47% complete, compared to 67% and 41% last year.

NEBRASKA: Days suitable for fieldwork last week 5.6. Topsoil 19% very short, 34% short, 45% adequate, 2% surplus. Subsoil remained at last fall levels with 85% short, very short. Sugar beet planting started. Activities: Spring fieldwork, fertilizer applications, livestock care.

NEVADA: Temperatures turned sharply cooler as storms passed through the State. Snow fell in the western mountains, eastern plains. Ely recorded .44 inch of precipitation, Winnemucca .13, Reno .04 inch. The moisture was certainly welcomed, but much more is still needed. The cooler weather slowed crop emergence, plant growth. Inclement weather resulted in the delay of potato planting. Calving continued in full swing, calves were being branded, turned out to Spring range. Lambing gained momentum, some sheep were being shorn. Rains benefitted some pastures, but stream flows remained low. Surface irrigation water supplies are forecast to be very short in some areas. Onion planting was slowed by the weather as was garlic growth. Activities: Calving, lambing, field preparation, spring grain seeding, onion planting, equipment maintenance, fence repairs, crop marketing, ditch burning, irrigation.

NEW ENGLAND: Warm spring weather in late March quickly turned to below average temperatures during the first week of April. Snow remains on the ground throughout most of the region, more snow is in the forecast. Maple producers fear the extreme temperature changes that have occurred this spring will hurt this year's production. Activities: Included nursery/greenhouse work, tending livestock, tapping maple trees, performing general maintenance, continuing to make preparations for the spring planting season.

NEW JERSEY: Days suitable for field work were 3.6. Topsoil 47% adequate, 53% surplus. Wet soils are impeding soil preparation. There was little precipitation, temperatures were below normal in most parts of the state. Winter wheat, barley were rated mostly in fair condition, but some fields were being abandoned due to poor germination. There was some top dressing, limestone application, weed control being done in small grains. Hay fields were in fair to good condition. Vegetable producers were planting spinach, endive, escarole, cabbage, sweet corn, lettuce, peas. Peppers, tomatoes were in greenhouses. Strawberries started blooming. Blueberries had green tissue beginning to show. Orchard operators were

pruning, doing maintenance work. Fruit development was behind schedule, there was little green tip showing on apples. Pastures were muddy, soil was cool. Christmas tree planting was underway.

NEW MEXICO: Days suitable for fieldwork 6.2. Topsoil 17% very short, 49% short, and 34% adequate. Most of state experienced a dry week as minor storms brushed the extreme north. Precipitation was spotty and light, with Red River (0.15") reporting the greatest amount. Temperatures were generally a few degrees above normal in the east, normal to slightly below normal in the west. Extremes ranged from 11° at Chama on the 4th to 89° at Carlsbad on the 2nd. Wind damage was 19% light, 10% moderate, and 16% severe. The strong winds have been drying up pastures, keeping farmers out of the fields. Freeze damage was 12% light, 3% moderate, 4% severe. Farmers spent the week irrigating wheat, alfalfa, planting chile, cotton, spraying for insects. Alfalfa 18% very poor, 10% poor, 35% fair, 31% good, 6% excellent. Irrigated wheat is in mostly poor to good condition, dryland wheat is in mostly very poor to fair condition. Wheat 9% very poor, 33% poor, 42% fair, 16% good. The lettuce, onion crops continue to do well, are in fair to excellent condition. Chile planting made great progress over the past week, jumping to 75% complete, with the crop listed as fair to excellent. Cotton planting is underway with 11% complete. Ranchers spent the week calving, lambing, shearing, feeding, hauling water. Cattle are 3% very poor, 13% poor, 40% fair, 43% good, 1% excellent. Sheep 3% very poor, 26% poor, 53% fair, 17% good, 1% excellent. Range, pasture feeds continue to show no improvement at 25% very poor, 25% poor, 43% fair, 7% good. Everyone is hoping for rain.

NEW YORK: Late week ice storms wreaked havoc, causing long power outages, downing tree limbs. Producers were busy cleaning up the damage. Much of the State still has heavy snowcover. Maple sap flow was slowed by the severe change in weather.

NORTH CAROLINA: Days suitable for field work 5.0. Soil 0% very short, 2% short, 76% adequate, 22% surplus. Some fields were still wet, but most state farmers found field conditions improved from recent weeks. Progress was made planting corn, potatoes, cabbage, vegetables. Pastures are providing the majority of forage for livestock, minimizing the need for supplemental hay. Last Sunday's frost, freeze, snow damaged some peaches, but other crops seem to have escaped unscathed. Activities: Top dressing small grain; applying lime, fertilizer, herbicides; scouting for pests; preparing land; tending livestock; equipment maintenance; completing Agricultural Census forms.

NORTH DAKOTA: Topsoil 10% very short, 29% short, 52% adequate, 9% surplus. Subsoil 15% very short, 26% short, 56% adequate, 3% surplus. Several inches of snow fell across the north central, north eastern areas of the state. The average date for starting field work was expected to be April 18. Hay, forage 7% very short, 20% short, 72% adequate, 1% surplus. Grain, concentrate 1% very short, 7% short, 87% adequate, 5% surplus. Cattle 1% very poor, 4% poor, 28% fair, 61% good, 6% excellent. Calf 0% very poor, 2% poor, 21% fair, 66% good, 11% excellent, calving 57% complete. Sheep 1% very poor, 3% poor, 26% fair, 61% good, 9% excellent. Lamb 1% very poor, 3% poor, 21% fair, 66% good, 9% excellent. Lambing 72%, shearing was 79% complete. Eighty-nine percent of the pastures, ranges were still dormant.

