

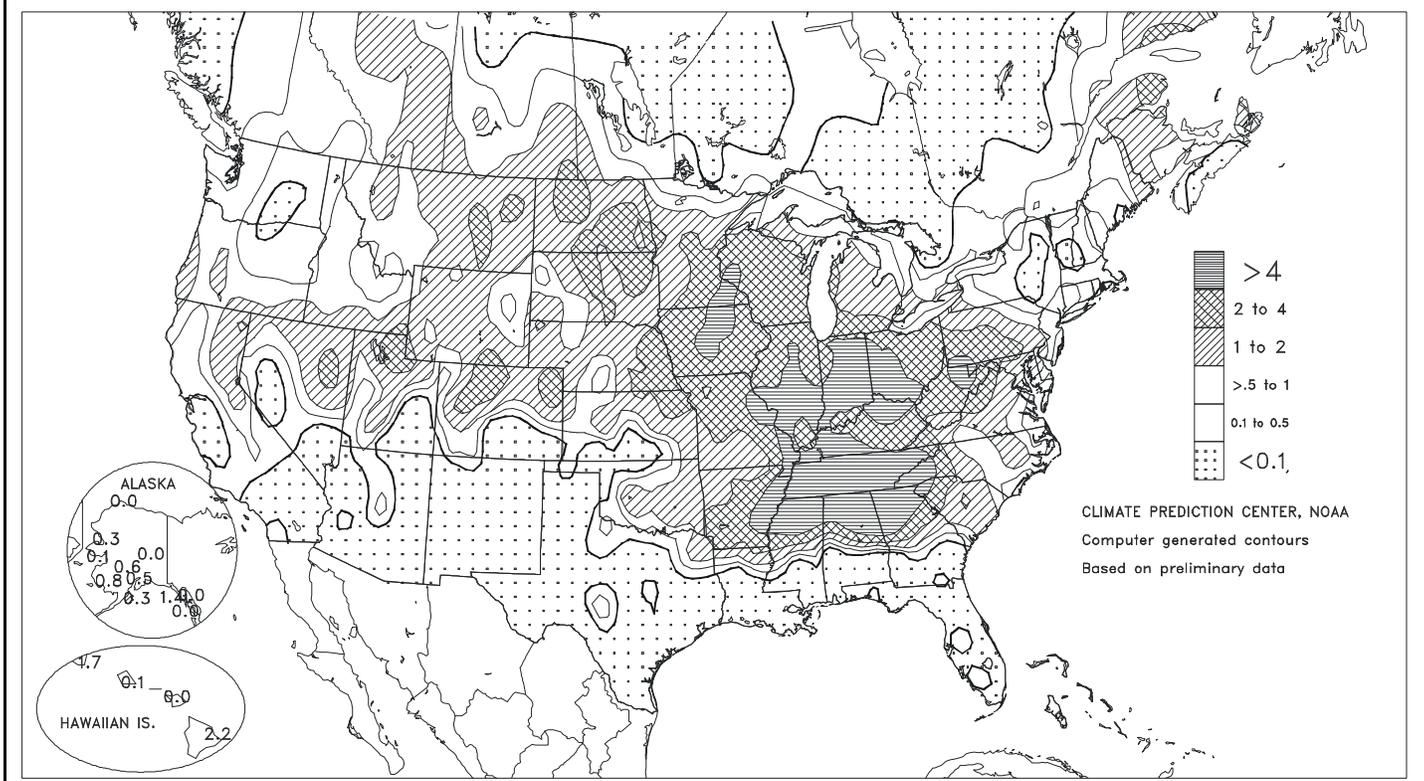
WEEKLY WEATHER AND CROP BULLETIN

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)

MAY 4 - 10, 2003



HIGHLIGHTS

May 4 - 10, 2003

Highlights provided by USDA/WAOB

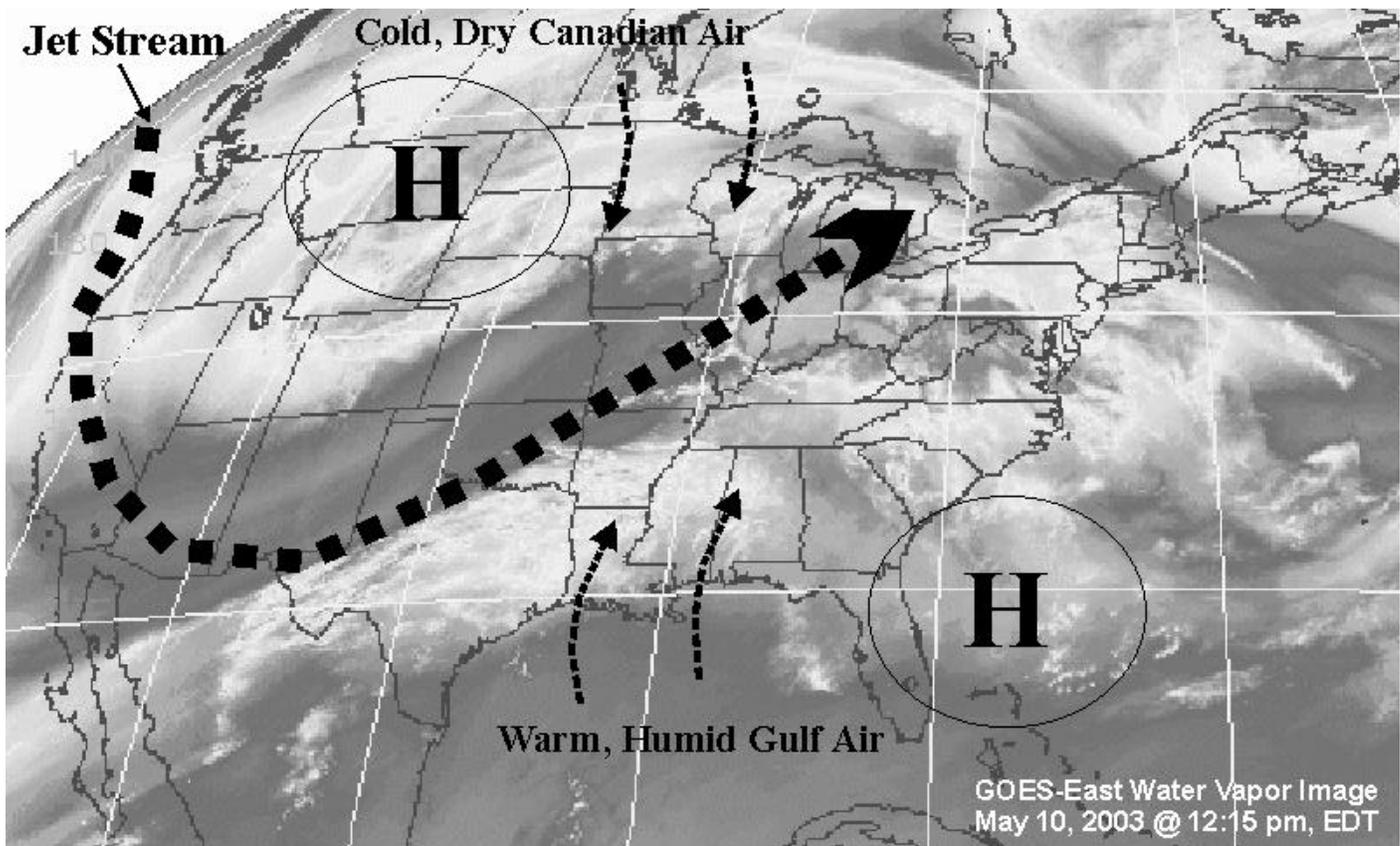
A rash of severe thunderstorms struck the **Plains, Midwest, South, and East**, slowing or halting fieldwork and causing local wind, hail, and flood damage, but boosting soil moisture reserves for emerging summer crops. According to preliminary information from the National Weather Service's Storm Prediction Center (SPC), there were nearly 400 tornadoes spotted during the week, along with more than 700 reports of wind damage and nearly 1,800 reports of hail at least three-quarters of an inch in diameter. Weekly rainfall totaled at least 2 inches across large portions of the **northern Plains, Midwest, and interior South**. More than 4 inches soaked areas from the

(Continued on page 7)

Contents

Summary of Severe Weather Outbreaks, April 28 - May 10 . . .	2
Crop Moisture Maps	4
Palmer Drought Maps	5
Weather Data for Mississippi and the Missouri Bootheel & U.S. Crop Production Highlights	6
Temperature Departure Map	7
Soil Temperature & Pan Evaporation Maps	8
Extreme Maximum & Minimum Temperature Maps	9
Growing Degree Day Maps	10
May 6 Drought Monitor	11
National Weather Data for Selected Cities	12
April Weather and Crop Summary	15
April Maximum & Minimum Temperature Maps	17
April Precipitation & Temperature Maps	18
April Weather Data for Selected Cities	19
National Agricultural Summary	20
Crop Progress and Condition Tables	21
Percent of Normal Precipitation Map, January 1 - May 10	23
State Agricultural Summaries	24
International Weather and Crop Summary	32
Northern Hemisphere Winter Grain Review	37
Subscription Information	40

Summary of Severe Weather Outbreaks, April 28 - May 10



An unprecedented severe weather outbreak gripped much of the Central and Eastern United States from April 28 - May 10. Numerous thunderstorms produced strong winds, hail, and tornadoes, causing fatalities and widespread property damage, while establishing new records for severe weather outbreaks in the United States.

The unusual severity and frequency of severe storms were a result of a combination of several meteorological factors. The water vapor image shown above, which depicts moisture content in the upper levels of the atmosphere (>15,000ft), exhibits a pronounced trough (or dip) in the jet stream over the Western United States. This alignment allowed an area of high pressure over the Bahamas to push warm, moist, unstable air from the Gulf of Mexico northward into the Central and Eastern United States. At the same time, cold, dry air pushed southward out of central Canada into the central and northern Plains, creating a sharp north-to-south contrast in air temperature and moisture content. Additional fuel for severe weather was provided by the jet stream, which raced northeastward across the central part of the Nation. Although the satellite image shown here was

taken on May 10, this overall weather pattern persisted for nearly 2 weeks, beginning on April 28.

The statistics of this severe weather event are given below. Several new records were set, with some of these numbers likely to increase as the month of May progresses. Tornado and hail composite maps are given to the right.

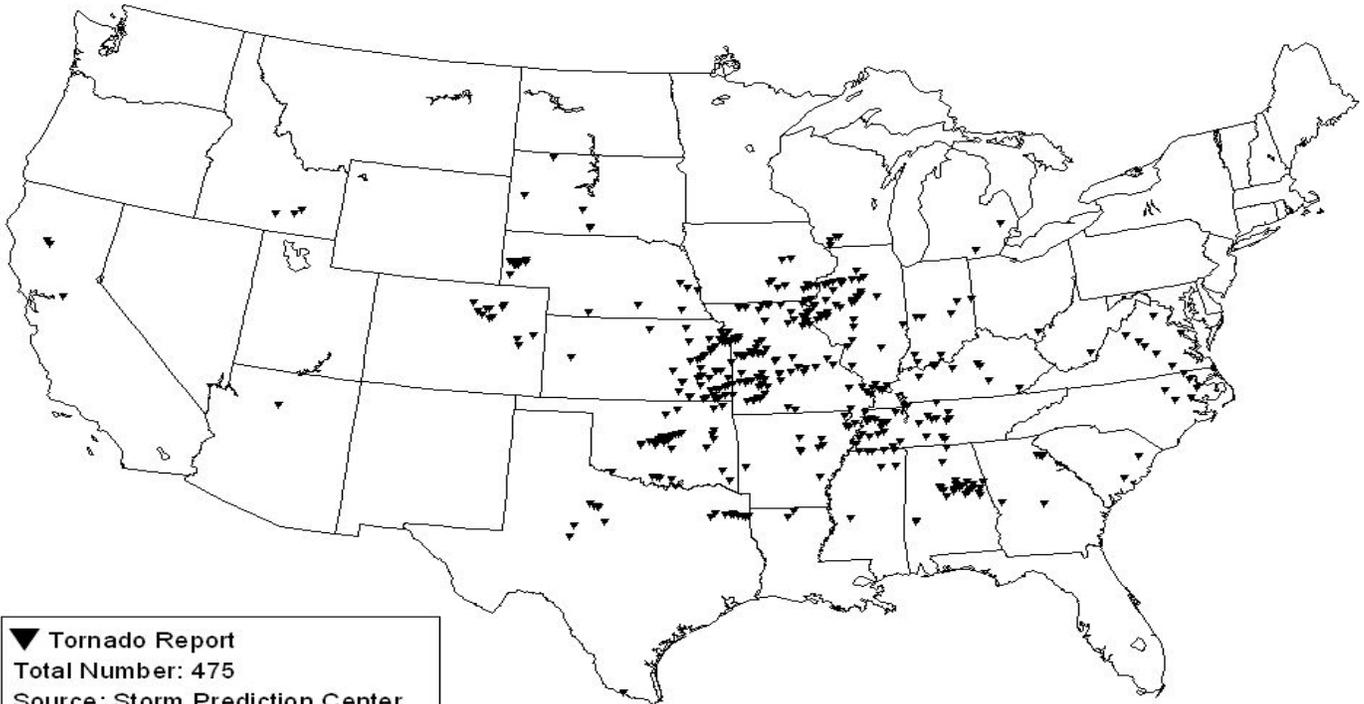
Previous May Record.....	391 (1995)
Previous Monthly Record.....	399 (June 1992)
May 1-10, 2003.....	412*
* First month to ever break 400	

May 2003, Month-to-Date Death Toll....	43
Final May 2002 Death Toll.....	4
Average May Death Toll, 2000-2002.....	2
Most May Tornado-Related Deaths.....	163 (1953)

Year-to-Date, 2003 Death Toll.....	53
Average Yearly Death Toll, 2000-2002.....	44

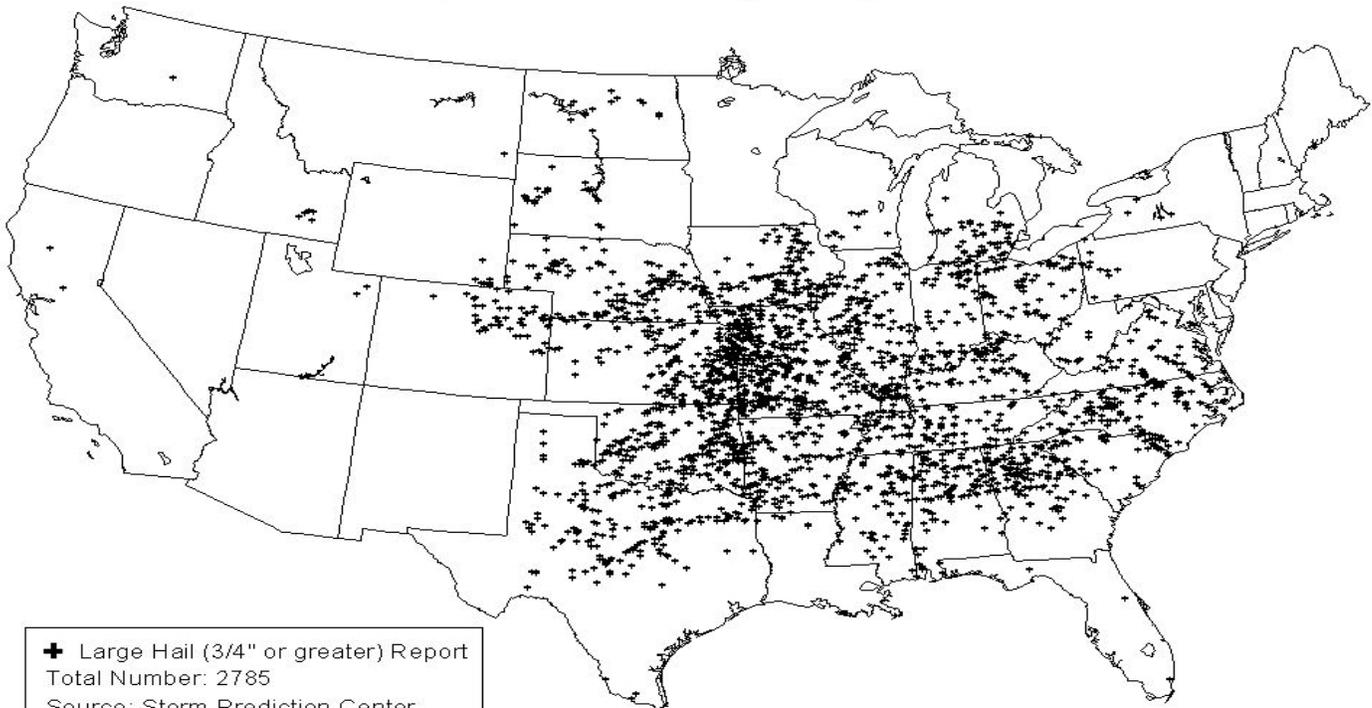
These statistics were provided by the Storm Prediction Center (SPC) and are subject to change.

United States - Tornadoes April 28 - May 10, 2003



▼ Tornado Report
Total Number: 475
Source: Storm Prediction Center
Based on Preliminary Data

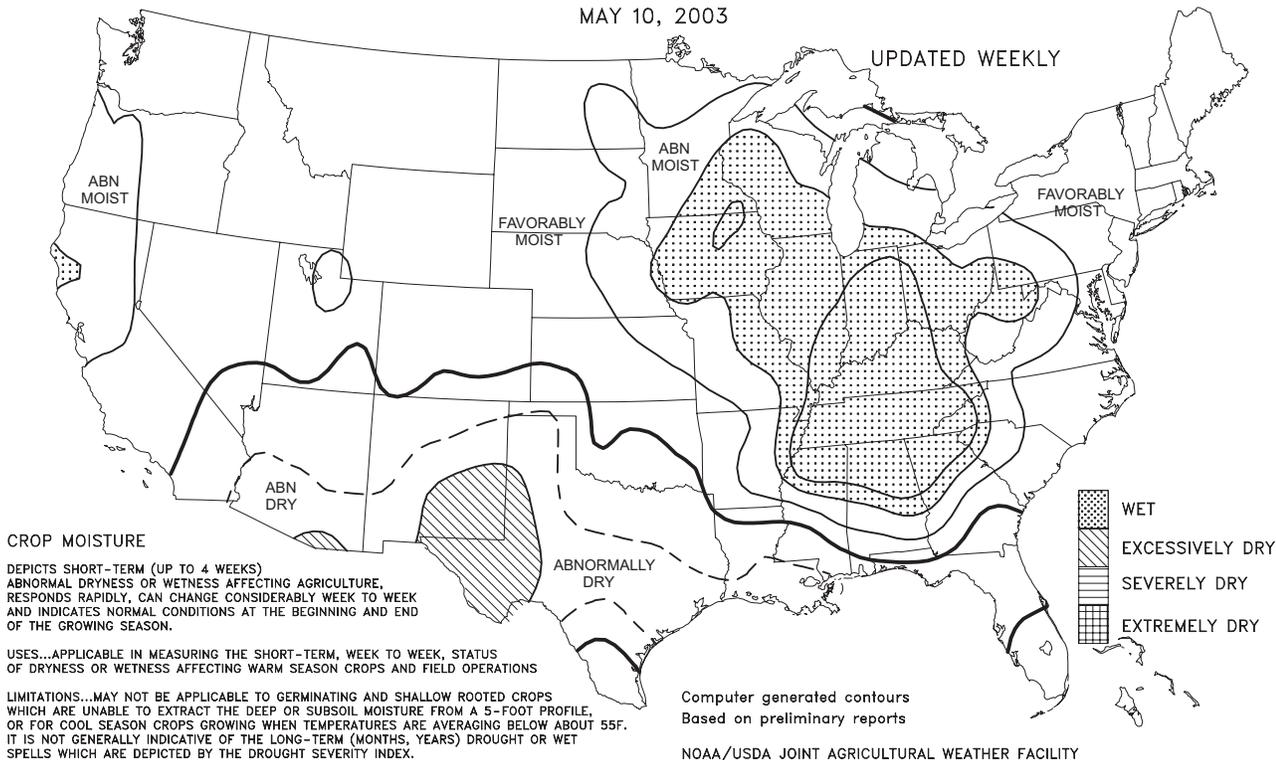
United States - Large Hail April 28 - May 10, 2003



+ Large Hail (3/4" or greater) Report
Total Number: 2785
Source: Storm Prediction Center
Based on Preliminary Data

Crop Moisture
SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-F.T. SOIL PROFILE
MAY 10, 2003

UPDATED WEEKLY



CROP MOISTURE

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

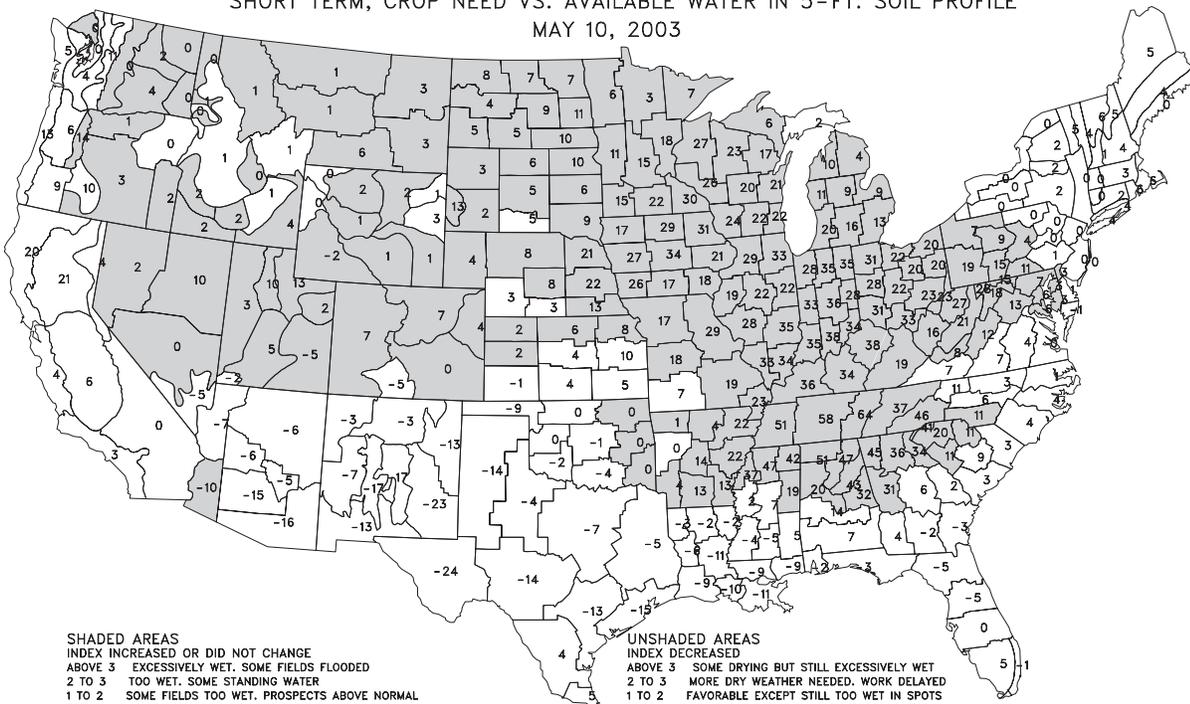
USES...APPLICABLE IN MEASURING THE SHORT-TERM, WEEK TO WEEK, STATUS OF DRYNESS OR WETNESS AFFECTING WARM SEASON CROPS AND FIELD OPERATIONS

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

Computer generated contours
Based on preliminary reports

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

Crop Moisture Index
SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-F.T. SOIL PROFILE
MAY 10, 2003



SHADED AREAS

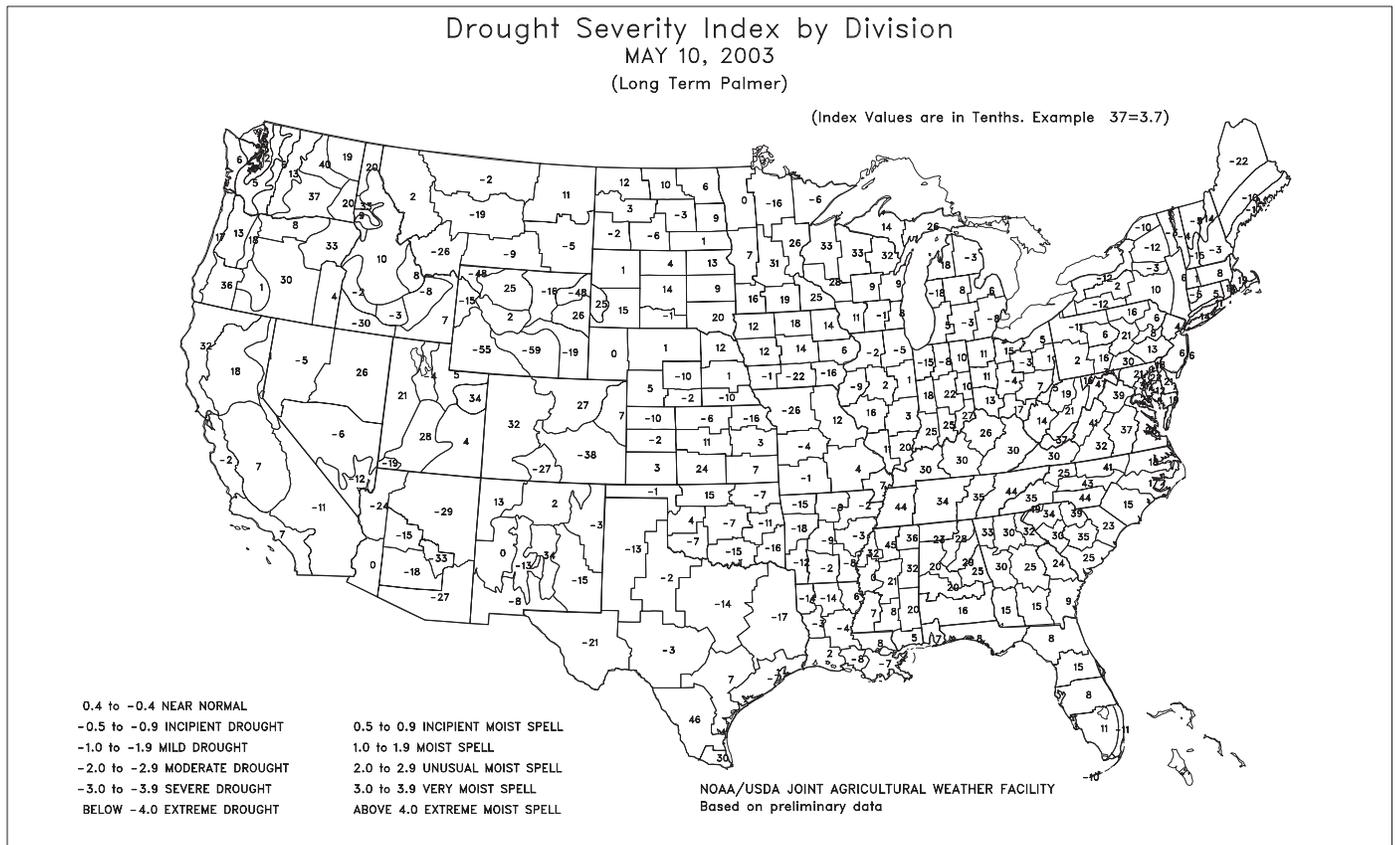
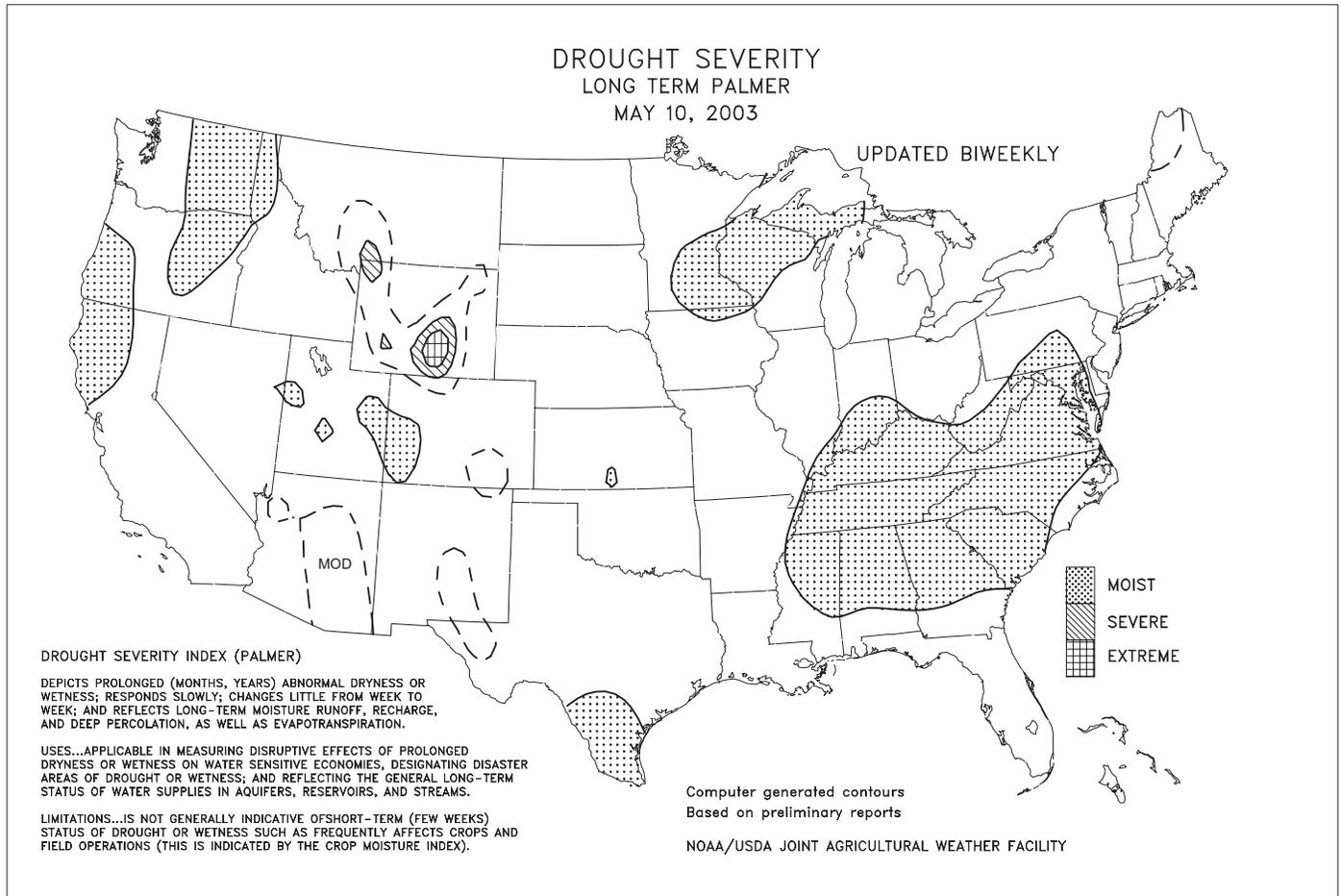
INDEX INCREASED OR DID NOT CHANGE
 ABOVE 3 EXCESSIVELY WET. SOME FIELDS FLOODED
 2 TO 3 TOO WET. SOME STANDING WATER
 1 TO 2 SOME FIELDS TOO WET. PROSPECTS ABOVE NORMAL
 0 TO 1 MOISTURE ADEQUATE FOR PRESENT CROP NEEDS
 0 TO -1 PROSPECTS IMPROVED BUT RAIN STILL NEEDED
 -1 TO -2 SOME IMPROVEMENT BUT STILL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

UNSHADED AREAS

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

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

BASED ON PRELIMINARY DATA



Weather Data for Mississippi and the Missouri Bootheel

Weather Data for the Week Ending May 10, 2003

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

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							4-INCH SOIL TEMP. °F		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
MS BATESVILLE X	84	70	88	64	77	10	4.43	3.20	4.20	11.48	90	21.31	97	-	-	0	0	2	1
MS BELZONI X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MS CLARKSDALE X	84	68	90	63	76	7	5.08	3.92	3.71	8.62	71	17.37	78	-	-	1	0	3	2
MS CLEVELAND X	85	69	89	64	77	7	2.88	1.62	2.83	8.21	60	17.46	76	-	-	0	0	2	1
MS GREENVILLE X	86	72	89	67	79	9	0.09	-1.17	0.05	6.80	52	-	-	-	-	0	0	2	0
MS GREENWOOD X	86	71	89	66	79	8	2.13	0.87	1.32	8.22	62	17.04	75	-	-	0	0	3	2
MS INDIANOLA 1S	89	72	92	68	80	-	0.29	-	0.28	5.81	-	13.25	-	80	75	4	0	2	0
MS INVERNESS 5E	88	73	91	68	81	-	0.02	-	0.02	4.38	-	13.03	-	84	76	4	0	1	0
MS LYON	87	70	90	63	78	-	5.64	-	4.64	11.40	-	17.49	-	79	70	1	0	3	2
MS MACON	88	71	91	65	79	-	0.14	-	0.11	11.14	-	21.49	-	82	74	2	0	3	0
MS MOORHEAD X	85	72	89	66	78	8	0.61	-0.65	0.32	6.50	49	17.35	74	-	-	0	0	3	0
MS ONWARD	88	71	90	67	79	-	2.39	-	2.30	-	-	-	-	78	74	1	0	2	1
MS PERTHSHIRE	86	70	89	65	78	-	7.36	-	4.55	11.41	-	18.07	-	82	72	0	0	3	2
MS ROLLING FORK X	90	70	92	67	80	10	1.57	0.32	1.47	7.62	56	17.64	74	-	-	3	0	2	1
MS SCOTT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MS SIDON	87	71	90	67	79	-	1.20	-	1.15	6.69	-	14.46	-	85	74	0	0	2	1
MS STARKVILLE	86	70	89	62	78	10	0.52	-0.66	0.38	9.23	69	20.62	86	83	73	0	0	3	0
MS TUNICA X	86	69	89	64	77	9	2.21	0.88	1.65	9.25	-	-	-	-	-	0	0	2	2
MS TUNICA 1W	86	69	89	63	78	-	3.29	-	2.16	6.16	-	-	-	76	71	0	0	3	2
MS VANCE	84	69	87	63	77	-	6.36	-	4.66	12.79	-	18.69	-	73	71	0	0	3	2
MS VERONA	85	68	88	60	76	-	3.41	-	2.51	12.17	-	20.49	-	80	70	0	0	3	2
MS VICKSBURG X	87	72	89	69	80	9	0.84	-0.42	0.71	12.66	92	23.84	96	-	-	0	0	2	1
MS YAZOO CITY X	87	71	90	68	79	9	0.99	-0.34	0.97	8.39	57	17.39	67	-	-	2	0	2	1
MS STONEVILLE X	88	68	92	66	78	10	0.06	-1.12	0.04	6.46	48	15.51	65	85	75	3	0	2	0
MO DELTA	79	64	84	54	71	7	3.62	2.52	1.71	9.49	79	13.12	67	74	65	0	0	3	3
MO STEELE	84	66	85	59	75	10	10.32	9.39	2.75	15.06	127	22.42	115	74	69	0	0	6	5
MO GLENNONVILLE	82	66	86	57	74	9	1.19	0.40	0.48	7.42	68	12.63	73	72	67	0	0	4	0
MO PORTAGEVILLE LF	83	66	86	57	74	9	4.56	3.62	1.50	10.14	86	16.89	89	80	68	0	0	6	5
MO CLARKTON	83	66	87	58	74	9	2.87	2.08	1.15	9.50	86	15.44	90	75	67	0	0	6	3
MO CARDWELL	84	66	86	59	75	9	7.85	6.70	2.27	14.39	116	21.08	108	77	69	0	0	6	4
MO CHARLESTON	80	64	84	56	72	10	1.41	0.43	0.62	8.71	75	14.54	79	74	67	0	0	5	1
MO PORTAGEVILLE DC	82	66	85	58	74	9	3.28	2.34	1.03	8.83	75	15.17	80	77	67	0	0	6	4

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

X Based on 1971-2000 normals.

