

# 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

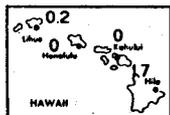
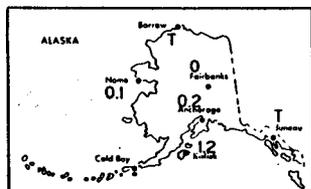
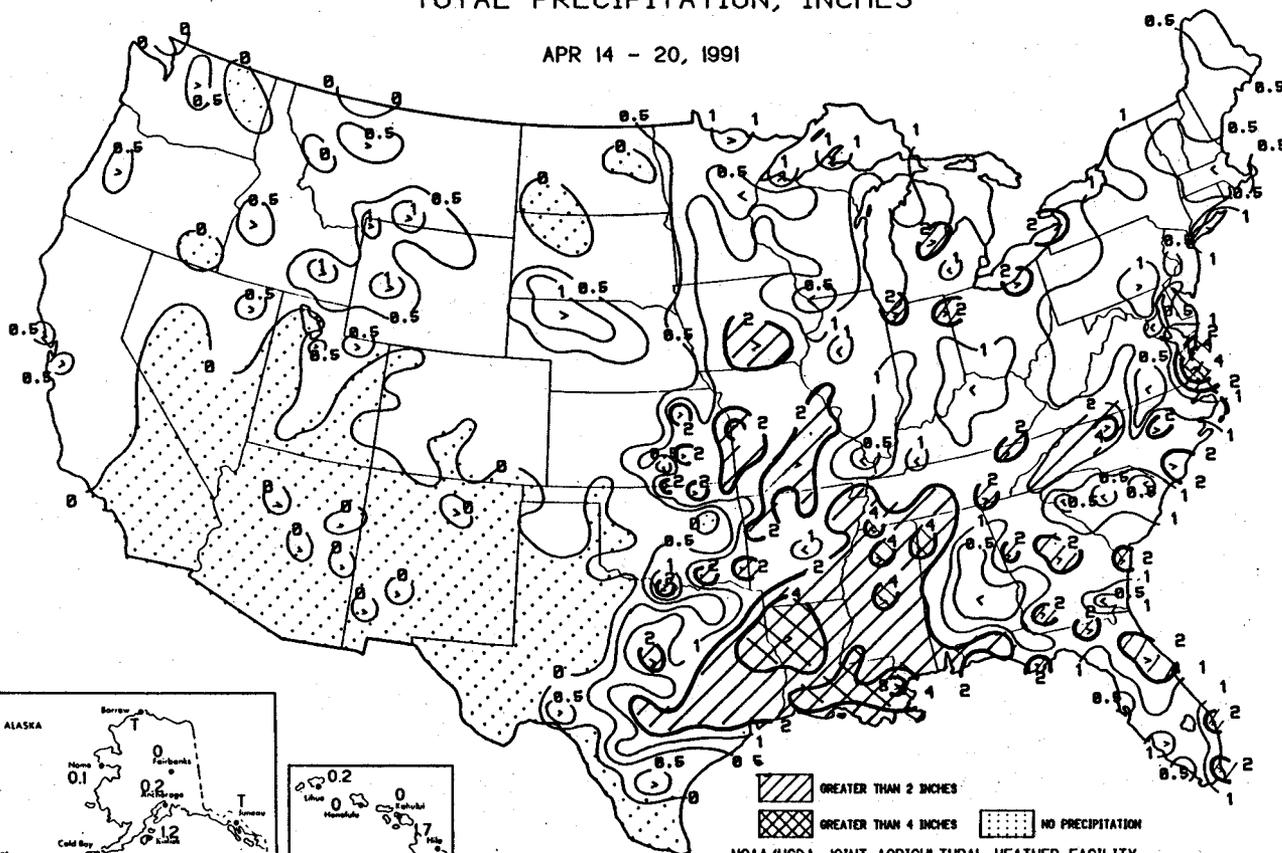
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April 23, 1991

## TOTAL PRECIPITATION, INCHES

APR 14 - 20, 1991



NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY  
Based on preliminary reports

## HIGHLIGHTS

April 14 - 20, 1991

Last week's moisture-laden storm slowly exited the East but not before depositing a fourth day of heavy rain from the Gulf coast to the Great Lakes. By midweek, a slightly weaker storm center swung out of the northern Rockies. But fueled by a steady inflow of Gulf and Atlantic moisture, the storm aggravated river flooding in the Mississippi Valley and caused flash flooding in parts of the East. Weekly temperatures were normal to below normal from California to the northern and central Plains, and along the northern Atlantic coast. While Sunday's drenching rain pushed the 4-day storm total to 22.60 inches in Bossier City, LA, snow accumulated to a depth of 7 inches in central Minnesota. Snow returned to the northern Rockies on Tuesday. The storm dumped up to 18 inches of snow in the mountains of northwestern Wyoming. Thunderstorms erupted on Wednesday from eastern Wyoming.

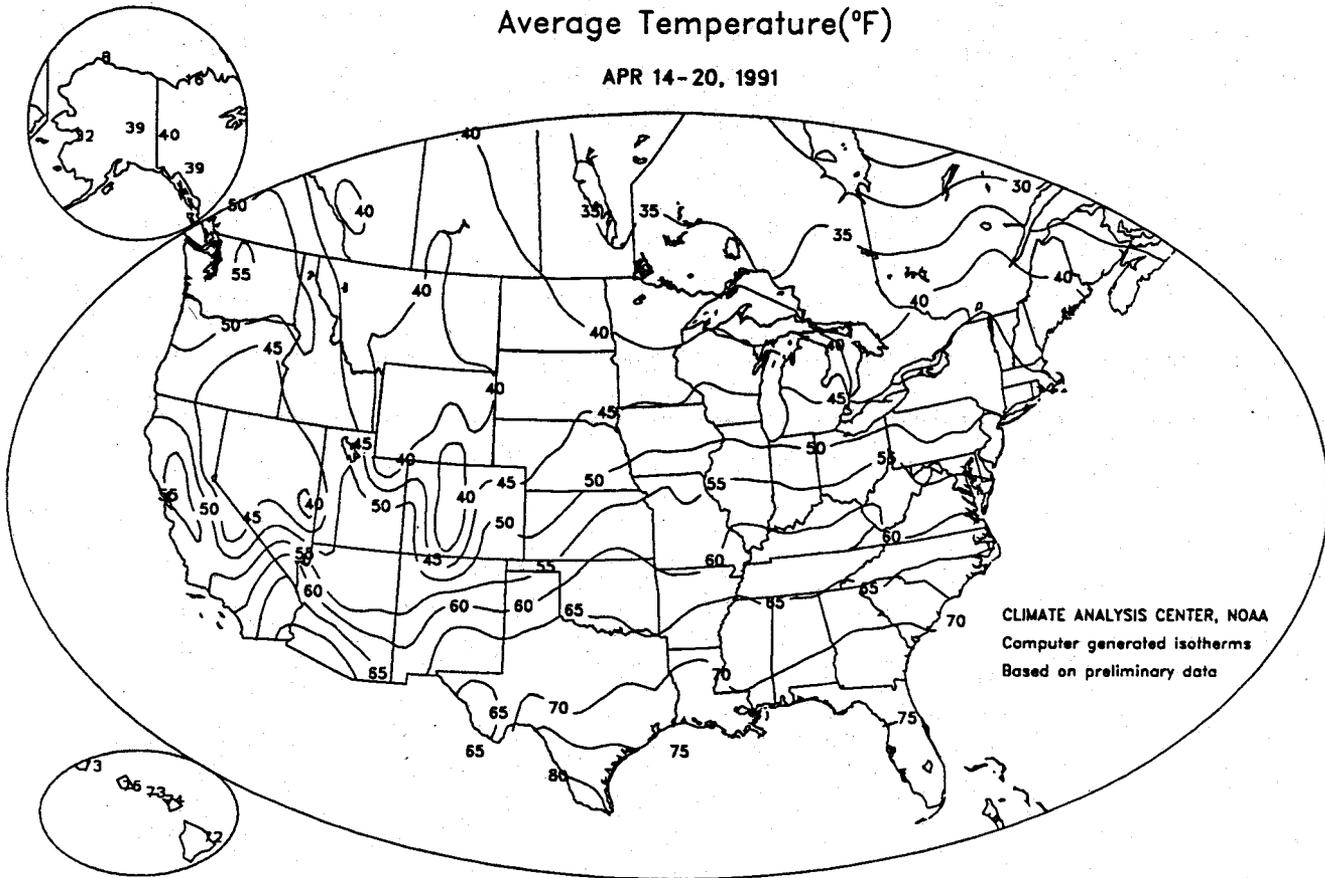
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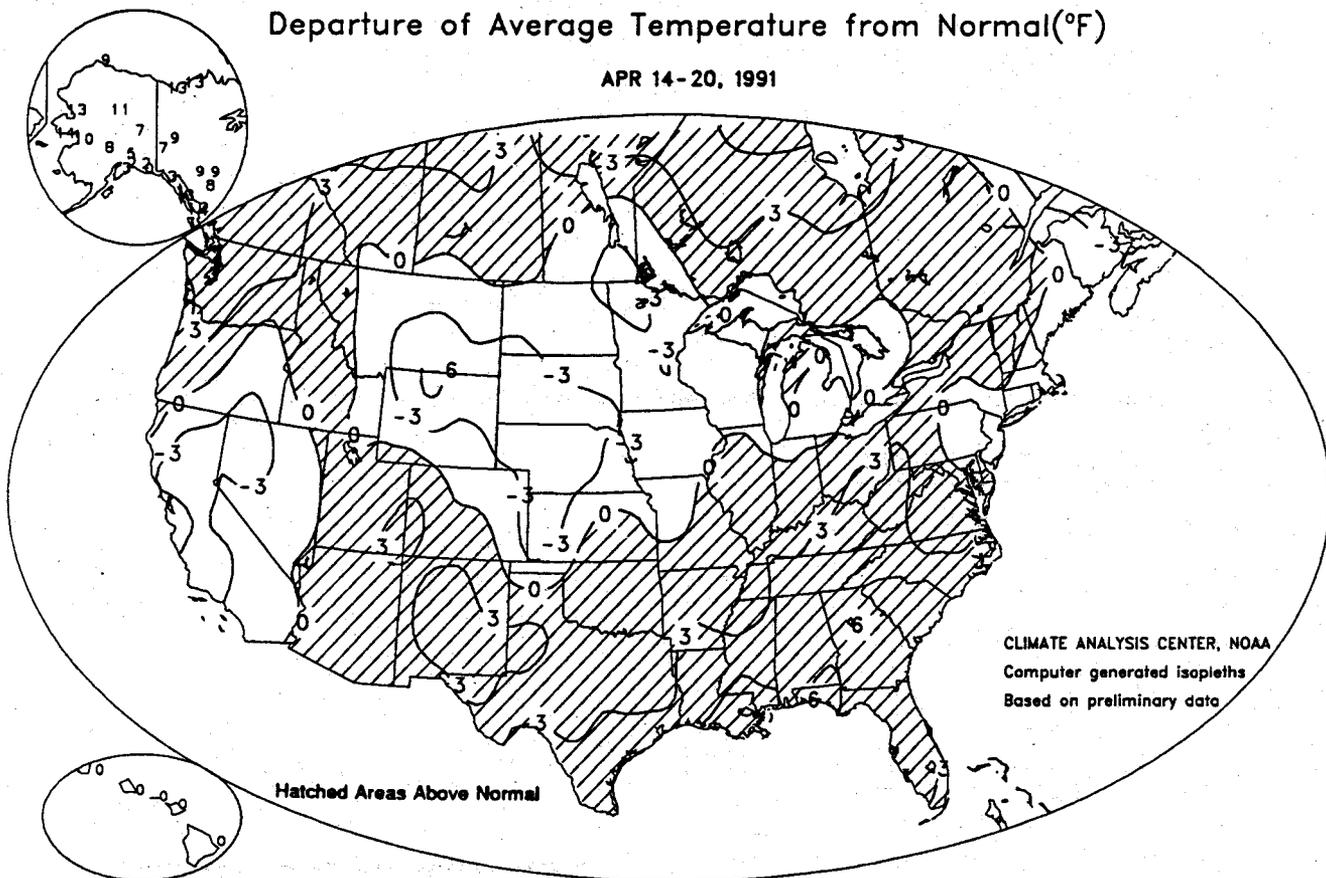
Average Temperature(°F)

APR 14-20, 1991



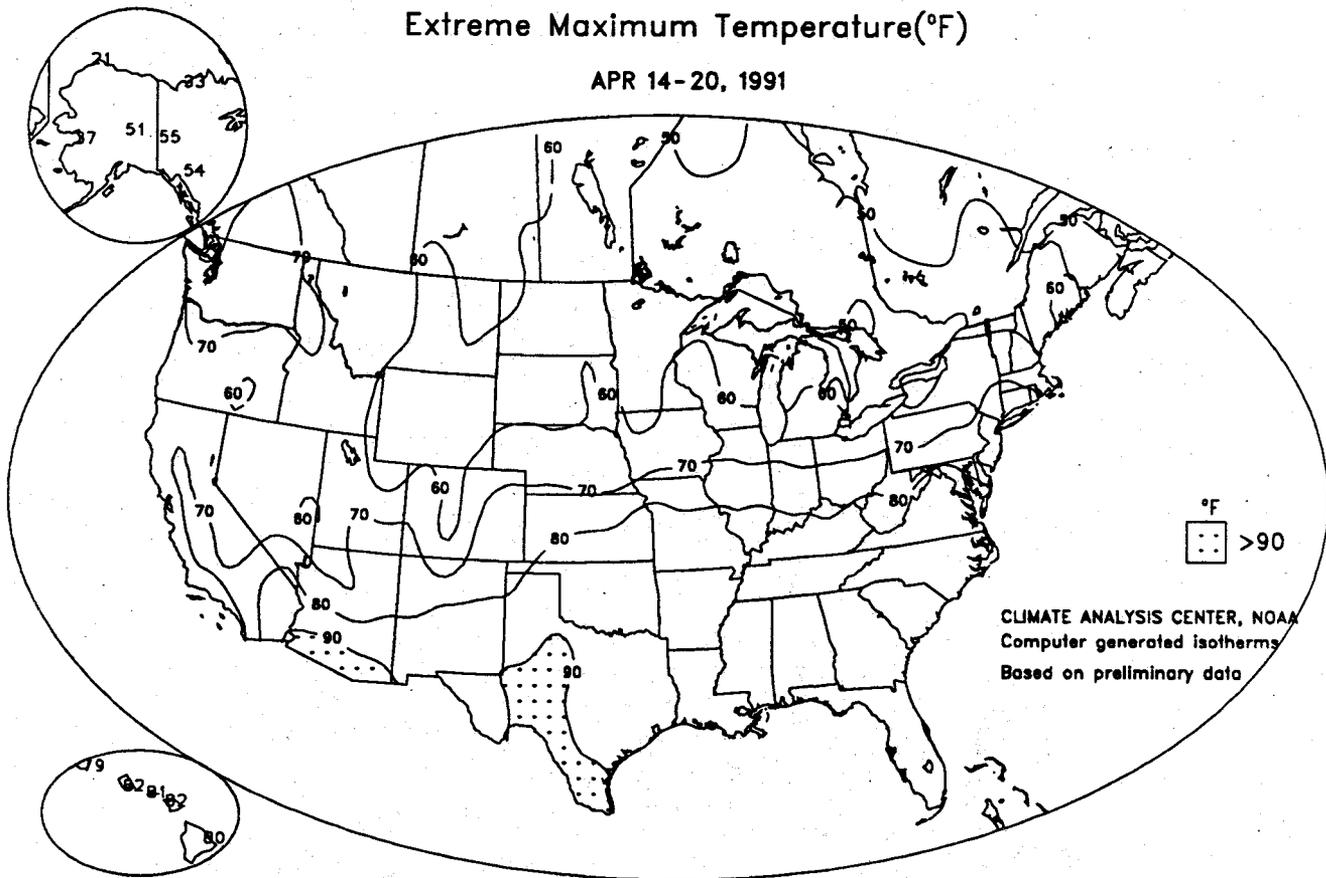
Departure of Average Temperature from Normal(°F)