OHIO: Day suitable for fieldwork. Topsoil 0% very short, 4% short, 72% adequate, 24% surplus. Corn 0% planted, 1% 2002, 1% avg. Oats 6% planted, 10% 2002, 25% avg. Tobacco beds seeded 35%, 22% 2002, 40% avg. Tobacco beds having plants up 10%, 4% 2002, 13% avg. Winter Wheat 7% jointed, 6% 2002, 10% avg. Livestock conditions 1% very poor, 4% poor, 17% fair, 65% good, 13% excellent. Pasture feeds 2% very poor, 9% poor, 29% fair, 51% good, 9% excellent. Winter wheat 1% very poor, 3% poor, 18% fair, 57% good, 21% excellent. Hay 1% very poor, 3% poor, 29% fair, 57% good, 10% excellent. Apple 0% very poor, 2% poor, 30% fair, 55% good, 13% excellent. Peach 0% very poor, 2% poor, 32% fair, 53% good, 13% excellent. Wet conditions continue to hamper most tillage activities, although some reported chisel plowing in their area. In drier locations farmers planted oats, potatoes as well as, applying ammonia, potash, phosphorus. Producers continued hauling grain, prepping equipment, spreading manure. Top dressing, applying nitrogen to wheat was reported throughout the state. Some fruit producers began spraying their orchards.

OKLAHOMA: Days suitable for fieldwork 6.2. Topsoil 10% very short, 24% short, 65% adequate, 1% surplus. Subsoil 8% very short, 28% short, 63% adequate, 1% surplus. Winter Wheat 78% jointing, 72% last week, 52% 2002, 69% avg. Rye 1% very poor, 4% poor, 18% fair, 65% good, 12% excellent. Oats 2% very poor, 7% poor, 33% fair, 55% good, 3% excellent; 30% jointing, 15% last week, 19% 2002, 35% avg. Corn 66% seedbed prepared, 58% last week, 59% 2002, 63% avg.; 21% planted, 14% last week, 22% 2002, 16% avg. Sorghum 35% seedbed prepared, 22% last week, 27% 2002, 27% avg. Soybeans 34% seedbed prepared, 31% last week, 28% 2002, 35% avg. Peanuts 36% seedbed prepared, 21% last week, 45% 2002, 38% avg. Cotton 65% seedbed prepared, 49% last week, 49% 2002, 52% avg. Livestock 1% very poor, 4% poor, 30% fair, 57% good, 8% excellent; Pasture, Range 4% very poor, 12% poor, 39% fair, 40% good, 5% excellent; Livestock: Livestock conditions were rated in mostly fair to good. Cattle auctions reported marketings were average. The price for feeder steers less than 800 pounds increased from last week, averaged \$84.94 per cwt. The average price for feeder heifers less than 800 pounds also increased from last week, averaged \$77.31 per cwt.

OREGON: Days suitable for fieldwork 5.0. Topsoil 1% very short, 20% short, 65% adequate, 14% surplus. Subsoil 15% very short, 28% short, 53% adequate, 4% surplus. Barley 27% planted, 22% previous week, 64% 2002, 64% 5 yr avg.; 7% emerged, 4% previous week, 33% 2002, 14% very poor, 12% poor, 52% fair, 21% good, 1% excellent. Spring wheat 49% planted, 43% previous week, 79% 2002, 14% emerged, 10% previous week, 27% 2002. Winter wheat 0% very poor, 17% poor, 62% fair, 19% good, 2% excellent. Range, Pasture 1% very poor, 11% poor, 46% fair, 37% good, 5% excellent. Activities: Colder conditions, below

normal temperatures reported across state after experiencing warmer conditions previous week. Temperatures in eastern state ranged from mid twenties to mid forties. A low pressure system delivered rain, snow. Precipitation in coastal areas, Willamette Valley ranged from 0.14 to 3.08 inches above normal, with temperatures as much as 4° below normal. In north central state, sufficient precipitation had fallen to germinate seeded fall wheat crop into very dry soil. Still need normal rainfall to make a fair crop. In Wasco County, no winter kill, erosion minimal in winter wheat fields. Weed spraying, tillage operations ongoing, alfalfa fields greening up. In Malheur County, sugarbeet planting winding down, winter wheat looked good. In central state, orchardgrass hay fields suffered winter damage, green up slow. Some irrigation districts may not receive full allotment for irrigation water. In Willamette Valley, winter wheat growth slow, some fields starting to show excess moisture stress. Herbicide, fertilizer applications being made on established grass fields when soil, weather conditions allowed. Mint, clover, alfalfa all showing good growth. Most field crops look good at this point. In Jackson County, grain, alfalfa seeded, fertilizer applied. Cold, wet weather across State prevented most vegetable planting activity. In eastern areas, Malheur County reported onion planting had started, in western state, Washington County reported green peas growing. Nursery sales activity, digging of plants from fields moving at a rapid pace. Out of state shipments of bareroot plants, balled, burlapped material major activity. Greenhouse operators supplying Easter lilies to local nursery outlets, getting bedding plants ready to ship. Easter lily fields on southern state coast looking good. Many firms having spring bulb festivals to sell their products. Christmas tree growers planting seedlings. Retail nurseries getting ready for spring rush. Many Willamette Valley fruit trees in early bloom with pears in full bloom. Berry crops starting to leaf out in most of valley, with some areas in bloom. Cool temperatures have moderated bud development in lower Hood River County. d'Anjou pears at full white to full bloom; Red Delicious apples at tight cluster to first pink; cherries at first white to first bloom; Pinot noir grapes at doeskin. Wasco County sweet cherry trees near full bloom at end of last week. Apricot, peach trees in full bloom. Apples, plums, cherries, grapes, d'Anjou, Bartlett pears in bloom in southwestern state. Range grasses greening up nicely, appear in better shape than this time last year. Winter feeding continued while waiting for a little more pasture growth. Some areas reported turning out cattle onto pasture. Heavy rains in Coos, Curry counties caused flooding of lowland pastures along rivers. Precipitation levels caused some calving grounds to be muddy.

PENNSYLVANIA: Days suitable for field work 2.0. Soil 55% adequate, 45% surplus. Spring plowing 8% complete, 28% 2002, 22% avg. Winter wheat 8% poor, 30% fair, 48% good, 14% excellent. Oats planted 10% complete, 16% 2002, 14% avg. Pasture feeds 13% very poor, 7% poor, 28% fair, 47% good, 5% excellent. Activities: Caring for livestock; preparing equipment for upcoming season; repairing fences; obtaining seeds; hauling manure; spreading fertilizer; spraying fruit; attending co-op, farm meetings.

