

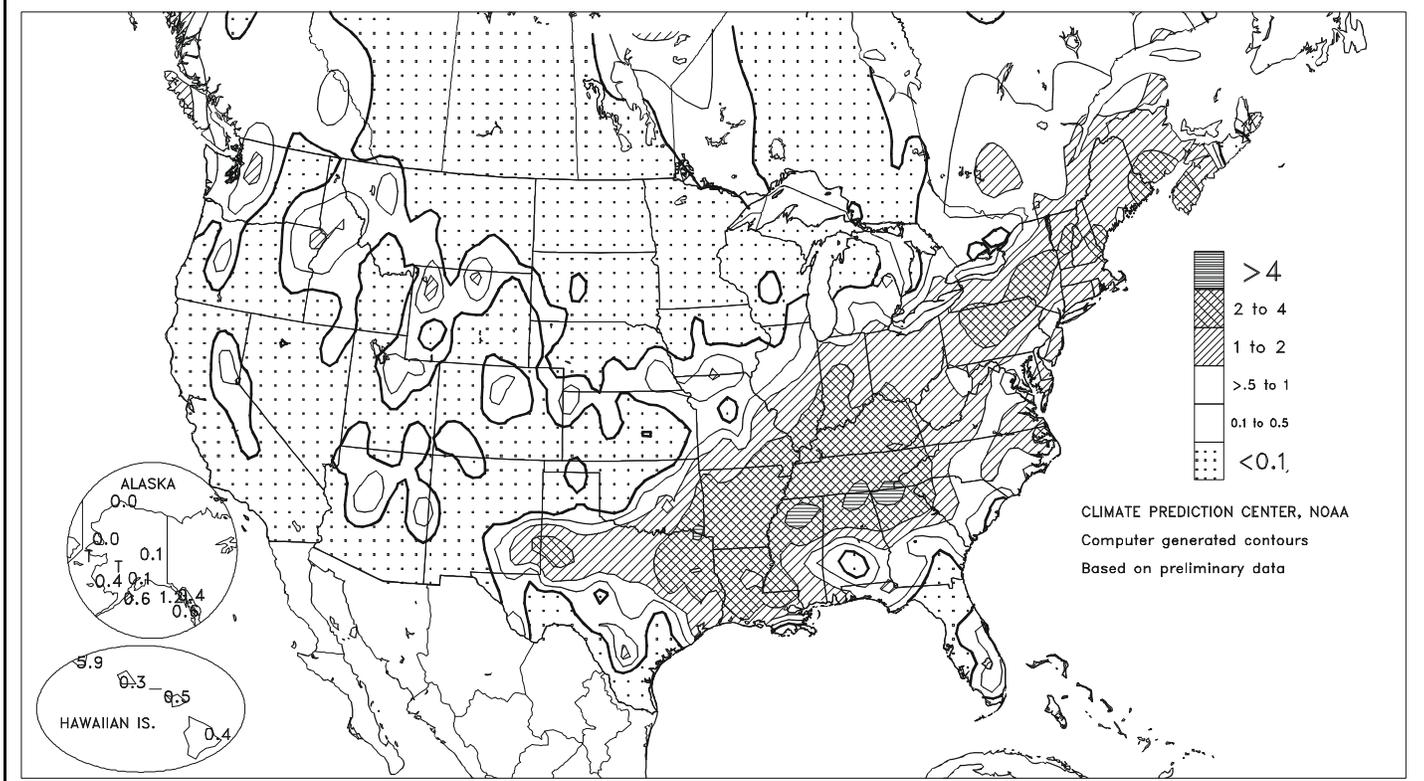
# WEEKLY WEATHER AND CROP BULLETIN

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

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

## Total Precipitation (Inches)

MAR 24 - 30, 2002



## HIGHLIGHTS

March 24 - 30, 2002

Highlights provided by USDA/WAOB

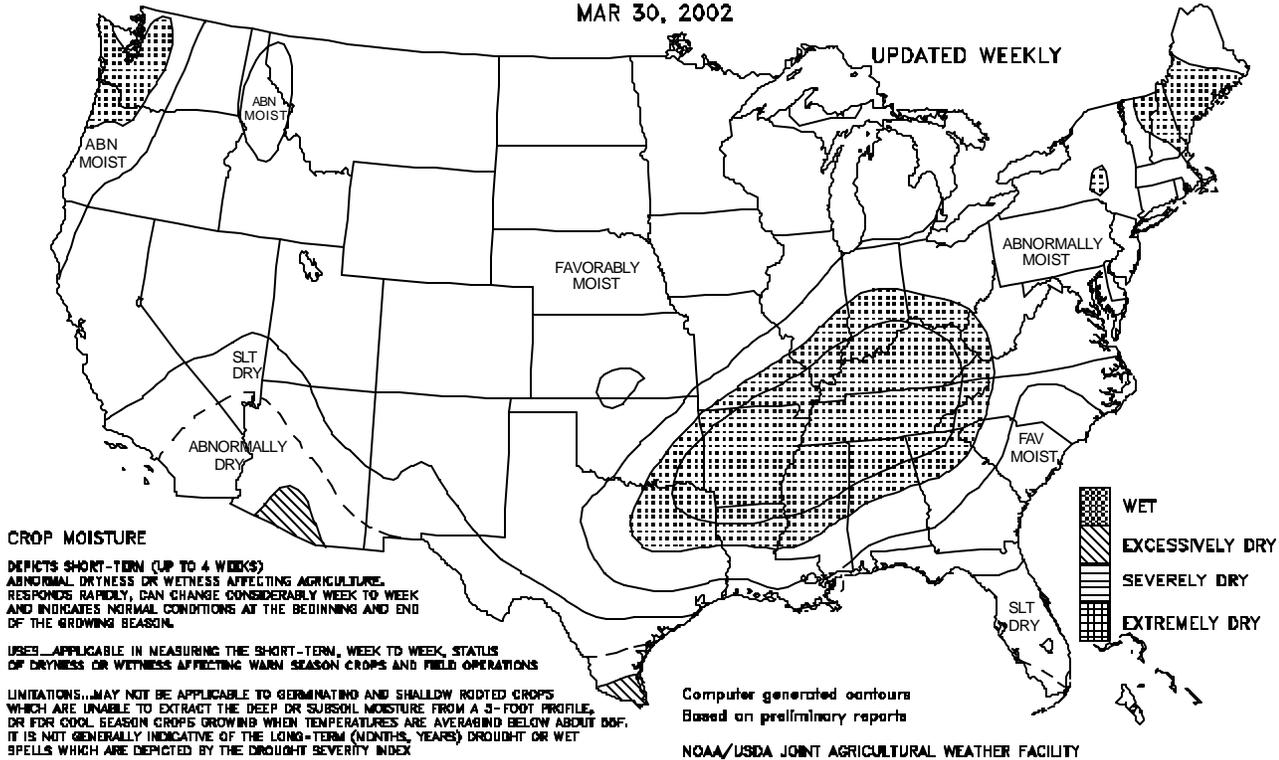
**A** late-week storm system traversed the **South**, causing fieldwork delays and triggering additional lowland flooding from **northeastern Texas to southern portions of the Ohio Valley**. Farther east, mostly light showers dampened the **southern Atlantic region**, leaving enough topsoil moisture for pasture and winter grain development and summer crop germination, but having little effect on long-term precipitation deficits and subsoil moisture shortages. However, significant precipitation fell in the **middle and northern Atlantic States**, providing some relief from long-term drought. Meanwhile in the **Midwest**, soil moisture remained slightly short across the  
*(Continued on page 7)*

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**Crop Moisture**  
 SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE  
 MAR 30, 2002

UPDATED WEEKLY



**CROP MOISTURE**

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

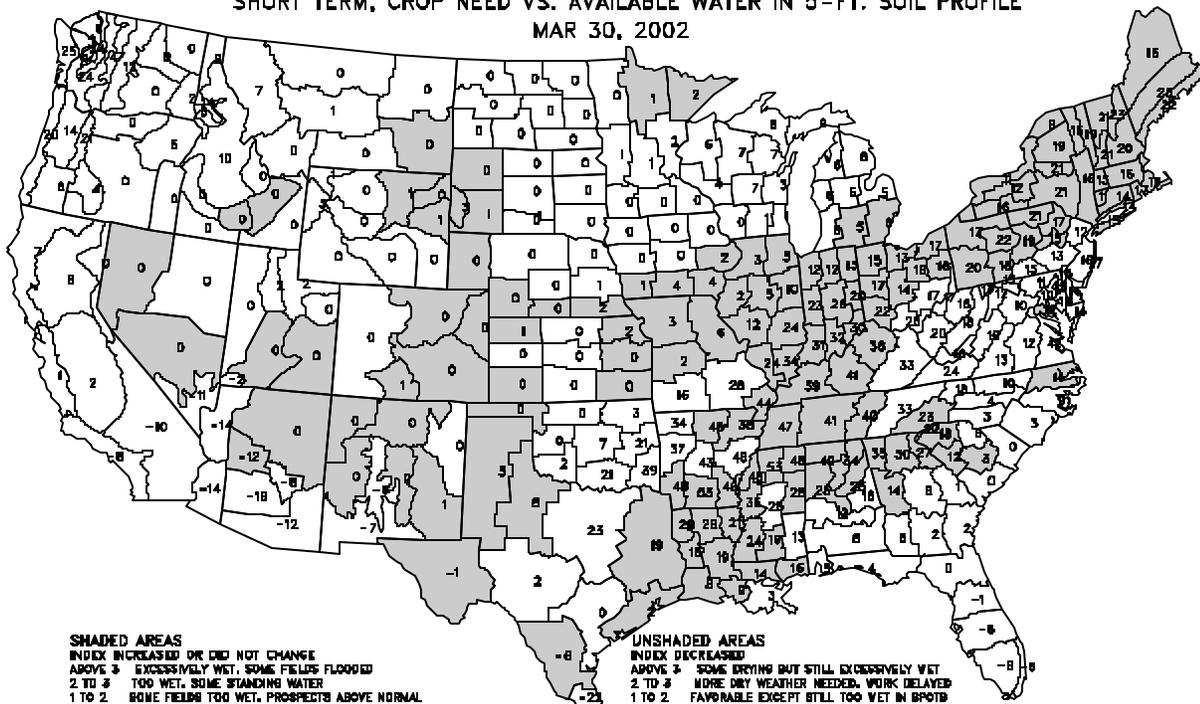
USES...APPLICABLE IN MEASURING THE SHORT-TERM, WEEK TO WEEK, STATUS OF DRYNESS OR WETNESS AFFECTING WARM SEASON CROPS AND FIELD OPERATIONS

LIMITATIONS...MAY NOT BE APPLICABLE TO GERMINATING AND SHALLOW ROOTED CROPS WHICH ARE UNABLE TO EXTRACT THE DEEP OR SUBSOIL MOISTURE FROM A 3-FOOT PROFILE, OR FOR COOL SEASON CROPS GROWING WHEN TEMPERATURES ARE AVERAGING BELOW ABOUT 50F. IT IS NOT GENERALLY INDICATIVE OF THE LONG-TERM (MONTHS, YEARS) DROUGHT OR WET SPELLS WHICH ARE DEPICTED BY THE DROUGHT SEVERITY INDEX

Computer generated contours  
 Based on preliminary reports

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

**Crop Moisture Index**  
 SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE  
 MAR 30, 2002



**SHADED AREAS**

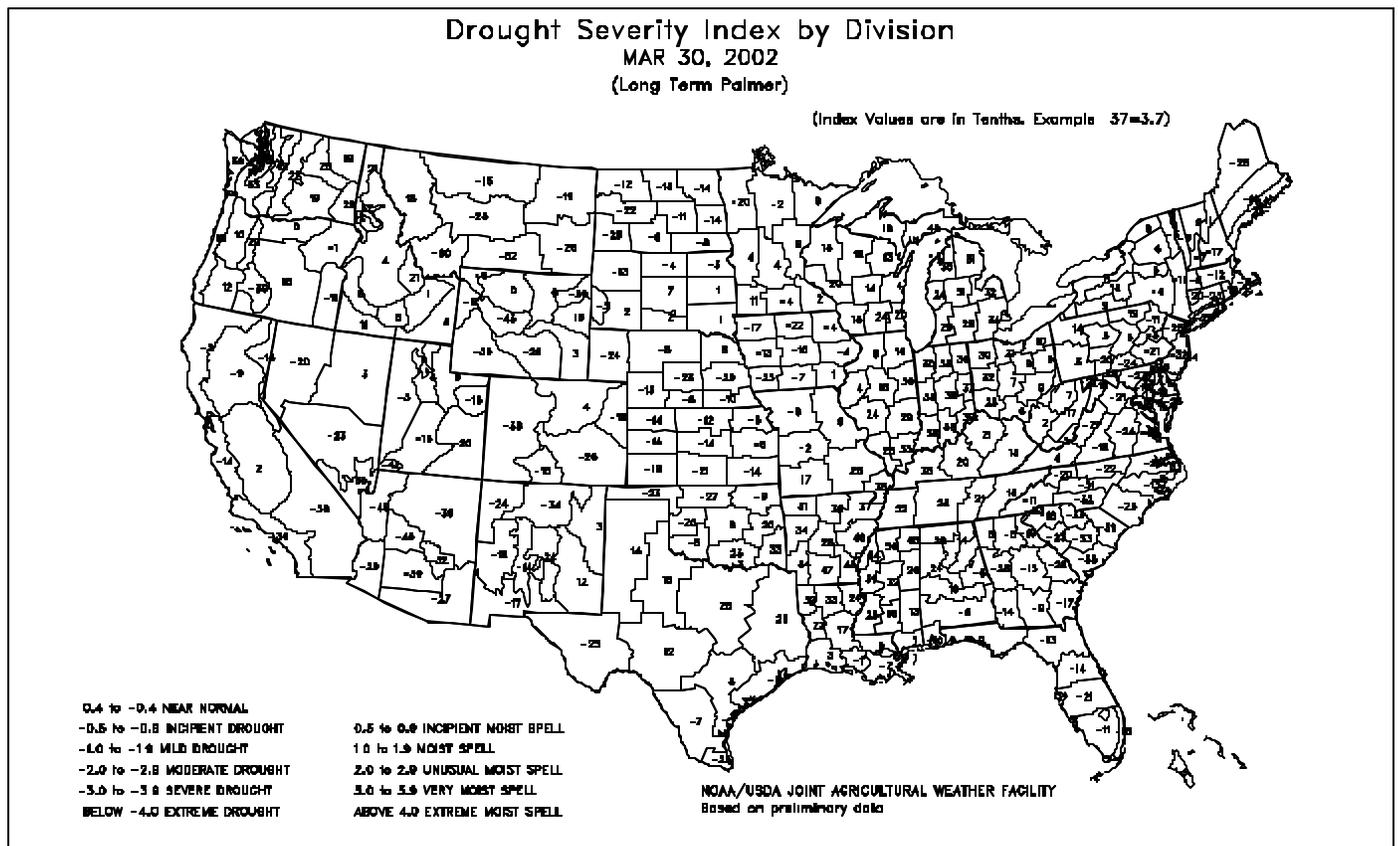
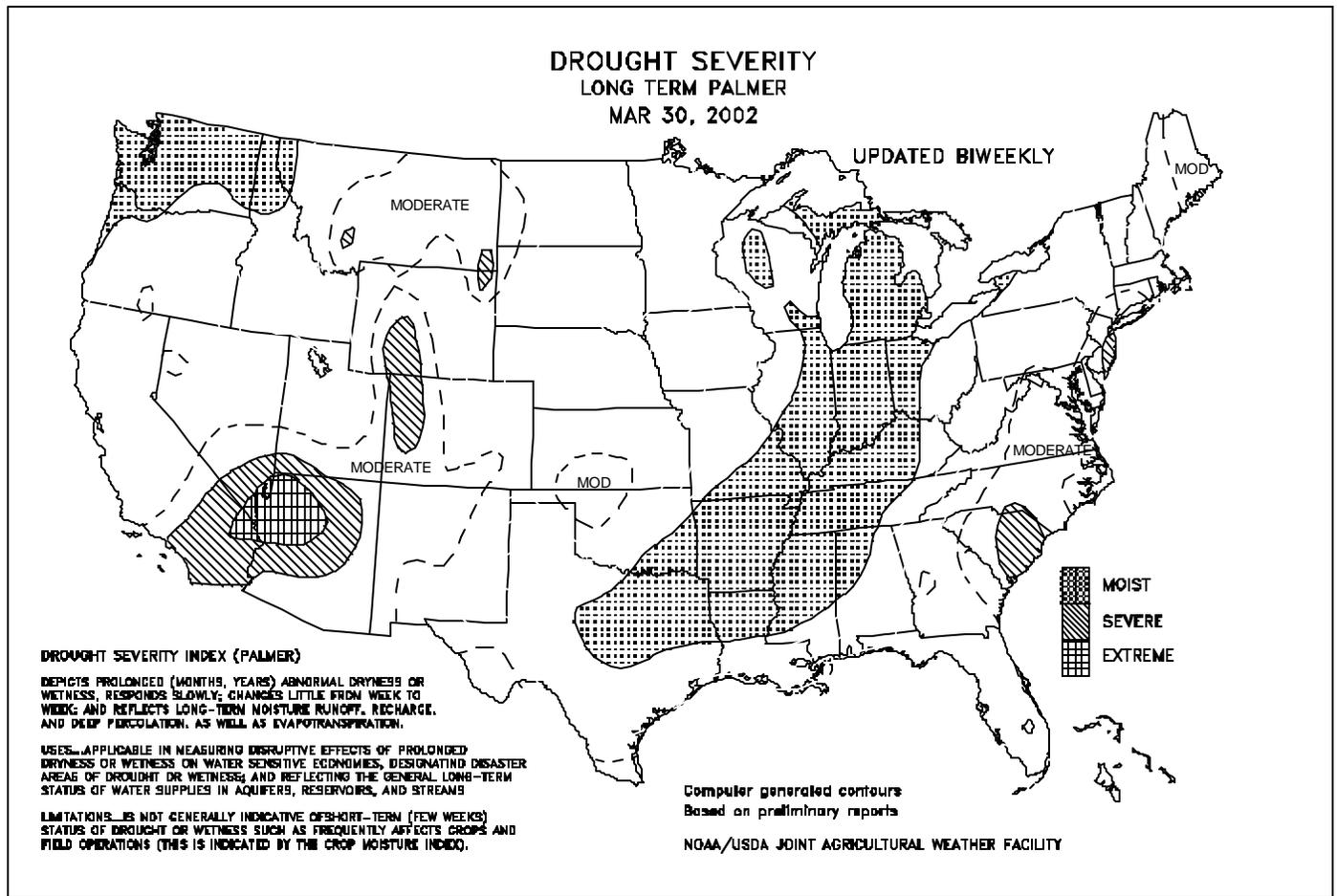
INDEX INCREASED OR DID NOT CHANGE  
 ABOVE 3... EXCESSIVELY WET, SOME FIELDS FLOODED  
 2 TO 3... TOO WET, SOME STANDING WATER  
 1 TO 2... SOME FIELDS TOO WET, PROSPECTS ABOVE NORMAL  
 0 TO 1... MOISTURE ADEQUATE FOR PRESENT CROP NEEDS  
 0 TO -1... PROSPECTS IMPROVED BUT RAIN STILL NEEDED  
 -1 TO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

**UNSHADED AREAS**

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

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

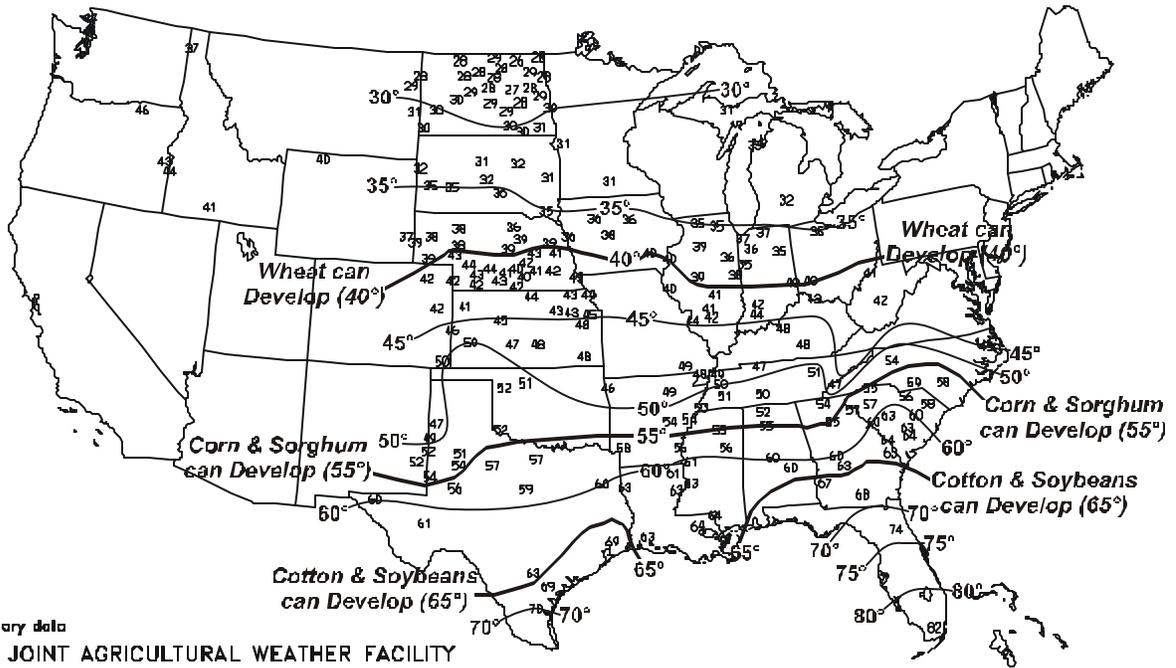
BASED ON PRELIMINARY DATA



- |                               |                                 |
|-------------------------------|---------------------------------|
| 0.4 to -0.4 NEAR NORMAL       | 0.5 to 0.9 INCIDENT MOIST SPELL |
| -0.5 to -0.9 INCIDENT DROUGHT | 1.0 to 1.9 MOIST SPELL          |
| -1.0 to -1.9 MILD DROUGHT     | 2.0 to 2.9 UNUSUAL MOIST SPELL  |
| -2.0 to -2.9 MODERATE DROUGHT | 3.0 to 3.9 VERY MOIST SPELL     |
| -3.0 to -3.9 SEVERE DROUGHT   | 4.0 to 4.9 EXTREME MOIST SPELL  |
| BELOW -4.0 EXTREME DROUGHT    |                                 |

### Average Soil Temperature (°F, 4" Bare)

MAR 24 - 30, 2002



Based on preliminary data

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

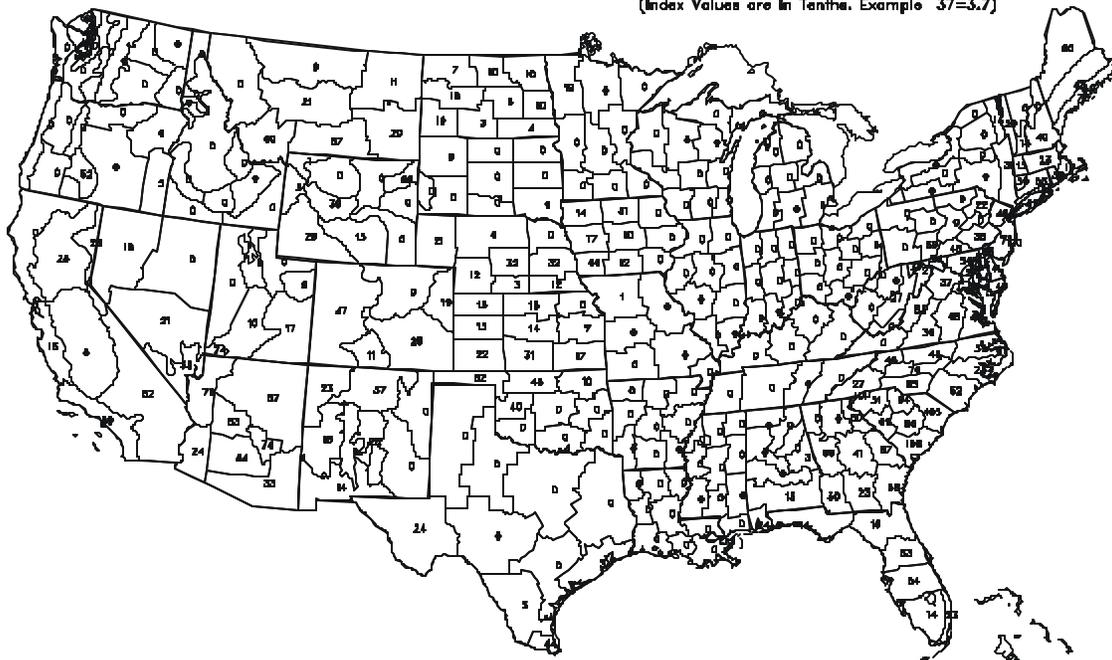
Supplemental data provided by High Plains Regional Climate Center

