

WEEKLY WEATHER AND CROP BULLETIN

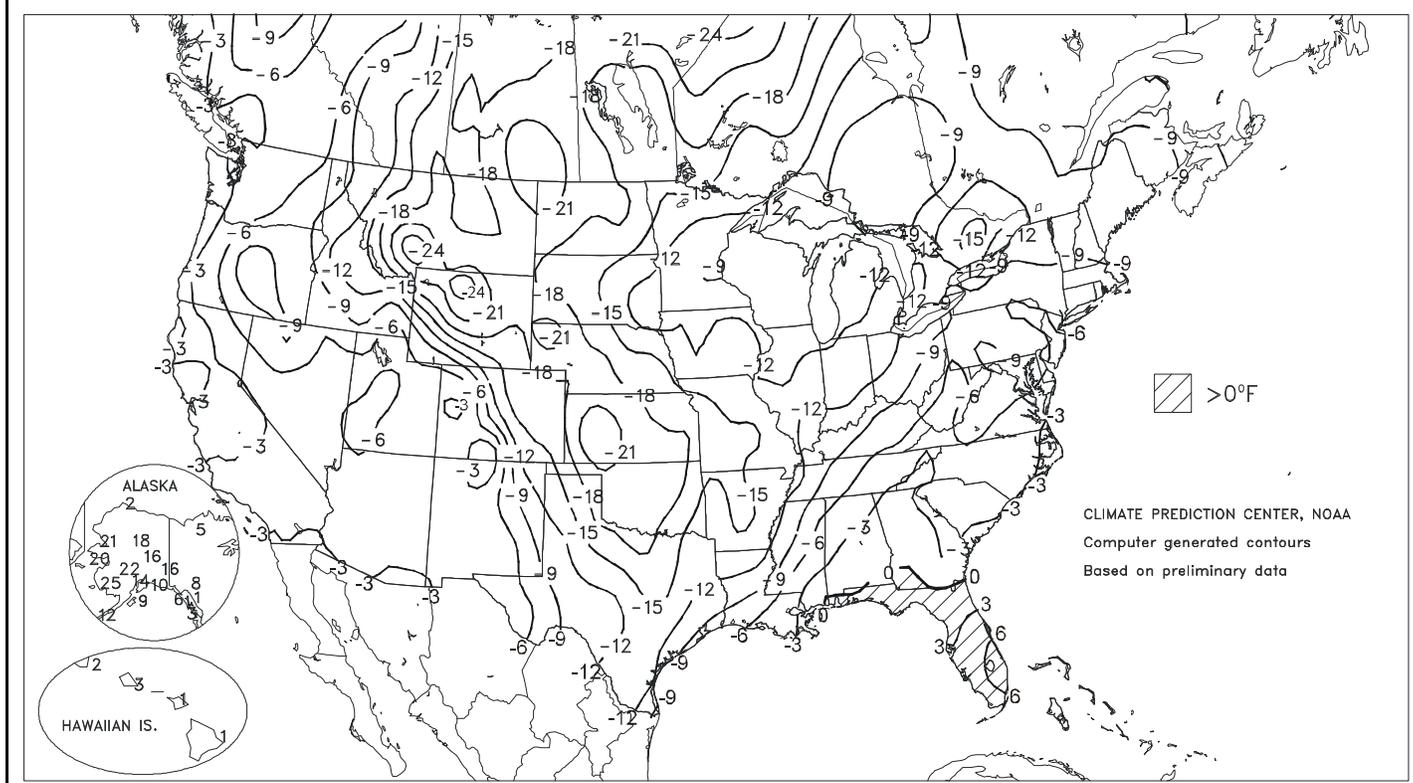
U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Weather Service

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



Departure of Average Temperature from Normal (°F)

FEB 23 - MAR 1, 2003



CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

HIGHLIGHTS

February 23 - March 1, 2003

Highlights provided by USDA/WAOB

Cold weather prevailed nearly nationwide, including areas from the **Rockies westward**. Widespread rain and snow showers accompanied the chilly weather across **southern California** and the **Four Corners region**, further improving **Southwestern** topsoil moisture reserves and high-elevation snow packs. However, despite recent precipitation, most of the **West** neared the end of a disappointing wet season that has failed to provide significant, large-scale relief from long-term drought. Farther east, the brunt of the latest Arctic outbreak affected the **Plains** and **Midwest**, where weekly temperatures ranging from 10 to 24°F below normal increased livestock

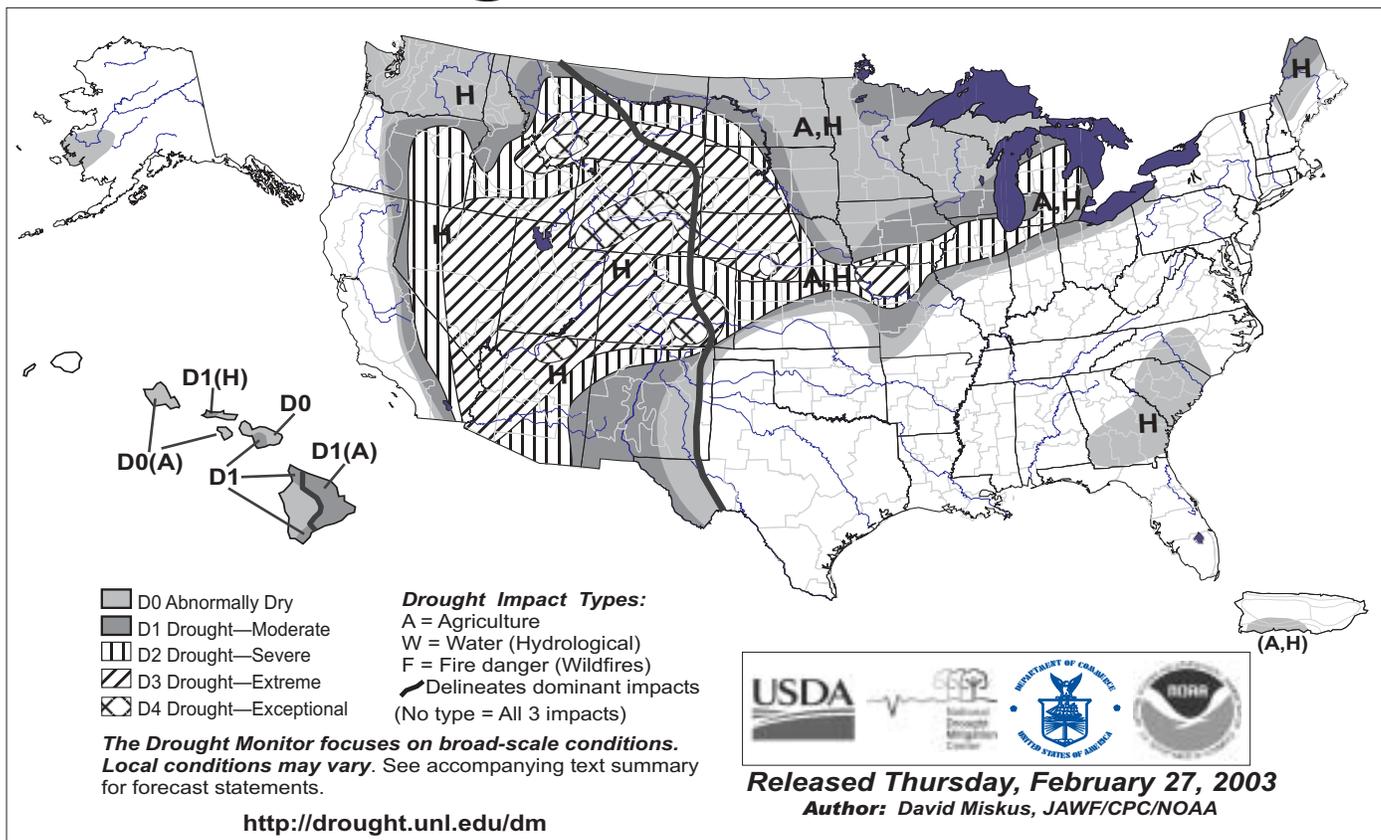
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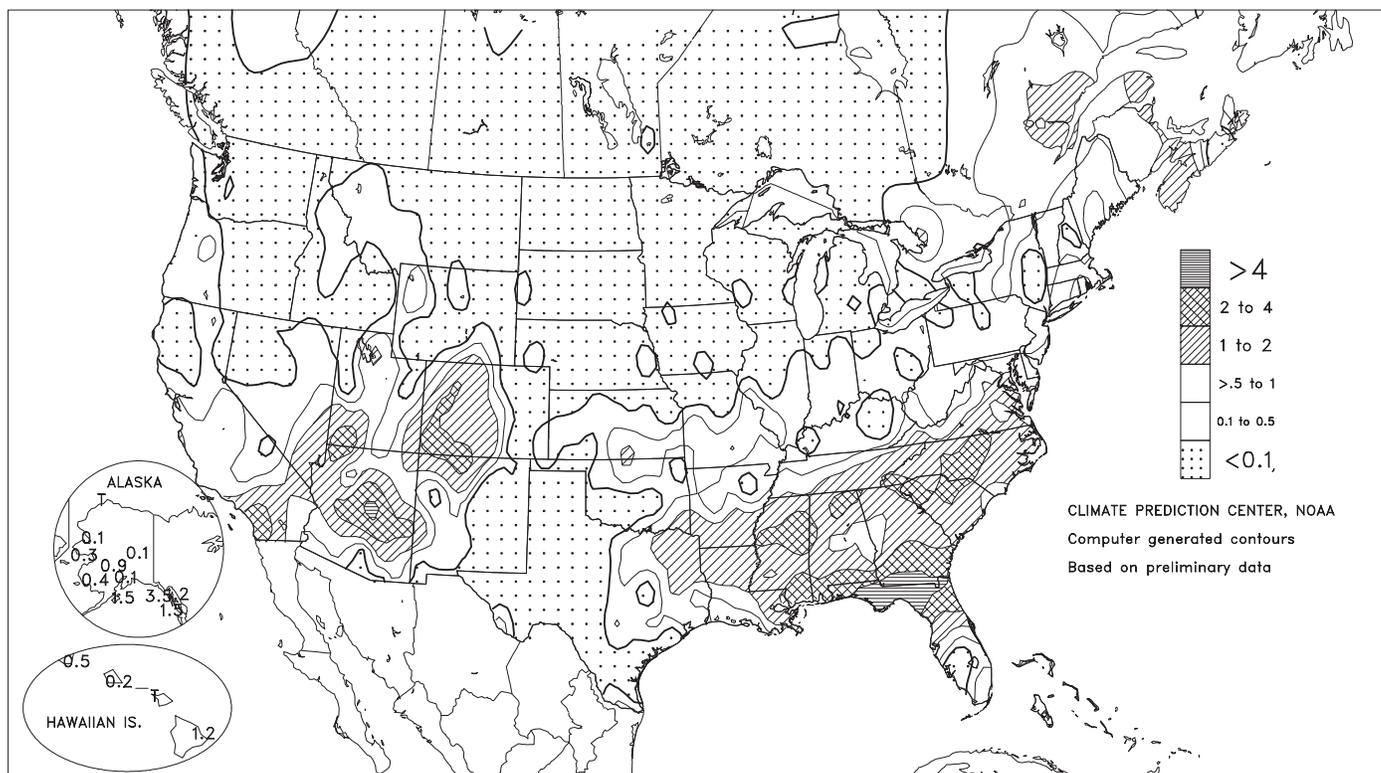
U.S. Drought Monitor

February 25, 2003
Valid 7 a.m. EST



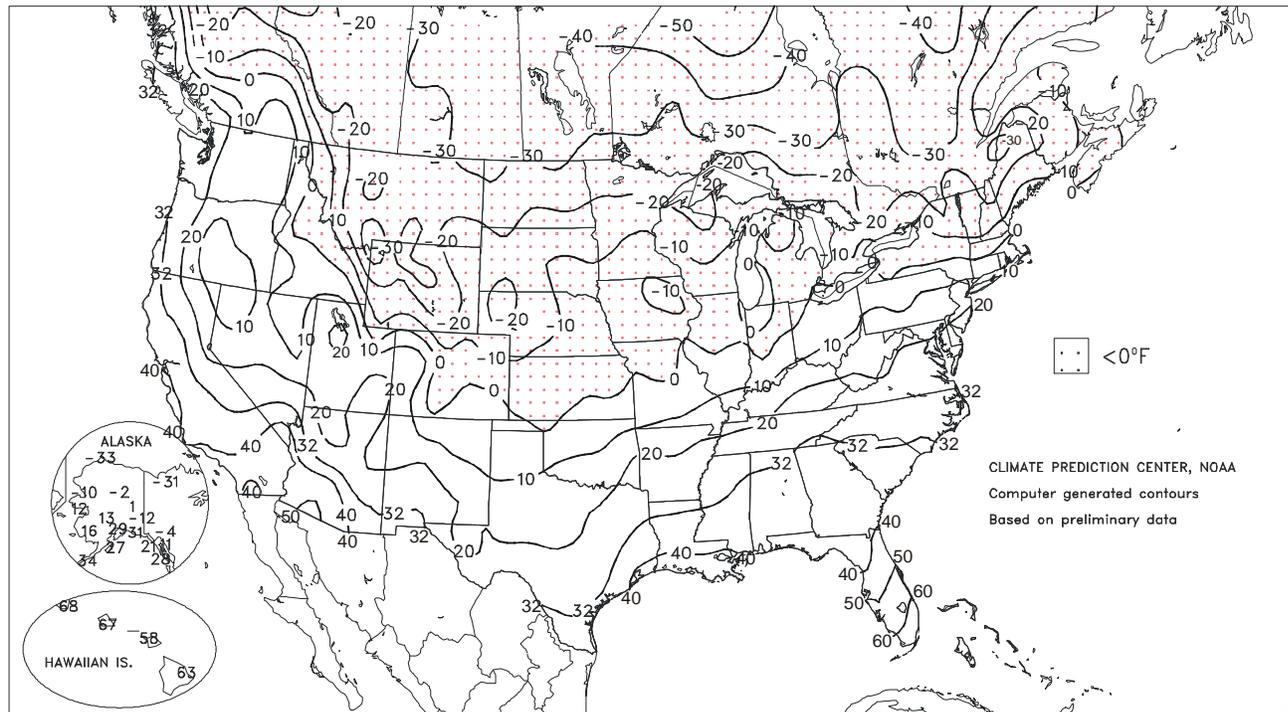
Total Precipitation (Inches)

FEB 23 - MAR 1, 2003



Extreme Minimum Temperature (°F)

FEB 23 - MAR 1, 2003



(Continued from front cover)

stress. Temperatures fell to 0 degrees F or below as far south as **northern Oklahoma** and the **Ohio Valley**, and were as low as -35 degrees F on the **northern Plains**, but snow insulated the majority of the winter wheat crop. However, areas of concern for winter wheat included the **northern High Plains**, where the snow cover was shallow and patchy, and **southern Oklahoma** and **northern Texas**, where temperatures ranged from 5 to 15 degrees F in the absence of snow cover. Wheat was still dormant on the northern and central Plains, but had begun to develop during a mid-February warm spell on the **southernmost Plains**. Additional snow fell from the **central Plains into the Northeast**, while cool, rainy weather hampered fieldwork across the **South**. Freezing rain caused some travel and electrical disruptions across the **interior South** and **southern Mid-Atlantic States**. Weekly rainfall ranged from 1 to 3 inches in many locations from the **Delta to the Carolinas**, while 2 to 6 inches fell from the **central Gulf Coast to southern Georgia and northern Florida**. Warm weather was confined to **Florida**, where weekly temperatures averaged as much as 7 degrees F above normal and highs approached 90 degrees F.

Early in the week, the coldest air of the winter swept across parts of the **Plains** and **Midwest**. On February 24, some locations in **Montana** and **Wyoming** noted their lowest temperatures in 4 to 6 years. **Sheridan, WY**, recorded -20 degrees F, their lowest reading since December 21, 1998, when the minimum temperature was -26 degrees F. In **Montana**, **Billings'** minimum of -17 degrees F was their lowest since a reading of -19 degrees F on January 27, 1997. On February 24-25, **Montana** locations reporting consecutive daily-record lows included **Wisdom** (-49 and -41 degrees F), **West Yellowstone** (-45 and -42 degrees F), and **Butte** (-37 and -26 degrees F). Farther south and east, consecutive records were established in locations such as **Lamoni, IA** (-3 and -5 degrees F), and **St. Joseph, MO** (-2 and -6 degrees F). By February 26-27, bitterly cold weather shifted into the **Northeast**, where **Massena, NY** (-24 and -16 degrees F), tallied consecutive record lows. In contrast, very warm weather prevailed across **southern Florida**, resulting in consecutive daily-record highs (88 degrees F on February 28 and 87 degrees F on March 1) in **West Palm Beach**.