SOUTH CAROLINA: Days suitable for field work 5.0. Soil 65% adequate, 35% surplus. Corn 29% planted, 72% 2002, 57% avg.; 62% fair, 38% good. Sorghum 3% planted, 6% 2002, 5% avg. Cotton 1% planted. Winter wheat 15% headed, 27% 2002, 16% avg.; 3% poor, 22% fair, 72% good, 3% excellent. Barley 4% headed, 9% 2002, 5% avg.; 4% poor, 87% good, 9% excellent. Pastures 2% poor, 17% fair, 60% good, 21% excellent. Rye 29% headed, 37% 2002, 27% avg.; 3% poor, 18% fair, 76% good, 3% excellent. Oats 18% headed, 31% 2002, 20% avg.; 30% fair, 69% good, 1% excellent. Tobacco 5% transplanted, 12% 2002, 11% avg. Grain Hay 3% harvested, 11% 2002, 10% avg.; 17% fair, 71% good, 12% excellent. Peaches 14% fair, 38% good, 48% excellent. Snapbeans 40% planted, 42% 2002, 39% avg.; 100% good. Cucumbers 50% planted, 54% 2002, 46% avg.; 100% good. Watermelons 30% planted, 56% 2002, 53% avg.; 40% fair, 60% good. Tomatoes 56% planted, 58% 2002, 47% avg.; 100% good. Cantaloups 25% planted, 40% 2002, 31% avg.; 100% good. Livestock 2% poor, 12% fair, 65% good, 21% excellent.

SOUTH DAKOTA: Days suitable for fieldwork 4.9. Topsoil 16% very short, 36% short, 47% adequate, 1% surplus. Subsoil 29% very short, 35% short, 35% adequate, 1% surplus. Feed supplies 15% very short, 35% short, 47% adequate, 3% surplus. Stock water supplies 16% very short, 33% short, 50% adequate, 1% surplus. Winter Rye 8% very poor, 17% poor, 34% fair, 31% good, 10% excellent; 60% breaking dormancy. Cattle 1% very poor, 3% poor, 24% fair, 61% good, 11% excellent. Sheep 1% very poor, 3% poor, 20% fair, 63% good, 13% excellent. Range, Pasture 27% very poor, 32% poor, 27% fair, 13% good, 1% excellent. Winter Wheat 86% breaking dormancy. Calving 47% complete. Lambing 59% complete. Cattle moved to pasture 5% complete. Calf deaths 30% below avg.; 69% avg.; 1% above avg. Sheep, lamb deaths 26% below avg.; 74% avg. Statewide average date to start spring fieldwork April 6. Most producers are ready, or have started with fieldwork, but would like to receive some moisture first. Many farmers remain busy with calving, lambing, fixing fence, disking, hay, pasture fertilizing, preparing for spring planting season.

TENNESSEE: Days suitable for fieldwork 6.0. Topsoil 1% very short, 6% short, 84% adequate, 9% surplus. Wheat 52% jointed, 46% 2002, 62% avg.; 95% top-dressed, 89% 2002, 92% avg.; 3% poor, 19% fair, 60% good, 18% excellent. Apples 75% budding or beyond, 76% 2002, 78% avg.; 38% blooming or beyond, 38% 2002, 42% avg.; 1% poor, 24% fair, 68% good, 7% excellent. Peaches 87% budding or beyond, 93% 2002, 94% avg.; 62% blooming or beyond, 67% 2002, 72% avg. Pastures 4% poor, 26% fair, 57% good, 13% excellent. Alfalfa hay 3% poor, 25% fair, 56% good, 16% excellent. Other hay 3% poor, 32% fair, 56% good, 9% excellent. Cattle 6% poor, 25% fair, 56% good, 13% excellent. A relatively warm, dry spring has allowed farmers to progress rapidly with field activities, especially planting corn. Corn planting progress was off to a record tying start, equal to the pace of 1995. Activities: Fertilizer spraying, seeding tobacco beds, land preparation for planting cotton. Precipitation averaged slightly above normal in the West, East sections of the state, well above normal elsewhere. The apple, peach crops came through the winter in good condition with only slight freeze damage.

TEXAS: Agricultural Summary: Soil moisture continued to suffer in the Panhandle, Low Plains. Spring made itself known last week as warm, seasonal temperatures covered the state. The Panhandle received little or no rain last week. The main weather story in that area was the heavy wind: Some gust reached up to 40 mph in some locations. The rest of the state also had windy conditions. By the latter half of the week, a cold front collided with a mass of dry air from the west, Gulf moisture, to create a line of severe thunderstorms in North Central, Central, East state. Baseball size hail was reported in the Dallas-Fort Worth area, a tornado caused property damage in Northeast state. Most rainfall accumulations averaged about a half inch, but some areas received over 2 inches. The Trans-Pecos region received snow in higher elevations early in the week. Many producers were pre-watering spring crop acreage in the morning before high winds made it difficult. More rain was still needed in the Panhandle to fill the soil profile. Small grains continued to be stressed from a lack of moisture. Planting of spring crops continued at a rapid pace, was nearing completion in southern areas. Green bugs, aphids continued to be a problem in some areas. Peach trees were being evaluated for freeze damage. Supplemental feeding of livestock continued in some areas. Small Grains: Dryland wheat, oats continued to suffer from moisture stress. High winds dried out soils and limited irrigation. Some producers were dealing with stripe rust, septoria leaf blotch, were spraying fungicides accordingly. Wheat was beginning to boot, head out in southern locations. Some of the more developed wheat was being evaluated for freeze damage. Irrigated wheat producers were still contending with high fuel prices. Wheat 65% of normal compared with 47% last year. Corn: Pre-watering of corn fields continued in the Panhandle. Only a few fields remained to be planted in Central state, the Upper Coast. Earlier planted fields were emerging with good stands. Some locations in Central state, suffered freeze damage but the extent was not quite known. Planting was almost finished in North Central regions. Some South state corn was at 2 and 3 leaf stage. Cotton: Land preparations continued in the Panhandle as producers pre-watered and applied herbicides. Planting was mostly completed in the Rio Grande Valley, continued along the Coastal Bend. High winds were depleting topsoil moisture in most areas. Sorghum: Land preparations were under way in Central, North Central state. Some sorghum was planted in central locations. Earlier planted fields suffered some freeze damage. Planting was in full swing on the Coastal Bend. Most fields in the Rio Grande Valley have emerged, were benefitting from good moisture levels. Peanuts: Land preparations and field work were active. Preparations were interrupted by high winds in a few areas. Rice: Planting progressed as conditions improved. Some earlier planted fields began to emerge. Soybeans: Land preparation continued in the Panhandle. Planting gained momentum on the Upper Coast, East state as conditions improved. Commercial Vegetables, Fruit, Pecans in the Rio Grande Valley, producers began harvesting spring onions. Spring vegetable, melon crops were progressing well. There was concern about high winds depleting soil moisture. Sugarcane, citrus harvest continued. In the San Antonio-Winter Garden, watermelon planting was active. Producers evaluated frozen foliage on potatoes but did not expect an effect on yield. Harvest of carrots, onions continued. In Trans Pecos Region, pecan trees were budding out. Fall onions were in 8th leaf stage but not bulbing yet. High winds depleted soil moisture. In East state, sweet potato bedding was ongoing. Producers monitored vegetables burnt back by frost. Some transplanted watermelons were lost to the freeze. Remaining watermelon fields were prepared for planting. Peaches, Pecan, Grapes: Peaches in the Hill Country were damaged by the freeze the previous week. Most pecans were beginning to bud out but were also hurt by the cold weather. Producers were watching grapes for freeze damage. Range, Livestock: Cattle were being pulled off wheat pasture in the Panhandle as fields were grazed out. Range and pasture feeds continued to decline in the area as no significant moisture fell. Additional supplemental feeding was required in varied locations across the state, but was decreasing as spring grasses emerged. Many cattle producers were working calves, goat producers were working kids. Foaling season continued. In Central, South, and East state, cattle were doing well on green pastures that have had adequate moisture.

