

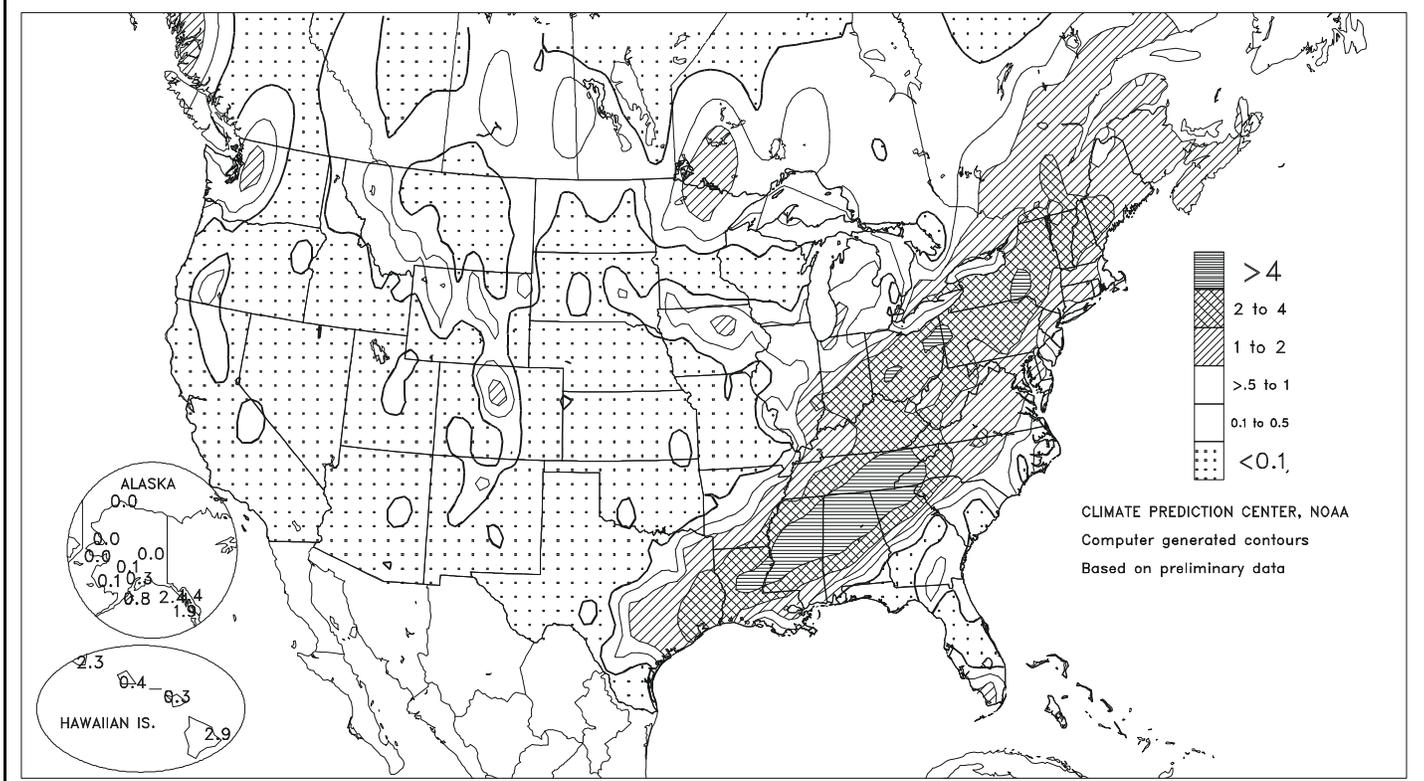
WEEKLY WEATHER AND CROP BULLETIN

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)

APR 2 - 8, 2000



HIGHLIGHTS

April 2 - 8, 2000

A slow-moving storm system produced torrential rainfall across the **South** early in the week, halting fieldwork but further easing long-term drought. Significant precipitation also spread into the **East**, primarily along and west of the **Appalachian cordillera**. The ensuing storm system primarily affected areas farther to the north, replenishing topsoil moisture in parts of the **Corn Belt** and **Great Lakes States**, and maintaining wet conditions in the **Northeast**. Cold, snowy conditions increased livestock stress from the **northern Plains** and **northern Corn Belt** into the **Northeast**. Meanwhile, strong high-pressure systems moved across the **Plains** and into the **Southeast** on

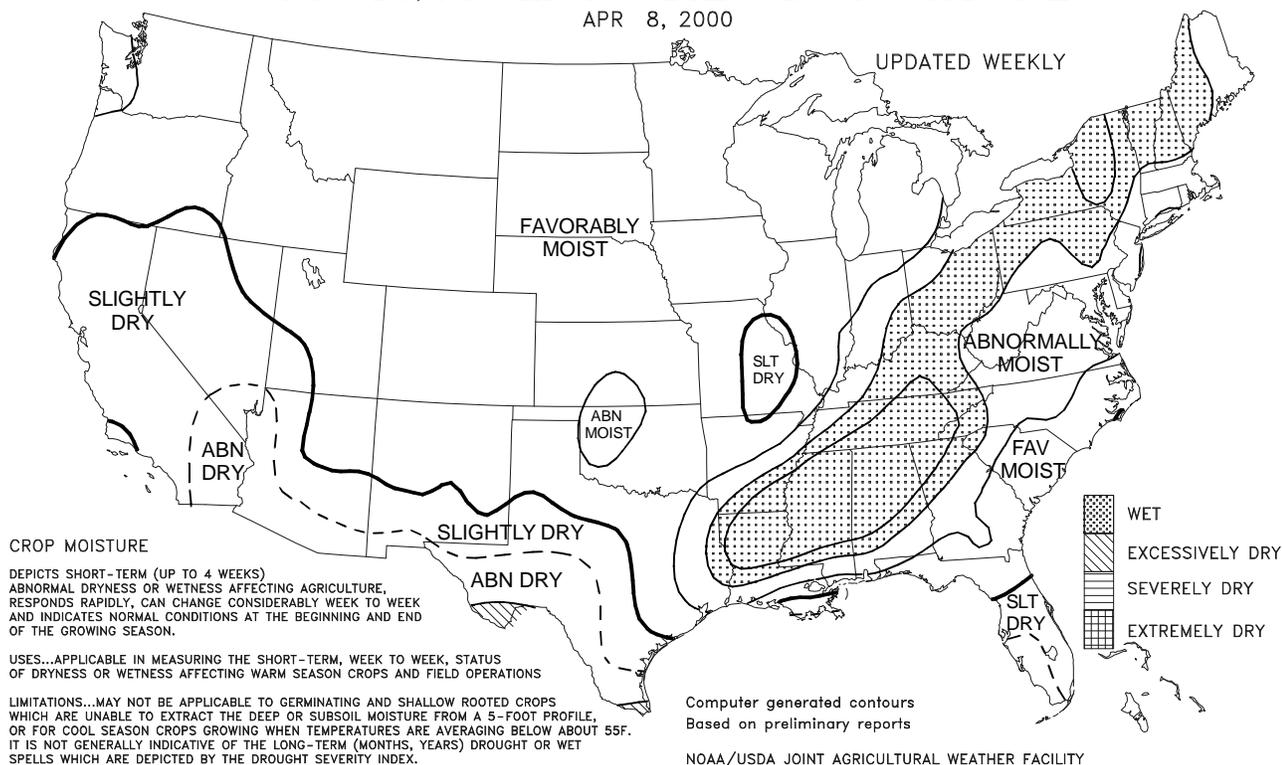
(Continued on back cover)

Contents

Crop Moisture Maps	2
April 4 Drought Monitor Map	3
Temperature Departure & Soil Temperature Maps	4
Extreme Maximum & Minimum Temperature Maps	5
Weather Data for the Delta & U.S. Crop Production Highlights	6
National Weather Data for Selected Cities	7
March Weather and Crop Summary	10
March Precipitation and Temperature Maps	12
March Weather Data for Selected Cities	13
Water Supply Forecast for the Western U.S.	14
Crop Progress Tables	16
National Agricultural Summary & Crop Condition Table	17
State Agricultural Summaries	18
International Weather and Crop Summary	23
La Niña Update	27

Crop Moisture
SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE
APR 8, 2000

UPDATED WEEKLY



CROP MOISTURE

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

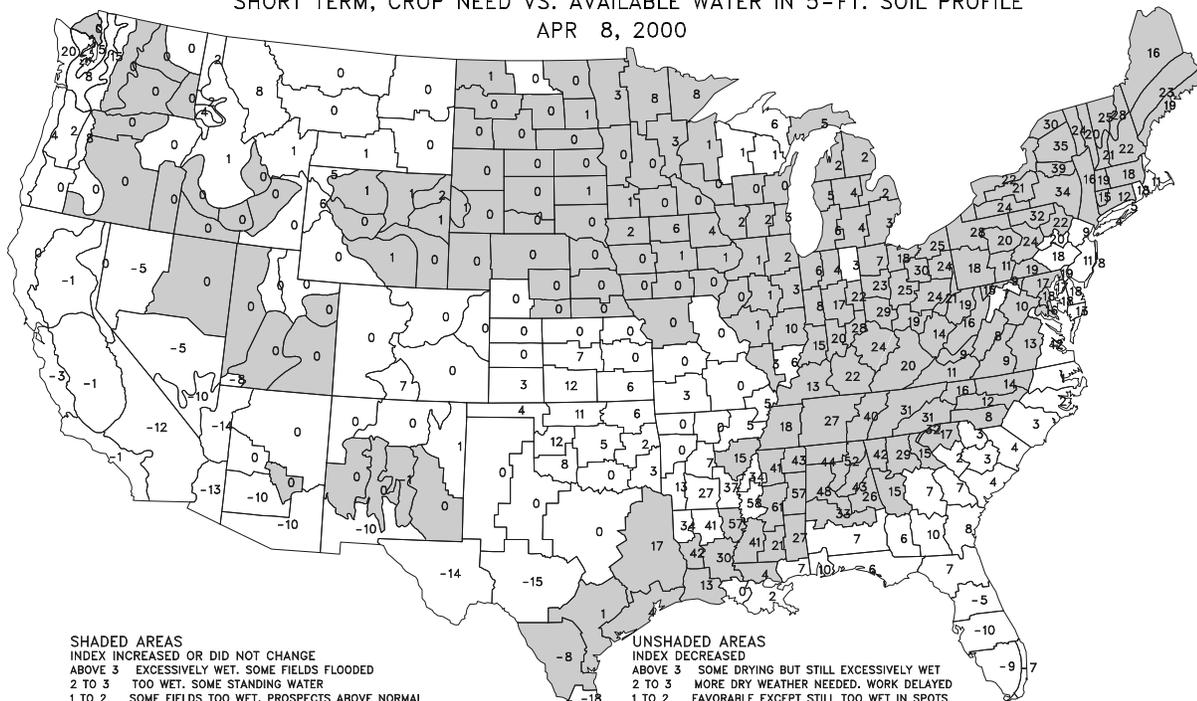
USES...APPLICABLE IN MEASURING THE SHORT-TERM, WEEK TO WEEK, STATUS OF DRYNESS OR WETNESS AFFECTING WARM SEASON CROPS AND FIELD OPERATIONS

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

Computer generated contours
Based on preliminary reports

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

Crop Moisture Index
SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE
APR 8, 2000



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

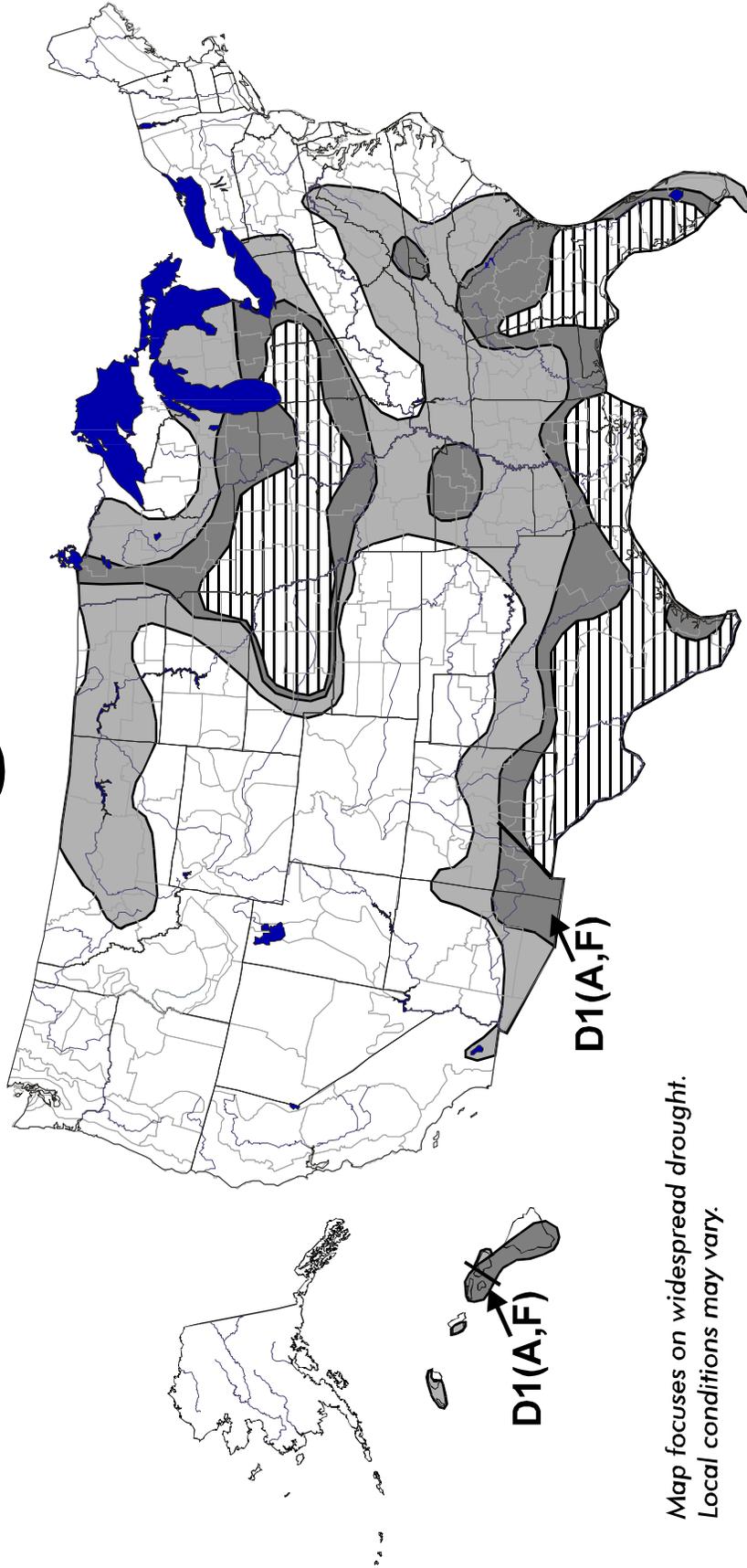
INDEX DECREASED
 ABOVE 3 SOME DRYING BUT STILL EXCESSIVELY WET
 2 TO 3 MORE DRY WEATHER NEEDED. WORK DELAYED
 1 TO 2 FAVORABLE EXCEPT STILL TOO WET IN SPOTS
 0 TO 1 FAVORABLE FOR NORMAL GROWTH AND FIELDWORK
 0 TO -1 TOPSOIL MOISTURE SHORT. GERMINATION SLOW
 -1 TO -2 ABNORMALLY DRY. PROSPECTS DETERIORATING
 -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

April 4, 2000 Valid 7 a.m. EST

U.S. Drought Monitor



Map focuses on widespread drought.
Local conditions may vary.

- D0 Abnormally Dry
 - ▨ D1 Drought-First Stage
 - ▩ D2 Drought-Severe
 - ▧ D3 Drought-Extreme
 - ▦ D4 Drought-Exceptional
 - ▬ Delineates Overlapping Areas
- Drought type: used only when impacts differ
- A = Agriculture
W = Water
F = Wildfire danger

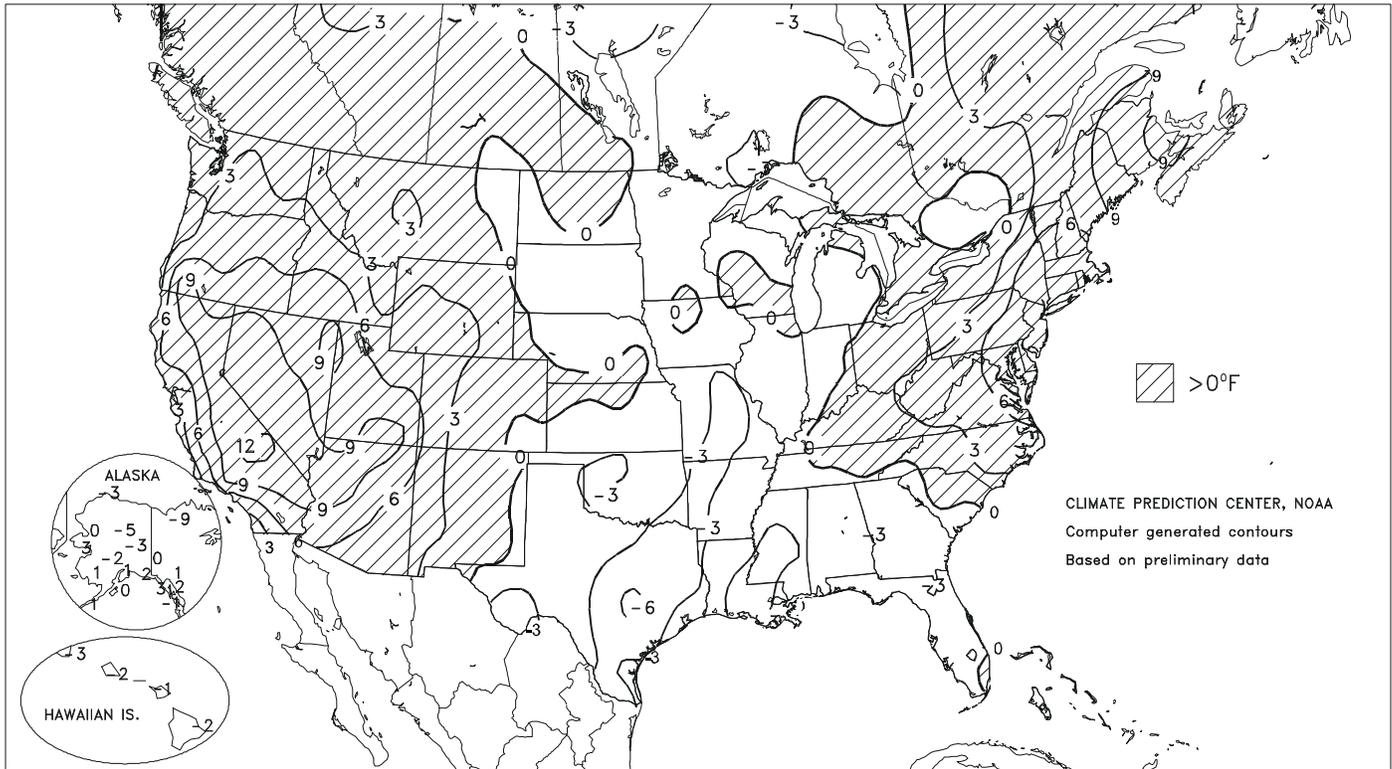
Plus (+) = Forecast to intensify next two weeks
 Minus (-) = Forecast to diminish next two weeks
 No sign = No change in drought classification forecast



● Released Thursday, April 6, 2000 ●
 Drought Monitor Web Site:
<http://fenso.unl.edu/monitor/monitor.html>

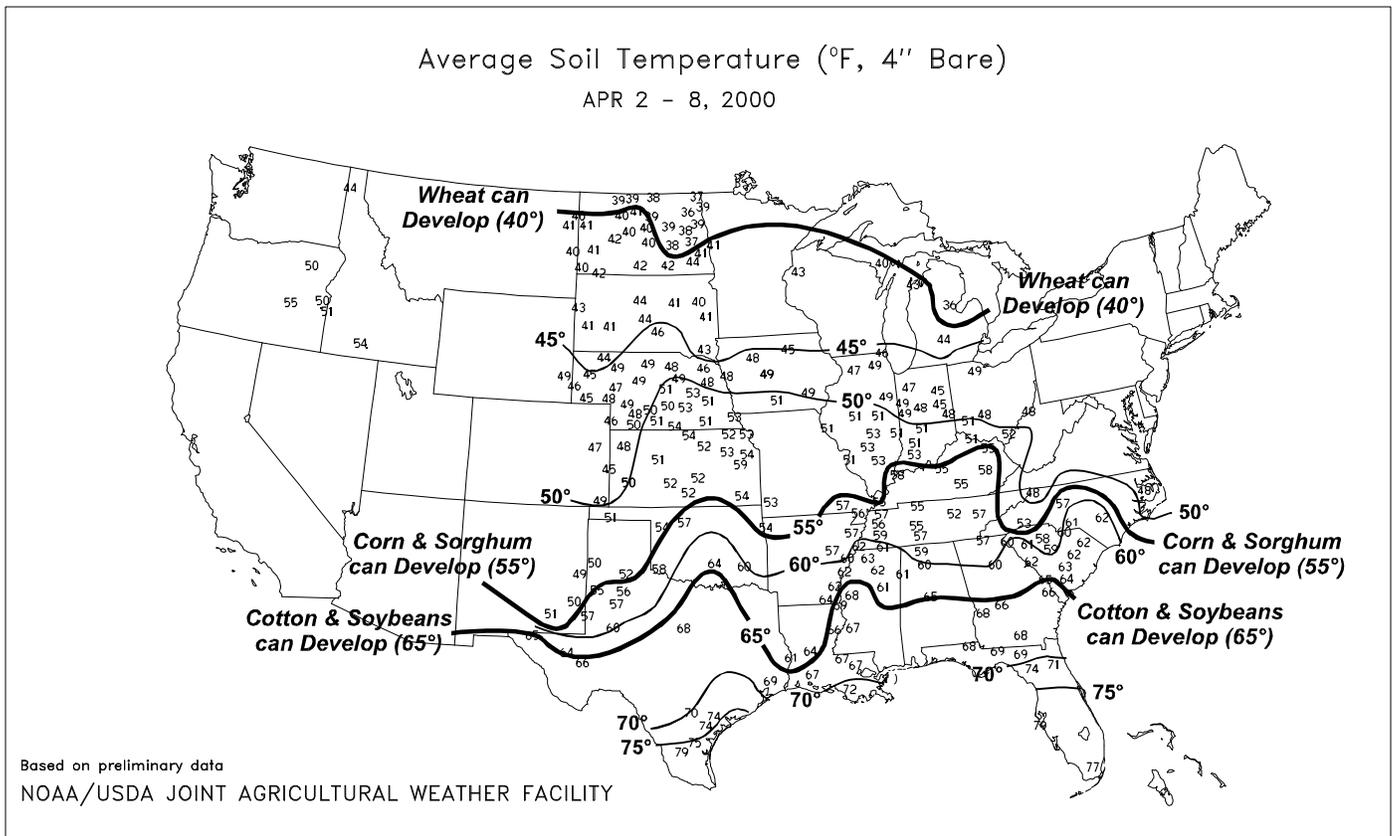
Departure of Average Temperature from Normal (°F)

APR 2 - 8, 2000



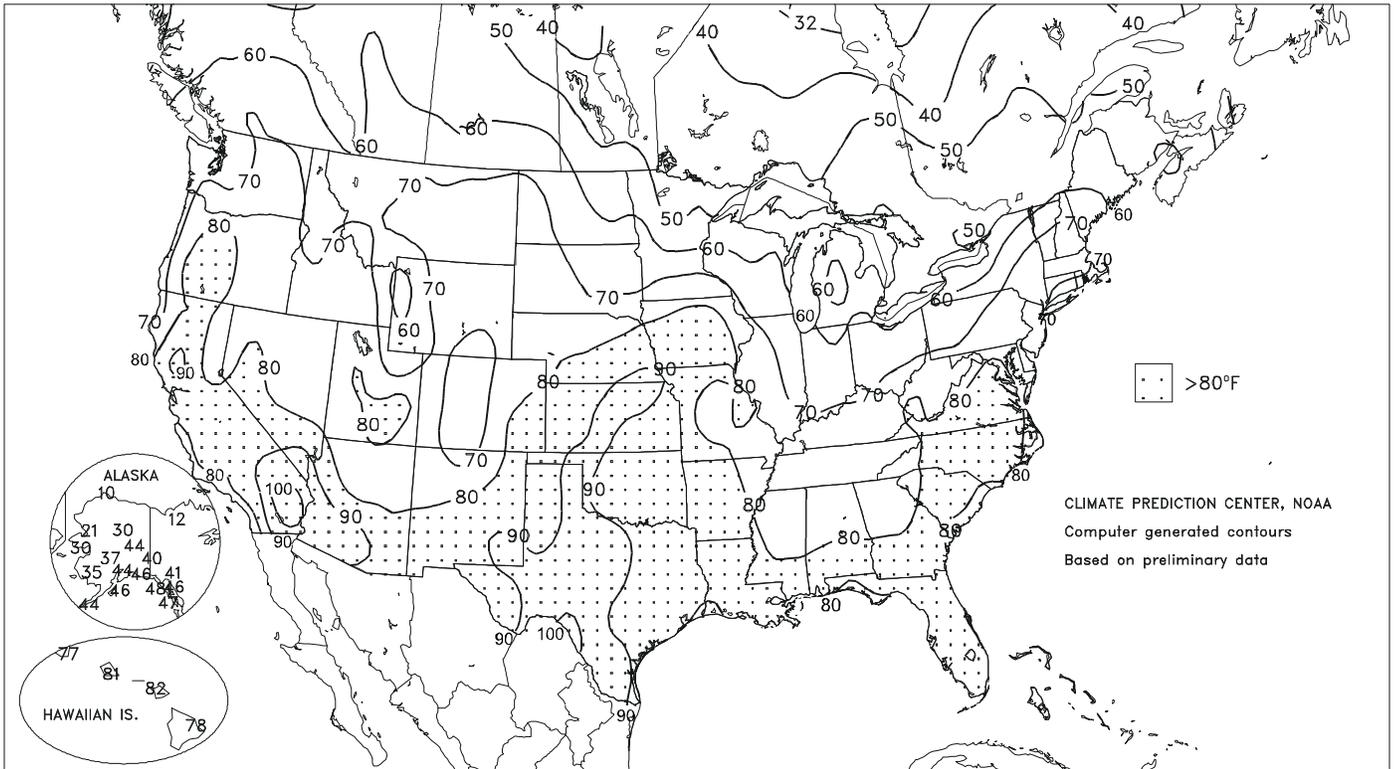
Average Soil Temperature (°F, 4" Bare)

