

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

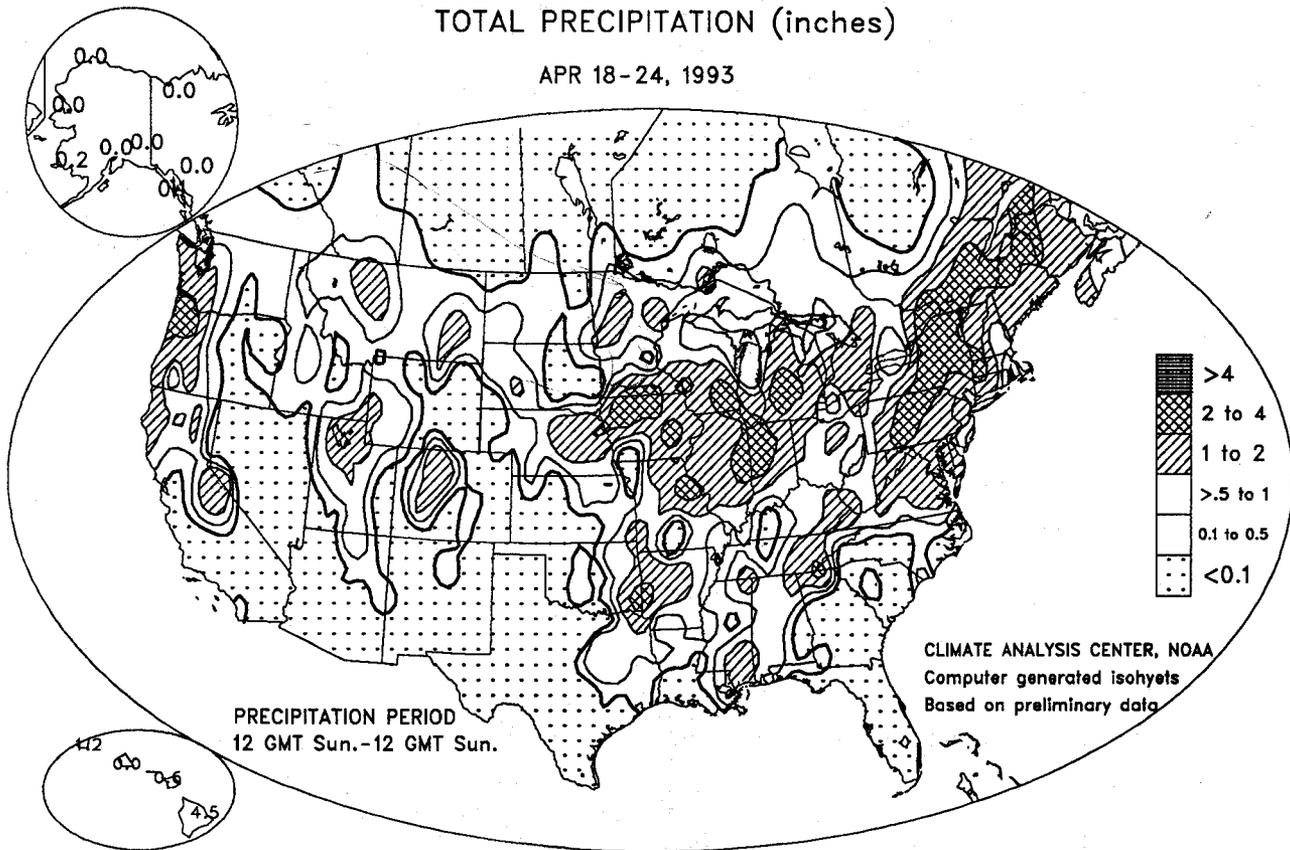
Volume 80, No. 17

Washington, D.C.

April 27, 1993

TOTAL PRECIPITATION (inches)

APR 18-24, 1993



HIGHLIGHTS

April 18 - 24, 1993

A strong spring storm dropped heavy rainfall on the Corn Belt and the Northeast, and infused frosty conditions into the Southeast. Elsewhere, beneficial showers dotted the northern Plains and the Pacific Northwest, while favorably drier weather covered the South, except in the southern High Plains, where topsoil moisture is diminishing. As the storm progressed from the northern Rockies to the Great Lakes during the first half of the week, it dumped wet snow. As much as 15 inches fell in Wyoming's Big Horn range, while up to 6 inches covered Nebraska's High Plains. Farther east, 1 to 3 inches of rain caused local flooding on Monday from northern Iowa to lower Michigan. On the northern fringe of the precipitation shield, as much as 4 inches of snow blanketed areas from southern Minnesota to northern lower Michigan. By midweek, the storm moved toward the

(Continued to p. 7)

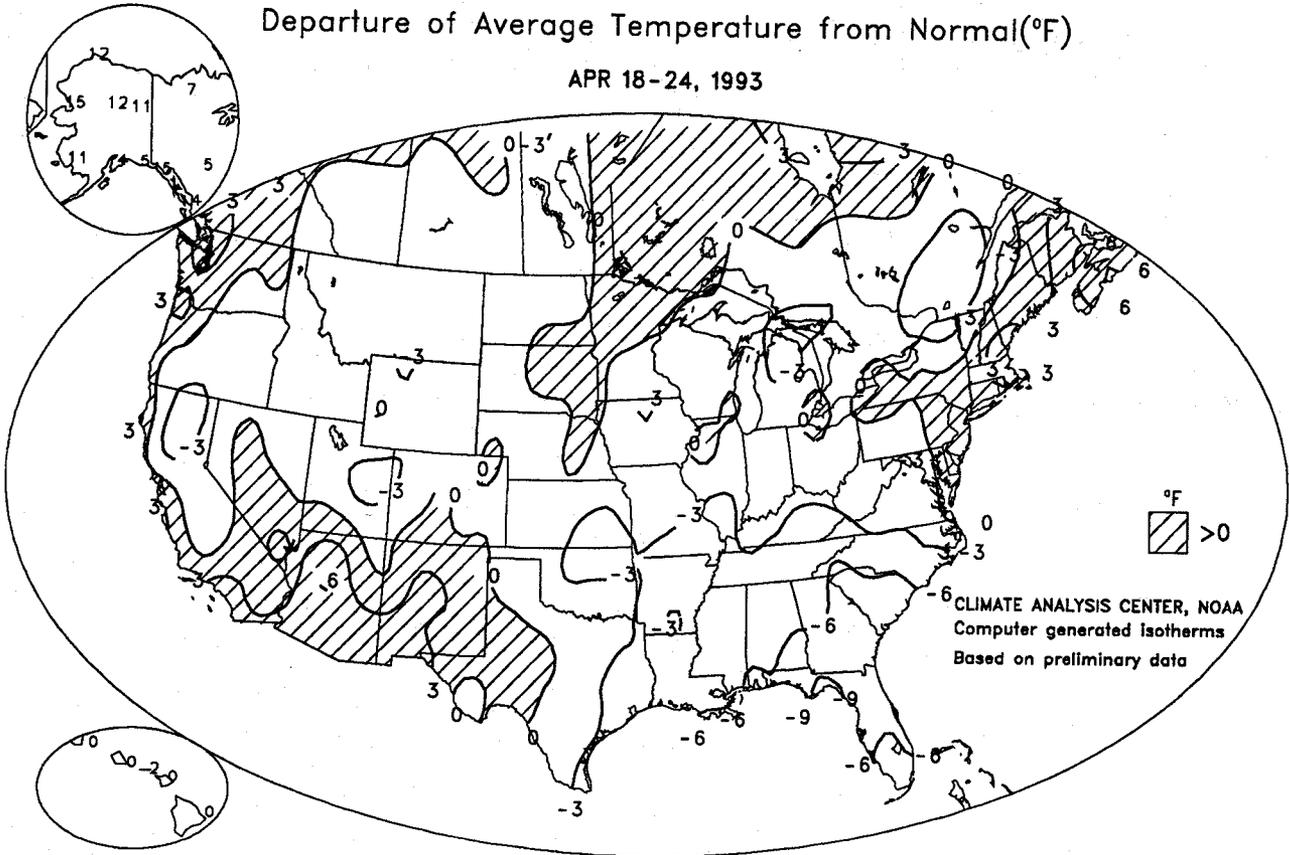
Contents

Page

Highlights & Total Precipitation Map	1
Temperature Departure & Soil Temperature Maps	2
National Weather Data for Selected Cities	3
National Agricultural Summary	6
Crop Progress and Condition Tables	7
State Summaries of Weather and Agriculture	8
International Weather and Crop Summary	13
Subscription and Mailing Permit Information & Extreme Minimum Temperature Map	16

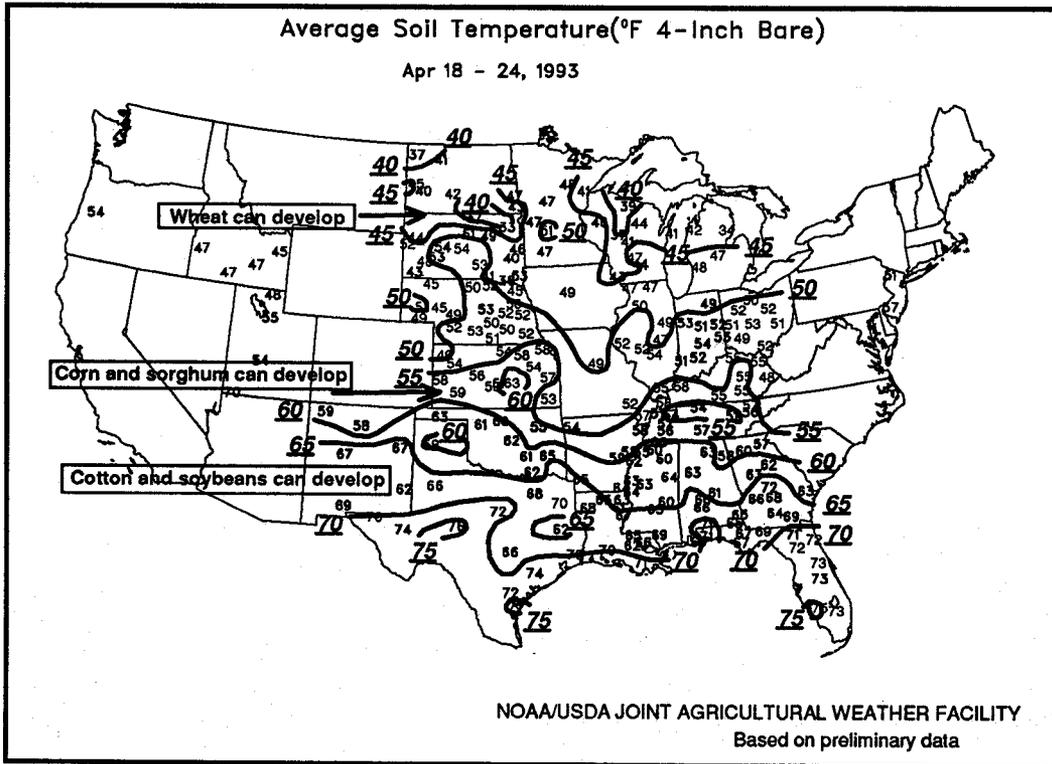
Departure of Average Temperature from Normal(°F)

APR 18-24, 1993



Average Soil Temperature(°F 4-Inch Bare)