- Sufficient data not available.

Weather and Crop Summary: Above-normal temperatures and gusty winds further stressed dry fields and caused crop damage due to blowing sand. Most areas in the Delta received significant rainfall, but little rain fell south of a line across the central Delta. The damage reports came from the southern Delta, where some growers were forced to initiate irrigation earlier than expected. Crop progress was still ahead of schedule for soybeans and cotton, while rice developed at an average pace. Winter wheat quickly matured and streaks of amber were noted.

U.S. Crop Production Highlights

The following information was released by USDA's Agricultural Statistics Board on May 12, 2003. Forecasts refer to May 1.

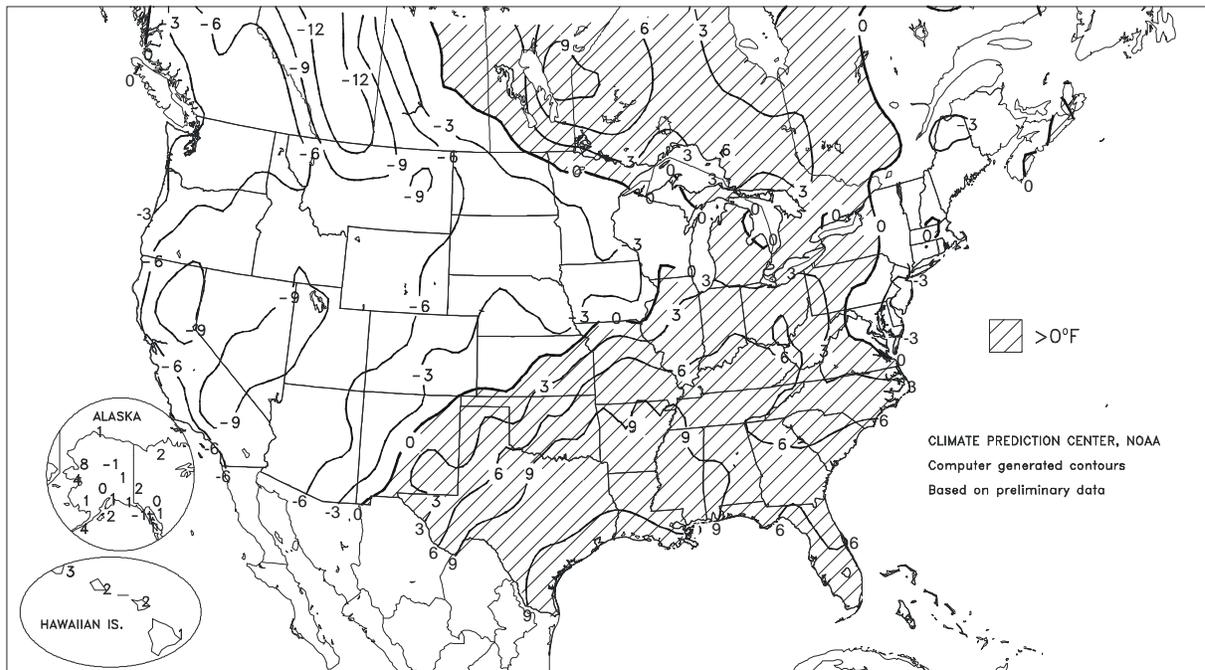
Winter wheat production is forecast at 1.56 billion bushels, up 37 percent (%) from 2002. The yield is forecast at 42.9 bushels per acre, 4.4 bushels higher than last year. The grain area totals 36.4 million acres, up 23% from last season.

Hard Red production is up 55% from a year ago to 942 million bushels. Soft Red is up 12% and totals 372 million bushels. White production totals 250 million bushels, up 24% from a year ago.

The **all orange** forecast for the 2002-03 crop is 11.4 million tons, up 1% from the April forecast but 9% below last season's

utilization. If attained, this will be the lowest utilization since the 1998-99 crop. Florida's all orange forecast, at 200 million boxes (9.00 million tons), is up 1% from the previous forecast but 13% lower than last season. If realized, this will also be Florida's lowest utilized production since the 1998-99 crop of 186 million boxes. The early and midseason varieties forecast is unchanged at 112 million boxes (5.04 million tons) but is 12% lower than last season's final utilization. Florida's Valencia forecast is 88.0 million boxes (3.96 million tons), up 2% from the April forecast but 14% below the previous season. In Arizona, California, and Texas, orange production forecasts are carried forward from April 1.

MAY 4 - 10, 2003



(Continued from front cover)

northern Delta to the southern Appalachians, most locations from **central and southern Illinois to southwestern Ohio**, and parts of the **upper Mississippi Valley**. Already planted summer crops benefited from the rains, except in areas of lowland flooding, but planting progress considerably slowed. In contrast, warm, dry conditions on the **southern Plains** hastened winter wheat maturation and stressed emerging, dryland summer crops. The **western and central Gulf Coast regions** also experienced an increase in crop stress due to topsoil moisture shortages and record warmth (temperatures as much as 12°F above normal). Farther north, however, cool weather and occasional frosts and freezes slowed winter wheat development and summer crop emergence on the **northern Plains**, where temperatures ranged from 2 to 12°F below normal. Farther west, drier weather gradually overspread **California's Central Valley**, but cool weather (weekly temperatures ranged from 6 to 12°F below normal) continued to slow the emergence and development of cotton and other summer crops. Meanwhile, rain and snow showers provided additional drought relief in the **Great Basin** and **interior Northwest**, while dry weather favored fieldwork in the **Southwest**.

At least five tornadoes were reported in the **United States** each day from April 28 to May 10, according to SPC. During the 13-day span, there were also near 1,200 reports of wind damage and about 2,800 reports of hail at least three-quarters of an inch in diameter. The most active severe weather days were a trio of 3-day periods (April 30 - May 2, May 4-6, and May 8-10), with at least 300 reports of severe weather on each of the 9 days.

SPC historical data since 1950 indicates only 9 months—all in May and June—with more than 300 tornadoes, led by 399 in June 1992 and 391 in May 1995, and attained most recently with 310 in May 1999. Very preliminary SPC reports indicated 412 tornadoes from May 1-11, although final numbers are commonly lowered as full tornado tracks are consolidated from individual reports. In addition, 43 tornado-related fatalities were reported through May 11, the Nation's highest monthly toll since May 1999, when 53 people perished (many of them in the F5 tornado that struck **Moore, OK**, on May 3).

In **Tennessee**, month-to-date rainfall through May 11 included 8.00 inches (530 percent of normal) in **Chattanooga** and 9.17 inches (also 530 percent) in **Nashville**. Most of **Chattanooga's** rain (7.33 inches) fell in just 3 days from May 5-7, while **Nashville** experienced its wettest May day on record (4.63 inches on May 5), surpassing 3.95 inches on May 6, 1984. **Nashville** also reported a daily-record total of 2.52 inches on May

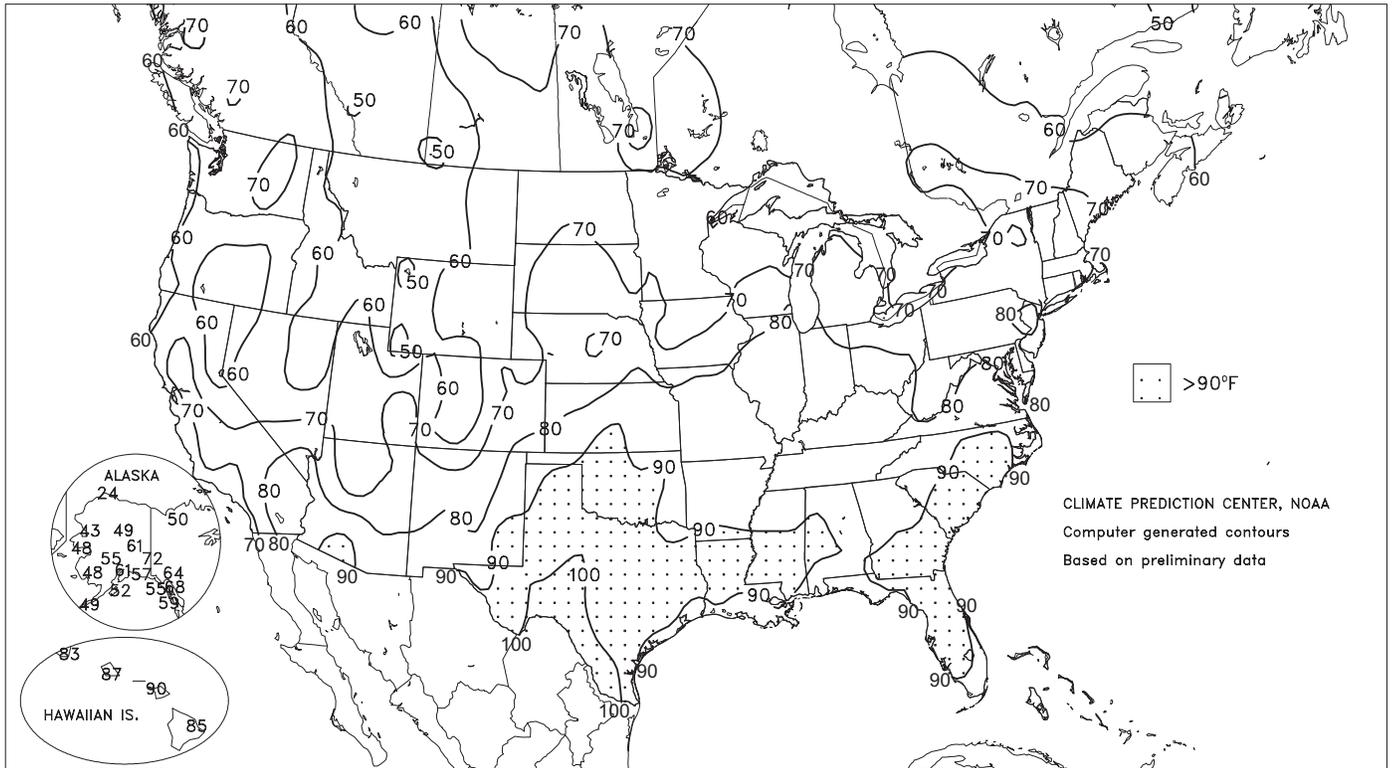
7. Other impressive daily totals across the **South** included 4.22 inches in **Tupelo, MS**, on May 5 and 4.67 inches in **Muscle Shoals, AL**, on May 6. Meanwhile, several rounds of precipitation also struck the **Plains, Midwest, and Intermountain region**. In **Iowa, Sioux City** noted a daily-record total of 1.85 inches on May 4, its second such record in 5 days (1.23 inches fell on April 30). **Fort Wayne, IN**, noted daily-record totals on May 4 (1.82 inches) and 9 (1.51 inches), en route to a month-to-date rainfall of 5.23 inches (396 percent of normal). Farther west, a late-season snowfall blanketed some areas. In **Colorado, Denver** received 7.0 inches in a 24-hour period on May 9-10, while **Grand Junction** (2.7 inches on May 9) experienced its second-snowiest May day behind 5.0 inches on May 18, 1979. **Grand Junction** also netted daily-record precipitation totals on May 4 (0.61 inch) and 9 (0.74 inch). In **Nevada**, May 7-9 snowfall included 11.2 inches in **Ely** and 1.8 inches in **Elko**.

Early in the week, cool weather lingered across the **East**, where daily-record lows included 25°F (on May 4) in **Houlton, ME**, and 32°F (on May 5) in **Atlantic City, NJ**. Meanwhile in **Texas**, scattered daily-record highs included 97°F on May 4 in **Wichita Falls** and 100°F on May 8 in **San Angelo**. Record warmth expanded across the **South** after midweek, resulting in three consecutive daily-record highs (92, 91, and 92°F) in **Baton Rouge, LA**. Farther west, however, **Pocatello, ID**, posted a daily-record low of 25°F on May 6, followed the next day by records in locations such as **Davenport, WA** (24°F), and **Pendleton, OR** (31°F). By May 9, daily-record lows across the **Intermountain region** included 14°F in **Ely, NV**, and 13°F at **Bryce Canyon, UT**.

Wet weather returned to parts of **southern and western Alaska** in early May, boosting May 1-11 precipitation totals to 2.45 inches (219 percent of normal) in **Valdez** and 1.10 inches (250 percent) in **King Salmon**. In contrast, month-to-date totals in **southeastern Alaska** included 0.01 inch (less than 1 percent of normal) on **Annette Island** and 0.11 inch (9 percent) in **Juneau**. Weekly temperatures averaged within 2°F of normal across most of **Alaska**, but as much as 4 to 8°F above normal in **westernmost parts of the State**. Meanwhile, warm, drier-than-normal weather prevailed in **Hawaii**, boosting weekly temperatures 1 to 3°F above normal. On the **Big Island, Hilo** posted a daily-record high of 85°F on May 4, followed 3 days later by a daily record of 90°F in **Kahului, Maui**. Showers increased across **Hawaii's** windward locations after midweek, resulting in May 8-11 (72-hour) totals on the **Big Island** of 2.40 inches in **Glenwood** and 1.79 inches in **Mountain View**.

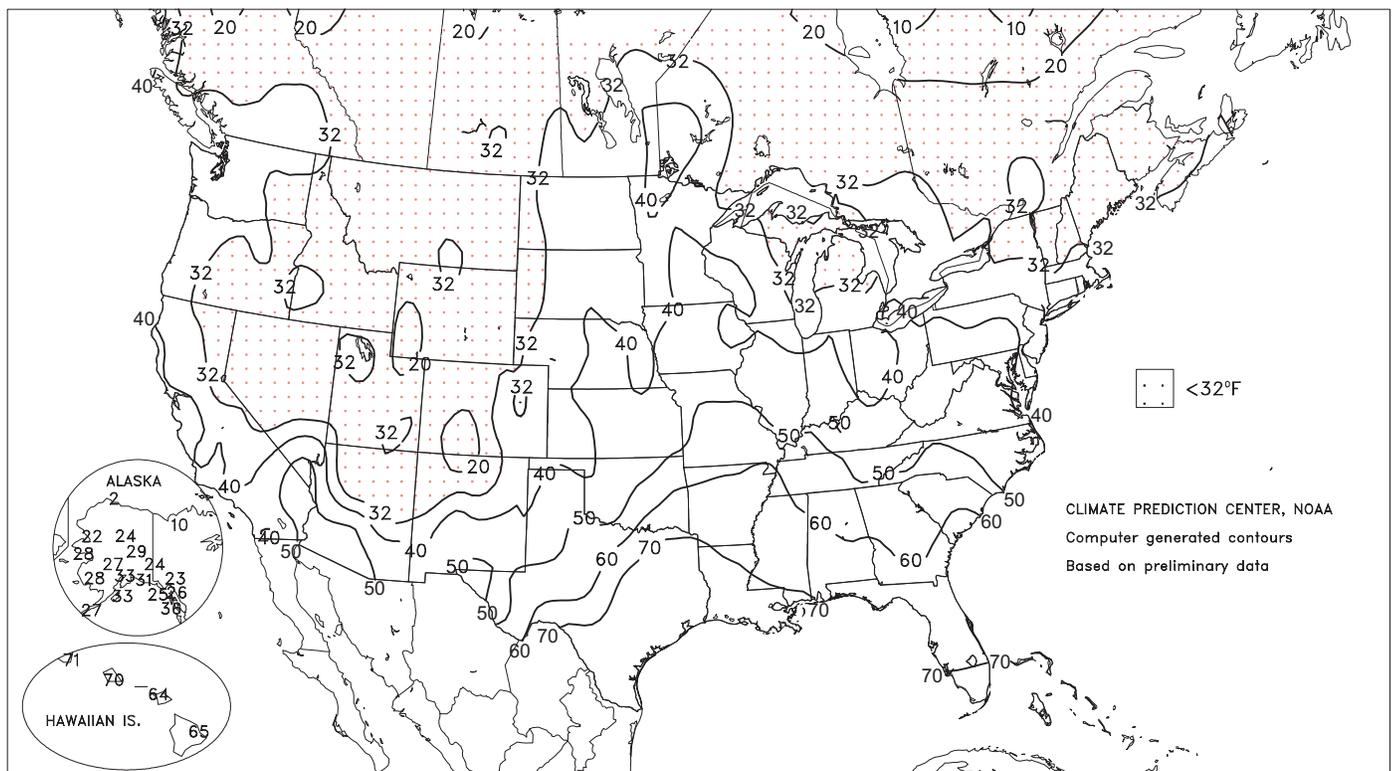
Extreme Maximum Temperature (°F)

MAY 4 - 10, 2003

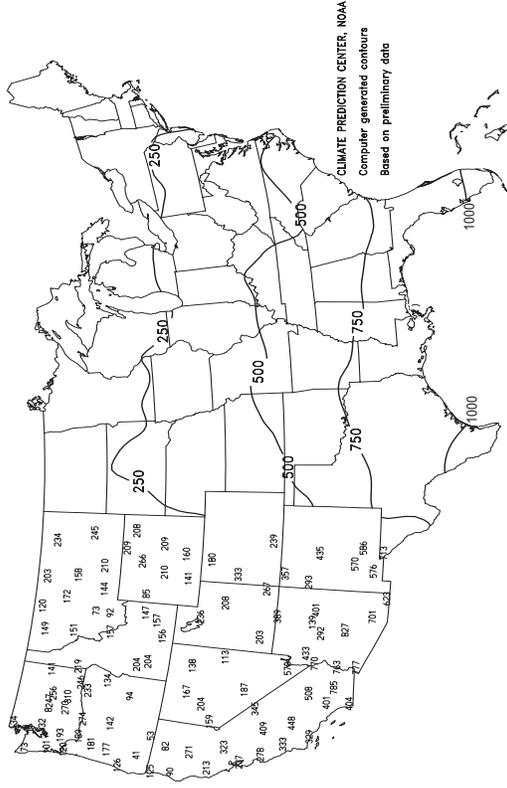


Extreme Minimum Temperature (°F)

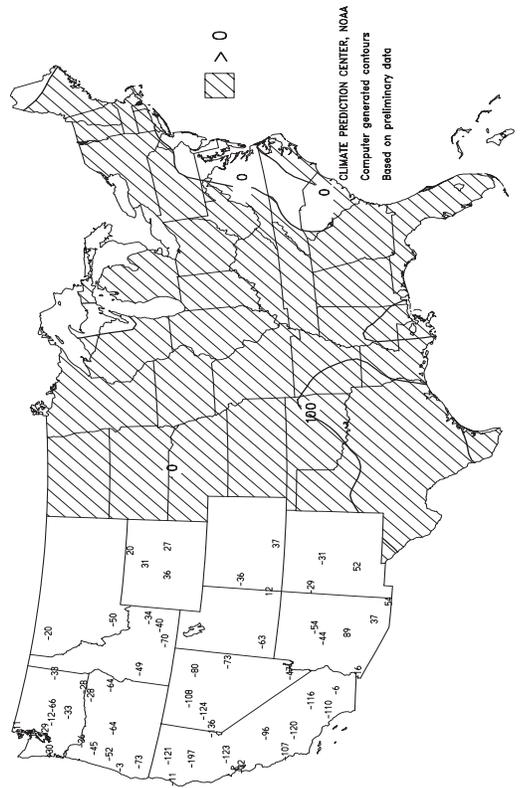
MAY 4 - 10, 2003



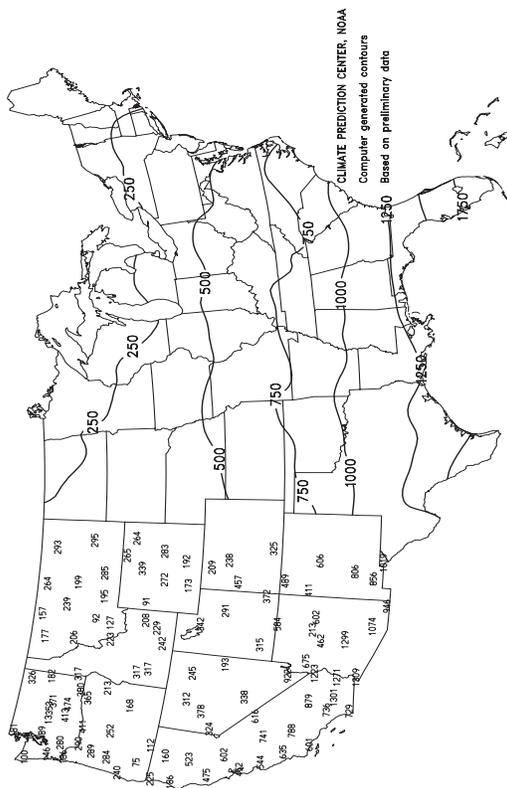
Total Growing Degree Days
APR 1 - MAY 10, 2003



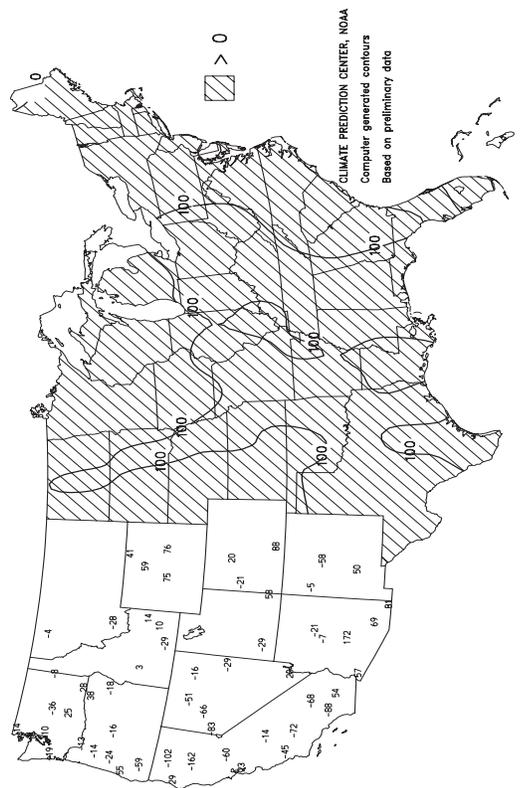
Departure From Normal Growing Degree Days
APR 1 - MAY 10, 2003



Total Growing Degree Days
MAR 1 - MAY 10, 2003

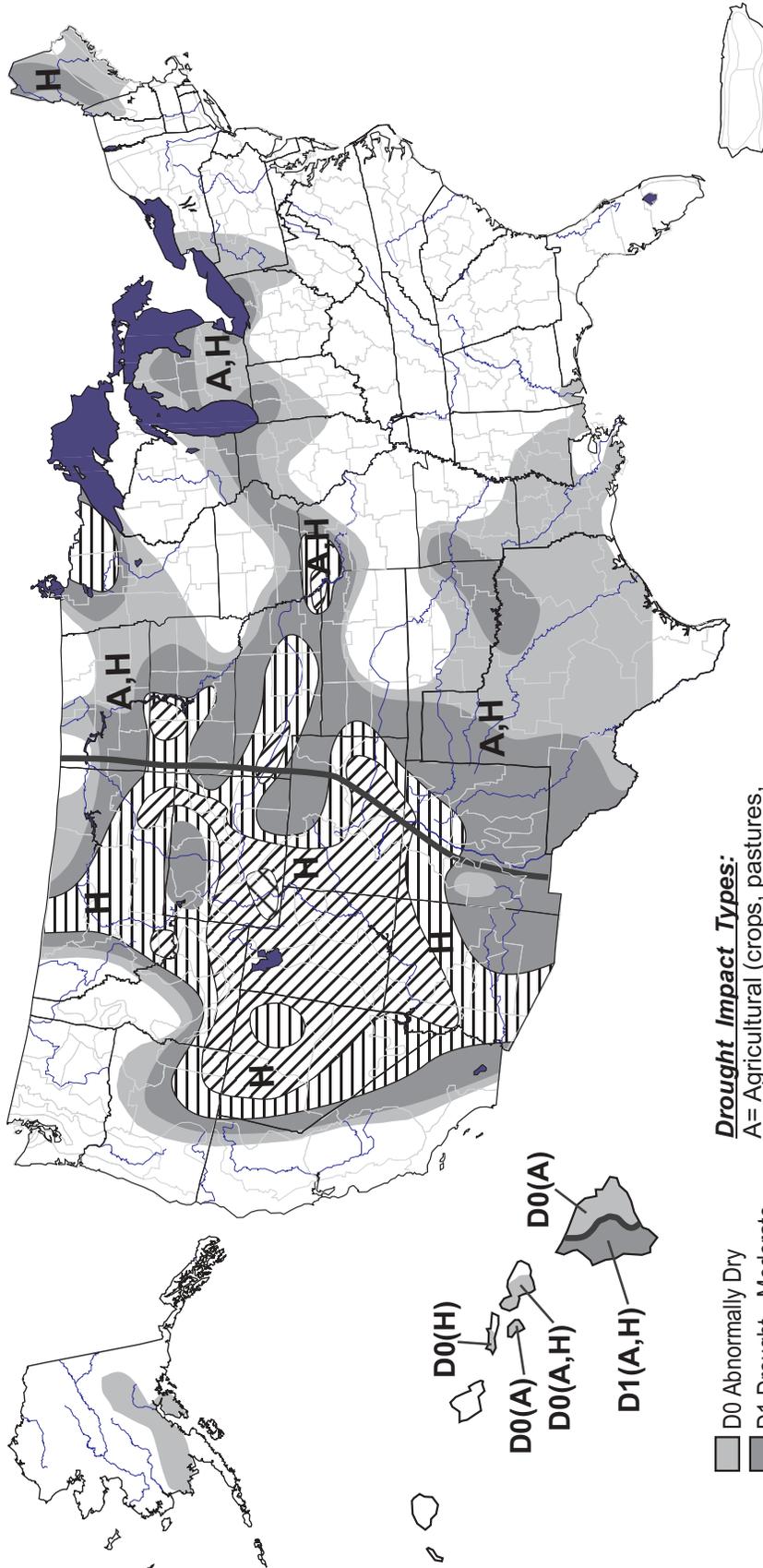


Departure From Normal Growing Degree Days
MAR 1 - MAY 10, 2003



U.S. Drought Monitor

May 6, 2003
Valid 8 a.m. EDT



- Drought Impact Types:**
- A= Agricultural (crops, pastures, grasslands)
 - H= Hydrological (water)
 - Delineates dominant impacts
 - (No type = both impacts)
- D0 Abnormally Dry
 - D1 Drought—Moderate
 - D2 Drought—Severe
 - D3 Drought—Extreme
 - D4 Drought—Exceptional