APR 14-20, 1991



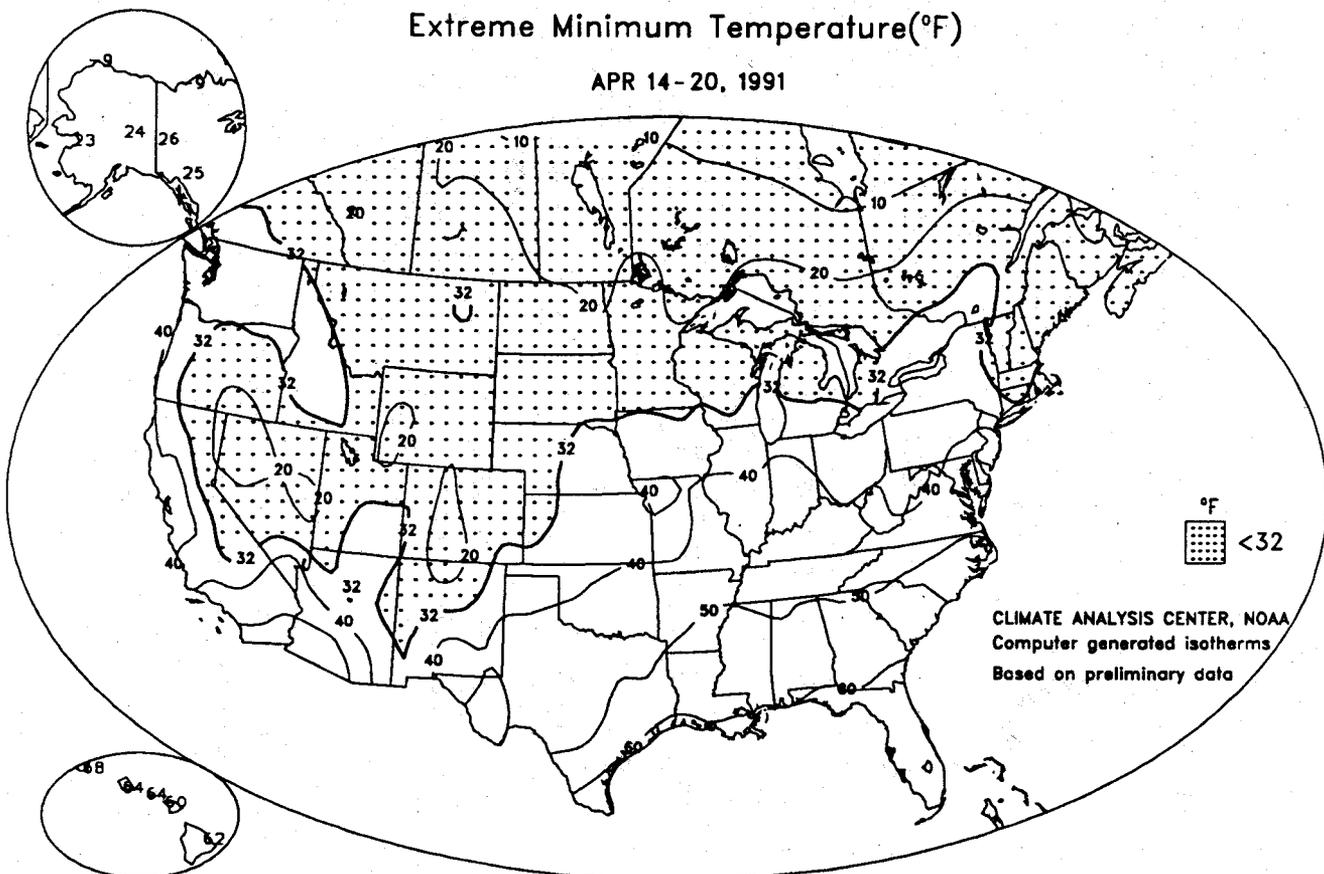
### Extreme Maximum Temperature(°F)

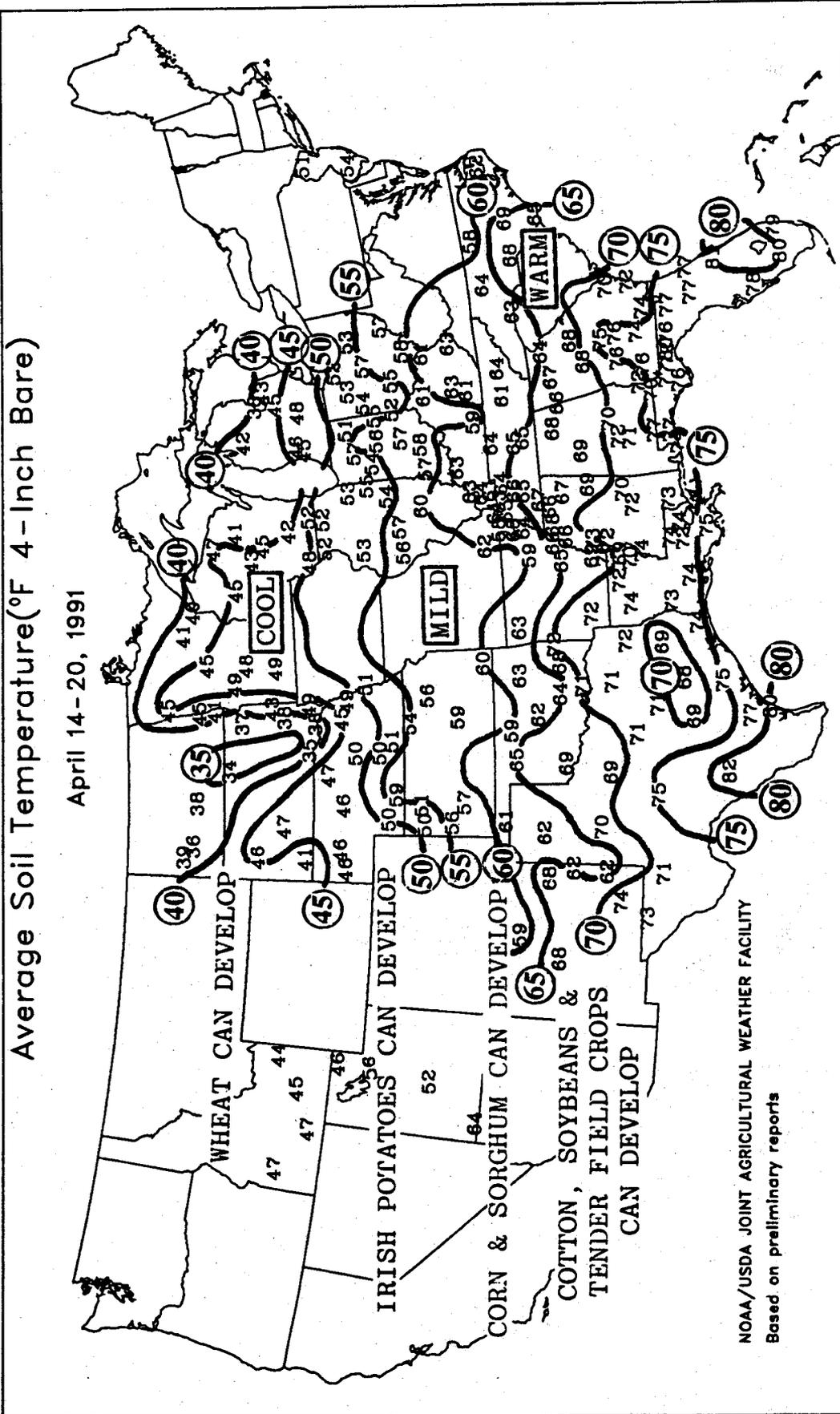
APR 14-20, 1991



### Extreme Minimum Temperature(°F)

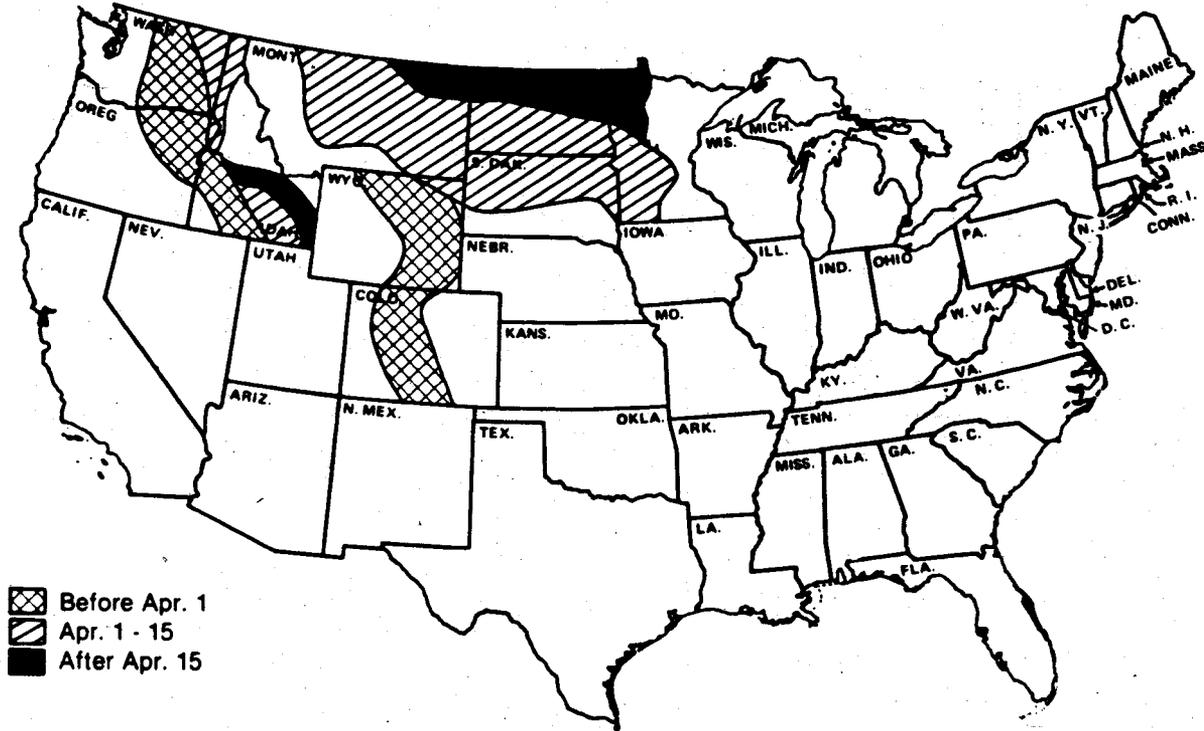
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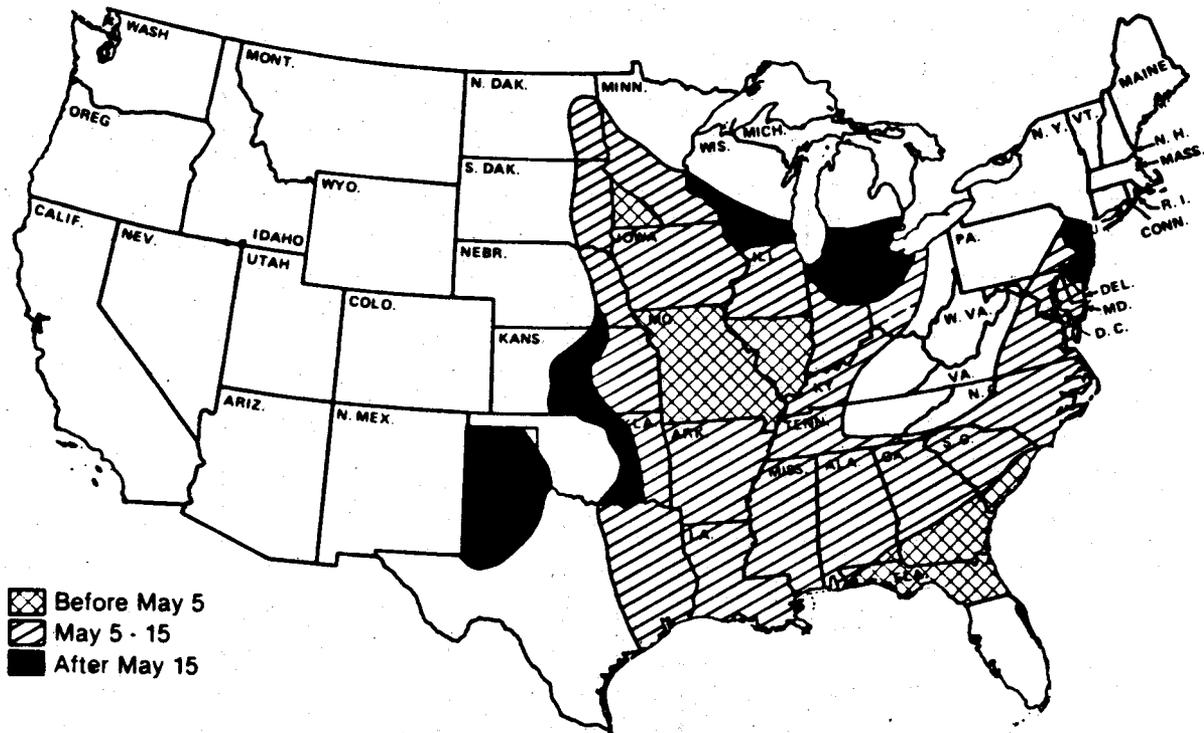
### Spring Wheat