Apr 18 - 24, 1993



National Weather Data for Selected Cities

Weather Data for the Week Ending April 24, 1993

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	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	71	46	79	31	59	-4	1.0	-2	1.0	6.3	62	14.6	73	80	34	0	1	1	1	0	
MOBILE	74	51	80	42	63	-6	.4	-7	.4	12.9	130	25.5	126	91	40	0	0	0	0	0	
MONTGOMERY	74	44	82	36	59	-6	.5	-7	.2	9.8	100	19.5	97	88	32	0	0	0	0	0	
AK ANCHORAGE	51	32	56	27	42	4	.4	-2	.3	24	24	2.4	85	81	47	0	0	0	0	0	
BARRROW	18	9	23	2	13	12	.4	0	.4	.3	42	.7	132	88	82	0	0	0	0	0	
FAIRBANKS	58	31	62	25	44	10	.5	-1	.0	.3	40	3.0	190	51	24	0	0	0	0	0	
JUNEAU	59	36	62	30	48	6	.5	-7	.0	4.0	74	22.2	161	87	45	0	0	0	0	0	
KODIAK	46	35	54	29	41	2	.7	-3	.5	15.5	195	25.8	125	95	71	0	0	0	0	0	
NOME	38	29	43	24	34	14	.1	-1	.1	1.9	172	4.2	167	95	79	0	0	0	0	0	
AZ PHOENIX	90	63	98	61	77	7	.0	0	.0	1.6	146	8.6	349	36	12	0	0	0	0	0	
FRESNOCO	75	42	81	34	58	5	.0	-2	.0	2.5	98	10.9	195	52	16	0	0	0	0	0	
TUCSON	91	54	99	46	72	2	.0	-1	.0	.5	49	6.8	270	42	10	0	0	0	0	0	
YUMA	92	64	101	60	78	2	.0	0	.0	4	109	3.3	358	30	12	4	0	0	0	0	
AR FORT SMITH	74	48	82	35	61	2	1.5	6	1.0	7.2	102	14.3	124	83	39	0	0	0	2	2	
LITTLE ROCK	73	50	83	41	62	3	.6	-5	.6	7.0	83	14.0	93	73	37	0	0	0	1	1	
CA BAKERSFIELD	78	49	89	45	63	-1	.0	0	.0	1.8	115	6.1	177	54	19	0	0	0	0	0	
EUREKA	60	47	62	41	54	3	1.2	-6	.6	10.2	130	23.2	125	85	37	0	0	6	1	0	
FRESNO	75	50	83	43	62	0	.0	-2	.0	2.0	72	9.6	148	87	32	0	0	0	1	0	
LOS ANGELES	71	56	77	53	64	3	.0	-1	.0	1.9	70	17.7	235	80	53	0	0	0	0	0	
REDDING	66	46	74	41	56	-3	.8	-4	.7	10.0	161	27.9	167	92	39	0	0	0	3	1	
SACRAMENTO	70	46	75	42	58	-1	.1	-1	.1	3.1	86	16.8	164	96	42	0	0	0	1	0	
SAN DIEGO	73	58	80	55	65	3	.0	-1	.0	1.2	50	15.0	258	80	51	0	0	0	0	0	
SAN FRANCISCO	66	52	72	48	59	3	.0	-2	.0	2.7	64	18.7	158	85	45	0	0	0	2	0	
CO DENVER	64	37	82	30	51	1	.4	0	.4	3.0	116	4.3	118	66	25	0	3	1	0	0	
GRAND JUNCTION	65	40	78	29	53	-3	.2	0	.2	2.9	160	5.4	186	62	23	0	1	3	0	0	
PUEBLO	68	35	82	24	51	-2	.1	-1	.1	2.3	159	2.9	140	64	18	0	4	2	0	0	
CT BRIDGEPORT	61	44	68	38	52	2	.7	-2	.7	9.6	142	14.8	114	73	46	0	0	0	1	1	
HARTFORD	64	41	76	36	53	2	1.5	6	1.5	10.7	160	16.3	122	77	37	0	0	0	3	1	
DC WASHINGTON	67	45	78	39	56	-3	1.1	5	1.1	10.0	189	15.1	141	76	33	0	0	0	2	1	
FL APALACHICOLA	73	49	80	40	61	-7	.1	-5	.1	4.5	69	14.9	105	83	36	0	0	0	1	0	
DAYTONA BEACH	75	50	82	42	62	-8	.0	-5	.0	5.9	126	13.2	125	83	36	0	0	0	0	0	
JACKSONVILLE	76	45	81	37	61	-9	.0	-6	.0	6.8	121	13.6	107	82	33	0	0	0	0	0	
KEY WEST	78	66	81	63	72	-6	.0	-4	.0	3.2	106	11.5	168	72	50	0	0	0	0	0	
MIAMI	79	64	83	58	72	-4	.0	-7	.0	8.8	196	16.0	186	70	42	0	0	0	0	0	
ORLANDO	78	55	81	48	66	-6	.0	-4	.0	8.0	172	14.3	144	79	34	0	0	0	0	0	
TALLAHASSEE	77	40	80	31	58	-9	.0	-8	.0	7.1	76	21.2	108	83	28	0	1	1	0	0	
TAMPA	77	52	82	45	65	-8	.0	-2	.0	6.3	162	12.2	137	84	34	0	0	0	0	0	
WEST PALM BEACH	77	60	79	52	68	-7	.0	-8	.0	12.5	246	22.6	216	72	39	0	0	0	0	0	
GA ATLANTA	71	46	78	39	58	-5	.0	-9	.0	8.2	88	16.5	88	68	28	0	0	0	1	0	
AUGUSTA	77	41	82	34	59	-5	.0	-7	.0	8.9	122	18.1	116	80	26	0	0	0	0	0	
MACON	74	43	80	34	59	-7	.0	-8	.0	11.6	153	21.3	126	84	28	0	0	0	1	0	
SAVANNAH	74	46	78	38	60	-7	.0	-7	.0	11.1	180	20.0	153	79	30	0	0	0	0	0	
HI HILO	81	67	84	64	74	1	4.5	1.0	1.4	18.6	70	23.4	50	86	68	0	0	0	6	4	
HONOLULU	84	69	87	64	77	1	.0	-3	.0	1.1	1	1.1	12	73	51	0	0	0	0	0	
KAHULUI	82	68	87	66	75	1	.6	2	.4	2.1	49	4.5	40	76	59	0	0	0	3	0	
LIHUE	80	69	82	64	74	0	1.2	5	1.0	2.0	28	3.2	20	78	62	0	0	0	3	1	
ID BOISE	61	36	70	28	48	-2	.2	-1	.1	4.1	177	6.7	140	79	31	0	0	3	3	0	
LEWISTON	60	42	67	37	51	-1	.4	-1	.2	2.5	125	3.9	94	77	41	0	0	0	3	0	
POCATELLO	57	34	68	25	46	-1	.2	-1	.1	3.0	136	7.4	176	78	28	0	2	3	0	0	
IL CHICAGO	60	38	76	29	49	-2	1.3	4	1.1	8.6	155	13.3	157	80	36	0	1	3	1	1	
MOLINE	65	42	74	30	53	1	.9	-1	.7	8.7	144	11.6	131	85	35	0	2	2	1	1	
PEORIA	64	43	77	33	54	0	.8	-1	.7	8.7	147	13.9	157	84	37	0	0	2	1	1	
QUINCY	64	44	75	35	54	-1	1.4	5	.9	5.1	83	8.4	94	82	47	0	0	0	2	2	
ROCKFORD	61	38	73	31	50	0	1.5	6	1.3	8.5	158	11.8	151	86	44	0	2	2	1	1	
SPRINGFIELD	65	43	75	33	54	-1	1.5	6	1.1	6.6	107	12.1	127	83	38	0	0	0	3	1	
IN EVANSVILLE	69	45	79	33	57	-3	.4	-6	.3	7.1	85	13.3	90	76	36	0	0	0	3	0	
FORT WAYNE	62	38	67	30	50	-1	.6	-2	.3	6.3	113	13.3	142	81	39	0	1	3	0	0	
INDIANAPOLIS	65	41	71	31	53	-1	.5	-4	.3	7.1	105	12.7	110	77	39	0	1	2	0	0	
SOUTH BEND	61	38	71	28	50	-1	1.6	7	1.4	5.3	86	10.9	105	79	34	0	2	3	1	1	
IA DES MOINES	64	40	70	31	52	-1	.3	-6	.2	6.0	120	9.1	131	85	33	0	1	2	0	0	
SIoux CITY	65	39	75	34	52	0	2.0	1.4	2.0	4.1	109	6.9	138	81	33	0	0	0	2	1	
WATERLOO	62	38	69	28	50	-1	.9	-1	.6	7.1	147	9.0	134	89	45	0	1	3	1	1	
KS CONCORDIA	66	42	75	34	54	-1	.5	0	.4	4.2	106	6.7	128	86	35	0	0	0	2	0	
DODGE CITY	70	40	82	30	55	-2	.0	-5	.0	3.0	95	6.8	160	76	30	0	2	0	0	0	
GOODLAND	64	35	80	28	50	-2	.1	-3	.0	1.1	55	2.5	89	76	30	0	3	2	0	0	
TOPEKA	66	42	75	34	54	-3	.0	-7	.0	7.7	160	11.3	165	84	36	0	0	0	1	0	
WICHITA	68	43	73	35	55	-4	.1	-6	.1	2.8	59	5.7	84	83	36	0	0	0	1	0	
KY BOWLING GREEN	67	45	77	34	56	-3	.1	-9	.1	5.8	67	11.6	70	75	38	0	0	0	2	0	
LEXINGTON	65	41	73	31	53	-4	.6	-4	.3	6.4	86	13.0	96	76	36	0	1	3	0	0	
LOUISVILLE	68	44	78	34	56	-2	.4	-6	.4	8.3	103	16.0	113	75	32	0	0	0	2	0	
LA BATON ROUGE	77	52	82	42	64	-6	.1	-1.2	.1	16.8	185	33.0	169	94	42	0	0	0	1	0	
LAKE CHARLES	75	56	80	45	65	-4	.1	-7	.1	12.6	216	23.7	170	94	55	0	0	0	1	0	
NEW ORLEANS	75	54	82	46	65	-5	.3	-8	.3	10.3	121	18.8	96	89	44	0	0	0	1	0	
SHREVEPORT	77	53	84	39	65	-2	.2	-8	.2	9.6	135	19.1	123	86	40	0	0	0	1	0	

Based on 1961-90 normals.

Weather Data for the Week Ending April 24, 1993

STATES AND STATIONS	TEMPERATURE °F								PRECIPITATION						RELATIVE HUMIDITY, PERCENT	NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM		AVERAGE MINIMUM	TEMP. °F		PRECIP.
															90 AND ABOVE		32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
ME CARIBOU	47	33	64	28	40	0	1.6	1.1	.7	5.1	116	9.3	107	88	60	0	2	5	2
PORTLAND	57	40	69	29	49		1.2	.2	.7	11.3	162	17.9	130	86	37	0	2	2	1
MD BALTIMORE	66	43	78	35	54	1	1.5	.8	.7	11.2	191	16.7	139	71	35	0	2	2	1
SALISBURY	68	43	76	34	56	-1	1.4	.4	1.4	10.9	162	17.4	126	88	43	0	2	1	1
MA BOSTON	63	46	73	40	54	4	1.1	-4	1.1	11.1	170	18.2	132	75	36	0	2	0	0
CHATHAM	55	42	62	39	48	2	1.1	.2	1.1	9.0	132	15.0	104	88	40	0	2	2	1
MI ALPENA	52	28	64	23	40	-3	.9	.4	.6	2.8	73	5.0	75	95	39	0	5	4	1
DETROIT	63	37	69	31	50	1	.9	.2	.5	5.1	105	10.3	123	81	33	0	4	1	1
FLINT	61	34	65	27	47	-1	2.1	1.4	1.3	5.3	118	9.3	130	91	39	0	1	1	1
GRAND RAPIDS	59	33	73	27	46		2.3	1.5	1.9	6.3	117	11.6	135	95	35	0	3	1	1
HOUGHTON LAKE	53	30	62	24	41	-1	1.5	.9	.8	3.6	95	6.2	96	93	40	0	3	3	1
LANSING	61	33	67	25	47	0	3.2	2.5	2.2	6.0	133	10.4	145	95	45	0	4	2	1
MARQUETTE	50	28	60	22	39	-1	.6	.0	.5	4.5	92	7.6	86	82	44	0	5	2	1
MUSKEGON	57	33	69	25	45	-2	1.6	.9	1.4	5.6	115	9.0	103	94	41	0	6	4	1
SAULT ST. MARIE	49	28	62	21	38	-3	.9	.4	.7	3.5	83	5.9	71	89	40	0	6	3	1
MN ALEXANDRIA	58	36	68	29	47	2	1.0	.5	.7	3.5	114	4.5	97	78	34	0	2	2	1
DULUTH	52	34	61	30	43	2	1.0	.5	.8	2.5	69	4.8	84	72	33	0	4	3	1
INT'L FALLS	56	30	65	23	43	1	.3	-.1	-.2	1.0	43	1.8	47	73	28	0	4	2	0
MINNEAPOLIS	60	38	68	27	49	0	T	-.6	T	2.5	66	4.2	74	72	31	0	1	2	0
ROCHESTER	57	36	65	29	46	-1	1.9	1.3	1.8	6.9	175	8.8	163	87	33	0	3	2	1
MS GREENWOOD	72	50	82	37	61	-5	.8	-.4	.8	9.0	91	14.7	76	86	42	0	0	1	1
JACKSON	75	49	83	36	62	-4	.1	-1.2	.1	7.8	75	15.9	77	85	42	0	0	1	0
MERIDIAN	74	48	81	35	61	-4	.4	-.8	.3	10.3	92	24.8	114	89	39	0	0	2	0
MO CAPE GIRARDEAU	67	46	73	33	56	-3	.4	-.7	.4	6.7	78	15.3	104	85	43	0	0	1	0
COLUMBIA	67	42	76	32	54	-1	1.8	.9	1.0	7.8	131	12.1	132	92	41	0	1	3	2
KANSAS CITY	66	42	74	33	54	-2	.2	-.6	.1	6.6	135	9.9	139	80	39	0	0	3	0
SAINT LOUIS	67	47	77	38	57	-1	2.0	1.2	1.4	8.9	141	15.2	148	76	41	0	0	3	2
SPRINGFIELD	67	43	77	33	55	-3	.3	-.6	.3	5.6	81	11.1	105	79	40	0	0	2	0
MT BILLINGS	56	36	69	30	46	-2	.6	.2	.3	2.2	89	3.0	74	78	39	0	2	4	0
GLASGOW	58	33	69	27	45	-1	.4	.2	.3	1.2	139	1.8	117	82	30	0	3	2	0
GREAT FALLS	51	35	66	31	43	-2	1.7	1.4	1.2	3.6	169	5.5	151	87	41	0	3	5	1
HAVRE	56	32	71	25	44	-2	.1	-.1	.1	1.0	76	1.7	75	85	42	0	4	2	0
HELENA	55	34	68	29	45	0	.5	.3	.2	2.1	142	3.9	156	85	33	0	2	4	0
KALISPELL	53	33	61	27	43	-2	1.1	.9	.7	2.7	146	4.9	111	94	39	0	3	5	1
MILES CITY	57	36	69	28	46	-2	2.0	1.6	1.5	3.0	182	3.9	149	95	40	0	2	3	1
MISSOULA	56	33	63	25	45	-1	.2	-.1	.1	2.0	120	3.6	95	89	33	0	3	3	0
NE GRAND ISLAND	65	41	76	33	53	0	1.0	.4	.9	2.5	65	5.1	102	85	33	0	0	2	1
LINCOLN	65	40	75	34	53	-1	.7	.0	.7	3.9	92	5.1	93	91	43	0	0	2	1
NORFOLK	65	41	75	33	53	1	1.5	.9	1.5	4.4	122	7.4	151	77	34	0	0	2	1
NORTH PLATTE	64	34	78	27	49	-1	.2	-.3	.1	1.7	61	3.8	109	81	30	0	3	3	0
OMAHA	63	42	71	32	52	-2	.7	.0	.7	4.6	109	6.4	114	75	36	0	1	2	1
SCOTTSBLUFF	61	33	74	22	47	-1	.1	-.3	.1	3.1	136	5.2	161	87	28	0	3	2	0
VALENTINE	64	33	76	24	49	-2	.5	-.1	.5	3.3	112	4.5	113	85	33	0	3	1	0
NV RLY	59	27	72	14	43	0	.2	-.1	.1	1.4	83	4.9	159	63	18	0	5	2	0
LAS VEGAS	82	58	92	52	70	5	0	-.1	.0	.2	24	4.3	277	38	9	1	0	0	0
RENO	64	35	75	27	50	0	T	-.1	T	.6	56	4.3	138	65	22	0	2	0	0
WINNEMUCCA	62	34	72	21	48	0	.1	-.1	.1	1.8	121	4.3	152	68	22	0	2	1	0
NH CONCORD	64	37	77	25	51	4	.7	.0	.5	6.2	122	9.3	92	91	40	0	3	3	0
NJ ATLANTIC CITY	65	42	74	38	54	2	.3	-.5	.2	10.6	164	15.7	120	75	36	0	0	2	0
NM ALBUQUERQUE	75	46	86	30	61	4	.0	-.1	.0	T	0	2.8	149	48	10	0	1	0	0
CLOVIS	78	43	90	31	61	2	.0	-.2	.0	.4	32	1.3	62	46	12	1	1	0	0
ROSWELL	82	49	94	41	66	3	.0	-.1	.0	.7	99	1.6	107	45	11	1	0	0	0
NY ALBANY	60	38	75	33	49	1	2.1	1.4	1.7	9.7	182	14.7	148	78	33	0	0	3	1
BINGHAMTON	56	37	73	31	46	0	1.6	.9	.7	10.0	188	14.8	148	79	40	0	4	5	2
BUFFALO	60	39	72	34	49	2	.9	.2	.6	5.1	102	11.4	114	76	35	0	0	4	1
NEW YORK	66	47	77	40	56	3	.6	-.3	.3	9.4	142	15.7	125	72	36	0	0	2	0
ROCHESTER	59	37	75	34	48	0	.7	.1	.2	5.3	121	9.1	107	85	37	0	0	5	0
SYRACUSE	59	38	74	33	49	1	1.7	.9	.9	9.6	176	15.1	152	85	42	0	0	4	1
NC ASHEVILLE	65	38	73	30	52	-5	.1	-.8	.1	8.9	101	14.7	86	77	29	0	1	1	0
CHARLOTTE	71	44	77	39	58	-3	T	-.6	T	8.9	135	17.8	126	67	29	0	0	0	0
GREENSBORO	69	43	76	37	56	-3	.3	-.3	.3	13.4	226	20.4	164	77	34	0	0	1	0
HATTERAS	68	49	74	40	59	2	.3	-.8	T	10.0	141	21.1	127	81	39	0	0	1	0
NEW BERN	71	46	77	42	59	2	.8	-.8	T	9.1	141	18.0	120	86	35	0	0	0	0
RALEIGH	70	42	78	34	56	-4	T	-.6	T	11.0	188	17.7	136	74	33	0	0	1	0
WILMINGTON	71	46	79	40	59	-3	T	-.7	T	12.1	176	20.9	131	84	35	0	0	0	0
ND BISMARCK	59	32	72	26	45	0	.3	-.1	.3	1.3	65	2.0	66	85	26	0	4	1	0
FARGO	59	34	68	26	46	0	.2	-.3	.2	1.4	56	2.4	65	80	28	0	3	2	0
GRAND FORKS	57	31	68	24	44	0	.1	-.3	.0	.5	25	.9	28	78	28	0	5	1	0
WILLISTON	57	31	71	23	44	-2	.1	-.2	.1	1.3	77	1.7	66	81	28	0	5	1	0
OH AKRON-CANTON	61	38	73	31	50	-1	.9	.1	.6	6.7	115	12.6	124	85	34	0	1	3	1
CINCINNATI	64	42	72	31	53	-2	.4	-.4	.2	5.9	82	13.2	106	75	36	0	1	4	0
CLEVELAND	61	37	73	30	49	-1	.9	.2	.6	6.5	120	13.5	140	89	35	0	2	4	1
COLUMBUS	63	41	73	33	52	1	1.1	.8	.8	6.1	103	12.1	119	83	35	0	0	4	1
DAYTON	63	41	72	30	52	-2	1.6	.8	1.4	8.1	131	14.8	141	78	36	0	1	4	1

Based on 1961-90 normals.