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



Released Thursday, May 8, 2003
Author: Michael Hayes, NDMC

<http://drought.unl.edu/dm>

National Weather Data for Selected Cities

Weather Data for the Week Ending May 10, 2003

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

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN. SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL IN. SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP.	
																90 AND ABOVE	32 AND BELOW	0.1 INCH OR MORE	5.0 INCH OR MORE
AL BIRMINGHAM	84	68	88	59	76	9	8.31	7.19	5.71	17.05	138	25.07	114	97	67	0	0	4	2
AL HUNTSVILLE	82	65	89	52	73	7	5.67	4.52	4.06	10.73	84	20.01	86	93	74	0	0	3	2
AL MOBILE	89	75	91	70	82	11	0.05	-1.29	0.05	7.99	57	14.11	56	89	57	3	0	1	0
AL MONTGOMERY	88	70	90	61	79	9	0.00	-0.96	0.00	12.04	99	16.83	74	98	62	1	0	0	0
AK ANCHORAGE	52	38	61	33	45	1	0.53	0.42	0.30	1.05	79	2.20	80	81	56	0	0	3	0
AK BARROW	21	11	24	2	16	1	0.00	-0.01	0.00	0.15	65	0.35	76	92	79	0	7	0	0
AK FAIRBANKS	57	35	61	29	46	1	0.00	-0.07	0.00	0.06	10	1.13	75	62	37	0	2	0	0
AK JUNEAU	59	32	68	26	45	-1	0.00	-0.77	0.00	4.42	58	11.54	70	77	43	0	3	0	0
AK KODIAK	50	37	52	33	44	2	0.27	-1.14	0.26	10.41	82	33.86	127	80	65	0	0	2	0
AK NOME	42	31	48	28	36	3	0.11	-0.03	0.05	1.92	132	3.22	103	91	69	0	5	3	0
AZ FLAGSTAFF	56	30	60	23	43	-5	0.00	-0.22	0.00	1.62	38	4.51	50	73	26	0	5	0	0
AZ PHOENIX	83	61	88	55	72	-4	0.00	-0.03	0.00	0.68	50	4.42	149	35	21	0	0	0	0
AZ TUCSON	82	54	85	49	68	-4	0.00	-0.06	0.00	0.55	47	1.65	54	38	20	0	0	0	0
AZ YUMA	80	57	85	53	69	-8	0.00	0.00	0.00	0.24	67	1.35	132	52	31	0	0	0	0
AR FORT SMITH	84	67	90	62	76	9	0.86	-0.29	0.56	6.01	64	9.71	67	92	62	1	0	3	1
AR LITTLE ROCK	86	69	90	66	78	11	0.92	-0.28	0.44	6.39	53	12.11	64	97	67	1	0	3	0
CA BAKERSFIELD	71	50	77	44	61	-7	0.01	-0.02	0.01	1.72	91	3.37	79	77	52	0	0	1	0
CA FRESNO	70	49	75	44	59	-8	0.17	0.11	0.11	4.15	137	5.79	79	84	54	0	0	3	0
CA LOS ANGELES	65	53	68	50	59	-3	0.02	-0.01	0.02	3.25	106	8.07	88	87	63	0	0	1	0
CA REDDING	66	46	72	41	56	-8	0.05	-0.31	0.05	8.85	110	17.86	89	63	55	0	0	1	0
CA SACRAMENTO	67	46	71	40	57	-7	0.10	-0.01	0.08	5.59	140	8.26	73	96	48	0	0	2	0
CA SAN DIEGO	64	56	66	51	60	-4	0.00	-0.03	0.00	3.09	101	7.97	108	82	66	0	0	0	0
CA SAN FRANCISCO	61	50	65	47	55	-3	0.01	-0.07	0.01	6.25	137	10.16	78	82	65	0	0	1	0
CA STOCKTON	69	44	74	40	57	-8	0.04	-0.07	0.02	3.13	92	4.81	56	87	54	0	0	3	0
CO ALAMOSA	60	24	66	19	42	-5	0.00	-0.14	0.00	0.75	63	1.04	63	58	19	0	6	0	0
CO CO SPRINGS	62	38	69	34	50	-2	0.17	-0.31	0.13	2.18	65	2.77	70	82	24	0	0	2	0
CO DENVER INTL	56	37	66	31	47	-5	1.57	1.00	0.69	6.84	251	7.34	231	85	48	0	2	4	2
CO GRAND JUNCTION	60	40	70	34	50	-7	0.84	0.62	0.61	1.81	83	2.96	91	78	52	0	0	4	1
CO PUEBLO	72	43	79	38	57	0	0.00	-0.32	0.00	2.83	106	3.65	112	67	35	0	0	0	0
CT BRIDGEPORT	62	46	72	41	54	-2	1.07	0.16	0.81	8.94	95	14.49	90	92	72	0	0	4	1
CT HARTFORD	69	43	79	37	56	-1	0.46	-0.50	0.35	7.40	81	12.96	82	91	58	0	0	4	0
DC WASHINGTON	68	55	80	49	62	-1	1.27	0.45	0.38	8.03	107	15.88	119	95	68	0	0	6	0
DE WILMINGTON	65	48	76	40	57	-3	0.51	-0.41	0.22	7.91	91	14.95	100	99	65	0	0	5	0
FL DAYTONA BEACH	90	71	93	67	81	8	0.00	-0.51	0.00	11.46	162	17.14	132	93	50	6	0	0	0
FL JACKSONVILLE	91	68	93	63	80	9	0.00	-0.66	0.00	13.66	171	18.41	124	93	48	6	0	0	0
FL KEY WEST	86	79	87	78	83	3	0.00	-0.59	0.00	8.33	176	10.12	120	86	72	0	0	0	0
FL MIAMI	88	77	89	73	82	4	0.01	-0.89	0.01	6.84	96	8.10	73	84	60	0	0	1	0
FL ORLANDO	92	71	94	69	82	7	0.00	-0.57	0.00	9.73	144	12.10	105	95	52	7	0	0	0
FL PENSACOLA	84	75	86	68	79	7	0.00	-0.82	0.00	10.30	90	16.20	75	93	77	0	0	0	0
FL TALLAHASSEE	90	67	92	63	78	6	0.01	-0.87	0.01	9.70	86	16.89	79	99	53	5	0	1	0
FL TAMPA	88	74	90	70	81	5	0.00	-0.44	0.01	8.50	162	11.52	113	88	57	1	0	1	0
FL WEST PALM	88	75	90	70	82	5	0.00	-0.95	0.00	10.87	127	12.80	86	91	65	1	0	0	0
GA ATHENS	80	64	85	55	72	5	2.61	1.81	2.02	11.06	117	17.34	93	94	74	0	0	5	1
GA ATLANTA	81	65	85	56	73	6	4.44	3.55	2.60	15.58	152	21.11	106	94	71	0	0	3	3
GA AUGUSTA	86	65	90	54	75	7	0.12	-0.44	0.08	14.31	172	20.03	118	94	66	2	0	3	0
GA COLUMBUS	88	70	89	60	79	9	0.01	-0.81	0.01	11.76	109	19.58	98	92	53	0	0	1	0
GA MACON	87	67	90	57	77	9	1.55	0.92	0.91	15.02	168	21.65	117	92	56	2	0	3	2
GA SAVANNAH	88	68	93	60	78	7	0.00	-0.66	0.00	14.89	189	18.96	128	97	59	2	0	0	0
HI HILO	81	68	85	65	75	2	2.24	0.18	0.96	17.86	60	24.56	51	89	76	0	0	6	2
HI HONOLULU	85	73	87	70	79	3	0.09	-0.10	0.09	2.87	88	5.18	62	73	66	0	0	1	0
HI KAHULUI	87	67	90	64	77	2	0.00	-0.19	0.00	1.03	23	8.79	84	79	66	1	0	0	0
HI LIHUE	82	72	83	71	77	2	1.72	1.03	0.83	10.76	142	17.26	112	82	73	0	0	3	2
ID BOISE	57	39	63	37	48	-8	0.66	0.36	0.63	3.92	126	6.40	114	83	55	0	0	4	1
ID LEWISTON	61	39	69	33	50	-6	0.26	-0.07	0.20	4.62	160	8.31	167	81	53	0	0	3	0
ID POCATELLO	56	33	60	25	44	-7	0.50	0.17	0.31	2.65	88	4.07	79	82	54	0	4	3	0
IL CHICAGO/O'HARE	68	48	84	32	58	3	2.94	2.19	1.13	10.07	136	10.62	98	88	67	0	1	6	2
IL MOLINE	69	48	80	41	59	0	3.12	2.23	1.48	9.02	113	9.92	89	94	67	0	0	4	3
IL PEORIA	72	53	85	47	63	4	3.38	2.44	1.28	8.25	107	9.85	90	10	61	0	0	4	3
IL ROCKFORD	66	49	80	40	58	2	0.68	-0.15	0.42	5.09	71	5.59	56	86	68	0	0	5	0
IL SPRINGFIELD	73	54	87	47	64	4	2.23	1.36	0.73	7.20	93	9.10	82	92	72	0	0	6	3
IN EVANSVILLE	77	61	83	47	69	6	3.39	2.26	1.12	10.19	98	16.25	99	91	78	0	0	6	3
IN FORT WAYNE	71	51	81	35	61	4	4.25	3.45	1.59	9.82	130	12.51	108	97	66	0	0	5	3
IN INDIANAPOLIS	73	56	84	44	65	6	3.72	2.77	2.02	10.59	126	15.30	115	97	66	0	0	7	3
IN SOUTH BEND	71	50	79	40	61	5	3.51	2.76	1.23	8.99	118	11.12	94	97	71	0	0	6	4
IA BURLINGTON	69	50	80	44	60	0	3.27	2.32	1.47	8.02	101	9.68	90	10	60	0	0	5	2
IA CEDAR RAPIDS	64	46	74	38	55	-3	1.96	1.17	1.21	5.21	79	6.11	70	99	65	0	0	5	2
IA DES MOINES	66	50	73	47	58	-1	4.12	3.22	2.50	11.43	162	13.59	146	95	74	0	0	5	3
IA DUBUQUE	63	45	74	36	54	-2	1.71	0.84	0.61	5.97	82	6.64	66	96	73	0	0	6	1
IA SIOUX CITY	62	45	72	39	54	-4	2.78	2.00	1.85	7.58	130	8.76	124	95	67	0	0	5	2
IA WATERLOO	64	45	72	39	54	-3	4.16	3.32	1.63	9.65	147	10.50	124	94	67	0	0	7	3
KS CONCORDIA	70	47	83	39	59	-1	0.94	0.09	0.57	6.23	104	7.44	101	97	66	0	0	6	1
KS DODGE CITY	75	45	86	39	60	-1	0.00	-0.61	0.00	4.64	94	6.02	97	91	33	0	0	0	0
KS GOODLAND	67	41	76	38	54	-1	1.02	0.34	0.56	4.09	112	4.94	110	92	56	0	0	4	1
KS TOPEKA	79	53	87	47	66	5	2.09	1.12	1.67	9.10	129	10.98	119	88	64	0	0	4	1

Weather Data for the Week Ending May 10, 2003

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP	
																90 AND ABOVE	32 AND BELOW	0.1 INCH OR MORE	5.0 INCH OR MORE
KY WICHITA	79	51	88	48	65	3	0.00	-0.80	0.00	7.82	122	9.88	120	90	57	0	0	0	0
KY JACKSON	74	60	83	46	67	5	1.94	0.84	1.21	9.33	96	19.31	114	98	66	0	0	6	1
KY LEXINGTON	76	60	83	43	68	7	4.71	3.69	1.85	11.28	119	17.07	106	92	72	0	0	5	3
KY LOUISVILLE	78	62	86	47	70	7	3.50	2.40	1.34	11.61	118	16.87	103	96	65	0	0	7	3
KY PADUCAH	80	63	84	52	71	8	1.89	0.75	0.60	10.31	95	18.06	99	94	69	0	0	5	2
LA BATON ROUGE	91	75	92	74	83	11	0.00	-1.23	0.00	5.32	43	13.10	55	93	54	6	0	0	0
LA LAKE CHARLES	85	75	87	70	80	7	0.03	-1.19	0.02	4.90	55	11.46	65	98	81	0	0	2	0
LA NEW ORLEANS	89	78	89	75	83	10	0.00	-0.94	0.00	10.64	92	15.39	67	86	63	0	0	0	0
LA SHREVEPORT	87	74	91	70	80	9	0.25	-0.90	0.24	4.57	45	12.67	67	90	62	3	0	2	0
ME CARIBOU	55	33	62	30	44	-4	0.71	0.02	0.34	5.19	84	9.28	83	85	47	0	4	3	0
ME PORTLAND	60	41	69	32	50	-1	0.31	-0.58	0.13	6.58	68	11.06	65	88	51	0	1	3	0
MD BALTIMORE	67	51	78	40	59	-1	0.99	0.16	0.48	7.56	93	16.86	116	98	80	0	0	6	0
MA BOSTON	64	46	77	42	55	-1	0.19	-0.53	0.12	8.31	98	14.22	91	89	53	0	0	4	0
MA WORCESTER	64	45	73	42	54	1	0.30	-0.64	0.26	7.98	84	14.77	89	87	39	0	0	3	0
MI ALPENA	58	35	64	24	47	-2	0.38	-0.18	0.36	4.25	81	4.75	57	94	54	0	1	3	0
MI GRAND RAPIDS	66	47	75	37	56	1	2.04	1.29	0.83	7.72	108	9.23	86	96	68	0	0	4	2
MI HOUGHTON LAKE	63	43	77	24	53	2	0.61	0.10	0.50	5.13	101	5.48	69	92	49	0	1	3	1
MI LANSING	66	44	75	32	55	1	0.93	0.37	0.46	6.19	99	6.75	73	90	69	0	1	5	0
MI MUSKOGON	65	46	75	37	56	3	1.50	0.85	0.57	5.75	93	6.26	63	92	73	0	0	5	1
MI TRAVERSE CITY	63	42	72	31	53	2	0.65	0.17	0.33	5.92	110	6.62	65	88	45	0	1	3	0
MN DULUTH	54	38	62	36	46	-3	1.14	0.60	0.93	4.20	93	4.62	71	76	58	0	0	4	1
MN INT'L FALLS	64	43	71	35	53	3	0.10	-0.33	0.06	1.26	43	1.45	33	74	36	0	0	2	0
MN MINNEAPOLIS	60	48	65	46	54	-2	2.46	1.86	0.72	6.32	126	7.09	104	94	68	0	0	5	3
MN ROCHESTER	58	44	65	41	51	-3	3.54	2.78	1.53	8.36	140	9.33	122	10	78	0	0	7	3
MS ST. CLOUD	58	45	68	42	51	-3	1.83	1.33	0.67	8.03	185	8.79	155	97	68	0	0	6	1
MS JACKSON	89	72	92	66	81	12	0.04	-1.17	0.03	16.00	119	26.43	112	92	56	3	0	2	0
MS MERIDIAN	88	71	90	63	80	11	0.00	-1.19	0.00	14.65	103	23.02	90	95	64	3	0	0	0
MS TUPELO	84	67	88	58	75	8	5.48	4.22	4.22	15.20	117	24.44	107	95	75	0	0	4	3
MO COLUMBIA	76	55	88	50	66	5	3.94	2.84	2.58	11.33	127	13.60	106	95	62	0	0	5	3
MO KANSAS CITY	77	52	85	48	65	4	1.53	0.34	0.85	7.65	102	8.86	89	94	62	0	0	4	1
MO SAINT LOUIS	78	59	90	52	68	4	2.52	1.60	1.02	9.67	112	12.61	97	94	81	1	0	4	3
MO SPRINGFIELD	79	59	84	52	69	7	1.09	0.12	0.57	8.16	86	12.20	88	86	67	0	0	4	1
MT BILLINGS	52	38	58	36	45	-8	1.03	0.49	0.31	3.54	98	4.74	95	90	54	0	0	5	0
MT BUTTE	46	29	51	21	38	-7	0.30	-0.08	0.24	3.44	145	4.99	148	86	41	0	5	3	0
MT GLASGOW	52	36	66	30	44	-9	1.29	0.99	0.47	2.96	182	3.36	150	96	73	0	2	6	0
MT GREAT FALLS	48	32	54	29	40	-9	0.94	0.44	0.56	3.62	117	4.35	101	97	59	0	4	5	1
MT HAVRE	50	33	55	28	42	-10	1.22	0.88	0.53	3.40	167	3.76	131	95	80	0	4	6	1
MT KALISPELL	54	37	59	27	45	-4	0.57	0.19	0.22	3.23	113	4.30	78	79	57	0	1	5	0
MT MISSOULA	54	34	59	29	44	-6	0.57	0.19	0.50	4.41	172	7.06	160	89	56	0	3	5	1
NE GRAND ISLAND	63	46	71	42	55	-2	2.45	1.62	1.30	6.40	110	8.04	114	96	77	0	0	3	3
NE LINCOLN	67	45	84	35	56	-3	2.17	1.26	0.87	5.43	85	7.46	97	96	72	0	0	4	3
NE NORFOLK	61	46	72	41	54	-3	3.54	2.75	1.81	6.43	114	7.54	108	95	75	0	0	4	3
NE NORTH PLATTE	64	42	72	36	53	-2	1.39	0.70	0.72	6.69	160	7.53	148	95	53	0	0	4	1
NE OMAHA	63	47	71	40	55	-4	2.54	1.59	1.04	6.70	105	8.37	105	95	73	0	0	5	2
NE SCOTTSBLUFF	61	38	72	32	49	-4	0.52	-0.04	0.30	3.22	86	3.93	81	91	51	0	1	4	0
NE VALENTINE	62	41	75	37	52	-2	1.60	0.91	1.02	5.74	142	6.32	131	93	59	0	0	4	1
NV ELY	46	25	57	14	36	-12	1.78	1.50	0.93	3.93	169	4.64	121	91	67	0	7	5	2
NV LAS VEGAS	75	54	82	50	64	-8	0.01	-0.04	0.01	0.71	89	2.84	137	47	29	0	0	1	0
NV RENO	57	38	64	35	48	-6	0.04	-0.07	0.02	1.19	88	1.57	45	64	38	0	0	2	0
NV WINNEMUCCA	55	35	60	28	45	-8	0.20	-0.02	0.18	1.86	92	3.75	108	92	62	0	3	2	0
NH CONCORD	65	39	72	29	52	-1	0.49	-0.25	0.32	7.78	109	13.68	110	10	46	0	1	3	0
NJ NEWARK	66	49	80	45	58	-2	0.49	-0.55	0.29	6.96	73	13.82	84	91	68	0	0	5	0
NM ALBUQUERQUE	73	47	81	44	60	-2	0.00	-0.11	0.00	1.46	115	2.48	113	35	14	0	0	0	0
NY ALBANY	67	42	71	31	54	-1	0.10	-0.67	0.08	6.46	86	12.08	99	91	47	0	1	2	0
NY BINGHAMTON	64	43	71	36	53	0	0.27	-0.52	0.13	5.26	69	9.99	79	90	59	0	0	4	0
NY BUFFALO	66	45	75	37	56	2	0.63	-0.05	0.59	4.98	71	9.95	79	94	52	0	0	2	1
NY ROCHESTER	66	43	75	32	55	1	0.27	-0.31	0.24	4.06	66	8.06	77	79	65	0	1	2	0
NY SYRACUSE	67	43	74	35	55	1	0.17	-0.59	0.12	6.45	86	10.49	86	91	48	0	0	4	0
NC ASHEVILLE	76	54	87	45	65	5	4.20	3.31	2.33	15.31	164	20.96	122	99	66	0	0	3	3
NC CHARLOTTE	77	60	89	54	69	2	1.35	0.59	0.85	16.94	202	22.52	141	99	68	0	0	3	1
NC GREENSBORO	76	59	87	49	67	4	0.81	-0.08	0.36	14.53	170	21.80	144	97	65	0	0	4	0
NC HATTERAS	73	63	79	51	68	3	1.77	0.99	1.06	16.86	181	22.41	117	96	81	0	0	3	1
NC RALEIGH	79	60	90	48	69	4	0.47	-0.34	0.26	10.06	127	16.59	107	95	66	1	0	2	0
NC WILMINGTON	84	64	92	48	74	6	0.99	0.10	0.61	13.36	159	19.08	115	97	60	2	0	2	1
ND BISMARCK	55	42	71	32	48	-5	1.81	1.37	0.41	3.09	105	3.59	92	92	76	0	1	7	0
ND DICKINSON	51	39	68	30	45	-6	1.81	1.38	0.73	4.61	151	4.76	123	99	73	0	1	6	1
ND FARGO	58	44	69	37	51	-3	2.72	2.27	0.81	4.73	150	5.19	115	94	68	0	0	6	3
ND GRAND FORKS	57	44	66	38	51	-2	1.08	0.69	0.46	3.06	115	3.46	88	95	56	0	0	5	0
ND JAMESTOWN	54	41	67	33	47	-6	3.12	2.70	1.04	4.28	151	4.43	112	10	76	0	0	6	3
ND WILLISTON	53	39	60	31	46	-5	1.65	1.30	0.50	5.14	225	6.10	190	96	78	0	2	7	1
OH AKRON-CANTON	70	52	79	43	61	5	2.70	1.81	0.96	7.96	102	11.67	93	91	71	0	0	5	3
OH CINCINNATI	74	58	80	41	66	5	4.78	3.81	2.51	9.80	106	15.05	101	98	78	0	0	6	3
OH CLEVELAND	70	52	78	41	61	6	2.14	1.39	0.65	7.55	102	12.27	101	92	64	0	0	6	2
OH COLUMBUS	73	56	81	40	65	6	2.89	2.04	0.98	7.92	108	12.54	104	93	74	0	0	6	3
OH DAYTON	73	56	82	36	64	6	3.76	2.85	0.99	8.33	97	11.62	86	96	64	0	0	5	4
OH MANSFIELD	70	51	77	36	60	5	2.63	1.67	1.06	7.52	84	10.80	79	97	66	0	0	5	3

Based on 1971-2000 normals

Weather Data for the Week Ending May 10, 2003

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS					
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP.		
																90 AND ABOVE	32 AND BELOW	0.1 INCH OR MORE	5.0 INCH OR MORE	
OK	TOLEDO	68	50	76	38	59	3	2.84	2.18	1.11	8.39	123	11.56	109	91	73	0	0	5	3
	YOUNGSTOWN	69	48	79	37	59	4	2.09	1.32	0.92	6.62	89	10.55	89	94	77	0	0	5	3
	OKLAHOMA CITY	86	58	91	49	72	6	0.26	-0.84	0.25	4.10	55	4.98	48	90	38	2	0	2	0
OR	TULSA	87	63	93	53	75	8	0.33	-0.97	0.31	5.78	62	7.69	60	90	61	2	0	2	0
	ASTORIA	56	42	57	37	49	-2	0.48	-0.29	0.43	20.24	151	37.75	122	92	65	0	0	5	0
	BURNS	54	35	58	25	44	-5	0.12	-0.10	0.09	3.17	133	4.52	97	78	51	0	1	2	0
	EUGENE	58	42	63	35	50	-3	0.46	-0.18	0.26	11.91	115	21.37	88	93	73	0	0	6	0
	MEDFORD	60	41	65	36	51	-5	0.44	0.16	0.26	6.78	191	11.00	135	92	55	0	0	5	0
	PENDLETON	61	38	67	31	50	-6	0.07	-0.21	0.07	3.06	110	7.05	130	79	54	0	2	1	0
	PORTLAND	59	44	61	40	52	-3	0.45	-0.10	0.21	10.80	151	21.16	129	88	65	0	0	4	0
	SALEM	58	44	61	39	51	-3	0.34	-0.16	0.15	10.86	142	21.02	113	90	71	0	0	5	0
PA	ALLENTOWN	66	46	83	39	56	-1	0.43	-0.53	0.26	6.33	75	10.85	74	95	73	0	0	6	0
	ERIE	64	47	77	39	55	0	0.62	-0.05	0.23	6.27	84	12.16	99	87	69	0	0	6	0
	MIDDLETOWN	66	51	77	44	58	-1	1.43	0.50	0.52	8.84	113	15.38	113	10	69	0	0	6	1
	PHILADELPHIA	67	51	82	45	59	-2	0.53	-0.36	0.25	7.15	84	14.11	95	92	77	0	0	6	0
	PITTSBURGH	70	54	76	48	62	5	2.69	1.90	1.04	6.68	92	11.71	95	92	68	0	0	6	3
	WILKES-BARRE	67	46	76	39	56	-1	0.40	-0.40	0.20	5.13	72	8.17	70	92	53	0	0	4	0
	WILLIAMSPORT	67	48	76	42	57	0	0.62	-0.18	0.30	6.67	85	11.68	88	93	76	0	0	5	0
RI	PROVIDENCE	63	44	72	39	54	-2	0.22	-0.60	0.13	9.96	102	15.76	90	82	57	0	0	3	0
SC	BEAUFORT	87	70	92	62	79	8	0.46	-0.02	0.46	7.11	97	11.14	77	95	49	2	0	1	0
	CHARLESTON	87	69	92	63	78	8	0.78	0.17	0.77	13.21	173	16.69	113	93	58	2	0	2	1
	COLUMBIA	83	66	91	61	75	6	1.29	0.73	1.25	15.40	184	20.36	121	94	64	2	0	3	1
	GREENVILLE	77	62	88	54	70	5	2.35	1.38	1.13	16.79	165	22.74	121	98	71	0	0	3	2
SD	ABERDEEN	58	42	70	33	50	-5	1.97	1.47	1.05	4.81	124	5.50	114	95	72	0	0	3	2
	HURON	61	43	73	37	52	-3	2.03	1.42	1.29	3.90	81	5.16	88	97	61	0	0	6	2
	RAPID CITY	57	38	71	31	48	-4	0.88	0.28	0.43	4.47	120	5.01	110	91	60	0	1	6	1
	SIoux FALLS	60	42	70	33	51	-4	1.79	1.09	0.79	5.72	105	6.67	103	95	72	0	0	5	2
TN	BRISTOL	77	58	84	48	67	7	2.32	1.38	1.06	12.32	146	21.11	137	98	55	0	0	4	2
	CHATTANOOGA	79	62	87	51	71	6	4.98	4.03	2.59	14.37	122	24.78	113	97	78	0	0	4	3
	KNOXVILLE	77	62	85	50	70	6	5.84	4.79	3.12	14.04	132	25.91	135	96	69	0	0	3	3
	MEMPHIS	85	70	87	64	77	9	3.56	2.31	2.14	10.70	81	19.82	91	89	67	0	0	4	2
	NASHVILLE	80	63	86	51	71	7	4.67	3.58	2.92	12.04	116	22.09	123	96	68	0	0	5	2
TX	ABILENE	93	61	97	56	77	7	0.00	-0.52	0.00	1.07	28	2.21	37	70	44	6	0	0	0
	AMARILLO	81	47	92	39	64	2	0.00	-0.43	0.00	1.15	38	1.39	33	54	16	1	0	0	0
	AUSTIN	91	75	94	73	83	10	0.18	-0.84	0.18	0.84	14	6.40	64	87	68	5	0	1	0
	BEAUMONT	85	76	88	75	81	8	0.01	-1.13	0.01	3.31	36	10.73	59	94	72	0	0	1	0
	BROWNSVILLE	93	77	94	76	85	7	0.00	-0.50	0.00	0.96	27	2.22	36	93	60	7	0	0	0
	CORPUS CHRISTI	92	76	96	75	84	8	0.00	-0.67	0.00	1.43	30	3.79	46	92	65	7	0	0	0
	DEL RIO	97	75	102	72	86	10	0.00	-0.50	0.00	0.80	24	1.57	32	86	58	7	0	0	0
	EL PASO	85	61	90	58	73	2	0.00	-0.06	0.00	0.22	39	1.59	113	23	14	1	0	0	0
	FORT WORTH	88	74	91	68	81	11	0.00	-1.12	0.00	2.80	36	6.10	50	88	63	2	0	0	0
	GALVESTON	83	77	84	76	80	5	0.00	-0.73	0.00	1.74	27	4.63	36	95	82	0	0	0	0
	HOUSTON	90	76	93	75	83	9	0.00	-1.01	0.00	4.60	55	10.76	72	89	66	5	0	0	0
	LUBBOCK	88	54	93	48	71	5	0.00	-0.43	0.00	1.35	51	1.45	38	50	24	2	0	0	0
	MIDLAND	93	62	97	51	77	7	0.00	-0.36	0.00	0.18	11	1.17	42	49	26	6	0	0	0
	SAN ANGELO	95	61	102	53	78	7	0.00	-0.62	0.00	1.32	38	3.20	59	63	32	5	0	0	0
	SAN ANTONIO	90	75	92	73	83	9	0.03	-0.90	0.02	0.99	17	4.12	45	92	65	4	0	2	0
	VICTORIA	91	75	93	74	83	8	0.01	-1.01	0.01	1.41	21	5.11	46	90	65	4	0	1	0
	WACO	88	75	92	73	81	9	0.01	-0.99	0.01	3.96	58	7.11	63	93	77	4	0	1	0
	WICHITA FALLS	94	64	99	56	79	10	0.12	-0.65	0.12	2.38	40	3.29	38	80	41	6	0	1	0
UT	SALT LAKE CITY	56	40	63	35	48	-2	1.35	0.83	0.39	4.97	106	6.66	90	91	52	0	0	6	0
VT	BURLINGTON	64	39	73	30	51	-8	0.01	-0.71	0.01	4.94	79	6.91	68	88	43	0	1	1	0
VA	LYNCHBURG	73	54	88	48	64	3	0.87	-0.05	0.45	10.90	127	18.17	119	97	65	0	0	4	0
	NORFOLK	75	56	85	44	66	2	0.41	-0.41	0.29	9.72	113	17.30	109	92	64	0	0	4	0
	RICHMOND	74	54	85	42	64	1	0.77	-0.08	0.33	11.24	133	17.62	117	98	67	0	0	7	0
	ROANOKE	74	55	87	47	65	3	0.77	-0.17	0.28	10.58	121	17.83	118	94	67	0	0	5	0
WA	WASH/DULLES	67	51	80	41	59	-1	2.08	1.21	0.81	8.50	106	16.32	118	98	83	0	0	7	2
	OLYMPIA	59	36	64	30	48	-4	0.27	-0.27	0.27	12.97	134	24.74	106	97	68	0	1	1	0
	QUILLAYUTE	55	39	59	33	47	-3	0.44	-0.90	0.36	25.38	125	42.57	92	92	64	0	0	3	0
	SEATTLE-TACOMA	58	43	62	38	50	-4	0.30	-0.11	0.15	9.60	139	19.35	119	92	72	0	0	3	0
	SPOKANE	58	36	66	29	47	-5	0.03	-0.31	0.02	3.58	109	7.48	113	80	37	0	3	2	0
	YAKIMA	65	40	70	29	52	-2	0.03	-0.05	0.02	1.66	123	4.15	125	68	34	0	2	2	0
WV	BECKLEY	72	56	77	48	64	6	1.41	0.43	0.64	8.58	102	15.42	105	92	62	0	0	6	1
	CHARLESTON	74	57	81	46	66	6	1.68	0.75	0.91	6.91	82	16.18	109	95	63	0	0	5	2
	ELKINS	69	50	76	47	60	5	2.92	1.91	1.38	9.16	103	15.73	102	10	61	0	0	5	2
	HUNTINGTON	74	59	82	43	66	5	2.92	1.97	1.36	11.44	135	18.63	126	96	68	0	0	6	3
WI	EAU CLAIRE	62	45	68	40	53	-2	2.70	1.96	0.68	8.17	140	9.13	119	99	57	0	0	7	2
	GREEN BAY	60	42	70	30	51	-2	2.04	1.48	0.83	6.72	124	7.87	103	97	70	0	1	4	2
	LA CROSSE	63	46	71	40	55	-2	2.36	1.62	0.66	7.30	113	8.39	97	96	57	0	0	7	2
	MADISON	63	46	74	34	55	0	2.18	1.49	0.63	6.91	104	7.77	85	89	69	0	0	6	1
	MILWAUKEE	61	42	81	36	52	-1	2.03	1.33	0.64	6.50	88	7.29	67	97	74	0	0	6	2
WY	CASPER	54	32	64	23	43	-6	0.34	-0.20	0.12	2.90	91	3.52	80	92	58	0	3	5	0
	CHEYENNE	53	35	62	31	44	-4	0.79	0.26	0.33	3.74	112	4.03	95	82	56	0	2	4	0
	LANDER	52	33	64	29	42	-8	1.24	0.66	0.70	3.17	77	4.58	88	73	52	0	4	5	1
	SHERIDAN	49	34	58	29	42	-8	0.96	0.44	0.55	4.82	138	5.99	124	92</					

April Weather and Crop Summary

Weather

Weather summary provided by USDA/WAOB

Cool, wet weather slowed fieldwork and crop development in California but provided drought relief across the Great Basin, Northwest, and northern and central Rockies. In contrast, unfavorably dry weather prevailed in the Four Corners region. Farther east, abundant rain and snow aided winter grains on the northern and central Plains, although some pastures and rangelands continued to exhibit the adverse effects of long-term drought. On the southern Plains, however, warm, breezy, mostly dry weather depleted topsoil moisture and increased stress on winter wheat and emerging summer crops. Meanwhile, widespread Midwestern showers boosted topsoil moisture reserves for winter wheat and newly planted summer crops. Although long-term precipitation deficits persisted in much of the Midwest, underlying dryness allowed spring fieldwork to proceed with few delays. Across the South, mostly dry weather west of the Delta contrasted with wet conditions in the Southeast. By month's end, warm, dry weather in the western Gulf Coast region hastened winter wheat maturation but stressed emerging summer crops. Meanwhile, frequently heavy rainfall slowed fieldwork in the southern Atlantic Coast States.