Usual Start of Planting, Principal Areas in the United States



### Soybeans for Beans

Usual Start of Planting, Principal Areas in the United States



# National Weather Data for Selected Cities

Weather Data for the Week Ending April 20, 1991

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	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	77	56	83	50	67	3	-.2	-1.0	.1	6.5	64	14.0	70	97	55	0	0	0	2	0		
MOBILE	79	62	85	56	70	2	2.8	1.5	1.0	10.1	100	29.5	151	98	62	0	0	0	5	3		
MONTGOMERY	81	59	85	56	70	4	T	-1.0	T	11.3	126	22.3	127	97	52	0	0	0	2	3		
AK ANCHORAGE	45	34	48	30	40	3	-.2	.1	.1	.9	79	1.9	70	93	55	0	0	2	4	0		
BARROW	16	1	21	-10	9	9	T	T	T	.1	25	.2	33	87	76	0	7	2	0	0		
FAIRBANKS	50	29	53	24	40	8	.0	-1.1	.0	2.2	400	3.6	232	82	35	0	5	2	0	0		
JUNEAU	50	36	55	31	43	4	.1	-1.6	.1	6.9	132	18.3	145	97	59	0	2	2	0	0		
KODIAK	45	35	48	30	40	3	1.2	.3	.7	5.4	86	26.2	153	96	63	0	1	7	6	1		
NOME	37	28	39	22	33	14	.1	.0	.1	1.2	122	2.7	123	96	72	0	7	0	0	0		
AZ PHOENIX	87	59	91	55	73	5	.0	-1.1	.0	2.1	201	3.2	140	33	9	1	0	0	0	0		
PRESCOTT	69	35	77	31	52	2	.0	-2.0	.0	4.0	192	6.2	115	53	14	0	3	0	0	0		
TUCSON	85	48	92	42	66	1	.0	-1.1	.0	1.4	152	3.5	148	39	9	1	0	0	0	0		
YUMA	86	58	90	55	72	1	.0	.0	.0	.8	335	1.8	218	40	12	1	0	0	0	0		
AR FORT SMITH	74	52	85	46	63	1	2.0	1.1	1.8	9.5	144	12.5	115	96	54	0	0	0	2	1		
LITTLE ROCK	73	57	82	49	65	2	.5	-.8	.3	9.3	113	17.5	110	89	57	0	0	0	3	0		
CA BAKERSFIELD	73	45	79	41	59	-4	T	-1.1	T	3.8	278	4.5	134	79	30	0	0	0	1	0		
EUREKA							-.2	-.4	.2	8.7	121	13.1	68	88	61	0	0	0	3	0		
FRESNO	71	46	76	43	59	-2	T	-.2	T	7.3	299	8.4	134	85	31	0	0	0	1	0		
LOS ANGELES	63	52	65	51	58	-2	T	-.2	T	4.0	162	7.9	99	85	59	0	0	0	0	0		
REDDING	66	44	72	39	55	-5	.3	-.4	.3	10.1	143	15.0	69	91	39	0	0	0	1	0		
SACRAMENTO	67	44	74	40	56	-3	.3	.0	.3	6.5	216	9.9	101	93	44	0	0	0	1	0		
SAN DIEGO	64	55	67	53	60	-1	T	-.2	T	7.3	304	10.4	171	79	57	0	0	0	0	0		
SAN FRANCISCO	60	48	64	46	54	-1	.4	.0	.4	6.5	171	10.5	90	86	54	0	0	0	2	0		
CO DENVER	59	34	69	30	47	-1	T	-.4	T	1.8	77	2.6	76	87	37	0	2	1	0	0		
GRAND JUNCTION	68	41	73	29	54	2	.0	-2.0	.0	1.2	104	2.3	97	45	12	0	1	0	0	0		
FUEBLO	66	37	78	28	52	0	.2	-1.1	.1	1.0	81	1.1	63	69	23	0	1	2	0	0		
CT BRIDGEPORT	55	41	73	36	48	-1	.9	.1	.4	5.2	81	9.9	78	92	56	0	0	0	5	0		
HARTFORD	61	37	75	29	49	-1	.2	-.7	.2	4.8	71	9.0	67	90	34	0	2	1	0	0		
DC WASHINGTON	63	48	86	45	55	-2	.3	-.3	.2	5.6	103	9.3	87	90	56	0	0	0	4	0		
FL APALACHICOLA	80	68	83	64	74	6	2.7	2.0	1.8	16.3	258	40.5	300	99	71	0	0	0	2	2		
DAYTONA BEACH	83	66	87	64	75	5	2.6	2.1	1.0	12.8	285	16.7	168	97	59	0	0	0	4	2		
JACKSONVILLE	82	64	87	62	73	4	1.6	.9	.8	10.3	192	22.0	185	97	58	0	0	0	2	1		
KEY WEST	86	75	88	70	80	3	1.2	.9	.9	4.3	206	6.8	118	84	63	0	0	0	2	2		
MIAMI	84	72	89	70	78	2	1.1	.3	.5	6.3	168	9.9	127	88	58	0	0	0	4	0		
ORLANDO	86	67	89	65	77	4	2.1	1.6	1.2	11.1	232	14.5	144	99	50	0	0	0	3	2		
TALLAHASSEE	83	62	86	58	73	5	.8	-.1	.2	16.8	201	36.6	203	100	56	0	0	0	5	0		
TAMPA	87	69	90	66	78	6	T	-.4	T	4.9	105	7.7	78	92	53	1	0	1	0	0		
WEST PALM BEACH	83	69	85	66	76	2	3.7	3.0	1.2	12.7	277	27.5	278	94	62	0	0	0	6	3		
GA ATLANTA	80	59	85	51	70	7	1.0	.0	1.0	9.6	107	17.3	95	94	47	0	0	0	2	1		
AUGUSTA	81	59	87	55	70	7	.8	.0	.5	10.2	142	19.7	130	99	55	0	0	0	3	1		
MACON	82	62	86	55	72	6	1.3	.6	1.0	12.5	164	25.1	154	99	58	0	0	0	4	1		
SAVANNAH	81	63	87	58	72	6	3.6	2.9	3.4	10.5	178	19.8	162	98	61	0	0	0	2	1		
HI HILO	80	65	81	62	72	0	1.7	-1.3	.7	44.7	198	57.8	127	94	60	0	0	0	6	1		
HONOLULU	82	68	83	65	75	0	.0	-.3	.0	7.0	154	9.9	90	77	49	0	0	0	0	0		
KAHULUI	82	66	83	60	74	0	.0	-.2	.0	2.3	65	7.2	69	83	51	0	0	0	0	0		
LIHUE	78	69	79	64	74	0	.2	-.5	.2	12.0	178	14.3	86	84	64	0	0	0	1	0		
ID BOISE	59	39	67	31	49	0	.8	.5	.3	1.9	104	3.3	74	85	41	0	0	1	3	0		
LEWISTON							T	-.2	T	1.3	72	1.7	42	70	29	0	0	0	1	0		
POCATELLO	55	32	63	28	44	-1	1.4	1.1	.5	4.1	246	5.1	142	88	37	0	3	3	1	2		
IL CHICAGO	57	42	69	37	49	0	1.7	.8	1.1	6.9	130	8.9	111	89	55	0	0	0	2	1		
MOLINE	61	43	68	37	52	1	1.5	.6	1.0	9.8	185	11.4	139	89	50	0	0	0	4	1		
PEORIA	65	44	76	41	54	2	1.6	.7	.9	5.9	110	7.7	91	94	52	0	0	0	5	1		
QUINCY	64	46	78	42	55	1	1.6	.7	.7	5.1	91	6.0	71	86	51	0	0	0	5	1		
ROCKFORD	60	40	63	35	50	1	.9	-.1	.6	6.3	117	7.9	99	84	45	0	0	0	2	1		
SPRINGFIELD	65	47	77	41	56	2	1.8	.9	1.3	5.4	94	7.4	82	97	60	0	0	0	5	1		
IN EVANSVILLE	70	50	83	44	60	3	1.1	.2	.4	6.3	87	12.4	93	97	57	0	0	0	4	0		
FORT WAYNE	59	45	71	38	52	2	2.8	2.0	1.3	7.2	136	10.3	110	94	61	0	0	0	5	3		
INDIANAPOLIS	63	48	74	43	56	3	1.8	.9	1.0	10.1	168	13.6	123	92	56	0	0	0	3	2		
SOUTH BEND	59	42	71	37	51	1	2.7	1.8	1.3	6.2	107	9.6	95	93	54	0	0	0	4	2		
IA DES MOINES	58	42	63	37	50	-1	4.0	3.3	2.6	9.7	229	10.8	171	93	55	0	0	0	5	2		
SIoux CITY							.8	.2	.6	4.3	138	5.2	110	89	49	0	0	0	2	1		
WATERLOO	55	38	63	30	47	-2	.9	.0	.5	9.1	204	10.2	165	98	59	0	2	3	0	0		
KS CONCORDIA	62	43	72	37	52	-1	.1	-.4	.1	3.4	106	4.1	88	93	55	0	0	0	1	0		
DODGE CITY	64	41	80	34	52	-3	T	-.4	T	1.3	52	1.6	46	89	43	0	0	0	1	0		
GOODLAND	57	35	72	27	46	-4	.1	-.2	.1	1.2	73	1.6	66	91	49	0	1	1	0	0		
TOPEKA	65	46	84	38	55	0	.8	.1	.5	5.4	131	6.2	102	94	57	0	0	0	3	0		
WICHITA	68	49	83	38	58	1	.1	-.5	.1	2.3	64	3.3	65	90	52	0	0	0	1	0		
KY BOWLING GREEN	73	51	80	44	62	4	1.1	.1	.6	7.1	85	17.7	104	93	55	0	0	0	3	1		
LEXINGTON	69	50	79	43	59	4	.8	-.1	.7	7.9	104	14.3	100	88	49	0	0	0	2	1		
LOUISVILLE	71	51	82	46	61	4	.7	-.3	.4	6.8	91	13.9	99	87	49	0	0	0	3	0		
LA ALEXANDRIA	80	63	86	58	71	4	5.4	4.1	2.1	16.8	196	30.7	174	92	57	0	0	0	3	3		
BATON ROUGE	80	62	87	55	71	2	3.8	2.5	1.7	7.6	92	25.2	141	99	58	0	0	0	4	3		
LAKE CHARLES	79	63	83	59	71	2	4.0	3.1	3.2	8.0	146	24.9	185	98	68	0	0	0	4	2		
NEW ORLEANS	79	64	84	61	71	2	5.9	4.9	2.5	14.4	188	39.1	220	99	67	0	0	0	6	2		

Based on 1951-80 normals

Weather Data for the Week Ending April 20, 1991

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	
																	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
SHREVEPORT	80	59	83	54	69	3	5.8	4.7	3.6	22.9	336	35.8	250	95	56	0	0	0	4	2
ME CARIBOU	50	27	56	23	38	1	.2	-1.4	.2	6.5	159	9.7	113	73	31	0	0	7	2	0
PORTLAND							.6	-1.4	.6	7.3	111	12.1	87	93	48	0	0	3	2	1
MD BALTIMORE	60	46	81	44	53	-1	.4	-1.4	.3	6.6	110	10.9	91	91	61	0	0	3	0	0
SALISBURY	62	47	82	44	55	0	.9	.2	.6	7.7	124	14.6	113	98	68	0	0	0	4	1
MA BOSTON	51	40	69	37	45	-1	.3	-1.5	.3	4.8	73	9.6	67	91	55	0	0	0	3	0
CHATHAM	48	40	59	35	44	-1	.8	-1.1	.4	5.7	85	11.0	72	91	69	0	0	0	3	0
MI ALPENA	47	34	55	26	41	-1	1.2	.6	.8	5.4	154	6.9	105	91	57	0	0	2	2	1
DETROIT	56	41	66	35	48	0	1.4	.7	.6	3.4	73	5.8	71	87	56	0	0	0	3	2
FLINT	53	38	65	32	45	-2	1.6	.9	.9	5.9	143	8.1	114	93	59	0	0	1	4	1
GRAND RAPIDS	56	38	66	33	47	0	2.0	1.1	1.4	8.3	167	10.3	121	93	54	0	0	0	3	1
HOUGHTON LAKE	50	36	59	29	43	0	1.3	.7	1.0	7.0	197	8.9	140	88	60	0	0	1	4	1
LANSING	53	37	64	30	45	-1	1.6	.9	.8	6.8	158	8.9	122	99	64	0	0	2	4	2
MARQUETTE	43	29	57	25	36	-2	.8	-1.1	.7	6.2	119	8.9	98	92	66	0	0	6	3	1
MUSKEGON	56	39	63	31	48	1	1.8	1.1	1.5	7.5	162	9.6	112	91	52	0	0	1	2	1
SAULT ST. MARIE	50	31	59	25	40	1	1.3	.7	.7	6.6	186	8.7	118	90	53	0	0	3	5	1
MN ALEXANDRIA	49	30	59	27	40	-3	1.0	.5	.8	2.8	109	4.3	104	89	53	0	0	6	2	1
DULUTH	45	29	58	20	37	-2	.9	.9	.4	2.5	79	3.5	68	93	54	0	0	5	2	1
INT'L FALLS	46	29	52	21	38	-2	1.1	.7	1.1	2.4	118	4.1	115	91	49	0	0	5	1	1
MINNEAPOLIS	54	33	62	28	43	-1	.5	.0	.3	4.0	136	5.5	121	95	46	0	0	4	3	0
ROCHESTER	52	35	61	30	44	-2	1.4	.8	.7	5.6	168	6.8	139	95	57	0	0	3	3	2
MS GREENWOOD	77	59	86	53	68	3	3.9	2.7	1.1	11.3	243	3.3	123	97	58	0	0	0	4	4
JACKSON	79	59	85	54	69	3	3.3	2.0	2.2	15.9	169	26.2	141	100	58	0	0	0	3	2
MERIDIAN	80	59	87	54	70	5	2.5	1.3	1.5	11.0	105	24.1	121	97	50	0	0	0	3	2
MO CAPE GIRARDEAU	70	54	82	48	62	1	.3	-1.7	.3	7.2	89	13.3	95	95	58	0	0	0	2	0
COLUMBIA	65	47	82	40	56	0	1.8	.9	.9	5.0	85	6.6	70	92	61	0	0	0	5	2
KANSAS CITY	63	46	83	39	54	-2	1.3	.6	.7	5.5	116	7.1	99	94	60	0	0	0	3	1
SAINT LOUIS	69	53	83	46	61	4	1.1	.3	.5	6.3	111	8.8	93	89	49	0	0	0	5	1
SPRINGFIELD	67	47	81	38	57	0	1.9	1.0	.7	5.3	86	9.2	94	96	59	0	0	0	3	3
MT BILLINGS	43	31	58	26	37	-8	.8	.4	.4	4.2	190	5.5	143	97	64	0	0	4	5	0
GLASGOW	48	35	61	31	42	-2	1.1	.0	.1	1.0	137	1.5	110	94	61	0	0	1	4	0
GREAT FALLS	49	31	63	23	40	-3	.5	.2	.2	2.5	143	3.4	98	94	54	0	0	4	4	0
HAVRE	51	34	65	28	43	-1	.1	.2	.1	1.1	89	1.6	71	94	51	0	0	2	1	0
HELENA	50	32	64	27	41	-2	.4	.2	.2	1.6	126	2.0	81	91	48	0	0	3	3	0
KALISPELL	47	32	67	27	44	1	.1	.2	.1	1.3	91	3.5	85	82	29	0	0	3	1	0
MILES CITY	49	36	62	27	42	-1	.3	.2	.2	2.5	180	3.5	137	92	62	0	0	2	1	0
MISSOULA	56	33	69	28	45	0	.1	.2	.2	1.4	100	2.2	62	80	32	0	0	3	0	0
NE GRAND ISLAND	57	38	66	32	48	-3	.3	.2	.2	2.9	94	3.5	80	92	54	0	0	1	3	0
LINCOLN	58	41	65	37	49	-2	1.1	.6	.1	4.6	124	5.6	105	97	60	0	0	0	1	0
NORFOLK							.3	.3	.2	3.4	119	4.7	115	86	45	0	0	0	2	0
NORTH PLATTE	57	38	79	32	48	-1	.4	.0	.4	1.8	82	2.3	76	91	49	0	0	1	3	0
OMAHA							.5	.2	.2	7.8	211	9.2	173	79	52	0	0	0	4	0
SCOTTSDUFF	54	32	66	26	43	-4	.3	.1	.2	1.2	66	2.1	78	90	50	0	0	3	2	0
VALENTINE	53	30	59	23	41	-5	.7	.2	.6	3.2	168	4.0	146	94	48	0	0	6	3	1
NV RLY	58	24	63	15	41	-1	.1	.2	.0	1.9	126	2.2	75	79	22	0	0	6	1	0
LAS VEGAS	78	52	81	47	65	1	.0	.1	.0	1.0	182	1.8	120	35	9	0	0	0	0	0
RENO	59	32	65	23	45	-1	.2	.1	.2	1.8	176	2.0	63	71	22	0	0	5	1	0
WINNEMUCCA	60	26	69	16	43	-3	.1	.1	.0	1.2	103	1.9	70	75	26	0	0	6	2	0
NH CONCORD							.4	.3	.3	3.8	77	7.1	69	94	38	0	0	3	3	0
NJ ATLANTIC CITY	58	44	77	40	51	0	.7	.0	.5	6.9	112	13.3	102	96	63	0	0	0	2	0
NM ALBUQUERQUE	75	41	81	28	58	2	.0	.1	.0	.2	22	.8	55	33	9	0	0	2	0	0
CLOVIS	75	46	82	38	60	3	.1	.2	.0	.4	44	1.1	59	62	26	0	0	0	0	0
ROSWELL	81	49	87	38	65	4	.0	.1	.0	.6	6	.6	40	41	16	0	0	0	0	0
NY ALBANY	58	36	67	27	47	0	.6	.1	.4	4.0	82	7.9	83	90	34	0	0	1	3	0
BINGHAMTON	54	36	62	33	45	0	.9	.2	.6	5.7	114	9.9	102	91	48	0	0	0	4	1
BUFFALO	54	40	59	35	47	1	2.3	1.5	.9	9.1	182	13.2	127	90	56	0	0	0	4	2
NEW YORK	57	45	74	41	51	-1	.6	.3	.3	4.7	71	9.7	76	88	52	0	0	0	4	0
ROCHESTER	53	39	58	33	46	0	.9	.3	.4	6.4	150	9.3	104	91	56	0	0	0	4	0
SYRACUSE	58	36	64	30	47	0	1.0	.2	.5	6.2	116	10.2	97	92	44	0	0	2	4	0
NC ASHEVILLE	75	49	82	46	62	5	2.8	2.0	1.2	10.2	143	15.1	112	99	50	0	0	0	5	2
CHARLOTTE	78	56	86	50	67	6	1.9	1.2	.8	10.4	148	17.8	122	94	52	0	0	0	4	2
GREENSBORO	69	52	84	47	61	2	4.4	3.7	3.1	13.0	218	18.7	146	98	62	0	0	0	4	2
HATTERAS	75	57	80	54	66	6	.7	.0	.6	7.3	121	20.8	140	96	64	0	0	0	3	1
NEW BERN	75	56	82	54	65	3	1.7	1.1	1.2	5.0	90	14.2	105	97	63	0	0	0	3	1
RALEIGH	72	54	85	49	63	3	.3	.4	.1	5.1	90	9.9	79	100	58	0	0	0	4	0
WILMINGTON	78	59	84	56	69	5	2.4	1.7	2.2	8.9	148	20.8	159	98	63	0	0	0	3	1
ND BISMARCK	51	29	59	18	40	-3	.1	.3	.1	1.6	100	2.0	79	91	52	0	0	5	1	0
FARGO	52	29	62	23	41	-3	.3	.2	.3	1.7	83	3.2	110	87	43	0	0	6	1	0
GRAND FORKS	49	27	57	19	38	-4	.4	.1	.4	1.2	77	2.3	81	92	44	0	0	6	1	0
WILLISTON	49	33	62	28	41	-2	.2	.1	.1	.8	61	1.4	59	93	54	0	0	3	4	0
OH AKRON-CANTON	59	44	69	36	52	2	1.3	.6	.5	5.1	93	9.5	93	96	62	0	0	0	6	0
CINCINNATI	67	49	78	42	58	3	.9	.0	.4	9.5	151	16.4	135	88	59	0	0	0	4	0
CLEVELAND	56	43	64	34	50	1	2.5	1.8	1.2	6.9	134	11.4	117	95	63	0	0	0	6	2
COLUMBUS	65	48	75	39	57	5	1.3	.5	.7	8.0	146	12.2	118	87	52	0	0	0	4	1