Heavy precipitation overspread the **Southwest** on February 25, resulting in daily-record totals in locations such as **San Diego, CA** (1.48 inches),

and **Las Vegas, NV** (0.77 inch). It was **San Diego's** highest daily rainfall since 1.59 inches fell on February 21, 2000. **Las Vegas'** rain helped to boost the monthly total to 2.13 inches (309 percent of normal), their sixth-greatest February sum and highest since 2.21 inches fell in 2001. **Las Vegas** also received measurable rainfall on 6 consecutive days from February 24 - March 1, tying their all-time record set in April 1943 and January 1949.

Farther east, snow, freezing rain, and rain fell during the mid- to late-week period, capping a very wet, wintry February across the **interior South**, **southern Ohio Valley**, **Mid-Atlantic States**, and **southern New England**. **Jackson, KY**, netted a monthly total of 7.89 inches (214 percent of normal), breaking their February 1989 record of 7.61 inches. **Charleston, WV**, measured 7.46 inches (234 percent of normal), their wettest February since 8.10 inches fell in 1887. Farther north and east, February was the snowiest month on record in locations such as **Boston, MA** (41.6 inches), **Baltimore, MD** (40.5 inches), and **Wilmington, DE** (31.6 inches). Elsewhere, it was the snowiest February on record in **Indianapolis, IN** (21.7 inches), **Youngstown, OH** (26.4 inches), and **Pittsburgh, PA** (25.3 inches). **Tulsa, OK** (10.5 inches), also set a February snowfall record, including 7.0 inches on February 23. **Wichita, KS**, received 10.2 inches on February 23, their ninth-highest storm-total snowfall on record and greatest since 11.3 inches fell on March 19, 1998.

Mostly light to moderate shower activity was observed in **Hawaii**, primarily across windward locations. Some of the heaviest rain fell on February 23-24, when 24-hour totals reached 1.09 inches in **Wainiha, Kauai**, and 1.61 inches on the **Big Island at Glenwood**. Meanwhile in **Alaska**, unusually warm weather boosted weekly temperatures as much as 25 degrees F above normal. The warmth continued to reduce low-elevation snow depths across **southern Alaska**, where Anchorage reported only a trace of snow on the ground on March 1 and received just 3.3 inches (17 percent of normal) during the first 2 months of the year. Elsewhere in **south-central Alaska**, February precipitation in **Valdez** totaled 14.22 inches (257 percent of normal), including 92.5 inches of snow. In contrast, drier-than-normal weather prevailed in **southeastern Alaska**, where a very dry month in **Juneau** (February precipitation totaled 1.44 inches, or 36 percent of normal) left their season-to-date snowfall at 39.0 inches (48 percent of normal).

Weather Data for Mississippi and the Missouri Bootheel

Weather Data for the Week Ending March 1, 2003

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

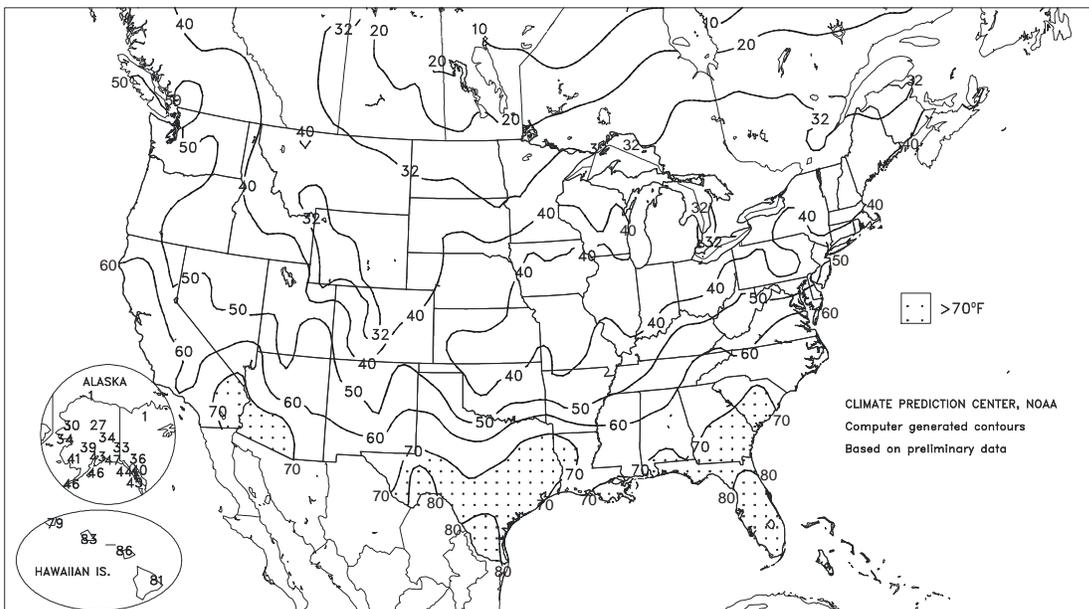
STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							4-INCH SOIL TEMP. °F		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL 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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MS BELZONI X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MS CLARKSDALE X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MS CLEVELAND X	43	32	57	27	37	-13	2.07	0.83	0.75	0.00	0	9.25	97	-	-	0	3	4	2
MS GREENVILLE X	44	34	61	28	39	-11	-	-	-	-	-	-	-	-	-	0	2	-	-
MS GREENWOOD X	47	36	60	31	42	-10	1.98	0.86	1.46	0.00	0	8.82	92	-	-	0	2	4	1
MS INDIANOLA 1S	45	34	61	30	40	-	1.79	-	1.26	0.00	-	7.44	-	46	43	0	1	3	2
MS INVERNESS 5E	46	36	61	32	41	-	1.95	-	1.36	0.00	-	8.65	-	47	45	0	1	4	2
MS LYON	42	33	51	26	37	-	1.01	-	0.67	0.00	-	6.09	-	45	39	0	3	4	1
MS MACON	52	40	59	35	46	-	1.25	-	0.86	0.00	-	10.30	-	53	48	0	0	3	1
MS MOORHEAD X	45	35	60	30	40	-11	2.49	1.27	1.32	0.01	6	10.80	107	-	-	0	2	7	2
MS ONWARD	47	36	66	32	41	-	1.70	-	1.27	0.00	-	8.81	-	49	45	0	1	4	1
MS PERTHSHIRE	42	32	54	26	37	-	0.80	-	0.57	0.00	-	6.66	-	44	38	0	4	3	1
MS ROLLING FORK X	47	33	65	31	40	-10	2.53	1.30	1.38	0.01	6	10.03	95	-	-	0	2	7	2
MS SCOTT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MS SIDON	47	36	61	32	42	-	2.04	-	1.45	0.00	-	7.77	-	50	43	0	1	5	1
MS STARKVILLE	51	38	59	33	44	-	1.79	-	1.01	0.00	-	11.39	-	52	46	0	0	3	2
MS TUNICA X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MS TUNICA 1W	40	32	49	24	36	-	0.16	-	0.11	0.00	-	2.35	-	42	39	0	4	3	0
MS VANCE	42	33	54	26	38	-	0.75	-	0.28	0.00	-	6.00	-	46	43	0	3	5	0
MS VERONA	49	36	58	31	43	-	1.38	-	0.80	0.00	-	8.32	-	52	44	0	1	3	1
MS VICKSBURG X	49	35	67	34	42	-12	1.82	0.57	1.15	0.04	21	11.22	100	-	-	0	0	6	1
MS YAZOO CITY X	51	35	64	33	43	-10	1.03	-0.32	0.42	0.00	0	9.00	78	-	-	0	0	4	0
MS STONEVILLE X	45	32	62	28	38	-11	2.24	1.10	1.19	0.00	0	9.05	90	48	42	0	4	6	2
MO DELTA	34	25	44	14	30	-11	0.05	-0.83	0.04	0.00	0	3.63	48	36	33	0	6	2	0
MO STEELE	35	29	42	20	32	-10	0.14	-0.76	0.11	0.00	0	7.36	95	37	35	0	5	2	0
MO GLENNONVILLE	34	27	43	18	31	-11	0.23	-0.43	0.18	0.00	0	5.21	83	37	35	0	5	4	0
MO PORTAGEVILLE LF	35	28	42	19	32	-10	0.14	-0.64	0.08	0.00	0	6.75	93	37	34	0	5	4	0
MO CLARKTON	34	27	43	18	31	-11	0.16	-0.50	0.12	0.00	0	5.94	95	37	34	0	5	3	0
MO CARDWELL	35	28	42	19	31	-13	0.23	-0.67	0.16	0.00	0	6.69	91	39	37	0	5	2	0
MO CHARLESTON	34	26	43	16	31	-10	0.18	-0.88	0.13	0.00	0	5.83	83	37	35	0	5	4	0
MO PORTAGEVILLE DC	35	28	43	18	32	-10	0.20	-0.58	0.08	0.00	0	6.34	87	38	35	0	5	4	0

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

Weather and Crop Summary: Continued precipitation and additional flooding hampered Delta fieldwork, including burn-down efforts.

Extreme Maximum Temperature (°F)

FEB 23 - MAR 1, 2003



National Weather Data for Selected Cities

Weather Data for the Week Ending March 1, 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 Dec 1	PCT. NORMAL SINCE Dec 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	
AL BIRMINGHAM	54	40	62	33	47	-3	0.51	-0.64	0.26	0.00	0	8.02	82	91	64	0	0	3	0	
AL HUNTSVILLE	48	37	55	30	43	-4	1.49	0.09	0.82	0.00	0	9.30	87	90	80	0	2	4	2	
AL MOBILE	63	48	72	37	56	0	1.71	0.28	1.63	0.06	27	6.21	56	91	69	0	0	3	1	
AL MONTGOMERY	59	45	68	40	52	-1	0.58	-0.89	0.38	0.00	0	4.84	45	95	72	0	0	2	0	
AK ANCHORAGE	39	31	43	29	35	14	0.13	-0.05	0.11	0.00	0	1.15	80	95	81	0	5	3	0	
AK BARROW	-10	-19	-1	-33	-14	2	0.01	0.01	0.01	0.00	0	0.21	88	82	78	0	7	1	0	
AK FAIRBANKS	28	7	34	1	17	16	0.06	0.00	0.06	0.00	0	0.83	89	89	85	0	7	1	0	
AK JUNEAU	36	27	40	11	32	1	1.23	0.28	0.71	0.71	546	7.86	88	97	87	0	5	4	1	
AK KODIAK	44	34	46	27	39	8	1.54	0.30	0.63	0.09	53	23.42	167	93	80	0	2	5	2	
AK NOME	31	22	34	12	27	20	0.35	0.21	0.20	0.01	50	1.26	75	93	81	0	7	5	0	
AZ FLAGSTAFF	38	25	49	17	31	-3	0.93	0.24	0.26	0.12	120	3.08	64	90	61	0	7	6	0	
AZ PHOENIX	65	50	73	45	57	-3	1.39	1.15	0.64	0.00	0	3.75	229	78	54	0	0	4	1	
AZ TUCSON	63	45	71	37	54	-2	0.24	0.02	0.15	0.00	0	1.11	58	77	49	0	0	2	0	
AZ YUMA	69	51	76	47	60	-4	0.30	0.24	0.30	0.00	0	1.12	167	68	47	0	0	1	0	
AR FORT SMITH	38	30	45	22	34	-13	0.51	-0.02	0.21	0.00	9	3.73	74	95	77	0	4	5	0	
AR LITTLE ROCK	38	29	50	22	34	-14	1.34	0.45	0.55	0.00	0	6.56	93	97	74	0	5	4	1	
CA BAKERSFIELD	60	45	65	40	53	-2	0.20	-0.12	0.08	0.00	0	1.68	69	90	70	0	0	4	0	
CA FRESNO	61	44	63	38	52	-1	0.51	-0.02	0.21	0.00	0	1.65	38	90	74	0	0	5	0	
CA LOS ANGELES	61	51	63	48	56	-2	0.79	0.06	0.55	0.00	0	3.82	62	90	71	0	0	3	1	
CA REDDING	61	38	64	30	50	-1	0.00	-1.30	0.00	0.00	0	9.03	74	66	47	0	1	0	0	
CA SACRAMENTO	61	41	66	36	51	-2	0.02	-0.78	0.01	0.00	0	2.68	36	98	48	0	0	2	0	
CA SAN DIEGO	61	55	63	52	58	-1	1.86	1.35	1.48	0.00	0	4.93	112	75	67	0	0	3	1	
CA SAN FRANCISCO	59	48	61	43	53	0	0.66	-0.25	0.41	0.00	0	3.93	46	89	76	0	0	3	0	
CA STOCKTON	61	40	66	34	51	-2	0.10	-0.48	0.06	0.00	0	1.69	32	96	76	0	0	2	0	
CO ALAMOSA	42	14	45	6	28	1	0.05	-0.01	0.04	0.00	0	0.25	53	83	51	0	7	2	0	
CO CO SPRINGS	30	11	37	-3	20	-14	0.24	0.11	0.15	0.09	450	0.68	105	97	66	0	7	2	0	
CO DENVER INTL	28	10	36	-5	19	-15	0.16	0.02	0.05	0.00	0	0.53	110	92	67	0	7	5	0	
CO GRAND JUNCTION	43	29	48	19	36	-2	0.72	0.56	0.21	0.21	1050	1.34	120	85	69	0	6	5	0	
CO PUEBLO	35	15	47	5	25	-12	1.15	0.05	0.08	0.07	350	0.79	130	84	67	0	7	2	0	
CT BRIDGEPORT	32	20	41	12	26	-8	0.01	0.25	0.93	0.08	73	5.65	84	80	59	0	7	2	1	
CT HARTFORD	32	15	39	4	23	-9	0.83	0.09	0.83	0.00	0	4.92	71	81	50	0	7	1	1	
DC WASHINGTON	39	28	51	22	33	-8	0.36	-0.38	0.14	0.01	9	7.87	132	84	62	0	5	5	0	
DE WILMINGTON	35	26	44	20	31	-6	0.25	-0.53	0.17	0.00	0	6.40	101	87	56	0	7	3	0	
FL DAYTONA BEACH	75	55	81	45	65	3	2.43	1.69	1.66	0.35	318	6.04	101	99	62	0	0	3	1	
FL JACKSONVILLE	71	48	79	38	59	1	5.65	4.87	4.41	4.41	4009	9.19	132	97	59	0	0	4	2	
FL KEY WEST	80	71	84	66	76	4	0.19	-0.14	0.18	0.00	0	1.81	48	93	75	0	0	2	0	
FL MIAMI	84	68	87	64	76	6	0.59	0.11	0.35	0.00	0	1.26	31	95	57	0	0	2	0	
FL ORLANDO	78	58	83	49	68	4	0.55	-0.11	0.51	0.00	0	2.39	49	96	64	0	0	2	1	
FL PENSACOLA	64	49	70	40	57	0	2.38	1.10	2.01	0.09	47	6.05	59	95	70	0	0	4	1	
FL TALLAHASSEE	69	46	75	33	58	1	4.82	3.51	2.22	1.86	930	8.03	79	95	65	0	0	3	3	
FL TAMPA	76	60	80	50	68	4	0.36	-0.33	0.29	0.00	0	3.05	61	94	67	0	0	2	0	
FL WEST PALM	84	68	88	64	76	7	0.03	-0.54	0.02	0.00	0	1.96	31	95	66	0	0	2	0	
GA ATHENS	53	37	67	34	45	-4	0.51	-0.63	0.23	0.07	41	6.35	69	90	71	0	0	3	0	
GA ATLANTA	53	40	66	36	46	-4	0.48	-0.73	0.34	0.00	0	5.53	56	90	75	0	0	2	0	
GA AUGUSTA	58	38	71	30	48	-3	1.79	0.75	0.99	0.99	660	6.72	77	97	67	0	1	4	1	
GA COLUMBUS	60	44	69	39	52	-1	1.07	-0.16	0.54	0.26	144	8.08	86	92	62	0	0	3	1	
GA MACON	59	42	70	36	51	-1	1.43	0.30	0.73	0.73	456	7.34	76	93	68	0	0	3	1	
GA SAVANNAH	63	43	74	35	53	-2	1.50	0.82	0.84	0.84	840	4.77	68	10	69	0	0	4	1	
HI HILO	80	66	81	63	73	1	1.19	-1.27	0.37	0.00	0	6.74	36	89	78	0	0	6	0	
HI HONOLULU	83	71	83	67	77	4	0.20	-0.34	0.09	0.00	0	2.32	45	81	71	0	0	4	0	
HI KAHULUI	82	65	86	58	74	2	0.02	-0.48	0.01	0.00	0	3.65	59	81	71	0	0	2	0	
HI LIHUE	78	69	79	68	74	2	0.53	-0.25	0.26	0.05	45	6.59	83	86	78	0	0	6	0	
ID BOISE	42	23	45	18	32	-8	0.07	-0.21	0.04	0.03	75	2.51	98	80	56	0	7	2	0	
ID LEWISTON	41	23	46	16	32	-9	0.08	-0.14	0.08	0.00	0	3.97	187	83	64	0	7	1	0	
ID POCATELLO	37	14	41	3	26	-7	0.00	-0.27	0.00	0.00	0	1.26	58	73	60	0	7	0	0	
IL CHICAGO/O'HARE	30	9	40	-2	20	-11	0.03	-0.38	0.03	0.00	0	0.46	13	83	51	0	7	1	0	
IL MOLINE	30	9	40	-3	19	-13	0.00	-0.44	0.00	0.00	0	0.69	22	80	52	0	7	0	0	
IL PEORIA	29	14	39	0	21	-12	0.02	-0.48	0.01	0.01	14	1.45	45	82	50	0	7	2	0	
IL ROCKFORD	30	7	41	-5	18	-11	0.01	-0.33	0.01	0.00	0	0.45	16	78	46	0	7	1	0	
IL SPRINGFIELD	29	16	37	-3	23	-12	0.06	-0.50	0.04	0.01	11	1.91	54	86	61	0	7	3	0	
IN EVANSVILLE	33	24	41	11	29	-11	0.41	-0.44	0.31	0.00	0	6.09	99	88	72	0	6	3	0	
IN FORT WAYNE	26	10	35	-5	18	-13	0.10	-0.41	0.06	0.03	43	2.42	60	89	58	0	7	3	0	
IN INDIANAPOLIS	29	16	37	0	23	-12	0.12	-0.54	0.12	0.00	0	3.33	67	94	72	0	7	1	0	
IN SOUTH BEND	28	12	38	2	20	-11	0.01	-0.49	0.01	0.01	14	1.56	36	85	58	0	7	1	0	
IA BURLINGTON	28	14	36	0	21	-12	0.00	-0.49	0.00	0.00	0	1.22	42	88	47	0	7	0	0	
IA CEDAR RAPIDS	26	6	37	-10	16	-13	0.01	-0.30	0.01	0.01	20	0.67	30	87	52	0	7	1	0	
IA DES MOINES	25	9	36	-6	17	-14	0.02	-0.29	0.02	0.02	40	1.19	52	83	55	0	7	1	0	
IA DUBUQUE	26	6	38	-8	16	-12	0.00	-0.40	0.00	0.00	0	0.51	18	80	52	0	7	0	0	
IA SIOUX CITY	27	6	45	-6	16	-14	0.00	-0.24	0.00	0.00	0	1.05	84	84	64	0	7	0	0	
IA WATERLOO	27	2	42	-13	15	-13	0.00	-0.30	0.00	0.00	0	0.54	28	80	58	0	7	0	0	
KS CONCORDIA	25	11	40	-2	18	-18	0.08	-0.25	0.04	0.00	0	1.09	75	84	67	0	7	2	0	
KS DODGE CITY	23	9	37	-2	16	-23	0.22	-0.03	0.19	0.02	50	0.82	62	93	81	0	7	3	0	
KS GOODLAND	26	8	44	-8	17	-18	0.09	-0.10	0.09	0.00	0	0.43	48	87	76	0	7	1	0	
KS TOPEKA	27	15	38	0	21	-17	0.13	-0.27	0.07	0.01	17	1.68	77	84	65	0	7	3	0	

