

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

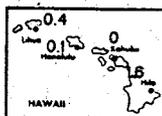
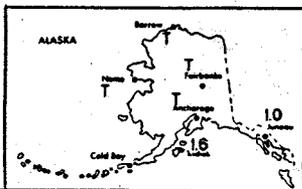
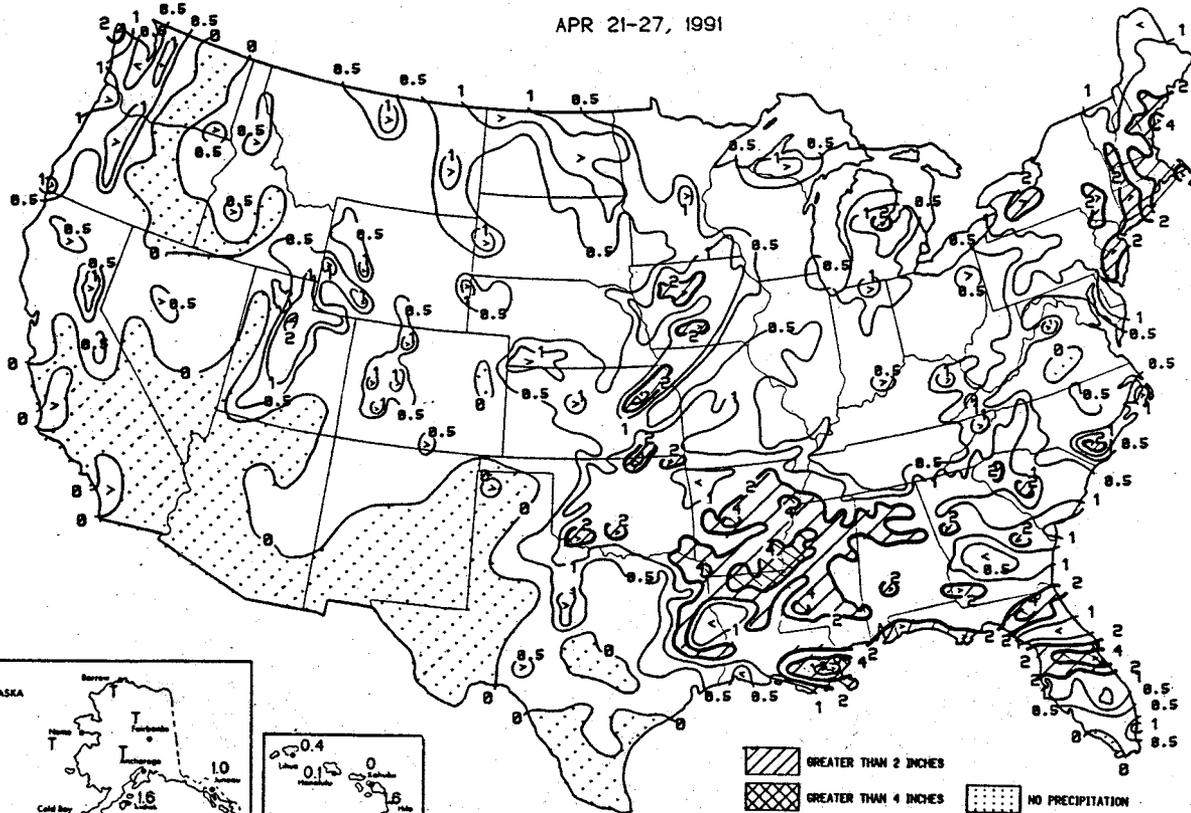
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April 30, 1991

TOTAL PRECIPITATION, INCHES

APR 21-27, 1991



NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports

HIGHLIGHTS

April 21 - 27, 1991

A formidable east coast storm dumped heavy rain on **New England** early in the week. But a powerful middle- to late-week storm made weather headlines because of a vicious tornado outbreak in **Kansas**. In contrast, the storm provided beneficial moisture to parts of the **Plains**, but worsened already wet conditions in the **lower Mississippi Valley**. The early-week system caused widespread flooding from **New York to Maine**. **Portland, ME**, received 4 inches of rain on Sunday. Gusty easterlies accompanied the deluge. A cool high pressure system settled into the **East** in the storm's wake, briefly changing rain to snow in the **central Appalachians**. Excessive rain continued to plague the **lower Mississippi Valley** and the **Gulf Coast States** as frequent thunderstorms focused along a stalled frontal boundary. The **New Orleans, LA**, area noted a weekly rainfall of 8 inches.

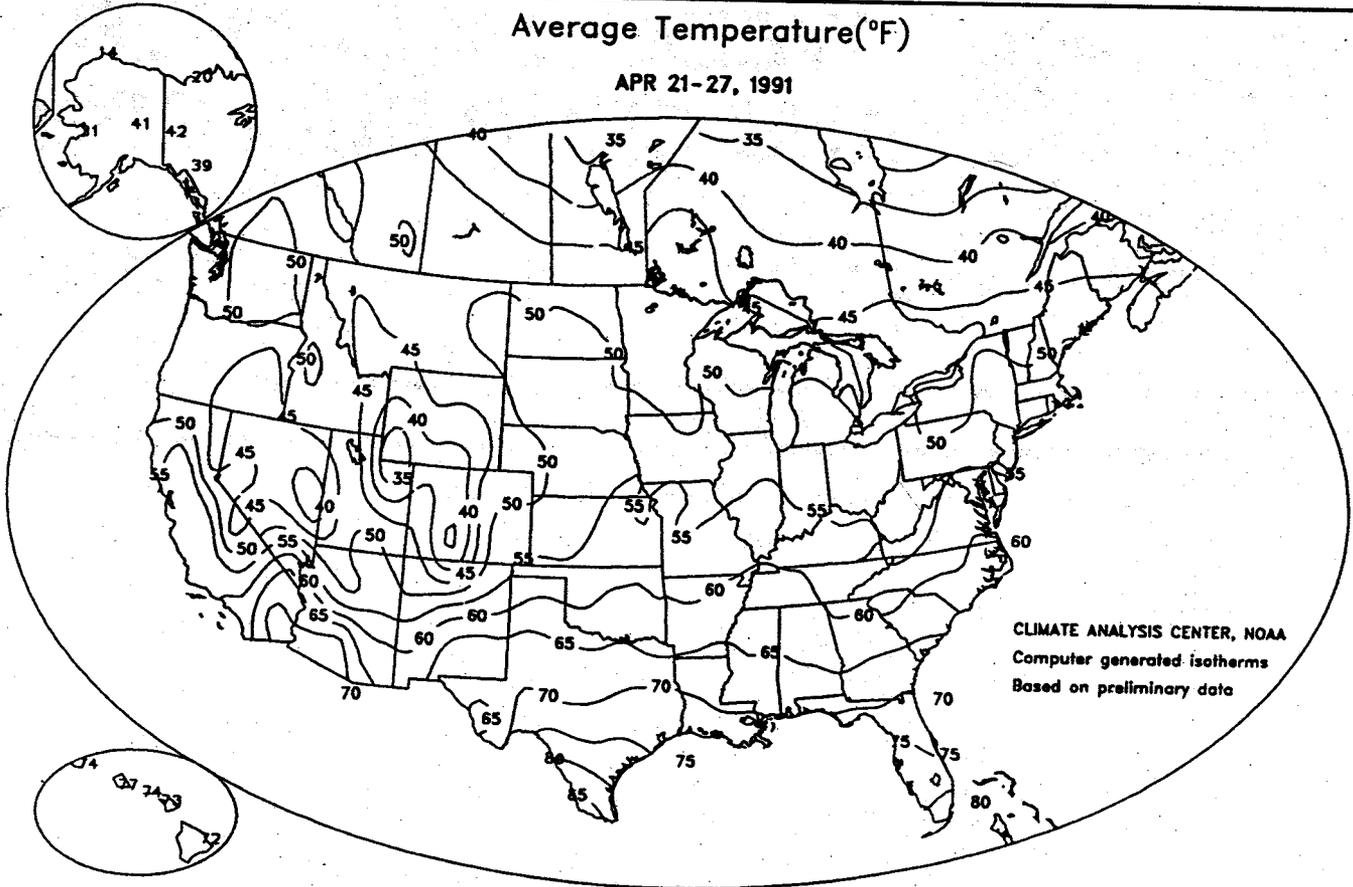
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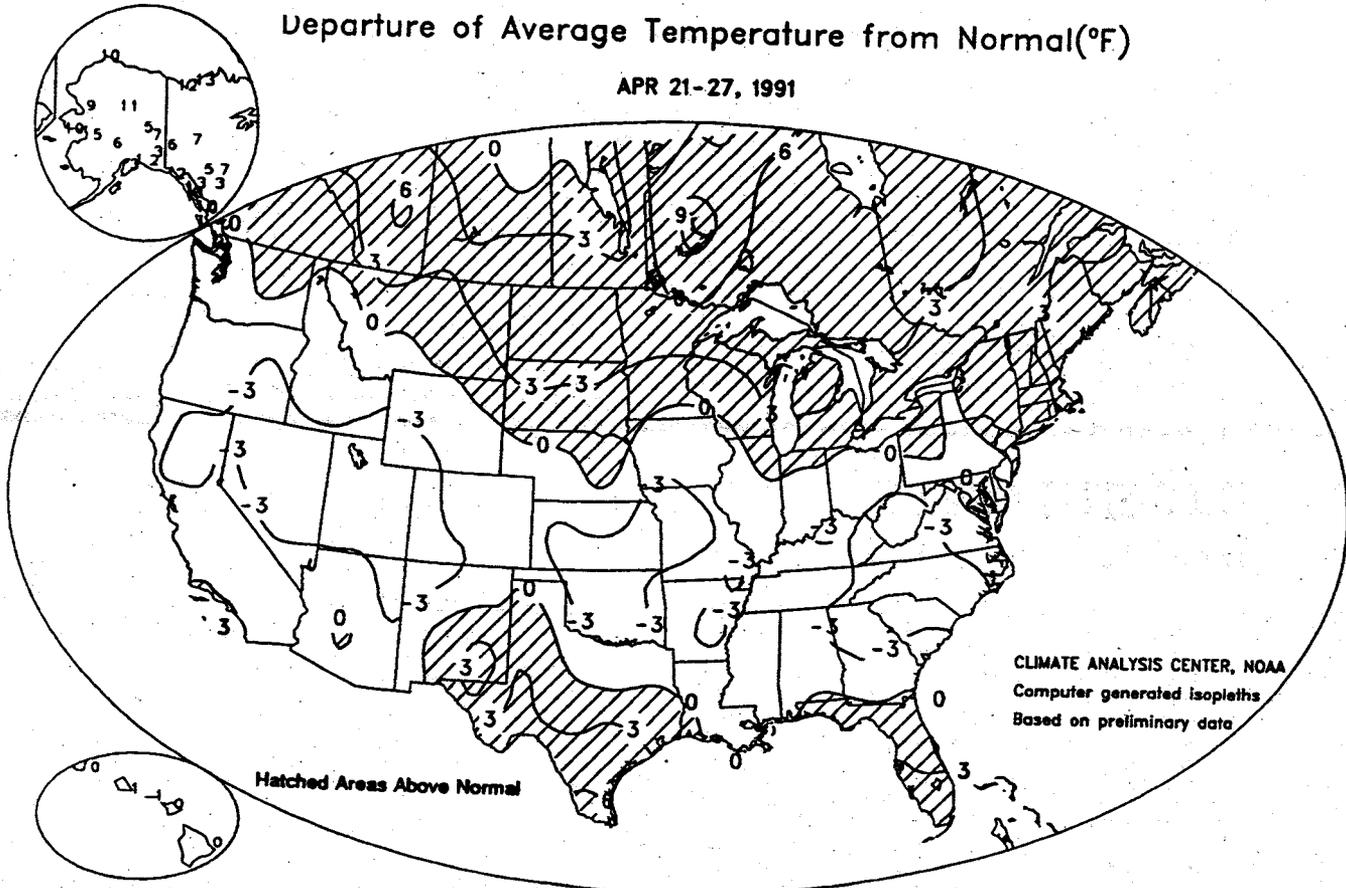
Average Temperature(°F)

APR 21-27, 1991



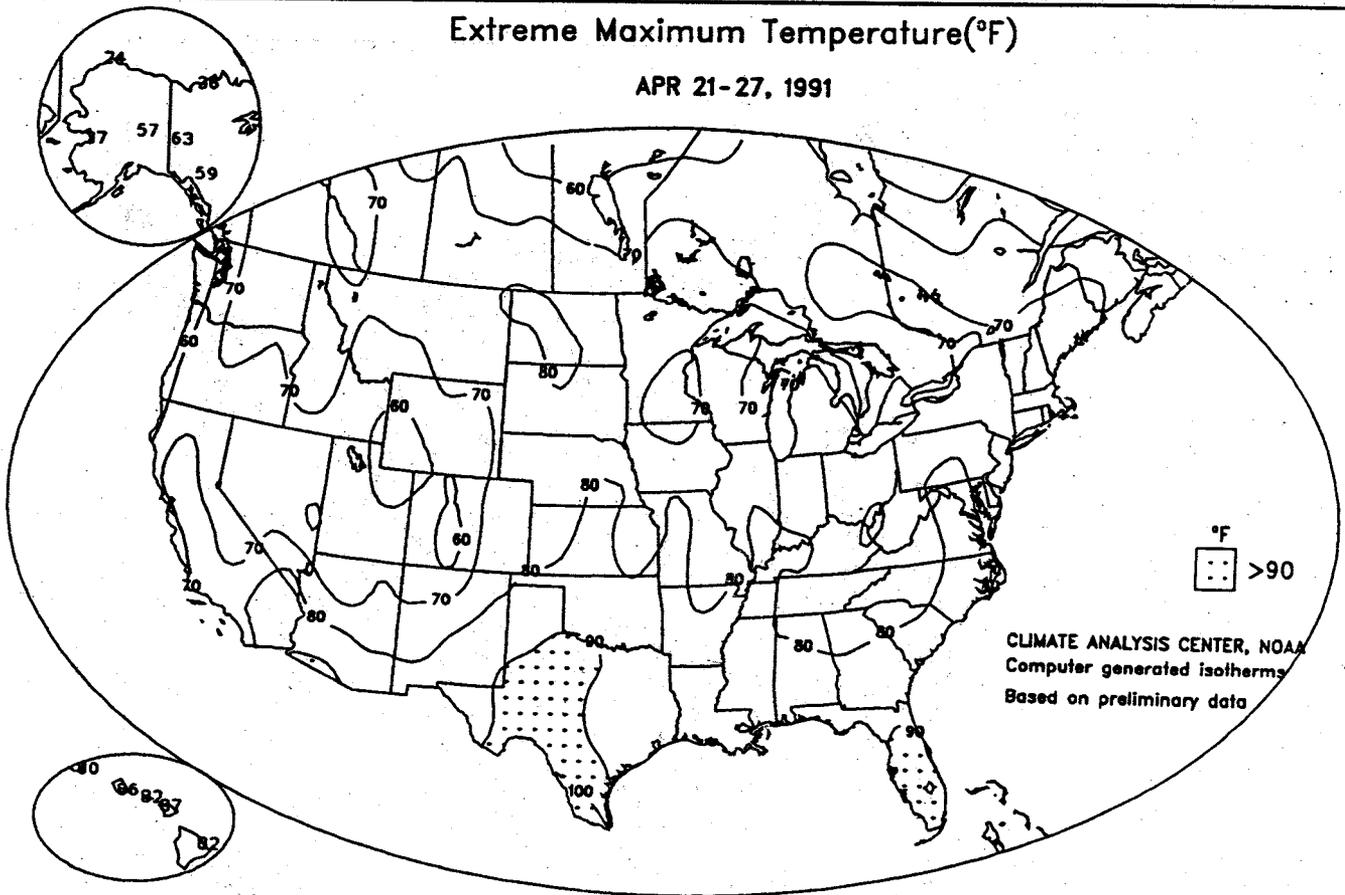
Departure of Average Temperature from Normal(°F)

