

WEEKLY WEATHER AND CROP BULLETIN

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration,
National Weather Service

U.S. DEPARTMENT OF AGRICULTURE
National Agricultural Statistics Service and
World Agricultural Outlook Board

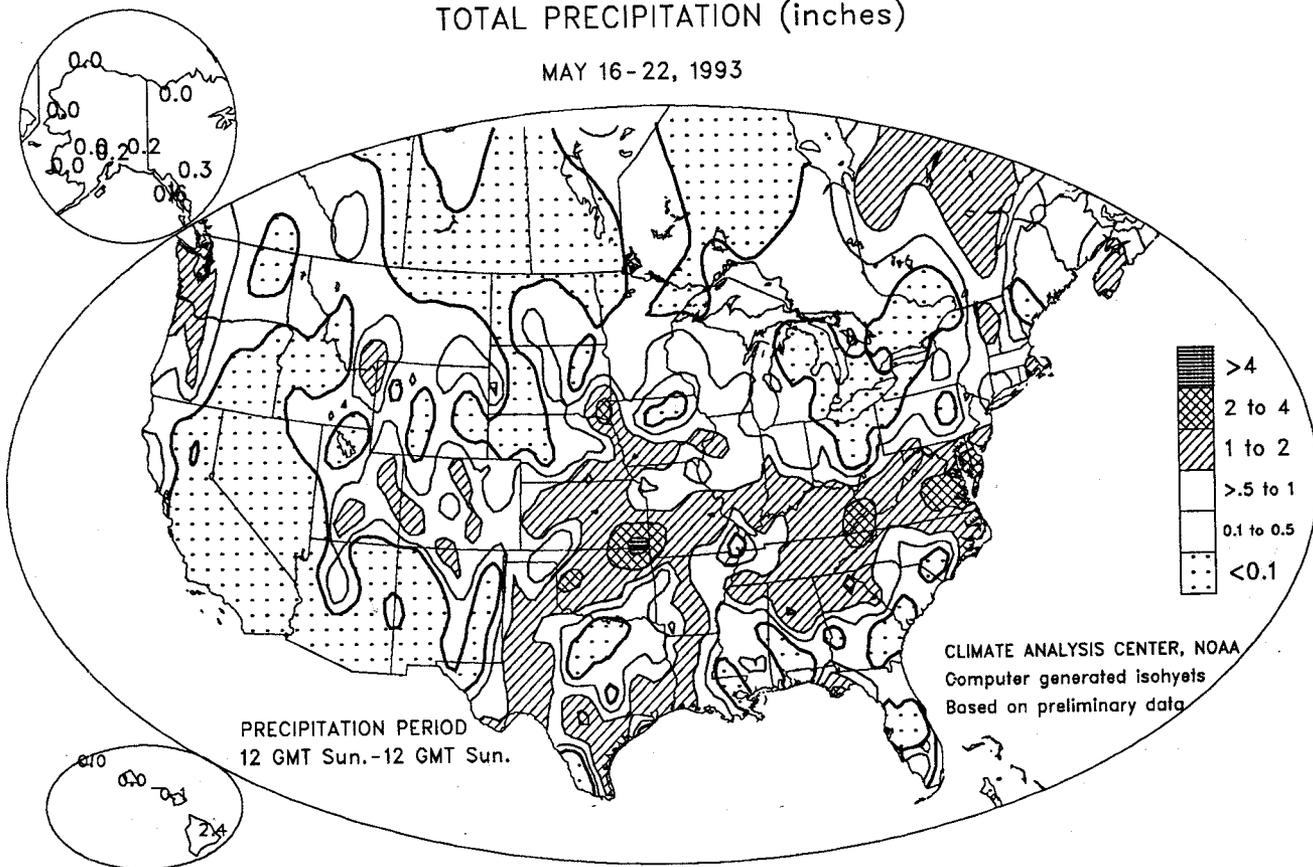
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Washington, D.C.

May 25, 1993

TOTAL PRECIPITATION (inches)

MAY 16-22, 1993



HIGHLIGHTS

May 16 - 22, 1993

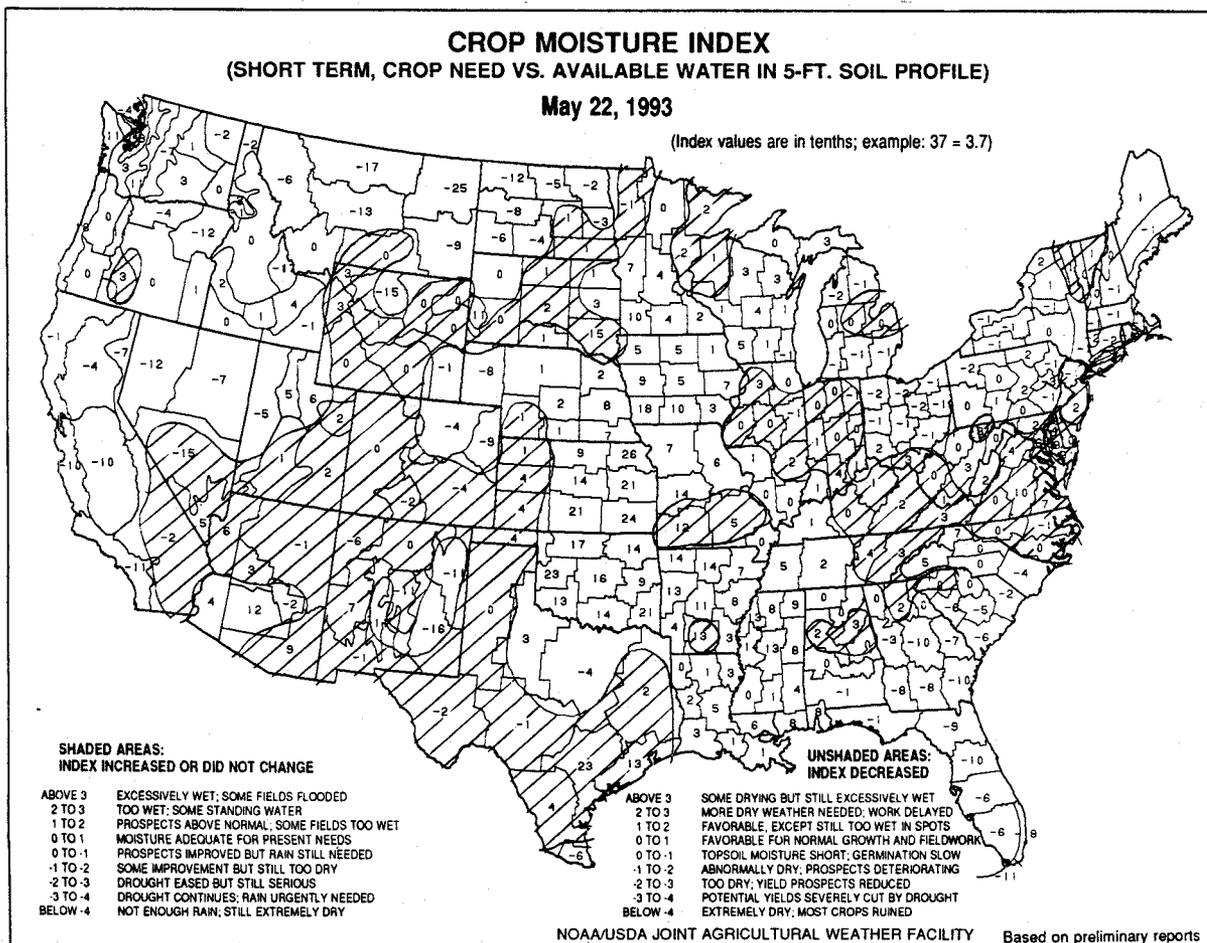
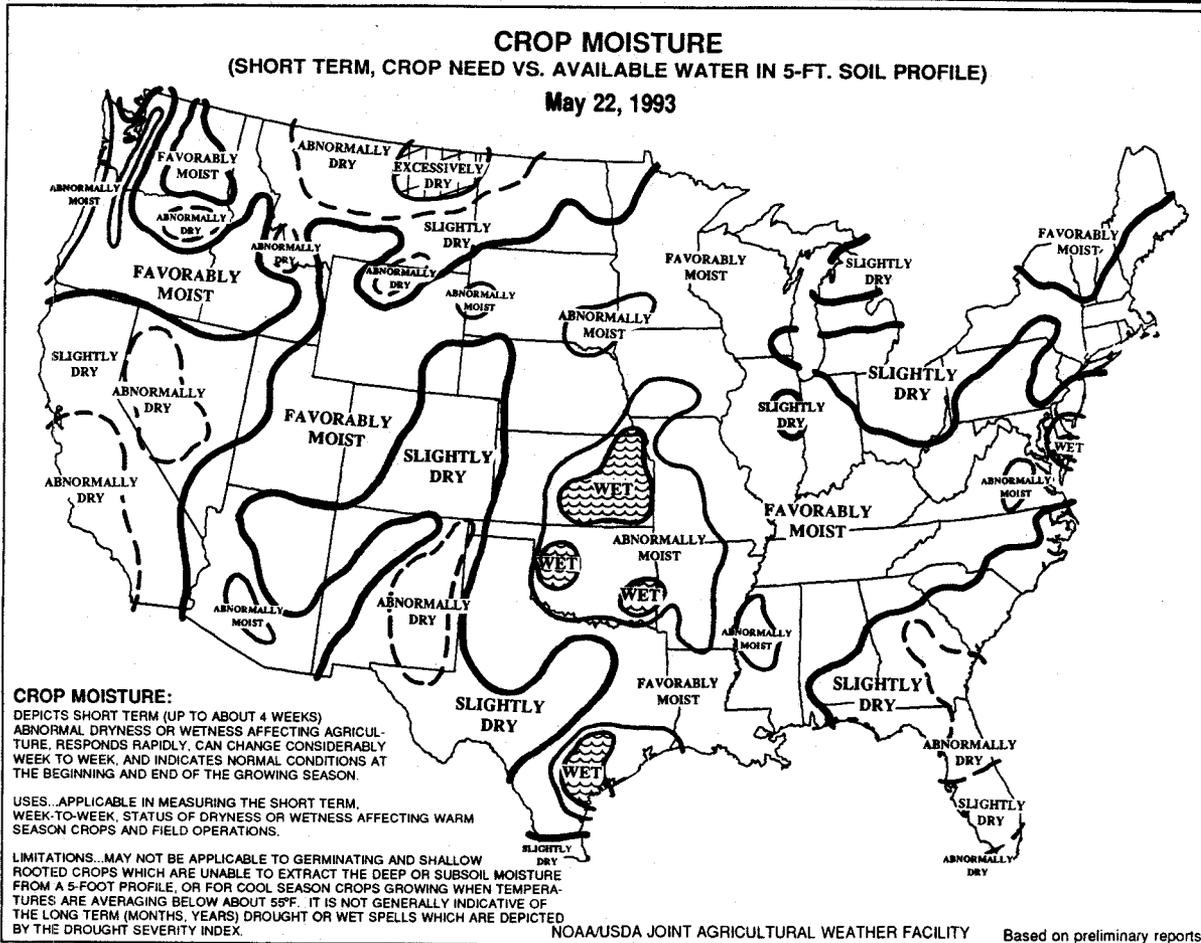
Thunderstorms accompanied a cold front as it pushed southward from the Corn Belt to the Gulf coast. Wet conditions continued to hinder fieldwork and crop development in the east-central Plains. However, little rain fell from the South Carolina piedmont southward through Florida, leaving topsoils too dry for normal planting and crop progress in some areas. Cool air blanketed areas east of the Rockies after midweek, resulting in frost as far south as eastern Nebraska and West Virginia. Other weekly highlights included rapid river rises in the Rocky Mountain States (due to snowmelt and scattered thunderstorms), and very warm weather in the West. Flood warnings were posted along numerous rivers from Idaho and western Montana southward into northern New Mexico, as temperatures averaged 3 to 10°F above normal and rainfall locally topped 1 inch. Farther east, frost appeared in the northern Great Lakes and northern Plains early in the week. Lows reached 25°F in Marquette, MI on Monday, and 29°F in Williston, ND on Tuesday. Two days later, Lincoln, NE registered 33°F.

Farther south, cloudy, cool weather slowed evaporation rates. The high on Wednesday in Topeka, KS reached only 54°F. Late in the week, more than 30 daily record lows were set throughout the East, while rain developed from the Corn Belt to Texas. Daily records included 36°F in Asheville, NC and 42°F in Montgomery, AL. Farther west, rainfall surpassed 2 inches in Sioux Falls, SD and San Antonio, TX.

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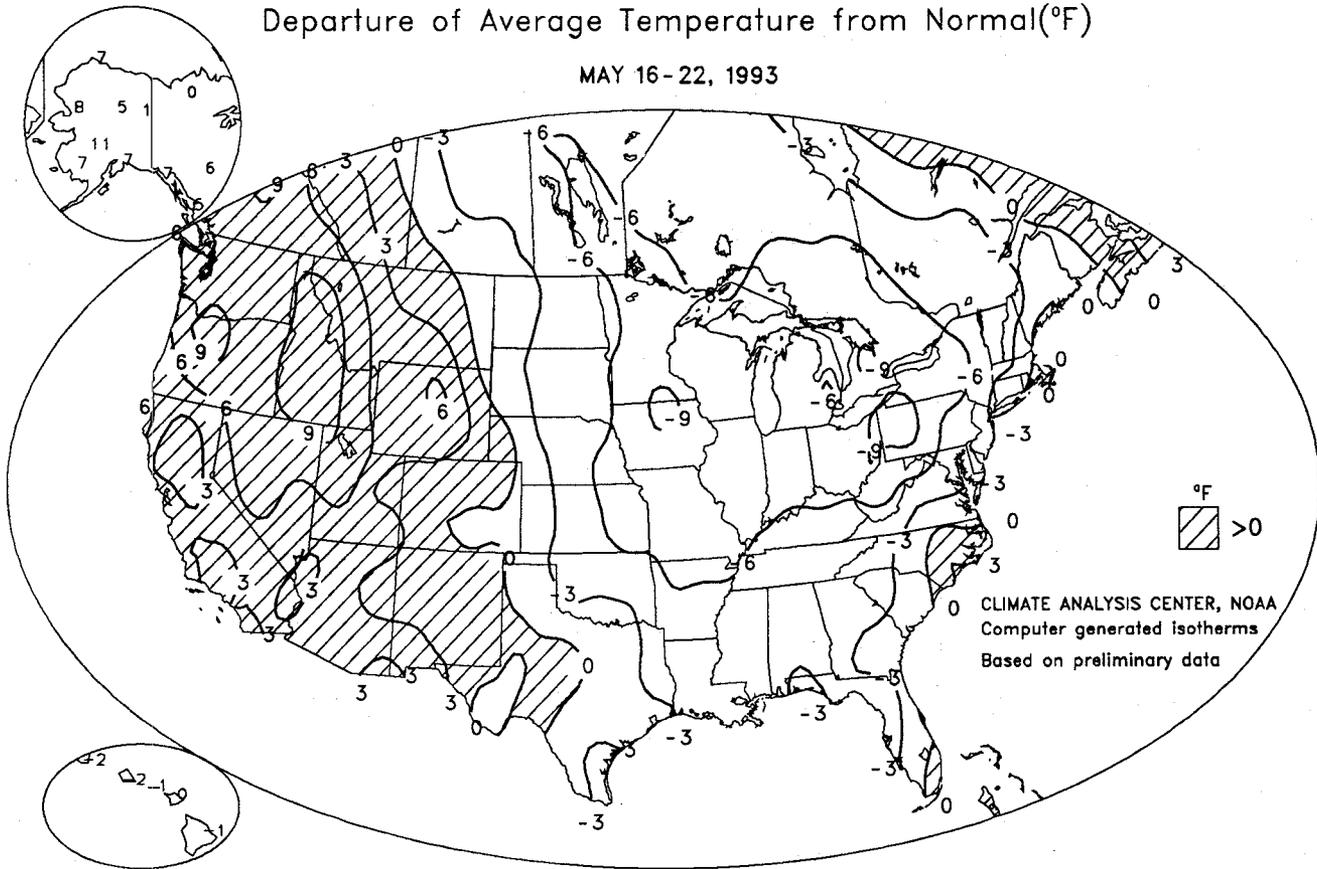
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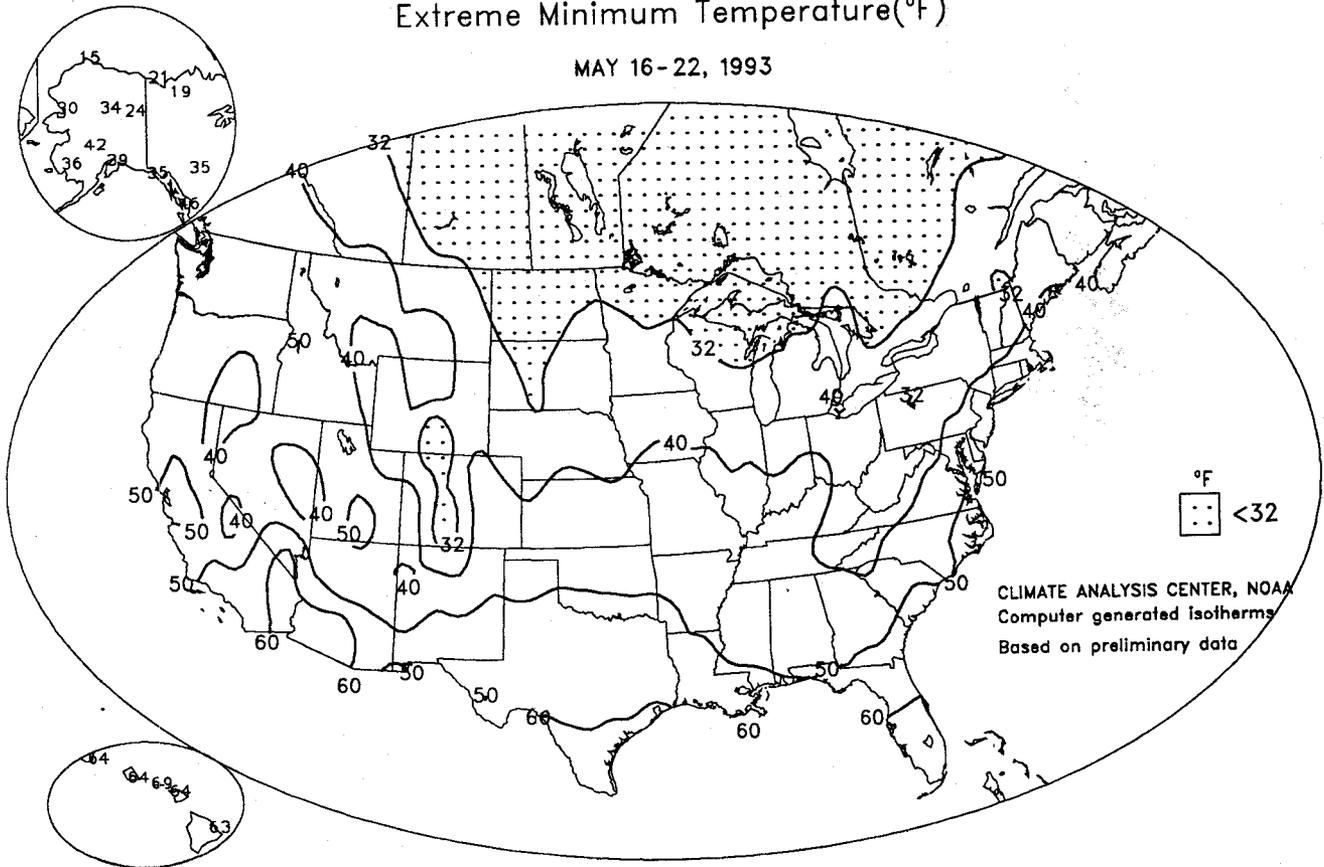
Departure of Average Temperature from Normal(°F)