Based on 1951-80 normals

Weather Data for the Week Ending April 20, 1991

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	.01 INCH OR MORE		.50 INCH OR MORE	
DAYTON	63	47	73	38	55	3	1.4	.6	.9	9.7	182	14.7	148	92	59	0	0	4	1		
TOLEDO	58	43	72	35	51	2	2.2	1.5	1.3	5.1	110	7.9	94	95	59	0	0	5	1		
YOUNGSTOWN	57	42	64	32	49	1	1.4	.6	.5	5.3	96	9.0	86	97	63	0	1	6	1		
OK OKLAHOMA CITY	73	51	83	42	62	1	T	-1.7	T	2.2	59	3.1	52	91	48	0	0	1	0		
TULSA	72	54	84	43	63	1	T	-1.0	T	2.4	42	4.2	48	86	48	0	0	0	0		
OR ASTORIA	55	40	66	35	48	0	.1	-1.0	T	13.7	128	29.0	100	97	68	0	0	1	0		
BURNS	53	30	58	23	41	-2	T	-1	T	.8	56	1.8	47	84	35	0	5	1	0		
MEDFORD							.3	-.1	.2	3.2	124	6.4	80	90	35	0	1	2	0		
PENDLETON	61	39	72	36	50	-1	.2	.0	.1	1.5	89	3.1	68	82	36	0	0	3	0		
PORTLAND	65	44	78	40	54	4	.1	-.4	-.1	7.7	148	13.9	91	90	47	0	0	2	0		
SALEM	64	41	73	36	53	3	.5	-.1	.5	8.2	136	14.3	81	93	52	0	0	1	0		
PA ALLENTOWN	57	44	72	38	51	0	.6	-.3	.4	4.7	73	8.6	67	93	56	0	0	4	0		
ERIE	54	44	64	40	49	3	1.6	.7	.9	6.1	117	9.9	102	89	58	0	0	4	1		
HARRISBURG	59	43	75	40	51	-2	1.2	.4	.9	5.2	92	9.1	81	91	53	0	0	4	1		
PHILADELPHIA	61	45	75	41	53	-1	.5	-.3	.3	5.3	85	10.1	83	92	58	0	0	3	0		
PITTSBURGH	61	44	73	37	53	2	.7	-.1	.3	4.8	82	9.2	84	90	54	0	0	3	0		
SCRANTON	56	41	69	37	48	-1	.5	-.2	.2	3.8	83	6.7	75	90	48	0	0	6	0		
RI PROVIDENCE	57	38	73	33	48	-1	.5	-.5	.3	7.2	104	13.0	88	94	40	0	0	4	0		
SC CHARLESTON	78	61	87	57	69	5	1.0	.5	.4	7.0	115	15.7	124	100	66	0	0	4	0		
COLUMBIA	80	60	87	55	70	6	.2	-.6	.2	10.7	139	18.0	113	95	53	0	0	3	0		
FLORENCE	79	60	86	55	69	5	.1	-.5	.1	6.5	106	13.1	101	95	55	0	0	1	0		
GREENVILLE	76	52	85	49	64	3	1.6	-.6	.7	9.5	105	16.4	93	97	57	0	0	5	2		
SD ABERDEEN	54	31	61	25	42	-3	.1	-.4	.1	2.6	118	3.4	102	88	43	0	0	1	0		
HURON	54	32	60	27	43	-3	.4	-.1	.4	4.4	180	5.4	150	89	43	0	0	2	0		
RAPID CITY	49	31	55	22	40	-5	.5	-.0	.3	2.7	120	3.7	117	91	47	0	0	2	0		
SIoux FALLS	56	33	62	28	44	-3	.2	-.4	.2	1.9	64	2.5	56	95	47	0	0	2	0		
TN CHATTANOOGA	76	55	83	50	66	5	2.6	1.5	1.0	11.5	121	22.4	115	97	48	0	0	5	3		
KNOXVILLE	76	53	83	48	65	5	1.3	-.4	1.2	9.4	114	18.9	111	95	46	0	0	4	1		
MEMPHIS	73	56	83	49	65	2	3.2	1.8	1.8	14.1	152	23.4	129	96	58	0	0	2	2		
NASHVILLE	76	53	85	48	65	4	1.4	-.4	1.1	6.6	77	15.0	88	92	46	0	0	2	1		
TX ABILENE	82	55	91	46	69	3	.0	-.6	.0	.6	22	3.4	76	76	22	1	0	0	0		
AMARILLO	72	41	86	37	57	0	T	-.2	T	.4	30	1.3	53	78	27	0	0	1	0		
AUSTIN	82	60	85	50	71	2	1.4	-.6	1.2	5.8	162	18.0	236	95	51	0	0	4	1		
BEAUMONT	80	66	84	61	73	3	3.0	2.0	2.1	8.5	149	27.9	199	95	66	0	0	4	2		
BROWNSVILLE	85	72	90	67	78	3	T	-.4	T	10.4	735	13.4	321	95	65	1	0	0	0		
CORPUS CHRISTI	85	69	89	57	77	3	.3	-.1	.3	5.6	303	9.3	190	96	59	0	0	2	0		
DEL RIO	88	63	95	48	75	3	T	-.5	T	1.8	103	3.2	99	67	27	2	0	0	0		
EL PASO	81	50	86	42	65	1	.0	.0	.0	.1	23	1.6	127	33	10	0	0	0	0		
FORT WORTH	78	55	83	47	67	1	.6	-.4	.6	4.2	84	9.5	112	94	51	0	0	1	1		
GALVESTON	78	69	82	65	74	4	.7	.0	.5	3.5	92	20.5	225	97	72	0	0	3	0		
HOUSTON	81	64	88	58	73	3	2.6	1.7	2.2	9.7	194	25.3	214	98	63	0	0	3	1		
LUBBOCK	80	48	89	40	64	3	T	-.2	T	.1	5	1.8	74	62	20	0	0	0	0		
MIDLAND	83	50	89	42	66	2	T	-.2	T	.1	2.0	109	59	17	0	0	0	0	0		
SAN ANGELO	83	50	90	40	67	-1	.0	-.4	.0	1.1	62	3.5	106	87	26	1	0	0	0		
SAN ANTONIO	83	62	88	49	73	3	.9	-.3	.9	5.9	198	13.3	211	93	46	0	0	1	1		
VICTORIA	82	67	87	59	75	3	.4	-.3	.3	14.3	502	25.1	363	99	64	0	0	3	0		
WACO	81	56	88	49	68	1	.6	-.3	.5	3.6	83	8.1	102	97	57	0	0	3	0		
WICHITA FALLS	80	51	88	44	65	1	.0	-.7	.0	.8	21	3.4	62	95	33	0	0	0	0		
UT CEDAR CITY	63	36	66	25	49	2	.0	-.2	.0	.9	49	1.9	61	48	13	0	3	0	0		
SALT LAKE CITY	62	39	68	34	50	1	T	-.5	T	1.7	54	3.5	59	76	28	0	0	0	0		
VT BURLINGTON	55	38	60	26	47	3	.6	-.1	.3	4.7	119	6.9	92	92	43	0	2	3	0		
VA NORFOLK	68	52	86	48	60	1	6.1	5.4	5.9	10.8	189	16.3	129	92	60	0	0	3	1		
RICHMOND	67	50	87	48	58	0	.5	-.1	.4	6.5	118	11.2	95	92	63	0	0	5	0		
ROANOKE	66	47	85	44	57	0	.9	.2	.5	9.7	168	15.3	131	95	58	0	0	4	0		
WA QUILLAYUTE	60	39	77	31	49	3	T	-1.6	T	12.7	74	42.0	96	98	59	0	1	1	0		
SEATTLE-TACOMA	63	43	72	42	53	4	.1	-.4	.1	10.6	200	19.7	127	97	49	0	0	2	0		
SPOKANE	61	37	68	34	49	3	T	-.3	T	3.4	165	5.9	97	73	29	0	0	0	0		
YAKIMA	67	37	76	33	52	3	.3	.2	.3	1.8	188	2.3	76	84	28	0	0	2	0		
WV BECKLEY	69	45	79	40	57	5	.6	-.2	.3	8.4	132	15.0	116	90	48	0	0	4	0		
CHARLESTON	74	51	84	42	63	7	1.4	.6	.7	9.3	147	15.0	116	87	37	0	0	3	2		
HUNTINGTON	73	50	83	42	62	5	1.7	.9	1.4	10.8	169	16.5	133	85	39	0	0	3	1		
PARKERSBURG	71	48	80	42	59	5	1.5	.7	1.0	8.7	149	14.1	125	89	46	0	0	3	1		
WI GREEN BAY	53	35	58	31	44	-1	1.1	.4	.9	5.3	148	6.3	109	93	48	0	3	3	1		
LACROSSE	54	39	63	34	47	-2	2.0	1.2	1.1	5.8	153	7.2	129	94	57	0	0	3	2		
MADISON	56	37	61	29	46	-1	.7	.0	.7	8.3	202	10.0	160	87	51	0	2	1	1		
MILWAUKEE	54	39	62	37	47	1	1.5	.7	.8	7.1	147	9.0	116	89	59	0	0	2	2		
WAUSAU	53	33	59	26	43	-1	.7	.0	.4	6.7	182	8.0	144	97	47	0	2	4	0		
WY CASPER							.2	-.2	.1	1.4	76	2.4	81	93	44	0	4	2	0		
CREYENNE							.3	.0	.2	1.4	85	1.9	78	90	45	0	4	3	0		
LANDER	46	28	54	20	37	-6	1.0	.5	.7	2.7	109	3.9	108	95	59	0	5	4	1		
SEKRIDAN	44	29	59	22	37	-7	.7	.2	.6	4.3	185	5.7	150	95	65	0	4	3	1		

Based on 1951-80 normals

## National Agricultural Summary

April 15 - 21, 1991

**HIGHLIGHTS:** The **Eastern half of the Nation** received widespread rainfall generally in excess of one-half inch, with heavy rains reported in parts of the **Delta**. Rainfall across the **West** continued to be minimal, with some exceptions in the **northern Rocky Mountains**.

**SMALL GRAINS:** Winter wheat condition was rated mostly good to fair, except in Washington, where most of the crop rated poor to very poor. Winter wheat heading advanced in the Southern States, raising the national total to 17 percent (%) headed, 7 percentage points above the 5-year average. Kansas wheat showed good growth, with heading beginning in the south. Oklahoma winter wheat condition was fair to good with 60 percent of the crop headed, 40 points ahead of normal. Dryland wheat condition in New Mexico rated mostly poor to fair. Winter barley in Washington was in mostly poor condition, and spring planting was well along. Oats seeding continued across much of the Midwest.

**CORN:** Planting in the 17 major producing States was 8 percent complete, matching normal. Planting neared completion in Georgia, reached 70 percent completion in Texas and 60 percent complete in North Carolina. Early planting lagged somewhat in much of the Corn Belt due to wet, cold conditions.

**COTTON:** Cotton planting was 14% complete, 5 points behind normal. Planting in Arizona was 34% complete, 44 points behind the normal of 78 percent. California planting was 50% complete, 23 points behind normal. Planting progressed ahead of normal in New Mexico, reaching 51% complete, 8 points ahead of normal. Dry conditions in the Plains region of Texas lowered planting prospects, but pre-planting activities continued.

**GRAIN SORGHUM:** Planting of grain sorghum was 18% complete, slightly ahead of the 17% average. Texas planting was 55% complete, equaling the average, and Louisiana progress reached 48% complete, 19 points ahead of normal. Thirty percent of the crop was planted in Mississippi, 12 points ahead of normal, and 10% planted in Oklahoma, 7 points ahead of normal.

**RICE:** The Nation's rice crop was 23% planted, 8 points behind normal. Planting in Arkansas, Mississippi, and Texas was 11-15% behind normal. Forty percent of the crop had emerged in both Louisiana and Texas. Watermold was a problem in parts of Louisiana.

**OTHER FIELD CROPS:** Standing water and wet fields kept field activity to a minimum in Arkansas. Alabama peanuts were 10% planted, 1

point ahead of normal. Mississippi peanuts were 14% planted, 6 points ahead of normal. Montana sugarbeets were 50% planted, 19 points ahead of normal. Canola fields were blooming in Ohio. Winter freeze damage was mostly light in alfalfa fields in Wisconsin. Arizona alfalfa was generally in good condition, with light to moderate insect activity. The Washington potato crop was 42% planted and 14% emerged.