UTAH: Days suitable for field work 4.2. Topsoil 2 % very short, 13 % short, 80 % adequate, 5 % surplus. Subsoil 8% very short, 28 % short, 61 % adequate, 3 % surplus. Winter wheat 5 % poor, 53 % fair, 31 % good, 11 % excellent. Winter wheat freeze damage 78 % none, 22 % light. Spring wheat 63 % planted, 37 % 2002, 50 % avg.; 18 % emerged, 19 % 2002, 17 % avg. Barley 66 % planted, 28 % 2002, 45 % avg.; 23 % emerged, 9 % 2002, 14 % avg. Barley freeze damage 86 % none, 12 % light, 2 % moderate. Oats 36 % planted, 14 % 2002, 18 % avg.; 27 % emerged, 3 % 2002, 8 % avg. Cattle/Calves 70 % cows calved. Condition 2 % very poor, 6 % poor, 22 % fair, 59 % good, 11 % excellent. Sheep Condition 6 % poor, 31 % fair, 58 % good, 5 % excellent, 63 % sheared on farm, 44 % sheared on range, 66 % Ewes lambd on farm, 36% Ewes lambd on range. Apricots Full Bloom or Past 79 %, 74 % 2002, 81 percent average. Peaches Full Bloom or Past 40 %, 8 % 2002, 5 % average. Pears Full Bloom or Past 45 %, 0 % 2002, 5 % average. Range, Pasture feed 13 % very poor, 20 % poor, 38 % fair, 29 % good. Windy conditions, wet weather limited time in the field to an average of 4.2 days last week. Activities: Plowing, planting, spraying winter grains, alfalfa fields, caring for livestock. Winter storms at the end of the week dropped much needed precipitation throughout much of the state. Low temperatures ranged from the mid 10's to mid 30's while high temperatures were between the upper 30's to low 60's throughout Utah. Snow pack is still at 60%-90% of normal levels. Farmers have been spraying fields to control weeds, army worms. Cache county reported that meadow voles have become a problem in alfalfa fields. Some areas reported frost damage to apricots, peaches. Beaver county reported damage to alfalfa fields due to wind and blowing sand. Livestock are in good condition. Producers continued lambing, calving activities as well as shearing sheep.

VIRGINIA: Days suitable for fieldwork 4.9. Pasture 1% very poor, 8% poor, 35% fair, 48% good, 8% excellent. Topsoil 4% short, 68% adequate, 28% surplus. Subsoil 5% short, 72% adequate, 23% surplus. Livestock 1% very poor, 7% poor, 23% fair, 61% good, 8% excellent. Other Hay 5% poor, 35% fair, 57% good, 3%

excellent. Alfalfa Hay 31% fair, 62% good, 7% excellent. Corn 7% planted, 11% 2002, 9% 5-yr avg. Winter Wheat 5% very poor, 11% poor, 36% fair, 43% good, 5% excellent. Barley 1% very poor, 9% poor, 36% fair, 48% good, 6% excellent. Greenhouse Tobacco 8% fair, 54% good, 38% excellent; 98% seeded, 99% 2002, 99% 5-yr avg. Tobacco Plantbeds 34% fair, 65% good, 1% excellent; 96% seeded, 100% 2002, 99% 5-yr avg. Summer Potatoes 60% planted, 92% 2002, 91% 5-yr avg. Apples 78% fair, 17% good, 5% excellent. Peaches 6% very poor, 7% poor, 48% fair, 29% good, 10% excellent. State experienced varying degrees of weather this week. The middle of the week saw sunny days, warm temperatures. However, the beginning, the end of the week brought rain, cooler temperatures. Days suitable for fieldwork were 4.9. Some areas of the state reported little pasture growth, but others said that pastures greened up well this week. Many farmers were still feeding livestock. Many farmers were a little behind on spring field work. Small grain growth was running about a week behind. Corn planting got underway, potato planting continued. The fruit trees were in full bloom, there is some concern about freezing in the upcoming weeks. Activities: Fertilizing fields, fencing, calving, lambing, purchasing stockers for the grazing season, preparing fields for no-till corn planting, applying herbicides, sub-soiling, applying nitrogen to small grains, budgeting for peanut planting.