MAY 16-22, 1993



Extreme Minimum Temperature(°F)

MAY 16-22, 1993



CUMULATIVE GROWING DEGREE DAYS (CORN*) April 1 - May 22, 1993

STATES AND STATIONS	TOTAL	DEP. FROM NORMAL	STATES AND STATIONS	TOTAL	DEP. FROM NORMAL	STATES AND STATIONS	TOTAL	DEP. FROM NORMAL
AL ANNISTON	731	- 105	SALINA	469	- 106	ZANESVILLE	459	- 1
BIRMINGHAM	744	- 103	TOPEKA	448	- 136	OK ALTUS	728	- 133
MOBILE	861	- 188	WICHITA	473	- 197	GAGE	595	- 84
MONTGOMERY	820	- 80	KY LEXINGTON	549	- 27	HOBART	628	- 128
MUSCLE SHOALS	730	- 56	BOWLING GREEN	620	- 41	MCALESTER	756	- 54
OZARK	850	- 132	PADUCAH	663	- 45	PONCA CITY	600	- 108
TUSCALOOSA	794	- 101	LA LAFAYETTE	924	- 152	OR BAKER	600	- 173
AZ DOUGLAS	899	+ 123	LAKE CHARLES	954	- 111	EUGENE	347	+ 46
FLAGSTAFF	398	+ 107	MONROE	837	- 113	NORTH BEND	363	+ 31
PHOENIX	1303	+ 292	NEW ORLEANS	910	- 163	PENDLETON	271	+ 85
TUCSON	1059	+ 149	SHREVEPORT	822	- 147	REDMOND	447	+ 64
YUMA	1347	+ 271	ME AUGUSTA	285	+ 72	PORTLAND	405	+ 18
AR EL DORADO	605	+ 133	CARIBOU	202	+ 78	SALEM	429	+ 102
FAYETTEVILLE	758	- 125	HOULTON	231	+ 70	SEXTON SUMMIT	143	- 36
FORT SMITH	560	- 116	PORTLAND	218	+ 29	PA ALLENTOWN	477	+ 68
JONESBORO	686	- 113	MD SALISBURY	560	+ 31	PHILADELPHIA	566	+ 108
LITTLE ROCK	666	- 137	MA WORCESTER	324	+ 56	WILLIAMSPORT	494	+ 87
TEXARKANA	712	- 136	MI BATTLE CREEK	363	- 2	SC BEAUFORT	907	- 49
CA BAKERSFIELD	773	- 144	JACKSON	369	+ 14	CHARLESTON	887	- 22
BLUE CANYON	841	+ 41	LANSING	362	- 16	COLUMBIA	840	- 49
DAGGETT	171	- 22	MUSKOGON	313	+ 39	FLORENCE	879	0
EUREKA	1001	+ 132	PELLSTON	225	+ 8	SUMTER/SHAW AFB	821	- 82
FAIRFIELD	332	+ 196	SAULT STE. MARIE	141	- 13	SD ABERDEEN	393	+ 84
FRESNO	647	+ 54	TRVERSE CITY	270	+ 17	HURON	355	- 4
MARYSVILLE	814	+ 105	MN DULUTH	160	- 4	PIERRE	382	- 2
MERCED	722	+ 30	INT'L FALLS	223	+ 18	RAPID CITY	330	+ 2
MT SHASTA	747	+ 39	ALEXANDRIA	273	+ 13	SIOUX FALLS	323	- 52
PASO ROBLES	262	- 42	WARROAD	188	- 16	WATER TOWN	272	- 10
RED BLUFF	730	+ 122	MS BILOXI	933	- 132	TN BRISTOL	592	- 12
RIVERSIDE	655	- 16	COLUMBUS	752	- 120	CHATTANOOGA	732	- 7
SANTA ANA	859	+ 163	JACKSON	832	- 77	CROSSVILLE	560	+ 19
SAN DIEGO	915	+ 262	MERIDIAN	818	- 97	MEMPHIS	762	- 76
SACRAMENTO	770	+ 175	GREENWOOD	794	- 116	NASHVILLE	673	- 58
THERMAL	657	+ 28	COLUMBIA	504	- 50	ABILENE	884	- 33
CO ALAMOSA	1171	+ 95	JOPLIN	578	- 98	AMARILLO	622	- 16
DENVER	281	- 23	SPRINGFIELD	519	- 104	AUSTIN	1010	- 57
EAGLE	423	+ 29	MT VICHY	530	- 75	BROWNSVILLE	1298	- 31
GRAND JUNCTION	243	- 79	BOZEMAN	297	+ 183	COLLEGE STATION	940	- 105
LA JUNTA	464	- 72	HELENA	318	+ 65	DALHART	593	- 1
DE DOVER	555	- 14	KALISPELL	323	+ 53	DALLAS/FT. WORTH	889	- 49
WILMINGTON	484	- 81	MILES CITY	411	+ 80	GALVESTON	1072	- 30
FL DAYTONA BEACH	965	+ 65	NE GRAND ISLAND	390	- 66	HOUSTON	998	- 62
FORT MYERS	1211	- 133	NORFOLK	403	- 24	KINGSVILLE	1217	- 36
GAINESVILLE	926	- 29	NORTH PLATTE	402	- 15	LAREDO	1305	+ 5
JACKSONVILLE	939	- 177	VALENTINE	381	- 36	LUBBOCK	811	+ 46
FORT LAUDERDALE	1352	- 107	SCOTTSBLUFF	411	+ 21	MC ALLEN	1345	+ 42
MIAMI	1356	+ 49	SNIDNEY	370	+ 22	MIDLAND	897	- 29
MILTON	903	+ 3	NV ELKO	320	- 5	PALACIOS	1036	- 100
PENSACOLA	909	- 110	ELY	342	+ 58	SAN ANTONIO	1045	- 54
ST. PETERSBURG	1121	- 140	LAS VEGAS	1064	+ 197	VICTORIA	1076	- 47
TALLAHASSEE	908	- 162	RENO	464	+ 37	WACO	919	- 94
TAMPA	1075	- 108	WINNEMUCCA	456	+ 55	WICHITA FALLS	752	- 114
VERO BEACH	1109	- 119	NH CONCORD	406	+ 97	WINK	942	+ 16
W. PALM BEACH	1236	- 73	NJ NEWARK	569	+ 142	UT CEDAR CITY	447	+ 55
GA ATHENS	747	- 64	NM ALBUQUERQUE	694	+ 50	VT MONTPELIER	303	+ 85
AUGUSTA	870	+ 2	CARLSBAD	934	+ 62	BURLINGTON	355	+ 102
BRUNSWICK	849	+ 2	CLOVIS	687	+ 29	VA CHARLOTTESVILLE	640	+ 12
COLUMBUS	830	- 165	GALLUP	532	+ 71	HAMPTON	662	+ 47
MACON	825	- 112	TRUTH OR CONSEQ.	801	+ 76	LYNCHBURG	683	+ 82
SAVANNAH	923	- 41	NY ALBANY	431	+ 89	NORFOLK	678	+ 36
ID BOISE	455	+ 73	ELMIRA	406	+ 67	RICHMOND	676	+ 5
BURLEY	380	+ 49	GLENS FALLS	382	+ 86	WA BELLINGHAM	288	+ 72
IDAHO FALLS	258	+ 22	POUGHKEEPSIE	429	+ 54	HOQUIAM	243	+ 50
POCATELLO	307	+ 11	ROCHESTER	361	+ 49	SEATTLE-TACOMA	321	+ 74
IL BELLEVILLE	542	- 78	SYRACUSE	394	+ 84	SPOKANE	320	+ 51
CHICAGO/MIDWAY	413	+ 14	UTICA	349	+ 74	TACOMA	348	+ 51
DECATUR	487	- 72	NC WATERTOWN	322	+ 70	WALLA WALLA	461	+ 59
PEORIA	515	+ 57	ASHEVILLE	542	- 64	WENATCHEE	479	+ 25
ROCKFORD	431	+ 56	FAYETTEVILLE	782	- 9	YAKIMA	485	+ 51
SPRINGFIELD	516	- 8	GREENSBORO	730	+ 48	WV HUNTINGTON	603	+ 42
QUINCY	470	- 31	HICKORY	663	- 18	MARTINSBURG	497	- 11
IN INDIANAPOLIS	504	+ 7	RALEIGH	744	+ 15	MORGANTOWN	523	+ 18
SOUTH BEND	402	+ 19	WILMINGTON	829	+ 17	WI EAU CLAIRE	300	- 22
TERRE HAUTE	522	+ 5	NEW BERN	787	- 20	GREEN BAY	293	+ 23
IA DES MOINES	405	- 101	BISMARCK	350	+ 62	LACROSSE	340	- 29
MASON CITY	295	- 101	DICKINSON	301	+ 43	MADISON	395	+ 34
OTTUMWA	441	- 23	JAMESTOWN	310	+ 39	WAUSAU	266	- 9
KS CHANUTE	479	- 161	MINOT	309	+ 69	WY CASPER	323	+ 46
DODGE CITY	475	- 92	GRAND FORKS	329	+ 73	LANDER	286	+ 25
GARDEN CITY	481	- 85	OH AKRON-CANTON	408	+ 21	SHERIDAN	343	+ 62
GOODLAND	409	- 37	COLUMBUS	474	- 2	WORLAND	423	+ 76
MEDICINE LODGE	537	- 160	DAYTON	466	- 5			
RUSSELL	465	- 78	FINDLAY	373	- 21			
			YOUNGSTOWN	399	+ 42			

Based on 1951-80 normals.

* Growing degree days for corn are computed to a 50°F base with the daily maximum temperature limited to 86°F or lower, and the daily minimum to 50°F or higher.

National Weather Data for Selected Cities

Weather Data for the Week Ending May 22, 1993

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP.	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	79	52	85	42	65	-5	.7	-.4	.5	10.3	70	18.6	76	93	35	0	0	2	1
MOBILE	82	60	87	48	71	-4	.7	-.7	.7	18.1	121	30.6	122	83	40	0	0	1	0
MONTGOMERY	82	55	89	42	68	-3	.5	-.4	.4	12.1	91	21.8	92	89	35	0	0	2	1
AK ANCHORAGE	66	44	75	39	55	-7	.5	.3	.4	1.1	58	3.2	93	90	38	0	0	2	0
BARROW	32	25	36	15	29	7	T	.0	T	.2	48	.8	120	89	80	0	7	0	0
FAIRBANKS	71	45	82	37	58	8	.0	-.2	.0	.8	69	3.4	173	63	22	0	0	0	0
JUNEAU	62	49	71	42	56	8	.7	-.1	.4	5.5	65	23.7	141	94	64	0	0	3	0
KODIAK	56	45	69	40	50	6	.1	-.2	.1	20.3	159	30.6	120	90	60	0	0	1	0
NOME	55	38	62	31	46	9	T	.1	T	2.2	133	4.5	147	83	51	0	1	0	0
AZ PHOENIX	96	73	100	68	85	5	.1	.1	.1	1.7	140	8.7	339	46	18	7	0	1	0
PRESCOTT	76	51	81	48	64	5	.9	.8	.7	3.5	113	11.9	194	82	36	0	0	2	1
TUCSON	93	64	97	60	79	4	T	.0	T	.8	66	7.1	262	66	18	5	0	0	0
YUMA	97	71	100	68	84	4	T	.0	T	.4	107	3.4	345	39	21	7	0	0	0
AR FORT SMITH	77	56	86	49	66	-3	.1	-.1	.0	13.0	111	20.2	124	88	40	0	0	3	0
LITTLE ROCK	76	57	83	51	66	-4	.8	-.8	.8	13.5	104	20.5	104	75	37	0	0	1	1
CA BAKERSFIELD	88	60	93	55	74	2	.0	.0	.0	1.8	99	6.1	166	56	26	4	0	0	0
FURCA	67	54	78	50	61	8	.1	-.2	.1	12.3	132	25.4	126	88	41	0	0	2	0
FRESNO	87	59	93	56	73	4	.0	-.1	.0	2.0	63	9.6	140	74	26	2	0	0	0
LOS ANGELES	71	58	74	56	65	2	T	.0	T	1.9	65	17.7	229	87	43	0	0	0	0
REDDING	83	56	89	52	70	2	.0	-.3	.0	10.3	138	28.2	157	81	27	0	0	0	0
SACRAMENTO	82	53	88	49	67	1	.0	.0	.0	3.1	78	16.8	159	95	42	0	0	0	0
SAN DIEGO	71	61	72	59	66	2	T	.0	T	1.2	46	15.1	248	87	55	0	0	1	0
SAN FRANCISCO	74	56	78	50	65	6	T	.0	T	2.8	61	18.7	154	86	48	0	0	0	0
CO DENVER	73	48	84	45	60	2	.4	-.1	.2	3.5	74	4.8	83	89	36	0	0	6	0
GRAND JUNCTION	77	53	82	47	65	1	.9	.6	.7	4.7	168	7.2	185	81	30	0	0	2	1
PUEBLO	73	47	83	42	60	-2	.4	-.1	.3	4.4	175	5.0	160	94	32	0	0	2	0
CT BRIDGEPORT	68	51	79	45	60	0	.3	-.6	.1	10.8	104	16.0	96	81	46	0	0	4	0
HARTFORD	66	47	77	41	57	-4	.4	-.5	.1	12.1	116	17.6	103	92	39	0	0	4	0
DC WASHINGTON	70	55	83	48	62	-5	1.4	.5	.9	13.4	159	18.6	134	91	33	0	0	4	1
FL APALACHICOLA	84	61	86	55	72	-2	.0	-.6	.0	4.6	52	14.9	91	88	41	0	0	0	0
DAYTONA BEACH	86	61	90	58	74	-1	.1	-.8	.1	6.2	84	13.5	102	90	41	1	0	1	0
JACKSONVILLE	86	61	92	50	74	-1	.4	-.4	.4	7.7	91	14.4	94	83	34	2	0	1	0
KEY WEST	85	75	86	73	80	-1	.0	-.8	.0	3.8	67	12.1	127	75	61	0	0	0	0
MIAMI	89	73	90	67	81	2	.1	-.4	.1	9.3	100	16.4	123	75	43	4	0	2	0
ORLANDO	88	65	90	62	76	-1	.0	-.9	.0	8.3	115	14.6	117	83	36	3	0	0	0
TALLAHASSEE	87	56	94	50	71	-3	T	-.1	T	7.4	56	21.5	92	83	29	3	0	0	0
TAMPA	85	62	87	59	74	-4	.0	-.8	.0	6.7	111	12.6	113	83	39	0	0	0	0
WEST PALM BEACH	88	69	90	65	78	0	T	-.6	T	14.0	135	24.0	153	79	47	1	0	0	1
GA ATLANTA	78	56	86	46	67	-3	1.8	.9	1.8	12.7	97	21.1	93	81	35	0	0	1	1
AUGUSTA	84	55	92	46	69	-2	.2	-.6	.2	10.3	97	19.4	103	86	38	2	0	2	0
MACON	82	56	89	43	69	-4	.3	-.5	.2	12.6	117	22.3	111	87	36	0	0	2	0
SAVANNAH	84	61	90	51	73	-1	T	-.1	T	12.2	127	21.0	128	82	33	2	0	0	0
HI HILO	79	67	81	63	73	-1	2.9	.9	1.1	28.6	78	33.4	59	92	72	0	0	7	3
HONOLULU	83	68	86	65	76	-2	.1	-.2	.1	.4	9	1.5	14	83	51	0	0	1	0
KAHULUI	82	69	84	65	75	-1	T	-.1	T	2.7	53	5.1	42	77	57	0	0	1	0
LIHUE	79	68	80	65	74	-2	.2	-.6	.1	4.8	48	6.1	31	79	60	0	0	2	0
ID BOISE	82	55	90	48	68	10	T	-.2	T	5.3	158	7.9	135	70	27	1	0	1	0
LEWISTON	79	55	86	52	67	8	.5	.2	.2	5.3	169	6.7	127	71	33	0	0	3	0
POCATELLO	76	47	82	41	61	7	.3	.0	.2	5.2	151	9.5	177	82	30	0	0	2	0
IL CHICAGO	67	42	76	36	54	-6	.4	-.4	.3	9.9	114	14.5	126	84	35	0	0	3	0
MOLINE	69	43	74	41	56	-7	1.4	.5	1.4	12.8	129	15.7	124	89	35	0	0	3	1
PEORIA	70	44	74	39	57	-6	.2	-.6	.2	10.5	113	15.7	128	82	35	0	0	2	0
QUINCY	67	47	72	42	57	-6	.3	-.8	.2	7.3	72	10.7	82	85	34	0	0	2	0
ROCKFORD	66	41	76	38	54	-6	.5	-.3	.5	11.1	129	14.5	130	93	35	0	0	3	0
SPRINGFIELD	70	46	75	38	58	-6	.1	-.7	.1	8.9	93	14.3	112	77	31	0	0	2	0
IN EVANSVILLE	72	51	78	46	61	-6	.7	-.3	.7	11.6	93	17.8	94	87	31	0	0	2	1
FORT WAYNE	67	42	76	37	54	-7	.2	-.5	.2	9.5	109	16.6	133	74	33	0	0	2	0
INDIANAPOLIS	69	44	76	40	57	-7	.4	-.6	.4	9.6	92	15.2	101	82	34	0	0	1	0
SOUTH BEND	66	43	77	37	54	-6	.4	-.3	.3	7.5	81	13.0	98	77	32	0	0	3	0
IA DES MOINES	66	45	73	40	56	-7	.7	-.3	.7	11.8	137	15.0	141	83	34	0	0	1	1
STOIK CITY	68	43	75	35	56	-7	.6	-.3	.6	6.7	99	9.5	118	85	32	0	0	2	1
WATERLOO	66	41	74	37	53	-8	.2	-.2	.2	11.4	135	13.3	129	95	38	0	0	2	0
KS CONCORDIA	66	50	73	43	58	-6	.9	-.1	.4	8.0	107	10.5	120	97	52	0	0	3	0
GOODLAND	73	52	85	46	63	-3	.3	-.4	.3	6.3	111	10.2	149	93	38	0	0	2	0
DODGE CITY	71	46	81	38	58	-2	.7	-.2	.4	3.3	68	4.7	84	93	42	0	0	3	0
TOPEKA	67	49	75	42	58	-7	1.0	.0	.5	13.8	161	17.3	164	89	43	0	0	4	0
WICHITA	71	52	78	44	62	-5	.3	-.8	.2	11.7	139	14.6	141	89	40	0	0	3	0
KY BOWLING GREEN	73	53	83	42	63	-4	.8	-.4	.5	9.2	71	15.0	72	89	45	0	0	4	0
LEXINGTON	70	49	78	42	59	-6	1.2	.1	.9	9.6	83	16.2	92	92	33	0	0	2	1
LOUISVILLE	71	51	80	46	61	-5	1.0	-.1	1.0	10.9	89	18.6	101	84	32	0	0	2	1
LA BATON ROUGE	82	58	86	53	70	-6	.1	-.1	.1	18.8	137	35.0	144	91	47	0	0	1	0
LAKE CHARLES	82	62	83	58	72	-3	2.2	.8	2.2	17.9	169	29.0	155	95	52	0	0	1	0
NEW ORLEANS	83	61	86	55	72	-3	T	-.1	T	16.2	129	24.8	105	86	41	0	0	1	0
SHREVEPORT	80	60	87	55	70	-3	.6	-.7	.6	12.7	105	22.1	108	93	45	0	0	1	1

Based on 1961-90 normals.