APR 2 - 8, 2000



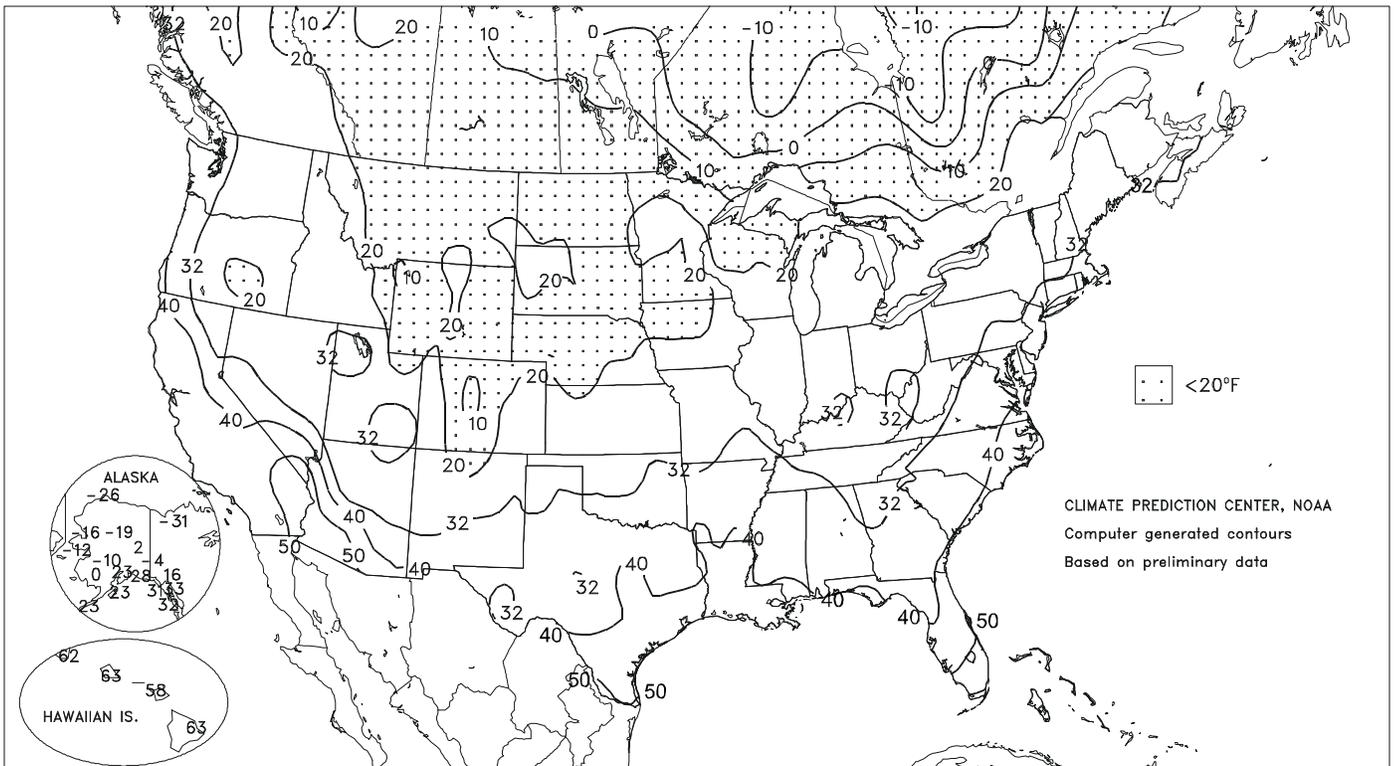
Extreme Maximum Temperature (°F)

APR 2 - 8, 2000



Extreme Minimum Temperature (°F)

APR 2 - 8, 2000



Weather Data for Selected Locations in the Delta

Weather Data for the Week Ending April 8, 2000

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

STATES AND STATIONS	TEMPERATURE EF						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. EF		PRECIP.	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
MS BATESVILLE *	70	51	77	36	61	4	2.87	1.73	1.50	-	-	-	-	-	-	0	0	3	2
BELZONI *	75	47	84	34	61	0	2.27	1.11	1.35	15.05	210	-	-	-	-	0	0	3	2
CLARKSDALE *	67	50	75	41	59	1	-	-	-	-	-	-	-	-	-	0	0	-	-
CLEVELAND *	70	49	78	43	60	2	2.12	1.27	0.90	10.72	190	16.43	119	-	-	0	0	3	3
GREENVILLE *	69	52	79	43	61	0	1.99	0.87	1.64	15.37	280	-	-	-	-	0	0	2	1
GREENWOOD *	69	48	79	38	59	-1	2.09	0.92	1.85	14.98	279	19.30	150	-	-	0	0	3	1
INDIANOLA 1S	58	43	76	42	51	-	-	-	-	-	-	-	-	63	56	0	0	0	1
INVERNESS 5E	70	52	81	44	61	-	3.72	-	2.34	15.74	-	19.98	-	-	-	0	0	5	1
LYON	67	49	76	41	58	-	1.77	-	0.81	9.32	-	13.99	-	-	-	0	0	3	2
MOORHEAD *	71	52	80	44	62	1	2.54	1.42	1.30	17.61	308	19.73	136	-	-	0	0	3	3
ONWARD	71	50	79	41	61	-	-	-	-	-	-	-	-	71	57	0	0	-	-
ROLLING FORK *	73	49	82	43	61	1	1.53	0.45	0.96	9.86	165	13.08	87	-	-	0	0	3	1
SIDON	70	51	81	44	61	-	4.89	-	3.32	13.24	-	17.68	-	-	-	0	0	7	1
TUNICA *	67	48	77	41	58	0	1.17	-0.06	0.63	-	-	-	-	-	-	0	0	2	2
VICKSBURG *	72	52	79	44	62	0	5.99	4.81	3.40	15.29	189	-	-	-	-	0	0	3	2
YAZOO CITY *	74	48	81	34	61	-1	-	-	-	-	-	-	-	-	-	0	0	-	-
STONEVILLE *	71	50	79	43	61	1	9.14	7.95	6.33	16.86	255	21.98	147	67	56	0	0	4	2

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

* Based on 1964-93 normals.

x Based on 1961-90 normals.

Delta Weather and Crop Summary: Heavy rain continued early in the week, but was followed by sharply cooler weather on April 5. Another cool outbreak brought even lower temperatures and frost at week' s end (the night of April 8-9). Although wet fields and standing water continued to delay fieldwork in many areas, the moisture was beneficial from the standpoint of long-term drought relief.

U.S. Crop Production Highlights

The following information was released by USDA' s Agricultural Statistics Board on April 11, 2000. Forecasts refer to April 1.

The **all orange** production forecast for 1999-2000 is 12.9 million tons, up 1 percent from last month' s forecast and 31 percent above last season' s revised final utilization. Florida' s all orange forecast is 228 million boxes (10.3 million tons), 1 percent higher than the March 1 forecast and 23 percent higher than the 186 million boxes (8.37 million tons) utilized last season. Florida' s early and midseason variety forecast remains at 134 million boxes (6.03 million tons) and is 20 percent higher than last season. Harvest is nearly complete. Florida' s Valencia forecast is increased to 94 million boxes (4.23 million tons), 2 percent higher than last month and 27 percent above last season' s final utilization. The increase is primarily due to an abnormally small amount of fruit droppage, the second-lowest in the last 30 non-freeze seasons. Fruit

size is slightly larger than average, and weight per fruit is well above average.

California' s all orange production forecast of 67 million boxes (2.51 million tons) is unchanged from January and is 86 percent higher than last season' s revised final utilization. Texas orange production is forecast at 1.80 million boxes (77,000 tons), up 6 percent from last month and 26 percent above last season. If realized, it will be the largest orange crop since the 1988-89 season, when 1.85 million boxes were utilized. The Arizona orange forecast is decreased to 900,000 boxes (34,000 tons), 14 percent lower than the previous forecast and 22 percent lower than last season.

National Weather Data for Selected Cities

Weather Data for the Week Ending April 8, 2000

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

STATES AND STATIONS	TEMPERATURE EF						PRECIPITATION						RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. EF		PRECIP.	
																90 AND ABOVE	32 AND BELOW	0.1 INCH OR MORE	5.0 INCH OR MORE
AL BIRMINGHAM	69	45	77	30	57	-3	6.32	4.93	3.24	18.13	234	26.02	148	94	43	0	1	5	2
HUNTSVILLE	68	45	79	32	56	-2	5.51	4.11	2.32	13.21	161	20.06	110	90	61	0	1	5	2
MOBILE	73	49	83	35	61	-5	0.72	-0.51	0.56	7.66	98	11.63	65	92	47	0	0	4	1
AK MONTGOMERY	72	45	79	31	58	-4	1.20	-0.12	0.81	4.54	59	10.46	58	94	45	0	1	3	1
ANCHORAGE	40	27	44	23	34	1	0.31	0.12	0.31	0.88	98	3.00	121	79	66	0	8	1	0
BARROW	-2	-18	10	-26	-10	-2	0.00	-0.06	0.00	0.07	29	0.51	91	84	77	0	8	0	0
FAIRBANKS	33	11	44	2	22	-3	0.00	-0.09	0.00	0.02	4	1.99	147	59	47	0	8	0	0
JUNEAU	42	35	46	30	39	1	1.35	0.62	0.33	7.10	173	13.48	109	95	86	0	1	7	0
KODIAK	41	30	46	23	36	0	0.89	-0.18	0.73	7.33	126	15.50	84	85	69	0	4	4	1
NOME	25	7	30	-12	16	3	0.00	-0.19	0.00	0.21	28	3.71	173	73	59	0	8	0	0
AZ FLAGSTAFF	66	29	71	21	48	8	0.00	-0.49	0.00	3.17	102	5.10	70	76	16	0	7	0	0
PHOENIX	89	60	94	50	75	8	0.00	-0.10	0.00	2.98	301	2.99	128	39	20	5	0	0	0
TUCSON	86	53	92	39	69	5	0.00	-0.11	0.00	0.93	111	1.22	51	33	15	3	0	0	0
YUMA	92	62	99	54	77	8	0.00	-0.04	0.00	0.40	154	0.50	60	34	26	6	0	0	0
AR FORT SMITH	70	41	85	31	55	-4	0.00	-0.97	0.04	3.15	62	6.15	64	83	37	0	1	1	0
LITTLE ROCK	69	46	81	35	58	-2	0.61	-0.83	0.35	5.24	80	9.26	68	90	42	0	0	3	0
CA BAKERSFIELD	82	51	89	44	66	5	0.00	-0.19	0.00	1.29	102	3.86	121	63	41	0	0	0	0
EUREKA	***	***	***	***	***	***	0.00	-0.95	0.00	2.81	45	19.52	115	83	75	***	***	0	0
FRESNO	83	52	91	48	67	8	0.00	-0.33	0.00	1.35	59	10.63	176	76	45	1	0	0	0
LOS ANGELES	66	55	72	53	60	1	0.00	-0.28	0.00	2.40	104	7.94	110	92	77	0	0	0	0
REDDING	78	47	89	44	63	7	0.09	-0.61	0.09	4.24	82	21.19	135	83	51	0	0	1	0
SACRAMENTO	76	48	86	43	62	6	0.00	-0.42	0.00	2.26	74	18.39	191	92	35	0	0	0	0
SAN DIEGO	67	57	69	56	62	1	0.00	-0.29	0.00	1.00	48	4.86	90	86	69	0	0	0	0
SAN FRANCISCO	65	51	85	48	58	3	0.00	-0.50	0.00	1.74	48	16.12	145	84	63	0	0	0	0
CO ALAMOSA	62	21	69	15	42	3	0.00	-0.13	0.00	0.45	76	0.70	61	76	26	0	8	0	0
CO SPRINGS	63	31	74	22	47	3	0.18	-0.08	0.18	2.15	173	3.06	159	69	20	0	5	1	0
DENVER	65	30	77	16	47	2	0.12	-0.28	0.12	1.85	107	2.36	84	76	21	0	4	1	0
GRAND JUNCTION	70	40	78	28	55	6	0.00	-0.20	0.00	1.26	113	3.31	153	41	21	0	1	0	0
PUEBLO	71	29	84	21	50	1	0.23	0.01	0.23	3.18	309	3.56	214	75	36	0	6	1	0
CT BRIDGEPORT	56	42	64	32	49	4	0.73	-0.28	0.36	4.73	97	8.78	79	79	64	0	1	3	0
HARTFORD	62	41	75	31	51	6	1.32	0.31	0.80	5.01	105	9.44	83	81	55	0	2	5	1
DC WASHINGTON	70	46	82	34	58	4	1.39	0.69	0.85	5.37	136	10.44	111	79	38	0	0	5	1
DE WILMINGTON	66	42	77	30	54	5	0.74	-0.14	0.31	9.88	224	15.56	150	85	36	0	1	4	0
FL DAYTONA BEACH	76	54	86	44	65	-3	0.01	-0.58	0.01	8.49	238	10.94	116	87	43	0	0	1	0
JACKSONVILLE	77	47	83	37	62	-3	0.29	-0.47	0.29	2.08	46	6.02	51	89	38	0	0	1	0
KEY WEST	81	71	86	65	76	0	1.98	1.58	1.97	3.46	161	4.62	78	79	59	0	0	2	1
MIAMI	81	66	89	59	73	-1	0.05	-0.56	0.05	0.40	13	2.17	30	79	52	0	0	1	0
ORLANDO	81	53	88	41	67	-3	0.00	-0.50	0.00	0.45	12	2.04	22	82	41	0	0	0	0
PENSACOLA	72	50	79	39	61	-5	0.25	-0.85	0.24	4.18	61	8.49	50	85	48	0	0	2	0
TALLAHASSEE	75	46	80	36	61	-3	0.11	-0.99	0.08	3.47	47	7.39	42	93	46	0	0	3	0
TAMPA	79	57	86	45	68	-2	0.13	-0.20	0.12	0.55	16	2.80	33	75	39	0	0	2	0
WEST PALM	80	63	89	55	72	0	0.00	-0.69	0.00	2.00	45	3.76	38	85	54	0	0	0	0
GA ATHENS	68	44	77	32	56	-3	1.55	0.43	0.71	5.01	74	11.40	72	86	53	0	1	4	2
ATLANTA	67	44	75	32	55	-4	2.57	1.36	1.58	6.36	89	12.51	75	91	55	0	1	4	2
AUGUSTA	75	44	83	31	59	-1	0.20	-0.73	0.14	3.12	55	10.78	77	85	48	0	2	3	0
COLUMBUS	72	47	79	34	59	-4	0.35	-0.88	0.21	7.62	106	12.81	77	91	37	0	0	4	0
MACON	72	45	78	32	58	-4	0.09	-0.89	0.06	5.29	90	10.87	72	94	44	0	2	3	0
SAVANNAH	74	47	80	36	60	-4	0.20	-0.61	0.18	4.51	96	8.79	76	89	47	0	0	3	0
HI HILO	76	65	78	63	70	-2	3.12	-1.13	0.82	8.19	44	26.58	68	93	81	0	0	7	3
HONOLULU	79	67	81	63	73	-2	0.41	-0.05	0.17	0.79	29	2.13	25	79	72	0	0	3	0
KAHULUI	80	65	82	58	72	-2	0.93	0.36	0.63	1.52	45	2.58	25	84	72	0	0	5	1
LIHUE	75	66	77	61	70	-4	2.63	1.65	1.01	3.65	69	6.27	43	85	76	0	0	8	2
ID BOISE	67	40	79	32	53	6	0.27	-0.08	0.25	1.96	117	5.53	132	67	38	0	1	2	0
LEWISTON	66	42	77	36	54	6	0.00	-0.28	0.00	0.97	69	4.09	114	68	50	0	0	0	0
POCATELLO	61	32	76	20	46	4	0.00	-0.31	0.00	0.81	50	3.76	105	64	35	0	4	0	0
IL CHICAGO/O'HARE	55	34	64	25	45	0	0.00	-0.95	0.00	1.18	31	4.50	68	80	44	0	5	0	0
MOLINE	58	34	77	27	46	-1	0.24	-0.75	0.23	1.09	27	5.79	84	78	43	0	4	2	0
PEORIA	58	35	74	28	47	-1	0.41	-0.57	0.30	2.04	51	4.67	67	79	37	0	4	4	0
ROCKFORD	56	32	69	23	44	0	0.43	-0.50	0.39	1.52	43	4.98	84	83	44	0	5	4	0
SPRINGFIELD	60	37	75	28	48	-2	0.45	-0.53	0.29	3.25	75	5.06	66	78	46	0	3	2	0
IN EVANSVILLE	61	40	70	28	51	-2	1.48	0.40	1.02	4.71	79	16.32	139	81	53	0	3	4	1
FORT WAYNE	54	36	62	25	45	-1	0.59	-0.29	0.56	2.60	67	5.42	71	85	55	0	4	2	1
INDIANAPOLIS	57	38	62	25	47	-2	2.19	1.21	2.08	3.83	78	8.76	91	87	46	0	4	3	1
SOUTH BEND	52	33	59	25	43	-2	0.97	-0.06	0.77	2.78	65	6.81	81	87	59	0	5	4	1
IA BURLINGTON	58	35	79	28	47	-1	0.26	-0.64	0.25	1.08	28	4.54	73	75	32	0	4	2	0
CEDAR RAPIDS	57	31	82	22	44	-1	0.19	-0.61	0.19	0.92	29	3.48	66	78	31	0	5	1	0
DES MOINES	61	33	86	22	47	0	0.32	-0.52	0.30	0.81	25	3.47	65	73	34	0	3	2	0
DUB																			

Weather Data for the Week Ending April 8, 2000

STATES AND STATIONS	TEMPERATURE EF						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. EF		PRECIP	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
KY WICHITA	65	38	84	30	52	-1	0.00	-0.60	0.00	6.11	197	9.75	201	76	42	0	2	0	0
KY JACKSON	65	43	79	28	54	0	2.12	1.05	1.15	4.06	68	10.22	75	84	36	0	1	4	2
KY LEXINGTON	61	41	71	25	51	-1	2.77	1.73	1.16	6.68	120	14.89	128	87	61	0	3	5	2
KY LOUISVILLE	63	44	72	30	53	0	1.98	0.85	1.05	6.00	101	18.13	150	84	51	0	1	4	2
LA PADUCAH	64	41	75	27	52	-3	0.91	-0.41	0.70	5.23	82	16.80	124	88	39	0	4	4	1
LA BATON ROUGE	73	48	81	35	61	-6	0.60	-0.82	0.42	3.96	62	7.39	44	99	46	0	0	2	0
LA LAKE CHARLES	73	51	81	38	62	-4	3.55	2.78	1.79	5.81	140	8.12	66	95	52	0	0	2	2
LA NEW ORLEANS	74	54	84	45	64	-3	0.62	-0.60	0.61	3.03	48	7.09	41	88	53	0	0	2	1
LA SHREVEPORT	72	48	84	36	60	-3	1.56	0.64	0.88	10.17	220	15.08	121	93	48	0	0	3	1
ME CARIBOU	51	31	60	26	41	7	1.62	0.99	0.74	3.48	111	9.30	124	92	53	0	6	5	1
ME PORTLAND	54	37	63	32	46	6	1.36	0.27	0.56	5.02	103	11.32	96	92	64	0	2	5	1
MD BALTIMORE	68	42	79	32	55	4	1.49	0.67	0.92	5.83	136	11.48	110	79	45	0	1	5	1
MA BOSTON	62	42	75	34	52	7	0.96	-0.02	0.51	4.55	95	9.87	82	86	54	0	0	4	1
MA WORCESTER	59	39	72	28	49	8	2.17	1.13	1.45	5.99	117	11.70	95	90	51	0	2	5	1
MI ALPENA	44	28	59	15	36	-1	0.39	-0.18	0.20	1.16	42	5.06	89	90	52	0	6	5	0
MI GRAND RAPIDS	50	32	61	23	41	-1	0.80	-0.09	0.70	2.03	56	4.58	67	90	54	0	5	4	1
MI HOUGHTON LAKE	45	26	60	17	36	-2	0.38	-0.19	0.16	1.55	58	4.47	84	90	56	0	6	6	0
MI LANSING	50	28	59	20	39	-3	0.62	-0.13	0.44	1.83	58	3.90	65	86	67	0	6	3	0
MI MUSKEGON	48	31	57	21	40	-1	0.62	-0.16	0.45	1.79	53	3.89	54	91	59	0	4	4	0
MI TRAVERSE CITY	47	27	61	21	37	-2	0.18	-0.41	0.07	1.26	53	4.09	70	88	43	0	6	4	0
MN DULUTH	41	25	50	19	33	-2	0.60	0.03	0.35	3.24	128	5.16	113	89	54	0	7	3	0
MN INT'L FALLS	41	25	47	19	33	-1	1.14	0.77	0.54	1.87	127	2.70	91	89	45	0	7	5	1
MN MINNEAPOLIS	52	33	69	24	43	1	0.04	-0.55	0.03	1.16	45	3.12	70	71	26	0	3	2	0
MN ROCHESTER	52	29	74	19	41	0	0.01	-0.65	0.01	0.88	35	3.63	90	77	36	0	5	1	0
MN ST. CLOUD	49	26	61	21	38	-1	0.02	-0.54	0.02	1.62	79	3.41	100	72	33	0	8	1	0
MS JACKSON	70	46	80	33	58	-4	5.44	3.92	2.75	10.78	143	13.95	80	95	49	0	0	5	2
MS MERIDIAN	71	43	79	30	57	-5	3.18	1.61	1.53	7.39	87	11.96	63	96	51	0	1	4	2
MS TUPELO	69	45	79	32	57	-3	4.13	2.71	1.84	11.41	149	18.43	107	91	54	0	1	4	3
MO COLUMBIA	62	37	81	30	49	-3	0.10	-0.84	0.09	2.48	59	6.64	88	76	36	0	3	2	0
MO KANSAS CITY	64	37	84	27	51	0	0.01	-0.71	0.01	2.95	89	5.62	102	68	32	0	3	1	0
MO SAINT LOUIS	63	40	81	32	52	-2	0.88	-0.04	0.84	2.76	60	7.10	83	79	51	0	1	3	1
MO SPRINGFIELD	64	36	81	28	50	-3	0.05	-1.05	0.05	3.04	59	5.89	65	79	47	0	3	1	0
MT BILLINGS	58	34	77	21	46	4	0.16	-0.24	0.12	0.96	60	3.77	120	60	27	0	3	2	0
MT BUTTE	57	24	69	16	41	6	0.01	-0.19	0.01	0.65	66	1.55	82	83	21	0	8	1	0
MT GLASGOW	54	27	73	18	41	1	0.13	0.00	0.12	0.78	142	1.01	85	77	48	0	8	2	0
MT GREAT FALLS	58	30	71	22	44	3	0.01	-0.30	0.01	0.79	54	1.82	62	75	23	0	6	1	0
MT KALISPELL	56	28	68	21	42	2	0.07	-0.18	0.06	1.10	85	2.72	69	83	44	0	7	2	0
MT MILES CITY	59	31	78	22	44	2	0.06	-0.23	0.01	0.56	60	1.61	83	77	27	0	6	3	0
MT MISSOULA	59	28	68	21	44	2	0.06	-0.16	0.05	0.38	31	2.84	87	80	43	0	6	2	0
NE GRAND ISLAND	64	30	86	19	47	0	0.00	-0.58	0.00	1.33	52	2.93	79	73	30	0	5	0	0
NE LINCOLN	65	32	89	19	48	0	0.01	-0.66	0.01	0.97	34	2.62	64	74	29	0	4	1	0
NE NORFOLK	61	30	81	20	45	-1	0.00	-0.54	0.00	1.14	46	2.46	65	75	30	0	6	0	0
NE NORTH PLATTE	65	22	79	14	43	-2	0.00	-0.43	0.00	1.22	73	1.99	81	81	27	0	7	0	0
NE OMAHA	64	33	88	24	48	0	0.03	-0.57	0.03	0.93	34	3.05	72	73	30	0	4	1	0
NE SCOTTSBLUFF	63	25	79	19	44	1	0.00	-0.35	0.00	1.08	73	2.23	91	63	28	0	7	0	0
NE VALENTINE	58	24	74	18	41	-2	0.18	-0.17	0.17	0.86	60	2.25	105	78	43	0	6	2	0
NV ELY	68	27	72	23	47	8	0.00	-0.25	0.00	0.62	50	2.89	112	57	28	0	8	0	0
NV LAS VEGAS	86	60	91	50	73	12	0.00	-0.06	0.00	0.21	43	1.80	124	29	19	2	0	0	0
NV RENO	74	38	80	33	56	9	0.00	-0.09	0.00	0.38	46	3.50	122	52	24	0	0	0	0
NV WINNEMUCCA	72	33	78	26	53	9	0.05	-0.17	0.05	0.93	90	3.83	160	60	31	0	4	1	0
NH CONCORD	60	37	80	30	48	8	1.84	1.08	0.96	6.09	171	11.18	130	92	55	0	3	5	1
NJ NEWARK	65	45	78	30	55	6	0.76	-0.25	0.33	4.19	84	9.12	80	77	52	0	1	3	0
NM ALBUQUERQUE	71	42	79	27	56	3	0.00	-0.14	0.00	1.27	181	1.87	117	50	19	0	1	0	0
NY ALBANY	55	38	76	26	46	3	1.28	0.49	0.47	5.08	133	11.34	134	84	59	0	2	6	0
NY BINGHAMTON	53	33	69	21	43	2	4.43	3.61	2.34	7.68	205	13.99	165	87	59	0	5	7	3
NY BUFFALO	49	34	60	26	41	-1	2.58	1.82	0.80	4.70	133	9.10	107	91	60	0	4	7	3
NY ROCHESTER	49	35	59	28	42	0	2.77	2.09	0.93	4.81	158	9.76	135	89	65	0	4	8	2
NY SYRACUSE	50	34	58	26	42	0	2.44	1.57	0.85	4.67	125	9.85	120	92	63	0	4	7	3
NC ASHEVILLE	65	39	81	31	52	-1	2.27	1.36	1.85	6.09	107	11.52	90	83	50	0	1	4	1
NC CHARLOTTE	69	44	81	32	57	0	1.35	0.60	0.83	4.94	94	11.60	90	81	40	0	1	4	1
NC GREENSBORO	69	44	81	32	56	1	1.52	0.77	0.69	4.47	98	9.97	90	83	40	0	1	4	2
NC HATTERAS	67	54	72	45	61	4	0.37	-0.59	0.35	3.08	57	12.77	86	79	54	0	0	2	0
NC RALEIGH	72	45	83	32	59	2	0.78	0.09	0.67	2.54	56	10.77	92	75	50	0	1	4	1
NC WILMINGTON	73	49	80	41	61	1	0.44	-0.32	0.43	3.05	64	9.02	73	84	40	0	0	2	0
ND BISMARCK	53	25	68	20	39	0	0.14	-0.25	0.08	1.42	118	3.55	171	87	48	0	7	3	0
ND DICKINSON	52	24	71	20	38	-1	0.10	-0.32	0.05	0.86	74	2.08	109	89	33	0	8	3	0
ND FARGO	48	27	61	20	37	-1	0.26	-0.17	0.15	2.01	131	3.35	126	84	39	0	6	2	0
ND GRAND FORKS	46	25	58	20	35	-2	0.31	-0.01	0.22	0.87	67	2.64	105	88	38	0	7	2	0
ND JAMESTOWN	48	26	60	20	37	-1	0.12	-0.25	0.07	0.94	73	3.35	141	87	36	0	7	2	0
ND WILLISTON	51	24	72	17	37	-2	0.62	0.34	0.41	1.26	126	2.10	108	86	56	0	8	3	0
OH AKRON-CANTON	61	36	12	26	49	4	4.17	3.35	1.43	6.26	147	11.23	130	91	64	1	4	6	4
OH CINCINNATI	58	39	67	23	49	-1	2.78	1.77	1.13	6.29	117	16.45	154	85	61	0	3	5	3
OH CLEVELAND	54	37	63	28	45	0	2.88	2.06	1.40	4.45	116	9.13	113	92	59	0	4	7	2
OH COLUMBUS	57	40	66	27	49	1	3.19	2.36	1.50	5.85	139	12.17	141	89	63	0	2	5	2
OH DAYTON	57	39	65	25	48	0	3.10	2.19	2.26	5.43	122	10.78	123	90	55	0	4	5	1
OH MANSFIELD	54	36	62	26	45	0	3.27	2.34	1.74	5.54	128	11.15	134	93	55	0	4	7	2