WASHINGTON: Days suitable for fieldwork 4.2. Topsoil 8% short, 90% adequate, 2% surplus. Subsoil 10% short, 89% adequate, 1% surplus. Irrigation water 15% short, 85% adequate. The highest temperature in the state was 82° in Whitman Mission. The lowest temperature in the state was 20° in Ellensburg. Showers continued to improve moisture conditions but limited fieldwork. Winter wheat 2% very poor, 5% poor, 32% fair, 53% good, 8% excellent. Spring wheat 39% planted, 9% emerged, 39% fair, 61% good. Barley 18% planted, 2% emerged. Wheat fields in Skagit County required helicopter applications of pesticides due to high soil moisture. In the east, winter wheat looked good, spring wheat, barley seeding has been progressing. Potatoes 18% planted, 6% emerged. Corn 4% planted. Dry peas 1% planted. Processing green peas 2% planted. Hay, other roughage supplies 8% short, 91% adequate, 1% surplus. Range, pasture feeds 9% poor, 66% fair, 25% good. Pastures were beginning to improve due to precipitation. Spring calving was winding down in Lincoln County while wool shearing was thirty percent complete in Grant. Tree fruit continued to develop about five to ten days ahead of normal in Yakima County. Frost control was implemented across the Yakima Valley, damage was slight but present. Bud breaks in Concord grapes was about a week early in Benton County.

WEST VIRGINIA: Days suitable for field work 6.0. Topsoil 6% short, 78% adequate, 16% surplus compared to last year's 2% very short, 18% short, 66% adequate, 14% surplus. Intended acreage prepared for Spring planting 25%, 33% in 2002, 27% 5-yr avg. Hay, roughage 22% very short, 48 % short, 29% adequate, 1% surplus. Feed grain supplies 2% very short, 11% short, 87% adequate. Corn 1% planted compared to 5% last year, 5-yr. avg not available. Winter wheat 1% poor, 15% fair, 84% good. Oats 27% planted, 3% emerged, 5-yr avg 13% planted, emerged not available. Tobacco beds seeded 62%, 55% 5-yr avg.; 10% emerged, 15% 5-yr avg. Hay 5% very poor, 6% poor, 53% fair, 35% good, 1% excellent. Range, pasture 1% very poor, 24% poor, 40% fair, 33% good, 2% excellent. Apples 50% fair, 50% good. Peaches 50% fair, 50% good. Cattle, calves 6% poor, 41% fair, 50% good, 3% excellent; percent calved 75, 76% 5-yr avg. Sheep, Lambs 14% poor, 40% fair, 45% good, and 1% excellent; percent lambed 77, 76% 5-yr avg. A late season snow storm struck parts of the state on March 31, resulting in up to a foot of snow in the mountains. Some areas of state as some farmers are looking for hay to purchase as hay supplies are running short. Spring calf, lamb losses are higher than normal. Activities: Calving, lambing, feeding livestock, purchasing, moving of hay, fertilizing, cleaning debris from early spring storms, other early spring activities.

WISCONSIN: Days suitable for fieldwork 1.1. Farmers rated the soil moisture conditions as 1% very short, 29% short, 54% adequate, 16% surplus. The state growing season for 2003 is off to a slow start. Temperatures last week were 4 to 7° below normal. There were wide variations in temperature for the week with readings ranging from 17° to 74°. Late in the week the weather turned wintry, temperatures dropped. There was precipitation in the form of rain, sleet, snow. Many parts of the state continue to have snow on the ground. Northern regions of the state report frost depths up to seven feet. The surface soil has thawed, but frost levels remain in the subsurface soil. Pastures have not had an opportunity to green up at this time.

WYOMING: Days suitable for fieldwork 2.5. Topsoil 8% very short, 39% short, 47% adequate, 6% surplus. Subsoil 31% very short, 46% short, 23% adequate. Winter wheat 4 % very poor, 14% poor, 54% fair, 28% good. Barley 42% planted, 27% 2002, 5-yr 41% avg.; 5% emerged, 1% 2002, 4% 5-yr avg. Oats 2% planted, 2% 2002, 5-yr 9% avg. Spring wheat 2% planted, 7% 2002, 5-yr 14% avg. Range, pasture feed 26% very poor, 32% poor, 32% fair, 10% good. Hay, roughage 16% very short, 30% short, 53% adequate, 1% surplus. Spring calves born 60%, 67% 2002, 66% 5-yr avg. Calf losses 21% light, 76% normal, 3% heavy. Cattle 5% poor, 36% fair, 58% good, 1% excellent. Calf 1% poor, 33% fair, 65% good, 1% excellent. Farm flock sheep shorn 68%, 64% 2002, 72% 5-yr avg. Farm flock ewes lambd 62%, 69% 2002, 73% 5-yr avg. Range flock sheep shorn 33%, 25% 2002, 30% 5-yr avg. Range flock ewes lambd 9%, 14% 2002, 14% 5-yr avg. Lamb losses 25% light, 74% normal, 1% heavy. Sheep 3% poor, 26% fair, 70% good, 1% excellent. Lamb 23% fair, 74% good, 3% excellent. Weekly temperatures averaged above normal. Almost all stations had below normal precipitation, but additional precipitation was received in many areas over the weekend. The heaviest moisture fell in Newcastle with 0.34 inch. Yearly precipitation totals remained above normal in eastern areas, under an inch below normal in most other areas.

International Weather and Crop Summary

March 30 - April 5, 2003

International Weather and Crop Highlights and Summaries provided by USDA/WAOB

HIGHLIGHTS

FSU-WESTERN: Unseasonably cold weather persisted over the region, delaying the greening of winter wheat and hampering spring grain planting.

EUROPE: In France, persistent dryness continued to limit topsoil moisture for winter crops and newly planted spring grains, while beneficial rain fell across crop areas in northern Italy.

MIDDLE EAST: Across Turkey, mild, showery weather favored winter grain development, while additional rain was needed for vegetative winter grains in western Iran.

EASTERN ASIA: Showers and seasonable warmth benefited vegetative winter wheat.

SOUTHEAST ASIA: Drier weather favored main-season rice harvesting in Java, Indonesia, while the seasonal northward

progression of rainfall boosted moisture supplies for the upcoming main crop season in Thailand.

AUSTRALIA: Showers continued to slow sorghum and cotton harvesting in eastern Australia but helped improve moisture supplies following nearly a year of severe drought.

NORTHWESTERN AFRICA: Widespread rain boosted soil moisture for reproductive winter grains from central Algeria to Tunisia, while the 2nd consecutive week of dry weather stressed crops in southern Morocco.