APR 21-27, 1991



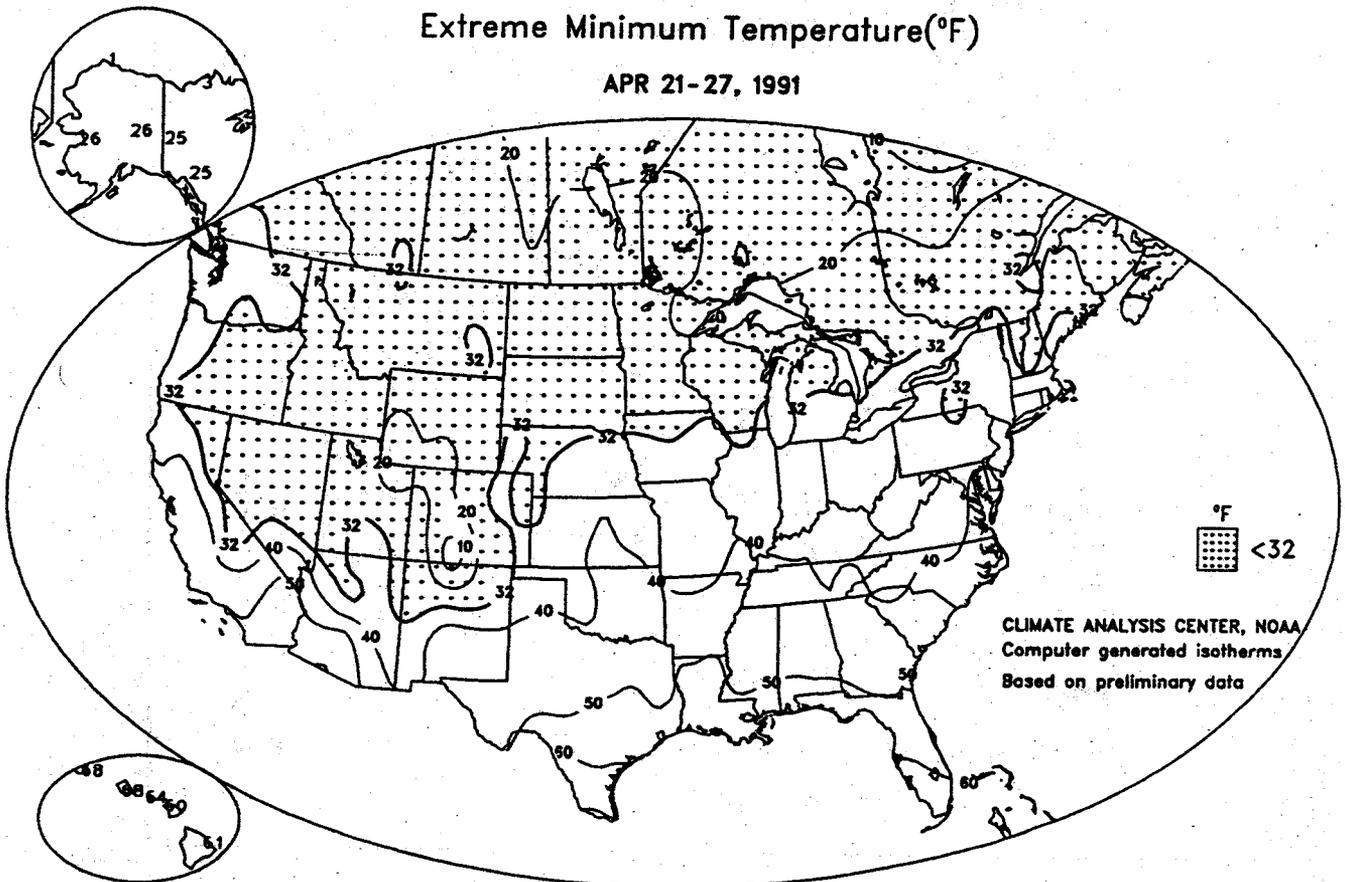
Extreme Maximum Temperature(°F)

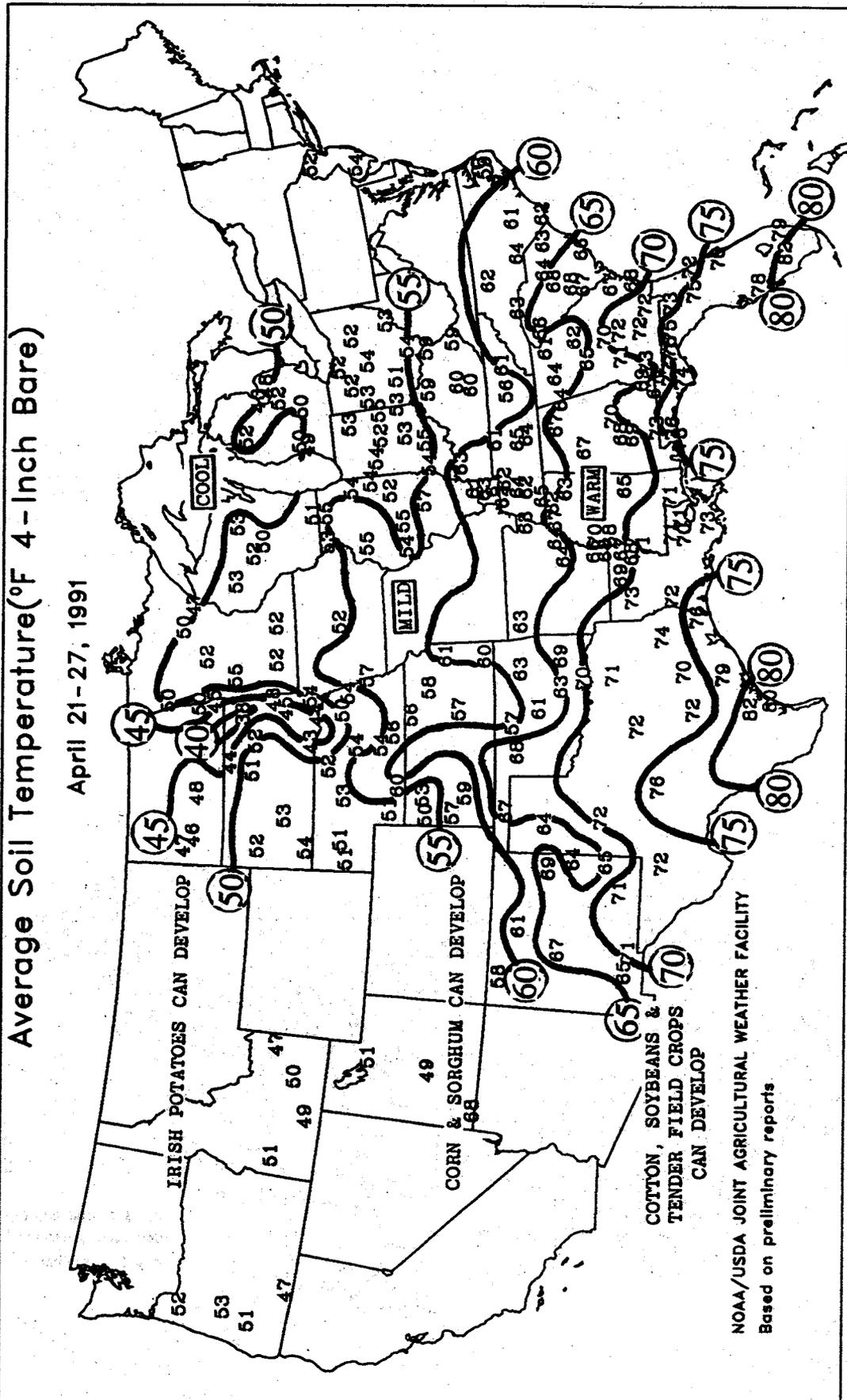
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Extreme Minimum Temperature(°F)

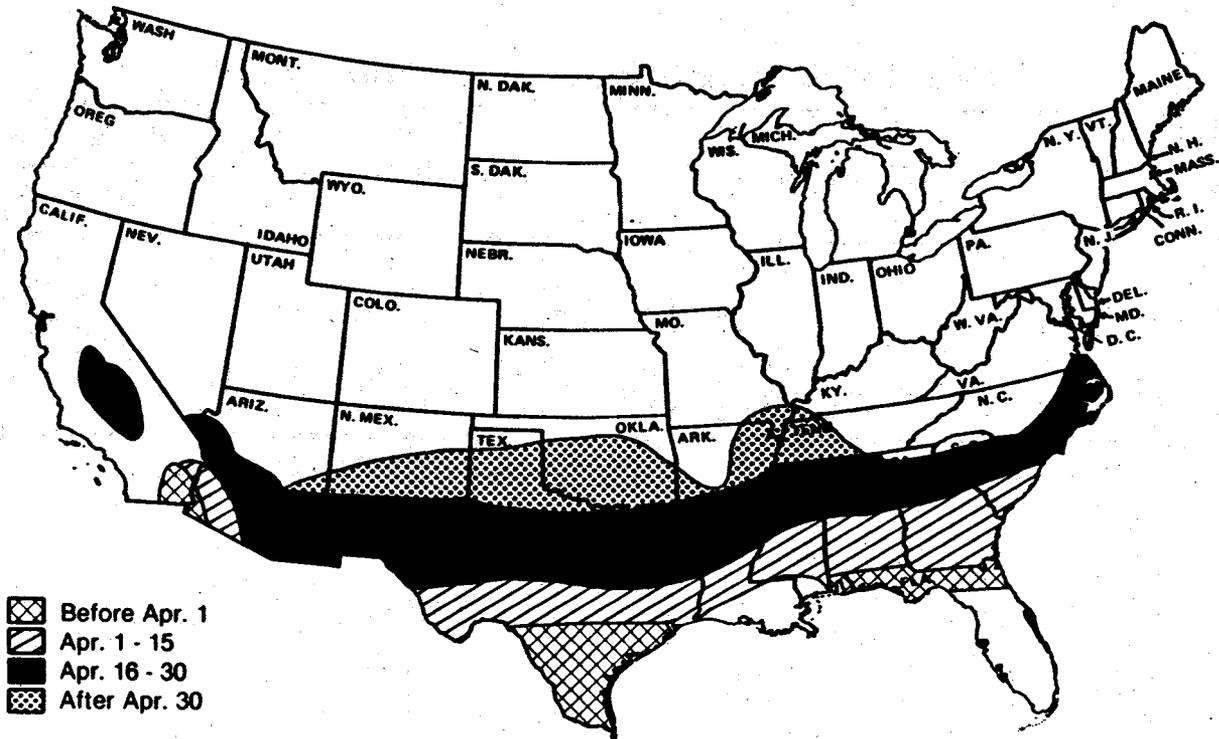
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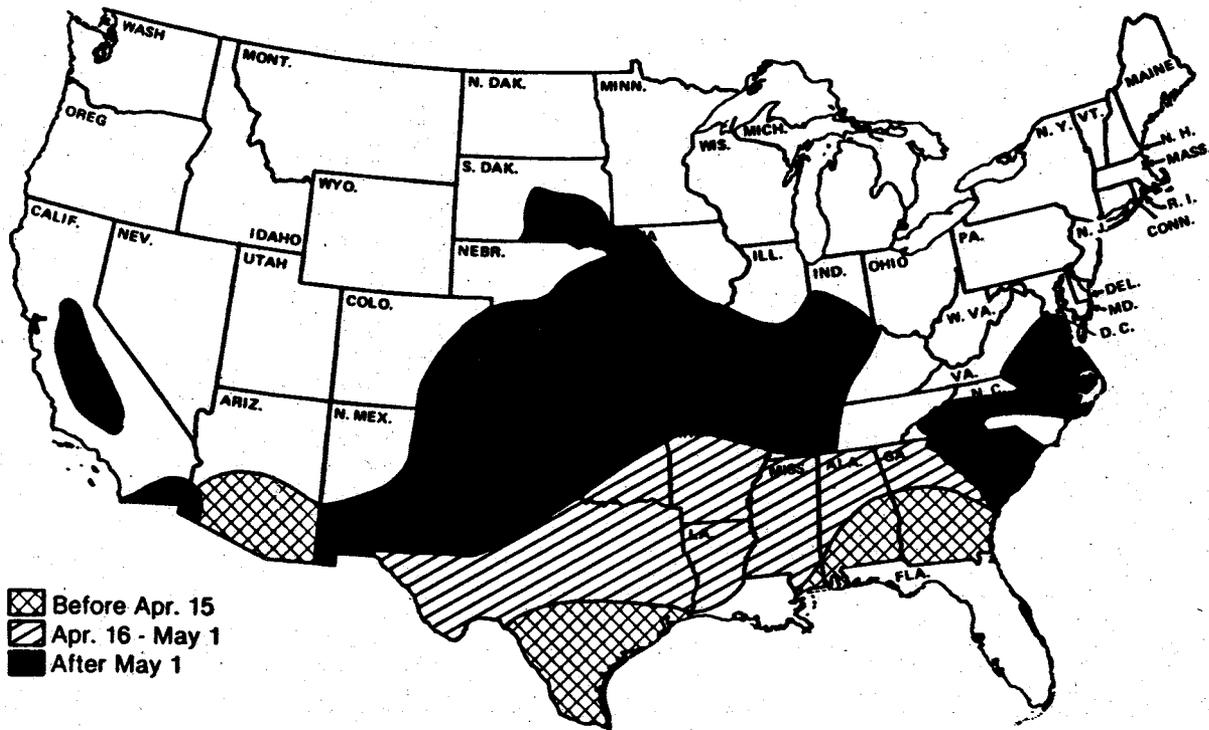
Cotton