Based on 1961-90 normals

*** Not Available

Weather Data for the Week Ending April 8, 2000

STATES AND STATIONS	TEMPERATURE EF						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN, SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL IN, SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. EF		PRECIP	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
OK TOLEDO	54	35	61	27	44	0	0.52	-0.27	0.42	2.36	66	5.14	73	73	52	0	5	3	0
OK YOUNGSTOWN	51	34	64	26	43	-1	3.93	3.11	1.05	5.79	144	9.93	121	93	72	0	5	7	4
OK OKLAHOMA CITY	69	43	85	32	56	-2	0.00	-0.63	0.00	3.60	105	5.82	95	79	37	0	1	0	0
OK TULSA	71	43	88	33	57	-2	0.00	-0.89	0.00	3.79	85	6.01	75	76	40	0	0	0	0
OR ASTORIA	58	43	67	38	51	4	1.59	0.18	0.82	7.05	81	23.82	91	96	79	0	0	3	1
OR BURNS	65	30	76	19	48	7	0.29	0.11	0.21	1.20	99	4.72	159	77	43	0	5	2	0
OR EUGENE	62	40	77	35	51	2	0.00	-0.99	0.00	2.37	36	17.92	89	92	74	0	0	0	0
OR MEDFORD	74	43	86	37	59	9	0.28	-0.07	0.28	1.80	81	9.56	140	85	41	0	0	1	0
OR PENDLETON	66	39	75	34	52	3	0.00	-0.28	0.00	2.42	164	7.41	179	77	46	0	0	0	0
OR PORTLAND	64	43	76	38	53	3	0.46	-0.24	0.38	3.67	84	13.84	102	90	68	0	0	2	0
OR SALEM	62	40	76	33	51	3	0.00	-0.76	0.00	2.98	59	16.96	110	90	70	0	0	0	0
PA ALLENTOWN	64	38	76	28	51	5	0.99	0.10	0.49	6.03	141	10.77	104	80	41	0	3	5	0
PA ERIE	52	36	64	30	44	1	3.58	2.73	0.91	5.62	142	10.05	119	86	70	0	4	8	4
PA MIDDLETOWN	67	41	76	30	54	6	0.74	-0.08	0.39	6.80	162	11.14	112	83	36	0	1	5	1
PA PHILADELPHIA	66	43	75	31	55	6	0.73	-0.21	0.31	7.14	158	12.40	118	83	53	0	1	4	0
PA PITTSBURGH	55	38	67	27	46	-1	2.07	1.22	0.84	4.33	99	8.56	92	87	49	0	4	6	2
PA WILKES-BARRE	61	37	74	25	49	4	1.68	0.94	0.96	4.53	134	9.01	118	78	39	0	4	4	1
PA WILLIAMSPORT	61	37	72	28	49	3	2.56	1.71	1.40	6.17	149	10.55	112	81	52	0	2	6	2
RI PROVIDENCE	61	41	74	31	51	7	0.86	-0.24	0.47	6.23	118	13.16	103	85	54	0	1	4	0
SC BEAUFORT	72	49	77	38	61	-3	0.36	-0.44	0.36	5.36	107	8.29	69	84	45	0	0	1	0
SC CHARLESTON	73	48	79	38	61	-2	0.29	-0.47	0.29	3.95	76	10.00	84	86	42	0	0	1	0
SC COLUMBIA	75	47	84	34	61	0	0.30	-0.65	0.29	4.25	72	14.31	99	74	39	0	0	2	0
SC GREENVILLE	68	43	78	30	55	-2	0.94	-0.15	0.51	5.29	80	10.88	72	89	41	0	2	4	1
SD ABERDEEN	52	26	63	15	39	-2	0.22	-0.26	0.19	1.43	76	2.39	88	82	42	0	6	2	0
SD HURON	55	26	71	16	41	-1	0.30	-0.21	0.28	0.65	29	1.43	43	84	31	0	6	2	0
SD RAPID CITY	56	25	76	20	40	-2	0.09	-0.34	0.07	1.40	93	1.93	80	75	28	0	8	2	0
SD SIOUX FALLS	53	27	71	17	40	-3	0.74	0.13	0.53	1.65	71	3.37	97	82	45	0	6	3	1
TN BRISTOL	63	40	78	30	51	-2	1.69	0.81	0.98	5.53	118	11.02	97	91	42	0	2	4	1
TN CHATTANOOGA	69	44	80	32	57	0	5.94	4.70	3.15	10.51	141	18.02	105	87	53	0	1	4	2
TN KNOXVILLE	65	44	74	30	54	-1	3.42	2.37	1.64	7.79	124	16.35	113	87	49	0	2	4	2
TN MEMPHIS	67	46	76	32	56	-4	2.24	0.76	1.58	7.56	107	14.30	94	87	54	0	1	4	1
TX NASHVILLE	66	44	77	28	55	-2	1.32	0.15	0.66	4.78	78	12.05	89	87	46	0	2	4	1
TX ABILENE	76	48	96	33	62	-1	0.16	-0.27	0.16	1.39	76	2.00	50	63	31	2	0	1	0
TX AMARILLO	69	38	88	30	54	0	0.00	-0.20	0.00	4.33	364	4.61	200	71	26	0	2	0	0
TX AUSTIN	73	46	86	34	60	-8	0.80	0.26	0.60	1.87	76	6.84	108	78	53	0	0	2	1
TX BEAUMONT	73	53	80	44	63	-4	3.03	2.21	1.47	5.93	143	8.33	68	92	49	0	0	3	2
TX BROWNSVILLE	81	59	88	50	70	-3	0.04	-0.26	0.03	2.93	341	4.07	117	87	49	0	0	2	0
TX CORPUS CHRISTI	80	56	89	46	68	-3	0.09	-0.25	0.05	3.77	286	4.89	98	89	51	0	0	2	0
TX DEL RIO	82	53	10	40	68	-1	0.00	-0.46	0.00	0.29	24	1.27	47	66	35	2	0	0	0
TX EL PASO	77	50	86	40	63	2	0.02	-0.04	0.02	0.36	100	0.39	33	45	24	0	0	1	0
TX FORT WORTH	72	49	90	41	61	-2	0.02	-0.81	0.01	3.12	84	8.01	104	76	40	1	0	2	0
TX GALVESTON	73	60	79	52	67	0	1.10	0.51	0.72	3.02	104	6.47	77	84	51	0	0	3	1
TX HOUSTON	74	50	83	38	62	-4	4.19	3.45	2.48	5.66	151	9.23	92	93	56	0	0	3	2
TX LUBBOCK	72	42	87	33	57	-1	0.00	-0.19	0.00	3.49	314	3.54	162	67	35	0	0	0	0
TX MIDLAND	75	46	91	36	61	-1	0.00	-0.15	0.00	0.95	127	1.56	88	58	29	2	0	0	0
TX SAN ANGELO	78	48	98	32	63	-2	0.00	-0.34	0.00	0.86	67	1.17	37	67	28	2	1	0	0
TX SAN ANTONIO	76	51	88	39	64	-3	0.79	0.25	0.41	2.02	96	5.62	100	80	40	0	0	2	0
TX VICTORIA	76	51	86	42	64	-5	1.13	0.63	0.73	3.33	158	7.75	124	94	52	0	0	3	1
TX WACO	72	49	86	39	61	-4	0.52	-0.22	0.51	2.48	78	9.07	131	83	55	0	0	2	1
TX WICHITA FALLS	73	45	90	36	59	-1	0.04	-0.68	0.04	3.02	100	4.95	90	74	39	1	0	1	0
UT SALT LAKE CITY	65	41	78	34	53	6	0.00	-0.57	0.00	0.84	33	4.81	98	61	33	0	0	0	0
VT BURLINGTON	50	36	64	26	43	3	2.55	1.85	1.00	3.89	129	8.46	131	89	64	0	2	7	2
VA LYNCHBURG	68	41	83	34	55	2	1.09	0.28	0.64	3.60	82	8.77	85	82	43	0	0	4	1
VA NORFOLK	72	49	81	40	60	6	0.65	-0.16	0.63	3.05	66	9.25	78	77	42	0	0	2	1
VA RICHMOND	71	45	80	38	58	3	0.99	0.21	0.89	4.66	104	10.25	94	67	43	0	0	3	1
VA ROANOKE	67	43	81	33	55	2	0.77	-0.08	0.48	3.63	82	7.40	73	74	48	0	0	4	0
VA WASH/DULLES	68	43	80	32	55	5	1.71	0.92	1.16	5.06	125	8.75	91	77	46	0	1	5	1
WA OLYMPIA	60	37	71	29	49	3	1.07	0.06	0.64	6.16	101	20.16	101	94	74	0	1	3	1
WA QUILLAYUTE	58	39	66	29	49	4	0.96	-1.31	0.55	11.28	80	33.25	81	91	74	0	2	3	1
WA SEATTLE-TACOMA	57	42	66	38	50	2	0.16	-0.55	0.14	2.98	69	12.00	88	93	72	0	0	2	0
WA SPOKANE	59	32	69	24	46	2	0.18	-0.13	0.18	1.80	98	5.31	100	78	36	0	4	1	0
WA YAKIMA	67	33	77	26	50	3	0.00	-0.15	0.00	0.60	71	3.47	124	79	42	0	3	0	0
WV BECKLEY	61	37	77	26	49	0	1.51	0.63	0.77	3.97	90	8.51	83	81	48	0	4	4	1
WV CHARLESTON	67	43	82	31	55	3	1.90	1.02	0.79	4.56	99	10.22	97	86	40	0	1	4	2
WV ELKINS	62	35	79	25	48	2	1.84	0.83	0.58	5.09	103	10.91	99	91	41	0	4	5	2
WV HUNTINGTON	66	43	80	30	54	1	1.85	0.97	1.06	4.56	97	11.88	114	84	39	0	1	4	1
WI EAU CLAIRE	52	29	67	19	41	0	0.02	-0.65	0.02	0.88	36	3.63	88	75	30	0	7	1	0
WI GREEN BAY	50	27	62	18	39	-1	0.25	-0.37	0.16	1.23	45	3.14	64	76	36	0	6	3	0
WI LA CROSSE	55	34	70	24	44	0	0.00	-0.72	0.00	1.38	49	3.75	81	70	25	0	4	0	0
WI MADISON	53	30	65	22	42	0	0.35	-0.38	0.35	1.52	51	4.32	84	72	37	0	6	1	0
WI MILWAUKEE	53	32	61	22	43	2	0.48	-0.45	0.47	1.62	44	4.48	66	77	46	0	4	2	0
WY CASPER	58	25	74	17	41	1	0.25	-0.11	0.13	0.83	61	1.85	74	73	34	0	7	3	0
WY CHEYENNE	57	27	70	17	42	2	0.12	-0.18	0.09	1.60	117	2.54	118	75	37	0	5	2	0
WY LANDER	58	30	72	17	44	3	0.16	-0.34	0.10	0.96	56	1.23	45	56	28	0	6	2	0
WY SHERIDAN	58	26	76	21	42	1	0.19	-0.20	0.11	0.98	70	3.11	112	75	37	0	7	2	0

Based on 1961-90 normals

*** Not Available

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

March Weather and Crop Summary

Weather

An active storm track brought frequent, generally beneficial precipitation to key hard red winter wheat areas of the central and southern Plains, although a few areas in southern Kansas and northern Oklahoma turned unfavorably wet. The precipitation arrived too late on the southern High Plains to provide significant relief to dryland winter wheat, but boosted summer crop pre-planting moisture. Meanwhile, areas from eastern Texas into the Southeast received frequent showers, benefiting pastures and newly planted summer crops, but failing to significantly dent long-term drought. Rainfall intensified at month's end across the South, especially in the lower Mississippi Valley, causing fieldwork delays. In contrast, significant precipitation bypassed central portions of Texas and Florida, while southern Texas turned very warm and dry after mid-month, following much-needed rainfall. Farther north, occasional light precipitation dampened soft red winter wheat areas of the southern and eastern Corn Belt. Across the remainder of the Corn Belt, mostly dry weather left topsoil moisture limited and caused further long-term drought intensification. Meanwhile, wetter-than-normal weather prevailed in the Southwest, interior Northwest, and along and near the northern Atlantic Coast. California's 9-week wet spell ended in early March, followed by 3 weeks of mild, favorably dry weather that permitted an acceleration of spring fieldwork.

Continuing a recent trend, temperatures averaged above normal nearly nationwide. The last time a significant portion of the Nation reported below-normal monthly temperatures was October 1999, when cool weather prevailed in most areas east of the Rockies. March temperatures averaged 3 to 11 °F above normal east of the Rockies, except only 1 to 3 °F above normal in several locations from the central and southern Plains into the Southeast. Departures were at least +6 °F in southern Texas and as much as +11 °F from North Dakota to Michigan. Temperatures averaged within 3 °F of normal in most areas from the West Coast to the Rockies.

Well over 300 daily-record highs were set during March, although nearly all of them occurred during the first 10 days of the month. The early-month warm spell peaked on March 7-8 and was impressive for its intensity. Sioux Falls, SD (80 °F on March 7) and Pittsburgh, PA (80 °F on March 8) experienced their earliest 80-degree warmth, breaking records that had stood since 1894 and 1876, respectively. On March 7 in Wisconsin, LaCrosse's high of 82 °F came more than 2 weeks earlier than their previous first observance (83 °F on March 23, 1910) of a reading at or above 80 °F. A day later in Michigan, March-record highs were established in Flint (80 °F) and Marquette (71 °F). Just 2 days after the record, however, Marquette registered a low of 5 °F, preceded by an 8.2-inch snowfall.

For the month as a whole, several locations recorded their highest average March temperature in more than 25 years:

Warmest March (°F) in Selected Locations Since...

Location	Avg.	Dep.	Warmest Since...
LaCrosse, WI	42.6	+9.8	44.4 in 1946
San Angelo, TX	63.0	+4.9	63.5 in 1967
Indianapolis, IN	47.0	+5.6	49.4 in 1973
Rochester, MN	39.3	+9.5	39.3 in 1973

Record warmth developed along the West Coast toward month's end. Pismo Beach, CA closed the month with consecutive daily-record highs (86 and 87 °F). The warmth came at the end of a 3-week period of mild, dry conditions that allowed fieldwork to resume in California, following 9 weeks of persistently wet weather. Sacramento netted 2.26 inches of rain (81 percent of normal) during the month, but none after March 11. Redding

received all of their measurable rainfall (4.07 inches, or 93 percent of normal) between March 2 and 13. Following a record-wet February (6.11 inches), Fresno observed 1.35 inches during the first 8 days of March, but not a drop thereafter. In the Sierra Nevada, the high-elevation snow pack was near normal at month's end, according to the California Department of Water Resources. The average water equivalent of the snow stood at 26 inches (95 percent of normal) on March 31, the sixth consecutive year (1994-95 to date) the Sierra Nevada entered the spring runoff season with a near- to above-normal pack. Prior to the mid-1990's, however, the Sierra Nevada had weathered a 6-year drought (1986-87 to 1991-92, followed by another dry season in 1993-94).

In Arizona, heavy precipitation followed Phoenix's driest October-February (0.01 inch) on record. Storm-total (March 4-7) rainfall reached 2.77 inches, including 1.53 inches on March 6 (their second-wettest March day on record behind 1.98 inches on March 3, 1983). For the month, Phoenix's rainfall totaled 2.98 inches (339 percent of normal). Farther north, Flagstaff, AZ received 48.4 inches of snow during March, boosting their season-to-date total to 71.8 inches (75 percent of normal).

Farther east, significant precipitation finally arrived on the southern High Plains after mid-month. Lubbock, TX netted 1.16 inches of rain on March 22, helping to boost their monthly total to 2.78 inches (312 percent of normal). Prior to the March rains, Lubbock's October 1999 - February 2000 precipitation totaled 1.71 inches (40 percent of normal), and the city's previous significant rainfall (3.10 inches) occurred on September 15-16, 1999. In some areas, however, the rain fell too quickly on parched soils, resulting in lowland flooding. The Colorado River at Colorado City, TX crested on the night of March 23-24, about 20.6 feet above flood stage. Elsewhere in the Texas panhandle, additional rain on the final day of the month pushed Amarillo's monthly total to 4.14 inches (431 percent of normal), breaking their March 1922 record of 4.06 inches. Heavy precipitation also pelted the southern Rockies, where Albuquerque, NM noted 1.27 inches (235 percent of normal) during March. During Albuquerque's stormiest period, March 21-23, precipitation totaled 0.83 inch, including 2.9 inches of snow.

Heavy precipitation also soaked the central Plains, leaving portions of northern Oklahoma and southern Kansas unfavorably wet at times. In southern Kansas, March totals reached 5.99 inches (247 percent of normal) in Wichita and 4.97 inches (319 percent) in Dodge City. Dodge City had last been wetter during March in 1973, when 8.84 inches fell, while Wichita had last seen more March rain (7.57 inches) in 1984. Just to the north, however, much of the Corn Belt continued to dry out. In Indiana, Indianapolis noted below-normal monthly precipitation (1.64 inches, or 43 percent of normal) for the 12th time in 13 months (March 1999 - March 2000), despite an 8.1-inch snowfall on March 11. Nine-month (July 1999 - March 2000) precipitation totaled 18.56 inches (70 percent of normal) in Moline, IL and 13.64 inches (61 percent) in Cedar Rapids, IA. Iowa statewide precipitation from September-March totaled 7.52 inches (56 percent of normal), the lowest since 1955-56 and only slightly above the 1939-40 record low of 7.13 inches.

Several individual storm systems produced heavy rain, snow, or severe thunderstorms, or a combination of all three. On March 7, the Storm Prediction Center indicated that there were six tornadoes in Oklahoma, and more than 175 reports of large hail or strong winds from South Dakota to Texas. A few days later, another storm left a swath of heavy snow from the central Plains into the Northeast. March 10-11 snowfall totaled 7.4 inches in Columbia, MO and 8.8 inches in Ft. Wayne, IN. Heavy rain developed across southern Texas on March 14, resulting in daily-record totals in Corpus Christi (3.66 inches) and Brownsville (2.38 inches).

Corpus Christi's only heavier single-day total during March was 4.66 inches, on March 10, 1903. March 14-15 rainfall locally exceeded 6 inches near Corpus Christi, with totals reaching 12.50 inches in Aransas Pass, 12.00 inches in Bayside, and 6.69 inches in Rockport. Meanwhile, as much as 2 feet of snow blanketed the central Rockies at mid-month. A week later, torrential rainfall struck the northern Mid-Atlantic region. On March 21-22, March rainfall records for a 24-hour period were established in locations such as Atlantic City, NJ (3.24 inches) and Philadelphia, PA (more than 3 inches). Wilmington, DE posted a 2-day total of 5.17 inches, contributing to their wettest March on record:

Record-High March Precipitation (Inches)

Location	Total	Normal	Previous Record/Year
Wilmington, DE	9.14	3.43	7.50 in 1993
Amarillo, TX	4.14	0.96	4.06 in 1922

Meanwhile in Macon, GA, a 5.19-inch total (108 percent of normal) in March followed February's record-low sum of 0.37 inch. Farther south, however, only 0.41 inch (14 percent of normal) fell in Tampa, FL, their driest March since only 0.22 inch fell in 1949. Tampa's January-March total stood at 2.67 inches, or 33 percent of normal. Elsewhere across the South, long-term rainfall deficits persisted in spite of beneficial March rainfall. In Jackson, MS, December-March precipitation was 14.03 inches (64 percent of normal), despite a 4.41-inch total (76 percent of normal) during March. In Texas, Houston's 8-month rainfall of 10.86 inches (42 percent of normal) was their lowest on record for any August-March period. Little Rock, AR noted an 18.21-inch precipitation deficit during the May 1999 - March 2000 (11-month) period, during which time their rainfall was 59 percent of normal. In contrast, favorable moisture conditions existed in the interior Northwest, following last year's spring-to-autumn drought. January-March precipitation in Pendleton, OR totaled 7.36 inches (193 percent of normal), compared with 2.77 inches (73 percent) during the same period in 1999. Last year, Pendleton's year-to-date precipitation reached 7.36 inches on November 5.

Mild weather prevailed across Alaska until late in the month, when sharply colder air invaded southern and western areas. As a result, monthly temperatures averaged generally 3 to 8 °F above normal across the Alaskan mainland. Fairbanks noted only 4 days with below-normal temperatures during March, en route to a monthly departure of +6.4°F. Nome's lowest temperature of the month, -20°F on March 26, came just 6 days after their warmest reading (34°F). McGrath noted a daily-record low of -32 °F on March 28. Heavy precipitation was confined to southern parts of the State. In the Aleutians, Cold Bay's monthly total of 5.56 inches (257 percent of normal) eclipsed their former March record by 0.84 inch.

Although the most significant rainfall in more than 2 months overspread the Hawaiian islands toward month's end, March rainfall was below normal statewide. For most of the month, dry conditions led to gradual drought intensification. Monthly and January-March rainfall ranged from 10 to 30 percent of normal at Honolulu (Oahu), Lihue (Kauai), and Kahului (Maui). Slightly heavier rainfall dampened windward portions of the Big Island, where Hilo netted 5.81 inches (42 percent of normal) during March.

Fieldwork

Above-normal temperatures stimulated winter wheat development in the Great Plains and Corn Belt most of the month. Winter wheat growth and conditions also benefited from above-normal precipitation in most of the central Great Plains and parts of the southern and northern Great Plains. In the Corn Belt, rainfall was below normal for the month, but soil moisture supplies were mostly adequate to support soft red winter wheat development in the eastern Corn Belt and Ohio and Missouri River Valleys. Hail and strong winds associated with isolated severe thunderstorms damaged a few wheat fields in Kansas, Oklahoma, and Texas. Excess moisture promoted development of foliar diseases and

yellowing in parts of Oklahoma and Kansas. Early-month warmth stimulated germination and emergence of some late-planted wheat fields in Kansas, while most fields advanced to the jointing stage in Oklahoma. Rain eased moisture shortages and boosted wheat conditions in eastern Texas early in the month. Dryland wheat fields in the High Plains received a much needed boost from late-month thunderstorms, although soil moisture supplies remained precariously low.