Monthly temperatures were mostly above normal in areas from the High Plains to the Appalachians, excluding the Great Lakes region. The passage of several high-pressure systems across southeastern Canada and the Northeastern United States not only brought late-season cold outbreaks and freezes to the Great Lakes States and New England, but also kept cool air frequently locked into place east of the Appalachians. Areas west of the Rockies were also unusually cool, largely due to the persistence of an upper-level trough near the West Coast. Monthly temperatures averaged as much as 8°F below normal in California's Central Valley and ranged from 2 to 6°F below normal in New England, but were up to 4°F above normal on the Plains.

The month opened on a cold note across the North, and the cool weather eventually overspread the Plains and Midwest. On April 6 in Michigan, monthly record lows included -9°F in Marquette (previously, -5°F on April 1, 1964) and -7°F in Alpena (previously, -6°F on April 1, 1923). Two days later in Nebraska, Alliance noted a daily-record low of 3°F. The cold outbreak was short-lived, however, and from April 9-15 early-season heat set or tied more than 150 daily-record highs across the Intermountain West, Plains, and Midwest. With a high of 92°F on April 13, Bismarck, ND, marked its earliest 90-degree reading on record (previously, 92°F on April 18, 1987). Although warmth briefly reached the Northeast (daily-record highs in Maine on April 15 included 83°F in Portland and 74°F in Bangor), cold weather soon returned. Both Portland (24 and 21°F) and Bangor (17 and 17°F) posted consecutive daily-record lows on April 17-18. Elsewhere in Maine, Caribou's low of 5°F on April 17 represented its latest reading at or below 5°F (previously, 4°F on April 10, 1977). On April 21, Caribou's snow depth fell to a trace, ending a 155-day streak (November 17 - April 20) with at least 1 inch of snow on the ground.

It was also a cool month in the West, where Tucson, AZ, failed to reach 90°F in April for the first time since 1983. Similarly, the highest temperature of the month in Sacramento, CA, was 76°F on April 8 and 9, the first time since 1983 that April temperatures

remained below 80°F. Farther east, however, warm, dry, breezy conditions prevailed across the South-Central United States. On April 15-16, high winds and dry topsoils contributed to a dust storm on the southern High Plains. In New Mexico, minimum visibilities reported by automated observing equipment included 5/8 mile in Hobbs and 3/4 mile in Carlsbad and Artesia. In addition, Artesia clocked a peak wind gust to 75 mph. In western Texas, the visibility dropped to 1/4 mile in El Paso, while winds gusted to 98 mph at Guadalupe Pass. Elsewhere in Texas, monthly precipitation totaled 0.06 inch (2 percent [%] of normal) in Austin-Bergstrom, its lowest April sum since only 0.03 inch fell in 1984. Other Texas cities reporting April rainfall ranging from 2 to 9% of normal included Midland (0.02 inch), San Angelo (0.06 inch), Del Rio (0.11 inch), Corpus Christi (0.12 inch), College Station (0.17 inch), San Antonio (0.17 inch), and Victoria (0.28 inch). Galveston, TX (4.61 inches, or 38% of normal), completed its driest January-April period since 4.03 inches fell in 1980. Farther north, however, late-month rains began to dent Midwestern precipitation deficits. In Illinois, Chicago's April precipitation totaled 4.33 inches (118% of normal), but more than half of that rain (2.22 inches) fell on the 30th. Des Moines, IA, received precipitation totaling 3.37 inches (43% of normal) in 5 months from November-March, but netted 3.55 inches in 3 days from April 28-30.

According to the California Department of Water Resources, the average water content of the Sierra Nevada snowpack was 26 inches on May 1, a substantial increase from about 20 inches at the beginning of April. A precipitation average of eight stations feeding the Sacramento River unofficially totaled 10.50 inches, the third-highest April sum behind 13.00 inches in 1948 and 11.55 inches in 1963. Closer to the California coast, April rainfall records were established in locations such as Eureka (11.25 inches, or 387% of normal) and Willow Creek (11.11 inches, or 323%). Eureka's former record was 11.13 inches in 1896; Willow Creek's previous wettest April was 10.47 inches in 1948. Farther north, Portland, OR, opened the month with measurable rainfall on 13 consecutive days, tying its April 1958 record. In addition, Portland set records for the greatest number of days with measurable precipitation in April (24, edging 23 days in 1955) and March-April (51, surpassing 41 days in 1955 and 1997). Elsewhere in Oregon, March-April records for days with measurable rainfall were broken in locations such as Astoria (53 days) and Salem (51 days).

East of the Rockies, the month's most impressive snow storm reached the Plains on April 6. In Nebraska, April 6 snowfall included 9.4 inches in Kearney (breaking its April daily record of 8.0 inches set on April 18, 1944) and 7.3 inches in Grand Island. Sioux City, IA, received 9.5 inches on April 6-7, breaking daily snowfall records on both days (6.3 and 3.2 inches, respectively). On April 7, snow spread into the Northeast, where daily records included 4.4 inches in Newark, NJ, and 4.0 inches at New York's Central Park. It was Central Park's greatest daily snowfall in April since 9.6 inches fell on April 6, 1982. Farther south, a trace of snow in Little Rock, AR, on the 9th was its first April snowfall since April 19, 1983. Additional snow fell in the East as late as April 10-11, when western North Carolina totals reached 22.0 inches atop Mount Mitchell and 4.0 inches in Asheville.

Heavy rain fell farther south, resulting in the wettest April day on record (7.38 inches on the 6th) in Jackson, MS. Jackson's monthly rainfall reached 11.89 inches (199% of normal), its highest April

total since 15.95 inches fell in 1991. Elsewhere, it was the wettest April on record at Cape Hatteras, NC (9.94 inches, or 302% of normal), surpassing the 9.57-inch standard set in 1989. Heavy rain also fell across Puerto Rico, boosting San Juan's monthly total to 9.37 inches (253% of normal). Much of Puerto Rico's heavy rain fell on April 17-18, when totals (rounded to the nearest inch) reached 22 inches in Naguabo, 17 inches in Las Piedras, and 16 inches in Rio Grande. The Puerto Rican rain fell as the result of a developing storm system that later became Ana, the first April tropical storm on record in the Atlantic Basin (there was an unnamed subtropical storm in the western Atlantic on April 22-23, 1992). After achieving tropical storm intensity on April 20, Ana reached peak strength 2 days later with maximum sustained winds near 50 mph.

In Hawaii, the return of a more typical trade-wind pattern brought an increase in rainfall to many windward areas. On the Big Island, Hilo's April rainfall of 14.07 inches (112% of normal) accounted for 63% of the year-to-date total of 22.25 inches (49%). However, little rain fell at some Hawaiian locations, including Kahului, Maui, where only 0.01 inch (1.74 inches below normal) was measured. Kahului's previous lowest April rainfall on record was 0.06 inch in 1990.

Alaskan temperatures ranged from near-normal levels in southeastern areas to as much as 9°F above normal across the northwestern part of the State. However, an impressive warm spell affected southeastern and interior Alaska toward month's end, breaking several April-record highs. Skagway posted four consecutive daily-record maxima from April 24-27, including a monthly record-tying high of 74°F on the 26th and record-setting high of 76°F on the 27th. Elsewhere in Alaska, monthly record highs were also established on April 26 in locations such as Juneau (74°F) and Tok (73°F). Meanwhile, wet weather was largely confined to northern and western Alaska, where April totals included 1.80 inches (277% of normal) in Bethel and 1.10 inches (169%) in Nome. In contrast, monthly precipitation totaled just 1.42 inches (40% of normal) in Valdez, its lowest April total since 0.57 inch fell in 1981. Other low Alaskan totals included 0.05 inch (24% of normal) in Fairbanks, 0.17 inch (25%) in Anchorage, and 0.86 inch (29%) in Juneau.

Fieldwork

Fieldwork summary provided by USDA/NASS

Seasonally heavy rains fell in the Pacific Northwest. Rainfall was about average in California early to midmonth but was above normal late in the month. Precipitation was sporadic across the Rockies and Great Plains. Sub-soil moisture remained short there even though significant precipitation was received in some areas, and temperatures for the month were generally above normal. Dry conditions continued in the Southwest from southern California to the Texas Panhandle. Severe storms were reported across eastern Texas, Oklahoma, Kansas, Missouri, Arkansas, and Tennessee. Hot, windy conditions depleted topsoil moisture levels in the southern Great Plains and minimized improvements from the rain. The southern Corn Belt received rain, but the northern Corn Belt, upper Great Plains, and upper Mississippi Valley continued dry. This disparity was seen in Illinois, where dry, dusty conditions prevailed in the northern part of the State while intermittent rainfall slowed fieldwork in the south. Warm, dry weather enabled Dakota producers to make good progress planting crops, and helped bring pastures out of dormancy. Ample rainfall was received over a wide swath including the

Southeast, Atlantic Coast, and Northeast. Southeastern producers were behind on planting corn and soybeans due to wet soils. Nationally, at month's end, spring planting was ahead of the 5-year average pace for corn, spring wheat, barley, oats, sugarbeets, and rice. Planting was equal to or behind the 5-year average for soybeans, cotton, sorghum, and peanuts.

The corn crop was 29 percent (%) planted as of April 27, ahead of last year's pace by 4 percentage points and 6 points ahead of the 5-year average. The crop was 6% emerged, 1 point behind last year but equal to the average. Most of the Corn Belt made good planting progress after midmonth despite scattered showers, with most States advancing ahead of their 5-year average. Only Nebraska received enough rainfall to limit progress significantly. Planting in Illinois progressed to 21 points ahead of the 5-year average pace with a late-month surge in activity. Planting in Indiana and Iowa also progressed rapidly after midmonth as producers took advantage of favorable weather. Planting continued in the Texas Panhandle but was completed in most central and southern areas. Cool weather across Indiana, Ohio, and Pennsylvania slowed emergence of early-planted fields.

By April 27, the Nation's winter wheat was 21% headed, ahead of last year's pace and the 5-year average of 20%. The crop broke dormancy in the northern Rockies and northern Great Plains significantly earlier than last year due to mild temperatures and adequate rainfall. After midmonth, fields quickly entered the heading stage in the southern Great Plains and lower Mississippi Valley, despite below-normal temperatures. More than half of the crop was headed in Arkansas and Oklahoma under warm, dry conditions. The crop was 90% headed in California, despite continued cool conditions. In Kansas, the crop was 86% jointed on April 27, six percentage points ahead of normal.

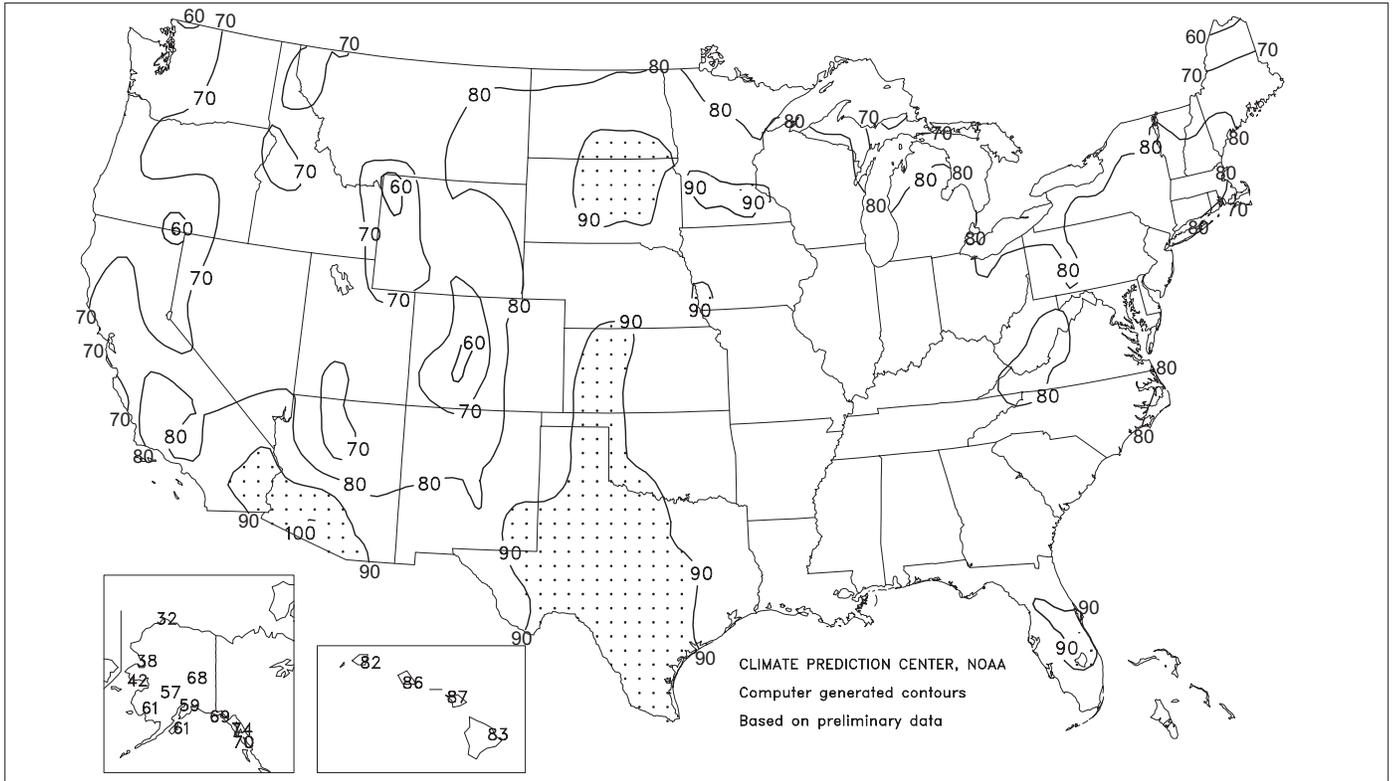
Cotton planting advanced to 18% complete by April 27, six percentage points behind last year and 1 point behind the 5-year average. Prior to midmonth, planting was active mostly in the southern Great Plains and Southwest, where soils were warm enough to germinate seed. California planting progress was well behind the average by the middle of April, and emergence and plant growth slowed due to rainy, cool weather. These persistent weather conditions caused California's progress to continue to lag for the remainder of the month. After midmonth, weather conditions allowed for significant planting progress in the middle Mississippi Valley. Wet conditions limited planting progress across most of the Southeast. Pre-planting irrigation continued in northern Texas, while planting was winding down and cultivation began in southern areas. Good moisture levels in the Rio Grande Valley benefited cotton acreage.

Three percent of the soybean crop was planted by April 27, equal to last year and the 5-year average. Planting was about normal in Louisiana but well ahead of the average in Mississippi and Arkansas, which had warmer weather and adequate soil moisture. Planting activities were just getting underway in most of the Corn Belt, where progress was isolated. Planting had not yet begun in the northern Great Plains.

Sorghum planting advanced to 19% complete on April 27, just 1 point behind last year but equal to the 5-year average. Wet soils limited planting progress in the Mississippi Valley early in the month, but progress increased after midmonth as conditions improved. At month's end, 8 of the 11 major producing States were at or below their average planting rate. Elsewhere, planting continued as weather conditions allowed.

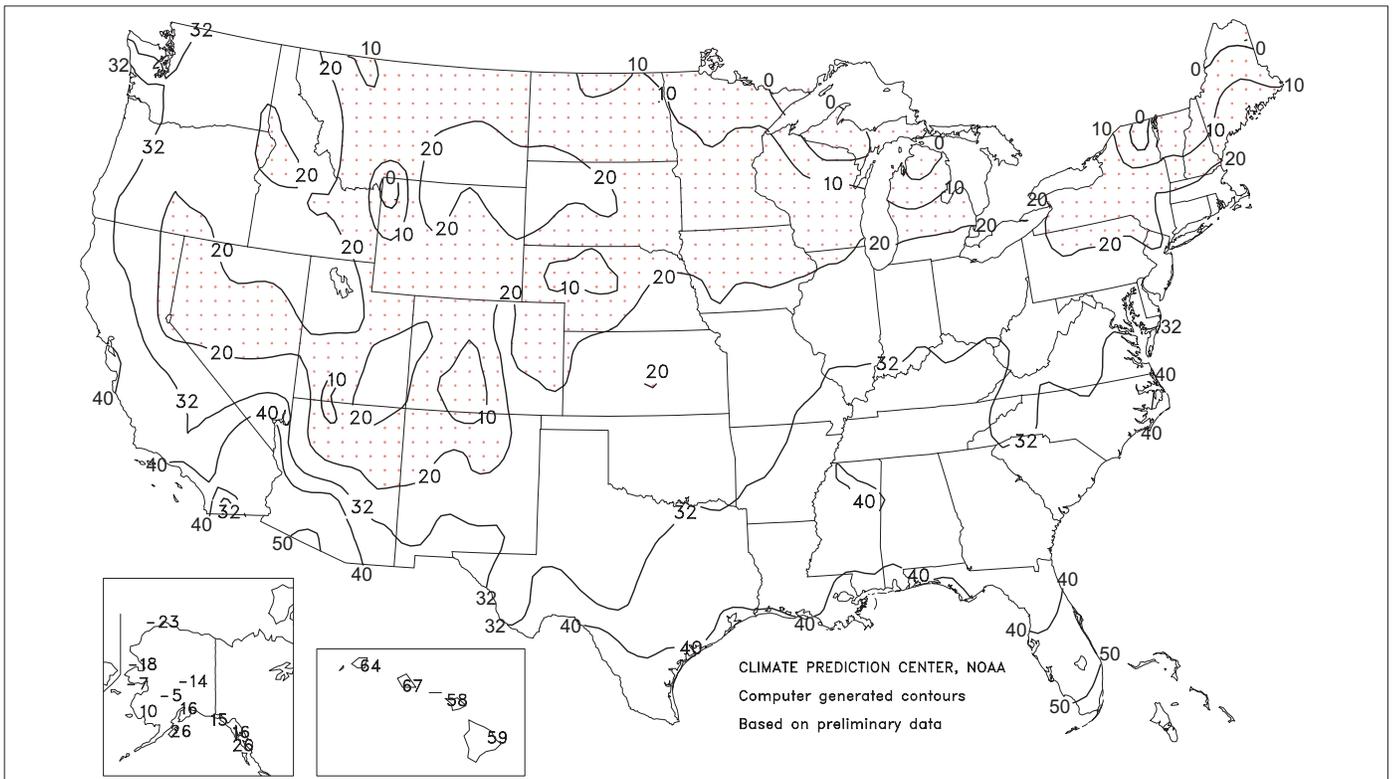
Extreme Maximum Temperature (°F)

April 2003



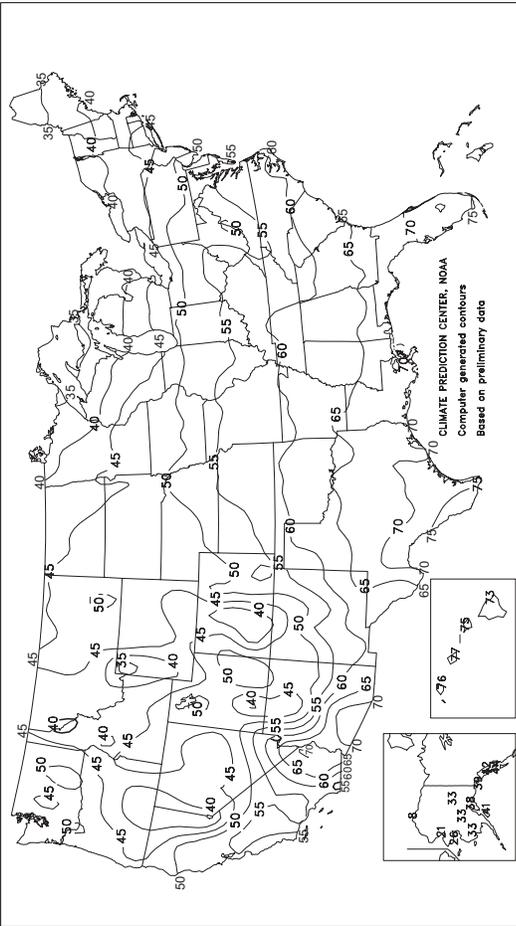
Extreme Minimum Temperature (°F)

April 2003



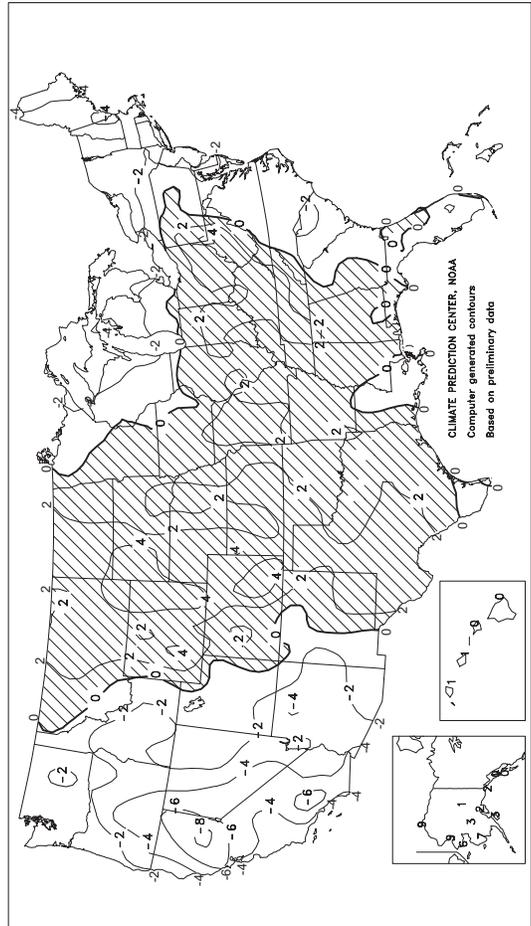
Average Temperature (°F)

April 2003



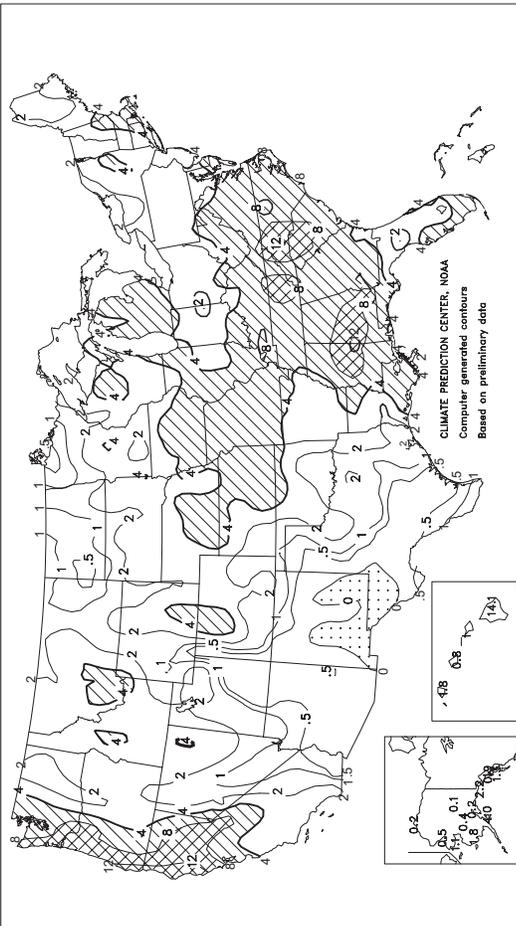
Departure of Average Temperature from Normal (°F)

April 2003



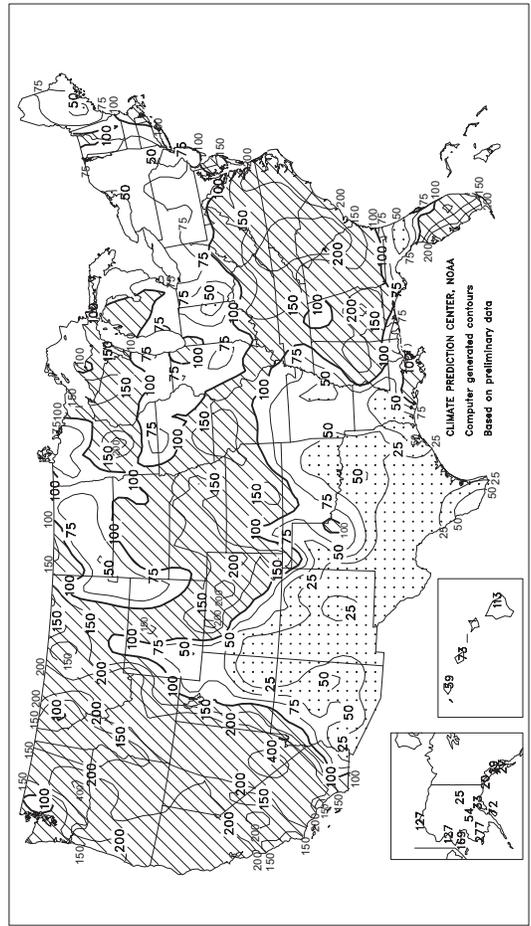
Total Precipitation (Inches)