### Additional Precipitation Needed to Bring Index Near Zero

MAR 30, 2002

(Long Term Palmer)

(Index Values are in Tenths, Example 37=3.7)



NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY  
Based on preliminary data

## Weather Data for Selected Locations in the Delta and the Bootheel

### Weather Data for the Week Ending March 30, 2002

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	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP
																		01 INCH OR MORE	50 INCH OR MORE	
MS BATESVILLE <sup>x</sup>	66	42	79	28	54	-2	0.85	-0.48	0.55	7.32	129	20.20	137	--	--	0	1	2	1	
BELZONI <sup>x</sup>	70	49	81	38	60	1	0.46	-1.01	0.38	5.51	89	--	--	--	--	0	0	2	0	
CLARKSDALE <sup>x</sup>	64	42	79	27	53	-4	3.04	1.83	1.95	9.95	188	20.83	137	--	--	0	1	2	2	
CLEVELAND <sup>x</sup>	66	44	81	35	55	-4	0.58	-0.82	0.50	6.48	110	18.75	123	--	--	0	0	2	1	
GREENVILLE <sup>x</sup>	68	46	78	31	57	-1	3.03	1.70	1.97	7.63	136	21.28	136	--	--	0	1	2	2	
GREENWOOD <sup>x</sup>	71	48	81	39	60	1	1.95	0.55	1.40	5.66	101	16.52	110	--	--	0	0	2	2	
INDIANOLA 1S	72	48	81	39	60	--	1.58	--	1.25	6.07	--	16.70	--	63	53	0	0	2	1	
INVERNESS 5E	72	49	80	39	61	--	1.62	--	1.03	5.51	--	15.60	--	66	55	0	0	2	2	
LYON	68	45	80	39	57	--	3.08	--	1.22	9.32	--	--	--	62	51	0	0	4	3	
MOORHEAD <sup>x</sup>	72	48	79	39	60	1	0.99	-0.40	0.65	4.56	79	15.65	99	--	--	0	0	2	1	
ONWARD	73	49	83	40	61	--	0.47	--	0.36	5.30	--	12.95	--	62	55	0	0	2	0	
ROLLING FORK <sup>x</sup>	70	48	83	40	59	1	0.17	-1.24	0.17	2.09	35	9.98	61	--	--	0	0	1	0	
SIDON	72	50	82	38	61	--	1.76	--	1.39	4.74	--	13.72	--	68	52	0	0	3	1	
TUNICA <sup>x</sup>	65	43	80	30	54	-2	1.43	0.10	0.83	9.56	178	15.93	113	--	--	0	1	2	2	
TUNICA 1W	66	44	79	37	55	--	2.19	--	1.70	9.48	--	15.06	--	60	50	0	0	3	1	
VANCE	67	46	80	38	57	--	3.58	--	2.27	--	--	--	--	63	54	0	0	3	3	
VICKSBURG <sup>x</sup>	71	46	84	31	59	-2	0.01	-1.46	0.01	4.32	70	12.65	73	--	--	0	1	1	0	
YAZOO CITY <sup>x</sup>	71	46	82	30	59	-1	0.00	-1.54	0.00	6.69	102	15.42	86	--	--	0	1	0	0	
STONEVILLE <sup>x</sup>	67	44	81	32	56	-2	0.98	-0.35	0.83	5.62	103	18.70	122	65	51	0	1	2	1	
MO CARDWELL	61	40	77	31	51	-2	1.67	0.42	1.13	5.97	126	12.85	108	54	48	0	1	4	1	
CHARLESTON	59	37	73	29	48	-3	3.74	2.40	2.60	7.19	167	13.25	119	53	43	0	1	3	2	
CLARKTON	60	38	77	29	49	-2	2.45	0.99	2.18	7.32	173	13.58	130	--	--	0	1	4	1	
DELTA	58	34	75	28	45	-6	2.04	0.35	2.00	7.21	144	13.71	110	51	40	0	3	2	1	
GLENNONVILLE	60	39	79	29	49	-2	3.12	1.66	2.90	7.22	170	13.23	126	54	44	0	1	4	1	
PORTAGEVILLE #1	60	40	76	31	50	-2	1.93	0.69	1.26	5.85	131	12.82	110	55	44	0	1	4	1	
PORTAGEVILLE #2	61	40	75	31	50	-2	1.76	0.52	1.35	5.75	129	12.22	105	55	44	0	1	4	1	
STEELE	61	41	76	32	51	-1	2.70	1.35	1.35	6.87	143	14.35	116	54	46	0	1	4	2	

Compiled by USDA/OCE/WA0B's Stoneville Field Office. <sup>x</sup> Based on 1971-2000 normals.

**Delta and Bootheel Weather and Crop Summary:** Typical spring conditions, featuring large day-to-day temperature variations, prevailed across the region. Precipitation varied, especially in the Delta, where some localized late-week flooding was noted. Fieldwork was again interrupted by rain, although corn planting continued in accessible fields. The majority of winter wheat was at the tiller stage, with some at the boot stage.

## U.S. Prospective Planting Highlights

*The following information was released by USDA's Agricultural Statistics Board on March 28, 2002.*

**Corn** growers intend to plant 79.0 million acres of corn for all purposes in 2002, up 4 percent (%) from 2001, but 1% below 2000. Expected acreage is up in many areas of the United States and in virtually all areas of the Corn Belt. Compared with last year, when producers had problems getting their crops in due to persistent precipitation, conditions so far this year have been cooperative and have increased farmers' hopes of planting their corn crop on time. Farmers intend to plant fewer corn acres than last year in Pennsylvania, Oklahoma, Kansas, and Colorado because of concerns about dry conditions.

**Soybean** producers intend to plant 73.0 million acres, down 2% from last year. Reduced soybean acreage was offset by an expected increase in corn plantings in most areas. Crop rotations, farm bill uncertainty, and price considerations were cited as primary reasons for the reduced soybean acreage. Producers in Alabama, Georgia, Louisiana, Mississippi, and Texas intend to shift from cotton to soybeans. Expected acreage in North Dakota is up 450,000 acres from last year, replacing wheat acreage.

**Sorghum** acreage planted for all purposes is estimated at 9.02 million acres, down 12% from last year and, if realized, the smallest acreage since 1929. Most of the acreage declines are expected on the central and southern Plains. Fewer acres are also expected in

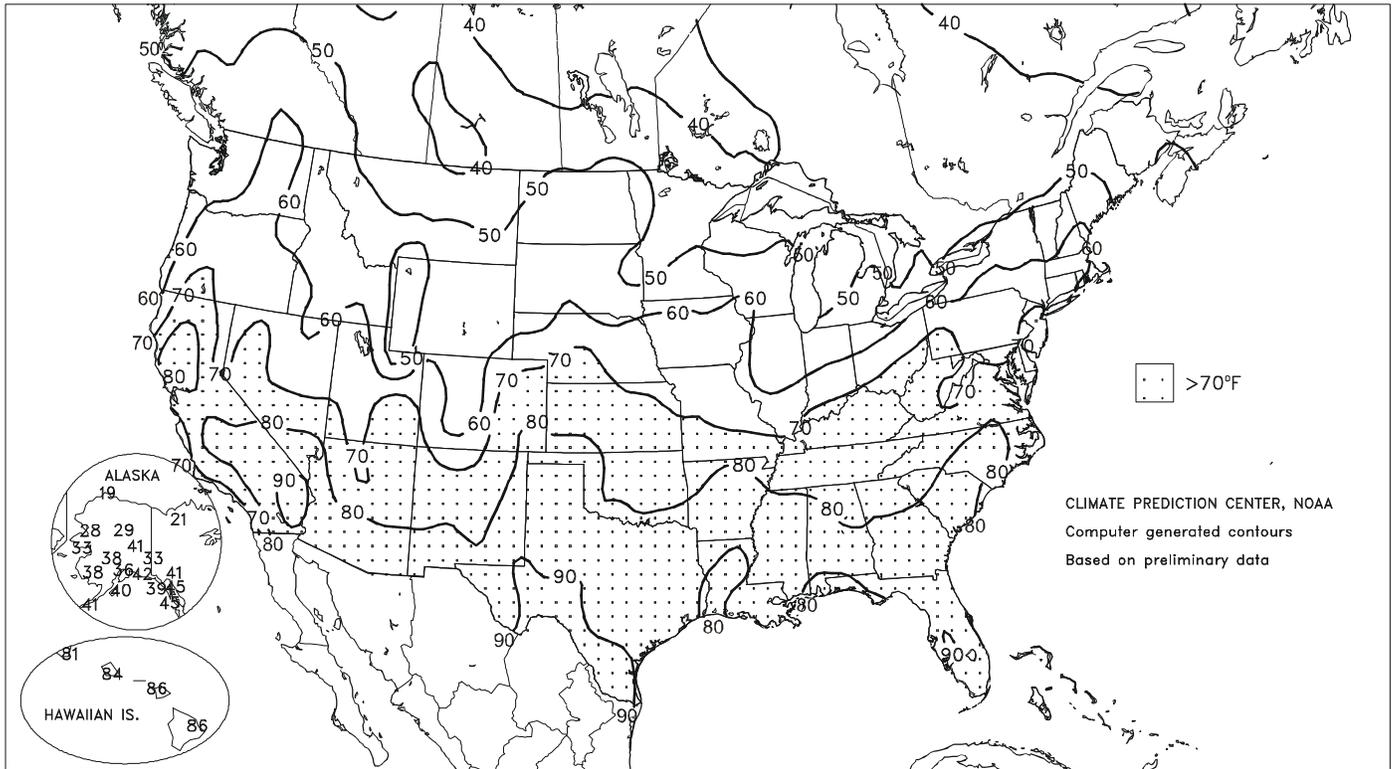
Illinois, Louisiana, Mississippi, and Missouri. Growers in seven States intend to plant more acres this year, and planting intentions in Arkansas show an increase of 75,000 acres from last year.

**All wheat** planted area is expected to total 59.0 million acres, down 1% from 2001 and the lowest level since 1972. Planted area for the **winter wheat** crop is 41.1 million acres, nearly identical to the previous year's acreage. This is the lowest acreage seeded to winter wheat since 1971. Of the total, about 29.3 million acres are Hard Red Winter, 8.4 million acres are Soft Red Winter, and 3.4 million acres are White Winter. The 2002 **other spring wheat** planted acreage is estimated at 15.1 million acres, down 3% from last year. Of the total, about 14.2 million acres are Hard Red Spring wheat. The area planted to **durum wheat** is intended to total 2.84 million acres, down 2% from 2001.

**All cotton** plantings for 2002 are expected to total 14.8 million acres, 6% below last year. Upland acreage is expected to total 14.5 million acres, down 7% from 2001. Producers from all upland cotton-producing States except for Kansas, Georgia, and Missouri intend to decrease acreage from last year. American-Pima cotton growers intend to increase their plantings to 274,500 acres, up 5% from 2001. The increase is in California, where producers are intending to plant 15,000 acres more than last year.

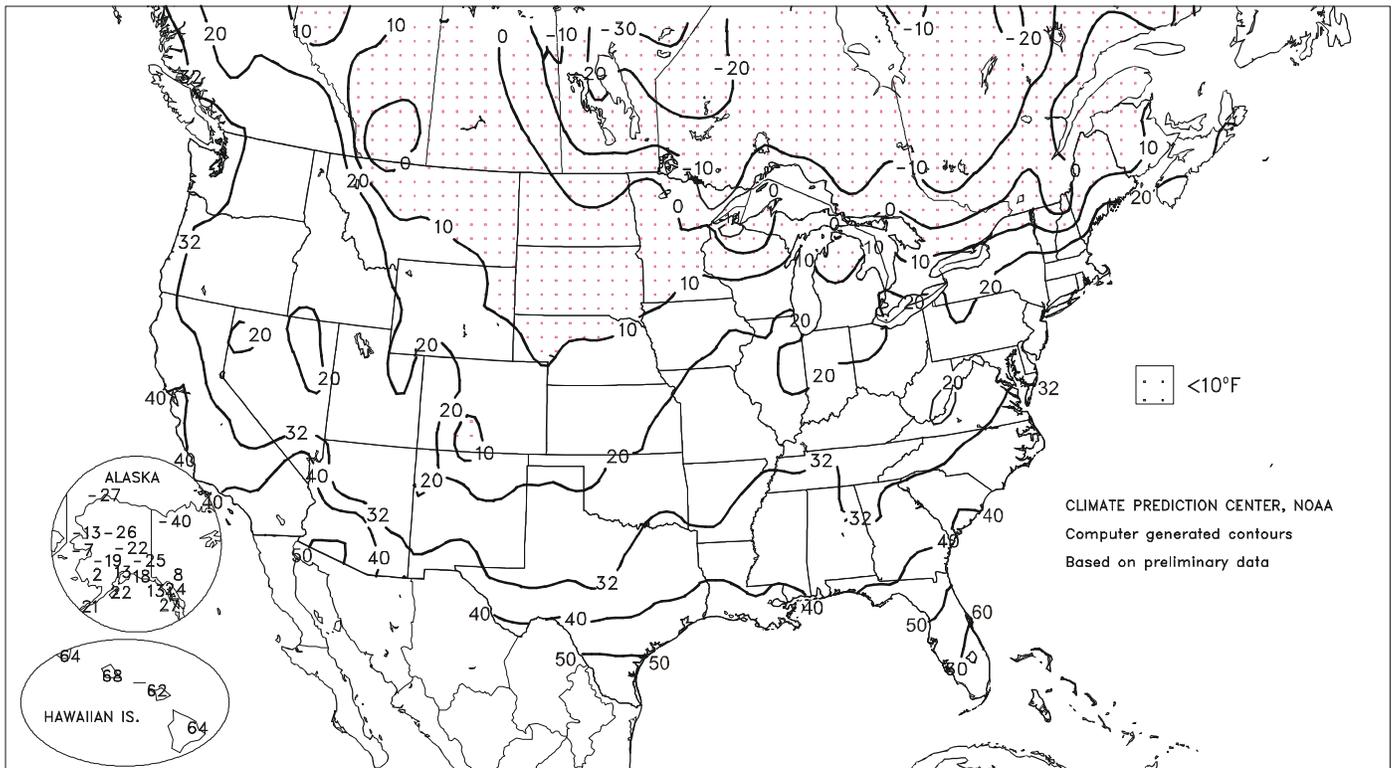
Extreme Maximum Temperature (°F)

MAR 24 - 30, 2002



Extreme Minimum Temperature (°F)

MAR 24 - 30, 2002



(Continued from front cover)

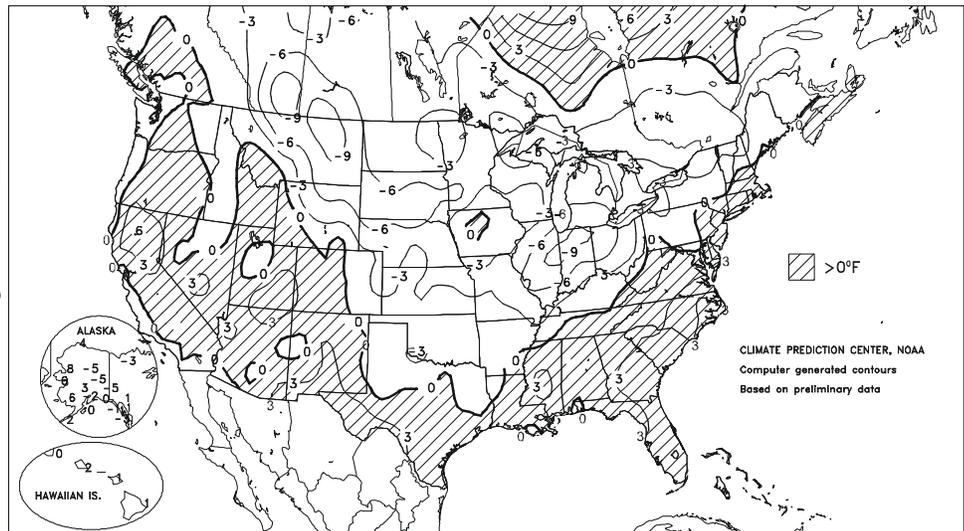
**western Corn Belt**, but was adequate to locally excessive in the **Ohio Valley**, where cool weather (as much as 10°F below normal) continued to slow winter wheat development. Temperatures also averaged as much as 10°F below normal on the **northern High Plains**, although breezy, occasionally mild weather melted much of the dormant winter wheat crop's protective snow cover. Farther south, dry, breezy conditions and temperature oscillations continued to stress wheat and limit crop development in a broad area centered on **southwestern Kansas**. However, the **southernmost Plains** (south of the **Texas Panhandle**) remained favorably wet, courtesy of two significant rainfall events in less than 2 weeks. Mostly dry weather accompanied a warming trend in the **West**, where most of the **northwestern half of the region** has favorable high-elevation snow packs and spring runoff prospects. Meanwhile in **southern California** and the **Four Corners region**, ranges and dryland crops continued to suffer from a lack of cold-season precipitation, while meager snow packs in the **central and southern Rockies** and the **Southwest** maintained water-supply concerns.

Prior to midweek, widespread precipitation fell across the **interior Northwest**, portions of the **central Plains**, and throughout the **East**. In **northeastern Oregon**, 1.09 inches of rain soaked **Meacham** (southeast of **Pendleton**) on March 24, capping a month that featured precipitation totaling 4.32 inches (279 percent of normal). Elsewhere in the **Northwest**, daily-record totals for March 24 included 0.91 inch in **Pullman, WA**, and 0.72 inch in **Lewiston, ID**. Meanwhile on the **Plains**, March 24-25 snowfall totaled 6.2 inches in **Goodland, KS**, and 7.6 inches in **Lincoln, NE**. Farther east, heavy rain returned to the **lower Ohio Valley**, where **Paducah, KY** (2.98 inches), notched a daily-record total for March 25. A day later, beneficial precipitation spread into the **Northeast**, resulting in daily-record totals in locations such as **Williamsport, PA** (1.91 inches), and **Albany, NY** (1.49 inches). Heavy snow was noted from the **Midwest into the Northeast**, including **Maine**, where March 26-27 totals reached 12.5 inches in **Caribou** and 6.8 inches in **Bangor**. Elsewhere, March 26-27 snowfall included 10.2 inches in **Cleveland, OH**, and 6.2 inches in **Fort Wayne, IN**. A very wintry spell continued on **Michigan's Upper Peninsula**, where **Marquette's** March and season-to-date snowfall climbed to record totals of 83.1 and 300.6 inches, respectively.

Farther south, warm, dry weather prevailed in **Florida**, where **Orlando** noted a daily-record high (89°F) on March 26 and closed the month with rainfall totaling 0.52 inch (15 percent of normal). **Ft. Myers, FL**, also experienced extremely dry conditions during March (0.19 inch, or 7 percent of normal), capped by daily-record warmth (90°F on March 29) near month's end. Meanwhile, warmth also developed across the

Departure of Average Temperature from Normal (°F)

MAR 24 - 30, 2002



**West**, resulting in consecutive daily-record highs on March 29-30 in **Red Bluff, CA** (86 and 88°F). In contrast, cold weather lingered on the **northern High Plains**, where **Great Falls, MT**, set March records with low temperatures below 0°F on 12 days (previously, 10 days in 1912), and high temperatures below 32°F on 15 days (previously, 15 days in 1951 and 1965). It was also the coldest March on record in **Great Falls**, with an average temperature of 17.4°F (16.0°F below normal).

Heavy rain returned to the **South** at week's end, producing daily-record totals for March 30 in locations such as **Texarkana, AR** (2.11 inches), **Monroe, LA** (1.76 inches), **Abilene, TX** (1.40 inches), and **Lubbock, TX** (0.88 inch). The precipitation in **Lubbock** boosted the monthly total to 2.15 inches (282 percent of normal), their ninth-wettest March on record. Just to the north, however, **Dodge City, KS**, received only 0.29 inch (16 percent of normal) during March, leaving their October 2001 - March 2002 total at 1.50 inches (26 percent). Meanwhile, the **lower Ohio River** remained above flood stage for much of the week due to runoff from earlier downpours, but began to recede by week's end. On the morning of March 28, the **Ohio River** stood 5.6 feet above flood stage at **Newburgh Dam**, near **Evansville, IN**, and 6.8 feet above flood stage in **Cairo, IL**.

Heavy rain fell across the **western Hawaiian islands**, especially **Kauai**, early in the week. In **Kokee, Kauai**, weekly rainfall totaled 10.46 inches, including 5.93 inches in 24 hours on March 24-25. Elsewhere on Kauai, Lihue netted a daily-record total (3.06 inches) on March 25. Meanwhile, a mostly dry month came to an end across **Alaska**. March precipitation totals included 3.18 inches (28 percent of normal) in **Yakutat** and 0.07 inch (9 percent) in **McGrath**. Only 2.2 inches of snow fell during March in **Fairbanks, AK**, leaving their season-to-date total at 31.9 inches (49 percent of normal). For the fifth consecutive week, **Alaskan** temperature patterns were consistent, featuring mild weather across northern and western areas (up to 8°F above normal) and cool weather elsewhere.