Usual Start of Planting, Principal Areas in the United States



Grain Sorghum

Usual Start of Planting, Principal Areas in the United States



National Weather Data for Selected Cities

Weather Data for the Week Ending April 27, 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
AL BIRMINGHAM	72	55	79	47	63	-2	1.0	-.1	.7	7.4	66	15.0	71	87	54	0	0	4	1
MOBILE	76	59	83	51	68	-3	3.1	1.1	2.1	13.2	117	32.6	157	97	60	0	0	3	2
MONTGOMERY	75	56	85	48	65	-3	1.2	-.3	.6	12.5	126	23.5	127	94	54	0	0	5	1
AK ANCHORAGE	47	33	50	29	40	1	1.4	-.1	.6	.9	72	1.9	67	85	51	0	0	3	0
BARROW	20	10	24	2	15	11	1.1	-.1	.1	.1	30	.3	37	90	78	0	0	7	1
FAIRBANKS	54	29	57	26	42	5	1.0	-.1	.1	2.2	361	3.6	225	81	32	0	0	0	0
JUNEAU	51	38	60	35	45	5	1.6	-.7	.7	7.9	133	19.3	145	96	55	0	0	6	0
KODIAK	44	37	48	35	40	2	1.6	-.7	.8	7.0	98	27.8	155	92	72	0	0	3	1
NOME	38	28	41	23	33	10	1.0	-.1	.1	1.2	108	2.7	116	89	71	0	0	5	1
AZ PHOENIX	84	60	86	59	72	2	1.0	-.1	.1	2.1	195	3.2	139	39	15	0	0	0	0
PRESCOTT	66	38	69	33	52	2	1.0	-.1	.1	4.0	180	6.2	113	60	21	0	0	0	0
TUCSON	82	48	84	46	65	-2	1.0	-.1	.1	1.4	143	3.5	145	49	11	0	0	0	0
YUMA	84	59	90	56	72	2	1.0	-.1	.1	.8	296	1.8	210	49	17	1	0	0	0
AR FORT SMITH	72	52	85	46	62	-1	1.0	-.1	.1	10.5	138	13.5	113	93	55	0	0	0	0
LITTLE ROCK	70	53	79	46	62	-3	3.2	1.9	2.2	12.4	131	20.7	120	86	56	0	0	5	2
CA BAKERSFIELD	73	48	77	44	60	-4	1.0	-.1	.1	3.8	252	4.5	129	80	31	0	0	0	0
BUREKA	56	47	58	44	51	-1	1.0	-.1	.1	9.0	117	13.4	68	89	67	0	0	0	0
FRESNO	72	49	76	46	61	-1	1.0	-.1	.1	7.3	274	8.4	129	82	31	0	0	0	0
LOS ANGELES	67	54	82	52	61	-1	1.0	-.1	.1	4.0	152	7.9	97	88	53	0	0	0	0
REDDING	67	45	75	39	56	-2	1.0	-.1	.1	10.2	134	15.1	68	88	47	0	0	2	0
SACRAMENTO	68	47	75	41	58	-1	1.0	-.1	.1	6.5	200	9.9	98	93	52	0	0	0	0
SAN DIEGO	66	56	70	54	61	-1	1.0	-.1	.1	7.3	288	10.4	168	83	60	0	0	0	0
SAN FRANCISCO	61	50	66	46	56	-1	1.0	-.1	.1	6.7	166	10.7	90	88	57	0	0	0	0
CO DENVER	61	39	74	36	50	0	1.0	-.1	.1	1.8	66	2.7	68	71	26	0	0	1	0
GRAND JUNCTION	60	37	69	27	49	-1	1.0	-.1	.1	1.5	110	2.5	100	78	26	0	0	1	3
FURBIO	68	38	77	30	53	-1	1.0	-.1	.1	1.3	80	1.3	65	66	17	0	0	1	0
CT BRIDGEPORT	63	45	72	42	54	2	1.7	-.8	1.6	6.9	95	11.6	86	84	49	0	0	0	4
HARTFORD	67	42	81	36	55	3	2.1	1.2	2.0	6.9	90	11.2	77	87	27	0	0	0	3
DC WASHINGTON	69	49	82	42	59	-1	1.1	-.6	0	5.7	93	9.4	82	84	45	0	0	0	3
FL APALACHICOLA	69	49	82	42	59	-1	2.8	2.1	2.1	19.1	272	43.3	305	98	67	0	0	0	3
DAYTONA BEACH	78	64	85	56	71	1	1.9	1.4	3	13.7	274	17.5	168	96	57	1	0	0	3
JACKSONVILLE	81	62	90	51	71	0	2.7	1.9	2.4	13.0	213	24.7	196	95	61	1	0	0	3
KEY WEST	82	62	90	51	71	0	2.7	1.9	2.4	13.0	213	24.7	196	95	61	1	0	0	3
MIAMI	88	77	90	68	83	4	1.0	-.4	0	4.3	171	6.8	109	85	63	2	0	0	0
ORLANDO	89	72	94	64	80	4	1.2	-.3	1.2	7.5	161	11.1	127	91	50	3	0	2	1
TALLAHASSEE	84	65	91	57	74	1	4.2	3.7	3.8	15.3	288	18.7	177	98	59	2	0	0	2
TAMPA	80	59	87	49	70	1	1.7	-.7	1.0	18.4	198	38.2	202	98	57	0	0	0	3
WEST PALM BEACH	86	68	92	58	77	4	1.4	1.0	1.2	6.3	124	9.1	89	94	60	2	0	0	3
GA ATLANTA	88	69	93	58	79	3	1.4	-.4	4	13.2	241	28.0	260	95	51	2	0	0	1
AUGUSTA	70	53	79	43	61	-3	1.3	-.4	1.3	10.9	110	18.6	97	87	53	0	0	0	3
MACON	74	51	82	45	63	-3	1.0	-.3	1.0	11.2	142	20.7	130	93	51	0	0	0	2
SAVANNAH	74	55	83	46	64	-3	1.0	-.3	1.0	12.9	154	25.5	149	95	54	0	0	0	4
HI HILLO	76	58	83	50	67	-1	1.7	1.0	1.2	12.3	184	21.5	166	94	55	0	0	0	3
HONOLULU	80	65	82	61	73	0	1.6	-1.3	.9	46.2	182	59.4	123	95	64	0	0	0	5
KAHULUI	84	70	86	68	77	1	1.1	-.1	1	7.2	148	10.0	89	77	49	0	0	0	1
LIHUE	84	63	87	60	74	-1	1.0	-.2	0	2.3	62	7.2	68	82	55	0	0	0	0
ID BOISE	78	71	80	68	75	1	1.4	-.3	2	12.4	166	14.6	84	85	67	0	0	2	0
LEWISTON	61	39	74	27	50	-1	1.4	-.1	2	2.2	108	3.7	77	85	42	0	1	4	0
POCATELLO	64	40	77	33	52	0	1.4	-.2	3	1.7	84	2.1	50	95	40	0	0	0	3
IL CHICAGO	55	35	64	30	45	-2	1.7	-.4	4	4.8	246	5.7	148	83	39	0	2	3	0
MOLINE	64	41	71	32	53	-1	1.0	-.4	4	7.4	119	9.4	105	85	42	0	0	0	0
PEORIA	66	38	79	31	52	-2	1.1	-.9	1	9.9	158	11.5	126	91	41	0	0	3	1
QUINCY	66	43	79	36	54	-1	1.4	-.5	4	6.3	100	8.1	87	89	48	0	0	0	0
ROCKFORD	64	43	76	36	54	-3	1.0	-.3	3	5.1	78	6.0	64	80	40	0	0	0	0
SPRINGFIELD	65	40	75	30	52	-1	1.6	-.4	3	6.9	108	8.4	95	85	42	0	0	0	0
IN EVANSVILLE	67	43	78	37	55	-2	1.0	-.7	2	5.6	84	7.6	77	91	44	0	0	1	0
FORT WAYNE	67	45	80	36	56	-4	1.2	-.8	2	6.5	79	12.5	88	96	58	0	0	2	0
INDIANAPOLIS	63	44	75	39	53	1	1.5	-.4	4	7.7	125	10.8	106	93	59	0	0	0	3
SOUTH BEND	64	42	78	33	53	-2	1.2	-.7	2	10.3	150	13.8	115	92	55	0	0	0	0
IA DES MOINES	63	41	75	35	52	0	1.0	-.1	6	7.0	105	10.5	94	95	48	0	0	0	3
SIOUX CITY	65	41	78	32	53	-2	1.0	-.1	6	10.5	210	11.7	164	94	42	0	0	1	4
WATERLOO	66	42	71	34	54	0	1.8	-.2	7	5.1	137	6.0	113	88	40	0	0	1	4
KS CONCORDIA	61	37	72	32	49	-2	1.6	-.7	1.0	10.7	199	11.8	166	96	50	0	0	4	1
DODGE CITY	65	45	81	41	55	-1	1.4	-.3	3	3.8	98	4.5	85	88	45	0	0	0	3
COODLAND	65	43	80	37	54	-4	1.5	-.0	3	1.8	60	2.1	54	91	49	0	0	0	3
TOPEKA	62	39	67	31	50	-2	1.5	-.1	4	1.7	83	2.0	74	88	45	0	0	1	3
WICHITA	65	44	77	35	55	-3	1.4	-.4	2	5.8	118	6.6	96	95	44	0	0	0	5
KY BOWLING GREEN	66	44	80	39	55	-4	1.6	-.0	3	2.9	70	4.0	69	93	49	0	0	0	4
LEXINGTON	69	48	81	42	59	-2	1.7	-.9	3	7.1	76	17.7	99	89	57	0	0	0	0
LOUISVILLE	64	45	77	38	55	-3	1.4	-.5	4	8.3	98	14.7	96	91	57	0	0	0	1
LA ALEXANDRIA	68	45	80	37	57	-3	1.3	-.6	3	7.2	85	14.2	95	83	51	0	0	0	1
BATON ROUGE	79	62	86	53	71	1	1.1	-1.2	1	16.9	171	30.8	162	91	53	0	0	0	3
LAKE CHARLES	79	61	85	50	70	-1	1.4	-.9	4	8.0	83	25.6	133	94	63	0	0	0	3
NEW ORLEANS	79	64	83	53	71	1	1.3	-.7	1	8.3	127	25.2	174	99	70	0	0	0	3
	77	63	83	57	70	0	5.3	4.2	4.1	19.6	225	44.3	235	96	67	0	0	2	2

Based on 1951-80 normals

Weather Data for the Week Ending April 27, 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	TEMP. °F		PRECIP.
															.01 INCH OR MORE				.50 INCH OR MORE	.01 INCH OR MORE	.50 INCH OR MORE
SHREVEPORT	76	58	86	50	67	-1	.4	-.7	.2	23.4	293	36.2	234	94	55	0	0	5	0		
ME CARIBOU	55	36	70	28	45	4	.4	-.2	.3	6.9	147	10.1	110	83	38	0	1	3	1		
PORTLAND	62	38	76	33	50	0	4.6	3.7	4.2	11.9	159	16.7	113	92	46	0	0	2	0		
MD BALTIMORE	68	46	81	39	57	0	.8	.1	.5	7.4	110	11.7	92	86	45	0	0	3	1		
SALISBURY	68	46	79	40	57	0	1.4	.7	1.2	9.1	130	16.0	117	96	51	0	0	5	1		
MA BOSTON	64	45	80	41	55	3	3.4	2.5	3.3	8.2	110	13.0	86	87	46	0	0	3	1		
CHATHAM	57	44	64	43	51	4	2.0	1.1	1.9	7.7	101	13.0	81	91	61	0	0	2	1		
MI ALPENA	60	32	68	24	46	2	.1	-.6	-.1	5.5	133	7.0	97	84	34	0	0	1	1		
DETROIT	62	42	76	36	52	1	.2	-.5	-.2	3.9	73	6.3	71	91	58	0	3	0	0		
FLINT	62	40	77	34	51	2	1.0	-.3	-.7	6.9	143	9.1	116	92	52	0	0	2	0		
GRAND RAPIDS	64	42	77	35	53	3	.7	-.1	-.5	9.0	155	11.0	118	88	46	0	0	4	1		
HOUGHTON LAKE	63	38	72	30	51	3	.8	-.1	-.8	7.8	186	9.6	138	86	35	0	0	3	0		
LANSING	63	42	77	35	52	4	1.2	-.6	-.7	8.1	162	10.2	127	99	57	0	2	2	1		
MARQUETTE	59	32	71	20	46	3	.4	-.5	-.4	6.6	109	9.3	93	80	32	0	4	1	0		
MUSKOGON	62	41	77	29	52	3	.2	-.5	-.2	7.7	144	9.8	105	88	40	0	1	1	0		
SAULT ST. MARIE	63	32	70	25	47	5	.4	-.6	-.4	6.6	160	8.7	109	80	22	0	5	0	0		
MN ALEXANDRIA	61	38	72	29	49	3	.4	-.2	-.4	3.2	103	4.7	101	88	37	0	3	0	0		
DULUTH	59	32	70	18	46	3	.4	-.1	-.2	2.9	78	3.9	69	82	29	0	3	0	0		
INT'L FALLS	62	35	74	20	49	6	.3	-.1	-.2	2.9	78	4.5	110	82	29	0	4	3	0		
MINNEAPOLIS	63	40	69	31	51	1	.4	-.1	-.1	4.4	127	5.9	116	82	33	0	4	3	0		
ROCHESTER	60	37	65	29	49	0	1.5	-.8	-.7	7.1	178	8.2	149	88	47	0	2	4	0		
MS GREENWOOD	73	56	82	48	64	4	.9	-.4	.5	12.2	109	25.2	120	96	63	0	0	1	2		
JACKSON	74	57	81	47	65	2	2.9	1.6	1.6	18.8	176	29.1	146	99	58	0	0	4	1		
MERIDIAN	75	57	84	49	66	1	1.7	-.5	1.0	12.7	109	25.8	122	94	54	0	0	5	2		
MO CAPE GIRARDEAU	70	50	78	43	60	0	.3	-.7	.3	7.5	83	13.6	91	89	45	0	0	4	0		
COLUMBIA	66	44	79	35	55	1	1.1	-.1	1.0	6.0	89	7.7	74	89	42	0	0	2	1		
KANSAS CITY	64	44	78	36	54	4	.4	-.4	-.2	6.9	106	7.5	94	96	42	0	0	4	0		
SAINT LOUIS	68	47	80	39	58	8	.1	-.8	-.4	4.4	98	8.8	86	83	40	0	0	2	0		
SPRINGFIELD	67	44	81	32	56	3	1.0	-.0	-.9	6.2	88	10.2	94	95	48	0	1	3	1		
MT BILLINGS	60	37	71	32	49	1	.3	-.3	-.2	4.5	165	5.8	132	81	31	0	1	2	0		
CLASCOV	64	37	78	30	50	3	.9	-.6	-.5	4.5	198	2.4	150	74	27	0	1	2	0		
GREAT FALLS	59	35	70	31	47	1	.1	-.1	-.1	2.6	120	3.5	90	76	31	0	4	1	0		
HAVRE	63	35	73	31	49	2	.4	-.1	-.4	1.5	99	2.0	79	79	27	0	2	1	0		
HELENA	59	35	71	31	47	2	.4	-.3	-.3	1.7	105	2.0	73	72	29	0	2	1	0		
KALISPELL	58	31	70	27	44	-1	.3	-.1	-.3	1.7	95	3.9	87	91	40	0	5	2	0		
MILES CITY	62	39	76	34	51	2	1.2	-.8	-.7	3.7	205	4.7	158	81	46	0	0	3	1		
MISSOULA	60	31	72	28	45	-1	.1	-.2	-.1	1.5	88	2.3	60	81	30	0	6	1	0		
NE GRAND ISLAND	67	43	84	39	55	1	.1	-.6	-.1	3.0	78	3.6	70	80	39	0	0	1	0		
LINCOLN	68	42	82	33	55	0	.6	-.1	-.5	5.2	117	6.2	102	90	44	0	0	3	1		
NORFOLK	67	41	76	33	54	1	.5	-.4	-.1	3.5	103	4.9	104	87	37	0	0	2	0		
NORTH PLATTE	62	38	70	33	50	-1	.2	-.0	-.3	2.3	86	2.9	80	93	45	0	0	3	0		
OMAHA	65	44	80	37	55	-1	1.8	1.1	1.7	9.6	216	11.0	182	85	47	0	0	3	1		
SCOTT'S BLUFF	62	36	77	33	49	-1	.4	-.0	-.4	1.6	74	2.5	82	83	33	0	0	1	0		
VALENTINE	65	37	77	30	51	1	.1	-.4	-.1	3.3	137	4.1	126	81	32	0	2	2	0		
NV KLY	51	23	62	20	37	-7	.4	-.2	-.3	2.3	134	2.6	83	89	42	0	7	5	0		
LAS VEGAS	76	54	82	52	65	-1	.0	-.0	-.0	1.0	176	1.8	118	44	15	0	0	0	0		
RENO	60	36	66	31	48	-1	.1	-.0	-.1	1.9	169	2.1	65	83	23	0	1	1	0		
WINNEMUCCA	56	32	64	29	44	-4	.3	-.1	-.2	1.5	107	2.2	75	88	37	0	5	4	0		
NH CONCORD	65	35	79	29	50	3	.9	-.2	-.9	4.7	83	8.0	73	94	26	0	2	2	1		
NJ ATLANTIC CITY	65	43	79	37	54	1	1.8	1.1	1.3	8.7	126	15.1	110	95	54	0	0	3	1		
NM ALBUQUERQUE	71	44	78	39	58	0	.0	-.1	-.0	.2	20	.8	52	43	11	0	0	0	0		
CLOVIS	77	46	84	40	61	2	.0	-.2	-.0	.4	35	1.1	52	74	23	0	0	0	0		
ROSWELL	82	52	86	45	67	4	.0	-.1	-.0	.7	5	.6	37	53	12	0	0	0	0		
NY ALBANY	65	41	79	35	53	3	1.7	1.0	1.6	5.7	102	9.5	94	83	32	0	0	3	1		
BINGHAMTON	59	40	73	31	49	1	1.6	.9	1.1	7.2	127	11.5	110	88	40	0	2	3	1		
BUFFALO	59	43	77	37	51	2	2.6	1.9	1.3	11.7	205	15.8	143	89	51	0	0	3	2		
NEW YORK	65	49	75	42	57	2	2.0	1.2	1.8	6.7	90	11.7	86	83	47	0	0	3	1		
ROCHESTER	59	39	73	33	49	-1	2.3	1.7	1.9	8.7	179	11.6	122	94	49	0	0	2	1		
SYRACUSE	62	39	76	33	50	1	1.6	.8	1.1	7.7	127	11.7	104	90	41	0	0	3	1		
NC ASHEVILLE	65	43	71	36	54	-4	.7	-.1	-.6	10.9	138	15.8	111	98	51	0	0	2	1		
CHARLOTTE	70	50	78	40	60	-3	.9	-.2	-.5	11.3	145	18.6	122	84	43	0	0	3	1		
GREENSBORO	69	47	76	41	58	-3	.5	-.2	-.5	13.5	202	19.2	142	89	41	0	0	3	0		
HATTERAS	69	54	78	48	61	0	.3	-.4	-.3	7.7	112	21.2	135	90	53	0	0	2	0		
NEW BERN	73	50	80	44	61	-3	.3	-.4	-.3	5.3	84	14.5	102	92	45	0	0	1	0		
RALEIGH	71	47	81	39	59	-3	.2	-.4	-.2	5.3	85	10.2	77	93	40	0	0	2	0		
WILMINGTON	73	52	81	44	62	-3	.3	-.4	-.2	9.2	137	21.1	153	94	50	0	0	2	0		
ND BISMARCK	64	37	80	25	51	4	.5	-.1	-.5	2.1	107	2.5	87	87	34	0	1	2	0		
FARGO	64	39	80	27	51	4	.9	-.4	-.6	2.5	102	4.1	120	82	39	0	2	3	1		
GRAND FORKS	62	38	80	27	50	4	.9	-.6	-.6	2.2	110	3.2	101	85	43	0	0	3	1		
WILLISTON	66	35	81	27	51	4	1.2	.9	.7	2.0	121	2.6	98	81	33	0	2	4	1		
OH AKRON-CANTON	62	43	79	38	53	1	.6	-.2	-.3	5.7	91	10.1	92	95	50	0	0	4	0		
CINCINNATI	64	45	77	38	54	-2	.2	-.6	-.2	9.7	137	16.6	128	90	60	0	0	4	0		
CLEVELAND	62	41	81	36	52	0	.9	-.2	-.6	7.9	133	12.4	117	97	55	0	0	3	1		
COLUMBUS	64	43	78	36	53	-1	.2	-.6	-.2	8.2	131	12.4	112	94	59	0	0	3	0		