Weather Data for the Week Ending March 1, 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 Dec 1	PCT. NORMAL SINCE Dec 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	27	16	39	4	21	-19	0.73	0.31	0.70	0.00	0	2.06	107	92	79	0	7	2	1
KY JACKSON	38	28	53	22	33	-8	0.39	-0.61	0.19	0.00	0	10.00	135	97	77	0	6	5	0
KY LEXINGTON	35	26	49	16	31	-9	0.25	-0.69	0.16	0.00	0	5.66	84	90	78	0	6	3	0
KY LOUISVILLE	36	27	48	16	31	-10	0.17	-0.76	0.08	0.00	0	5.28	79	90	68	0	6	4	0
KY PADUCAH	35	27	42	16	31	-11	0.26	-0.72	0.12	0.00	0	7.04	93	94	74	0	5	5	0
LA BATON ROUGE	61	45	69	37	53	-3	0.46	-0.67	0.39	0.00	0	7.79	68	10	74	0	0	2	0
LA LAKE CHARLES	56	44	69	40	50	-7	0.05	-0.65	0.04	0.00	0	6.42	72	96	74	0	0	2	0
LA NEW ORLEANS	63	49	71	41	56	-2	1.19	-0.01	0.88	0.03	18	4.83	42	97	81	0	0	4	1
LA SHREVEPORT	47	35	73	31	41	-13	1.18	0.19	0.72	0.00	0	8.13	91	94	75	0	2	4	1
ME CARIBOU	19	-6	30	-22	6	-11	0.38	-0.12	0.35	0.00	0	8.52	167	81	47	0	7	3	0
ME PORTLAND	29	8	37	-5	18	-10	0.70	-0.08	0.70	0.00	0	3.87	53	87	51	0	7	1	1
MD BALTIMORE	37	25	46	18	31	-7	0.45	-0.38	0.20	0.00	0	8.34	126	87	70	0	7	4	0
MA BOSTON	32	18	40	6	25	-9	0.51	-0.29	0.51	0.00	0	4.30	59	78	48	0	7	1	1
MA WORCESTER	28	14	37	2	21	-8	0.17	-0.63	0.17	0.00	0	4.78	66	84	48	0	7	1	0
MI ALPENA	25	0	42	-9	13	-9	0.01	-0.35	0.01	0.00	0	0.51	16	86	45	0	7	1	0
MI GRAND RAPIDS	27	8	36	1	18	-10	0.00	-0.37	0.00	0.00	0	1.19	33	84	53	0	7	0	0
MI HOUGHTON LAKE	24	-2	37	-12	11	-12	0.00	-0.32	0.00	0.00	0	0.36	12	83	55	0	7	0	0
MI LANSING	29	4	38	-3	17	-10	0.00	-0.34	0.00	0.00	0	0.56	18	79	47	0	7	0	0
MI MUSKEGON	30	12	39	8	21	-7	0.00	-0.37	0.00	0.00	0	0.52	13	83	52	0	7	0	0
MI TRAVERSE CITY	26	6	41	-12	16	-9	0.04	-0.28	0.04	0.00	0	0.71	15	87	48	0	7	1	0
MN DULUTH	21	-2	37	-15	10	-9	0.00	-0.20	0.00	0.00	0	0.20	10	79	55	0	7	0	0
MN INT'L FALLS	18	-15	28	-23	2	-14	0.01	-0.13	0.01	0.01	50	0.10	7	80	42	0	7	1	0
MN MINNEAPOLIS	26	7	42	-3	17	-8	0.00	-0.22	0.00	0.00	0	0.78	42	75	52	0	7	0	0
MN ROCHESTER	24	4	39	-9	14	-9	0.00	-0.20	0.00	0.00	0	0.72	42	85	59	0	7	0	0
MS ST. CLOUD	24	0	37	-13	12	-9	0.00	-0.15	0.00	0.00	0	0.47	34	85	53	0	7	0	0
MS JACKSON	52	39	64	34	46	-6	0.91	-0.19	0.78	0.01	6	10.44	101	96	74	0	0	5	1
MS MERIDIAN	57	42	63	34	49	-4	0.78	-0.65	0.75	0.00	0	8.41	73	95	72	0	0	3	1
MS TUPELO	49	35	58	31	42	-6	1.40	0.07	0.79	0.00	0	9.31	93	94	80	0	2	4	1
MO COLUMBIA	28	16	36	-1	22	-16	0.19	-0.42	0.10	0.01	11	2.30	57	89	67	0	7	4	0
MO KANSAS CITY	27	15	35	0	21	-16	0.06	-0.37	0.03	0.03	43	1.17	46	88	63	0	7	3	0
MO SAINT LOUIS	31	21	42	7	26	-13	0.41	-0.25	0.20	0.01	10	2.95	65	82	65	0	7	4	0
MO SPRINGFIELD	29	21	37	7	25	-16	0.38	-0.25	0.29	0.00	0	3.50	78	91	76	0	6	3	0
MT BILLINGS	24	4	38	-17	14	-19	0.02	-0.13	0.02	0.00	0	1.21	86	79	50	0	7	1	0
MT BUTTE	21	-17	29	-37	2	-23	0.12	-0.01	0.06	0.02	100	1.61	158	85	51	0	7	3	0
MT GLASGOW	18	-6	32	-27	6	-18	0.00	-0.06	0.00	0.00	0	0.23	37	80	70	0	7	0	0
MT GREAT FALLS	26	5	41	-16	16	-13	0.02	-0.13	0.00	0.02	100	0.50	41	79	52	0	7	1	0
MT HAVRE	23	-10	37	-31	7	-20	0.00	-0.11	0.00	0.00	0	0.37	44	85	71	0	7	0	0
MT KALISPELL	30	13	40	2	22	-8	0.00	-0.25	0.00	0.00	0	1.07	40	82	61	0	7	0	0
MT MISSOULA	29	10	39	-3	20	-12	0.03	-0.16	0.01	0.02	67	2.57	138	77	64	0	7	2	0
NE GRAND ISLAND	25	7	45	-5	16	-16	0.02	-0.25	0.02	0.00	0	1.18	94	82	66	0	7	1	0
NE LINCOLN	27	7	40	-6	17	-15	0.23	-0.05	0.17	0.01	20	2.04	148	87	62	0	7	3	0
NE NORFOLK	28	6	47	-3	17	-14	0.00	-0.26	0.00	0.00	0	0.85	62	82	61	0	7	0	0
NE NORTH PLATTE	26	2	44	-12	14	-19	0.02	-0.16	0.02	0.00	0	0.55	59	93	58	0	7	1	0
NE OMAHA	26	10	38	0	18	-14	0.05	-0.23	0.05	0.00	0	1.65	102	86	60	0	7	1	0
NE SCOTTSBLUFF	25	4	37	-15	14	-19	0.05	-0.12	0.04	0.00	0	0.38	33	82	71	0	7	2	0
NE VALENTINE	27	0	41	-17	14	-16	0.01	-0.15	0.01	0.00	0	0.52	65	86	59	0	7	1	0
NV ELY	37	14	47	4	26	-6	0.24	0.03	0.15	0.04	133	0.66	43	78	59	0	7	3	0
NV LAS VEGAS	57	45	67	41	51	-4	1.31	1.14	0.55	0.07	350	2.21	170	73	53	0	0	6	1
NV RENO	48	28	56	22	38	-3	0.05	-0.20	0.05	0.00	0	0.39	18	71	46	0	5	1	0
NH WINNEMUCCA	42	16	48	9	29	-10	0.02	-0.13	0.01	0.01	50	1.91	130	81	52	0	7	2	0
NH CONCORD	30	4	38	-10	17	-10	0.53	-0.06	0.53	0.00	0	5.73	106	87	44	0	7	1	1
NJ NEWARK	35	25	45	16	30	-7	0.33	-0.45	0.33	0.00	0	6.87	97	72	56	0	7	1	0
NM ALBUQUERQUE	47	30	50	22	39	-5	0.21	0.10	0.08	0.00	0	1.03	108	79	43	0	5	3	0
NY ALBANY	31	11	40	-3	21	-7	0.11	-0.45	0.11	0.00	0	5.02	106	87	49	0	7	1	0
NY BINGHAMTON	27	13	40	-1	20	-7	0.32	-0.29	0.26	0.01	11	4.75	93	87	67	0	7	3	0
NY BUFFALO	27	11	36	-3	19	-10	0.28	-0.30	0.16	0.00	0	4.97	88	92	69	0	7	3	0
NY ROCHESTER	28	10	36	-2	19	-9	0.21	-0.29	0.13	0.00	0	4.03	91	90	69	0	7	4	0
NY SYRACUSE	31	11	45	-8	21	-6	0.35	-0.18	0.27	0.00	0	4.07	85	83	57	0	7	3	0
NC ASHEVILLE	52	33	63	28	42	0	0.34	-0.65	0.19	0.04	27	5.54	69	91	67	0	5	3	0
NC CHARLOTTE	51	35	67	31	43	-5	1.42	0.47	0.58	0.58	414	6.16	80	92	67	0	1	4	1
NC GREENSBORO	48	32	64	28	40	-4	1.46	0.65	0.66	0.41	342	7.72	114	93	68	0	4	5	1
NC HATTERAS	55	40	65	32	48	0	0.69	-0.29	0.55	0.02	13	5.56	56	95	71	0	1	5	1
NC RALEIGH	49	32	67	28	41	-5	1.85	0.95	1.14	0.32	246	7.15	94	86	65	0	5	5	1
NC WILMINGTON	58	38	67	33	48	-3	0.65	-0.29	0.38	0.07	50	5.27	63	97	64	0	0	3	0
ND BISMARCK	20	-7	37	-19	7	-16	0.00	-0.13	0.00	0.00	0	0.31	32	80	64	0	7	0	0
ND DICKINSON	19	-7	33	-24	6	-19	0.00	-0.06	0.00	0.00	0	0.15	19	87	62	0	7	0	0
ND FARGO	17	-7	29	-19	5	-14	0.00	-0.17	0.00	0.00	0	0.29	21	84	60	0	7	0	0
ND GRAND FORKS	15	-14	26	-25	0	-18	0.00	-0.14	0.00	0.00	0	0.28	22	84	60	0	7	0	0
ND JAMESTOWN	14	-10	27	-22	2	-19	0.00	-0.13	0.00	0.00	0	0.15	13	87	63	0	7	0	0
ND WILLISTON	11	-18	24	-35	-4	-26	0.01	-0.09	0.01	0.01	50	1.01	106	92	80	0	7	1	0
OH AKRON-CANTON	30	14	38	3	22	-10	0.20	-0.42	0.11	0.00	0	3.75	77	84	65	0	7	3	0
OH CINCINNATI	32	22	43	9	27	-11	0.19	-0.56	0.14	0.00	0	4.96	86	83	70	0	6	4	0
OH CLEVELAND	28	13	39	4	20	-12	0.40	-0.17	0.26	0.00	0	4.75	98	89	67	0	7	2	0
OH COLUMBUS	32	19	40	9	26	-10	0.29	-0.27	0.16	0.04	50	4.83	100	80	65	0	7	3	0
OH DAYTON	29	16	38	3	22	-12	0.23	-0.36	0.20	0.02	22	2.96	59	84	63	0	7	3	0
OH MANSFIELD	28	12	37	2	20	-11	0.14	-0.42	0.13	0.00	0	2.78	57	94	64	0	7	2	0