## National Weather Data for Selected Cities

Weather Data for the Week Ending March 30, 2002

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

STATES AND STATIONS	TEMPERATURE EF						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS					
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. EF		PRECIP		
																90 AND ABOVE	32 AND BELOW	0.1 INCH OR MORE	50 INCH OR MORE	
AL	BIRMINGHAM	72	45	81	35	58	1	1.82	0.47	1.25	6.40	109	15.33	99	87	46	0	0	2	2
	HUNTSVILLE	71	43	81	35	57	2	2.31	0.93	1.64	5.44	85	12.68	75	87	64	0	0	3	1
	MOBILE	76	50	81	38	63	1	0.91	-0.63	0.91	5.10	73	11.49	65	95	61	0	0	1	1
	MONTGOMERY	77	47	83	35	62	2	0.72	-0.58	0.72	5.50	89	10.56	63	91	42	0	0	1	1
AK	ANCHORAGE	32	22	36	13	27	-2	0.08	-0.03	0.06	0.83	146	1.41	71	79	63	0	7	2	0
	BARROW	1	-14	19	-27	-7	4	0.00	0.00	0.00	0.03	300	0.09	38	87	76	0	7	0	0
	FAIRBANKS	26	1	41	-22	14	-4	0.07	0.03	0.06	0.08	36	0.70	61	74	60	0	7	2	0
	JUNEAU	43	29	45	24	36	0	0.39	-0.28	0.22	1.38	41	10.32	85	89	74	0	4	4	0
	KODIAK	37	29	40	22	33	-1	0.61	-0.55	0.31	4.13	83	27.11	144	72	58	0	6	2	0
	NOME	24	11	33	-7	18	6	0.01	-0.11	0.01	0.49	98	3.27	151	84	70	0	7	1	0
AZ	FLAGSTAFF	56	26	66	21	41	2	0.46	0.00	0.19	0.90	36	0.99	14	83	24	0	6	3	0
	PHOENIX	80	56	86	53	68	3	0.00	-0.17	0.00	0.08	8	0.13	5	39	24	0	0	0	0
	TUCSON	77	46	84	40	62	1	0.00	-0.11	0.00	0.15	20	0.76	29	35	20	0	0	0	0
	YUMA	79	55	87	50	67	-2	0.00	-0.03	0.00	0.00	0	0.00	0	51	41	0	0	0	0
AR	FORT SMITH	66	42	79	31	54	-2	2.06	1.18	1.85	8.67	230	13.68	157	97	64	0	1	3	1
	LITTLE ROCK	68	44	82	33	56	0	1.37	0.17	0.88	8.24	178	15.39	133	93	50	0	0	2	1
CA	BAKERSFIELD	74	47	85	39	61	2	0.05	-0.20	0.05	0.43	33	1.21	33	78	51	0	0	1	0
	FRESNO	73	47	84	40	60	3	0.05	-0.35	0.05	0.95	45	2.10	33	89	57	0	0	1	0
	LOS ANGELES	63	51	65	48	57	-2	0.01	-0.36	0.01	0.29	13	1.39	17	96	74	0	0	1	0
	REDDING	75	47	86	37	61	7	0.01	-0.97	0.01	2.54	51	8.74	52	65	49	0	0	1	0
	SACRAMENTO	73	43	83	41	58	3	0.02	-0.46	0.02	2.87	107	6.28	62	97	41	0	0	1	0
	SAN DIEGO	61	54	63	51	58	-3	0.01	-0.42	0.01	0.48	22	0.96	15	79	68	0	0	1	0
	SAN FRANCISCO	65	47	72	44	56	1	0.00	-0.57	0.00	2.13	68	5.13	44	89	78	0	0	0	0
	STOCKTON	73	42	81	37	58	2	0.00	-0.42	0.00	1.79	82	4.12	56	89	62	0	0	0	0
CO	ALAMOSA	59	17	69	10	38	2	0.00	-0.11	0.00	0.04	10	0.77	90	63	20	0	7	0	0
	CO SPRINGS	55	26	71	19	41	1	0.09	-0.19	0.05	0.33	34	0.69	43	79	24	0	6	2	0
	DENVER INTL	55	25	69	17	40	-1	0.04	-0.11	0.04	0.47	58	1.00	79	76	37	0	7	1	0
	GRAND JUNCTION	63	34	69	30	48	2	0.00	-0.22	0.00	0.64	70	0.97	48	62	30	0	2	0	0
	PUEBLO	61	25	79	19	43	-1	0.04	-0.21	0.03	0.04	5	0.54	37	73	43	0	6	2	0
CT	BRIDGEPORT	52	36	68	31	44	1	1.15	0.17	0.76	3.27	83	5.87	55	83	56	0	2	2	1
	HARTFORD	53	32	67	26	42	0	0.91	0.00	0.53	3.73	101	6.45	61	91	52	0	5	4	1
DC	WASHINGTON	60	41	70	33	51	1	0.51	-0.23	0.50	3.16	92	4.95	53	80	48	0	0	2	1
DE	WILMINGTON	55	39	69	31	47	1	0.60	-0.26	0.59	3.59	95	6.74	67	92	54	0	1	2	1
FL	DAYTONA BEACH	82	59	84	52	70	4	0.01	-0.84	0.01	1.52	42	6.29	66	10	51	0	0	1	0
	JACKSONVILLE	81	53	86	44	67	4	0.12	-0.77	0.12	2.03	54	7.34	69	98	42	0	0	1	0
	KEY WEST	82	72	84	67	77	2	0.11	-0.35	0.11	1.19	68	3.33	61	87	68	0	0	1	0
	MIAMI	85	71	88	67	78	4	0.03	-0.64	0.03	0.89	37	4.69	74	83	54	0	0	1	0
	ORLANDO	86	61	89	56	74	5	0.04	-0.75	0.04	0.54	16	5.10	63	97	45	0	0	1	0
	PENSACOLA	73	51	77	40	62	-1	1.15	-0.22	1.13	4.04	66	11.13	69	93	61	0	0	3	1
	TALLAHASSEE	80	47	84	37	64	1	0.35	-0.99	0.35	10.37	166	17.97	111	95	46	0	0	1	0
	TAMPA	84	63	87	57	74	5	0.00	-0.55	0.00	0.64	24	5.96	78	95	55	0	0	0	0
	WEST PALM	83	71	84	66	77	5	0.08	-0.85	0.06	1.71	49	10.28	105	88	63	0	0	2	0
GA	ATHENS	71	47	78	34	59	3	2.34	1.33	2.24	4.82	100	11.59	84	75	56	0	0	2	1
	ATLANTA	70	45	79	35	58	1	1.84	0.76	1.49	5.12	99	13.03	88	81	53	0	0	2	1
	AUGUSTA	77	47	83	32	62	4	0.41	-0.55	0.23	3.37	76	8.37	64	86	52	0	1	2	0
	COLUMBUS	77	48	82	36	62	2	0.50	-0.69	0.50	4.13	75	10.63	72	83	37	0	0	1	1
	MACON	76	46	82	32	61	2	0.09	-0.91	0.07	4.10	87	10.25	72	93	41	0	1	2	0
	SAVANNAH	77	51	83	37	64	2	1.06	0.18	1.06	5.30	154	9.23	89	98	53	0	0	1	1
HI	HILO	80	66	86	64	73	1	0.42	-3.09	0.24	10.52	76	55.68	172	88	76	0	0	4	0
	HONOLULU	82	71	84	68	76	1	0.31	-0.02	0.24	2.59	146	7.21	105	81	73	0	0	3	0
	KAHULUI	82	66	86	62	74	1	0.51	-0.01	0.35	1.81	82	6.56	79	79	65	0	0	2	0
	LIHUE	78	68	81	64	73	0	5.94	5.18	2.94	7.78	228	13.98	124	91	82	0	0	5	3
ID	BOISE	57	36	63	32	46	0	0.09	-0.21	0.08	1.09	84	2.23	58	76	53	0	1	2	0
	LEWISTON	54	39	60	37	47	0	0.82	0.57	0.78	1.50	149	3.27	105	78	64	0	0	2	1
	POCATELLO	51	34	59	29	43	2	0.00	-0.28	0.00	0.77	60	1.69	49	72	57	0	3	0	0
IL	CHICAGO/O'HARE	43	28	50	23	36	-5	0.67	-0.07	0.61	2.72	110	5.46	93	84	68	0	5	3	1
	MOLINE	49	29	60	22	39	-4	0.53	-0.25	0.48	1.94	71	3.97	68	78	54	0	5	3	0
	PEORIA	47	31	55	24	39	-5	0.31	-0.38	0.20	1.75	66	5.66	97	87	58	0	4	4	0
	ROCKFORD	46	26	55	19	36	-4	0.29	-0.39	0.27	1.59	72	4.07	82	82	46	0	6	2	0
	SPRINGFIELD	46	31	59	23	38	-8	0.50	-0.24	0.24	2.07	69	5.94	93	90	73	0	4	4	0
IN	EVANSVILLE	57	34	71	29	46	-3	1.80	0.81	1.28	6.19	151	10.62	105	95	73	0	3	4	1
	FORT WAYNE	41	25	54	16	33	-9	1.05	0.33	0.55	2.43	90	6.82	102	92	65	0	5	4	1
	INDIANAPOLIS	48	31	64	23	39	-6	2.12	1.32	0.73	4.23	129	8.36	102	10	69	0	4	5	2
	SOUTH BEND	41	25	55	13	33	-8	0.60	-0.15	0.34	2.40	89	6.97	100	87	64	0	7	4	0
IA	BURLINGTON	48	31	61	22	40	-5	0.27	-0.46	0.24	1.51	54	4.01	71	84	44	0	4	2	0
	CEDAR RAPIDS	51	27	64	19	39	-2	0.20	-0.42	0.11	0.94	45	2.45	58	80	29	0	5	2	0
	DES MOINES	50	31	64	20	40	-3	0.09	-0.54	0.05	0.81	39	1.83	43	73	41	0	5	2	0
	DUBUQUE	48	26	60	17	37	-2	0.08	-0.60	0.08	0.95	39	2.41	47	74	44	0	5	1	0
	SIoux CITY	50	25	61	14	38	-3	0.00	-0.54	0.00	0.20	11	1.11	36	77	38	0	5	0	0
	WATERLOO	50	27	62	16	39	-1	0.02	-0.57	0.02	0.42	21	1.89	49	74	37	0	4	1	0
KS	CONCORDIA	56	31	70	15	43	-3	0.06	-0.48	0.02	0.32	15	1.74	48	77	51	0	3	3	0
	DODGE CITY	61	29	79	14	45	-2	0.00	-0.47	0.00	0.26	15	1.30	43	78	35	0	3	0	0
	GOODLAND	54	22	73	11	38	-5	0.36	0.11	0.34	0.41	37	0.89	45	85	53	0	7	2	0
	TOPEKA	57	32	69	22	45	-3	0.25	-0.38	0.20	0.78	32	3.04	67	83	53	0	4	4	0

Based on 1971-2000 normals

\*\*\* Not Available

Weather Data for the Week Ending March 30, 2002

STATES AND STATIONS	TEMPERATURE EF						PRECIPITATION								RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. EF		PRECIP		
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
KY	WICHITA	62	35	77	19	48	-1	0.00	-0.62	0.00	0.42	16	2.36	53	80	42	0	3	0	0
	JACKSON	62	39	77	29	51	0	1.60	0.70	0.80	6.68	159	12.01	105	79	35	0	2	3	2
	LEXINGTON	59	35	72	29	47	-2	2.19	1.26	1.20	6.84	162	10.61	98	88	64	0	4	4	2
	LOUISVILLE	59	36	72	32	48	-2	2.76	1.82	1.40	7.01	166	12.61	117	90	46	0	1	4	2
LA	PADUCAH	61	35	72	25	48	-3	3.87	2.89	2.98	7.61	187	13.65	119	96	44	0	3	3	2
	BATON ROUGE	77	52	83	40	64	1	1.70	0.51	1.70	5.97	123	11.70	72	97	53	0	0	1	1
	LAKE CHARLES	75	55	80	41	65	2	0.39	-0.41	0.39	3.44	102	9.06	74	95	64	0	0	1	0
	NEW ORLEANS	76	55	82	45	66	2	0.75	-0.47	0.75	3.28	66	9.33	57	92	70	0	0	1	1
	SHREVEPORT	71	49	82	38	60	-1	1.68	0.76	1.07	5.17	130	10.60	83	93	61	0	0	2	2
ME	CARIBOU	36	20	46	4	28	-2	1.23	0.65	0.58	2.37	98	6.70	90	90	51	0	6	4	1
	PORTLAND	46	29	60	22	38	1	0.49	-0.51	0.25	2.13	54	7.59	68	86	45	0	5	4	0
MD	BALTIMORE	57	39	69	29	48	1	0.48	-0.33	0.48	3.40	90	5.94	58	80	54	0	2	1	0
MA	BOSTON	51	37	63	31	44	2	1.03	0.15	0.55	3.25	89	8.20	75	84	44	0	1	3	1
	WORCESTER	47	32	59	28	39	1	1.26	0.28	0.90	4.14	102	8.04	72	92	39	0	4	4	1
MI	ALPENA	39	16	48	0	28	-4	0.04	-0.48	0.02	2.08	104	4.29	84	88	47	0	7	2	0
	GRAND RAPIDS	42	23	48	15	33	-6	0.53	-0.17	0.53	1.99	82	4.60	77	86	55	0	6	1	1
	HOUGHTON LAKE	41	16	45	4	28	-5	0.05	-0.47	0.05	1.98	104	6.08	127	88	48	0	7	1	0
	LANSING	43	22	51	16	32	-6	0.43	-0.22	0.43	1.67	77	4.02	77	87	50	0	7	1	0
	MUSKEGON	42	23	47	13	32	-6	0.01	-0.61	0.01	1.45	66	4.04	67	83	56	0	7	1	0
	TRAVERSE CITY	40	20	48	6	30	-5	0.03	-0.53	0.03	2.19	120	5.01	76	87	45	0	6	1	0
MN	DULUTH	33	17	46	1	25	-5	0.15	-0.31	0.14	0.35	22	1.38	39	86	65	0	6	2	0
	INTL FALLS	35	15	45	-2	25	-4	0.14	-0.12	0.14	0.29	34	0.40	17	84	50	0	6	1	0
	MINNEAPOLIS	43	25	53	10	34	-3	0.00	-0.51	0.00	1.36	79	2.21	62	71	45	0	5	0	0
	ROCHESTER	44	23	54	10	34	-1	0.00	-0.55	0.00	0.00	0	2.34	68	81	45	0	5	0	0
	ST. CLOUD	36	15	47	-3	26	-7	0.01	-0.44	0.01	1.06	77	3.13	115	86	53	0	6	1	0
MS	JACKSON	76	49	85	38	63	4	0.28	-1.11	0.20	5.92	108	14.59	93	88	50	0	0	2	0
	MERIDIAN	76	46	84	34	61	1	0.21	-1.31	0.19	4.18	63	12.98	72	91	71	0	0	2	0
	TUPELO	72	45	83	36	58	2	2.31	0.98	2.11	7.54	125	17.93	113	88	71	0	0	2	1
MO	COLUMBIA	53	33	67	26	43	-5	0.42	-0.36	0.27	1.62	53	4.83	69	93	58	0	3	4	0
	KANSAS CITY	55	33	68	23	44	-4	0.08	-0.49	0.06	0.58	25	2.99	63	88	46	0	3	2	0
	SAINT LOUIS	51	35	62	27	43	-7	1.00	0.17	0.41	3.67	108	7.66	98	89	67	0	3	5	0
	SPRINGFIELD	58	36	72	26	47	-3	1.24	0.27	0.84	3.38	93	7.64	95	89	67	0	3	2	1
MT	BILLINGS	45	27	58	15	36	-4	0.01	-0.28	0.01	0.25	25	0.82	34	82	49	0	5	1	0
	BUTTE	42	27	48	20	35	2	0.02	-0.17	0.02	0.37	49	0.81	46	84	45	0	7	1	0
	GLASGOW	36	20	45	7	28	-7	0.03	-0.08	0.03	0.29	73	0.79	78	85	68	0	7	1	0
	GREAT FALLS	37	19	46	-1	28	-8	0.06	-0.19	0.05	0.64	70	1.21	57	91	60	0	6	2	0
	HAVRE	36	18	46	-3	27	-9	0.01	-0.13	0.01	0.12	20	0.57	40	93	75	0	7	1	0
	KALISPELL	46	29	50	21	37	-1	0.02	-0.22	0.02	0.43	42	1.58	43	88	55	0	6	1	0
	MISSOULA	49	33	55	30	41	0	0.10	-0.09	0.04	0.91	107	2.17	81	84	62	0	4	4	0
NE	GRAND ISLAND	52	26	67	16	39	-3	0.00	-0.52	0.00	0.67	35	1.48	47	85	56	0	6	0	0
	LINCOLN	51	25	65	7	38	-6	0.76	0.20	0.73	1.34	65	2.34	69	82	48	0	5	2	1
	NORFOLK	51	26	66	12	38	-3	0.01	-0.49	0.01	0.13	7	0.85	27	74	37	0	5	1	0
	NORTH PLATTE	53	21	71	13	37	-4	0.04	-0.26	0.03	0.26	23	0.34	17	94	34	0	7	2	0
	OMAHA	49	28	62	14	39	-5	0.16	-0.38	0.15	0.87	44	1.54	43	82	46	0	5	2	0
	SCOTTSBLUFF	50	22	65	14	36	-4	0.17	-0.13	0.15	0.38	36	0.43	20	88	56	0	7	2	0
	VALENTINE	44	22	63	7	33	-6	0.02	-0.26	0.02	0.35	35	0.61	34	90	60	0	7	1	0
NV	ELY	56	20	64	16	38	0	0.00	-0.21	0.00	0.29	30	1.38	56	78	31	0	7	0	0
	LAS VEGAS	75	49	84	43	62	1	0.10	0.03	0.10	0.19	36	0.19	10	43	24	0	0	1	0
	RENO	65	32	74	28	48	3	0.08	-0.05	0.08	0.42	53	1.25	43	64	35	0	3	1	0
	WINNEMUCCA	60	25	70	20	43	0	0.36	0.17	0.36	0.98	126	2.72	122	84	48	0	7	1	0
NH	CONCORD	48	27	61	20	37	0	1.41	0.69	0.97	3.30	115	7.28	89	96	37	0	7	5	1
NJ	NEWARK	56	38	73	33	47	1	0.51	-0.44	0.34	3.33	83	5.66	52	73	41	0	0	3	0
NM	ALBUQUERQUE	69	39	78	32	54	3	0.00	-0.11	0.00	0.00	0	0.42	29	48	16	0	1	0	0
NY	ALBANY	47	29	62	25	38	-1	1.46	0.72	1.36	3.02	103	7.13	94	89	45	0	5	4	1
	BINGHAMTON	44	28	59	22	36	0	1.92	1.20	1.64	3.60	129	7.70	98	84	57	0	6	3	1
	BUFFALO	41	28	60	19	34	-4	1.08	0.37	0.75	3.28	116	9.97	119	95	64	0	5	3	1
	ROCHESTER	44	27	60	19	36	-2	0.73	0.11	0.53	2.02	83	6.56	96	83	56	0	6	4	1
	SYRACUSE	46	29	63	20	37	-1	1.00	0.25	0.95	2.74	96	6.33	84	87	50	0	6	4	1
NC	ASHEVILLE	64	37	73	26	51	2	1.16	0.18	0.60	4.13	94	9.07	74	90	54	0	2	2	2
	CHARLOTTE	71	43	79	33	57	1	0.55	-0.35	0.38	3.97	95	10.19	87	91	45	0	0	2	0
	GREENSBORO	69	42	78	32	56	4	0.63	-0.20	0.56	2.66	72	7.02	68	84	41	0	1	2	1
	HATTERAS	66	50	71	39	58	3	0.39	-0.68	0.31	4.54	96	15.02	103	94	65	0	0	2	0
	RALEIGH	72	45	81	35	59	5	1.22	0.42	0.95	3.22	83	10.46	92	91	50	0	0	2	1
	WILMINGTON	72	49	80	35	60	2	1.17	0.33	0.67	4.98	123	8.78	72	10	55	0	0	2	2
ND	BISMARCK	41	19	54	2	30	-4	0.02	-0.20	0.01	0.82	109	1.31	77	79	51	0	7	2	0
	DICKINSON	40	19	57	6	30	-4	0.00	-0.24	0.00	0.17	29	0.65	47	87	44	0	7	0	0
	FARGO	42	20	54	4	31	-2	0.04	-0.24	0.04	0.14	13	0.47	20	84	39	0	6	1	0
	GRAND FORKS	40	16	55	-1	28	-3	0.00	-0.22	0.00	0.05	6	0.14	7	89	37	0	7	0	0
	JAMESTOWN	41	18	59	1	29	-4	0.00	-0.23	0.00	0.11	14	0.32	16	89	40	0	7	0	0
	WILLISTON	36	19	46	8	28	-5	0.00	-0.17	0.00	0.77	118	1.75	111	80	65	0	7	0	0
OH	AKRON-CANTON	45	30	66	23	38	-3	1.37	0.65	0.47	3.58	120	7.69	99	94	64	0	5	4	0
	CINCINNATI	52	32	68	27	42	-5	1.00	0.09	0.48	4.53	122	8.67	92	85	62	0	5	4	0
	CLEVELAND	44	30	64	22	37	-4	2.27	1.55	0.65	3.98	144	8.62	114	94	62	0	5	4	3
	COLUMBUS	50	32	68	25	41	-5	1.56	0.88	0.71	3.51	128	7.16	96	84	58	0	5	3	2
	DAYTON	46	31	66	24	38	-6	1.66	0.83	0.87	3.85	124	6.67	83	95	61	0	4	5	1
	MANSFIELD	43	28	62	18	36	-4	1.30	0.43	0.44										