Weather Data for the Week Ending May 22, 1993

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
ME CARIBOU	62	40	69	33	51	-1	.3	-1.4	.1	6.7	95	11.0	96	78	36	0	0	0	0	4	4	0	0
ME PORTLAND	64	46	75	41	55	1	.3	-1.5	.1	12.7	123	19.4	112	88	41	0	0	0	0	4	4	1	0
MD BALTIMORE	69	50	82	41	60	-5	1.7	.8	1.2	15.1	166	20.6	135	92	38	0	0	0	0	4	4	1	0
MA BOSTON	63	51	77	49	57	-2	3.8	3.0	1.8	16.8	170	23.3	137	100	64	0	0	0	0	4	4	3	0
MA CHATHAM	58	49	63	47	53	0	1.0	.2	.4	11.9	115	18.0	100	95	50	0	0	0	0	5	5	0	0
MI ALPENA	58	35	63	31	47	-6	.3	-1.3	.2	4.3	69	6.5	70	94	42	0	0	2	2	4	4	0	0
MI DETROIT	64	45	71	40	55	-5	.1	-1.6	.1	6.1	81	11.3	103	75	34	0	0	0	0	1	1	0	0
MI FLINT	64	41	73	37	53	-5	.2	-1.4	.2	6.8	98	10.7	112	79	35	0	0	0	0	1	1	0	0
MI GRAND RAPIDS	63	39	73	35	51	-7	.1	-1.7	.1	7.8	95	13.2	115	80	34	0	0	0	0	1	1	0	0
MI HOUGHTON LAKE	60	38	72	35	49	-6	.2	-1.4	.2	4.5	74	7.1	81	77	37	0	0	0	0	2	2	0	0
MI LANSING	63	40	73	37	52	-7	.1	-1.6	.1	7.4	104	11.8	120	94	44	0	0	0	0	1	1	0	0
MI MARQUETTE	56	32	67	25	44	-8	.5	-2.3	.3	7.4	98	10.5	92	81	40	0	0	4	4	3	3	0	0
MI MUSKEGON	60	39	72	35	50	-7	.2	-1.4	.1	7.3	100	10.7	96	85	37	0	0	0	0	3	3	0	0
MI SAULT ST. MARIE	54	32	63	28	43	-8	.2	-1.4	.2	6.2	95	8.7	81	90	45	0	0	3	3	2	2	0	0
MN ALEXANDRIA	61	43	69	37	52	-6	.9	.3	.9	6.6	120	7.6	107	76	33	0	0	0	0	1	1	1	0
MN DULUTH	57	37	66	33	47	-5	.2	-1.5	.1	4.5	73	6.7	82	71	35	0	0	0	0	4	4	0	0
MN INT'L FALLS	57	33	66	29	45	-8	.4	-2.4	.4	3.0	70	3.8	65	83	37	0	0	4	4	2	2	0	0
MN MINNEAPOLIS	64	42	71	37	53	-7	.4	-1.4	.3	5.8	86	7.4	87	84	38	0	0	0	0	2	2	0	0
MN ROCHESTER	60	39	67	35	50	-8	.5	-1.3	.4	9.3	135	11.3	134	88	44	0	0	0	0	2	2	0	0
MS GREENWOOD	81	57	88	46	69	-4	.2	-1.0	.1	18.1	123	23.8	99	93	42	0	0	0	0	2	2	0	0
MS JACKSON	82	56	89	46	69	-3	.0	-1.2	.0	13.2	85	21.3	83	92	35	0	0	0	0	2	2	0	0
MS MERIDIAN	81	56	88	46	69	-3	.0	-1.0	.0	14.1	91	28.6	110	90	34	0	0	0	0	0	0	0	0
MO CAPE GIRARDEAU	72	52	80	47	62	-6	.1	-1.1	.1	10.9	83	19.6	101	87	43	0	0	0	0	3	3	0	0
MO COLUMBIA	68	47	74	41	58	-6	.8	-1.3	.3	12.3	120	16.6	123	93	36	0	0	0	0	4	4	0	0
MO KANSAS CITY	68	49	75	41	59	-6	.7	-1.5	.5	14.2	155	17.4	154	90	36	0	0	0	0	4	4	1	0
MO SAINT LOUIS	70	52	76	48	61	-6	1.0	-1.1	.5	13.3	135	19.6	142	75	32	0	0	0	0	4	4	0	0
MO SPRINGFIELD	68	48	76	41	58	-7	.9	-2.4	.4	9.2	83	14.7	100	91	36	0	0	0	0	5	5	0	0
MT BILLINGS	73	48	80	45	61	5	.2	-1.4	.2	2.7	58	3.5	56	70	40	0	0	0	0	4	4	0	0
MT GLASGOW	73	42	85	35	57	1	.1	-1.3	.1	1.5	68	2.1	71	55	20	0	0	0	0	1	1	0	0
MT GREAT FALLS	71	45	76	43	58	4	.3	-1.3	.3	5.8	137	7.7	134	82	34	0	0	0	0	3	3	0	0
MT HAVRE	70	43	79	39	57	1	.1	-1.3	.0	2.2	79	2.8	77	74	31	0	0	0	0	2	2	0	0
MT HELENA	74	47	80	41	60	7	.4	-1.0	.4	3.7	126	5.5	139	80	29	0	0	0	0	1	1	0	0
MT KALISPELL	75	48	83	43	62	10	.4	-1.0	.3	3.7	111	6.0	100	80	31	0	0	0	0	4	4	0	0
MT MILES CITY	72	45	81	39	59	1	.6	-1.4	.4	4.0	114	4.9	109	78	32	0	0	0	0	3	3	0	0
MT MISSOULA	76	47	85	44	62	9	.1	-1.3	.1	3.8	119	5.3	102	88	30	0	0	0	0	3	3	0	0
NE GRAND ISLAND	68	47	75	38	58	-5	.3	-1.6	.2	4.8	69	7.5	91	93	41	0	0	0	0	2	2	0	0
NE LINCOLN	67	45	74	33	56	-7	.5	-1.4	.3	7.4	98	8.6	98	98	46	0	0	0	0	3	3	0	0
NE NORFOLK	71	46	77	38	58	-4	.1	-1.8	.1	6.5	98	9.5	120	84	33	0	0	0	0	1	1	0	0
NE NORTH PLATTE	71	45	82	37	58	-1	.2	-1.6	.2	3.9	70	6.1	95	86	37	0	0	0	0	1	1	0	0
NE OMAHA	68	48	75	40	58	-6	.5	-1.6	.4	9.3	117	11.1	119	78	35	0	0	0	0	3	3	0	0
NE SCOTTSBLUFF	75	44	81	38	59	2	.2	-1.5	.2	3.9	85	6.0	108	85	31	0	0	0	0	2	2	0	0
NE VALENTINE	72	41	83	31	57	-4	.1	-1.7	.1	5.6	96	6.8	99	83	30	0	0	1	1	0	0	0	0
NV ELY	75	39	80	34	57	5	.2	-1.0	.2	2.2	78	5.7	136	75	24	0	0	0	0	2	2	0	0
NV LAS VEGAS	91	67	96	63	79	4	T	-1.1	T	2	20	4.3	243	48	19	6	0	0	0	0	0	0	0
NV RENO	78	46	82	42	62	5	T	-2.2	T	7	43	4.4	119	72	23	0	0	0	0	0	0	0	0
WY WINNEMUCCA	82	46	86	41	64	8	.0	-2.2	.0	2.3	105	4.9	136	65	16	0	0	0	0	0	0	0	0
NH CONCORD	65	44	73	37	55	-2	.3	-1.4	.1	7.5	95	10.6	82	96	46	0	0	0	0	4	4	0	0
NJ ATLANTIC CITY	67	47	86	39	57	-4	1.2	-1.5	.5	12.8	133	17.8	110	97	35	0	0	0	0	4	4	1	0
NM ALBUQUERQUE	82	54	86	50	68	3	T	-1.1	T	2	15	3.0	129	64	23	0	0	0	0	2	2	0	0
NM CLOVIS	81	55	86	51	68	2	.6	-1.1	.3	1.2	46	2.1	60	81	28	0	0	0	0	3	3	0	0
NM ROSWELL	87	58	90	55	73	2	.1	-1.1	.1	1.3	89	2.3	98	77	22	2	0	0	0	5	5	0	0
NY ALBANY	63	43	69	39	53	-5	.4	-1.4	.4	11.7	141	16.7	129	85	46	0	0	0	0	4	4	0	0
NY BINGHAMTON	60	42	63	37	51	-6	.3	-1.5	.2	12.0	145	16.9	129	89	42	0	0	0	0	3	3	0	0
NY BUFFALO	61	41	65	37	51	-7	T	-1.7	T	6.1	78	12.3	97	82	40	0	0	0	0	1	1	0	0
NY NEW YORK	68	54	77	50	61	-2	.2	-1.6	.1	10.5	104	16.8	105	87	41	0	0	0	0	3	3	0	0
NY ROCHESTER	61	39	64	35	50	-8	.1	-1.5	.1	6.1	89	10.0	91	92	47	0	0	0	0	2	2	0	0
NY SYRACUSE	62	41	65	36	52	-7	.8	-1.1	.8	11.6	138	17.1	133	81	37	0	0	0	0	2	2	1	0
NC ASHEVILLE	71	48	84	36	60	-4	1.5	-1.3	1.2	13.5	103	19.3	90	95	42	0	0	0	0	2	2	1	0
NC CHARLOTTE	78	56	88	47	67	-1	1.0	-1.1	.9	11.9	121	20.8	120	83	41	0	0	0	0	2	2	1	0
NC GREENSBORO	77	55	85	45	66	-1	.6	-1.3	.6	16.1	172	23.1	146	80	46	0	0	0	0	2	2	1	0
NC HATTERAS	76	62	81	53	69	1	.3	-1.6	.2	10.9	103	21.9	109	90	59	0	0	0	0	3	3	0	0
NC NEW BERN	81	61	89	51	71	1	1.4	-1.3	.8	12.6	123	21.5	114	92	46	0	0	0	0	3	3	1	0
NC RALEIGH	77	56	85	45	67	-1	.8	-1.1	.8	12.8	140	19.5	120	86	41	0	0	0	0	2	2	1	0
NC WILMINGTON	83	62	89	50	72	3	2.0	-1.1	1.1	14.6	143	23.4	121	94	42	0	0	0	0	3	3	2	0
ND BISMARCK	69	36	80	27	52	-4	.3	-2.2	.3	2.6	67	3.2	67	75	27	0	0	2	2	1	1	0	0
ND FARGO	67	39	75	34	53	-4	.1	-1.5	.1	1.9	42	2.9	51	70	29	0	0	0	0	1	1	0	0
ND GRAND FORKS	65	40	81	33	52	-4	T	-1.5	T	1.5	41	1.9	39	66	29	0	0	0	0	0	0	0	0
ND WILLISTON	70	37	84	29	54	-3	T	-1.4	T	1.5	46	2.0	46	64	25	0	0	4	4	1	1	0	0
OH AKRON-CANTON	62	40	69	36	51	-9	.1	-1.8	.1	8.4	92	14.4	106	83	41	0	0	0	0	2	2	0	0
OH CINCINNATI	67	45	73	41	5																		

Weather Data for the Week Ending May 22, 1993

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS							
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE	MAXIMUM	MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																			.01 INCH OR MORE	.50 INCH OR MORE		
TOLEDO	68	41	77	37	55	-5	.1	-.6	.1	6.8	89	11.7	105	88	34	0	0	0	0	1	0	
YOUNGSTOWN	61	36	67	32	49	-10	T	-.8	T	7.2	83	12.9	101	86	41	0	0	1	1	1	0	
OK OKLAHOMA CITY	77	56	85	48	66	-3	.5	-.8	.2	15.6	172	20.2	171	89	45	0	0	0	5	0	0	
TULSA	73	55	83	48	64	-6	1.1	-.2	1.0	14.3	129	19.2	132	88	43	0	0	0	3	1	0	
OR ASTORIA	66	51	77	46	59	6	1.0	-.3	.4	19.0	137	26.6	84	96	45	0	0	0	4	0	0	
BURAS	73	45	79	37	59	9	T	-.2	T	3.6	155	6.0	147	74	28	0	0	0	0	0	0	
MEDFORD	79	50	89	47	65	6	.7	-.5	.6	4.2	112	8.2	98	85	28	0	0	0	2	1	0	
FENDLETON	78	55	86	52	67	8	.4	-.1	.3	4.5	150	7.1	125	67	30	0	0	0	2	0	0	
FORTLAND	77	54	87	50	65	8	1.0	-.5	.9	11.8	159	15.6	94	92	41	0	0	0	4	1	0	
PA SALEM	78	51	89	45	65	10	.4	-.0	.3	12.5	157	18.9	103	86	38	0	0	0	3	0	0	
ALLENTOWN	67	47	78	39	57	-4	.3	-.7	-.1	14.0	142	18.7	118	88	41	0	0	0	3	0	0	
ERIE	60	42	66	39	51	-7	-1	-.7	-.1	6.2	72	11.6	88	93	51	0	0	0	1	0	0	
HARRISBURG	67	50	70	42	58	-5	-.2	-.8	-.2	14.4	153	19.1	123	85	41	0	0	0	1	0	0	
PHILADELPHIA	69	53	83	46	61	-2	-.5	-.5	-.3	11.6	111	16.6	98	90	33	0	0	0	4	0	0	
PITTSBURGH	64	43	69	39	53	-7	-.1	-.7	-.1	8.7	95	14.6	104	81	41	0	0	0	3	0	0	
SCRANTON	65	45	68	37	55	-5	-.1	-.7	-.1	12.4	154	15.4	125	80	39	0	0	0	2	0	0	
RI PROVIDENCE	67	51	77	46	59	1	-.6	-.3	-.2	12.7	117	20.2	110	92	48	0	0	0	5	0	0	
SC CHARLESTON	83	62	89	52	73	-1	-.5	-.5	-.4	10.0	104	22.0	135	89	40	0	0	0	2	0	0	
COLUMBIA	82	55	91	47	69	-3	-.5	-.5	-.1	9.2	87	20.0	104	91	34	2	0	0	2	0	0	
FLORENCE	83	59	91	48	71	-1	-.1	-.5	-.3	6.0	65	15.1	94	90	36	2	0	0	3	0	0	
GREENVILLE	76	50	85	40	63	-3	-.6	-.3	-.3	15.9	129	26.6	128	90	32	0	0	0	3	0	0	
SD ABERDEEN	70	41	85	33	55	-5	-.3	-.7	-.0	3.9	80	5.0	82	78	34	0	0	0	0	0	0	
HURON	69	42	83	36	55	-5	-.3	-.4	-.3	7.6	134	8.5	126	90	39	0	0	0	2	0	0	
RAPID CITY	69	42	77	34	55	-5	-.4	-.2	-.2	6.0	126	7.3	129	81	37	0	0	0	5	0	0	
STOUK FALLS	66	43	80	36	55	-5	2.6	1.9	2.3	10.3	165	11.8	160	84	36	0	0	0	2	1	0	
TN CHATTANOOGA	78	54	88	42	66	-2	-.6	-.4	-.3	12.5	93	21.4	92	95	38	0	0	0	4	0	0	
KNOXVILLE	74	52	84	40	63	-3	1.2	-.3	-.1	11.7	99	18.0	90	94	36	0	0	0	3	1	0	
MEMPHIS	78	57	85	48	67	-1	1.2	-.1	1.0	12.6	87	18.7	83	86	40	0	0	0	2	1	0	
NASHVILLE	75	54	85	44	65	-4	-.8	-.4	-.4	12.5	98	18.3	91	88	36	0	0	0	4	0	0	
TX ABILENE	85	61	94	51	73	0	-.2	-.2	-.2	3.1	58	5.2	70	72	35	2	0	0	3	0	0	
AMARILLO	79	53	86	48	66	-6	-.2	-.0	-.3	3.4	97	4.6	98	96	37	0	0	0	3	0	0	
AUSTIN	86	65	91	58	75	-1	-.1	-.1	-.1	8.8	113	15.4	132	88	42	1	0	0	2	0	0	
BEAUMONT	84	63	85	58	74	-2	-.6	-.6	-.6	15.3	142	29.3	155	95	52	0	0	0	1	1	0	
BROWNSVILLE	86	68	87	63	77	-4	-.5	-.2	-.2	3.4	83	8.1	120	90	57	0	0	0	1	0	0	
CORPUS CHRISTI	83	65	86	62	74	-4	1.8	1.0	1.8	9.8	198	11.9	138	95	57	0	0	0	1	1	0	
DEL RIO	90	66	97	62	78	1	1.2	-.5	-.8	2.4	42	3.8	46	80	39	4	0	0	4	1	0	
EL PASO	91	65	94	58	78	5	0	-.1	-.0	1	19	1.8	120	46	19	6	0	0	0	0	0	
FORT WORTH	84	63	91	57	74	2	T	-.2	T	7.6	72	15.1	102	84	43	1	0	0	1	0	0	
GALVESTON	81	71	82	68	76	0	T	-.8	T	12.2	172	25.2	200	76	59	0	0	0	1	0	0	
HOUSTON	85	64	89	57	75	-1	-.7	-.6	-.7	19.9	194	28.4	161	91	44	0	0	0	4	1	0	
LUBBOCK	84	57	92	51	70	0	1.8	1.3	1.2	3.5	103	4.9	111	86	34	1	0	0	4	1	0	
MIDLAND	89	58	97	52	73	0	1.0	-.5	-.6	1.9	67	4.0	104	75	30	4	0	0	4	1	0	
SAN ANGELO	90	61	97	50	75	1	-.2	-.5	-.2	3.2	69	5.0	76	70	32	0	0	0	1	0	0	
SAN ANTONIO	87	64	91	57	76	0	2.1	1.2	1.7	11.9	172	17.0	162	87	42	2	0	0	2	1	0	
VICTORIA	84	65	87	61	75	-2	1.9	-.8	1.9	17.3	215	24.2	170	92	48	0	0	0	1	0	0	
WACO	87	63	89	56	75	0	T	-.1	T	9.7	110	16.0	128	88	37	0	0	0	0	0	0	
WICHITA FALLS	81	58	88	51	70	-2	-.5	-.5	-.5	10.9	129	15.4	132	94	44	0	0	0	3	1	0	
UT CEDAR CITY	77	48	80	46	63	5	-.2	-.0	-.2	2.4	79	6.8	145	72	29	0	0	0	0	0	0	
SALT LAKE CITY	79	56	86	51	68	8	-.4	-.0	-.3	6.9	127	11.4	148	71	29	0	0	0	3	0	0	
VT BURLINGTON	62	44	67	33	53	-5	-.5	-.2	-.5	6.4	90	10.5	99	86	33	0	0	0	3	0	0	
VA NORFOLK	75	59	87	51	67	0	-.8	-.1	-.4	11.3	119	18.5	111	89	52	0	0	0	4	0	0	
RICHMOND	74	55	86	46	64	-3	1.4	-.5	-.9	13.8	149	21.2	135	90	38	0	0	0	4	1	0	
ROANOKE	72	50	83	38	61	-4	-.4	-.5	-.4	13.0	135	20.2	132	83	32	0	0	0	2	0	0	
WA QUILLAYUTE	66	49	82	41	58	6	1.6	-.4	-.6	28.3	123	37.1	74	95	36	0	0	0	2	0	0	
SEATTLE-TACOMA	73	53	80	50	63	7	-.5	-.2	-.2	11.1	156	15.5	94	86	34	0	0	0	3	0	0	
SPOKANE	77	51	87	46	64	9	-.1	-.3	-.0	4.0	108	6.3	88	78	26	0	0	0	0	0	0	
YAKIMA	83	49	91	39	66	8	-.1	-.1	-.1	1.4	88	2.9	85	80	23	1	0	0	0	0	0	
WV BECKLEY	66	44	76	35	55	-5	-.8	-.1	-.6	12.4	129	16.8	109	94	44	0	0	0	4	1	0	
CHARLESTON	70	47	79	39	59	-6	1.2	-.3	-.6	10.1	104	15.0	95	94	32	0	0	0	4	1	0	
HUNTINGTON	68	48	75	37	58	-5	1.1	-.1	-.6	9.8	96	15.7	97	92	32	0	0	0	3	0	0	
PARKERSBURG	66	43	72	36	54	-9	-.4	-.4	-.3	11.9	119	16.4	102	99	48	0	0	0	3	0	0	
WI GREEN BAY	63	36	75	31	49	-7	-.2	-.5	-.1	6.8	106	8.5	100	86	39	0	0	2	2	0	0	
LACROSSE	63	42	73	37	52	-8	-.2	-.5	-.2	11.8	166	14.2	159	91	39	0	0	0	1	0	0	
MADISON	65	40	75	35	53	-7	-.7	-.1	-.2	11.1	146	13.9	141	82	35	0	0	0	4	0	0	
MILWAUKEE	61	43	75	37	52	-3	-.3	-.3	-.2	10.4	127	14.0	125	73	38	0	0	0	4	0	0	
WAUSAU	61	36	74	31	49	-8	-.5	-.3	-.3	8.6	118	10.4	115	96	37	0	0	1	3	0	0	
WY CASPER	73	47	81	42	60	6	-.6	-.1	-.5	5.5	137	7.2	140	89	34	0	0	0	5	1	0	
CHEYENNE	67	43	76	38	55	2	-.2	-.4	-.1	4.0	99	5.2	107	87	36	0	0	0	5	0	0	
LANDER	71	48	78	45	59	5	-.3	-.2	-.1	5.0	102	6.4	106	84	36	0	0	0	4	0	0	
SHERIDAN	72	46	78	40	59	5	-.4	-.2	-.2	5.4	123	6.2	109	85	37	0	0	0	5	0	0	