Four percent of the Nation's winter wheat was at the heading stage on April 2, slightly ahead of last year and the average for this date. In Texas, winter wheat was 11 percent headed, nearly double the 5-year average. Eighty-four percent of the Oklahoma wheat acreage was at the jointing stage or beyond, and 8 percent was heading. Both stages were well ahead of last year and the 5-year average. Development was also ahead of normal in Louisiana, where 7 percent of the crop was turning color, and in Kansas, where 44 percent was jointing. Winter wheat was 15 percent headed in North Carolina, three times the 5-year average.

Dry weather aided fieldwork along the western Gulf Coast, where corn planting remained active early in the month. Planting rapidly advanced northward from the Coastal Bend in southern Texas into portions of the North Central region in eastern Texas. Periodic light showers aided emergence in both areas. By the end of the month, planting was complete along the Gulf Coast and over half of the acreage was planted statewide. Cotton planting expanded in the Coastal Bend and South Texas, progressing slightly ahead of the 5-year average. Rice planting began along the Gulf Coast early in the month and progressed well ahead of the average in Texas and Louisiana, despite water shortages. Growers also planted sorghum and soybeans along the Gulf Coast and inland regions of southern Texas.

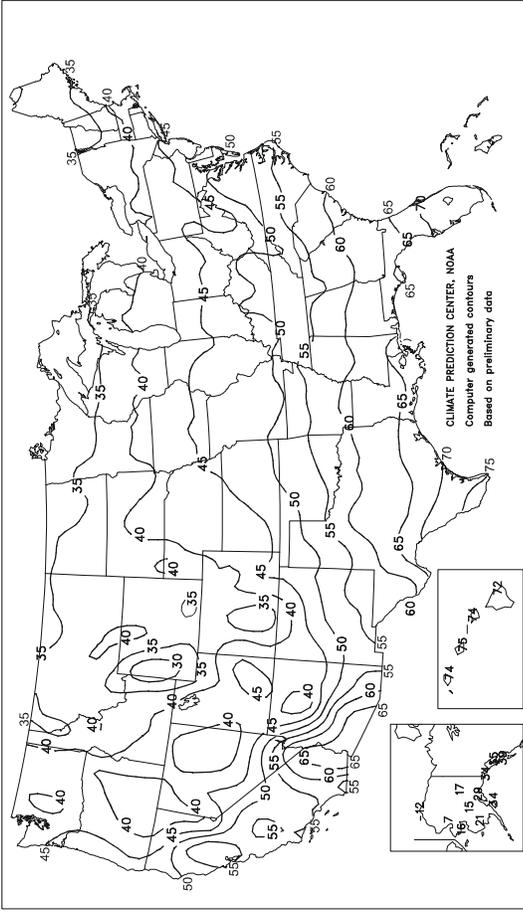
In the Corn Belt, field preparations began near mid-month and accelerated as spring began with above-normal temperatures and below normal precipitation. As the month ended, fertilizer applications were more than 50 complete in Iowa. By April 2, two percent of the corn acreage was planted, equal to last year's pace and slightly ahead of the 5-year average. Nearly ideal planting conditions prevailed along the Ohio and Tennessee River Valleys. Progress was ahead of normal in Missouri, Kentucky, and Tennessee.

A wet weather pattern continued along the Pacific Coast from central California to the Canadian border nearly until mid-month. In northern California, fieldwork was frequently halted by muddy conditions early in the month. In low-lying areas, plants began yellowing due to standing water. In more mature grain fields, plants lodged due to excessive rain and strong winds. Growth of winter forages and corn was slow in some areas due to below-normal temperatures. Fields prepared for corn planting were temporarily idled, while growers waited for drier soil conditions. Orchard activities, including fruit harvest, were delayed by rain in some areas, but remained active in southern California. A dry weather pattern returned along the Pacific coast near mid-month, allowing fieldwork to resume as excess moisture slowly drained from soggy fields. In northern California, winter grains slowly recovered from excessive wetness, while warm weather promoted rapid crop development where soils were drier.

In the Southeast, rain boosted soil moisture supplies in the southern Appalachians and adjacent Piedmont, but drier-than-normal conditions continued in the Atlantic Coastal Plain and along the Gulf Coast. In Florida, the sugarcane harvest neared completion and growers prepared fields for spring crops. Citrus growers regularly irrigated groves to maintain tree and fruit conditions. Well-cared-for trees produced ample new growth and bloom buds. Nationally, 4 percent of the cotton acreage was planted on April 2, equal to last year and the average. Field preparations were delayed by rain in parts of the lower Mississippi Valley and Southeast, but continued with few delays in the Atlantic Coastal Plain.

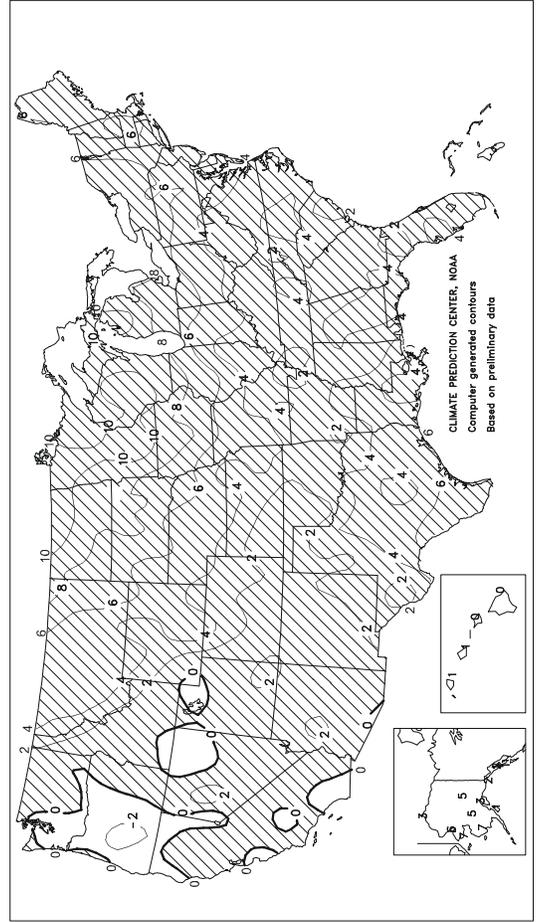
Average Temperature (°F)

MAR 2000



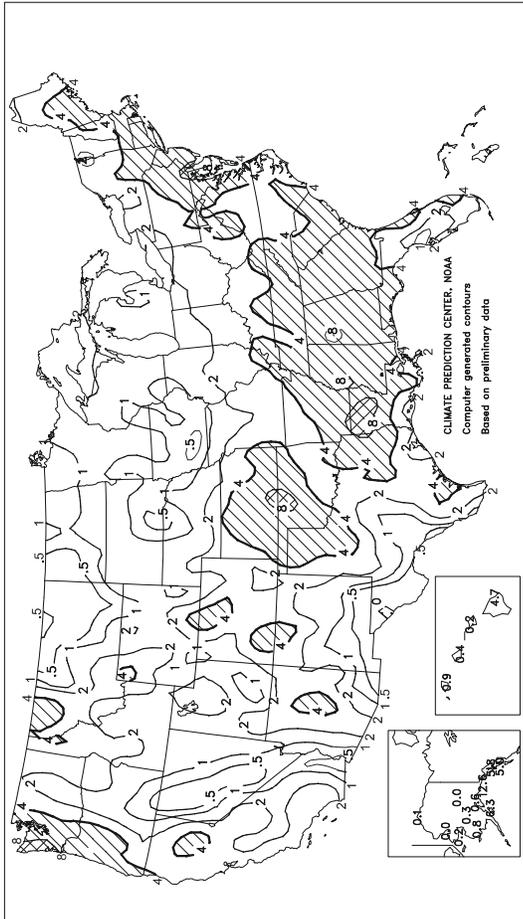
Departure of Average Temperature from Normal (°F)

MAR 2000



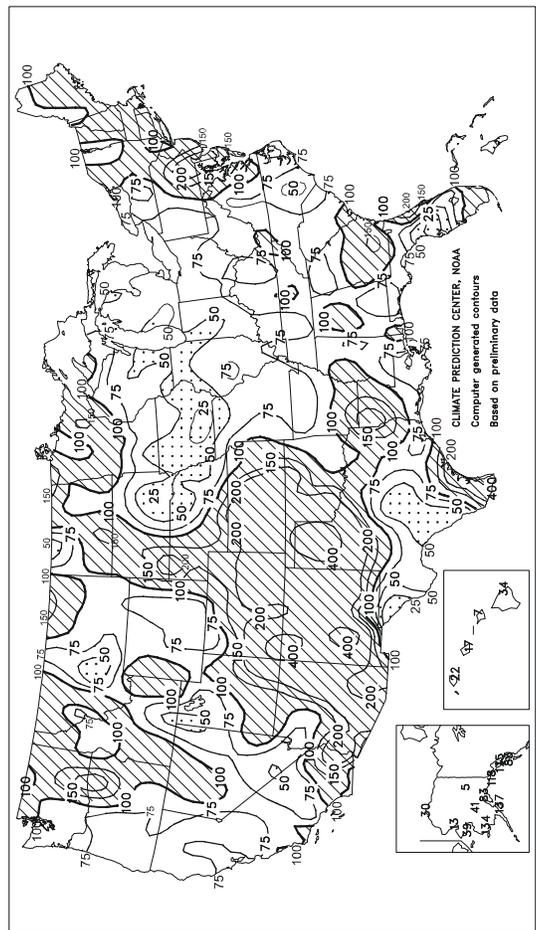
Total Precipitation (inches)

MAR 2000



Percent Of Normal Precipitation

MAR 2000



TEMPERATURE AND PRECIPITATION SUMMARY

March 2000

STATES AND STATIONS	TEMP, EF		PRECIP.		STATES AND STATIONS	TEMP, EF		PRECIP.		STATES AND STATIONS	TEMP, EF		PRECIP.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AL BIRMINGHAM	58	4	10.67	4.48	LEXINGTON	48	3	3.89	-0.51	COLUMBUS	46	5	2.65	-0.62
HUNTSVILLE	56	4	5.75	-0.87	LONDON-CORBIN	51	4	2.54	-1.89	DAYTON	45	5	2.21	-1.21
MOBILE	64	4	6.94	0.53	LOUISVILLE	51	5	3.59	-1.07	MANSFIELD	42	4	2.13	-1.17
MONTGOMERY	60	3	3.22	-3.04	PADUCAH	50	3	4.25	-0.67	TOLEDO	44	8	1.84	-0.82
AK ANCHORAGE	29	3	0.57	-0.12	LA BATON ROUGE	64	3	3.36	-1.45	YOUNGSTOWN	42	6	1.86	-1.25
BARROW	-12	3	0.05	-0.12	LAKE CHARLES	66	5	2.26	-1.03	OK OKLAHOMA CITY	53	3	3.12	0.41
COLD BAY	32	2	5.56	3.40	NEW ORLEANS	66	4	2.41	-2.49	TULSA	53	2	3.72	0.26
FAIRBANKS	17	6	0.02	-0.35	SHREVEPORT	62	4	7.90	4.31	OR ASTORIA	46	0	5.46	-1.61
JUNEAU	35	2	5.75	2.47	ME BANGOR	35	5	4.23	1.10	BURNS	37	1	0.91	-0.10
KING SALMON	29	7	1.50	0.43	CARIBOU	30	5	1.86	-0.57	EUGENE	45	-2	2.37	-3.15
KODIAK	34	1	6.35	1.72	PORTLAND	38	5	3.66	-0.01	MEDFORD	46	-1	1.52	-0.30
NOME	16	7	0.21	-0.33	MD BALTIMORE	48	4	4.34	0.96	PENDLETON	44	-1	2.42	1.26
AZ FLAGSTAFF	36	1	3.12	0.57	MA BOSTON	43	4	3.59	-0.10	PORTLAND	46	-1	3.21	-0.35
PHOENIX	63	1	2.98	2.10	Worcester	40	6	3.82	-0.13	SALEM	45	-1	2.98	-1.19
TUCSON	59	0	0.93	0.21	MI ALPENA	37	9	0.77	-1.34	PA ALLENTOWN	44	5	5.04	1.76
AR FORT SMITH	55	3	2.99	-0.96	DETROIT	44	8	1.55	-1.00	ERIE	42	6	2.04	-0.96
CA BAKERSFIELD	56	-1	1.29	0.25	FLINT	41	7	0.90	-1.26	MIDDLETOWN	47	6	6.06	2.78
EUREKA	48	-1	2.81	-2.51	GRAND RAPIDS	42	8	1.23	-1.40	PHILADELPHIA	48	6	6.41	2.95
FRESNO	56	1	1.35	-0.54	HOUGHTON LAKE	38	10	1.17	-0.85	PITTSBURGH	45	6	2.26	-1.15
LOS ANGELES	58	0	2.40	0.42	LANSING	41	7	1.21	-1.09	WILKES-BARRE	43	6	2.85	0.30
REDDING	54	2	4.15	-0.23	MUSKEGON	41	8	1.08	-1.43	WILLIAMSPORT	44	6	3.61	0.42
SACRAMENTO	56	2	2.26	-0.31	TRVERSE CITY	40	11	1.08	-0.65	PR SAN JUAN	76	-2	0.78	-1.53
SAN DIEGO	58	-2	1.00	-0.77	MN DULUTH	33	9	2.64	0.73	RI PROVIDENCE	43	6	5.37	1.32
SAN FRANCISCO	55	2	1.74	-1.32	INT'L FALLS	32	10	0.73	-0.33	SC CHARLESTON	61	3	3.66	-0.68
STOCKTON	55	1	0.77	-1.40	MINNEAPOLIS	41	10	1.12	-0.82	COLUMBIA	58	3	3.95	-0.87
CO ALAMOSA	34	2	0.45	0.00	ROCHESTER	39	9	0.87	-0.91	FLORENCE	58	3	2.87	-1.25
CO SPRINGS	39	2	1.97	1.03	ST. CLOUD	37	9	1.60	0.19	GREENVILLE	56	4	4.35	-1.04
DENVER	41	2	1.72	0.44	MS JACKSON	60	3	4.41	-1.41	MYRTLE BEACH	57	***	2.92	*****
GRAND JUNCTION	44	1	1.26	0.36	MERIDIAN	59	2	3.77	-2.98	SD ABERDEEN	37	7	1.21	-0.13
PUEBLO	44	2	2.94	2.16	TUPELO	57	3	5.14	-0.93	HURON	40	8	0.35	-1.31
CT BRIDGEPORT	43	4	4.00	0.25	MO COLUMBIA	47	4	2.34	-0.83	RAPID CITY	39	5	1.31	0.28
HARTFORD	43	5	3.69	0.06	JOPLIN	51	4	2.93	-0.62	SIoux FALLS	39	6	0.91	-0.73
DC WASHINGTON	52	5	3.98	0.81	KANSAS CITY	47	4	2.93	0.42	TN BRISTOL	49	2	3.84	0.14
DE WILMINGTON	47	4	9.14	5.71	SPRINGFIELD	50	4	2.92	-0.97	CHATTANOOGA	56	6	4.52	-1.51
FL DAYTONA BEACH	67	3	8.48	5.58	ST JOSEPH	47	5	1.73	-0.62	JACKSON	52	1	3.94	-1.08
FT LAUDERDALE	76	4	5.62	2.95	ST LOUIS	49	4	1.88	-1.70	KNOXVILLE	53	4	4.37	-0.72
FT MYERS	72	3	3.37	0.30	MT BILLINGS	41	6	0.78	-0.38	MEMPHIS	56	3	4.41	-1.00
JACKSONVILLE	64	3	1.79	-1.89	BUTTE	35	7	0.64	-0.12	NASHVILLE	53	3	3.34	-1.51
KEY WEST	76	2	1.48	-0.23	GLASGOW	37	8	0.54	0.13	TX ABILENE	60	4	0.88	-0.48
MELBOURNE	70	3	2.18	-0.50	GREAT FALLS	37	4	0.74	-0.36	AMARILLO	49	2	4.14	3.18
MIAMI	75	3	0.35	-2.04	HELENA	39	5	0.26	-0.47	AUSTIN	64	2	0.92	-0.95
ORLANDO	70	3	0.45	-2.76	KALISPELL	37	3	1.03	0.01	BEAUMONT	66	5	2.90	-0.34
PENSACOLA	64	4	3.92	-1.71	MILES CITY	41	8	0.50	-0.12	BROWNSVILLE	74	5	2.89	2.36
ST PETERSBURG	71	4	0.73	-2.83	MISSOULA	40	4	0.32	-0.65	COLLEGE STATION	65	5	2.57	-0.01
TALLAHASSEE	64	4	3.36	-2.85	NE GRAND ISLAND	42	4	1.32	-0.57	CORPUS CHRISTI	71	6	3.68	2.74
TAMPA	71	4	0.42	-2.59	HASTINGS	42	5	1.63	-0.40	DALLAS/FT WORTH	61	4	2.92	0.15
WEST PALM BEACH	73	3	2.00	-1.66	LINCOLN	44	5	0.88	-1.21	DEL RIO	69	6	0.28	-0.41
GA ATHENS	57	3	3.41	-2.05	MCCOOK	43	4	1.91	0.56	EL PASO	57	2	0.06	-0.23
ATLANTA	57	4	3.64	-2.13	NORFOLK	43	7	1.14	-0.72	GALVESTON	68	6	1.92	-0.31
AUGUSTA	58	3	2.92	-1.73	NORTH PLATTE	41	4	1.22	0.02	HOUSTON	66	5	1.35	-1.57
COLUMBUS	60	3	7.27	1.50	OMAHA/EPPLEY	44	5	0.81	-1.23	LUBBOCK	54	3	2.78	1.89
MACON	59	2	5.19	0.40	SCOTTSBLUFF	40	4	1.08	-0.01	MIDLAND	59	3	0.76	0.18
SAVANNAH	62	3	4.30	0.52	VALENTINE	40	6	0.68	-0.36	SAN ANGELO	63	5	0.77	-0.14
HI HILO	72	0	4.73	-9.19	NV ELKO	37	-1	0.77	-0.19	SAN ANTONIO	67	5	0.91	-0.61
HONOLULU	75	1	0.38	-1.82	ELY	36	1	0.62	-0.34	VICTORIA	69	6	2.16	0.61
KAHULUI	74	1	0.18	-2.54	LAS VEGAS	59	3	0.21	-0.21	WACO	62	4	1.60	-0.73
LIHUE	74	1	0.93	-3.24	RENO	41	-2	0.38	-0.33	WICHITA FALLS	56	3	2.51	0.30
ID BOISE	43	1	1.69	0.40	WINNEMUCCA	40	0	0.88	0.10	UT SALT LAKE CITY	42	0	0.84	-1.07
LEWISTON	45	1	0.97	-0.12	NH CONCORD	39	7	4.25	1.53	VT BURLINGTON	36	5	1.35	-0.88
POCATELLO	38	2	0.81	-0.45	NJ ATLANTIC CITY	46	4	5.13	1.51	VA LYNCHBURG	50	4	2.51	-0.96
IL CHICAGO/O'HARE	44	7	1.18	-1.51	NE NEWARK	48	6	3.43	-0.44	NORFOLK	53	4	2.40	-1.30
MOLINE	45	8	0.82	-2.16	NM ALBUQUERQUE	48	1	1.27	0.73	RICHMOND	52	4	3.67	0.06
PEORIA	46	7	1.63	-1.28	NY ALBANY	40	6	3.80	0.87	ROANOKE	51	4	2.86	-0.62
ROCKFORD	43	8	1.05	-1.41	BINGHAMTON	39	6	3.25	0.43	WASH/DULLES	48	5	3.35	0.18
SPRINGFIELD	46	5	2.80	-0.44	BUFFALO	40	6	2.12	-0.56	WA OLYMPIA	43	-1	5.09	0.14
IN EVANSVILLE	48	2	3.21	-1.50	ROCHESTER	41	7	2.04	-0.24	QUILLAYUTE	44	1	10.33	-1.15
FORT WAYNE	44	6	2.01	-0.89	SYRACUSE	40	6	2.23	-0.54	SEATTLE-TACOMA	44	-2	2.82	-0.72
INDIANAPOLIS	47	6	1.64	-2.15	NC ASHEVILLE	50	3	3.82	-0.81	SPOKANE	39	0	1.62	0.13
SOUTH BEND	44	7	1.81	-1.29	CHARLOTTE	55	4	3.59	-0.84	YAKIMA	43	0	0.60	-0.07
IA BURLINGTON	46	7	0.79	-2.06	GREENSBORO	53	4	2.95	-0.77	WV BECKLEY	46	4	2.46	-0.94
CEDAR RAPIDS	43	8	0.71	-1.61	HATTERAS	55	3	2.71	-1.58	CHARLESTON	49	3	2.66	-0.97
DES MOINES	45	8	0.35	-1.98	RALEIGH	53	3	1.76	-2.01	ELKINS	42	2	3.25	-0.58
DUBUQUE	42	8	0.94	-1.95	WILMINGTON	58	4	2.61	-1.27	HUNTINGTON	49	3	2.71	-0.97
SIoux CITY	42	6	0.71	-1.25	ND BISMARCK	36	8	1.27	0.50	WI EAU CLAIRE	39	9	0.86	-0.84
WATERLOO	42	8	1.33	-0.97	DICKINSON	37	8	0.71	0.00	GREEN BAY	39	9	0.98	-1.07
CONCORDIA	46	5	3.32	1.12	FARGO	35	9	1.75	0.69	LA CROSSE	42	9	1.38	-0.60
DODGE CITY	45	1	4.97	3.41	GRAND FORKS	34	10	0.56	-0.38	MADISON	41	9	1.17	-1.00
GOODLAND	41	2	2.33	1.15	JAMESTOWN	35	8	0.82	-0.06	MILWAUKEE	42	9	1.12	-1.55
HILL CITY	44	5	3.83	2.29	MINOT	37	10	0.49	-0.56	WAUSAU	40	11	0.86	-1.10
TOPEKA	47	3	2.62	0.16	WILLISTON	36	8	0.60	-0.09	WY CASPER	37	4	0.58	-0.37
WICHITA	48	3	5.99	3.56	OH AKRON-CANTON	43	5	2.02	-1.31	CHEYENNE	37	3	1.48	0.45
JACKSON	52	5	1.94	-2.83	CINCINNATI	47	4	3.34	-0.90	LANDER	37	3	0.76	-0.39
					CLEVELAND	43	6	1.57	-1.34	SHERIDAN	38	4	0.79	-0.18

Based on 1961-90 normals .

(Note: 24 new stations added for December 1999 table)

*** Not Available.

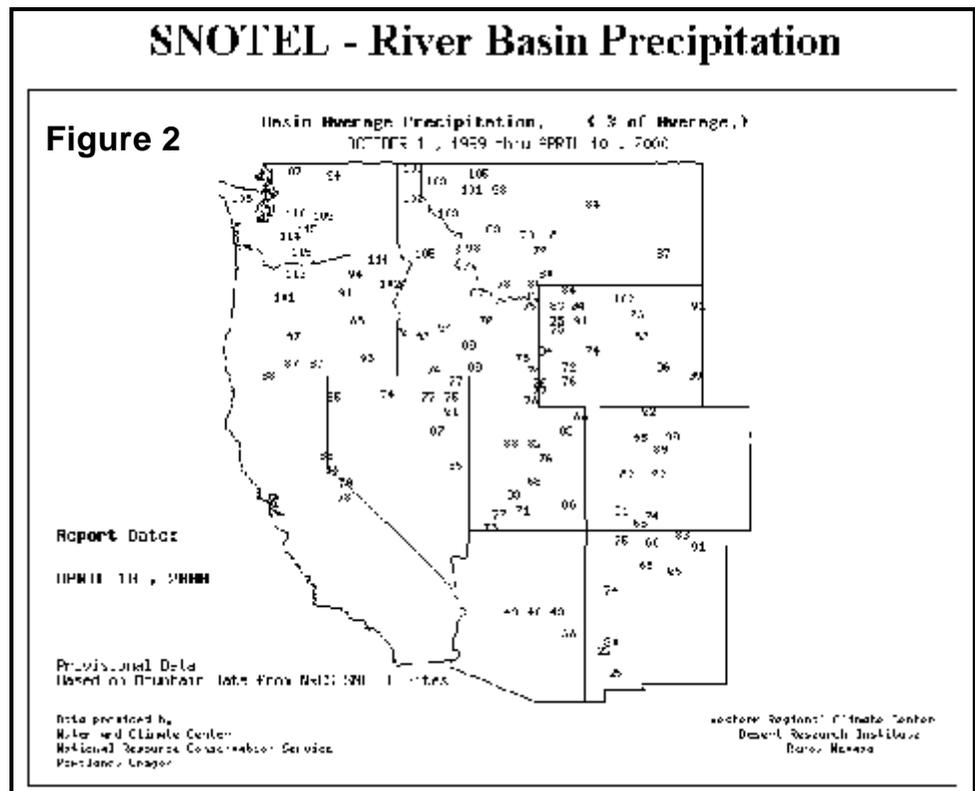
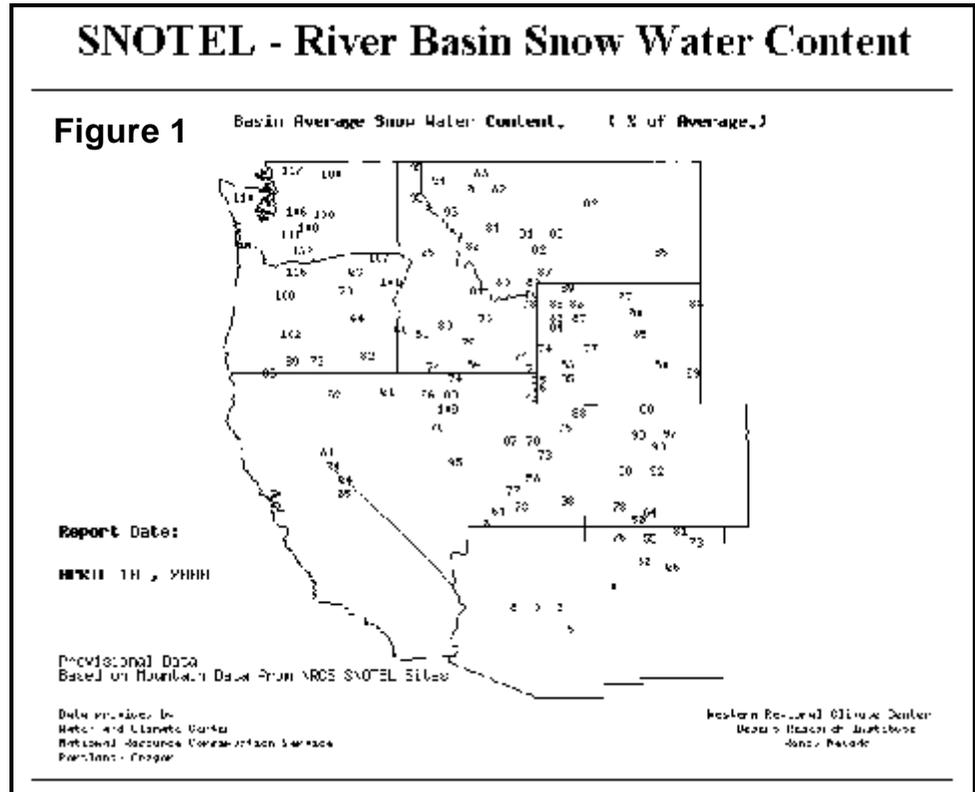
Water Supply Forecast for the Western United States

Snowpack and Precipitation

As of April 10, 2000, western snowpack conditions continue show the effects of the current La Niña weather pattern (fig. 1). Well-below-average snowpacks (less than 70 percent [%] of normal) are generally being reported in Arizona, New Mexico, southern Colorado, southern Utah, northern Nevada, and parts of eastern Oregon. Nearly all other western basins are reporting near- or slightly below-average snowpacks (80 to 110%), with the exception of Oregon and southern Washington Cascades, which are reporting above-average snowpacks (110 to 130%). Western season-to-date precipitation mirrors snowpack in most areas (fig. 2).