Weather Data for the Week Ending March 30, 2002

STATES AND STATIONS	TEMPERATURE EF						PRECIPITATION								RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. EF		PRECIP		
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
OK TOLEDO	41	25	55	15	33	-8	0.84	0.16	0.39	1.87	76	6.19	99	92	70	0	5	3	0	
OK YOUNGSTOWN	46	30	66	20	38	-3	1.70	0.96	0.61	3.24	113	7.89	109	92	62	0	5	5	2	
OK OKLAHOMA CITY	63	41	78	26	52	-2	0.66	0.04	0.48	2.24	81	5.33	95	90	51	0	2	2	0	
OR TULSA	63	43	78	30	53	-2	0.38	-0.43	0.25	2.09	61	5.66	81	87	68	0	3	2	0	
OR ASTORIA	52	40	56	35	46	-1	0.45	-1.07	0.19	6.77	95	26.39	107	95	79	0	0	5	0	
OR BURNS	56	27	66	25	42	3	0.01	-0.22	0.01	0.47	41	1.74	50	82	53	0	7	1	0	
OR EUGENE	57	37	60	32	47	0	0.00	-1.16	0.00	4.30	77	14.56	74	93	77	0	1	0	0	
OR MEDFORD	66	35	75	31	51	3	0.00	-0.35	0.00	1.35	77	4.59	73	92	42	0	1	0	0	
OR PENDLETON	57	38	63	34	47	0	0.14	-0.12	0.14	0.82	70	2.15	56	79	57	0	0	1	0	
OR PORTLAND	56	41	60	36	49	1	0.03	-0.71	0.03	3.46	97	13.22	103	86	69	0	0	1	0	
PA SALEM	56	36	61	30	46	-2	0.15	-0.65	0.15	4.51	113	17.16	115	87	72	0	1	1	0	
PA ALLENTOWN	53	34	66	28	44	2	0.59	-0.21	0.55	3.37	99	5.37	56	77	45	0	2	2	1	
PA ERIE	43	28	67	23	35	-5	1.21	0.43	0.67	2.42	82	9.60	124	91	71	0	5	5	1	
PA MIDDLETOWN	53	37	64	28	45	0	1.25	0.56	1.25	4.68	150	7.52	85	83	45	0	2	1	1	
PA PHILADELPHIA	56	40	70	34	48	1	0.64	-0.21	0.55	3.70	102	6.68	87	83	51	0	0	3	1	
PA PITTSBURGH	51	33	72	24	42	-1	1.64	0.92	1.26	3.65	122	6.59	82	89	50	0	5	3	1	
PA WILKES-BARRE	51	33	63	28	42	0	1.19	0.52	1.19	2.58	102	5.31	75	79	47	0	4	1	1	
PA WILLIAMSPORT	50	32	64	25	41	-1	2.01	1.24	1.91	4.06	134	6.98	82	78	56	0	4	2	1	
RI PROVIDENCE	55	34	62	30	45	3	1.34	0.29	0.76	4.49	107	9.03	75	82	53	0	4	3	1	
SC BEAUFORT	77	55	81	43	66	6	0.77	-0.11	0.77	2.53	72	6.22	58	99	54	0	0	1	1	
SC CHARLESTON	78	53	84	40	66	6	0.12	-0.77	0.12	3.32	87	7.95	72	98	45	0	0	1	0	
SC COLUMBIA	75	49	82	36	62	4	0.79	-0.20	0.65	3.41	78	7.81	61	93	54	0	0	2	1	
SC GREENVILLE	71	44	77	35	57	3	1.39	0.33	1.17	4.97	97	11.21	81	88	46	0	0	2	1	
SD ABERDEEN	43	17	53	4	30	-5	0.05	-0.31	0.05	0.53	43	0.83	38	82	44	0	7	1	0	
SD HURON	40	20	50	1	30	-7	0.03	-0.42	0.03	0.50	32	1.53	59	85	52	0	6	1	0	
SD RAPID CITY	37	19	47	3	28	-10	0.18	-0.10	0.15	0.75	81	1.00	57	85	59	0	7	4	0	
SD SIOUX FALLS	41	21	57	5	31	-6	0.03	-0.48	0.03	1.39	83	1.83	68	84	57	0	5	1	0	
TN BRISTOL	66	36	78	23	51	1	0.81	0.02	0.42	5.33	143	10.53	99	93	44	0	3	3	0	
TN CHATTANOOGA	70	43	80	33	56	2	2.66	1.36	1.44	6.51	109	13.78	85	84	58	0	0	3	3	
TN KNOXVILLE	66	40	79	30	53	0	2.30	1.22	1.36	10.24	206	19.99	148	84	45	0	2	3	2	
TN MEMPHIS	67	45	78	36	56	0	1.54	0.24	1.13	11.11	208	16.81	121	83	53	0	0	4	1	
TX NASHVILLE	66	40	78	31	53	0	1.44	0.42	0.89	7.93	170	14.87	121	86	48	0	1	3	1	
TX ABILENE	72	46	89	28	59	0	1.86	1.56	1.40	4.01	308	5.66	166	82	57	0	1	2	1	
TX AMARILLO	68	35	87	20	52	1	0.00	-0.28	0.00	0.43	41	1.80	81	68	25	0	3	0	0	
TX AUSTIN	75	51	83	35	63	-1	0.10	-0.31	0.08	1.53	75	3.89	66	82	66	0	0	2	0	
TX BEAUMONT	76	55	81	43	65	1	1.29	0.41	1.23	1.72	48	6.08	48	98	61	0	0	2	1	
TX BROWNSVILLE	81	65	89	57	73	2	0.00	-0.27	0.00	0.23	28	1.30	39	90	62	0	0	0	0	
TX CORPUS CHRISTI	81	61	91	53	71	3	0.00	-0.36	0.00	0.09	6	0.66	13	85	68	1	0	0	0	
TX DEL RIO	82	57	90	43	70	4	0.00	-0.22	0.00	0.10	11	0.14	6	67	42	1	0	0	0	
TX EL PASO	77	50	84	38	63	4	0.00	-0.03	0.00	0.00	0	1.22	118	35	15	0	0	0	0	
TX FORT WORTH	72	49	85	34	60	0	1.22	0.61	1.21	6.96	238	12.81	178	90	62	0	0	2	1	
TX GALVESTON	72	59	79	50	66	0	0.55	-0.07	0.55	1.84	70	4.75	51	97	72	0	0	1	1	
TX HOUSTON	76	54	86	42	65	0	0.76	-0.01	0.39	2.38	75	4.53	46	91	64	0	0	3	0	
TX LUBBOCK	68	37	84	24	53	-1	0.88	0.70	0.88	2.15	326	3.28	175	81	45	0	2	1	1	
TX MIDLAND	72	43	88	27	58	0	0.72	0.66	0.49	0.89	247	1.95	133	72	42	0	1	2	0	
TX SAN ANGELO	76	48	91	33	62	2	0.36	0.17	0.20	1.33	146	2.75	95	82	50	1	0	2	0	
TX SAN ANTONIO	77	55	84	41	66	2	0.24	-0.17	0.24	1.23	69	2.03	39	90	49	0	0	1	0	
TX VICTORIA	79	55	88	46	67	1	0.22	-0.28	0.19	0.48	23	1.33	20	90	62	0	0	2	0	
TX WACO	72	50	82	36	61	0	0.73	0.25	0.71	2.15	91	4.81	72	91	69	0	0	2	1	
TX WICHITA FALLS	68	43	84	28	55	-2	0.72	0.20	0.67	2.31	108	4.53	94	87	57	0	1	2	1	
UT SALT LAKE CITY	55	35	60	32	45	-1	0.68	0.25	0.53	2.73	152	4.23	94	78	42	0	1	2	1	
VT BURLINGTON	42	24	59	14	33	-2	0.78	0.19	0.77	1.89	87	5.14	85	82	44	0	6	2	1	
VA LYNCHBURG	64	37	74	25	51	2	0.66	-0.17	0.39	3.79	104	7.16	70	83	46	0	2	3	0	
VA NORFOLK	67	46	78	38	57	5	0.87	-0.02	0.58	4.14	106	9.74	87	87	52	0	0	2	1	
VA RICHMOND	66	41	77	30	54	3	1.27	0.40	1.09	4.13	105	8.54	82	91	49	0	2	3	1	
VA ROANOKE	64	39	76	26	52	2	0.48	-0.37	0.41	3.56	97	5.99	60	76	47	0	2	3	0	
WA WASH/DULLES	60	37	71	23	49	2	0.65	-0.13	0.65	3.16	93	4.86	53	84	57	0	2	1	1	
WA OLYMPIA	52	35	58	32	44	-1	0.16	-0.92	0.05	5.28	104	21.06	112	89	67	0	1	5	0	
WA QUILLAYUTE	50	38	54	34	44	0	1.35	-0.83	0.53	9.22	87	37.67	103	99	87	0	0	5	1	
WA SEATTLE-TACOMA	51	41	55	36	46	-1	0.01	-0.76	0.01	2.87	80	13.53	105	90	82	0	0	1	0	
WA SPOKANE	50	32	55	27	41	-1	0.04	-0.26	0.02	1.05	73	3.22	68	89	54	0	5	2	0	
WA YAKIMA	61	32	66	28	46	1	0.00	-0.14	0.00	0.30	49	1.46	57	73	51	0	4	0	0	
WV BECKLEY	61	35	73	21	48	3	1.26	0.49	0.76	4.58	132	7.53	78	74	43	0	3	4	1	
WV CHARLESTON	62	35	78	25	49	0	1.42	0.61	1.02	4.74	127	8.80	86	93	44	0	3	2	1	
WV ELKINS	60	32	73	21	46	3	0.57	-0.27	0.49	4.13	110	9.10	88	94	37	0	4	4	0	
WV HUNTINGTON	62	35	78	24	49	0	1.13	0.33	0.71	7.57	207	11.22	113	80	40	0	3	2	1	
WI EAU CLAIRE	42	21	53	6	31	-4	0.06	-0.49	0.05	2.14	124	4.22	119	83	41	0	5	2	0	
WI GREEN BAY	40	22	54	11	31	-5	0.09	-0.47	0.09	2.21	115	4.30	104	89	55	0	6	1	0	
WI LA CROSSE	49	25	60	11	37	-2	0.06	-0.55	0.06	1.14	62	3.78	94	76	28	0	4	1	0	
WI MADISON	46	24	58	16	35	-3	0.10	-0.55	0.10	1.43	67	4.23	91	84	48	0	6	1	0	
WI MILWAUKEE	41	28	51	20	34	-4	0.17	-0.57	0.13	1.03	43	3.93	66	74	57	0	5	2	0	
WI CASPER	47	20	56	8	34	-4	0.05	-0.14	0.05	0.65	79	0.85	42	87	55	0	7	1	0	
WI CHEYENNE	47	22	59	14	35	-1	0.01	-0.24	0.01	0.83	87	1.63	89	83	46	0	7	1	0	
WI LANDER	48	26	58	18	37	-2	0.12	-0.21	0.12	0.66	58	1.14	52	86	50	0	7	1	0	
WI SHERIDAN	41	22	58	13	32	-6	0.58	0.31	0.24	0.98	113	1.39	63	86	65	0	7	5	0	

Based on 1971-2000 normals

\*\*\* Not Available

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

## National Agricultural Summary

March 25 - 31, 2002

*Weekly National Agricultural Summary provided by USDA/NASS*

### HIGHLIGHTS

Heavy rain flooded streams and prevented fieldwork throughout most of the lower Mississippi, Ohio, and Tennessee River Valleys. Rain also delayed fieldwork in parts of the southern Great Plains and interior areas of the Southeast. Meanwhile, light showers and above-normal temperatures stimulated development of winter grains and forages along the eastern Gulf Coast, as well as adjacent areas of the interior Southeast and Atlantic Coastal Plains. The warm weather also

promoted fruit set in Florida's citrus groves. Dry weather prevailed over most of the Great Plains, western Corn Belt, and Great Lakes region, but cold weather limited small grain seeding. In the Pacific Northwest, warm weather supported planting of small grains, but some isolated areas experienced rain delays. In the Southwest, dry weather aided field and orchard work and favorably warm weather stimulated growth of winter crops and flowering of fruit and nut crops.

**Winter Wheat:** One percent of the Nation's winter wheat has entered the heading stage, equal to this date last year but slightly behind the 5-year average of 2 percent. Warm weather promoted growth in the Southeast and Southwest, while cold air prevented development in most areas of the Great Plains and Corn Belt. Development was most advanced in California and Texas, where 15 and 7 percent, respectively, was headed. A few fields emerged from dormancy in the central Great Plains and southern Corn Belt, despite the cold weather. However, many fields in the Great Plains suffered due to severe moisture shortages, and fields in the Ohio Valley experienced unfavorably wet conditions.

**Cotton:** Four percent of the acreage was planted, slightly behind last year's 5 percent but equal to the 5-year average. In Texas, field preparations and planting continued where temperatures and topsoil moisture supplies were adequate. Emergence of earlier planted fields was mostly satisfactory. A few fields were planted in California and other fields were prepared for planting. Warm, dry weather supported fieldwork and planting in Arizona. Heavy rain prevented field tillage in the lower Mississippi Valley, while mostly dry weather aided field preparations in the Southeast. Planting normally begins in the lower Mississippi Valley and Southeast near mid-April.

**Small grains:** Spring wheat was 1 percent planted, equal to last year's pace but slightly behind the 2-percent average for this date. Dry weather and near-normal temperatures provided favorable planting conditions in central Washington, while cooler, wetter conditions limited progress in eastern Washington and Idaho. At the end of the week, planting exceeded the 5-year average in Washington, but lagged behind normal in Idaho. Cold weather delayed planting in Minnesota, Montana, and South Dakota.

The barley acreage was 2 percent seeded, behind last year's 3 percent and the 5-year average of 4 percent. Planting

progressed behind normal in Idaho and Washington, partly due to cold weather. Wet topsoils and strong winds also delayed fieldwork and contributed to slow planting in eastern Washington and adjacent areas of Idaho. Cold weather prevented planting in Minnesota.

Four percent of the oat acreage was seeded, ahead of last year's 3 percent but slightly behind the 5-year average. Dry weather favored seedbed preparation across the northern Corn Belt and adjacent parts of the Great Plains, but cool weather delayed planting progress in most areas. In Pennsylvania, planting exceeded the 5-year average, despite late-week rain delays.

**Rice:** Nine percent of the rice crop was planted, 2 percentage points ahead of last year and the 5-year average. Planting continued in Texas, and was nearly 2 weeks ahead of normal, despite moisture shortages in most areas. Some flushing was also in progress to aid in securing a good stand. Planting was less advanced in Louisiana, but remained ahead of normal, in spite of widespread rain delays. Wet weather also delayed planting in interior areas of the Mississippi Delta.

**Sorghum:** Twelve percent of the sorghum acreage was planted, compared with 10 percent at this time last year and 1 percentage point behind the average for this date. In Texas, seedbed preparation continued and planting remained ahead of normal. However, rain and wet soils slowed progress in some areas, and soils were too dry for planting in other areas. Emergence was spotty and uneven in many fields due to moisture shortages.

**Other crops:** Less than 1 percent of the sugar beet acreage was planted in the four major sugar beet-producing States, behind last year and the average of 1 and 3 percent, respectively. Cold weather and wet soils limited progress to 2 percent in Idaho, where 14 percent would normally be planted by this date. In the Red River Valley, the planting season normally begins after mid-April.

# Crop Progress and Condition

Week Ending March 31, 2002

Winter Wheat Percent Headed				
	Mar 31 2002	Prev Week	Prev Year	5-Yr Avg
AR	0	NA	0	2
CA	15	NA	9	15
CO	0	NA	0	0
ID	0	NA	0	0
IL	0	NA	0	0
IN	0	NA	0	0
KS	0	NA	0	0
MI	0	NA	0	0
MO	0	NA	0	0
MT	0	NA	0	0
NE	0	NA	0	0
NC	5	NA	0	6
OH	0	NA	0	0
OK	0	NA	0	3
OR	0	NA	0	0
SD	0	NA	0	0
TX	7	NA	7	6
WA	0	NA	0	0
18 Sts	1	NA	1	2
These 18 States planted 90% of last year's winter wheat acreage.				

Cotton Percent Planted				
	Mar 31 2002	Prev Week	Prev Year	5-Yr Avg
AL	0	NA	0	0
AZ	15	NA	13	14
AR	0	NA	0	0
CA	3	NA	13	8
GA	0	NA	0	0
LA	0	NA	0	0
MS	0	NA	0	0
MO	0	NA	0	0
NC	0	NA	0	0
OK	0	NA	0	0
SC	0	NA	0	0
TN	0	NA	0	0
TX	8	NA	10	8
VA	0	NA	0	0
14 Sts	4	NA	5	4
These 14 States planted 98% of last year's cotton acreage.				

Sugar Beets Percent Planted				
	Mar 31 2002	Prev Week	Prev Year	5-Yr Avg
ID	2	NA	5	14
MI	0	NA	0	3
MN	0	NA	0	0
ND	0	NA	0	0
4 Sts	0	NA	1	3
These 4 States planted 81% of last year's sugar beet acreage.				

Sorghum Percent Planted				
	Mar 31 2002	Prev Week	Prev Year	5-Yr Avg
AR	0	NA	2	2
CO	0	NA	0	0
IL	0	NA	0	0
KS	0	NA	0	0
LA	2	NA	0	0
MO	0	NA	0	0
NE	0	NA	0	0
NM	0	NA	0	0
OK	0	NA	0	0
SD	0	NA	0	0
TX	35	NA	29	31
11 Sts	12	NA	10	11
These 11 States planted 97% of last year's sorghum acreage.				

Oats Percent Planted				
	Mar 31 2002	Prev Week	Prev Year	5-Yr Avg
IA	12	NA	0	15
MN	0	NA	0	1
NE	15	NA	4	24
ND	0	NA	0	0
OH	6	NA	7	12
PA	10	NA	1	4
SD	0	NA	0	4
WI	1	NA	0	2
8 Sts	4	NA	1	5
These 8 States planted 49% of last year's oat acreage.				

Barley Percent Planted				
	Mar 31 2002	Prev Week	Prev Year	5-Yr Avg
ID	1	NA	9	11
MN	0	NA	0	1
MT	1	NA	1	1
ND	0	NA	0	0
WA	11	NA	12	15
5 Sts	2	NA	3	4
These 5 States planted 78% of last year's barley acreage.				

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

*National crop conditions for selected States are weighted based on the year 2000 planted acres.*

Spring Wheat Percent Planted				
	Mar 31 2002	Prev Week	Prev Year	5-Yr Avg
ID	2	NA	7	14
MN	0	NA	0	1
MT	0	NA	1	1
ND	0	NA	0	0
SD	1	NA	1	5
WA	25	NA	17	19
6 Sts	1	NA	1	2
These 6 States planted 98% of last year's spring wheat acreage.				

Rice Percent Planted				
	Mar 31 2002	Prev Week	Prev Year	5-Yr Avg
AR	0	NA	1	1
CA	0	NA	0	0
LA	36	NA	28	29
MS	0	NA	1	2
MO	0	NA	0	0
TX	45	NA	21	22
6 Sts	9	NA	7	7
These 6 States planted 100% of last year's rice acreage.				

Winter Wheat Crop Condition by Percent					
	VP	P	F	G	EX
AR	4	21	34	34	7
CA	0	0	5	95	0
CO	11	24	46	18	1
ID	0	5	19	74	2
IL	0	1	31	56	12
IN	2	8	35	45	10
KS	16	25	34	23	2
MI	1	9	40	40	10
MO	1	4	37	53	5
MT	30	30	31	8	1
NE	2	13	53	31	1
NC	0	5	24	61	10
OH	3	9	39	41	8
OK	29	26	28	15	2
OR	15	17	23	39	6
SD	2	18	38	40	2
TX	27	21	35	18	1
WA	0	2	39	53	6
18 Sts	15	19	35	28	3
Prev Wk	NA	NA	NA	NA	NA
Prev Yr	6	14	36	39	5

## Weekly State Agricultural Summaries

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

**ALABAMA:** Days suitable for fieldwork 4.0. Topsoil 1% very short, 7% short, 67% adequate, 25% surplus. Corn 13% planted, 6% 2001, 18% avg. Winter wheat 11% headed, 10% 2001, 13% avg.; 1% poor, 26% fair, 68% good, 5% excellent. Pasture, range feed 1% very poor, 10% poor, 36% fair, 44% good, 9% excellent. Livestock feed 1% very poor, 8% poor, 25% fair, 51% good, 15% excellent. Farmers are tilling for spring planting, but surplus moisture stopped or halted fieldwork in some fields. Catfish farmers have restocked ponds, some are feeding more often due to warmer temperatures.

**ALASKA: DATA NOT AVAILABLE**

**ARIZONA:** Temperatures throughout the state were above average for the week with slight precipitation reported. Lack of precipitation has caused the deterioration of range, pasture feeds. Cotton planting is getting underway with 15% of the spring 2002 cotton crop being planted.

**ARKANSAS:** Days suitable for fieldwork 2.3. Soil 0% very short, 0% short, 26% adequate, 74% surplus.; Sorghum 0% planted, 2% 2000, 2% 5 yr. avg. Corn 7% planted, 24% 2000, 14% 5 yr. avg. Wheat 0% headed, 0% 2000, 2% 5 yr. avg.; 4% very poor, 21% poor 34% fair, 34% good, 7% excellent. Other Hay 2% very poor, 42% poor, 37% fair, 19% good. Pasture, Range feed 2% very poor, 25% poor, 45% fair, 22% good, 6% excellent. FIELD CROP : Planting corn, sorghum. Fertilizer is being applied to wheat, hay, pastures. Row crop planting is extremely limited due to excessive rainfall. Commercial tomatoes are being bedded, plastic laid. LIVESTOCK, PASTURE , RANGE: Cattle were in good condition. Cattle producers were working cattle, weaning calves, selling livestock. Many reports are received on Friday, may not reflect conditional changes due to weekend weather.

**CALIFORNIA:** Cotton planting was underway in a few areas, while field preparation continued elsewhere. Alfalfa hay, seed fields were thriving, but some fields were treated for weevils. Alfalfa hay was being cut, windrowed, dried, baled. The recent rain, warm weather stimulated growth, development of grain, silage crops. Wheat, barley, oats continued good progress; irrigation, weed control continued. Harvesting of winter forage continued in occasional fields. Grain fields planted to green manure were mowed and disced. More rain would improve dryland hay, wheat crops; some oat hay was stunted from the lack of moisture. Robust growth of sugar beets continued, as fields were irrigated and cultivated. Ground was being prepared for rice planting, herbicides were applied. Stubble from 2001 rice fields was still being burned in occasional fields. Growers continued planting corn for grain, silage. Recently planted corn began to emerge in response to the improved weather conditions. Safflower planting was underway in a few areas. Seasonal cultural activities such as weed control, cultivation, irrigation continued in orchards, vineyards. New orchards, vineyards were being planted where older ones had been removed. Peaches, plums, nectarines were in full bloom; most trees were already leafing. A few stone fruit orchards were being girdled to increase fruit size. Apricot growers began to thin fruit in the Firebaugh district. San Joaquin cherry orchards passed the mid-blossom stage. Apple blossoming continued. Grape growers irrigated, mowed cover crops, cultivated, applied herbicides in vineyards. Bud break continued in grape vineyards; new shoots were growing rapidly in the warm sunlight. Strong spring growth was noted in citrus orchards due to the recent warm weather. Navel, Valencia orange harvesting continued. Grapefruit picking was ongoing in the desert, in the San Joaquin Valley. Lemons were also being picked. The harvest of minneola tangelos neared completion. Strawberry plants were spreading, blooming; fields were weeded and irrigated. Nut growers were performing seasonal cultural activities such as pruning, irrigating, spraying trees. Most almond orchards were fully leafed, developing well. Walnut, pecan

trees began pushing buds. Brush removal, shredding continued. Recent warm weather has stimulated growth, development of vegetables. Warmer weather has dramatically improved asparagus production. Hot caps will soon be removed from summer squash. Watermelon planting was in progress in the west side districts of Fresno County; growers used transplants to get a quick start on the season. Cantaloupes, mixed melons were also planted, using seeds or transplants. Fresh market, processing tomato planting continued using mostly transplants; field preparation was still in progress. Lettuce, garlic, onions, tomatoes, other vegetable fields continued to show excellent progress. Some spinach fields were prepared for harvest in Tulare County. Fresno County's broccoli, asparagus harvesting continued. Lettuce harvesting continued at a steady pace. The following vegetables were also harvested: Basil, cabbage, carrots, celery, cilantro, green onions, mustard greens, collard greens, leeks, daikon, mint, parsley, radishes, radicchio, turnips, squash. Recent rainfall improved grazing conditions on foothill, rangeland pastures. Cattle continued to exhibit good weight gains. Lambing was reported in some areas, as a few flocks of sheep grazed harvested broccoli, alfalfa fields. Turkey production continued; young hatchlings were thriving. Beekeepers were moving bees out of almond orchards, preparing to move bees out of dried plum orchards. Out of state hives were headed home.

**COLORADO:** Days suitable for field work 5.8. Topsoil 29% very short, 46% short, 24% adequate, 1% surplus. Subsoil 24% very short 48% short, 28% adequate, 0% surplus. Temperatures were unseasonably warm for most of the week. Most of state experienced dry conditions, while some areas received spotty moisture. Spring barley 15% planted, 15% 2001, 29% avg. Dry onions 25% planted, 25% 2001, 42% avg. Sugar beets 6% planted, 6% 2001, 11% avg. Spring wheat 9% planted, 11% 2001, 18% avg. Winter wheat 3% pastured, 6% 2001, 7% avg. Cows 55% calved, 59% 2001, 62% avg. Ewes 47% lambled, 52% 2001, 47% avg.

**DELAWARE:** Days suitable for fieldwork 4.8. Topsoil 3% very short, 35% short, 62% adequate. Subsoil 27% very short, 50% short, 23% adequate. Barley 19% poor, 37% fair, 41% good, 3% excellent. Winter Wheat 20% poor, 37% fair, 41% good, 2% excellent. Pasture feed 3% very poor, 15% poor, 24% fair, 55% good, 3% excellent. Strawberries 1% bloomed, 6% avg. Apples 1% bloomed, 5% avg. Peaches 11% bloomed, 16% avg. Sweet corn 3% planted, 4% 2001, 2% avg. Green peas 15% planted, 7% 2001, 9% avg. Potatoes 25% planted, 3% 2001, 9% avg. Hay supplies 10% very short, 33% short, 57% adequate. Showers Tuesday, Saturday helped surface soil moisture levels, as well as small grains, peas, potatoes that have been planted. Poultry operators are at a heightened alert for biosecurity, due to avian influenza outbreaks in the region.

**FLORIDA:** Topsoil 1% very short, 44% short, 55% adequate. Subsoil 2% very short, 34% short, 64% adequate. Rainfall range: from mostly traces to over 1.00 in. at Okahumpka, Pensacola; several reports of no measurable rain. Temperature average: 1° below normal at Pensacola to 5° above at many central, southern Peninsula localities. Daytime highs: 70s, 80s. Nighttime lows: 40s, 50s, 60s. Sugarcane harvesting nearly done, several mills closed. Tobacco transplanting gaining momentum. Producers preparing for cotton, peanut planting; to get underway in 2 to 3 weeks. Mostly dry weather increasing need for irrigation of vegetables over central, southern Peninsula. Vegetables available: Tomatoes, peppers, cabbage, Chinese cabbage, celery, cucumbers, eggplant, endive, escarole, lettuce, parsley, potatoes, radishes, snap beans, squash, sweet corn, strawberries. Dry, warm, windy week citrus areas. Rain needed, irrigation active. Bloom completed. Valencia harvest very active all areas. Grapefruit going mostly to processors. Temple, Honey tangerine harvest slowing as

supplies run low. Hedging, topping active in harvested groves; dead trees being removed, burned; resets going in larger groves. Pasture feed 5% poor, 75% fair, 20% good. Cattle feed 65% fair, 35% good. Panhandle: pasture feed poor to fair due to dry soil condition; near freezing temperatures hurt grass in some locations. North: pasture feed fair due to drought; cool season forages starting to head, warm season permanent grass greening-up. Central: pasture feed fair, stock ponds very low. Southwest: pasture feed mostly fair. Statewide, condition of cattle fair to good.