Based on 1961-90 normals.

National Agricultural Summary

May 17 - 23, 1993

HIGHLIGHTS: Rain fell from the central Great Plains to the middle Atlantic Coast early in the week, delaying fieldwork. Dry conditions prevailed over the rest of the Nation, allowing fieldwork to advance rapidly. Late in the week, scattered thundershowers disrupted planting, especially in the central Corn Belt. Temperatures were lower than normal over the eastern two-thirds of the Nation, delaying plant development. Scattered frost occurred from North Dakota to northern Pennsylvania, though no crop damage was reported. In the West, above-normal temperatures and dry conditions started to dry pastures.

SMALL GRAINS: Winter wheat condition remained mostly good in the 19 major producing States. Crop development continued more than a week behind normal. Heading of the winter wheat crop stood at 51 percent (%), compared with 75% last year and the average of 67%. Dry weather and sunshine were needed for the Arkansas crop. Persistent damp conditions adversely affected some fields in Kansas. In South Dakota, wheat progressed well but tan spot and wheat streak mosaic occurred in some fields. Wheat harvest began in central Texas, and producers prepared for harvest in the Low Plains. Some Texas wheat fields suffered from limited moisture and disease. Spring wheat acreage was 96% planted, compared with 95% last year and 96% average. Spring wheat emergence stood at 76%, compared with 82% last year and average. Spring wheat condition rated mostly good. Oats were 75% planted in Wisconsin, 95% planted in North Dakota, and 91% planted in South Dakota. Barley planting progressed to 98% complete in North Dakota, 93% in South Dakota, 89% in Idaho. Rye condition rated good in South Dakota.

CORN: Favorable conditions the early part of the week allowed planting progress to advance at a good pace in the central and western Corn Belt. Acreage planted increased by at least 30 points in Nebraska, Minnesota, Iowa, Wisconsin, and Illinois. Progress in the eastern Corn Belt was ahead of average. However, progress remained about 1½ weeks behind average. Planting was 71% complete in the 17 major corn-producing States, compared with 95% last year and 87% average. Planting in Missouri is off to its slowest start since 1978 due to wet fields.

SOYBEANS: Soybean planting progress in the 19 major producing States was 25% complete, compared with 64% last year and 47% average. Dry soils delayed plantings for some producers in the Southeast. Wet conditions in Kansas and Missouri limited planting to their southern districts. Wet conditions also hampered planting in Texas.

COTTON: Cotton planting progress was equal to the average but behind last year. Cotton planting at 70%, compared with 80% last year and 70% average. Some replanting occurred in Georgia, California, Texas, and Arizona. Cool weather hampered growth in the San Joaquin Valley of California and on the Texas High Plains. Cotton in the California desert and in central Texas progressed well with the warm conditions. More moisture was needed for the crop in the Texas Low Plains, but seeding in other areas of Texas was delayed by excessive moisture.

SORGHUM: Planting progress in the 12 major producing States advanced, with 37% of the acreage planted. This compared with 58% last year and 49% average. Because of wet conditions, progress in Kansas and Missouri was limited to their southern districts. Some sorghum started to head in southern Texas.

RICE: Rice planting progress in the five major States reached 70% complete, compared with 95% last year and 85% average. Rice emergence, at 49%, compared with 81% last year and 67% average. High winds delayed planting in some areas of California. Wet conditions in Texas hindered planting progress. Rice water weevils were found in some southern Louisiana fields.

OTHER FIELD CROPS: Nationally, peanut planting advanced where conditions allowed. In Texas, planting continued where soil conditions allowed. Standing water in some fields hurt the emerged crop. More moisture was needed for the crop in Georgia and Florida. Recent rains decreased the need for irrigation of the onion crop in parts of Texas. Onion condition rated good in Colorado and Oregon. Harvests continued in Georgia, Texas, and California. Dry bean planting progress was behind average in Idaho and Minnesota, but slightly ahead of average in Colorado and North Dakota. Potato planting activities continued across the Nation, with progress behind that of last year and average in Idaho, Montana, and Maine. Planting progress in Minnesota, North Dakota, Colorado, and southern New England remained ahead of average. Michigan progress was near average. Cool weather delayed emergence in New York. Harvesting in Florida advanced and was completed in the Imperial Valley of California. Rain was needed for the tobacco crop in Georgia.

FRUIT AND NUTS: Conditions in the Florida citrus areas remained dry. Dry conditions caused some non-irrigated trees to wilt, lose leaves, and drop fruit. Some fruit for harvest was deteriorating. High humidity caused fungal and bacterial problems in some orchards in Texas. Valencia orange harvests advanced in Arizona but slowed in Florida due to low supplies. Grape picking continued in the Coachella Valley of California. Poor pollination conditions caused lighter-than-normal set in the plum crop in the Willamette Valley of Oregon. Peach and apple sets were reported as good in New Jersey, but light in the Hood River Valley of Oregon. Condition of the pecan crop in central Texas remained good. However, insects damaged some trees in the Blacklands and Cross Timbers regions of Texas.

VEGETABLES: The major vegetable producing areas of Florida remained dry. Cool weather delayed maturation of the sweet corn crop in the Zellwood area of Florida. Wet soils delayed fieldwork for the east Texas sweetpotato crop. Fungus and insects damaged some Texas tomato fields. Excessive topsoil moisture continued to hinder the planting of vegetables in New Jersey. Hail damage occurred to some pea fields in Oregon.

PASTURE AND LIVESTOCK: Pastures remained in good condition over most of the Nation, although pastures in the Southeast rated mostly fair to good. The warm, dry conditions caused California pasture condition to decline. Cattle conditions continued to improve in Iowa, but scours in calves and flu in swine were still problems. External parasite problems occurred on some Arkansas cattle. Elsewhere, livestock conditions remained in good condition across the Nation. Pasture, range, and feed supplies remained adequate.

Crop Progress

for the Week Ending May 23, 1993

COTTON (Percent Planted)

	Current	Last Wk	1992	Avg.
AL	82	65	95	90
AZ	98	93	97	98
AR	77	48	92	81
CA	99	98	100	100
GA	87	67	75	77
LA	98	71	99	83
MS	71	46	95	81
MO	92	46	95	83
NM	90	86	93	96
NC	90	70	87	80
OK	25	14	39	31
SC	93	81	89	84
TN	74	43	93	77
TX	53	42	64	52
14 States	70	54	80	70

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

WINTER WHEAT (Percent Headed)

	Current	Last Wk	1992	Avg.
AR	95	87	99	99
CA	99	98	99	98
CO	15	0	80	25
GA	100	98	100	100
ID	1	0	11	4
IL	53	19	78	79
IN	33	12	40	48
KS	55	15	99	90
MI	0	0	0	3
MO	45	19	82	88
MT	0	0	2	0
NE	3	0	74	44
NC	92	89	92	95
OH	15	8	5	18
OK	94	76	100	97
OR	20	2	58	37
SD	0	0	16	6
TX	87	78	91	89
WA	5	0	25	19
19 States	51	32	75	67

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

SOYBEANS (Percent Planted)

	Current	Last Wk	1992	Avg.
AL	36	22	35	30
AR	8	7	27	18
GA	30	16	26	27
IL	31	5	81	63
IN	45	17	72	52
IA	15	5	86	58
KS	4	1	35	30
KY	15	6	28	24
LA	40	15	54	29
MI	35	20	55	45
MN	27	9	85	61
MS	11	5	30	23
MO	5	1	56	35
NE	13	1	61	50
NC	32	19	30	28
OH	60	30	66	52
SC	24	12	22	21
SD	21	6	64	44
TN	9	3	27	18
19 States	25	9	64	47

These 19 States produced 95% of the 1992 soybean crop.

GRAIN SORGHUM (Percent Planted)

	Current	Last Wk	1992	Avg.
AR	58	41	94	74
CO	9	7	19	15
IL	9	0	55	44
KS	5	4	35	25
LA	77	56	88	78
MS	61	45	88	74
MO	22	8	69	46
NE	8	1	56	42
NM	25	19	27	NA
OK	39	8	29	16
SD	7	1	39	20
TX	74	71	75	72
12 States	37	31	58	NA
Excl. States with NA	37	31	58	49

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

CORN (Percent Planted)

	Current	Last Wk	1992	Avg.
CO	87	69	95	87
GA	99	99	100	99
IL	75	41	98	91
IN	79	52	92	83
IA	65	20	100	90
KS	75	70	98	95
KY	77	60	90	79
MI	70	45	85	85
MN	67	34	96	87
MO	35	16	95	82
NE	76	36	97	94
NC	98	93	97	93
OH	90	67	92	78
PA	62	40	60	55
SD	48	23	96	83
TX	99	95	98	99
WI	52	21	85	81
17 States	71	40	95	87

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

SPRING WHEAT (Percent Planted)

	Current	Last Wk	1992	Avg.
ID	88	66	100	98
MN	98	95	87	95
MT	95	86	96	96
ND	97	87	95	95
SD	94	89	100	100
5 States	96	88	95	96

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

SPRING WHEAT (Percent Emerged)

	Current	Last Wk	1992	Avg.
ID	61	48	97	84
MN	87	61	77	91
MT	69	44	76	74
ND	74	47	79	76
SD	83	73	100	98
5 States	76	53	82	82

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

RICE (Percent Planted)

	Current	Last Wk	1992	Avg.
AR	62	40	98	81
CA	60	35	80	82
LA	93	81	96	91
MS	58	36	100	84
TX	83	75	95	97

5 States 70 51 95 85
These 5 States produced 97% of the 1992 rice crop.

RICE (Percent Emerged)

	Current	Last Wk	1992	Avg.
AR	39	22	85	59
CA	20	5	45	47
LA	83	71	90	83
MS	37	23	90	73
TX	72	63	78	87

5 States 49 35 81 67
These 5 States produced 97% of the 1992 rice crop.

Crop Condition (Percent)

for the Week Ending May 23, 1993

WINTER WHEAT

State	VP	P	F	G	EX
AR	0	11	53	33	3
CA	0	0	5	65	30
CO	2	5	18	61	14
GA	0	9	46	41	4
ID	1	4	24	57	14
IL	0	0	18	77	5
IN	0	1	17	72	10
KS	0	1	10	50	39
MI	3	7	35	40	15
MO	0	11	61	28	0
MT	1	5	24	54	16
NE	0	0	17	75	8
NC	0	1	34	63	2
OH	1	8	26	51	14
OK	0	0	25	75	0
OR	0	3	7	66	24
SD	0	0	11	64	25
TX	1	3	46	45	5
WA	0	0	4	79	17
19 State	0	2	23	58	17
Prev Week	0	2	22	59	17
Prev Year	4	15	44	32	5

SPRING WHEAT

State	VP	P	F	G	EX
ID	0	1	13	73	13
MN	1	2	28	58	11
MT	0	2	19	61	18
ND	0	0	21	77	2
SD	1	2	16	64	17
5 State	0	1	21	70	8
Prev Week	N/A	N/A	N/A	N/A	N/A
Prev Year	1	6	28	61	4

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

State Summaries of Weather and Agriculture

These summaries provide brief descriptions of crop and weather conditions important on a national scale. More detailed data are available in Weather and Crop Bulletins published each Monday by NASS State Statistical Offices in cooperation with the National Weather Service.

ALABAMA: Rainfall 0.10 to 1.40 in. north; 0.01 to 2.07 in. central; 0.01 to 0.65 in. south. Temperatures 4 to 10° below normal north; 5 to 7° below normal central; 4 to 8° below normal south. Lows 36 to 47° north; 39 to 46° central; 40 to 49° south. Highs 82 to 87° north; 84 to 89° central; 86 to 90° south.

Days suitable for fieldwork 5.2. Soil moisture 11% short, 73% adequate, 16% surplus. Acreage prepared 95%, 96% 1992, 94% avg. Corn planted 95%, 100% 1992, 97% avg.; silked 1%, 2% 1992, 11% avg.; 15% fair, 73% good, 12% excellent. Sorghum planted 41%, 42% 1992, 50% avg.; 24% fair, 73% good, 3% excellent. Peanuts planted 86%, 78% 1992, 85% avg.; 11% fair, 89% good. Wheat headed 90%, 100% 1992, 100% avg.; turning color 42%, 75% 1992, 78% avg.; 5% poor, 36% fair, 59% good. Hay harvested 42%, 58% 1992, 44% avg. Pasture conditions 2% poor, 15% fair, 73% good, 10% excellent. Activities: Harvesting timber; land preparation; planting corn, cotton, peanuts, soybeans, spring vegetables; applying fertilizer; spraying fruit; marketing cattle; general care of livestock, poultry, catfish.

ALASKA: Statewide temperatures averaged above normal last week with several record breaking highs. Most farming areas were very dry and badly in need of rain.

Days suitable for fieldwork 7. Farmwork progress 5 to 7 days ahead of schedule. Barley seeding was 85% completed by weekend. Last year only 45% had been seeded. Commercial potato planting was 50% complete, unchanged from last year. Vegetable seeding, transplanting continues with approximately 30% planted. Growth prospects for hayfields, pastures 60% poor, 20% fair, 20% good. Topsoil moisture supplies 80% short, 20% adequate. Subsoil moisture 40% short, 60% adequate.

ARIZONA: Sunny, warm most areas except for thunderstorms 16th north; 18th central, north; light showers 19th to 20th northeast, light showers 22nd southeast, east central. Temperatures 1 to 6° above normal. Extremes 35°; 92° higher elevations; 49°; 105° deserts.

Cotton planting nearly complete. Planted 98%, 97% 1992, 98% avg. Squaring 10%, 4% 1992, 18% avg. Activities included: Irrigating, planting, replanting, pesticide applications, pest monitoring, cultivating. Cotton mostly good. Insects, weeds mostly light. Alfalfa mostly good. Harvest activities moderate to active. Weeds, insects mostly light; disease light. Small grains turning color 98%, 94% 1992, 91% avg.; harvested 15%, 8% 1992, 13% avg. Fields good to excellent condition. Bell peppers, chile peppers, watermelons, honeydews, grapes were harvested in western areas. Cabbage, carrots, mixed greens, green onions, kale, parsley, dry onions, potatoes, squash, radishes, mixed greens, central. Fruit harvest limited to valencia oranges, lemons, grapefruit, available both western, central areas. Tomatoes, head lettuce harvested eastern.

ARKANSAS: Cool week, temperatures below normal. Scattered showers statewide first part of week. Extremes 36°; 89°. Rainfall 0.05 to 2.35 in.

Days suitable for fieldwork 4. Moderate rate of crop growth. Soil moisture supplies 3% short, 44% adequate, 53% surplus. Wheat conditions are slowly deteriorating, needs sunshine, dry weather. Army worm problem in wheat was reported in some areas. Scab, glume blotch diseases were reported in some wheat fields. Producers applied burn-down chemicals to rice fields. Corn, cotton cultivation began in some areas. Fruit crop in fair to good. Vegetable crop good. Corn 86% planted, 100% 1992, 96% avg. Livestock good, external parasite problems were reported in some areas. Cattle making good gains. Pastures good, hay cutting began.

CALIFORNIA: Last week generally warmer than normal mostly dry. Pacific trough stayed too far north for much rain to occur. Warm high pressure started, ended the week's weather with above normal temperatures.