Spring and Summer Streamflow Forecasts

As of April 1, 2000, conditions continue to look favorable for supplying above average (110 to 130%) spring and summer streamflow in most of Oregon, along with southwestern and northeastern Washington (fig. 3). Average (90 to 110%) streamflow is expected in central and northern Idaho, northwestern Montana and central California. Slightly below-average (70% to 90%) spring and summer streamflows are forecast parts of western and central Montana, southeastern and southwestern Idaho, northern and western Nevada, western Wyoming, most of Utah, parts of western Colorado, northern New Mexico, and northern Arizona. Well-below-average (less than 70%) spring and summer streamflows are forecast for southern Idaho, portions of south-



western and central Montana, central Wyoming, southern Colorado, southern Utah, most of Arizona, and New Mexico.

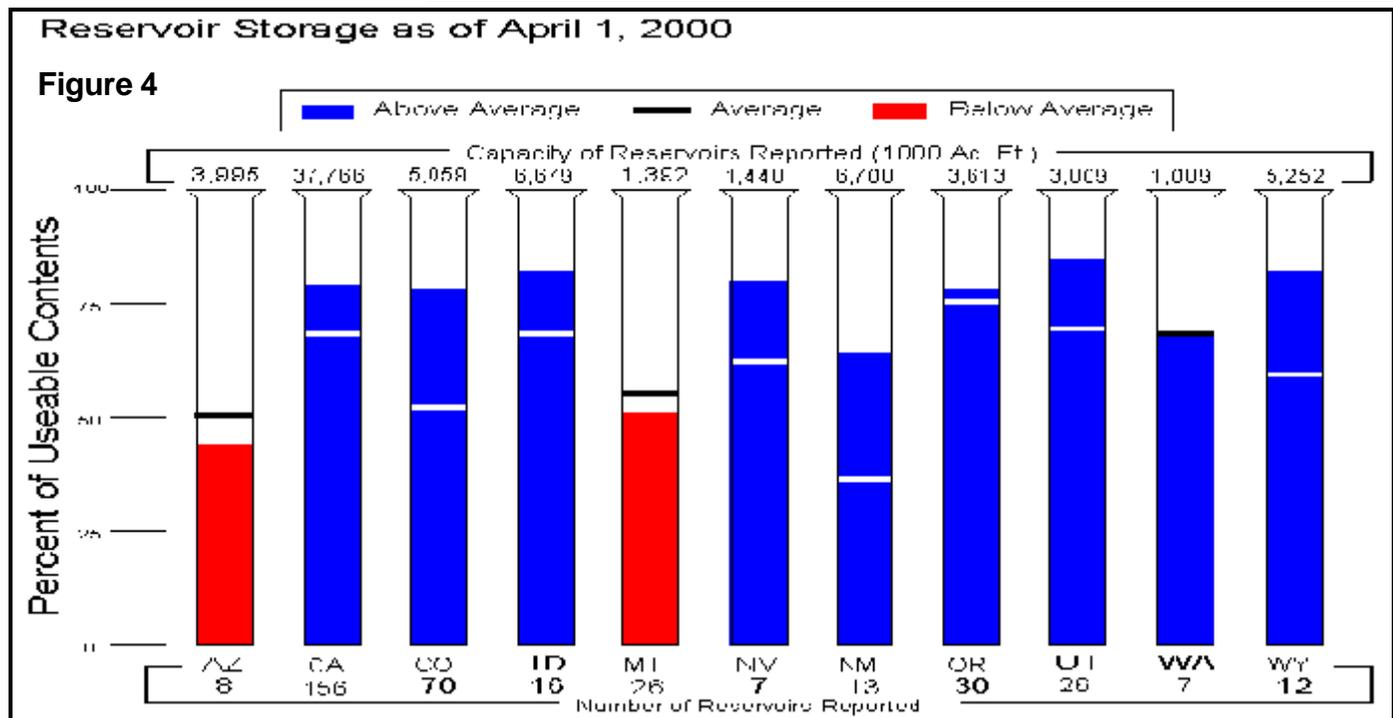
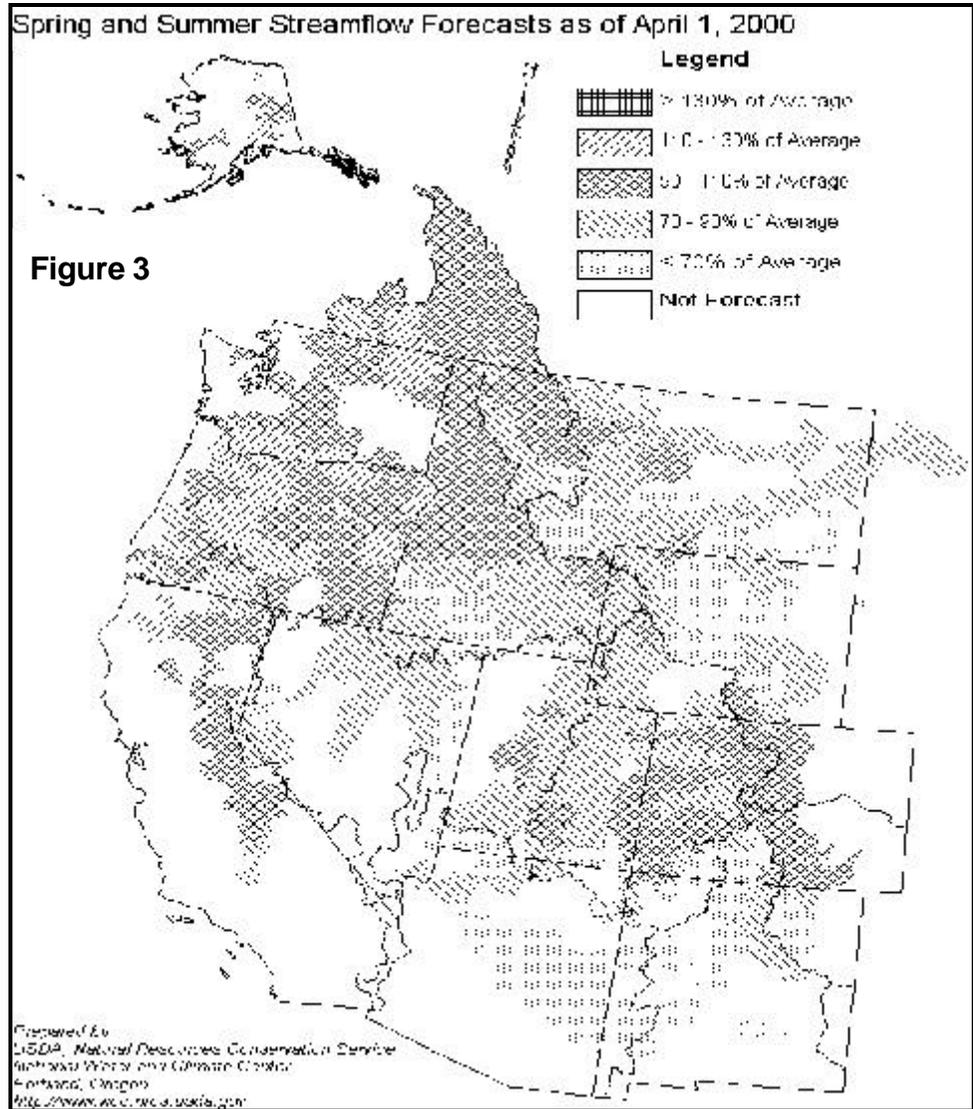
Reservoir Storage

As of April 1, 2000, major Western storage reservoirs are generally near or above average for this time of year (fig. 4). Arizona and Montana continue to report slightly below-average storage levels. Reservoirs in southern Colorado, New Mexico, and Arizona continue to benefit from a wet spring and summer during 1999 and several recent precipitation events.

For More Information

The National Water and Climate Center Homepage provides the latest available snowpack and water supply information. Please visit:

<http://www.wcc.nrcs.usda.gov>



Crop Progress and Condition

Week Ending April 9, 2000

Winter Wheat Percent Headed				
	Apr 9 2000	Prev Week	Prev Year	5-Yr Avg
AR	23	6	7	12
CA	45	35	37	40
CO	0	0	0	0
ID	0	0	0	0
IL	0	0	0	0
IN	0	0	0	0
KS	0	0	0	0
MI	0	0	0	0
MO	0	0	0	0
MT	0	0	0	0
NE	0	0	0	0
NC	20	15	17	8
OH	0	0	0	0
OK	10	8	5	3
OR	0	0	0	0
SD	0	0	0	0
TX	20	11	13	10
WA	0	0	0	0
18 Sts	6	4	4	3

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

Corn Percent Planted				
	Apr 9 2000	Prev Week	Prev Year	5-Yr Avg
CO	0	0	1	1
IL	4	0	2	1
IN	1	0	1	0
IA	0	0	0	0
KS	3	0	2	2
KY	13	1	6	7
MI	0	0	0	0
MN	0	0	0	0
MO	26	5	10	10
NE	0	0	0	0
NC	15	5	21	19
ND	0	0	0	0
OH	1	0	3	1
PA	0	0	0	0
SD	0	0	0	0
TN	25	14	10	21
TX	55	53	52	48
WI	0	0	0	0
18 Sts	4	2	3	3

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

Oats Percent Planted				
	Apr 9 2000	Prev Week	Prev Year	5-Yr Avg
IA	79	15	69	28
MN	26	7	4	1
NE	83	66	48	31
ND	1	0	1	0
OH	38	23	42	29
PA	21	8	23	22
SD	32	14	21	6
WI	24	7	17	4
8 Sts	29	11	20	9

These 8 States planted 52% of last year's oat acreage.

Spring Wheat Percent Planted				
	Apr 9 2000	Prev Week	Prev Year	5-Yr Avg
ID	39	20	27	28
MN	10	4	2	0
MT	7	3	8	3
ND	2	1	1	0
SD	45	19	21	7
WA	47	25	47	39
6 Sts	13	6	8	4

These 6 States planted 98% of last year's spring wheat acreage.

Cotton Percent Planted				
	Apr 9 2000	Prev Week	Prev Year	5-Yr Avg
AL	2	0	5	4
AZ	28	1	14	26
AR	0	0	0	0
CA	35	10	2	13
GA	2	0	2	2
LA	0	0	0	0
MS	0	0	1	1
MO	0	0	0	0
NC	0	0	0	1
OK	0	0	0	0
SC	5	0	2	1
TN	0	0	1	0
TX	11	9	9	10
VA	0	0	0	0
14 Sts	8	4	5	6

These 14 States planted 99% of last year's cotton acreage.

Sorghum Percent Planted				
	Apr 9 2000	Prev Week	Prev Year	5-Yr Avg
AR	11	4	4	9
CO	0	0	0	0
IL	0	0	0	0
KS	0	0	0	0
LA	4	0	4	6
MO	0	0	0	0
NE	0	0	0	0
NM	0	0	0	0
OK	1	0	0	2
SD	0	0	0	0
TX	40	38	37	40
11 Sts	14	13	13	14

These 11 States planted 98% of last year's sorghum acreage.

Rice Percent Planted				
	Apr 9 2000	Prev Week	Prev Year	5-Yr Avg
AR	5	1	1	7
CA	1	0	0	0
LA	54	40	54	46
MS	2	1	4	15
TX	59	46	41	37
5 Sts	17	11	14	16

These 5 States planted 95% of last year's rice acreage.

Barley Percent Planted				
	Apr 9 2000	Prev Week	Prev Year	5-Yr Avg
ID	22	13	19	19
MN	10	4	0	0
MT	11	2	9	4
ND	1	1	0	0
WA	31	16	34	29
5 Sts	12	5	10	8

These 5 States planted 78% of last year's barley acreage.

National Agricultural Summary

April 3 - 9, 2000

HIGHLIGHTS

Fieldwork continued with few delays in the Great Plains and the western Corn Belt. However, precipitation occurred from eastern Texas northeastward into New England, halting fieldwork in the eastern Corn Belt, parts of the lower Mississippi and Tennessee Valleys, and Atlantic Coast States. Warm, dry weather aided planting progress and stimulated crop development in the Southwest and Pacific Northwest. Winter wheat growth slowed after a

cold front passed through the Great Plains and Corn Belt. Soil moisture shortages stressed dryland wheat fields in the southern High Plains, but moisture supplies remained mostly adequate to support wheat development in the central Great Plains and eastern Corn Belt. Soil moisture shortages increased along the eastern Gulf Coast and Atlantic Coastal Plains, as mostly dry weather continued.

Winter Wheat: Six percent of the Nation's winter wheat was at the heading stage or beyond, compared with 4 percent last year and the average of 3 percent. Above-normal temperatures promoted development in California and the Pacific Northwest. Forty-five percent of the acreage was headed in California, ahead of last year and the average. A cold front slowed growth in the Great Plains and Corn Belt, but development remained ahead of normal in most areas. In Texas, winter wheat headed advanced 9 percentage points to 20 percent headed, double the normal pace of 10 percent. Winter wheat rapidly progressed to the heading stage in Arkansas, advancing to 23 percent headed, compared with 12 percent normally headed by this date. Development also remained well ahead of normal in Oklahoma, Kansas, and Colorado even though temperatures averaged slightly below normal. In Oklahoma, 89 percent was at the jointing stage or beyond and 10 percent was headed, compared with the normal progress of 78 percent jointed and 3 percent headed by this date. Wheat acreage in Kansas and Colorado was 60 and 23 percent jointed respectively, well ahead of the average in both States.

as warm weather raised soil temperatures. Fourteen percent of the sorghum acreage was planted, equal to the 5-year average, and slightly ahead of this date last year. Planting progressed ahead of normal in Arkansas, but was delayed by rain in other areas of the Mississippi Delta.

Corn: Four percent of the corn acreage was planted, slightly ahead last year and the 5-year average. Planting rapidly progressed in the southern Corn Belt and Tennessee River Valley. Dry weather aided progress in Missouri, where progress advanced 21 percentage points, to 26 percent planted statewide. More than half of the acreage was planted in the Bootheel. Planting advanced more than 10 percentage points in Kentucky and Tennessee before mid-week rains halted progress. Planting accelerated in North Carolina, but was slightly behind the 5-year average. Growers began planting in the central and eastern Corn Belt, progressing slightly ahead of normal before rain halted progress. Soil moisture was adequate to germinate seeds along the Ohio River Valley, but a few emerged fields were damaged by freezing temperatures after mid-week.

Cotton: Planting advanced 4 percentage points, to 8 percent complete, ahead of last year's 5-percent pace and the 6-percent average for this date. Dry weather and above-normal temperatures aided rapid progress in the Southwest. Planting advanced 25 percentage points in California and 27 percentage points in Arizona. Planting began in the Southeast and progressed slightly ahead of normal in South Carolina due to warm, dry weather. Cool, wet weather limited planting in Alabama, where progress fell slightly behind the 5-year average. Rain also prevented planting in the lower Mississippi Valley.

Small grains: Oat seeding advanced to 29 percent, well ahead of last year's rapid progress, and 20 percentage points ahead of the 5-year average. Dry weather aided progress across the northern Corn Belt, especially in Iowa, where growers seeded nearly two-thirds of their intended oat acreage. Planting was active in the eastern Corn Belt and upper Ohio River Valley before rain and snow halted progress near mid-week. The barley acreage was 12 percent seeded, 2 percentage points ahead of last year's pace, and 4 percentage points ahead of the 5-year average. Dry weather aided progress in Washington, Idaho, and Montana. Planting accelerated in Minnesota and began in North Dakota. Spring wheat planting was 13 percent complete, ahead of last year's 8 percent pace, and the 4-percent average for this date. Progress was aided by dry weather in Idaho, South Dakota, and Washington.

Other crops: Seventeen percent of the rice crop was planted, slightly ahead of normal due to rapid progress along the western Gulf Coast. Planting was more than 50 percent complete in Texas and Louisiana, where progress advanced 13 and 14 percentage points respectively. Rain delayed planting in inland areas of the Mississippi Delta. Progress was slightly behind average in Arkansas, and well behind normal in Mississippi. Planting began in California,

(Continued from page 16)

Winter Wheat Crop Condition by Percent					
	VP	P	F	G	EX
AR	0	2	17	52	29
CA	0	0	20	65	15
CO	1	2	14	62	21
ID	0	3	19	64	14
IL	0	4	20	58	18
IN	1	4	22	54	19
KS	2	8	31	47	12
MI	0	2	15	50	33
MO	0	3	33	52	12
MT	2	7	35	50	6
NE	5	13	34	42	6
NC	0	1	11	76	12
OH	0	1	12	53	34
OK	1	4	20	60	15
OR	0	0	36	62	2
SD	0	4	25	61	10
TX	27	29	29	14	1
WA	0	0	11	74	15
18 Sts	5	9	25	49	12
Prev Wk	5	9	26	48	12
Prev Yr	1	4	22	59	14

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

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 3.3. Topsoil 0% very short, 7% short, 66% adequate, 27% surplus. Corn 50% planted, 42% 1999, 46% avg. Corn 33% emerged, 16% 1999. Wheat 28% headed, 21% 1999, 26% avg. Wheat 1% very poor, 2% poor, 24% fair, 67% good, 6% excellent. Pasture feed 1% very poor, 5% poor, 31% fair, 52% good, 11% excellent. Livestock 1% very poor, 4% poor, 23% fair, 62% good, 10% excellent. Additional rain still needed in most of Area. Some frost problems reported in Northern Area because of recent cold weather fronts.

ARIZONA: Area continued to record well above average temperatures with no precipitation during the week of April 9. Weather conditions were good for cotton planting but have minimal impact on crop, vegetable production due to irrigation. Livestock was reported to be in fair condition for the month of March. Stock Water was reported as short to adequate while Soil Moisture was reported as short. Insect Damage was reported as none to light. Producers in central Area continued to ship a variety of vegetables including: Broccoli, cabbage, cilantro, dandelion, dill, endive, escarole, flowering kale, green onions, kale, kohlrabi, mixed greens, napa, parsley, spinach, swiss chard. Lettuce shipments included: Leaf, romaine. Eastern Areas producers shipped hot house tomatoes. Producers in western Area also shipped a wide variety of vegetables including: Anise, broccoflower, broccoli, cabbage, cauliflower, celery, endive, escarole, mixed greens, napa, parsley, salad savoy, spinach, swiss chard. Western lettuce, salad/salad mixes shipments included: Boston, iceberg, leaf, romaine, spring mix. Central Area citrus producers harvested lemons, navels, grapefruit, minneolas, fairchild tangerines, tangelos. Western citrus producers harvested grapefruit, lemons, tangelos last week.

ARKANSAS: Days suitable for fieldwork: 5.0. Soil moisture 1% very short, 14% short, 64% adequate, 21% surplus. Rice 5% planted, 1% 1999, 7% 5 yr. avg. Sorghum 11% planted, 4% 1999, 9% 5 yr. avg. Corn 65% planted, 20% 1999, 46% 5 yr avg. Wheat 23% headed, 7% 1999, 12% 5 yr. avg.; 2% poor, 17% fair, 52% good, 29% excellent. Other Hay 4% very poor, 9% poor, 33% fair, 43% good, 11% excellent. Pasture, Range 2% very poor, 8% poor, 34% fair, 44% good, 12% excellent. Livestock good condition. The main farm activities: Row crop ground preparation, planting corn, rice, sorghum, wheat disease scouting, fertilizing wheat fields, pastures, vaccinating cattle. Viral disease in some wheat fields, Southeastern section.

CALIFORNIA: Cotton planting continued at a rapid rate with excellent planting conditions; a few early planted fields began to emerge. Some growers applied granular systemic insecticides to protect young seedlings from aphids and mites. Many fields of wheat, barley, oats were maturing and forming heads. Dryland grain farmers were expecting a short crop if no additional rain falls soon. Silage, grain crop growth benefitted from warm weather. Some early wheat, oats were being cut for silage. Irrigation was in progress on later-planted fields. A few blackeye beans were planted, but most growers were awaiting warmer temperatures. Corn was being planted as fast as growers could prepare ground. Previously planted fields of corn were beginning to emerge; more fields were being planted for silage. Alfalfa hay was cut and baled. Sugarbeets showed good growth in most fields; spring sugarbeets were being harvested. Rice growers continued pre-plant field preparations. Occasional fields of rice and wild rice were planted. Safflower, sunflower fields were being planted and some herbicides were applied. The continued warm, sunny weather allowed fruit and nut growers to plant new trees and vines. Weed control and application of fungicides to stone fruit, almond trees continued. Nut trees, stone fruit trees, grapevines were leafing. Fruit thinning continued in early varieties of peaches, nectarines, and apricots. Growers irrigated and applied sulfur to control mildew in grape vineyards. Picking of grapefruit and lemon crops was active in southern California. Harvest of valencia oranges in the desert areas was active. San Joaquin Valley valencia oranges were maturing. Picking of navel oranges continued, but growers remain concerned about puff, crease, and soft fruit. Minneola tangelos were also being picked. Avocado set has benefitted from warmer temperatures. Strawberry fields were blooming and setting fruit in the San Joaquin Valley. Sweet corn and market onions were reaching maturity, as harvest of winter vegetables was nearing completion in Southern California. Tomato transplanting and seeding continued in the San Joaquin Valley. Tomato

fields were treated for weeds. Honeydew melon and watermelon planting started. Onion and garlic fields required irrigation. Growers planted summer vegetables. Outdoor planting of peppers, eggplant, okra, tomatoes and Asian vegetables was proceeding normally. Planting of new radicchio fields was complete. Asparagus harvest was active and crop quality looked good. Some Tulare County processing spinach fields were still being cut. Harvested fields were disced to prepare for planting of other crops. Spring broccoli was starting to form heads. Development of zucchini and yellow summer squashes progressed significantly with the warm weather. Plants were now pushing through hot caps. Picking of early crops was about two weeks away, if warm weather persists. Harvest of carrots, lettuce and broccoli continued in Kern County. Also harvested this week in California were basil, green and Napa cabbage, cauliflower, cilantro, chard, zucchini, scallop squash, kale, mushrooms, parsley and radishes. Rangeland pastures were drying rapidly in many areas. Northern California's north winds and warm temperatures have reduced forage quality. February's very heavy rainfall was followed by very dry weather. Grass had headed out in northern areas and many cattle will ship early. Dry weather has improved conditions at central and northern California dairies and has reduced health problems. Beehives were moved into citrus groves to pollinate new crop citrus blossoms.

COLORADO: Days suitable for fieldwork 5.3. Topsoil 1% very short 10% short, 88% adequate, 1% surplus. Subsoil moisture 2% very short, 18% short, 78% adequate, 2% surplus. Warmer, dryer conditions prevailed throughout the state. Spring barley 35% seeded, 49% 1999, 37% avg.; 7% emerged, 16% 1999, 11% avg. Dry onions 80% seeded, 64% 1999, 63% avg.; 1% very poor, 2% poor, 13% fair, 55% good, 29% excellent. Sugar beets 35%, 41% 1999, 46% avg. Summer potatoes 28% planted, 20% 1999, 12% avg. Spring wheat 25% planted, 47% 1999, 28% avg.; 4% emerged, 15% 1999, 8% avg. Winter wheat 23% jointed, 26% 1999, 12% avg. More than 80% of the crop is in good to excellent condition. Cows 70% calved, 72% 1999, 75% avg. Ewes 56% lambled, 62% 1999, 71% avg.

