

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

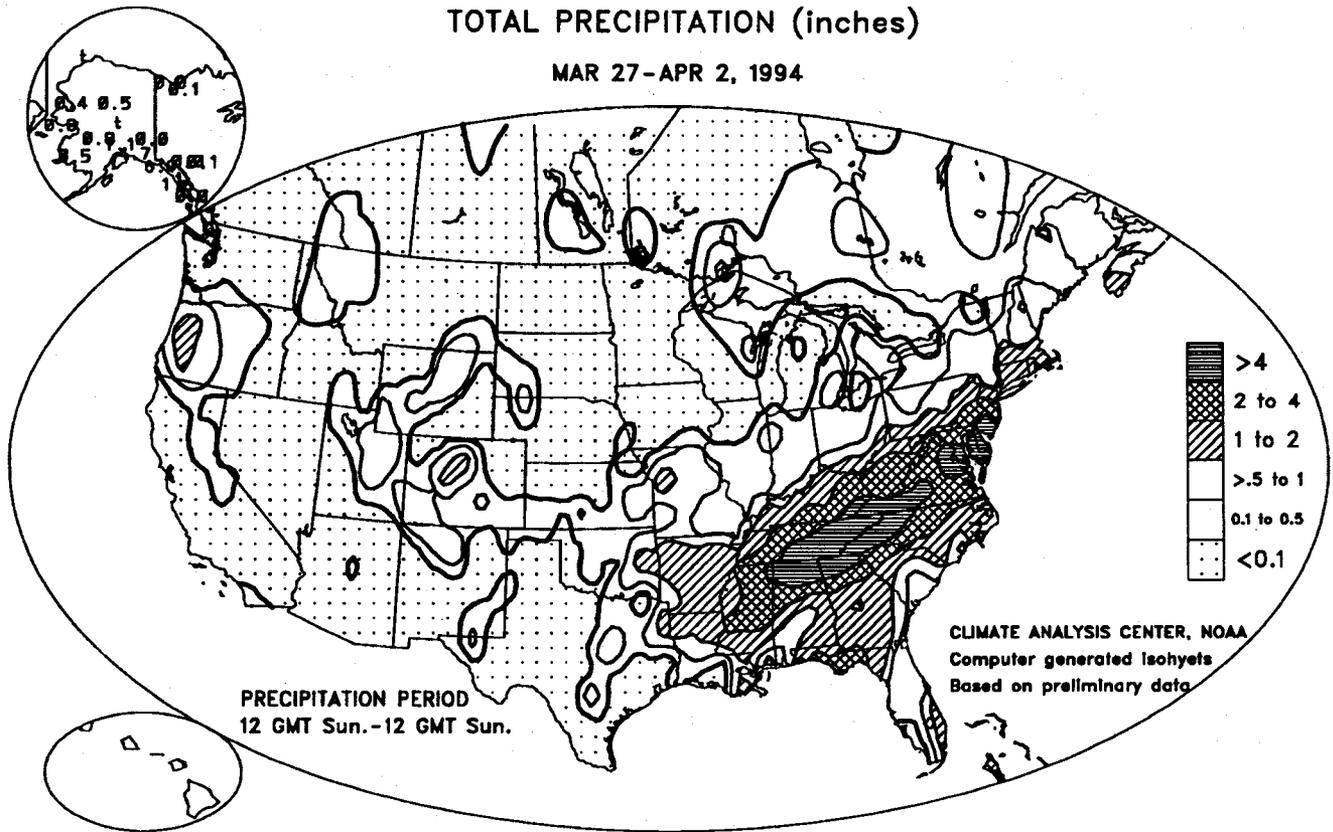
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Washington, D.C.

April 5, 1994

TOTAL PRECIPITATION (inches)

MAR 27 - APR 2, 1994



HIGHLIGHTS

March 27 - April 2, 1994

A fearsome spring storm--which caused flash flooding from the Tennessee Valley to the Middle Atlantic region and produced a deadly tornado outbreak in the Southeast--swept off the Atlantic seaboard early in the week, followed by cool, tranquil weather east of the Rockies. The storm spawned 31 tornadoes on March 27, including 10 in Georgia, 7 in South Carolina and North Carolina, and 6 in Alabama. With more than 40 fatalities attributed to the tornadoes, it was the United States' deadliest outbreak since an upper Ohio Valley tornado swarm on May 31, 1985. Farther north, copious rains continued in the Tennessee Valley and spread northeastward. Early-week rainfall approached 7 inches in Tennessee at Knoxville and Chattanooga. Asheville, NC received in excess of 5 inches, and locations such as Washington, DC and Atlantic City, NJ measured

(Continued to p. 8)

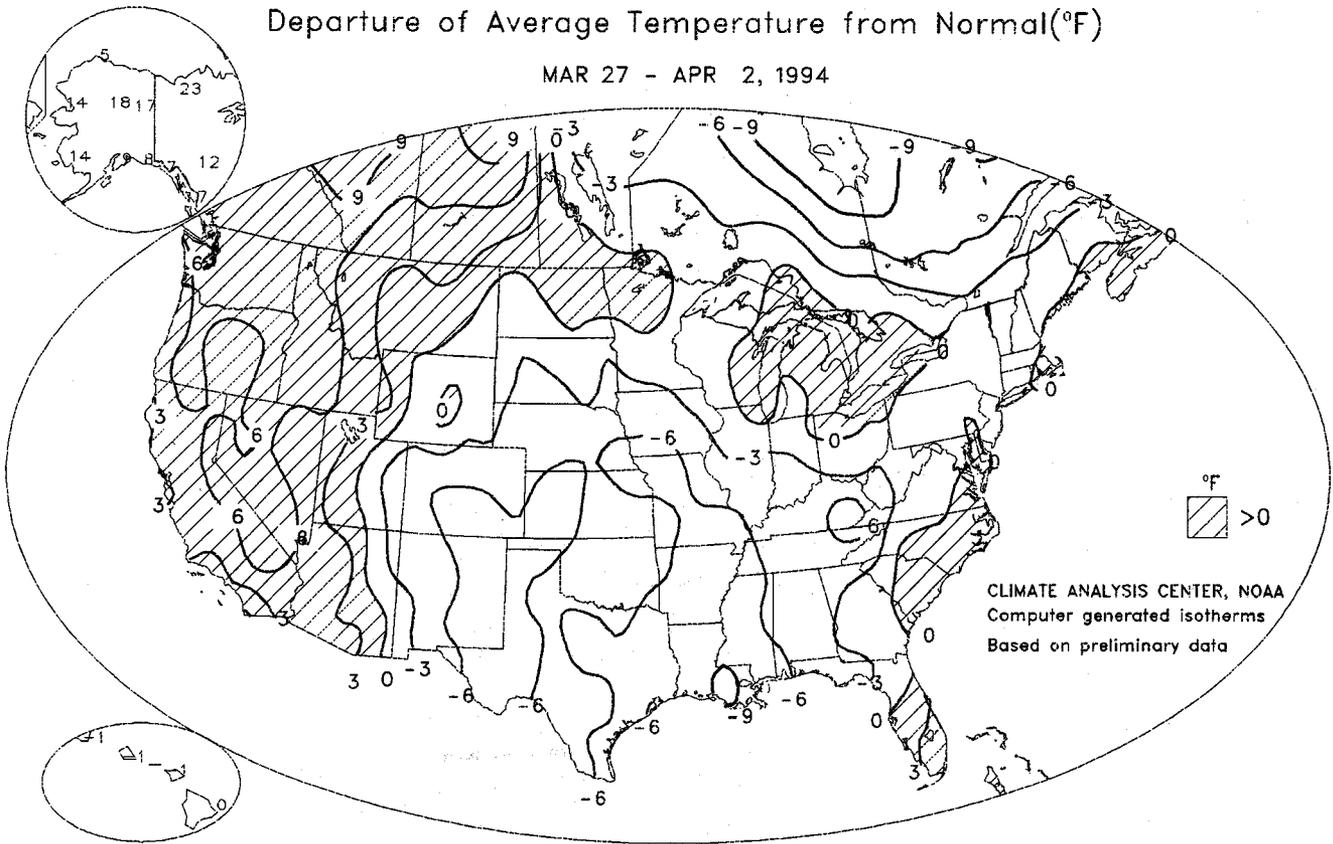
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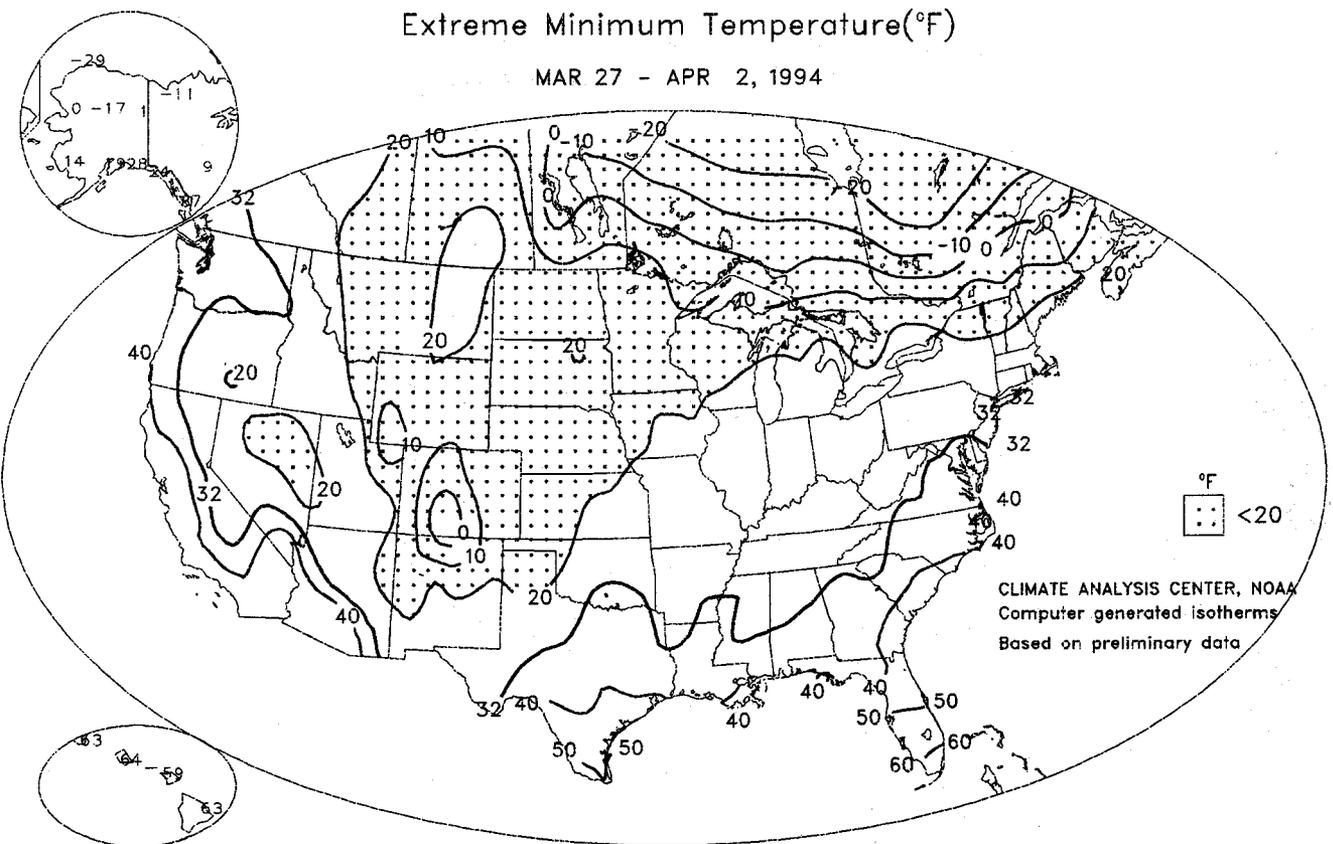
Departure of Average Temperature from Normal(°F)

MAR 27 - APR 2, 1994



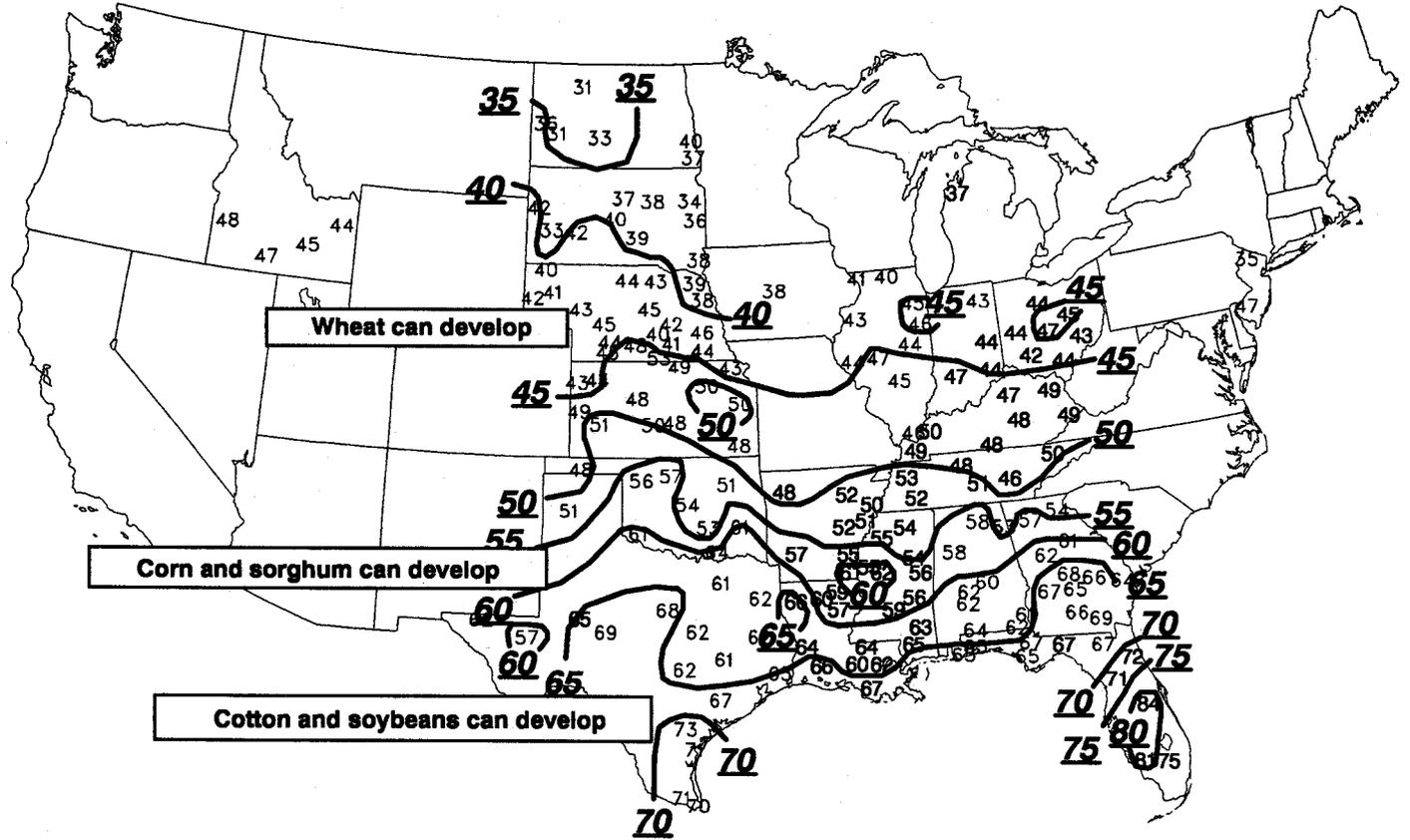
Extreme Minimum Temperature(°F)

MAR 27 - APR 2, 1994



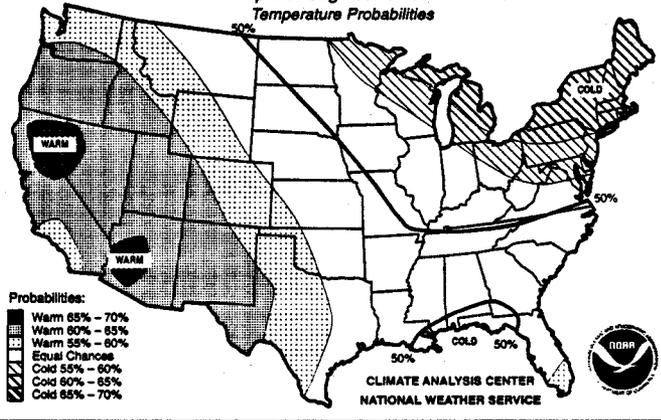
Average Soil Temperature(°F 4-Inch Bare)