Based on 1971-2000 normals

*** Not Available

Weather Data for the Week Ending March 1, 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 Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP.		
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
OK	TOLEDO	28	9	35	3	18	-13	0.05	-0.42	0.03	0.01	14	2.01	52	89	61	0	7	3	0
	YOUNGSTOWN	32	12	38	6	22	-9	0.33	-0.21	0.18	0.01	13	3.96	89	88	66	0	7	3	0
	OKLAHOMA CITY	31	20	42	9	25	-21	0.07	-0.49	0.07	0.00	0	0.87	30	95	78	0	6	1	0
	TULSA	30	21	41	8	26	-20	0.69	0.04	0.68	0.00	0	1.94	53	92	87	0	6	2	1
OR	ASTORIA	51	34	54	30	43	-2	0.50	-1.32	0.34	0.12	46	17.80	100	82	70	0	2	4	0
	BURNS	38	11	42	6	25	-8	0.09	-0.20	0.06	0.03	75	1.37	59	84	59	0	7	2	0
	EUGENE	50	32	54	26	41	-3	0.51	-0.95	0.37	0.10	50	9.73	69	90	72	0	4	4	0
	MEDFORD	53	31	60	26	42	-3	0.17	-0.31	0.12	0.05	71	4.34	94	89	52	0	5	2	0
	PENDLETON	42	25	47	19	34	-7	0.06	-0.22	0.06	0.00	0	4.30	159	86	66	0	7	1	0
	PORTLAND	50	34	56	30	42	-3	0.06	-0.89	0.05	0.01	8	10.42	111	74	59	0	3	2	0
	SALEM	52	32	57	26	42	-2	0.20	-0.95	0.20	0.00	0	10.23	92	80	67	0	4	1	0
PA	ALLENTOWN	33	22	42	15	28	-5	0.25	-0.45	0.25	0.00	0	3.83	60	79	59	0	7	1	0
	ERIE	26	9	38	2	17	-14	0.11	-0.47	0.05	0.00	0	4.16	85	96	80	0	7	3	0
	MIDDLETOWN	33	22	40	14	27	-8	0.24	-0.50	0.10	0.00	0	6.45	110	95	69	0	7	4	0
	PHILADELPHIA	37	25	46	19	31	-7	0.51	-0.22	0.46	0.00	0	6.61	104	81	59	0	7	3	0
	PITTSBURGH	35	22	49	12	28	-6	0.24	-0.38	0.12	0.05	56	4.41	85	90	65	0	7	3	0
	WILKES-BARRE	32	20	45	11	26	-6	0.17	-0.33	0.13	0.01	14	2.72	59	85	51	0	7	4	0
	WILLIAMSPORT	32	21	41	15	27	-5	0.36	-0.27	0.26	0.07	78	4.36	79	91	70	0	7	3	0
RI	PROVIDENCE	33	18	43	8	25	-8	0.53	-0.31	0.51	0.02	17	5.13	65	76	57	0	7	2	1
SC	BEAUFORT	61	44	72	38	52	-1	0.52	-0.18	0.39	0.10	100	3.49	48	98	63	0	0	3	0
	CHARLESTON	62	42	74	37	52	-1	1.25	0.47	0.68	0.54	491	4.03	55	91	60	0	0	3	2
	COLUMBIA	56	37	71	31	46	-5	1.22	0.26	0.60	0.60	429	5.59	65	93	65	0	1	4	1
	GREENVILLE	51	36	66	33	44	-3	1.02	-0.17	0.42	0.10	59	5.15	58	95	67	0	0	4	0
SD	ABERDEEN	23	-2	36	-14	10	-14	0.00	-0.16	0.00	0.00	0	0.30	30	85	60	0	7	0	0
	HURON	26	2	36	-9	14	-12	0.00	-0.20	0.00	0.00	0	0.80	74	85	54	0	7	0	0
	RAPID CITY	25	0	39	-17	13	-17	0.00	-0.14	0.00	0.00	0	0.54	64	85	56	0	7	0	0
	SIoux FALLS	27	4	42	-7	15	-10	0.00	-0.19	0.00	0.00	0	0.97	92	82	63	0	7	0	0
TN	BRISTOL	48	32	64	28	40	-1	0.98	0.08	0.32	0.00	0	8.80	125	98	69	0	5	5	0
	CHATTANOOGA	50	37	57	33	44	-2	1.08	-0.22	0.54	0.01	5	10.49	100	87	70	0	0	4	1
	KNOXVILLE	49	36	61	31	42	-3	0.94	-0.15	0.47	0.00	0	11.93	136	95	73	0	1	4	0
	MEMPHIS	42	33	50	24	38	-10	0.50	-0.65	0.34	0.00	0	9.13	105	89	73	0	3	3	0
	NASHVILLE	41	32	53	21	36	-9	0.28	-0.75	0.12	0.00	0	10.05	129	95	78	0	4	5	0
TX	ABILENE	47	28	64	15	38	-14	0.17	-0.13	0.16	0.00	0	1.14	53	86	73	0	4	2	0
	AMARILLO	41	16	53	4	28	-15	0.02	-0.15	0.02	0.00	0	0.24	20	93	59	0	7	1	0
	AUSTIN	49	33	78	25	41	-17	0.60	0.05	0.36	0.02	25	6.71	169	91	77	0	3	5	0
	BEAUMONT	57	45	71	40	51	-7	0.55	-0.18	0.41	0.00	0	7.43	81	10	80	0	0	2	0
	BROWNSVILLE	65	47	79	35	56	-9	0.18	-0.01	0.12	0.00	0	1.37	54	96	82	0	0	5	0
	CORPUS CHRISTI	57	42	77	33	50	-12	0.01	-0.44	0.01	0.01	17	2.34	66	95	82	0	0	1	0
	DEL RIO	59	37	77	27	48	-11	0.01	-0.22	0.01	0.00	0	0.78	50	88	62	0	3	1	0
	EL PASO	59	40	61	29	49	-4	0.09	0.01	0.08	0.00	0	1.38	162	63	33	0	1	2	0
	FORT WORTH	42	29	65	20	35	-18	0.44	-0.28	0.36	0.00	0	3.32	76	96	73	0	6	2	0
	GALVESTON	57	48	69	44	52	-8	0.21	-0.34	0.17	0.00	0	2.90	43	96	78	0	0	2	0
	HOUSTON	54	43	74	38	48	-10	0.65	-0.07	0.50	0.00	0	5.20	77	91	78	0	0	3	1
	LUBBOCK	50	24	65	12	37	-9	0.00	-0.17	0.00	0.00	0	0.10	8	83	67	0	6	0	0
	MIDLAND	53	28	66	17	41	-11	0.00	-0.14	0.00	0.00	0	1.00	88	88	65	0	4	0	0
	SAN ANGELO	52	29	69	18	41	-12	0.00	-0.29	0.00	0.00	0	1.90	94	89	68	0	4	0	0
	SAN ANTONIO	53	37	79	27	45	-13	0.33	-0.11	0.16	0.01	17	3.12	90	95	72	0	3	4	0
	VICTORIA	57	39	77	31	48	-11	0.07	-0.43	0.03	0.03	43	3.79	83	95	78	0	2	4	0
	WACO	44	32	69	22	38	-16	0.24	-0.42	0.12	0.03	33	2.11	48	94	78	0	3	3	0
	WICHITA FALLS	36	25	49	15	31	-18	0.04	-0.42	0.03	0.00	0	0.92	33	86	76	0	6	2	0
UT	SALT LAKE CITY	39	26	45	22	33	-5	0.32	-0.05	0.12	0.05	83	1.84	67	90	54	0	7	4	0
VT	BURLINGTON	26	2	38	-12	14	-10	0.34	-0.05	0.34	0.00	0	1.87	47	89	48	0	7	1	0
VA	LYNCHBURG	42	27	61	24	35	-6	0.97	0.16	0.49	0.10	83	7.39	109	91	68	0	7	5	0
	NORFOLK	49	35	66	30	42	-2	0.82	-0.03	0.64	0.00	0	7.57	102	93	66	0	2	4	1
	RICHMOND	45	29	63	25	37	-5	0.93	0.10	0.52	0.03	23	6.41	96	91	68	0	6	4	1
	ROANOKE	42	29	59	24	36	-6	0.74	-0.06	0.35	0.11	92	7.36	114	87	68	0	6	5	0
	WASH/DULLES	36	25	47	21	31	-7	0.29	-0.44	0.15	0.00	0	7.67	129	85	71	0	7	4	0
WA	OLYMPIA	50	27	54	18	39	-3	0.17	-1.19	0.17	0.00	0	11.85	85	89	72	0	6	1	0
	QUILLAYUTE	49	30	53	23	39	-4	0.43	-2.48	0.35	0.00	0	18.04	68	92	67	0	6	3	0
	SEATTLE-TACOMA	48	33	51	25	40	-4	0.07	-0.87	0.07	0.00	0	9.77	103	79	59	0	3	1	0
	SPOKANE	37	19	43	12	28	-7	0.00	-0.36	0.00	0.00	0	4.05	120	80	48	0	7	0	0
	YAKIMA	47	21	54	11	34	-4	0.00	-0.17	0.00	0.00	0	2.49	125	73	43	0	7	0	0
WV	BECKLEY	40	26	53	21	33	-4	0.38	-0.40	0.17	0.00	0	5.61	89	90	80	0	6	6	0
	CHARLESTON	41	28	55	21	35	-5	0.46	-0.39	0.17	0.00	0	9.29	141	93	76	0	5	5	0
	ELKINS	41	22	52	10	32	-3	0.59	-0.25	0.21	0.00	0	6.59	98	98	66	0	7	5	0
	HUNTINGTON	38	27	53	19	33	-7	0.24	-0.60	0.16	0.00	0	6.90	107	95	75	0	6	5	0
WI	EAU CLAIRE	26	3	42	-8	15	-8	0.02	-0.18	0.02	0.00	0	0.78	42	85	42	0	7	1	0
	GREEN BAY	25	4	40	-9	15	-9	0.00	-0.27	0.00	0.00	0	0.82	36	83	52	0	7	0	0
	LA CROSSE	28	6	42	-4	17	-10	0.01	-0.22	0.01	0.00	0	0.93	42	84	44	0	7	1	0
	MADISON	28	4	39	-6	16	-11	0.01	-0.31	0.01	0.00	0	0.54	21	84	45	0	7	1	0
	MILWAUKEE	28	10	40	0	19	-10	0.00	-0.39	0.00	0.00	0	0.54	15	76	51	0	7	0	0
WY	CASPER	25	-5	37	-30	10	-20	0.06	-0.11	0.03	0.01	50	0.66	53	86	67	0	7	3	0
	CHEYENNE	25	8	40	-13	16	-15	0.15	0.00	0.13	0.00	0	0.17	19	89	69	0	7	3	0
	LANDER	17	-1	27	-16	8	-22	0.05	-0.12	0.03	0.03	100	1.63	150	84	76	0	7	2	0
	SHERIDAN	25	-4	36	-20	10	-20	0.02	-0.12	0.00	0.02	100	1.20	88	75	63	0	7	1	0

Based on 1971-2000 normals

*** Not Available

National Agricultural Summary

February 24 - March 2, 2003

Weekly National Agricultural Summary provided by USDA/NASS

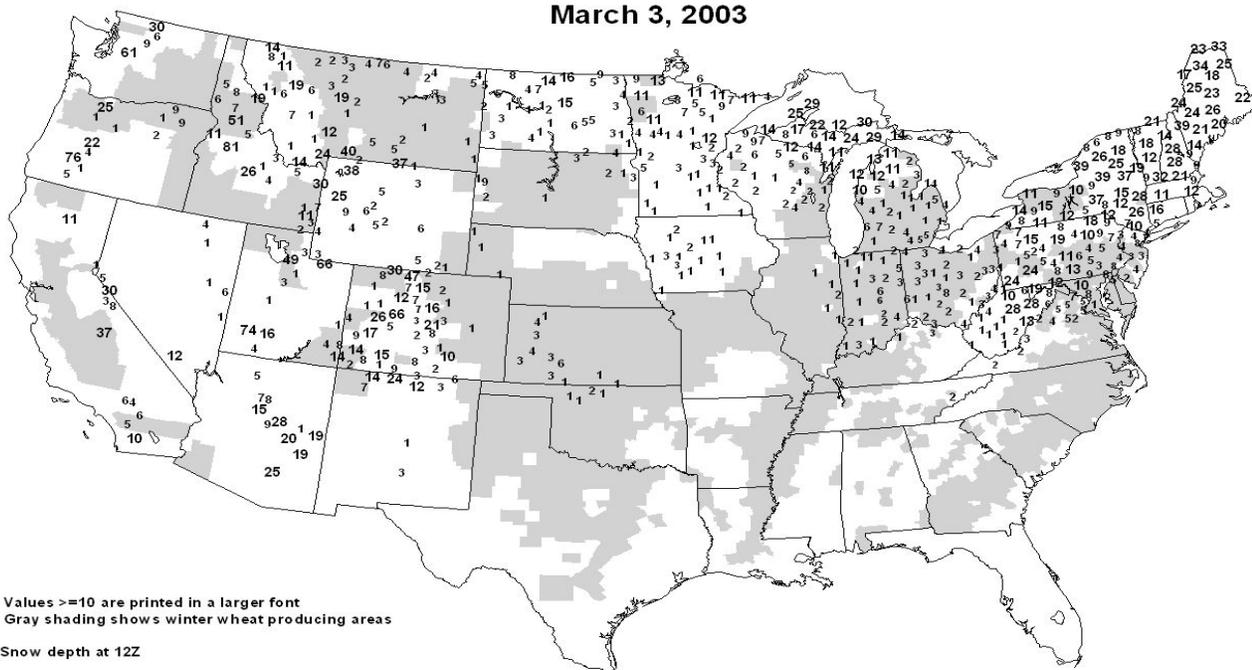
HIGHLIGHTS

Rain benefited soil moisture for many California field crops, but restriction of fieldwork activities due to the rainfall was generally minor. Blooming continued in tree fruit and almond orchards. Freeze damage to blooms from recent cold weather was reported in early stone fruit varieties. Weather conditions for almond pollination remained less than ideal. Wet conditions slowed winter vegetable harvesting in southern California. Significant precipitation that fell in the Southwest helped alleviate dry soil conditions. Record to near-record low temperatures covered the northern Rocky Mountains and northern Great Plains as dry conditions with below-normal snowpack persisted. Due to the lack of snow cover, winter wheat and alfalfa in some areas were exposed to potentially damaging cold weather. Winter made a comeback in Texas as record cold, ice, and snow blanketed the State. Significant moisture fell in north-central, south-central, and east Texas, and a sheet of ice covered most areas

with accumulations ranging from less than a 1/2 inch to almost 4 inches. Areas too wet for weeks were still suffering from saturated conditions, and virtually no fieldwork was possible. Extremely cold weather in the plains and north Texas could adversely affect the wheat in locations that did not have snow or ice to protect the crop. Texas wheat conditions were rated at 74 percent of normal, compared with 50 percent last year. The extreme cold stressed livestock, and producers were breaking ice so their stock could drink. The weather was especially stressful on cows that were calving and goats that were kidding. Across the Southeast, rain, freezing rain, and snow were reported. Dry weather gave way to sporadic and sometimes heavy showers over much of Florida. The week began with warm days and mild nights over the citrus areas then ended generally overcast and rainy, with highs in the low 80s degrees F. Virtually all of Florida's citrus belt recorded below-average rainfall for February.

Snow Depth (Inches)

March 3, 2003



Values >=10 are printed in a larger font
 Gray shading shows winter wheat producing areas

Snow depth at 12Z

The NWS cooperative network is the principal
 source of the snow depth reports

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

February 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: The state received rain in many areas during February. Conditions were favorable for land preparation of early spring planting in areas where rain was not a factor. Chill hours required for peach blooms have been met for all commercial varieties in Central state. In areas where cotton is still being harvested, ginning is also nearing completion. Cattle were fed hay because of colder than normal weather. Activities: Were general care of livestock, poultry, catfish.

ALASKA: DATA NOT AVAILABLE

ARIZONA: Temperatures for most of the state were below average 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 near completion, while heading is underway. Range, Pasture feeds have improved due to the recent precipitation. There were 9 of the 18 reporting stations above normal levels.

ARKANSAS: A "severe weather" cold front entered into state on the first Monday of February bringing cold, wet weather. Heavy snow developed on the 5th and 6th, with the heaviest amounts (2"-4") found in the northern, northeastern counties. The central parts of the state had one to two inches of snow with the southern portions of the state receiving rain. The pattern repeated itself on the 9th of the month. After several days of clearing weather, a winter weather advisory was reenacted mid-month. With this next pattern of winter weather came mostly light freezing rain, drizzle mixed with light snow flurries. Also, by mid-month many reporting stations had recorded over two inches of precipitation above the monthly norms. Temperature highs averaged in the lower 50's with lows in the teens during this time. The third week of the month saw light snow flurries enter into the southern, eastern counties of the state, while most of the rest of the state continued to have light freezing rain, drizzle. By the time this storm ended at weeks' end another cold front bringing snow, sleet entered the state from the north. The 22nd saw snow, ice in the northern counties which pushed south through the next two days. Then, on the 24th freezing rain, sleet, snow entered the state from the west, southwest blanketing most of the state from that date through the end of the month. Snow amounts ranging from 4"-10" were reported from this front. This later cold front also brought temperatures that ranged from the mid-teens at night to the upper-40's (southern state) during the daylight hours. The latest cold front brought temperatures that were significantly below the norms, averaging 22^o lower than the norm for several consecutive days. Northern, Central state had several days where the temperature did not rise above freezing. Overall, February has been consistently one of the coldest on record. It was the coldest February since 1989 and the 21st coldest on record since 1880. The average temperature was less than 42^o with one daily temperature broken with a high of 28^o on the 25th. Also, February was the 24th wettest on record since 1880, the 6th snowiest since 1885. Several river areas had reported flooding before the last cold front entered the state, the precipitation from the last snowfall only added to this flooding. Producers were able to do very little field work with cleaning, maintenance of farm machinery being the major activity. Livestock are considered to be in fair to good condition, although practically all cattle are being fed hay and/or supplements.