DELAWARE: Days suitable for fieldwork 4.6. Topsoil 62% adequate, 38% surplus. Subsoil moisture 78% adequate, 22% surplus. Percent of acreage prepared for planting of spring crops 39%. Winter wheat 1% poor, 9% fair, 82% good, 8% excellent. Barley 3% poor, 11% fair, 78% good, 8% excellent. Potatoes 36% planted, 31% 1999, 39% avg. Green peas 39% planted, 37% 1999, 34% avg. Snap Beans 11% planted, 1% 1999, 0% avg. Sweet corn 13% planted, 6% 1999, 5% avg. Peaches 70% bloomed, 57% 1999, 52% avg. Strawberries 50% bloomed, 22% 1999, 15% avg. Pasture feed 23% fair, 73% good, 4% excellent. Hay supplies 17% very short, 33% short, 50% adequate. Activities: Field preparation, planting work continued.

FLORIDA: Cold fronts crossing Peninsula brought cooler weather to most areas, significant rainfall to some localities. Temperatures at major stations averaged normal to 3 ° below. Most daytime highs 70s, 80s; most lows 40s, 50s, 60s. Alachua, Apopka, Hastings, Jacksonville, Okahumpka, Ona, Pensacola, Pierson, Tallahassee, Umatilla recorded at least one low in 30s. Rainfall over most Peninsula localities from 0.00 to 0.25 in. However, some parts of western Panhandle, northern Peninsula received significant rains which helped ease drought conditions. Moisture in Panhandle, northern Peninsula short to adequate. Central, southern Peninsula moisture very short or short with scattered areas adequate moisture. Sugarcane grinding virtually complete. Field corn planting active. Farmers starting to plant cotton, peanuts. Tobacco transplanting active. Lack of rain, freezing temperature in north increased wild fire index, some areas. Watermelon harvesting started around Immokalee with very light volume available. Major vegetables harvested: Potatoes, tomatoes, peppers, endive, escarole, cabbage, celery, cucumbers, lettuce, radishes, snap beans, squash, strawberries, sweet corn, eggplant, watermelon. Dry all citrus areas, few showers, irrigation continues. Abundant new growth, bloom almost over. Valencia harvest increasing. Grapefruit movement very active, picking of Temples, Honey tangerines slowing as supplies run low. Caretakers cutting cover crops, spraying, hedging, topping. Pasture feed 5% very poor, 25% poor, 65% fair, 5% good. Cattle 5% very poor, 10% poor, 75% fair, 10% good. Poor pasture feed pulling down condition of cattle. Panhandle: light frost, continued dry weather reduced pasture feed Stock ponds dry night, good

early growth of permanent pasture grass. North: pasture, range mostly poor condition; rainfall barely enough to damp down fire danger; small grain forage condition declining seasonally, permanent pasture condition improved following light showers. Central: pastures greening up, mole crickets active. Southwest: pasture feed improving most areas.

GEORGIA: Days suitable for field work 4.8. Soil moisture 5% very short, 16% short, 66% adequate, 13% surplus. Corn 3% poor, 32% fair, 60% good, 5% excellent; 74% emerged, 68% 1999, N/A avg. Hay 1% very poor, 7% poor, 42% fair, 47% good, 3% excellent. Peanuts 0% planted, 1% 1999, 1% avg. Sorghum 9% planted, 5% 1999, 3% avg. Tobacco 1% poor, 28% fair, 62% good, 9% excellent; 47% transplanted, 64% 1999, 60% avg. Wheat 93% jointing, 93% 1999, 93% avg.; 70% boot, 76% 1999, 67% avg. Onions 3% poor, 16% fair, 73% good 8% excellent; 2% harvested, 1% 1999, 1% avg. Watermelons 4% poor, 48% fair, 41% good, 7% excellent; 65% planted, 70% 1999, 62% avg. Apples 7% poor, 47% fair, 42% good, 4% excellent; 40% blooming, 23% 1999, 40% avg. Peaches 31% fair, 42% good, 27% excellent; 90% blooming, 93% 1999, 98% avg. Damage assessments are underway for two frosts that occurred over much of the State last week. They may have adversely affected some fruit, vegetable crops. The frost burned some hay, corn. There was concern about possible damage in wheat. A storm pushed through the State on Saturday bringing rain, wind. There was possible wind damage to newly transplanted tobacco plants. The wind dried out transplants quickly. Drought concerns remain. Hession Fly damage was reported in wheat. Other activities included: Preparing cotton land for planting, spraying for leaf scab in pecan trees, routine care of livestock.

HAWAII: Variable weather conditions were fair to poor for agriculture during the week. Occasionally heavy showers continued to fall in some areas of the State at the start of the week. Field activities were slowed by muddy fields. Losses were light. Gustly trade winds hampered certain types of farm work, caused leaf shredding, bruising of fruits in exposed areas. Banana harvesting was active. Leaf shredding was heavy in some windward areas. Papaya harvesting was very active in the major growing areas. Overall crop conditions were fair to good. Recent rains have help replenish soil moisture. Head cabbage harvesting remained steady. Overall quality was good. Dry onion harvesting increasing. Weather conditions were generally beneficial in the major producing areas.

IDAHO: Days suitable for field work 6.0. Topsoil 2% very short, 15% short, 63% adequate, 20% surplus. Warm weather during the daytime, cool to freezing conditions at night were reported throughout the state. High winds caused damage to winter wheat, have dried out soil moisture in Eastern areas, some replanting will be necessary. Some winter wheat in the Treasure Valley was reported to be nitrogen deficient, this may due to producers delaying nitrogen application until the spring. Calving 92% complete, 92% lambing. Hay, roughage supplies 12% very short, 13% short, 68% adequate, 7% surplus. Irrigation supply 46% excellent, 37% good, 15% fair, 2% poor. Onions 64% planted, 79% 1999, 73% avg. Dry peas 7% planted, 14% 1999, 9% avg. Oats 5% planted, 8% 1999, 10% avg. Lentils planted none, 1999 none, 1% avg. Potatoes 6% planted, 2% 1999, 2% avg. Sugarbeets 47% planted, 21% 1999, 35% avg.; 2% emerged, 1% 1999, 4% avg. Spring barley 2% emerged, 4% 1999, 5% avg. Spring wheat 3% emerged, 6% 1999, 6% avg. Activities: Planting sugar beets, spring wheat, spring barley, onions, potatoes, dry peas, lentils, oats, branding cattle, soil preparation, applying fertilizer, preparing irrigation systems.

ILLINOIS: Days suitable for fieldwork 6.0. Topsoil 19% very short, 48% short, 31% adequate, 2% surplus. Oats 81% planted, 79% 1999, 42% avg. Alfalfa 7% poor, 25% fair, 58% good, 10% excellent. Pasture 3% very poor, 13% poor, 37% fair, 41% good, 6% excellent. Corn planters began to roll in last week as dry weather allowed farmers to plant corn in the central, southwest regions, to seed oats in the north. Farmers in many areas held off planting though due to cool, dry soils, the early date on the calendar. Topsoils continue to be dry across most of the state, surplus moisture levels continue to be reported in the Southeast District. Rains at week's end were a welcome blessing across many areas of the state but with the dryness of the topsoil they were quickly absorbed. The below normal temperatures last week caused some concern with the fruit crops as peaches are now in bloom, apples will begin soon. High winds experienced last week dried topsoils as quickly as they were being worked, hindered spraying applications. During last week most farmers were also preparing equipment for planting, hauling grain, discussing the dryness of the soils when normal wet hole through April is working up like the best piece of dirt on the farm.

INDIANA: Days suitable for fieldwork 4.6. Topsoil 21% very short, 29% short, 43% adequate, 7% surplus. Subsoil 33% very short, 37% short, 27% adequate, 3% surplus. Soils remain dry over most of the state. Much needed precipitation arrived late in the week. Farmers are preparing fields for planting corn, soybeans. Corn fields planted are mostly in the southwest. A few soybean fields are planted. Application of fertilizer, nitrogen continues. Winter wheat 1% very poor, 4% poor, 22% fair, 54% good, 19% excellent. Winter wheat 32% jointed, 18% 1999, 16% avg. Pastures improving, growing. Range, pasture 7% very poor, 20% poor, 41% fair, 25% good, 7% excellent. Hay supplies mostly adequate. Farmers continue to purchase inputs. Livestock are in mostly good condition, calving, lambing active. Major activities: Tillage of soils, spreading chemicals, lime, preparing equipment, selling grain, ditching, seeding oats, hauling manure, feeding, caring for livestock.

IOWA: Days suitable for field work 6.5. Topsoil 48% very short, 40% short, 12% adequate, 0% surplus. Subsoil moisture 45% very short, 44% short, 11% adequate, 0% surplus. Dry, windy conditions. Corn 0% planted, 0% 1999, 0% avg. Oats 79% planted, 69% 99, 28% avg. Winter wheat 6% poor, 49% fair, 38% good, 7% excellent. Fertilizer applied (including fall applications) 75% complete. Seedbed preparation (including fall preparation) 65% complete. High percentage of calves being saved, some feedlots reported breathing dirt in the air due to dry soil conditions, some wind erosion.

KANSAS: Days suitable for fieldwork 4.5. Topsoil 1% very short, 10% short, 75% adequate, 14% surplus. Subsoil moisture 2% very short, 12% short, 80% adequate, 6% surplus. Winter wheat condition showed improvement. Wheat 2% very poor, 8% poor, 31% fair, 47% good, 12% excellent. Wheat 60% jointing, 51% 1999, 40% avg. Wind damage 84% none, 14% light, 2% moderate. Freeze damage 92% none, 6% light, 2% moderate. Range, Pasture 1% very poor, 7% poor, 32% fair, 53% good, 7% excellent. Oats 77% seeded, 98% 1999, 93% avg. Corn 3% planted, 2% 1999, 2% avg.

KENTUCKY: Days suitable for fieldwork 3.0. Topsoil 1% very short, 7% short, 75% adequate, 17% surplus. Subsoil moisture 4% very short, 25% short, 64% adequate, 7% surplus. Near normal temperatures were felt throughout the State with above average rainfall across the State. Land, equipment were being prepared for planting season. About 86% of tobacco transplants were sown compared to 82% 1999, 76% for the avg.. Corn planting remains localized as wet conditions have slowed planting across the State. Winter wheat 1% poor, 10% fair, 67% good, 22% excellent. Average height for winter wheat was 14 inches. About 78% of the fruit trees were reported to be budding or in bloom. Some reports of damage to peach crop, no indications of damage to the apple crop reported at this time. Pasture feed 2% very poor, 12% poor, 35% fair, 45% good, 6% excellent.

LOUISIANA: Days suitable for fieldwork 3.6. Soil moisture 1% very short, 10% short, 62% adequate, 27% surplus. Corn 18% poor, 28% fair, 51% good, 3% excellent; 73% planted, 68% 1999, 84% avg.; 64% emerged, 54% 1999, 67% avg. Corn planting continued where soil moisture allowed. Hay 0% first cutting, 1% 1999, 1% avg. Rice 42% emerged, 29% 1999, 26% avg. Rice planting continued. Spring plowing 75% plowing, 70% 1999, 71% avg. Sugarcane 4% poor, 18% fair, 50% good, 28% excellent. Sugarcane producers were applying fertilizer and herbicides. Wheat 2% very poor, 8% poor, 38% fair, 48% good, 4% excellent; 95% headed, 81% 1999, 60% avg.; 21% turning color, 0% 1999, 1% avg. Livestock 1% very poor, 6% poor, 34% fair, 48% good, 11% excellent. Vegetables 1% very poor, 8% poor, 40% fair, 47% good, 4% excellent. Pastures 3% very poor, 8% poor, 33% fair, 51% good, 6% excellent. Pasture conditions continued to improve.

MARYLAND: Days suitable for fieldwork 3.9. Topsoil 7% short, 76% adequate, 17% surplus. Subsoil moisture 15% short, 74% adequate, 11% surplus. Percent of acreage prepared for planting of spring crops 36%. Winter wheat 12% fair, 66% good, 22% excellent. Barley 1% poor, 11% fair, 66% good, 22% excellent. Rye 1% poor, 10% fair, 75% good, 14% excellent. Potatoes 60% planted, 55% 1999, 55% avg. Green peas 46% planted, 54% 1999, 44% avg. Tobacco beds 97% planted, 84% 1999, 80% avg. Tomatoes 6% planted, 4% 1999, 3% avg. Sweet corn 15% planted, 11% 1999, 8% avg. Apples 31% bloomed, 12% 1999, 16% avg. Peaches 71% bloomed, 43% 1999, 36% avg. Strawberries 40% bloomed, 19% 1999, 17% avg. Pasture feed 1% very poor, 3% poor, 20% fair, 62% good, 14% excellent. Hay supplies 7% very short, 37% short, 56% adequate. Activities: Continued field preparation work, planting has begun for field corn.

MICHIGAN: Days suitable for fieldwork 5.0. Topsoil 0% very short, 5% short, 95% adequate, 0% surplus. Subsoil moisture 30% very short, 40% short, 30% adequate, 0% surplus. Temperatures ranged from 0 to 3 ° below normal across the State. Widespread gentle rains, snow late in the week slowed fieldwork but benefitted winter crops, built soil moisture. Precipitation amounts ranged from three-tenths to eight-tenths inches with the heaviest rain in the southern parts of the State. Planting of oats, alfalfa, sugar beets continued as the earliest planted sugar beets began to sprout. Apple progress was near green tip. Other activities included: Broadcasting fertilizer, hauling manure, preparing machinery, supplies for spring planting, making maple syrup. The mild weather has been favorable for livestock, hay supplies have been adequate for most farmers.

MINNESOTA: Days suitable for fieldwork 4.6. Topsoil 22% very short, 43% short, 28% adequate, 7% surplus. Corn 12% ground prepared, 1% 1999, 1% avg. Soybeans 5% ground prepared, 1% 1999, 0% avg. Green peas 11% planted, 2% 1999, 0% avg. Very strong winds on Wednesday dried soils rapidly, blew a lot of topsoil around. Rain, snow during the week will be beneficial in the short run for some northern, southern areas. Those who intend to plant corn soon will in many cases try to perform tillage, planting operations in rapid succession, to conserve soil moisture. Planting of small grains is near-completion in some southern areas, but has yet to begin in the major growing areas of the Red River Valley.

MISSISSIPPI: Days suitable for fieldwork 1.9 Soil moisture 2% very short, 10% short, 53% adequate, 35% surplus. Corn 71% planted, 53% 1999, 60% avg.; 59% emerged, 26% 1999, 29% avg. Cotton 0% planted, 1% 1999, 1% avg. Rice 2% planted, 4% 1999, 15% avg. Sorghum 3% planted, 6% 1999, 12% avg. Soybeans 1% planted, 3% 1999, 3% avg. Wheat 97% jointing, 86% 1999, 86% avg.; 52% heading, 25% 1999, 20% avg.; 2% poor, 16% fair, 64% good, 18% excellent. Watermelons 35% planted, 25% 1999, 26% avg. Blueberries 4% very poor, 8% poor, 30% fair, 42% good, 16% excellent. Cattle, 1% very poor, 7% poor, 22% fair, 60% good, 10 excellent. Pasture 1% very poor, 8% poor, 30% fair, 52% good, 9% excellent.

MISSOURI: Days suitable for fieldwork during the week of 6.1. Topsoil 20% very short, 39% short, 41% adequate. Planting corn was the main farming activity throughout the State. The Bootheel had the least amount of days with 4.9. By the end of the week 64% of the ground had been worked at least once for spring crops, excluding no-till, compared with 55 normally. The north-central district was the driest with over 85% in very short to short. The highest ratings were in the Bootheel with over 90% adequate to surplus. Twenty-six percent of the corn was planted, ahead of the 10% 1999, two weeks ahead of normal. The Bootheel, southwest districts reported over 50% planted. Winter wheat 3% poor, 33% fair, 52% good, 12% excellent. The west-central, east-central, southwest, Bootheel districts reported the best conditions with over 70% in the good to excellent category. Pasture, range 8% very poor, 26% poor, 41% fair, 22% good, 3% excellent. The weekly precipitation averaged 0.09 inch.

MONTANA: Days suitable for fieldwork 4.3. Topsoil 14% very short, 42% short, 43% adequate, 1% surplus. Subsoil moisture 24% very short, 45% short, 31% adequate, 0% surplus. The weather has been cooperative enough for fieldwork such as seeding small grains, spreading fertilizer to be done. Some producers were hampered by rain, snowfall, but the precipitation was very much needed. Producers in higher elevation areas have not started fieldwork yet as the ground is still too wet. Fieldwork in progress was rated 51% none, 30% just started, 19% well underway. Winter wheat emergence was 2% still dormant, 49% greening, 49% green, growing. Wind damage to winter wheat 62% none, 28% light, 8% moderate, 2% heavy. Freeze, drought damage to the winter wheat crop 71% none, 24% light, 5% moderate, 0% heavy. Oats 5% planted, 2% 1999, 1% avg. Sugar beets 11% planted, 6% 1999, 2% avg. There are reports of cutworms being found, becoming a problem. As a result of the continued fairly mild conditions, livestock is reported to be in very good condition. Calving, lambing is making good progress as few problems have occurred, death losses are minimal. Calving 74% completed, 70% 1999, 72% avg. Lambing 55% completed, 48% 1999, 51% avg. Producers are continuing to give supplemental feed to meet nutritional needs. At the end of the week, 95% of the cattle, calves, 84% of the sheep, lambs were receiving supplemental feed. There is a concern of a shortage of water for livestock as a result of below normal precipitation. There are some reports of ponds, reservoirs being either low or empty due to a lack of snowfall, runoff.

NEBRASKA: Topsoil moisture supplies, as well as subsoil moisture supplies, were mostly short to very short. Temperatures across the State averaged near normals during the week. Precipitation ranged from traces to twenty hundredths. Winter Wheat 5% very poor, 13% poor, 34% fair, 42% good, 6% excellent. Oat seedings 83% complete, compared to 55% 1999, 35% avg.; 21% emerged, 14% 1999, 5% avg.; 28% poor, 40% good, 32% good. Pasture, range feed 12% very poor, 25% poor, 45% fair, 17% good, 1% excellent. Calving 83% complete, ahead of 1999 at 76%. Producer activities included: Crop planting preparations, livestock care.

NEVADA: Unseasonably warm weather was prevalent statewide. High temperatures for the week reached 91 ° in Las Vegas, 80 ° in Reno. Precipitation was near nil with only some widely scattered light rain at the end of the week. Accelerated snow melt reduced mountain snowpack which fell further below historic averages at most watersheds. Irrigation water supplies remained mostly adequate. Fieldwork advanced under the clear weather. Small grain planting progressed, additional field preparation was undertaken. Spring wheat, barley emergence increased. Weed control efforts intensified as the warm weather spurred growth. Pasture, range feed remained mostly fair to good. Calving, lambing continued. Branding, movement to Spring range continued. Main farm ranch activities: Field preparation, grain planting, weed control, branding, working cattle.

NEW ENGLAND: Temperatures were above average for the week. Fields received much needed precipitation after the dry winter. Maple sugaring activities nearly complete. Farmers tending livestock, repairing machinery, bringing tractors, trucks, implements out of storage for spring planting. Fruit growers pruning trees. Manure spreading by dairy farmers continues. Garden centers gearing up for spring seed, seedling sales.

NEW JERSEY: Temperatures continue above normal. Land preparation activities include: Plowing, seed bed preparation. Fertilizer application on wheat, barley. Cumulative rainfall for year 2000 as much as 25% more than 1999 in the southern part of the state. Planting of peas, spinach, lettuce, cabbage, potatoes throughout the state. Apple, peach trees are being pruned with some peach trees beginning to bloom. Cutting of dandelions, leeks and spinach reported.

NEW MEXICO: Days suitable for field work 6.8. Topsoil 33% very short, 24% short, 43% adequate, 0% surplus. The week began with a winter storm exiting north, a rapid warm-up ensued. Temperatures in Carlsbad hit 91 on the 5th and 95 on the 7th. The statewide temperature average for the week was 5 ° above normal. The only precipitation reported was from the night of April 2nd, with .84" at Red River, .09" at Las Vegas, .05" at Capulin/Des Moines. Main farm activities during the week were: Planting chile, land preparation for spring planting, spraying for green bugs, aphids in wheat. Cotton planting had begun in Dona Ana County. Onions remained in mostly good to excellent condition. Chile was 75% planted, was in fair to excellent condition. Irrigated wheat was in fair to good condition, while the dryland wheat was more poor to fair. Potatoes were in good condition but were in need of rain. Supplemental feeding of cattle continued. Cattle continued in fair to good condition, while sheep were in poor to good condition. Pasture, range feed 16% very poor, 26% poor, 45% fair, 13% good.

NEW YORK: Days suitable 3.0. Soil moisture 40% adequate, 60% surplus. Pasture feed very poor, continue dormant, not used. Maple syrup producers busy with clean-up activities. Syrup making finished. Heavy snowfall at end of week limited outside activities to normal winter chores.

NORTH CAROLINA: Days suitable for field work were 5.0 compared to 4.5 last week. Soil moisture 1% very short, 9% short, 86% adequate, 4% surplus. Rain continued into the first full week of April. The western half of the State realized the heaviest rainfall as the year's first bit of severe weather rolled through. There was no damage reported. Farmers were able to get a good start on corn planting, continue to prepare land for corn, cotton, tobacco. Other activities included: Applying herbicides, fertilizer. Irish potato, cabbage plantings are nearly complete, well ahead of schedule. Other activities included: Scouting for pests, equipment maintenance, tending livestock. Cereal leaf blight has been reported in some wheat acreage.

NORTH DAKOTA: Topsoil 5% very short, 22% short, 70% adequate, and 3% surplus. Subsoil moisture was 5% very short, 21% short, 69% adequate, 5% surplus. No durum wheat was planted. Cool temperatures

last week slowed fieldwork across the state. The northwest, north central districts received some snow as well. The average starting date for fieldwork is expected to be April 12th. Cattle 0% very poor, 0% poor, 16% fair, 74% good, 10% excellent. Calf 0% very poor, 0% poor, 15% fair, 74% good, 11% excellent. Calving 69% complete. 95% of the cattle were receiving supplemental feed. Sheep 0% very poor, 0% poor, 12% fair, 75% good, 13% excellent. Lamb 0% very poor, 0% poor, 13% fair, 74% good, 13% excellent. Lambing 76% complete, shearing 85% complete. 85% of the sheep were receiving supplemental feed. Hay, roughage supplies were 0% very short, 3% short, 86% adequate, 11% surplus. Grain, concentrate supplies were 0% very short, 3% short, 89% adequate, 8% surplus. Pasture range were 5% very poor, 10% poor, 33% fair, 47% good, and 5% excellent. Pasture, ranges were 81% open and 91% dormant.

OHIO: Days suitable for fieldwork, 2.3 days. Topsoil 2% very short, 16% short, 61% adequate, 21% surplus. Corn 1% planted, 3% 1999, 1% average. Oats 38% planted, 42% 1999, 29% avg. Oats emerged, 5% 1999, 2% avg. Winter wheat 20% jointed, 16% 1999. Tobacco beds 63% seeded, 55% 1999. Tobacco beds having plants up 23%, 19% 1999. Potatoes 8% planted, 14% 1999, 5% avg. Sugar beets 3% planted. Apples green 53% tip, 38% 1999. Peaches green 49% tip, 43% 1999. Peaches full 20% bloom, 19% 1999. Pasture 1% very poor, 8% poor, 29% fair, 48% good, 14% excellent. Winter wheat 0% very poor, 1% poor, 12% fair, 53% good 34% excellent. Apples 3% very poor, 2% poor, 20% fair, 62% good, 13% excellent. Peaches 4% very poor, 9% poor, 18% fair, 58% good, 11% excellent. Hay 1% very poor, 6% poor, 27% fair, 53% good, 13% excellent. Activities throughout the state included: Applying anhydrous ammonia, fertilizer, lime; hauling manure, plowing, chiseling, discing, applying pre-emergence herbicides, burning brush, clearing fence rows, equipment maintenance, preparation, installing tile, moving grain, sowing oats, alfalfa seedlings, planting grasses, legumes, marketing grain, top dressing wheat, scouting turkey, culling unproductive livestock, buying seed. Reporters throughout the state mentioned that the grass turned green earlier than normal this year due to warm temperatures, rain. Growers in several counties, including Jackson, Fairfield, Washington, are re-seeding pastures. Livestock are reported in good to excellent condition, although continuous changes in weather in some regions have been stressful to animals. Lambing, calving are progressing normally throughout the state. A Clark county reporter mentioned that livestock are being pastured earlier than normal due to short hay supplies.

OKLAHOMA: Days suitable for fieldwork 5.0. Topsoil 1% very short, 10% short, 82% adequate, 7% surplus. Subsoil moisture 5% very short, 19% short, 72% adequate, 4% surplus. Wheat 1% very poor, 4% poor, 20% fair, 60% good, 15% excellent; 89% jointing, 87% 1999, 78% avg.; 10% headed, 5% 1999, 3% avg. Oats 1% very poor, 7% poor, 33% fair, 53% good, 6% excellent; 98% planted, 100% 1999, 100% avg.; 51% jointing, 69% 1999, 47% avg.; 2% headed, 7% 1999, 3% avg.; Corn 70% seedbed prepared, 78% 1999, 80% avg.; 18% planted, 17% 1999, 16% avg. Sorghum 26% seedbed prepared, 33% 1999, 30% avg.; 1% planted, 0% 1999, 2% avg. Soybeans 55% seedbed prepared, 33% 1999, 37% avg.; 1% planted, 4% 1999, 3% avg. Peanuts 34% seedbed prepared, 50% 1999, 39% avg. Cotton 61% seedbed prepared, 52% 1999, 74% avg. Pasture 2% very poor, 9% poor, 31% fair, 51% good, 7% excellent; Livestock 4% poor, 25% fair, 61% good, 10% excellent; Cattle marketings average.