March 27 - April 2, 1994

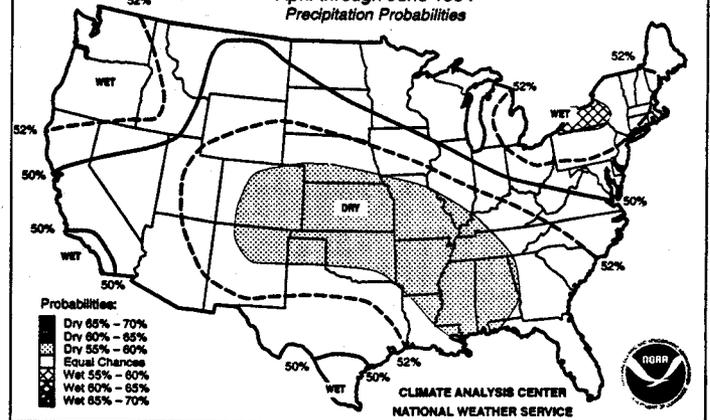


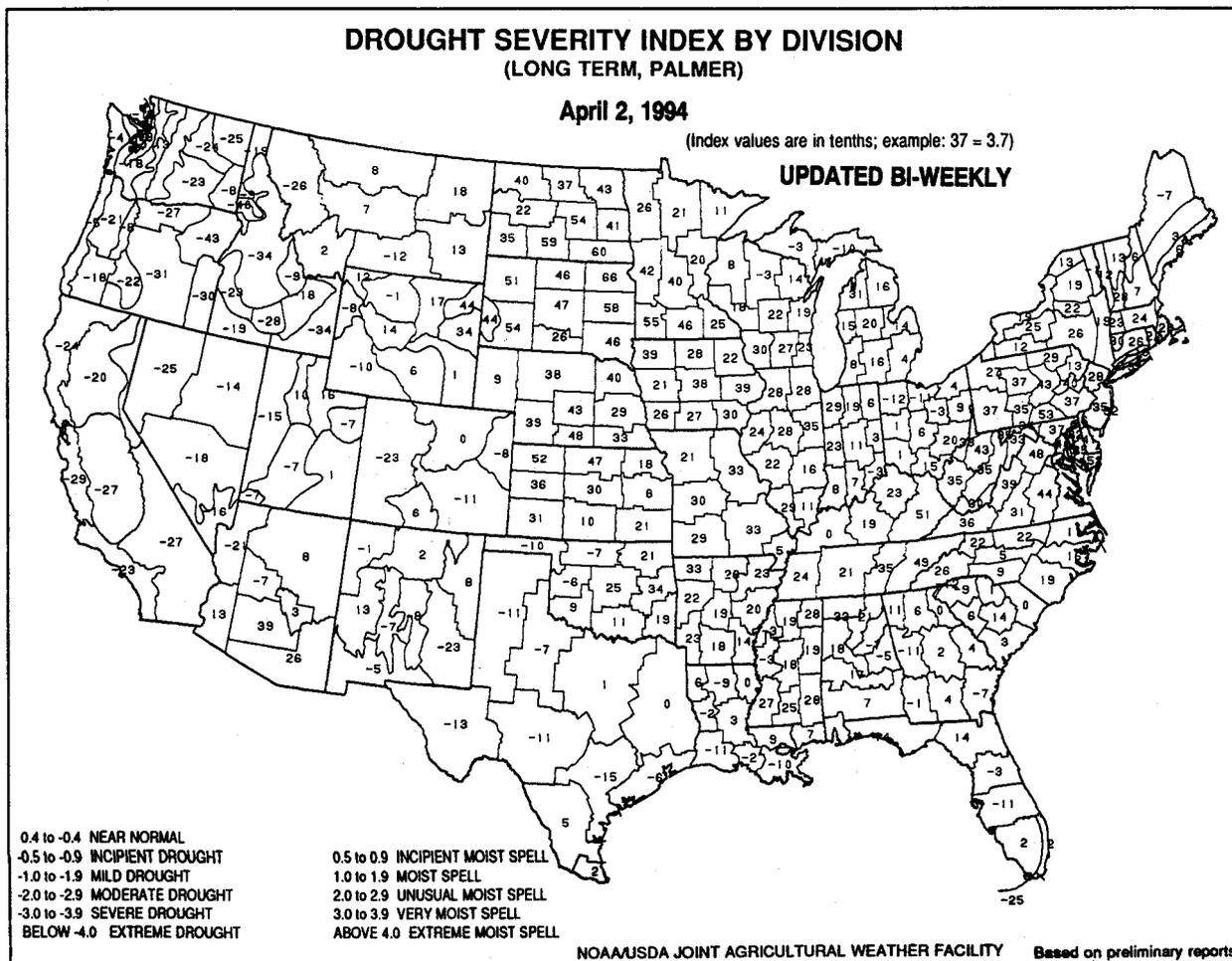
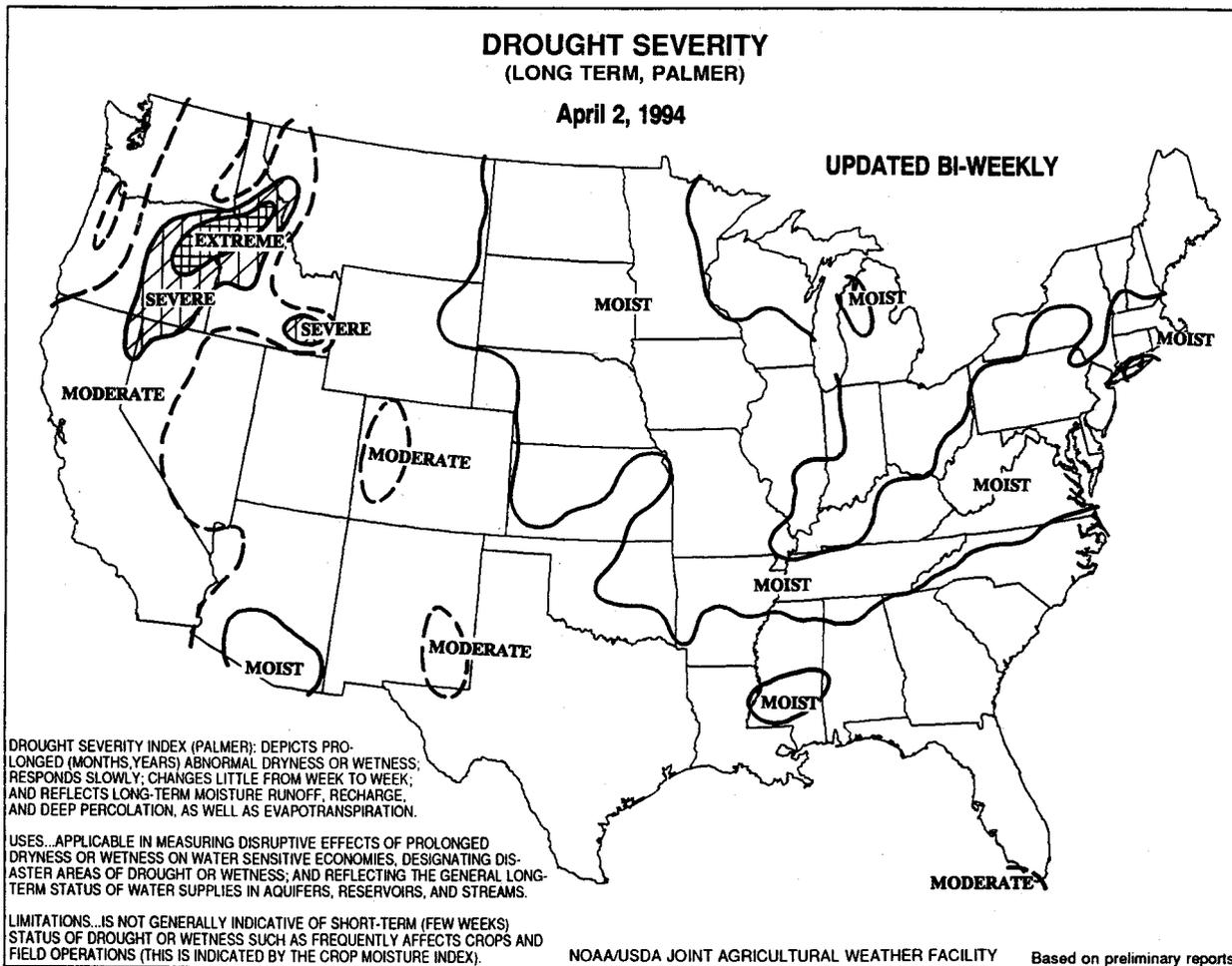
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports

THREE-MONTHLY WEATHER OUTLOOK April through June 1994 Temperature Probabilities



THREE-MONTHLY WEATHER OUTLOOK April through June 1994 Precipitation Probabilities





National Weather Data for Selected Cities

Weather Data for the Week Ending April 2, 1994

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS							
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE	MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																			.01 INCH OR MORE	.50 INCH OR MORE		
AL BIRMINGHAM	66	40	80	30	53	-5	3.2	1.9	2.4	7.6	115	17.5	106	91	43	0	0	1	3	2		
MOBILE	70	43	82	35	56	-3	3.3	1.8	4.4	4.3	64	12.2	72	95	44	0	0	0	2	1		
MONTGOMERY	70	43	82	35	56	-3	3.3	1.8	4.4	4.3	64	12.2	72	95	44	0	0	0	2	1		
AK ANCHORAGE	43	31	48	23	37	7	4.4	1.2	1.6	213	2.5	106	86	59	0	0	0	0	0	0		
BARROW	4	-15	16	-29	-5	6	4.4	1.0	1.1	44	1.2	54	78	71	0	0	0	0	0	0		
FAIRBANKS	51	20	57	1	36	16	4.4	1.1	1.2	44	1.0	74	86	38	0	0	0	0	0	0		
JUNEAU	47	35	50	29	41	5	1.0	1.3	1.5	5.4	155	14.4	122	100	69	0	0	0	0	0		
KODIAK	42	35	47	28	39	3	3.8	2.8	1.4	10.9	221	27.0	153	96	75	0	0	0	0	0		
NOME	34	23	39	9	28	17	4.4	1.2	1.2	212	2.5	126	90	71	0	0	0	0	0	0		
AZ PHOENIX	81	54	87	47	68	2	0.0	1.2	1.0	1.4	146	2.0	89	50	15	0	0	0	0	0		
PRESCOTT	67	35	72	27	51	6	0.0	1.3	1.0	1.5	24	1.8	36	62	17	0	0	0	0	0		
TUCSON	81	49	88	43	65	3	0.0	1.1	1.0	1.1	156	2.2	96	54	12	0	0	0	0	0		
YUMA	90	59	94	50	75	7	0.0	1.1	1.0	1.1	46	4.4	46	33	12	4	0	0	0	0		
AR FORT SMITH	65	39	78	31	52	-4	1.2	1.3	1.2	4.1	97	11.5	132	77	27	0	0	0	0	0		
LITTLE ROCK	63	41	77	37	52	-6	1.1	1.1	1.1	4.6	88	13.1	111	74	37	0	0	0	0	0		
CA BAKERSFIELD	79	47	84	45	63	4	0.0	1.2	1.0	1.0	89	2.9	96	42	18	0	0	0	0	0		
BUREKA	58	46	62	42	52	3	1.1	1.9	1.1	2.1	37	14.3	87	90	42	0	0	0	0	0		
FRESNO	78	47	82	43	63	5	0.0	1.4	1.0	1.5	27	3.7	64	86	20	0	0	0	0	0		
LOS ANGELES	66	54	69	50	60	1	0.0	1.3	1.0	1.0	49	5.7	82	91	24	0	0	0	0	0		
REDDING	74	45	83	37	60	6	0.0	1.8	1.9	4.2	11.7	77	84	29	0	0	0	0	0	0		
SACRAMENTO	73	45	78	42	59	4	0.0	1.5	1.0	1.0	0	4.6	50	93	34	0	0	0	0	0		
SAN DIEGO	65	54	68	49	60	-1	0.0	1.3	1.0	3.7	199	7.1	137	89	30	0	0	0	0	0		
SAN FRANCISCO	66	49	73	45	57	3	0.0	1.6	1.0	1.2	8	8.0	75	92	37	0	0	0	0	0		
CO DENVER	53	26	67	20	40	-3	1.5	1.1	1.3	1.9	66	2.3	93	74	24	0	0	0	0	0		
GRAND JUNCTION	58	28	68	16	43	-6	1.8	1.5	1.6	1.0	89	1.8	81	68	17	0	0	0	0	0		
PUEBLO	54	21	76	9	38	-8	1.5	1.3	1.4	1.3	152	2.0	135	82	29	0	0	0	0	0		
CT BRIDGEPORT	50	37	61	32	44	1	2.0	1.1	1.0	5.7	143	14.0	137	90	58	0	0	0	0	0		
HARTFORD	50	31	59	26	40	-2	1.0	1.1	1.4	5.7	147	14.9	142	90	51	0	0	0	0	0		
DC WASHINGTON	58	41	70	39	50	-2	3.7	3.0	1.9	8.5	254	17.0	193	92	51	0	0	0	0	0		
FL APALACHICOLA	72	50	80	43	61	-2	1.1	1.2	1.0	5.3	118	14.2	117	94	49	2	0	0	0	0		
DAYTONA BEACH	79	58	92	46	68	2	1.2	1.4	1.2	3.4	112	11.7	131	94	49	2	0	0	0	0		
JACKSONVILLE	75	51	89	41	63	-2	1.2	1.5	1.1	2.1	56	9.6	89	90	40	0	0	0	0	0		
KEY WEST	82	71	88	62	77	1	1.0	1.4	1.3	1.9	4.9	8.8	86	65	0	0	0	0	0	0		
MIAMI	84	70	88	63	77	4	1.5	1.9	1.5	1.9	76	11.2	169	85	59	0	0	0	0	0		
ORLANDO	81	59	92	47	70	1	1.2	1.4	1.2	1.2	36	8.8	101	90	49	2	0	0	0	0		
TALLAHASSEE	74	45	83	33	60	-3	2.3	1.1	2.3	11.8	181	22.7	135	92	42	0	0	0	0	0		
TAMPA	80	58	87	46	69	0	1.2	1.3	1.2	1.7	21	4.8	59	89	44	0	0	0	0	0		
WEST PALM BEACH	82	68	87	59	75	2	1.9	1.3	1.9	2.6	84	11.8	139	87	59	0	0	0	0	0		
GA ATLANTA	68	44	86	37	56	-1	1.1	1.1	1.7	5.8	95	14.6	94	85	44	0	0	0	0	0		
AUGUSTA	73	45	88	36	59	0	1.1	1.1	1.7	6.4	131	14.6	110	93	37	0	0	0	0	0		
MACON	73	45	88	33	59	-2	1.5	1.6	1.5	6.1	121	14.4	100	96	39	0	0	0	0	0		
SAVANNAH	75	51	86	43	63	0	1.6	1.2	1.5	3.8	94	9.2	85	85	39	0	0	0	0	0		
HI HILO	79	64	81	63	72	-1	1.6	1.0	1.0	18.1	121	54.0	154	93	65	0	0	0	0	0		
HONOLULU	80	66	83	64	73	-2	0.0	1.5	1.0	3.2	137	10.6	131	82	61	0	0	0	0	0		
KAHULUI	81	63	84	59	72	-1	1.0	1.5	1.1	3.1	109	5.5	55	90	67	0	0	0	0	0		
LIHUE	77	66	80	63	72	-1	1.1	1.9	1.1	2.2	50	12.9	95	84	66	0	0	0	0	0		
ID BOISE	67	37	73	28	52	7	1.0	1.3	1.2	1.2	12	2.4	61	57	17	0	0	0	0	0		
LEWISTON	69	40	73	36	54	8	0.0	1.3	1.0	1.3	24	1.9	57	64	27	0	0	0	0	0		
POCATELLO	61	26	67	19	43	3	1.1	1.3	1.1	1.2	12	2.1	62	76	25	0	0	0	0	0		
IL CHICAGO	53	32	70	24	43	0	1.1	1.7	1.1	1.1	37	5.7	98	82	42	0	0	0	0	0		
MOLINE	53	29	72	22	41	-2	1.0	1.8	1.0	1.6	20	4.3	72	88	40	0	0	0	0	0		
PEORIA	55	31	72	23	43	-2	1.1	1.7	1.1	1.8	25	3.7	60	93	47	0	0	0	0	0		
QUINCY	52	31	70	25	42	-5	1.3	1.5	1.3	1.7	22	1.4	23	79	40	0	0	0	0	0		
ROCKFORD	52	29	67	22	41	0	1.0	1.7	1.0	1.2	43	5.2	101	88	36	0	0	0	0	0		
SPRINGFIELD	56	33	71	25	44	-2	1.4	1.4	1.4	1.7	49	3.9	57	85	42	0	0	0	0	0		
IN EVANSVILLE	57	37	74	27	47	-6	1.1	1.1	1.0	1.9	36	7.4	63	86	43	0	0	0	0	0		
FORT WAYNE	55	32	75	25	44	1	1.2	1.5	1.1	1.7	55	5.3	76	91	44	0	0	0	0	0		
INDIANAPOLIS	55	32	73	26	44	-3	1.1	1.8	1.0	1.0	23	5.0	57	86	40	0	0	0	0	0		
SOUTH BEND	52	30	76	23	41	-2	1.1	1.7	1.1	1.9	26	4.8	64	89	46	0	0	0	0	0		
IA DES MOINES	51	26	70	21	39	-5	1.1	1.6	1.1	1.2	7	3.1	71	86	32	0	0	0	0	0		
SIOUX CITY	52	24	73	16	38	-4	1.0	1.5	1.0	1.0	2	1.8	54	87	35	0	0	0	0	0		
WATERLOO	51	26	69	20	39	-2	1.0	1.6	1.0	1.2	6	2.3	53	90	34	0	0	0	0	0		
KS CONCORDIA	56	28	74	19	42	-5	1.0	1.5	1.0	1.1	3	1.9	24	76	27	0	0	0	0	0		
DODGE CITY	59	25	78	15	42	-6	1.4	1.0	1.4	1.5	27	1.3	46	73	22	0	0	0	0	0		
GOODLAND	55	20	75	11	38	-6	1.0	1.2	1.0	1.3	22	1.7	35	74	24	0	0	0	0	0		
TOPSKA	57	29	74	23	43	-6	1.1	1.5	1.1	1.3	12	1.6	34	80	29	0	0	0	0	0		
WICHITA	60	32	75	25	46	-6	1.2	1.5	1.2	1.4	14	1.7	17	85	32	0	0	0	0	0		
KY BOWLING GREEN	58	38	73	29	48	-4	2.2	1.1	1.8	7.3	135	19.1	143	91	50	0	0	0	0	0		
LEXINGTON	54	37	68	29	45	-5	1.6	1.6	1.1	6.8	146	15.7	147	91	53	0	0	0	0	0		
LOUISVILLE	57	37	74	30	47	-4	1.8	1.2	1.7	3.9	79	11.0	98	89	46	0	0	0	0	0		
LA BATON ROUGE	69	42	80	35	56	-10	1.2	1.0	1.2	3.7	72	13.3	85	95	43	0	0	0	0	0		
LAKE CHARLES	70	44	75	36	57	-7	1.1	1.6	1.1	2.0	56	7.3	63	92	41	0	0	0	0	0		
NEW ORLEANS	70	45	82	38	57	-8	1.7	1.3	1.6	4.8	93	8.6	53	86	40	0	0	0	0	0		
SHERVEPORT	68	39	77	32	53	-8	1.2	1.3	1.2	3.7	86	12.3	97	88	39	0	0	0	0	0		

Based on 1961-90 normals.