April 2003



Percent Of Normal Precipitation

April 2003



TEMPERATURE AND PRECIPITATION SUMMARY

April 2003

STATES AND STATIONS	TEMP, °F		PRECIP.		STATES AND STATIONS	TEMP, °F		PRECIP.		STATES AND STATIONS	TEMP, °F		PRECIP.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AL BIRMINGHAM	64	3	4.39	-0.28	LEXINGTON	57	2	4.10	0.43	COLUMBUS	55	3	2.54	-0.71
HUNTSVILLE	63	3	3.18	-1.36	LONDON-CORBIN	58	2	6.06	2.05	DAYTON	53	2	1.49	-2.54
MOBILE	68	2	3.63	-1.43	LOUISVILLE	59	3	6.00	2.09	MANSFIELD	50	3	2.10	-2.07
MONTGOMERY	65	1	7.94	3.56	PADUCAH	60	3	5.96	1.01	TOLEDO	49	1	2.57	-0.67
AK ANCHORAGE	38	2	0.17	-0.35	LA BATON ROUGE	67	0	3.18	-2.38	YOUNGSTOWN	49	2	1.82	-1.51
BARROW	9	10	0.15	0.03	LAKE CHARLES	68	1	1.08	-2.56	OK OKLAHOMA CITY	60	0	1.56	-1.44
COLD BAY	38	5	1.76	-0.54	NEW ORLEANS	70	2	6.19	1.17	TULSA	62	1	2.17	-1.78
FAIRBANKS	34	2	0.05	-0.16	SHREVEPORT	66	1	2.12	-2.30	OR ASTORIA	49	0	5.80	0.87
JUNEAU	42	1	0.86	-2.10	ME BANGOR	39	-4	1.98	-1.34	BURNS	41	-2	1.55	0.70
KING SALMON	38	5	0.93	-0.01	CARIBOU	32	-6	1.43	-1.21	EUGENE	50	0	5.62	1.96
KODIAK	41	4	3.96	-1.52	PORTLAND	41	-3	2.53	-1.73	MEDFORD	49	-3	3.53	2.22
NOME	26	6	1.10	0.45	MD BALTIMORE	53	0	2.40	-0.60	PENDLETON	50	-1	1.41	0.28
AZ FLAGSTAFF	41	-2	0.44	-0.85	MA BOSTON	44	-4	3.99	0.39	PORTLAND	51	0	4.37	1.73
PHOENIX	70	0	0.17	-0.08	WORCESTER	42	-3	3.38	-0.54	SALEM	50	0	5.58	2.82
TUCSON	66	0	0.04	-0.24	MI ALPENA	37	-3	2.16	-0.15	PA ALLENTOWN	49	0	2.23	-1.26
AR FORT SMITH	63	2	2.71	-1.20	DETROIT	48	0	2.07	-0.98	ERIE	45	-2	1.96	-1.42
LITTLE ROCK	64	3	3.01	-2.46	FLINT	46	1	2.94	-0.19	MIDDLETOWN	51	-1	2.54	-0.70
CA BAKERSFIELD	59	-4	1.19	0.74	GRAND RAPIDS	46	0	2.96	-0.52	PHILADELPHIA	53	0	2.20	-1.29
EUREKA	49	-2	11.25	8.34	HOUGHTON LAKE	40	-2	3.36	1.07	PITTSBURGH	53	3	2.45	-0.56
FRESNO	59	-2	2.84	2.08	LANSING	45	-1	2.82	-0.27	WILKES-BARRE	47	-2	2.65	-0.63
LOS ANGELES	58	-3	0.49	-0.14	MUSKEGON	45	0	2.04	-0.87	WILLIAMSPORT	49	0	2.93	-0.56
REDDING	53	-5	4.21	1.81	TRVERSE CITY	40	-3	3.57	0.85	PR SAN JUAN	80	1	9.37	5.66
SACRAMENTO	55	-4	2.53	1.51	MN DULUTH	38	-1	2.03	-0.06	RI PROVIDENCE	46	-3	4.35	0.19
SAN DIEGO	60	-3	1.41	0.66	INT'L FALLS	40	1	0.65	-0.73	SC CHARLESTON	65	1	5.18	2.41
SAN FRANCISCO	54	-2	4.42	3.25	MINNEAPOLIS	48	1	2.40	0.09	COLUMBIA	62	-1	6.65	3.67
STOCKTON	55	-5	1.65	0.69	ROCHESTER	46	1	2.54	-0.47	FLORENCE	61	-2	3.36	0.57
ALAMOSA	42	1	0.24	-0.30	ST. CLOUD	45	1	4.73	2.60	GREENVILLE	59	0	7.14	3.61
CO SPRINGS	50	5	0.97	-0.65	MS JACKSON	65	2	11.89	5.91	MYRTLE BEACH	62	0	6.58	4.46
DENVER	50	5	2.22	1.17	MERIDIAN	64	0	10.27	4.65	SD ABERDEEN	46	1	2.01	0.18
GRAND JUNCTION	53	2	0.22	-0.64	TUPELO	63	2	6.28	1.34	HURON	48	2	1.58	-0.71
PUEBLO	56	6	2.00	0.75	MO COLUMBIA	57	3	4.37	0.21	RAPID CITY	48	3	2.04	0.18
CT BRIDGEPORT	46	-3	3.58	-0.41	JOPLIN	60	2	2.93	-1.39	SIoux FALLS	48	2	3.69	1.04
HARTFORD	46	-3	2.61	-1.25	KANSAS CITY	57	3	4.81	1.43	TN BRISTOL	56	1	6.66	3.43
DC WASHINGTON	55	-1	2.55	-0.22	SPRINGFIELD	58	2	2.64	-1.67	CHATTANOOGA	62	2	5.80	1.57
DE WILMINGTON	51	-1	2.62	-0.77	ST JOSEPH	56	2	6.09	2.86	JACKSON	61	1	2.67	-2.44
FL DAYTONA BEACH	69	0	0.81	-1.73	ST LOUIS	58	1	4.29	0.60	KNOXVILLE	60	2	5.95	1.96
FT LAUDERDALE	75	1	3.45	-0.46	MT BILLINGS	49	3	1.40	-0.34	MEMPHIS	64	2	3.52	-2.27
FT MYERS	74	0	2.50	0.83	BUTTE	39	0	2.56	1.54	NASHVILLE	61	3	4.69	0.76
JACKSONVILLE	67	0	2.63	-0.51	GLASGOW	48	4	1.24	0.49	TX ABILENE	67	2	0.60	-1.07
KEY WEST	76	-1	5.20	3.14	GREAT FALLS	46	3	1.84	0.44	AMARILLO	58	2	0.28	-1.05
MELBOURNE	70	0	1.51	-0.57	HELENA	46	2	2.27	1.36	AUSTIN	68	0	0.10	-2.41
MIAMI	76	0	2.87	-0.49	KALISPELL	45	2	0.90	-0.32	BEAUMONT	69	1	1.31	-2.53
ORLANDO	71	0	4.32	1.90	MILES CITY	51	4	1.35	-0.05	BROWNSVILLE	75	1	0.41	-1.55
PENSACOLA	68	1	2.90	-0.99	MISSOULA	45	0	1.70	0.61	COLLEGE STATION	70	2	0.17	-3.03
ST PETERSBURG	72	0	5.59	3.67	NE GRAND ISLAND	52	2	3.36	0.75	CORPUS CHRISTI	73	2	0.12	-1.93
TALLAHASSEE	67	1	2.09	-1.50	HASTINGS	52	1	4.24	1.37	DALLAS/FT WORTH	67	2	1.90	-1.30
TAMPA	72	1	4.20	2.40	LINCOLN	53	2	2.42	-0.48	DEL RIO	74	3	0.11	-1.60
WEST PALM BEACH	74	0	3.76	0.19	MCCOOK	53	3	2.58	0.36	EL PASO	65	0	0.02	-0.21
GA ATHENS	60	-1	2.54	-0.81	NORFOLK	51	2	2.17	-0.42	GALVESTON	70	0	1.07	-1.49
ATLANTA	62	0	3.45	-0.17	NORTH PLATTE	49	1	3.84	1.87	HOUSTON	71	2	2.45	-1.15
AUGUSTA	62	0	6.36	3.42	OMAHA/EPPLEY	53	2	3.66	0.72	LUBBOCK	63	3	1.12	-0.17
COLUMBUS	65	1	4.73	0.89	SCOTTSBLUFF	49	3	1.37	-0.42	MIDLAND	67	3	0.02	-0.71
MACON	64	1	4.27	1.13	VALENTINE	49	3	2.27	0.30	SAN ANGELO	68	3	0.06	-1.54
SAVANNAH	65	0	6.27	2.95	NV ELKO	44	-1	1.66	0.85	SAN ANTONIO	72	3	0.17	-2.43
HI HILO	73	0	14.12	1.58	ELY	41	-1	1.74	0.84	VICTORIA	71	1	0.28	-2.69
HONOLULU	77	1	0.81	-0.30	LAS VEGAS	63	-3	0.38	0.23	WACO	68	2	0.94	-2.05
KAHULUI	75	1	0.01	-1.74	RENO	46	-3	0.83	0.48	WICHITA FALLS	65	3	1.83	-0.79
LIHUE	76	2	1.76	-1.24	WINNEMUCCA	44	-3	1.03	0.18	UT SALT LAKE CITY	50	0	1.65	-0.37
ID BOISE	49	-2	1.39	0.12	NH CONCORD	41	-4	4.08	1.01	VT BURLINGTON	41	-3	2.09	-0.79
LEWISTON	50	-1	1.56	0.26	NJ ATLANTIC CITY	49	-2	2.79	-0.66	VA LYNCHBURG	56	1	5.32	1.86
POCATELLO	44	-2	1.36	0.18	NEWARK	50	-2	2.42	-1.50	NORFOLK	58	1	6.39	3.01
IL CHICAGO/O'HARE	48	0	4.33	0.65	NM ALBUQUERQUE	57	1	0.00	-0.50	RICHMOND	57	0	4.34	1.16
MOLINE	53	2	3.94	0.12	NY ALBANY	44	-3	2.89	-0.41	ROANOKE	57	1	5.02	1.41
PEORIA	53	2	2.63	-0.93	BINGHAMTON	42	-2	2.47	-1.02	WASH/DULLES	53	0	2.71	-0.51
ROCKFORD	48	0	2.64	-0.98	BUFFALO	43	-2	0.90	-2.14	WA OLYMPIA	48	1	4.72	1.14
SPRINGFIELD	54	1	2.83	-0.53	ROCHESTER	43	-2	1.27	-1.48	QUILLAYUTE	46	-1	10.04	2.60
IN EVANSVILLE	58	2	3.93	-0.55	SYRACUSE	44	-1	2.61	-0.78	SEATTLE-TACOMA	49	-1	2.74	0.15
FORT WAYNE	50	1	2.35	-1.19	NC ASHEVILLE	55	1	5.26	1.76	SPOKANE	45	-2	1.41	0.13
INDIANAPOLIS	55	3	2.55	-1.06	CHARLOTTE	59	-2	8.25	5.30	YAKIMA	49	0	1.28	0.75
SOUTH BEND	50	2	3.30	-0.32	GREENSBORO	58	0	6.39	2.96	WV BECKLEY	53	2	5.40	1.98
IA BURLINGTON	53	1	3.26	-0.35	HATTERAS	59	-1	6.54	3.25	CHARLESTON	57	3	3.40	0.15
CEDAR RAPIDS	51	2	2.73	-0.49	RALEIGH	58	-1	4.35	1.55	ELKINS	52	3	3.80	0.27
DES MOINES	53	2	6.09	2.51	WILMINGTON	62	-1	6.51	3.57	HUNTINGTON	58	3	4.33	1.00
DUBUQUE	48	1	2.84	-0.65	ND BISMARCK	47	4	0.85	-0.61	WI EAU CLAIRE	46	1	3.42	0.51
SIoux CITY	51	2	3.15	0.40	DICKINSON	46	3	0.53	-1.23	GREEN BAY	42	-2	2.36	-0.20
WATERLOO	50	2	4.04	0.81	FARGO	45	1	1.33	-0.04	LA CROSSE	48	0	2.48	-0.90
KS CONCORDIA	55	2	3.28	0.83	GRAND FORKS	43	1	1.00	-0.23	MADISON	45	-1	2.95	-0.40
DODGE CITY	56	2	2.30	0.05	JAMESTOWN	43	0	0.88	-0.48	MILWAUKEE	43	-2	2.61	-1.17
GOODLAND	52	3	1.71	0.20	MINOT	45	2	1.01	-0.54	WAUSAU	42	-2	4.44	1.60
HILL CITY	54	2	2.42	0.49	WILLISTON	46	4	1.64	0.59	WY CASPER	46	3	1.54	0.02
TOPEKA	58	3	5.92	2.78	OH AKRON-CANTON	51	3	2.30	-1.09	CHEYENNE	46	4	2.22	0.67
WICHITA	58	3	4.06	1.49	CINCINNATI	56	2	1.91	-2.05	LANDER	48	4	0.88	-1.19
KY JACKSON	59	3	5.14	1.35	CLEVELAND	49	1	2.47	-0.90	SHERIDAN	47	3	2.29	0.52

Based on 1971-2000 normals.

*** Not Available.

National Agricultural Summary

May 5 - 11, 2003

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

Tornados were reported across a wide area that included the central Great Plains, Midwest, Southeast, and lower Great Lakes as well as the Tennessee and Ohio Valleys. Heavy rains fell in a wide swath from southern Illinois, Indiana, and Ohio, through Tennessee to northern Alabama, Mississippi, and Georgia, causing flooding in many locations. Much of Iowa and Wisconsin also reported heavy rainfall. Most of California remained cool, with continued wet conditions in the north. Dry conditions dominated in a band from southern California to the Texas and Oklahoma Panhandles. Subsoil moisture

conditions remained very dry in the central and northern Rockies, despite some local heavy showers. Rain slowed planting progress much of the week in the central and northern Great Plains and upper Mississippi Valley. The Southeast was mixed, with some areas receiving heavy showers and others little to no precipitation. Farther north, Pennsylvania had scattered, heavy rains that limited planting progress, while a relatively dry week allowed growers across New York and New England to make good progress.

Corn: Planting was 64-percent complete, 4 percentage points ahead of last year's pace but 3 points behind the average. The crop was 24 percent emerged, 4 points ahead of last year but 5 points behind the average. Heavy showers across most of the Corn Belt slowed planting progress. States in the eastern Corn Belt remained ahead of their average pace, but planting progress in Iowa, Nebraska, and Wisconsin was several days behind normal. In Iowa, Illinois, and Indiana, planting progressed 8 points or less. With drier conditions, producers in Kansas and South Dakota planted about one-fifth of their crop. Above-normal temperatures and adequate topsoil moisture in the eastern Corn Belt and Atlantic Coastal Plains led fields to rapidly emerge.

Soybeans: Planting was 16-percent complete, equal to last year's pace but 10 points behind normal for this date. Heavy rainfall across the Corn Belt and adjacent areas of the Delta, Tennessee Valley, and Southeast limited planting progress to 5 points or less in most States. Planting progress was more than 1 week behind normal in Iowa and Illinois, and several days behind average in the rest of the Corn Belt.

Winter Wheat: Fifty-six percent of the Nation's winter wheat was headed, 4 points ahead of last year's pace, and 6 points ahead of the average. Above-normal temperatures stimulated development in the central and southern Great Plains, central Corn Belt, and along the Atlantic Coastal Plain and yielded double-digit increases in the percentage headed. Heading was well ahead of normal in Kansas and Illinois, and slightly ahead of normal in Missouri, Oklahoma, and Texas. A few fields were headed in Colorado, Nebraska, Ohio, and Washington, but none had entered the heading stage in Idaho, Michigan, Montana, Oregon, and South Dakota.

Cotton: Planting advanced to 44-percent complete, 8 points behind last year and 3 points behind the 5-year average. Nearly ideal conditions supported planting in Virginia, with producers seeding over one-third of their acreage. Progress was only slightly slower in North Carolina and Oklahoma. Planting continued across the Southeast as local soil conditions allowed, but all States except Mississippi remained behind the average. California planting progress remained well behind their average, but increased 12 points despite continued cool, wet conditions.

Sorghum: Planting advanced to 27 percent complete, 2 percentage points behind last year and the average. Planting was most active in the Delta, with Louisiana and Arkansas advancing 14 points despite scattered showers. Planting was also active in Colorado, Kansas, Missouri, and South Dakota, but minimal progress was seen in Illinois, Nebraska, New Mexico, Oklahoma, and Texas.

Rice: Seventy-eight percent of the crop had been planted, compared with 82 percent last year and the average of 79 percent. The crop was 63 percent emerged, 1 point behind last year but 7 points ahead of the

average. Missouri and Mississippi led the way on planting progress and emergence. Planting accelerated 23 points and emergence increased 22 points in Missouri, while planting and emergence in Mississippi rose 16 and 30 points, respectively. Conditions in California limited planting progress, and no rice emergence was reported. This was well behind last year's pace and the average.

Small grains: Spring wheat planting progressed to 69 percent, 23 points ahead of last year and 5 points ahead of the average. The crop was 41 percent emerged, 26 points ahead of last year and 6 points ahead of the average. Minnesota planting advanced 14 points to 89 percent complete, 49 points ahead of last year and 26 points ahead of the normal pace. Below-normal temperatures across the northern Great Plains and Pacific Northwest slowed crop development.

The barley crop was 63 percent seeded, compared with last year's 45 percent but equal to the 5-year average. The crop was 39 percent emerged, 20 points ahead of last year and 4 points ahead of the average. Minnesota's planting progress advanced to 88 percent complete, 52 points ahead of last year and 32 points ahead of the normal pace, with growers seeding 26 percent of their crop. Planting was virtually completed in Washington, where emergence advanced 18 points. Rains slowed planting in North Dakota but allowed the newly seeded crop to rapidly emerge.

The oat crop was 79 percent seeded and 54 percent emerged. Planting was ahead of last year's pace of 67 percent seeded, and emergence was 13 points ahead of last year's pace. Planting was completed in Iowa and Ohio. Other States showed slow progress due to wet conditions. Emergence was boosted by 23 points in Minnesota and Pennsylvania, and 22 points in Ohio. Emergence in South Dakota was 18 points above the average.

Other crops: Sugar beet planting progressed to 91 percent in the four major sugar beet-producing States. Planting was ahead of last year by 16 points and 10 points ahead of the 5-year average. Each of the four major producing States was ahead of normal planting progress for this date. As favorable soil conditions continued, growers in Michigan rapidly increased their planting pace. Progress slowed in Idaho as planting neared completion.

Peanuts were 26 percent planted, 8 points behind last year and 9 points behind the average. Planting in Oklahoma increased to 40 percent, advancing 15 points from the previous week and 9 points ahead of the average. Planting progress in the Southeast accelerated as soil conditions improved, but a slow start earlier in the year kept Alabama, Florida, Georgia, North Carolina, and Virginia behind their average pace.

Crop Progress and Condition

Week Ending May 11, 2003

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

Winter Wheat Percent Headed				
	May 11 2003	Prev Week	Prev Year	5-Yr Avg
AR	97	80	98	98
CA	97	96	100	99
CO	11	3	11	10
ID	0	0	0	0
IL	68	22	56	56
IN	35	8	35	40
KS	65	25	54	50
MI	0	0	0	0
MO	69	33	64	60
MT	0	0	0	0
NE	1	0	2	3
NC	80	60	93	95
OH	3	2	3	6
OK	98	91	95	90
OR	0	0	22	7
SD	0	0	0	0
TX	85	72	75	78
WA	5	3	5	5
18 Sts	56	39	52	50

These 18 States planted 90% of last year's winter wheat acreage.

Corn Percent Planted				
	May 11 2003	Prev Week	Prev Year	5-Yr Avg
CO	43	29	60	58
IL	73	68	48	69
IN	58	50	11	54
IA	64	56	81	78
KS	80	58	85	81
KY	71	70	50	69
MI	35	24	38	51
MN	85	80	75	74
MO	71	66	77	71
NE	46	33	76	71
NC	82	73	97	89
ND	58	49	38	45
OH	86	83	16	53
PA	41	26	49	46
SD	47	27	60	47
TN	86	85	92	89
TX	92	83	95	90
WI	42	28	33	53
18 Sts	64	55	60	67

These 18 States planted 92% of last year's corn acreage.

Cotton Percent Planted				
	May 11 2003	Prev Week	Prev Year	5-Yr Avg
AL	64	58	72	68
AZ	70	65	91	87
AR	51	37	61	56
CA	80	68	94	89
GA	41	22	55	45
LA	65	50	73	77
MS	73	64	68	65
MO	33	20	73	64
NC	42	17	56	51
OK	41	15	37	24
SC	24	10	54	43
TN	23	20	47	44
TX	33	24	34	30
VA	64	26	81	75
14 Sts	44	32	52	47

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

Sorghum Percent Planted				
	May 11 2003	Prev Week	Prev Year	5-Yr Avg
AR	84	70	89	79
CO	7	2	4	5
IL	2	1	3	12
KS	10	3	13	13
LA	62	48	68	74
MO	26	20	26	27
NE	2	1	6	8
NM	4	1	0	1
OK	16	14	20	15
SD	7	0	3	7
TX	52	49	53	52
11 Sts	27	22	29	29

These 11 States planted 97% of last year's sorghum acreage.

Soybeans Percent Planted				
	May 11 2003	Prev Week	Prev Year	5-Yr Avg
AR	31	24	26	24
IL	10	6	9	28
IN	21	17	3	31
IA	6	4	27	28
KS	13	5	20	22
KY	6	4	3	14
LA	36	34	37	48
MI	8	4	18	21
MN	24	12	21	34
MS	73	68	62	58
MO	8	6	13	19
NE	6	3	18	20
NC	7	2	18	12
ND	10	8	2	10
OH	46	41	6	33
SD	7	2	9	12
TN	4	4	14	11
WI	8	5	17	19
18 Sts	16	11	16	26

These 18 States planted 96% of last year's soybean acreage.

Corn Percent Emerged				
	May 11 2003	Prev Week	Prev Year	5-Yr Avg
CO	8	2	7	13
IL	41	23	23	37
IN	32	11	4	25
IA	12	3	15	25
KS	42	24	49	46
KY	62	52	45	53
MI	3	0	3	16
MN	7	2	3	26
MO	57	43	59	52
NE	13	5	24	22
NC	60	41	88	77
ND	12	1	2	10
OH	34	8	8	22
PA	9	2	21	14
SD	3	1	3	9
TN	83	74	83	74
TX	77	69	79	75
WI	3	1	6	13
18 Sts	24	13	20	29

These 18 States planted 92% of last year's corn acreage.

Peanuts Percent Planted				
	May 11 2003	Prev Week	Prev Year	5-Yr Avg
AL	35	19	30	42
FL	25	10	34	37
GA	17	5	34	33
NC	32	5	37	36
OK	40	25	25	31
TX	32	*10	31	31
VA	29	10	58	52
7 Sts	26	10	34	35

These 7 States planted 98% of last year's peanut acreage.

Crop Progress and Condition

Week Ending May 11, 2003

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

Oats Percent Planted				
	May 11 2003	Prev Week	Prev Year	5-Yr Avg
IA	100	98	100	98
MN	89	81	74	77
NE	96	94	99	97
ND	49	42	28	46
OH	100	99	72	91
PA	86	79	79	85
SD	92	86	83	82
WI	76	71	62	85
8 Sts	79	73	67	76
These 8 States planted 53% of last year's oat acreage.				

Oats Percent Emerged				
	May 11 2003	Prev Week	Prev Year	5-Yr Avg
IA	83	74	92	85
MN	55	32	34	49
NE	86	77	88	84
ND	25	11	4	18
OH	79	57	48	76
PA	58	35	67	60
SD	73	55	50	55
WI	40	22	31	55
8 Sts	54	37	41	51
These 8 States planted 53% of last year's oat acreage.				

Barley Percent Planted				
	May 11 2003	Prev Week	Prev Year	5-Yr Avg
ID	80	72	85	85
MN	88	62	36	56
MT	61	55	45	74
ND	46	40	18	39
WA	98	97	94	95
5 Sts	63	56	45	63
These 5 States planted 81% of last year's barley acreage.				

Barley Percent Emerged				
	May 11 2003	Prev Week	Prev Year	5-Yr Avg
ID	58	44	45	55
MN	34	13	14	30
MT	33	22	10	35
ND	25	11	2	16
WA	85	67	73	78
5 Sts	39	25	19	35
These 5 States planted 81% of last year's barley acreage.				

Rice Percent Planted				
	May 11 2003	Prev Week	Prev Year	5-Yr Avg
AR	91	87	88	83
CA	20	19	56	47
LA	93	87	92	95
MS	85	69	83	84
MO	69	46	51	66
TX	97	93	99	97
6 Sts	78	72	82	79
These 6 States planted 100% of last year's rice acreage.				

Rice Percent Emerged				
	May 11 2003	Prev Week	Prev Year	5-Yr Avg
AR	77	56	72	59
CA	0	0	18	11
LA	84	73	86	87
MS	65	35	66	62
MO	40	18	32	31
TX	92	80	95	90
6 Sts	63	47	64	56
These 6 States planted 100% of last year's rice acreage.				

Spring Wheat Percent Planted				
	May 11 2003	Prev Week	Prev Year	5-Yr Avg
ID	84	78	89	90
MN	89	75	40	63
MT	61	57	45	72
ND	56	51	30	49
SD	97	92	92	87
WA	98	96	93	97
6 Sts	69	63	46	64
These 6 States planted 99% of last year's spring wheat acreage.				

Spring Wheat Percent Emerged				
	May 11 2003	Prev Week	Prev Year	5-Yr Avg
ID	65	59	60	66
MN	43	23	10	34
MT	23	12	4	32
ND	35	21	5	24
SD	84	64	54	63
WA	84	70	70	82
6 Sts	41	27	15	35
These 6 States planted 99% of last year's spring wheat acreage.				

Sugar Beets Percent Planted				
	May 11 2003	Prev Week	Prev Year	5-Yr Avg
ID	99	98	96	98
MI	98	91	94	95
MN	88	83	69	75
ND	84	78	57	70
4 Sts	91	86	75	81
These 4 States planted 81% of last year's sugar beet acreage.				

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

NA - Not Available
* - Revised

Winter Wheat Crop Condition by Percent					
	VP	P	F	G	EX
AR	1	11	30	48	10
CA	0	0	20	65	15
CO	6	12	28	39	15
ID	0	0	4	74	22
IL	1	5	23	61	10
IN	1	3	17	55	24
KS	5	14	32	37	12
MI	2	9	22	54	13
MO	1	6	30	47	16
MT	1	5	19	56	19
NE	0	8	32	47	13
NC	2	12	34	49	3
OH	1	2	14	55	28
OK	4	10	29	43	14
OR	0	5	49	43	3
SD	1	4	26	53	16
TX	18	24	37	18	3
WA	2	7	19	54	18
18 Sts	6	12	30	40	12
Prev Wk	5	11	29	43	12
Prev Yr	16	19	31	29	5

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

Crop Progress and Condition

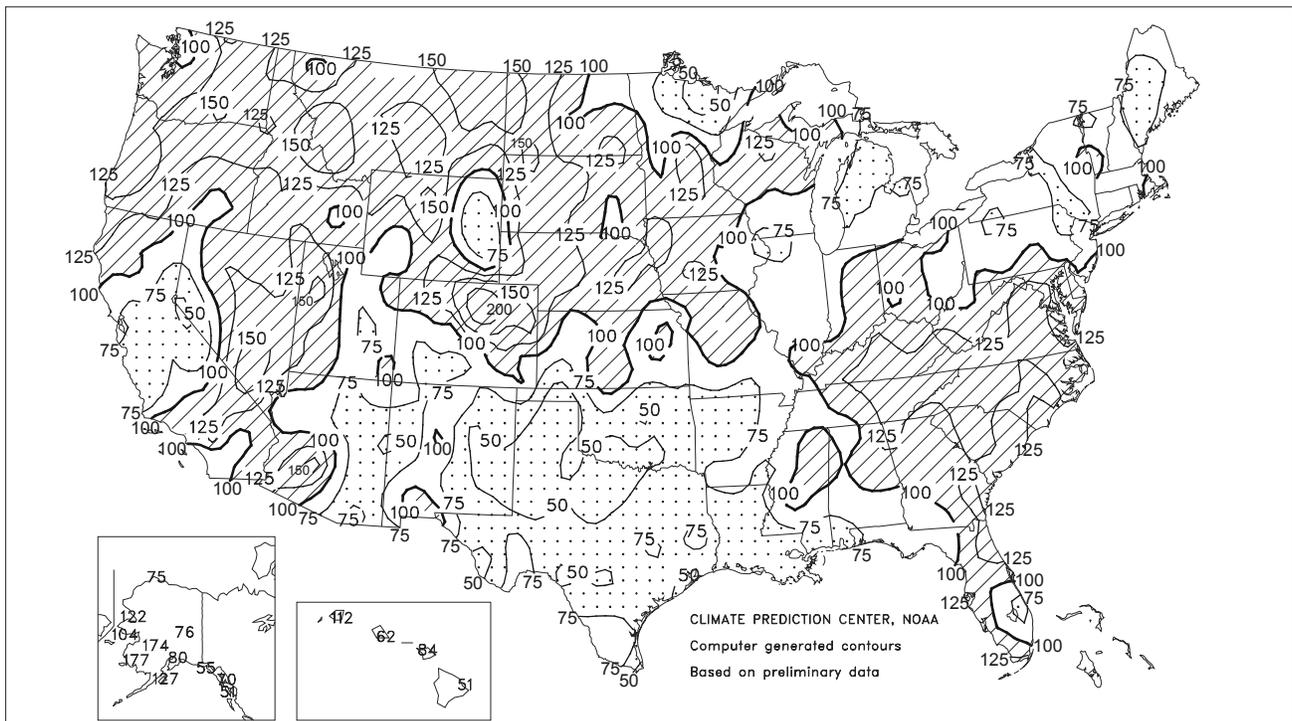
Week Ending May 11, 2003

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

Pasture and Range Crop Condition by Percent Week Ending May 11, 2003											
	VP	P	F	G	EX		VP	P	F	G	EX
AL	1	3	25	53	18	NH	0	2	35	53	10
AZ	20	32	26	18	4	NJ	0	0	3	87	10
AR	1	7	40	44	8	NM	34	37	27	2	0
CA	0	0	20	60	20	NY	0	1	14	64	21
CO	13	34	32	18	3	NC	0	2	20	63	15
CT	0	17	18	50	15	ND	6	21	40	31	2
DE	0	2	14	76	8	OH	1	4	22	58	15
FL	0	5	40	50	5	OK	3	14	38	37	8
GA	0	3	20	62	15	OR	2	10	39	43	6
ID	0	1	25	61	13	PA	0	6	26	53	15
IL	0	1	19	61	19	RI	0	10	50	40	0
IN	1	5	21	58	15	SC	0	0	11	72	17
IA	0	2	17	61	20	SD	11	20	35	29	5
KS	16	24	35	21	4	TN	1	4	19	60	16
KY	0	3	13	56	28	TX	14	22	36	24	4
LA	1	13	49	35	2	UT	7	16	38	38	1
ME	0	3	57	40	0	VT	0	0	41	59	0
MD	0	3	21	53	23	VA	1	6	24	56	13
MA	0	16	20	56	8	WA	0	1	55	43	1
MI	2	9	24	51	14	WV	0	3	43	46	8
MN	3	7	35	47	8	WI	1	5	23	50	21
MS	2	10	32	48	8	WY	7	21	46	20	6
MO	2	9	32	49	8	48 Sts	6	12	31	41	10
MT	3	14	30	43	10						
NE	11	19	39	26	5	Prev Wk	6	15	33	38	8
NV	5	10	25	46	14	Prev Yr	9	16	31	36	8

Percent Of Normal Precipitation

JAN 1, 2003 - MAY 10, 2003



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 3.7. Corn 91% planted, 95% 2002, 94% avg.; 80% emerged, 79% 2002, 81% avg. Soybeans 10% planted, 15% 2002, 15% avg. Winter wheat 1% very poor, 4% poor, 31% fair, 58% good, 6% excellent. Pasture feed 1% very poor, 3% poor, 25% fair, 53% good, 18% excellent. Livestock condition 0% very poor, 2% poor, 34% fair, 50% good, 14% excellent. Rains delayed fieldwork in most areas. Activities: Fertilizing hayfields, pastures, controlling weeds, working cattle for spring herd health management.

ALASKA: Days suitable for fieldwork to 5.0. Topsoil 5% short, 95% adequate. Subsoil 1% short, 99% adequate. Rain fell in many of the growing areas across the State last week. Temperatures in general remained above normal. Last week saw daytime high temperatures mostly in the mid to high fifties. Lows were in the twenties to mid-thirties. Fieldwork progress was reported up to two weeks ahead of normal. Hay supplies 25% short, 70% adequate, 5% surplus. Livestock 10% fair, 75% good, 15% excellent.

ARIZONA: Temperatures for the State were well below average for the week. Cotton 70% planted, 91% 2002, 87% 5-yr avg. Alfalfa conditions were mostly good, with harvest progressing at a normal rate. Small grain development remains behind normal because of the extended cool spring temperatures. With no precipitation reported at any of the 17 reporting stations, Range, pasture feeds have not improved.

ARKANSAS: Days suitable for fieldwork 4. Soil 0% very short, 16% short, 52% adequate, 32% surplus. Corn 100% planted, 99% 2002, 98% 5-yr avg.; 98% emerged, 93% 2002, 90% 5-yr avg. Soybeans 31% planted, 26% 2002, 24% 5-yr avg.; 19% emerged, 17% 2002, 11% 5-yr avg. Sorghum 84% planted, 89% 2002, 79% 5-yr avg.; 67% emerged, 78% 2002, 57% 5-yr avg. Cotton 51% planted, 61% 2002, 56% 5-yr avg.; 35% emerged, 43% 2002, 23% 5-yr avg. Rice 91% planted, 88% 2002, 83% 5-yr avg.; 77% emerged, 72% 2002, 59% 5-yr avg. Winter Wheat: 97% headed, 98% 2002, 98% 5-yr avg.; 1% very poor, 11% poor, 30% fair, 48% good, 10% excellent. Pasture, Range feed 1% very poor, 5% poor, 53% fair, 38% good, 3% excellent. Alfalfa Hay 3% poor, 34% fair, 60% good, 3% excellent. Other Hay 1% very poor, 8% poor, 58% fair, 31% good, 2% excellent. Revisions: none
CROPS: Producers were at full speed planting rice, cotton, sorghum, early season soybeans. Corn planting is approaching completion. Corn was being fertilized, sprayed for aphids. Herbicides were being sprayed in rice, sorghum fields. Due to heavy rains, some soybeans will need to be replanted once the fields have dried. Wheat fields in the southern portion of the state are being monitored for armyworms, leaf beetles. Strawberry harvest is in full swing. Tomatoes are being staked, tied. Tornado weather in the southeastern portion of the state produced hail that severely damaged fruit trees, reduced fruit crops up to 75%.
LIVESTOCK: Livestock were reported to be in good condition with many herds being sprayed for ticks. Cull bulls, cows were being sold, calves were being weaned. Many pastures are being fertilized, being sprayed for weeds. Harvesting hay began last week, but slowed or stopped in most areas due to the heavy rains. Crops are reported to be short due to lack of moisture early in the season.

CALIFORNIA: Cotton planting resumed following weather-related delays, was nearing completion in some areas. However, soil, weather conditions remained less than ideal. Good, even stands were reported in many previously planted fields, but growth has been slowed by the

cool weather. Many grain fields continued to experience problems with mold, rust. Harvesting of winter wheat was expected to begin soon. Harvesting of oats continued. Winter forage was cut for silage, green-chopped. Harvested fields were disced in preparation for the next crop. Alfalfa hay fields continued to be cut, windrowed, dried. However, cutting was delayed in some areas due to wet conditions. Planting of field corn continued. Previously planted fields were exhibiting good growth. Dry bean fields were bedded up in preparation for planting. Sugarbeets continued to show steady growth. Irrigation, cultivation for weed control were underway in some fields. Rice planting was significantly delayed by cool weather, rainfall. Some growers were preparing for late planting, and others may not plant at all. Sweet potato field fumigations continued. Harvesting of spring potatoes continued. Picking, packing of early stone fruit varieties continued. Apricots, nectarines, Brooks cherries, April Snow, Earlitreat peaches were harvested. Fruit maturity was delayed due to the cool temperatures, but good color development was evident. Hail, rain damage in cherry, prune, peach, pear orchards was reported in many locations. Splitting was evident in early cherry varieties due to the damp, rainy weather. Fruit thinning continued in many stone fruit orchards. Growers treated orchards to control diseases, insect pests where necessary. Wine, raisin, table grape vineyards were cultivated, fertilized, treated with sulfur, insecticides. Cool temperatures reduced the need for fungicide applications in many locations. New canes were trained onto overhead trellises in some table grape vineyards. Strawberry harvesting continued at a steady pace. Fruit was packed for shipment, sold at roadside stands. Some fields continued to show evidence of strawberry rot damage due to recent rains. Blueberries were developing well, nearly ready for harvest. Olive trees were blooming. Some citrus orchards received foliar nutrient applications. Orchards were monitored for scale or thrips. Lemons, Navel, Valencia oranges were picked, packed. Spring rains slowed Navel harvesting, but quality remained good to excellent. Almond orchards continued to show good crop progress. Some trees were blown over by wind in the Kerman district. Almond, walnut, pistachio orchards received treatments to control disease, insect pests. Copper continued to be applied in walnut orchards as a result of the rainy weather. Planting of tomatoes, peppers was interrupted by wet soil conditions. Cool, wet weather was also expected to delay the start of tomato harvesting in some areas. Some tomato fields were affected by diseases due to the moist conditions. Previously planted fields of processing, fresh market tomatoes were growing steadily, blooming. Cantaloupe planting continued. Onions, garlic were maturing rapidly and nearing their harvest cycle. Some mature fields were cut to begin the drying process. Wet field conditions led some growers to treat their onion, garlic plantings to prevent rust, mildew. Field preparation, planting of summer vegetables continued. Eggplant, peppers, squash, sweet corn, cucumbers fields continued to thrive. Lettuce harvest continued in the San Joaquin Valley. Harvesting of broccoli, cabbage, asparagus continued. The following vegetables were also harvested: artichokes, basil, carrots, cilantro, fava beans, mustard greens, green onions, spinach. Rangeland grasses were maturing. Vegetation was described as tall, lush in several areas. Cattle grazed on foothill rangeland while sheep grazed in pastures, fallow fields and the occasional harvested grain field. Hives of leafcutter bees were placed in some alfalfa seed fields to aid pollination; honey bees stayed in their boxes or gathered nectar as weather permitted

COLORADO: Days suitable for field work 4.9. Top soil 5% very short, 20% short, 67% adequate, 8% surplus. Subsoil 21% very short,

38% short, 39% adequate, 2% surplus. Temperatures last week were below normal for the state. The Front Range, northeastern areas of the state experienced some scattered thunderstorms, snow showers. Spring wheat 83% planted, 84% 2002, 81% avg.; 48% emerged, 54% 2002, 57% avg.; 4% poor, 21% fair, 58% good, 17% excellent. Spring barley 89% seeded, 95% 2002, 93% avg.; 68% emerged, 76% 2002, 75% avg.; 1% very poor, 4% poor, 17% fair, 55% good, 23% excellent. Alfalfa 0% 1st cutting, 1% 2002, 0% avg. Dry beans 1% planted, 3% 2002, 2% avg. Sugar beets 91% planted, 95% 2002, 96% avg.; 50% up to stand, 25% 2002, 25% avg.; 10% very poor, 11% poor, 17% fair, 47% good, 15% excellent. Summer potatoes 78% planted, 76% 2002, 86% avg.; 38% emerged, 7% 2002, 21% avg.; 3% very poor, 3% poor, 6% fair, 72% good, 16% excellent. Fall potatoes 44% planted, 42% 2002, 47% avg.; 9% emerged, 0% 2002, 0% avg.; 20% poor, 20% fair, 60% fair. Dry onions 5% very poor, 5% poor, 9% fair, 60% good, 21% excellent.