OREGON: Days suitable for fieldwork 7. Topsoil 7% short, 88% adequate, 5% surplus. Subsoil 9% short, 78% adequate, 13% surplus. Barley 72% planted, 58% 1999, 57% avg. Barley 26% fair, 53% good, 21% excellent. Spring wheat 58% planted, 35% 1999. Winter wheat 36% fair, 62% good, 2% excellent. Range, pasture 8% poor, 24% fair, 61% good, 7% excellent. Activities: Good weather state wide allowed spring field work to continue, for spring grains to be planted. In Willamette Valley fertilizer, herbicide applications continued. Field crops in good condition. Grass for hay greening up. On eastside farmers busy planting spring crops. Warmer temperatures increased crop size, advanced growth rapidly. Fields continued to be worked, meadows dragged. Nurseries very busy digging, shipping nursery stock. Greenhouses moving bedding plants to retail outlets. Easter lily growers in Curry county fertilizing, weeding, roguing out off type lilies. Christmas tree planting almost done, with supply of trees for planting short. There are reports that next years trees for planting already sold out. In Willamette Valley, early potatoes, onions, other early spring vegetables being planted though some fields still too wet to plant. Washington County reported green peas doing well. In eastern areas of State, spring seeding of onions, carrots, potatoes continued, Umatilla County reported some early green peas emerging. Western area Fruit trees blooming. First peaches near full bloom, with cherries, pears following. Some early apple

varieties pushing past green tip. Hazelnuts, blueberries leafing out. Cultivation underway in berry fields. In Coos, Curry counties, blueberry, cranberry growers preparing to irrigate as needed on a field-by-field basis. In Eastern area, cherries starting to bloom while apricots, peaches in the late flowering stage. Livestock in excellent condition with calving about done in most of state. Ranchers reported that spring calves getting shots, tagged, marked, branded. Eastern area reports some cattle being turned out, pastures are growing. Western areas reports pastures greening up, supplement feeding winding down.

PENNSYLVANIA: Days suitable for field work 2.8. Soil moisture 1% very short, 4% short, 74% adequate, 21% surplus. Plowing 26%, 30% 1999, 26% avg. Oats 21% planted, 23% 1999, 22% avg. Oats 6% emerged, 1% 1999, average not available. Wheat crop 1% poor, 18% fair, 70% good, 11% excellent. Oat crop 2% very poor, 69% fair, 29% good. Alfalfa, alfalfa mixtures stand 1% very poor, 4% poor, 23% fair, 62% good, 10% excellent. Timothy clover stand 5% very poor, 9% poor, 28% fair, 51% good, 7% excellent. Peaches 57% pink, 21% 1999, 20% avg.; 36% full bloom or past, 14% 1999, 12% avg. Cherries 25% pink, 14% 1999, 16% avg.; 15% full bloom or past, 9% 1999, 10% avg. Activities include: Spring plowing; planting oats, tobacco; fixing fences; machinery maintenance; ordering supplies; spreading lime, fertilizers; hauling manure; caring for livestock; spraying herbicides; pruning trees; planting alfalfa.

SOUTH CAROLINA: DATA NOT AVAILABLE

SOUTH DAKOTA: Days suitable for field work 5.0. Topsoil 11% very short, 36% short, 50% adequate, 3% surplus. Subsoil Moisture 9% very short, 36% short, 51% adequate, 4% surplus. Winter rye 7% poor, 29% fair, 50% good, 14% excellent. Oats 2% emerged. Spring wheat 5% emerged. Range, pasture 1% very poor, 9% poor, 32% fair, 49% good, 9% excellent. Stock water supplies 1% very short, 14% short, 76% adequate, 9% surplus. Feed supplies 2% short, 79% adequate, 19% surplus. Cattle 6% fair, 71% good, 23% excellent; moved to pasture 7%. Sheep 7% fair, 69% good, 24% excellent. Lambing 65%. Calving 47%. Calf deaths 47% below avg.; 52% avg.; 1% above avg. Sheep, lamb deaths 49% below avg.; 50% avg.; 1% above avg.

TENNESSEE: Days suitable for fieldwork 3. Topsoil 1% very short, 2% short, 75% adequate, 22% surplus. Subsoil moisture 3% very short, 27% short, 62% adequate, 8% surplus. Tobacco 90% seeded, 80% 1999, 86% avg.; 73% plants up, 57% 1999, 58% avg. Wheat 88% jointed, 60% 1999, 67% avg.; 3% poor, 12% fair, 51% good, 34% excellent; Apples 96% budding or beyond, 75% 1999, 82% avg.; 75% blooming or beyond, 41% 1999, 51% avg. Peaches 87% blooming or beyond, 84% 1999, 82% avg. Pastures 2% very poor, 9% poor, 35% fair, 49% good, 5% excellent. Strawberries 3% poor, 41% fair, 49% good, 7% excellent. Farmers watched anxiously as night time temperatures dipped below freezing in many parts of the State last week. With apple, peach trees already in bloom, Areas fruit growers were the most concerned. Early indications suggest only a light freeze, but the full extent of the damage will not be known until later in the growing season. Some early planted corn, wheat was also hurt by the cold temperatures, but is expected to recover. Heavy rains delayed fieldwork, caused flooding in some locations.

TEXAS: Freezing temperatures, high winds, frost accompanied a passing front across the Plains while light rain showers, mild frost was experienced in some other locations. Hail damage occurred in some areas associated with the same weather front, could create the need for additional replanting. Land preparation continued but progress remained limited in areas where rains fell. In areas where moisture was not nor has not been received progress remained slow. In these same areas of deficient rainfall cattle movement continued, supplemental feeding remained necessary. Available stock water remained limited for some producers. In other areas supplemental feeding continued to decline as spring green up continued, available stock water began to return to more normal levels. In a few areas some CPR land was being returned to crop production. In the Rio Grande Valley, Winter Garden areas, vegetables continued to make good progress, but hail damage occurred in a few locations. Field Crops: Small Grains: Conditions for small grains remained varied throughout the state. Some fields that were not zeroed out earlier continued to be grazed out, plowed. Irrigated fields remain the most promising, recent rains have benefitted some remaining dryland fields. Wheat fields are beginning to head on the Plains, are mostly headed in southern areas. Statewide wheat condition was rated at 40% of normal compared with 71% 1999. Corn: Corn planting remained active on the Plains, North Central. Some planting was on hold in the extreme High Plains as soil temperature were not adequate. Cultivation continued in the southern areas. Statewide corn t 80% of normal compared with

81% 1999. Emerged, Published 51%, 1999 47%, Average NA. Cotton: Emergence continued in the southern areas with good stands in most fields. Planting continued in other northern areas, but slowed as soil temperatures have not warmed to adequate levels. More moisture will be needed in some areas before planting can begin. Rice: Planting, flushing continued for some growers. Some growers received good run off from recent rains, can now pump water when necessary. Emerged, Published 40%, 1999 22%, Average 14%. Sorghum: Planting was completed in the southern areas, planting continued to move northward as weather conditions allowed. Cultivation continued in earlier planted fields however light rains slowed progress in a few locations. Statewide sorghum 82% of normal compared with 79% 1999. Peanuts: Planting began in South Central. Planted, Published 1%, 1999 1%, Average 1%. Soybeans: Land preparation remained active where possible, planting continued along the upper Coast, South Central. Emerged beans were making good progress, stands were favorable. Published 19%, 1999 19%, Average 11%. Commercial Vegetables, Fruit and Pecans: Rio Grande Valley, harvest remained active for greens, carrots, onions cabbage, began for beans, peas, potatoes. Cantaloupe, melon planting continued and available soil moisture was becoming critical in some areas. San Antonio-Winter Garden, watermelon planting remained active, some re-planting was necessary as a result of wind, hail damage. Harvest remained active for cabbage, carrots, broccoli. Planting of green beans, chili peppers continued. East Areas growing conditions for strawberries remained favorable, watermelon planting continued. Growth of watermelons was slowed as a result of the cool weather, some fields were again damaged by hail and high wind. High Plains, potato and onion planting was mostly completed. Land preparation remained slow where rains fell. Fruit trees continued to bloom in many locations, some damage from frost occurred. Peaches: Fruit setting continued in southern areas, however some fruit was again damaged by frost in a few areas. Pecans: Bud break continued to move northward, applications of zinc continued to be applied by producers. Range and Livestock: Many areas of the state received additional rainfall along with high winds, hail, frost in some locations. Green-up of range, pasture continued in areas where recent rains fell. Planting of new grass continued in some locations where soil moisture was adequate. Run-off was considerable in some locations, some livestock ponds filled to near normal, while in other locations ponds remained dry. Supplemental feeding continued to decline where green-up was favorable, but remained necessary in other areas. Hauling water to livestock remained necessary in a few locations. In a few areas concern was expressed about the increase in grasshopper populations.

UTAH: Days suitable for field work 7. Topsoil 1% very short, 15% short, 79% adequate, 5% surplus. Subsoil moisture 9% short, 86% adequate, 5% surplus. Winter wheat 1% poor, 11% fair, 87% good, 1% excellent; freeze damage 94% none, 6% light. Fall barley 2% very poor, 21% fair, 66% good, 11% excellent; freeze damage 89% none, 10% light, 1% moderate. Pasture, range feed 9% poor, 32% fair, 51% good, 8% excellent. Spring wheat 53%: planted, 14% emerged. Barley 55% planted, 16% emerged. Oats 18% planted, 6% emerged. Apricots full bloom or past 99%, 99% 1999, 77% avg. Sweet cherries full bloom or past 8%, 10% 1999, 13% avg. Pears full bloom or past 17%, 0% 1999, 11% avg. Cows calved 69%, 71% 1999, 67% avg. Ewes lambled: on farm 71%, 73% 1999, 66% avg.; on range 27%, 31% 1999, 30% avg. Sheep sheared on farm 60%, 57% 1999, 54% avg.; on range 38%, 37% 1999, 37% avg. Major farm, ranch activities included: Spring planting, spring tillage, spraying fruit, shearing sheep, lambing, calving. Farmers were able to accomplish a lot in their fields this week due to the warm, dry weather. However, the lack of precipitation forced many to begin irrigation.

VIRGINIA: Days suitable for fieldwork 4.3. Topsoil 14% short, 75% adequate, 11% surplus. Subsoil moisture 2% very short, 27% short, 66% adequate, 5% excellent. Pastures 1% very poor, 7% poor, 32% fair, 49% good, 11% excellent. Livestock 1% very poor, 3% poor, 22% fair, 61% good, 13% excellent. Other Hay 2% very poor, 5% poor, 31% fair, 55% good, 7% excellent. Alfalfa Hay 1% very poor, 2% poor, 20% fair, 62% good, 15% excellent. Corn for Grain 13% planted, 14% 1999, 8% avg. Winter Wheat 1% very poor, 2% poor, 14% fair, 62% good, 21% excellent. Barley 2% poor, 16% fair, 58% good, 24% excellent. Tobacco greenhouse 99% planted, 100% 1999, 100% avg.; 14% fair, 59% good, 27% excellent. Tobacco plantbeds 100% planted, 100% 1999, 98% avg.; 5% very poor, 6% poor, 21% fair, 68% good. Potatoes, Summer 97% planted, 90% 1999, 90% avg. Apples 12% fair, 82% good, 6% excellent. Peaches 13% very poor, 4% poor, 46% fair, 28% good, 9% excellent. Rains, above normal temperatures across the Commonwealth improved small grain conditions. High winds, cooler temperatures by the end of the week caused damage to peaches, some lodging in small grains. The extent of damage to the peach crop will not be known for another couple of weeks. As weather conditions permitted, many farmers made good

progress in getting their corn crop planted. Small grain producers continue to apply nitrogen, scout for cereal leaf beetles, powdery mildew. Some land preparation has begun for soybeans, cotton. Other farming activities included: Land preparation for vegetables, bedding sweet potatoes, caring for livestock, repairing fences.

WASHINGTON: Days suitable for fieldwork 6.5. Topsoil 1% very short, 10% short, 69% adequate, 20% surplus; Subsoil moisture 11% short, 88% adequate, 1% surplus. Winter wheat, dryland, 13% fair, 71% good, 16% excellent; irrigated 100% good. The winter wheat crop was progressing nicely, but will need moisture in the near future to keep condition favorable. Spring wheat, dryland 1% poor, 85% fair, 14% good; irrigated 100% good. Planted 47%, 47% 1999, 39% avg.; 13% emerged, 11% 1999, 16% avg. Barley, dryland 1% poor, 87% fair, 12% good; 100% irrigated, good. Planted 31%, 34% 1999, 29% avg.; emerged 6%, 6% 1999, 9% avg. Both barley, spring wheat planting was in full swing due to the warm weather. Warmer nights to increase soil temperatures, precipitation will be needed to promote growth. Potatoes 12% fair, 88% good. Planted 30%, 12% 1999, 19% avg.; emerged 6%, 0% 1999, 2% avg. Hay, roughage 1% short, 99% adequate. Range, pasture 19% poor, 38% fair, 43% good. Warm weather across the state enabled spring activities to flourish last week. Potatoes, sweet corn, onions, sugar beets were all being planted. Apple growers were finishing up pruning in western area tree fruits in central area were starting to bloom.

WEST VIRGINIA: Days suitable for fieldwork 3.2. Topsoil 3% very short, 22% short, 73% adequate, 2% surplus. Rain across most areas of the State improved crop, livestock conditions. Wheat 17% fair, 62% good, 21% excellent. Hay 3% very poor, 19% poor, 45% fair, 31% good, 2% excellent. Intended Acreage Prepared for Spring Planting 42%, 54% 1999, 47% 5-yr avg. Corn 4% planted, 4% 1999, 5% 5-yr avg. Oats 34% Planted, 27% 1999, 25% 5-yr avg.; 12% emerged, 4% 1999, 6% 5-yr avg. Tobacco beds seeded 87%, 63% 1999, 65% 5-yr avg.; 38% emerged, 12% 1999, 15% 5-yr avg. Cattle 1% very poor, 7% poor, 21% fair, 68% good, 3% excellent; 76% calved. Sheep 1% poor, 15% fair, 80% good, 4% excellent; 88% lambled. Feed grain supplies 5% very short, 12% short, 74% adequate, 9% surplus. Hay, roughage supplies 23% very short, 30% short, 46% adequate, 1% surplus. Activities: Field preparation, planting, calving, lambing, general maintenance.

WISCONSIN: Days suitable for fieldwork 5.8. Soil moisture 22% very short, 49% short, 28% adequate, 1% surplus. Spring tillage completed: 24% 2000, 13% 1999, 5% 5-year average. Winter weather returned last week, with blizzard-like conditions for the lower one-third of the state on Friday. Snowfall amounts from the April 7 storm were 0.9 inch in La Crosse, 4.0 inches in Madison, 6.6 inches reported in Milwaukee. The moisture was much needed, and by the end of the weekend, most of the snowfall melted, had soaked in. Windy conditions, lack of significant amounts of precipitation throughout the state last week helped soil conditions to become drier. At this time 1999, soil moisture was rated 90% adequate to surplus. Spring tillage was ahead of the 1999 pace of 13%, over two weeks ahead of the five-year average of 5% complete. Largest gains were made in the central districts. Alfalfa, winter wheat have been reported greening-up nicely, but not showing much growth due to lack of moisture. Corn producers have planters ready to go, in southern areas started to apply anhydrous in anticipation of warmer planting conditions. Potato planting started on a limited basis last week in the central sands. Spring calving has kept beef producers busy. Many farmers continued to haul manure, spread lime, top-dress pastures, wheat fields with fertilizer.

WYOMING: Days suitable for fieldwork 5.4. Topsoil 6% very short, 53% short, 41% adequate. Subsoil moisture 8% very short, 64% short, 24% adequate, 4% surplus. Barley 49% planted, 64% 1999, 50% avg.; 10% emerged, 9% 1999, 3% avg. Oats 15% planted, 24% 1999, 15% avg. Spring wheat 11% planted, 32% 1999, 22% avg. Sugar beets 33% planted, 20% 1999, 9% avg. Spring calves 72% born, 69% 1999, 70% avg. Farm flock ewes 76% lambled, 72% 1999, 78% avg. Farm flock sheep 71% shorn, 78% 1999, 80% avg. Range flock ewes 20% lambled, 13% 1999, 12% avg. Range flock sheep 42% shorn, 38% 1999, 37% avg. Calf, lamb losses light to normal. Range, pasture feed 2% poor, 50% fair, 44% good, 4% excellent. Stock water supplies 31% short, 69% adequate.

International Weather and Crop Summary

April 2 - 8, 2000

HIGHLIGHTS

EUROPE: Timely rainfall in Spain and Portugal helped jointing to reproducing winter grains and newly planted summer crops.

FSU-WESTERN: Continued unseasonably mild weather promoted rapid greening of winter grains in Ukraine, southern Russia, and western Belarus and diminished snow cover in northern Russia.

EASTERN ASIA: In the North China Plain, seasonably dry, warm weather increased irrigation demands for vegetative winter wheat. In the central Yangtze Valley, dryness was starting to stress rain fed winter wheat and rapeseed.

SOUTHEAST ASIA: Drier weather favored fieldwork across peninsular Thailand and Malaysia, while showers increased moisture supplies, but caused some rice harvest delays in Java.

AUSTRALIA: Mostly dry weather favored cotton and sorghum harvests, but tropical rains flooded northern sugarcane areas farther north.

SOUTH AMERICA: In central Argentina, late-week showers slowed summer crop harvesting, but mostly dry weather aided fieldwork across southern Brazil.

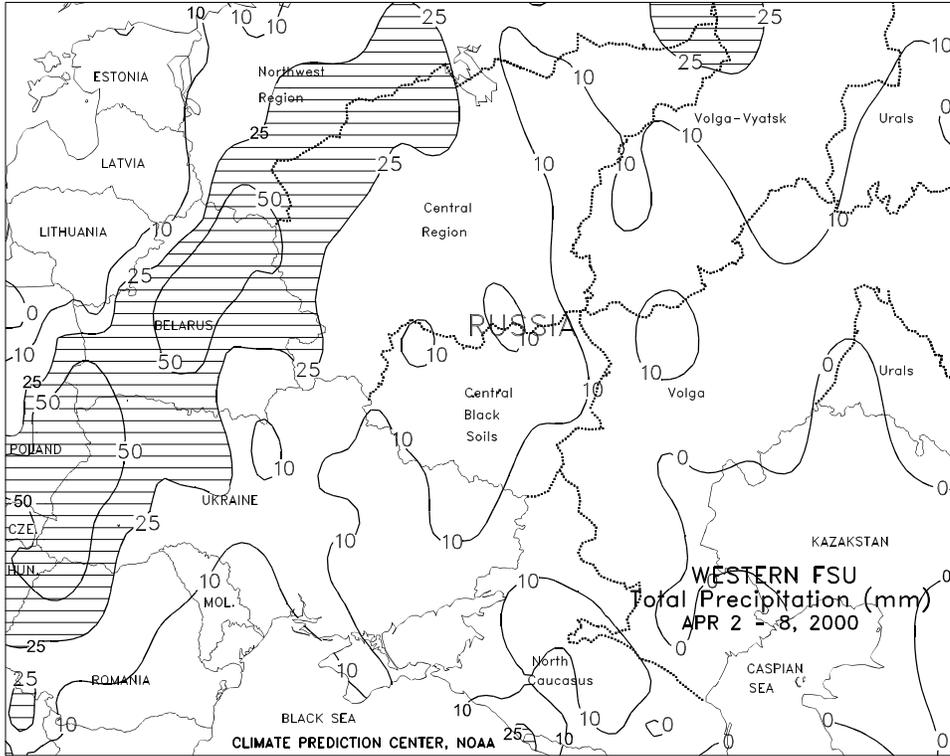
NORTHWESTERN AFRICA: A change in the weather pattern brought rainfall to drought stricken winter grains.

SOUTH AFRICA: Cool, showery weather continued across the corn belt, slowing summer crop drydown and maturation.



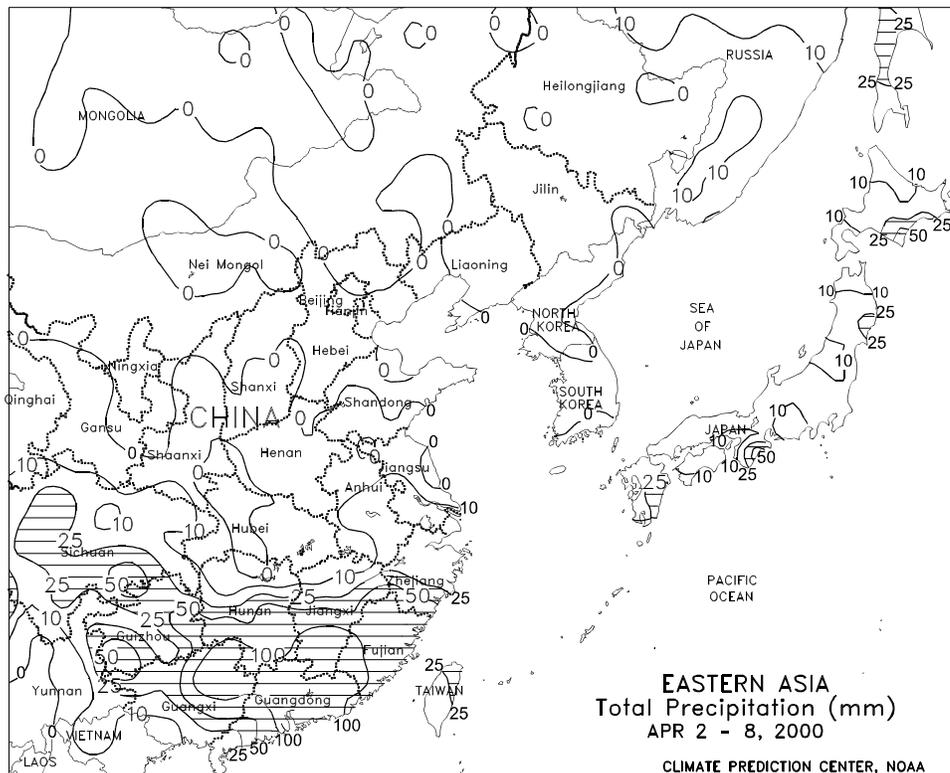
EUROPE

In England, rain and snow (12-45 mm of liquid equivalent) halted spring planting and caused isolated flooding, but increased topsoil moisture for tillering to jointing winter grains. Similarly, scattered precipitation (8-33 mm) across France maintained adequate moisture levels for developing winter grains and oilseeds. Farther south, timely rainfall (13-67 mm) helped germinating to emerging summer crops and jointing to reproducing winter grains across Portugal and much of Spain. More rain is needed, however, to improve subsoil moisture depleted by several consecutive months of dry weather. In Italy, widespread showers (10-47 mm) further improved moisture supplies for jointing winter grains and newly planted spring-sown crops. Farther east, heavier precipitation (17-72 mm) fell across the Balkans, Hungary, Slovakia, and southeastern Poland, maintaining adequate to locally excessive soil moisture for winter grains and oilseeds, and reportedly causing flooding in Hungary. In contrast, dry weather persisted across Romania, Bulgaria, and Greece, further reducing moisture supplies for tillering winter wheat. Similarly, dry weather prevailed from the Benelux countries, Germany, and Denmark eastward, helping spring fieldwork. On average, temperatures ranged from slightly below normal (0-2 degrees C below normal) in western Europe to slightly above normal (0-2 degrees C above normal) in eastern Europe, posing no problems for developing crops.



FSU-WESTERN

Two low pressure systems tracked northeastward through the western Ukraine and Belarus into northwestern Russia (Northwest and Central Regions) during the week, producing widespread, significant precipitation (15-50 mm or more). A brief period of moderate to heavy snow was associated with the second system as it moved through Belarus and northwestern Russia on April 6. Ahead of the storm systems, unseasonably mild air (daytime highs ranging from 19 - 27 degrees C) spread northward into southern Russia (North Caucasus, lower Volga Valley, southern Black Soils Region) and the eastern two-thirds of Ukraine, causing rapid greening of winter grains and further raising soil temperatures for spring grain emergence. Furthermore, several days of dry weather in these areas favored fieldwork, with scattered showers (6-15 mm) at week's end providing topsoil moisture for greening wheat and spring grain germination. Weekly temperatures averaged 4 to 7 degrees C above normal in Russia and 2 to 4 degrees C above normal in Belarus, the western Ukraine, and the Baltics. Daytime highs rose into the teens (degrees C) in northern Russia at week's end, rapidly diminishing snow cover.