Weather Data for the Week Ending April 24, 1993

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	MINIMUM	TEMP. °F		PRECIP.	
																	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
TOLEDO	64	38	71	30	51	1	.5	-.2	.3	5.7	114	10.6	125	85	36	0	1	4	0	
YOUNGSTOWN	60	38	71	30	49		.8	-.1	.5	6.0	107	11.6	119	82	36	0	2	3	1	
OK OKLAHOMA CITY	73	47	83	39	60	-2	.0	-.7	.0	4.2	89	8.8	118	83	36	0	0	0	0	
TULSA	72	46	78	37	59	-4	.7	-.2	.7	6.5	103	11.4	117	82	36	0	0	1	1	
OR ASTORIA	57	45	62	35	51	2	1.6	.8	.7	14.6	133	22.2	78	96	64	0	0	1	1	
BURNS	53	31	60	24	42	-2	.1	.0	.1	3.3	214	5.7	173	80	39	0	4	6	2	
MEDFORD	62	41	68	37	52	0	.3	.0	.2	3.1	110	7.1	96	95	36	0	0	0	0	
PENDLETON	62	42	71	36	52	0	.2	.0	.2	3.0	148	5.6	120	75	31	0	0	3	3	
PORTLAND	62	47	70	38	54	3	1.0	.5	.3	9.6	174	13.4	91	92	34	0	0	6	0	
SALEM	63	44	68	34	54	4	1.1	.6	.3	10.3	166	16.7	100	90	41	0	0	6	0	
PA ALLENTOWN	63	42	75	37	52	1	1.3	.5	.8	12.2	202	17.0	139	72	35	0	0	1	0	
ERIE	59	40	75	33	49	1	.7	-.1	.4	5.0	90	10.4	103	86	45	0	0	3	3	
HARRISBURG	64	44	78	35	54	1							76	38	0	0	0	0	0	
PHILADELPHIA	66	47	75	41	57	4	.5	-.5	.4	10.3	159	15.3	117	69	34	0	0	0	0	
PITTSBURGH	61	40	70	33	51	-1	.2	-.5	.1	5.9	100	11.8	109	78	33	0	0	3	3	
SCRANTON	62	40	77	34	51	1	1.7	1.0	.9	10.3	211	13.3	146	74	37	0	0	2	0	
RI PROVIDENCE	63	44	72	35	53	4	.1	-.8	.1	10.9	149	18.5	124	79	43	0	0	1	0	
SC CHARLESTON	72	47	77	39	59	-7	.1	-.6	.1	8.5	149	20.5	155	79	36	0	0	0	0	
COLUMBIA	74	40	80	32	57	7	T	-.7	T	7.6	101	18.3	114	86	26	0	1	0	0	
FLORENCE	73	44	80	36	58	-6	T	-.6	T	5.1	80	14.2	108	81	30	0	0	0	0	
GREENVILLE	69	40	76	33	55	-7	T	-.8	T	12.9	151	23.6	139	73	30	0	0	1	0	
SD ABERDEEN	63	37	71	28	50	3	.1	-.4	.1	2.7	106	3.8	101	85	30	0	2	1	0	
HURON	63	38	73	29	51	2	.1	-.4	.1	4.2	127	5.0	116	82	32	0	0	1	0	
RAPID CITY	60	34	73	24	47	0	.2	-.2	.2	2.6	106	3.9	117	78	34	0	3	1	0	
SIOUX FALLS	61	39	71	28	50	2	.1	-.2	.1	3.5	98	5.1	106	80	33	0	1	2	0	
TN CHATTANOOGA	70	46	79	37	58	-3	.8	-.2	.8	9.8	102	18.6	97	83	31	0	0	1	1	
KNOXVILLE	68	41	76	31	55	-5	.4	-.4	.3	8.1	100	14.4	88	91	35	0	1	2	0	
MEMPHIS	72	50	81	39	61	-4	.1	-.4	.1	6.4	96	12.5	70	77	37	0	0	0	0	
NASHVILLE	68	47	77	38	58	-3	.3	-.8	.3	7.5	95	13.3	85	77	35	0	0	0	0	
TX ABILENE	82	54	94	43	68	0	.0	-.5	.5	1.5	53	3.6	72	66	22	2	0	0	0	
AMARILLO	75	42	87	30	58	0	.0	-.3	.3	1.3	78	2.4	88	73	17	0	1	0	0	
AUSTIN	80	58	86	48	69	-2	.7	-.7	.7	3.5	95	10.1	132	83	46	0	0	1	0	
BEAUMONT	77	57	81	46	67	-3	T	-.9	T	11.7	196	25.7	182	94	55	0	0	0	0	
BROWNSVILLE	82	63	86	52	73	-3	T	-.4	T	1.9	114	6.6	153	86	54	0	0	0	0	
CORPUS CHRISTI	80	63	82	56	71	-3	T	-.5	T	4.0	182	6.1	104	82	55	0	0	1	0	
DEL RIO	90	59	98	51	75	3	.0	-.6	.0	.5	17	1.9	35	73	33	4	0	0	0	
EL PASO	86	55	93	44	71	6	.0	-.1	.0	2	2	1.7	130	31	14	1	0	0	0	
FORT WORTH	78	55	87	44	66	1	.0	-.0	.0	5.1	88	12.7	125	79	37	0	0	0	0	
GALVESTON	74	64	77	58	69	-1	T	-.6	T	8.2	201	21.2	221	81	60	0	0	0	0	
HOUSTON	79	57	83	43	68	-2	.0	-.8	.0	12.9	223	21.4	162	85	45	1	0	1	0	
LUBBOCK	81	48	90	38	65	2	.0	-.0	.0	1.5	97	2.9	112	50	13	1	0	0	0	
MIDLAND	84	49	92	42	67	0	.0	-.2	.0	.7	73	2.8	140	53	13	2	0	0	0	
SAN ANGELO	86	53	96	42	69	1	.0	-.4	.0	8	36	2.5	64	66	20	3	0	0	0	
SAN ANTONIO	83	57	89	43	70	0	.0	-.7	.0	2.8	82	7.8	113	82	39	0	0	0	0	
VICTORIA	79	59	83	48	69	-2	T	-.7	T	5.0	117	11.8	113	87	47	0	0	1	0	
WACO	79	56	87	43	67	-1	T	-.8	T	6.9	145	13.2	156	83	44	0	0	0	0	
WICHITA FALLS	79	49	89	41	64	-1	.0	-.7	.0	4.6	97	9.1	114	83	33	0	0	0	0	
UT CEDAR CITY	66	35	72	25	51	2	.0	-.3	.0	1.9	83	6.2	162	54	16	0	2	0	0	
SALT LAKE CITY	60	41	71	34	51	-1	.7	-.2	.5	2.9	80	7.5	125	72	32	0	0	2	1	
VT BURLINGTON	53	34	65	25	44	-3	1.6	.9	.6	4.8	108	8.8	112	91	53	0	2	4	1	
VA NORFOLK	71	48	79	41	60	1	.5	-.2	.5	9.0	147	16.3	122	73	32	0	0	2	0	
RICHMOND	70	43	79	34	56	-2	.2	-.5	.2	10.1	169	17.4	141	76	34	0	0	2	0	
ROANOKE	68	42	77	37	55	-2	.4	-.3	.4	10.4	172	17.7	151	69	29	0	0	1	0	
WA QUILLAYUTE	56	43	64	34	50	3	2.6	1.0	.8	20.1	113	28.8	64	98	35	0	0	6	2	
SEATTLE-TACOMA	60	46	73	41	53	3	.7	-.2	.2	8.2	149	12.6	85	86	30	0	0	6	0	
SPOKANE	57	39	63	33	48	1	.6	.3	.3	2.9	117	5.1	87	88	32	0	0	3	0	
YAKIMA	64	33	69	29	49	-2	T	-.1	T	1.1	102	2.7	89	85	25	0	4	1	0	
WV BECKLEY	63	40	73	30	51	-2	.5	-.3	.5	8.2	135	12.6	106	71	42	0	3	1	1	
CHARLESTON	68	41	79	33	55	-2	.6	-.2	.4	7.9	126	12.8	105	76	28	0	0	3	0	
HUNTINGTON	67	41	78	33	54	0	.4	-.5	.2	6.9	109	12.9	103	76	29	0	0	3	0	
PARKERSBURG	64	39	72	31	52	-4	.4	-.5	.1	9.4	141	13.9	109	82	38	0	1	4	0	
WI GREEN BAY	57	32	71	26	45	-2	.9	.4	.7	4.0	102	5.8	94	90	35	0	5	5	1	
LACROSSE	59	39	67	30	49	-2	2.6	1.9	2.1	8.4	199	10.8	178	84	40	0	1	2	2	
MADISON	59	35	70	25	47	-2	1.6	.8	.9	8.2	176	11.0	160	87	37	0	3	4	2	
MILWAUKEE	58	37	75	31	48	1	2.5	1.7	2.1	9.3	170	12.9	152	81	34	0	1	3	1	
WAUSAU	57	32	63	26	44	-2	.6	.0	.4	3.7	91	5.6	94	88	41	0	5	2	0	
WY CASPER	55	32	72	25	44	-1	.1	-.3	.1	2.5	117	4.2	129	80	37	0	4	4	0	
CHEYENNE	53	30	66	24	42	-3	.2	-.2	.2	2.8	137	4.0	141	72	37	0	3	2	0	
LANDER	55	34	69	27	45	-1	.5	-.1	.4	3.1	111	4.4	115	85	28	0	2	2	0	
SHERIDAN	55	33	66	20	44	-2	1.0	.5	.7	2.4	106	3.3	89	86	46	0	3	4	1	

Based on 1961-90 normals.

National Agricultural Summary

April 19 - 25, 1993

HIGHLIGHTS: Rain fell from the Corn Belt to New England the early part of the week, keeping many fields from drying out. Later in the week, scattered rain showers fell across the lower Mississippi Valley, the Ohio Valley, and across the Northeast. Where weather conditions permitted, fieldwork advanced, especially in areas with lighter soils. Temperatures were near normal except in the Southwest, where it was very warm, and the Southeast, where it was unseasonably cool.

SMALL GRAINS: Winter wheat continued in mostly good condition in the 19 major producing States. Progress of this year's crop remained behind normal. Heading of the winter wheat crop stood at 5 percent (%), compared with 22% last year and the 5-year average of 12%. Only progress in California was ahead of average. Although progress was behind in Kansas, sunshine and higher temperatures promoted rapid wheat growth. In Texas, wheat condition rated 76% of normal, compared with 87% last year. Low Plains of Texas wheat needed more moisture. Drier conditions across the five major spring wheat States allowed planting to advance. Spring wheat acreage was 16% planted, compared with 40% last year and 45% average. Good progress was made in the Dakotas and Minnesota. Oats and barley seeding advanced in the northern Plains, but remained behind the 5-year average. Insects caused stress to small grains in Texas.

CORN: Corn planting progress advanced where weather conditions allowed. Planting was 4% complete in the 17 major corn-producing States, compared with 12% last year and 16% average. Some planting occurred in the southern districts of Indiana. Fields in Iowa and Illinois were still too wet to plant. Wet conditions have delayed planting progress in Missouri by 3 weeks. Some central Texas fields needed rain.

COTTON: Cotton planting in Texas remained ahead of last year and average, but cool weather caused some delays. Good progress was made in California and the Southwest, where warmer soil temperatures promoted germination and emergence. Drier conditions allowed planting to start in the Mississippi Delta and advance in the Southeast. Nationally, planting progress remained behind normal with 18% planted, compared with 23% last year and 22% average.

SORGHUM: Big gains in planting of the sorghum crop occurred in Arkansas, Mississippi, and Texas, but progress remained behind normal. Planting progress in the 12 major States reached 21%, compared with 27% last year and 24% average. Cool temperatures delayed crop growth in the Texas Blacklands.

RICE: Rice planting in the five major States reached 19% complete, compared with 62% last year and 38% average. Planting had just begun in California. Cool weather slowed planting progress in Texas. Producers in Louisiana applied insecticides.

OTHER FIELD CROPS: Onion seeding advanced but was behind the 5-year average in Colorado and Idaho. Planting was nearing completion in Malheur County, Oregon. Onions were in good condition in Georgia, Colorado, and New Mexico. Harvesting advanced in Arizona and Texas but still had not begun in Georgia. Sugar beet planting remained active in the northern

and central Great Plains and Idaho. Progress lagged the 5-year average in all areas. In California, new-crop sugar beets were sprayed for aphids. Harvest of California over-winter sugar beets increased. Potato planting activities continued in Minnesota, Idaho, and Oregon. Progress was ahead of last year in Minnesota, but behind last year and the 5-year average in Idaho. Harvest continued in Florida and California. Tobacco plant emergence in Kentucky, at 55%, lagged last year's progress of 84% and 5-year average of 82%. Tobacco plant beds in North Carolina are in fair to good condition.

FRUIT AND NUTS: Most Florida citrus groves and trees were in very good condition. However, surface moisture was generally short. The Arizona citrus harvest remained slow. Grapefruit and Valencia orange harvests advanced in Arizona, California, and Florida. The California navel orange crop was 80% picked. Some rind puff and softness problems were reported. The Florida tangerine harvest was completed. In California, grape growers protected their vineyards from pests. Apple trees continued to bloom in the Pacific Northwest. Apples and peaches are in good condition in Georgia. Texas peaches were also doing well. Lack of bees caused some concern among growers in Willamette Valley, Oregon. Producers in the Medford District of Oregon have concerns over pear scab. Brown spot problems occurred in some Texas orchards. Some Oregon hazelnuts have heavy aphid populations. Pecan nuts started to form in the Upper Coast region of Texas, and north Texas pecan trees still bloomed.