CALIFORNIA: Pre-plant irrigation was underway in a few cotton fields by early February. By mid-month, rainfall was restricting work in many grain fields, but was proving beneficial to crop development. Wheat, barley, oat plantings were thriving. There were some reports of lodging due to rain, primarily in early-planted grain fields. Vigorous growth was noted in fields of alfalfa hay. Some alfalfa fields were treated with herbicide to control broadleaf weeds, with pesticides to control alfalfa weevils. The season's first cutting of alfalfa hay took place early in the month. Sugar beet fields were weeded, irrigated, treated with herbicides. Sweet potato hotbed fumigation was mostly complete by the end of the month. Potato harvesting continued. Blooms were reported in many peach, nectarine orchards. By late February, some early variety fruit trees in Southern state were well past full bloom. Freeze damage to blooms from cold weather was reported in some areas. Bloom sprays were applied as weather conditions allowed. Bees were placed in orchards to aid in pollination. However, bee activity was

hindered in late February by rainfall, cold weather. Peach orchards received San Jose scale treatments. Pruning activity was winding down in tree fruit orchards by the end of the month, but continued in many vineyards. Brush shredding was ongoing in orchards, vineyards as conditions permitted. Wine, raisin grape vineyard removal continued. Grafting of new tree fruit varieties continued. Strawberry plants showed steady growth. Olive trees were pruned, continued to bloom. Navel oranges, lemons, tangerines, pummelos, and grapefruit were picked, packed. Rainfall in late February slowed the packing of citrus fruit, which helped packing houses to clear inventories. There were some problems with rind puff, granulation in the navel crop early in the month. In the latter half of February, cooler mornings helped to reduce rind problems. The Central Valley Valencia orange crop was developing normally. The quality of the lemon crop was good, with strong color, maturity reported. Almond trees began to show blooms in early February. By the middle of the month, many trees were in full bloom. Fungicides were applied to almond blossoms. Bees were placed in orchards for pollination. Pruning, brush shredding, removal continued in some almond orchards. Replacement trees were planted in some orchards. Walnut orchards were treated for San Jose scale. In early February, warm weather prompted good growth in many vegetable fields. Fields of broccoli, lettuce, garlic, onions thrived in the warmer conditions. Later in the month, frosty mornings, rainfall hindered planting and other field work, the cooler temperatures slowed crop development. Tomatoes for fresh, processing use were planted. Planting began in pepper, eggplant, bean fields. Tomato, melon fields were sprayed for weeds. Broccoli harvesting continued. Asparagus harvesting was underway in central California by late February. Harvesting of greenhouse vegetables continued. The following vegetables were also harvested: Napa cabbage, carrots, cauliflower, celery, cilantro, mustard greens, kale, leaf lettuce, green onions, parsley, radicchio, spinach. Winter pastures were in good overall condition throughout the month. The best conditions were reported in the northern half of the State. However, some pastures in central state deteriorated in mid-February due to a lack of rain. Livestock were in good condition. Supplemental feeding of cattle took place in a few locations. Sheep grazed in alfalfa fields, pastures in the central part of the State. Lambs grazed in alfalfa fields in the southern desert area. Later in the month, lambs in the southern desert were moved to market or to other areas for further feeding.

COLORADO: February temperatures were below average during the early and late parts of the month, seasonal during mid-month. Snowfall was limited to the mountain areas during the first half of February, however, the last half of the month provided snowfall to a majority of the state, including drought stricken Eastern state. Even with recent moisture, the Eastern Plains remain very dry. Water officials continue to make plans to restrict allocations for spring, summer 2003, as reservoir levels remain very low. Statewide mountain snowpack measurements have climbed to about 83% of average, which is a dramatic increase from 56% at this time last year. Winter wheat remains dormant in mostly fair condition, but vulnerable to blowout and freezing temperatures. Activities: Continue to center around feed, care of livestock in preparation for the upcoming lambing, calving activities.

DELAWARE: The area received a large amount of snow during the month of February. This resulted in some damage to barns, sheds, poultry houses. Pastures, hay are in short supply. Small grains are in good condition due to the snow, rain. Livestock are in fair condition. Activities: Snow removal, repairing damaged barns, machine buildings, feeding livestock, working on farm equipment.

FLORIDA: Cool temperatures during the first half of February 2003 slowed the development of vegetables, pastures while dry, windy conditions lowered soil moisture supplies. Dusty conditions, fluctuating temperatures caused some respiratory problems in cattle. Cold weather, colder than normal soil temperatures, drought, a virus in the oats forage lowered the pasture feed in the northern half of the State. Hay feeding was active but the poor quality of hay contributed to poor cattle condition in some areas. In the southern areas, drought lowered the condition of grasses for grazing. Significant rains fell around mid month, at the end. These showers replenished soil moisture in most northern, central Peninsula, most Panhandle localities but left some central, most

southern Peninsula areas dry. Pasture feed suffered in many areas as soils dried. Temperatures warmed during the last half of February which boosted vegetable, pasture growth, especially in central, southern Peninsula localities. Hay making was active in some central areas as temperatures reached summertime levels. Potato digging started in the southern Peninsula about mid month while corn, peanut, soybean producers started to prepare land for spring crop planting in the Panhandle, northern Peninsula areas. Tobacco growers tended hot beds throughout the period, began to prepare land for transplanting during the last half of the month. Sugarcane harvesting in the Everglades continued throughout the month with the milder weather helping young plants, the ratoon crop recover from the late January freeze. Some grove caretakers ran irrigation systems early in the month to minimize the effect of the cool temperatures. Pin head citrus bloom buds began to show on terminal leaf axles at the beginning of the month while virtually all citrus trees showed feathery new growth by the end. Citrus harvesting was very active in early February but slowed by the end as producers picked virtually all supplies of early, mid season oranges. A very limited amount of Valencia harvesting started by the end of the month with most processors waiting for better acid to sugar ratios before accepting the fruit. Fresh fruit packing houses shipped grapefruit, tangerines, oranges throughout the month. Activities: Mowing, chopping, discing of cover crops, removing dead trees, resetting new trees, hedging, topping, applying of pre-bloom fertilizer, spring herbicides, the setting of bee hives in preparation for the pollination of open blooms.

GEORGIA: Constant December rains slowed most farming activities for the State. According to David Stooksbury, State Climatologist, the long-term drought that has impacted state since 1998 is all but over. The State ended the year with more than 90% of normal yearly rainfall. Some areas experienced damage due to high winds, extreme cold weather. Wet soil conditions delayed small grain and wheat planting, cotton harvesting. Onion planting was behind schedule due to weather. Ryegrass, small grains, wheat were damaged from cold weather in some areas. Rains had replenished ponds, streams and added to soil moisture levels. Cotton harvesting approached competition. Rye, wheat, oat planting progressed nicely. Mild temperatures toward the end of the month improved grazing conditions. Activities: Growers continued winter grazing, routine care of livestock, poultry continued.

HAWAII: Generally favorable weather for agriculture prevailed throughout the State during the past week. East state banana harvest remained active. Lower Puna papaya orchards continued to recover from the previous weeks' dry conditions. Vegetables remained in generally fair to good condition with the beneficial showers, regular irrigation.

IDAHO: Topsoil 15% very short, 23% short, 61% adequate, 1% surplus. Winter wheat 1% poor, 14% fair, 82% good, 3% excellent. Hay, Roughage supply 2% very short, 3% short, 64% adequate, 31% surplus. Lambing 67% complete. Calving 44% complete. Livestock was reported to be doing well. Continued mild winter weather has allowed for more winter wheat to emerge from dormancy in various areas of the state. Activities: Hauling manure, preparing taxes, machine maintenance, attending educational programs, pivot repair, preparation, marketing, feeding livestock.

ILLINOIS: Topsoil 4% very short, 28% short, 61% adequate, 1% surplus. Colder than normal temperatures continued across the state last month which helped the livestock remain healthy, allowed for ample grazing. Average temperature departure was one to 4° colder than normal. Soil moisture deficits across the state are a concern as farmers prepare for spring planting. The northern half of the state received little or no precipitation, while the southern half of the state received as much as one to two inches above normal. Wheat crop improved this month with 2% poor, 30% fair, 58% good, 10% excellent. Due to the extreme cold weather during the middle part of the month many wheat growers are concerned with how much of the crop has been damaged. Activities: Signing up for the farm program, preparing income taxes, hauling grain, spreading fertilizers, preparing equipment for spring field work.

INDIANA: Dry subsoil conditions exist in most of the northern regions of the state. Frequent snow showers with some areas receiving heavy amounts during the month limited field activities. Snow amounts for the winter period ranked third highest on record for state. Southern regions of the state received more precipitation, 70% more than normal, than the central, northern areas during February. Precipitation was 20% below normal in the northern areas. Temperatures averaged 5° below normal for the state. Precipitation averaged about 3.00 inches, mostly in the

form of snow. This was 0.72 inches above normal. Some areas received rain. Snow cover existed in most areas during the month which helped protect wheat during days of cold temperatures. Farmers continued to work on taxes, prepare reports for the FSA farm program. Farmers are spending a lot of time at local FSA offices. Some fertilizer was spread in a few areas of the state when soils were frozen enough to support heavy equipment. Activities: Snow removal, hauling manure, moving grain to market. Winter wheat is in mostly good condition. Some top dressing was accomplished. Livestock are in mostly good condition. Livestock were under some stress during the cold weather. Feedlots are muddy. Farm ponds are low, northern areas. Hay supplies remain in short supply. Hay prices are high. Lambing, calving is underway on some farms. Activities: Repairing equipment, attending meetings with fertilizer, seed dealers, visiting FSA offices, purchasing supplies, seeding clover, tiling, cleaning ditches, selling tobacco, spreading lime, taking care of livestock.

IOWA: February's mid-month winter storm brought precipitation in the form of rain, snow to most of state. It appears that this precipitation improved soil moisture availability slightly, as 37% of the state was reported as being adequately supplied. This level increased from 29% of the state being reported as adequate during the month of January. At the end of February, the average depth of snow cover across state was 1 inch, similar to values from last month, last year at this time. The average depth of frost penetration for the state was 17 inches, compared to 16 inches last month, 4 inches at the same time last year. Movement of grain for the state was 24% none, 38% light, 35% moderate, 3% heavy. Hog, pig losses in February were 16% below avg.; 75% avg.; 9% above avg. Cattle, calf losses were 19% below avg.; 79% avg.; 2% above avg.

KANSAS: Topsoil 16% very short, 44% short, 37% adequate, 3% surplus. Rain, snow improved soil moisture conditions Statewide. Wheat mostly holding its own, but will need good spring rains as it comes out of dormancy. Wheat 6% very poor, 20% poor, 45% fair, 26% good, 3% excellent. Wind, freeze damage to wheat has been mostly light so far. Spring calving is in full swing. Some problems reported in areas which had heavy, drifting snow or heavy precip which caused unusually muddy conditions. Hay, forage supplies 11% very short, 38% short, 50% adequate, 1% surplus. Feed grain supplies 5% very short, 19% short, 74% adequate, 2% surplus.

KENTUCKY: A sharp fluctuation of temperatures occurred at the beginning of February, with much of the State seeing highs in the upper 50s, and even the low 60s for the first 4 days. Highs dropped back into the mid 30s, and by the 8th, lows had dipped all the way back into the single digits. Two storm systems brought precipitation to the State over the course of the first week. The first system resulted in precipitation as rain. The second system arrived late in the week, brought 1 to 2 in. snow to most of the State. Temperatures for the period averaged 32° across the State which was 2° below normal. Precipitation for the period totaled 0.72 in. statewide which was 0.17 in. below normal. The second week was punctuated by a powerful storm system that brought copious amounts of precipitation to the entire State. Areas in the north were plagued by paralyzing freezing rain on the weekend, while the south saw mostly rainfall, southeastern sections of the State faced flooding threats even into the 17th. Temperatures for the period averaged 34° which was 2° below normal. Precipitation totaled 3.21 in. statewide which was 2.32 in. above normal. In the aftermath of the previous week's ice storm, many sections of northern, central state spent a good part of the third week removing downed limbs, trees, working to restore power. For the southern half of the State, farmers faced concerns with flooding - including pumping basements, moving livestock, trying to stay ahead of the rising waters in many low-lying areas. Two additional weather systems during the week brought rainfall to what was already saturated ground, worsening previously existing flooding problems in south-central, eastern sections of the State. Temperatures averaged 36° which was 2° below normal. Precipitation totaled 1.73 in. statewide which was 0.85 in. above normal. The final week of February brought numerous periods of precipitation in the form of rain, freezing rain, sleet, snow across much of the State. Following the exit of a weak storm system that brought precipitation to a majority of the State on the 24th, arctic high pressure swept into the area, was the prominent weather feature for the first half of the week, helping to make this period the State's 4th week in a row with below normal temperatures. Southern sections saw a majority of the precipitation as disturbances grazed southern parts of the area from time to time, before a stronger system ushered high pressure eastward, brought a majority of the State rainfall again by the 28th. This week ended what was the 7th wettest and 30th coldest February in the last 108 years for the State. Temperatures for the period averaged 33° across the State which was 6° below normal. Precipitation for the period

totaled 0.29 in. statewide which was 0.64 in. below normal. Farmers keep busy all month dealing with the changing weather conditions. Ice, snow hampered caring for livestock, other farm work. Many farmers had to deal with debris disposal from either flooding or ice damage to trees. Muddy conditions made calving more difficult, caused some losses. Transportation of grain, tobacco, livestock to market was difficult for extended periods during the month due to snow, ice, flooding. Some north-central, north-eastern communities had to deal with power losses for up to a week due to an ice storm. The 2002-2003 Burley tobacco auction season came to a close February 20. Contract centers ended their season on February 21. Clean up sales are scheduled for several days in March. Belt-wide contract sales totaled 219.5 million pounds returning \$198.51 per cwt. Belt-wide auction sales totaled 82.0 million pounds with, average price of \$195.14 per cwt. Resales amounted to 4,424,110 pounds for the season-to-date. State contract sales totaled 168.6 million pounds returning \$198.72 per cwt. state auction sales totaled 62.3 million pounds with an average price of \$195.97 per cwt. State resales amounted to 3,785,685 pounds for the season-to-date.

LOUISIANA: Extremely wet conditions in many areas slowed producers in making preparations for spring planting. During the week of February 17-23, many areas in our state received more than 4 inches of rain. Although this may have been too much rain at one time, the wet conditions were welcomed in most areas as the month of January was very dry for state (less than 2 inches for the entire month's state average). Sugarcane producers continued digging ditches, repairing turn rows that were rutted up during last season's harvesting. Other field crop producers were getting equipment ready for the upcoming season. Livestock producers were fertilizing winter pastures, feeding hay. Strawberry producers continued harvesting, selling their crop. Crawfish producers continued harvesting one of the best crops in recent years.

MARYLAND: A huge snow storm hit the area in the middle of February that resulted in over 20 inches of snow in most locations. The storm caused some damage to barns, sheds, greenhouses, poultry houses. Livestock, poultry are in fair condition despite the snow, cold temperatures. Hay supplies are becoming low but no serious problems. Small grains appear to be in good condition. Activities: Planning for spring plantings, repairing barns, farm equipment, attending conferences.

MICHIGAN: Snow, cold weather during the month of February had producers scrambling to provide adequate feed and water to animals. Livestock consumed feed at a rapid rate. Hay is still available in most areas of the State. Hay prices are up from last year. Some producers anticipate hay shortages this spring. In areas of the State where snow cover was minimal, growers were spreading manure. Early calving began. Growers in the south central, southeast were concerned with wheat condition due to lack of insulating snow early in the month. Precipitation, temperatures were below normal throughout state in February. Activities: Bookkeeping, equipment repair, maintenance, snow plowing, cutting wood, signing up for farm programs, thinning fence rows, completing 2002 taxes.

MINNESOTA: Conditions for winter have been relatively mild with minimal snow, some cold days. Very little snow cover, deep ground frost, minimal moisture is a concern. Wind erosion is also a concern due to lack of snow cover. Winter injury to alfalfa, other perennial crops is a possibility with frost going deeper into the soil because of the lack of snow cover. Dry conditions could cause moisture problems this coming crop season. Feed supplies, livestock conditions are good overall.