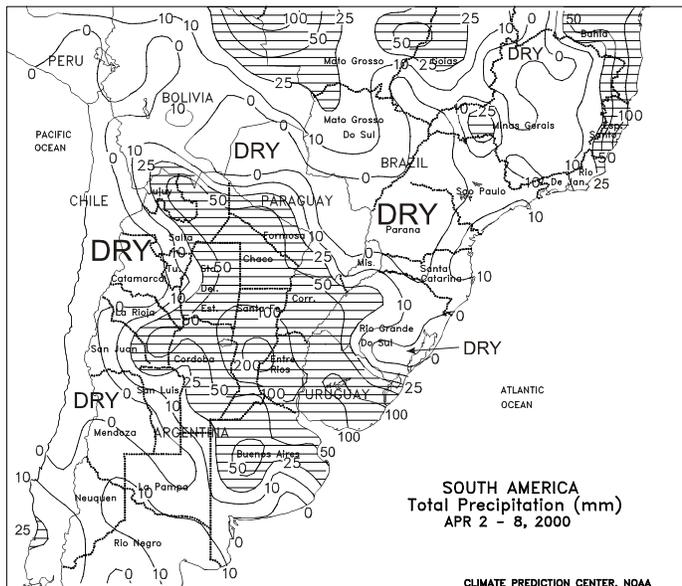
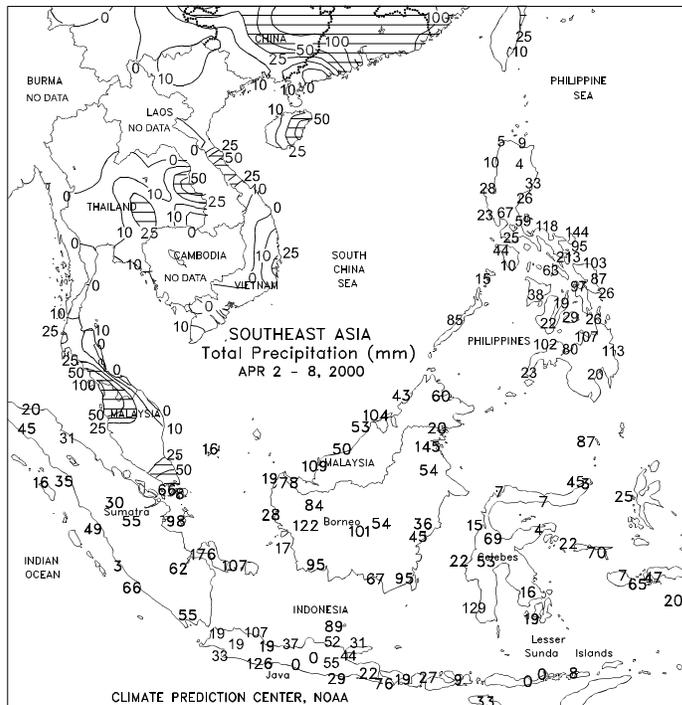


EASTERN ASIA

In the North China Plain, seasonably dry, warm weather continued to increase irrigation demands of vegetative winter wheat. Farther south in Hubei, southern Anhui, and Jiangsu, dryness has started to stress rain fed winter wheat and rapeseed. These areas are typically wetter than the North China Plain and have averaged between 30 to 40 percent of normal for the past 8 weeks. In Manchuria, seasonably warmer weather (average temperatures greater than 5 degrees C) has pushed northward into southern Heilongjiang, allowing spring wheat planting to commence. Across southern China, rain (50-150 mm) continued to boost moisture supplies for early double-crop rice and reproductive to filling winter grains. The heaviest rain (100-150 mm) occurred in Guangdong and eastern Guangxi possibly causing some flooding. Temperatures averaged 2 to 4 degrees C above normal across most of China.

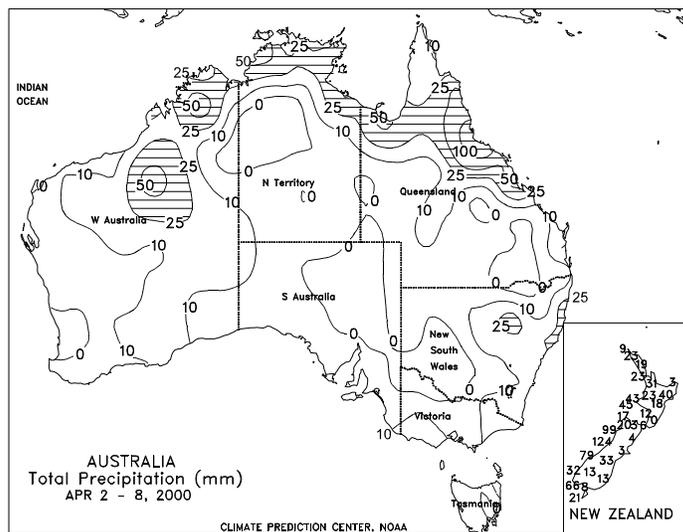
SOUTHEAST ASIA

In Java, Indonesia, moderate to heavy showers (30-70 mm or more) increased irrigation supplies, but caused minor harvest delays for main-season rice. Drier weather (10-30 mm) fell across peninsular Malaysia and Thailand, easing wetness and aiding oil palm and plantation crop fieldwork. Heavier showers (50-100 mm), however, were reported along the western coast of the peninsula near the Thailand and Malaysia border. Scattered showers (5-25 mm) fell across southeastern and eastern Thailand, while dry weather prevailed across the northwest. Mostly dry weather aided winter-spring rice harvesting in the Mekong River Delta of southern Vietnam. In the Philippines, heavy showers (70-200 mm) continued across southern Luzon, boosting moisture supplies, but causing local flooding. Unseasonably heavy showers (10-50 mm) fell in the western rice growing areas of the Philippines.



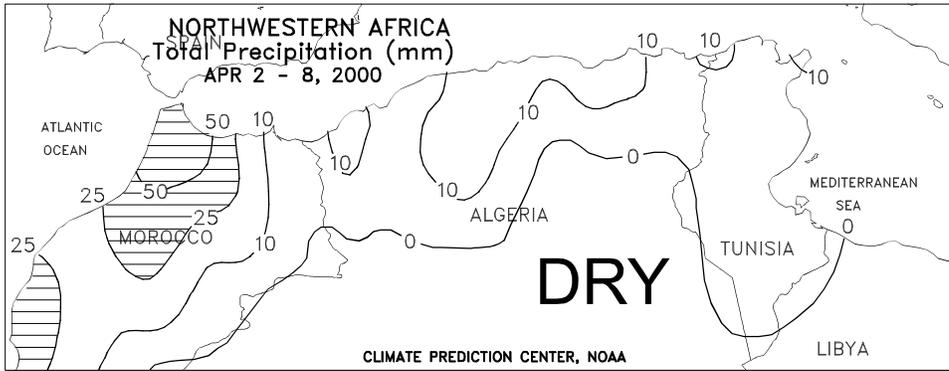
SOUTH AMERICA

In central Argentina, late-week showers (25-100 mm) slowed summer crop harvesting, but increased soil moisture for second-crop soybeans. The heaviest showers (100-200 mm) fell in south-central Santa Fe, causing some local flooding. Dry weather aided fieldwork across La Pampa and southern Buenos Aires. Moderate to heavy showers (40-80 mm) also slowed cotton maturation and harvesting across northern Argentina. According to reports as of April 7, national Argentine sunflower, corn, and rice were 94, 35, and 28 percent harvested, respectively. Corn was 89 percent harvested in Entre Rios, 80 percent in Santa Fe, 35 percent in Buenos Aires, and 27 percent in Cordoba. Sorghum was 12 percent harvested, while first-crop soybeans were 14 percent harvested. In the north, cotton was 35 percent harvested in Formosa and 12 percent in Chaco. In southern Brazil, mostly dry weather covered Parana, Sao Paulo, and Mato Grosso do Sul, aiding soybean harvesting. Light to moderate showers (10-50 mm) fell across Rio Grande do Sul and Mato Grosso, but did not significantly hamper fieldwork. Southern Paraguay also experienced favorably dry harvest weather. Widespread showers (40-80 mm) brought drought relief to Uruguay. Temperatures averaged near normal to slightly above normal in central Argentina and 2 to 4 degrees C above normal across northern Argentina, Paraguay, and southern Brazil. The warmer weather aided summer crop maturation and harvesting. According to reports as of April 7, Brazilian soybeans were 47 percent harvested compared to the 5-year average of 57 percent. In Parana, soybeans were 50 percent harvested compared to the 5-year average of 77 percent. In Rio Grande do Sul, harvesting was 5 percent done compared with the 5-year average of 28 percent.



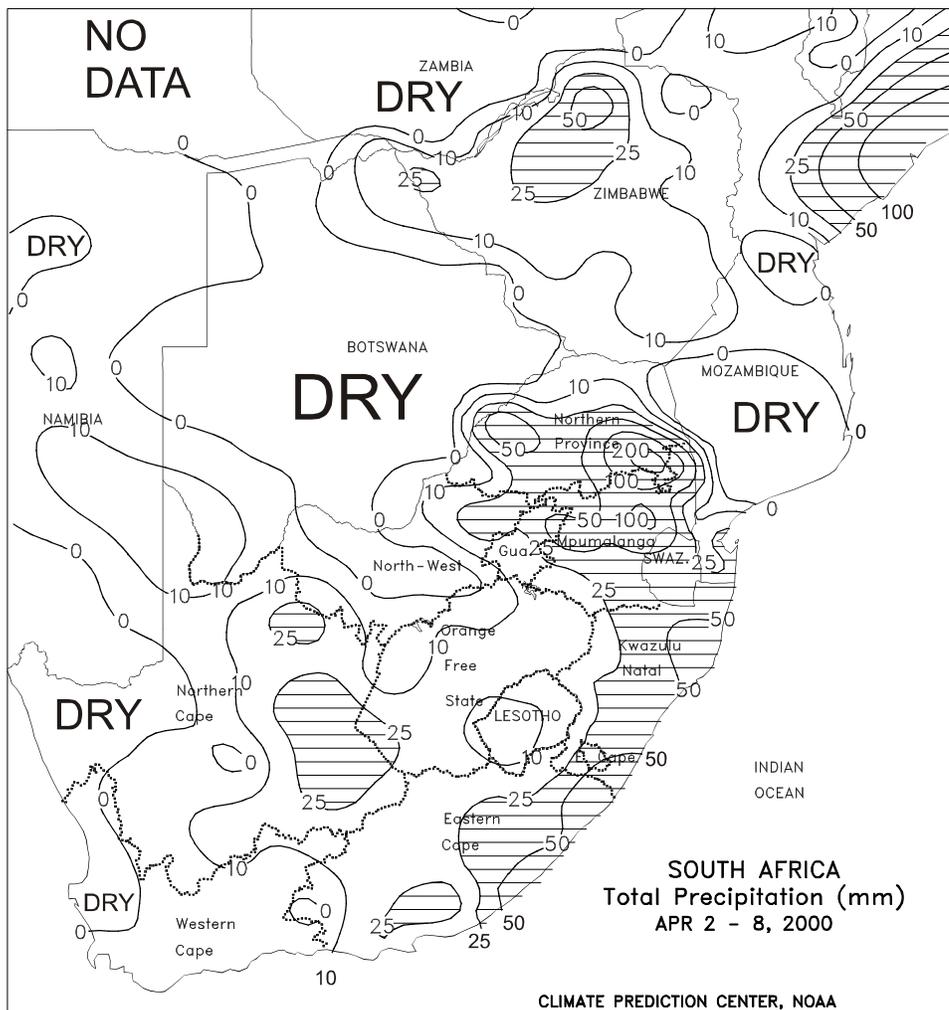
AUSTRALIA

Showers were generally scattered and light (10 mm or less in most areas) in the main sorghum and cotton areas of Queensland and northern New South Wales. Above-normal temperatures (highs in the lower 30's degrees C) that accompanied the general dryness favored late crop development. At midweek, heavier rain (25-50 mm) slowed summer crop drydown and hampered fieldwork in the southernmost growing areas of New South Wales. Farther north, heavy tropical rain (100-300 mm or more) fell along Queensland's northern coast, renewing flooding and likely causing some damage to sugarcane. Elsewhere, light rain (10 mm or less in most areas) returned to the winter grain belts of Western Australia and the southeast (South Australia, Victoria, and southern New South Wales), moistening topsoils for upcoming planting activities. In New Zealand, light to moderate rain (3-32 mm) fell in the main agricultural areas.



NORTHWESTERN AFRICA

A shift in the weather pattern brought rainfall to much of the winter grain areas. Weather systems moving in from the Atlantic Ocean brought moderate to heavy rainfall amounts (11-50 mm) to Morocco. Algeria and Tunisia had precipitation amounts between 1 to 19 mm. Lower temperatures (mid 20 degrees C) accompanied the rainfall in Morocco. The rest of the region continued to experience temperatures that averaged 1 to 2 degrees C above normal. The rainfall helped to stabilize conditions for winter grains throughout the region that had previously experienced several weeks of drought. Drought has accelerated winter grain development, and most crops are now in the filling stage. Crops remain in a high degree of stress and are still in danger of further yield reductions without continuous rainfall.



SOUTH AFRICA

Mild, showery weather continued across the region, keeping immature summer crops well watered, but slowing drydown of ripening crops. In the western corn belt (North West and northern Free State), rainfall averaged less than 10 mm, aiding crop drydown. Light to moderate showers (10-25 mm or more) fell elsewhere in the corn belt. Temperatures averaged near to below normal across the corn belt, with lows at a few locations in the east falling below 5 degrees C. Harvesting of corn and other summer crops typically begins by late April followed by wheat planting in May. Elsewhere, heavier rainfall (25-50 mm or more) covered crops in Eastern Cape Province and KwaZulu-Natal, including coastal sugarcane. Dry, seasonably warm weather favored crop development in Western Cape.

La Niña Update: March 10, 2000

The following is derived from the ENSO Advisory 2000/3 issued by the Climate Prediction Center/National Centers for Environmental Prediction (NCEP) on March 10, 2000.

Strong cold episode conditions (La Niña) continued in the tropical Pacific during February, as sea surface temperatures remained more than 1°C below normal throughout the equatorial Pacific between 160°E and 110°W (Fig. 1, bottom left panel). This anomaly pattern, which has persisted for the last several months and is similar to the pattern observed during the 1998-1999 northern winter, has been accompanied by stronger-than-normal low-level easterlies (Fig. 1, middle panels) and reduced precipitation (positive OLR anomalies, Fig. 1, right panels) over the central and western equatorial Pacific. Accompanying these conditions, convection has been enhanced throughout the Australasian sector. In addition, above-normal sea level pressure has dominated the eastern tropical Pacific and below-normal pressure has prevailed over Indonesia and Malaysia, which is consistent with the pattern of stronger-than-normal easterlies over the central and western equatorial Pacific (Fig. 1, middle panels) and with the pattern of tropical convection. The strength of this pressure pattern has given rise to the highest values of the equatorial SOI in the historical record dating back to January 1958.

The equatorial subsurface temperature structure has maintained a pattern that is typical of the mature phase of cold episodes, with positive subsurface temperature anomalies in the western equatorial Pacific and negative subsurface temperature anomalies in the eastern equatorial Pacific. During the last several months there has been a slow eastward expansion of the positive subsurface anomalies into the central Pacific, which indicates a slow build-up of heat in the equatorial region. However, this build-up has been confined to depths deeper than 100 m, with the upper 100 m remaining cooler than normal. Historically, the "building-up" phase of the ENSO cycle has lasted between one and two years before the subsequent development of warm (El Niño) episode conditions.

The present cold episode has had a pronounced effect on the mean upper-tropospheric global circulation. Upper-tropospheric (200-hPa) heights have

been below normal over most sections of the Tropics and above normal in the middle latitudes of both hemispheres for much of the period since late 1998. This global pattern, which represents a general poleward shift of the jet stream in both hemispheres and abnormally strong monsoons in the tropics and subtropics, has been associated with the very active 1999 Atlantic hurricane season, the above-average 1999 Sahel rainy season, and the recent very heavy rains and flooding observed in portions of Indonesia, Australia, South America and southern Africa.

The most recent NCEP coupled model forecasts and statistical model forecasts, and other available forecasts exhibit considerable spread in the evolution of the SSTs over the next 3-9 months. The NCEP coupled model forecast indicates that cold episode conditions will weaken during the next 3 months, followed by near-normal conditions during June-November. The NCEP statistical model forecast shows a rapid transition to warm episode conditions over the next 9 months. Other available coupled model and statistical predictions indicate the continuation of cold episode conditions through the end of 2000. The lack of any rapid evolution in the subsurface thermal structure and the persistence of low-level easterly anomalies over the central and western equatorial Pacific continues to support a slower decay of the cold episode conditions than is shown by either the NCEP coupled model or the NCEP statistical model. Thus, it is likely that cold episode conditions will gradually weaken over the next 6 months and that near-normal or slightly cooler than normal conditions in the tropical Pacific will be present at the end of the year.

Weekly updates for SST, 850-hPa wind, and OLR are available on the Climate Prediction Center homepage at:

<http://www.cpc.ncep.noaa.gov>

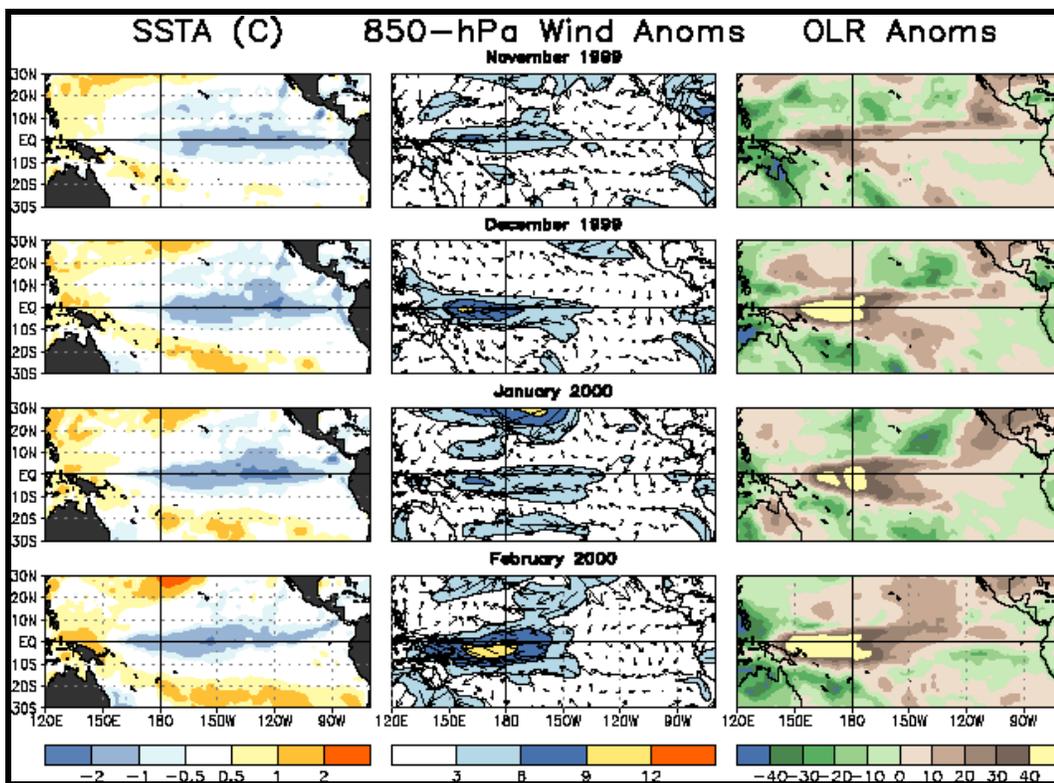


Figure 1. Anomalous sea surface temperatures (left hand panels), 850-hPa vector wind (center panels) and outgoing longwave radiation (right hand panels) for November 1999 through February 2000. SST departures from average SST are computed based on the 1961-1990 adjusted OI climatology (Smith and Reynolds 1998, *J. Climate*, 11, 3320-3323). OLR and 850-hPa vector wind departures are computed with respect to the 1979-1995 base period means. Contour interval is 0.5°C, 3 m s⁻¹, and 15 W m⁻², respectively.

The *Weekly Weather and Crop Bulletin* (ISSN 0043-1974) is published weekly and jointly prepared by the U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA) and the U.S. Department of Agriculture (USDA). Publication began in 1872 as the *Weekly Weather Chronicle*. It is issued under general authority of the Act of January 12, 1895 (44-USC 213), 53rd Congress, 3rd Session. NOAA is responsible for managing, printing, and distributing the bulletin. The contents may be reprinted freely, with proper credit.

Annual subscriptions: domestic first class \$45, foreign \$55 (in U.S. funds by international money order or check drawn on U.S. bank) payable to **U.S. Department of Commerce, NOAA**. POSTMASTER: Send address changes to: **Climate Prediction Center, W/NP52, Attn: *Weekly Weather and Crop Bulletin*, Room 605, WWBG, 5200 Auth Road, Camp Springs, MD 20746-4304**. Order subscriptions from the office and address listed above. First-class postage paid at Washington, DC, and other mailing offices. Correspondence to the meteorologists should be directed to: **Weekly Weather and Crop Bulletin, NOAA/USDA, Joint Agricultural Weather Facility, USDA South Building, Room 5844, Washington, DC 20250**. Internet URL: <http://www.usda.gov/oce/waob/jawf>; E-mail address: wwcb@jawsrv.wwb.noaa.gov

U.S. DEPARTMENT OF COMMERCE

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**
Subscriptions . . . **John Kopman** (301) 763-8000 ext 7534
. fax: (301) 763-8125

U.S. DEPARTMENT OF AGRICULTURE

Economic Research Service
E.R.S. Editor **Sharon Lee**
National Agricultural Statistics Service
Agricultural Statistician **Mark Miller** (202) 720-7621
State Summaries Editor **Delores Thomas** (202) 720-8033
World Agricultural Outlook Board
International Editor **Tom Puterbaugh**
U.S. Editor **Brad Rippey** (202) 720-2397
Agricultural Weather Analysts **Mark Brusberg**
. . . . **Bob Stefanski, Brian Morris, and Harlan Shannon**
Stoneville **Elizabeth Lord**

(Continued from front cover)

April 4-5 and 8-9, bringing short-lived cold episodes. However, the cold outbreaks did not have a major effect on the **central and southern Plains'** jointing winter wheat or the **Southeast's** blooming fruit trees. Weekly temperatures averaged as much as 5°F below normal in the **South-Central States**, and were generally within 3 °F of normal in the **Southeast**. Mild weather (temperatures up to 9°F above normal) lingered in the **Northeast**, while warm, mostly dry weather prevailed in the **West**. In the **Northwest**, warmth (3 to 7°F above normal) promoted winter wheat development. Weekly readings ranged from 4 to 14°F above normal in most of **California**, **Arizona**, and the **Great Basin**, spurring fieldwork and crop development.

Across the **South**, weekly rainfall exceeded 4 inches in many areas from **central Louisiana** to the **southern Appalachians**. April 1-8 rainfall reached 6.38 inches in **Jackson, MS** and 4.29 inches in **Houston, TX**. **Jackson** recently experienced their lowest December-February rainfall on record (5.93 inches, or 37 percent of normal), followed by a drier-than-normal March (4.41 inches, or 76 percent). **Houston** completed their driest August-March period on record (10.86 inches, or 42 percent of normal). However, mostly dry weather persisted across **central and southern Florida** and returned to the remainder of the **lower Southeast**, including **northern Florida** and **southern Georgia**. Through week's end, year-to-date rainfall in **Florida** stood at 2.04 inches (22 percent of normal) in **Orlando**, 2.78 inches (33 percent) in **Tampa**, and 7.39 inches (42 percent) in **Tallahassee**. In contrast, **Birmingham, AL** netted 6.18 inches during the first 8 days of April, boosting their year-to-date sum to 24.74 inches (141 percent of normal).

Fleeting shots of cold air reached the **central and southern Plains** on April 4 and 8. In **Kansas**, where 60 percent of the winter wheat was jointing on April 9, according to USDA's National Agricultural Statistics Service, temperatures twice fell into the lower to middle 20's across western and northern areas. Lows on the cold mornings dipped to 21 and 22°F in **Hill City** and 23°F (both days) in **Garden City**. Farther south, April 4 and 8 lows included 25 and 28 °F in **Gage, OK** and 32 and 27°F in **Dalhart, TX**. Winter wheat was 89 percent jointing and 10 percent headed in **Oklahoma**, and 20 percent headed in **Texas**. Meanwhile in **Nebraska**, where wheat was mostly tillering, lows in **North Platte**

fell to 14 and 17°F on Tuesday and Saturday, respectively. Between cold snaps, an equally brief hot spell set more than a dozen daily-record highs on April 5. **Concordia, KS** noted a record high of 92 °F on Wednesday, just a day after a low of 27°F. **Concordia** then reported a low of 25 °F on April 8. Farther north, record highs on Wednesday included 86 °F in **Des Moines, IA**, 88°F in **Atlantic, IA**, and 89°F in **Lincoln, NE**. Two days later, **Del Rio, TX** posted a daily-record high of 101 °F.

In the **Southeast**, daily-record lows on April 5 included 30 °F in **Jackson, TN** and 32°F in **Macon, GA**. A day later in **Florida**, record lows were noted in **Melbourne** (42°F) and **Orlando** (41°F). The second surge of cold air arrived at week's end, and by Sunday morning, April 9, lows of 30 °F in **Meridian, MS** and 32°F in **Macon** were among nearly 20 daily-record lows. In contrast, the first half of the week featured nearly three dozen daily-record highs in the **West**. On Sunday, **Ukiah, CA** logged a high of 92 °F, their second consecutive daily record. A day later, daily-record highs included 91 °F in **Fresno, CA** and 86°F in **Medford, OR**.

Rain and snow spread across the **Corn Belt** on April 7, providing much-needed topsoil moisture but having little effect on long-term precipitation deficits. April 1-8 precipitation totaled 0.29 inch in **Moline, IL**, leaving their July 1, 1999 - April 8, 2000, total at 18.85 inches (68 percent of normal). Similarly, **Cedar Rapids, IA** received 0.28 during the first 8 days of April, leaving their total since July 1 at 13.92 inches (60 percent of normal). Farther north, significant snow blanketed a few areas from the **Dakotas** to **Lower Michigan**. Storm-total snowfall reached 11.0 inches in **Huron, SD**, 6.6 inches in **Milwaukee, WI**, and 4.9 inches in **Houghton Lake, MI**. At week's end, rain changed to snow across much of the **Northeast**.

Near- to slightly below-normal temperatures prevailed in **Alaska**, following the previous week's cold snap. Weekly readings were as much as 5°F below normal across interior sections. Significant precipitation was confined to **southeastern Alaska**. Meanwhile, most of **Hawaii** experienced a second consecutive week of drought-easing showers.

Climate Prediction Center, W/NP52
Attn: *Weekly Weather & Crop*
Bulletin
NOAA/NWS/NCEP/CPC
5200 Auth Road
WWB, Room 605
Camp Springs, MD 20746-4304

WEEKLY NEWS BULLETIN FIRST CLASS

FIRST CLASS MAIL
POSTAGE & FEES PAID
NOAA
PERMIT NO. G-19

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300