Based on 1951-80 normals

Weather Data for the Week Ending April 27, 1991

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY, PERCENT			NUMBER OF DAYS					
	AVERAGE	MAXIMUM	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
DAYTON	62	44	74	37	53	-2	.4	-1.4	.2	10.0	164	15.1	140	93	60	0	0	0	0	0	0	0	0
TOLEDO	62	41	78	35	52	1	.5	-1.2	.5	5.6	106	8.5	93	97	62	0	0	0	0	0	0	0	0
YOUNGSTOWN	62	40	82	32	51	.2	.2	-1.6	.2	5.6	88	9.2	82	96	53	0	0	0	0	0	0	0	0
OK OKLAHOMA CITY	71	50	82	41	60	-3	1.5	.7	1.3	3.7	81	4.6	68	91	47	0	0	0	0	0	0	0	0
TULSA	71	53	82	45	62	-2	1.1	.0	.6	3.5	51	5.3	54	93	43	0	0	0	0	0	0	0	0
OR ASTORIA	52	41	53	37	46	-2	1.4	.5	.5	15.1	130	30.4	101	85	68	0	0	0	0	0	0	0	0
BURNS	53	29	65	21	41	-5	.0	.0	.0	5.0	50	1.8	45	85	34	0	0	0	0	0	0	0	0
MEDFORD	61	41	72	30	51	-1	.3	.1	.1	3.5	127	6.8	82	93	49	0	0	0	0	0	0	0	0
PENDLETON	62	41	73	35	52	-1	.2	.0	.1	1.7	89	3.3	69	78	31	0	0	0	0	0	0	0	0
PORTLAND	57	44	64	40	51	-1	.9	.5	.3	8.6	152	14.9	94	86	59	0	0	0	0	0	0	0	0
SALEM	57	41	63	39	49	-1	.7	.3	.3	8.9	137	15.0	83	92	59	0	0	0	0	0	0	0	0
PA ALLENTOWN	64	43	79	38	53	0	1.8	.9	1.3	6.5	88	10.4	76	88	46	0	0	0	0	0	0	0	0
ERIE	59	44	75	39	52	3	.7	.1	.5	6.9	113	10.6	101	86	44	0	0	0	0	0	0	0	0
HARRISBURG	64	44	79	35	54	-1	.9	.2	.7	6.1	95	10.0	83	85	44	0	0	0	0	0	0	0	0
PHILADELPHIA	66	47	80	42	56	0	1.7	.9	1.2	6.9	99	11.8	92	86	55	0	0	0	0	0	0	0	0
PITTSBURGH	62	42	80	37	52	-1	.5	.3	.3	5.2	80	9.7	82	89	51	0	0	0	0	0	0	0	0
SCRANTON	62	41	78	35	52	0	1.9	1.2	1.1	5.7	107	8.6	89	90	51	0	0	0	0	0	0	0	0
RI PROVIDENCE	65	43	80	39	54	3	3.1	2.2	3.0	10.3	132	16.1	103	86	42	0	0	0	0	0	0	0	0
SC CHARLESTON	73	56	81	44	65	-2	1.9	1.4	.9	9.9	134	17.7	133	96	61	0	0	0	0	0	0	0	0
COLUMBIA	74	51	81	40	63	-4	1.3	.5	1.2	12.0	142	19.3	115	94	50	0	0	0	0	0	0	0	0
FLORENCE	73	53	81	42	63	-3	.6	.1	.4	7.1	104	15.7	100	91	47	0	0	0	0	0	0	0	0
GREENVILLE	69	47	79	37	58	-5	1.5	.6	1.4	10.9	110	17.9	96	88	49	0	0	0	0	0	0	0	0
SD ABERDEEN	65	39	78	28	53	4	.9	.4	.8	3.4	128	4.2	112	86	39	0	0	0	0	0	0	0	0
BURON	65	39	76	29	52	2	.9	.4	.9	5.3	179	6.3	153	82	35	0	0	0	0	0	0	0	0
RAPID CITY	64	38	76	31	51	3	1.0	.5	.9	3.6	133	4.7	127	79	29	0	0	0	0	0	0	0	0
SIoux FALLS	65	39	73	29	52	2	.1	.5	.1	2.0	56	2.6	52	82	34	0	0	0	0	0	0	0	0
TN CHATTANOOGA	71	51	77	39	61	-2	.9	.1	.9	12.4	118	23.2	114	90	46	0	0	0	0	0	0	0	0
KNOXVILLE	71	50	80	46	60	-2	.4	.4	.4	9.8	209	19.3	108	84	43	0	0	0	0	0	0	0	0
MEMPHIS	71	55	82	45	63	-3	1.0	.3	1.0	15.1	142	24.5	125	89	51	0	0	0	0	0	0	0	0
NASHVILLE	71	51	80	39	61	-2	.1	.9	.0	6.7	70	15.0	83	88	49	0	0	0	0	0	0	0	0
TX ABILENE	81	56	91	48	68	1	1.6	1.0	.8	2.2	69	5.0	98	84	35	0	0	0	0	0	0	0	0
AMARILLO	76	44	86	38	60	1	.7	.3	.4	5.8	131	18.0	213	95	54	0	0	0	0	0	0	0	0
AUSTIN	83	63	88	53	73	2	.7	.3	.4	9.2	136	28.6	190	96	71	0	0	0	0	0	0	0	0
BEAUMONT	80	66	86	57	73	2	.7	.4	.4	10.4	564	13.4	291	96	64	2	0	0	0	0	0	0	0
BROWNSVILLE	88	74	99	69	81	5	.7	.5	.7	5.6	235	9.3	171	93	73	1	0	0	0	0	0	0	0
CORPUS CHRISTI	85	71	91	60	78	3	.1	.4	.0	1.9	85	3.2	88	77	38	2	0	0	0	0	0	0	0
DEL RIO	87	67	96	57	77	3	.1	.4	.0	1.9	85	3.2	88	77	38	2	0	0	0	0	0	0	0
EL PASO	81	54	84	43	67	1	.1	.4	.0	1.9	85	3.2	88	77	38	2	0	0	0	0	0	0	0
FORT WORTH	76	56	88	45	66	-2	.0	.0	.0	1.1	22	1.6	124	36	10	0	0	0	0	0	0	0	0
GALVESTON	77	70	82	62	74	2	.1	.9	.1	4.3	72	9.6	101	92	51	0	0	0	0	0	0	0	0
HOUSTON	82	66	89	54	74	3	.1	.6	.1	3.5	79	20.6	210	95	81	0	0	0	0	0	0	0	0
LUBBOCK	82	50	87	45	66	3	.1	.8	.1	9.8	165	25.4	199	97	71	0	0	0	0	0	0	0	0
MIDLAND	86	53	91	47	70	3	.1	.2	.1	2	8	1.8	68	83	16	0	0	0	0	0	0	0	0
SAN ANGELO	85	53	93	41	69	3	.0	.3	.0	.7	1	2.0	96	81	15	3	0	0	0	0	0	0	0
SAN ANTONIO	85	65	90	55	75	3	.7	.5	.7	1.1	49	3.5	93	82	33	2	0	0	0	0	0	0	0
VICTORIA	85	68	88	58	77	3	.0	.7	.7	5.9	159	13.3	189	94	57	1	0	0	0	0	0	0	0
WACO	81	58	87	49	69	0	.0	.7	.0	14.3	399	25.1	328	95	67	0	0	0	0	0	0	0	0
WICHITA FALLS	77	50	92	39	64	-3	.9	.1	.9	1.7	38	4.3	69	88	43	1	0	0	0	0	0	0	0
UT CEDAR CITY	58	32	66	28	45	-4	.2	.1	.1	1.0	52	2.1	62	77	24	0	0	0	0	0	0	0	0
SALT LAKE CITY	56	38	66	31	47	-4	1.9	1.4	1.1	3.6	98	5.3	84	87	46	0	0	0	0	0	0	0	0
VT BURLINGTON	61	38	73	35	49	3	.8	.2	.7	5.6	120	7.7	95	83	36	0	0	0	0	0	0	0	0
VA NORFOLK	71	50	82	42	60	-1	.2	.5	.2	11.0	173	16.5	124	84	44	0	0	0	0	0	0	0	0
RICHMOND	72	48	83	37	60	-1	.2	.6	.2	6.5	106	11.3	90	88	43	0	0	0	0	0	0	0	0
ROANOKE	65	45	72	34	55	-4	.1	.7	.1	9.7	151	15.4	123	84	47	0	0	0	0	0	0	0	0
WA QUILLAYUTE	51	40	53	38	45	-2	2.0	.6	1.1	14.7	79	44.0	97	99	68	0	0	0	0	0	0	0	0
SEATTLE-TACOMA	56	42	63	38	49	-2	.5	.0	.3	11.0	191	20.2	126	97	63	0	0	0	0	0	0	0	0
SPOKANE	61	36	74	31	49	0	.2	.1	.1	3.6	155	6.1	96	86	36	0	0	0	0	0	0	0	0
YAKIMA	66	35	79	26	51	-1	.7	.1	.1	1.8	169	2.3	74	81	26	0	0	0	0	0	0	0	0
WV BECKLEY	60	42	71	33	51	-4	.8	.0	.6	9.1	129	15.8	115	95	55	0	0	0	0	0	0	0	0
CHARLESTON	67	43	85	37	55	-3	.2	.6	.1	9.5	133	15.2	111	93	49	0	0	0	0	0	0	0	0
HUNTINGTON	66	44	81	37	55	-4	.6	.2	.4	11.3	158	17.0	129	93	48	0	0	0	0	0	0	0	0
FARKERSBURG	64	43	80	35	54	-4	.7	.7	.7	8.7	132	14.2	118	91	53	0	0	0	0	0	0	0	0
WI GREEN BAY	62	39	68	29	51	3	.1	.6	.1	5.4	127	6.4	99	86	38	0	0	0	0	0	0	0	0
ILCROSSE	62	40	74	31	51	0	.6	.2	.6	5.3	117	6.7	106	95	54	0	0	0	0	0	0	0	0
MADISON	64	38	71	29	51	1	.4	.3	.2	8.8	180	10.4	149	88	41	0	0	0	0	0	0	0	0
MILWAUKEE	61	43	72	37	52	4	.6	.2	.6	7.7	138	9.6	113	85	43	0	0	0	0	0	0	0	0
WAUSAU	62	38	70	29	50	2	.6	.2	.3	7.3	164	8.6	136	89	39	0	0	0	0	0	0	0	0
WY CASPER	56	33	67	28	44	-1	.4	.0	.3	1.9	81	2.8	84	84	32	0	0	0	0	0	0	0	0
CHEYENNE	53	31	65	28	42	-2	.1	.3	.1	1.5	75	2.0	71	80	33	0	0	0	0	0	0	0	0
LANDER	56	33	63	23	45	-1	.5	.1	.3	3.2	103	4.3	103	77	26	0	0	0	0	0	0	0	0
SHERIDAN	59	32	71																				

National Agricultural Summary

April 22 - 28, 1991

HIGHLIGHTS: Predominately dry weather across the Southwest allowed fieldwork to progress, while rains generally in excess of 1 inch through the Midwest slowed planting. Heavy rains of 4 inches or more fell in parts of the Delta. Temperatures averaged near normal across the Nation, promoting seasonal greening.

SMALL GRAINS: Heading of winter wheat advanced to 28 percent (%) nationwide, outpacing last year by 13% and the 5-year average by 10%. Timely rains brought Oklahoma and Kansas winter wheat along well ahead of normal with Oklahoma 85% headed, compared with 40% normal, and Kansas 15% headed, compared with 3% normal. Spring wheat seeding reached 64% complete in the five largest producing States, 9% ahead of last year and 21% ahead of normal. Seeding of spring barley and durum wheat also progressed well ahead of normal in the northern High Plains, as growers have been taking advantage of the dry weather. Oats seeding was well along in the Midwest. Winter wheat condition was rated mostly good to fair in most areas, with Washington growers reporting poor to very poor condition due to excessive winterkill. Condition of dryland fields in the Texas Plains continued to diminish.

CORN: Planting was underway in all of the 17 major producing States, but fell behind schedule due to persistent rains in the Corn Belt. Planting progressed to 16% complete by the end of the week, compared with 21% last year and the average of 24%. Planting was well along in the southern Atlantic Coast States and Texas, while just beginning in northernmost regions.

COTTON: Nationwide cotton planting was 20% complete, 9 percentage points behind normal. Planting hastened in Arizona and California under mostly clear skies, but little acreage was planted in the Southeast and Delta regions due to rains. Some reseeded was necessary in California due to locally heavy rains, and some fields had to be reworked to prepare for planting in Arkansas. Few producers were planting in the Texas High Plains due to low moisture and cool temperatures, while some reseeded was done in the Upper Coast region.

GRAIN SORGHUM: Planting of grain sorghum in the 12 major producing States was 19% complete, compared with the historic average of 20%. Planting was slowed in the Delta due to rain. Texas planting was 57% complete statewide, 2 points behind normal. Louisiana planting progressed to 52% complete, 5 points ahead of normal. Thirty-five percent of the crop was planted in Mississippi, matching the historic average, and progress reached 15% complete in Oklahoma, 10 points ahead of normal. Arkansas planting, at 20% complete, was 17 points behind normal. Moisture remained short for new seedings in the Trans-Pecos region of Texas, but stands across the rest of the State progressed well.

RICE: Nationwide planting of rice, at 29% complete, fell 18 points behind normal. Planting in Arkansas was only 13% complete,

compared with their average of 39%. Mississippi planting, also at 13% complete, was 38 points behind the normal of 51%. Texas rice was 73% planted, 13% behind normal. Rice planting was winding down in the Upper Coast region of Texas and emerged fields showed good growth. Sixty percent of the acreage was planted in Louisiana, 7 points behind normal. Louisiana reporters rated condition mostly good to fair with 52% of the crop emerged.

OTHER FIELD CROPS: Soybean planting was just getting underway as conditions permitted in the Southeast. Cool, wet weather slowed potato planting in eastern Idaho with statewide progress reaching 21%, 7 points behind normal. Washington potatoes were 62% planted, and Oregon planting was nearing completion. Sugarbeet planting was nearly complete in Idaho and past the midpoint in Montana and Wyoming. Michigan sugarbeet planting was only 5% complete due to continued wet weather, compared with 60% average. Dry bean planting was just getting underway in Minnesota, and some acreage was seeded in California. Alfalfa harvest continued in Arizona, and the first cutting was 15% complete in Alabama. Peanut planting continued in the Southeast, with progress reaching 30% complete in Alabama, 21% complete in Georgia, and 16% complete in Mississippi. Early tobacco transplanting was underway in Kentucky and North Carolina. Dry pea and lentil planting continued in Idaho and Washington.