DELAWARE: Days suitable for fieldwork 4.9. Topsoil 5% short, 78% adequate, 17% surplus. Subsoil 5% short, 87% adequate, 8% surplus. Corn 47% planted, 80% 2002, 59% avg.; 21% emerged, 47% 2002, 24% avg. Soybeans 12% planted, 9% 2002, 7% avg. Sorghum 13% planted, 14% 2002, 7% avg. Barley 2% very poor, 10% poor, 27% fair, 55% good, 6% excellent; 65% headed, 99% 2002, 90% avg. Winter wheat 10% poor, 20% fair, 62% good, 8% excellent; 20% headed, 68% 2002, 52% avg. Strawberries 81% bloomed, 82% 2002, 80% avg. Apples 99% bloomed, 96% 2002, 96% avg. Peaches 98% bloomed, 89% 2002, 97% avg. Snap beans 34%, planted 33% 2002, 34% avg. Sweet corn 47% planted, 53% 2002, 45% avg. Potatoes 89% planted, 100% 2002, 95% avg. Watermelons planted 20%, 23% 2002, 25% avg. Cantaloupes planted 20%, 38% 2002, 29% avg. Hay supplies 12% very short, 23% short, 58% adequate, 7% surplus. Pasture feed 2% poor, 14% fair, 76% good, 8% excellent. Other hay 1st cutting 15%, 23% 2002, 20% avg. Alfalfa hay 1st cutting 10%, 24% 2002, 19% avg. Rain hindered spring plantings this week. Field corn planting was delayed along with the harvesting of dry hay. Barley is more than 60% headed, will turn in the next week. Pastures are in mostly good condition. Hay supplies are adequate to short.

FLORIDA: Topsoil 10% very short, 50% short, 40% adequate. Subsoil 1% very short, 39% short, 60% adequate. Temperature 4 to 9° above normal, major cities. Daytime highs: 80s, 90s; most localities baked as highs reached into mid to upper 90s; many cities set new daily record highs. Nighttime lows: 60s, 70s. Rainfall range: none most areas to almost 0.30 in. at Ocklawaha; most localities recorded no measurable rain. Wild fire danger increasing. High temperatures, strong winds, a lack of rain drying soils. Peanuts 25% planted, 34% 2002, 37% 5-yr avg. Some cotton planting nearly finished. Hay baling active. Growers stepped up vegetable harvesting to meet Memorial Day demand; truck shortage slowing some movement, especially watermelons. Vegetables: Cantaloupes, cucumbers, sweet corn, eggplant, okra, peppers, potatoes, squash, tomatoes, watermelons, light supplies of blueberries. Volume of cabbage, carrots, celery, endive, escarole, radishes declining seasonally. Hot, dry, windy weather in citrus areas; all growers irrigating. Trees continuing to set new crop fruit. Valencia harvest still very active, most fruit going to the juice plants. Several thousand grapefruit remain, most to be processed, many packing houses closed for season. Temple harvest all but over. Caretakers cutting cover crops, irrigating, hedging, topping; removing, burning dead trees; applying spring sprays, fertilizers; a few resets going in groves with irrigation. Pasture feed 5% poor, 40% fair, 50% good, 5% excellent. Cattle 5% poor, 15% fair, 75% good, 5% excellent. Panhandle, North: Pasture feed decreased due to hot temperatures, steady winds, drought, cattle condition improving with better grass; haying active. Central: pasture condition down due to seasonal hot, dry conditions; haying active. South: pasture feed lower due to hot, dry winds, condition somewhat balanced by scattered rain. Statewide: cattle condition mostly good.

GEORGIA: Days suitable for field work 4.5. Soil 2% very short, 12% short, 52% adequate, 34% surplus. Corn 2% poor, 25% fair, 64% good, 9% excellent. Cotton 4% poor, 31% fair, 56% good, 9% excellent; 41% planted, 55% 2002, 45% avg. Hay 7% poor, 26% fair, 53% good, 14% excellent. Sorghum 1% very poor, 7% poor, 28% fair, 60% good, 4% excellent; 32% planted, 39% 2002, 33% avg. Soybeans 1% poor, 19% fair, 78% good, 2% excellent; 5% emerged, 17% 2002, 7% avg. Tobacco 1% poor, 22% fair, 65% good, 12% excellent. Wheat 1% harvested for grain, 3% 2002, 2% avg. Onions 4% poor, 22% fair, 47% good, 27% excellent; 29% harvested, 72% 2002, 53% avg. Watermelons 2% very poor, 10% poor, 46% fair, 38% good, 4% excellent; 96% planted, 100% 2002, 96% avg. Apples 7% poor, 27% fair, 46% good, 20% excellent. Peaches 21% fair, 79% good; 1% harvested, 1% 2002, 3% avg. North state experienced severe weather last week. Thunderstorms, tornadoes postponed farming activities. Pastures, hayfields in north, west state were flooded due to heavy rains, which hampered the application of herbicides and hay cutting. Rains ruined hay that was cut. Cotton, peanut planting continued in south state. Cotton displayed weak strands due to poor vigor or germination. Growers sprayed pecan trees for leaf disease. Pasture, hayfield conditions continued to improve. Activities: Routine care of livestock and poultry, applying sidedressing nitrogen applications, preparing fields for planting.

HAWAII: Generally favorable weather continued throughout the State during the past week. East state banana harvest remained active. Lower Puna papaya orchards benefitted from the favorable weather, regular spraying to prevent disease infections. Vegetables remained in mostly fair to good condition with warm, sunny weather, heavy irrigation.

IDAHO: Days suitable for fieldwork 5. Topsoil 12% short, 77% adequate, 11% surplus. Irrigation Water Supply 3% very poor, 16% poor, 41% fair, 38% good, 2% excellent. Cool, damp weather conditions continue to enhance the states irrigation water supply. Spring planting in North state is starting to progress as weather conditions permit. Hay, Roughage Supply is 3% short, 67% adequate, 30% surplus. Sugarbeets 84% emerged, 54% 2002, 70% avg. Oats 71% Planted, 72% 2002, 71% avg.; 48% emerged, 41% 2002, 42% avg. Onions 94% emerged, 86% 2002, 97% avg. Dry Peas 46% planted, 87% 2002, 81% avg.; 16% emerged, 44% 2002, 41% avg. Lentils 31% planted, 79% 2002, 71% avg. Potatoes 53% planted, 59% 2002, 60% avg.; 2% emerged, 1% 2002, 5% avg. Dry Beans 8% planted, 23% 2002, 7% avg. Winter Wheat 55% Jointed, 39% 2002, 55% avg.; Boot Stage 2%, 0% 2002, 6% avg. Spring Wheat 2% Jointed, 3%, 2002, 9% avg. Barley 4% Jointed, 3% 2002, 8% avg. Alfalfa Hay 1st cutting harvested 1%, 0% 2002, 2% avg. Activities: Planting small grains, sugarbeets, potatoes, corn, lentils, dry peas, dry beans, cutting hay, moving livestock to spring range.

ILLINOIS: Days suitable for fieldwork 1.0. Topsoil 2% short, 47% adequate, 51% surplus. Winter wheat 7% filled, 9% 2002, 6% avg. Oats 1% headed, 3% 2002, 3% avg.; 3% poor, 19% fair, 68% good, 10% excellent. Alfalfa hay 1% poor, 19% fair, 66% good, 14% excellent. Red clover 1% poor, 26% fair, 65% good, 8% excellent. Heavy rainfall accompanied by high winds, tornadoes in some areas slowed spring planting across the state last week. Replanting may be necessary where the storms left water standing in fields, wash-outs or sediment deposits. The average temperature last week was over two degrees warmer than normal, precipitation averaged 2.4 inches above normal. Damp spring conditions have pasture, fruit, vegetable crops doing well but could cause fungus or other deteriorating conditions on winter wheat, oats, alfalfa, red clover. Activities: Machinery maintenance, spraying, mowing, hauling grain.

INDIANA: Days suitable for fieldwork 0.6. Topsoil 1% short, 27% adequate, 72% surplus. Subsoil 7% short, 56% adequate, 37% surplus. Rain, wind, strong thunderstorms in many areas of the state halted most field activities during the week. Heavy rain occurred in many regions causing flooding, standing water to exist in many low lying areas of fields. Corn, soybean planting slowed by rain, wet soil conditions. Corn planting 2 days ahead of average. Soybean planting 5 days behind average. Many fields of corn have emerged. Good stands in early planted corn fields. Some replanting will be necessary, especially in river bottom fields. Dry soil conditions alleviated from rain last week. Temperatures averaged 3° to 11° above normal for the week. Precipitation averaged 2.84 to 6.40 inches. Fertilizer was being applied on some fields. Farmers continued spraying chemicals for weed, insect control. Winter wheat 79% good to excellent compared with 62% 2002, 94% jointed, 99% 2002, 99% avg. Wheat damaged in some fields from wind, water. Livestock are in mostly good condition. Spring calving active. Pastures continue to improve, grow. Pastures 1% very poor, 5% poor, 21% fair, 58% good, 15% excellent. Activities: Tilling soils, planting major crops, moving grain to market, hauling manure, repairing equipment, cleaning up from wind damage, taking care of livestock.

IOWA: Day suitable for fieldwork 0.6. Topsoil 0% very short, 0% short, 49% adequate, 51% surplus. Oat seedings 100% complete, compared to 98% last week, similar to last year's progress of 100% complete. Oat emergence 83%, compared to 74% last week, but slightly below the 92% 2002, 0% very poor, 2% poor, 19% fair, 64% good, 15% excellent. Corn planting increased from 56% complete to 64% complete. This is behind last year's progress of 81% complete, the 5-yr avg of 78%. Corn planting is four days behind normal. Corn emergence 12%, slightly behind 2002, progress of 15% emergence, and below the 5-yr avg 25% emergence. Soybean planting 6%, below 2002, progress of 27%, 5-yr avg 28%. Soybean planting is ten days behind normal. Pasture, Range feed improved from last week 0% very poor, 2% poor, 17%t fair, 61% good, 20% excellent.

KANSAS: Days suitable for fieldwork 4.3. Topsoil 8% very short, 14% short, 72% adequate, 6% surplus. Subsoil 16% very short, 32% short, 51% adequate, 1% surplus. Wheat 98% jointed, 92% 2002, 96% avg. Range, pasture 16% very poor, 24% poor, 35% fair, 21% good, 4% excellent. Stockwater supplies 8% very short, 22% short, 70% adequate. Feed grain supplies 5% very short, 19% short, 75% adequate, 1% surplus. Hay, forage 9% very short, 33% short, 57% adequate, 1% surplus. Widespread shower activity improved the crop, pasture outlook in many areas but subsoil moisture remains very low in the Southwest portion of the State where dry conditions continue to cause deterioration of the wheat crop.

KENTUCKY: Days suitable for fieldwork 1. Topsoil 24% adequate, 76% surplus. Subsoil 37% adequate, 63% surplus. For the week, temperatures averaged 71°, 7° above normal. Rainfall Statewide was 3.38 in. Constant heavy showers throughout the week flooded some low lying areas, allowed for only minimal planting progress. Tobacco transplants emerged; less than 2 inches 31%, 2 to 4 inches 37%, larger than 4 inches 32%. Burley tobacco set 4% and dark tobacco set 1% Winter wheat 1% very poor, 4% poor, 17% fair, 49% good, 29% excellent; 88% headed. Corn 71% planted, 62% emerged, 3% very poor, 6% poor, 30% fair, 44% good, 17% excellent. Hay crops 2% poor, 14% fair, 56% good, 28% excellent. Pasture feed 3% poor, 13% fair, 56% good, 28% excellent. Farmers reported 95% had adequate tobacco plants with some shortages reported in south central, eastern state

LOUISIANA: Days suitable for fieldwork 6.4. Soil 25% very short, 47% short, 25% adequate, 3% surplus. Corn 4% poor, 37% fair, 53% good, 6% excellent. Cotton 46% emerged 15% last week, 59% 2002, 54% avg. Hay 1st cutting 32%, 21% last week, 37% 2002, 38% avg. Rice 1% poor, 27% fair 62% good, 10% excellent. Rice producers were having trouble keeping their fields flooded due to the dry conditions.

Sorghum 47% emerged, 25% last week, 55% 2002, 58% avg. Soybeans 21% emerged, 19% last week, 24% 2002, 34% avg. Many producers reported that planting of soybeans will not resume until rain is received. Spring plowing 96% plowed, 95% last week, 95% 2002, 96% avg. Sugarcane 4% very poor, 11% poor, 32% fair, 46% good, 7% excellent. Sweet potatoes 7% planted, 2% last week, 12% 2002, 9% avg. Winter wheat 11% poor, 41% fair, 46% good, 2% excellent; 100% headed, 95% last week, 100% 2002, 100% avg; 57% turning color, 34% last week, 82% 2002, 88% avg. Livestock 1% very poor, 7% poor, 42% fair, 47% good, 3% excellent. Vegetables 3% very poor, 16% poor, 43% fair, 35% good, 3% excellent.

MARYLAND: Days suitable for fieldwork 3.6. Topsoil 3% short, 72% adequate, 25% surplus. Subsoil 89% adequate, 11% surplus. Corn 56% planted, 65% 2002, 58% avg.; 22% emerged, 41% 2002, 20% avg. Soybeans 4%, planted 8% 2002, 7% avg. Sorghum 12% planted, 5% 2002, 4% avg. Strawberries 86% bloomed, 89% 2002, 85% avg. Apples 99% bloomed, 98% 2002, 95% avg. Peaches 99% bloomed, 97% 2002, 98% avg. Sweet Corn 40% planted, 58% 2002, 54% avg. Potatoes 85% planted, 88% 2002, 98% avg. Barley 2% very poor, 6% poor, 24% fair, 61% good, 7% excellent; 73% headed, 94% 2002, 91% avg. Tomatoes 47% planted, 42% 2002, 49% avg. Hay supplies 25% very short, 34% short, 41% adequate. Other Hay 1st cutting 10%, 15% 2002, 14% avg. Alfalfa Hay 1st cutting 11%, 14% 2002, 14% avg. Winter Wheat 3% very poor, 8% poor, 29% fair, 52% good, 8% excellent; 19% headed, 75% 2002, 56% avg. Pasture feed 3% poor, 21% fair, 53% good, 23% excellent. Tobacco 7% transplanted, 33% 2002, 14% avg. Snap beans 14% planted, 22% 2002, 23% avg. Cantaloupes 39% planted, 40% 2002, 48% avg. Watermelons 33% planted, 25% 2002, 33% avg. Rain delayed field corn planting, dry hay from being harvested. A small amount of soybeans, tobacco were planted. Barley is more than 70% headed, will begin to turn in the next week or two. Pastures are in mostly good condition. Harvesting is just beginning for strawberries, green peas.

MICHIGAN: Days suitable for fieldwork 2.0. Topsoil 0% very short, 2.0% short, 52% adequate, 46% surplus. Subsoil 1.0% very short, 22% short, 57% adequate, 20% surplus. Asparagus 11% harvested, 13% 2002, 29% avg. Barley 51% planted, 41% 2002, 82% avg.; 9.0% emerged, 31% 2002, 67% avg. Oats 78% planted, 75% 2002, 88% avg.; 36% emerged, 45% 2002, 67% avg. Soybeans 1.0% emerged, 1.0% 2002, 3.0% avg. Rain almost every day last week delayed spring planting. Temperatures ranged from normal to 4° above normal State. Average rainfall amounts ranged from 1.20 inches northeast Lower Peninsula to 3.23 inches western Upper Peninsula. Fieldwork put on hold due to rainy weather across State. Soil conditions some areas have been affected by heavy rains, which caused soil to be saturated. The wheat crop continued to grow, look good. Wheat fields still a Feekes' growth stage of 5 most areas. In west central, central, Thumb region of Lower Peninsula, Feekes' growth stage progressed to stage 6. Very little corn, soybean planting activity last week. Oats emerged well, and stands looked good. Sugarbeet planting conditions very good. Sugarbeet fields had good emergence. Alfalfa has shown progress; fields between 6 to 12 inches tall. The new alfalfa growth is taking advantage of moisture. Cold weather kept pastures from growing Upper Peninsula. Much needed rain last week helped fruit growers across State. Bees moved into orchards to help pollination. Apples full bloom southwest, full pink to early bloom southeast. On Ridge, apples pink to king bloom. In west central, northwest, apples tight cluster to early pink. Bloom appeared heavy southwest. Cool temperatures kept bacterial populations low. European red mites remained scarce. Spotted tentiform leafminer adults prevalent south. Growers have been encouraged to chemically thin due to prospect of a large crop. Peaches in shuck southwest, full pink southeast, ranged from calyx red to first bloom west central. Oriental fruit moths caught southwest. Tart cherry fruit stems beginning to elongate southwest. Tart cherry buds white bud southeast. Frost evening of May 3 damaged some tart cherry buds northwest. Preliminary assessment of damage indicated crop probably

reduced on poor sites. Sweet cherries full bloom southeast, on Ridge and beginning to bloom west central, northwest. The viability of many sweet cherry flower buds appeared to have been negatively affected by extreme cold December. Plums shuck southwest, open cluster to white bud west central. Growers spraying to protect against brown rot, black knot. Pear fruitlets 6 mm diameter southwest. Pears white bud southeast and green cluster west central. Pear psylla adults continued to be seen. Blueberries in south pink bud. Early varieties beginning to bloom southwest. Mummy berry shoot strikes observed at a few farms on Ridge, Van Buren County. Strawberry bloom began southwest, flowers emerged from crowns southeast. Fall bearing raspberry canes continued to emerge from soil south. Shoots 1 to 3 inches long. Cranberry fruit buds began to swell southwest. Growers continued to plant onions, celery, sweet corn, peas, potatoes, cabbage, carrots, spinach, parsnips. Most vegetables have emerged. Seeding is nearly complete for onions with earlier planted fields flag stage and processing onion fields loop stage. Asparagus harvest has resumed, showing no sign of frost damage. Direct-seeding cucumbers inside tunnels at cotyledon stage. Early lettuce transplants doing well. Most of carrot planted acres have been sprayed with pre-emergence weed control.

MINNESOTA: Days suitable for fieldwork 3.0. Topsoil 0% very short, 6% short, 75% adequate, 19% surplus. Corn 93% ground prepared, 87% 2002, 82% avg. Soybeans 45% ground prepared, 39% 2002, 51% avg.; 0% emerged, 0% 2002, 4% avg. Potatoes 63% planted, 56% 2002, 53% avg. Sweet corn 19% planted, 21% 2002, 30% avg. Green peas 55% planted, 57% 2002, 58% avg. Canola 56% planted, 11% 2002, NA% avg. Dry Beans 11% planted, 4% 2002, 13% avg. Sunflowers 14% planted, 3% 2002, 14% avg. Pasture feed 3% very poor, 7% poor, 35% fair, 47% good, 8% excellent. Alfalfa 8% very poor, 8% poor, 31% fair, 47% good, 6% excellent. Rain showers throughout the state during this past week delayed planting activities. Farmers throughout state are reporting that fields will need a few days to dry out before field work will resume. The statewide average temperature was 50.9^o, 2.5^o below normal for the week.

MISSISSIPPI: Days suitable for fieldwork 4.5. Soil 3% very short, 25% short, 41% adequate, 31% surplus. Corn 99% planted, 100% 2002, 98% avg.; 97% emerged, 97% 2002, 93% avg.; 6% poor, 18% fair, 53% good, 23% excellent. Cotton 73% planted, 68% 2002, 65% avg.; 60% emerged, 47% 2002, 40% avg.; 8% poor, 24% fair, 56% good, 12% excellent. Rice 85% planted, 83% 2002, 84% avg.; 65% emerged, 66% 2002, 62% avg.; 2% poor, 22% fair, 58% good, 18% excellent. Sorghum 85% planted, 73% 2002, 77% avg.; 70% emerged, 54% 2002, 61% avg.; 1% poor, 18% fair, 69% good, 12% excellent. Soybeans 73% planted, 62% 2002, 58% avg.; 61% emerged, 45% 2002, 42% avg.; 1% very poor, 9% poor, 26% fair, 54% good, 10% excellent. Wheat 100% heading, 100% 2002, 96% avg.; 2% mature, 5% 2002, 5% avg.; 6% poor, 45% fair, 45% good, 4% excellent. Hay 63% harvested (cool season), 56% 2002, 48% avg.; 3% harvested (warm season), NA 2002, NA avg.; 3% very poor, 6% poor, 47% fair, 41% good, 3% excellent. Cattle 2% very poor, 6% poor, 20% fair, 61% good, 11% excellent. Pasture 2% very poor, 10% poor, 32% fair, 48% good, 8% excellent. Watermelons 94% planted, 93% 2002, 79% avg.; 3% poor, 26% fair, 47% good, 24% excellent. Dry conditions in the southern half of the state, coupled with very wet, stormy conditions in the northern half, made for a variable weather week across the state.

MISSOURI: Days suitable for fieldwork 1.2. Topsoil 5% short, 60% adequate, 35% surplus. Subsoil 4% very short, 25% short, 62% adequate, 9% surplus. Major storms with heavy rains again delayed fieldwork throughout the State. Ground worked at least once for spring crops 74%, 76% 2002, 80% avg. Corn planting ranges from about 33% northeast to 95% or more west-central, southwest, southeast districts. Sorghum planting most advanced southwest, southeast at 48%, least advanced north-central, central, east-central at 3% or less. Soybean planting ranges from 4% northeast, south-central districts to 11%

northwest, southeast. Wheat crop most advanced in southwest, southeast districts at over 90% headed, least advanced across northern third of State at 33% headed. Pasture feed 2% very poor, 9% poor, 32% fair, 49% good, 8% excellent. Water levels in ponds improved from heavy rains but some still below normal. Rainfall averaged 1.83 inches, ranging from less than 0.74 inch southwest district to 2.79 inches northeast and 3.00 inches southeast. Some crop damage in localized areas from flash flooding, hail.

MONTANA: Days suitable for fieldwork 1.2. Topsoil 0% very short, 5% short, 71% adequate, 24% surplus. Subsoil 11% very short, 24% short, 62% adequate, 3% surplus. Winter wheat 1% very poor, 5% poor, 19% fair, 56% good, 19% excellent. Barley 61% planted, 45% 2002, 74% 5-yr avg.; 33% emergence, 10% 2002, 35% 5-yr avg. Corn 43% planted, 34% 2002, 47% 5-yr avg.; 14% emergence, 8% 2002, 14% 5-yr avg. Dry bean's 34% planted, 20% 2002, 35% 5-yr avg.; 11% emergence, 2% 2002. Oats 36% plantings, 38% 2002, 61% 5-yr avg.; 14% emergence, 27% 5-yr avg. Potatoes 8% planted, 12% 5-yr avg. Spring wheat 61% planted, 45% 2002, 72% 5-yr avg.; 23% emergence, 4% 2002, 32% 5-yr avg. Sugar beets 98% planted, 85% planting 2002, 94% 5-yr avg.; 66% emergence, 30% 2002, 60% 5-yr avg. Livestock grazing 91% open, 3% difficult, 6% closed, Range, pasture feed 3% very poor, 14% poor, 30% fair, 43% good, 10% excellent. Currently, 47% of cattle, 45% sheep are receiving supplemental feed. Calving, lambing 96%, 80% complete, 95%, 83% 2002.

NEBRASKA: Days suitable for fieldwork 1.8. Topsoil 1% very short, 4% short, 77% adequate, 18% surplus. Subsoil 11% very short, 34% short, 52% adequate, 3% surplus. Sugar beets 90% planted, 96% 2002. Wheat 71% jointed, ahead of 44% 2002, 61% avg. Alfalfa 2% very poor, 5% poor, 26% fair, 48% good, 19% excellent. Pasture, range feed 11% very poor, 19% poor, 39% fair, 26% good, 5% excellent, below year ago, average.

NEVADA: The State continued to experience Spring storms during the week, clearing only at week's end. Precipitation totals for the week exceeded one inch at in several areas coming in the form of rain in lowland areas, snow at higher elevations. As a result, accumulated snowpack now exceeds normal for all major watersheds. Snowpack for the upper Humboldt River watersheds stands at 189% of normal. The lowest measurement is for Clover Valley at 103% of normal. Temperatures for the week averaged well below normal while the storms passed. Range, pasture feeds improved remarkably with timely rains. Cattle branding was common, stock were being turned out on the range. Hay, crop, forage growth was slowed by the cooler weather. Spring seeding was halted by the wet conditions with some grain, potato fields still to be planted. Activities: Calving, branding, lambing, livestock movement, weed control.

NEW ENGLAND: Days suitable for field work 5.8. Topsoil 1% very short, 4% short, 81% adequate, 14% surplus. Subsoil 4% very short, 5% short, 83% adequate, 8% surplus. Pasture feed 0% very poor, 7% poor, 37% fair, 52% good, 4% excellent. Maine Potatoes 0% planted, 5% 2002, 15% avg. Rhode Island Potatoes 25% planted, 80% 2002, 70% avg.; condition good. Massachusetts Potatoes 55% planted, 60% 2002, 65% avg.; condition good. Maine Oats 0% planted, 20% 2002, 30% avg. Maine Barley 0% planted, 25% 2002, 30% avg. Field Corn 10% planted, 15% 2002, 20% avg.; condition fair/good. Sweet Corn 20% planted, 20% 2002, 25% avg.; condition good/fair. First Crop Hay: condition good/fair. Apples: Bud to Early Bloom Stage, condition good/fair. Peaches: Early Bloom Stage, condition good/fair. Pears: Early Bloom Stage, condition good/fair. Strawberries: Bud to Early Bloom Stage, condition good/fair. Massachusetts Cranberries: Bud Stage, condition good/fair. Highbush Blueberries: Bud Stage, condition fair/good. Maine Wild Blueberries: Bud Stage, condition good. Average temperatures with a mix of sun and rain greened up grass, accelerated pasture

growth. Cold soil temperatures, moisture in the north are keeping farmers' planting progress 1-3 weeks behind schedule. Activities: Planting vegetables, sweet corn, field corn, potatoes; spreading lime, manure; applying fertilizer, herbicides; pruning; mowing orchards; plowing; tilling; discing; fixing fences.

NEW JERSEY: Days suitable for field work 5.7. Top soil 93% adequate, 7% surplus. Activities: Planting corn, soybeans, vegetables. Activities: Weed control in pastures, hay crops, pruning, laying equipment for drip irrigation, harvesting spring vegetables. There was measurable amounts of rainfall during the week over most of the state. Temperatures were below normal in most areas of the state for much of the week. In the south, barley, wheat began to develop heads in some fields. Small grains condition was rated good across most of the state. In southern state there were some reports of aphids on alfalfa hay fields. Hay crops were rated mostly good across the state. Some corn fields were spiking in central districts. Peppers, tomatoes were mostly planted in some areas of the south, but remained in greenhouses in most areas in the north, central districts. There was a report of overwintering spinach destruction from heavy snow, killing freezes to approximately 100 acres in Monmouth county. It was reported there was also damage to some other crops, including strawberries, in the same county. Lettuce harvest continued in southern counties. Sweet corn planting continued in the central, southern counties. Pea planting was mostly completed in the south, plants were in flower in some fields. Potato vines had begun to emerge in parts of the south. Strawberry harvest began in the north, south, plastic covers were removed in some fields. Peaches had finished flowering in areas of the north. Peaches were sizing in the south. Apples displayed good fruit set in northern areas. Blueberry bushes were in heavy bloom in southern localities. Grape vines in the south were leafing out, buds were just breaking. Supplemental livestock feeding continued in some localities.

NEW MEXICO: Days suitable for fieldwork 6.3. Topsoil 49% very short, 42% short, 9% adequate. State experienced a cool, dry week with breezy to windy afternoons. Temperatures were very close to normal in the southeast but generally below normal elsewhere. The statewide average was 4° below normal. Except for the lower elevations of the south, east, most areas had some overnight freezing temperatures. The only measurable precipitation for the week was .02 inches at Clayton. Wind damage 30% light, 19% moderate, 1% severe. Most of the damage was to corn, cotton, wheat. Dryland crops were hit especially hard, land erosion is a major concern. Farmers were busy planting crops, irrigating, cutting hay, harvesting lettuce, spraying for insects. Alfalfa remained in mostly fair to good condition, with 61% 1st cutting complete. Corn 68% planted, 35% emerged, 4% poor, 62% fair, 28% good, 6% excellent. Cotton 69% planted, 43% fair, 50% good, 7% excellent. Winter wheat 71% headed, 36% very poor, 26% poor, 25% fair, 12% good, 1% excellent. The dryland crop continues to suffer from dry conditions combined with strong winds. Lettuce was listed as fair to excellent, made good progress with 58% of the harvest complete. Chile conditions were reported as mostly fair to good. Onions were reported as mostly good to excellent. Apples were in fair to good condition, with fruit set listed as 90% light, 10% average. Ranchers spent the week branding, hauling water, supplementing feed. Those ranchers who haven't been able to provide supplemental feed are seeing weight losses, face culling more animals. Livestock conditions cattle 7% very poor, 14% poor, 41% fair, 37% good, 1% excellent. Sheep conditions 16% very poor, 21% poor, 47% fair, 16% good. Range, pasture 34% very poor, 37% poor, 27% fair, 2% good.

NEW YORK: Days suitable: 4.7. Soil 1% short, 69% adequate, 30% surplus. Pasture feed 1% poor, 14% fair, 64% good, 21% excellent. More animals turned out as week progressed. Weather was relatively quiet. Rainfall generally below normal, temperatures near or slightly below normal. Oats 76% planted, 62% 2002; 8% fair, 83% good, 9% excellent. Wheat 3% poor, 18% fair, 68% good, 11% excellent. Corn

28% planted, 18% 2002. Potatoes 39% planted, 30% 2002. Soybeans 5% drilled, 28% 2002. Lake Ontario tart cherries in bloom. Lake Erie concord vineyards show fairly significant damage due to earlier frost. Onion planting complete in Orange County.