MISSISSIPPI: Soil 13% adequate, 87% surplus. Wheat 100% emerged, 25% jointing, NA 2002. Hay supply 13% short, 79% adequate, 8% surplus. Feed Grain 10% short, 87% adequate, 3% surplus. Excessive moisture conditions have delayed fieldwork, will push back anticipated plantings of row crops. Reports are numerous that feed cattle has become a major undertaking due to the saturated pastures.

MISSOURI: Precipitation during February averaged about 2.91 inches, well above the 1.90 inch 30-year average, but amounts were relatively light in northern counties while many east-central, southern

counties were sharply above average. The abnormally cold weather, snow during the last half of the month caused some stress to livestock, but most areas have adequate feed supplies. The wheat crop remains dormant, with most of the State having received snow cover protection prior to when the coldest temperatures occurred. Precipitation was beneficial to wheat except for some areas of the Bootheel where amounts were excessive. Farmers are caring for livestock, getting ready for fieldwork.

MONTANA: Topsoil 23% very short, 44% short, 33% adequate, 0% surplus compared to 2002 49% very short, 38% short, 13% adequate, 0% surplus. Subsoil 41% very short, 38% short, 20% adequate, 1% surplus compared to 2002 56% very short, 34% short, 10% adequate, 0% surplus. During the month of February, precipitation in state has been above normal with a few exceptions. Winter wheat 4% very poor, 18% poor, 60% fair, 16% good, 2% excellent. This is better than last month's rating of 3% very poor, 25% poor, 42% fair, 28% good, 2% excellent. This year's winter wheat better than 2002 19% very poor, 30% poor, 43% fair, 8% good, 0% excellent. Wind damage to the winter wheat crop is currently rated at the following levels: 14% none, 57% light, 25% moderate, 4% heavy. Freeze, drought damage for the crop 12% none, 34% light, 45% moderate, 9% heavy. Snow cover for winter wheat 20% very poor, 15% poor, 35% fair, 25% good, 5% excellent. Livestock grazing 34% open, 41% difficult, 25% closed, compared to 2002 when 52% open, 26% difficult, 22% closed. Currently, 99% of the cattle are received supplemental feed, 99% of sheep. Last year 98% of cattle, 96% sheep received supplemental feed. Calving, lambing 23% and 12% completed respectively compared to 25% for cattle, 12% for sheep last year.

NEBRASKA: Temperatures for February averaged above normals the first three weeks, 11 to 22° below normals during the last week with highest readings during the third week. Precipitation for the month occurred during the first, last weeks in the form of snow. At the end of February, wheat 12% very poor, 20% poor, 44% fair, 23% good, 1% excellent, well below last year. Hay, forage supplies were mostly adequate to short. Cattle were grazing stalk fields with some supplemental feeding. Cattle were in mostly good condition with calving 20% done. Activities: Planning for the 2003 crop year, FSA sign ups, livestock care, attending farm sales.

NEVADA: A split jet stream rested over state for much of the month, pushing storms to the north, the south. Precipitation was much below normal for most of the State, with the notable exception of Las Vegas which had above normal precipitation for the month. Concerns of irrigation water supplies heightened as the water content of winter snow pack remained below normal in all primary watersheds. Western watersheds were near normal for snow pack, but much of the East had less than half of normal. Calving was underway during the month, as was farm flock lambing, kidding. Marketing of yearling cattle was active and bull sales were busy. Hay shipments to dairy, equine accounts continued. Fall seeded grains, though limited, were wintering well. Garlic fields were in good condition. Shipments of onions from storage ended. Potato processing remained active. Winter livestock feeding demands were minimized by lack of snowfall. Activities: Equipment maintenance, ditch burning, livestock care, fence repairs, crop, livestock marketing.

NEW ENGLAND: Cold temperatures, snow were prevalent throughout most of February in state. Most maple producers are awaiting warmer temperatures when sap will begin to flow; frigid temperatures, deep snow in areas have caused poor conditions for tapping. In the meantime, producers are preparing for the upcoming season. Activities: During the month included nursery/greenhouse work, tending livestock, preparing for the spring planting season.

NEW JERSEY: February brought windy conditions, cold temperatures, snow to much of the region. The month was one of the snowiest on record for many areas, with some localities reporting cumulative snowfall totals of 30 inches or more. The first of several snowstorms swept through the region on February 7 dropping 6 to 8 inches of snow statewide. The President's Day storm dumped over 20 inches of snow in many areas. Warmer temperatures, steady rain the weekend of February 21 combined with the heavy snow pack to cause

minor flooding in some localities. Temperatures averaged below normal, with the highest recorded temperature 52° on February 4. The lowest recorded temperature was 2° on February 14, the average monthly temperature was 29.

NEW MEXICO: The month of February started out relatively cool, with temperatures averaging 40 below normal for the state. Two storms brought light precipitation to the southeast, but accumulation was generally spotty, light. During the second week a significant storm came through that dropped 6 to 10 inches of snow on the northern, central mountains above 9000 feet. The third week brought several winter-type storms, with the main storm impacting the southern half of the state. Greatest precipitation amounts included 1.50 inches at Las Cruces, 1.11 inches at Carlsbad. Temperatures were near normal. The last week of the month was marked by a series of minor storms that favored the north. Chama, Farmington, Red River all measured over an inch of moisture. Temperatures were cool for most of the state, with the east averaging as much as 10 to 14° below normal. By the end of the month several areas had recorded precipitation accumulation near or above normal levels. This occurred mostly in the southern counties. Other areas were still well below average levels, although they were in better shape than they were at the end of January. Farmers were busy planting onion transplants, pre-irrigating for chile, pruning pecan trees, leveling land, preparing seed beds. Ranchers were preparing for calving, many were supplementing feed.

NEW YORK: The month of February was dominated by numerous heavy snowfalls combined with prolonged periods of frigid temperatures, about the same as January. Activities: Limited due to coldness, excessive snow. Activities: Tending livestock, snow removal, farm machinery maintenance, attending producer meetings, trade shows, grading, packing onions, apples.

NORTH CAROLINA: Cold wet weather persisted throughout the month of February in North Carolina. Saturated field conditions prevented most spring crop preparations, deterred pasture, cover crop growth. The quality of small grain crops is a concern due to the poor weather conditions, late planting dates. Soil 0% very short, 1% short, 21% adequate, 78% surplus. The cold temperatures, poor pasture feeds increased hay, feed grain demand for livestock operations, causing tighter hay supplies. Many operations are further culling their herds, using alternative feeds to stretch hay supplies. Activities: Seeding greenhouse tobacco beds, planting potatoes, cabbage, equipment maintenance, caring for livestock, record keeping, enrolling in Farm Service Agency programs, completing Agricultural Census forms. The Weather, Crop report will be released on a weekly basis until late fall.

NORTH DAKOTA: Calving, lambing have started across the state, with the cold temperatures causing difficulties for some producers. The average snow cover for the state was 3.0 inches. Snow cover protection for alfalfa 59% poor, 38% adequate, 3% excellent. Hay, forage 7% very short, 20% short, 70% adequate, and 3% surplus. Cattle conditions were rated 1% very poor, 3% poor, 29% fair, 60% good, 7% excellent, calving 8% complete. Sheep conditions 1% very poor, 3% poor, 27% fair, 58% good, and 11% excellent. Lambing was 21% and shearing 45% complete. Thirteen percent of the cattle, sheep feed was obtained from pastures and ranges. Road conditions for travel were rated 94% open, 5% difficult, 1% closed. Ten percent of the roads drifted, 6% icy, 6% muddy, 78% dry.

OHIO: February 2003 was 5.0° colder than normal in state, with temperatures averaging 25.0° across the state. Precipitation averaged 3.17 inches, 0.92 inches above normal. Cattle remains in good condition across the state. Some producers reported purchasing forage for their operations.

OKLAHOMA: Days suitable for fieldwork 1.0. Subsoil 6% very short, 25% short, 65% adequate, 4% surplus. Topsoil 3% very short, 22% short, 66% adequate, 9% surplus. Winter Wheat 1% very poor, 4% poor, 27% fair, 58% good, 10% excellent. Rye 2% very poor, 5% poor, 27% fair, 57% good, 9% excellent. Oats 5% very poor, 11% poor, 40% fair, 40% good, 4% excellent. Wheat grazed 62% 2003, 38% 2002 41

% avg. Rye grazed 86% 2003, 53% 2002, 34 % avg. Oats grazed 45% 2003, 38% 2002 37 % avg. Livestock 1% very poor, 8% poor, 34% fair, 50% good, 7% excellent. Pasture, Range 8% very poor, 19% poor, 45% fair, 27% good, 1% excellent. Livestock: Livestock were rated in mostly good to fair condition Statewide, but the cold, wet conditions have caused stress to the cattle. With spring calving underway, producers are reporting losing a large number of calves at birth due to the cold conditions. Farmers, ranchers have been forced to feed extra amounts of hay, feed during these adverse conditions.

OREGON: Activities: Winter care of livestock ongoing across State. Supplemental feed continued. Shipments of wheat, barley, oats, corn, potatoes, dry onions continued. Digging, shipping of balled, burlapped, bareroot plants ongoing. State Department of Agriculture sponsoring nursery research grant programs for disease control, plant development. State is still lacking in consistent rainfall, mountain snowpack buildup has not yet transpired. Snowpack in Cascades is 58% of average, while snowpack feeding the Willamette Basin is 25% of average. According to the Natural Resources Conservation Service (NRCS), all river basin sites less than 65% of average snow water equivalent. Values ranged from 0% for Coast Range to 64% for Owyhee, Rogue, Umpqua.

PENNSYLVANIA: During the month of February, State experienced below average temperatures almost every day. The average high temperature was approximately 33.3°, 5.8° below normal. The average low temperature was approximately 18.9°, 4.6° below normal. Precipitation levels in western Pennsylvania were 25 to 50% below normal, despite large amounts of snowfall, rain. Precipitation levels in central state were normal to 50% above normal, while levels in eastern state were greater than 50% above normal. The precipitation total for the month was about 3.8 inches, 0.9 inches above normal. The precipitation total for the year is approximately 5.8 inches, 0.5 inches above normal. Activities: Maintaining machinery, fixing fences, buying seeds, other supplies, caring for livestock, buying hay, corn, shoveling snow, tax preparation, attending farm shows, organizational meetings.

SOUTH CAROLINA: The weather for the month consisted of cold fronts which brought about some snow, icy conditions in, around the upstate counties. The fronts also brought about overcast skies, scattered showers. There were also several days with strong, windy conditions with wind gusts nearing 40 mph. The cold fronts were followed by warming trends with some temperatures in the 70° range. Farmers are busy in preparation for the upcoming planting season by servicing their equipment, tilling the land. The high fuel prices may encourage some farmers to pursue the option of no-till planting this year. Farmers are also using winter grazing pastures to supplement their winter hay supply.

SOUTH DAKOTA: Feed Supplies 18% very short, 33% short, 45% adequate, 4% surplus. Stock water supplies 23% very short, 30% short, 46% adequate, 1% surplus. Winter Rye 11% very poor, 3% poor, 48% fair, 35% good, 3% excellent. Winter Wheat 7% very poor, 14% poor, 48% fair, 26% good, 5% excellent. Cattle condition 1% very poor, 3% poor, 24% fair, 60% good, 12% excellent. Sheep condition 1% very poor, 2% poor, 24% fair, 62% good, 11% excellent. Accessible livestock feed supplies 94% readily available, 5% difficult, 1% inaccessible. Accessible stock water supplies 86% readily available, 13% difficult, 1% inaccessible. Road conditions—county 100% open, township 98% open, 2% difficult. Cattle deaths 37% below normal, 62% normal, 1% above normal. Average snow depth state wide 1.0 inch. Alfalfa snow cover 88% poor, 12% adequate. Winter wheat snow cover 90% poor, 10% adequate. Winter rye snow cover 82% poor, 18% adequate. Calf deaths 28% below avg.; 70% avg.; 2% above avg. Sheep, lamb deaths 34% below avg.; 65% avg.; 1% above avg. The month of February brought some periods of cold temperatures, snowfall, but most of the state experienced, continuing, mild winter weather. With little snow cover, moisture received across the state, farmers, ranchers worry about the condition of winter crops, as well as the upcoming growing season. Activities: Tending to livestock, calving, lambing, fixing machinery, preparing for this year's growing season.

TENNESSEE: Overall, temperatures averaged below normal, precipitation averaged above normal during the month of February. The

first full week of the month began mild, dry, but a cold front moved through bringing showers, snow, cooler temperatures. Temperatures averaged below normal for the week, while precipitation amounts averaged around an inch. The next two weeks saw precipitation amounts well above normal causing some minor flooding, temperatures below normal. For the week ending February 16, precipitation totals ranged from 2 to over 5 inches across the state. The last week of the month saw temperatures ranging from slightly below normal over the East to well below normal elsewhere. Although it was mostly cloudy, rainfall totals averaged slightly below normal over the East to well below normal elsewhere. Winter wheat was in mostly fair conditions for the month. Cattle were being sold in some areas due to the tight, expensive hay supplies.

TEXAS: February had a variety of temperature extremes ranging from very warm to icy conditions. Brief periods of 70, 80° weather were always followed by heavy rain, freezing precipitation. In the Panhandle, moisture was generally short all month as most came in the form of snow, ice. From North state down through Central, East, the Upper Coast, producers had to deal with wave after wave of rain showers; usually a decent downpour once a week. North, East, Central state were blanketed with ice for almost three days. Soil moisture was short on the Plains, the Trans Pecos. The Rio Grande Valley had generally adequate soil moisture. The rest of the state, however, experienced a surplus; extreme in many locations. Fieldwork on the Plains continued to consist of deep breaking, listing to prepare for summer crops as well as top dressing of small grains. In the Valley, harvest of sugarcane, citrus, vegetables occurred, early planting began for cotton, corn, sorghum. In North, Central, East state, Upper Coast, the Coastal Bend, most field work was non-existent due to the constant barrage of rain, ice. The major casualty of this weather was the corn crop. Corn producers were delayed in land preparation, planting all month, there was no end in sight by March 1. Wheat condition was in generally good shape, but there was concern about the future as moisture remained short. Supplemental feeding increased in most areas as the weather failed to warm up, trampling of pastures remained a constant problem. In some eastern counties that had been saturated, hay was beginning to be in short supply. The weather aggravated sickness in cattle, adversely affected cows that were calving. Poultry producers had to run their heaters longer than usual, that, along with higher fuel prices, became a major stumbling block. Greenbugs were present in wheat but populations were fluctuating because of freezing weather.

UTAH: February welcomed colder temperatures, increased precipitation in state. Water shortages are still a concern, however, with total precipitation levels between 60%-80% of average in the states major river basins. Lambing, calving have begun and producers have reported that livestock are in good condition. The mild temperatures in the early part of the month raised concerns about fall planted crops, fruit trees breaking out of dormancy early. This did not happen, colder temperatures in late February have suppressed this concern. Sevier, Millard counties have reported army worm infestations in specific location on range or pasture sites. Some growers have begun planting spring grains, apply fertilizers, herbicides to their fields.

VIRGINIA: Pasture 7% very poor, 31% poor, 41% fair, 20% good, 1% excellent. Livestock 1% very poor, 10% poor, 33% fair, 51% good, 5% excellent. Small Grain, Winter Grazing Crops 14% very poor, 28% poor, 36% fair, 20% good, 2% excellent. State experienced very wet, cold weather during the month of February. Due to the wet conditions, field work, farm activities were hampered with some counties reporting little to no field work done. Because of the cold, wet weather, late planting, growth of the small grains was running behind schedule. Several counties reported some flooding during the month. The snow, ice took its toll on pasture, winter grazing crops. For that reason, producers were feeding livestock full time. Feed supplies were very short causing farmers to search outside of this region, to use alternative feeding practices. Livestock body conditions are lower than normal. Several counties reported building damage due to heavy snow, ice. Some

reported livestock losses from the collapsing buildings, severe weather conditions. Most counties continue to report full ponds, running springs, keeping hopes high for adequate irrigation in the spring. Activities: Spring calving, preparing to seed tobacco greenhouses, repairing machinery, buildings, attending meetings, feeding livestock, preparing taxes, attending auctions, meeting with creditors, purchasing seed, sampling soil, applying nutrients, making plans for the upcoming growing season. Temperatures for the month of February ranged from cold to freezing. Snow, ice, rain were characteristic for the month. Almost all of state experienced many forms of precipitation during each week of the month.