Weather Data for the Week Ending April 2, 1994

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS							
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE	MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																			.01 INCH OR MORE	.50 INCH OR MORE		
ME CARIBOU	36	21	40	4	28	-3	.1	-.4	.1	2.5	95	7.5	109	73	40	0	0	7	2	0	0	
PORTLAND	45	30	52	25	37	-1	.7	-.2	.7	6.7	170	13.4	124	82	48	0	0	5	4	2	1	
MD BALTIMORE	56	39	68	33	48	-1	3.0	2.3	1.2	8.6	240	17.3	177	93	52	0	0	0	0	4	3	
SALISBURY	60	40	69	34	50	1	2.8	1.9	.9	8.9	202	17.5	152	96	56	0	0	0	0	5	3	
MA BOSTON	49	36	58	34	42	-1	1.3	.5	.6	7.5	192	15.7	141	83	54	0	0	0	0	4	2	
CHATHAM	46	37	53	33	42	1	2.0	1.1	1.0	7.4	181	16.6	142	93	76	0	0	0	0	4	1	
MI ALPENA	47	27	64	20	37	3	.2	-.4	.1	1.3	57	4.3	82	90	49	0	0	0	0	3	0	
DETROIT	54	33	73	25	43	2	.5	-.2	.3	2.3	85	6.5	104	86	45	0	0	2	3	0	0	
FLINT	50	29	71	25	40	0	.3	-.3	.2	1.7	73	4.3	87	87	46	0	0	0	0	5	0	
GRAND RAPIDS	49	29	69	26	39	-1	.1	-.6	.1	1.5	51	5.8	96	86	46	0	0	6	2	0	0	
HOGGETON LAKE	47	26	62	17	37	2	.1	-.4	.1	1.6	73	4.9	101	89	48	0	0	0	0	7	0	
LANSING	50	27	71	24	39	0	.3	-.4	.1	2.0	82	4.9	97	92	49	0	0	0	0	7	0	
MARQUETTE	38	19	50	9	29	-1	.3	-.4	.2	2.3	77	4.4	64	91	45	0	0	0	0	3	0	
MUSKEGON	45	29	55	24	37	-1	.7	-.7	.7	1.3	50	6.7	102	90	52	0	0	0	0	5	0	
SAULT ST. MARIE	39	23	44	15	31	1	.1	-.5	.0	1.6	63	4.7	71	90	39	0	0	0	0	7	0	
MN ALEXANDRIA	44	25	64	19	34	0	.7	-.4	.7	.5	31	1.4	46	93	43	0	0	0	0	7	0	
DULUTH	39	23	51	10	31	0	.1	-.4	.0	1.1	56	3.6	89	88	44	0	0	0	0	7	0	
INT'L FALLS	39	24	50	18	32	2	.1	-.2	.0	.6	55	1.4	54	85	39	0	0	0	0	7	0	
MINNEAPOLIS	48	27	63	19	37	-1	.7	-.5	.7	.3	15	2.3	59	83	42	0	0	0	0	7	0	
ROCHESTER	46	23	63	15	35	-2	.1	-.4	.1	.3	16	2.2	65	90	45	0	0	0	0	7	0	
MS GREENWOOD	65	39	76	32	52	-7	1.6	.3	.8	5.6	92	12.5	80	94	44	0	0	2	2	2	2	
JACKSON	66	38	77	31	52	-8	1.2	-.2	1.2	5.6	89	20.1	121	94	42	0	0	2	1	1	1	
MERIDIAN	70	40	85	31	55	-5	1.4	-.1	.9	6.2	87	21.0	118	94	37	0	0	1	3	1	1	
MO CAPE GIRARDEAU	56	37	71	27	47	-6	.1	-1.1	.1	4.4	82	11.8	102	88	47	0	0	2	1	0	0	
COLUMBIA	52	30	71	23	41	-6	.8	.0	.8	2.1	62	5.0	76	88	45	0	0	4	3	1	1	
KANSAS CITY	53	30	73	21	42	-7	.4	-.2	.4	.7	26	2.8	57	87	37	0	0	5	2	0	0	
SAINT LOUIS	55	36	73	30	46	-5	.2	-.7	.1	1.4	37	5.0	65	78	40	0	0	2	2	0	0	
SPRINGFIELD	58	33	71	27	46	-5	.6	-.3	.6	3.6	88	7.8	101	84	34	0	0	4	1	1	1	
MT BILLINGS	56	30	69	20	43	3	.1	-.2	.1	.7	58	1.5	52	71	25	0	0	3	4	0	0	
GLASGOW	52	27	68	24	39	3	.7	-.1	.7	.2	37	1.2	112	85	30	0	0	7	0	0	0	
GREAT FALLS	57	23	70	15	40	2	.7	-.3	.7	.2	17	1.2	47	85	26	0	0	7	1	0	0	
HAVRE	55	23	69	15	39	2	...	...	...	...	...	...	...	85	24	0	0	7	1	0	0
HELENA	57	26	69	20	41	3	.1	-.1	.1	.4	50	1.0	54	86	28	0	0	6	2	0	0	
KALISPELL	60	25	67	22	43	5	.7	-.2	.7	.1	7	2.1	57	81	27	0	0	6	0	0	0	
MILES CITY	50	28	66	25	39	1	.1	-.2	.1	.4	61	1.5	89	90	42	0	0	6	1	0	0	
MISSOULA	64	26	70	21	45	6	.7	-.2	.7	.5	48	1.3	43	88	24	0	0	6	0	0	0	
NE GRAND ISLAND	53	22	74	15	38	-6	.7	-.5	.7	.2	2	1.9	60	85	31	0	0	7	0	0	0	
LINCOLN	53	24	72	16	38	-6	.7	-.6	.7	.1	3	.9	26	84	30	0	0	7	0	0	0	
NORFOLK	53	25	75	15	39	-3	.7	-.4	.7	.2	2	1.7	50	84	38	0	0	7	2	0	0	
NORTH PLATTE	55	22	76	16	38	-3	.7	-.3	.7	.1	4	.9	41	80	24	0	0	7	1	0	0	
OMAHA	55	27	73	17	41	-3	.1	-.4	.1	.1	7	1.6	44	...	...	0	0	6	1	0	0
SCOTTSBLOFF	54	20	70	10	37	-3	.7	-.3	.7	.7	62	2.1	99	74	26	0	0	7	0	0	0	
VALENTINE	51	19	72	14	35	-6	.7	-.3	.7	.3	18	1.0	41	81	31	0	0	7	2	0	0	
NV ELY	60	22	64	17	41	4	.7	-.2	.7	1.0	95	2.7	110	73	20	0	0	7	0	0	0	
LAS VEGAS	79	52	84	46	66	6	.7	-.1	.7	.1	30	.7	47	30	12	0	0	0	0	0	0	
RENO	69	34	73	31	52	7	.7	-.1	.7	1.0	135	1.7	60	69	18	0	0	2	0	0	0	
WINNECOCCA	67	29	73	17	48	6	.1	-.1	.1	.4	50	1.6	74	68	16	0	0	5	2	0	0	
NE CONCORD	46	25	56	21	36	-2	.5	-.1	.4	5.0	172	9.3	117	86	39	0	0	6	3	0	0	
NJ ATLANTIC CITY	53	36	60	29	45	-1	3.3	2.4	1.7	9.5	245	17.1	165	95	62	0	0	2	5	3	3	
NM ALBUQUERQUE	62	34	76	25	48	-2	.1	-.1	.1	.6	109	.9	59	58	22	0	0	4	1	0	0	
CLOVIS	59	31	78	23	45	-6	.4	-.3	.4	.9	140	1.1	75	79	25	0	0	4	1	0	0	
ROSWELL	65	34	84	27	50	-7	.3	-.2	.3	.7	172	.7	58	79	28	0	0	4	1	0	0	
NY ALBANY	48	27	56	22	37	-2	.5	-.2	.4	4.3	136	9.3	119	88	40	0	0	6	3	0	0	
SINGAMTON	45	30	58	25	37	-1	.6	-.1	.5	5.1	168	10.3	133	85	50	0	0	7	2	0	0	
BUFFALO	48	33	68	31	40	2	.4	-.3	.3	2.6	91	7.0	88	89	48	0	0	4	3	0	0	
NEW YORK	53	40	60	37	46	0	1.8	.9	.7	6.3	162	13.8	142	85	53	0	0	0	3	3	3	
ROCHESTER	49	31	67	28	40	0	.4	-.1	.4	1.7	69	6.0	90	88	45	0	0	6	2	0	0	
SYRACUSE	48	30	64	28	39	-1	.9	-.2	.5	5.1	172	10.5	140	86	49	0	0	7	4	1	1	
NC ASHEVILLE	60	36	68	28	48	-4	5.1	4.0	3.8	7.5	126	18.0	126	90	48	0	0	3	4	2	2	
CHARLOTTE	68	45	80	37	57	2	2.2	1.4	1.5	4.9	107	11.1	91	80	39	0	0	0	3	1	1	
GREENSBORO	64	42	71	33	53	0	2.6	1.8	1.2	5.0	129	11.2	108	87	43	0	0	0	4	2	2	
HATTERAS	66	48	77	42	57	2	1.2	.3	.7	7.1	156	17.5	125	96	61	0	0	0	3	1	1	
NEW BERN	69	45	82	39	57	0	.5	-.3	.2	5.6	137	13.4	105	92	45	0	0	0	3	0	0	
RALEIGH	67	41	76	33	54	0	1.9	1.2	.9	5.9	149	12.4	111	92	49	0	0	0	4	2	2	
WILMINGTON	70	48	79	42	59	2	.5	-.3	.3	8.3	177	18.6	135	99	54	0	0	0	3	0	0	
ND BISMARCK	44	25	62	17	34	-1	.7	-.2	.7	.7	78	1.7	96	93	50	0	0	7	2	0	0	
FARGO	43	25	61	20	34	0	.1	-.2	.1	1.0	84	2.3	100	89	52	0	0	7	1	0	0	
GRAND FORKS	42	24	56	17	33	1	.7	-.2	.7	.4	36	1.6	74	93	50	0	0	7	1	0	0	
WILLISTON	45	23	64	16	34	-1	.2	-.1	.1	.2	29	2.1	122	88	43	0	0	7	2	0	0	
OH AKRON-CANTON	51	33	67	27	42	-1	.6	-.2	.3	3.4	96	8.5	108	87	50	0	0	4	3	0	0	
CINCINNATI	54	35	71	25	44	-4	.5	-.5	.4	2.2	49	7.1	73	90	49	0	0	3	2	0	0	
CLEVELAND	51	33	70	25	42	0	.2	-.5	.1	1.3	42	4.7	64	84	50	0	0	4	3	0	0	
COLUMBUS	55	34	71	28	45	2	.6	-.2	.4	2.0	58	7.3	97	92	45	0	0	3	4	0	0	
DAYTON	54	34	71	26	44	-1	.6	-.2	.3	2.0	55	7.1	89	83	43	0	0	4	3	0	0	

Based on 1961-90 normals.

Weather Data for the Week Ending April 2, 1994

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS						
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																		.01 INCH OR MORE	.50 INCH OR MORE		
TOLEDO	53	33	72	22	43	1	.3	-.4	.1	2.1	74	6.8	108	88	44	0	3	3	0	0	
YOUNGSTOWN	51	33	68	25	42	0	.6	-.2	.4	3.9	118	8.2	109	89	50	0	4	3	0	0	
OK OKLAHOMA CITY	64	36	80	31	50	5	.1	-.6	.1	3.2	113	6.0	108	76	32	0	4	1	1	1	
TULSA	64	38	80	30	51	5	.8	.0	.8	4.2	113	7.0	98	76	32	0	2	1	1	1	
OR ASTORIA	58	43	73	38	51	4	.2	-1.3	.1	6.5	87	24.6	98	96	63	0	0	2	2	0	
BURNS	61	27	70	19	44	5	.2	.0	.2	.3	31	1.1	39	78	30	0	5	0	0	0	
MEDFORD	69	38	83	33	54	5	1.1	.7	.9	1.4	70	3.6	55	86	23	0	0	0	1	1	
PRIDLETON	66	42	74	37	54	7	.1	-.1	.1	.6	45	3.8	98	66	34	0	0	1	1	0	
PORTLAND	67	44	77	37	56	7	.3	-.4	.3	1.8	49	10.3	80	86	41	0	0	2	2	0	
SALEM	66	42	77	35	54	7	.7	-.1	.5	2.6	58	11.1	75	87	37	0	0	1	1	1	
PA ALLENTOWN	52	34	63	26	43	-1	1.5	.7	.6	5.9	169	14.8	154	87	50	0	2	3	1	1	
ERIE	47	34	69	29	41	0	.2	-.6	.1	3.0	93	6.9	90	85	53	0	3	2	0	0	
HARRISBURG	54	37	69	31	46	0	1.9	1.2	1.0	6.2	179	15.0	163	84	49	0	1	3	1	1	
PHILADELPHIA	57	40	68	36	49	3	1.9	1.1	.9	6.5	172	14.0	136	86	49	0	0	4	2	2	
PITTSBURGH	52	34	69	28	43	-1	.5	-.3	.4	5.0	138	11.0	129	83	43	0	3	3	0	0	
SCRANTON	48	33	60	27	41	-2	.9	-.3	.4	3.8	139	8.1	115	87	53	0	4	4	0	0	
RI PROVIDENCE	51	35	60	28	43	1	1.4	.5	.6	7.2	166	14.8	126	86	55	0	3	3	1	1	
SC CHARLESTON	72	52	81	44	62	1	.4	-.5	.3	4.4	98	13.2	117	82	41	0	0	2	2	0	
COLUMBIA	73	46	88	36	60	1	.8	-.2	.4	4.5	88	12.7	93	91	38	0	0	2	0	0	
FLORENCE	74	48	84	40	61	2	.8	.0	.3	4.2	97	11.1	100	89	36	0	0	3	0	0	
GREENVILLE	67	38	80	29	53	-2	1.2	.1	.9	4.5	79	12.2	86	88	43	0	2	3	1	0	
SD ABERDEEN	47	28	70	25	37	1	.1	-.2	.1	.4	36	1.7	70	88	43	0	7	3	0	0	
HURON	50	24	73	17	37	-1	.1	-.4	.1	.3	15	1.9	67	90	39	0	7	1	0	0	
RAPID CITY	51	24	69	16	38	-1	.1	-.2	.1	.4	33	1.5	74	79	35	0	6	3	0	0	
SIOUX FALLS	49	24	71	15	36	-3	.1	-.4	.1	.2	11	1.8	61	89	40	0	7	1	0	0	
TN CHATTANOOGA	61	38	74	28	50	-5	6.7	5.5	6.2	11.0	173	24.8	154	96	48	0	1	3	1	1	
KNOXVILLE	58	38	71	31	48	-5	7.0	5.9	5.8	11.8	219	27.7	204	98	54	0	2	5	2	1	
MEMPHIS	61	42	74	34	51	-6	2.2	1.0	2.2	6.9	119	16.7	121	81	42	0	0	1	1	1	
NASHVILLE	59	40	75	30	50	-5	2.8	1.8	2.5	7.6	147	18.1	144	86	44	0	1	3	1	1	
TX ABILENE	68	41	87	31	54	-6	T	-.4	T	.1	5	1.9	53	64	23	0	1	0	0	0	
AMARILLO	61	30	80	17	46	-6	T	-.2	T	1.2	121	2.3	110	65	20	0	3	0	0	0	
AUSTIN	71	45	76	40	58	-7	.1	-.4	.1	1.7	85	5.2	89	71	36	0	0	1	0	0	
BEAUMONT	71	45	75	37	58	-6	.2	-.6	.2	3.9	111	12.1	104	94	38	0	0	1	0	0	
BROWNSVILLE	75	56	85	48	66	-6	.0	-.2	.0	1.8	307	4.3	133	84	40	0	0	0	0	0	
CORPUS CHRISTI	73	53	79	48	63	-6	T	-.2	T	3.5	346	5.5	118	83	34	0	0	0	0	0	
DEL RIO	73	51	83	42	62	-4	.0	-.3	.0	2.5	208	5.2	141	66	32	0	0	0	0	0	
EL PASO	71	41	83	29	56	-3	T	-.1	T	.4	119	.6	56	45	16	0	1	0	0	0	
FORT WORTH	67	45	79	38	56	-3	.4	-.4	.4	2.1	64	5.5	74	68	34	0	0	1	0	0	
GALVESTON	69	56	73	52	63	-3	T	-.5	T	1.6	68	4.2	53	76	42	0	0	0	0	0	
HOUSTON	72	44	77	37	58	-6	.2	-.5	.2	2.4	72	7.3	68	90	37	0	0	1	0	0	
LUBBOCK	66	35	82	22	50	-5	T	-.2	T	.2	19	.7	38	64	28	0	1	0	0	0	
MIDLAND	69	38	89	29	53	-7	T	-.1	T	T	0	1.1	72	72	22	0	1	0	0	0	
SAN ANGELO	73	43	89	36	58	-4	T	-.2	T	T	4	2.1	73	64	24	0	0	0	0	0	
SAN ANTONIO	73	46	77	37	60	-6	1.5	1.1	1.5	5.1	309	7.2	140	78	36	0	0	1	1	1	
VICTORIA	72	48	76	44	60	-5	T	-.4	T	4.8	199	7.0	82	82	37	0	0	1	0	0	
WACO	68	43	78	37	55	-7	1.0	.4	.8	2.5	99	7.2	115	83	43	0	0	2	1	1	
WICHITA FALLS	67	39	87	31	53	-5	.0	-.6	.0	1.1	40	2.9	49	70	26	0	1	0	0	0	
UT CEDAR CITY	62	28	67	21	45	2	.0	-.3	.0	1.2	84	2.6	85	69	17	0	6	0	0	0	
SALT LAKE CITY	59	34	70	30	47	1	.2	-.3	.2	1.5	73	3.7	83	70	28	0	3	2	0	0	
VT BURLINGTON	43	27	48	19	35	-2	.3	-.3	.3	3.0	123	6.4	109	88	47	0	6	4	0	0	
VA NORFOLK	66	45	82	41	56	3	1.0	.2	.4	10.4	264	18.1	162	90	51	0	0	4	0	3	
RICHMOND	64	42	73	35	53	1	3.2	2.4	1.3	7.9	208	15.4	151	89	39	0	0	4	3	3	
ROANOKE	58	40	70	36	49	-2	2.7	1.9	1.8	5.7	153	15.6	166	82	44	0	0	4	1	1	
WA QUILLAYUTE	59	42	72	34	50	6	.2	-2.1	.1	10.6	88	38.4	98	96	53	0	0	0	0	0	
SEATTLE-TACOMA	64	45	74	41	55	8	.0	-.7	.0	3.2	85	10.2	78	85	44	0	0	0	0	0	
SPOKANE	64	35	69	31	50	8	.0	-.3	.0	T	0	2.2	44	77	31	0	2	0	0	0	
YAKIMA	70	36	77	30	53	7	T	-.1	T	T	6	1.5	55	78	27	0	3	1	0	2	
WV BECKLEY	52	33	66	30	43	-4	3.0	2.2	1.6	7.6	211	17.5	184	88	54	0	5	4	2	2	
CHARLESTON	57	36	74	31	46	-4	2.6	1.8	1.8	7.7	201	19.7	201	92	50	0	2	4	2	2	
HUNTINGTON	55	35	69	29	45	-3	2.2	1.3	1.4	8.6	229	18.5	188	93	46	0	2	4	1	1	
PARKERSBURG	53	35	70	29	44	-4	1.6	.7	1.2	5.0	122	16.2	161	90	53	0	3	4	1	1	
WI GREEN BAY	48	27	60	18	38	1	.4	-.2	.2	1.1	52	3.7	85	93	53	0	7	3	0	0	
LACROSSE	49	28	67	20	39	-1	..	..	..	..	..	..	89	37	0	7	0	0	0	0
MADISON	52	27	66	22	39	0	T	-.6	T	.5	20	4.7	102	86	34	0	6	1	0	0	
MILWAUKEE	51	30	66	25	41	2	.1	-.6	.1	1.2	42	6.9	116	87	44	0	5	2	0	0	
WAUSAU	46	26	61	16	36	0	.2	-.4	.1	.6	26	2.0	51	86	40	0	7	3	0	0	
WY CASPER	53	26	68	19	40	2	.1	-.2	.1	.6	55	2.0	93	74	27	0	6	2	0	0	
CHEYENNE	48	21	62	11	34	-3	.1	-.2	.1	.6	50	2.1	111	76	31	0	7	2	0	0	
LANDER	51	25	64	19	38	0	.3	-.1	.2	1.2	97	2.5	109	80	27	0	6	3	0	0	
SHERIDAN	50	24	67	18	37	-1	.2	-.1	.2	.8	74	3.7	152	84	38	0	7	2	0	0	

Based on 1961-90 normals.

March Weather and Crop Summary

Weather

Overall atmospheric features from the winter months remained intact, including a west coast ridge and a Great Lakes trough. As a result, dryness persisted from the West Coast States to the High Plains, while excessive moisture plagued areas from the Tennessee Valley to the Middle Atlantic States. Occasional infusions of tropical energy, originating from a persistent pool of warmer-than-normal ocean water southwest of Baja California, contributed to the wetness of several major storm systems.

The Sierra Nevada, California's key watershed range, received minimal snowfall in March, in addition to temperatures of 3 to 6°F above normal. As a result, the spring snow melt season commenced earlier than normal, reducing the snowpack to 50 percent of normal on April 1, the typical peak snowpack date. (Without early melting, the Sierra Nevada snowpack would have been approximately 70 percent of normal on April 1.)

Farther east, vast stretches of the central and southern Plains and the Corn Belt received less than 25 percent of the normal monthly precipitation. Specifically, month-long dryness covered west-central Texas, Kansas (except the extreme southeast), Nebraska, Iowa, southern South Dakota, southern Minnesota, southern Wisconsin, northern Missouri, and northern Illinois. Lincoln, NE not only set a March record for dryness (0.06 inches), but had its driest month ever. The ongoing drying trend in the upper Mississippi Valley, which began in October 1993, and the gradual elimination of snow cover during March, have drastically reduced the possibility of major flooding in the spring of 1994.

But spring flooding has been an occasional but persistent nuisance since late January from the Ohio River southward through the Tennessee Valley and eastward into the northern Middle Atlantic States. (Farther north, melting snow and rainfall coupled to induce widespread minor flooding in the Northeast.) March precipitation exceeded twice normal and totaled 8 or more inches in many locations from eastern Tennessee to New Jersey. Moisture-laden storms pummeled the aforementioned areas on March 1-4, 8-10, and 27-29. Monthly rainfall records were broken at numerous locations, including Huntington, WV (8.62 inches) and Baltimore, MD (8.64 inches). The middle storm also deposited a stripe of heavy snow from

northern New Mexico to the lower Ohio Valley. Tulsa, OK logged its highest single-storm snowfall on record (12.9 inches).

Although arctic air drastically reduced its grip on the Northeast, occasional snowfall, including a fresh 1- to 2-foot blanket in the central and northern Appalachians early in the month, continued to obliterate all-time seasonal snowfall records. The late-month storm added Elkins, WV (124.5 inches) and Scranton, PA (88.7 inches) to an expanding list. However it was not snow, but tornadoes, that memorialized the storm on March 27. A 31-tornado outbreak left more than 40 people dead across the Southeast.