FRUIT AND NUTS: Southern California citrus picking continued, as did Valencia orange and grapefruit picking in Florida and Arizona. Weather conditions were ideal in Florida, while new crop fruit was setting. Apples were in full bloom in parts of Washington, and frost protection was necessary in only a few areas. Michigan fruit development remained well ahead of normal. Freeze damage was reported in Michigan's tart and sweet cherry crops, but the extent of the damage has not yet been assessed. Freeze damage has also been reported in western Colorado fruit crops. New Jersey apples were heavy in bloom. Apples, peaches, and tart cherries were blooming in Oregon.

VEGETABLES: Harvests of many southern Florida vegetables neared completion, while activity increased further north in the State. Western Arizona vegetable harvests neared completion, while continuing in full swing in central Arizona. Onion digging continued in Texas' Rio Grande Valley with good yields reported, and harvest is expected to start soon in the San Antonio-Winter Garden area. Harvests of squash, cantaloupe, cabbage, and strawberries were also active in Texas. Asparagus, broccoli,

(Continued to p. 10)

(Continued from p. 9)
cauliflower, lettuce, and strawberries were being harvested in California. California supplies of broccoli, cauliflower, and iceberg lettuce were reportedly heavy.

PASTURES AND LIVESTOCK: Calving and lambing continued to wind down in the Western States, with no abnormal death losses reported. Supplemental feeding was necessary in parts of the Texas High Plains due to lack of forage. Sheep shearing continued in Idaho and Washington. Seasonal movement of livestock to pasture continued to pick up as forage greened.

(Continued from front cover)
inches. Rain in **Memphis, TN**, pushed the city's monthly total to an April record of 14 inches. Snow developed in the **central and northern Rockies** at midweek. Accumulations reached 18 inches in **eastern Idaho** and exceeded a foot in **northern Utah**. As the storm churned into the **northern Plains, eastern Montana and North Dakota** received generous rainfall. Heavy showers dotted the **central and southern Plains**. But the storm will be most remembered for its outbreak of tornadoes on Friday. More than 70 tornadoes shredded the landscape from **Nebraska to Texas**. Areas near **Wichita, KS**, were hardest hit. As the week ended, strong thunderstorms swept through the **lower Mississippi Valley**, and cool air spilled southward through the **Rockies and the Plains**.

Crop Progress

FOR WEEK ENDING APRIL 28, 1991

	COTTON % PLANTED		
	1991	1990	AVG.
AL	34	60	57
AZ	60	91	85
AR	1	0	13
CA	80	90	88
GA	10	14	19
LA	6	57	38
MS	7	27	27
MO	6	5	11
NM	55	45	66
NC	22	24	22
OK	2	0	3
SC	17	22	23
TN	5	4	18
TX	14	15	16

14 STATES 20 28 29

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

	CORN % PLANTED		
	1991	1990	AVG.
CO	15	25	34
GA	93	95	95
IL	29	19	32
IN	9	22	24
IA	5	19	18
KS	50	30	35
KY	24	16	30
MI	2	5	6
MN	8	20	15
MO	42	22	52
NE	10	16	19
NC	81	73	62
OH	5	26	22
PA	3	4	9
SD	1	3	0
TX	81	82	87
WI	1	4	3

17 STATES 16 21 24

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

	RICE % PLANTED		
	1991	1990	AVG.
AR	13	8	39
CA	3	5	9
LA	60	64	67
MS	13	14	51
TX	73	69	86

5 STATES 29 27 47

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

	SPRING WHEAT % PLANTED		
	1991	1990	AVG.
ID	79	85	77
MN	75	66	51
MT	56	67	52
ND	54	35	31
SD	90	90	61

5 STATES 64 55 43

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

	WINTER WHEAT % HEADED		
	1991	1990	AVG.
AR	68	60	60
CA	80	90	89
CO	0	0	0
GA	97	97	91
ID	0	0	0
IL	0	2	3
IN	0	0	0
KS	15	3	3
MI	0	0	0
MO	5	2	7
MT	0	0	0
NE	0	0	0
NC	67	67	38
OH	0	0	0
OK	85	25	40
OR	0	0	0
SD	0	0	0
TX	43	40	44

18 STATES 28 15 18

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

**GRAIN SORGHUM
% PLANTED**

	1991	1990	AVG.
AR	20	10	37
CO	0	0	0
IL	0	0	0
KS	0	0	0
LA	52	57	47
MS	35	26	35
MO	4	1	7
NE	0	0	0
NM	2	10	NA
OK	15	1	5
SD	0	0	0
TX	57	56	59

12 STATES 19 18 NA

EXCL. STATES WITH NA 19 18 20

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

NA - NOT AVAILABLE.

Crop Condition

PERCENT

FOR WEEK ENDING APRIL 28, 1991

STATE	WINTER WHEAT				
	VP	P	F	G	EX
AR	0	0	55	45	0
CA	0	0	5	85	10
CO	1	6	29	54	10
GA	0	1	33	64	2
ID	5	9	37	39	10
IL	0	1	30	65	4
IN	0	4	24	68	4
KS	0	13	25	47	15
MI	3	6	23	45	23
MO	0	3	31	63	3
MT	8	16	39	33	4
NE	0	19	38	41	2
NC	0	0	10	84	6
OH	1	8	31	46	14
OK	0	5	55	40	0
OR	2	15	44	38	1
SD	0	11	21	48	20
TX	5	20	52	20	3
WA	35	40	13	12	0
19 STATE	3	12	35	43	7
PREV WEEK	4	10	40	39	7
PREV YEAR	0	3	21	63	13

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 2.00 to 4.00 in. north; 1.00 to 3.00 in. central, south. Temperatures 1 to 2° above normal coast, near normal elsewhere.

Days suitable for fieldwork 3.7. Soil moisture 60% adequate, 40% surplus. Acreage intended for spring planting 77% prepared, 78% 1990, 83% avg. Fieldwork progress 52% behind, 46% on schedule, 2% ahead. Corn 77% planted, 89% 1990, 83% avg. Sorghum 20% planted, 37% 1990, 23% avg. Cotton 34% planted, 60% 1990, 57% avg. Peanuts 30% planted, 33% 1990, 30% avg. Soybeans 3% planted, 8% 1990, 4% avg. Winter wheat 83% headed, 79% 1990, 72% avg.; 23% turning color, 25% 1990, 18% avg.; 3% poor, 36% fair, 57% good, 4% excellent. Feed supplies from pastures 17% short, 67% adequate, 16% surplus. Pastures 1% poor, 19% fair, 68% good, 12% excellent. Livestock 13% fair, 77% good, 10% excellent. Primary activities: Land preparation; planting row crops, vegetables; applying fertilizer, lime, herbicides; fertilizing, overseeding pastures; spraying fruit, pecan trees; thinning peaches; general care of livestock, poultry, catfish.

ARIZONA: Sunny, warm, dry except extreme north, cloudy early in period. Increased cloudiness mid week, isolated rain north. Strong winds, lower temperatures by weekend. Temperatures 4° below to 2° above normal. Extremes 46°; 90° deserts, 20°; 82° higher elevations. Precipitation mostly none.

Cotton planting 60%, 91% 1990, 85% avg.; crop good. Small grains heading 96%, 95% 1990, 94% avg.; turning color 42%, 52% 1990, 39% avg.; small grains good south, excellent central. Alfalfa hay harvest active, all producing areas harvesting; insects light to moderate, selected areas applying controls for aphids. Mixed vegetable harvest continued central, west; nearly completed west; red potatoes harvested central; grapefruit, valencia orange harvest, shipping continued west, central.

ARKANSAS: Temperatures were normal during the week, while numerous showers were prominent across the State at weekend, heaviest rainfall in the southeast. Temperature 39°; 86°. Rainfall 0.37 to 8.51 in.

Days suitable for fieldwork 4. Soil moisture 51% adequate, 49% surplus. Main farming activities: Preparing land for planting field crops; planting cotton, rice, soybeans, corn, sorghum; scouting for insects, disease in wheat fields; controlling weeds in rice; fertilizing hay, pastures; sprigging warm season grasses; maintaining hay equipment, livestock. Rice planting 13%, 8% 1990, 39% avg. Cotton planting 1%, 0% 1990, 13% avg. Sorghum planting 20%, 10% 1990, 37% avg. Corn planting 81%, 66% 1990, 80% avg. Wheat heading 68%, 60% 1990, 60% avg. Oats heading 52%, 43% 1990, 55% avg. Some cotton fields reworked due to heavy rains of last weekend. Disease problems in wheat were medium, including rust, Septoria, bacteria streak, and powdery mildew. Prospects good for apple, peach crops in Washington County. Blueberries were in good condition, strawberries were in full bloom in Logan County. Fruit rot in strawberries was

reported in Crittenden County. Pasture 1% poor, 7% fair, 77% good, 15% excellent. Livestock excellent.

CALIFORNIA: Storm system brought light to moderate weekend rains. More weak systems brushed northern areas mid week. Strong off shore winds brought a dry warming trend late in the week.

Showers slowed field operations northern half. Cotton seeding good progress, soil temperatures still marginal some areas. Some fields replanted due locally heavy rain. Rice seeding slow start, cool, showers. Pest controls were applied. Oats, winter forage cut hay, green chop. Other grains late, most headed. Some sunflowers planted. Seeding field corn increased. Some dry beans seeded, soil temperatures marginal. Alfalfa harvest normal. Ground squirrel damage considerable some areas. Sudan grass harvest on going south. Sugarbeets thinned. Fieldwork active in orchards, vineyards. Apricot, peach, nectarine fruit thinned. Fruit size varied. Grapes irrigated, mildew, nematode controls applied. Kiwifruit leafing out. Persimmon, pomegranate bloom buds maturing. Dates bagged. Southern California citrus picking continued. Almonds developing. Blight sprays applied to walnuts. Asparagus harvest active, good quality. Broccoli heavy supply, generally good quality. Cauliflower heavy supply, variable quality. Iceberg lettuce supply seasonally increasing, central coast. Huron district Iceberg lettuce heavy supply, good quality. Potato harvest, planting continued Hemet San Jacinto area. Strawberry supplies steadily increasing, central coast, variable quality. Onion planting delayed, Tulalake area, wet conditions. Fumigating sweet potato fields continued. Tomato planting active, westside. Pasture condition mostly fair to good in some northern counties. Light supplemental feeding. Water supplies adequate.

COLORADO: Light rain, thunder showers most eastern areas on 22nd, 23rd. Dry most areas except northeast on 24th. Winter storm moved across State on 25th with snow in all mountain areas, rain western valleys, eastern plains. Weekend unseasonably cool with scattered rain, snow showers. Temperatures plus or minus 3° normal. Precipitation trace to nearly 1.00 in.

Days suitable for fieldwork 5.3. Soil moisture 7% very short, 41% short, 51% adequate, 1% surplus. Barley seeding 67% complete 1991, 78% 1990, 86% avg.; oats 68% seeding complete, 71% 1990, 73% avg.; corn planting 15%, 25%, 34%; dry onions 83%, 82% 1990, 82% avg. Winter wheat 1% very poor, 6% poor, 29% fair, 54% good, 10% excellent; dry onions 40% fair, 53% good, 7% excellent. Winter wheat 42% jointed, 48% 1990, 44% avg. Moderate to severe freeze damage to fruit crops over weekend in western areas, primarily Mesa County. Livestock mostly good. Calving, lambing both 87% complete. Pasture, range feed conditions mostly fair.

FLORIDA: Temperatures 2 to 5° above normal, north; 4 to 8° above normal elsewhere. Extreme highs mid 90s interior Peninsula; lows mid 50s north. Rainfall 1.00 to 2.00 in. with localized

total exceeding 4.00 in. Few southern Peninsula locations received less than 0.50 in.

Soil moisture adequate Panhandle; adequate to surplus northern Peninsula; short to adequate central Peninsula; adequate southern Peninsula. Peanut planting active. Cotton planting becoming active. Some peanut fields up to stand. Rust problem winter wheat. Corn, sugarcane, tobacco making good progress. Statewide pastures good to excellent. Pasture ratings, 20% fair, 60% good, 20% excellent. Cattle condition mostly good to excellent. Rain most citrus areas, surface moisture adequate, very little irrigation, abundant new growth. New crop fruit setting with ideal weather. Valencia harvest remains active, grapefruit movement slowing. Caretakers cutting cover crops, spraying, fertilizing. Warm temperatures, frequent showers prevailed much of week, over major vegetable producing areas. Harvest many crops near complete, southern areas. Harvest active central areas, underway some crops northern areas. Volume leaders: Potatoes, tomatoes, sweet corn, cucumbers, peppers, celery, squash, cabbage. Also available: Snap beans, carrots, lettuce, radishes, eggplant, escarole, watermelons. First hastings potatoes dug.

GEORGIA: Temperatures slightly below normal except extreme south 1 to 3° above normal. Highs 70s northern third, upper 80s elsewhere. Lows mid 30s in mountains, upper 40s central to low 50s south. Rains statewide. Heavier totals 1.00 to 2.00 in. Some central, south areas under 0.50 in.

Days suitable for fieldwork 4.5. Soil moisture 2% short, 83% adequate, 15% surplus. Corn 24% fair, 75% good, 1% excellent. Cotton 38% fair, 62% good. Sorghum 30% fair, 60% good, 10% excellent; 23% planted, 20% 1990, 17% avg. Peanuts 25% fair, 75% good; 21% planted, 28% 1990, 27% avg. Soybeans 1% planted, 1% 1990, 2% avg. Tobacco 50% fair, 48% good, 2% excellent; 99% transplanted, 100% 1990, 99% avg. Watermelons 23% fair, 77% good; 93% planted, 94% 1990, 93% avg. Wheat 1% poor, 33% fair, 64% good, 2% excellent; 100% boot, 100% 1990, 99% avg.; armyworms reported in some fields. Rye 3% poor, 31% fair, 65% good, 1% excellent. Other small grains 6% poor, 23% fair, 70% good, 1% excellent. Apples 7% fair, 93% good; 98% blooming, 100%, 100% avg. Peaches 12% very poor, 40% fair, 84% good; hail damage previous weekend in south central areas. Onions 95% fair, 5% good; 32% harvested, 42% 1990. Pasture 2% fair, 86% good, 12% excellent. Cattle, hogs mostly good.

HAWAII: Weather was favorable for agriculture during past week. Mostly sunny skies, with some light passing showers aided crop development. Winds mostly moderate 15 to 25 mph. Temperatures mid 60s to low 80s. Rainfall none to 4.40 in.

Days suitable for fieldwork 7.0. Spraying pesticides for insect, disease control active. Warmer temperatures promoting larger insect populations. Papaya production increased. Ginger root harvesting neared completion. Pineapple production on seasonal up swing. Sugarcane harvesting, planting operations normal.

IDAHO: Temperatures were below normal across State. Precipitation over most of State.

Days suitable for fieldwork 4. Soil moisture 4% very short, 23% short, 59% adequate, 14% surplus. Winter wheat 11% jointed. Spring barley

67% planted, 86% 1990, 71% avg.; emerged 41%, 62% 1990, 39% avg. Oats 44% planted, 66% 1990, 57% avg.; emerged 24%, 33% 1990, 29% avg. Potatoes 21% planted, 37% 1990, 28% avg. Sugarbeets 97% planted, 99% 1990, 96% avg.; emerged 38%, 57% 1990, 53% avg. Dry peas 27% planted. Lentils 18% planted. Field corn 4% planted. Spotty precipitation covered most of State. Irrigation water supplies were mostly good. Some replanting of sugarbeet fields in south central. Cold wet weather in east slowed potato planting. Plums in full bloom. Apples starting to bloom. Activities: Spraying for insects, weeds, fertilizing, seedbed preparation, planting, ditch work for irrigation, fencing, branding, sheep shearing. Pasture, range condition 78% of normal. Hay, roughage supplies adequate.

ILLINOIS: Temperatures 2 to 5° above normal north, central, 1 to 3° above normal south. Precipitation was above normal 0.13 to 1.82 in.

Days suitable for fieldwork 4. Soil moisture 1% short, 86% adequate, 13% surplus. Oats seeded 90%, 88% 1990, 93% avg. Livestock roughage requirements from pasture 64%, 54% 1990, 63% avg. Alfalfa 1% poor, 30% fair, 65% good, 4% excellent. Pasture 8% fair, 73% good, 19% excellent.