**GEORGIA:** Days suitable for fieldwork 5.4. Soil 4% very short, 22% short, 67% adequate, 7% surplus. Corn 2% poor, 35% fair, 59% good, 4% excellent; 51% planted, 36% 2001, 51% avg.; 27% emerged, 27% 2001, 22% avg. Hay 1% very poor, 12% poor, 46% fair, 39% good, 2% excellent. Sorghum 1% planted, 0% 2001, 1% avg. Tobacco 3% poor, 46% fair, 50% good, 1% excellent; 19% transplanted, 8% 2001, 22% avg. Wheat 68% jointing, 63% 2001, 78% avg.; 32% boot, 35% 2001, 43% avg. Onions 20% fair, 76% good, 4% excellent. Watermelons 6% poor, 46% fair, 48% good; 28% planted, 16% 2001, 31% avg. Apples 20% poor, 30% fair, 50% good; 0% blooming, 1% 2001, 14% avg. Peaches 3% very poor, 1% poor, 2% fair, 79% good, 15% excellent; 81% blooming, 75% 2001, 75% avg. Most of the State received beneficial rains over the weekend. Recent rains have replenished soil moisture in many areas throughout the State. Temperatures for the week were near normal to slightly above normal. Spring planting preparations advanced despite rains. Corn planting, tobacco transplanting progressed where weather conditions allowed. Growers applied fertilizer to pastures, hay fields. Onion crops fared well. Central state peaches were in good shape, as most of the crop escaped cold weather damage earlier in the month. Activities: Preparing land for vegetables, planting cotton, applying the first spray to pecan trees, routine care of livestock, poultry.

**HAWAII:** Southerly winds brought variable weather to the State throughout the week. East state banana orchards were in fair condition due to disease infection, low temperatures, cloudy conditions. Past week' sclouds, rain brought an increased incidence of fungal diseases to lower Puna papaya orchards, forcing growers to intensify spraying. Ginger root planting, field preparations were active in East state fields.

**IDAHO:** Days suitable for fieldwork 2.2. Topsoil 24% short, 60% adequate, 16% surplus. Irrigation water supply 6% very poor, 13% poor, 76% fair, 5% good. Fields are beginning to dry out, allowing more fieldwork. Onions 14% planted. Hay, roughage supply 1% very short, 18% short, 79% adequate, 2% surplus. Calving 81% complete. Lambing 75% complete. Activities: Preparing fields, equipment for spring planting, applying fertilizer, feeding livestock.

**ILLINOIS:** Days suitable for fieldwork 1.3. Topsoil 1% very short, 13% short, 46% adequate, 40% surplus. Oats 14% planted, 9% 2001, 26% avg. Alfalfa 1% poor, 29% fair, 65% good, 5% excellent. Pasture 5% very poor, 8% poor, 33% fair, 50% good, 4% excellent. Farmers in some areas of far northern state were able to spread dry fertilizer, apply anhydrous, seed oats during the week. Fields in the rest of the state were too wet for virtually any fieldwork to be accomplished. The cooler than normal weather during the month of March, above average precipitation in the south has kept fields saturated to the point where application of nitrogen to the winter wheat crop has been delayed. Some reports indicated that farmers would begin having nitrogen applied by airplane soon if soil conditions did not improve. The condition of the wheat crop continues to improve as it comes out of dormancy. Activities: Hauling grain where roads were solid enough, taking delivery on seed, completing maintenance on machinery, attending farm sales.

**INDIANA:** Topsoil moisture is mostly adequate to surplus. Snow, rain, ice last week halted field activities around the state. Most central, northern areas received heavy snow amounts. Farmers were busy preparing equipment, purchasing supplies for spring planting of crops. Pastures, forage crops are in mostly fair to good condition. Pasture growth, development have been slow thus far. Hay supplies are mostly adequate. Winter wheat is in mostly good condition. Livestock are in

mostly good condition. Feedlots are muddy. New born calves, lambs were under stress last week. Calving, lambing active. Activities: Hauling manure, moving grain to market, top dressing wheat, marketing tobacco, building fence, purchasing seed, chemicals, ditching, attending FSA offices, clearing fence rows, caring for livestock.

**IOWA:** Days suitable for fieldwork 3.5. Topsoil 8% very short, 42% short, 49% adequate, 1% surplus. Oat planting, spring fertilizer applications were underway in state during the last week of March, with weather patterns consisting primarily of below normal temperatures, precipitation. Concern over dry soil conditions persist. Oat 12% plantings, compared to the 5-yr avg.; 15 % avg.

**KANSAS:** Days suitable for fieldwork 5.9. Topsoil 29% very short, 47% short, 24% adequate. Subsoil 32% very short, 49% short, 19% adequate. Another dry week, Very little moisture received in the State. Wheat 16% very poor, 25% poor, 34% fair, 23% good, 2% excellent. Wheat has come out of dormancy, but is growing very little because of dry conditions. Damage from wind, freeze damage has been light. Wheat 10% jointed, 2% 2001, 20% avg. Oats 85% planted, 36% 2001, 70% avg. Corn planting beginning in southeast. Pasture feed 13% very poor, 23% poor, 42% fair, 22% good. Stockmen providing supplemental feed to livestock. Hauling water to cattle necessary some areas. Stockmen concerned about grazing potential of dry pastures. Stock water supplies 11% very short, 34% short, 55% adequate. Hay, forage supplies 2% very short, 15% short, 79% adequate, 4% surplus. Feed grain supplies 5% short, 92% adequate, 3% surplus.

**KENTUCKY:** Days suitable for fieldwork 1.2. Topsoil 1% short, 31% adequate, 68% surplus. Subsoil 1% very short, 4% short, 49% adequate, 46% surplus. For the week, temperatures averaged 49<sup>o</sup>, 1<sup>o</sup> below normal. Rainfall statewide was 2.47 inches, 1.44 inches above normal. Land prepared for planting corn, soybeans, 28% tobacco, 50% transplants seeded. Roughage requirements livestock are getting from 19% pastures. Farms with livestock on 83% winter feed. Winter hay supply still 35% on hand. Cattle are in good condition with abundant hay supplies. Winter damage to legume stand: 5% alfalfa, 5% red clover. Fall seeded acreage lost to winter kill: wheat 3%, 3% barley. Wheat 2% poor, 17% fair, 58% good, 23% excellent. Barley 3% poor, 19% fair, 67% good, 11% excellent. Pasture feed 2% very poor, 15% poor, 28% fair, 45% good, 10% excellent.

**LOUISIANA:** Days suitable for fieldwork 4.0. Soil 4% short, 52% adequate, 44% surplus. Corn 43% planted, 29% last week, 48% 2001, 57% avg.; 20% emerged, 10% last week, 6% 2001, 25% avg. Rice 16% emerged, 0% last week, 0% 2001, 0% avg. Rice planting continued, early season weed control has begun. Sorghum 2% planted, currently at, has not been planted this early since 1995. Spring 39% plowing, 34% last week, 33% 2001, 50% avg. Sugarcane 2% very poor, 14% poor, 41% fair, 37% good, 6% excellent. Winter wheat 2% very poor, 9% poor, 41% fair, 41% good, 7% excellent; 14% headed, 6% last week, 8% 2001, 42% avg. Livestock 2% very poor, 7% poor, 42% fair, 45% good, 4% excellent. Vegetables 1% very poor, 15% poor, 43% fair, 39% good, 2% excellent. Range, pasture 3% very poor, 17% poor, 44% fair, 34% good, 2% excellent.

**MARYLAND:** Days suitable for fieldwork 4.8. Topsoil 2% very short, 25% short, 70% adequate, 3% surplus. Subsoil 36% very short, 43% short, 20% adequate, 1% surplus. Barley 1% very poor, 7% poor, 35% fair, 45% good, 12% excellent. Winter Wheat 1% very poor, 13% poor, 33% fair, 45% good, 8% excellent. Pasture feed 8% very poor, 22% poor, 42% fair, 25% good, 3% excellent. Tobacco beds 95 transplanted, 82% 2001, 81% avg. Strawberries 3% bloomed, 2% 2001, 5% avg. Apples 1% bloomed, 2% 2001, 7% avg. Peaches 3% bloomed, 3% 2001, 22% avg. Sweet corn 4% planted, 4% 2001, 2% avg. Green peas 27% planted, 15% 2001, 23% avg. Potatoes 11% planted, 1% 2001, 22% avg. Hay supplies 6% very short, 25% short, 59% adequate, and 10% surplus. Rain showers last week helped to replenish soil moisture, restore pasture feeds after a dry winter.

**MICHIGAN:** Days were suitable for fieldwork 5. Weather conditions for most of the week were cold, rainy, with warmer weather the latter part of the week. Temperatures ranged from 4 to 8° below normal in the State. Average rainfall amounts ranged from no precipitation in the west central Lower Peninsula to 0.42 inches in the southeastern Lower Peninsula.

**MINNESOTA: DATA NOT AVAILABLE**

**MISSISSIPPI:** Days suitable for fieldwork 2.5. Soil 34% adequate, 66% surplus. Corn 23% planted, 42% 2001, 41% avg. Cattle 1% very poor, 6% poor, 31% fair, 56% good, 6% excellent. Pasture 2% very poor, 9% poor, 42% fair, 39% good, 8% excellent. Wheat 44% jointing, 57% 2001, 64% avg. Watermelons 9% planted, 21% 2001, 19% avg. Blueberries 3% poor, 29% fair, 59% good, 9% excellent. Hay, 5% poor, 40% fair, 49% good, 6% excellent. Hay Supply 1% short, 66% adequate, 33% surplus.

**MISSOURI:** Warmer temperatures at the end of the week encouraged more farmers to begin fieldwork, but progress is not widespread, mostly limited to tillage and spreading fertilizer. Weekly rainfall averaged 0.71 inches, varying from less than 0.25 inch in the northeast, west-central districts to 2.76 inches in the southeast district. Precipitation for March averaged 3.40 inches, close to the 30-year average of 3.48 inches. March rainfall by district ranged from less than 1.50 inches in the northern and west-central districts to 7.91 inches in the southeast district. Much of the southeastern district is still too wet for fieldwork. Cool weather has slowed the growth of wheat, hay, pastures.

**MONTANA:** Day suitable for fieldwork 1. Topsoil 24% very short, 38% short, 37% adequate, 1% surplus. Subsoil 52% very short, 35% short, 13% adequate, 0% surplus. March snow storms have provided some much needed moisture throughout the state. At the end of last week, Some seeding of small grain is now underway, with 1% of the barley crop in the ground, the same as 2001. Spring wheat, durum wheat, oats are all less than 1% seeded at this time. Winter wheat was observed to be 87% dormant, 13% greening at the end of last week. Wind damage 16% none, 37% light, 25% moderate, 22% heavy. Winter wheat 30% very poor, 30% poor, 31% fair, 8% good, 1% excellent. Livestock is reported to be in good condition throughout the state, with a few reports of death loss due to cold temperatures. By week's end, calving 58% complete, 29% lambing complete. Grazing was reported to be 64% open, 9% difficult, 27% closed. However, little forage is available, as pastures are fighting to recover from prolonged drought conditions. As such, livestock receiving supplemental feed 98% for cattle, calves, 96% for sheep, lambs.

**NEBRASKA:** Topsoil, subsoil moisture supplies were adequate to short. Spring tillage, fertilizer applications were underway. Oat planting 15% seeded, 5% 2001, 24% avg. Cattle, calves 1% poor, 16% fair, 63% good, 20% excellent. Calving 64% complete with calf losses average to below average.

**NEVADA: DATA NOT AVAILABLE**

**NEW ENGLAND:** Maple tapping continued last week; many producers have no need to trudge through snow to reach their taps, due to mild winter temperatures this year. Manure spreading by dairy farmers continues. Activities: Nursery/greenhouse work, tending livestock, tapping maple trees, performing general maintenance, preparing for the spring planting season.

**NEW JERSEY:** Days suitable for fieldwork 3.6. Topsoil 2% very short, 11% short, 78% adequate, 9% surplus. Scattered showers provided some relief from dry conditions, replenishing surface reservoirs, topsoil moisture supplies. Winter wheat, barley were rated in mostly good condition. Producers were concerned the mild winter caused excessive growth in some wheat, barley fields. Hay producers have completed seeding new alfalfa fields. Pastures have begun to

green up with some growth reported in the central, southern counties. Mild weather conditions allowed producers to make good progress harvesting dandelions, leeks. Vegetable producers tended greenhouse plants, began planting herbs, summer potatoes, peas in some areas. Orchards cleared brush, applied fertilizer, continued pruning apple, peach trees. Mild winter weather resulted in early flowering in some areas. Some apple orchards reported trees were showing green tips. Peaches, blueberries were reported in bud stage.

**NEW MEXICO:** Days suitable for field work 6.5. Topsoil 56% very short, 30% short, 14% adequate. While two storm systems crossed the state during the week, temperatures still averaged above normal. Early in the week, the first system ushered in cool air across the east, some rain, snow showers across the north. Mid week was warm, dry as high pressure dominated. By the end of the week, a second storm with a more southerly track favored the southeast. Rain showers, a few thunderstorms brought light precipitation to much of the state, the southeast got as much as 1 to even over 2 inches of rain. Farmers continued to fight the wind last week, most were thankful for a little rain. Activities: Field preparation, fertilization, planting. Alfalfa was looking good with over half of the crop in fair to excellent condition. Total wheat was in very poor to good condition with 32% being grazed. Lettuce was in mostly good to excellent condition. Onion planting was completed, reported to be in fair to excellent condition. Chile was 31% planted. The state is about 50% short on its normal rain fall, ranchers are marketing their late calves, culling herds a little heavier than normal due to the bad pasture feeds. Pasture, range feed 27% very poor, 48% poor, 24% fair, 1% good.

**NEW YORK:** March began with mild weather permitting outside activities to get off to an early start. However, this was quickly put to a stop by snow storms. Attention was turned to ice, snow removal. Conditions improved, by month's end efforts were again geared to getting an early start on fieldwork. The maple syrup season peaked near the end of the month with conditions near ideal for sap flow. Apple, onions, potatoes continued moving from storage to market. Caring for livestock, spreading manure, orchard maintenance, machinery repair were other major activities.

**NORTH CAROLINA:** Days suitable for field work 4.0 compared to last week's 2.7 days. Soil moisture 3% very short, 7% short, 70% adequate, 20% surplus. Significant rainfall continued across most of state last week. The rainfall was accompanied by above normal temperatures. Activities: Top-dressing small grains, land preparation, planting Irish potatoes, cabbage. Recent rains will delay corn planting in some areas. Other areas reported minor frost damage to peaches, strawberries from cold weather the week of March 22<sup>nd</sup>.

**NORTH DAKOTA:** Below normal temperatures, precipitation across the state contributed to dry soil conditions. Producers are getting machinery ready for spring, attending sales. The average snow cover for the state was 0.7 inches as of March 31, up from the 0.6 inches on March 3, 2002, but down from 0.8 inches on April 2, 2001. Hay supplies 0% very short, 3% short, 87% adequate, 10% surplus. Grain, concentrate supplies 0% very short, 2% short, 90% adequate, 8% surplus. Calving 46% complete while lambing was 64% complete. Sheep shearing was estimated to be 74% complete. Cattle, cow 0% very poor, 1% poor, 16% fair, 72% good, 11% excellent. Calf 0% very poor, 0% poor, 14% fair, 74% good, 12% excellent. Sheep 2% very poor, 2% poor, 15% fair, 70% good, 11% excellent. Lamb 1% very poor, 1% poor, 15% fair, 70% good, 13% excellent. Pastures, ranges 55% open, estimated to be 100% dormant. Roads 99% open, 1% difficult. Roads 0% drifted, 6% icy, 7% muddy, 87% dry.

**OHIO:** Days suitable for fieldwork 0.6. Topsoil 0% very short, 2% short, 49% adequate, 49% surplus. Corn 1% planted. Oats 6% planted, 7% 2001, 12% avg. Tobacco beds 10% seeded. Tobacco beds 1% having plants up. Winter wheat 5% jointed. Livestock 0% very poor, 3% poor, 24% fair, 62% good, 11% excellent. Pasture feed 5% very poor, 11% poor, 48% fair, 33% good, 3% excellent. Winter wheat 3% very poor, 9% poor, 39% fair, 41% good, 8% excellent. Activities throughout the state were very limited due to snow, heavy rainfall during

the week throughout state. Activities: Applying lime, plowing chiseling, hauling manure, grain, wheat topdressing, equipment maintenance, preparation, sowing oats, alfalfa seedings, seeding green bell peppers, cabbage, broccoli, carrots, tomatoes, cutting firewood, boiling maple syrup, clearing fence rows.

**OKLAHOMA:** Days suitable for fieldwork 5.0. Topsoil 39% very short, 25% short, 31% adequate, 5% surplus. Subsoil 45% very short, 24% short, 27% adequate, 4% surplus. Wheat 30% jointing, 28% last week, 23% 2001, 64% avg. Rye 19% very poor, 30% poor, 40% fair, 11% good; Oats 17% very poor, 35% poor, 34% fair, 13% good, 1% excellent; 95% planted, 95% last week, 78% 2001, 94% avg.; 6% jointing, 5% last week, 5% 2001, 32% avg. Sorghum 20% seedbed prepared, 18% last week, 25% 2002, 20% avg. Soybeans 22% seedbed prepared, 15% last week, 18% 2002, 29% avg. Peanuts 35% seedbed prepared, 28% last week, 19% 2001, 26% avg. Livestock 4% very poor, 15% poor, 48% fair, 30% good, 3% excellent; Pasture, Range 27% very poor, 31% poor, 26% fair, 14% good, 2% excellent; Marketings of feeder steers, heifers were at an 8 week low. The price for feeder steers less than 800 pounds averaged \$83.20 per cwt. The price for feeder heifers less than 800 pounds averaged \$76.90 per cwt.

**OREGON:** Days suitable for fieldwork 6. Topsoil 17% very short, 21% short, 59% adequate, 3% surplus. Subsoil 17% very short, 17% short, 63% adequate, 3% surplus. Barley 55% planted, 60% 2001, 59% 5 yr. avg.; 20% emerged, 30% very poor, 19% poor, 20% fair, 29% good, 2% excellent. Spring wheat 65% planted, 69% 2001, 12% emerged. Winter wheat 15% very poor, 17% poor, 23% fair, 39% good, 6% excellent. Range, pasture 20% very poor, 10% poor, 16% fair, 50% good, 4% excellent. Activities: Spring field work underway. Spring wheat, barley being planted state wide. Morrow, Gilliam counties continue to suffer from drought conditions. Winter wheat showing signs of water stress in these areas. In Willamette Valley winter crops came thru winter with no freeze damage. Fertilizer being applied to grass seed crops, small grains. Red clover, grass seed being planted. In Marion county hop yard work starting. Nurseries very active in shipping products to eastern markets. Bareroot digging near end, but balled, burlapped digging, movement of container plants in full swing. South Coast Easter lily growers spot weeding, roguing out off type plants. Harvest of hydrangea cutting to start in two weeks. Christmas tree growers planting new seedlings. Potato, onion planting about half completed in Umatilla County. Some potatoes, onions, beets, peas also planted in Western state. In Klamath County, growers receiving seed shipments for potatoes, onions. In Western state, seed bed preparation for other vegetables going on along with some field preparation for corn, beans. Dormant, delayed dormant, small fruit tree sprays applied in Willamette Valley. Crane berries, some fruit trees starting to bud, including sweet cherries. Hazelnut catkins large. Berries showing some green up. Some peach varieties blooming in Yamhill County with brown rot sprays being applied. Hazelnut growers spraying for Eastern Filbert Blight. Hood River Bartlett & D'Anjou pear buds at cluster bud to tight cluster. Cranberry growers observing buds for signs of change on southern coast. Many peach varieties in full bloom in Jackson, Josephine counties. With warmer temperatures, pear buds moving fast. First bloom on early varieties may occur early next week. Livestock conditions mostly good to good. A few areas are reporting turning out of cattle onto pasture, most areas still supplemental feeding. Calves, lambing season progressing, with some reports of scours. Pastures are starting to green up. Sheep being turned out onto grass fields.

**PENNSYLVANIA:** Days suitable for fieldwork 2.1. Soil 6% very short, 22% short, 49% adequate, 23% surplus. Spring 26% plowing complete, 7% 2001, 8% avg. Wheat crop 28% fair, 48% good, 24% excellent. Oats 10% planted, 1% 2001, 4% avg.; 2% very poor, 2% poor, 64% fair, 32% good. Pasture feeds 9% very poor, 29% poor, 40% fair, 21% good, 1% excellent. Activities: Spring plowing; planting oats; fixing fences; machinery maintenance; ordering supplies; storing equipment; cleaning barns; spreading lime, fertilizers; hauling, spreading manure; caring for livestock; spraying herbicides.

**SOUTH CAROLINA:** Days suitable for field work 5.9. Soil 4% very short, 20% short, 72% adequate, 4% surplus. Winter Wheat 15%

headed, 9% 2001, 14% avg.; 1% poor, 49% fair, 48% good, 2% excellent. Barley 2% headed, 3% 2001, 2% avg.; 10% poor, 17% fair, 73% good. Oats 15% headed, 9% 2001, 17% avg.; 10% poor, 29% fair, 60% good, 1% excellent. Rye 28% headed, 13% 2001, 24% avg.; 43% fair, 54% good, 3% excellent. Corn 45% planted, 23% 2001, 42% avg. Cantaloups 20% planted, 9% 2001, 14% avg. Cucumbers 35% planted, 20% 2001, 30% avg. Snap beans 23% planted, 23% 2001, 27% avg. Tobacco 4% transplanted, 4% 2001, 5% avg. Tomatoes 35% planted, 27% 2001, 21% avg. Watermelons 42% planted, 24% 2001, 37% avg. Pastures 1% very poor, 13% poor, 25% fair, 57% good, 4% excellent.

**SOUTH DAKOTA:** Days suitable for field work 0.5. Topsoil 5% very short, 23% short, 67% adequate, 5% surplus. Subsoil 7% very short, 31% short, 57% adequate, 5% surplus. Feed supplies 2% very short, 8% short, 82% adequate, 8% surplus. Stock water supplies 6% very short, 12% short, 76% adequate, 6% surplus. Winter rye 3% poor, 43% fair, 49% good, 5% excellent. Cattle 1% poor, 11% fair, 70% good, 18% excellent. Sheep 1% poor, 9% fair, 72% good, 18% excellent. Range, pasture 7% very poor, 15% poor, 29% fair, 45% good, 4% excellent. Winter wheat 3% breaking dormancy, 1% rye breaking dormancy. Cattle death losses 34% below normal, 65% normal, 1% above normal. Calving 34% complete. Calf deaths 29% below avg.; 69% avg.; 2% above avg. Cattle moved to pasture 1% complete. Lambing 54% complete. Sheep, lamb deaths 30% below avg.; 69% avg.; 1% above avg.. Expected date to start spring field work, April 15, 2002. Little has been reported in the way of spring field activity due to cold temperatures, snowfall that prevailed during the month of March. Activities: Working on machinery, hauling grain, calving, lambing, feeding livestock

**TENNESSEE:** Days suitable for fieldwork 2.0. Topsoil 60% adequate, 40% surplus. Wheat 36% jointed, 28% 2001, 47% avg.; 80% top-dressed, 86% 2001, 78% avg.; 4% poor, 18% fair, 65% good, 13% excellent. Apples 52% budding or beyond, 41% 2001, 63% avg.; 30% blooming or beyond, 1% 2001, 20% avg. Peaches 90% budding or beyond, 65% 2001, 83% avg.; 62% blooming or beyond, 19% 2001, 59% avg. Pastures 6% poor, 35% fair, 51% good, 8% excellent. Cattle 6% poor, 35% fair, 51% good, 8% excellent. Hay Stocks, 2% very short, 7% short, 70% adequate, 21% surplus. Frequent rains slowed most field activities last week as the Volunteer State welcomed the first full week of spring. Field preparation, planting, fertilization were all delayed, farmers now need warm sunshine to dry up fields. Some wheat producers are applying nitrogen fertilizer with airplanes to lessen the delay caused by wet soil conditions. Herbicide applications in wheat are also running behind schedule. The State's apple, peach crops have avoided any major frost damage to this point. Also, early indications are that greenhouse tobacco plants are up and doing well. Corn planting has been delayed because of the rains, should begin as soon as fields dry sufficiently.