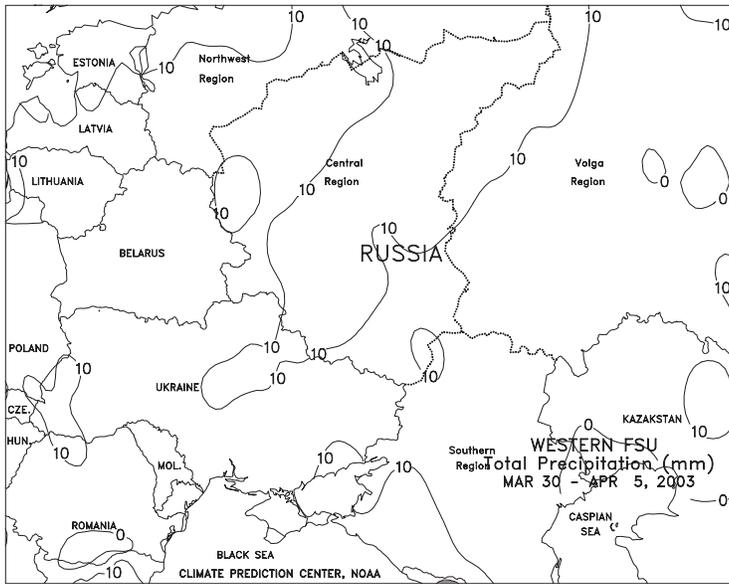
SOUTH AFRICA: Dry weather in the corn belt reduced moisture supplies but benefited summer crops maturing in many areas.

SOUTH AMERICA: Locally heavy rain slowed fieldwork in Argentina and Brazil.



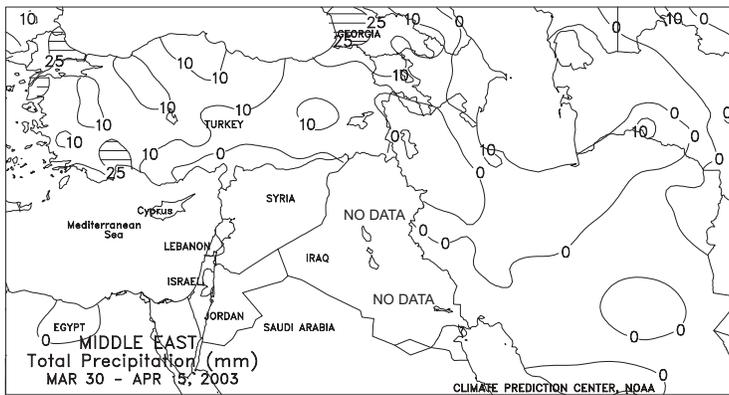
EUROPE:

Across England, the Low Countries, and Germany, light rain (3-15 mm or more) increased topsoil moisture for vegetative winter grains and oilseeds and spring grain planting. The heaviest rainfall was reported in the Low Countries (10-20 mm). Across France, however, mostly dry weather (scattered amounts less than 5 mm) continued to limit topsoil moisture for rainfed vegetative winter grains and vegetative to early flowering oilseeds. Although the dry weather favored spring grain planting and summer crop field preparations, rain was needed for uniform seed germination. By midweek, cooler weather (lows near 0 and highs in the low teens degrees C) reduced crop water use across northern Europe. In eastern and southeastern Europe, seasonably warmer weather continued to cause winter grains and oilseeds to break dormancy. Across the region, light rain (2-10 mm) increased topsoil moisture for greening winter crops and spring fieldwork. In Italy's Po Valley, much-needed rain (10-50 mm or more) boosted moisture supplies, especially for rainfed winter crops and newly planted spring grains. In central and southern Italy, widespread rain (15-45 mm or more) maintained favorable moisture supplies for vegetative durum spring wheat. Across the Iberian Peninsula, mostly dry weather prevailed across the south, while light to moderate rain (10-25 mm) prevailed across the central and north. Adequate moisture supplies existed for winter grains that ranged from the reproductive stage in the south to the vegetative stage in the north. Across Europe, temperatures averaged near to slightly above normal for the week.



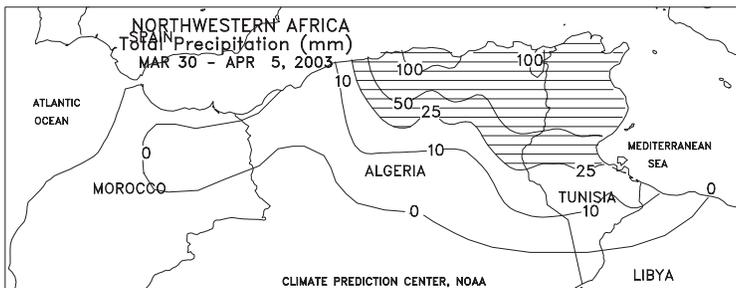
FSU-WESTERN:

A strong cold front swept across the region, bringing a mixture of rain and snow (2-23 mm of liquid equivalent) to most areas and ushering in another round of unseasonably cold air (temperatures averaging 1 to 4 degrees C below normal). The continued unseasonably cold weather kept winter grains in Ukraine and the Southern Region in Russia from breaking dormancy at usual dates. Typically, by the end of March, winter grains begin greening in Moldova, southern Ukraine, and the southern portion of the Southern Region in Russia. Greening usually spreads rapidly northward in Ukraine and Russia in April, in response to the normal seasonal increase in temperatures. Although most of Ukraine and the southern Region in Russia were snow-free during the week, soil temperatures remained unfavorably low for widespread spring grain planting. In northern Russia, daytime highs on some days rose into the single digits (around 5 degrees C), causing some melting of the moderate to deep snow cover.



MIDDLE EAST:

Across Turkey, widespread, light to moderate rain (5-25 mm) covered the main winter grain areas, boosting soil moisture for vegetative winter grains. Also, warmer weather favored winter grain development, after previous unseasonably cool weather. Across the central Plateau of Turkey, early-week minimum temperatures were -9 to -4 degrees C and by week's end were above 5 degrees C. Elsewhere, mostly dry weather prevailed across the eastern Mediterranean, northern Iraq, and western Iran. Only scattered, light rain (5-10 mm) fell across north-central Iran (near Tehran). Adequate to abundant moisture supplies existed across the eastern Mediterranean, after several weeks of widespread rainfall. In western Iran, however, rain was needed to maintain favorable yield prospects for greening winter grains. Temperatures averaged 1 to 2 degrees C above normal across most of the region, except in eastern Turkey, where weekly temperatures averaged 2 to 5 degrees C below normal.