Open weather permitted good progress field activities. Small grains mature most areas. Lodging problem some fields, high winds. Wheat harvest full swing desert counties, just underway San Joaquin Valley. Rice seeding progressed normally; seeding delayed some fields, high winds. Applications fertilizer, herbicides ongoing. Cotton planting virtually complete. Growth hampered cool temperatures San Joaquin Valley, desert area fields growing rapidly. Few pima fields disced under, poor stands. New crop sugarbeets planted, irrigated, treated mildew, ground squirrels. Harvest over-wintered sugarbeets gradually winding down. Corn planted, irrigated, sprayed weeds. Oats, winter forage cut silage, greenchopped. Alfalfa, oats, sudangrass hay cut. Grape growers irrigated, cultivated, treated vineyards control mildew, worms. Table grape harvest continued, Coachella Valley. Sonoma County, grape bloom began. Early variety apricot, nectarine, peach, plum varieties picked, packed. Thinning later variety peaches. Almond orchards irrigated. Walnut, pear orchards treated codling moth. Almond, apple, peach orchard worms treated. Cherry harvest, on-going. Pomegranates, olives bloomed. Citrus groves irrigated, weeded, treated control thrips. Valencia harvest full swing, export. Over ten percent Valencia crop harvested. Lemon movement good. Grapefruit harvest Coachella Valley, western portion Riverside County. Avocado harvest continued. Strawberry harvest progressed. Broccoli harvest fairly heavy Salinas-Watsonville, moderate Santa Maria; generally good quality both locations. Bell pepper harvest Coachella Valley. Cabbage harvest continued Fresno, Modesto. Imperial carrot harvesting winding down. Central coast cauliflower harvest continued generally good quality. Santa Maria celery harvest increasing. Cucumber harvesting progressed Tulare County. Fresh market tomato harvesting continued Coachella, Imperial Valleys, planting other regions. Head lettuce harvest fairly heavy Salinas-Watsonville, moderate Santa Maria. Harvest of leaf, romaine lettuce Salinas-Watsonville fairly heavy, variable quality. Onion harvesting continued Merced, Palo Verde, Fresno areas. Onion harvesting slowed Imperial Valley. Watermelon harvest began Imperial Valley, continued Coachella Valley. Potato harvest continued Coachella Valley. Imperial Valley potato harvest complete. Potatoes planted Siskiyou County. Squash harvest decelerated Imperial Valley, steady Visalia. Other crops harvested: Radishes, green onions, peas, turnips, celery, green beans, eggplant, oriental vegetables. Rangeland, pasture conditions declining, grasses maturing, drying rapidly. Water, feed supplies remain good. Cattle moved to mountain summer ranges. Stocker cattle shipped into feedlots. Ranchers cutting fire breaks.

COLORADO: Moist unstable air on 17th to 18th produced rainfall statewide with some locally heavy rains. Thunderstorms on 21st produced widespread rainfall of 0.10 in. to 1.00 in. Temperatures mostly 1 to 3° above normal except in the Arkansas Basin where temperatures were near or slightly below normal.

Days suitable for fieldwork 5.1. Soil moisture 4% very short, 29% short, 55% adequate, 12% surplus. Alfalfa 1st cutting 2%, 17% 1992, 5% avg. Spring barley emerged 88%, 98% 1992, 84% avg. Oats seeded 85%, 95% 1992, 95% avg. Barley, oats condition mostly good to excellent. Spring wheat seeded 91%, 96% 1992, 90% avg.; emerged 60%, 80% 1992, 69% avg. Summer storage onions, sugarbeets condition declined last week but still mostly good. Sugarbeets thinned 4%, 22% 1992, 7% avg. Dry beans planted 9%, 18% 1992, 7% avg.; emerged 1%, 3% 1992, 1% avg. Sorghum planted 9%, 19% 1992, 15% avg. Corn planted 87%, 95% 1992, 87% avg. Corn 59% emerged, 78% 1992, 50% avg.; good to excellent. Fall potatoes are 82% planted, 90% 1992, 73% avg. Winter wheat jointed 86%, 96% 1992, 83% avg.; headed 15%, 80% 1992, 25% avg.; 2% very poor, 5% poor, 18% fair, 61% good, 14% excellent. Livestock mostly good to excellent. Pasture, range feed condition good.

FLORIDA: Temperatures 5 to 8° below normal north, 3 to 5° below normal central, 1 to 2° above normal southeast. Lows, lower 40s Panhandle, middle 50s central, upper 50s south, 60s southeast coast.

Highs; around 90°. Rain reported 2 days. Rainfall under 0.25 to 0.50 in. with heavier amounts near 0.50 in.

Soil moisture mostly short throughout State. Dry soil delaying cotton, peanut, soybean planting in most areas. Small grain harvest starting. Tobacco making good progress. Irrigated corn making good progress. Dry land crops under stress from lack of moisture in most areas. Haying active. Sugarcane making good progress. Rain needed, irrigation in use all citrus areas. Non-irrigated trees wilting, dropping leaves, little green fruit. Some fruit remaining for harvest softening. Picking of Valencias slowing as supplies are low. White, colored grapefruit harvest almost over. Caretakers cutting cover crops, post-bloom spraying. Dry in major vegetable producing areas. Season winding down west central except for watermelons. Season essentially complete south. Light harvesting sweet corn 7 to 10 days Zellwood, north. Cool weather delaying maturation. Harvesting squash, potatoes, increasing north. Volume leaders: Potatoes, tomatoes, watermelons, sweet corn, cucumbers. Also available: Snap beans, cabbage, carrots, celery, chinese cabbage, sweet corn, eggplant, escarole, romaine lettuce, specialty lettuces, peppers, radishes, squash, cherry tomatoes. States pastures poor to excellent. Pasture ratings 20% poor, 65% fair, 10% good, 5% excellent. States cattle herds fair to good condition.

GEORGIA: Cooler than normal week. Temperatures 4 to 8° below normal, except 3 to 5° below normal over southeast. Record breaking cold late in week, weekend with minimums in 40s common, 30s mountains. Warmest from low 80s mountains to low 90s extreme south. Another dry week, particularly across south half. Scattered thunderstorms gave some locations of north to western areas 0.50 to locally 2.00 in. Heaviest rains mostly in Atlanta to Gainesville area. Days suitable for fieldwork 5.5. Soil moisture 12% very short, 42% short, 45% adequate, 1% surplus. Corn 2% poor, 32% fair, 61% good, 5% excellent; 0% silked, 3% 1992, 6% avg.; few earliest fields beginning to silk. Cotton 1% poor, 48% fair, 51% good; several acres replanted. Sorghum 30% fair, 70% good; 51% planted, 40% 1992, 50% avg. Peanuts 30% fair, 65% good, 5% excellent; 92% planted, 82% 1992, 86% avg.; 1% blooming, 1% 1992; Rain needed. Soybeans 29% fair, 71% good; planting active north, stopped few areas south, dry soils. Tobacco 12% poor, 48% fair, 40% good; need rain, showers spotty. Wheat 0% harvested for grain, 3% 1992, 7% avg.; few fields harvested in south. Onions 11% fair, 85% good, 4% excellent; 80% harvested, 91% 1992, 94% avg.; prices declining, marketing channels full. Watermelons 1% poor, 63% fair, 29% good, 7% excellent; 99% planted, 98% 1992, 98% avg. Other vegetables 32% fair, 64% good, 4% excellent. Apples 9% fair, 91% good. Peaches 16% poor, 3% fair, 48% good, 33% excellent; 2% harvested, 14% 1992, 13% avg. Hay, pastures fair to good.

HAWAII: Weather sunny mixed with passing showers, cloudy periods. Temperatures mid 60 to high 80s. Rainfall none to 10.50 in. with winds at 5 to 20 mph.

Weather favorable for crop progress. Sunny weather allowed normal farming operations to continue. Intermittent showers favorable for most crops, pastures providing relief from dry weather. Orchard growers in wet areas increased spraying efforts curtailing disease outbreaks. Irrigation active maintaining crop progress. Banana production steady, near last week's level. Papaya output seasonally low. Watermelon harvesting active.

IDAHO: Temperatures 3 to 18° above normal throughout State. Little precipitation was measured in southwest, south-central parts of the State, while close to 0.50 in. fell in many northern, eastern areas.

Days suitable for fieldwork 6. Soil moisture 8% short, 85% adequate, 7% surplus. Spring wheat 97% not yet jointed, 3% jointed. Spring barley planted 89%, 99% 1992, 97% avg.; emerged 58%, 95% 1992, 84% avg. Spring barley 97% not yet jointed, 3% jointed. Oats planted 70%, 98% 1992, 93% avg.; emerged 40%, 90% 1992, 76% avg. Potatoes planted 67%, 96% 1992, 86% avg.; emerged 7%, 31% 1992, 17% avg. Sugarbeets planted 99%, 100% 1992, 100% avg.; emerged 73%, 99% 1992, 96% avg. Onions emerged 100%, 100% 1992, 100% avg. Dry peas planted 63%, 100% 1992, 98% avg.; emerged 26%, 98% 1992, 82% avg. Lentils planted 53%, 100% 1992, 98% avg. Field corn planted 68%, 81% 1992, 77% avg. Field corn

emerged 24%, 45% 1992, 38% avg. Dry beans planted 5%, 20% 1992, 14% avg. Alfalfa first cutting 4%, 16% 1992, NA avg. Irrigation water supplies 1% poor, 17% fair, 63% good, 19% excellent. Hay, roughage supplies 2% very short, 17% short, 81% adequate. Activities: Land preparation, planting, irrigating, thinning sugarbeets, applying herbicides. Pasture, range condition 95% of normal. Livestock mostly good condition. Cattle, hogs good.

ILLINOIS: Cool weather prevailed early in the week, with seasonable temperatures returning during the weekend. Temperatures averaged 2 to 8° cooler than normal. Highs mid 60s; mid 70s. Lows 40s; mid 50s. Precipitation less than 0.10 in. to over 1.00 in.

Days suitable for fieldwork 5.5. Soil moisture 14% short, 49% adequate, 37% surplus. Oats planted 94%, 100% 1992, 100% avg. Wheat filled 3%, 27% 1992, 27% avg. Alfalfa 10% excellent, 84% good, 6% fair; cut first crop 10%, 31% 1992, 26% avg. Red clover 20% excellent, 77% good, 3% fair; cut 3%, 16% 1992, 18% avg. Pasture condition 95% of normal.

INDIANA: A scattered light frost hit areas of northern, central areas late in the week. Highs upper 60s to around 70° which was 2 to 6° below normal over the north, central, 6 to 10° below normal in the south. Mean lows were from 40s in the north, central to mid 40s to mid 50s in the south, which was mostly 3 to 9° below normal. Rainfall 0.50 to 1.50 in. across State.

Days suitable for fieldwork 5. Favorable conditions continued to allow operators to plant corn, soybeans at a rapid pace. Pastures 96% of normal, 96% last week. Wheat crop ratings decreased, 83% rated good to excellent. Topsoil 30% short, 45% adequate, 25% surplus. Subsoil 1% short, 76% adequate, 23% surplus. Oats seeded 99%, 100% 1992, 98% avg. Spring tillage 86%, 100% 1992, 100% avg. Alfalfa hay 1st cutting 11%, 18% 1992, 21% avg.

IOWA: Temperatures 5 to 7° below normal. Extremes 31° northeast; 78° southeast. Scattered frost north, 19th, 20th, 21st. Rainfall 0.08 in. north central to 2.93 in. southwest; average 0.88 in. (normal 0.92 in.). May will be seventh consecutive month of above normal precipitation.

Days suitable for fieldwork 5.6. Topsoil 61% adequate, 39% surplus. Subsoil 30% adequate, 70% surplus. Fertilizer application 75%, 100% 1992, 100% normal. Primary seedbed preparation completed 70%, 100% 1992, 100% normal. Oats sown 90%, 100% 1992, 100% normal; emerged 70%, 100% 1992, 100% normal. Corn emerged 20%, 88% 1992, 58% normal. Soybeans emerged 2%, 37% 1992, 22% normal. Oat 1% very poor, 7% poor 42% fair, 43% good 7% excellent. Winter wheat 2% very poor, 3% poor, 36% fair, 51% good, 8% excellent. Pasture 3% very poor, 3% poor, 17% fair, 58% good, 19% excellent. Hay 4% very poor, 14% poor, 27% fair, 45% good, 10% excellent. Livestock conditions are improving; however, scours is still a problem for calves, flu is up in swine.

KANSAS: Temperatures mostly 2 to 8° below normal over the State. Precipitation received all districts. In the western districts averages of approximately 0.50 in. fell. Greater amounts fell in the central, eastern districts. In the southeastern-district the average was over 2.00 in., with some localities receiving 8.00 in. or more.

Days suitable for fieldwork 2.0. Western districts experienced 3.0 to 5.5 days suitable. Rain slowed fieldwork the past week, especially in the central, eastern districts. For State topsoil moisture 3% short, 44% adequate, 53% surplus. Subsurface moisture 59% adequate, 41% surplus. Corn planting 75% complete, 95% avg. In the western districts corn planting is mostly complete. Planting of corn in the northeast, east central, at 25 to 45%, is well behind due to wet fields throughout the season. Sorghum acreage 5% planted compared to 25% avg. Soybeans planted stand at 4%, 30% avg. Most sorghum, soybeans planted thus far are located in the southern districts. Persisting wet conditions are becoming detrimental to the health, condition of the wheat crop in some areas. Wheat 1% poor, 10% fair, 89% good to excellent. Growth still behind normal. Ninety-nine percent of State's wheat acreage jointed compared to 100% avg. Acreage headed 55% for the State, compared to 90% avg. Disease pressure in wheat is widespread. Because of the ideal conditions, pressure from foliar diseases is becoming greater. Across the State 10% alfalfa has been cut the first time. Alfalfa weevils are reaching

treatment levels in many areas of central, eastern areas. Pastures are in good condition.

KENTUCKY: Cool week, rainfall slightly below average. Highs lower 70s, about 7° below normal. Lows near 50°, about 7° below normal. Rainfall near 0.50 in. west, about 0.75 in. east.

Days suitable for fieldwork 4.0. Soil moisture 17% surplus, 79% adequate, 4% short. Wheat headed 97%, 99% 1992, 98% avg.; 2% poor, 14% fair, 75% good, 9% excellent; emerged corn 64% of planted; 20% fair, 69% good, 11% excellent. Burley tobacco 17% set, 36% 1992, 28% avg. Dark tobacco 25% set. Hay 9% fair, 70% good, 21% excellent.

LOUISIANA: Temperatures 3.1 to 4.4° below normal. Extremes 47°, 90°. Rainfall 0.06 in. east central to 1.22 in. southwest.

Days suitable for fieldwork 5.7. Soil moisture 5% short, 95% adequate. Corn 10% poor, 45% fair, 45% good; 99% emerged, 100% 1992, 99% avg.; 1% silked, 8% 1992, 5% avg. Cotton 4% poor, 54% fair, 42% good; 82% emerged, 96% 1992, 73% avg. Planting very active. Hay 43% first cutting, 43% 1992, 34% avg. Harvest progressing well. Peaches 2% poor, 55% fair, 43% good; 1% harvested, 9% 1992, 4% avg. Rice 1% poor, 82% fair, 17% good. Rice water weevils found in southern parishes. Sorghum 65% fair, 35% good; 67% emerged, 80% 1992, 70% avg. Soybeans 27% emerged, 39% 1992, 20% avg. Planting active, ahead of schedule. Spring plowing 93% plowed, 98% 1992, 93% avg. Sweet potatoes 29% planted, 21% 1992, 22% avg. Wheat 2% very poor, 47% poor, 30% fair, 21% good; 84% turning color, 95% 1992, 94% avg.; 23% harvested, 25% 1992, 26% avg. Sugarcane 2% poor, 22% fair, 66% good, 10% excellent. Layby, fertilization active. Livestock 21% fair, 74% good, 5% excellent. Marketing heavier spring calves. Pastures 1% very poor, 1% poor, 6% fair, 88% good, 4% excellent. Topdressing, pastures look good. Vegetables 53% fair, 42% good, 5% excellent. Strawberry harvest nearly complete.

MARYLAND & DELAWARE: **MARYLAND:** Precipitation 1.35 in. Temperature 62.5°, normal 65.1°. Extremes 29°, 86°.

Days suitable for fieldwork 3.7. Topsoil moisture, 68% adequate, 32% surplus. Subsoil moisture 68% adequate, 32% surplus. Small grains mostly fair to good condition, barley 29% turning, 27% 1992, 36% avg.; rye 89% headed, 97% 1992, 99% avg.; 4% turning, 23% 1992, 17% avg.; wheat headed 76%, 79% 1992, 82% avg.; oats 18% headed, 22% 1992, 16% avg. Field corn 82% planted, 86% 1992, 77% avg. Sweet corn 69% planted, 55% 1992, 63% avg. Soybeans planted 13%, 21% 1992, 17% avg. Pasture in mostly excellent condition. Alfalfa hay 30% first cut, 29% 1992, 33% avg. Other hay 15% first cut, 19% 1992, 17% avg. Strawberries 93% blooming, 96% 1992, 97% avg.; 8% harvested, 12% 1992, 12% avg. Tobacco 12% transplanted, 29% 1992, 28% avg.

DELAWARE: Precipitation 1.55 in. Temperature 61.0°, normal 65.3°. Extremes 42°, 84°.

Days suitable for fieldwork 2.8. Topsoil moisture 60% adequate, 40% surplus; subsoil moisture 60% adequate, 40% surplus. Small grains mostly fair to good condition, light infestation of powdery mildew on wheat. Barley 30% turning, 33% 1992, 42% avg. Rye 83% headed, 92% 1992, 98% avg.; wheat 59% headed, 60% 1992, 82% avg. Corn for grain 78% seeded, 91% 1992, 89% avg. Sweet corn 77% planted, 82% 1992, 70% avg. Strawberries 86% blooming, 99% 1992, 100% avg.; 6% harvested, 2% 1992, 11% avg. Pastures, livestock excellent condition, haymaking active.

MICHIGAN: Extremes 28°, 77°. Precipitation none to 0.62 in. across the State.

Days suitable for fieldwork 6.5. Soil moisture 35% short, 60% adequate, 5% surplus. Oats 90% planted, 96% 1992, 98% avg. Barley 90% planted, 95% 1992, 96% avg. Potatoes 70% planted, 75% 1992, 70% avg. Sugarbeets 99% planted, 100% 1992, 100% avg. Pasture condition 80% of normal. Major activities: Hauling manure, pruning, spraying, spreading fertilizer, tilling, planting.

MINNESOTA: Temperatures 5 to 7° below normal for the State. Extremes 25°, 84°. Precipitation 0.07 to 0.31 in. below normal for the northwest, north central, southeast, south central, 0.02 to 0.48 in.

above normal elsewhere. Precipitation 0.48 to 1.13 in. for the State. Greatest weekly precipitation was 2.45 in.

Days suitable for fieldwork 5.6. Topsoil 4% very short, 25% short, 44% adequate, 27% surplus. Spring wheat 87% emerged, 77% 1992, 91% avg.; 7% jointing, 5% 1992, 6% avg. Oats 96% seeded, 97% 1992, 98% avg.; 79% emerged, 90% 1992, 90% avg.; 7% jointing, 8% 1992, 8% avg. Barley 88% emerged, 74% 1992, 87% avg.; 3% jointing, 3% 1992, 4% avg. Sunflowers 78% planted 60% 1992, 62% avg. Potatoes 82% planted, 73% 1992, 75% avg. Flax 72% planted, 45% 1992, 63% avg. Dry beans 42% planted, 63% 1992, 59% avg. Sweet corn 33% planted, 76% 1992, 59% avg. Green peas 62% planted, 91% 1992, 82% avg. Corn 67% planted, 98% 1992, 93% avg.; 26% emerged, 78% 1992, 55% avg. Soybeans 27% planted, 85% 1992, 61% avg.; 5% emerged, 36% 1992, 17% avg. Spring wheat 1% very poor, 2% poor, 28% fair, 58% good, 11% excellent. Oats 3% poor, 24% fair, 64% good, 9% excellent. Barley 1% very poor, 2% poor, 20% fair, 67% good, 10% excellent.