NORTH CAROLINA: Days suitable for field work 3.7. Soil 0% very short, 1% short, 55% adequate, 44% surplus. Experienced an early taste of summer like temperatures, thunderstorms this week. Precipitation in the Western Mountain region was especially heavy. Harvest of potentially one of the best hay crops in years has been delayed due to the saturated conditions. Wind has lodged small grain acreage in some isolated areas of the central, coastal regions while some tobacco fields received hail damage in the coastal region. Progress was made planting tobacco, corn, cotton, vegetables. Pastures are experiencing buttercup infestations, Cereal leaf beetle has been found in hay fields. Activities: Land preparation, fertilization, hay making, picking strawberries, applying pesticides.

NORTH DAKOTA: Days suitable for fieldwork 0.8 Topsoil 2% very short, 5% short, 75% adequate, 18% surplus. Subsoil 7% very short, 18% short, 67% adequate, 8% surplus. Cool, wet weather made it's way across the state last week, slowing planting progress, but increasing soil moisture supplies. Durum wheat 27% planted, 9% 2002, 24% avg.; 14% emerged, 1% 2002, 8% avg. Canola 36% planted, 25% 2002, 44% avg.; 13% emerged, 3% 2002, 14% avg. Dry Edible Beans 1% planted, 0% 2002, 2% avg. Flaxseed 19% planted, 10% 2002, 27% avg.; 5% emerged, 0% 2002, 6% avg. Potatoes 27% planted, 26% 2002, 38% avg.; 5% emerged or beyond, 2% 2002, 2% avg. Two percent of the sunflowers were planted, 0% 2002, 2% avg. Stockwater supplies 3% very short, 8% short, 86% adequate, 3% surplus. Calving, lambing both 95% complete. Five percent of the pastures, ranges were still dormant. Pasture, range feed 6% very poor, 21% poor, 40% fair, 31% good, 2% excellent.

OHIO: Day suitable for fieldwork 1.4. Topsoil 0% very short, 2% short, 40% adequate, 58% surplus. Corn 86% planted, 16% 2002, 53% avg.; 34% emerged, 8% 2002, 22% avg. Soybeans 46% planted, 6% 2002, 33% avg.; 9% emerged, 1% 2002, 11% avg. Oats 79% emerged, 48% 2002, 76% avg. Winter Wheat 91% jointed, 84% 2002, 93% avg.; 3% headed 3% 2002, 6% avg. Potatoes 72% planted, 41% 2002, 59% avg. Livestock conditions 0% very poor, 2% poor, 13% fair, 70% good, 15% excellent. Pasture feeds 1% very poor, 4% poor, 22% fair, 58% good, 15% excellent. Winter wheat 1% very poor, 2% poor, 14% fair, 55% good, 28% excellent. Hay conditions 1% very poor, 2% poor, 17% fair, 63% good, 17% excellent. Apple conditions 0% very poor, 1% poor, 19% fair, 64% good, 16% excellent. Peach conditions 0% very poor, 5% poor, 20% fair, 59% good, 16%. Last week spring thunder storms rumbled across the state of state. These storms brought farming activities in many locations to a standstill. Many fields in low lying areas are still flooded. Producers fear the rains may have damage freshly planted fields. Respondents indicated some of these fields may need to be replanted. In isolated locations, farmers were able to plant corn, soybeans. Growers applied fertilizer to freshly planted crops where ground conditions were favorable. Vegetable producers continue to transplant seedlings, nursery sales are reported to be ahead of schedule.

OKLAHOMA: Days suitable for fieldwork 5.9. Topsoil 18% very short, 42% short, 39% adequate, 1% surplus. Subsoil 18% very short, 37% short, 45% adequate. Winter Wheat 32% soft dough, 13% last week, 33% 2002, 23% avg. Rye 2% very poor, 9% poor, 36% fair, 46% good, 7% excellent. Oats 2% very poor, 10% poor, 42% fair, 42% good, 4% excellent; 86% jointing, 82% last week, 88% 2002, 91% avg.; 54% headed, 38% last week, 48% 2002, 60% avg.; 16% soft dough, n/a last week, 25% 2002, 17% avg. Corn 96% seedbed prepared, 93% last week, 93% 2002, 97% avg.; 67% planted, 58% last week, 90% 2002, 94% avg.; 39% emerged, 35% last week, 62% last year, 52% avg;

Sorghum 51% seedbed prepared, 48% last week, 60% 2002, 63% avg.; 7% emerged, n/a last week, 9% 2002, 8% avg. Soybeans 68% seedbed prepared, 65% last week, 74% 2002, 78% avg.; 28% planted, 25% last week, 37% 2002, 34% avg.; 15% emerged, n/a last week, 19% 2002, 16% avg. Peanuts 90% seedbed prepared, 79% last week, 91% 2002, 89% avg.; 15% emerged, n/a last week, 10% 2002, 9% avg. Cotton 94% seedbed prepared, 88% last week, 94% 2002, 92% avg.; 9% emerged, n/a last week, 13% 2002, 7% avg. Alfalfa Hay 4% poor, 30% fair, 55% good, 11% excellent; 1st 68% cutting, 46% last week, 47% 2002, 57% avg. Other Hay 11% poor, 39% fair, 45% good, 5% excellent; 1st 24% cutting, 16% last week, 20% 2002, 23% avg. Watermelons 76% planted, 61% last week, 60% 2002, 70% avg. Livestock 1% very poor, 3% poor, 25% fair, 59% good, 12% excellent; Pasture, Range 3% very poor, 14% poor, 38% fair, 37% good, 8% excellent; Livestock: Livestock were rated in mostly good to excellent condition. Livestock insect activities were rated as light to moderate with ticks being the major problem reported. Cattle auctions reported a slight decrease in marketings from last week. The marketing of heifers under 800 pounds was unchanged from the previous week. The price for feeder steers less than 800 pounds increased an average of fifty cents per cwt. from last week with the average price being \$84.15 per cwt. The average price for feeder heifers less than 800 pounds increased from last week by \$2.20 averaging \$78.25 per cwt.

OREGON: Days suitable for fieldwork 4.5. Topsoil 0% very short, 12% short, 77% adequate, 11% surplus. Subsoil 7% very short, 15% short, 73% adequate, 5% surplus. Barley 72% planted, 69% previous week, 90% 2002, 92% 5-yr avg.; 51% emerged, 47% previous week, 72% 2002.; 0% very poor, 3% poor, 51% fair, 41% good, 5% excellent. Spring wheat 92% planted, 90% previous week, 100% 2002, 79% 5-yr avg.; 68% emerged, 62% previous week, 95% 2002. Winter wheat 0% very poor, 5% poor, 49% fair, 43% good, 3% excellent. Range, Pasture 2% very poor, 10% poor, 39% fair, 43% good, 6% excellent. Activities: Overall picture of state weather continued to be that of cooler temperatures, windy conditions, having an adverse effect on plant, crop development as well as range conditions. Weekly precipitation below normal for most weather stations, but still abundant for this spring. Some snowfall reported in southern state, with Klamath Falls receiving 1.5 inches. Some freeze damage from late last year showing in Marion County canberries. All but two weather stations reported air temperatures below normal, with Lakeview recording an average of 39° Fahrenheit. Southwest Valleys reported growing degree days ranging from 27 to 46 days below normal. Grain crops responding to increase in temperatures. Wet weather continued to make fieldwork challenging. Most tillage operations two to three weeks behind normal, particularly in western state. Some fieldwork, including planting of spring crops, occurred on drier, well-drained soils. Hay late for first cutting. Mint fields made fairly good growth. Grass seed heading, crimson clover near full bloom. In Eastern state, some alfalfa fields cut. Winter wheat starting into "boot" stage, looked healthy. Winter, spring crops responded well to recent rainfall. Some growers concerned about crop injury to some grass seed crops in Union County as temperatures dipped into low to mid-twenties. Winter wheat crop continued to put on rapid growth, fields evenly green. Some areas still concerned about vegetable planting due to wet fields. Klamath County potato planting stalled because of wet weather, Union County growers planting between showers. In Malheur County, potato planting winding down. In Willamette Valley areas, Clackamas County vegetable planting got underway after much delay, in Lane County some early corn, green beans going in on more sandy soils. Nursery operations about done with shipment of plant material, starting to plant new starts. Greenhouses still shipping bedding plants to retail outlets, wet weather continued to slow home gardeners. Spring plant sales going strong with five or six major sales last weekend in Portland area. Nursery stock showing up for sale at Saturday markets. Willamette Valley berries continued in bloom, with some beginning to set fruit. Some apple scab, heavy dead bud, blossom blast in cherries, plums. Some cedar apple rust in pears. Cool, wet weather has slowed down tree fruit

development in Yamhill County, has caused pear scab infections in Hood River County. Wasco County sweet cherry set moderate, with good fruit set in most areas. Cherries approaching marble size in early areas. In western state, cattle movement has been affected by cool, wet conditions. Some pastureland still too moist to move livestock. Concern exists about lack of growth on some fields. Turnout continued in eastern state. Some ranchers in Harney County hauling water due to shortage of stock water. Spring showers over northern, central parts of Malheur County have aided grazing conditions. Annual pasture grasses in Wasco County started to head out.

PENNSYLVANIA: Days suitable for field work 3.0. Soil 1% very short, 6% short, 57% adequate, 36% surplus. Spring 72% plowing, 77% 2002, 77% avg. Corn 41% planted, 49% 2002, 46% avg.; 9% emerged, 21% 2002, 14% avg.; 34% fair, 54% good, 12% excellent. Barley 51% heading, 80% 2002, 73% avg. Winter wheat 15% heading, 43% 2002, 24% avg.; 1% very poor, 4% poor, 20% fair, 55% good, 20% excellent. Oats 86% planted, 79% 2002, 85% avg.; 58% emerged, 67% 2002, 60% avg.; 2% poor, 39% fair, 52% good, 7% excellent. Soybeans 13% planted, 7% 2002, 12% avg. Potatoes 35% planted, 52% 2002, 47% avg. Pasture feeds 6% poor, 26% fair, 53% good, 15% excellent. Activities: Planting oats, corn, soybeans, vegetables; repairing, replacing fences; spreading manure; spreading lime, fertilizer; caring for livestock; spraying fruit, attending meetings.

SOUTH CAROLINA: Days suitable for field work 5.4. Soil 82% adequate, 18% surplus. Corn 89% planted, 100% 2002, 99% avg.; 79% emerged, 99% 2002, 94% avg.; 2% poor, 37% fair, 60% good, 1% excellent. Soybeans 12% planted, 26% 2002, 17% avg. Sorghum 50% planted, 54% 2002, 51% avg.; 100% fair. Cotton 24% planted, 54% 2002, 43% avg.; 64% fair, 36% good. Peanuts 21% planted, 62% 2002, 48% avg. Winter wheat 96% headed, 99% 2002, 98% avg.; 21% turning color, 79% 2002, 48% avg.; 7% poor, 17% fair, 73% good, 3% excellent. Barley 91% headed, 100% 2002, 91% avg.; 10% turning color, 57% 2002, 42% avg.; 1% poor, 22% fair, 76% good, 1% excellent. Pastures 11% fair, 72% good, 17% excellent. Rye 91% headed, 98% 2002, 98% avg.; 23% turning color, 59% 2002, 50% avg.; 3% poor, 16% fair, 79% good, 2% excellent. Oats 91% headed, 100% 2002, 98% avg.; 18% turning color, 64% 2002, 54% avg.; 18% fair, 78% good, 4% excellent. Sweetpotatoes 25% planted, 38% 2002, 32% avg. Tobacco 99% transplanted, 100% 2002, 99% avg.; 8% poor, 43% fair, 44% good, 5% excellent. Grain Hay 56% harvested, 64% 2002, 60% avg.; 1% poor, 20% fair, 68% good, 11% excellent. Peaches 2% very poor, 3% poor, 10% fair, 54% good, 31% excellent. Apples 100% good. Snapbeans 98% planted, 98% 2002, 90% avg.; 100% good. Cucumbers 100% planted, 100% 2002, 96% avg.; 27% fair, 63% good, 10% excellent. Watermelons 93% planted, 96% 2002, 96% avg.; 34% fair, 64% good, 2% excellent. Tomatoes 100% planted, 96% 2002, 97% avg.; 87% good, 13% excellent. Cantaloups 94% planted, 90% 2002, 91% avg.; 48% fair, 42% good, 10% excellent. Livestock 1% poor, 14% fair, 69% good, 16% excellent.

SOUTH DAKOTA: Days suitable for field work 2.2. Topsoil 2% very short, 6% short, 87% adequate, 5% surplus. Subsoil 6% very short, 25% short, 66% adequate, 3% surplus. Feed supplies 18% very short, 31% short, 50% adequate, 1% surplus. Stock water supplies 10% very short, 26% short, 62% adequate, 2% surplus. Winter Rye 5% poor, 23% fair, 57% good, 15% excellent; boot 25%, 6% 2002, 25% avg.; boot 12%, 8% 2002, 21% avg.; 0% headed, 0% 2002, 6% avg. Sunflower 2% planted, 1% 2002, 4% avg. Cattle condition 2% poor, 23% fair, 62% good, 13% excellent. Sheep condition 2% poor, 19% fair, 68% good, 11% excellent. Range, Pasture 11% very poor, 20% poor, 35% fair, 29% good, 5% excellent. Calving 90% complete. Lambing 91% complete. Cattle moved to pasture 40% complete. Rain showers moved across the state throughout the week, bringing additional moisture to most areas, although producers continue to wait for warm

temperatures. Activities: Row crop seeding, spraying, applying fertilizer, fixing fences, working with cattle.

TENNESSEE: Days suitable for fieldwork 1.0. Topsoil 34% adequate, 66% surplus. Subsoil 45% adequate, 55% surplus. Wheat 85% headed, 90% 2002, 94% avg.; 3% very poor, 8% poor, 21% fair, 55% good, 13% excellent. Pastures 1% very poor, 4% poor, 19% fair, 60% good, 16% excellent. Alfalfa hay 1st cutting 11%, 16% 2002, 26% avg.; 1% very poor, 7% poor, 26% fair, 57% good, 9% excellent. Other hay 1st cutting 8%, 11% 2002, 18% avg.; 3% very poor, 7% poor, 23% fair, 57% good, 10% excellent. Severe weather across state last week caused significant damage to a number of the State's farms. Tornado conditions along with severe thunderstorms, heavy rains, hail, wind during much of the week caused substantial damage to many areas. Numerous crops, pastures, hay fields, barns, sheds, machinery, livestock were damaged or destroyed. The heavy rains brought flooding to many parts of the State, especially East state. Farmers were having problems with standing water, erosion, debris in some fields. Many greenhouse nursery liners, seedlings were also washed away. Corn, cotton, soybean plantings were at a virtual standstill last week due to the unstable weather conditions, all lag behind last year, the normal pace. The State's winter wheat crop also suffered from last week's heavy rainfall, water run-off. Both the corn, wheat 11% very poor-to-poor after last week's stormy weather conditions. Growers are concerned about the amount of acreage, potential yield loss to all crops.

TEXAS: Agricultural Summary: Hot, windy, dry and humid conditions continued to dominate most areas across the state during the week. There were some isolated thunderstorms that dropped hail, some rainfall to various locations of the Plains, Central state. Small tornadoes were reported in East Texas, with some minor damage reported. In a few areas, heavier rain caused some delays in farming activities, but overall general field activities continued. In most areas of the State, high temperatures, winds continued to deplete topsoil moisture as well as affect newly seeded crop stands. Where conditions allowed, some crops were being watered to aid in emergence, in development. Planting of spring crops continued where conditions allowed, but once again many producers were waiting for rain before continuing. Despite the dry conditions, planting continued for cotton, sorghum, peanuts in northern areas. Progress, development in small grains continued under mostly dry conditions. Insect, disease problems were reported in some areas during the week. Haying activities were beginning to increase across the state, but the lack of rainfall has reduced production. Some producers were liquidating cattle. Supplemental feeding of livestock increased as range, pasture forages declined across many locations. Livestock continued to be in good condition in most areas. Small Grains: Hot, windy days accelerated the turning of small grain fields. Harvest for grain was beginning to get underway in southern, central areas. More signs of earlier freeze damage became apparent in more areas. Baling of small grains and cutting wheat for silage continued. Wheat 49% of normal compared with 44% 2002. Corn: Planting of corn was winding down on the Plains, was mostly complete in other areas. Most planted acreage was progressing well, but was still in need of rainfall. Corn in drier areas started to show signs of stress, wilt in the heat of the day. Rain is needed within the next week or two, or yields could be diminished. In some areas, irrigation was running at full speed. Corn 75% of normal compared with 70% 2002. Cotton: Cotton planting continued on the Plains, still was making progress in other areas. Dry soil conditions has limited progress. Producers continued to pre-water, apply herbicides. Some light insect problems were reported in the Coastal Bend area. Moisture shortages continued to be a concern in most areas. Sorghum: Land preparations continued in the Plains, Central state. Sorghum producers were still waiting for rains. Some grain sorghum has made good progress in the Blacklands. Sorghum has started to show leaf curls in the afternoons due to heat. Some dryland locations were too dry, planting will be on hold until rain is received. Sorghum 72% of normal compared with 55% 2002. Peanuts: Planting made some progress in areas of the High, Low Plains. Emergence of

irrigated peanuts was favorable. Rice: Emergence made progress during the week. Growth and development were considered mostly normal in earlier planted fields. Rice was being watered for emergence. Rice 84% of normal compared to 88% 2002. Soybeans: Land preparation, pre-watering remained active where possible. Planting continued in some locations. Planting in some dryland locations will be slow until moisture is received, but some producers were dry planting. Commercial Vegetables, Fruit, Pecans In the Rio Grande Valley harvest activities continued for melons, cantaloupes, carrots, greens, peas, cabbage, potatoes, onions, sugarcane. Dryland crops were suffering from lack of precipitation. In the San Antonio-Winter Garden area planting continued but was winding down for some vegetable crops. Onions were approaching maturity, harvest was expected to begin very soon. Carrot, cabbage harvest continued. The hot, dry weather caused some stress to some crops where irrigation was limited. Pecans: Development continued in most areas across the state. Fertilizer, zinc application continued. In the Cross Timbers, some pecan damage was reported. Pecan Nut Casebearer was in full swing in most areas. In East state, Sweet potatoes planting occurred as conditions allowed. Spring vegetable, watermelon planting continued. Vegetables, fruits were making fair to good growth with some insects, disease pressure. Range, Livestock: Range, pasture feeds were declining due to the lack of available moisture for plant growth. Drought conditions were present or increasing in more locations. Livestock conditions remained good in most areas. Supplemental feeding was necessary for livestock in many areas. Horn flies continued to cause problems. Ranchers were busy moving, marketing, working livestock. Early stages of grasshopper infestation were reported. Shrimp growers in the Trans-Pecos were preparing to stock lakes with new larvae.

UTAH: Days suitable for fieldwork 4.3. Topsoil 3.0% very short, 18% short, 76% adequate, 3.0% surplus. Subsoil 8.0% very short, 33% short, 59% adequate. Stock Water Supplies 9.0% very short, 26% short, 64% adequate, 1.0% surplus. Irrigation Water Supplies 19% very short, 38% short, 43% adequate. Alfalfa Height 11 inches, 11 inches 2002, 11 inches avg. Barley 92% emerged, 77% 2002, 82% avg.; 14% fair, 73% good, 13% excellent. Cattle Moved to Summer Range 19%, 18% 2002, 16% avg. Cattle/calves Condition 1.0% very poor, 6.0% poor, 28% fair, 54% good, 11% excellent. Corn 43% planted, 46% 2002, 45% avg. Oats 90% planted, 78% 2002, 77% avg.; 69% emerged, 56% 2002, 53% avg. Potatoes 28% planted, 60% 2002, 59% avg. Ewes Lambled on Range 87%, 91% 2002, 87% avg. Sheep Sheared on Range 88%, 99% 2002, 95% avg. Sheep Moved to Summer Range 10%, 17% 2002, 14% avg. Sheep Condition 2.0% very poor, 5.0% poor, 23% fair, 63% good, 7.0% excellent. Spring Wheat 93% emerged, 85% 2002, 85% avg.; 21% fair, 68% good, 11% excellent. Winter Wheat 3.0% poor, 30% fair, 48% good, 19% excellent. Range, Pasture feed 7.0% very poor, 16% poor, 38% fair, 38% good, 1.0% excellent. Activities: Planting corn, irrigating fields, tending to livestock. Cloudy conditions were the norm throughout state. Most areas experienced some precipitation, parts of state, Millard and Summit counties received over an inch of rain during the past week. Farmers were grateful for the rain last week, although more precipitation is needed, the outlook for the crop season is much more positive than it was just a few weeks ago. Low temperatures were in the 30s, 40s last week while highs ranged from the mid 50s to upper 70s. Small grains continued emerging in the field, reports indicated that the majority of crops are in good to excellent condition. Cache county reported that small grains are growing well but the cool weather has slowed the growth of alfalfa. At weeks end the average height of alfalfa was 11 inches. Box Elder county reported that winter wheat conditions have shown significant improvement thanks to the rain. Rich and Beaver counties have reported that they will get very little irrigation water this year, are hoping for more moisture to build up stock water supplies. Ranchers have begun moving livestock to summer ranges. Producers continued shearing and lambing sheep on ranges. In Emery county, ranchers have been informed that they will not be able to use Forest Service land until early July. In Washington county, 50% of the cattle

are out on the range but the rest may remain in feed lots, sold, or be moved out of state.

VIRGINIA: Days suitable for fieldwork 4.3. Topsoil 5% short, 64% adequate, 31% surplus. Subsoil 3% short, 74% adequate, 23% surplus. Pasture 1% very poor, 6% poor, 24% fair, 56% good, 13% excellent. Livestock 3% poor, 18% fair, 67% good, 12% excellent. Other Hay 2% poor, 29% fair, 57% good, 12% excellent. Alfalfa Hay 2% poor, 24% fair, 58% good, 16% excellent. Corn 64% planted, 81% 2002, 69% 5-yr avg. Corn for Grain 37% emerged, 65% 2002, 19% 5-yr avg. Soybeans 7% planted, 13% 2002, 8% 5-yr avg.; 6% very poor, 13% poor, 34% fair, 38% good, 9% excellent; 53% headed, 84% 2002, 17% 5-yr avg. Barley 2% very poor, 13% poor, 31% fair, 46% good, 8% excellent. Greenhouse Tobacco 1% poor, 8% fair, 68% good, 23% excellent. Tobacco Plantbeds 24% fair, 74% good, 2% excellent. Flue Tobacco 36% transplanted, 43% 2002, 41% 5-yr avg. Burley Tobacco 5% transplanted, 5% 2002, 7% 5-yr avg. Dark Fire Tobacco 9% transplanted, 31% 2002, 23% 5-yr avg. Peanuts 29% planted, 58% 2002, 52% 5-yr avg. Cotton 64% planted, 81% 2002, 75% 5-yr avg. Summer Potatoes 5% very poor, 9% poor, 48% fair, 28% good, 10% excellent. Apples 43% fair, 57% good. Peaches 10% very poor, 23% fair, 63% good, 4% excellent. Showers throughout the week, over the weekend slowed or stopped fieldwork temporarily in some areas. Despite the rain, farmers made good progress with planting of row crops. Planting progress still lags behind normal for this time of year. Quality of hay is diminishing as it is too wet to cut in some areas. Activities: Apple thinning, treating wheat for diseases, planting vegetables, harvesting strawberries.

WASHINGTON: Days suitable for fieldwork 6.4. Topsoil 6% short, 85% adequate, 9% surplus. Subsoil 9% short, 89% adequate, 2% surplus. Irrigation water supplies 2% short, 98% adequate. The highest temperature in the state was 75° in Pasco. The lowest temperature in the state was 25° in Deer Park. Winter wheat 5% headed, 2% very poor, 7% poor, 19% fair, 54% good, 18% excellent. Spring wheat 98% planted, 84% emerged, 35% fair, 48% good, 17% excellent. Barley 98% planted, 85% emerged, 31% fair, 41% good, 28% excellent. Continued wet conditions had crops looking very good in the Palouse but also raised concerns about rust. Stripe rust has been reported in southern Adams County. Prolonged overnight freezing conditions were experienced earlier in the week in Whitman County, but damage has not been reported. Cooler temperatures have slowed the development of spring cereals, but conditions remain mostly fair to good. In Franklin County, the first cutting of alfalfa was underway, while potato planting finished. Potatoes 99% planted, 48% emerged, 11% fair, 57% good, 32% excellent. Corn 75% planted, 27% emerged, 100% good. Dry peas 97% planted. Dry edible beans 45% planted, 38% good, 62% excellent. Processing green peas 97% planted. Alfalfa 1st cutting 13% complete. Hay, other roughage supplies 8% short, 91% adequate, 1% surplus. Range, pasture feeds 1% poor, 55% fair, 43% good, 1% excellent. Dairy producers in western state were busy harvesting green chop, applying manure to harvested fields. Garden stores, nurseries reported excellent sales volume for the Mother's Day weekend. Poor fruit set was reported in cherries in the mid-valley area of Benton County. Several nights of moderate frost control, cooler than ideal temperatures slowed fruit development for much of the week in the Yakima Valley. Asparagus harvest continued in Franklin, Benton Counties and sweet corn planting continued in Grant.

WEST VIRGINIA: Days suitable for field work 2.0. Topsoil 58% adequate, 42% surplus, 55% adequate, 45% surplus 2002. Intended

acreage prepared for Spring planting 71%, 65% in 2002, 75% 5-yr avg. Hay, roughage supplies 13% very short, 32% short, 55% adequate. Feed grain supplies 2% very short, 15% short, 83% adequate. Corn 20% planted, 35% 2002, 39% 5-yr avg.; 7% emerged. Soybeans 4% planted, 20% 2002, 18% 5-yr avg. Winter Wheat 14% fair, 79% good, 7% excellent, 5% headed, 30% 2002, 23% 5-yr avg. Oats 72% planted, 75% 2002, 76% 5-yr avg.; 60% emerged, 45% 2002, 41% 5-yr avg. Tobacco beds emerged 90%, 98% 2002, 93% 5-yr avg. Hay 1% poor, 41% fair, 52% good, 6% excellent. Apples 41% fair, 58% good, 1% excellent. Peaches 42% fair, 57% good, 1% excellent. Cattle, calves 2% poor, 33% fair, 61% good, 4% excellent; percent calved 94%, 95% 2002, 94% 5-yr avg. Sheep, Lambs 6% poor, 48% fair, 44% good, 2% excellent; percent lambled 95%, 96% 2002, 96% 5-yr avg. Activities: Calving lambing, planting when conditions allowed, repairing fences, cleaning debris from areas hit by flooding, high winds.

WISCONSIN: Days suitable for fieldwork 1.9. Topsoil moisture is certainly adequate for crops, the subsoil moisture levels should be replenishing themselves. Soil 0% very short, 1% short, 52% adequate, 47% surplus. Rain was the news maker for the past week in state agriculture. Precipitation totaled over 2 inches, statewide. Showers were present throughout the whole week, stopped most fieldwork. Most of the field activity was early in the week. Rainfall amounts for the period of March 1 to May 11, are now above normal for most of the state. The only area still behind in precipitation is the Milwaukee area, they are less than one inch behind normal. Mother's Day weekend saw additional storms with rains, some damaging winds. Farmers are ready for sun, warm weather to dry fields, allow them to get back to planting. Temperatures for the week were close to normal levels for this time of year. There were some scattered reports of frost early in the week in limited areas. Pasture feeds 1% very poor, 5% poor, 23% fair, 50% good, 21% excellent. Pastures have been slow to improve, but should recover quickly with warm weather, sun, now that moisture concerns are past.

WYOMING: Days suitable for field work 3.0. Topsoil 5% very short, 30% short, 64% adequate, 1% surplus. Winter wheat 5% poor, 26% fair, 68% good, 1% excellent; 67% jointed, 2002 22%, 26% 5-yr avg. Barley 88% planted, 88% 2002, 88% 5-yr avg.; 63% emerged, 53% 2002 62% 5-yr avg.; 23% fair, 68% good, 9% excellent. Oats 70% planted, 51% 2002, 63% 5-yr avg.; 43% emerged, 22% 2002, 28% 5-yr avg. Spring wheat 76% planted, 35 2002%, 63% 5-yr avg.; 36% emerged, 19% 2002, 31% 5-yr avg. Sugarbeets 93% planted, 85% 2002, 95% 5-yr avg.; 30% emerged, 25% 2002, 44%. 5-yr avg. Corn 47% planted, 41% 2002, 5-yr 49% avg.; 2% emerged, 3% 2002, 8% 5-yr avg. Dry beans 1% planted, 2% 2002, 2%. 5-yr avg. Irrigation water supplies 17% very short, 42% short, 41% adequate. Range, pasture feed 7% very poor, 21% poor, 46% fair, 20% good, 6% excellent. Spring calves born 95%, 96% 2002, 96% 5-yr avg. Calf losses 20% light, 79% normal, 1% heavy. Farm flock sheep shorn 97%, 2002 96%, 5-year average 97%. Farm flock ewes lambled 96%, 93% 2002, 96% 5-yr avg. Range flock sheep shorn 90%, 2002 81%, 5-year average 84%. Range flock ewes lambled 44%, 51% 2002, 51% 5-yr avg. Lamb losses 19% light, 80% normal, 1% heavy. Weekly temperatures averaged below normal in most of the State. About three-quarters of the stations received above normal precipitation. All stations received some rain or snow for the week. The heaviest moisture fell in Evanston with 1.01 inch. Precipitation helped improve soil moisture supplies.

International Weather and Crop Summary

May 4 - 10, 2003

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

HIGHLIGHTS

EUROPE: Rain continued to benefit crops in France, while hot, dry weather stressed emerging summer crops in southeastern Europe.

FSU-WESTERN: Several days of dry weather helped planting activities, while mild weather spurred winter grain growth and spring-sown crop emergence.

MIDDLE EAST: Seasonably dry weather signaled the approach of the summer dry season, while warm weather favored winter grain development.

NORTHWESTERN AFRICA: Mostly dry weather favored winter grain maturation and early harvesting.

SOUTH AFRICA: Dry weather continued for a 7th consecutive week in the corn belt, favoring summer crop maturation and harvesting, but hampering winter wheat planting and development.

EASTERN ASIA: Rain benefited immature winter wheat on the North China Plain, but northern Manchuria remained unfavorably dry.

SOUTHEAST ASIA: Showers favored corn in Thailand and the Philippines, while hot weather slowed rice transplanting.

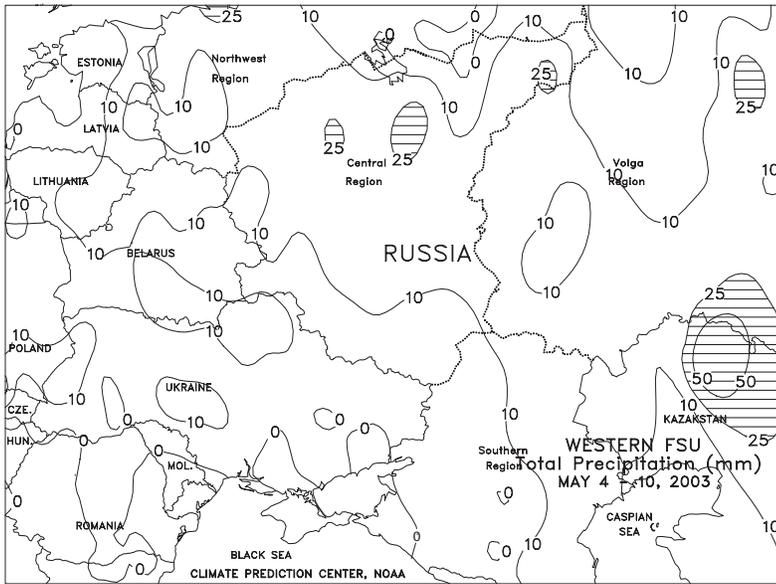
AUSTRALIA: Scattered showers benefited winter grains in Western Australia, while mostly dry weather continued to delay winter grain planting in drought-plagued southeastern Australia.