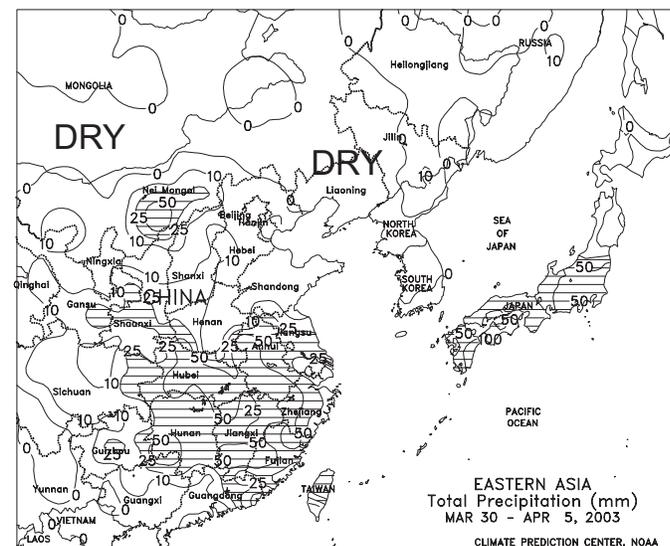
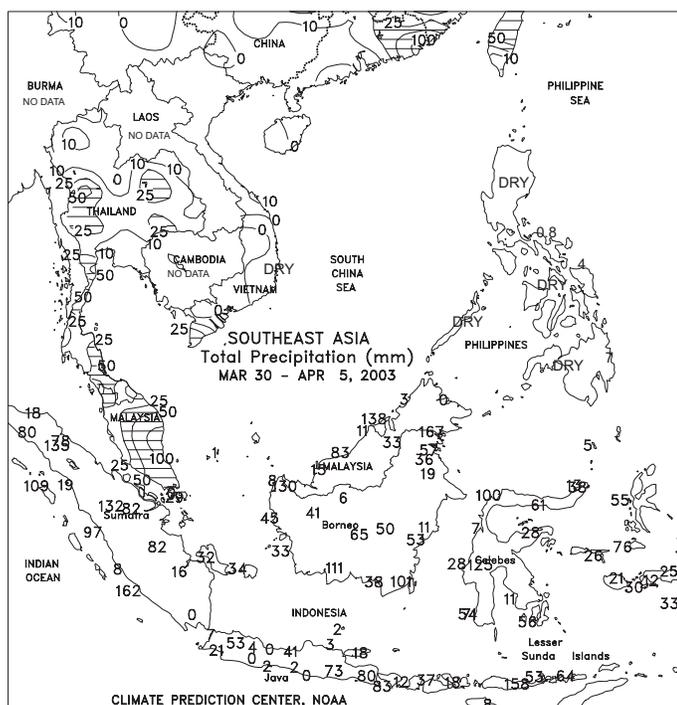
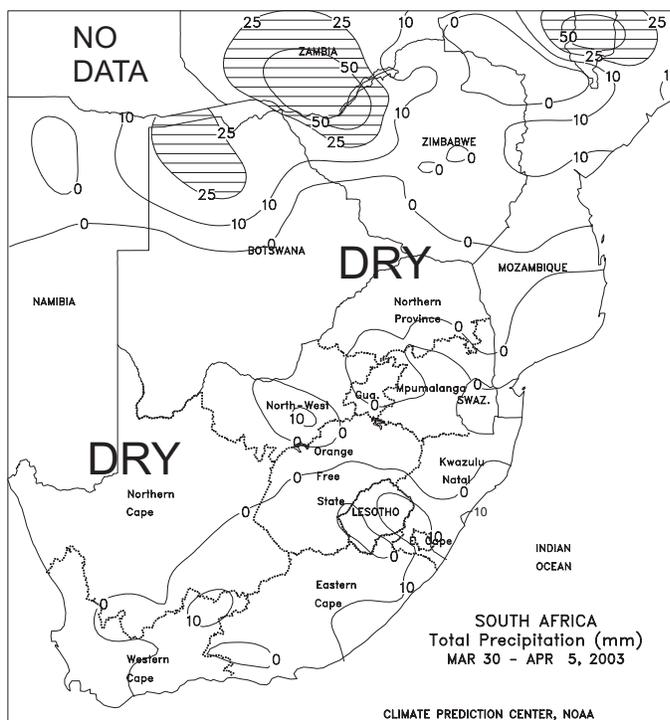


NORTHWESTERN AFRICA:

From central Algeria to northern Tunisia, widespread rain (25-100 mm or more) provided abundant moisture supplies for winter grains, advancing through the reproductive phase of development. The heaviest rain (100-150 mm) was confined to coastal areas, creating the potential for local flooding and crop lodging. Farther west, warm, dry weather favored reproductive winter grains across northern Morocco and western Algeria. The 2nd consecutive week of dryness in southern Morocco was accompanied by above-normal temperatures, further stressing winter grains. Weekly temperatures averaged 1 to 2 degrees C above normal across most of Morocco and 1 to 2 degrees C below normal across Tunisia and Algeria.

SOUTH AFRICA:

Mostly dry weather (less than 5 mm) continued in the corn belt for the 2nd consecutive week. Although moisture supplies are declining in the western and central corn belt, the dryness benefited summer crops, maturing in many areas. In the eastern corn belt, the chronically dry weather continued to hasten summer crop maturation. Farther south, following 3 weeks of near- to above-normal rainfall, dry weather returned to western Cape. Nevertheless, moisture supplies remained sufficient for early winter grain planting and development in southern South Africa. Temperatures in South Africa averaged about 1 to 3 degrees C above normal, accelerating summer crop maturation.