Fieldwork

Storm systems in early March hit the South Central and Atlantic Seaboard States depositing significant amounts of snow which restricted fieldwork. The snow accumulation damaged poultry structures, and downed power lines which produced widespread power outages. In the South and Southwest, storm systems left fields too wet to allow planting to begin, which left field preparation behind schedule. A warming trend, starting in the Pacific Coast and moving eastward early in the month, melted the snow pack for winter wheat. The warm weather triggered wheat growth in the upper Great Plains, but the rapid snow melt produced some flooding and soil erosion. In mid-month, the southeastern half of the Nation experienced warm, windy weather, which helped dry fields and allowed field preparation and planting to start. Rain along the Pacific Coast at mid-month lessened concerns about soil moisture. Mid-month conditions brought about weather suitable for field preparation in the Southeast, with farmers planting corn and sorghum. The small grains responded to the mild weather as winter wheat broke out of dormancy in the lower High Plains. The central Plains still remained below the desired moisture level for wheat growers. By the end of the month, drier, spring weather let farmers plant and prepare fields in the Ohio Valley and Midwestern regions. Planting and field preparation proceeded rapidly in the latter half of the month. Crop progress showed all commodities equal to, or ahead of, the 5-year average.

Note: Monthly U.S. temperature and precipitation maps, along with the "March Weather in Historical Perspective" feature, will appear in next week's *Bulletin*.

(Continued from front cover)

more than 3 inches. Considerable flash flooding ensued, especially in **southern Appalachians**. By midweek, record warmth in the **Southeast** yielded to a surge of chilly, dry air. Among the 18 early-week daily record highs were readings of 88°F in **Macon, GA** on Sunday, and 92°F in **Daytona Beach, FL** on Monday. Five days later (on April 1), **Macon** noted a low of 33°F, with sub-freezing temperatures recorded as far south as **McComb, MS**. In the **Northeast**, rain changed briefly to snow on Tuesday. **Elkins, WV** and **Worcester, MA** measured 3 inches. Farther west, lows on Monday plunged to 17°F in **Amarillo, TX** and 11°F in **Goodland, KS**. Cold air returned at midweek, as **Gage, OK** noted its second 17-degree reading in 3 days. Meanwhile, warm, dry conditions blanketed the **West**. **Portland, OR** set its fourth consecutive daily record high on

Tuesday. **Olympia, WA** tied its March record (76°F) on Monday and Tuesday. Record warmth also overspread **Alaska**, and on March 31, **Fairbanks** tied its March record (56°F). Late in the week, a compact storm system tracked through **Oregon**, across the **Great Basin** and **central Rockies**, and into the **central Plains**. **Medford, OR** collected more than 1 inch of rain, and **Colorado's Sangre de Cristo Mountains** received up to 1 foot of snow. Some light rain developed on Saturday across **southern Kansas**, but significant amounts were confined to easternmost wheat areas. **Oklahoma** endured the brunt of a severe weather outbreak on Saturday evening, accounting for 56 of the day's 79 reports of 1-inch diameter, or larger, hail. Northwestern winds surged across the **Plains** as the storm sped eastward, gusting to 60 miles per hour (mph) in **Garden City, KS** and 51 mph at **Lubbock, TX**.

TEMPERATURE AND PRECIPITATION SUMMARY

March 1994

STATES AND STATIONS	Temp. °F		Precip.		STATES AND STATIONS	Temp. °F		Precip.		STATES AND STATIONS	Temp. °F		Precip.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AL BIRMINGHAM	55	0	7.6	1.4	LA BATON ROUGE	60	-1	3.7	-1.1	OK YOUNGSTOWN	35	-2	3.9	0.8
AL HUNTSVILLE	53	1	9.4	2.7	LA LAKE CHARLES	62	1	2.0	-1.3	OK OKLAHOMA CITY	53	2	3.6	0.9
AL MOBILE	60	0	4.3	-2.1	LA NEW ORLEANS	61	-1	4.8	-0.1	OK TULSA	53	2	3.2	-0.2
AL MONTGOMERY	59	3	5.0	-1.2	ME SHERBROOK	58	1	3.7	-0.4	OR ASTORIA	48	3	6.4	-0.6
AK ANCHORAGE	26	0	1.6	0.9	ME CARIBOU	26	1	2.4	0.0	OR BURNS	40	3	0.3	-0.7
AK BARROW	-18	-3	0.1	0.0	ME PORTLAND	33	0	6.6	2.9	OR MEDFORD	49	2	1.4	-0.5
AK FAIRBANKS	11	0	0.2	-0.2	MD BALTIMORE	43	-1	8.6	5.2	OR FREDSTON	47	2	0.6	-0.6
AK JUNEAU	37	4	4.9	1.6	MA BOSTON	46	1	8.6	4.4	OR PORTLAND	50	3	1.8	-1.7
AK KODIAK	30	-2	10.1	5.5	MA BOSTON	38	-1	7.4	3.7	PA SALEM	50	5	2.6	-1.6
AK NOME	4	-5	1.2	0.7	MI CHATHAM	27	1	7.4	3.6	PA ALLENTOWN	37	-2	5.7	2.4
AZ FLAGSTAFF	41	6	3.0	0.5	MI ALPENA	39	1	1.2	-0.9	PA ERIE	33	-3	2.7	-0.3
AZ PHOENIX	65	3	1.4	0.5	MI DETROIT	37	1	2.3	-0.2	PA HARRISBURG	39	-2	4.3	1.0
AZ PRESCOTT	49	6	0.5	-1.4	MI FLINT	33	-1	1.7	-0.4	PA PHILADELPHIA	43	2	6.4	3.0
AZ TUCSON	63	4	1.1	0.4	MI GRAND RAPIDS	34	0	1.5	-1.2	PA PITTSBURGH	38	-2	5.0	1.6
AZ WINSLOW	48	2	0.6	0.0	MI HOUGHTON LAKE	30	2	1.8	-0.3	PA SCRANTON	35	-2	3.8	1.2
AZ YUMA	70	5	0.1	-0.1	MI LANSING	33	1	1.9	-0.3	RI WILLIAMSPORT	36	-3	5.2	2.0
AR FORT SMITH	55	3	2.9	-1.0	MI MARQUETTE	27	3	2.3	-0.5	RI PROVIDENCE	39	1	7.0	3.0
AR LITTLE ROCK	55	2	4.7	-0.3	MI MUSKEGON	33	-1	1.2	-1.3	SC CHARLESTON	61	3	4.3	-0.1
CA BAKERSFIELD	60	3	1.0	-0.1	MN SAULT ST. MARIE	25	1	1.5	-0.8	SC COLUMBIA	58	3	4.3	-0.5
CA BISHOP	51	4	--	--	MN ALEXANDRIA	30	4	0.5	-0.9	SC FLORENCE	59	4	4.2	0.1
CA EUREKA	51	2	2.0	-3.3	MN DULUTH	29	4	0.8	-1.1	SC GREENVILLE	53	1	4.5	-0.9
CA FRESNO	59	4	0.5	-1.4	MN INF'L FALLS	29	7	0.6	-0.5	SD ABERDEEN	34	5	0.4	-0.7
CA LOS ANGELES	61	3	1.0	-1.0	MN MINNEAPOLIS	35	4	0.3	-1.6	SD BURON	36	4	0.3	-1.4
CA REDDING	56	4	1.2	-3.2	MN ROCHESTER	33	3	0.3	-1.5	SD RAPID CITY	41	6	0.3	-0.7
CA SACRAMENTO	57	3	T	-2.6	MN ST. CLOUD	31	3	0.7	-0.7	SD SIOUX FALLS	37	4	0.2	-1.4
CA SAN DIEGO	60	1	3.6	1.9	MS GREENWOOD	56	0	5.6	-0.2	TN BRISTOL	46	-1	7.5	3.8
CA SAN FRANCISCO	56	3	0.2	-2.8	MS JACKSON	56	0	5.6	-0.4	TN CHATTANOOGA	50	0	11.0	5.0
CA SANTA MARIA	--	--	2.2	0.0	MS MERIDIAN	58	1	6.2	-0.5	TN KNOXVILLE	49	0	11.8	6.7
CO ALAMOSA	35	3	0.5	0.0	MO TUPELO	53	-1	9.3	3.3	TN MEMPHIS	54	1	6.6	1.2
CO CO. SPRINGS	41	4	0.5	-0.4	MO CAPE GIRARDEAU	47	0	4.4	-0.7	TN NASHVILLE	51	0	7.6	2.7
CO DENVER	45	6	0.9	-0.4	MO COLUMBIA	46	4	1.3	-1.8	TX ABILENE	58	1	0.1	-1.3
CO GRAND JUNCTION	47	4	0.3	-0.7	MO KANSAS CITY	46	3	0.3	-2.2	TX AMARILLO	49	2	0.8	-0.1
CO PUEBLO	43	1	1.1	0.3	MO SAINT LOUIS	48	3	1.3	-2.3	TX AUSTIN	63	1	1.7	-0.2
CT BRIDGEPORT	38	-1	5.8	2.0	MO SPRINGFIELD	49	3	3.0	-0.8	TX BEAUMONT	63	2	3.8	0.5
CT HARTFORD	36	-2	5.8	2.1	MT BILLINGS	42	7	0.6	-0.6	TX BROWNSVILLE	68	-1	1.8	1.3
DC WASHINGTON	45	-2	8.5	5.3	MT GLASGOW	36	7	0.2	-0.2	TX CORPUS CHRISTI	66	0	3.5	2.6
FL APALACHICOLA	63	2	5.3	1.0	MT GREAT FALLS	40	7	0.2	-0.9	TX DEL RIO	66	4	2.5	1.4
FL DAYTONA BEACH	66	1	3.4	0.5	MT HAVRE	38	7	0.1	-0.6	TX EL PASO	58	3	0.4	0.1
FL FT. MYERS	71	2	1.0	-2.1	MT HELENA	40	6	0.3	-0.4	TX FORT WORTH	59	4	1.6	-1.4
FL JACKSONVILLE	63	1	2.1	-1.5	MT KALISPELL	37	3	0.1	-1.0	TX GALVESTON	64	3	1.6	-0.6
FL KEY WEST	75	1	0.3	-1.4	MT MILES CITY	40	7	0.4	-0.2	TX HOUSTON	63	2	2.4	-0.8
FL MIAMI	74	2	1.9	-0.4	MT MISSOULA	40	5	0.5	-0.5	TX LAREDO	--	--	--	--
FL ORLANDO	68	1	1.2	-2.0	NE GRAND ISLAND	41	4	T	-1.9	TX LUBBOCK	53	2	0.2	-0.7
FL TALLAHASSEE	62	1	12.0	5.8	NE LINCOLN	42	3	0.1	-2.0	TX MIDLAND	57	1	T	-0.5
FL TAMPA	68	1	0.7	-2.4	NE NORFOLK	41	5	T	-1.8	TX SAN ANGELO	61	2	T	-0.9
FL WEST PALM BEACH	71	0	2.6	-0.3	NE NORTH PLATTE	42	5	T	-1.2	TX SAN ANTONIO	64	2	5.0	3.5
GA ATHENS	56	2	5.9	0.4	NE OMAHA	42	5	0.1	-2.0	TX VICTORIA	63	1	4.8	2.5
GA ATLANTA	57	4	5.8	0.0	NE SCOTTSDALE	41	5	0.7	-0.4	TX WACO	59	1	2.2	-0.1
GA AUGUSTA	58	3	6.4	1.8	NE VALENTINE	39	2	0.3	-1.1	TX WICHITA FALLS	55	1	1.0	-1.4
GA MACON	59	2	6.1	1.3	NV ELKO	40	2	0.1	-0.8	UT BLANDING	--	--	--	--
GA SAVANNAH	63	4	3.8	0.0	NV ELY	39	5	0.9	-0.1	UT CEDAR CITY	45	5	1.2	-0.2
HI HILO	72	0	18.0	4.1	NV LAS VEGAS	63	6	0.1	-0.3	UT SALT LAKE CITY	46	4	1.1	-0.8
HI HONOLULU	73	-1	3.2	1.0	NV RENO	49	6	1.0	0.3	VT BURLINGTON	30	-1	2.8	0.6
HI KAHULUI	73	0	3.1	0.4	NV WINNEMUCA	45	4	0.5	-0.3	VA LYNCHBURG	47	1	7.2	3.7
HI LIHUE	72	-1	2.2	-2.0	NH CONCORD	32	-1	4.9	2.2	VA NORFOLK	52	3	10.4	6.6
ID BOISE	46	4	0.2	-1.1	NJ ATLANTIC CITY	41	-1	9.2	5.5	VA RICHMOND	49	1	8.0	4.4
ID LEWISTON	47	3	0.2	-0.9	NM ALBUQUERQUE	50	3	0.5	0.0	VA ROANOKE	47	0	5.7	2.2
ID POCATELLO	41	5	0.1	-1.2	NM CLOVIS	50	3	0.9	0.3	WA COLVILLE	--	--	--	--
IL CAIRO	--	--	--	--	NY ROSWELL	54	2	0.7	0.3	WA QUILLYUTE	46	2	10.5	-1.0
IL CHICAGO	38	1	1.1	-1.6	NY ALBANY	33	-1	4.2	1.2	WA SEATTLE-TACOMA	49	3	3.2	-0.4
IL MOLINE	39	2	0.6	-2.4	NY BINGHAMTON	31	-2	5.1	2.3	WA SPOKANE	42	3	0.5	-1.0
IL PEORIA	41	2	0.7	-2.2	NY BUFFALO	33	0	2.6	-0.1	WA WALLA WALLA	49	3	0.9	-1.2
IL QUINCY	42	2	0.4	-2.7	NY NEW YORK	40	-1	6.2	2.6	WA YAKIMA	45	2	T	-0.6
IL ROCKFORD	36	1	1.1	-1.4	NY ROCHESTER	32	-2	1.7	-0.6	WV BECKLEY	41	-1	7.4	4.0
IL SPRINGFIELD	43	2	1.2	-2.0	NY SYRACUSE	31	-3	5.1	2.3	WV CHARLESTON	45	-1	7.7	4.1
IN EVANSVILLE	45	-2	1.9	-3.0	NC ASHEVILLE	47	-1	7.5	1.9	WV ELKINS	39	0	6.3	2.5
IN FORT WAYNE	39	1	1.7	-1.2	NC CHARLOTTE	55	4	4.9	0.5	WV HUNTINGTON	44	1	8.6	5.1
IN INDIANAPOLIS	41	-1	0.9	-2.9	NC GREENSBORO	50	1	5.1	1.4	WV PARKERSBURG	41	-1	5.0	1.1
IN SOUTH BEND	37	-1	0.9	-2.2	NC HATTERAS	54	2	7.2	2.9	WI GREEN BAY	33	3	1.1	-0.9
IA DES MOINES	41	3	0.2	-2.0	NC NEW BERN	55	1	5.6	1.7	WI LACROSSE	36	3	0.4	-1.6
IA DUBUQUE	36	2	0.5	-2.4	NC RALEIGH	52	2	5.8	2.0	WI MADISON	36	3	0.5	-1.7
IA SIOUX CITY	40	4	T	-1.9	NC WILMINGTON	57	4	8.3	3.8	WI MILWAUKEE	36	3	1.2	-1.5
IA WATERLOO	37	2	0.1	-2.2	ND BISMARCK	33	4	0.7	-0.1	WI WAUSAU	32	3	0.6	-1.4
KS CONCORDIA	46	5	0.1	-2.1	ND FARGO	30	5	1.0	-0.1	WI CASPER	42	8	0.6	-0.4
KS DODGE CITY	47	4	0.1	-1.5	ND GRAND FORKS	29	5	0.4	-0.6	WI CHEYENNE	39	5	0.6	-0.5
KS GOODLAND	44	4	0.3	-0.9	ND WILLISTON	34	6	0.2	-0.5	WI LANDER	39	5	1.2	0.0
KS TOPEKA	47	3	0.2	-2.3	OH AKRON-CANTON	36	-2	3.0	-0.3	WI SHERIDAN	39	4	0.8	-0.2
KS WICHITA	50	4	0.3	-2.2	OH CINCINNATI	41	-2	2.2	-2.0	PR SAN JUAN	79	1	1.4	-1.0
KY BOWLING GREEN	47	0	7.3	2.2	OH CLEVELAND	36	-1	1.2	-1.7					
KY JACKSON	46	-1	11.8	7.0	OH COLUMBUS	39	1	2.0	-1.2					
KY LEXINGTON	43	-2	6.8	2.4	OH DAYTON	39	-1	1.9	-1.5					
KY LOUISVILLE	45	-1	3.9	-0.8	OH MANSFIELD	35	-2	2.1	-1.2					
KY PADUCAH	48	0	3.6	-1.4	OH TOLEDO	37	1	2.0	-0.7					

Based on 1961-90 normals.

National Agricultural Summary

March 28 - April 3, 1994

HIGHLIGHTS: Field preparation advanced rapidly as sunny, dry weather prevailed for most of the Nation early in the week. Heavy rain over the Tennessee Valley added to the already surplus soil moisture and brought field work to a complete halt. In the central Great Plains, moisture was still needed, though some reports of hail damage were received. A chilly week slowed small grains development in the Great Plains. Planting was generally ahead of schedule in the Gulf Coast region where warm, dry conditions allowed fieldwork to proceed for the second week in a row.

SMALL GRAINS: Cool weather slowed winter wheat growth in the central and southern Great Plains. Winter wheat remained dormant in the northern Great Plains, where excessive topsoil moisture was reported. The snow cover is virtually gone for the entire Northern United States. Light wind damage was reported in the northern High Plains. In Kansas, winter wheat condition was mostly fair. Russian wheat aphids were reported moving northward in western Kansas, while other disease and insect problems were light. Septoria leaf blotch was reported in some wheat fields in Arkansas. Some wheat fields were destroyed in southern Illinois due to poor stands. Winter wheat headed in Texas was ahead of the 5-year average, but dry conditions lowered yield outlook for some areas. Winter wheat headed was 1% for the 19 largest producing States. Winter wheat condition for the Nation was mostly good. Spring wheat seeding was 1 percent(%) complete, one percentage point below the 5-year average, with only Idaho reporting progress.

CORN: Corn planted was 2% completed for the Nation, which is normal for this time of year. Planting was reported underway in 5 of the 17 leading producing States. Georgia was 18 points ahead of the 5-year average, where only fields too wet to be planted remained.

COTTON: Planting was 7% complete, 2 points ahead of the 5-year average. Three of the 14 major producing States reported progress for the week. Texas was 4 points ahead of normal even though the week's cool weather slowed planting in some areas of the Blacklands.

SORGHUM: Planting was 17% complete, 4 points ahead of normal. Planting was underway in 5 of the 12 largest producing States. Mississippi was 8 points ahead of normal, with 10% of the crop emerged.

RICE: Seeding was 10% complete, 3 points ahead of schedule. Seeding was one-third complete in Louisiana, where 8% of the rice crop was reported emerged.

Crop Progress for the Week Ending April 3, 1994

COTTON (Percent Planted)

	Current	Last Wk	1993	Avg.
AL	0	NA	0	0
AZ	28	NA	15	26
AR	0	NA	0	0
CA	5	NA	5	8
GA	0	NA	0	0
LA	0	NA	0	0
MS	0	NA	0	0
MO	0	NA	0	0
NM	0	NA	1	3
NC	0	NA	0	0
OK	0	NA	0	0
SC	0	NA	0	0
TN	0	NA	0	0
TX	13	NA	11	9
14 States	7	NA	5	5

These 14 States produced 99% of the 1993 cotton crop.

WINTER WHEAT (Percent Headed)

	Current	Last Wk	1993	Avg.
AR	0	NA	0	0
CA	15	NA	15	18
CO	0	NA	0	0
GA	16	NA	4	15
ID	0	NA	0	0
IL	0	NA	0	0
IN	0	NA	0	0
KS	0	NA	0	0
MI	0	NA	0	0
MO	0	NA	0	0
MT	0	NA	0	0
NE	0	NA	0	0
NC	0	NA	0	0
OH	0	NA	0	0
OK	1	NA	0	1
OR	0	NA	0	0
SD	0	NA	0	0
TX	7	NA	2	3
WA	0	NA	0	0
19 States	1	NA	0	1

These 19 States produced 92% of the 1993 winter wheat crop.