MISSISSIPPI: Temperatures 72°, 3.6 below normal. Extremes 38°, 89°. Received little rainfall, average 0.37 in., 0.79 in. below normal. Soil temperature 74°.

Days suitable for fieldwork 4.2, 6.2 1992, 4.0 avg. Soil moisture 71% adequate, 26% surplus, 3% excessive. Corn 81% planted, 100% 1992, 90% avg.; 68% emerged, 97% 1992, 85% avg.; 3% very poor, 12% poor, 51% fair, 34% good. Cotton 71% planted, 95% 1992, 81% avg.; 45% emerged, 88% 1992, 70% avg.; 42% poor, 52% fair, 6% good. Peanuts 37% planted, 63% 1992, 61% avg. Rice 58% planted, 100% 1992, 84% avg.; 37% emerged, 90% 1992, 73% avg.; 4% very poor, 40% poor, 56% fair. Sorghum 61% planted, 88% 1992, 74% avg.; 46% emerged, 81% 1992, 67% avg.; 8% poor, 58% fair, 34% good. Soybeans 11% planted, 30% 1992, 23% avg.; 5% emerged, 28% 1992, 17% avg. Sweet potatoes 20% planted, 40% 1992, 43% avg.; 100% fair. Watermelons 82% planted, 88% 1992, 90% avg.; 14% poor, 43% fair, 43% good. Wheat 98% heading, 100% 1992, 100% avg.; 19% mature, 44% 1992, 48% avg.; 1% harvested, 5% 1992, 3% avg.; 14% very poor, 7% poor, 49% fair, 30% good. Hay 22% harvested, 38% 1992, 23% avg. Peaches 5% harvested, 17% 1992, 8% avg.; 2% very poor, 21% poor, 42% fair, 35% good. Livestock 94% good, 6% excellent. Pasture 94% of normal. Activities: Planting crops.

MISSOURI: Temperatures near normal, varying from 4° above normal Kirksville to 4° below normal Springfield. Rainfall 1.04 in., 0.17 in. southeastern district to 2.05 in. southwest. Northern districts around 0.60 in., central districts near 1.50 in.

Days suitable for fieldwork 3.2, ranging 1 to 2 days central to 5.6 southeast. Topsoil moisture 43% adequate, 57% surplus. Corn planting latest since 1978. Corn planting by district ranges 13% west central, 19% east-central, to 92% southeast. Single crop soybean planting ranges from 16% southeast to 5% or less all other districts. Sorghum planting ranges from just getting started most central, northern districts to 49% southeast. Many wheat fields have low spots where growth is poor to none, while most well drained areas have fair to good wheat. Alfalfa first cutting 8%, 1992 33%, 33% avg. Other hay cut 4%, 11% 1992, 12% avg. Pasture 1% poor, 13% fair, 64% good, 22% excellent.

MONTANA: Temperatures were well above normal. Precipitation varied with most areas receiving below normal amounts.

Days suitable for fieldwork 6.2. Topsoil moisture 45% short, 53% adequate, 2% surplus. Subsoil moisture 37% short, 61% adequate, 2% surplus. Barley condition 4% poor, 23% fair, 57% good, 6% excellent; planted 91%, 96% 1992, 94% avg.; emerged 62%, 77% 1992, 68% avg. Oats 3% poor, 27% fair, 60% good, 10% excellent; planted 90%, 95% 1992, 92% avg.; emerged 57%, 62% 1992, 60% avg. Sugarbeets 2% poor, 13% fair, 80% good, 5% excellent; planted 100%, 100% 1992, 100% avg.; emerged 79%, 87% 1992, N.A. avg. Corn planted 91%, 88% 1992, 79% avg.; emerged 26%, 74% 1992, N.A. avg. Dry beans planted 90%, 92% 1992, 56% avg.; emerged 20%, 55% 1992, N.A. avg. Potatoes planted 48%, 65% 1992, 65% avg.; emerged 5%, 9% 1992, N.A. avg. Pasture, range feed 84% of normal. Movement of cattle, calves to summer ranges 57%, sheep, lambs 59%.

NEBRASKA: Temperatures near normal west to 3 to 7° below normals east. Precipitation 0.10 in. west to almost 2.00 in. east.

Days suitable for fieldwork 5.3. Topsoil 10% short, 62% adequate, 28% surplus. Subsoil 3% short, 76% adequate, 21% surplus. Winter wheat 17% fair, 75% good, 8% excellent; 3% headed, 74% 1992, 44% avg. Corn 76% planted, 97% 1992, 94% avg.; 31% emerged, 79% 1992, 68% avg. Sorghum 8% planted, 56% 1992, 42% avg. Soybeans 13% planted, 61% 1992, 50% avg. Alfalfa condition 9% fair, 62% good, 29% excellent. Wild hay condition 7% fair, 87% good, 6% excellent. Pasture, range condition 99% of normal.

NEVADA: Week began with southerly flow around a low pressure system. The low brought subtropical moisture into southern, eastern, northeastern areas, causing thunderstorms on the 16th. A drier airmass moved in on the 19th, stayed through the 22nd with just a few afternoon thunderstorms. Temperatures 5 to 10° above normal.

Condition all crops generally good most areas. Irrigation water supplies generally adequate. First cutting alfalfa hay started central areas, second cutting underway extreme south. Livestock movement to summer ranges continues.

NEW ENGLAND: Precipitation 0.01 to 0.96 in. north; 0.20 to 1.04 in. south. Temperatures 49 to 56° north; 50 to 60° south. Maximum temperatures 64 to 76° north; 70 to 79° south. Minimum temperatures 30 to 41° north; 33 to 46° south.

Days suitable for fieldwork 5.7. Soil moisture 3% very short, 16% short, 68% adequate, 13% surplus. Available grazing 10% short, 84% adequate, 6% surplus. Fieldwork progress 3 days behind schedule other than New Hampshire at 1 day ahead. Maine potatoes 25% planted, 55% 1992, 60% avg.; condition good. Connecticut River Valley potatoes 90% planted, 75% 1992, 80% avg.; condition good. Rhode Island potatoes 55% planted, 80% 1992, 80% avg.; condition good. Maine oats 75% planted, 60% 1992, 65% avg.; condition good. Field corn 50% planted, 55% 1992, 50% avg.; emerged 10%, 20% 1992, 20% avg.; condition good. Sweet corn 50% planted, 55% 1992, 50%; emerged 20%, 20% 1992, 30% avg.; condition good. Hay in good condition. Apple, pears, peaches, blueberries petal fall. Strawberries full bloom; Massachusetts cranberries bud stage. Shade tobacco 50% planted in CT. Major farm activities: Plowing, fertilizing, spreading manure on fields. Seeding potatoes, field corn, sweet corn continue. Oil sprays applied to fruit trees. Harvesting asparagus. Increasing signs of insects. Tobacco activity increasing.

NEW JERSEY: Temperatures below normal. Extremes 36°; 76°. Rainfall 0.47 in. north, 0.48 in. central, 0.76 in. south. Heaviest 24 hour total 0.65 in. on 18th, 19th. Estimated soil moisture, in percent field capacity, averaged 69% north, 67% central, 86% south. Four inch soil temperatures averaged 56° north, 58° central, 60° south.

Field preparation, planting continues. Ground preparation remains behind due to excessive topsoil moisture. Topsoil moisture supply adequate. Harvest of spring vegetables continues. Planting of spring cabbage, snap beans, sweet corn continues. Asparagus, lettuce (Boston, Bibb, Leaf), parsley, leeks, radishes, spinach, greens of all types available in good supply. Green onions and beets in moderate supply. Peach, apples set good. Light harvest of strawberries. Fruit condition generally good. Some first cutting of hay. Field corn germinating in some areas.

NEW MEXICO: Temperatures 1° above normal for the State. Extremes 31° central mountains; 95° southeast desert. Precipitation was more widespread, abundant in the north, but was totally absent in the southwest. Several areas in the northern mountains received totals over 1.00 in.

Days suitable for fieldwork 6.4. Soil moisture 75% short, 25% adequate. Isolated areas reported light wind, hail damage. Crop conditions: Alfalfa 8% poor, 40% fair, 47% good; 5% excellent. Cotton 15% poor, 47% fair, 38% good. Corn 28% fair, 72% good. Irrigated wheat 9% poor, 23% fair, 63% good, 5% excellent. Dryland wheat 21% very poor, 23% poor, 35% fair, 21% good. Chile 31% fair, 62% good, 7% excellent. Onions 12% poor, 10% fair, 70% good, 8% excellent. Lettuce mostly good, harvest declining. Cattle, sheep fair to good. Range and pasture 73% of normal.

NEW YORK: Week was cool. Highs generally in 60s, lower 70s. Lows in 40s to lower 50s. Coolest midweek with highs in mid 50s to

mid 60s. Lows in mid 30s to mid 40s. Precipitation continued below normal statewide. Most stations reported rains ranging between 0.25 to 0.50 in. Locally higher amounts due to thunderstorms 20th, 21st.

Days suitable for fieldwork 5.9. Soil moisture mostly adequate. Pasture condition 92% of normal. Hay mostly good, some areas first cuttings. Wheat mostly good. Corn planting 61% complete, 51% 1992, 45% avg. Early plantings emerged rapidly with good stands. Oats 81% planted, 71% 1992, 66% avg. Potatoes 63% planted, cooler weather has delayed emergence. New planted fruit trees in need of water. Pollination conditions in Lake Ontario region marginal, bees active. One-half of apple crop has reached petal fall. Oswego onion planting at flag stage, late plantings just emerging. Sweet corn, lettuce planting continued. Orange County onion fields in good shape, earliest plantings at flag to five-leaf stage. Lettuce, celery plantings continued.

NORTH CAROLINA: Temperatures 4° below normal to 4° above normal. Precipitation 2.10 in. at Butner to 0.01 in. at Pope Air Force Base.

Days suitable for fieldwork 5.4. Soil moisture 1% very short, 18% short, 79% adequate, 2% surplus. Crop condition: Pasture 3% poor, 16% fair, 74% good, 7% excellent. Winter wheat 1% poor, 34% fair, 63% good, 2% excellent. Oats 2% poor, 30% fair, 67% good, 1% excellent. Barley 2% poor, 23% fair, 73% good, 2% excellent. Rye 1% poor, 23% fair, 74% good, 2% excellent. Field tobacco 18% fair, 80% good, 2% excellent. Irish potatoes 23% fair, 65% good, 12% excellent. Corn 20% fair, 76% good, 4% excellent. Hay 16% fair, 75% good, 9% excellent. Peaches 4% fair, 83% good, 13% excellent. Truck crops 35% fair, 62% good, 3% excellent. Cotton 25% fair, 73% good, 2% excellent. Hay, roughage supplies 7% short, 86% adequate, 7% surplus. Corn planted 98%, 97% 1992, 93% avg. Flue-cured tobacco transplanted 93%, 95% 1992, 90% avg. Cotton planted 90%, 87% 1992, 80% avg. Peanuts planted 88%, 75% 1992, 67% avg. Sorghum planted 55%, 50% 1992, 43% avg. Soybeans planted 32%, 30% 1992, 28% avg. Sweet potatoes transplanted 30%, 31% 1992, 30% avg. Burley tobacco transplanted 10%, 12% 1992, 25% avg. Major activities: Transplanting tobacco plants, cutting hay. Other activities: Planting peanuts, cotton, corn, soybeans; sidedressing tobacco; tending livestock; general farm maintenance.

NORTH DAKOTA: Week began with cold Canadian high pressure over the State. The week ended with another cold front approaching from the west. Temperatures 3 to 6° below normal for the week. Extremes 21° west central; 85° northeast. Precipitation none in northeast to 0.35 in. south central.

Days suitable for fieldwork 5.9. Topsoil 4% very short, 23% short, 71% adequate, 2% surplus. Subsoil 11% very short, 38% short, 49% adequate, 2% surplus. Small grains planting neared completion with condition mostly good. Spring wheat 21% fair, 77% good, 2% excellent; durum 31%, 69% 1992, 0% avg.; oats 32%, 66% 1992, 2% avg.; barley 22%, 77% 1992, 1% avg.; winter wheat 26%, 71% 1992, 3% avg. Hard red spring wheat 97% planted, 74% emerged and beyond; 95%, 79% 1992; 95%, 76% avg.; durum wheat 93% planted, 57% emerged and beyond; 89%, 59% 1992; 88%, 58% avg.; barley 98% planted, 77% emerged and beyond; 94%, 78% 1992; 95%, 77% avg.; oats 95% planted, 72% emerged and beyond; 95%, 80% 1992; 93%, 72% avg. Winter wheat 44% jointing and beyond. Sugarbeets 99% planted, 98% 1992, 99% avg.; corn 74%, 84% 1992, 72% avg.; flax 66%, 60% 1992, 55% avg.; potatoes 81%, 59% 1992, 71% avg.; soybeans 76%, 74% 1992, 56% avg.; dry beans 42%; 46% 1992, 41% avg.; sunflower 32%, 28% 1992, 32% avg. Percent of planted acres emerged: Sugarbeets 88%; corn 30%; flax 27%; potatoes 4%; soybeans 24%; dry beans 7%; sunflower 4%. Post emerged herbicide application for broadleaf control 12% complete, wild oats 23%. Range, pasture conditions 80% of normal; furnished 83% roughage requirements. Stockwater supplies 1% very short, 5% short, 92% adequate, 2% surplus.

OHIO: A cool weather pattern took hold as high pressure slid down from Canada. Widely scattered showers were present during the week, a few thunderstorms rumbled across State on 23rd well in advance of the next low pressure system. High temperatures averaged in the lower 60s in the northeast, in the middle to upper 60s elsewhere. Low temperatures upper 30s in the northeast to the 40s elsewhere. Temperatures 3 to 9° below normal for the week. Most areas received

some rain during the period but for many areas accumulations were small. Rainfall was 0.50 in. or less except in the southwest and extreme south where 0.50 to 1.00 in. was observed. Much of State has received 1.00 in. of rain or less over the past four weeks.

Days suitable for fieldwork 5.7. Topsoil moisture 28% short, 60% adequate, 12% surplus. Oats planted 98%, 1992 100%; emerged 82%, 1992 94%, 90% avg. Potatoes planted 80%, processing tomatoes planted 55%, sugarbeets planted 99%. Alfalfa 1st cut harvested 10%, other hay 1st cut harvested 6%. Pasture 1% very poor, 2% poor, 24% fair, 59% good, 14% excellent. Hay 1% very poor, 2% poor, 26% fair, 58% good, 13% excellent. Planting activity continued at a frenzied pace. Irrigation of vegetables has been necessary due to dry weather. Strawberries have been irrigated to prevent frost damage. Cucumber planting has been delayed due to cool, dry conditions.

OKLAHOMA: Temperatures 4° below normal south central to slightly below normal Panhandle. Precipitation 0.46 in. Panhandle to 1.51 in. southeast.

Days suitable for fieldwork 3.7. Topsoil moisture 3% short, 28% adequate, 69% surplus. Subsoil moisture 100% adequate. Wheat 25% fair, 75% good; 94% heading, 100% 1992, 97% avg.; 23% soft dough, 74% 1992, 45% avg. Oats 88% jointing, 100% 1992, 100% avg.; 63% heading, 97% 1992, 82% avg.; 13% soft dough, 50% 1992, 39% avg. Barley 95% jointing, 100% 1992, 100% avg.; 66% heading, 98% 1992, 76% avg.; 14% soft dough, 63% 1992, 33% avg. Corn 99% planted, 100% 1992, 96% avg.; 92% up to stand, 93% 1992, 88% avg. Sorghum 66% seedbed prepared, 81% 1992, 82% avg.; 39% planted, 29% 1992, 16% avg.; 5% up to stand, 11% 1992, 8% avg. Soybeans 52% seedbed prepared, 86% 1992, 89% avg.; 22% planted, 26% 1992, 34% avg.; 14% up-to-stand, 6% 1992, 11% avg. Peanuts 82% seedbed prepared, 93% 1992, 91% avg.; 23% planted, 45% 1992, 37% avg.; 5% up-to-stand, 22% 1992, 8% avg. Cotton 81% seedbed prepared, 94% 1992, 93% avg.; 25% planted, 39% 1992, 31% avg.; 11% up-to-stand, 27% 1992, 15% avg. Alfalfa 39% 1st cut, 65% 1992, 72% avg. Pastures 96% of normal. Livestock 16% fair, 82% good, 2% excellent. Prices for feeder steers, heifers steady to higher. Marketings average.

OREGON: Temperatures above normal statewide. Northeast 12° above normal, western areas 3 to 8° above normal. Precipitation 0.75 to 2.75 in. Willamette Valley, coast, elsewhere 0.50 in. or less. Thunderstorms, light wind, hail, statewide.

Soil moisture 5% short, 87% adequate, 8% surplus. Winter wheat 3% poor, 7% fair, 66% good, 24% excellent. Winter wheat headed 20%. Barley planted 87%. Dry, warm weather help dry out fields, accelerate crop development, fieldwork. First crop alfalfa cut in many areas. Onion planting continued, processing vegetable crop plantings underway; Willamette Valley. Potato planting 70% complete Klamath Basin, 25% emerged Malheur County. Hailstorm damaged some snap pea fields in northeastern areas. Cranberry development at hook stage in Stevens beds, roughneck stage in McFarlin beds; southern coast. Willamette Valley sweet, tart cherries, prunes, plums lighter than normal set, poor pollination conditions; apples good set; excellent strawberry set, late harvest. Hood River Valley pear set light, except Bosc; Red, Golden Delicious apples set light; some scab, fireblight noted. The Dallas, Milton Freewater districts cherry set moderate to good; apples, prunes, plums sets good. Livestock good to excellent. western pastures showing good growth where fertilized. Sheep shearing underway, Willamette Valley. Range, pasture condition 97% of normal.

PENNSYLVANIA: Cool with frost reported near end of the week. Rainfall below normal. Temperature 56°, 1° below normal. Extremes 25°, 83°. Precipitation 0.30 in., 0.52 in. below normal.

Days suitable for fieldwork 5. Soil moisture 18% short, 74% adequate, 8% surplus. Plowing 82% complete, 88% 1992, 87% avg. Corn 62% planted, 60% 1992, 55% avg. Soybeans 29% planted, 24% 1992, 20% avg. Oats 88% planted, 93% 1992, 94% avg. Potatoes 72% planted, 69% 1992, 73% avg. Barley 71% boot, 74% 1992, 76% avg.; 57% heading or headed, 52% 1992, 55% avg. Wheat 55% boot, 62% 1992, 65% avg.; 14% heading or headed, 19% 1992, 24% avg.; 5% very poor, 4% poor, 18% fair, 57% good, 16% excellent. Oats

2% very poor, 9% poor, 32% fair, 48% good, 9% excellent. Hay stands mostly fair to good. Alfalfa first cutting 6% complete, 10% 1992, 10% avg. Quality of hay made 12% poor, 17% fair, 71% good. Feed from pastures good to excellent. Peaches 100% pink, 97% 1992, 99% avg.; 94% full bloom or past, 92% 1992, 94% avg. Cherries 100% pink, 94% 1992, 97% avg.; 99% full bloom or past, 84% 1992, 92% avg. Apples 97% pink, 90% 1992, 94% avg.; 92% full bloom or past, 78% 1992, 87% avg. Activities: Hauling manure; plowing, seedbed preparation; planting of oats, corn, soybeans, potatoes; first alfalfa cutting started; fixing fence; caring for livestock.