VEGETABLES: Cool weather limited growth of late planted vegetables in Florida and hampered vegetable growth in eastern Texas. Vegetable planting in the Middle Atlantic States was still 7 to 10 days behind due to excessive moisture. Wet conditions also delayed plantings in the Pacific Northwest. Winds damaged seedling peppers in the Trans-Pecos region of Texas. Watermelons continued in fair condition in Georgia. Cucumber beetles infested some watermelon fields in Texas. Aphid infestations were reported in some eastern Texas fields. Other vegetables were in fair to good condition across the South and Southeast. The lettuce harvest continued in California and began in New Mexico. Asparagus harvest advanced in California and started in Oregon. Broccoli, celery, cauliflower, and lettuce harvests continued active. Carrot and cabbage harvests continued in Texas and California.

PASTURE AND LIVESTOCK: Pasture and livestock conditions remained in good condition across the Nation. Pastures in western Oregon need drier conditions, and those in Louisiana need warmer weather. The damp conditions caused higher-than-normal calving losses in Utah, Iowa, and Nebraska. Lambing losses were also greater than normal in Utah. Muddy conditions stressed livestock in South Dakota. Supplemental feeding continued where needed with adequate feed supplies.

Crop Progress

for the Week Ending April 25, 1993

COTTON (Percent Planted)

	Current	Last Wk	1992	Avg.
AL	28	8	43	40
AZ	62	38	55	69
AR	2	0	7	5
CA	70	45	75	75
GA	14	5	17	10
LA	5	0	31	23
MS	1	0	24	26
MO	0	0	5	4
NM	47	31	48	62
NC	3	0	7	10
OK	2	0	0	2
SC	8	3	9	10
TN	0	0	8	7
TX	18	15	17	15
14 States	18	12	23	22

These 14 States produced 99% of the 1992 cotton crop.

WINTER WHEAT (Percent Headed)

	Current	Last Wk	1992	Avg.
AR	12	7	42	41
CA	95	75	95	86
CO	0	0	0	0
GA	49	20	72	83
ID	0	0	0	0
IL	0	0	0	1
IN	0	0	0	0
KS	0	0	5	4
MI	0	0	0	0
MO	0	0	2	1
MT	0	0	0	0
NE	0	0	0	0
NC	15	3	45	41
OH	0	0	0	0
OK	4	1	67	24
OR	0	0	0	0
SD	0	0	0	0
TX	22	9	50	33
WA	0	0	0	0
19 States	5	3	22	12

These 19 States produced 90% of the 1992 winter wheat crop.

GRAIN SORGHUM (Percent Planted)

	Current	Last Wk	1992	Avg.
AR	17	7	60	27
CO	0	0	0	0
IL	0	0	0	0
KS	0	0	0	0
LA	5	2	37	39
MS	20	7	44	38
MO	0	0	8	4
NE	0	0	0	0
NM	1	0	2	NA
OK	2	1	4	4
SD	0	0	0	0
TX	54	47	61	58
12 States	21	18	26	NA
Excl. States with NA	21	18	27	24

These 12 States produced 99% of the 1992 grain sorghum crop.

CORN (Percent Planted)

	Current	Last Wk	1992	Avg.
CO	6	0	11	7
GA	88	66	96	92
IL	0	0	16	28
IN	2	0	4	13
IA	0	0	2	8
KS	10	3	35	30
KY	10	4	39	23
MI	0	0	0	0
MN	0	0	2	6
MO	3	2	28	34
NE	0	0	11	11
NC	40	21	75	59
OH	0	0	4	9
PA	0	0	2	4
SD	0	0	0	0
TX	62	49	71	79
WI	0	0	0	1
17 States	4	2	12	16

These 17 States produced 94% of the 1992 corn crop.

RICE (Percent Planted)

	Current	Last Wk	1992	Avg.
AR	6	3	75	28
CA	1	0	2	2
LA	50	42	69	59
MS	7	5	59	41
TX	45	22	66	75
5 States	19	13	62	38

These 5 States produced 97% of the 1992 rice crop.

SPRING WHEAT (Percent Planted)

	Current	Last Wk	1992	Avg.
ID	33	9	89	74
MN	22	1	29	46
MT	21	8	59	57
ND	11	2	21	31
SD	17	2	87	75
5 States	16	3	40	45

These 5 States produced 96% of the 1992 spring wheat crop.

Crop Condition (Percent)

for the Week Ending April 25, 1993

WINTER WHEAT

State	VP	P	F	G	EX
AR	0	0	22	78	0
CA	0	0	5	45	50
CO	0	3	15	58	24
GA	0	15	40	38	7
ID	2	4	20	63	11
IL	0	0	14	80	6
IN	0	0	25	67	8
KS	0	1	7	53	39
MI	3	7	35	45	10
MO	0	5	59	36	0
MT	0	3	18	61	18
NE	0	0	17	72	11
NC	0	0	27	71	2
OH	2	8	32	45	13
OK	0	0	17	83	0
OR	0	0	8	45	47
SD	0	4	9	62	25
TX	1	2	41	53	3
WA	0	0	9	91	0
19 State	0	2	19	62	17
Prev Week	0	2	19	61	18
Prev Year	2	8	36	46	8

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

(Continued from front cover)

Northeast and intensified, drawing cold air southward into the Plains and Southeast. Wednesday minima of 29°F in Dalhart, TX and 22°F in Scottsbluff, NE contrasted sharply with the Nation's first 100°F readings of the year in Coolidge, AZ and Lake Havasu City, AZ. Late in the week, frost was scattered across the Southeast, while heavy rain and snow plagued the Northeast. On Thursday, temperatures dipped to 31°F in Knoxville, TN and Birmingham, AL. A day later, Tallahassee, FL (31°F) notched its latest freeze on record (formerly April 8, 1971), and Columbia, SC noted 32°F. Snowfall on Thursday reached 14 inches in north-central Pennsylvania and 10 inches in central New York State. A 6-inch snowfall in Syracuse, NY pushed their seasonal total past 190 inches. Elkins, WV surpassed a seasonal total of 100 inches with a 1-inch accumulation. In Upstate New York, relentless snowmelt and precipitation has caused severe lake and river flooding since late March. At week's end, a new storm system raced across the Nation's mid-section, touching off gusty winds and strong thunderstorms. Winds gusted to 59 mph in Fort Morgan, CO. On Saturday evening, a line of thunderstorms from Michigan to Oklahoma included the cell that produced a tornado near Tulsa, OK killing seven people, according to press reports.

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 0.62 to 2.60 in. north; 0.53 to 2.13 in. central; 0.67 in. to 1.59 in. south. Temperatures 3 to 11° below normal north; 3 to 9° below normal central; 5 to 9° below normal south. Lows 28 to 37° north; 28 to 39° central; 32 to 44° south. Highs 75 to 81° north; 79 to 83° central; 80 to 83° south.

Days suitable for fieldwork 5.0. Soil moisture 87% adequate, 13% surplus. Acreage prepared 71%, 82% 1992, 77% avg. Corn planted 59%, 84% 1992, 78% avg. Sorghum planted 8%, 21% 1992, 23% avg. Peanuts planted 20%, 24% 1992, 24% avg. Wheat headed 36%, 65% 1992, 69% avg.; turning color 5%, 9% 1992, 17% avg.; 3% poor, 40% fair, 57% good. Pasture 45% fair, 49% good, 6% excellent. Primary activities: Harvesting timber; land preparation; soil testing; planting corn, cotton, peanuts, soybeans, spring vegetables; applying fertilizer; spraying fruit; marketing cattle; general care of livestock, poultry, catfish.

ARIZONA: Sunny, warm throughout period, statewide. Windy 18th, 19th, west; windy 23rd, central. Temperatures 1 to 6° above normal. Extremes 23°; 92° higher elevations: 36°; 102° deserts.

Cotton planting active. Planted 62%, 55% 1992, 69% avg. Activities included: Pre-irrigation, laser leveling, listing. Alfalfa condition good. Harvest activities moderate to active west, central; light, eastern. Weeds, light; insect infestations moderate to heavy statewide; disease light. Small grains jointing 100%, 100% 1992, 100% avg. Heading 94%, 87% 1992, 91% avg. Fields in mostly good condition. Western area vegetable harvest wrapping up; limited volume cabbage available. Good volume broccoli, cabbage, carrots, mixed greens, leaf lettuce, green onions available central areas. Also available: Cauliflower, romaine lettuce, parsley, potatoes, turnips, available, central. Citrus harvest continued slow central, western areas. Valencia oranges, lemons, grapefruit, tangerines, tangelos available both western and central areas.

ARKANSAS: Cool week, temperatures averaging below normal. Scattered showers beginning of week; heavy rain, thunderstorms statewide weekend. Extremes 27°; 85°. Rainfall 0.15 to 3.76 in.

Days suitable for fieldwork 4. Moderate rate of crop growth. Soil moisture supplies 48% adequate, 52% surplus. Producers continued to prepare land for planting as weather allowed. Wheat condition fair to good, needs sunshine, dry weather. Some wheat fields saturated. Producers continued to apply fertilizer to wheat in dry areas. Septoria leaf blotch, rust, barley yellow dwarf diseases in some wheat fields. Corn 39% planted, 88% 1992, 75% avg. Rice, cotton, soybeans, corn, sorghum planting continued as weather allowed. Livestock good condition. Producers feeding hay, supplies adequate. Pastures good condition.

CALIFORNIA: Week began wet with many areas in the north reporting significant precipitation. Last half of the week was basically dry, mild.

Good progress field activities. Some areas slowed, rain 23rd. Small grains developing rapidly, planting just underway higher elevation fields. Rice seeding began limited areas, ground preparation gained momentum. Cotton planting full swing San Joaquin Valley. Warmer soil temperatures aided germination, emergence. Desert area seeding nearing completion. Rain interrupted harvest oats, winter forage for silage. Established alfalfa irrigated, treated weevils, cut hay, green chopped. Corn, safflower excellent growth; planting ongoing some areas. New crop sugarbeets sprayed aphids. Harvest over-wintered beets increased. Seeding blackeye beans underway few areas. Grape growers irrigated, fertilized, disced, treated for mildew, nematodes. Stonefruit were thinned. Apples, asian pears, plums treated for worms. Almonds sized well. Avocado, grapefruit, lemon picking active. Navel oranges 80% picked; rind puff, softness problems. Valencia orange packing active; prices low. Asparagus harvest San Joaquin Delta full swing. Bell pepper planting continued Westside, San Joaquin Valley. Broccoli harvest fairly heavy Salinas-

Watsonville, moderate Santa Maria generally good quality both. Harvest Westside continued. Cabbage harvest continued Westside. Carrot harvest continued Coachella Valley. Central Coast cauliflower harvest fairly light to moderate, variable quality. Fresh market tomato planting continued San Joaquin Valley, Westside. Head lettuce harvest seasonally increasing Salinas-Watsonville, light Santa Maria. Westside head lettuce harvesting winding down, Palo Verde completed. Harvest leaf lettuce Salinas-Watsonville fairly heavy, good quality. Harvest Westside seasonally decreasing. Potato harvest continued Coachella Valley. Squash harvest increasing Westside, Coachella Valley. Sweet corn harvested Coachella Valley, planting continues Westside. Other crops harvested included: Cabbage, radishes, green onions, eggplant, green beans, summer squash, turnips, oriental vegetables. Range and pasture conditions good to excellent. Scattered showers. Rangeland providing quality abundant feed. Some stockers shipped after making good weight gains.

COLORADO: Freezing temperatures in portions of the western valleys, light snow showers in the mountains in the beginning of the week. Mostly dry, occasionally windy conditions occurred 19th thru 23rd. On 24th a fast moving disturbance brought substantial amounts of moisture to most areas, particularly near the eastern foothills, where amounts ranged up to nearly 0.10 in. south of Denver. West of the Divide amounts were mostly 0.10 to 0.30 in. Drier, warmer conditions returned on the 25th. Temperatures on the Front Range were 2 to 3° above normal. Eastern plains temperatures 2 to 3° below normal, elsewhere temperatures were near normal.

Days suitable for fieldwork 5.2. Soil moisture 14% short, 79% adequate, 7% surplus. Spring barley seeded 55%, 66% 1992, 67% avg.; emerged 26%, 32% 1992, 34% avg. Oats seeded 45%, 60% 1992, 61% avg. Spring wheat seeded 18%, 33% 1992, 43% avg.; emerged 5%, 8% 1992, 12% avg. Sugarbeets planted 80%, 83% 1992, 83% avg. Dry onions planted 70%, 86% 1992, 75% avg. Dry onions 94% good to excellent. Corn planted 6%, 11% 1992, 7% avg. Winter wheat jointed 12%, 44% 1992, 21% avg.; 3% poor, 15% fair, 58% good, 24% excellent. Cows calved 85%, 85% 1992, 83% avg.; ewes lambled 85%, 89% 1992, 86% avg. Livestock rated mostly good to excellent. Pasture, range feed condition good.

FLORIDA: Two days of rain Panhandle, 1.00 to 2.00 in. totals, one day or less elsewhere, amounts under 0.10 in. Temperatures 6 to 10° below normal north, 4 to 8° below normal elsewhere. Highs 80° western Panhandle, low or middle 80s elsewhere. Lows freezing mark some areas north, lower 40s central, middle 40s interior south. Record lows entire State.

Soil moisture mostly short to adequate. Frost damage in a few areas 23rd. Peanut planting active. Cool temperatures slowing cotton planting. Winter wheat headed. Corn, tobacco making slow progress because of cool weather. Sugarcane making good progress. Most citrus groves, trees very good condition. Surface moisture generally short, low volume irrigation use most areas. Abundant new foliage growth, bloom continuing. Some trees completed petal drop, others still in full bloom. Valencia harvest very active. Most white grapefruit going to processor. Colored grapefruit about half to fresh, processor. Temple, Honey tangerine harvest all but complete. Caretakers cutting cover crops, hedging, topping, post bloom spraying. Growing conditions during week slightly cooler than normal, late planted crops delaying growth. Volume leaders: Tomatoes, potatoes, cucumbers, peppers, cabbage. Also available: Snap beans, carrots, celery, chinese cabbage, sweet corn, eggplant, escarole, romaine lettuce, specialty lettuces, radishes, squash, strawberries, cherry tomatoes. State's pastures fair to excellent. Pasture ratings, 5% poor, 35% fair, 55% good, 5% excellent. State's cattle herds good condition.

GEORGIA: Cool relatively dry week. Temperatures 4 to 8° below normal. Late freeze, or frost over much of State late in week. Minimums upper 20s mountains, low to mid 30s colder locations

southern areas. Warmest from mid 70s mountains to low, mid 80s central, south. Most of week dry. Showers, thunderstorms north, west 25th, early 26th, amounts 0.50 to locally 1.00 in. Rain totals about 2.00 in. extreme northwest to little or none over most of east, southeast.