RICE (Percent Planted)

	Current	Last Wk	1993	Avg.
AR	2	NA	0	0
CA	0	NA	0	0
LA	31	NA	18	22
MS	6	NA	1	3
TX	21	NA	3	23
5 States	10	NA	4	7

These 5 States produced 96% of the 1993 rice crop.

SPRING WHEAT (Percent Planted)

	Current	Last Wk	1993	Avg.
ID	40	NA	2	15
MN	0	NA	0	0
MT	0	NA	0	0
ND	0	NA	0	1
SD	0	NA	0	8
5 States	1	NA	0	2

These 5 States produced 97% of the 1993 spring wheat crop.

GRAIN SORGHUM (Percent Planted)

	Current	Last Wk	1993	Avg.
AR	2	NA	2	1
CO	0	NA	0	0
IL	0	NA	0	0
KS	0	NA	0	0
LA	3	NA	1	7
MS	14	NA	2	6
MO	0	NA	0	0
NE	0	NA	0	0
NM	0	NA	0	1
OK	1	NA	0	1
SD	0	NA	0	0
TX	50	NA	35	40
12 States	17	NA	12	13

These 12 States produced 98% of the 1993 grain sorghum crop.

CORN (Percent Planted)

	Current	Last Wk	1993	Avg.
CO	0	NA	0	0
GA	70	NA	28	52
IL	0	NA	0	0
IN	0	NA	0	0
IA	0	NA	0	0
KS	3	NA	0	2
KY	1	NA	1	1
MI	0	NA	0	0
MN	0	NA	0	0
MO	3	NA	0	1
NE	0	NA	0	0
NC	0	NA	0	0
OH	0	NA	0	0
PA	0	NA	0	0
SD	0	NA	0	0
TX	48	NA	36	48
WI	0	NA	0	0
17 States	2	NA	1	2

These 17 States produced 91% of the 1993 corn crop.

Crop Condition (Percent)

for the Week Ending April 3, 1994

WINTER WHEAT

State	VP	P	F	G	EX
AR	0	0	53	47	0
CA	0	0	10	70	20
CO	3	2	21	62	12
GA	0	0	5	87	8
ID	0	4	37	48	11
IL	3	17	48	30	2
IN	0	5	48	47	0
KS	0	3	47	45	5
MI	5	10	25	45	15
MO	4	16	54	26	0
MT	1	9	30	49	11
NE	0	0	45	55	0
NC	0	0	21	77	2
OH	1	7	31	50	11
OK	0	3	31	64	2
OR	0	6	30	59	5
SD	0	0	28	70	2
TX	1	15	55	28	1
WA	0	1	45	46	8
19 State	1	5	40	49	5
Prev Week	N/A	N/A	N/A	N/A	N/A
Prev Year	0	2	20	58	20

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

State Summaries of Weather and Agriculture

These summaries 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.

ALABAMA: Rainfall 0.36 to 1.16 in. north; 0.13 to 1.18 in central; 0.04 to 1.64 in south. Temperatures 6 to 12° below normal statewide. Lows 25 to 33° north; 25 to 35° central; 28 to 38° south. Highs 71 to 76° north; 74 to 79° central, south.

Days suitable for fieldwork 3.3. Soil moisture 40% adequate, 60% surplus. Percent acreage prepared 53%, 41% 1993, 45% avg. Corn planted 35%, 27% 1993, 44% avg. Wheat headed 22%, 11% 1993, 23% avg.; 49% fair, 47% good, 4% excellent. Pasture 9% poor, 61% fair, 30% good. Livestock 5% poor, 47% fair, 48% good. Activities: plowing, planting, care of livestock, poultry, catfish.

ARIZONA: Temperatures mostly above normal; 2° below to 5° above. Extremes 17°; 82° higher elevations; 29°; 95° deserts. Precipitation reported one station; 0.02 in.

Cotton planting increasing; 28%, 15% 1993, 26% avg. Small grain jointing 99%, 94% 1993, 93% avg.; heading 57%, 53% 1993, 62% avg.; turning color 2%, 0% 1993, 4% avg. Condition continues mostly good. Alfalfa mostly good. Harvest progress continues moderate, sheeping off activities light; stand renovation, new stand establishment mostly normal. Weed, insect, disease infestations light to moderate. Citrus harvest continues. Grapefruit, lemons, valencia oranges available central, western areas. Winter vegetable harvest continues active. Available from western, central areas: Bok choy, broccoli, cauliflower, cilantro, dill, kale, boston, iceberg, leaf, romaine lettuce, parsley, spinach. Western harvest also included anise, artichokes, asparagus, broccoflower, celery, endive, escarole, napa, salad savoy. Central crops available included beets, cabbage, carrots, fava beans, green onions, kohlrabi, leeks, mixed greens, radishes, rappini, rutabagas, swiss chard, turnips. Tomatoes available eastern areas. Range, pasture conditions improved slightly; 75%, 3% higher than February. Cattle, calves fair to good. Stockwater supplies remained mostly adequate, soil moisture short to adequate. Below average to average amounts of feed supplies remained available. Insect damage negligible.

ARKANSAS: Light showers first, last of week. Temperatures 5 to 10° below normal. Extreme 19°; 81°. Precipitation 0.11 to 2.11 in.

Days suitable for fieldwork 5. Soil moisture 62% adequate, 38% surplus. Reports of septoria leaf blotch, sulfur deficiency in some wheat fields. Corn planted 47%, 15% 1993, 12% avg. Peach orchards in good condition. Fertilization, liming, weed control of pastures ongoing. Pasture conditions: 9% poor, 57% fair, 34% good. Livestock good with Brucellosis vaccination underway for cattle. Producers starting to move cattle off hay to pastures.

CALIFORNIA: Light precipitation recorded southern, northern areas. Most State sunny, dry.

Good progress field activities despite scattered showers southern counties. Small grains excellent development. Irrigation, weed treatments most areas, planting higher elevation fields neared completion. Rice fields readied for planting, stubble burned where air quality regulations allowed. Cotton planting full swing desert areas, just underway San Joaquin Valley. Seedbed preparation for planting corn, dry beans, safflower active. Corn planting began south. Early seeded fields good germination, emergence. Over-wintered sugarbeets harvested, new crop fields cultivated, irrigated, thinned. Safflower planting gained momentum. Alfalfa, barley, sudangrass, winter forage cut hay, greenchopped central, south. Alfalfa treated aphids, weeds, weevils. Dry soils; orchards, vineyards irrigated. Minor frost damage Sacramento Valley. Thrip control active. Growers thinning heavy fruit set. Grape growers discing weeds, mildew spraying. Grape shoots growing fast. Navel orange harvest 80 percent picked. Valencia orange picking desert area. Lemon harvest active south coast area. New crop citrus bloomed. Strawberry harvest active; good quality. Asparagus harvest continued San Joaquin Valley, some frost damage delta area. Broccoli harvest continued central coast, central valley. Cabbage harvested south coast. Harvest cauliflower central coast. Garlic, onion fields treated weeds Fresno County. Head, leaf lettuce fields harvested central, desert valleys. Quality excellent Riverside, Tulare Counties, yield light Fresno County. Planting melons continued Palo Verde Valley, aphids treatment. Peppers planted central valley. Transplanting fresh market tomatoes Merced

County. Processing tomato fields planted Colusa County. Hot caps opened, removed cucumber, squash, tomato fields. Eggplant, peppers, squash developing well. Other crops harvested: Beets, turnips, oriental vegetables. Warm temperatures promoted rapid grass growth. Feed, water supplies plentiful. Additional rains needed to sustain growth, areas beginning to dry. Northern districts greening up. Sheep grazing seed alfalfa fields, central valley. Cattle remain good condition.

COLORADO: Temperature in southeastern areas fell into the single digits early morning of the 28th as a front moved through; light snow showers lingered in the south through the 28th. Skies were clear on the 29th through the 1st, little precipitation was noted. Another system pushed into the west on the night of the 1st through 2nd, dropped up to 0.75 in. of rain in the western valleys, around 0.50 in. the southeast plains with lesser amounts elsewhere. Temperatures mostly 2 to 5° below normal.

Days suitable for fieldwork 4.6. Soil moisture 5% very short, 46% short, 42% adequate, 7% surplus. Spring barley 24% seeded, 24% 1993, 23% avg.; 5% emerged, 2% 1993, 5% avg. Oats 31% seeded, 18% 1993, 24% avg.; 5% emerged, 1% 1993, 6% avg. Dry onions 55% planted, 24% 1993, 27% avg. Dry onion 11% fair, 76% good, 13% excellent. Sugarbeets 18% planted, 18% 1993, 14% avg. Spring wheat 12% planted, 6% 1993, 5% avg. Winter wheat 8% pastured, 10% 1993, 9% avg.; 3% very poor, 2% poor, 21% fair, 62% good, 12% excellent. Last week's frost damage to fruit trees on the western slope was less than previously anticipated. Cows calved 68%, 69% 1993, 65% avg. Ewes lambed 79%, 74% 1993, 71% avg. Calving, lambing losses reported less than average. Livestock good to excellent. Pasture, range feed condition mostly fair.

FLORIDA: Temperatures 3 to 9° below normal. Scattered frost occurred over northwest area 1st, 2nd mornings with normally colder locations reporting minimums near freezing. Elsewhere, lows varied upper 30s to low 60s. Highs upper 70s to low 90s. Most areas received some rain with amounts varying from under 0.50 in. to locally 1.00 to 3.00 in.

Soil moisture mostly short to adequate throughout State. Tobacco transplanting winding down. Corn planting active. Early corn up. Making preparations for cotton, peanut planting. Sugarcane making good progress. Citrus trees very good condition. Rain needed all areas. Irrigation maintaining good tree condition. Trees currently setting next years crop. Most varieties bloomed rapidly, few early-mid older trees bloomed a little late. Valencia harvest increasing. Seedless grapefruit active, east coast. Temples, Honey tangerine movement slowing. Caretakers cutting cover crops, hedging, topping, post bloom spraying. Growing conditions seasonally normal over major vegetable growing areas with clear skies, light showers. Rain needed most areas. Some wind damage to watermelons west, southwest. Tomato harvest to start Palmetto/Ruskin 7 to 10 days. Sweet corn harvest increasing east coast, Everglades. Leading vegetable shipments: Tomatoes, peppers, cabbage, potatoes, sweet corn. Also available: Snap beans, carrots, celery, chinese cabbage, cucumbers, eggplant, escarole, iceberg lettuce, leaf lettuce, romaine, specialty lettuces, radishes, strawberries, squash, cherry tomatoes. Pasture feed 30% fair, 60% good, 10% excellent. Cattle in mostly good condition.

GEORGIA: Temperatures 6 to 8° below normal north, 5° below normal southeast. Highs 70s northeast to 80s southeast. Lows 20s northern border to 40s southeast. Rain reported 2 to 3 days in north, southwest, 1 to 2 days southeast. Rain 0.75 in. north, southeast. Local areas in central, southwest 1.00 to 2.00 in.

Days suitable for fieldwork 3.5. Soil moisture 3% short, 64% adequate, 33% surplus. Corn 3% poor, 13% fair, 79% good, 5% excellent. Busy planting corn except in areas where fields too wet. Peanuts 0% planted, 0% 1993, 0% avg. Tobacco 14% fair, 82% good, 4% excellent; 35% transplanted, 11% 1993, 37% avg.; Continuing transplanting at a fast pace. Wheat 97% jointing, 78% 1993, 91% avg.; 50% boot, 23% 1993, 48% avg.; looks good, some wheat down in north due to storms. Other small grains 11% fair, 82% good, 7% excellent. Onions 100% good; Applying fungicides. Watermelons 4% poor, 47% fair, 49% good; 42% planted, 38% 1993, 51% avg. Other vegetables 10% poor, 30% fair, 57% good, 3% excellent; Planting vegetables, laying plastic, spraying for weeds. Apples 29%

fair, 71% good; 7% blooming, 3% 1993, 29% avg.; utilized overhead irrigation to prevent frost damage. Peaches 4% fair, 96% good; 98% blooming, 90% 1993, 94% avg.; utilized overhead irrigation to prevent frost damage. Pasture 2% poor, 23% fair, 70% good, 5% excellent; fertilizing fields, greening up nice. Cattle 14% fair, 83% good, 3% excellent. Hogs 2% fair, 95% good, 3% excellent. Activities: clearing, repairing damage due to the storms in the north. Preparing fields in the south. Attending to livestock, poultry.

HAWAII: Increased periods of sunshine, warmer temperatures, lighter tradewinds caused by a weak high pressure system north of the State brought relief from recent wet, windy weather. Rainfall none to 2.90 in. Temperatures low 60s to mid 80s.

Weather was generally beneficial allowing most crops to recover from the adverse mid-March conditions. Favorable weather allowed farmers to resume normal field, harvesting activities, schedules. Papaya production at seasonally lower levels. Papaya ringspot virus discovered spreading to new areas causing concern for industry.

IDAHO: Temperatures 0 to 10° above normal. Precipitation none north, none to 0.05 in. southwest, none to 0.03 in. south-central, none to 0.30 in. east.

Days suitable for fieldwork 6. Soil moisture 3% very short, 39% short, 55% adequate, 3% surplus. Spring barley planted 28%, 2% 1993, 12% avg. Spring barley emerged 4%, 0% 1993, 7% avg. Oats planted 8%, 1% 1993, 7% avg. Sugarbeets planted 46%, 0% 1993, 21% avg. Onions planted 96%, 0% 1993, 37% avg. Irrigation water supplies 2% very poor, 6% poor, 29% fair, 52% good, 11% excellent. Hay, roughage supplies 1% poor, 88% fair, 11% good. Activities: Planting small grains, sugarbeets, shipping seed potatoes, irrigation repair, service. Livestock good condition with calving 80% complete, lambing 83% complete.

ILLINOIS: Fairly dry until the weekend with temperatures on a bit of a rollercoaster. Temperatures 3 to 8° cooler than normal. Highs 50 to 60°. Lows 25 to 35°. Precipitation varied 0.25 to 0.50 in. fell primarily across central, southern areas.

Days suitable for fieldwork 3.0. Soil moisture 4% short, 84% adequate, 12% surplus. Oats planted 42%, 3% 1993, 20% avg. Pasture 90% of normal. Alfalfa 3% poor, 32% fair, 65% good. Farmers across most of the State began spring fieldwork this week. Activities included disking, plowing, seeding oats along with applying anhydrous, early preplant herbicides. Reports of wheat being destroyed in the south due to poor stands were received. Corn planting continued in central to south central areas with most farmers in this region waiting for warmer soil temperatures.

INDIANA: Highs mostly in the 50s, 1 to 8° below normal in the east-central, south, normal to 3° above normal in the north, west-central. Average lows upper 20s to mid 30s, 2 to 8° below normal across the central, south, 1 to 5° below normal in the north. Precipitation of 0.20 to 0.50 in. was common across the State, except for 0.10 in. or less in the northwest. Daily average four-inch soil temperatures under bare ground averaged in the 40s.

Livestock doing well. Spring tillage continues where dry. Pastures starting to green up. Main activities: Manure hauling, top dressing wheat, spreading fertilizer. Other activities: Purchasing supplies, lime spreading, equipment setup, general farm maintenance, farm program sign up.

IOWA: Temperatures 2 to 5° below normal. Extremes 12°; 74°. Precipitation only trace most areas, maximum 0.18 in.; State average 0.01 in. (normal 0.64 in.). Preliminary data indicate a State average precipitation of 0.18 in. in March which ties with 1910 as the lowest March total in 122 years of State recordkeeping.

Days suitable for fieldwork 5. Topsoil 22% short, 77% adequate, 1% surplus. Subsoil 75% adequate, 25% surplus. Oats sown 55%, 0% 1993, 17% avg. Fertilizer application 48%, 20% 1993, 36% avg. Primary seedbed preparation 50%, 21% 1993, 40% avg. Winter wheat winterkill 4%. Alfalfa hay winterkill 21%. Red clover hay winterkill 13%. Winter wheat 5% excellent, 51% good, 44% fair. Livestock are in mostly good condition. The dry March weather has been excellent for calving.

KANSAS: Temperatures 1 to 5° below normal. Precipitation very light to moderate, 0.01 in. southwest, 0.88 in. southeast.

Days suitable for fieldwork 5.5. Topsoil 74% short to very short, 26% adequate. Subsurface moisture 18% short to very short, 81% adequate, 1% surplus. Seedbed preparations for row crops continue

at rapid pace. Increase number of acres being fertilized this spring on land too wet to fertilize last fall. Light amounts of freeze damage northwest, west central, southwest, central. Cool temperatures, lack of moisture combined to slow wheat growth many areas. Light amounts of precipitation fell southern tier of counties but more is needed. Wheat jointing 15%, 2% 1993, 10% avg. Disease, insect infestations remain light, however, Russian wheat aphids moving northward western third of State. Corn planting in early stages. Majority of corn planted in east central, southeast. Oats planted 95%, 30% 1993, 80% avg. Spring barley planted 95%, 25% 1993, 75% avg. Pasture, ranges fair to good. Cattle getting 20% roughage requirements from pastures. Some calving problems due to higher birthweight calves west central.

KENTUCKY: Wet, cool. Temperatures 5 to 10° below normal. Highs first part of week mid 40s to upper 50s, second part of week, upper 50s to 70s. Lows mid 20s to lower 40s. Lows dropped below freezing on March 30th. April 1st to 3rd rainfall about 0.25 in.

Days suitable for fieldwork 1.2. Soil moisture 20% adequate, 80% surplus. Wheat 5% poor, 31% fair, 60% good, 4% excellent. Barley 7% poor, 32% fair, 57% good, 4% excellent. Tobacco beds 55% seeded, 35% 1993, 65% avg. Pastures mostly fair to good. Warm, dry weather needed to allow increased field activity.

LOUISIANA: Temperatures 6.1 to 8.1° below normal. Extremes 29°; 85°. Rainfall 0.15 in. south-central to 1.42 in. northeast.

Days suitable for fieldwork 5.0. Soil moisture 6% short, 83% adequate, 11% surplus. Corn 3% poor, 67% fair, 30% good; 82% planted, 45% 1993, 59% avg.; 44% emerged, 22% 1993, 37% avg. Continued in earnest with the excellent conditions, ahead of schedule. Rice 8% emerged, 8% 1993, 11% avg. Farmers stepped up planting. Wheat 8% poor, 49% fair, 43% good; 21% headed, 29% 1993, 42% avg.; crop looking good. Sorghum 0% emerged, 0% 1993, 2% avg. Planting was in the initial stages. Spring plowing 68% plowed, 42% 1993, 46% avg. Sugarcane 55% fair, 45% good. Off-barring, herbicide applications, plowing out stubble continued. Livestock 12% poor, 53% fair, 35% good. Spring herd management was active. Pasture 7% poor, 10% fair, 79% good, 4% excellent. Fertilization active. Vegetables 2% poor, 40% fair, 58% good. Planting continued.

MARYLAND & DELAWARE: **MARYLAND:** Precipitation 3.18 in., normal 0.87 in. Temperature 45.1°, normal 47.1°. Extremes 22°; 76°.

Activities: Caring for livestock. General farm chores. Machinery maintenance. Fieldwork being delayed due to excessive moisture.

DELAWARE: Precipitation 4.33 in., normal 0.86 in. Temperature 46.0°, normal 47.3°. Extremes 32°; 61°.

Activities: Caring for livestock. General farm chores. Machinery maintenance. Fieldwork being delayed due to excessive moisture.

MICHIGAN: Extremes 1°; 73°. Precipitation none to 0.47 in. across the State. State experienced a fairly mild week, skies were mostly sunny with very limited precipitation.

Livestock in good condition. Calving, lambing were going well. Feed supplies remained adequate. Activities: caring for livestock, hauling manure, spreading fertilizer, repairing equipment for planting.