PUERTO RICO: Island rainfall of 0.81 in. was 0.71 in. below normal. Highest weekly totals 2.67 in. at Borinquen Airport and 2.58 in. at Manati 2E. Highest 24-hour total 2.38 in. at Borinquen Airport. Island temperatures 81 to 82° coasts and 76 to 80° interior, with mean station temperatures 85.2° at San Juan to 66.6° at Pico del Este--Luquillo. Extremes 64°, 94°.

SOUTH CAROLINA: Temperatures across State 3 to 6° below normal. Average precipitation 0.40 in.

Days suitable for fieldwork 5.9. Soil moisture 5% very short, 64% short, 31% adequate. Corn fair to good. Tobacco fair to good. Cantaloupes fair to good; 89% planted, 87% 1992, 86% avg. Watermelons fair to good; 90% planted, 91% 1992, 90% avg. Cucumbers good; 90% planted, 90% 1992, 89% avg. Snapbeans fair to good; 80% planted, 75% 1992, 77% avg. Tomatoes good. Oats fair to good; 96% headed, 99% 1992, 99% avg.; 60% turning color, 69% 1992, 73% avg. Rye fair to good; 62% turning color, 72% 1992, 72% avg. Wheat fair to good; 98% headed, 100% 1992, 100% avg. Grain Hay fair to good; 67% harvested, 59% 1992, 65% avg. Peaches fair to good. Pastures fair to good.

SOUTH DAKOTA: Temperatures 4 to 8° below normal. Extremes 29°, 86°. Precipitation was variable with amounts none to over 2.00 in. Localized areas received between 5.00 to 7.50 in. in the southeast part of the State late in the week. Maximum 7.50 in.

Days suitable for fieldwork 4.8. Topsoil moisture 1% very short, 9% short, 67% adequate, 23% surplus. Subsoil moisture 1% very short, 5% short, 68% adequate, 26% surplus. Rye 3% very poor, 9% fair, 64% good, 24% excellent. Oats 1% very poor, 3% poor, 14% fair, 68% good, 14% excellent. Barley 2% very poor, 2% poor, 14% fair, 59% good, 23% excellent. Barley 93% planted, 100% 1992, 100% avg. Oats 91% planted, 100% 1992, 100% avg. Flax 57% planted, 74% 1992, 69% avg. Sunflowers 14% planted, 28% 1992, 16% avg. Drier weather allowed fieldwork to progress rapidly over much of the state. Most fields were still water logged in the southeast areas. Small grain development made good progress but Tan Spot and Wheat Streak Mosaic diseases were reported in winter wheat fields. Livestock: 1% very poor, 3% fair, 73% good, 23% excellent. Pasture conditions 93% of normal.

TENNESSEE: Cold front moved into the State on the 17th, remained until the 19th when it finally pushed south. Front was replaced by a high-pressure system that controlled the weather for the remainder of the week. Temperatures below normal for the week, 10° below normal over the plateau to 3° below normal in the west. Lows for the week were mostly in the low to mid 60s, average highs were mainly in the low to mid 70s. Most of the State experienced below normal rainfall. West averaged almost 0.75 in., 0.73 in. below normal. Middle averaged a little more than 0.50 in. below normal, plateau region averaged 0.19 in. below normal. East was the only area with above-normal rainfall, at 0.08 in. above normal levels. Heaviest rains fell over the extreme northeast; amounts were generally 1.00 to 2.00 in.

Days suitable for fieldwork 3.5. Soil moisture 79% adequate, 21% surplus. Corn 89% planted, 96% 1992, 83% avg. Cotton 74% planted, 93% 1992, 77% avg. Sorghum 28% planted, 80% 1992, 52% avg. Soybeans 9% planted, 27% 1992, 18% avg. Tobacco 29% transplanted, 58% 1992, 43% avg.; 1% poor, 28% fair, 70% good, 1% excellent. Wheat 98% headed, 100% 1992, 99% avg.; 4% turning color, 44% 1992, 34% avg.; 4% poor, 27% fair, 63% good, 6% excellent. Alfalfa 45% 1st cutting harvested, 57% 1992, 61% avg. Pastures 4% fair, 75% good, 21% excellent. Hay 2% poor, 7% fair, 82% good, 9% excellent. Cattle 3% fair, 90% good, 7% excellent.

TEXAS: Dry air was in control to begin this past week. High pressure moved into northern Gulf, allowed moist air to flow back into State. Toward end of week disturbances moved across Texas, triggering thunderstorms. Over past weekend heavy rains were recorded Northern Panhandle, over far South Texas, Coastal Plains. Rain totals exceeded normal over southern half of State, where totals were 1.00 to 3.00 in. above normal for week. North Texas, High Plains had widely scattered rains but totals tended to be on light side.

Crops: Corn planting almost completed in High Plains, where cool weather hampered growth of existing stands. Blacklands showed good growth. Central Texas had excellent growth, some fields had minor damage from strong winds. Statewide corn condition 82% normal, 92% 1992. Grain sorghum planting neared completion Cross Timbers, while High Plains some producers were still bedding ground, applying herbicides. Grain sorghum is heading as far north as Coastal Bend. Sorghum 78% normal, 83% 1992. Cotton planting remained active High Plains, cool temperatures, wet conditions in some areas slowed cotton emergence. In Low Plains cotton planting well underway, but some areas could use rain. Some replanting took place in Blacklands. East Texas, planting was running late due excessive soil moisture. There was some minor hail damage in Trans-Pecos. Central Texas cotton progressed well due recent hot weather. Some fields in Rio Grande Valley experiencing nematode problems. Statewide cotton condition 69% normal, 69% 1992. Rice planting experienced another week of interruptions because of weather, continued to lag normal progress. Statewide rice condition 83% normal, 89% 1992. Soybean planting occurred only in dryer areas. Planting in Blacklands winding down. Small grains in High Plains received moisture, will help fill out heads, rust beginning to get severe some fields. Wheat harvesting well under way Central Texas. Low Plains, producers getting ready for harvest. Wild Oats continued to be problem, some fields were suffering from limited moisture, diseases. Statewide wheat condition 74% normal, 82% 1992. Peanut planting continued where soil conditions allowed. Stands were good in Low Plains except where water stood. Some Cross Timbers producers were still preparing ground, applying herbicides.

Commercial Vegetables: Rio Grande Valley, watermelon harvesting continued, yields continued to improve on irrigated land. San Antonio-Winter Garden, onion harvest winding down. East Texas, sweet potatoes late due to wet soils. Watermelon were making good progress. Harvesting of cabbage, potatoes, squash, beans active. Some tomato fields damaged by fungus, insects. High Plains, potatoes, cabbage made good progress. Irrigation of onions slowed due recent rains. Trans-Pecos, harvesting of cabbage continued. Onion yields improved. Peppers thinning continued. Peach harvesting underway East Texas. Edwards Plateau, some orchards were hit with fungal, bacteria diseases associated with high humidity. Pecan crop continued look good Central Texas. Phylloxera showed up in some trees in Blacklands, East Texas, where June Bugs damaged some trees. In Cross Timbers some trees were damaged by web worms.

Range and Livestock: Hay baling activities continued across state between rains. Farmers continued to move cattle off wheat pastures. Sheep shearing was winding down Edwards Plateau. Hornfly population beginning to build East Texas. Livestock conditions were good most areas of the State.

UTAH: Temperature maximums 5° above normal, minimums 7° above normal. Precipitation was heavy in the southeast, light in the north central, northern mountains, moderate elsewhere in the State.

Days suitable for fieldwork 6.4. Soil moisture 4% short, 88% adequate, 8% surplus. Winter wheat jointed or better 85%, 98% 1992. Spring wheat emerged 92%; jointed or better 33%, 80% 1992, 60% avg. Barley emerged 96%; jointed or better 35%, 77% 1992, 58% avg. Oats planted 85%; emerged 67%, 91% 1992. Corn planted 85%, 93% 1992; emerged 31%. Alfalfa hay height 15.1 inches. Cattle moved to spring range 59%, 61% 1992, 43% avg. Sheep moved to spring range 53%, 49% 1992. Pasture, range good to excellent.

VIRGINIA: Temperatures within 2° of normal. Extremes 27°; 88°. Precipitation above normal with most areas receiving 1.00 to 2.00 in.

Days suitable for fieldwork 3.0. Topsoil moisture 4% short, 55% adequate, 41% surplus. Pasture 7% poor, 12% fair, 57% good, 24%

excellent. Alfalfa 9% fair, 69% good, 22% excellent. Other hay 18% fair, 56% good, 26% excellent. Wheat 32% fair, 66% good, 2% excellent. Barley 33% fair, 64% good, 3% excellent. Apple 14% fair, 72% good, 14% excellent. Potato 34% fair, 66% good. Corn 83% planted, 82% 1992, 83% avg. Corn 5% poor, 41% fair, 43% good, 11% excellent. Peanuts 90% planted, 93% 1992, 92% avg. Soybeans 22% planted, 20% 1992, 24% avg. Cotton 99% planted, 95% 1992, 97% avg. Flue tobacco 66% transplanted, 90% 1992, 80% avg. Burley tobacco 14% transplanted, 17% 1992, 27% avg. Dark-fired tobacco 46% transplanted, 63% 1992, 55% avg. Sun-cured tobacco 40% planted, 60% 1992, 65% avg. Cutting, baling hay, spraying for cereal leaf beetles, planting corn, soybeans, planting vegetables, picking strawberries. Some first cuttings of hay damaged by rainfall.

WASHINGTON: Temperatures 5 to 8° above normal west; 2 to 12° above normal east. Precipitation 0.24 to 1.09 in. west; none to 0.87 in. east.

Days suitable for fieldwork 5.9. Soil moisture 25% short, 75% adequate. Irrigation water supply 17% short, 83% adequate. Hay, other roughage 9% very short, 51% short, 40% adequate. Range, pasture 8% poor, 17% fair, 73% good, 2% excellent. Winter wheat dryland 5% fair, 75% good, 20% excellent; irrigated 100% good. Spring wheat dryland 20% fair, 80% good; irrigated 100% good. Barley dryland 25% fair, 75% good; irrigated 100% good. Warm, dry weather continued for most of the week. Winter wheat was beginning to head, spring grain seeding neared completion in most areas of the State. First cutting of alfalfa was underway in many areas with others expected to begin next week. Ranges, pastures continued to dry with the warm weather. Green chopping, grass silage making were underway.

WEST VIRGINIA: Temperature 55°. Extremes 31°, 83°. Precipitation 0.63 in.

Days suitable for fieldwork, 2.9. Soil moisture, 95% adequate, 5% surplus. Soil prepared, 80%. Wheat, 78% fair, 22% good. Barley, good; 98% headed. Oats, 22% fair, 78% good; 92% planted, 84% emerged. Corn, 60% planted, 18% emerged. Soybeans, 20% planted, 10% emerged. Hay, 58% fair, 42% good. Apples, good. Peaches, good. Tobacco beds, 40% fair, 60% good. Pastures, 28% fair, 72% good; 89% of normal. Cattle, 2% fair, 98% good. Sheep, good. Gardens, 44% fair, 56% good; 65% planted, 40% emerged. Farm activities: General maintenance, planting corn, gardens, soybeans.

WISCONSIN: Temperature 51°, 7° below normal. Extremes 22°; 83°. Precipitation 0.80 to 2.20 in.

Days suitable for fieldwork 5.0. Soil moisture 1% short, 71% adequate, 28% surplus. Pasture condition 86% of normal, 78% 1992, 78% avg. General condition of crops 2% poor, 32% fair, 58% good, 8% excellent. Oats 3% poor, 25% fair, 64% good, 8% excellent. Oats 75% planted. Corn 2% very poor, 3% poor, 38% fair, 55% good, 2% excellent; 52% planted, 85% 1992, 81% avg. Winter wheat 2% poor, 24% fair, 68% good, 6% excellent. Soybeans 20%, 59% 1992, 47% avg. Percent of alfalfa acres lost to winterkill 25%.

WYOMING: Temperatures above normal with some areas as much as 7° above normal. Precipitation was below normal over most of the State. Exceptions were in the south central, parts of the northwest where precipitation was from one-quarter to three-quarters of an inch above normal.

Days suitable for fieldwork 5.4. Topsoil moisture 9% short, 87% adequate, 4% surplus. Spring wheat 89% planted, 100% 1992, 94% avg.; 50% emerged, 85% 1992, 73% avg. Oats 91% planted, 96% 1992, 89% avg.; 54% emerged, 73% 1992, 64% avg. Barley 91% planted, 97% 1992, 92% avg.; 74% emerged, 87% 1992, 82% avg. Sugarbeets 99% planted, 100% 1992, 100% avg.; 76% emerged, 66% 1992, 68% avg. Corn 76% planted, 91% 1992, 75% avg.; 33% emerged, 40% 1992, 27% avg. Dry beans 5% planted, 22% 1992, 16% avg.; 1% emerged, 3% 1992, 2% avg. Winter wheat insect, disease infestation 86% light, 14% moderate. Irrigation water supplies 79% adequate, 21% short. Condition of all livestock 5% fair, 90% good, 5% excellent. Range ewes lambing 79%. Range sheep shorn 95%. Lamb death losses 11% light, 72% normal, 17% heavy. Percent of cattle, calves moved to summer ranges 42%. Percent of sheep, lambs moved to summer ranges 31%.

International Weather and Crop Summary HIGHLIGHTS

May 16 - 22, 1993

FSU: In western areas, while rain benefited winter grains in Ukraine, continued dryness diminished topsoil moisture in Russia. Dry weather allowed spring grain planting in Kazakhstan.

EUROPE: Beneficial showers spread into north-central Europe, but Hungary is still too dry.

SOUTH ASIA: Rain in southern India spurred grain, oilseed, and cotton planting.

SOUTHEAST ASIA: Widespread showers covered most Thai rainfed rice and corn areas.

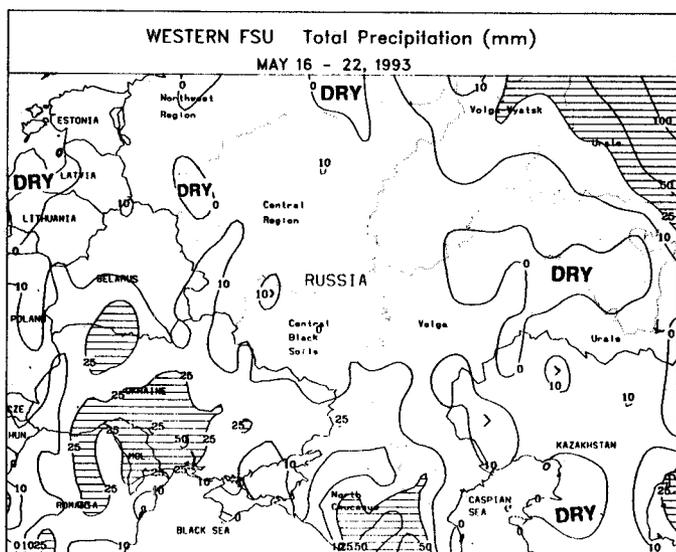
EASTERN ASIA: Soil moisture was favorable throughout China. Topsoils were becoming dry in Manchuria.

AUSTRALIA: Portions of eastern Australia received beneficial moisture, but additional rains are still needed to relieve long-term dryness.

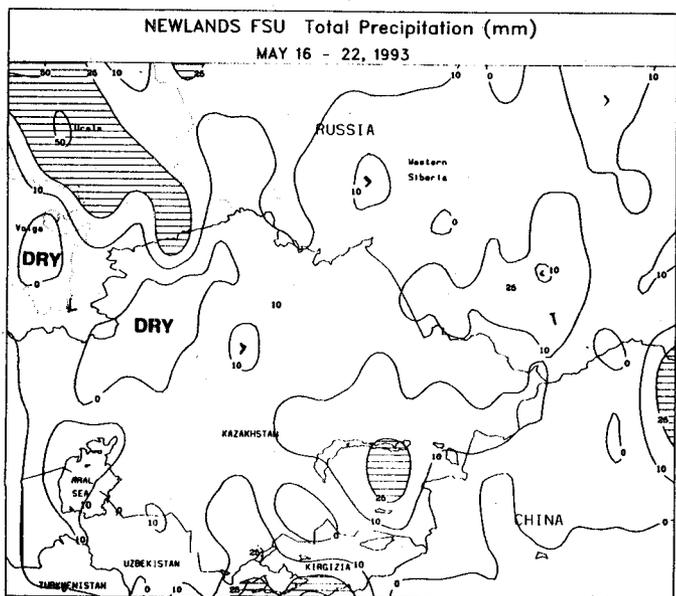
SOUTH AMERICA: Dry, warm weather favored summer crop harvesting across southern Brazil and central Argentina, except for late-week showers in Buenos Aires.

CANADA: Cool weather in the eastern Prairies slowed spring crop germination and necessitated local replanting.

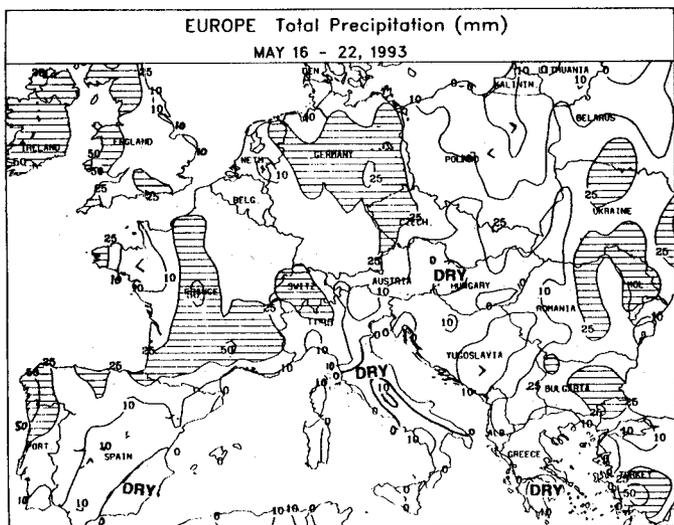
MEXICO: Dry weather aided fieldwork across the west, while showers favored most eastern crops.