Days suitable for fieldwork 5.6. Little or no crop damage from low temperatures. Soil moisture 18% short, 80% adequate, 2% surplus. Corn 59% fair, 39% good, 2% excellent; planting active. Cotton 71% fair, 29% good; Planting ahead of average. Sorghum 3% poor, 70% fair, 26% good, 1% excellent; 10% planted, 18% 1992, 13% avg. Peanuts 76% fair, 24% good; 16% planted, 21% 1992, 16% avg. Soybeans 0% planted, 1% 1992, 1% avg. Tobacco 17% poor, 51% fair, 30% good, 2% excellent; 92% transplanted, 100% 1992, 98% avg. Wheat 98% jointing, 100% 1992, 100% avg.; 88% boot, 97% 1992, 98% avg. Other small grains 30% poor, 32% fair, 38% good. Onions 9% fair, 91% good; 0% harvested, 28% 1992, 29% avg.; few scattered fields harvested. Watermelons 20% poor, 74% fair, 6% good; 92% planted, 92% 1992, 92% avg. Other vegetables 6% poor, 61% fair, 33% good. Apples 8% fair, 92% good; 78% blooming, 96% 1992, 98% avg. Peaches 6% very poor, 1% poor, 14% fair, 79% good; 100% blooming, 100% 1992, 100% avg. Pasture 4% poor, 27% fair, 61% good, 8% excellent. Cattle and hogs good. Planting vegetables active, harvesting early vegetables, fertilizing, liming pastures, land preparation, irrigating early vegetables.

HAWAII: Favorable showers fell over the State, mainly windward, higher elevations. Gusty winds blew early in the week subsiding by weekend. Temperatures low 60s to mid 80s. Rainfall none to 7.00 in.

Rain interrupted planting, harvesting schedules. Showers restored soil moisture levels in some areas, irrigation was still essential for normal crop development. After continuous rains, some orchard growers may intensify spraying efforts to curtail disease outbreaks. Banana production moderate, papaya output declining seasonally. Watermelon acreage increased with recent plantings. Sweet corn harvesting generally light.

IDAHO: Temperatures 4° below normal to 4° above normal. Precipitation fell statewide, with some northern areas receiving more than 0.50 in.

Days suitable for fieldwork 4. Soil moisture 0% very short, 2% short, 79% adequate, 19% surplus. Spring barley planted 31%, 88% 1992, 69% avg. Oats planted 11%, 71% 1992, 48% avg. Potatoes planted 6%, 27% 1992, 19% avg. Sugarbeets planted 45%, 99% 1992, 92% avg. Onions planted 20%, 100% 1992, 95% avg. Dry peas planted 4%, 83% 1992, 53% avg. Lentils planted 1%, 80% 1992, 40% avg. Field corn planted 1%, 13% 1992, 9% avg. Irrigation water supplies 0% very poor, 6% poor, 19% fair, 54% good, 21% excellent. Hay and roughage supplies 4% very short, 10% short, 85% adequate, 1% surplus. Activities: Fertilizing, sorting, cutting potato seed, planting field crops and grains, reseeding winter wheat, fencing, branding, cleaning irrigation ditches. Pasture, range condition 89% of normal. Calving completed 98%. Lambing completed 95%. Livestock mostly good condition.

ILLINOIS: Limited sunshine, cool weather prevailed last week, as temperatures were 0 to 4° below normal, precipitation was 0.50 to 1.00 in. Highs 60s. Lows mostly in the 40s. Extreme low: 25°.

Days suitable for fieldwork 0.3. Soil moisture 7% adequate, 93% surplus. Oats planted 9%, 84% 1992, 85% avg. Alfalfa 2% excellent, 74% good, 24% fair. Fieldwork remains minimal as farmers continue to wait for drier conditions. Pasture condition 87% of normal.

INDIANA: High temperatures low to mid 60s north; mid to upper 60s south. Highs were 1 to 3° below normal. Lows upper 30s to low 40s north to the low 40s south. Lows mostly close to normal to 3° above normal. Rainfall 0.70 to 1.90 in. across much of State.

Some fieldwork was accomplished in the southern three districts of State. Feedlots remain muddy. Pastures are rated 83% of normal, 81% last week. Wheat crop ratings remain fair to excellent. Topsoil 29% adequate, 71% surplus. Subsoil moisture 33% adequate, 67% surplus. Oats seeded 20%, 68% 92, 70% avg. Spring tillage 45%, 78% 92, 79% avg.

IOWA: Temperatures 0 to 2° below normal. Extremes 24°; 75°. Heavy rains were followed by light to moderate snow early week. Widespread flooding along major rivers. Precipitation 0.03 in. southwest to 2.85 in. southeast; average 1.10 in. (normal 0.68 in.).

Days suitable for fieldwork 0.6. Topsoil 19% adequate, 81% surplus. Subsoil 15% adequate, 85% surplus. Fertilizer application 25%, 70% 1992, 76% normal. Primary seedbed preparation completed 24%, 64% 1992, 76% normal. Oats sown 10%, 85% 1992, 89% normal. Winter wheat 1% poor, 61% fair, 35% good, 3% excellent. Pasture 5% very poor, 26% poor, 34% fair, 30% good, 5% excellent. Cattle losses above average due to mud, cold weather, scours.

KANSAS: Temperatures 4° below normal to 2° above normal over State. Light precipitation received all districts.

Days suitable for fieldwork 3. Farmers took advantage of the opportunity to work fields. Seedbed preparation, corn planting behind because wet field conditions throughout spring. Corn planting 10% complete, 30% avg. Most corn planted was in southern districts. Oats planting 60% complete, 98% avg. Topsoil moisture 4% short, 75% adequate, 21% surplus. Subsurface moisture 73% adequate, 27% surplus. Wheat 92% good to excellent, 7% fair, 1% poor. Sunshine, warmer temperatures past week promoted rapid wheat growth, progress still behind normal. Thirty percent of State's wheat acreage jointed compared 70% avg. Disease pressure in wheat widespread but light. Because wet conditions, potential for foliar diseases great. Cattle moving pasture. Pastures good condition, providing about 40% cattle roughage requirements. Farmers principle activities seedbed tillage, corn planting, pasture burning, moving cattle to pasture.

KENTUCKY: Temperature 58°. Highs around 68°, lows around 47°. Rainfall 0.65 in.; the east received the heaviest rain.

Days suitable for fieldwork 3.4. Soil moisture 44% surplus, 56% adequate. Wheat 2% poor, 27% fair, 63% good, 8% excellent. Barley 18% fair, 68% good, 14% excellent. Tobacco plants emerged 55%, 84% 1992, 82% avg. Pastures good condition. Fruit, strawberry good to excellent condition. Light frost 22nd, no serious damage reported.

LOUISIANA: Temperatures 3.8 to 6.1° below normal. Extremes 35°; 84°. Rainfall 0.04 in. south central to 0.68 in. north central.

Days suitable for fieldwork 4.4. Soil moisture 2% short, 80% adequate, 18% surplus. Corn 6% very poor, 19% poor, 65% fair, 10% good; 87% planted, 98% 1992, 93% avg.; 70% emerged, 87% 1992, 80% avg. Made excellent progress. Cotton 5% planted, 31% 1992, 23% avg.; 0% emerged, 17% 1992, 8% avg. Off to a slow start. Hay 1% first cutting, 4% 1992, 4% avg. Rice 50% planted, 69% 1992, 59% avg.; 35% emerged, 54% 1992, 45% avg. Made good progress, spraying for insects. Sorghum 5% planted, 37% 1992, 39% avg.; 0% emerged, 24% 1992, 25% avg. Soybeans 0% planted, 0% 1992, 1% avg. Land preparation active. Spring plowing 65% plowed, 83% 1992, 77% avg. Sweet potatoes 0% planted, 1% 1992, 6% avg. Cool weather prevented planting. Wheat 4% very poor, 42% poor, 40% fair, 14% good; 73% headed, 93% 1992, 91% avg.; 8% turning color, 10% 1992, 14% avg. Sugarcane 1% poor, 69% fair, 20% good, 10% excellent. Fertilizing, spraying, cultivating. Livestock 48% fair, 48% good, 4% excellent. Pastures 14% very poor, 2% poor, 6% fair, 78% good. Cool weather retarded growth. Vegetables 16% poor, 60% fair, 21% good, 3% excellent. Planting made good progress.

MARYLAND & DELAWARE: **MARYLAND:** Precipitation 1.45 in. Temperature 56.3°, normal 56.7°. Extremes 29°; 82°.

Days suitable for fieldwork 3.3. Topsoil 35% adequate, 65% surplus. Subsoil 24% adequate, 76% surplus. Small grains fair to mostly good condition, barley, rye just beginning to head. Light disease problems, scouting fields. Field corn 5% planted, 10% 1992, 11% avg. Pasture in mostly excellent condition. Potatoes nearly 75% planted, about 1 week behind. Sweet potato planting advanced significantly. Planting of green peas past halfway, advancing rapidly. Peach bloom at 64%, 64% 1992, 89% avg. Apples, strawberries beginning to bloom, 2 weeks late.

DELAWARE: Precipitation 1.35 in. Temperature 56.3°, normal 56.3°. Extremes 31°; 76°.

Days suitable for fieldwork 4.5. Topsoil 57% adequate, 43% surplus. Subsoil 17% adequate, 83% surplus. Small grains fair to mostly good condition, spraying weeds. Corn for grain 6% seeded, 32% 1992, 17%

avg. Sweet corn 12% planted, 25% 1992, 19% avg. Potatoes 1/2 planted, green peas 3/4 planted. Peach bloom 77%, 76% 1992, 95% avg. Apples, strawberries behind, just starting to bloom. Pasture excellent condition.

MICHIGAN: Extremes 11°; 74°. Precipitation none to 3.21 in.

Corn harvested remained at 98% harvested. Warm temperatures with plenty of rainfall sums up the week's weather. Flood warnings were in effect in many areas. Most fields are too wet, muddy to start spring planting. Livestock were doing well. Feed supplies were adequate to short. Pastures were beginning to turn green. Major activities included keeping out of the mud, purchasing chemicals, fertilizer, seeds, waiting to start planting.

MINNESOTA: Temperatures near normal to 1° below normal for the State, Extremes 17°; 71°. Precipitation 0.13 to 0.47 in. below normal for the western one-third, central, east central; 0.44 to 1.07 in. above normal elsewhere. Greatest weekly total 3.02 in.

Days suitable for fieldwork 2.7. Topsoil 1% very short, 6% short, 52% adequate, 41% surplus. Subsoil 1% short, 8% short, 52% adequate, 39% surplus. Spring wheat 22% planted 29% 1992, 46% avg. Oats 12% seeded, 25% 1992, 49% avg. Barley 18% seeded, 17% 1992, 33% avg. Sugarbeets 12% planted, 31% 1992, 30% avg. Potatoes 5% planted, 3% 1992, 5% avg. Green peas 6% planted, 17% 1992, 28% avg. Corn 5% ground prepared, 13% 1992, 28% avg. Soybean 2% ground prepared 4% 1992, 9% avg.

MISSISSIPPI: Temperatures 65°, 5.5° below normal. Extremes 28°; 83°. Entire State received below normal rainfall, averaging 0.60 in., 0.59 in. below normal. Soil temperatures 63°.

Days suitable for fieldwork 3.0, 3.3 1992, 3.5 avg. Soil moisture 43% adequate, 52% surplus, 5% excessive. Corn 48% planted, 79% 1992, 69% avg.; 25% emerged, 66% 1992, 53% avg.; 3% very poor, 28% poor, 65% fair, 4% good. Cotton 1% planted, 24% 1992, 26% avg. Peanuts 3% planted, 18% 1992, 15% avg. Rice 7% planted, 59% 1992, 41% avg.; 3% emerged, 25% 1992, 13% avg. Sorghum 20% planted, 44% 1992, 38% avg.; 9% emerged, 37% 1992, 33% avg. Sweet potatoes 1% planted, 7% 1992, 17% avg. Watermelons 50% planted, 65% 1992, 64% avg.; 57% poor, 43% fair. Wheat 87% jointing, 98% 1992, 98% avg.; 17% heading, 77% 1992, 80% avg.; 15% poor, 69% fair, 15% good, 1% excellent. Peaches 7% very poor, 33% poor, 18% fair, 42% good. Livestock 2% fair, 93% good, 5% excellent. Pasture 90% of normal. Activities: Planting preparations, ground preparation.

MISSOURI: Temperatures 7° below normal Bootheel to 1° below normal northeast. Rainfall 0.87 in., varying from less than 0.50 in. northwestern, south central districts to 1.50 in. northeastern, east central districts. Several rivers above flood stage.

Days suitable for fieldwork 0.8. Topsoil 14% adequate, 86% surplus. Ground worked for spring crops 34%, 75% 1992, 75% avg. Corn planting by area ranges from virtually none through central, northern districts to 17% southeast, nearly 3 weeks behind normal, latest since 1984. Oats sown 21%, 90% 1992, 92% avg. Wheat progressing well except low portions of fields where water stands due to poor drainage. Pastures 14% poor, 38% fair, 45% good, 3% excellent.

MONTANA: Temperatures 4 to 7° above normal in the southwest, 2 to 4° above normal elsewhere. Temperatures slightly below normal west of Divide. Good amounts of precipitation received most areas.

Days suitable for fieldwork 3.1. Topsoil 6% short, 75% adequate, 19% surplus. Subsoil 26% short, 65% adequate, 9% surplus. Winter wheat 3% still dormant, 40% greening, 57% green and growing. Barley planted 19%, 68% 1992, 54% avg. Oats planted 20%, 71% 1992, 57% avg. Sugarbeets planted 43%, 60% 1992, 60% avg. Corn planted 10%, 17% 1992, N.A. avg. Dry beans planted 5%, 0% 1992, 0% avg. Potatoes planted 2%, 14% 1992, 3% avg. Pasture, range feed condition is rated at 83% of normal. Calving 89% complete, lambing 75% complete.

NEBRASKA: Temperatures 2° below normal. Precipitation varied across the State from 0.10 in. to almost 2.00 in. northeast.

Days suitable for fieldwork 2.2. Topsoil 53% adequate, 47% surplus. Subsoil 67% adequate, 33% surplus. Wheat 17% fair, 72% good, 11% excellent; 8% jointed, 29% 1992, 20% avg. Oat planting 15% complete, 92% 1992, 92% avg. Sugarbeet planting 75% complete. Pasture, range condition 97% of normal. Spring calving 86% complete with above normal losses.

NEVADA: Series of weak low pressure systems moved across the north. Most precipitation was light; a few areas received close to 0.50 in. Temperatures near normal. Extremes 12°; 98°.

Fall potato crop planting off to a good start. Planting progress most field crops about normal. Livestock movement continues to spring, summer ranges. Calving, lambing nearing completion. Shearing continues.

NEW ENGLAND: Precipitation 1.19 to 2.23 in. Maine; 0.16 to 2.76 in. elsewhere. Temperatures 40 to 52° north; 48 to 54° south. Highs 62 to 77° north; 68 to 77° south. Lows 23 to 31° north; 22 to 40° south.

Activities: tending livestock, top dressing alfalfa, pastures, some plowing. Greenhouse producers transplanting nursery stock.