INDIANA: Temperatures 1 to 4° above normal. Lows mid 40s to low 50s, highs upper 60s to around 70s. Precipitation 0.20 to 0.85 in.

Days suitable for fieldwork 2.5. Topsoil 60% adequate, 40% surplus. Subsoil 57% adequate, 43% surplus. Spring cropland 77% tilled, 80% 1990, 85% avg. Wheat 11 in. high, 11 in. 1990, 10 in. avg. Wheat 45% jointed, 45% 1990, 59% avg. Oats 69% seeded, 78% 1990, 82% avg. Clover 86% seeded, 88% 1990, 88% avg. Pasture 16% excellent, 66% good, 18% fair. Over 60% of cattle feed is from pastures. Wet soils continued to delay planting, tillage, especially in northern areas.

IOWA: Normal temperatures. Extremes 25°; 80°. Precipitation 0.11 to 3.74 in.; average 1.58 in.

Days suitable for fieldwork 1.7. Topsoil 35% adequate, 65% surplus. Subsoil 3% short, 48% adequate, 49% surplus. Winter wheat 4% poor, 23% fair, 67% good, 6% excellent. Hay 3% poor, 23% fair, 64% good, 10% excellent. Pasture mostly good to excellent. Oats 85% sown, 97% 1990, 95% avg. Oats 50% emerged, 56% 1990, 53% avg. Seedbed preparation 69% completed, 83% 1990, 79% avg. Fertilizer application 68% completed, 83% 1990, 79% avg. Livestock mostly good condition. Wet, cool conditions stressing young livestock. Cattle moving to pasture as forage growth is becoming adequate.

KANSAS: Temperatures 3° below normal except northwest where normal. Precipitation 0.30 to 0.90 in.

Days suitable for fieldwork 3.0. Surface 27% short, 64% adequate, 9% surplus. Subsurface 70% short, 30% adequate. Wheat good progress; jointing, heading ahead of normal. Corn planting continues ahead normal. First cutting alfalfa started; weevil problems continue some areas.

KENTUCKY: Temperatures 60°, 1 to 2° below season normal. Highs 70°, lows between 45 to 49°. Precipitation 0.85 to 0.90 in. below normal.

Days suitable fieldwork 4.6. Soil moisture 1% short, 82% adequate, 17% surplus. Corn planting active. Most active West. Corn planted 24%; corn emerged 10%. Wheat headed 21%; wheat condition 1% poor, 21% fair, 74% good, 4% excellent. Wheat needs sun, warm weather. Soybeans just started planting. Tobacco plants less than 2 in. tall

83%, 2 to 4 in. 15%, greater than 4 in. 2%. Early transplanting expected to begin around May 1st. Pastures excellent. Alfalfa expected average first cutting May 8th.

LOUISIANA: Temperatures 2.7 to 0.1° below normal. Extremes 45°; 87°. Rainfall 0.69 in. southwest to 5.69 in. north central.

Days suitable for fieldwork 1.5. Soil moisture 16% adequate, 84% surplus. Spring plowing 73%, 71% 1990, 85% avg. Corn 6% poor, 75% fair, 19% good; 97% planted, 95% 1990, 93% avg.; 95% emerged, 89% 1990, 82% avg. Wet soils stressing many fields. Hay 4% first cutting, 6% 1990, 8% avg. Rice 9% poor, 36% fair, 55% good; emerged, 52% 1990, 52% avg. Sorghum 27% poor, 64% fair, 9% good; 46% emerged, 33% 1990, 29% avg. Sweet potatoes 8% planted, 5% 1990, 11% avg. Sugarcane 38% fair, 56% good, 6% excellent. Wheat 24% poor, 48% fair, 28% good; 87% headed, 97% 1990, 96% avg.; 40% turning color, 22% 1990, 20% avg. Scab disease problems, some southern parishes. Vegetables 5% very poor, 11% poor, 56% fair, 28% good. Pasture 2% poor, 26% fair, 70% good, 2% excellent. Slow growth due to excessive soil moisture. Livestock 29% fair, 63% good, 8% excellent.

MARYLAND & DELAWARE: **MARYLAND:** Precipitation 1.06 in. Temperature 53.6°, normal 56.6°. Extremes 30°; 78°.

Days suitable for fieldwork 3.4. Topsoil 58% adequate, 42% surplus. Subsoil 68% adequate, 32% surplus. Oats 73% planted, 91% 1990, 83% avg. Corn 16% planted, 20% 1990, 16% avg. Sweet corn 27% planted, 12% 1990, 16% avg. Potatoes 59% planted, 69% 1990, 88% avg. Green peas 77% planted, 95% 1990, 96% avg. Sweet potatoes 40% planted, 81% 1990, 94% avg. Small grains good. Pasture excellent. Peaches 99% bloomed, 97% 1990, 98% avg. Apples 88% bloomed, 92% 1990, 65% avg. Strawberries 54% bloomed, 76% 1990, 52% avg. Activities for the week: Soil preparation; planting vegetables, corn, oats, tobacco; repairing fence; hauling manure; spreading fertilizer; maintaining machinery; caring for livestock.

DELAWARE: Precipitation 2.34 in. Temperature 52.4°, normal 56.4°. Extremes 39°; 79°.

Days suitable for fieldwork 3.0. Topsoil 83% adequate, 17% surplus. Subsoil 100% adequate. Corn 14% planted, 28% 1990, 22% avg. Sweet corn 15% planted, 20% 1990, 24% avg. Potatoes 98% planted, 94% 1990, 87% avg. Green peas 75% planted, 77% 1990, 75% avg. Small grains good. Pasture excellent. Apples 94% bloomed, 75% 1990, 79% avg. Strawberries 38% bloomed, 30% 1990, 32% avg. Activities for the week: Soil preparation; planting vegetables, corn; repairing fence; hauling manure; spreading fertilizer; maintaining machinery; caring for livestock.

MICHIGAN: Temperatures 2 to 6° above normal. Extremes 16°; 78°. Precipitation none to 1.85 in. across the State.

Days suitable for fieldwork 2.5. Soil moisture 7% short, 27% adequate, 66% surplus. Corn 2% planted, 5% 1990, 6% avg. Oats planted 45%, 50% 1990, 55% avg. Potatoes planted 15%, 10% 1990, 8% avg. Sugarbeets planted 5%, 45% 1990, 60% avg. Winter wheat 3% very poor, 6% poor, 23% fair, 45% good, 23% excellent. Pasture condition 80% of normal. Major activities: Hauling manure, weed control spraying, fertilizing. Fruit development well ahead of normal. Tart, sweet cherries were damaged the most in the recent freeze. Total freeze damage has not been assessed.

MINNESOTA: Temperatures 0.1 to 5.6° above normal. Extremes 22°; 80°. Precipitation generally 0.28 to 0.83 in. with the greatest weekly total of 1.48 in.

Days suitable for fieldwork 3.6. Topsoil 6% very short, 17% short, 63% adequate, 14% surplus. Subsoil 16% very short, 23% short, 52% adequate, 9% surplus. Spring wheat 75% planted, 66% 1990, 51% avg. Oats 57% planted, 74% 1990, 65% avg. Barley 68% planted, 38% 1990, 38% avg. Field corn 21% ground prepared, 51% 1990, 42% avg.; 8% acreage planted 20% 1990, 15% avg. Soybeans 5% ground prepared, 20% 1990, 17% avg.; 0% acreage planted, 1% 1990, 0% avg. Potatoes 8% planted, 14% 1990, 11% avg. Sugarbeets 29% planted, 56% 1990, 46% avg. Dry beans 1% planted, 0% 1990, 0% avg. Green peas 32% planted, 35% 1990, 38% avg. Sweet corn 1% planted, 7% 1990, 5% avg.

MISSISSIPPI: Temperatures 64°, 30° below normal. Extremes 42°, 86°. Mostly wet statewide. State rainfall 3.20 in., 1.93 in. above normal. Soil temperatures 66°.

Days suitable for fieldwork 1.2, 4.9 1990, 5.0 avg. Soil moisture 14% adequate, 66% surplus, 20% excessive. Corn 60% planted, 65% 1990, 70% avg.; 54% emerged, 48% 1990, 50% avg.; 6% very poor, 11% poor, 48% fair, 35% good. Cotton 7% planted, 27% 1990, 27% avg.; 4% emerged, 5% 1990, 6% avg. Peanuts 16% planted, 10% 1990, 16% avg. Rice 13% planted, 14% 1990, 51% avg.; 10% emerged, 7% 1990, 18% avg. Sorghum 35% planted, 26% 1990, 35% avg.; 30% emerged, 11% 1990, 15% avg. Sweet potatoes 16% planted, 8% 1990, 17% avg. Watermelons 77% planted, 51% 1990, 55% avg. Wheat 96% jointing, 99% 1990, 99% avg.; 74% heading, 89% 1990, 73% avg.; 2% very poor, 1% poor, 81% fair, 16% good. Peaches 3% poor, 29% fair, 45% good, 23% excellent. Livestock 4% poor, 10% fair, 78% good, 8% excellent. Pasture 89% of normal. Activities: Mostly shop work, some land preparation for planting.

MISSOURI: Temperatures 4° below normal. Precipitation 1.10 in., 0.50 in. south central district to nearly 1.50 in. northwest. Storms northwest damaged buildings, phone lines.

Days suitable for fieldwork 1.9. Topsoil 1% short, 70% adequate, 29% surplus. Corn planting ranges 25% northwest to 70% or more west central, southwest, southeast. Sorghum planting most advanced west central, southeast. Wheat heading varies from none northeast to 13% southeast. Oats sown 93%, 95% 1990, 97% avg. Ground worked at least once for spring crops 81%, 67% 1990, 76% avg. Pasture 20% fair, 68% good, 12% excellent.

MONTANA: Winter storm hit eastern plains end of week with rain, snow. Eastern districts averaged over 1.00 in. precipitation. Temperatures cool but near normal. Early part of week warm.

Topsoil 28% short, 69% adequate, 3% surplus. Subsoil 69% short, 30% adequate, 1% surplus. Weekend snow, rain brought welcome moisture to much of the eastern parts of the state. Winter wheat still dormant none, greening 32%, green and growing 68%. Barley planted 48%, 59% 1990, 51% avg. Oats planted 34%, 50% 1990, 43% avg. Sugar beets planted 60%, 54% 1990, 54% avg. Field tillage not yet started 18%, just started 30% well underway 52%. Calving 88% complete, lambing 76%. Pasture, range feed condition 75%.

NEBRASKA: Temperatures near normal across the State. Precipitation 0.10 in. in the north central to 1.83 in. in the east central.

Days suitable for fieldwork 4.8. Topsoil 21% short, 75% adequate, 4% surplus. Subsoil 64% short, 36% adequate. Wheat 19% poor, 38% fair,

41% good, 2% excellent; 23% jointed, 46% 1990, 24% avg. Oats 93% sown, 95% 1990, 92% avg. Corn 10% planted, 16% 1990, 19% avg. Alfalfa 3% very poor, 7% poor, 42% fair, 48% good. Pasture, range 74% of normal.

NEVADA: Temperatures below normal. Extremes 19°; 89°. Precipitation none to 0.76. Thunderstorms produced rain, snow showers northern areas. Southern areas remained dry. Gusty winds hampered field preparations. Planting of spring crops continues. Some areas irrigating, mainly from well sources. Surface irrigation water supplies remain short. Livestock movement continues to spring, summer ranges. Calving, lambing 80 percent complete. Shearing of range flocks continues. Major activities: Maintenance of irrigation resources, field preparations.

NEW ENGLAND: Precipitation 0.65 to 4.25 in. Temperatures mid 40s northern Maine, high 40s to low 50s elsewhere north, high 40s to mid 50s south. Maximum temperatures high 60s north to low 80s south; minimum temperatures 22° north to 42° south.

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

NEW JERSEY: Temperatures near normal 32°; 81°. Rainfall 0.77 in. north, 0.89 in. central, 0.72 in. south. Heaviest 24 hour total 1.38 in. on 24th, 25th. Estimated soil moisture percent field capacity, averaged 97% north, 95% central, 92% south. Four inch soil temperature 52° north, 54° central, 55° south.

Isolated hail occurred on 24th. Fieldwork active on lighter soils. Poorly drained fields remained too wet. Tomato planting began. Peaches northern areas in petal fall stage. Apple bloom heavy. Blueberry, strawberry bloom continued. Early spring greens, vegetable harvest remained limited but increasing. Oat planting well advanced. Limited field corn planting continued. Hay, pasture growth normal.

NEW MEXICO: Several periods of damp, cloudy conditions occurred mainly over northern parts of State during the week. Temperatures 2 to 4° below normal from northwestern plateau southeastward through central valleys into northeastern plains. Cold averages of 6 to 8° below normal reported in northern mountains. Temperatures near normal elsewhere. Measurable precipitation confined to northern mountains, northwestern plateau, with several reports of more than 0.25 in. for week.

Days suitable for fieldwork 6.5. Soil moisture 86% short, 14% adequate. Alfalfa 47% fair, 48% good, 5% excellent. Cotton 33% fair, 67% good. Irrigated wheat 6% poor, 47% fair, 47% good. Dryland wheat 25% very poor, 62% poor, 13% fair. Low winter moisture, windy spring conditions have curtailed the wheat condition. Chile conditions fair to good. Onion, lettuce conditions good. Cold weather at the end of the week affecting fruit crop. Cattle, sheep poor to good. Range, pasture 62% of normal, ranging from 30% to 110%.

NEW YORK: Wet week, 1.00 to 2.50 in. of rain fell. Some snow fell in western areas on 22nd. Temperatures close to normal. Early week temperatures averaged below normal, rest of week temperatures were near or above normal. Extremes 24°; 83°.

Days suitable for fieldwork 2.8. Soil moisture mostly surplus. Rain, wet fields

slowed fieldwork. Spring plowing was active where fields were dry enough. Pasture condition was 82% of normal. Hay, wheat fair to good. Oats 37% planted, 23% 1990, 31% avg. Corn planting should begin as fields dry. Apples in Hudson Valley reached full bloom. Many peach varieties have set fruit. Fruit in Lake Ontario region show good crop potential. Sweet cherries were in full bloom. Wet fields delayed vegetable planting in many areas. Orange County onion planting neared completion.

NORTH CAROLINA: Temperatures about 3° below normal across the State. Precipitation none to 3.60 in.

Days suitable for fieldwork 4.2. Soil moisture 1% short, 69% adequate, 30% surplus. Pasture 6% fair, 82% good, 12% excellent. Crop condition: Wheat 10% fair, 84% good, 6% excellent; oats 10% fair, 87% good, 3% excellent; barley 10% fair, 86% good, 4% excellent; rye 9% fair, 85% good, 6% excellent; Irish potatoes 15% fair, 73% good, 12% excellent; tobacco plant beds 1% poor, 11% fair, 77% good, 11% excellent; peaches 20% fair, 67% good, 13% excellent; truck crops 22% fair, 73% good, 5% excellent. Corn planted 81%; cotton planted 22%; sorghum planted 16%; flue cured tobacco transplanted 43%. Wheat headed 67%. Tobacco plant bed supplies 4% short, 92% adequate, 4% surplus. Major activities included: Planting corn, cotton, truck crops; land preparation; transplanting flue cured tobacco. Other activities included: Planting sorghum, soybeans; harvesting truck crops; spraying small grains, corn; fertilizing pastures; tending tobacco beds; tending livestock; equipment repair; general farm maintenance.

NORTH DAKOTA: Temperatures 7 to 8° above normal statewide. Extremes 20° north central, 85° north central. Precipitation as rain 0.53 in. southwest to 1.06 in. central.

Days suitable for fieldwork 4.5. Topsoil supplies improved to above average while subsoil improved slightly, remained well below average. Topsoil 18% short, 82% adequate. Subsoil 42% very short, 54% short, 4% adequate. Planting progressed well ahead of average with dry conditions most of week. Hard red spring wheat 54% planted, 35% 1990, 31% avg.; durum wheat 30%, 15% 1990, 15% avg.; barley 59%, 33% 1990, 28% avg.; oats 42%, 29% 1990, 28% avg.; sugarbeets 42%, 38% 1990, 44% avg.; flax 3%, 1% 1990, 2% avg.; potatoes 2%, 0% 1990, 2% avg.; corn 4%, 1% 1990, 3% avg.. Winter wheat 16% poor, 44% fair, 40% good; 7% dormant, 51% green, 41% stooling, 1% jointing. Calving 87% complete, lambing 92%, shearing 94%. Pastures 53% of normal, furnished 19% roughage requirements. Stockwater 19% very short, 37% short, 44% adequate.