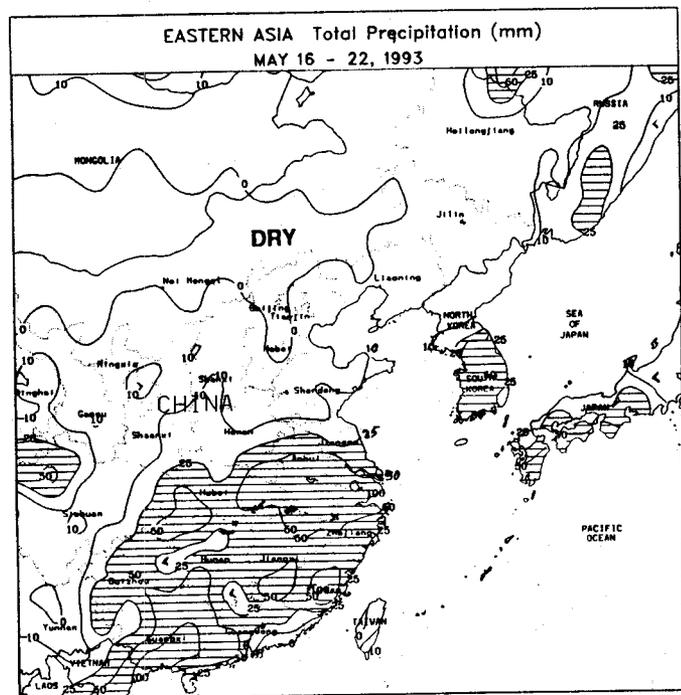
FSU: Showers and local thunderstorms over southern Belarus, Ukraine, and North Caucasus provided beneficial moisture for winter grains in the jointing stage and spring grain establishment. However, the rain slowed summer crop planting. Precipitation amounts generally ranged from 10 to 24 mm, with the greatest amounts of moisture (25-76 mm) falling over Moldova and southwestern Ukraine. In contrast, unseasonably warm, dry weather over the Baltic States, northern Belarus, Central Region, Black Soils Region, Volga Vyatsk, and Volga Valley continued a month-long dry spell. Average temperatures in these areas ranged from 3 to 5 degrees Celsius (C) above normal, exacerbating dryness. While the dry weather accelerated spring grain planting, it diminished topsoil moisture for germination and establishment. In Russia, recent reports indicated spring grains and pulses were planted on about 21 million hectares as of May 17, up about 6 million hectares from the previous week. Sowing was 12 percent behind 1992 as of May 17, compared with 60 percent behind on April 26. Subsoil moisture was adequate for winter grains. By week's end, a cooling trend spread westward over FSU crop areas.



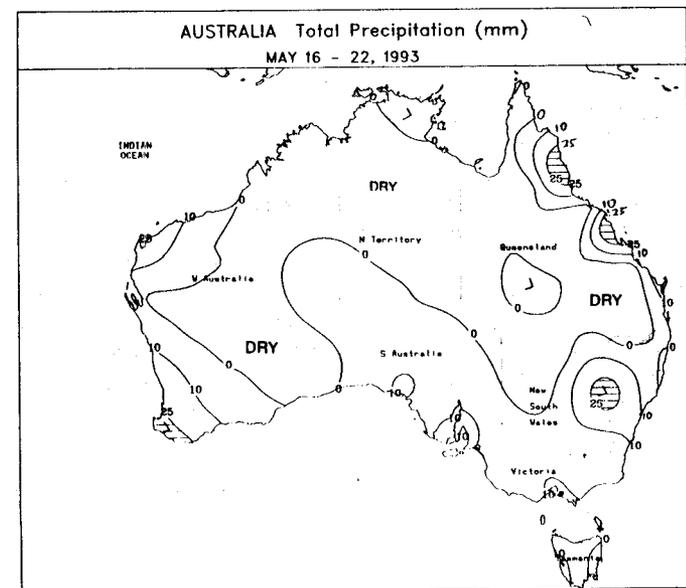
In the New Lands, spring grain planting usually begins in mid-May. Generally dry weather (precipitation less than 10 mm) prevailed over most of Kazakhstan, allowing spring grain planting. In contrast, unseasonably cold, damp weather over the northern Urals and Siberia slowed planting and crop emergence. Average temperatures in these areas ranged from 1 to 3 degrees C below normal, with minimum temperatures as low as -5 degrees C covering Siberia. In cotton growing areas of Central Asia, planting was well underway. Although favorable weather helped planting in most areas, some delays occurred in extreme eastern Uzbekistan and adjacent areas of Kyrgyzstan, where rainfall ranged from 19 to 32 mm.



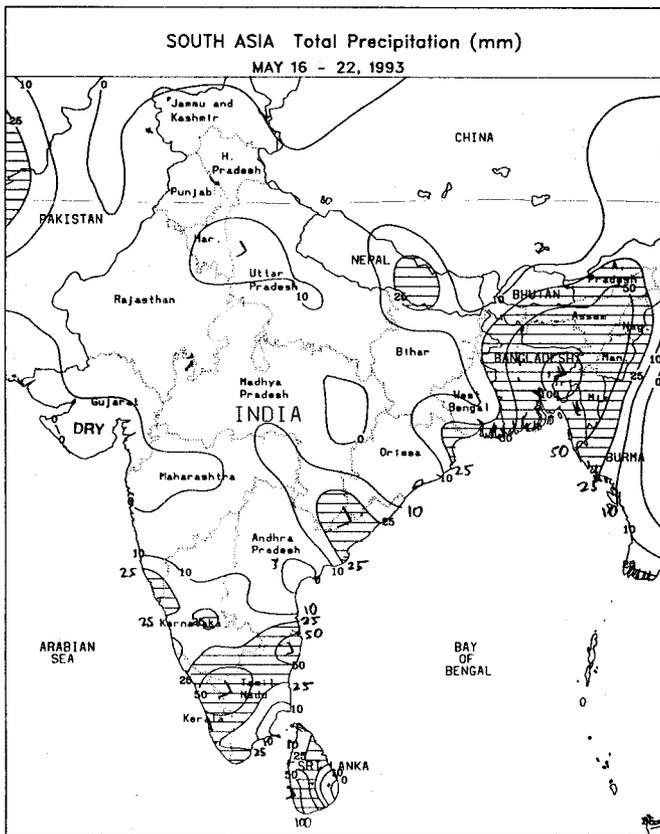
EUROPE: A broad area of rain (10-40 mm) kept crops in the United Kingdom and France well-watered, provided timely topsoil moisture for heading winter grains in Germany, the Czech Republic, and southwestern Poland, and eased the severe water shortage in northwestern portions of the Iberian peninsula. In contrast, dry weather prevailed across the Mediterranean region from southeastern Spain to Greece, typical of the summer dry season. Variable showers (5-35 mm) helped crop development in Italy's Po Valley. Shower activity increased in northeastern and east-central Europe, where a drying trend since March and unfavorably warm May weather (3-5 degrees C above normal again this week) depleted topsoil moisture. However, little rain (6 mm or less) fell in the major crop areas of western Slovakia, Hungary, and northeastern Poland. Scattered showers (5-26 mm) benefited grains across much of southern Scandinavia, although dry weather prevailed in extreme southwestern Finland and south-central Sweden.



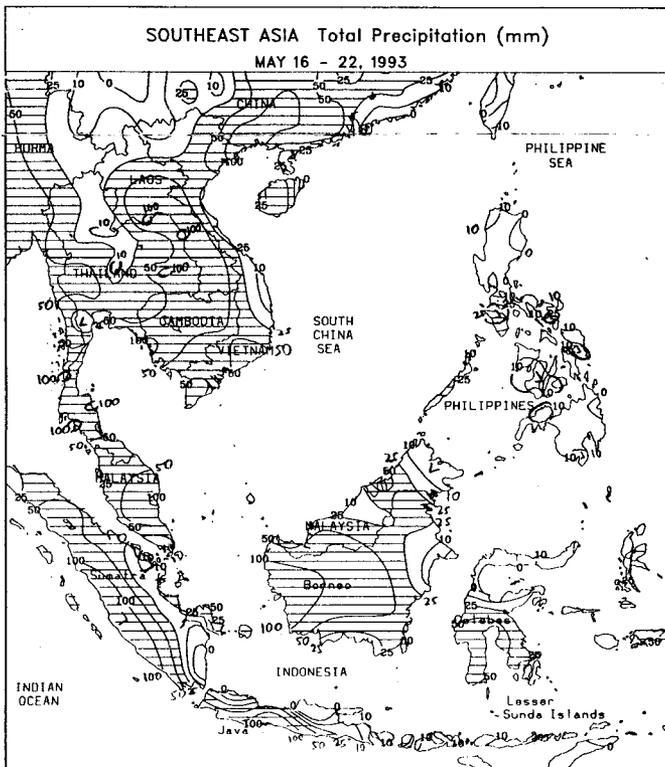
EASTERN ASIA: Light rain (less than 10 mm) benefited germinating summer crops and reproductive to filling winter wheat across the northern areas of North China Plain. Further south, heavier rains (20-75 mm) fell across Henan, Anhui, and Jiangsu, favoring germinating to vegetative corn, soybeans, and cotton. In Manchuria, continued dry weather allowed spring wheat, corn, and soybean planting to progress, but depleted topsoil moisture for germination. Widespread moderate showers (20-80 mm) covered the Yangtze Valley and southern China, keeping rice irrigation supplies at adequate levels. Heavy showers (90-180 mm) fell across portions of Guangxi and Fujian, causing some flooding. Temperatures averaged 2-4 degrees C below normal across the North China Plain and the Yangtze Valley and 1-3 degrees C above normal across extreme southern China and Manchuria.



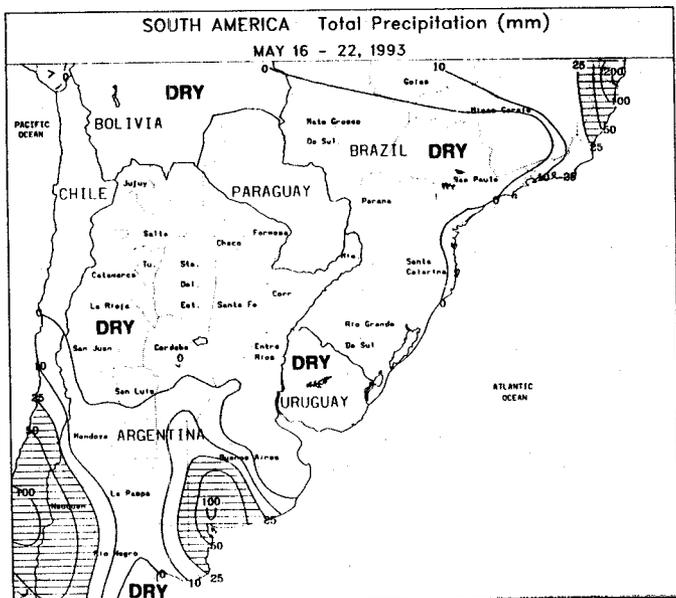
AUSTRALIA: Light to moderate rain (5-35 mm) fell across the central wheat areas of New South Wales, favoring winter wheat planting. Dry weather covered extreme northern New South Wales and southern Queensland, where despite previous rains, additional topsoil moisture is needed for wheat planting. Seasonal temperatures across eastern Australia kept evaporation rates at normal levels. Across the western and southern wheat areas, light rains (5-15 mm) improved topsoil moisture for grain planting. Scattered showers (5-50 mm) benefited sugarcane across coastal Queensland.



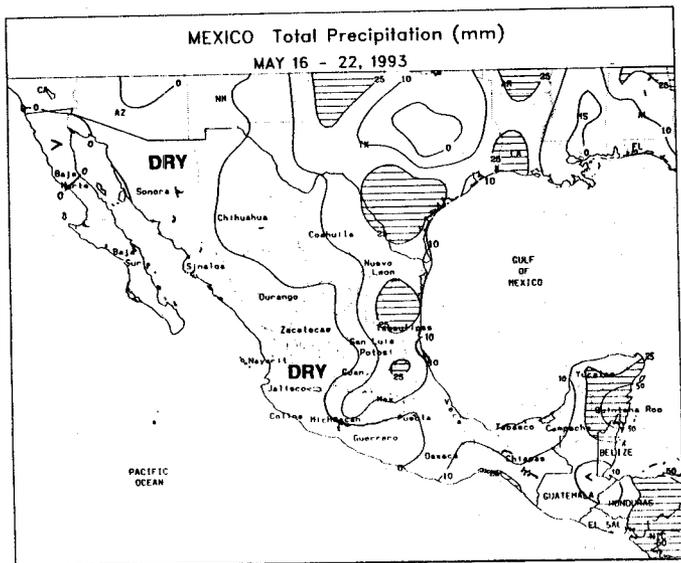
SOUTH ASIA: Light to moderate showers (10-50 mm or more) fell across southern India, boosting planting moisture for summer grains, oilseeds, and cotton. However, while temperatures averaged near normal, highs from the mid 30's to low 40's C maintained high evaporative losses. The southwest monsoon, currently approaching southern India at a normal pace, typically becomes established over India's southern tip in early June. Scattered showers continued over eastern rice areas, with amounts of 50-100 mm concentrated over eastern Bangladesh and Assam. Local flooding continued to hamper planting, which is typically in full swing by June. Hot, dry weather dominated Pakistan and central and northwestern India, although isolated showers (10-23 mm) dotted the region.



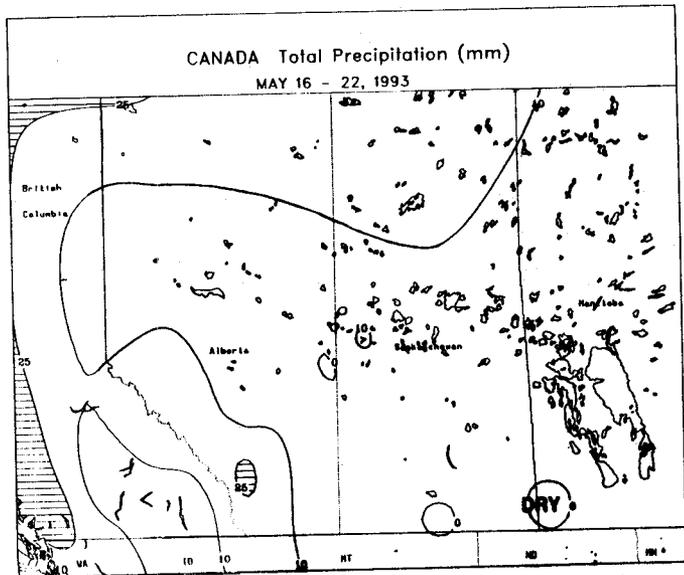
SOUTHEAST ASIA: Widespread showers (25-50 mm or more) benefited Indochina's main season grains. However, pockets of light rain (6-23 mm) persisted over rainfed rice and corn areas of central and northern Thailand. The rain held temperatures to normal levels (highs in the low to mid 30's C). To the south, beneficial showers (23-114 mm) continued over rice and oil palm areas of western Malaysia. Elsewhere, rainfall totals exceeding 50 mm were generally limited to coastal areas of eastern Malaysia and Indonesia. In the Philippines, scattered showers (10-51 mm) helped local rice and corn areas of southern Luzon and the Visayans, but a dominant wet pattern has failed to develop. Moisture is limited for main season rice and corn, largely planted during April and May.



SOUTH AMERICA: Dry, warm weather prevailed for most of the week across central Argentina, easing river flooding in northern Buenos Aires and allowing summer crop harvesting and winter wheat planting to progress. Temperatures averaged 3-5 degrees C above normal, helping to dry out wet fields and mature summer crops. However, on May 22, a frontal system brought light to moderate rain (10-20 mm) to western Buenos Aires and extreme southern Cordoba and heavy showers (50-100 mm) to southwestern Buenos Aires. The rains caused some additional harvest delays in northern Buenos Aires and possible flooding in the south. Dry weather prevailed across most of southern Brazil, favoring citrus, coffee, and late summer crop harvesting. Coastal Bahia received moderate to heavy rains (40-150 mm), aiding cocoa. Temperatures averaged near to slightly above normal across southern Brazil.



MEXICO: Light to moderate showers (10-35 mm) fell across northeastern and east-central Mexico, favoring flowering coffee, but delaying citrus harvesting. The northwestern and west-central crop areas remained dry, aiding winter wheat harvesting and corn planting.



CANADA: Cool, dry weather dominated Saskatchewan and Manitoba, with minimum temperatures of -1 to -3 degrees C reported at most locations. Temperatures as low as -5 degrees C in eastern Saskatchewan and western Manitoba reportedly necessitated replanting. By week's end, warmer weather moved into the region, aiding grain and oilseed germination. In Alberta, rainfall was also light (1-14 mm) but somewhat warmer weather benefited early crop development. To the east, cool, mostly dry weather covered Ontario's crop region, slowing winter wheat development. Frost persisted in northern growing regions. Corn and soybean planting normally begins in June.

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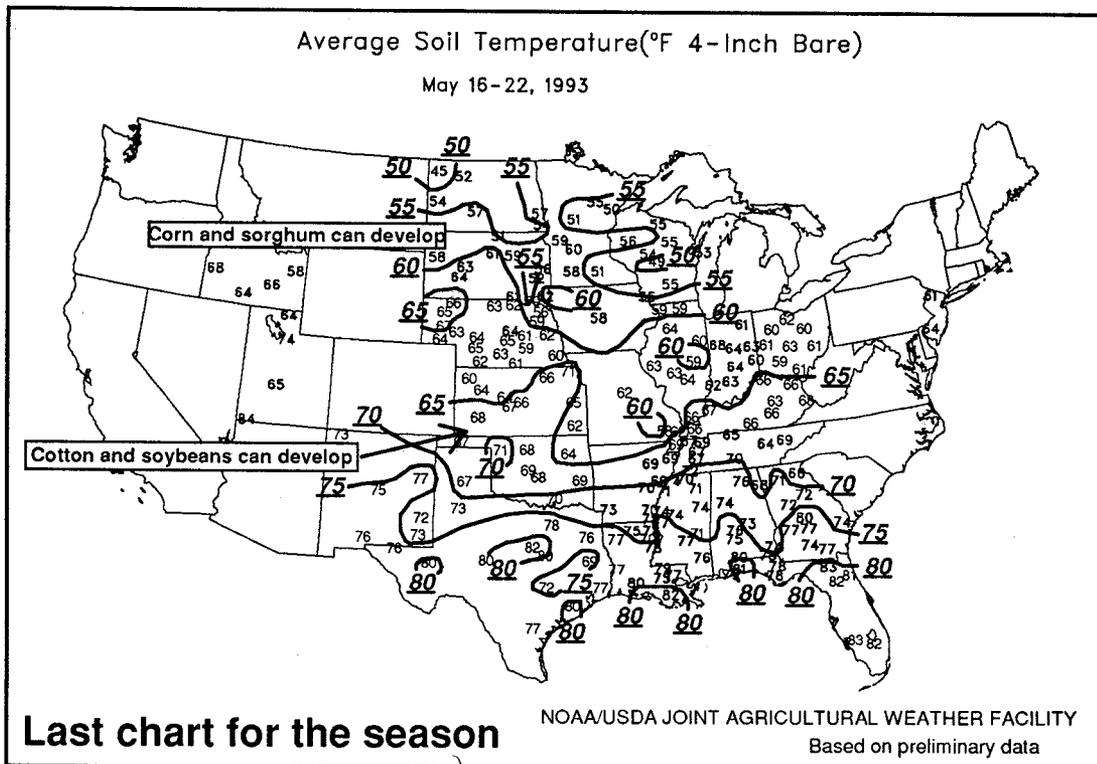
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