**FRUIT AND NUTS:** Florida citrus trees were in excellent condition due to the above-average rainfall. Valencia orange movement was active in most areas, but the grapefruit movement slowed. The Georgia peach crop was in mostly good condition, with 100% of the trees blooming. Arizona grapefruit and Valencia orange harvests and shipping continued. California citrus harvest continued active in the south. Maryland apple trees were 58% bloomed, 18 points ahead of normal.

**VEGETABLES:** The Arkansas strawberry crop was in good condition, with harvest to begin next week. Tomato planting was nearly complete. Florida vegetable harvest wound down in the south and became more active in the central areas. The first Immokalee watermelons were harvested. The Texas Rio Grande Valley onion and early squash harvests continued. The San Antonio Winter Garden cabbage and onion harvests continued. Chili pepper planting was underway in the Trans-Pecos area. California asparagus, broccoli, and cauliflower harvests continued, with variable quality. Arizona vegetable harvest, including red potatoes, continued in the west. The Mississippi watermelon crop was 65% planted, 23 points ahead of normal. The Georgia onion crop was 22% harvested. Dry onions in Colorado were 79% planted and in mostly good condition. Maryland strawberries were 41% bloomed, 14 points ahead of normal.

**PASTURES AND LIVESTOCK:** Pasture, range, and livestock were in mostly fair to good condition. North Dakota continued to have poor range and pasture conditions due to lack of moisture. Feed supplies were adequate in most States. Calving and lambing were over 80% complete in Colorado. Heavy rains and cool weather stressed newborn livestock in Iowa. Sheep shearing was winding down in most areas but was in full swing in Michigan.

**Crop Progress**

FOR WEEK ENDING APRIL 21, 1991

	COTTON % PLANTED		
	1991	1990	AVG.
AL	23	46	28
AZ	34	82	78
AR	0	0	2
CA	50	75	73
GA	5	7	9
LA	5	9	12
MS	6	3	6
MO	0	0	2
NM	51	35	43
NC	10	4	8
OK	0	0	2
SC	5	6	12
TN	1	0	4
TX	12	13	13

14 STATES 14 19 19

THESE 14 STATES PRODUCED 99% OF THE 1990 COTTON CROP.

	CORN % PLANTED		
	1991	1990	AVG.
CO	2	2	9
GA	92	93	90
IL	9	1	8
IN	3	3	4
IA	1	1	2
KS	30	15	15
KY	8	5	16
MI	0	0	0
MN	1	5	3
MO	31	6	25
NE	3	2	4
NC	60	48	44
OH	3	4	3
PA	1	1	4
SD	0	0	0
TX	70	72	78
WI	0	0	0

17 STATES 8 6 8

THESE 17 STATES PRODUCED 95% OF THE 1990 CORN CROP.

	GRAIN SORGHUM % PLANTED		
	1991	1990	AVG.
AR	10	0	20
CO	0	0	0
IL	0	0	0
KS	0	0	0
LA	48	31	29
MS	30	12	18
MO	2	0	1
NE	0	0	0
NM	0	8	NA
OK	10	1	3
SD	0	0	0
TX	55	50	55

12 STATES 18 15 NA

EXCL. STATES WITH NA 18 15 17

THESE 12 STATES PRODUCED 98% OF THE 1990 GRAIN SORGHUM CROP.

NA - NOT AVAILABLE.

	RICE % PLANTED		
	1991	1990	AVG.
AR	7	0	18
CA	0	1	3
LA	51	50	52
MS	12	7	27
TX	66	58	77

5 STATES 23 18 31

THESE 5 STATES PRODUCED 98% OF THE 1990 RICE CROP.

	SPRING WHEAT % PLANTED		
	1991	1990	AVG.
ID	59	75	64
MN	29	32	27
MT	38	32	31
ND	30	21	15
SD	62	74	40

5 STATES 36 33 25

THESE 5 STATES PRODUCED 97% OF THE 1990 SPRING WHEAT CROP.

	WINTER WHEAT % HEADED		
	1991	1990	AVG.
AR	21	34	31
CA	70	85	84
CO	0	0	0
GA	87	88	76
ID	0	0	0
IL	0	0	0
IN	0	0	0
KS	3	0	0
MI	0	0	0
MO	0	0	0
MT	0	0	0
NE	0	0	0
NC	36	39	18
OH	0	0	0
OK	60	10	20
OR	0	0	0
SD	0	0	0
TX	31	24	28
WA	0	0	0

19 STATES 17 8 10

THESE 19 STATES PRODUCED 91% OF THE 1990 WINTER WHEAT CROP.

**Crop Condition**

PERCENT

FOR WEEK ENDING APRIL 21, 1991

STATE	WINTER WHEAT				
	VP	P	F	G	EX
AR	0	0	54	41	5
CA	0	0	5	85	10
CO	2	10	32	50	6
GA	0	0	20	73	7
ID	7	13	30	38	12
IL	0	2	23	70	5
IN	0	1	28	68	3
KS	3	5	33	41	18
MI	NA				
MO	0	2	40	56	2
MT	4	17	35	40	4
NE	0	24	49	24	3
NC	0	0	6	86	8
OH	1	7	34	48	10
OK	0	10	60	30	0
OR	1	2	60	32	5
SD	0	6	34	46	14
TX	6	16	57	18	3
WA	36	38	14	12	0
19 STATE	4	10	40	39	7
PREV WEEK	4	11	39	40	6
PREV YEAR	0	4	28	56	12

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 mostly 0.50 in. or less, 1.00 to 2.00 in. isolated areas. Temperatures within 2° of normal, 3° above normal southeast.

Days suitable for fieldwork 4.2. Soil moisture 2% short, 53% adequate, 45% surplus. Acreage intended for spring planting 73% prepared, 65% 1990, 72% avg. Fieldwork progress 2% ahead, 40% behind, 58% on schedule. Corn 69% planted, 74% 1990, 71% avg. Sorghum 19% planted, 24% 1990, 16% avg. Cotton 23% planted, 46% 1990, 28% avg. Peanuts 10% planted, 6% 1990, 9% avg. Winter wheat 68% headed, 63% 1990, 57% avg.; 11% turning color, 22% 1990, 11% avg.; 3% poor, 18% fair, 74% good, 5% excellent. Feed supplies from pastures 9% short, 80% adequate, 11% surplus. Pastures 2% poor, 25% fair, 62% good, 11% excellent. Livestock 18% fair, 80% good, 2% excellent. Primary activities: land preparation; planting cotton, peanuts, sorghum, corn, vegetables; applying fertilizer, lime, herbicides; fertilizing pastures; cutting hay; spraying fruit, pecan trees, stocking ponds; general care of livestock, poultry, catfish.

**ARIZONA:** Mostly sunny skies, warmer temperatures statewide, strong winds 16th to 17th, north; temperatures 3° below to 5° above normal. Extreme 17°; 84° higher elevations; 41°; 91° deserts; no precipitation statewide.

Cotton planted 34%, 82% 1990, 78% avg.; planting active. Small grains heading 86%, 94% 1990, 88% avg.; turning color 26%, 33% 1990, 28% avg.; small grains good condition. Alfalfa good overall, except southeast, fair; insects light to moderate statewide; heavy activity Egyptian alfalfa weevil southeast; harvest moderate to active. Mixed vegetables harvested central, west; red potatoes harvested central. Grapefruit, valencia orange harvest, shipping continued west, central.

**ARKANSAS:** Temperatures near normal with scattered showers throughout the State. Heaviest rainfall was in the eastern half of the State. Temperature 38°; 85°. Rainfall 0.07 to 4.00 in.

Soil moisture supplies 25% adequate, 75% surplus. Standing water, wet fields, continuous rains kept fieldwork to a minimum. Main activities: Fertilizer application to wheat, pastures; scouting for insect, maintenance of hay equipment; draining flooded fields; livestock health practices. Rice planting 7%, 0% 1990, 18% avg. Sorghum planting 10%, 0% 1990, 20% average. Corn planting 45%, 56% 1990, 68% avg. Wheat headed 21%, 34% 1990, 31% avg. Wheat diseases, including Septoria leaf blotch, rust, downy mildew, bacterial stripe, were light to moderate across the State. Strawberry crop was in good condition, harvest is scheduled to begin the first week of May in Searcy County. Spinach harvest was 60% complete in Crawford County. Tomatoes 85% to 100% planted in Bradley, Drew, Ashley Counties. Pastures good. Livestock good.

**CALIFORNIA:** Low pressure continued. Weak systems brushed north coast. Warmer air arrived

late week bringing light rain north central State.

Field activities progressed, mostly open weather. Small grain growth continued; many fields headed. Irrigation, fertilization, broad leaf weed control ongoing. Lodging evident some areas, windy conditions persisted. Alfalfa harvested hay, green chopped. Seed alfalfa sprayed weevil control. Ground preparation rice, corn, dry edible beans active. Cotton seeding progressed most areas; some pre plant fieldwork still underway. New crop sugarbeets thinned; limited harvest over wintered beets. Safflower developing well. Orchard, vineyard fieldwork continued. Discing, irrigating, weed, fungus control active. Apricots, peaches, nectarines, thinned. Kiwifruit, persimmons, pomegranates, walnuts leafed out. Citrus trees showed new growth. Citrus harvest active in southern California. Almonds continued rapid growth. Asparagus harvest active, good quality. Broccoli heavy supply, generally good quality. Cauliflower moderate supply, variable quality. Iceberg lettuce moderate supply, Huron district. Potato harvesting, planting continued Hemet San Jacinto area. Strawberries moderate supply, variable quality, Santa Maria area. Fumigating sweet potato fields continued. Tomato planting active, Westside. Pasture condition good northern half, poor to fair southern half. Light supplemental feeding. Livestock good condition. Water supplies adequate.

**COLORADO:** Series of fast moving Pacific cold fronts crossed the State. Very little precipitation was received; amounts generally less than 0.10 in. except Arkansas River Basin with up to 0.50 in. Temperatures 1 to 7° cooler than normal entire State.

Days suitable for fieldwork 5.4. Soil moisture 5% very short, 50% short, 44% adequate, 1% surplus. Barley seeding 63% complete, 65% 1990, 71% avg.; oats, 60%, 58%, 64%; corn planting progressing slowly, now 2% complete, same as 1990, slower than average of 9%. Winter wheat 2% very poor, 10% poor, 32% fair, 50% good, 6% excellent; dry onions 79% planted, mostly good condition. Livestock mostly good. Calving 82% complete, lambing 84%. Pasture, range feed conditions improved to mostly fair.

**FLORIDA:** Temperatures 2 to 5° above normal. Extreme highs, upper 80s interior Peninsula; lows, upper 40s northern Peninsula. Rainfall 1.00 in. Panhandle, 1.00 to 2.00 in. elsewhere. Isolated locations received over 5.00 in.

Soil moisture adequate Panhandle, southern Peninsula; adequate to surplus northern Peninsula; short to adequate central Peninsula. Farmers making preparation for planting spring sown crops. Cotton planting underway. Peanut planting active. Winter wheat heading. Corn, sugarcane, tobacco making good progress. Pastures good to excellent, with some pockets only fair Panhandle, central Peninsula. Pasture ratings are 30% fair, 60% good, 10% excellent. Cattle mostly good condition. Citrus trees excellent condition, rainfall above average, abundant growth. New crop fruit setting. Rain slows harvest. Valencia movement active most

areas, grapefruit harvest slowing. Caretakers cutting cover crops, spraying continues, young trees being planted. Warm temperatures, abundant shower activity over major vegetable producing areas. Harvest winding down southern areas, becoming active central areas. Volume leaders: Potatoes, tomatoes, cucumbers, peppers, sweet corn, celery, squash, cabbage. Also available: Snap beans, carrots, lettuce, radishes, eggplant, escarole. First Immokalee watermelons harvested.

**GEORGIA:** Nearly all of State some rain. Rainfall 0.50 to 1.50 in., varied under 0.50 in. to more than 2.00 in. Heaviest 3.58 in. at Savannah airport. Rain 2 to 4 days most locations. Warm week with temperatures 2 to 5° above normal. Warmest ranged low to mid 80s north, mid to upper 80s central, south. Coolest 20th and 21st, lows upper 30s to mid 40s north, mid 40s to low 50s central and south.

Days suitable for fieldwork 4.4. Soil moisture 4% short, 77% adequate, 19% surplus. Corn 12% fair, 86% good, 2% excellent; Condition improved slightly. Cotton 13% poor, 33% fair, 52% good, 2% excellent. Sorghum 17% planted, 10% 1990, 10% avg. Peanuts 6% poor, 33% fair, 61% good; 13% planted, 11% 1990, 13% avg. Tobacco 24% fair, 76% good; 99% transplanted, 100% 1990, 93% avg. Watermelons 24% fair, 76% good; 91% planted, 92% 1990, 90% avg. Wheat 100% jointing, 100% 1990, 100% avg.; 99% boot, 99% 1990, 94% avg.; spraying for disease control. Rye, other small grains fair to mostly good. Apples 100% good; 95% blooming, 99% 1990, 98% avg. Peaches 13% fair, 86% good, 1% excellent; 100% blooming, 100% 1990, 100% avg. Onions 100% fair; 22% harvested, 28% 1990; Showers slowing harvest. Pasture 5% fair, 86% good, 9% excellent. Cattle, hogs good.

**HAWAII:** Favorable weather for agriculture. Sunny skies, light to moderate morning showers. Irrigation necessary in drier areas. Winds light to moderate 5 to 20 mph. Temperatures mid 60s to low 80s. Rainfall none to 2.30 in.

Days suitable for farm work 7.0. Papaya production remains seasonally low. Ginger root harvesting active, preparations continued for next seasons crop. Tomato production down slightly. Chinese, head cabbage production steady.

**IDAHO:** Temperatures below normal across State. Precipitation over entire State, most areas still below normal.

Days suitable for fieldwork 4. Soil moisture 7% very short, 230% short, 55% adequate, 8% surplus. Winter wheat 4% jointed. Spring barley 52% planted, 75% 1990, 57% avg. Oats 27% planted, 52% 1990, 38% avg. Potatoes 15% planted, 19% 1990, 13% avg. Sugar beets 87% planted, 97% 1990, 87% avg. Onions 100% planted, 100% 1990, 93% avg. Parts of the State received much needed precipitation, amount varied by location. Potato planting in east continued slowly due to cool wet weather. Seed potatoes were being sorted, shipped. Fruit trees budding, some flowering. Activities: Plowing, planting, fertilizing, spraying for weeds, land preparation for irrigation. Pasture, range condition 77% of normal. Hay, roughage supplies adequate.

**ILLINOIS:** Temperatures 1 to 3° below normal north, central, 1 to 2° above normal south. Rainfall was below normal from 0.11 to 1.00 in.

Days suitable for fieldwork 1.5. Soil

moisture 54% adequate, 46% surplus. Oats seeded 75%, 69% 1990, 81% avg. Livestock roughage requirements from pasture 54%, 37% 1990, 28% avg. Alfalfa 2% poor, 23% fair, 70% good, 5% excellent. Pasture 12% fair, 65% good, 23% excellent.