OHIO: Low pressures moved through at a frequent pace bringing rain or the threat of rain every few days. Precipitation amounted to 0.50 in. or less which was 0.30 to 0.80 in. subnormal. Temperatures cool early in the period, moved above normal later in the period. Lows reached down to the low to mid 30s, highs climbed to the mid 70s to low 80s. Temperatures ran 3 to 6° above normal. Soil temperatures lows of mid 40s to highs in the low 60s.

Days suitable for fieldwork 1.4. Soil moisture 39% adequate, 61% surplus. Activities: spreading fertilizer, manure; mowing road sides; harvesting haylage; some planting. Cold soils slowed germination, emergence of seeds. Corn planting lagged recent years; seeds from earlier plantings

were in danger of rotting without warmer soils. Winter wheat rates mostly good; a few stands reached the jointing stage. Oat planting 67% complete, 84% 1990, 75% avg. Optimum time passing to plant oats. Alfalfa weevil infestations reported with some stands treated to control the pests. Sugarbeet planting 57% complete. Canola bloom continued. Potato planting 30% complete. Some sweet corn planted. Apples in full bloom with peak expected May 1. Low temperatures slowed bee activity during part of the period.

OKLAHOMA: Temperatures 3° below normal west central to normal southeast. Precipitation 0.08 in Panhandle to 1.67 in. southwest.

Days suitable for fieldwork 4.5. Topsoil 40% short, 50% adequate, 10% surplus. Subsoil 55% short, 45% adequate. Wheat 5% poor, 55% fair, 40% good; 85% heading, 25% 1990, 40% avg.; 5% soft dough, 1% 1990, 5% avg. Wheat fair to good; development ahead of normal. Insect activity light. Corn 97% seedbed prepared, 90% 1990, 95% avg.; 70% planted, 60% 1990, 55% avg.; 35% up to stand, 15% 1990, 30% avg. Sorghum 75% seedbed prepared, 50% 1990, 60% avg.; 15% planted, 1% 1990, 4% avg. Soybeans 80% seedbed prepared, 55% 1990, 55% avg.; 15% planted, 1% 1990, 5% avg. Peanuts 60% seedbed prepared, 35% 1990, 70% avg.; 1% planted, 0% 1990, 3% avg. Cotton 80% seedbed prepared, 45% 1990, 70% avg.; 2% planted, 0% 1990, 3% avg. Alfalfa 15% first cutting, 5% 1990, 10% avg. Pasture condition 80%. Cattle fair to good; marketings average, prices mixed.

OREGON: Temperatures 3 to 5° below normal entire State. Cloudy skies, afternoon, evening thunderstorms across State. Rainfall 2.00 in. moisture coast, interior western valleys; 0.10 to 0.50 in. Precipitation rest of State.

Soil moisture 44% short, 53% adequate, 3% surplus. Barley 76% seeded, 81% 1990, 85% avg. Wet conditions hampered fieldwork; seeding of spring grains underway, weather permitting; cool conditions slowed crop growth east. Primary, secondary tillage, fertilization, planting spring small grains, corn. Strawberry bloom continued Willamette Valley, late harvest expected. December freeze cherries in bloom. Sweet cherries completing bloom; low bee activity Willamette Valley, Hood River; pollination good The Dalles. Tree fruit bloom good Medford, frost Grant County. Southern area cranberry development whit bud to roughneck. Too west for vegetable field activity west. Potatoes emerging Marrow, Umatilla area, late planting winding down. Asparagus harvest underway in calves branding, turnout continued east. Cold weather causing slow grass growth west. Range, pasture 17% very poor, 13% poor, 54% good, 4% excellent.

PENNSYLVANIA: Wet week with above normal temperatures. Temperature 52°, 2° above normal. Extremes 29°; 83°. Precipitation 1.04 in., 0.22 in. above normal.

Days suitable for fieldwork 3. Soil moisture 1% short, 52% adequate, 47% surplus. Plowing 57% complete, 60% 1990, 61% avg. Corn 3% planted, 4% 1990, 9% avg. Soybeans 0% planted, 1% 1990, 2% avg. Oats 64% planted, 63% 1990, 68% avg. Potatoes 30% planted, 30% 1990, 37% avg. Tobacco beds 83% planted, 89% 1990, 84% avg. Barley 84% pre boot, 91% 1990, 93% avg.; 15% boot, 8% 1990, 7% avg.; 1% heading or headed, 1% 1990, 0% avg. Wheat 93% pre boot, 95% 1990, 96% avg.; 7% boot, 5% 1990, 4% avg.; 3% poor, 21% fair, 54% good, 22% excellent.

Oats 3% poor, 26% fair, 54% good, 17% excellent. Hay stands mostly good. Feed from pastures 2% very poor, 6% poor, 48% fair, 44% good. Peaches 27% pre pink, 36% 1990, 31% avg.; 19% pink, 24% 1990, 26% avg.; 54% full bloom or past, 40% 1990, 43% avg. Cherries 23% pre pink, 43% 1990, 33% avg.; 18% pink, 17% 1990, 24% avg.; 59% full bloom or past, 40% 1990, 43% avg. Apples 45% pre pink, 47% 1990, 54% avg.; 33% pink, 27% 1990, 29% avg.; 22% full bloom or past, 26% 1990, 17% avg. Activities: Spring plowing; planting crops; repairing fence; spreading fertilizer; maintaining machinery; caring for livestock; spraying; hauling manure.

PUERTO RICO: No Data Available.

SOUTH CAROLINA: Temperatures 3° below normal Upstate to near normal along the south coast. Rainfall varied 0.30 in. the central to 1.10 in. the mountains.

Days suitable for fieldwork 4.6. Soil moisture 9% short, 78% adequate, 13% surplus. Tobacco fair to good; 88% planted, 96% 1990, 75% avg. Corn fair to good; 91% planted, 95% 1990, 90% avg. Watermelons fair to good; 85% planted, 76% 1990, 81% avg. Cantaloupes fair to good; 75% planted, 69% 1990, 80% avg. Peaches good. Cucumbers fair to good; 58% planted, 54% 1990, 64% avg. Oats fair to good; 76% headed, 84% 1990, 71% avg.; 7% turning color, 13% 1990, 5% avg. Wheat fair to good; 83% headed, 87% 1990, 67% avg.; 5% turning color, 7% 1990, 4% avg. Barley good; 4% turning color, 3% 1990, 5% avg. Rye fair to good; 12% turning color, 14% 1990, 7% avg. Grain hay fair to good; 17% harvested, 23% 1990, 15% avg. Pastures fair to good.

SOUTH DAKOTA: Temperatures normal to 6° above normal. Extremes 18°; 81°. Precipitation over most of state. Ranges from under 0.25 in. southeast, south central to over 1.00 in. west.

Days suitable for fieldwork 5.0. Topsoil 1% critical, 20% short, 79% adequate. Subsoil 17% critical, 64% short, 18% adequate, 1% surplus. Rye 4% poor, 9% fair, 49% good, 38% excellent. Livestock 1% poor, 4% fair, 68% good, 27% excellent. Feed supplies 9% very short, 6% short, 66% adequate, 19% surplus. Stockwater 12% very short, 34% short, 40% adequate, 14% surplus.

TENNESSEE: High pressure dominated early week. Low pressure 26th through weekend brought wide spread showers, thundershowers. Rain heaviest West. Temperatures normal to slightly above normal statewide. Precipitation above normal west; below normal middle, east.

Days suitable for fieldwork 4.0. Soil moisture 1% short, 87% adequate, 12% surplus. Corn 22% planted, 22% 1990, 45% avg. Cotton 5% planted, 4% 1990, 18% avg. Sorghum 4% planted, 4% 1990, 12% avg. Tobacco 94% plants up, 96% 1990, 92% avg.; 2% transplanted, 1% 1990, 1% avg. Wheat 90% jointed, 92% 1990, 90% avg.; 22% headed, 30% 1990, 30% avg.; 1% poor, 28% fair, 69% good, 2% excellent. Strawberries 27% fair, 61% good, 12% excellent. Improved planting conditions, progress slow. Insect, disease problems wheat. Widespread tick, fly problems.

TEXAS: Two cold fronts, a dry line, plenty of tropical moisture combined to bring rainfall to eastern sections of State. Northeast corner of State picked up enough rain for area averages to fall nearly 0.50 in. above normal. South Plains had weekly total slightly above normal. Unfortunately, west Texas not helped much by recent systems, remains very dry. Data shows

many areas receiving rain about right time, since totals did not change year to date status very much. Normally, this is time during spring season when peak of rainfall occurs in north, south. Data shows only northeast of State, southern Low Plains had totals above normal. Rest of State had totals slightly behind normal. Greatest departure below normal in Coastal Bend with -0.80 in. Northern half of east Texas had departure of +0.45 in.

Crops: Small grain conditions continued to diminish on Plains. Dryland wheat fields continued to suffer serious moisture stress. Some wheat fields being baled for hay on Low Plains. Irrigated wheat trying to head, yields expected below normal. Wheat rust continued increasing problem in some Blackland, south Texas fields. Some south Texas producers preparing to start harvest soon. Oat fields showing good progress east, central Texas. Statewide wheat 58% of normal compared with 72% 1990. Corn planting off to minimal start on High Plains as pre planting operations continued. Cultivating, side dressing practices common to Blacklands, east, central Texas, Coastal areas. Stands looked good, plants along coast still showed signs of excessive moisture. Some corn fields Rio Grande Valley begun tasseling. Statewide corn condition is 87% of normal compared with 84% 1990. Sorghum planting in Trans Pecos well underway, moisture needed desperately. Elsewhere in State, sorghum stands progressing well. Cultivation activities common most areas as weather permitted. Statewide sorghum condition is 83% of normal compared with 88% 1990. Cotton pre plant operations continued full swing on Plains, moisture still needed desperately. Few producers started planting operations, for most part, low soil moisture, temperatures were delaying factor. Producers in Coastal Bend continued cultivation, early insect control, while Upper Coastal producers replanted some acreage due recent excessive rainfall. Cotton 0% squared, 2% 1990, 1% avg. Rice planting winding down in Upper Coast. Emerged fields continued progress well. Good stands reported. Rice 51% emerged, 41% 1990, 58% avg. Peach thinning, spraying continued most areas of State. Last weeks hail damage caused only minimal damage some trees. For most part, heavy peach crop still expected. Other field crops: Peanuts 0% planted, 1% 1990, 3% avg. Soybeans 14% planted, 15% 1990, 10% avg. Sugarbeets 65% planted, 74% 1990, 91% avg. Sunflowers 0% planted, 8% 1990, 4% avg.

Commercial Vegetables: Rio Grande Valley, onion harvest continued full swing with good yields reported. Squash harvest continued while cantaloupe harvest begun. Pepper, tomato, melon crops continued progress well. San Antonio Winter Garden, cabbage harvest continued. Strawberry harvest got underway. Watermelons making good progress. Onion harvest expected to start soon. All other crops showing good development. East Texas, producers would like to see sunshine, warmer temperatures. Plant growth slowed by cooler temperatures, too much rain. Insect pressure increasing. Watermelons, cantaloupes set out, some watermelon replanting necessary due recent excessive moisture. High Plains, onion sets continued good shape, required some irrigation. Tomato, pepper planting continued. Potatoes begun to bloom. Trans Pecos, chile plants growing well. Onion sets doing fine as irrigation continued.

Range and Livestock: Livestock continued fair, good shape last week. Limited forage on Plains forcing some supplemental feeding to

continue. For other areas of State, forage production continued to increase as ranges, pastures greened. Recent moisture promoted fertilize practices on pastures. Horn flies becoming increasing problem Blacklands' ranchers, pose no major threat. Range, pasture 10% poor, 47% fair, 34% good, 9% excellent.

UTAH: Maximum temperatures 2° less than normal, minimums approximated normal throughout the State. Precipitation ranged from heavy in the northern half, to light in the southern half of the State.

Days suitable for fieldwork 4.5. Soil moisture 28% short, 69% adequate, 3% surplus. Spring wheat 71% emerged, 86% 1990, 64% avg. Barley 69% emerged, 79% 1990, 68% avg. Corn 24% planted, 27% 1990, 23% avg.; emergence just underway. Oats 75% seeded, 73% 1990, 69% avg.; 30% emerged, 46% 1990, 41% avg. Potatoes 10% planted, 18% 1990. Winter wheat height 5.7 in., 7.7 in. 1990, 7.3 in. avg. Alfalfa height 4.4 in., 10 in. 1990, 7 in. avg. Apricots, sweet cherries, tart cherries, apples, pears mostly fair to good. Peaches poor condition. Calf death losses slightly below normal. Lamb death losses mostly normal. Pasture, range mostly fair. Cutworms, nematodes being reported in some alfalfa fields. Cool weather has slowed growth of crops, range.

VIRGINIA: Temperatures below normal for the week. Extremes 28°; 80°. Precipitation varied from near normal in the east to below normal in the southwest. Norfolk received over 6.00 in.

Days suitable for fieldwork 3.8. Topsoil 82% adequate, 18% surplus. Corn 35% planted, 33% 1990, 26% avg. Corn 3% poor, 33% fair, 61% good, 3% excellent. Soybeans 1% planted, 1% 1990, 1% avg. Peanuts 5% planted, 16% 1990, 6% avg. Cotton 12% planted, 50% 1990, 50% avg. Flue tobacco 1% transplanted, 5% 1990, 3% avg. Wheat 30% fair, 67% good, 3% excellent. Barley 20% fair, 74% good, 6% excellent. Apple 5% fair, 84% good, 11% excellent. Peach 20% fair, 75% good, 5% fair. Potatoes nearly all good condition. Alfalfa 8% fair, 74% good, 18% excellent. Other hay 16% fair, 67% good, 17% excellent. Pasture 10% fair, 69% good, 21% excellent. Cutting small grain haylage, spraying some small grains fields for cereal leaf beetles, powdery mildew. Planting sweet corn, tomatoes, snap beans, cucumbers. Spring planting in full swing for summer crop.

WASHINGTON: Temperatures 3° above normal to 17° below normal east; 2° above normal to 3° below normal west. Precipitation none to 0.28 in. east; 0.20 to 1.10 in. west.

Days suitable for fieldwork 5.4. Soil moisture 60% very short, 32% short, 8% adequate. Range, pasture 10% very poor, 30% poor, 31% fair, 29% good. Hay, other roughage 9% short, 81% adequate, 10% surplus. Winter wheat 36% very poor, 40% poor, 13% fair, 11% good. Winter barley 28% very poor, 56% poor, 10% fair, 6% good. Potatoes planted 62%; emerged 27%. Spring wheat planted 93%; emerged 68%. Spring barley planted 82%; emerged 50%. Dry peas planted 67%. The weather was sunny early in week and fieldwork progressed rapidly. Cool, stormy weather later slowed field activity. Farmers were progressing well in spring planting of wheat, barley, dry peas, lentils along the eastern border of the State. Limited reports of some diseases in winter wheat were showing up in Whitman County. The all wheat condition is below normal due to

(Continued to back cover)

International Weather and Crop Summary

HIGHLIGHTS

April 21 - 27, 1991

WESTERN USSR ... The combination of spring snow melt and recent moderate rain causes flooding in crop areas along the Volga River.

NORTHWESTERN AFRICA ... Widespread light showers benefit immature winter grains, while unseasonably cool weather slows crop maturation.

EUROPE ... Subfreezing temperatures harm crops in the west and north. Temperatures were not low enough to significantly damage winter grains in the jointing stage.

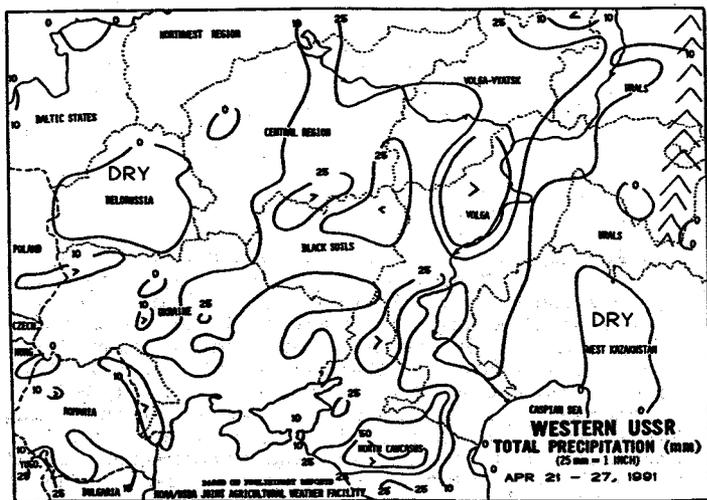
EASTERN ASIA ... Beneficial showers cover Manchuria's spring wheat regions. Drier weather returns to most of the North China Plain.