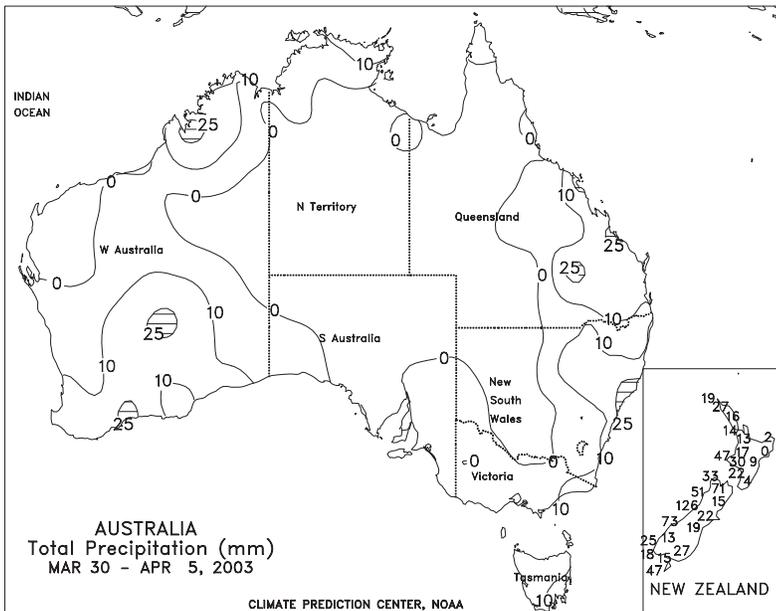


SOUTHEAST ASIA:

In Java, Indonesia, scattered, locally heavy showers caused minor delays in early rice harvesting. Dry weather in the Philippines continued to favor late-season harvest activities. Seasonal monsoon showers typically arrive in April, prompting main-season rice and corn planting. Light showers (less than 10 mm) fell throughout Vietnam as winter-spring rice began to mature to the north and harvesting started in the south. Seasonal showers (10-50 mm) continued to fall in Thailand, boosting moisture supplies for the upcoming main-season rice and corn planting activities, while second-season rice continued to mature. Showers remained heavy (50-150 mm) in peninsular Malaysia and Sumatra, increasing moisture supplies for oil palm.

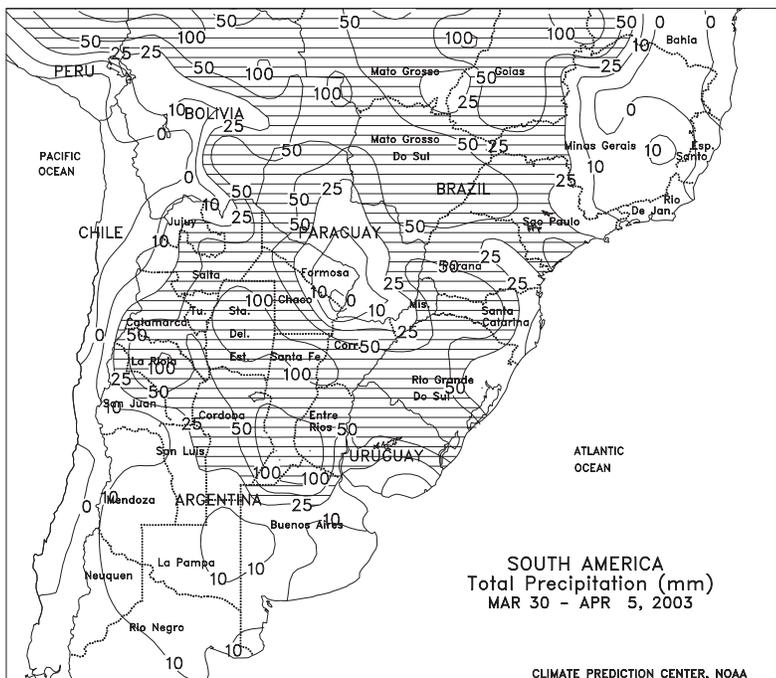
EASTERN ASIA:

Light showers (3-15 mm) overspread the North China Plain and temperatures averaged near to above normal, supporting normal development of vegetative winter wheat. Heavier showers (10-25 mm or more) benefited wheat in southern (Hubei to Jiangsu) and western (Sichuan and Shaanxi) growing areas. Crops have entered reproductive phases of development in the warmest locations (Sichuan) and are approaching the heading phase elsewhere. Widespread, locally heavy rain (25-50 mm or more) fell along a frontal system stretching from southern China to southern Japan, increasing irrigation reserves for rice and other summer crops. Warm, dry weather dominated Manchuria and the Korean Peninsula, warming topsoils for upcoming summer crop planting and germination.



AUSTRALIA:

Scattered showers (5-15 mm, locally near 50 mm) in Queensland and northern New South Wales continued to slow sorghum and cotton harvesting, but helped improve soil moisture and reservoir levels following nearly a year of severe drought. Farther south, widely scattered showers (2-8 mm) in southern New South Wales, Victoria, and South Australia improved local moisture supplies, but the rainfall was too light and sparse to bring significant drought relief to these areas. In contrast, widespread rain (2-10 mm) in Western Australia helped improve soil moisture and condition topsoils for winter grain planting. Rainfall must continue in Western Australia and was still needed in southeastern Australia to alleviate the extreme drought and to encourage winter grain planting, which typically begins in May. Temperatures in major crop-producing areas were generally seasonable.



SOUTH AMERICA:

Moderate to heavy rain (50-100 mm or more) returned to primary growing areas of central and northern Argentina (northern Buenos Aires to Chaco) and southern Brazil (Rio Grande do Sul to Parana), ending a very favorable period of harvest weather. According to independent sources from Argentina, corn, soybeans, and sunflowers were 45, 23, and 76 percent harvested, respectively, as of April 6, which reflects a marginal increase from the previous week. However, drier weather (5-25 mm) enabled fieldwork in Argentina's southern growing areas (La Pampa and central and southern Buenos Aires). Temperatures averaged 2 to 3 degrees C below normal throughout Argentina, as well as neighboring areas of southern Brazil and Paraguay, with lows below 5 degrees C in southern Buenos Aires. Except for La Pampa and western portions of Buenos Aires, moisture reserves in Argentina and southern Brazil are generally favorable for winter wheat planting, usually underway during May. Elsewhere in Brazil, widespread rain (25-50 mm or more) maintained moisture reserves for immature corn, but may have caused some delays in soybean harvesting and winter wheat planting. The exceptions were in Minas Gerais and Bahia, where drier weather continued to prevail. According to independent sources from Brazil, soybeans were 48 percent harvested as of April 4.

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