**INDIANA:** Temperatures 0 to 3° below normal. Lows low 30s, highs low 60s to low 70s. Precipitation 0.50 to 1.00 in.

Days suitable for fieldwork 1.2. Topsoil 33% adequate, 67% surplus. Subsoil 51% adequate, 49% surplus. Spring cropland 72% tilled, 74% 1990, 79% avg. Wheat 8 in. high, 8 in. 1990, 7 in. avg. Wheat 25% jointed, 40% 1990, 28% avg. Oats 63% seeded, 62% 1990, 69% avg. Clover: 77% seeded, 80% 1990, 81% avg. Pasture 7% excellent, 70% good, 22% fair, 1% poor. Cool, wet week. Corn, soybean plantings limited.

**IOWA:** Temperatures 1 to 3° below normal. Extremes 28°; 74°. Precipitation 0.09 to 3.27 in.; average 1.05 in. Some lowland flooding south.

Days suitable for fieldwork 0.6. Topsoil 21% adequate, 79% surplus. Subsoil 3% short, 49% adequate, 48% surplus. Winter wheat 1% poor, 31% fair, 60% good, 8% excellent. Hay 6% poor, 25% fair, 57% good, 12% excellent. Pasture mostly good to excellent. Oats 72% sown, 85% 1990, 83% avg. Oats 20% emerged, 10% 1990, 21% avg. Seedbed preparation 64% completed, 72% 1990, 65% avg. Fertilizer application 62% completed, 71% 1990, 66% avg. Livestock mostly good condition. Cool temperatures, heavy rains stressed pigs, calves. Low weight gains were reported.

**KANSAS:** Temperatures normal across State. Precipitation 2.00 to 2.50 in. east, 0.50 to 1.20 in. central, 0.11 to 0.25 west.

Days suitable for fieldwork 4.0. Surface moisture 39% short, 52% adequate, 9 surplus. Subsurface moisture 69% short, 31% adequate. Wheat good growth; jointing on schedule. Heading started south central, southeast counties. Corn planting continues ahead schedule; nearing completion southeast counties. Range, pasture furnish adequate forage central, east, short west. Alfalfa greening up; weevil problems some localities.

**KENTUCKY:** Temperatures much above normal early, then well below normal. High temperatures 80s, later in week highs lower 50s. Temperatures averaged lower 60s, 1 to 2° above normal. Rainfall 1.00 to 2.00 in. south, east, 0.50 to 1.00 in. far west, north.

Days suitable for fieldwork 3.1; farmers about 4.5 days behind schedule on farm work. Soil moisture ample at 57% adequate, 43% surplus. Wettest condition west. Corn planting active well drained soils, earliest planted corn emerged. Wheat condition 1% poor, 26% fair, 65% good, 8% excellent. Wheat would benefit from drier weather. Tobacco plants have emerged in 75% beds, 74% 1990, 65% avg. Tobacco plants are generally on schedule, early setting expected to begin May 1st. Pastures good to excellent. Alfalfa showing good growth.

**LOUISIANA:** Temperatures 2.2 to 4.4° above normal. Extremes 50°; 88°. Rainfall 2.74 in. northeast to 5.54 in. southeast.

Days suitable for fieldwork 1.1. Soil moisture 2% adequate, 98% surplus. Spring plowing 68%, 60% 1990, 74% avg. Corn 10% poor, 37% fair, 53% good; planted 95%, 88% 1990, 84% avg.; emerged 90%, 73% 1990, 66% avg. Hay first cutting 4% 2% 1990, 3% avg. Rice emerged 40%, 36% 1990, 38%

avg. Water mold was a problem in some areas, southwest. Sorghum emerged 44%, 15% 1990, 15% avg. Sweet potatoes planted 4%, 3% 1990, 6% avg. Sugarcane 29% fair, 65% good, 6% excellent. Wheat 5% poor, 43% fair, 52% good; headed 82%, 90% 1990, 86% avg.; turning color 9%, 5% 1990, 6% avg. Lodging was a problem in many areas due to heavy rain, high winds. Vegetables 3% very poor, 10% poor, 56% fair, 31% good. Pasture 4% poor, 27% fair, 67% good, 2% excellent. Livestock 23% fair, 73% good, 4% excellent. Crawfish harvest slowing down.

**MARYLAND & DELAWARE:** MARYLAND: Precipitation 1.00 in. Temperature 50.5°, normal 54.4°. Extremes 30°; 88°.

Days suitable for fieldwork 2.9. Topsoil 29% adequate, 71% surplus. Subsoil 57% adequate, 43% surplus. Oats 57% planted, 73% 1990, 68% avg. Corn 7% planted, 1% 1990, 6% avg. Sweet corn 13% planted, 6% 1990, 9% avg. Potatoes 54% planted, 63% 1990, 77% avg. Green peas 70% planted, 71% 1990, 83% avg. Sweet potatoes 38% planted, 52% 1990, 74% avg. Small grains, pasture good. Peaches 91% bloomed, 97% 1990, 90% avg. Apples 58% bloomed, 64% 1990, 39% avg. Strawberries 41% bloomed, 48% 1990, 27% avg. Activities: Soil preparation; planting vegetables, corn, oats, tobacco; repairing fence; hauling manure; spreading fertilizer; maintaining machinery; caring for livestock.

DELAWARE: Precipitation 0.88 in. Temperature 53.5°, normal 54.4°. Extremes 34°; 82°.

Days suitable for fieldwork 4.3. Topsoil 25% adequate, 75% surplus. Subsoil 50% adequate, 50% surplus. Corn 7% planted, 4% 1990, 6% avg. Sweet corn 8% planted, 12% 1990, 14% avg. Potatoes 80% planted, 81% 1990, 78% avg. Green peas 65% planted, 67% 1990, 65% avg. Small grains good. Pasture excellent. Peaches 100% bloomed, 98% 1990, 94% avg. Apples 59% bloomed, 47% 1990, 52% avg. Strawberries 13% bloomed, 19% 1990, NA avg. Activities for the week: Soil preparation; planting vegetables, corn; repairing fence; hauling manure; spreading fertilizer; maintaining machinery; caring for livestock.

**MICHIGAN:** Temperatures 1° above to 7° below normal. Extremes 20°; 72°. Precipitation 0.69 to 2.54 in. across the State. Cool wet weather persisted throughout most of the week.

Minor fieldwork reported. In some areas, corn, oat planting has begun. Grape, peach pruning is due to begin soon. Farmers continue to assess bud damage on fruit crops from last weeks frost. Sheep shearing is expected to be in full swing this week. Feed supplies are in good shape, there is some movement in corn, hay supplies. Winter wheat, hay look good. Major activities included: Plowing fields, spreading manure, repairing fences, equipment, looking after newborn livestock, clearing brush, spraying orchards.

**MINNESOTA:** Temperatures 2 to 5° below normal. Extremes 17°; 67°. Precipitation generally 0.10 to 1.50 in. with the greatest weekly total of 1.80 in.

Days suitable for fieldwork 1. Topsoil 5% very short, 13% short, 59% adequate, 23% surplus. Subsoil 18% very short, 27% short, 50% adequate, 5% surplus. Spring wheat 29% planted, 32% 1990, 27% avg. Oats 20% planted, 46% 1990, 42% avg. Barley 26% planted, 17% 1990, 19% avg. Field corn 5% ground prepared, 23% 1990, 19% avg. Soybeans 1% ground prepared, 5% 1990, 8% avg. Sugarbeets 4% planted, 21% 1990, 19% avg. Green peas 11% planted, 25% 1990, 23% avg. Fall seeded small grains 31% dormant, 6% poor, 59%

good, 4% excellent. Winter freeze damage; alfalfa 23% none, 62% light, 15% moderate, 0% severe; winter wheat 21% none, 69% light, 8% moderate, 2% severe; rye 33% none, 58% light, 7% moderate, 2% severe.

**MISSISSIPPI:** Temperatures 68°, 3° above normal. Extremes 42°; 87°. Mostly wet statewide. Rainfall 3.01 in., 1.71 in. above normal. Soil temperature 70°.

Days suitable for fieldwork 0.7, 3.6 1990, 4.0 avg. Soil moisture 9% adequate, 39% surplus, 52% excessive. Corn 58% planted, 46% 1990, 53% avg.; 50% emerged, 36% 1990, 36% avg.; 6% very poor, 17% poor, 37% fair, 40% good. Cotton 6% planted, 3% 1990, 6% avg.; 3% emerged, 1% 1990, 1% avg. Peanuts 14% planted, 0% 1990, 8% avg. Rice 12% planted, 7% 1990, 27% avg.; 8% emerged, 4% 1990, 11% avg. Sorghum 30% planted, 12% 1990, 18% avg.; 26% emerged, 7% 1990, 6% avg. Sweet potatoes 5% planted, 6% 1990, 9% avg. Watermelons 65% planted, 44% 1990, 42% avg. Wheat 91% jointing, 95% 1990, 97% avg.; 61% heading, 68% 1990, 51% avg.; 3% very poor, 8% poor, 61% fair, 28% good. Livestock 27% fair, 59% good, 14% excellent. Pasture 7% poor, 15% fair, 61% good, 17% excellent. Peaches 19% very poor, 34% poor, 41% fair, 6% good.

**MISSOURI:** Temperatures near normal. Rainfall 1.50 in., varying from under 1.00 in. east central, southeast to nearly 2.00 in. central, northwest districts. Some minor flooding.

Days suitable for fieldwork 1.5. Topsoil 3% short, 54% adequate, 43% surplus. Corn planting by district ranges from 18% northwest to nearly half or more west central, central, southwest, southeast. Oats sown 88%, 73% 1990, 87% ave. Ground worked at least once for spring crops 77%, 58% 1990, 65% avg. Pasture 1% poor, 22% fair, 67% good, 10% excellent.

**MONTANA:** Much needed moisture fell east of divide. Heaviest amounts south central. Amounts up to 1.47 in. Most areas less than 0.50 in. Temperatures slightly above normal northwest, elsewhere near normal or below.

Topsoil 21% short, 72% adequate, 7% surplus. Subsoil 62% short, 35% adequate, 3% surplus. Winter wheat 4% still dormant, 43% greening, 53% green and growing. Barley planted 31%, 27% 1990, 31% avg. Barley emerged 4%, 1% 1990, 3% avg. Oats planted 18%, 25% 1990, 23% avg. Sugarbeets planted 50%, 30% 1990, 31% avg. Field tillage progress 34% none, 35% just started, 31% well underway. Calving 86% complete, 88% 1990, 85% avg. Lambing 72% complete, 80% 1990, 76% avg. Pasture, range feed condition 76%.

**NEBRASKA:** Temperatures 2 to 5° below normals. Precipitation mid week with 0.10 in. east central to 0.70 in. southwest, northeast.

Days suitable for fieldwork 3.6. Topsoil 25% short, 64% adequate, 11% surplus. Subsoil 68% short, 32% adequate. Wheat 49% fair, 24% good, 3% excellent; 6% jointed, 12% 1990, 5% avg. Oats 90% seeded, 84% 1990, 81% avg. Corn 3% planted, 2% 1990, 4% avg. Pasture condition 71% of normal.

**NEVADA:** Temperatures above normal. Extremes 16°; 82°. Precipitation none to 0.48.

Precipitation mostly north, west areas. Field preparations continue for spring planting, irrigation. Irrigation water from surface sources remains short. Cattle, sheep movement to spring, summer ranges continues. Calving, lambing 75% complete. Shearing underway. Major activities include general maintenance, field preparations.

**NEW ENGLAND:** Precipitation 0.05 to 0.95 in. north, 0.70 to 1.55 in. south. Temperatures high 30s to low 40s northern Maine, low to high 40s elsewhere north; mid 40s to low 50s south. Maximum temperatures low 50s north to mid 70s south; minimum temperatures 21° north to 36° south.

Major farm activities: Spreading manure, mending fences, plowing fields, repairing machinery.

**NEW JERSEY:** Temperatures much below normal. Extremes 28°; 78°. Rainfall 2.71 in. north, 2.51 in. central, 2.13 in. south. Heaviest 24 hour total 1.79 in. on 21st, 22nd. Estimated soil moisture percent field capacity, averaged 98% north, 96% central, 94% south. Four inch soil temperature 49° north, 50° central, 52° south.

Soil moisture currently excessive all areas. Unfavorable weather conditions hampered fieldwork, slowed early crop growth. Fruit bloom generally heavy; weather poor for pollination. Light harvest of leeks, green onions, radishes, spinach, asparagus, spring greens continued; warmer temperatures needed.

**NEW MEXICO:** Sunny, warm conditions prevailed across the state throughout the week. Temperatures 1 to 2° above normal most areas, except 4 to 6° above normal over south eastern plains, southern half of north eastern plains. Precipitation remained very scant with trace amounts in far northeast.

Days suitable for fieldwork 6.4. Soil moisture 71% short, 29% adequate. Alfalfa condition 57% fair, 43% good. Irrigated wheat 13% poor, 31% fair, 56% good. Dryland wheat 17% very poor, 50% poor, 33% fair. Chile, onions fair to good. Lettuce conditions good. Cattle, sheep poor to good. Range, pasture 67% of normal, 20% to 120%.

**NEW YORK:** Temperatures near normal. No major extremes. Rainfall most areas between 1.00 to 2.00 in. Exception was region from Catskills to Eastern Adirondacks to Champlain Valley, including northern half of Hudson Valley, where about 0.50 in. fell.

Days suitable for fieldwork 3.9. Soil moisture adequate to surplus. Pasture condition 87% of normal. Hay condition fair to mostly good. Wheat condition good. Oats 22% planted, one week ahead of normal. Fruit crops wintered well. Early vegetable crops planted as weather permitted. Major farm activities: Plowing, fertilizing, planting in areas where weather cooperated.

**NORTH CAROLINA:** Temperatures about 4° above normal across the State. Precipitation 0.19 to 5.73 in.

Days suitable for fieldwork 4.7. Soil moisture 11% short, 75% adequate, 14% surplus. Pasture 1% poor, 9% fair, 76% good, 14% excellent. Crop condition wheat 6% fair, 86% good, 8% excellent; oats 5% fair, 90% good, 5% excellent; barley 6% fair, 89% good, 5% excellent; rye 6% fair, 90% good, 4% excellent; Irish potatoes 11% fair, 86% good, 3% excellent; tobacco plant beds 3% poor, 11% fair, 81% good, 5% excellent; peaches 3% poor, 18% fair, 72% good, 7% excellent; truck crops 19% fair, 76% good, 5% excellent. Corn planted 60%; cotton planted 10%; sorghum planted 13%; flue cured tobacco transplanted 20%. Wheat headed 36%. Tobacco plant bed supplies 1% very short, 3% short, 93% adequate, 3% surplus. Major activities included: Planting corn, cotton, sorghum; land preparation; and transplanting flue cured

tobacco. Other activities included: Top dressing, spraying small grains; fertilizing pastures; tending tobacco beds; tending livestock; equipment repair; general farm maintenance.

**NORTH DAKOTA:** Temperatures 3° below normal northeast to 1° above normal northwest. Extremes 14° southwest; 62° northwest, west central, east central. Precipitation 0.08 in. south central to 0.61 in. north central, northeast.

Days suitable for fieldwork 4.3. Topsoil 2% very short, 60% short, 38% adequate. Subsoil 62% very short, 38% short. Hard red spring wheat 30% planted, durum wheat 12% planted, oats 18% planted, barley 34% planted, sugarbeets 6%. Winter wheat 15% poor, 49% fair, 36% good; 16% dormant, 84% green. Condition of ranges, pastures 52% of normal; furnished 9% roughage requirements. Stockwater supplies 15% very short, 47% short, 38% adequate.

**OHIO:** Low pressure brought rain 19th to 21st. Jet stream position south of State kept high temperatures subnormal. Highs mid 50s to 60s; 1 to 7° subnormal. Lows in low to mid 40s; 1 to 4° above normal. Rainfall 0.50 to 2.50 in. with higher amounts in the north which produced above normal amounts in the north, sub normal amounts in the south. Soil temperatures at the 4.00 in. depth under bare soil averaged in the lower to mid 50s.