NEW JERSEY: Temperatures above normal. Extremes 34°; 80°. Rainfall 1.00 in. north, 0.78 in. central, 0.65 in. south. Heaviest 24 hour total 1.03 in. on 21st, 22nd. Estimated soil moisture, in percent field capacity, averaged 98% north, 94% central, 92% south. Four inch soil temperatures averaged 54° north, 56° central, 56° south.

Planting, ground preparation 10 days to 2 weeks behind due to excessive topsoil moisture, rains. Some planting of various types of lettuce, escarole, endive, spring spinach, snap beans. Asparagus, Fall spinach available in moderate volume. Peaches nearing full bloom. Limited fresh market tomatoes being transplanted from greenhouses. Limited planting of Spring cabbage, sweet corn, potatoes.

NEW MEXICO: Dry, relatively warm weather. Temperatures 2° above normal, with some areas in the south 4 to 5° above normal. Precipitation was limited to a few tenths of an inch in the north central mountains other areas receiving no measurable amounts.

Days suitable for fieldwork 6.7. Soil moisture 55% short, 44% adequate, 1% surplus. Crop conditions: Alfalfa 4% very poor, 8% poor, 28% fair, 52% good, 8% excellent; first cutting underway in southern counties. Corn planting active. Irrigated wheat 12% fair, 82% good, 6% excellent. Dryland wheat 9% very poor, 20% poor, 53% fair, 18% good. Chile 8% poor, 25% fair, 54% good, 13% excellent. Onions 86% good, 14% excellent. Lettuce good to excellent; some early harvest reports. Continued insect problems in wheat, alfalfa. Reports of freeze damage to fruit in isolated areas. Cattle and sheep fair to excellent. Range, pasture 76% of normal.

NEW YORK: Week started mild with highs in mid 60s to mid 70s. Cooler at midweek with highs in the 30s to 40s. End of week again warmed with highs in the 50s to mid 60s. Extremes 25°; 77°. Precipitation above normal, 2.00 to 4.25 in. north, to 0.50 to 1.00 in. south and west; elsewhere 1.00 to 2.00 in. The Saint Lawrence Valley received the heaviest amounts.

Major activities: Caring for livestock, spreading manure, spring plowing, planting early vegetable crops, orchard maintenance. Wet fields continued to hamper field activities.

NORTH CAROLINA: Temperatures 1 to 5° below normal. Precipitation 1.17 in. at Longwood to none at many locations.

Days suitable for fieldwork 4.3. Soil moisture 66% adequate, 34% surplus. Crop condition: Pasture 2% poor, 25% fair, 73% good; winter wheat 27% fair, 71% good, 2% excellent; oats 27% fair, 73% good; barley 28% fair, 72% good; rye 28% fair, 72% good; tobacco plant beds 1% poor, 36% fair, 58% good, 5% excellent; irish potatoes 19% poor, 46% fair, 35% good; peaches 4% poor, 16% fair, 80% good; truck crops 13% poor, 34% fair, 53% good; hay, roughage supplies 2% very short, 10% short, 87% adequate, 1% surplus. Tobacco plant bed supply 3% very short, 22% short, 75% adequate; irish potatoes planted 96%, 99% 1992, 94% avg.; cabbage transplanted 95%, 100% 1992, 100% avg.; corn planted 40%, 75% 1992, 59% avg. Flue-cured tobacco transplanted 16%, 29% 1992, 27% avg. Major activities: Land preparation; tobacco plant bed maintenance; transplanting tobacco

plants; planting corn. Other activities: Planting potatoes, cabbage; tending livestock; general farm maintenance.

NORTH DAKOTA: Temperatures below normal with scattered precipitation. Temperatures 3° below normal west central, southwest to normal southeast. Extremes 16° west central; 75° south central. Precipitation 0.10 in. northeast to 0.89 in. southwest.

Days suitable for fieldwork 4.6. Topsoil supplies mostly adequate and above average. Topsoil none very short, 9% short, 88% adequate, 3% surplus. Subsoil none very short, 53% short, 45% adequate, 2% surplus. Planting progress behind last year and average. Hard red spring wheat 11% planted, 21% 1992, 31% avg.; durum wheat 6%, 5% 1992, 13% avg.; barley 11%, 14% 1992, 28% avg.; oats 6%, 26% 1992, 27% avg.; sugarbeets 18%, 2% 1992, 27% avg. Winter wheat 0% very poor or poor, 33% fair, 67% good, 0% excellent; 12% dormant, 83% green, 5% stooling or earlier. Roughage requirements furnished by pastures 13%; pasture 79% of normal. Calving 86% complete, lambing 90%, shearing 93%. Stockwater supplies none very short, 6% short, 94% adequate, 0% surplus.

OHIO: Wet fields continued to be a major obstacle to fieldwork. A warm front 19th cold front 20th brought rain early in the week. Another cold front caused more rain 24th night, 25th. Most areas received at least an inch of rain with locally 2.00 or 3.00 in. Temperatures held close to or slightly cooler than normal. Highs in the low to mid 60s were 0 to 4° below normal. Lows in the upper 30s to middle 40s were mostly 2 to 4° below normal. Low temperatures did drop to, or near, freezing during the week with Wooster, Ripley the coldest at 28°. Limited sunshine, cool daytime temperatures kept soils on the cool side. Four-inch soil maximums averaged mostly in the middle 50s, minimums averaged mostly in the middle, upper 40s.

Days suitable for fieldwork 2.3. Soil moisture 33% adequate, 67% surplus. Oats planted 11%, 63% 1992, 64% avg. Oats emerged 2%, 28% 1992, 23% avg. Tobacco beds sown 67%. Potatoes planted 1%, 10% 1992, 18% avg. Sugarbeets planted 2%. Pasture 1% very poor, 6% poor, 37% fair, 50% good, 6% excellent. Hay 1% very poor, 5% poor, 35% fair, 54% good, 5% excellent. Fruit development continues to be 1 to 2 weeks behind. Drier, warmer weather, more sunshine are sorely needed in order to do fieldwork. Improved weather would also help winter wheat, which is generally in good condition.

OKLAHOMA: Temperatures 4° below normal north central to 1° below normal Panhandle. Precipitation none Panhandle, west central, central, southwest to 1.93 in. southeast.

Days suitable for fieldwork 4.6. Topsoil 4% short, 60% adequate, 37% surplus. Subsoil 100% adequate. Wheat 17% fair, 83% good; 89% jointing, 100% 1992, 91% avg.; 4% heading, 67% 1992, 24% avg. Oats 32% jointing, 96% 1992, 68% avg.; 1% heading, 36% 1992, 12% avg. Barley 26% jointing, 66% 1992, 72% avg. Corn 91% seedbed prepared, 96% 1992, 95% avg.; 72% planted, 60% 1992, 47% avg.; 18% up-to stand, 23% 1992, 15% avg. Sorghum 23% seedbed prepared, 45% 1992, 55% avg.; 2% planted, 4% 1992, 4% avg. Soybeans 30% seedbed prepared, 64% 1992, 57% avg.; 11% planted, 4% 1992, 5% avg. Peanuts 59% seedbed prepared, 69% 1992, 60% avg. Cotton 72% seedbed prepared, 67% 1992, 64% avg.; 2% planted, 0% 1992, 2% avg. Alfalfa 1% 1st cut, 10% 1992, 8% avg. Pastures 95% of normal. Livestock 23% fair, 76% good, 1% excellent. Prices for feeder steers and heifers steady to \$1.00 per cwt. lower. Marketings average.

OREGON: Temperatures 0 to 4° below normal east, 2 to 5° above normal west. Precipitation coastal areas 2.00 to 3.00 in., Willamette Valley 0.50 to 1.33 in.; elsewhere up to 0.50 in.

Soil moisture 77% adequate 23% surplus. Winter wheat 8% fair, 45% good, 47% excellent. Barley planted 65%. Fieldwork, plantings delayed, wet conditions statewide. Producers considering summer fallow over late spring barley, wheat. Fruit trees in full bloom statewide. Cherry, prune bloom complete, strawberries, blueberries bloom underway, Willamette Valley. Lack of bees causing some pollination concerns. Heavy aphid populations in hazelnuts. Pear scab concerns surfacing, Medford district. Vegetable plantings delayed, wet conditions; Willamette Valley. Malheur County. onion seeding nearing completion, potato seedings 25 to 30% complete.

Sweet corn seedings underway. Hermiston area asparagus harvest underway, melon seeding underway. Livestock good. Western area pastures excessively wet, eastern area pastures adequate moisture. Branding, range turnout underway. Range, pasture condition 93% of normal.

PENNSYLVANIA: Temperatures, precipitation were above normal. Temperature 54°, 6° above normal. Extremes 25°; 79°. Precipitation 1.21 in., 0.39 in. above normal.

Days suitable for fieldwork 2. Soil moisture 0% short, 17% adequate, 83% surplus. Plowing 16% complete, 49% 1992, 52% avg. Corn 0% planted, 2% 1992, 4% avg. Soybeans 0% planted, 0% 1992, 0% avg. Oats 24% planted, 47% 1992, 54% avg. Potatoes 5% planted, 15% 1992, 26% avg. Tobacco beds 69% planted, 93% 1992, 87% avg. Barley 0% boot, 3% 1992, 5% avg. Wheat 0% boot, 2% 1992, 3% avg. Wheat crop condition 3% very poor, 5% poor, 28% fair, 49% good, 15% excellent. Hay stands mostly fair to good. Peaches 24% pink, 37% 1992, 56% avg.; 10% full bloom or past, 7% 1992, 29% avg. Cherries 12% pink, 25% 1992, 50% avg.; 3% full bloom or past, 11% 1992, 27% avg. Apples 3% pink, 10% 1992, 27% avg.; 0% full bloom or past, 0% 1992, 7% avg. Activities: Hauling manure; maintaining machinery; fixing fence; preparing for spring work; some planting; pruning fruit trees; caring for livestock.

PUERTO RICO: Island rainfall 1.52 in. was 0.26 in. above normal. Highest rainfall 5.25 in. at Arecibo Ionos. Obs., 4.97 in. at San Sebastian, 4.70 in. at Las Marias. Highest 24 hour total was 4.00 in. at Paraiso on 19th. Island temperatures 79 to 80° on the coasts, 72 to 76° in the interior with mean station temperature 81.3° at Roosevelt Roads to 63.9° at Pico Del Este-Luquillo. Extremes 51°; 94°.

SOUTH CAROLINA: Temperatures 2 to 5° below normal. Average precipitation was less than 0.10 in.

Days suitable for fieldwork 5.9. Soil moisture 27% short, 73% adequate. Tobacco fair; 60% planted, 74% 1992, 74% avg. Corn fair to good; 86% planted, 93% 1992, 89% avg. Cantaloupes fair to good; 70% planted, 72% 1992, 68% avg. Watermelons fair to good; 77% planted, 82% 1992, 80% avg. Cucumbers fair to good; 68% planted, 72% 1992, 74% avg. Snapbeans fair to good; 57% planted, 56% 1992, 56% avg. Tomatoes fair to good; 95% planted, 95% 1992, 94% avg. Oats fair to good; 44% headed, 62% 1992, 70% avg. Rye fair to good; 5% turning color, 10% 1992, 6% avg. Wheat fair to good; 23% headed, 53% 1992, 68% avg. Grain Hay fair to good; 9% harvested, 14% 1992, 14% avg. Peaches fair to good. Pastures fair to good.

SOUTH DAKOTA: Temperatures normal to 5° below normal. Extremes 3°; 78°. Precipitation occurred on several days with amounts varying from a quarter to a half of an inch. Maximum 1.77 in.

Days suitable for fieldwork 2.1. Topsoil 3% short, 58% adequate, 39% surplus. Subsoil 1% very short, 4% short, 70% adequate, 25% surplus. Rye 10% fair, 71% good, 19% excellent. Barley 13% planted, 75% 1992, 65% avg. Oats 15% planted, 91% 1992, 77% avg. Most of the fieldwork done last week was in fields with lighter soils or on high ground. Fields are still to wet to work in most areas. Livestock 6% fair, 74% good, 20% excellent. Muddy feedlots continue to make conditions hard on livestock. Scours, pneumonia continue to cause sickness in calves. Lambing was 82% complete, calving was 73% complete. Pasture conditions 85% of normal.

TENNESSEE: A high pressure system produced fair, warm weather on the 19th. A cold front brought rain to most of the State on the 20th. Fair weather returned with another high-pressure system, lasted until the 24th. A cold front arrived on the 25th, bringing more rain. Temperatures below normal. About 1° below normal in the west to as much as 7° below normal over the Plateau. Warmest reading was 82° at Chattanooga on the 25th, coldest was 30° at Bristol on the 23rd. Temperatures in the east 4° below normal. Precipitation near normal in the east to around 1.50 in. above normal over the rest of the State. Most rain 2.33 in. fell at Memphis; least was 0.36 in. at Bristol.

Days suitable for fieldwork 3.3. Soil moisture 80% adequate, 20% surplus. Corn 14% planted, 61% 1992, 34% avg. Sorghum 0% planted, 18% 1992, 7% avg.; tobacco 79% plants up, 93% 1992, 91% avg. Wheat 71% jointed, 86% 1992, 89% avg.; 2% headed, 22% 1992,

19% avg.; 4% poor, 13% fair, 77% good, 6% excellent. Apples 95% budding or beyond, 98% 1992, 95% avg.; 69% blooming or beyond, 91% 1992, 91% avg. Peaches 98% blooming or beyond, 100% 1992, 100% avg. Strawberries 1% poor, 30% fair, 66% good, 3% excellent. Pastures 1% poor, 11% fair, 74% good, 14% excellent. Cattle 1% poor, 11% fair, 82% good, 6% excellent. Activities: finishing fertilization of hay, pastures, corn planting, spraying wheat fungicides.

TEXAS: In general, it was a dry, cool week. A cool front pushed through the region early in the week bringing the first round of cool, dry air. Another front over the weekend repeated the same pattern. Temperatures below normal in all districts except in south-central Texas, Edwards Plateau where near normal readings were observed. Precipitation was below normal in all districts. No rainfall was reported for the week over most of West Texas. Northeast Texas measured the only significant rain amounts.

Crops: Corn planting continued High, Low Plains; some producers still applying herbicides, laying off rows. Stands looked good Blacklands, some fields Central Texas could use rain. Statewide corn condition 83% normal, 88% 1992. Sorghum planting continued Blacklands, growth of plants slowed due unseasonably cool weather. Greenbugs were increasing in numbers. Cultivation activities common most areas, weather permitted. Statewide sorghum 76% normal, 83% 1992. High Plains some early cotton fields planted, cool temperatures delayed most planting. Low Plains finishing preparation of ground for planting, applying preplant herbicides. Cotton planting active Blacklands, Central Texas, while Trans Pecos, some plants damaged from dry windy conditions earlier week. Cotton growth slowed by cooler temperatures Coastal Bend. Rice planting activities continued, slowed due cooler temperatures. Soybean seedbed preparation underway Blacklands where conditions allowed. Small grains High Plains still experiencing problems with Russian Wheat Aphids, non-irrigated fields could use moisture. Low Plains, wheat maturing well but could use rain. Some wheat, oat fields cut for hay Cross Timbers, some wheat fields in the Hill Country exhibiting damage from earlier freezes, need of rain. Wheat 76% normal, 87% 1992.