WASHINGTON: Warmer temperatures, rainfall earlier in the month helped winter wheat emergence in Eastern state. Western state had super saturated fields from heavy precipitation, causing some crop fields to flood. Cooler weather blanketed state the last week in February with temperatures dipping into the teens. Some fruit producers in Yakima County have reported crop damage due to freezing weather. Early potato planting has begun in the Columbia Basin. Farmers were also preparing fields for planting spring crops. Christmas tree growers were planting new fields, preparing equipment for herbicide application.

WEST VIRGINIA: Topsoil 33% adequate, 67% surplus, Winter wheat 9% poor, 39% fair, 52% good. Cattle, calves 1% very poor, 6% poor, 42% fair, 49% good, 2% excellent, calving 34%. Sheep, Lambs 3% poor, 58% fair, 38% good, 1% excellent, lambing 24%. Hay, roughage supplies 14% very short, 49% short, 33% adequate, 4% surplus. Feed grain supplies 14% short, 86% adequate. February was characterized by above normal precipitation, below normal temperatures. A severe ice, snow storm struck the state the third weekend of February, resulting in prolonged power outages, deep snows across much of the state. Weight of ice, snow collapsed some poultry houses. Hay supplies running short in some areas of state as some farmers are looking for hay to purchase. Muddy conditions became a problem the last week of the month. Calving, lambing have been affected. Calf, lamb losses are higher than normal due to these conditions. Activities: Calving, lambing, snow, ice handling, feeding livestock, purchasing, moving of hay.

WISCONSIN: February was very similar to the month of January in state. Average monthly temperatures were 3-7° below normal for February. High temperatures for the month were in the low 50's for a two day period, but most of the month consisted of below normal temperatures. Minimum temperatures were mostly colder than January. Precipitation for February was below .5 inch and up to 1.5 inches below normal. Much of state had little or no snow cover. Northern state had some snow on the ground but significantly lower than most years. There is some concern being voiced about possible drought conditions for spring crops. Winterkill for alfalfa, winter wheat crops may be of greater importance due to the lack of snowcover.

WYOMING: Topsoil 27% very short, 57% short, 16% adequate. Subsoil 43% very short, 48% short, 9% adequate. Winter wheat 3% very poor, 25% poor, 48% fair, 24% good, wind damage 22% none, 33% light, 26% moderate, 19% severe, freeze damage 80% none, 15% light, 5% moderate. Avg snow cover depth 4.00 inches. Cattle 5% poor, 41% fair, 54% good. Sheep 4% poor, 48% fair, 47% good, 1% excellent. Hay, roughage supplies 17% very short, 37% short, 46% adequate. Spring grazing prospects 17% very poor, 40% poor, 38% fair, 5% good. Spring calves born 16%, 2002 23%, 5-yr avg 23%. Calf losses 34% light, 66% normal. Farm flock sheep shorn 37%, 2002 34%, 5-yr avg 30%. Farm flock ewes lambing 28%, 2002 30%, 5-yr avg 29%. Lamb losses 27% light, 73% normal. Monthly temperatures averaged 0.1° below normal in Rock Springs to 6° below normal in Lander. About half of the reporting stations received above normal precipitation for the month. The heaviest moisture fell in Sundance at 2.20 inches, Afton 1.45 inch, Newcastle 1.39 inch, Jackson 1.26 inch. Despite the precipitation received, yearly totals were behind normal at most stations.

International Weather and Crop Summary

February 23 - March 1, 2003

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

HIGHLIGHTS

EUROPE: Warmer but still mostly dry weather prevailed across much of Europe, maintaining favorable overwintering conditions for winter grains and oilseeds.

FSU-WESTERN: Continued unseasonably cold weather maintained a moderate to deep snow cover as far south as the Black Sea Coast.

MIDDLE EAST: Widespread precipitation boosted irrigation supplies across southeastern Turkey and the Middle East, while snow cover protected dormant winter grains from cold weather in central Turkey.

NORTHWESTERN AFRICA: Timely rain boosted soil moisture supplies in southern Morocco, while rain continued to cover the rest of northwestern Africa, maintaining adequate to abundant soil moisture supplies.

SOUTH AFRICA: Showers in the western corn belt benefited reproductive summer crops, while net drying in the eastern corn belt reduced moisture supplies for corn and other summer crops.

EASTERN ASIA: Unseasonable showers returned to the Yangtze Valley, while on the North China Plain, mild weather favored overwintering wheat.

SOUTHEAST ASIA: Showers continued, although lighter, in western Java, Indonesia.

AUSTRALIA: Drier weather returned to most major summer crop- and winter grain-producing areas, keeping drought well established.

SOUTH AMERICA: In Argentina, showers benefited soybeans and other immature summer crops in the main growing areas, while in Brazil, a reduction in rainfall helped to advance summer crop harvesting.

February 2003

MONTHLY DATA FROM SELECTED FOREIGN CITIES CLIMATE PREDICTION CENTER-NCEP-NWS-NOAA

*** DATA NOT AVAILABLE

COUNTRY CITY	TEMPERATURE (C)					PRECIPITATION (MM)		
	AVG MAX	AVG MIN	HI MAX	LO MIN	AVG	DPART F/NRM	TOTAL	DPART F/NRM
NORWAY OSLO	-2	-9	3	-19	-5	0.3	40	-5
SWEDEN UPPSALA	-1	-8	4	-20	-4	-1.2	12	-17
FINLAN HELSINKI	-3	-9	5	-22	-6	0.1	6	-27
UKINGD ABERDEEN	6	1	11	-4	4	0.0	6	-48
MANCHESTER	8	2	13	-5	5	0.1	36	-16
CARDIFF	9	4	13	-1	6	0.0	39	-32
LONDON	8	2	15	-4	5	0.0	27	-9
IRELAN DUBLIN	8	3	12	-5	5	-0.5	20	-31
ICELAN REYKJAVIK	4	1	9	-7	2	2.1	115	29
DENMAR COPENHAGEN	1	-4	7	-11	-2	-2.3	3	-21
LUXEMB LUXEMBOURG	4	-3	14	-10	1	-0.8	18	-49
SWITZE ZURICH	1	-4	12	-10	-1	-2.7	29	-40
GENEVA	4	-3	14	-9	1	-1.8	23	-48
FRANCE PARIS/ORLY	7	1	16	-5	4	-0.6	15	-26
STRASBOURG	5	-3	16	-8	1	-1.9	4	-29
BOURGES	8	0	16	-5	4	-0.7	41	-15
BORDEAUX	10	2	17	-5	6	-0.8	53	-22
TOULOUSE	9	3	16	-5	6	-1.0	42	-5
MARSEILLE	11	3	16	-3	7	-1.0	20	-22
SPAIN VALLADOLID	9	1	15	-7	5	-1.4	55	22
MADRID	11	1	15	-5	6	-1.3	43	18
SEVILLE	17	7	21	2	12	-0.6	42	1
PORTUG LISBON	15	9	17	5	12	-0.2	89	5
GERMAN HAMBURG	3	-4	11	-11	0	-2.1	8	-34
BERLIN	2	-5	12	-11	-1	-2.8	6	-27
DUSSELDORF	7	-2	15	-8	3	-0.8	9	-41
LEIPZIG	2	-5	13	-11	-2	-1.8	5	-25
DRESDEN	1	-5	11	-13	-2	-2.2	7	-28
STUTTGART	4	-5	14	-10	-1	-2.1	12	-24
NURNBERG	3	-6	13	-12	-2	-2.5	12	-22
AUGSBURG	1	-8	13	-16	-4	-3.9	15	-24
AUSTRI VIENNA	2	-5	8	-10	-2	-2.7	2	-31
INNSBRUCK	4	-8	13	-15	-2	-2.9	29	-14
CZECHR PRAGUE	0	-7	13	-13	-3	-3.0	4	-16
POLAND WARSAW	-2	-8	4	-20	-5	-3.9	4	-17
LODZ	0	-7	7	-18	-4	-3.1	4	-26
KATOWICE	0	-9	9	-20	-4	-4.0	9	-27
HUNGAR BUDAPEST	1	-7	7	-15	-3	-4.5	24	-2
YUGOSL BELGRADE	1	-5	11	-10	-2	-5.3	28	-10
ROMANI BUCHAREST	1	-8	7	-19	-3	-3.9	28	-2
BULGAR SOFIA	1	-7	10	-14	-3	-4.8	16	-18
ITALY MILAN	9	-2	16	-6	3	-1.1	0	-49
VERONA	8	-2	13	-6	3	-1.4	0	-42
VENICE	8	-2	13	-4	3	-1.6	13	-32
GENOA	11	5	16	2	8	-1.4	0	-46
ROME	***	***	17	-3	***	***	12	-55
NAPLES	11	2	18	-3	6	-2.8	61	-24
GREECE THESSALONIKA	7	1	15	-4	4	-3.3	7	-33
LARISSA	7	-1	12	-5	3	-3.4	19	-20
ATHENS	9	4	16	-1	7	-3.7	75	40
TURKEY ISTANBUL	5	1	16	-4	3	-2.9	145	87
ANKARA	2	-5	10	-15	-1	-1.3	61	28
CYPRUS LARNACA	16	7	20	1	11	-0.5	75	32
ESTONI TALLINN	-3	-8	4	-22	-6	-1.4	6	-29
RUSSIA ST.PETERSBURG	-3	-8	5	-23	-6	0.3	25	-6
LITHUA KAUNAS	-3	-8	2	-20	-6	-2.7	18	-13
BELARU MINSK	-4	-9	2	-19	-6	-1.6	28	-6
RUSSIA KAZAN	-10	-16	-1	-28	-13	-2.1	12	-20
MOSCOW	-6	-12	2	-23	-9	-2.4	8	-28
YEKATERINBURG	-10	-17	-1	-29	-13	-1.6	20	1
OMSK	-12	-19	1	-31	-16	0.2	12	-4
KAZAKH KUSTANAY	-10	-18	1	-29	-14	1.1	5	-9
RUSSIA BARNAUL	-8	-17	-1	-29	-13	1.2	15	-5
KHABAROVSK	-12	-23	-2	-30	-18	-1.5	9	-2
VLADIVOSTOK	-4	-11	2	-18	-7	1.8	4	-12
UKRAIN KIEV	-4	-9	3	-18	-7	-3.3	19	-20
LVOV	-3	-12	3	-27	-8	-5.3	40	-2
KIROVOGRAD	-5	-11	2	-29	-8	-4.8	22	-3
ODESSA	-3	-7	4	-14	-5	-4.6	65	30
YALTA	4	0	11	-4	2	-1.6	68	5

Based on Preliminary Reports

February 2003

COUNTRY	CITY	TEMPERATURE (C)					PRECIPITATION (MM)			COUNTRY	CITY	TEMPERATURE (C)					PRECIPITATION (MM)		
		AVG MAX	AVG MIN	HI MAX	LO MIN	AVG DPART F/NRM	TOTAL	DPART F/NRM	AVG MAX			AVG MIN	HI MAX	LO MIN	AVG DPART F/NRM	TOTAL	DPART F/NRM		
RUSSIA	SARATOV	-8	-13	-4	-23	-10	-0.5	21	-4	TANZAN	DAR ES SALAAM	33	25	35	22	29	1.1	33	-24
UKRAIN	KHARKOV	-6	-11	1	-19	-8	-3.4	11	-22	GABON	LIBREVILLE	31	25	32	20	28	1.1	110	-162
RUSSIA	VOLGOGRAD	-7	-13	3	-24	-10	-3.7	28	5	TOGO	LOME	33	26	34	23	30	1.8	8	-24
	ASTRAKHAN	-2	-10	8	-21	-6	-0.9	5	-4	BURKIN	OUAGADOUGOU	37	22	40	18	30	2.0	2	2
	KRASNODAR	3	-6	11	-14	-2	-2.3	13	-32	MOZAMB	MAPUTO	32	24	35	20	28	1.9	55	-60
	ORENBURG	-9	-17	2	-32	-13	-0.7	23	3	ZAMBIA	LUSAKA	25	19	29	16	22	-0.2	122	-67
KAZAKH	TSELINOGRAD	-12	-19	-4	-27	-15	-0.9	7	-6	ZIMBAB	KADOMA	29	18	39	16	24	0.2	112	-51
	KARAGANDA	-9	-18	-2	-26	-14	-0.6	22	3	S AFRI	PRETORIA	30	19	34	16	24	2.0	132	30
GEORGI	TBILISI	8	1	18	-2	4	1.3	22	-9		JOHANNESBURG	26	15	30	13	21	1.5	49	-59
UZBEKI	TASHKENT	10	2	21	-6	6	3.5	55	-1		BETHAL	27	15	32	9	21	1.2	77	-9
TURKME	ASHKHABAD	10	2	24	-6	6	1.6	43	14		DURBAN	30	22	33	14	26	2.3	16	-116
SYRIA	DAMASCUS	12	3	19	-1	8	0.3	64	40		CAPE TOWN	27	17	37	12	22	1.2	7	-7
ISRAEL	JERUSALEM	11	6	20	-2	8	-0.3	306	154	CANADA	TORONTO	-2	-12	8	-21	-7	-1.6	47	5
PAKIST	KARACHI	28	18	33	12	23	2.6	1	-9		MONTREAL	-6	-15	4	-26	-11	-2.4	60	1
INDIA	AMRITSAR	21	7	28	2	14	0.1	110	75		WINNIPEG	-13	-26	-2	-36	-19	-5.8	12	-1
	NEW DELHI	24	11	29	7	17	0.4	21	0		REGINA	-10	-22	-3	-39	-16	-4.0	13	1
	AHMEDABAD	31	17	36	11	24	1.6	8	***		SASKATOON	-11	-22	-2	-36	-16	-3.3	8	-2
	INDORE	30	14	35	11	22	1.5	8	5		LETHBRIDGE	-1	-12	10	-30	-6	-2.0	10	-3
	CALCUTTA	29	18	33	14	24	1.0	8	-17		CALGARY	-2	-12	8	-25	-7	-1.2	22	13
	VERAVAL	31	18	36	16	24	1.8	0	-1		EDMONTON	-4	-13	6	-28	-9	-0.3	11	-3
	BOMBAY	32	20	36	19	26	1.3	5	***		VANCOUVER	8	1	11	-4	5	-0.2	28	-93
	POONA	34	14	37	11	24	1.8	3	1	MEXICO	GUADALAJARA	***	***	30	6	***	***	0	-7
	BEGAMPET	33	19	36	17	26	0.8	10	1		TLAXCALA	***	7	25	3	***	***	0	-5
	VISHAKHAPATNAM	29	23	31	20	26	0.0	3	-10		ORIZABA	***	***	30	9	***	***	***	***
	MADRAS	32	22	33	21	27	0.6	0	-15	BERMUD	ST GEORGES	21	17	24	13	19	0.7	48	-63
	MANGALORE	34	23	35	22	29	1.0	0	-3	BAHAMA	NASSAU	28	20	32	12	24	2.3	43	0
HONGKO	HONG KONG INT	23	17	28	12	20	3.2	3	-40	CUBA	HAVANA	28	17	31	8	22	0.6	17	-24
N KORE	PYONGYANG	5	-4	11	-12	1	3.0	7	-6	JAMAIC	KINGSTON	31	24	33	22	28	1.7	1	-22
S KORE	SEOUL	7	0	12	-8	3	2.8	43	16	P RICO	SAN JUAN	29	22	31	21	25	0.5	68	10
JAPAN	SAPPORO	0	-7	7	-13	-4	-0.2	67	-29	GUADEL	RAIZET	30	22	31	20	26	1.6	49	-18
	NAGOYA	11	2	16	-2	6	1.6	63	-3	MARTIN	LAMENTIN	29	25	32	20	27	2.2	54	-97
	TOKYO	10	4	14	1	7	0.6	56	-5	BARBAD	BRIDGETOWN	29	23	30	21	26	0.5	60	19
	YOKOHAMA	9	3	15	1	6	0.1	59	-11	TRINID	PORT OF SPAIN	32	22	33	20	27	1.4	35	-1
	KYOTO	10	2	16	-1	6	0.7	66	-16	COLOMB	BOGOTA	21	9	22	4	15	1.6	23	-16
	OSAKA	11	4	17	0	7	1.2	63	3	VENEZU	CARACAS	31	23	33	20	27	2.3	0	-12
THAILA	PHITSANULOK	33	20	36	16	27	-0.8	19	9	F GUIA	CAYENNE	29	24	30	22	27	0.8	148	-171
	BANGKOK	34	26	36	21	30	1.4	1	-17	BRAZIL	FORTALEZA	30	25	31	22	27	-0.8	190	-24
MALAYS	KUALA LUMPUR	33	24	35	23	29	1.8	218	42		RECIFE	31	26	32	24	28	-0.7	167	65
VIETNA	HANOI	25	19	30	12	22	3.8	37	9		CAMPO GRANDE	32	23	37	19	28	2.0	184	16
CHINA	HARBIN	-3	-14	7	-23	-9	3.9	1	-4		FRANCA	29	20	32	18	24	1.1	133	-95
	HAMI	2	-11	9	-19	-5	-0.9	4	2		RIO DE JANEIRO	34	25	38	24	30	1.9	20	-105
	LANCHOW	9	-3	16	-8	3	4.0	0	-3		LONDRINA	32	21	36	19	27	2.3	106	-79
	BEIJING	6	-4	13	-10	1	1.2	3	-2		SANTA MARIA	31	21	36	14	26	1.0	164	33
	TIENTSIN	6	-4	13	-10	1	1.3	2	-2		TORRES	29	22	33	17	26	-0.9	267	114
	LHASA	8	-4	13	-8	2	0.1	3	2	PERU	LIMA	27	21	29	20	24	0.6	0	0
	KUNMING	18	6	21	3	12	1.8	9	-8	BOLIVI	LA PAZ	15	4	17	3	10	0.9	122	20
	CHENGCHOW	9	0	15	-8	5	1.5	25	13	CHILE	SANTIAGO	30	11	34	7	20	0.6	0	-5
	YECHANG	10	4	19	-1	7	0.5	73	42	ARGENT	IGUAZU	31	21	37	18	26	0.8	161	-41
	HANKOW	10	5	20	-3	8	0.9	98	39		FORMOSA	32	22	39	16	27	0.3	173	44
	CHUNGKING	16	10	23	4	13	3.2	10	-11		CERES	32	19	40	11	25	1.0	112	-24
	CHIHKIANG	12	6	28	-1	9	2.2	47	-3		CORDOBA	29	17	40	8	23	0.5	194	66
	WU HU	10	4	24	-2	7	2.2	108	47		RIO CUARTO	28	16	38	8	22	0.6	54	-49
	SHANGHAI	10	4	19	-2	7	0.9	72	11		ROSARIO	29	18	38	7	24	0.5	95	-31
	NANCHANG	12	7	25	-1	9	2.0	141	40		BUENOS AIRES	27	17	35	7	22	-0.1	342	243
	TAIPEI	21	15	29	11	18	1.8	21	-182		SANTA ROSA	32	15	39	5	24	1.5	21	-58
	CANTON	22	15	29	8	19	4.0	8	-61		TRES ARROYOS	28	15	37	9	22	1.1	68	-14
	NANNING	22	14	32	7	18	3.8	26	-17	MARSHA	MAJURO	29	27	30	23	28	0.6	230	51
CANARY	LAS PALMAS	21	15	23	13	18	-0.2	13	-7	NEW CA	NOUMEA	30	24	33	21	27	0.9	54	-70
MOROCC	CASABLANCA	17	10	21	4	14	-0.1	28	-13	FIJI	NAUSORI	30	23	33	20	27	0.1	185	-76
	MARRAKECH	19	7	26	3	13	-0.8	7	-24	SAMOA	PAGO PAGO	32	26	34	25	29	1.1	228	-80
ALGERI	ALGER	16	6	24	1	11	-0.7	132	65	TAHITI	PAPEETE	31	25	32	23	28	0.6	204	-12
	BATNA	11	1	17	-4	6	-0.2	32	8	PNEWGU	PORT MORESBY	31	25	34	24	28	1.4	116	-82
TUNISI	TUNIS	15	8	19	4	11	-0.9	67	9	NZEALA	AUCKLAND	23	16	27	11	20	***	54	***
NIGER	NIAMEY	38	20	40	16	29	1.9	0	-1		WELLINGTON	21	14	26	9	18	***	31	***
MALI	TIMBUKTU	34	19	40	11	27	2.9	0	0	AUSTRA	DARWIN	30	25	33	23	28	-0.4	661	323
	BAMAKO	37	23	40	18	30	2.0	0	-1		BRISBANE	27	21	30	20	24	-0.5	216	45
MAURIT	NOUAKCHOTT	28	17	36	13	22	-0.4	0	-3		PERTH	32	17	42	9	25	0.0	21	3
SENEGA	DAKAR	22	17	26	16	20	-0.5	0	0		CEDUNA	28	17	41	12	23	0.6	18	7
CHAGOS	DIEGO GARCIA	31	26	34	23	28	0.4	263	-14		ADELAIDE	28	17	40	13	22	0.0	60	20
LIBYA	TRIPOLI	16	7	21	2	12	-1.1	15	-19		MELBOURNE	25	15	36	8	20	0.3	18	-26
	BENGHAZI	15	9	20	6	12	-0.9	51	7		WAGGA	33	19	38	10	26	2.4	58	19
EGYPT	CAIRO	19	11	25	7	15	-0.3	1	-2		CANBERRA	29	15	35	10	22	2.1	57	1
	ASWAN	24	10	35	6	17	-0.7												