Days suitable for fieldwork 1.6. Most of this time was available on 18th. Soil moisture 40% adequate, 60% surplus. Insect levels were reported moderate to high for this time of the year. Activities on farms included spreading fertilizer and manure, calibrating sprayers, applying pest controls, fence, fence row maintenance, planting in drier, better drained areas. Corn planting advanced slowly, earlier plantings emerged. Winter wheat sustained some water damage from heavy rains, ponding in fields. Oat planting reached 56%, 67% 1990, 63% avg.; falling behind previous years. Potato planting 28% complete, sugarbeets 58%, tobacco bed seeding 85% complete. Canola fields blooming. Sweet corn emerged in southern areas. Tree fruits rated good. Peaches sustained some frost damage but crop better than previous two years.

**OKLAHOMA:** Temperatures 1 below normal Panhandle to 1 above normal southwest. Precipitation 0.02 in west central to 1.39 in. south central.

Days suitable for fieldwork 5.9. Topsoil moisture 65% short, 20% adequate, 15% surplus. Subsoil moisture 65% short, 35% adequate. Wheat 10% poor, 60% fair, 30% good; 95% jointing, 95% 1990, 85% avg.; 60% heading, 10% 1990, 20% avg. Wheat condition fair to good; development ahead of normal. Insect activity light. Corn 40% planted, 45% 1990, 40% avg. 15% up to stand, 10% 1990, 15% avg. Sorghum 70% seedbed prepared, 50% 1990, 55% avg. Soybeans 75% seedbed prepared, 50% 1990, 45% avg. Peanuts 55% seedbed prepared, 35% 1990, 60% avg. Cotton 75% seedbed prepared, 45% 1990, 60% avg. Pasture condition 80%. Cattle fair to good; marketings average, prices lower.

**OREGON:** Temperatures near normal along coast, southwest interior; about 2° above normal Willamette Valley; near normal east except extreme south central; extreme northeast about 3° below normal, areas near Columbia Gorge about 4° normal. Precipitation 0.20 to 0.40 in. across most of State. Some areas east of Cascades had up to 0.75 in. Precipitation from isolated thunder

showers. A few eastern areas had little or no rain.

Soil moisture 29% short, 57% adequate, 15% surplus. Winter wheat 1% very poor, 2% poor, 60% fair, 32% good, 5% excellent. Barley 69% seeded, 765 1990, 81% avg. Wet conditions delayed fieldwork; tillage, planting, fertilizing, underway some areas. Apples expected full bloom end of week, Hood River valley; bloom beginning in south valley; anjou's full bloom, bartlett bloom slow, light. Cherry pollination good in the Dalles district. Blueberries, strawberries in bloom Washington county. Onions, peas, broccoli, beans planting in west, weather permitting. Livestock good to excellent all areas; Klamath county still feeding hay; calving, lambing ending. Pastures good west with warmer weather needed for spring growth. Range, pasture poor to fair east on average, in need of rain. Pasture, range 11% poor, 53% fair, 32% good, 4% excellent.

**PENNSYLVANIA:** Cold at ends of week, warm in middle, normal precipitation. Temperature 49°, 1° above normal. Extremes 28°; 77°. Precipitation 0.88 in., 0.06 in. above normal.

Days suitable for fieldwork 3. Soil moisture 3% short, 76% adequate, 21% surplus. Plowing 50% complete, 42% 1990, 45% avg. Corn 1% planted, 1% 1990, 4% avg. Oats 49% planted, 36% 1990, 49% avg. Potatoes 25% planted, 21% 1990, 23% avg. Tobacco beds 65% planted, 84% 1990, 69% avg. Barley 96% pre-boot, 98% 1990, 98% avg.; 4% boot, 2% 1990, 2% avg. Wheat 98% pre-boot, 98% 1990, 99% avg.; 2% boot, 2% 1990, 1% avg. Wheat crop condition 1% very poor, 4% poor, 17% fair, 61% good, 17% excellent. Oats crop condition 1% very poor, 3% poor, 20% fair, 58% good, 18% excellent. Hay stands mostly good. Feed from pastures 6% very poor, 8% poor, 40% fair, 46% good. Peaches 34% pre pink, 49% 1990, 56% avg.; 33% pink, 30% 1990, 23% avg.; 33% full bloom or past, 21% 1990, 21% avg. Cherries 39% pre pink, 68% 1990, 59% avg.; 38% pink, 22% 1990, 24% avg.; 23% full bloom or past, 10% 1990, 17% avg. Apples 67% pre pink, 83% 1990, 81% avg.; 28% pink, 15% 1990, 16% avg; 5% full bloom or past, 2% 1990, 3% avg. Activities: Spring plowing; planting crops; repairing fence; spreading fertilizer; maintaining machinery; caring for livestock.

**PUERTO RICO:** Island rainfall 0.97 in. was 0.11 in. below normal. Highest weekly total 5.22 in. Pico Del Este Luquillo, 3.21 in. Rio Piedras Aes, 3.16 in. Canovanas. Divisional temperatures 76 to 78° on the Coasts, 69 to 73° in the interior with mean station temperatures 61.7° at Pico Del Este Luquillo to 80.2° at Roosevelt Roads N.S. Extremes 53°; 91°.

**SOUTH CAROLINA:** Temperatures 2 to 3° above normal. Rainfall 0.60 in. northeast to 2.70 in. mountains.

Days suitable for fieldwork 4.4. Soil moisture 7% short, 89% adequate, 4% surplus. Tobacco fair to good; 71% planted, 89% 1990, 57% avg. Corn fair to good; 81% planted, 91% 1990, 82% avg. Watermelon fair to good; 81% planted, 71% 1990, 77% avg. Cantaloupes fair to good; 68% planted, 57% 1990, 61% avg. Peaches good. Tomatoes good; 96% planted, 95% 1990, 92% avg. Cucumbers fair to good; 69% planted, 83% 1990, 74% avg. Snap beans fair to good; 50% planted, 51% 1990, 57% avg. Oats fair to good; 58% headed, 68% 1990, 49% avg.; 1% turning color, 2% 1990, 0% avg. Wheat fair to good; 61% headed, 75% 1990, 46% avg. Grain hay fair to good; 9%

harvested, 12% 1990, 6% avg. Pastures fair to good.

**SOUTH DAKOTA:** Temperatures 2 to 5° below normal. Extremes 12°; 64°. Growing degree days well below normal Statewide. Ranges 6 to 32° days below normal. Precipitation widespread, amounts varied, most locations below normal for week. Largest amount 1.02 in. Black Hills received 6.00 in. to 12.0 in. of snow.

Days suitable for fieldwork 1.7. Topsoil 16% short, 78% adequate, 6% surplus. Subsoil 21% very short, 56% short, 23% adequate. Livestock 1% poor, 7% fair, 73% good, 19% excellent. Feed supplies 7% very short, 12% short, 70% adequate, 11% surplus. Stockwater supplies 18% very short, 26% short, 54% adequate, 2% surplus.

**TENNESSEE:** Frontal systems brought scattered showers statewide. Temperatures above normal except Plateau. Precipitation averaged above normal east, below normal west.

Days suitable for fieldwork 3.0. Soil moisture 50% surplus, 50% adequate. Corn 10% planted, 10% 1990, 27% avg. Cotton 1% planted, 0% 1990, 4% avg. Sorghum 1% planted, 1% 1990, 5% avg. Tobacco 82% plants up, 88% 1990, 85% avg. Wheat 78% jointed, 88% 1990, 79% avg.; 8% headed, 12% 1990, 10% avg.; 33% fair, 64% good, 3% excellent. Apple trees 94% budding, 94% 1990, 96% avg.; 78% blooming, 82% 1990, 86% avg. Very little fieldwork last week due to excessive moisture.

**TEXAS:** Even though much of eastern half of State received some rainfall, week turned out relatively dry statewide for this time of year. Minor disturbances moved by from southwest early in week, producing meager amounts of rainfall. At mid week, a stronger disturbance passed, creating more significant rains for eastern half of State. Behind this disturbance more settled weather arrived as week closed out. Rainfall amounts below normal across all of State during past week. East Texas more than 0.75 in. of rain for entire time period but still fell short of normal since spring is typically very wet. Western half of State quite dry with zero to a few hundredths of an inch reported on average.

**Crops:** Small grain conditions remained generally stable for week. Irrigated wheat fields on Plains approaching pre boot stage and showing good signs of growth. Blacklands producers report rust explosion due recent damp weather. Hill Country wheat fields continued to head out with minimal problems. Wheat fields further south continued to mature, fair to average yields expected. Statewide wheat condition is rated at 58% of normal compared with 71% 1990. Corn stands continued to progress well most growing areas. However, large amounts of rainfall in Blacklands, Coastal regions slowed cultivation activities, stressed plant development. Pre planting activities continued full swing on Plains as planting should get underway soon. Some minimal hail damage reported by South Texas producers, corn plants should survive. Statewide corn condition is rated at 87% of normal compared with 81% 1990. Pre planting activities on Plains also continued for sorghum. Existing stands other growing areas progressing well, but need warmer weather to promote plant development. Blacklands, South Texas producers still battling green bug problems, no major damage reported. Statewide sorghum condition was rated at 81% of normal compared with 81% 1990. Prospects for cotton planting on Plains not favorable due lack of moisture, but pre planting activities continued. Emerged cotton fields other areas of State

continued to progress well, but warmer, drier weather needed for cultivating activities to resume. Rice planting slowed another week by wet conditions, but emerged fields looked real good. Some Upper Coastal producers began spraying for weed control. The peach crop continued excellent shape. Fruit thinning, spraying continued. Some light hail damage reported Blacklands trees, but for most part, no major damage reported. Other field crops: Rice 40% emerged, 36% 1990, 44% avg. Soybeans 1% planted, 5% 1990, 2% avg. Sugarbeets 45% planted, 62% 1990, 73% avg.

**Commercial Vegetables:** Rio Grande Valley, onion harvest resumed, as well as harvest of early squash. Recent rains really helped other vegetable crops. Pepper, tomatoes progressing well. San Antonio Winter Garden, watermelons continued good progress. Onions, cabbage, peppers, beets, melons suffered some hail damage, but for most part, should survive with only minor set backs. Cabbage, onion harvest continued full swing. East Texas, most vegetable planting completed. Early weeds becoming problem. Producers would like to see some warmer temperatures. High Plains, onion sets continued good shape despite dry, windy conditions. Tomatoes, peppers being planted. Potato crop looks real good. Trans Pecos, chili planting well underway. Onion sets doing good, were being watered.

**Range and Livestock:** Northern ranges, pastures continue to diminish quantity, quality. Livestock remained fair shape. Supplemental feeding necessary some cases due short rangeland. Other areas of State, forage production, quality continued to increase as livestock showed good signs of weight gain. Sheep, goat shearing winding down. Range, pasture 1% very poor, 11% poor, 46% fair, 34% good, 8% excellent.

**UTAH:** Maximum temperatures 4° less than normal throughout the State, average minimums 2° less than normal. Precipitation amounts ranged from light to moderate in the mountainous regions of the State, to heavy in the western division. No precipitation was reported in the Dixie, southeastern divisions.

Days suitable for fieldwork 5.8. Soil moisture 38% short, 62% adequate. Spring wheat 87% seeded, 62% avg.; 62% emerged, 73% 1990, 73% avg. Barley 85% seeded, 78% avg.; 42% emerged, 63% 1990, 63% avg. Oats 61% seeded, 62% 1990, 60% avg.; 27% emerged, 3/4 1990, 37% avg. Corn 8% seeded, 12% 1990, 12% avg. Winter wheat height 4.0 in., 6.6 in. 1990, 6.3 in. avg. Alfalfa height 3.5 in., 7 in. avg. Peach crop losses due to cold temperatures near 100% in some areas. Other fruits are in mostly fair. Calving 83% complete, 80% avg. Farm flock lambing 85% complete, 93% avg. Range flock lambing 58% complete, 59% avg. Farm flock shearing 83% complete, 80% avg. Range flock shearing 72% complete, 75% avg. Some pneumonia reported in sheared flocks. Pasture, range fair to good.

**VIRGINIA:** Temperatures below normal at the beginning of the week, above normal by mid week, below normal at the end of the week. Extremes 29°; 87°. Most of the State 0.50 in. of rain with above normal amounts in the south, west.

Days suitable for fieldwork 4.0. Topsoil 19% short, 71% adequate, 10% surplus. Corn 25% planted, 15% 1990, 16% avg. Corn condition 39% fair, 53% good, 8% excellent. Wheat condition 31% fair, 61% good, 8% excellent. Barley condition 28% fair, 70% good, 2% excellent.

Alfalfa condition 21% fair, 67% good, 12% excellent. Other hay condition 2% poor, 13% fair, 66% good, 19% excellent. Tobacco planted condition 43% fair, 55% good, 2% excellent. Apples, peaches both over 60% good condition. Good pollination, heavy fruit set on peaches which may require thinning or pruning. Pasture condition 10% fair, 70% good, and 20% excellent. Harvested rye, hay for silage. Sprayed alfalfa for weevils. Tobacco plants growing rapidly. Some powdery mildew in wheat. Planting tomatoes, snap beans, cucumbers, other vegetables. Fumigating, applying herbicides to peanut land. Cotton planting commenced. Prepared land for spring planting.

**WASHINGTON:** Temperatures 3° above normal to 3° below normal east; 3° above normal to 2° below normal west. Precipitation none to 0.30 in. east; none to 0.34 in. west.

Days suitable for fieldwork 6.7. Soil moisture 78% very short, 12% short, 10% adequate. Range, pasture 13% very poor, 30% poor, 31% fair, 26% good. Hay, other roughage 5% short, 89% adequate, 6% surplus. Winter wheat 36% very poor, 38% poor, 14% fair, 12% good. Winter barley 24% very poor, 59% poor, 10% fair, 7% good. Potatoes planted 42%; emerged 14%. Spring wheat planted 84%; emerged 53%. Spring barley planted 73%; emerged 34%. Dry peas planted 50%. Dry, fair conditions speeded up fieldwork. Spring wheat, barley seeding continued. Early varieties of canola are nearly ready to bolt. Fruit trees were at full bloom or past bloom depending on location across the State. Pollination weather was good. The first codling moth was trapped this season in Yakima County. Strawberries in western areas were starting to bloom. Marion berries sustained winter damage. Spinach, green onions, garlic were maturing. Asparagus harvest was started after cool temperatures delayed it this season. Field harvest of rhubarb was active in King, Pierce Counties. Pastures continued to grow. More rain is needed east of Cascade Mountains. Tulip harvest was in full swing through the Skagit Valley.

**WEST VIRGINIA:** Temperature 55°. Extremes 33°; 85°. Precipitation 0.68 in.

Days suitable for fieldwork 3.5. Soil moisture 52% adequate, 48% surplus. Wheat, barley, good to excellent. Gardens, 23% fair, 77% good, 13% planted, 11% emerged. Tobacco good, 80% beds seeded, 46% emerged. Hay 15% fair, 52% good, 33% excellent. Apples, peaches good. Pastures 7% fair, 66% good, 27% excellent; 90% of normal. Cattle, sheep condition, good. Calving 89% complete. Lambing 91% complete. Hay supplies 70% adequate, 30% surplus. Other feed adequate. Farm activities: General maintenance, calving, lambing, fencing, plowing, seeding tobacco beds.