Commercial Vegetables: Rio Grande Valley, onion, cabbage harvest continued full swing. Winter Garden, limited carrot harvesting underway, onion harvesting should start any day. Onion planting High Plains continued. Watermelon & cantaloupe seedlings, transplants under way North Texas. Aphid population increasing some vegetable fields East Texas, cool temperatures hampered growth. Some seedling peppers damaged by wind Trans Pecos, some watermelon fields being treated for cucumber beetles. Peaches doing well across State. Leaf Curl appeared some orchards Low Plains, crop appears good despite earlier freezes. Some leaf curl being reported Cross Timbers, also some orchards having brown rot problems. Thinning, spraying for disease control continued most areas. Upper Coast should have some early varieties ready next week. Some pecans are being grafted Hill Country. Casebearer spraying begun Central Texas. Pecan nuts showing up Upper Coast, trees still blooming northern part State.

Range and Livestock: Supplemental feeding still necessary some areas High Plains due limited forage. Other areas, forage production increased as ranges, pastures greened. Some South Texas ranchers burned pear for cattle. Gnats, flies, increasing problem for ranchers East Texas, Trans Pecos livestock pestered by flies, lice, ticks.

UTAH: Temperature maximums 2° above normal, minimums were 1° above normal. Precipitation was moderate in north central, northern mountains. Western division precipitation was extremely light; the rest of the State reported no precipitation.

Days suitable for fieldwork 6.0. Soil moisture 77% adequate, 23% surplus. Winter wheat 23% good, 77% fair. Fall barley condition 30% good, 47% fair, 23% poor. Alfalfa hay height 4.8 in., 10.2 in. 1992, 6.9 in. avg. Spring wheat planted 57%, 100% 1992, 95% avg.; emerged 18%, 77% 1992, 66% avg. Barley planted 59%, 100% 1992, 91% avg.; emerged 22%, 79% 1992. Oats planted 43%, 75% 1992, 71% avg.; emerged 13%, 41% 1992. Corn planted 3%, 37% 1992, 17% avg. Apricots full bloom or past 75%. Sweet cherries full bloom or past 6%. Peaches full bloom or past 7%. Pears full bloom or past 8%. Fruit blossoming is 2 to 3 weeks behind last year.

Potatoes planted 9%. Calf death losses normal to above normal. Lamb death losses above normal. Pasture, range condition good to excellent.

VIRGINIA: Temperatures near normal. Extremes 24°; 82°. Precipitation slightly below normal ranging from 0.19 to 2.64 in.

Days suitable for fieldwork 3.2. Topsoil 5% short, 48% adequate, 47% surplus. Pasture 2% poor, 32% fair, 58% good, 8% excellent. Alfalfa 2% poor, 26% fair, 64% good, 8% excellent. Other hay 3% poor, 36% fair, 52% good, 9% excellent. Wheat 3% poor, 39% fair, 58% good. Barley 1% poor, 34% fair, 63% good, 2% excellent. Peach 17% fair, 65% good, 18% excellent. Apple 15% fair, 77% good, 8% excellent. Potato 51% fair, 49% good. Corn 24% planted, 35% 1992, 29% avg. Corn 23% very poor, 15% poor, 62% fair. Peanuts 4% planted, 11% 1992, 8% avg. Liming, fertilizing land, overseeding pastures, spraying fruit trees, planting snapbeans, cucumbers. Plantbeds in southwestern areas nearly all seeded.

WASHINGTON: Temperatures above normal west; near to above normal east. Precipitation 0.06 to 2.11 in. west; 0.03 to 0.60 in. east.

Days suitable for fieldwork 4.3. Soil moisture 6% short, 75% adequate, 19% surplus. Irrigation water supply 37% short, 63% adequate. Hay, other roughage 25% very short, 34% short, 41% adequate. Range, pasture 13% poor, 51% fair, 36% good. Winter wheat dryland 10% fair, 90% good; irrigated 100% good. Spring wheat dryland 100% good; irrigated 100% good. Barley dryland 100% good; irrigated 100% good. Rains limited field work as warm, wet spring continued. Many spring grain growers still waiting for fields to dry. Planting of vegetables advanced slowly; asparagus harvest underway. Most fruits started or continued to bloom. Alfalfa and grasses started to grow. Hay supplies slightly eased as livestock grazed spring ranges, pastures.

WEST VIRGINIA: Temperature 53°. Extremes 27°; 86°. Precipitation 1.19 in.

Days suitable for fieldwork 2.7. Soil moisture 61% adequate, 39% surplus. Wheat good. Barley good. Oats 35% planted, 10% emerged. Hay 17% poor, 25% fair, 58% good. Apples good. Peaches good. Soil prepared 22%. Tobacco beds planted 92%. Pastures 21% poor, 30% fair, 36% good, 13% excellent; 85% of normal. Cattle 10% poor, 10% fair, 80% good. Sheep 5% poor, 37% fair, 58% good. Hay feed supplies 15% short, 85% adequate. Other feed supplies 3% short, 97% adequate. Farm activities: General maintenance, feeding livestock, fencing, spreading fertilizer, preparing land.

WISCONSIN: Temperature 46°; 2° below normal. Extremes 16°; 76°. Early in the week 1.00 to 3.00 in. of rain fell in the southeast while up to 8 in. of wet snow plagued the central, east central areas. By 21st sunshine, milder weather returned. Late on 23rd rain showers dropped 0.25 to 0.75 in. statewide. On 24th a few storms in the central, northern areas were potent, dropping marble size hail just west of Wausau.

Days suitable for fieldwork 2.6. Soil moisture 1% short, 32% adequate, 67% surplus. Intended spring tillage 9% complete, 10% in 1992, 26% avg. Oats 6% planted, 10% in 1992, 36% avg. Corn 0% planted, 0% in 1992, 1% avg.

WYOMING: Cool, dry week. Temperatures 4° below normal in the northwest to about 3° above normal in the southwest. Temperatures were generally above normal in the northeast, southwest; generally below normal in the Big Horn Basin, southeast. Lows in the teens were reported in many areas. Precipitation was well below normal over all but the far west where precipitation was well above normal.

Days suitable for fieldwork 3.4. Topsoil 3% short, 88% adequate, 9% surplus. Spring wheat 17% planted, 65% 1992, 57% avg.; 0% emerged, 22% 1992, 17% avg. Oats 26% planted, 53% 1992, 48% avg.; 0% emerged, 12% 1992, 14% avg. Barley 55% planted, 85% 1992, 77% avg.; 16% emerged, 49% 1992, 43% avg. Sugarbeets 41% planted, 83% 1992, 74% avg.; 0% emerged, 12% 1992, 8% avg. All livestock condition 14% fair, 81% good, 5% excellent. Spring calves born 86%, 87% 1992, 85% avg. Calf death losses 13% light, 52% normal, 35% heavy. Farm flock: ewes lambled 89%, 92% 1992, 90% avg.; shorn 86%, 92% 1992, 87% avg. Range flock: ewes lambled 32%, 37% 1992, 48% avg.; shorn 64%, 64% 1992, 64% avg. Lamb death losses 18% light, 77% normal, 5% heavy. Hay, range grass growth 56% slow, 40% avg.; 4% above average. Stockwater 5% very short, 87% adequate, 8% surplus.

International Weather and Crop Summary HIGHLIGHTS

April 18 - 24, 1993

FSU-WESTERN: Continued unseasonably cool weather slowed winter grain growth and spring grain emergence.

EUROPE: Spanish drought worsened in the south; timely rain helped corn planting in France.

NORTHWESTERN AFRICA: Drought continued over Morocco. Light showers favored filling winter grains in western Algeria. Mostly dry weather prevailed over eastern Algeria and Tunisia.

SOUTH AFRICA: Dry weather aided corn harvesting and winter wheat planting.

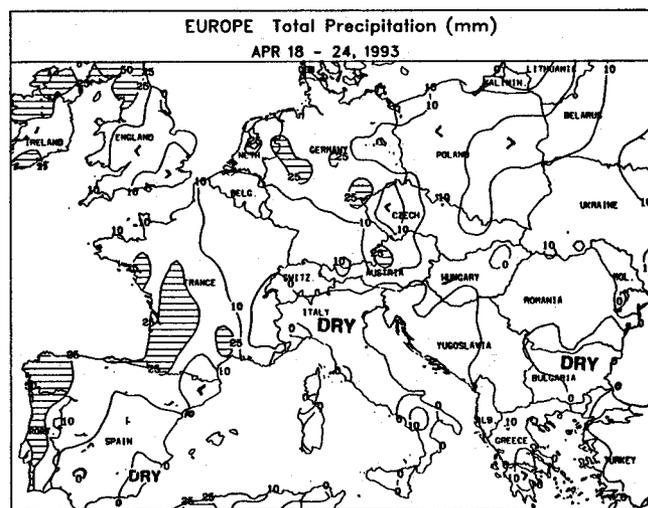
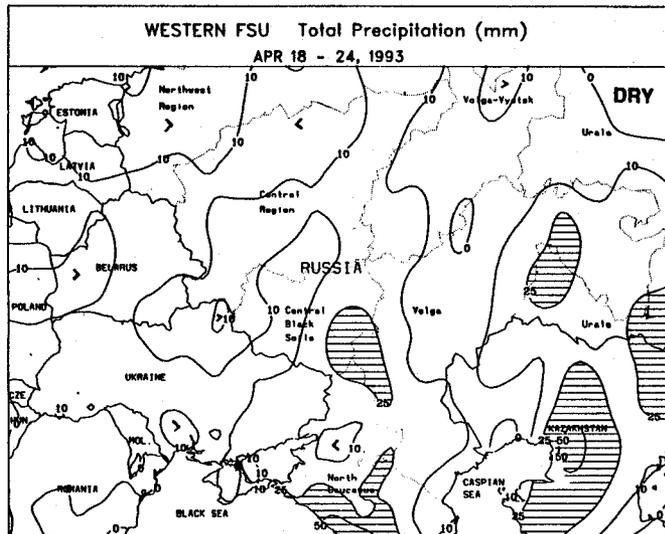
SOUTH ASIA: Hot, dry weather favored winter grain and oilseed maturation.

SOUTHEAST ASIA: Showers improved planting prospects in Indonesia's rainfed rice and corn areas.

EASTERN ASIA: Portions of the North China Plain are becoming too dry, but summer crop planting continued.

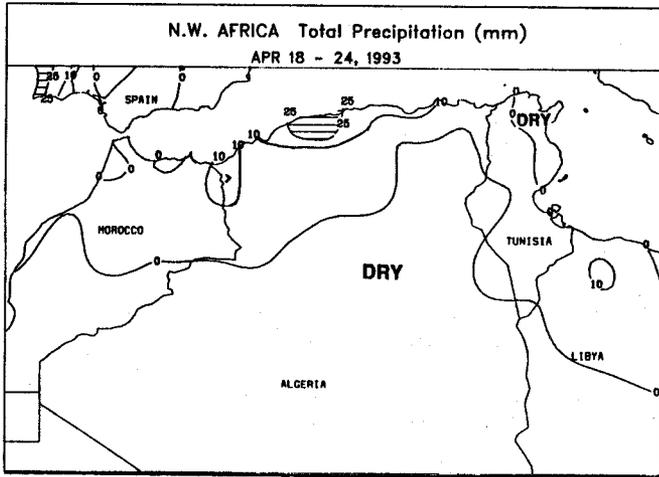
AUSTRALIA: Dryness continued to limit pasture growth, while the sugarcane region received beneficial showers.

SOUTH AMERICA: Heavy rains caused summer crop harvesting delays across central Argentina. Scattered showers caused minor soybean harvest delays in southern Brazil.

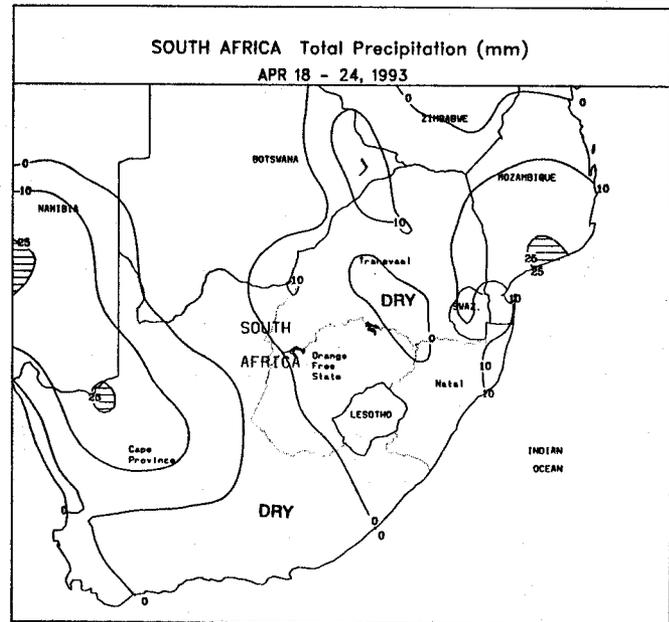


FSU-WESTERN: Unseasonably cool weather was accompanied by mixed rain and snow over most of the region. Weekly average temperatures were near-normal over the extreme west and 2-6 degrees Celsius (C) below normal in central and eastern areas. The cool weather delayed greening of winter grains over Belarus, Central Region, Black Soils Region, middle Volga, and Volga Vyatsk, and slowed vegetative growth in Ukraine and North Caucasus. Winter grains usually have broken dormancy over the entire region by the end of April. Spring grain planting continued to progress northward. Light precipitation (around 10 mm) caused only minor planting delays. Although reports indicate spring grain planting is lagging behind last year in most areas, weather conditions for planting spring grain in North Caucasus have been favorable. In fact, reports indicate sugar beet and sunflower planting is virtually complete. By week's end, milder air from Eastern Europe began to spread eastward across the region.

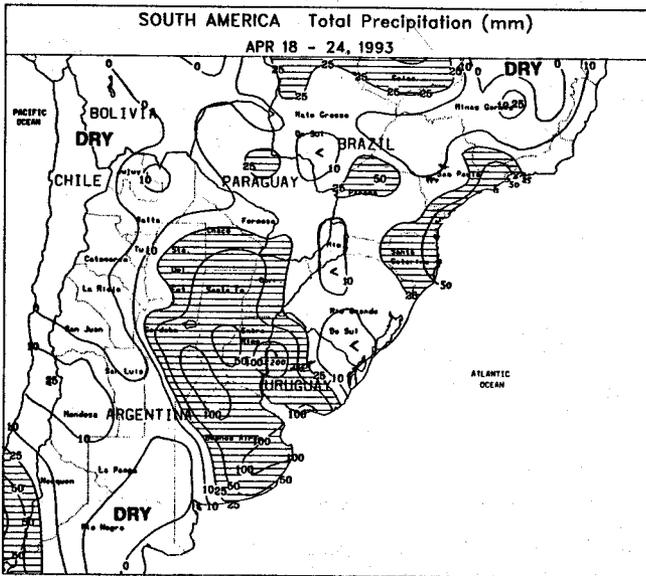
EUROPE: Mostly dry weather dominated the Mediterranean region, from southern Spain across Italy to Greece, and over most of eastern Europe. Scattered light showers (less than 10 mm) caused little if any fieldwork delays throughout this region. However, the Spanish drought worsened in most grain and livestock areas. Beneficial rain (10-25 mm) fell again in Portugal and the extreme northern portion of Spain, easing the water shortage in these areas. Timely rain (10-25 mm) also fell again over the western half of France, improving topsoil moisture for corn planting, and over much of the United Kingdom and northern Germany, favoring early spring growth. Warmer weather in the northeast, with high temperatures reaching the low to mid 20's C from Hungary to Poland, reduced topsoil moisture as winter crops began more vigorous spring growth. Some light, scattered rain (mostly less than 5 mm, except 10 mm in eastern Poland) provided little soil replenishment.