**TEXAS:** Agricultural Summary: Wide swings in the weather pattern brought freezing temperatures to areas of the Plains; warmer temperatures during mid to late week, heavy thunderstorms to Eastern, Northern, Central locations. Elsewhere, mostly dry, windy conditions covered the state during mid week. By late week, areas of the Plains, many southern, eastern locations received severe storms accompanied by heavy rains, hail, some tornadoes as the result of a Pacific low pressure area that crossed the state. Small grains in these areas benefitted from the increased moisture levels as well as earlier planted corn, sorghum. In other areas conditions remained mostly dry, small grains continued to be stressed from lack of moisture. Planting of spring crops proceeded at a moderate rate in central, southern locations where soil moisture, temperature was adequate. Irrigation was necessary on some emerging crops in the drier southern locations, some pre-watering remained necessary in many other locations as soil moisture was too low for adequate germination. Supplemental feeding continued to be necessary in most locations across the state. Pasture recovery continued to be slow as the result of cold conditions earlier in the month. In some areas soil moisture was too low for any green-up to occur, remaining livestock was being totally fed. Herd reduction, some liquidation continued for some producers in the drier locations as continued feeding was not economically feasible. Field Crops Report: Small Grains: Growth, development continued for small grains in areas

where earlier rains fell. Many locations in the same areas received additional rainfall in late week, however many areas remained dry, some wheat fields have been considered a total loss. Abandonment, plow-up was still being considered by some producers if rains are not immediate. Wheat 43% of normal compared with 64% 2001. Spring oats were emerging in some locations, were affected by lack of moisture, cold temperatures in some areas. Corn: Land preparation and planting made fair progress across the state, however activity was mostly stalled in the wetter locations. Emergence, development moved forward in areas where moisture was adequate, however growth was slow in the drier locations. Insect populations remained active in some locations. Cotton: Land preparation continued where possible. Pre-watering remained necessary in some locations as soil moisture was considered too low for planting, adequate emergence. Planting continued and moved northward into some south central locations where temperature, soil moisture were adequate. Emergence of earlier planted cotton remained mostly satisfactory. Planting began on a limited basis in El Paso county. Sorghum: Land preparation, planting continued, but remained slow in areas where earlier rains occurred. In some locations conditions were considered too dry for planting at this time. Emergence was variable in many locations as of result of short moisture levels. Peanuts: Land preparation moved ahead in many locations but some areas progressed slowly due to moisture level shortages. Some producers were waiting on a final decision with the farm bill before they began preparation. Soybeans: Land preparation, planting continued, but slow as the result of earlier rainfall. In eastern locations some soybeans were washed-out during heavy periods of rainfall and others were in bad shape as the result of too much rain. Emergence was occurring in southern, eastern locations. Rice: Planting continued, but most areas were in need of rain to adequately germinate the crop. Some flushing was also in progress to aid in securing a good stand. A few locations remained too wet for planting. Commercial Vegetables, Fruit, Pecans In the Rio Grande Valley harvesting continued for cabbage, carrots, some remaining greens. Onion harvest began in most locations. Harvest of citrus remained active, but continued to slow. Melon crops were progressing well. In the San Antonio-Winter Garden planting continued for watermelons, cantaloupes, cucumbers. Earlier damaged potatoes, onions were making good to fair recovery. Carrot harvest continued in some locations. In East Texas land preparation was mostly on hold until drying out occurs, however some melon planting continued in drier locations. In the High Plains land preparation continued, but remained slow in some areas depending on levels of soil moisture. Onions, chili peppers continued to make good progress in portions of the Trans Pecos region. Pecans: Bud break continued to move northward as temperatures warmed, day length increased. Irrigation remained active in a few of the drier locations. Peaches: Blooming, and fruit setting continued to move northward. Some orchards were damaged by hail during late week, but no estimates were made at this time. Range, Livestock: Range, pasture feeds improved in some areas with the benefit of earlier rains. State had the best pasture feeds as winter rains have aided re-growth in most locations. Elsewhere, conditions remained variable depending on moisture levels. Some areas received additional heavy rains during late week, will continue to improve. However, in some areas drought conditions lingered and no pasture recovery was in progress. Supplemental feeding remained high for remaining cattle herds in these dry areas. In a few locations most livestock herds have been greatly reduced or liquidated due to a shortage of supplemental feed. Some producers were buying water rights as well water was unavailable, water rationing was in progress for many small towns in the drier areas. Grass seeding, sprigging was underway in southern, central locations where earlier rains had increased soil moisture levels.

**UTAH:** Days suitable for field work 5. Topsoil 30% short, 59% adequate, 11% surplus. Subsoil 2% very short, 26% short, 72% adequate. Winter wheat 14% poor, 43% fair, 43% good; freeze damage 71% light, 25% moderate, 4% severe. Spring wheat 24% planted, 26% 2001, n/a avg. Barley 16% planted, 16% 2001, n/a avg.; freeze damage

52% none, 26% light, 22% moderate. Oats 10% planted, 14% 2001, 7% avg. Cows 58% calved, 50% 2001, 43% avg. Cattle, Calf 2% poor, 25% fair, 67% good, 6% excellent. Sheep sheared 49% on farm, 23% 2001, n/a avg.; on range 18%, 15% 2001, n/a avg. Ewes lambing 56% on farm, 34% 2001, n/a avg.; 28% range, 15% 2001, n/a avg. Sheep 2% poor, 34% fair, 58% good, 6% excellent. Range, Pasture feed 1% very poor, 19% poor, 54% fair, 26% good. Activities: Spring planting, shearing sheep, lambing, calving. Crops such as alfalfa are behind on growth due to cold weather.

**VIRGINIA:** Topsoil moisture ratings increased nicely, but surface water levels remained generally low. Subsoil moisture remained low due to the earlier extended periods. Tobacco farmers were busy seeding their greenhouses, plantbeds. Potato producers began planting, should complete their planting soon. The month ended on a better note, as rains fell across the state. Some flooding was reported in southwestern state. of dryness.

**WASHINGTON:** Days suitable for fieldwork averaged 4.7. Topsoil 0% very short, 5% short, 90% adequate, 5% surplus. Subsoil 0% very short, 10% short, 87% adequate, 3% surplus. The highest temperature in the state was 69<sup>o</sup> in Pasco. The lowest temperature in the state was 24<sup>o</sup> in Omak, Stampede Pass. Freezing, thawing each day may have caused damage to the roots of winter wheat plants. Spring wheat is ahead of normal at 25% planted. Rangeland, pastureland have not yet recovered from 2001 drought. Range, pasture feeds 2% very poor, 8% poor, 28% fair, 58% good, 4% excellent.

**WEST VIRGINIA:** Topsoil 2% very short, 11% short, 73% adequate, 14% surplus, 7% short, 82% adequate, 11% surplus at this time 2001. Wheat 4% very poor, 14% poor, 54% fair, 28% good, 20% poor, 63% fair, 17% good 2002. Small grains have been slowed due to dry weather. Cattle, calves reported in poor to good condition, sheep, lambs were reported in fair to good condition. The absence of freezing weather during most of the month was very important to livestock having access to limited water supplies. Below normal rainfall throughout most of the fall has required earlier feeding of livestock, hauling water in some areas. Dry conditions have been an aid for calving, lambing. Hay, feed grain supplies are adequate. Activities: Feeding livestock, general maintenance. Major rains on the 20<sup>th</sup> and 31<sup>st</sup> have reduced the short term effects of the dry, warm winter. Drought, near drought conditions that existed over much of the State may be broken if precipitation continues at recent levels.

**WISCONSIN:** Days suitable for fieldwork 1.1. Soil 10% short, 78% adequate, 12% surplus. Northern State ground is still frozen, snow covered, while southern state has no frost, bare ground. Fieldwork is just starting in southern state, with oat planting, spring tillage, fertilizer applications, manure hauling activities.

**WYOMING:** Days suitable for fieldwork 2.8. Topsoil 23% very short, 45% short, 32% adequate. Winter wheat 1% very poor, 11% poor, 25% fair, 63% good, wind damage 32% none, 55% light, 10% moderate, 3% severe. Natrona, Goshen county had 15%-25% severe wind damage. Winter wheat freeze damage 82% none, 15% light, 3% moderate. Campbell, Natrona had the most moderate freeze damage. Barley 9% planted, 28% 2001, 39% avg. No Spring wheat planted, 4% 2001, 10% average. No oats planted, 0% 2001, 6% average. Pasture, range 24% very poor, 26% poor, 40% fair, 10% good. Stock water supplies 20% very short, 32% short, 48% adequate. Barley planting well behind normal. Spring like temperatures for the week. Topsoil moisture continued to improve. Snow water equivalents from mountain snow pack ranges by basin from 63%-85% of normal, similar to last week.

## 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 experienced varied weather conditions in March. Too much rain, not enough rain, a late freeze about sums up the states' weather conditions. Wet soils delayed fieldwork, while cold weather slowed growth of pasture grasses. Most soils are dry enough for plowing, but some farmers are waiting for warmer soil temperatures before planting. Cover crop burn down for cotton has begun. Most pastures are in good condition.

**ALASKA: DATA NOT AVAILABLE**

**ARIZONA:** Lack of precipitation throughout the month of March caused severe deterioration of range and pasture conditions for most of the state. Small grain emergence was completed and heading is well underway.

**ARKANSAS:** February ended with the entire state having 50% to 70% above normal precipitation totals. March weather added to these amounts. The crop moisture index is over 3 inches (excessively wet) throughout the state. The average temperature was 4 to 6° below normal. There was no severe weather, yet the excessive moisture brought severe conditions to the central, southern, eastern regions of the state, leaving 11 counties under continual flood alert. Due to these weather conditions, farmer's average days in the field remained under two days per week. Activities: Equipment preparation, preparing land for spring planting. There were limited opportunities for fertilizing, planting, with only a small percentage of corn having been planted. Livestock is in good to excellent condition.

**CALIFORNIA:** Throughout the month of March, cotton growers were preparing fields for planting. By month's end planting was underway in a few areas, field preparation continued elsewhere. Alfalfa hay, seed fields were thriving. Alfalfa hay was being cut, windrowed, dried, baled. Rain, the arrival of warm weather late in the month, stimulated growth, development of grain, silage crops. Wheat, barley, oats made good progress; irrigation, weed control continued. Robust growth of sugar beets continued. Stubble from 2001 crop was burned, ground was being prepared for planting rice. Corn for grain, silage was planted. As April approached, safflower planting was underway in a few areas. Spring's cultural Activities :Such as weed control, cultivation, irrigation continued in orchards, vineyards. New orchards, vineyards were planted where older ones had been removed. Peaches, plums, nectarines were in full bloom. My month's endmost stone fruit trees were already leafing. San Joaquin County cherry orchards were past the mid-blossom stage as April began. Apple blossoming continued throughout the month. Grapevine bud break continued as growers irrigated, mowed cover crops, cultivated, applied herbicides. Strong spring growth was noted in citrus orchards. Navel, valencia orange harvesting continued. Grapefruit picking was ongoing in the desert, in the San Joaquin Valley. Lemons were also picked. Strawberry fields were weeded, irrigated; by month's end most plants were spreading, blooming. Nut growers performed spring cultural activities such as pruning, irrigating, spraying trees. As April neared, most almond orchards were fully leafed, developing well. However, in some parts of the state a mid March freeze damaged developing almonds. Walnut, pecan trees were pushing buds. Brush removal, shredding continued. Early March asparagus harvest was lagging, but by month's end the warm weather had dramatically accelerated the rate of harvest.

Vegetable crops were developing well. Melons were planted. Field preparation, planting of fresh market, processing tomato transplants continued. Garlic, onions were progressing well. Lettuce harvesting improved after the early month delays attributed to cool temperatures. The following vegetables were also harvested in March: Basil, cabbage, carrots, celery, cilantro, green onions, mustard greens, collard greens, leeks, daikon, mint, parsley, radishes, radicchio, turnips, squash. Late month rainfall improved grazing conditions on foothill, rangeland pastures. Cattle continued to exhibit good weight gains. Turkey production continued; young hatchlings were thriving. Throughout March bees were actively pollinating orchards; as April neared, out-of-state hives were headed home.

**COLORADO:** March temperatures were slightly below average. Moisture received during the month was again below average. March mountain snowpack was only 52% of average, statewide. The Eastern Plains remain very dry. Winter wheat remains in mostly fair condition as it begins to break dormancy. Lambing, calving continue under mostly ideal conditions. Activities: Care feeding of livestock, planting spring crops.

**DELAWARE: DATA NOT AVAILABLE**

**FLORIDA:** March 2002. Cold, rainy weather during early March brought hard freezes to some northern areas and dumped from five to nine inches of rain over some Big Bend localities. The freezing temperatures burned some clover, rye, oats in the Panhandle, northern areas. The heavy rains flooded, damaged some pine plantings in low areas of the northern Peninsula. The freezing temperatures killed some early watermelon transplants, singed some cole crops, damaged the tops of potatoes in the Hastings area with older plants suffering the most harm. The damage to potatoes lowered yield expectations. Temperatures warmed by mid month. Mostly light showers kept the danger of wildfires high during the month, especially over central Peninsula areas. Picking of Valencia oranges gained momentum during the month as the harvest of early, mid-season oranges neared the end. Grove caretakers ran irrigation during most of the month to keep trees in good condition for the final stages of the blooming. Vegetable planting, harvesting continued at a normal pace for most of the month. Sugarcane harvesting slowed by the end of the month with some mills closing during the last two weeks. Tobacco transplanting got underway during the last two weeks. Temperatures again plunged during late month bringing lows in the 30s to some Panhandle, northern Peninsula localities and lows in the 40s to many central Peninsula areas. This cold caused no significant damage to tomatoes around Quincy but killed some very young watermelon transplants with producers replanting as needed. Temperatures remained mostly normal during the last week of the month when daily afternoon storms returned to many Peninsula localities.

**GEORGIA:** March temperatures were near normal, while rainfall was slightly below normal throughout most of the state. A cold snap the first part of March, the latter part of the month brought minimal damage to row crops. Pasture feeds were mostly fair to good. Warm season forages have started to green up. Small grains were in mostly fair to good condition. Carrot harvesting was active. Tobacco transplanting was just getting under way. Onion

condition was good. Land preparation for spring planting was active. Feeding hay to livestock continues. Cattle are continuing to calve.

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**HAWAII: DATA NOT AVAILABLE**

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**IDAHO:** Temperatures during March were well below normal, especially during the first half of the month. Precipitation totals were near normal for March with accumulations ranging from less than a tenth of an inch in areas of Eastern state to nearly two inches in North state. Planting progress in lower elevations has been delayed by the cool, wet weather. At the end of March, snow was beginning to melt off fields in higher elevations. Activities for March: Preparing fields, equipment for spring planting, applying fertilizer, calving, lambing, feeding livestock.

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**ILLINOIS:** Farmers in some areas of far northern states were able to spread dry fertilizer, apply anhydrous, seed oats later in the month. Fields in the rest of the state were too wet for virtually any fieldwork to be accomplished. The cooler than normal weather during the month of March, above average precipitation in the south has kept fields saturated to the point where application of nitrogen to the winter wheat crop has been delayed. Some reports indicated that farmers would begin having nitrogen applied by airplane soon if soil conditions did not improve. The condition of the wheat crop continues to improve as it comes out of dormancy.

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**INDIANA:** Topsoil moisture is mostly adequate to surplus. Snow, rain, ice last week halted field activities around the state. Most central, northern areas received heavy snow amounts. Damaging winds in some areas during March. Wet field conditions prevented fieldwork during most of the month. Topsoil moisture is mostly adequate to surplus. Some tillage took place in early March where soils were dry enough to support heavy equipment. Spreading fertilizer, lime took place on some farms. Amish farmers have plowed some fields intended for oats, corn. Farmers were busy preparing equipment, purchasing supplies for spring planting of crops. Pastures, forage crops are in mostly fair to good condition. Pasture growth, development have been slow thus far. Hay supplies are mostly adequate. Winter wheat is in mostly good condition, breaking dormancy in most fields. Livestock are in mostly good condition. Feedlots are muddy. New born calves, lambs were under stress last week. Calving, lambing active. Activities: Hauling manure, moving grain to market, top dressing wheat, marketing tobacco, building fence, purchasing seed, chemicals, ditching, attending FSA offices, clearing fence rows, caring for livestock.

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**IOWA:** Summary for March 2002. Soil very 10% short, 43% short, 46% adequate, 1% surplus. Continued mild weather in March caused increased concern over the state's lack of soil moisture. Snow cover disappeared by the end of March, while frost penetration fell to 1 inch, compared to 4 inches for both last month, last year. Each region of the state has shown at least some shortage of moisture. Grain movement 12% none, 39% light, 43% moderate, 6% heavy. Availability of hay, roughage supplies for livestock feed 5% short, 76% adequate, 19% surplus. Quality of hay, roughage 6% poor, 46% fair, 48% good. Utilization of stubble fields for grazing 42% none, 20% light, 26% moderate, 12% extensive. Cattle deaths fell slightly from the previous month, were below the losses suffered 2001. Cattle, Calf losses 26% below avg.; 71% avg.; 3% above avg. Hog deaths increased slightly from last month but were slightly lower than those in March, 2001. Hog, Pig losses 14% below avg.; 83% avg.; 3% above avg. Rapidly changing temperatures have caused some problems with livestock.

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**KANSAS:** Topsoil 31% very short, 44% short, 25% adequate. Subsoil 30% very short, 50% short, 20% adequate. Very little moisture received in the State during the month of March. Wheat 17% very poor, 27% poor, 33% fair, 21% good, 2% excellent. Wheat condition has continued to decline due to drought stress, is in desperate need of moisture. Damage from wind, freeze damage has been light. Wheat 9% jointed, 1% 2001, 12% avg. Oats 75% planted, 17% 2001, 58% avg. Spring calving is nearing completion. Because of moderate, dry weather, few weather related calving problems. Stockmen providing supplemental feed to livestock. Hauling water to cattle necessary some areas. Stock water supplies 11% very short, 31% short, 58% adequate. Hay, forage supplies 1% very short, 12% short, 84% adequate, 3% surplus. Feed grain supplies 5% short, 93% adequate, 4% surplus.

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**KENTUCKY:** March began very cold with below normal precipitation. Stockwater ponds were unusually low, soil moisture needed replenishing. Warmer temperatures returned at mid-month with periods of widespread rain. Heavy rain late in the month replenished soil moisture but caused extensive flooding in most low lying areas of the State. Warmer temperatures with increased soil moisture stimulated early growth of winter wheat, pasture. Fruit trees began to bud in many areas by late March. Wet field conditions slowed lime spreading, small grain fertilizing, most producers used the period to mend fences, clear flood debris, prepare equipment for spring planting. Farmers continued to provide hay to livestock while pastures showed some limited early spring growth. Cattle remained in mostly good condition due to the mild winter weather. Greenhouse growers prepared to seed flats for float bed produced tobacco plants, while other tobacco farmers prepared ground for seeding traditional plant beds.

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**LOUISIANA:** Cooler temperatures and wet conditions slowed field activities. Corn producers began to plant in some areas where soil moisture levels would allow it. Sugarcane farmers were applying herbicides, destroying old stubble, draining fields. Rice farmers began planting. Wheat fields continued to look good after some unseasonably cold temperatures earlier in the month. Crawfish producers were running traps on a regular basis, production was doing well. Cattlemen were fertilizing winter pastures, cutting ryegrass for hay. State has received almost 4 inches (3.89 inches) of rain over the last four weeks.

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**MARYLAND: DATA NOT AVAILABLE**

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**MICHIGAN:** There was very little snow cover for the month but the weather was cold enough for frost on the ground. The high winds, cold weather brought down many trees, branches. Wheat conditions were not favorable, were very spotty. Activities: Repairing equipment, buildings, pruning fruit trees, spreading, hauling manure, tree trimming, attending meetings. Conditions for livestock were good. Some beef cattle herds were calving. Hay supplies were more than adequate but there were reports of corn supply shortages.

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**MINNESOTA:** After one of the warmest winters on record, March temperatures were below normal. A snow storm passed across the central part of the state on March 14 which brought record snowfall amounts. Parts of southern state received freezing rain which resulted in scattered power outages. The snow, rain received added much needed water to the soil profile. However, additional water will be needed to meet next seasons growing needs. Wind erosion has been a problem due to lack of snow cover for the majority of the winter. Livestock producers are busy with calving; feed supplies are adequate.

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**MISSISSIPPI:** March 1, 2002 Soil moisture 4% short, 37% adequate, 59% surplus. Hay supply 1% short, 60% adequate, 39% surplus. Most parts of the state have received plentiful amount of rainfall during the month of March. Planting of spring row crops has been delayed in many areas of the state due to the frequent rains. Reports indicate that pasture, cattle are looking good at this time of year. Farmers are spreading fertilizer on the winter wheat crop, are hoping for some dry weather to allow them to finish.

**MISSOURI:** March rainfall varied considerably, ranging from less than an inch in some northwestern, north-central counties to more than 5 inches in many south-central and southeastern counties. With the exception of a few southwestern counties, fieldwork has generally not yet begun. The Bootheel has been too wet, the cold weather of the past 2 weeks over most of the State has not been conducive to tillage, planting. Winter wheat is mostly in fair to good condition, although some excessively wet areas of the southeast may cause some small acreage losses. Cool weather may delay availability of pasture feed, but hay supplies are adequate in most areas.

**MONTANA:** March stated dry, but brought much needed precipitation to the state during the second half of the month. For the month of March, Topsoil 22% very short, 36% short, 40% adequate, 2% surplus. Subsoil 52% very short, 35% short, 13% adequate, 0% surplus. Wind damage to winter wheat 15% none, 38% light, 25% moderate, 22% heavy. Freeze, drought damage to winter wheat 8% none, 19% light, 37% moderate, 36% heavy, 30% very poor, 31% poor, 29% fair, 9% good, 1% excellent. Grazing 63% open, 10% difficult, 27% closed. While grazing was mostly open, little grass is available. Livestock receiving supplemental feed 98% for cattle, calves, 96% for sheep, lambs. Calving, lambing is underway with 58% of the calves, 28% of lambs born.

**NEBRASKA:** Statewide, moisture was minimal with the exception of local weekly snow storms. Wheat 2% very poor, 13% poor, 53% fair, 31% good, 1% excellent. Oat planting 15% seeded, 5% 2001, 24% avg. Hay, forage supplies were mostly adequate to surplus statewide. Cattle, calves 1% poor, 16% fair, 63% good, 20% excellent. Calving 64% complete with most producers reporting calf losses at average to below average.

**NEVADA:** March was somewhat dry across the State, continuing the trend of January, February. Precipitation was slightly above normal in Winnemucca, but generally below normal elsewhere. Water content of the winter snow pack for primary watersheds ranged from 79 to 101% of normal of state, was below normal for all watersheds. Temperatures averaged above a few degrees below normal for the month, but warmed appreciably toward the end of the month. Calving continued in full swing. Farm flock lambing was underway with range flocks to follow. Marketing of cattle remained active. Shipping of baled, cubed hay continued. Potato processing was ongoing. Fall seeded grains, garlic were in good condition. Field preparations, spring grain planting were underway. Onions were planted, sprinkler irrigation was underway. Activities: Calving, field preparation, spring grain seeding, onion planting, equipment maintenance, livestock feeding, fence repairs, crop marketing, ditch burning, irrigation.

**NEW ENGLAND:** Warmer than normal temperatures continued throughout March in state, along with the occasional cold spell. Some precipitation was received during the month, but drought conditions have not yet been alleviated. All 14 counties in Vermont have recently been designated as disaster areas by Secretary of Agriculture Veneman. Maple tapping is well underway at this point and producers are optimistic that the drought conditions will not greatly affect their production. Activities: Nursery/greenhouse work,

tending livestock, tapping maple trees, performing general maintenance, preparing for the spring planting season.

**NEW JERSEY:** March brought mild temperatures, much needed rainfall across the state. Precipitation totals ranged from 3.0 to 4.5 inches for the month, with the heaviest 24 hour total of 1.59 inches reported from March 21 to March 22. Although the rains brought some relief, a drought emergency was declared March 4, mandating restrictions on water usage throughout the state. Temperatures averaged at or above normal for the month of March. The average daytime temperature was 53° and the average nighttime temperature was 33°. The highest reported temperature was 77° on March 16, the lowest reported temperature was 14° on March 5.