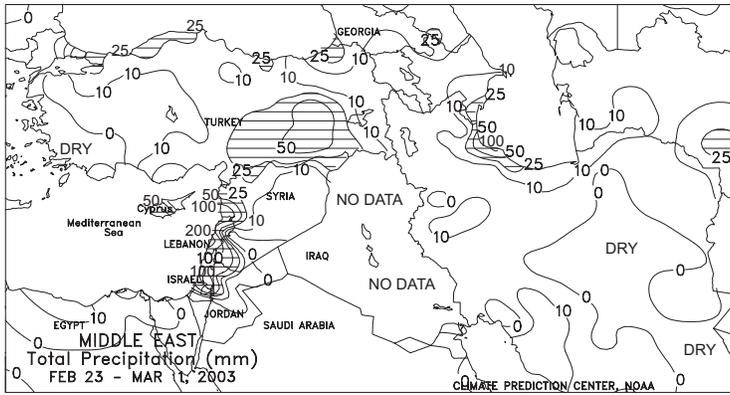
EUROPE

The stagnant weather pattern continued, keeping most of Europe dry, but warmer weather pushed out the bitterly cold air from Eastern Europe. Only the Iberian peninsula (10-50 mm) received significant precipitation, boosting moisture supplies for winter grains. While most of Europe has received little or no precipitation during the past 2 to 3 weeks, dormant winter crops and cold weather kept crop water use to zero. The exception was in Italy's Po Valley, where continued dry weather increased short-term moisture deficits, but irrigation supplies remained adequate. The dry weather favored fieldwork preparation for durum wheat planting in central and southern Italy. Minimum temperatures fell below -15 degrees C across portions of eastern Poland, Hungary, and central Romania, but moderate snow cover protected winter crops. However, by week's end, warmer temperatures started to melt the snow cover across eastern Europe. In western Europe, temperatures averaged 2 to 4 degrees C above normal with maximum temperatures reaching 14 to 17 degrees C, causing winter grain and oilseeds to start losing winter hardiness, especially in France and England. However, temperatures averaged 3 to 7 degrees C below normal across eastern Europe. Temperatures averaged near normal across the Iberian peninsula and 1 to 2 degrees C below normal across Italy.



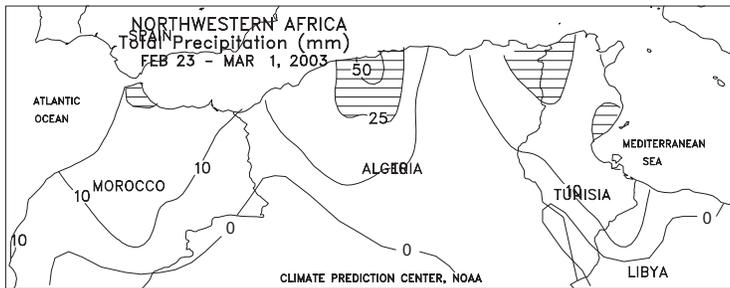
FSU-WESTERN

A blocking ridge of high pressure continued to keep most of the region unseasonably cold and dry. The lowest temperatures ranged from -23 to -15 degrees C as far south as southern Ukraine and the central portion of the Southern Region in Russia. A moderate to deep snow cover extended as far south as the Black Sea coast, protecting winter grains from potential freeze damage. Dry weather prevailed over most of the region. Weekly temperatures averaged 3 to 7 degrees C below normal in Ukraine, Belarus, and the Southern Region in Russia, and 1 to 4 degrees C below normal in most of northern Russia and the Baltics. By the end of the week, temperatures slowly moderated as minimum temperatures were generally above -10 degrees C in the Baltics, Belarus, and western Ukraine. On March 1, maximum temperatures warmed to above 0 degrees C in southeast Ukraine and the southern portions of the Southern Region in Russia.



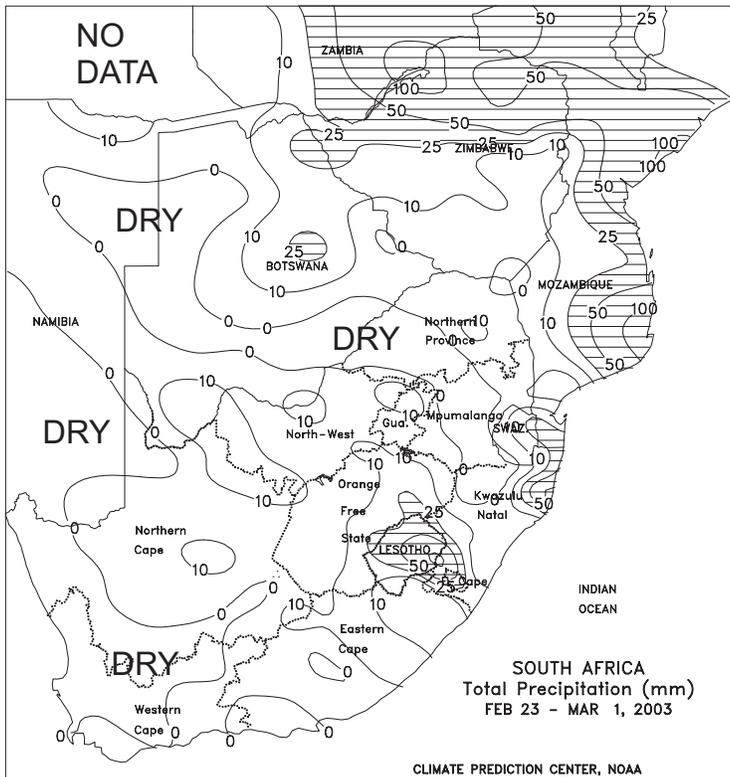
MIDDLE EAST

Rain and snow (5-20 mm of water equivalent) continued across the central wheat areas of Turkey, maintaining adequate moisture supplies for overwintering winter crops. The heaviest precipitation (25-90 mm of water equivalent) again fell across southeastern Turkey, boosting irrigation supplies and snowpack, especially in the Tigris and Euphrates watersheds. In central Turkey, snow cover protected dormant winter wheat from moderately cold winter air (minimum temperatures between -17 to -13 degrees C). Mostly dry weather prevailed across western Turkey. Moderate to heavy showers (25-100 mm or more) continued across the Mediterranean coast from Syria to northern Israel and Jordan, boosting irrigation supplies. Snow was even reported along the higher elevations of western Syria, Lebanon, and Israel. In western Iran, light precipitation (5-10 mm) provided some moisture supplies for dormant wheat. More rain, however, will be needed across western Iran once winter grains green within the next month. Heavier rain (25-100 mm) boosted moisture supplies for semi-dormant winter grains along the Iranian Caspian Sea coast. Based on weather reports from neighboring areas of Turkey and Syria, light to moderate rain probably fell across northwestern Iraq, with drier weather in northeastern Iraq. Temperatures averaged 4 to 8 degrees C below normal across Turkey, 3 to 4 degrees C below normal across the Middle East, and slightly below normal across western Iran.



NORTHWESTERN AFRICA

Widespread rain (10-50 mm or more) continued to cover the region, while timely rain (10-25 mm) boosted soil moisture supplies in southern Morocco. Moisture supplies remained adequate to abundant for vegetative winter grains approaching the heading stage in the next few weeks. Temperatures averaged near normal with scattered near-freezing minimum temperatures only in higher elevations.



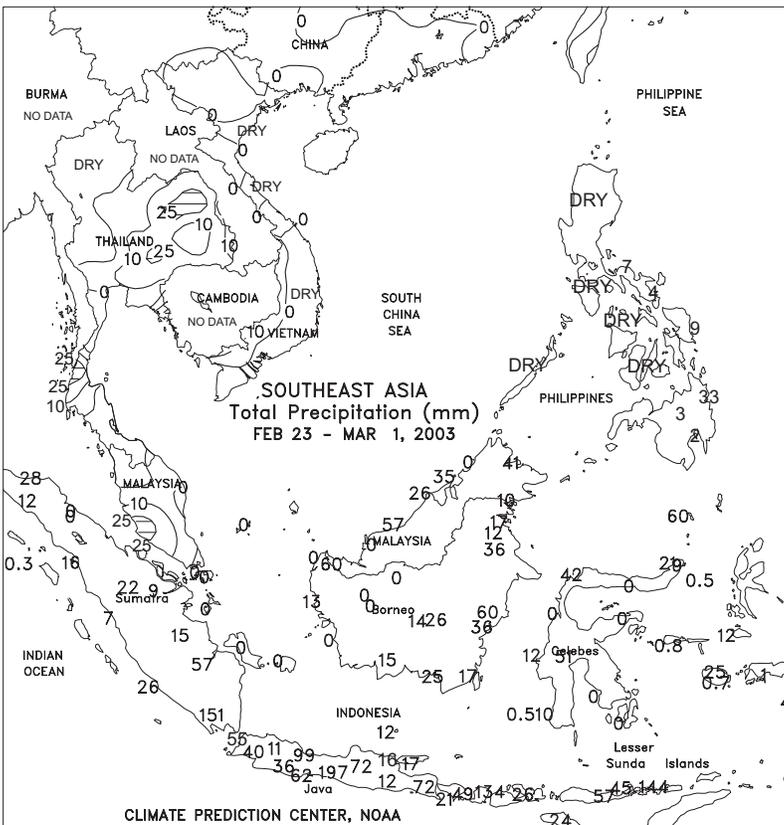
SOUTH AFRICA

Light showers (less than 10 mm) in Northwest and Free State maintained adequate moisture supplies for reproductive summer crops. In contrast, showers (generally less than 5 mm) in Mpumalanga and northern KwaZulu Natal were too light to prevent net evaporative losses, reducing moisture supplies for reproductive to filling corn and non-commercial summer crops. Although rainfall last week improved crop conditions in the eastern corn belt, conditions will likely begin to deteriorate again if more rain does not fall soon. Temperatures in the corn belt were generally seasonable, with maximum temperatures in the upper 20s to lower 30s degrees C.



EASTERN ASIA

Unseasonable, moderate to heavy showers (25-50 mm or more) returned to the Yangtze Valley, increasing long-term moisture reserves for rice and other summer crops. Lighter rain (less than 10 mm) fell in crop areas closer to the southern coast. Throughout southern China, above-normal temperatures (1-3 degrees C above normal in the Yangtze Valley; 3-7 degrees C above normal in the coastal provinces) spurred growth of early planted summer crops. Planting of corn and early double-crop rice typically begins in southern China in March, and fieldwork for most other summer crops, including cotton, is usually underway in April. Farther north, scattered showers (5-25 mm) benefited greening winter wheat in southern growing areas (Sichuan to Jiangsu). Mostly dry, warmer-than-normal weather dominated much of the North China Plain (namely Shandong and Hebei), where wheat remained dormant. Temperatures continued to average above normal in Manchuria but not high enough to encourage early planting. Spring wheat planting is usually underway in northern China by late March, with planting of corn and soybeans usually occurring in April. Elsewhere, showers (greater than 10 mm) covered South Korea, with somewhat heavier precipitation (10-50 mm) over southern and central Japan, increasing long-term moisture reserves for rice and other summer crops that will be planted in upcoming months.



SOUTHEAST ASIA

In Java Indonesia, showers (25-50 mm) continued in western areas, although lighter than in previous weeks, while heavier amounts (50-100 mm or more) were confined to central growing areas. Main-season rice continued through reproduction and was beginning to mature. Dry weather prevailed throughout the Philippines as second-season harvest activities begin. In Vietnam, dry weather and warm conditions (5-7 degrees C above normal) reduced irrigation supplies for reproductive winter-spring rice. The warm, dry conditions, however, were favorable to maturing rice in southern Vietnam. Light showers (10-25 mm) in eastern Thailand supplemented irrigation supplies for reproductive second-season rice. Limited shower activity reduced moisture supplies for oil palm in peninsular Malaysia and Sumatra.

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