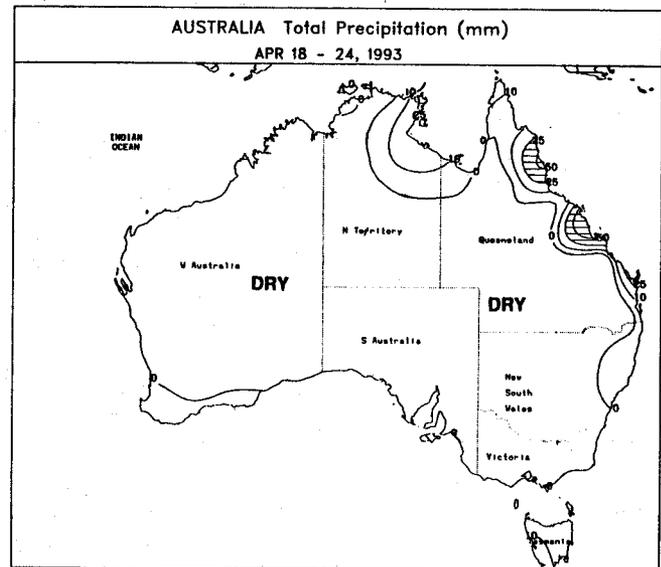
NORTHWESTERN AFRICA: Drought continued over Moroccan winter grain areas, further reducing yield prospects for winter grains in the filling stage. Except for occasional showers, persistent dryness during most of the growing season adversely affected winter grains. In addition, this is the second consecutive year of drought to cover Morocco, and reports indicate reservoir levels were down to about 30 percent of capacity by the end of March. Further east, continued light showers (10-25 mm) over western Algeria continued to favor grain-fill. Mostly dry weather prevailed over winter grain areas in eastern Algeria and Tunisia.



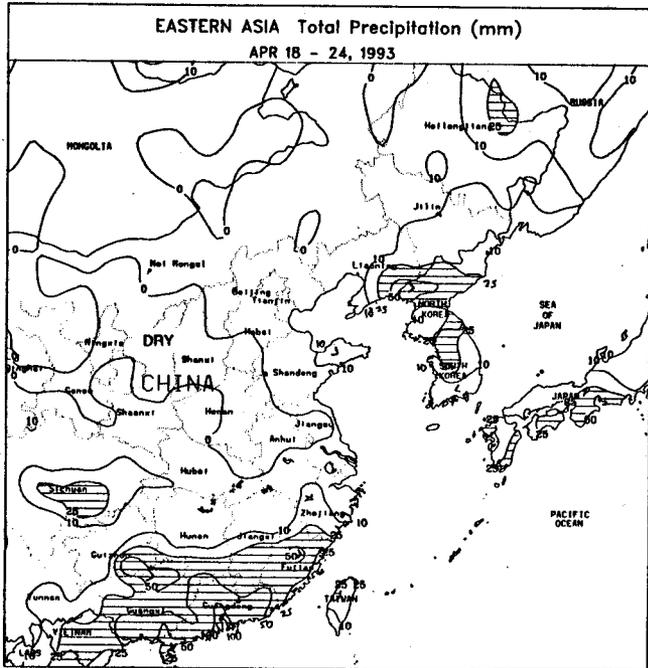
SOUTH AFRICA: Dry, seasonably mild weather dominated the region, aiding early corn harvest and field preparations for winter wheat planting. However, the dryness remained unfavorable for Natal's sugarcane. Minimum temperatures ranged from 3 to 10 degrees C in most winter wheat regions, helping crop germination following last week's near-freezing temperatures.



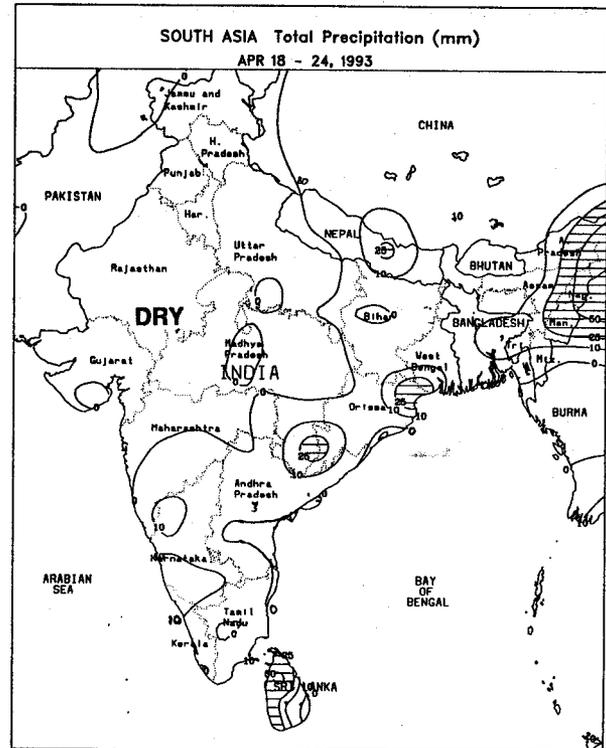
SOUTH AMERICA: Mid-week heavy rains (30-140 mm) fell across central Argentina (Santa Fe and most of Buenos Aires), delaying corn and soybean harvesting. While dry weather prevailed from April 22 to 24, several more days of dry weather are needed for fieldwork to fully resume. However, the rains boosted subsoil moisture reserves for the upcoming winter wheat crop in the region, where planting usually begins in early May. Temperatures averaged near normal across Argentina's main crop areas. Scattered showers (5-50 mm) fell across southern Brazil, causing minor soybean harvest delays. Moderate showers (20-65 mm) fell across northern and eastern Parana and eastern Santa Catarina, delaying harvesting but aiding germinating winter wheat. Coastal Bahia received moderate rains (13-25 mm) favoring cocoa, while interior sections of Bahia remained dry.



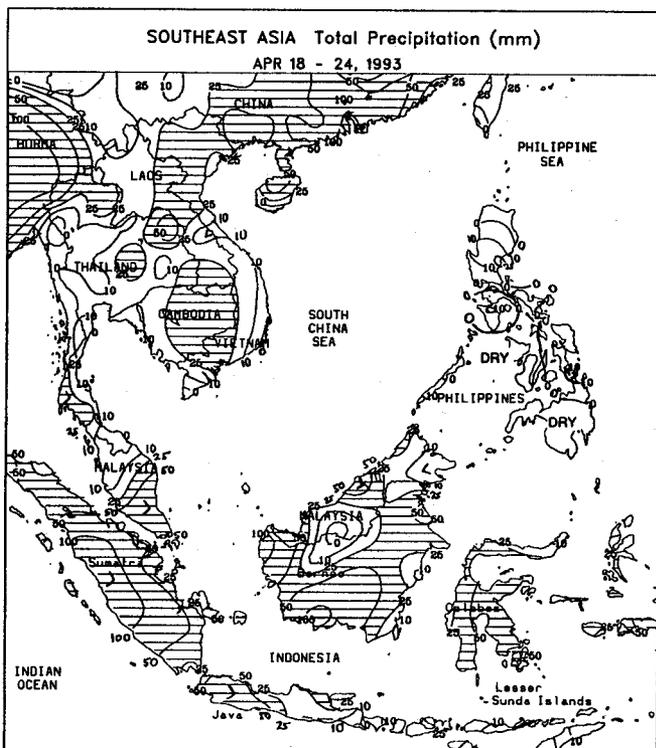
AUSTRALIA: Dryness continued across eastern Australia, allowing cotton and sorghum harvesting to progress. However, rain is needed to alleviate dry topsoils for pastures and winter wheat planting, which typically begins by mid-May. Scattered showers (15-65 mm) fell across northeastern Queensland, favoring sugarcane.



EASTERN ASIA: Dry weather again prevailed across the North China Plain, favoring summer crop planting. However, warm and dry conditions may be starting to stress vegetative rainfed winter wheat, which broke dormancy 2-3 weeks early. Light to scattered moderate rains (3-25 mm) fell across Manchuria, favoring topsoil moisture and causing only minor planting delays. Widespread moderate to heavy showers (20-90 mm) were reported across the south coastal provinces of China, aiding rainfed summer grains, irrigation reserves, and sugarcane. Temperatures averaged 2-5 degrees C above normal across most of China and near normal in Manchuria.



SOUTH ASIA: Dry, unseasonably warm weather favored winter grain and oilseed maturation and drydown. High temperatures averaged in the upper 30's to low 40's C over nearly all of India and Pakistan, causing some livestock stress. By late April, winter harvests are usually active across Pakistan and north-central India, as well as in winter wheat and rice areas of Bangladesh. Shower activity increased along India's east coast, with 10-25 mm amounts scattered from southern Orissa to West Bengal, and in the far eastern States. Rice harvests in southern and eastern India should be in full swing during May.



SOUTHEAST ASIA: Highly variable showers (10-100 mm or more) continued across Indochina's rainfed rice and corn areas, improving planting moisture. Most locations in central Thailand's corn region received 20-65 mm. Showers tapered off over the Malay Peninsula, but a few locations in Malaysia's oil palm region received 26-110 mm. Widespread showers (50-100 mm) continued over Java's primary rice areas. Dry weather dominated the Philippines, benefiting maturing secondary grains but reducing moisture for main season plantings, typically underway in April and May.

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

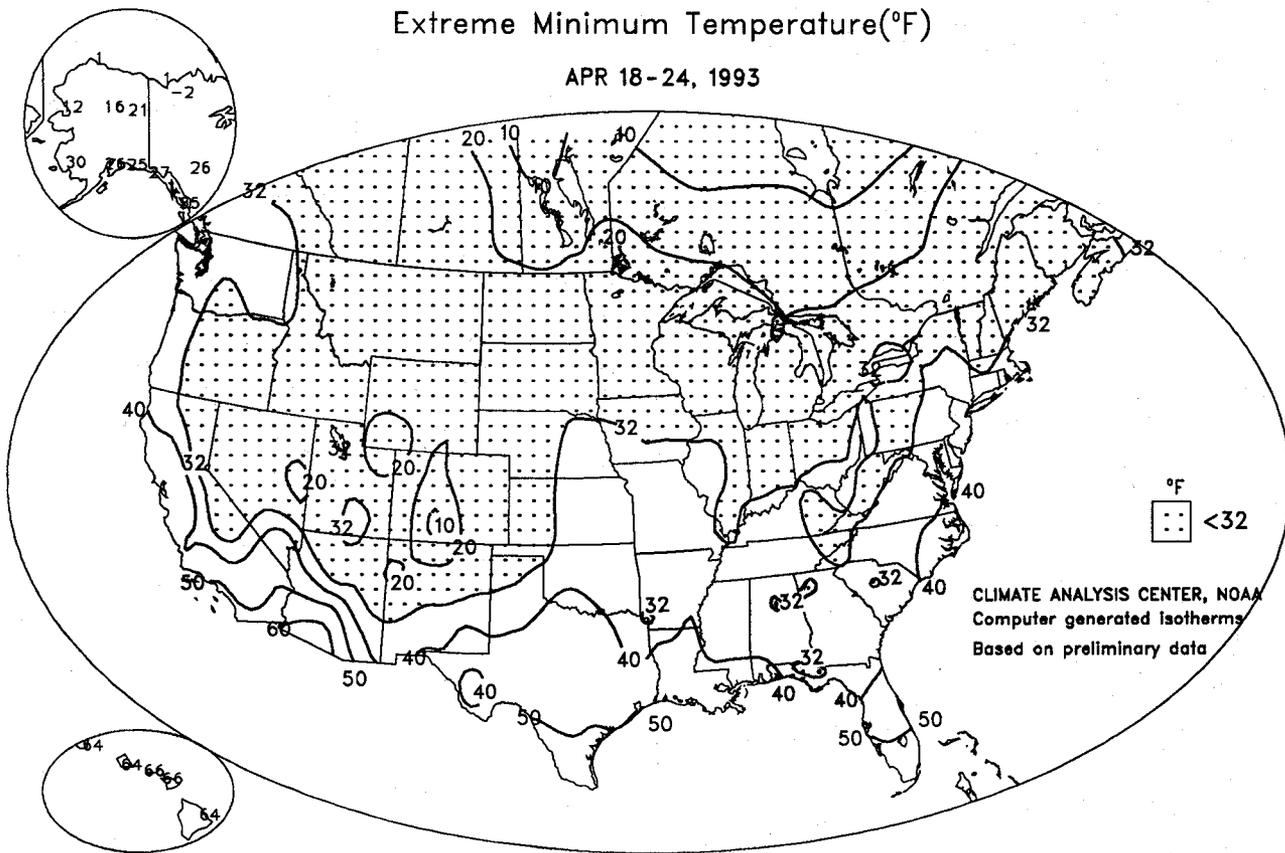
Annual subscriptions: domestic first class \$45, foreign \$55 (in U.S. funds by international money order or check drawn on U.S. bank) payable to U.S. Department of Commerce, NOAA. POSTMASTER: Send address changes to Weekly Weather and Crop Bulletin, NOAA/USDA, Joint Agricultural Weather Facility, USDA South Building, Room 5844, Washington, DC 20250. Order subscriptions from the office and address listed above. First class postage paid at Washington, DC, and additional mailing offices.

U.S. DEPARTMENT OF COMMERCE
 National Oceanic and Atmospheric Administration
 National Weather Service/Climate Analysis Center
 Managing Editor **Douglas Le Comte**
 Meteorologists **Brad Rippey** (202) 720-1444
Vilhelm Bjerknes, David Secora, and Jeff Savadel.
 Subscriptions **Joyce Houston** (202) 720-7917

U.S. DEPARTMENT OF AGRICULTURE
 Economics Management Staff
 Editor **Sharon Lee**
 National Agricultural Statistics Service
 Agricultural Statistician . . **David Mueller** (202) 720-2157
 World Agricultural Outlook Board
 Agricultural Weather Analysts . **Ray Motha** (202) 720-9805
Tom Puterbaugh, Mark Brusberg, and Bob Stefanski.

Extreme Minimum Temperature(°F)

APR 18-24, 1993



°F
 [Dotted Box] <32
 CLIMATE ANALYSIS CENTER, NOAA
 Computer generated isotherms
 Based on preliminary data

**WEEKLY NEWS BULLETIN
 FIRST CLASS**

NOAA/USDA Joint Agricultural
 Weather Facility
 USDA South Building, Room 5844
 Washington, DC 20250

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

OFFICIAL BUSINESS
 PENALTY FOR PRIVATE USE, \$300