**WISCONSIN:** Temperature 44°, 2° below normal. Extremes 15°; 70°. Precipitation trace to 0.50 in.

Days suitable for fieldwork 3.2. Wet fields, cool temperatures kept farmers out of field until end of week. Soil moisture 65% adequate, 35% surplus. Spring plowing 15% complete, 20% 1990, 26% avg. Oats planted 15%, 20% 1990, 30% avg. Estimates from reporters say winter freeze damage to alfalfa, winter wheat fields is mostly light. Farmers reported 19% of the alfalfa having no damage, 66% with light damage, 14% with moderate damage, 1% with severe damage. Reports show 22% of winter wheat has no damage, 56% with light damage, 17% with moderate damage, 5% with severe damage.

(Continued to back cover)

## International Weather and Crop Summary

### HIGHLIGHTS

April 14 - 20, 1991

**WESTERN USSR** ... Winter grains continue greening as far north as the Central Region.

**NORTHWESTERN AFRICA** ... Light precipitation maintains adequate moisture for winter grains in the filling stage.

**EUROPE** ... Subfreezing temperatures threaten crops over the northern portion of the continent.

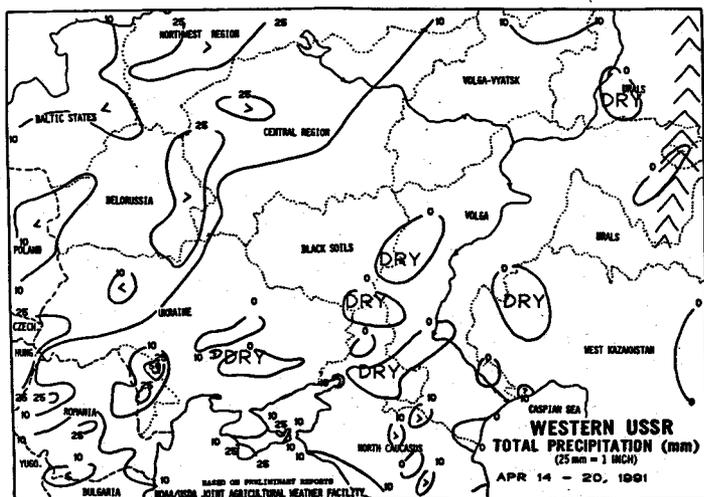
**EASTERN ASIA** ... Widespread showers benefit vegetative to heading winter wheat and maintain favorable planting conditions in most summer crop areas.

**SOUTHEAST ASIA** ... Unfavorably hot weather persists in Thailand. Showers improve local grain planting conditions in the eastern Philippines.

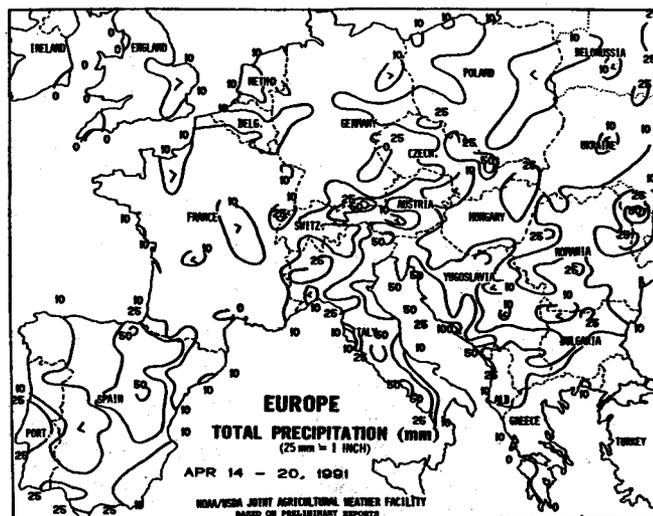
**SOUTH AFRICA** ... Dry and warmer weather favors late-filling to maturing corn.

**SOUTH AMERICA** ... Locally heavy rain disrupts summer crop harvests in southern Brazil and eastern Argentina.

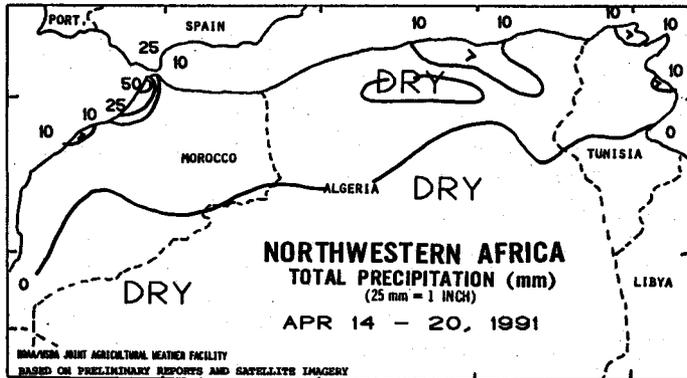
**AUSTRALIA** ... Favorable harvest conditions continue across the eastern summer crop regions.



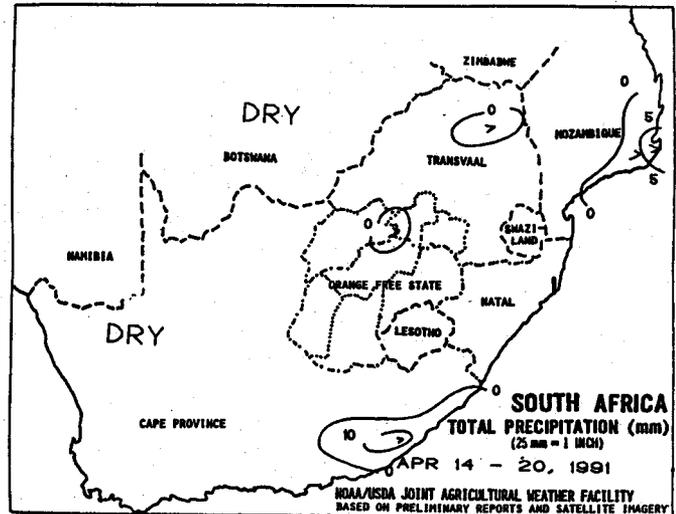
**WESTERN USSR** ... Early in the week, unseasonably warm, dry weather covered most of the region, helping spring fieldwork and prompting winter grains to continue breaking dormancy as far north as the Central Region. By week's end, a slow moving cold front brought cooler weather and widespread showers to crop areas in the Baltic States, Belorussia, the Central Region, Moldavia, and the northwestern Ukraine. Precipitation amounts generally ranged from 10 to 25mm, with local amounts in excess of 25mm. Dry weather continued to prevail over the remainder of the region. Weekly average temperatures were 1-2 degrees Celsius (C) below normal in the northwest and 3-6 degrees C above normal in the east.



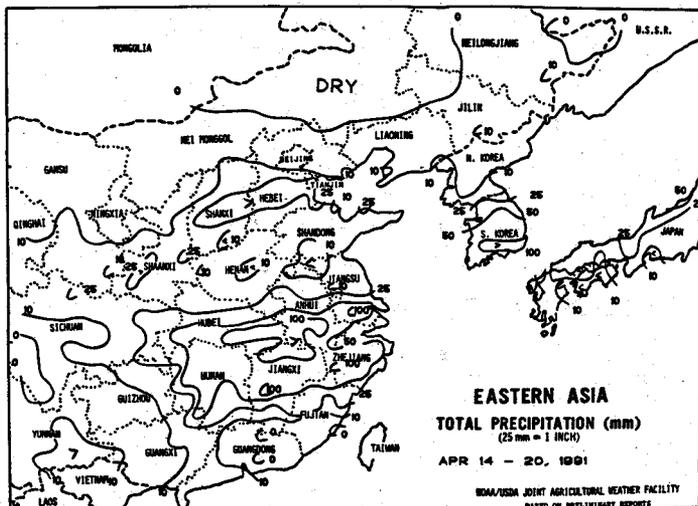
**EUROPE** ... An unseasonably cold air mass pushed southward during the week, dropping temperatures to below-normal levels. Lowest temperatures, including those for April 21, ranged from -1 to -7 degrees C in northern Spain, France, eastern England, the Benelux, Germany, Czechoslovakia, and Poland. The cold weather in these areas hampered the early growth of newly planted sugarbeets, burned the top growth of vegetative winter grains, and may have damaged some fruit trees and vineyards, especially in those areas which experienced extreme cold (-3 to -7 degrees C). Precipitation during the week was generally light (10-25mm) but widespread over the northern portion of the continent, and light to moderate (10-50mm) in the south.



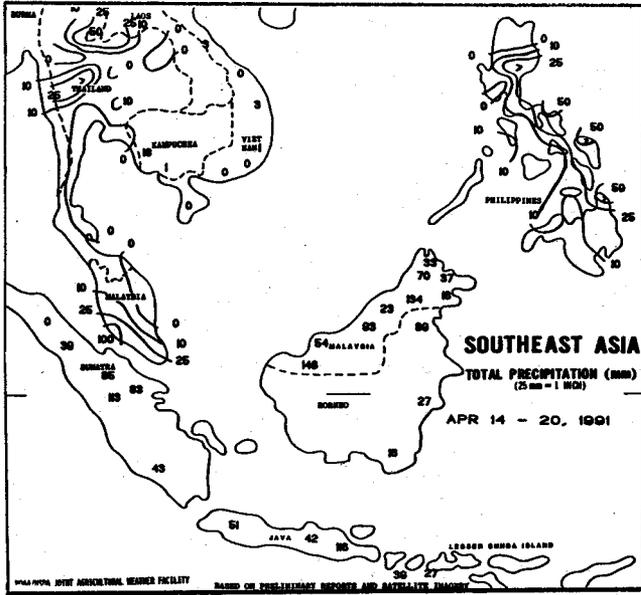
**NORTHWESTERN AFRICA** ... Winter grains in Morocco, Algeria, and Tunisia were mostly in the filling stage. Light, scattered precipitation (generally less than 10mm) covered winter grain areas over most of the region, helping to maintain adequate moisture conditions for crops. Weekly temperatures over the region were 1-3 degrees C below average, lowering evaporation rates.



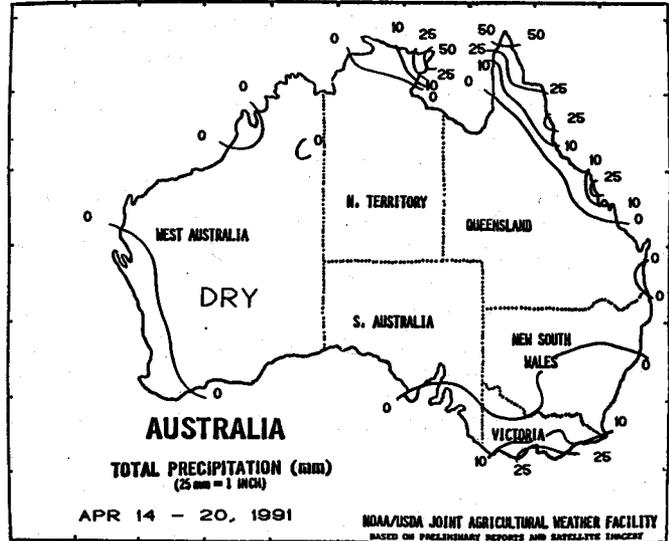
**SOUTH AFRICA** ... Seasonably dry and mild weather benefited late-filling to mature corn over the western two thirds of the Maize Triangle. In the East, temperatures were lower than normal, with brief periods of freezing temperatures late in the week likely causing no damage to mostly maturing corn. Elsewhere, dry, warmer-than-normal weather favored maturing crops in the eastern Cape Province and Natal.



**EASTERN ASIA** ... Beneficial showers (5-43mm) continued over the North China Plain, maintaining generally favorable topsoil moisture for vegetative to heading winter wheat. Temperatures averaged 1-3 degrees C below normal, with local freezing temperatures possibly burning back growth in outlying crop areas. To the south, moderate to heavy showers (25-100mm or more) covered a large section of the Yangtze Valley, with heaviest rain (100-147mm) in middle sections of the valley, likely resulting in local flooding. Moderate rain (10-44mm) benefited vegetative south-coastal rice in eastern Guangxi and western Guangdong. However, continued drier- and warmer-than-normal weather from central Guangdong to northern Fujian reduced available moisture for vegetative rice.



**SOUTHEAST ASIA** ... Unseasonably hot weather persisted across Thailand's rainfed rice and corn areas, maintaining unfavorable conditions for early planting. Weekly temperatures averaged 2-3 degrees C above normal, with highs of 38-42 degrees C common at most locations. Moderate to heavy showers (19-94mm) improved irrigation reserves in Thailand's northern hills region, but rainfall elsewhere was widely scattered, bringing little relief from the high evaporative losses. In the Philippines, rainfall increased over many eastern grain regions, with amounts totaling 10-50mm or more from southern Luzon to Mindanao. More rainfall is needed in upcoming weeks across the Philippines to ensure normal planting of main season crops. Farther south, rainfall continued to taper off over Java, but moderate to heavy showers (25-146mm) continued over Sumatra and most of Malaysia's primary palm oil areas.



**AUSTRALIA** ... Favorable harvest conditions continued across the summer crop regions of Queensland and New South Wales. Light to moderate showers fell along Queensland's eastern coast. Only very light rain fell in the western wheat areas, where soil moisture should be near normal.

**SOUTH AMERICA** ... In south-central Brazil, locally heavy rain (100-316mm) inundated much of Rio Grande do Sul, delaying the harvest of soybeans severely stressed by the long summer drought. Wet weather (40-72mm) also slowed soybean harvesting throughout much of Brazil's primary crop areas. Lighter rain (10-25mm) fell in southern Mato Grosso do Sul and northern Sao Paulo, while dry weather prevailed over eastern Minas Gerais. In Argentina, widespread showers (10-25mm) covered the entire crop region, with isolated heavy rain (75-112mm) disrupting fieldwork in northern Buenos Aires. Summer crop harvesting had progressed rapidly until the recent wet weather.



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(Continued from front cover)

**Kansas** to the **Gulf coast**, producing flash flooding in **Kansas** and up to 6 inches of rain in **northern Louisiana**. For the second week in a row, a storm delivered beneficial rain to the eastern halves of **Kansas** and **Oklahoma** but left the States' western halves mostly dry. Heavy rain on Thursday and Friday initiated or heightened flooding in parts of **Iowa, Indiana, and North Carolina**. By week's end, the storm reached the **East coast**, deluging **Norfolk, VA**, with nearly 6 inches of rain. Meanwhile, a cold front entered **California**, dropping light amounts of precipitation statewide.

(Continued from p. 16)

**WYOMING:** Temperatures mostly below normal. Precipitation near, slightly below normal south central, southwest; mostly well above normal elsewhere.

Days suitable for fieldwork 1.0. Topsoil 23% short, 56% adequate, 21 % surplus. Spring wheat 40% planted, 50% 1990, 35% avg.; 15% emerged, 15% 1990, 10% avg. Oats 40% planted, 45% 1990, 35% avg.; 10% emerged, 20% 1990, 10% avg. Barley 70% planted, 70% 1990, 65% avg.; 30% emerged, 40% 1990, 25% avg. Sugarbeets 60% planted, 40% 1990, 40% avg.; 5% emerged, small amount 1990, 5% avg. Corn small amount planted, 0% 1990, small amount avg. Potatoes 20% planted, 15% 1990, 5% avg.; small amount emerged. Winter wheat fair to mostly good. Alfalfa prospects mostly good. Livestock mostly good. Spring calves born 80%, 80% 1990, 75% avg. Death losses light to normal. Farm flock: Ewes lambed 90%, 85% 1990, 85% avg.; shorn 75%, 85% 1990, 75% avg. Range flock: Ewes lambed 40%, 40% 1990, 45% avg.; shorn 55%, 70% 1990, 50% avg. Death losses light to normal. Ranges, pastures good to excellent.

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