SOUTH AMERICA: Dry weather benefited central Argentina and southern Brazil, following last week's inundating rain.



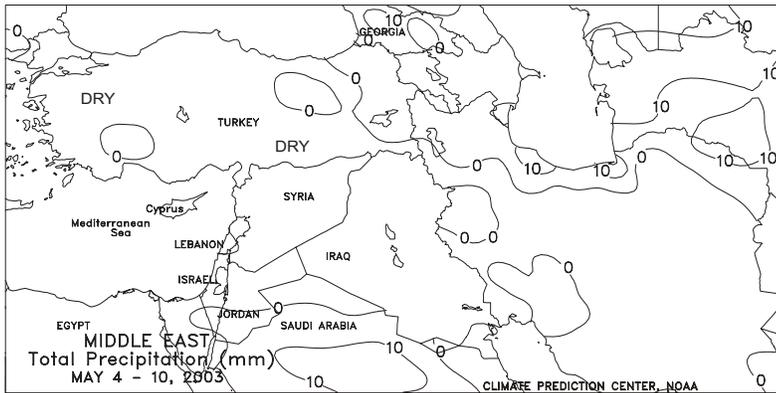
EUROPE

In France, a band of showers fell from southwest (25-60 mm) to northeast France (5-25 mm), favoring vegetative to reproductive winter grains, reproductive to filling winter oilseeds, and emerging summer crops. However, portions of extreme eastern and northwestern France were dry. Across northern France, very beneficial rain since April 26 had boosted soil moisture supplies and stabilized summer crop prospects. Dry weather prevailed in England, but soil moisture remained adequate due to previous rains. In Sweden, light rain (3-10 mm) did not significantly increase already limited soil moisture supplies. In Germany, light rain (less than 5 mm) prevailed in the north, while heavier amounts (5-30 mm) increased soil moisture for summer and winter crops in the south. Moderate rain increased soil moisture supplies in the Czech Republic and southern Poland. However, from Slovakia and Hungary southward to Bulgaria, hot, dry weather stressed newly emerged summer crops and jointing winter grains. The hot weather, however, favored winter grain development that had been behind schedule. Warm, dry weather covered Italy, favoring winter grain development but increasing crop water use. In northeastern Spain, unseasonably heavy rain (50-100 mm) caused flooding and possibly damaged filling to maturing winter grains. Elsewhere in Spain and Portugal, mostly dry weather favored filling winter grains. Temperatures averaged 1 to 4 degrees C above normal across western Europe and 4 to 6 degrees C above normal across central and eastern Europe. Maximum temperatures exceeded 30 degrees C in portions of central and eastern Europe, increasing crop water use.



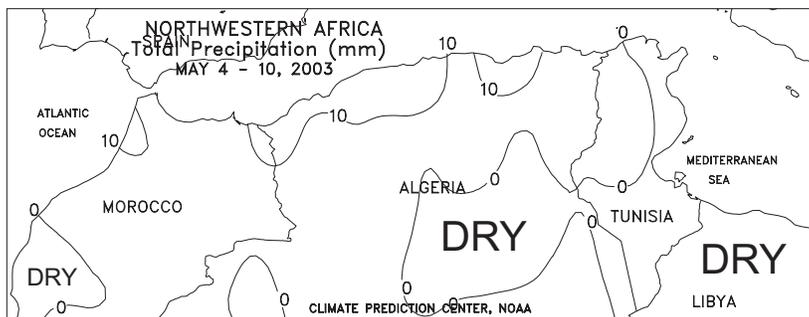
FSU-WESTERN

Several days of warm, dry weather prevailed across the region, helping spring grain, sugar beet, and sunflower planting. Rain was needed in Ukraine and the Southern Region in Russia, where several weeks of dryness had depleted topsoil moisture. Significant precipitation was confined to crop areas that stretching from northern Belarus eastward across northern Russia (Central and Volga Regions), where an early-week storm brought occasional showers (10-25 mm or more). Mild weather continued to stimulate winter grain growth and aided the germination of newly planted crops. Weekly temperatures averaged 1 to 5 degrees C above normal in Ukraine and Moldova, where maximum temperatures late in the week ranged from 30 to 35 degrees C. Elsewhere across the region, weekly temperatures averaged near to slightly above normal. Winter grains were jointing, except in extreme northern Russia where crops were tillering. Reports from Russia as of May 6 indicated that spring grains were about 21 percent planted, compared with 36 percent last year. Sunflowers and sugar beets were about 31 and 57 percent planted, respectively, compared with 44 and 80 percent last year.



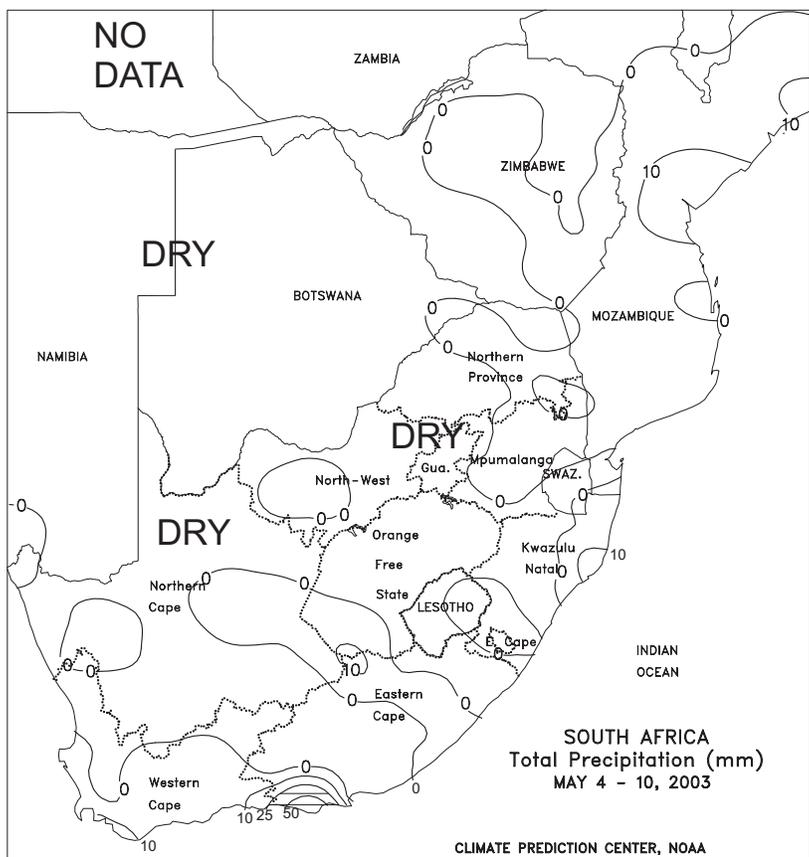
MIDDLE EAST

Across Turkey, the eastern Mediterranean, and Iran, seasonably dry weather signaled the approach of the summer dry season. Warm weather (temperatures averaging 2-6 degrees C above normal) hastened winter grain development but increased summer crop irrigation use. Across Turkey and the eastern Mediterranean, near-to above-normal winter rainfall provided adequate irrigation supplies for the upcoming summer crop season. In western Iran, seasonably dry weather also prevailed, but below-normal winter rainfall provided somewhat limited moisture supplies for summer and winter crops. However, recent rain the past several weeks provided beneficial moisture for vegetative winter grains. Across Iran, temperatures averaged near to slightly below normal, reducing crop moisture requirements. Based on weather reports from neighboring countries, dry weather covered northern Iraq.



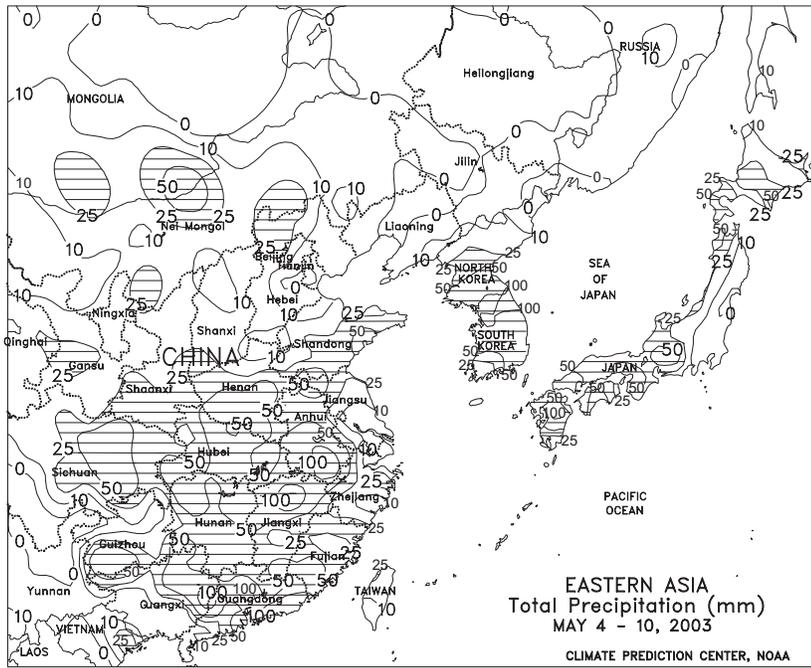
NORTHWESTERN AFRICA

Across southern Morocco and Tunisia, mostly dry weather favored maturing winter grains and early harvesting. In Algeria and northern Morocco, light rain (5-15 m) favored immature winter grains but did not hamper early winter grain harvesting. Typically, winter grain harvesting begins in May and extends through July. Cooler weather prevailed across the region after last week's unseasonably hot weather. Temperatures averaged slightly below normal across Morocco and western Algeria and 3 to 5 degrees C above normal in eastern Algeria and Tunisia.



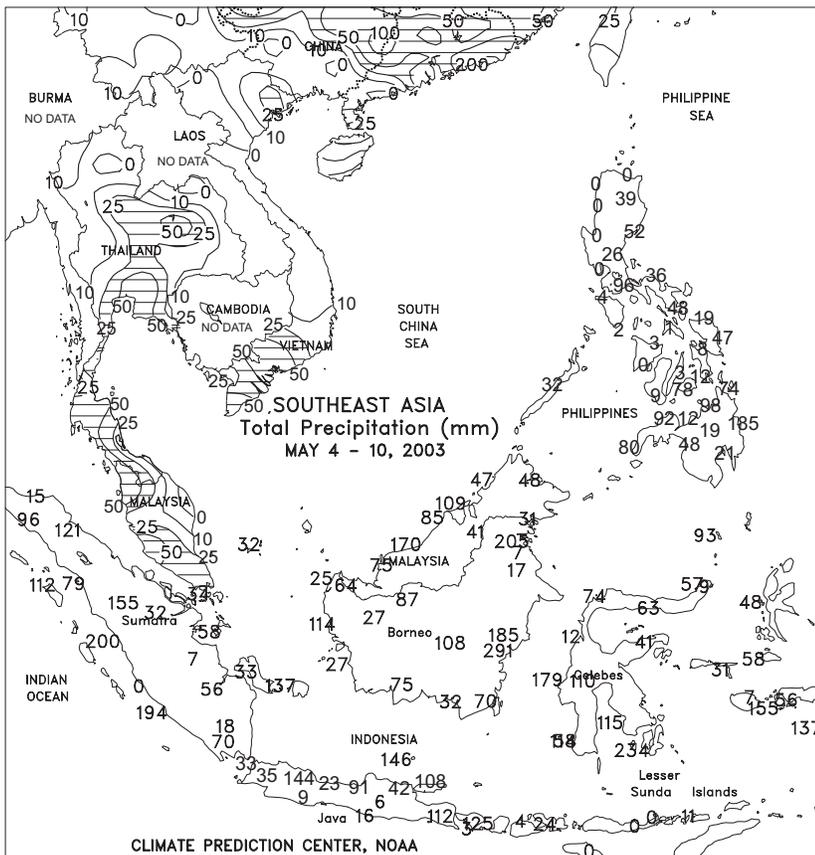
SOUTH AFRICA

For the 7th consecutive week, dry weather gripped the corn belt, spurring summer crop maturation and harvesting. In Free State, the persistent dryness continued to hamper winter wheat planting and early development. In contrast, light showers (less than 5 mm) maintained generally favorable moisture supplies for winter wheat in Western Cape, but caused only brief fieldwork delays. Temperatures in major crop producing areas were generally seasonable, favoring winter wheat development in areas where moisture supplies were sufficient.



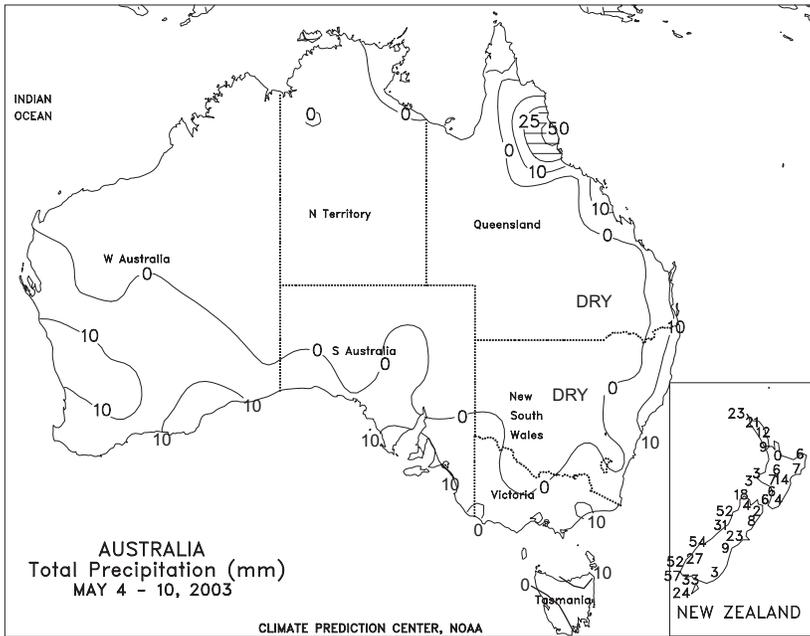
EASTERN ASIA

On the North China Plain, beneficial rain (10-25 mm or more) and near- to below-normal temperatures (highs in the middle to upper 20s degrees C) maintained generally favorable prospects for reproductive to filling winter wheat. The moisture was also welcomed for corn and soybean germination and establishment. In southern China, moderate to heavy showers (25-100 mm or more) maintained irrigation levels for rice and other summer crops. Showers (greater than 25 mm) brought some relief from above-normal temperatures (highs in the lower and middle 30s degrees C) in rice areas along the southeast coast, but amounts were still below normal. Elsewhere, mostly dry, cooler-than-normal weather (lows from -5 to 0 degrees C) persisted in Manchuria's northern producing areas (northern Jilin and Heilongjiang), impeding summer crop germination. Rain and warmer weather were needed to ensure even germination and proper establishment of corn and soybeans. Locally heavy rain (25-50 mm, exceeding 100 mm) continued across the Korean Peninsula and in southern Japan.



SOUTHEAST ASIA

Showers (20-50 mm) fell in key corn-producing areas of central Thailand, benefiting vegetative crops. While dry weather prevailed throughout rice-producing areas of Thailand, hot weather (35-40 degrees C) slowed transplanting activities. Similarly, hot (35-40 degrees C) weather slowed 10th month rice transplanting in northern Vietnam. Showers (10-150 mm) in the Philippines were more widespread than in previous weeks, providing beneficial moisture for vegetative corn but slowing rice transplanting. Showers remained unseasonably heavy in Java, Indonesia, while heavy showers (30-150 mm) in peninsular Malaysia and Sumatra boosted moisture supplies for oil palm.



AUSTRALIA

Dry weather returned to southern Queensland and northern New South Wales, favoring winter grain planting and other fieldwork, but reducing topsoil moisture for early crop development. Farther south, dry weather maintained the extreme drought in southern New South Wales and northern Victoria, further delaying winter grain planting. In South Australia, light showers (3-7 mm) moistened topsoils but were much too light to significantly boost subsoil moisture and end the severe, long-term drought. In contrast, scattered showers (2-23 mm) returned to Western Australia, favoring germinating to emerging winter grains. Unseasonably warm (temperatures 1-3 degrees C above normal) weather in Western Australia spurred crop development, but increased evaporative losses in southeastern Australia. Seasonably warm weather prevailed in northern New South Wales and southern Queensland.



SOUTH AMERICA

Following recent weeks of untimely wetness, much-needed dryness improved conditions for mature summer crops throughout the region. In Argentina, the dryness allowed floodwaters to recede in Santa Fe and Entre Rios, benefiting unharvested second-crop soybeans. Harvest conditions were generally favorable elsewhere in Argentina, including northern cotton areas (Chaco and Formosa) that recently recorded untimely rainfall. In addition, winter wheat planting should be underway in southern producing areas (La Pampa and southern Buenos Aires), where topsoil moisture levels were favorable for germination. According to independent sources from within Argentina, corn and soybeans were about 75 percent harvested as of May 10, ahead of last season's pace despite recent harvest delays. In Brazil, mostly dry weather favored soybean harvesting, especially in Rio Grande do Sul, and supported continuing winter wheat planting. The sunny skies also promoted winter corn development. However, scattered showers (25 mm or more) caused some fieldwork delays in southern Mato Grosso do Sul and Minas Gerais. According to independent sources in Brazil, soybeans were 98 percent harvested as of May 9. In the primary summer crop areas of Brazil and Argentina, cooler-than-normal weather (temperatures averaging 1-3 degrees C below normal) slowed the drying process, but frost was generally patchy and light, posing no threat to Brazil's coffee or citrus. In Brazil's northeastern interior, rain (25-50 mm or more) and seasonable warmth boosted moisture reserves for immature summer grains, oilseeds, and cotton.

2003/2004 Winter Grain Prospects In The Northern Hemisphere Outside Of The United States

This article contains USDA’s initial assessment of foreign crop prospects for Northern Hemisphere winter grains for the 2003/04 crop year. Information in this article was based on agricultural weather information obtained from the World Agricultural Outlook Board/Joint Agricultural Weather Facility, remote sensing analyses by the Foreign Agricultural Services Production Estimates and Crop Assessment Division, reports from U.S. agricultural attaches stationed abroad, and field travel. This information served as the basis for the first USDA forecast of 2003/04 country-level area, yield, and production for wheat and coarse grains published in May 2003 in USDA’s *World Agricultural Production* circular and *World Agricultural Supply and Demand Estimates* report.

Winter Grains Summary: Winter grain production (wheat, barley, and rye) for 2003/04, outside the United States, is expected to be much lower than last year. Forecast foreign wheat production is expected to decrease a second consecutive year and is the lowest since 1995/96 (see Figure 1). The drop in production is due to lower forecasts in Russia, and a dramatic 54-percent drop in Ukraine's wheat crop that suffered its worst winterkill in a quarter century. In the European Union (EU-15), little change is expected for wheat area and production is forecast down slightly. A smaller French crop, due to dry weather in the northern region, is partially offset by a larger Spanish crop. Eastern Europe is expected to have a smaller wheat crop due to unusually cold weather. Drier weather in rainfed areas in India should also result in a smaller crop where potential lodging and diseases in the Punjab region remain a concern. In China, wheat production is expected to decrease based on lower planted area. For Algeria, Tunisia, and Morocco, production is expected to recover from last year's drought. In Canada, winter wheat area seems to be recovering from last year's drought-reduced harvest, but there is some concern over the dryness and possible winterkill.

Ukraine: Conditions for 2003/04 Ukraine winter wheat have been consistently unfavorable so far this season. Wet September and October weather resulted in delays in planting and establishment, and the crop was not fully hardened in time for a bitterly cold December. Repeated cycles of thawing and re-freezing during February and March caused widespread and persistent ice crusting, which destroyed virtually all of the country's winter barley and a significant portion of the wheat. Unusually cold spring weather eliminated any chance of recovery by winter crops. Because of the lack of spring tillering, weed infestation will likely be worse than usual, and many farms lack the money to purchase adequate amounts of

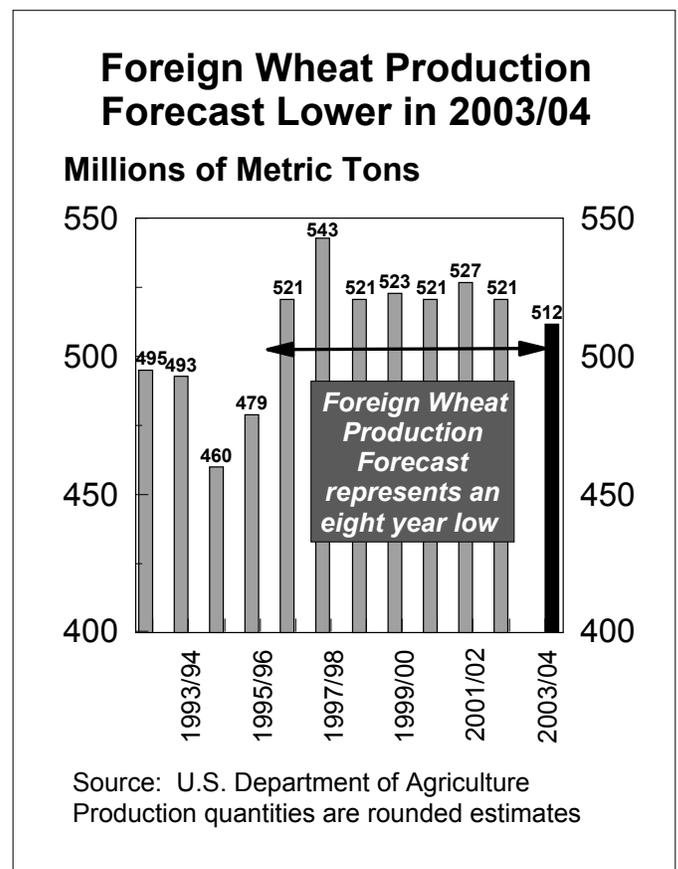


Figure 1.

herbicides. According to April 1 data from the Ministry of Statistics, roughly 40 percent of Ukraine's 8 million hectares of sown winter grains were destroyed by the combination of December frost and February ice crusting, and the final damage assessment is likely to reach 50 percent.

Russia: Sown area for 2003/04 winter grains in Russia decreased by roughly 2 million hectares, including a nearly 10-percent drop in the Southern District, Russia's main winter wheat zone. The reduction is attributed to a combination of low wheat prices and wet weather during the fall sowing campaign that shortened the planting season. Winterkill losses were higher than normal, estimated between 15 and 25 percent, due chiefly to low winter temperatures and a lack of protective snow cover in some areas. Cool weather delayed spring development of winter grains in European Russia. Local officials and farmers reported in mid-April that crop development was 2 to 3 weeks behind normal. The use of mineral fertilizers and plant-protection chemicals will likely remain stable or improve only marginally from last year. Only 10-15 percent of the country's arable land receives recommended amounts of fertilizers and chemicals, due chiefly to farms' financial constraints.

European Union: The EU-15 wheat crop is forecast to be lower than last year. The six largest wheat-producing members of the EU-15 are France, Germany, United Kingdom (UK), Italy, Spain, and Denmark, and they are expected to contribute over 90 percent of total production. In the major wheat-producing countries, year-to-year production increases are expected in Denmark, Germany, and Spain; and decreases are forecast in France, Italy, and the UK. The vast majority of wheat in the EU-15 is winter wheat, planted from October through December. Barley production is forecast up due to increased area and expected improvement in yields. Winter crop planting conditions were generally favorable, with the exception of excessive moisture in southern Germany. However, extreme cold combined with a lack of snow cover in northern France and northern Germany in January and February created damaging conditions for dormant winter barley. In some places, winter barley was replanted with lower yielding spring varieties. Winter and spring moisture conditions in Spain have been extremely favorable. The weather has been average in Italy and the UK. March and April were unusually dry in France and Germany, but abundant moisture reserves likely sustained winter crops planted in heavy soils.

Eastern Europe: During the fall planting season, wet weather and a late summer-crop harvest delayed and reduced winter grain planting in many areas. Episodes of bitterly cold weather threatened winter grains throughout the region. In December, a lack of snow cover extended from Poland southward into northeastern Romania, leaving winter grains vulnerable to extreme cold (down to -25 C in Poland), especially winter barley and winter rapeseed. In January and February, above-normal precipitation produced moderate to heavy snow cover across the region,

protecting winter crops from additional outbreaks of bitterly cold weather. Winter's unusually cold weather pattern persisted into the spring, slowing winter grain development by about 2 or 3 weeks. Higher-than-normal winterkill is expected and more area will be seeded to summer crops because of the harsh winter.

India: A dry start to the India wheat season resulted in lower production for the 2003/04 crop. Below-normal precipitation in the western growing states of Punjab, Haryana, Rajasthan, and western Uttar Pradesh resulted in lower rainfed area. Though irrigation supplies were reported to be low in some regions, final reports indicate water was sufficient for the crop. The dry conditions early in season negatively impacted total rainfed area sown in the west. In the Uttar Pradesh, Bihar, and Madhya Pradesh, greater-than-normal precipitation in October and November favored sowing and early development. Overall, significantly cooler weather in many areas characterized the season; however, that appears to have been detrimental. The combination of cooler weather and showers during the months of January and February historically constitute a very favorable season for the Indian wheat crop. The above-average national yield this season is the result of cooler weather and rainfall during the flowering-reproductive crop stage. Weather conditions during ripening and maturation were favorable and continued into harvest, which typically occurs from April to June.

China: Wheat area and production are forecast to drop to record low levels in 2003/04. Wheat area has declined every year since 1997/98 (down 29 percent in 5 years) due to poor profits, water shortages, and lower support prices. Scattered showers in September/October 2002 provided adequate moisture for winter wheat planting and germination in most areas of the North China Plain. Soil moisture had been very low in the northern and eastern parts of the North China Plain following a brief but intense summer drought. Cool temperatures hindered emergence before the onset of dormancy, and several provinces reported poor crop conditions at the end of the year. Widespread precipitation in December improved moisture conditions for the dormant crop, and snow cover offered protection from very cold weather in January. Timely showers and mild temperatures in March and April benefited vegetative wheat on the North China Plain. Soil moisture is abundant to excessive in the southern wheat-growing regions, where rainfall has been above normal since the beginning of the year. Winter wheat harvesting starts at the end of May in the south and continues through mid-June.

Northwestern Africa: Crop prospects for winter grains in Morocco, Algeria, and Tunisia are much better and totals will be much higher than last year's drought-reduced output. Winter grain planting usually occurs from mid-November to mid-December throughout the region. All three countries received widespread, above-normal rainfall in November, boosting topsoil moisture for early winter grain planting. Early rainfall enticed farmers to increase sown area. November rains were especially heavy in Morocco, and drier weather in December improved conditions for fieldwork. In Algeria and Tunisia, near-to-above-normal rainfall maintained adequate moisture supplies for germinating to vegetative winter grains. During the growing season, northern Morocco, Algeria, and Tunisia received the greatest amount of rain since the 1995/96 growing season when a record crop of 10.9 million tons was produced. In Tunisia, growing season rainfall was the highest in the past 20 years (see Figure 2). In portions of eastern Algeria and Tunisia, however, locally heavy rain in January may have produced some localized flooding, creating the potential for possible washouts of winter grain fields as well as causing quality problems. The only area that received below-normal rainfall during the growing season was southern Morocco, mainly due to persistent dryness in January to February 2003. However, timely rains in autumn and again in late March boosted soil moisture levels for planting and reproduction.

Middle East: Planted area is expected to be similar to 2002/03. Winter grain prospects are favorable based on good moisture availability. Most of the region has received normal to above-normal precipitation this season with the exception of western Iran, where conditions were dry during planting and establishment and did not improve until December. Western growing areas produce the majority of rainfed wheat. Thirty to forty percent of Iran's wheat crop is rainfed. Spring rains have provided needed moisture; however, deficits remain in portions of western Iran. In Turkey, wheat area is estimated up slightly due to higher prices and favorable weather during planting. Turkey received abundant rainfall throughout the season, benefiting rainfed crops and boosting irrigation supplies. The coastal Mediterranean countries of Syria, Lebanon, Israel, and Jordan have experienced a very wet season thus far. Syria's output is expected higher this year based on good rainfall. In Iraq, wheat and barley production are estimated to be similar to last year. Rainfall in the north, where crops are primarily rainfed, has been similar to last season. The north produces one-third of the winter grains and crops in this region were reportedly unaffected by the recent military conflict. Impacts to the crops in the south-central part of the country are as yet unknown.

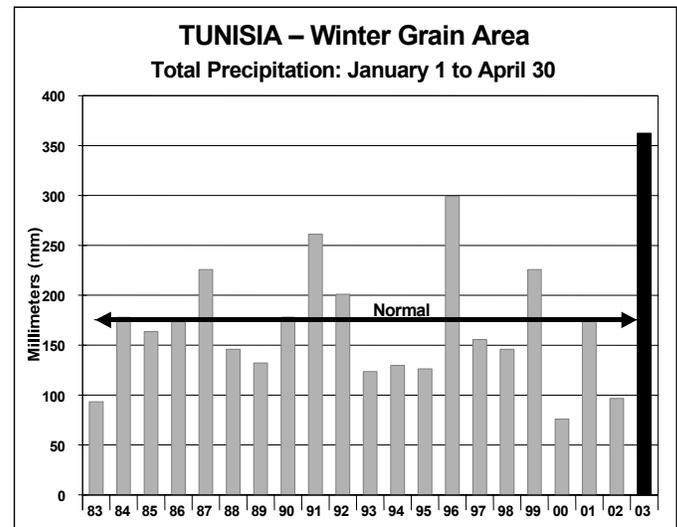


Figure 2.

Canada: Canadian wheat production should increase because of substantially improved yields from last year's drought-reduced levels. The average wheat yield this year is forecast to be 2.30 tons per hectare, up dramatically from 1.82 tons in 2002. Moisture conditions are adequate all across the Canadian prairie, which was not the case at this time last year. Spring wheat accounts for over 90 percent of the total wheat produced in Canada. Winter wheat production is typically between 1.5 and 1.8 million tons, but based on the expansion of winter wheat area this year, winter wheat production could be as high as 2.5 million tons. Most winter wheat is grown in Ontario, and harvested area is forecast to increase despite dry conditions during planting and extremely cold winter weather. Winter wheat yields can be nearly double spring wheat yields. Spring wheat planting, including durum wheat, has just begun in western Canada.

Mexico: Wheat production is struggling to return to the levels of the early 1990s, when harvested area regularly topped 700,000 hectares. Unfavorable moisture conditions in 2003/04 may extend the recent trend of limited area for another year, as the major producing states are irrigated. Ironically, the heightened moisture pressure of recent years has removed substantial marginal land from the national total, thus improving overall wheat yield. Winter wheat was planted after the monsoon retreated in October; however brief, occasional showers may have been sufficient to sustain development in spite of heat and poor soil moisture. Given the scaled-down area, only the success of a special wheat variety with a reduced moisture requirement will permit yield to exceed 4.0 tons per hectare.

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Correspondence to the meteorologists should be directed to: **Weekly Weather and Crop Bulletin, NOAA/USDA, Joint Agricultural Weather Facility, USDA South Building, Room 4443B, Washington, DC 20250**. Internet URL: <http://www.usda.gov/oce/waob/jawf>; E-mail address: jawfweb@oce.usda.gov

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National Oceanic and Atmospheric Administration
National Weather Service/Climate Prediction Center
Managing Editor **David Miskus** (202) 720-7919
Meteorologists **Eric Luebehusen**,
..... **Brad Pugh**, and **Chester Schmitt**

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