**NEW MEXICO: DATA NOT AVAILABLE**

**NEW YORK: DATA NOT AVAILABLE**

**NORTH CAROLINA:** As of March 24<sup>th</sup>, Soil 3% very short, 16% short, 62% adequate, 19% surplus. March brought mixed temperatures which is normal for the month. Most areas welcomed significant precipitation the last three weeks of the month. The rainfall supplied partial relief to many areas that have been rain deficient since last September. Ground water, low stream flow are still real concerns for many communities. Small grains, specifically wheat, are in mostly good condition. Corn planting is set to begin next week with no delays foreseen.

**NORTH DAKOTA:** Strong winds coupled with a lack of snowfall during the month of March caused severe erosion in some fields. Colder than normal temperatures during the month of March have caused above normal calf losses in some areas. Some producers may begin field work in 2-3 weeks if dry conditions continue. Calving, lambing is progressing with very little difficulty.

**OHIO:** March 2002 was 0.9° colder than normal in state, with temperatures averaging 37.9° across the state. Precipitation averaged 3.45 inches, 0.78 inches above normal. The South Central district received the most precipitation with 5.61 inches while the Northeast district received the least with 2.36 inches.

**OKLAHOMA:** Cool, dry conditions hampered the State for much of March limiting wheat development. Seedbed preparation began, but was running behind normal for most crops. Hay supplies were short, without any measurable precipitation cool season grass growth was a concern for livestock producers. Ranges, pastures were rated in mostly poor to very poor shape the entire month.

**OREGON:** Activities: Spring planting of small grains, potatoes, onions. Digging, shipping of balled, burlapped, bareroot plants at a hectic pace. Christmas tree growers planting new seedlings. Spraying, fertilizing grass seed fields. Pruning, spraying orchards. Some early orchards in blossom. Training of berries. Livestock calving ongoing. Snow pack levels are above average.

**PENNSYLVANIA:** Days suitable for fieldwork 2.1. Soil 6% very short, 22% short, 49% adequate, 23% surplus. Spring 26% plowing complete, 7% 2001, 8% avg. Wheat crop 28% fair, 48% good, 24% excellent. Oats 10% planted, 1% 2001, 4% avg.; 2% very poor, 2% poor, 64% fair, 32% good. Pasture feeds 9% very poor, 29% poor, 40% fair, 21% good, 1% excellent. Activities: Spring plowing; planting oats; fixing fences; machinery maintenance; ordering supplies; storing equipment; cleaning barns;

spreading lime, fertilizers; hauling, spreading manure; caring for livestock; spraying herbicides.

**SOUTH CAROLINA:** The weather for March began with scattered showers statewide, several days of near freezing temperatures. All reporting counties are recording below average rainfall amounts. A warm front moved through state mid-month providing several days of springlike temperatures. The increase in the temperatures caused an increase in pollen counts from flowering plants, trees. Temperatures ranged from 3° below normal to 6° above normal. Farmers were busy with corn planting, land preparation, pruning fruit trees, tending to livestock.

**SOUTH DAKOTA:** Average snow depth 0.80 inch. Feed supplies 2% very short, 8% short, 82% adequate, 8% surplus. Stock water supplies 6% very short, 12% short, 76% adequate, 6% surplus. Cattle death losses for March, 34% below normal, 65% normal, 1% above normal. Calf deaths for March, 29% below avg.; 69% avg.; 2% above avg. Calving 34% complete. Cattle moved to pasture 1% complete. Lambing 54% complete. Sheep, lamb deaths for March, 30% below avg.; 69% avg.; 1% above avg. The month of March brought below normal temperatures, precipitation in the form of snow. Farmers, producers kept busy fixing machinery, hauling grain, calving, lambing, feeding cattle.

**TENNESSEE:** During the first half of March, an arctic cold front passed through the Volunteer State, bringing some of the coldest air of the season. A hard freeze damaged a few acres of the winter wheat crop during the first week of the month, but the majority of the crop escaped harm. About mid-month, a storm system brought heavy rainfall across the state. Flooding was a major concern in some areas. Temperatures on average were seasonable to above normal, typical for this time of year. Temperature deviations were as large as 84° in Chattanooga to 20° in Bristol with precipitation well above normal in every section of state. Cattle were in good condition and hay stocks plentiful.

**TEXAS:** Conditions in March were somewhat cooler, drier than normal. In early month two arctic cold fronts crossed the state, bringing freezing temperatures, high winds. Some early planted crops in southern locations were injured or destroyed by the unexpected cold temperatures. Some wheat, oat crops were also injured across portions of the Plains, Central state. Many portions of the state remained dry, however heavy rains, some storms crossed many portions of Central, East state as well as portions of the Edwards Plateau. Spring planting continued in Central, Southern locations but, was stalled at times due to the wet conditions in some areas while pre-watering was in progress in other locations. Supplemental feeding remained necessary for most producers, herd reduction, liquidation was also necessary in some of the drier locations.

**UTAH:** The past winter has been colder than recent winters. Snow pack is around 70 to 80% of normal in most of the state. The cold weather has caused below average crop growth and has damaged peach buds. Some snow mold in winter wheat has been found. The problem does not appear to be as bad as anticipated because most of the wheat was planted rather late due to limited fall

moisture. Calving, lambing are in full swing. Livestock are in good to fair condition.

**VIRGINIA:** Topsoil ratings increased nicely, but surface water levels remained generally low. Subsoil remained low due to the earlier extended periods of dryness. Farmers prepared for planting throughout the month. Damage to fruits, small grains was reported in some areas as a result of dry weather conditions. Tobacco farmers were busy seeding their greenhouses, plantbeds. Potato producers began planting, should complete their planting soon. February's dry conditions continued into early March in the Commonwealth. The month ended on a better note, as rains fell across the state. Some flooding was reported in southwestern state.

**WASHINGTON:** The month of March brought more snow, colder temperatures across the state. While March snow is not unusual, some areas were surprised to find significant accumulation all the way up to the coastal waters. The largest increase was on the western side of the state, which brought precipitation levels well above normal.

**WEST VIRGINIA:** For the week ending March 31, Topsoil 2% very short, 11% short, 73% adequate, 14% surplus, 7% short, 82% adequate, 11% surplus at this time 2001. Wheat 4% very poor, 14% poor, 54% fair, 28% good, 20% poor, 63% fair, 17% good 2001. Small grains have been slowed due to dry weather. Cattle, calves reported in poor to good condition, sheep, lambs were reported in fair to good condition. The absence of freezing weather during most of the month was very important to livestock having access to limited water supplies. Below normal rainfall throughout most of the fall has required earlier feeding of livestock, hauling water in some areas. Dry conditions have been an aid for calving, lambing. Hay, feed grain supplies are adequate. Activities: Feeding livestock, general maintenance. Major rains on the 20<sup>th</sup> and 31<sup>st</sup> have reduced the short term effects of the dry, warm winter. Drought, near drought conditions that existed over much of the State may be broken if precipitation continues at recent levels.

**WISCONSIN:** March began with the largest single snowfall accumulation, coldest temperatures seen all winter. The week following the snowfall, temperatures reached 40°, remained above normal for the rest of the month.

**WYOMING:** Days suitable for fieldwork 2.8. Topsoil 23% very short, 45% short, 32% adequate, improved 21 points for the month. Stock water 20% very short, 32% short, 48% adequate. Winter wheat 1% very poor, 11% poor, 25% fair, 63% good, nearly unchanged for the month. wind damage 32% none, 55% light, 10% moderate, 3% severe. Natrona, Goshen county had the most severe 15%-25% wind damage. Winter wheat freeze damage 82% none, 15% light, 3% moderate. Barley 9% planted, 28% 2001, 39% avg. No spring wheat planted, 4% 2001, 10% avg. No oats planted, 0% 2001, 6% avg. Cattle, calf 70% good to excellent. Sheep, lamb 60% good to excellent. Pasture, range 24% very poor, 26% poor, 40% fair, 10% good. Temperatures, precipitation during the month averaged below normal.

## International Weather and Crop Summary

March 24 - 30, 2002

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

### HIGHLIGHTS

**EUROPE:** Much-needed rain fell across eastern Romania and much of Bulgaria, but more rain is needed to end chronic dryness.

**FSU-WESTERN:** Mild, showery weather promoted further greening of winter grains in Ukraine and southern Russia and boosted soil moisture for the upcoming growing season.

**MIDDLE EAST:** Beneficial rain continued across Turkey, but drier weather returned to Iran's western winter wheat areas.

**NORTHWESTERN AFRICA:** Light showers kept topsoils moist, but moisture reserves remained low.

**SOUTH AFRICA:** Warm, dry weather hastened summer crop drydown and maturation across the corn belt.

**EASTERN ASIA:** Across the North China Plain, seasonably, dry weather continued the need for supplemental wheat irrigation, and in southern China, beneficial rain eased short-term dryness.

**SOUTHEAST ASIA:** Showers favored rice in Thailand, while drier weather allowed harvesting to resume in the Philippines.

**AUSTRALIA:** Locally heavy rain hampered summer crop harvesting and likely raised some concern for maturing cotton.

**SOUTH AMERICA:** In Argentina, heavy showers delayed summer crop harvesting and possibly damaged maturing northern cotton. In southern Brazil, heavy showers continued to slow soybean harvesting in Mato Grosso and Goias, while drier weather favored harvesting elsewhere.

## March 2002

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

\*\*\* DATA NOT AVAILABLE

COUNTR	CITY	TEMPERATURE (C)					PRECIPITATION (MM)		
		AVG MAX	AVG MIN	HI MAX	LO MIN	AVG	DPART F/NRM	TOTAL	DPART F/NRM
NORWAY	OSLO	4	-3	12	-11	1	2.1	44	-14
SWEDEN	UPPSALA	5	-3	16	-14	1	1.2	43	5
FINLAN	HELSINKI	4	-3	15	-11	0	2.4	39	4
UKINGD	ABERDEEN	10	2	16	-4	6	0.9	34	-27
	MANCHESTER	11	4	16	-3	8	1.3	36	-26
	CARDIFF	12	6	17	1	9	1.3	46	-28
	LONDON	12	5	17	-1	9	1.1	38	-4
IRELAN	DUBLIN	11	4	15	-2	8	0.7	29	-25
ICELAN	REYKJAVIK	3	-1	9	-10	1	0.3	56	-27
DENMAR	COPENHAGEN	8	1	13	-6	4	1.2	27	-9
LUXEMB	LUXEMBOURG	11	3	17	-4	7	1.8	72	5
SWITZE	ZURICH	12	4	19	-3	8	2.5	57	-11
	GENEVA	13	3	21	-2	8	2.2	58	-7
FRANCE	PARIS/ORLY	14	5	20	-2	9	1.4	62	19
	STRASBOURG	13	3	21	-3	8	1.4	35	-1
	BOURGES	14	4	23	-2	9	2.1	25	-28
	BORDEAUX	16	7	24	1	12	2.4	29	-42
	TOULOUSE	16	7	25	2	12	2.9	22	-32
	MARSEILLE	18	8	25	2	13	2.7	46	3
SPAIN	VALLADOLID	15	5	23	-1	10	1.3	39	15
	MADRID	16	5	26	0	10	-0.1	54	37
	SEVILLE	22	12	31	7	17	1.1	81	55
PORTUG	LISBON	19	11	28	4	15	1.0	118	37
GERMAN	HAMBURG	9	2	18	-5	6	1.1	62	-1
	BERLIN	10	3	18	-3	6	1.2	46	4
	DUSSELDORF	12	3	17	-4	8	0.8	60	-7
	LEIPZIG	10	2	19	-4	6	1.4	32	-4
	DRESDEN	9	2	19	-4	6	1.2	26	-15
	STUTTGART	12	2	21	-4	7	1.3	54	11
	NURNBERG	11	1	20	-6	6	1.2	58	14
	AUGSBURG	11	0	19	-5	5	0.8	87	45
AUSTRI	VIENNA	12	2	21	-4	7	1.8	69	29
	INNSBRUCK	14	1	21	-3	8	2.5	126	66
CZECHR	PRAGUE	9	1	18	-5	5	1.3	27	-2
POLAND	WARSAW	9	1	18	-4	5	2.1	38	8
	LODZ	9	1	18	-3	5	1.7	30	-7
	KATOWICE	11	0	19	-4	5	1.8	23	-20
	PRZEMYSL	10	2	19	-2	6	3.5	13	-18
HUNGAR	BUDAPEST	13	3	20	-3	8	2.2	25	-2
YUGOSL	BELGRADE	15	6	25	0	11	3.1	14	-33
ROMANI	BUCHAREST	15	1	25	-7	8	3.0	21	-17
BULGAR	SOFIA	13	4	25	-2	8	3.0	62	27
ITALY	MILAN	18	6	27	-1	12	3.0	16	-48
	VERONA	15	7	23	3	11	2.5	7	-45
	VENICE	15	6	23	1	11	2.2	3	-46
	GENOA	17	11	25	7	14	2.0	29	-56
	ROME	18	6	24	-1	12	1.0	10	-51
	NAPLES	18	8	25	2	13	2.2	12	-66
GREECE	THESSALONIKA	15	7	23	3	11	1.7	92	53
	LARISSA	17	7	26	1	12	2.6	46	8
	ATHENS	17	10	22	4	13	1.4	48	-7
TURKEY	ISTANBUL	13	7	21	2	10	2.4	48	-8
	ANKARA	14	0	22	-6	7	3.0	28	-12
CYPRUS	LARNACA	21	10	25	6	15	1.8	48	5
ESTONI	TALLINN	5	-2	16	-8	2	2.7	43	8
RUSSIA	ST.PETERSBURG	4	-2	12	-12	1	2.0	39	6
LITHUA	KAUNAS	8	0	14	-4	4	3.2	41	4
BELARU	MINSK	8	0	15	-5	4	4.1	24	-20
RUSSIA	KAZAN	2	-3	6	-11	-1	3.9	19	-5
	MOSCOW	6	-1	14	-7	2	4.0	26	-8
	YEKATERINBURG	2	-4	9	-10	-1	3.1	23	7
	OMSK	1	-5	10	-22	-2	6.0	50	35
KAZAKH	KUSTANAY	2	-4	8	-13	-1	7.5	36	21
RUSSIA	NOVOSIBIRSK	1	-5	6	-11	-2	5.3	19	5
	BARNAUL	3	-4	10	-18	-1	7.1	42	26
	KHABAROVSK	0	-11	13	-26	-5	1.3	9	-9
	VLADIVOSTOK	5	-2	12	-12	2	3.5	10	-13
UKRAIN	KIEV	10	1	18	-4	6	4.3	17	-17
	LVOV	10	0	18	-5	5	3.1	34	-4
	KIROVOGRAD	11	1	22	-7	6	4.5	17	-16

Based on Preliminary Reports

March 2002

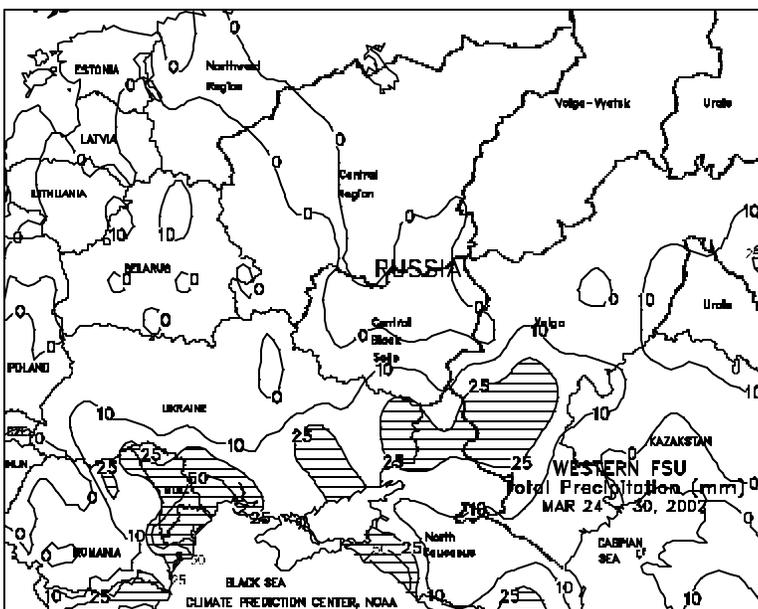
COUNTR	CITY	TEMPERATURE (C)					PRECIPITATION (MM)		COUNTR	CITY	TEMPERATURE (C)					PRECIPITATION (MM)				
		AVG MAX	AVG MIN	HI MAX	LO MIN	DPART AVG	F/NRM	TOTAL			DPART F/NRM	AVG MAX	AVG MIN	HI MAX	LO MIN	DPART AVG	F/NRM	TOTAL	DPART F/NRM	
	ODESSA	10	4	24	-1	7	4.2	67	39	KENYA	NAIROBI	27	15	35	12	21	0.3	86	21	
	YALTA	12	6	26	1	9	2.9	39	-12	TANZAN	DAR ES SALAAM	31	***	35	20	***	***	209	77	
RUSSIA	SARATOV	6	1	14	-4	4	7.7	27	7	GABON	LIBREVILLE	31	24	33	22	27	0.3	317	-88	
UKRAIN	KHARKOV	9	1	18	-4	5	5.1	25	-4	TOGO	LOME	33	27	34	23	30	2.0	11	-59	
RUSSIA	VOLGOGRAD	8	0	17	-7	4	5.0	55	32	BURKIN	OUAGADOUGOU	40	25	42	20	33	1.6	0	-5	
	ASTRAKHAN	13	2	24	-3	7	5.8	9	-7	COTE D	ABIDJAN	***	***	33	23	***	***	***	***	
	KRASNODAR	12	5	20	-4	9	3.6	52	12	MOZAMB	MAPUTO	31	23	38	19	27	1.1	8	-90	
	ORENBURG	3	-2	9	-10	1	6.8	41	21	ZAMBIA	LUSAKA	27	17	32	14	22	-0.9	27	-116	
KAZAKH	TSELINOGRAD	4	-2	14	-10	1	9.5	29	-1	ZIMBAB	KADOMIA	29	17	33	14	23	-0.8	38	-54	
	KARAGANDA	5	-3	16	-10	1	8.2	45	27	S AFRI	PRETORIA	29	17	33	12	23	1.7	36	-57	
UZBEKI	TASHKENT	18	7	31	-4	12	4.0	98	33		JOHANNESBURG	25	13	28	7	19	0.9	94	-7	
TURKME	ASHKHABAD	19	7	34	-2	13	3.7	8	-34		BETHAL	26	12	29	5	19	0.8	58	-34	
SYRIA	DAMASCUS	21	5	28	-1	13	2.6	9	-12		DURBAN	28	21	31	15	25	0.8	22	-103	
ISRAEL	JERUSALEM	18	12	25	5	15	4.0	60	-34		CAPE TOWN	27	15	34	6	21	1.6	8	-12	
PAKIST	KARACHI	33	20	38	17	27	2.1	0	-11	CANADA	TORONTO	5	-4	18	-11	0	0.7	61	5	
INDIA	AMRITSAR	29	13	35	7	21	2.0	16	-24		MONTREAL	2	-6	17	-16	-2	0.3	87	17	
	NEW DELHI	31	16	38	10	24	1.3	6	-9		WINNIPEG	-6	-17	8	-30	-12	-5.7	18	-4	
	AHMEDABAD	37	20	41	15	28	0.9	0	***		REGINA	-7	-19	7	-32	-13	-8.1	25	7	
	INDORE	34	18	39	11	26	0.5	8	7		SASKATOON	-7	-20	6	-31	-14	-7.9	14	-1	
	CALCUTTA	34	22	36	16	28	0.5	21	-20		LETHBRIDGE	-6	-19	11	-38	-12	-12.2	18	-8	
	VERAVAL	33	22	41	17	28	2.4	0	***		CALGARY	-7	-18	13	-31	-12	-10.5	17	0	
	BOMBAY	34	24	39	21	29	1.8	0	***		EDMONTON	-7	-16	6	-30	-11	-8.9	13	-2	
	POONA	36	16	39	13	26	0.3	0	-1		VANCOUVER	7	1	14	-5	4	-2.3	60	-54	
	BEGAMPET	37	22	39	20	29	0.8	16	2	MEXICO	GUADALAJARA	29	15	35	7	22	2.8	0	-6	
	VISHAKHAPATNAM	32	24	33	21	28	0.1	0	-10		TLAXCALA	24	8	29	4	16	0.2	1	-5	
	MADRAS	34	24	37	21	29	0.5	0	-5		ORIZABA	24	14	32	9	19	1.5	14	-19	
	MANGALORE	35	25	38	24	30	1.1	0	-5		BERMUD	ST GEORGES	22	17	24	13	19	0.4	142	37
HONGKO	HONG KONG INT	26	20	29	14	23	4.0	94	18	BAHAMA	NASSAU	28	20	31	18	24	1.7	65	15	
N KORE	PYONGYANG	12	1	18	-5	7	2.9	18	-12	CUBA	HAVANA	28	21	32	17	24	1.0	24	-19	
S KORE	SEOUL	12	4	19	-3	8	2.1	32	-19	JAMAIC	KINGSTON	31	23	33	22	27	0.9	14	-11	
JAPAN	SAPPORO	6	-1	13	-7	3	2.5	49	-32	P RICO	SAN JUAN	30	23	33	21	26	0.8	31	-23	
	NAGOYA	16	6	22	0	11	2.7	113	-2	GUADEL	RAIZET	30	22	31	19	26	1.0	87	20	
	TOKYO	16	8	24	4	12	3.5	83	-32	MARTIN	LAMENTIN	29	25	31	21	27	2.0	42	-36	
	YOKOHAMA	16	8	24	4	12	3.2	102	-47	BARBAD	BRIDGETOWN	30	24	31	21	27	1.0	16	-20	
	KYOTO	17	6	22	-1	11	2.2	109	-13	TRINID	PORT OF SPAIN	32	23	33	20	27	1.0	56	26	
	OSAKA	16	8	21	2	12	2.9	98	-1	COLOMB	BOGOTA	20	9	22	3	14	0.8	109	50	
THAILA	PHITSANULOK	35	22	38	18	29	-1.1	6	-22	VENEZU	CARACAS	30	23	31	17	26	0.8	20	7	
	BANGKOK	34	27	36	22	30	0.3	44	13	F GUIA	CAYENNE	30	24	31	22	27	0.7	702	360	
MALAYS	KUALA LUMPUR	35	25	36	24	30	2.3	141	-95	BRAZIL	FORTEALEZA	30	25	32	24	28	0.1	204	-106	
VIETNA	HANOI	26	21	30	15	23	2.7	8	-38		RECIFE	30	25	31	24	28	-1.2	226	28	
CHINA	HARBIN	7	-5	21	-18	1	4.1	1	-8	BRAZIL	BELO HORIZONTE	***	***	26	23	***	***	***	***	
	HAMI	14	-2	25	-9	6	1.5	2	1		CAMPO GRANDE	33	24	35	22	28	2.3	83	-66	
	LANCHOW	15	3	25	-3	9	3.4	4	-5		FRANCA	28	20	30	17	24	1.5	135	-72	
	BEIJING	16	3	29	-4	10	3.5	6	-2		RIO DE JANEIRO	32	24	37	22	28	1.1	97	-37	
	TIENTSIN	16	4	29	-3	10	3.7	1	-6		LONDRINA	34	24	36	19	29	5.4	71	-78	
	LHASA	13	-1	18	-7	6	0.5	2	-1		SANTA MARIA	31	22	39	16	27	3.4	212	72	
	KUNMING	21	10	25	1	15	1.9	16	-3		TORRES	29	22	38	19	26	0.2	148	40	
	CHENGCHOW	18	7	29	0	13	4.7	25	-3	PERU	LIMA	29	21	33	19	25	2.0	0	0	
	YECHANG	19	11	28	3	15	4.2	99	39	BOLIVI	LA PAZ	15	4	25	3	9	0.6	93	-16	
	HANKOW	18	11	26	2	15	4.1	150	61	CHILE	SANTIAGO	28	10	32	5	19	1.5	2	-3	
	CHUNGKING	20	13	27	8	17	3.2	50	12	ARGENT	IGUAZU	33	22	37	19	27	2.9	67	-63	
	CHIHKIANG	18	10	28	3	14	3.4	94	16		FORMOSA	32	24	38	18	28	2.7	377	224	
	WU HU	17	9	26	4	13	3.9	158	64		CERES	30	21	37	11	25	2.5	332	192	
	SHANGHAI	16	10	26	4	13	4.5	100	14		CORDOBA	27	18	37	10	22	1.7	306	184	
	NANCHANG	17	11	28	3	14	3.5	127	-49		RIO CUARTO	25	17	36	8	21	0.7	50	-64	
	TAIPEI	25	19	30	14	22	3.0	131	-64		ROSARIO	27	19	36	10	23	2.1	267	134	
	CANTON	24	18	27	10	21	3.3	94	8		BUENOS AIRES	25	17	34	9	21	0.6	399	305	
	NANNING	23	17	33	7	20	2.5	28	-29		SANTA ROSA	26	13	34	3	19	-0.5	54	-32	
CANARY	LAS PALMAS	23	16	31	13	20	1.2	2	-14		TRES ARROYOS	24	13	32	5	18	-0.1	96	15	
MOROCC	CASABLANCA	20	11	25	8	16	0.9	86	46	MARSHA	MAJURO	29	27	30	25	28	0.7	191	-13	
	MARRAKECH	23	12	34	7	17	1.2	60	21	NEW CA	NOUMEA	29	23	34	20	26	0.4	199	50	
ALGERI	ALGER	21	7	29	0	14	1.1	35	-25	FIJI	NAUSORI	32	23	34	22	28	1.4	458	68	
	BATNA	19	4	27	-3	11	2.2	15	-47	SAMOA	PAGO PAGO	32	26	34	25	29	1.3	273	-10	
TUNISI	TUNIS	21	11	28	5	16	2.4	10	-31	TAHITI	PAPEETE	32	25	33	23	28	0.9	207	30	
NIGER	NIAMEY	40	24	45	19	32	0.9	0	-3	PNEWGU	PORT MORESBY	30	24	32	23	27	0.4	209	21	
MALI	TIMBUKTU	37	21	43	14	29	1.8	0	0	NZEALA	AUCKLAND	22	16	25	13	19	***	88	***	
	BAMAKO	39	25	41	20	32	0.9	2	0		WELLINGTON	20	15	23	10	17	***	35	***	
MAURIT	NOUAKCHOTT	32	18	40	15	25	0.7	0	-1	AUSTRA	DARWIN	32	25	34	22	29	0.4	279	-94	
SENEGA	DAKAR	24	18	33	17	21	0.4	0	0		BRISBANE	28	19	31	15	23	-0.3	60	-64	
CHAGOS	DIEGO GARCIA	30	26	33	24	28	-0.3	156	-45		PERTH	30	15	38	9	22	-0.5	4	-10	
LIBYA	TRIPOLI	24	11	35	4	17	2.1	9	-24		CEDUNA	26	12	40	6	19	-0.5	1	-13	
	BENGHAZI	21	13	30	8	17	1.8	32	8		ADELAIDE	25	14	35	9	19	-0.7	10	-12	
EGYPT	CAIRO	25	14	32	11	20	2.2	0	-6		MELBOURNE	23	13	36	4	18	-0.2	39	8	
	ASWAN	31	16	37	10	24	1.8	0	0		WAGGA	28	12	37	7	20	-0.4	25	-16	
ETHIOP	ADDIS ABABA	22	***	26	9	***	***	4	-63		CANBERRA	25	10	34	6	18	0.2	42	-8	