MINNESOTA: Temperatures 1 to 3° below normal. Extremes 8°; 71°. Precipitation 0.21 to 0.58 in. below normal. Precipitation none to 0.11 in. for State. Greatest weekly total was 0.22 in. Snowfall 8 in. for the northwest, northeast, 1 to 3 in. elsewhere. Snow depth at week's end 3 to 8 in. for the northwest, northeast, 1 in. or less elsewhere.

Occasional warm, sunny days hinted at the awaited spring field season, but cold weather then returned to the State. Spring calving season is nearing completion.

MISSISSIPPI: Temperatures 6° below normal. Extremes 22°; 85°. Precipitation was heavy in the east-central district with 2.47 in. Rainfall 1.45 in. across the State, 0.15 in. above normal. Soil temperature 58°.

Days suitable for fieldwork 2.3. Soil moisture 53% adequate, 47% surplus. Corn 40% planted, 16% 1993, 29% avg.; 16% emerged, 5% 1993, 16% avg.; 77% fair, 22% good, 1% excellent. Rice 6% planted, 1% 1993, 3% avg.; 3% emerged, 0% 1993, 0% avg. Sorghum 14% planted, 2% 1993, 6% avg.; 10% emerged, 0% 1993, 0% avg. Watermelons 22% planted, 7% 1993, 26% avg.; 3% poor, 2% fair, 95% good. Wheat 84% jointing, 60% 1993, 77% avg.; 7% heading, 3% 1993, 14% avg.; 35% fair, 60% good, 5% excellent. Livestock 8% fair, 80% good, 12% excellent. Pasture 85% of normal. Activities: Land preparation for spring crops, equipment maintenance.

MISSOURI: Temperatures 5 to 8° below normal. Precipitation 0.42 in., ranging from 0.32 in. south-central to 0.61 in. west-central.

Days suitable for fieldwork 4.3. Topsoil 9% short, 75% adequate, 16% surplus. Corn plantings mostly limited to southeast district where 15% planted. Oats sown 50%, 8% 1993, 41% avg. Percent ground worked once 43%, 31% 1993, 52% avg. Pasture 6% poor, 50% fair, 43% good, 1% excellent.

MONTANA: Temperatures 2 to 6° below normal, except eastern third 2 to 5° above normal. Precipitation scattered and light.

Days suitable for fieldwork 2.9. Topsoil 13% short, 76% adequate, 11% surplus. Subsoil moisture 23% short, 67% adequate, 10% surplus. Field tillage work in progress 60% none, 28% just started, 12% well underway. Winter wheat 38% dormant, 55% greening, 7% growing. Wind damage to winter wheat 39% none, 41% light, 16% moderate, 4% heavy. Barley 3% planted, 0% 1993, 1% avg. Sugarbeets 5% planted, 0% 1993, 0% avg. Livestock grazing is 84% open, 10% difficult, 6% closed. Livestock in most regions receiving supplemental feed. Calving is 70% complete, lambing is 60% complete.

NEBRASKA: Temperatures 1 to 5° below normal. Precipitation less than 0.10 in., occurred in the form of snow.

Days suitable for fieldwork 6.0. Topsoil 39% short, 61% adequate. Subsoil moisture 97% adequate, 3% surplus. Wheat 45% fair, 55% good. Oat 45% planted, 1% 1993, 27% avg. Pasture, range condition 98% of normal. Spring calving 68% complete; minimal losses.

NEVADA: High pressure system dominated. Light showers west, northeast, east-central areas. Temperatures 5 to 7° above normal. Extremes 14°; 86°.

Preparing ground for spring planting making progress all areas. Some oats, barley already planted. Winter wheat greening up. Much concern about supplies of surface water for irrigation. First cutting alfalfa hay about complete extreme south. Calving and lambing continue with no major problems.

NEW ENGLAND: Precipitation, temperature data unavailable. Activities: Sugaring throughout region. Tending livestock.

NEW JERSEY: Temperatures below normal. Extremes 23°; 71°. Rainfall 0.90 in. north, 1.20 in. central, 1.70 in. south. Heaviest 24-hour total 1.59 in. on 28th, 29th. Estimated soil moisture, in percent of field capacity, averaged 100% north, 98% central, 98% south. 4-inch soil temperatures averaged 37° north, 46° central, 49° south.

Farmers busy caring for livestock; repairing equipment, limited planting in some areas.

NEW MEXICO: Temperatures 3° below normal in east, normal in west. Extremes 1° northern mountains; 90° southeastern desert. Most precipitation was confined to the eastern counties. Higher totals 0.25 to 0.50 in.

Days suitable for fieldwork 6.1. Soil moisture 79% short, 21% adequate. Light to moderate wind, freeze damage reported to apricots, peaches, cherries, alfalfa, lettuce, onions, cabbage. Crop conditions: Alfalfa 5% poor, 49% fair, 41% good, 5% excellent. Irrigated wheat 18% poor, 34% fair, 42% good, 6% excellent. Dryland wheat 30% very poor, 51% poor, 19% fair. Chile, onions, lettuce fair to good. Potato planting active. Cattle, sheep poor to good. Range feed condition 58% of normal.

NEW YORK: Week started cool, wet, ended mild. Precipitation near or little below normal. Temperatures slightly below normal. On 27th storm brought snow changing to rain. The 28th through 30th were cool with scattered rain, snow showers. Rest of week was dry, mild, except in north. Cooler in north with dusting of snow.

Activities: tending livestock, spreading manure, moving crops from storage, attending meetings, repair work. Maple syrup season well underway. Producers collecting sap, making syrup. Weather conducive for several good sap runs during the week.

NORTH CAROLINA: Temperatures 4° below normal to 2° above normal. Largest negative departures were in the mountains. Rainfall 6.31 in. at Mount Mitchell to 0.18 in. at the Marine Corps Air Station in Jacksonville.

Days suitable for fieldwork 2.6. Soil moisture 45% adequate, 55% surplus. Crop conditions: Wheat 21% fair, 77% good, 2% excellent; oats 2% poor, 27% fair, 71% good; barley 23% fair, 74% good, 3% excellent; rye 19% fair, 78% good, 3% excellent; pasture 2% very poor, 4% poor, 28% fair, 66% good; outdoor tobacco plant bed; 3%

poor, 23% fair, 74% good; greenhouse tobacco plant beds 6% fair, 86% good, 8% excellent; irish potatoes; 7% poor, 57% fair, 36% good; peaches 29% fair, 71% good; truck crops 12% poor, 53% fair, 35% good; hay, roughage supplies 16% very short, 27% short, 57% adequate. Feed grain supplies 5% very short, 14% short, 79% adequate, 2% surplus; tobacco plant supplies 84% adequate, 16% surplus. Irish potatoes planted 67%, 60% 1993, 74% avg.; corn planted 5%, 2% 1993, 9% avg.; cabbage transplanted 75%, 65% 1993, 73% avg. Main activities: topdressing small grains, tobacco plant bed maintenance, preparing land for planting. Other activities: tending livestock; equipment repair, general farm maintenance.

NORTH DAKOTA: Temperatures 1 to 3° below normal. Extremes: 2° southwest; 66° south central.

Topsoil moisture significantly above last year. Topsoil moisture 0% short, 76% adequate, 24% surplus compared to 8% short, 86% adequate and 6% surplus last year. Subsoil moisture 8% short, 75% adequate, 17% surplus compared to 6% very short, 49% short, 43% adequate, 2% surplus last year. Winter wheat 93% dormant, 7% green while condition was 26% fair, 72% good, 2% excellent. Calving, passed half way point. Calving was 56% complete, lambing 65%, shearing 69%. Calves 19% fair, 76% good, 5% excellent. Lambs 15% fair, 80% good, 5% excellent. Supplemental feeds provided to nearly all livestock as 89% of pastures were still dormant. Pastures 94% of normal compared to 84% 1993. Supplies of hay, forage, grains, concentrates were mostly adequate.

OHIO: Cool weather turned to mild, dry weather by late in the week. Highs: low to mid 50s, near normal north, 5 to 8° below normal south. Lows: around 30° north to the mid 30s south, short of normal by 1 to 3°. Soil temperatures low 30s north to the mid 30s south, below normal by 1 to 3°. Rainfall under 0.50 in. at most locations; as high as 0.88 in. at the agronomy farm in Columbus, 0.84 in. at Dayton. Most totals were below normal by 0.20 to 0.60 in.

Days suitable for fieldwork 3.7. Soil moisture 4% short, 55% adequate, 41% surplus. Winter wheat 1% very poor, 7% poor, 31% fair, 50% good, 11% excellent. Oats planted 4%, 0% 1993, 2% average. Tobacco beds planted 35%. Potatoes planted 1%. Sugarbeets planted 5%. Pasture 3% very poor, 12% poor, 41% fair, 41% good, 3% excellent. Hay 1% very poor, 7% poor, 41% fair, 49% good, 2% excellent. Apples 1% very poor, 12% poor, 39% fair, 46% good, 2% excellent. Peaches 36% very poor, 35% poor, 18% fair, 11% good, 1% excellent. Many farmers were able to plow their fields, topdress winter wheat.

OKLAHOMA: Temperatures 4° below normal southeast to 1° below normal west-central. Precipitation none west central, southwest to 1.15 in. east-central.

Topsoil moisture 24% short, 71% adequate, 5% surplus. Subsoil moisture 27% short, 73% adequate. Oats 41% fair, 59% good; 26% jointing, 12% 1993, 33% avg.; 1% headed, 0% 1993, 2% avg. Barley 15% fair, 85% good; 24% jointing, 16% 1993, 32% avg.; 1% headed, 0% 1993, 0% avg. Corn 71% seedbed prepared, 65% 1993, 76% avg.; 13% planted, 12% 1993, 11% avg. Soybeans 25% seedbed prepared, 16% 1993, 32% avg. Peanuts 35% seedbed prepared, 46% 1993, 32% avg. Pasture 94% of normal. Livestock fair 8%, good 92%. Feeders, calves were steady to \$2.00 higher.

OREGON: Record highs early in the week, western sections. Precipitation 0.50 to 0.75 in. coastal areas, 0.25 to 1.00 in., 1.00 to 1.15 in. southwestern valleys, up to 0.50 in., eastern sections.

Soil moisture 36% short, 61% adequate, 3% surplus. Winter wheat 6% poor, 30% fair, 59% good, 5% excellent. Barley planted 41%. Spring wheat seeding, fertilizing, ground preparation underway, statewide. Peaches, prunes, apricots bloom stage. Some frost damage, southern Willamette Valley. Caneberries, hazelnuts leafing out; strawberry regrowth underway: Willamette Valley. Pears beginning to bloom; Medford district, lower Hood River Valley. Cherry bloom expected, The Dalles district, no frost damage. Onion, potato planting underway; Malheur County, Columbia Basin. Columbia Basin green peas planting on schedule. Livestock mostly good. Range, pasture 89% of normal. Supplemental feeding continues, eastern areas; cattle turned out on pastures, western areas. Livestock producers starting to brand.

PENNSYLVANIA: Eastern part of the State received major precipitation early in the week. Rest of the State had below normal precipitation. Temperature 44°, 4° above normal. Extremes 19°; 70°. Precipitation 0.76 in., 0.05 in. below normal.

Activities: Hauling manure; fixing fence; caring for livestock.

PUERTO RICO: Rainfall 0.45 in., 0.20 in. below normal. Highest weekly total rainfall 2.74 in. at Mayaguez. Temperatures 77 to 79° on coasts, 70 to 74° interior with mean station temperature 80.2° San Juan WSFO to 62.9° Pico del Este. Extremes 54°; 93°.

SOUTH CAROLINA: Temperatures 1 to 3° above normal. Average rainfall 1.00 in.

Days suitable for fieldwork 5.2. Soil moisture 21% short, 74% adequate, 5% surplus. Tobacco fair to good; 4% planted, 2% 1993, 9% avg. Corn fair to good; 55% planted, 27% 1993, 38% avg. Cantaloupes fair to good; 37% planted, 11% 1993, 20% avg. Watermelons fair to good; 44% planted, 22% 1993, 35% avg. Cucumbers fair to good; 27% planted, 26% 1993, 35% avg. Snapbeans good; 36% planted, 35% 1993, 26% avg. Pastures fair to good.

SOUTH DAKOTA: Temperatures slightly below normal last week. Extremes 7°; 75°. Scattered, light precipitation early 0.25 to 0.50 in. below normal. Heaviest 0.85 in. west-central.

Topsoil moisture 11% short, 49% adequate, 40% surplus. Subsoil moisture 67% adequate, 33% surplus. Winter rye 3% fair, 96% good, 1% excellent. Winter wheat 28% fair, 70% good, 2% excellent. Spring planting started in extreme western, southern portions. Remainder waiting for warmer, dryer soil. Expected starting date for fieldwork 12th. Livestock 7% fair, 81% good, 12% excellent. Temperature swings caused health problems for young livestock, ranchers forced to take extra care. Calving, lambing progressed. Feed supply 74% adequate, 26% surplus. Ranchers held livestock off wet pastures. Water supply 62% adequate, 38% surplus. Other farm activities: Hauled grain, moved hay to ranch headquarters, prepared equipment for fieldwork, early fertilizer application.

TENNESSEE: Temperatures slightly above normal. Rainfall well above normal across the State. Most areas received at least 2.00 in. of rain. Rainfall amounts in east 2.50 in. to as much as 10.00 in.

Days suitable for fieldwork 1.0. Soil moisture 4% adequate, 96% surplus. Corn 2% planted, 0% 1993, 0% avg. Cotton 0% planted, 0% 1993, 0% avg. Tobacco 74% seeded, 68% 1993, 82% avg.; 23% plants up, 22% 1993, 36% avg. Wheat 10% jointed, 16% 1993, 29% avg.; 1% poor, 36% fair, 63% good. Apples 54% budding or beyond, 54% 1993, 60% avg.; 5% blooming or beyond, 6% 1993, 20% avg. Peaches 79% budding or beyond, 83% 1993, 81% avg.; 52% blooming or beyond, 64% 1993, 65% avg. Pastures 5% poor, 39% fair, 52% good, 4% excellent. Cattle 3% poor, 41% fair, 55% good, 1% excellent. Fieldwork brought to a halt because of saturated soils. Wheat is beginning to respond to nitrogen topdress, in fair to good condition. Pasture growth slow because of excessive moisture, cattle producers still feeding hay, and hay supplies are becoming extremely short. Apple trees beginning to bloom. Some light frosts occurred, too early to know if any damage occurred to the fruit crop.

TEXAS: Surges of high pressure resulted in cool, dry weather. Early in week, freezing temperatures were reported in Panhandle, northern south Plains and parts of northeast Texas. A front brought showers to northern, eastern areas early in weekend but amounts were generally light. Precipitation ran below normal statewide with none reported over most of Plains, southern areas. Temperatures below normal except for normal values for Northern High Plains.

Crops: Corn planting winding down in Blacklands, Coastal Bend, South Central, Upper Coast, Rio Grande Valley. In South Central Texas some fields were damaged by hail. Field preparation continued in Plains. Corn 75% normal. Cotton field preparation continued in Cross Timbers. Producers were bedding fields, applying herbicides in Southern Low Plains. High winds delayed application of pre-plant herbicides in some areas of Northern Low Plains. Cold weather slowed cotton planting in some areas of Blacklands. Planting was winding down in Rio Grande Valley. Rice: Planting gained momentum along Upper Coast. Sorghum: Planting continued to wind down in Coastal Bend, Rio Grande Valley, South Central Texas. Planting was in full swing in Blacklands. Sorghum 73% normal. Small Grains most areas of Plains were in need of moisture to boost growth of small grains. Yield outlook for wheat in some areas of Southern Low Plains was poor due to dry conditions. Oat fields continued to provide grazing across many areas of State. Wheat 63% normal, 76% 1993.

Commercial Vegetables: Rio Grande Valley: harvest of cabbage, carrots, onions continued. Melons continued to make good progress. High Plains: land preparation, onion planting continued. San Antonio-Winter Garden: cabbage, carrot harvest continued as conditions allowed. Planting of watermelons continued. East Texas: land preparation continued. Cool season vegetables made good progress in some areas. Trans-Pecos: planting of cantaloupes, chilies continued. Peaches: producers applied fungicides in many areas of State. In Cross Timbers, plum curculio control materials were applied to some orchards. In Blacklands, producers were still concerned about crop outlook due to the recent cold weather.

Range and Livestock: Ranges, pastures in most areas of State could use a good rain to boost growth of warm season grasses. Some weed control and fertilization practices were underway. Producers in Trans-Pecos were cutting, baling alfalfa hay. Supplemental feeding was on rise in some areas of Plains where a lack of moisture has hampered forage growth. Spring calving, branding continued. Livestock continued to be in fair to good condition.

UTAH: Maxima 3° above normal, minima 2° below normal. Precipitation light to moderate across the State, except for Uinta Basin, Southeast divisions which received little to no precipitation.

Days suitable for fieldwork 6.4. Soil moisture 12% short, 46% adequate, 42% surplus. Winter wheat freeze damage 12% none, 88% light. Winter wheat 77% good, 23% adequate. Fall barley freeze damage 18% none, 82% light. Fall barley condition 81% good, 19% adequate. Spring wheat planted 38%, 6% 1993, 39% avg. Barley planted 45%, 9% 1993. Oats planted 19%, 5% 1993. Cows calved 61%, 61% 1993. Ewes lambing on farm 72%, 66% 1993. Ewes lambing on range 38%, 17% 1993. Sheep sheared on farm 55%, 43% 1993. Sheep sheared on range 34%, 22% 1993. Pasture, range conditions good to excellent.

VIRGINIA: Temperatures slightly below normal. Extremes 25°; 82°. Precipitation was much above normal.

Days suitable for fieldwork 0.8. Topsoil moisture was 9% adequate 91% surplus. Barley 3% poor, 49% fair, 45% good, 3% excellent. Wheat 4% poor, 59% fair, 35% good, 2% excellent. Pasture 58% fair, 40% good, 2% excellent. Alfalfa hay 55% fair, 45% good. Peaches 40% very poor, 7% poor, 41% fair, 12% good. Apple 26% fair, 74% good. Tobacco plantbeds 96% seeded. Planted condition 1% poor, 39% fair and 60% good. Potato planting was about 65% completed. Topdressing small grains, overseeding pastures, hay fields, fertilizing, liming corn, soybean land, and pruning, spraying fruit trees.

WASHINGTON: Temperatures 3° below normal to 9° above normal west; 6 to 11° above normal east. Precipitation none to 0.26 in. west; none to 0.20 in. east.

Days suitable for fieldwork 6.9. Soil moisture 62% short, 38% adequate. Hay, other roughage supplies 22% short, 75% adequate, 3% surplus. Range, pasture 13% very poor, 10% poor, 60% fair, 17% good. Winter wheat dryland 1% poor, 50% fair, 45% good, 4% excellent; irrigated 60% good, 40% excellent. Spring wheat dryland 1% poor, 36% fair, 59% good, 4% excellent; irrigated 71% good, 29% excellent. Barley dryland 65% fair, 25% good, 10% excellent; irrigated 100% good. Warm, dry weather prompted a flurry of fieldwork. Spring grains, potatoes were being planted. Irrigation water began flowing in the Columbia Basin. Blueberries, stone fruit beginning to bloom. Orchardists were also busy with dormant sprays and pest control. Early vegetable planting underway. Pastures were starting to green up, a few cattle were turned out onto early spring pastures.

WEST VIRGINIA: Temperature 45°. Extremes 24°; 75°. Precipitation 0.73 in. Temperatures 2 to 4° below normal except 0 to 2° above normal in the northern half. Precipitation 0.12 to 0.19 in. above normal in the central, northeast region, near normal in the south, 0.14 to 0.42 in. below normal elsewhere.

Farm activities: Cultivating, calving, lambing, feeding livestock. **WISCONSIN:** Temperature 36°, 1° below normal. Extremes -8°; 72°. Precipitation trace to 0.20 in. Early in the week snow fell: up to 8 in. north, 1 to 5 in. reported in central areas, rain in the south.