SOUTHEAST ASIA ... Tropical Storm Vanessa brings moderate to heavy rain to the Philippines and Vietnam. Beneficial showers bring relief to most Thai rainfed grain.

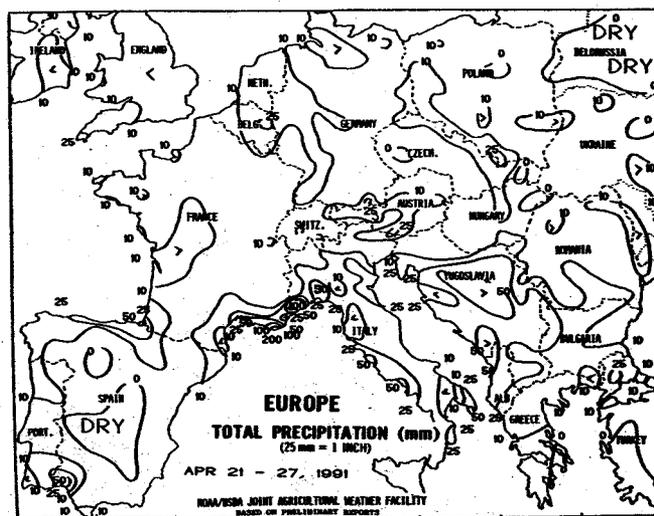
SOUTH AFRICA ... Seasonably dry weather benefits mature corn.

SOUTH AMERICA ... Early-week rain delays southern Brazil's soybean harvest. Favorable conditions prevail in Argentina.

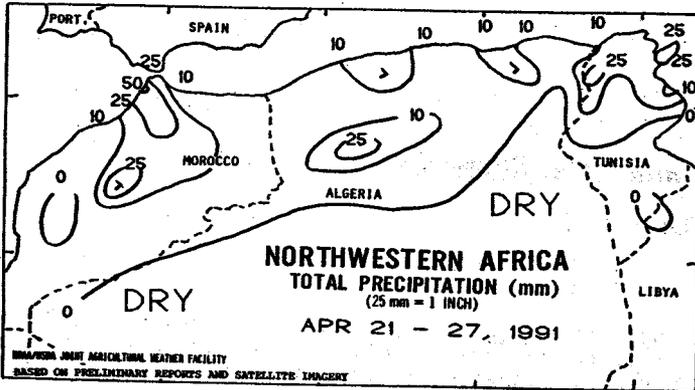
AUSTRALIA ... Western and southeastern wheat regions receive beneficial rains to boost topsoil moisture.



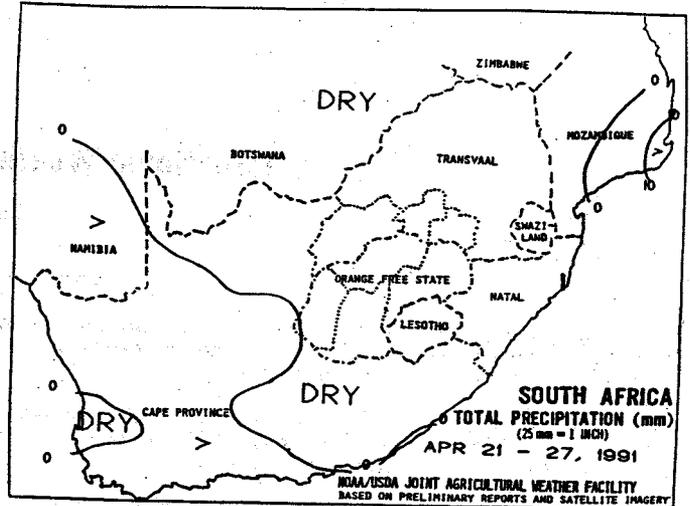
WESTERN USSR ... Crop progress for winter grains ranged from jointing in the south to greening as far north as the Northwest and Volga Vyatsk Regions. Spring grains were emerging in the southern Ukraine and the North Caucasus. A cooling trend spread east and south over the region, slowing crop growth. Weekly average temperatures ranged from 3 degrees Celsius (C) in the northwest (4 degrees C below normal) to 12 degrees C in the southeast (near normal). Moderate to heavy rain (25 to 50mm, with local amounts in excess of 50mm) soaked crop areas in the North Caucasus, parts of the Black Soils Region, the Volga, and the Volga Vyatsk. The combination of saturated topsoils from melting snow and this past week's moderate rain in the Volga has reportedly caused widespread flooding along the Volga River, especially in and around Volgograd.



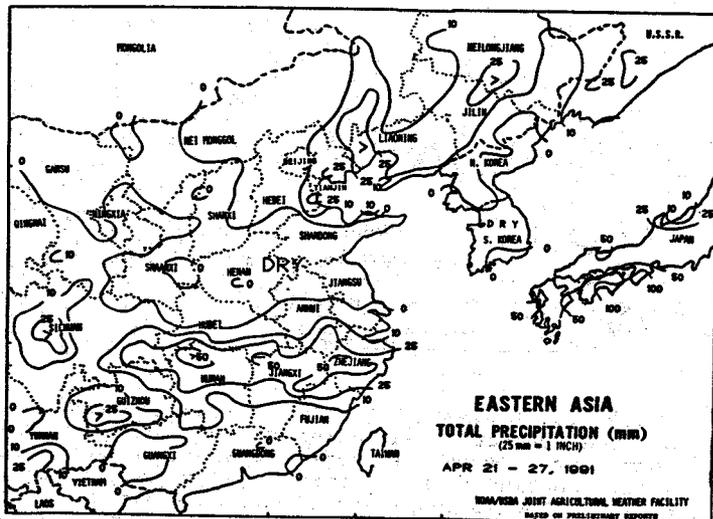
EUROPE ... Unseasonably cold weather covered most of the western and northern portions of the continent. Weekly average temperatures over the entire continent ranged from 3 to 5 degrees C below normal. Lowest temperatures occurred early in the week (-1 to -7 degrees C), covering crop areas north of a line that stretched from northern Spain, eastward through northern Italy, into southern Romania. The cold weather in these areas hampered the growth of newly planted sugarbeets and likely damaged some fruit trees and vineyards, especially in those areas which experienced extreme cold (-3 to -7 degrees C). Although minimum temperatures in most areas were not low enough to cause significant damage to winter grains in the jointing stage, temperatures were low enough to burn some top growth. Precipitation over the continent was generally light but widespread. Moderate precipitation (25-65mm) covered the Mediterranean coast of France, parts of Italy, and most of Yugoslavia.



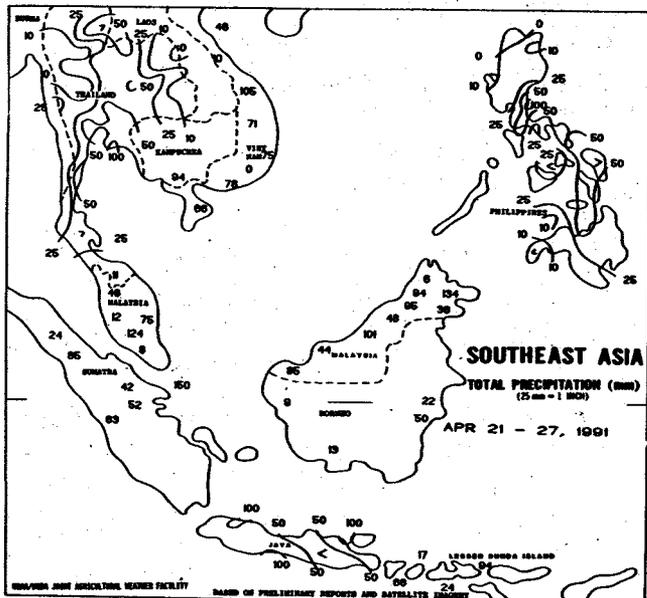
NORTHWESTERN AFRICA ... Crop progress for winter grains ranged from filling to maturing. Light showers covered winter grains in Morocco, Algeria, and Tunisia, benefiting immature crops. Weekly average temperatures were 3-9 degrees C below normal over the region, slowing crop maturation.



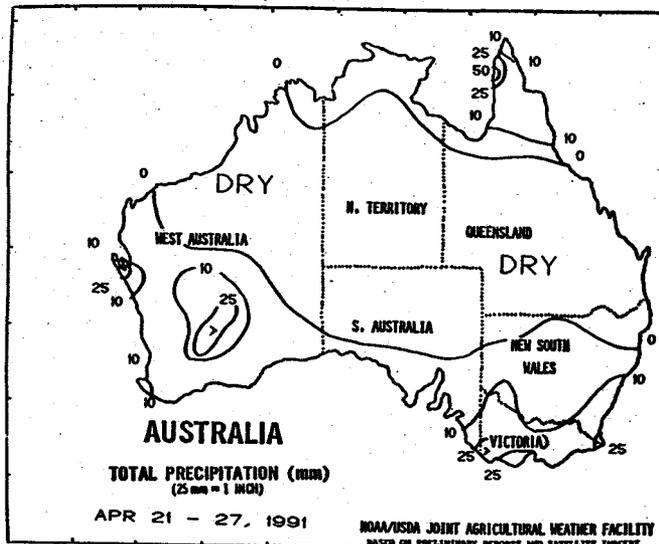
SOUTH AFRICA ... Seasonably dry weather continued across the Maize Triangle, maintaining favorable conditions for maturing corn. Temperatures averaged near normal across the region, with daytime highs averaging in the middle 20's C in the west, favoring late crop growth. Dry, warmer-than-usual temperatures benefited maturing crops in Natal and the eastern Cape Province.



EASTERN ASIA ... Light to moderate showers (5-43mm) over most of Manchuria improved topsoil moisture for spring wheat planting. The rain reached northernmost winter wheat areas of the North China Plain, but drier weather returned to most wheat areas from Hebei and Shandong southward. Further south, moderate to heavy showers (25-71mm) stretched across the Yangtze Valley, maintaining ample moisture for spring crop planting. In contrast, continued drier- and warmer-than-normal weather over south-coastal rice areas reduced available moisture for vegetative crops.



SOUTHEAST ASIA ... Tropical Storm Vanessa rolled through the southern Philippines with sustained winds of 35 knots, bringing beneficial rainfall (25-95mm) for planting to most southern and eastern crop areas. Scattered showers (10-59mm) also covered crop regions of southern and eastern Luzon, but dry weather dominated main season rice areas of western Luzon. Vanessa hit the coast of central Vietnam on the 27th, bringing moderate to heavy showers (30-105mm) to most central and southern rice areas. In Thailand, much needed, moderate to heavy showers (25-50mm or more) covered a large portion of the major rainfed rice and corn areas, providing timely planting moisture. Further south, moderate to heavy showers (25-100mm or more) lingered over most primary crop regions of Malaysia and Indonesia.



AUSTRALIA ... Beneficial rains fell in the western wheat areas (5-30mm) to boost pre-planting topsoil moisture. Rains also increased topsoil moisture in the wheat areas of Victoria and extreme southern New South Wales (10-25mm). Dry conditions continued in the eastern summer crop region, which enabled harvesting and fieldwork to progress.

SOUTH AMERICA ... Untimely rain early in the week in southern Brazil caused additional harvest delays, especially in Rio Grande do Sul, Santa Catarina, and southern Parana, where weekly rainfall totaled 50-105mm. Widespread showers (10-31mm) slowed fieldwork in southern Mato Grosso do Sul and northern Parana. Another area of locally heavy rain (50-107mm) soaked eastern Sao Paulo and southern Minas Gerais, where early coffee and citrus harvesting usually begins soon. Mostly dry weather helped summer crop harvesting in Goias and Mato Grosso. In Argentina, dry weather over most primary summer crop areas favored harvesting. Light showers (mostly less than 10mm) caused little delay in northern cotton harvesting. Winter wheat planting begins soon with mostly favorable moisture conditions.



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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)382-1444**
Vilhelm Bjerknes and Wes Byrd.

Subscriptions (202) 447-7917 . . . **Joyce Houston**

U.S. DEPARTMENT OF AGRICULTURE

Economics Management Staff
Editor **Sharon Lee**
National Agricultural Statistics Service
Agricultural Statistician . . . **Dave Abbe (202) 447-2157**
World Agricultural Outlook Board
Agricultural Weather Analysts . . **Ray Motha (202) 447-5716**
Tom Puterbaugh, Mark Brusberg and Bob Stefanski.

(Continued from p. 16)

winter damage to emerging winter wheat and because of soil crusting in spring wheat areas. Apples were in full bloom through Cheland, Yakima Counties. Frost protection for fruit trees was needed in only a few areas. Blueberries were beginning to bloom in Cowlitz County. Spring planting of vegetable crops continued. Asparagus harvest continued in Franklin County. Cattle, sheep were being turned out on spring pastures. Sheep shearing continued, calving was nearly completed.

WEST VIRGINIA: Temperature 56°. Extremes 27°; 86°. Precipitation 0.31 in.

Days suitable for fieldwork 4.0. Soil moisture 71% adequate, 29% surplus. Wheat, barley good to excellent. Corn 19% planted. Oats, 72% planted, 31% emerged. Gardens, 35% fair, 59% good, 6% excellent, 27% planted, 16% emerged. Tobacco fair, 83% beds seeded, 54% emerged. Hay 24% fair, 71% good, 5% excellent. Apples, peaches good. Pastures 13% fair, 68% good, 19% excellent; 92% of normal. Cattle, sheep good. Calving 92% complete. Lambing 92% complete. Hay supplies 76% adequate, 24% surplus. Other feed adequate. Farm activities: General maintenance, calving, lambing, fencing, plowing, seeding tobacco beds, planting corn.

WISCONSIN: Temperature 52°, 3° above normal. Extremes 18°; 83°. Precipitation 0.30 to 1.00 in.

Days suitable for fieldwork 4.0. Wet fields, frequent showers continue to slow farming activities. Soil moisture 2% short, 77% adequate, 21% surplus. Spring plowing 22% complete, 44% 1990, 45% avg. Oats

planted 29%, 59% 1990, 57% avg. Estimates from reporters say winter freeze damage to alfalfa, winter wheat fields still remains light, more than previously reported. Farmers reported 18% of the alfalfa having no damage, 60% with light damage, 19% with moderate damage, 3% with severe damage. Reports show 21% of winter wheat has no damage, 54% with light damage, 20% with moderate damage, 5% with severe damage. Vegetable planting activities are progressing well with early planted peas germinated and looking good.

WYOMING: Temperatures mostly below normal. Precipitation below normal north central, mostly above normal elsewhere.

Days suitable for fieldwork 3.0. Topsoil 17% short, 80% adequate, 3% surplus. Spring wheat 60% planted, 60% 1990, 50% avg.; 20% emerged, 25% 1990, 20% avg. Oats 50% planted, 50% 1990, 45% avg.; 15% emerged, 30% 1990, 15% avg. Barley 75% planted, 80% 1990, 70% avg.; 40% emerged, 65% 1990, 45% avg. Sugarbeets 65% planted, 75% 1990, 70% avg.; 5% emerged, 15% 1990, 10% avg. Corn 5% planted, 10% 1990, 5% avg.; 0% emerged, 0% 1990. Potatoes 30% planted, 20% 1990, 15% avg.; 10% emerged. Dry beans 0% planted, 0% 1990. Winter wheat fair to mostly good. Alfalfa prospects mostly good. Livestock mostly good. Spring calves born 85%, 85% 1990, 85% avg. Death losses light to normal. Farm flock: Ewes lambed 95%, 90% 1990, 90% avg.; shorn 85%, 90% 1990, 85% avg. Range flock: Ewes lambed 50%, 50% 1990, 50% avg.; shorn 65%, 70% 1990, 60% avg. Death losses light to normal. Ranges, pastures good to excellent.

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