Based on Preliminary Reports



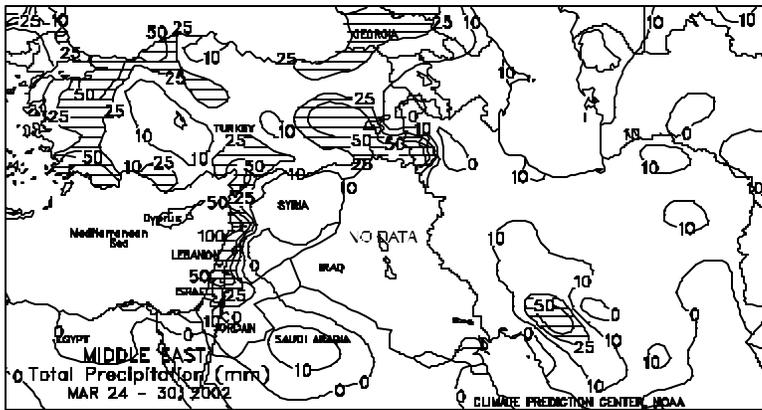
### EUROPE

Mostly dry weather (less than 3 mm) in England, France, the Benelux countries, and Germany helped sugar beet planting and other fieldwork. Soil moisture remained adequate to abundant for winter grains and oilseeds in this region. In northeastern Spain, light showers (2-17 mm) boosted topsoil moisture for early summer crop development. Mostly dry weather (less than 5 mm) elsewhere in Spain, Portugal, and Italy favored corn and sunflower planting, but more rain was needed in Italy to increase low reservoir levels in the north and to improve durum wheat prospects in the south. In eastern Europe, scattered, light showers (2-28 mm) fell across the Czech Republic, Slovakia, and the western Balkans, while more substantial and much-needed rain (5-40 mm) fell across eastern Romania and much of Bulgaria. Precipitation in the latter areas improved topsoil moisture, but persistent, soaking rains are still needed to end chronic dryness. Rainfall would also be welcome in western Romania, southern Hungary, and northern Serbia. Elsewhere in eastern Europe, dry weather prevailed. Temperatures in England and the Iberian peninsula averaged about 1 to 4 degrees C above normal, while throughout the remainder of Europe, temperatures averaged about 0 to 3 degrees C below normal.



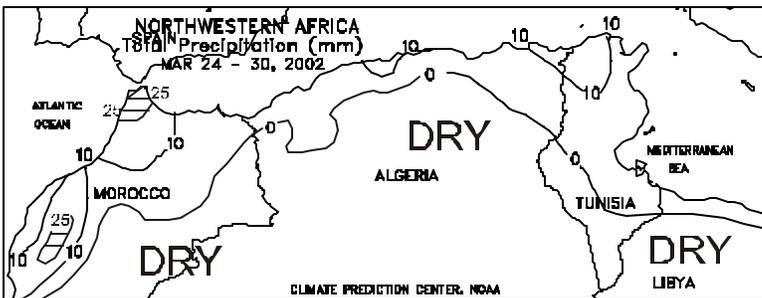
### FSU-WESTERN

Unseasonably mild weather prevailed over most of the region. Weekly temperatures averaged 1 to 3 degrees C above normal in Ukraine and southern Russia, promoting further greening of winter grains. Furthermore, the mild weather raised soil temperatures to favorable levels for early spring grain planting. Recent reports indicated that fieldwork for spring grain planting was underway in Ukraine and southern Russia. Farther north, winter grains remained dormant throughout most of northern Russia, although unseasonably mild weather (temperatures averaging 1 to 3 degrees C above normal) melted most protective snow cover. Extreme maximum temperatures ranged from 5 to 15 degrees C in northern Russia and the Baltics, and 15 to 18 degrees C in Belarus, Ukraine, and southern Russia. Light to moderate precipitation (10-25 mm or more) fell from Moldova, eastward across southern Ukraine and southern areas in Russia (North Caucasus and the lower Volga Valley), boosting soil moisture for the upcoming growing season. The precipitation in Moldova and southern Ukraine was especially beneficial, helping to ease long-term dryness that had persisted since early December in Moldova and early January in Ukraine. Elsewhere in northern Ukraine, northern Russia, Belarus, and the Baltics, precipitation (less than 10 mm) was light and scattered.



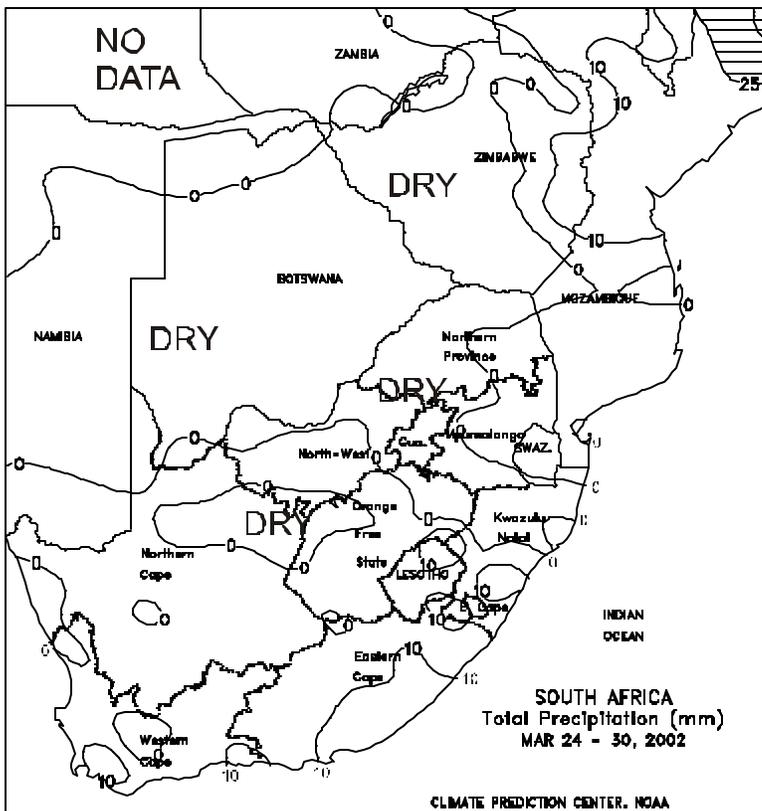
**MIDDLE EAST**

Widespread rain (10-25 mm) continued across Turkey, maintaining favorable moisture levels for vegetative to reproductive winter wheat. Locally heavy rain (25 mm or more) also fell along the eastern Mediterranean coast as far south as Israel. Temperatures in the wettest areas averaged 1 to 4 degrees C below normal, slowing crop growth and lowering moisture requirements. In addition, sub-freezing temperatures limited crop development on central Turkey's Anatolian Plateau. Following last week's beneficial rainfall, light showers lingered across Syria and, as depicted by satellite imagery, northern Iraq. However, shower activity in southeastern Turkey continued to improve irrigation reserves along the Tigris and Euphrates Rivers. Warmer, drier weather returned to western Iran, but scattered, mostly light showers (5-10mm, locally exceeding 25 mm) continued in the south and east. Additional rainfall is needed throughout Iran to help overcome the impact of 3 years of drought on long-term moisture reserves.



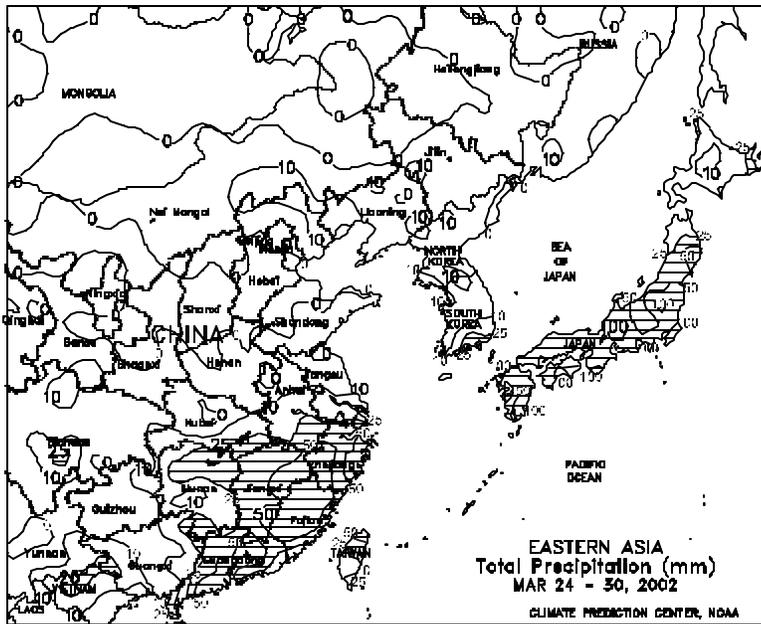
**NORTHWESTERN AFRICA**

Light showers (less than 25 mm) dampened topsoils throughout Morocco, Algeria, and Tunisia. However, sub-soil moisture remains limited in these areas. Over the last 4 weeks, persistent showers have stabilized crops in Morocco and western Algeria, while rainfall deficits continued to be high in eastern Algeria and Tunisia. Above-normal temperatures (1-5 degrees C) in western areas increased crop water demands on winter grains entering the reproduction phase.



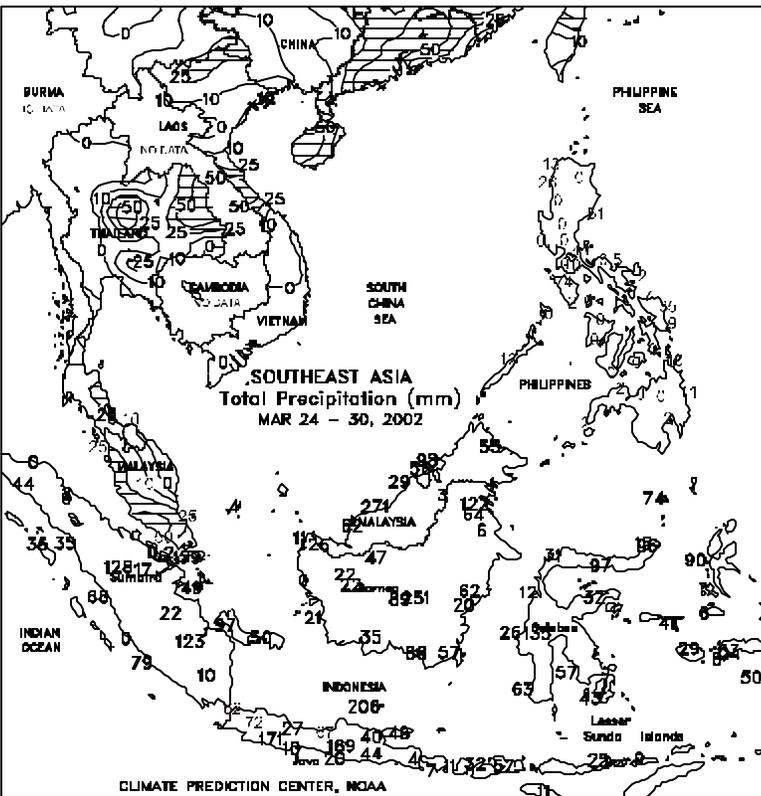
**SOUTH AFRICA**

Warm, dry weather continued to dominate the region. Conditions were favorable for maturing corn, sunflowers, and other summer crops, but later planted varieties would have benefited from additional rainfall through the end of March. Scattered showers (10-25 mm or more) supplemented late-season irrigation requirements of sugarcane and other summer crops in southern KwaZulu-Natal and sections of Eastern Cape. Dry, seasonably warm weather continued in Western Cape, helping summer harvests.



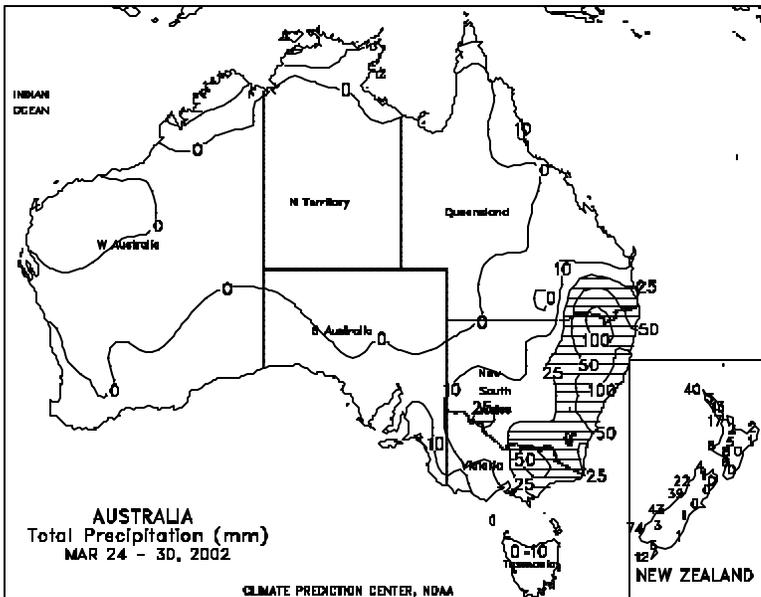
**EASTERN ASIA**

Seasonably dry weather continued across the North China Plain, necessitating supplemental irrigation for vegetative winter wheat. Typically in this region, rainfall during late March averages about 5 mm per week, increasing to about 10 mm per week by mid-May, and over 25 mm per week by mid-June when the rainy season starts. Temperatures averaged 2 to 4 degrees C above normal throughout the North China Plain and Manchuria, favoring early summer crop fieldwork. Widespread rain (25-70 mm) covered southeastern China (Zhejiang, Fujian, Guangdong, Jiangxi, and Hunan), boosting moisture supplies for early rice transplanting and sugarcane. The rain eased short-term dryness in Guangdong and Fujian. Light rain (less than 15 mm) prevailed elsewhere in the Yangtze Valley and southwestern China (Guangxi, Guizhou, and Sichuan). Temperatures averaged 1 to 3 degrees C above normal across the Yangtze Valley and southern China.



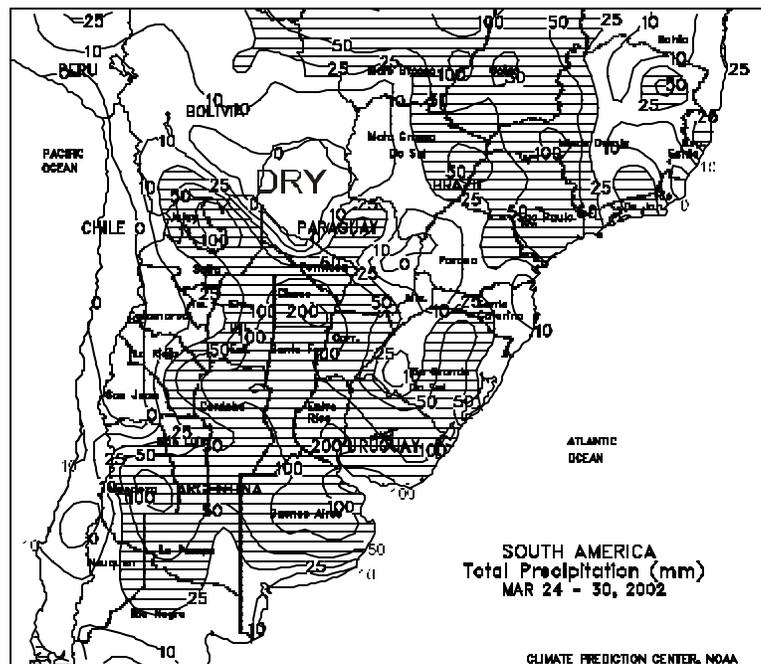
**SOUTHEAST ASIA**

Variable showers (10-90 mm) continued to favor second-crop rice across southern and eastern Thailand. Drier weather favored second-crop grain harvesting and eased wetness from last week's heavy rains. Moderate showers (25-100 mm) favored oil palm in peninsular Malaysia and Sumatra, Indonesia. In Java, Indonesia, showers (25-100 mm) continued to delay main-season rice harvesting.



**AUSTRALIA**

Moderate to heavy rain (10-50 mm, locally exceeding 100 mm) covered much of the main eastern summer crop region (southeastern Queensland and northeastern New South Wales). The rainfall hampered harvesting and likely raised concern for open cotton, especially in locations near Moree, New South Wales, that recorded the heaviest rainfall (totals near or exceeding 100 mm). However, the moisture was generally favorable for grazing land and pastures, and in parts of the southeast (South Australia, Victoria, and southern New South Wales), increased soil moisture for winter crop establishment. Winter grain and oilseed planting activities typically begin in April and May. Dry, seasonably warm weather continued in Western Australia. In New Zealand, mostly dry weather continued in major small grain and pasture areas, with scattered showers (10 mm or more) in the northern peninsula of North Island and along the west coast of South Island.



**SOUTH AMERICA**

In central Argentina, late-week heavy rain (50-125 mm) delayed summer crop harvesting and caused local flooding. The rainfall boosted soil moisture for immature summer crops and second-crop soybeans, but drier weather is needed for crop maturation and harvesting. In the northern cotton areas, another week of heavy showers (50-200 mm) also delayed early cotton harvesting and possibly damaged maturing cotton. According to the Argentine Agricultural Secretariat as of March 22, nationwide corn, sunflowers, and sorghum were 17, 32, and 10 percent harvested, respectively, compared with 17, 50, and 8 percent last year at this time. In southern Brazil, moderate to heavy rain (50-100 mm) continued to slow soybean harvesting in Mato Grosso and Goias. Heavy rain (50-100 mm) also fell across western and southern Minas Gerais and Sao Paulo, raising concerns about maturing coffee, citrus, and sugarcane. Light to moderate showers (10-50 mm) allowed harvesting to progress in Parana and Rio Grande do Sul.

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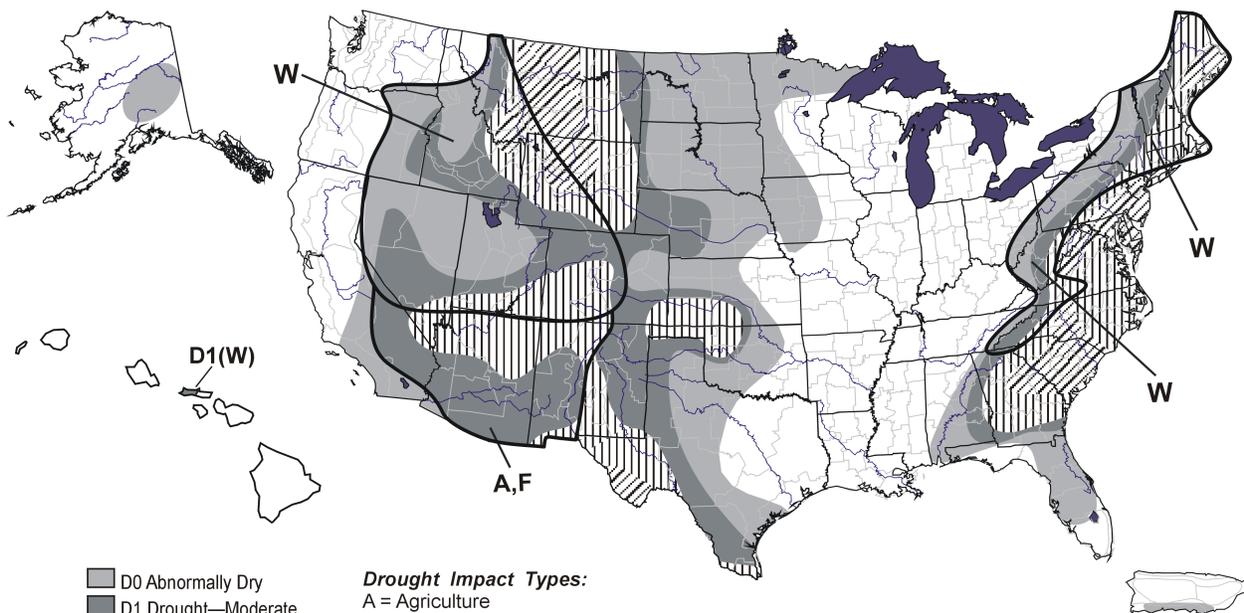
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# U.S. Drought Monitor

March 26, 2002  
Valid 8 a.m. EST



- D0 Abnormally Dry
- D1 Drought—Moderate
- ▨ D2 Drought—Severe
- ▩ D3 Drought—Extreme
- ⊠ D4 Drought—Exceptional

**Drought Impact Types:**  
A = Agriculture  
W = Water (Hydrological)  
F = Fire danger (Wildfires)  
— Delineates dominant impacts  
(No type = All 3 impacts)

*The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.*

<http://drought.unl.edu/monitor/monitor.html>



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