Days suitable for fieldwork 1.5. Soil moisture 2% short, 70% adequate, 28% surplus. Intended spring tillage 2% complete, 5% 1993, 2% avg. Oats 1% planted, 0% 1993, 0% avg. In the north, frost is still pretty deep while in the central sands, parts of southern Wisconsin frost is moving out. The resulting moisture is preventing some farmers from fieldwork but manure hauling is reported in all areas. Most reporters indicated that winter wheat, alfalfa look good. Maple syrup production is fair, running good in the cool weather early in the week.

WYOMING: Temperatures mostly 2 to 6° below normal. Precipitation was below normal across the State by generally one to two tenths of an inch. Moran, Alva, Lander received the largest amounts of precipitation with 0.40 to 0.44 in.

Days suitable for fieldwork 3.8. Topsoil moisture 14% short, 79% adequate, 7% surplus. Subsoil moisture 8% short, 92% adequate. Spring wheat 7% planted, 4% 1993, 13% avg. Oats 12% planted, 15% 1993, 9% avg.; 1% emerged, 0% 1993, 0% avg. Barley 44% planted, 3% 1993, 31% avg. Winter wheat 25% fair, 75% good. Freeze damage 3% none, 91% light, 6% moderate. Prospects for alfalfa hay 27% fair, 60% good, 13% excellent. Condition of all livestock 4% fair, 96% good. Spring calves born 65%, 60% 1993, 59% avg. Calf death losses 35% light, 65% normal. Farm flock: Ewes lambing 80%, 73% 1993, 67% avg.; shorn 81%, 62% 1993, 64% avg. Range flock: Ewes lambing 12%, 10% 1993, 23% avg.; shorn 39%, 19% 1993, 36% avg. Lamb death losses 18% light, 82% normal. Range, pasture 97% normal.

March 1994

MONTHLY DATA FROM SELECTED FOREIGN CITIES
CLIMATE ANALYSIS CENTER-NMC-NWS-NOAA
*** = DATA NOT AVAILABLE

International Weather and Crop Summary
HIGHLIGHTS

March 27 - April 2, 1994

FSU-WESTERN: Tranquil weather favored early-spring fieldwork.

NORTHWESTERN AFRICA: Unfavorably warm, dry weather increased stress on winter grains in Morocco, Algeria, and Tunisia.

EUROPE: Showers and unseasonably mild weather promoted early-spring growth.

SOUTH ASIA: Dry, warm weather helped winter crop maturation but stressed immature northern crops.

SOUTHEAST ASIA: Continued unseasonable rains increased Thailand's moisture reserves.

SOUTH AFRICA: Showers benefited late-planted eastern corn, while conditions favored maturing corn in the west.

EASTERN ASIA: Dry, warm weather aided early winter grain growth and field preparations for summer crops across the North China Plain.

AUSTRALIA: Dry weather continued to favor summer crop harvesting across eastern Australia.

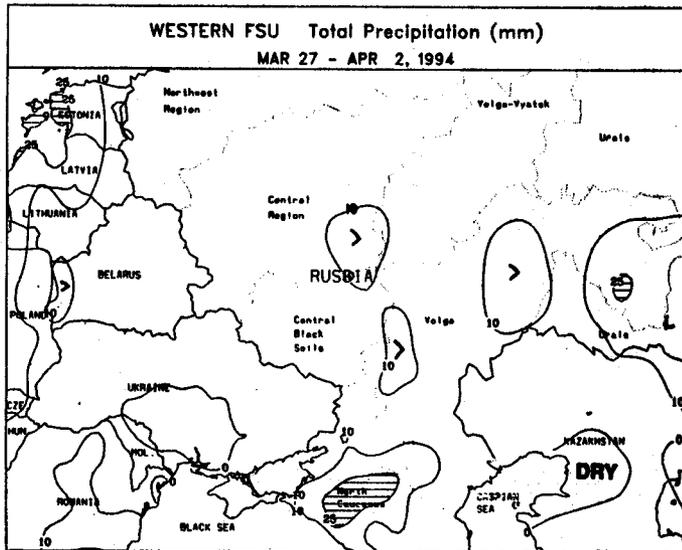
SOUTH AMERICA: In Argentina, dry weather favored corn and sunflowerseed harvesting, while frost threatened second-crop soybeans.

COUNTRY	CITY	TEMPERATURE (C)					PRECIPITATION (MM)		
		AVG MAX	AVG MIN	HI MAX	LO MIN	AVG DEPART	F/NRM TOTAL	F/NRM DEPART	
NORWAY	OSLO	3	-6	8	-19	-2	0.3	82	29
SWEDEN	STOCKHOLM	4	-3	10	-14	1	0.4	38	12
FINLAND	HELSINKI	1	-6	7	-21	-3	0.1	61	27
U KING	GLASGOW	9	3	12	-3	6	-0.2	183	112
	EDINBURGH	9	3	14	-2	6	0.7	89	38
	BIRMINGHAM	11	5	15	0	8	2.4	60	9
	LONDON	12	5	17	-3	8	2.1	45	-15
IRELAND	DUBLIN	11	5	16	0	8	1.5	55	2
ICELND	REYKJAVIK	1	-3	8	-12	-1	-1.4	85	3
DENMRK	COPENHAGEN	6	1	12	-6	3	1.5	53	21
LUXEMB	LUXEMBOURG	10	4	19	-2	7	2.9	71	3
SWITZL	ZURICH	13	6	21	0	10	5.2	82	9
	GENEVA	15	6	23	-1	10	5.3	17	-61
FRANCE	PARIS/ORLY	14	6	22	1	10	***	35	**
	STRASBOURG	14	7	22	-2	10	4.6	23	-14
	BOURGES	14	6	24	1	10	3.5	30	-30
	BORDEAUX	17	7	25	1	12	3.7	17	-59
	TOULOUSE	16	7	26	2	12	3.4	15	-42
	MARSEILLE	18	8	24	5	13	3.3	2	-42
SPAIN	VALLADOLID	17	5	23	2	11	3.3	2	-31
	MADRID	19	6	26	1	**	***	0	-47
	SEVILLE	24	11	30	7	17	2.2	0	-93
PORTUG	LISBON	20	11	27	8	16	2.4	1	-98
GERMNY	HAMBURG	8	3	16	-2	6	2.1	144	88
	BERLIN	10	4	21	-1	7	2.3	89	52
	DUSSELDORF	11	5	20	-3	8	2.1	101	60
	LEIPZIG	11	4	18	-2	7	3.6	96	62
	DRESDEN	10	4	20	-2	7	3.8	119	82
	STUTTGART	12	5	20	-2	9	4.3	40	-2
	NURNBERG	11	4	19	-2	8	4.0	50	5
AUSTRI	VIENNA	13	5	22	-1	9	3.9	28	-3
	INNSBRUCK	15	4	24	-3	10	5.3	35	-14
CZECH	PRAGUE	11	3	21	-3	7	3.6	40	11
POLAND	WARSAW	8	1	19	-8	4	2.2	66	38
	LODZ	8	1	20	-8	4	2.4	53	17
	KATOWICE	9	2	21	-3	6	3.2	94	56
	PRZEMYSL	9	1	18	-3	5	2.8	56	22
HUNGAR	BUDAPEST	13	4	22	-1	9	3.0	26	-3
F YUGO	BELGRADE	16	6	25	1	11	4.1	27	-25
ROMANI	BUCHAREST	15	2	26	-6	9	4.7	13	-20
BULGAR	SOFIA	14	3	26	-2	8	3.4	20	-20
ITALY	MILAN	18	6	22	2	12	4.3	17	-61
	VERONA	17	5	20	1	11	2.7	2	-54
	VENICE	16	7	19	2	11	3.5	1	-57
	GENOA	15	10	22	7	13	1.2	15	-72
	ROME	18	7	23	2	12	1.5	0	-64
	NAPLES	18	9	23	5	13	2.6	1	-83
GREECE	THESSALONIKA	16	6	21	1	11	1.2	12	-34
	LARISSA	18	5	23	0	11	1.7	24	-14
	ATHENS	17	9	19	4	13	0.5	20	-14
TURKEY	ISTANBUL	13	6	20	0	9	2.6	21	-42
	ANKARA	11	-1	20	-8	5	0.3	20	-7
CYPRUS	LARNACA	19	9	23	5	14	0.4	77	38
ESTONI	TALLINN	1	-5	9	-19	-2	-0.3	70	42
FSU	ST. PETERSBERG	1	-4	7	-21	-2	0.4	40	8
LITHUA	KALINAS	3	-2	13	-14	0	0.5	76	44
FSU	MINSK	2	-3	11	-13	0	0.9	74	34
	KAZAN	-4	-10	4	-20	-7	-1.8	26	0
	MOSCOW	0	-7	5	-20	-3	-0.7	60	26
	YEKATERINBURG	-1	-9	6	-19	-5	-1.4	14	-2
	OMSK	-5	-15	4	-28	-10	-1.9	29	15
	KUSTANAY	-6	-16	4	-29	-11	-3.1	28	12
	KRASNOYARSK	0	-10	12	-26	-5	1.5	5	-9
	NOVOSIBIRSK	-3	-10	7	-25	-7	4.7	18	3
	BARNAUL	-2	-10	12	-25	-6	1.4	12	-7
	KHABAROVSK	-3	-13	4	-21	-8	-1.4	44	26
	VLADIVOSTOK	0	-6	5	-11	-3	-0.8	53	29
	KIEV	5	-1	13	-10	2	1.0	74	38
	LVOV	8	1	17	-5	4	3.2	48	8
	KIROVOGRAD	6	-2	28	-7	2	2.8	26	2

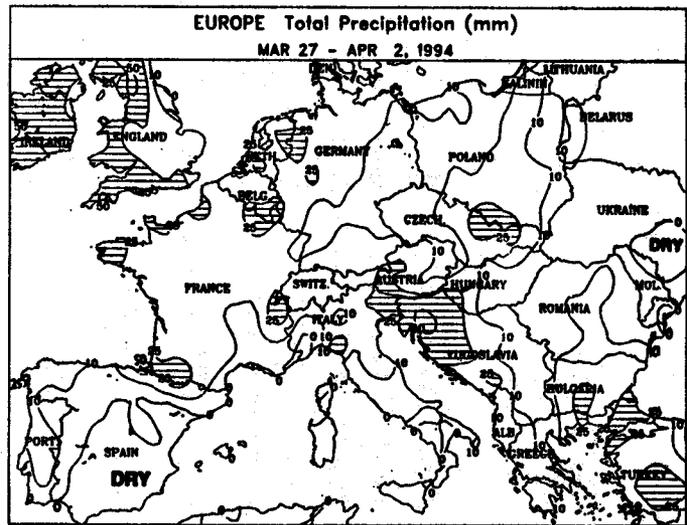
Based on Preliminary Reports

March 1994

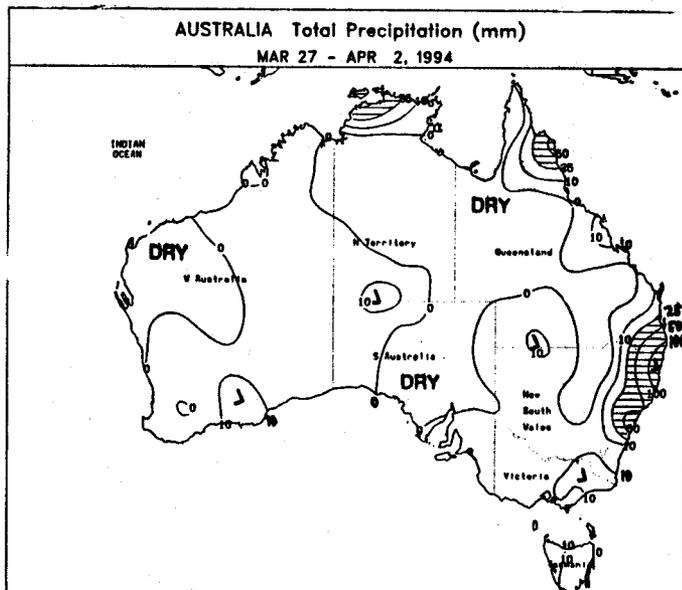
COUNTRY	CITY	TEMPERATURE (C)					PRECIPITATION (MM)			COUNTRY	CITY	TEMPERATURE (C)					PRECIPITATION (MM)		
		AVG MAX	AVG MIN	HI	LO	DPART	AVG	F/NRM	TOTAL			AVG MAX	AVG MIN	HI	LO	DPART	AVG	F/NRM	TOTAL
FSU	ODESSA	8	1	20	-4	5	1.9	7	-22	KENYA	NAIROBI	28	14	30	11	21	0.7	40	-30
	YALTA	9	3	18	-3	6	-0.2	22	-20	TANZAN	DAR ES SALAAM	**	**	34	22	**	**	43	-90
	VORONEZH	-1	-7	5	-19	-4	-1.6	39	9	GABON	LIBREVILLE	31	23	34	20	27	-0.2	440	35
	SARATOV	-4	-9	4	-19	-6	-1.7	57	37	TOGO	LOME	32	25	33	21	29	0.7	59	-11
	KHARKOV	2	-3	14	-10	-1	-0.5	39	10	B FASO	OUAGADOUGOU	39	25	43	20	32	1.1	0	-6
	VOLGOGRAD	0	-6	15	-16	-3	-0.1	36	5	IVRY C	ABIDJAN	32	26	33	22	29	1.2	112	12
	ROSTOV	4	-3	16	-15	0	-1.5	67	29	MOZAMB	MAPUTO	31	22	36	19	26	0.9	22	-68
	ASTRAKHAN	3	-5	18	-17	-1	-2.4	34	18	ZAMBIA	LUSAKA	30	**	34	14	**	**	0	-142
	KRASNODAR	8	-1	23	-11	4	0.1	107	51	ZIMBAB	HARARE	27	15	30	12	21	1.4	57	-41
	ORENEURG	-5	-14	4	-30	-10	-3.8	25	3	S AFRI	PRETORIA	27	16	31	13	21	0.6	77	-2
	TSELINOGRAD	-4	-14	11	-30	-9	1.8	11	2		JOHANNESBURG	24	12	27	8	18	-0.1	82	-8
	KARAGANDA	-2	-11	15	-28	-6	0.4	19	1		BETHAL	25	11	29	6	18	0.2	75	-12
	TASHKENT	16	6	26	-4	11	2.4	44	-27		DURBAN	28	20	30	17	24	0.3	161	34
	ASHKHBAD	15	6	27	0	10	0.7	45	3		CAPE TOWN	26	15	34	11	21	1.4	3	-18
SYRIA	DAMASCUS	19	5	26	-2	12	0.7	26	5	CANADA	TORONTO	4	-5	15	-13	-1	-0.1	51	-6
ISRAEL	JERUSALEM	15	6	23	1	11	-0.9	109	18		MONTREAL	1	-7	9	-21	-3	-0.7	65	-2
PAKIST	KARACHI	34	19	38	10	27	2.2	1	-13		WINNIPEG	3	-8	13	-21	-2	4.5	7	-16
INDIA	AMRITSAR	29	13	33	7	21	2.2	9	-33		REGINA	3	-6	17	-21	-2	4.3	4	-12
	NEW DELHI	31	16	36	10	24	1.4	4	-11		SASKATOON	2	-7	16	-26	-3	4.2	3	-13
	AHMEDABAD	38	21	43	15	30	2.2	0	0		LEATHERIDGE	11	-4	21	-11	4	4.2	1	-25
	INDORE	36	17	40	11	27	1.8	0	-3		CALGARY	10	-5	19	-13	3	4.9	9	-6
	CALCUTTA	34	22	37	16	28	0.8	29	7		EDMONTON	6	-4	17	-12	1	4.6	6	-11
	VERAVAL	33	20	40	17	27	1.7	0	0		VANCOUVER	11	3	18	-2	7	0.9	104	-5
	BOMBAY	34	21	36	16	28	1.0	0	0	MEXICO	GUADALAJARA	26	10	33	8	18	-0.7	0	-6
	POONA	37	16	39	12	27	1.0	0	-3		MEXICO CITY	**	**	30	8	**	**	0	-9
	BEGAMPET	37	22	40	18	30	1.5	0	-15		ACAPULCO	31	22	33	20	27	0.8	0	-4
	VISHAKHAPATNAM	31	25	32	21	28	**	0	**	BERMUD	ST. GEORGES	22	17	24	13	19	1.3	92	-21
	MADRAS	34	23	38	20	29	0.2	0	-6	BAHAMA	NASSAU	27	19	31	13	23	0.9	26	-14
	MANGALORE	34	25	38	21	29	1.3	0	-9	CUBA	HAVANA	28	21	33	17	24	1.0	36	-8
H KONG	KINGS PEAK	21	16	26	11	18	**	20	**	JAMAIC	KINGSTON	31	23	32	22	27	1.2	19	-1
N KREA	PYONGYANG	6	-5	16	-10	1	-1.7	21	-31	P RICO	SAN JUAN	30	22	33	21	26	0.7	35	-25
S KREA	SEOUL	9	0	19	-5	5	1.0	33	-23	GUADEL	RAIZET	31	20	32	16	25	0.9	8	-37
JAPAN	SAPPORO	2	-3	11	-9	-1	-0.5	162	80	MARINQ	LAMENIN	29	21	31	17	25	0.7	35	-40
	NAGOYA	13	3	20	-1	8	0.3	55	-55	BARBAD	BRIDGETOWN	30	24	30	21	27	0.8	18	-19
	TOKYO	12	5	19	2	8	-0.3	116	16	TRINID	PORT OF SPAIN	32	22	33	20	27	1.4	28	-3
	YOKOHAMA	12	5	18	2	8	0.0	132	13	COLOMB	BOGOTA	19	9	21	5	14	0.5	75	17
	KYOTO	12	3	20	0	8	0.1	33	-75	VENEZU	CARACAS	28	21	30	19	25	-0.4	1	-22
	OSAKA	12	5	19	1	9	0.0	38	-64	F GUIA	CAYENNE	29	23	30	21	26	0.3	471	110
THAILN	PHEICHABUN	35	22	39	19	29	0.3	207	161	BRAZIL	FORTALEZA	29	23	31	22	26	-0.4	302	-40
	BANGKOK	34	25	37	21	30	0.2	35	8		RECIFE	**	**	32	22	**	**	88	-170
MALAYS	KUALA LUMPUR	33	24	36	23	28	1.3	259	43		BELO HORIZONTE	27	19	31	16	23	-0.6	333	177
VIEINM	HANOI	21	17	28	12	19	-1.2	124	86		CAMPO GRANDE	30	20	35	18	25	0.3	94	-52
CHINA	HARBIN	0	-10	20	-19	-5	1.6	12	3		FRANCA	26	19	29	15	22	1.2	232	45
	HAMI	12	-5	23	-15	3	-1.0	1	0		LONDRINA	**	**	31	15	**	**	**	**
	LANCHOW	13	-1	26	-9	6	0.8	5	-9		SANTA MARIA	27	**	34	10	**	**	110	1
	BEIJING	11	0	23	-6	5	0.2	0	-9		PORTO ALEGRE	28	19	33	13	23	-0.3	112	23
	TIENTSIN	10	-1	24	-5	5	-0.7	1	-7	PERU	LIMA	27	20	29	19	23	1.0	0	0
	LHASA	12	-2	18	-10	5	0.3	5	3	BOLIVI	LA PAZ	14	3	17	1	8	-0.3	75	-2
	KUNMING	19	7	24	1	13	0.3	52	36	CHILE	SANTIAGO	27	10	33	5	19	1.1	0	-2
	CHENGCHOW	14	2	23	-3	8	0.2	12	-13	ARGENT	IGUAZU	30	18	33	12	24	**	37	**
	YEHCHANG	15	7	24	1	11	0.5	49	-8		FORMOSA	29	19	37	12	24	-1.2	188	27
	HANKOW	14	6	22	0	10	0.0	67	-18		CERES	28	15	35	9	22	-1.1	207	72
	CHUNGKING	16	9	24	4	12	**	48	**		CORDOBA	27	14	34	9	21	0.2	46	-71
	CHIHKIANG	14	7	22	-1	10	0.2	77	4		RIO CUARTO	26	15	34	7	20	0.6	63	-56
	WU HU	13	5	21	-2	9	**	56	**		ROSARIO	26	15	33	8	21	0.3	147	-19
	SHANGHAI	12	6	21	-1	9	**	36	**		BUENOS AIRES	26	16	33	6	21	1.0	96	-10
	NANCHANG	13	7	21	2	10	-0.6	112	-39		SANTA ROSA	27	14	37	1	21	1.4	64	-23
	TAIPEI	20	15	26	9	17	0.2	130	-44		TRES ARROYOS	25	14	34	6	20	1.4	103	21
	CANTON	20	14	26	9	17	-0.5	62	-22	N CALD	NOOMEA	28	23	31	20	25	0.0	79	-55
	NANNING	19	14	29	7	16	-1.4	115	67	FILJI	NAUSORI	30	25	33	22	27	1.0	353	-60
ONRY I	LAS PALMAS	21	15	26	13	18	-0.4	4	-7	SAMOA	PAGO PAGO	32	26	34	24	29	1.4	279	-16
MOROCC	CASABLANCA	19	12	25	9	15	0.7	28	-21	TAHITI	PAPEETE	32	25	35	23	29	1.7	313	118
	MARRAKBCH	22	10	34	7	16	0.3	70	38	N ZEAL	AUCKLAND	21	15	24	9	18	-1.0	0	-81
ALGERI	ALGER	21	8	31	4	14	1.1	1	-58		WELLINGTON	19	14	23	9	16	**	143	**
	BATNA	18	3	25	-2	10	1.9	37	-6	PA N G	PORT MORESBY	30	23	37	23	27	-0.3	133	-99
TUNISI	TUNIS	21	10	29	6	15	2.1	0	-45	AUSTRL	DARWIN	32	24	34	22	28	-0.2	253	-85
NIGER	NIAMEY	40	24	43	19	32	1.3	0	-5		MOREE	27	15	29	10	21	-2.9	65	13
MALI	TIEMUKTU	36	21	43	13	28	0.8	0	0		BRISBANE	26	19	29	14	22	-1.8	134	-10
	BAMAKO	38	25	42	21	31	0.9	0	-3		PERTH	29	18	36	11	24	0.7	2	-13
MAURIT	NOUAKCHOTT	33	18	44	11	26	1.3	0	0		CEDUNA	28	12	36	5	20	0.3	0	-21
SENEGL	DAKAR	24	17	28	14	21	-0.4	0	0		ADELAIDE	25	14	31	8	19	-0.9	2	-19
CHAG A	DIEGO GARCIA	29	26	31	24	27	-0.3	243	15		MELBOURNE	21	12	29	6	16	-2.1	20	-15
LIBYA	TRIPOLI	22	10	33	5	16	0.8	5	-27		WAGGA	24	11	28	6	18	-3.1		



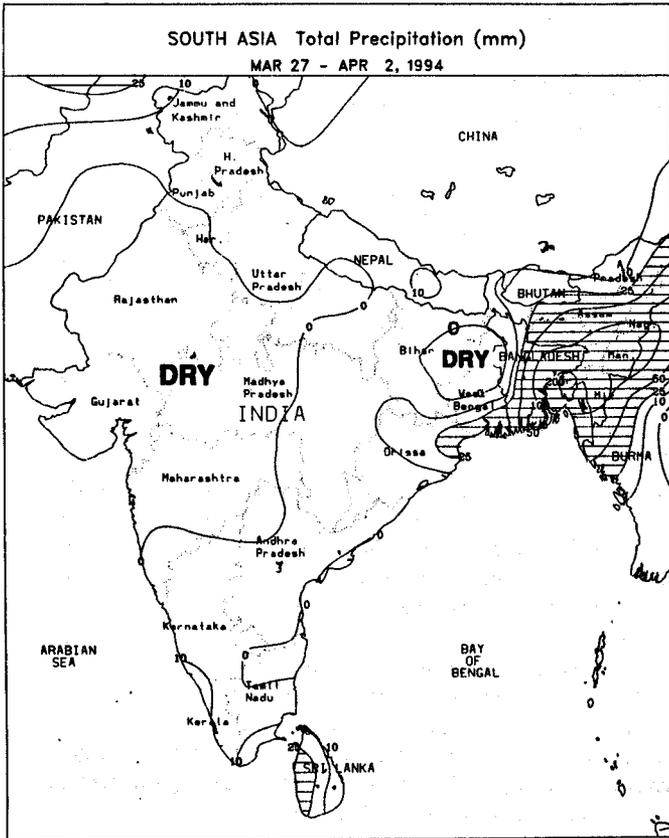
FSU-WESTERN: A tranquil weather pattern brought light precipitation and seasonable temperatures to most areas. Precipitation amounts were generally around 10 mm. Greatest amounts of moisture (23-36 mm) were confined to winter grains areas in western North Caucasus, Russia. Unfavorably dry weather continued over Moldova and southern Ukraine. A gradual melting of snow continued over northern Russia, where weekly average temperatures ranged from 1 to 3 degrees Celsius (C) below normal. Winter grains continued to break dormancy over Ukraine and southern Russia. In addition, fieldwork in preparation for spring grain planting progressed in these areas, under favorable weather conditions. Weekly temperatures averaged 2-4 degrees C above normal over the Baltic States, western Belarus, and western Ukraine, melting most of the snow cover.



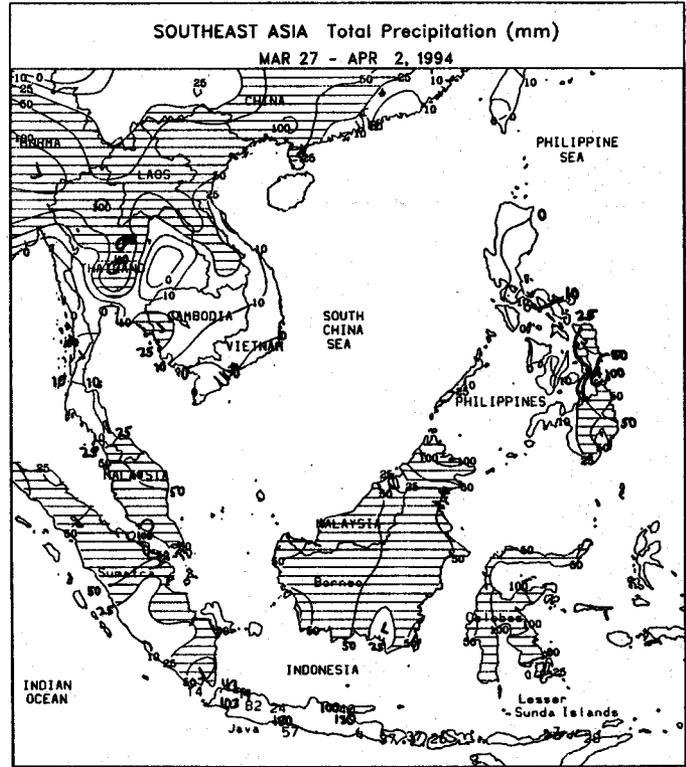
EUROPE: Showers and unseasonably mild weather covered much of Europe, with dry weather confined to Spain and southern Italy. Rain (20-69 mm) continued to provide ample soil moisture in the United Kingdom, northern France, the Benelux countries, and northwestern Germany for winter grains beginning active spring growth. Mostly light showers (less than 10 mm) in the northeast also maintained adequate soil moisture for greening winter crops. Much-needed rain (10-30 mm) moistened topsoils in Bulgaria, where soil moisture is low for crops in the spring growing season. Some helpful showers also fell in extreme northern Italy, but amounts were highly variable (1-31 mm). Corn areas of southwestern France benefited from 9 to 21 mm of rain, as early planting began. Dry, warm weather in Spain was unfavorable for nonirrigated crops in the east, with low soil moisture due to winter dryness. Weekly average temperatures ranged from 2 to 4 degrees C above normal across most of Europe. Near- to slightly below-average temperatures were confined to the United Kingdom, Bulgaria, and Greece.



AUSTRALIA: Dry weather continued to favor main-season cotton and sorghum harvesting across eastern Australia. Temperatures averaged 1-3 degrees C below normal in the east, slowing late-planted sorghum development. Scattered showers (5-20 mm) fell across the northeast coast of Queensland, aiding sugarcane.

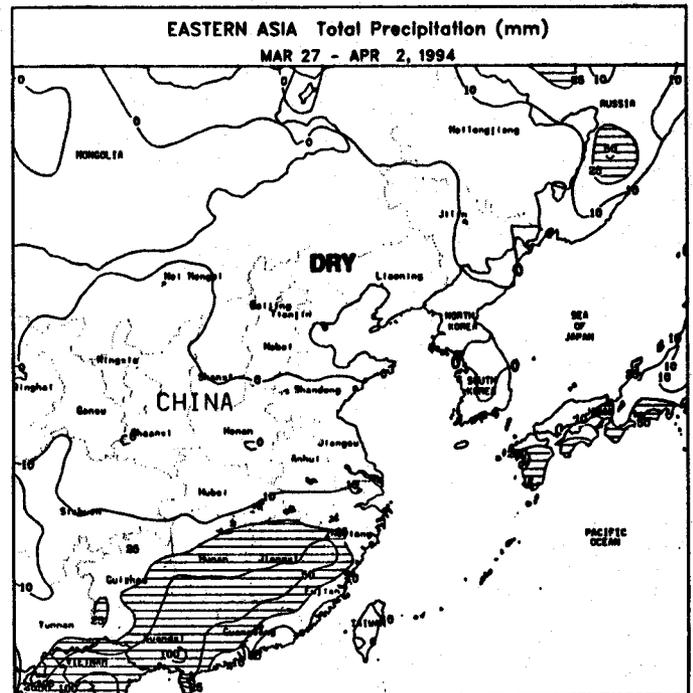


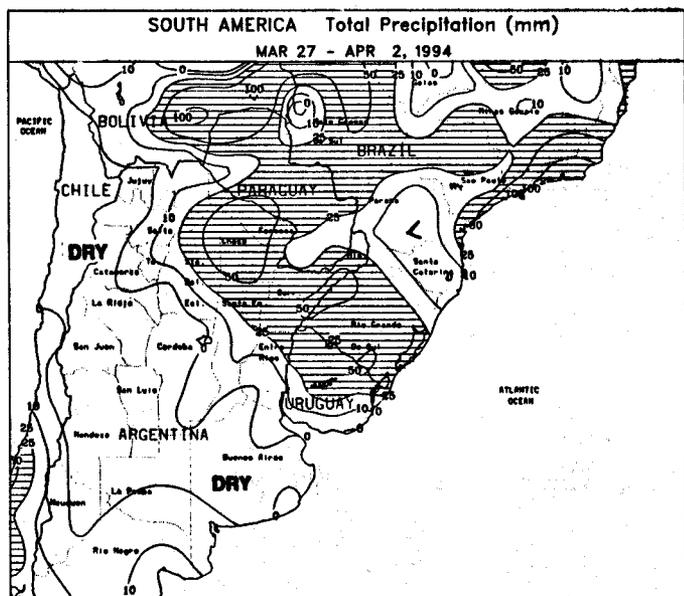
SOUTH ASIA: Dry, warm weather continued throughout the region's primary winter grain and oilseed areas. Temperatures 1-3 degrees C above normal aided crop drydown and harvests in central India, but immature northern crops required cooler weather for normal development. In the east, moderate to heavy showers (25-50 mm or more) fell over rice areas from West Bengal to Assam. The rainfall boosted moisture reserves for rice planting, currently underway in Bangladesh, but was unfavorable for dry-season harvesting. Flooding has been reported in Bangladesh from the heavy rains.



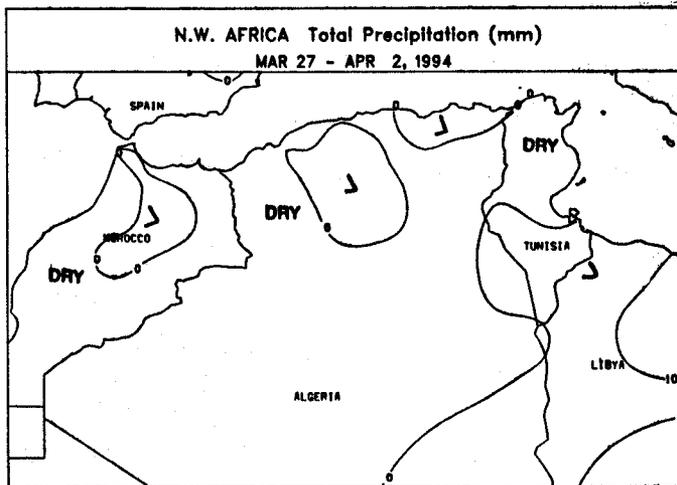
SOUTHEAST ASIA: Unseasonably heavy rain (25-100 mm or more) continued throughout Thailand's northern rice areas, further helping critically low reservoirs. The rain stretched into northern Vietnam, benefiting immature winter-spring rice. Since early March, northern and northeastern Thailand have received 100-200 mm, or about 4 to 10 times their normal rainfall. The predominantly irrigated second rice crop, which accounts for about 10 percent of the total production, benefited from both the rain and accompanying cooler weather. Further south, showers were scattered throughout Indonesia and Malaysia, with most major rice and oil palm areas reporting more than 50 mm.

EASTERN ASIA: Dry, warm weather (2-4 degrees C above normal) promoted early-spring growth of winter grains and field preparation for summer crops across the North China Plain. Widespread rain (20-75 mm) covered southern China, favoring transplanted early double-crop rice and irrigation supplies. Eastern Sichuan received light to moderate rain (5-20 mm), aiding vegetative wheat and topsoil moisture for summer crop planting. Temperatures averaged 1-3 degrees C below normal across southwestern China (Guizhou, Guangxi, and Yunnan) and near normal across the southeast.

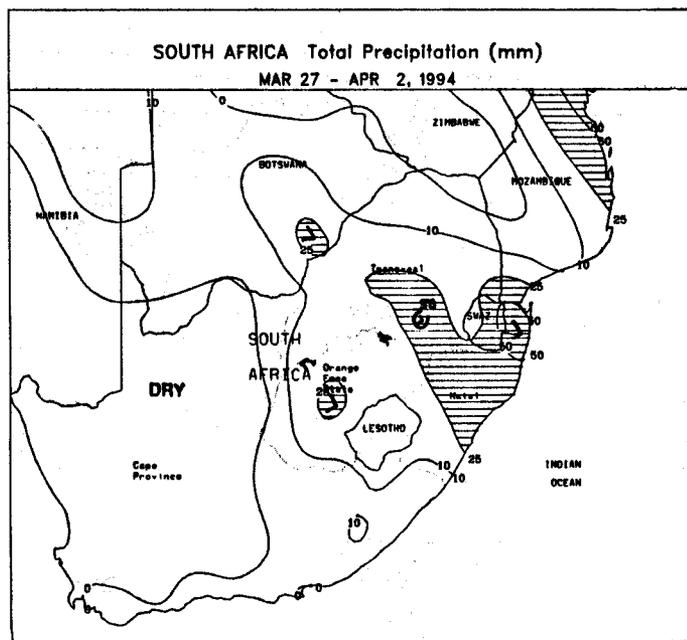




SOUTH AMERICA: Dry weather prevailed across central Argentina, favoring corn and sunflowerseed harvesting. Additional rain is still needed for second crop soybeans. On March 30, minimum temperatures fell to -1 degrees C at Pehuajo in northwestern Buenos Aires. Minimum temperatures elsewhere in the region ranged from 2 to 4 degrees C, possibly causing some frost. While localized damage to filling second-crop soybeans was possible, the overall impact on soybean yield potential should be minimal. Temperatures averaged 1-3 degrees C below normal across the region. Moderate showers (30-70 mm) fell across northern Argentina, delaying cotton harvesting. In southern Brazil, moderate to heavy showers (30-80 mm) slowed summer crop harvesting across Mato Grosso do Sul, Goias, and Mato Grosso. Drier weather prevailed across Parana, aiding fieldwork. Only 1 day of weather data was reported across Rio Grande do Sul, but satellite imagery and data from surrounding areas (northwestern Argentina and Uruguay) indicated that rainfall ranged from about 10 to 30 mm. The rain caused only minor harvesting delays.



NORTHWESTERN AFRICA: Winter grains over Morocco, Algeria, and Tunisia were entering the heading stage. Earlier planted crops were flowering. Unfavorably dry weather continued over crop areas in Algeria and Tunisia, causing further deterioration in crop conditions. Although winter grains in Morocco have experienced more favorable weather conditions than Algeria and Tunisia, insufficient moisture has covered crop areas since early March. As a result, crops had to rely on declining soil moisture reserves to sustain normal growth. Weekly average temperatures were 2-5 degrees C above normal over Morocco, Algeria, and Tunisia, further exacerbating dry conditions.



SOUTH AFRICA: Moderate to heavy showers (15-50 mm or more) fell across eastern corn areas, providing additional moisture to late-planted crops. Warm, mostly dry weather aided crop maturation throughout western corn areas, although rain moved into the region late in the week. Showers (6-36 mm) over the primary sugarcane region came too late to significantly improve crop prospects.

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Limited Irrigation Supplies for Mexican Winter Wheat

Below-normal rainfall from July 1993 to March 1994 (55 percent of normal), reduced irrigation supplies for winter crops across northwestern Mexico (fig. 1). Typically, July to September rainfall accounts for 70 percent of yearly rainfall across northwest Mexico (Sonora and Sinaloa), thus supplying a major portion of the region's irrigation water. Although, exact reservoir levels are not known at this time, they are believed to be below last year's levels, possibly affecting winter crops.

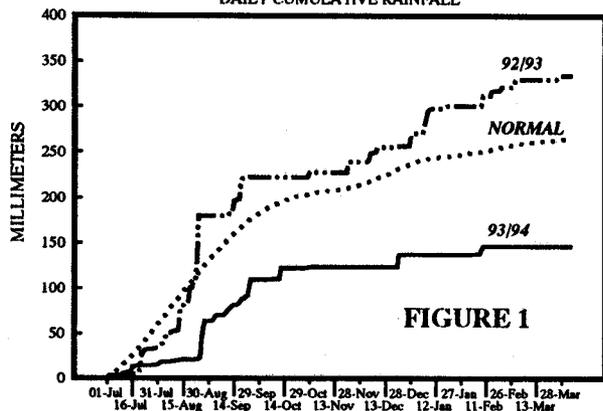
Nearly all winter wheat in northwestern Mexico and the Southern Plateau is irrigated. Winter wheat usually accounts for 65-70 percent of total Mexican wheat production. Winter wheat

planting usually occurs from October to December, with harvesting taking place from May to June.

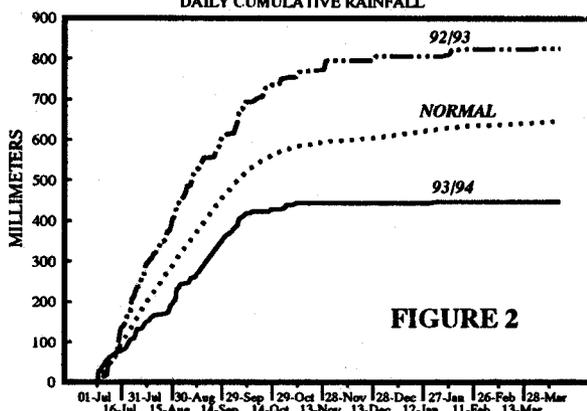
Across the winter wheat areas of the Southern Plateau (Guanajuato, eastern Jalisco, and eastern Michoacan), rainfall from July to October 1993 (the latter portion of the rainy season) averaged 75 percent of normal (fig. 2). The winter season is usually much drier than in the northwest. Irrigation supplies for winter crops, while not abundant, should still be adequate in the Southern Plateau.

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NORTHWEST MEXICO (SONORA)
 DAILY CUMULATIVE RAINFALL



SOUTHERN PLATEAU
 DAILY CUMULATIVE RAINFALL



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