

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

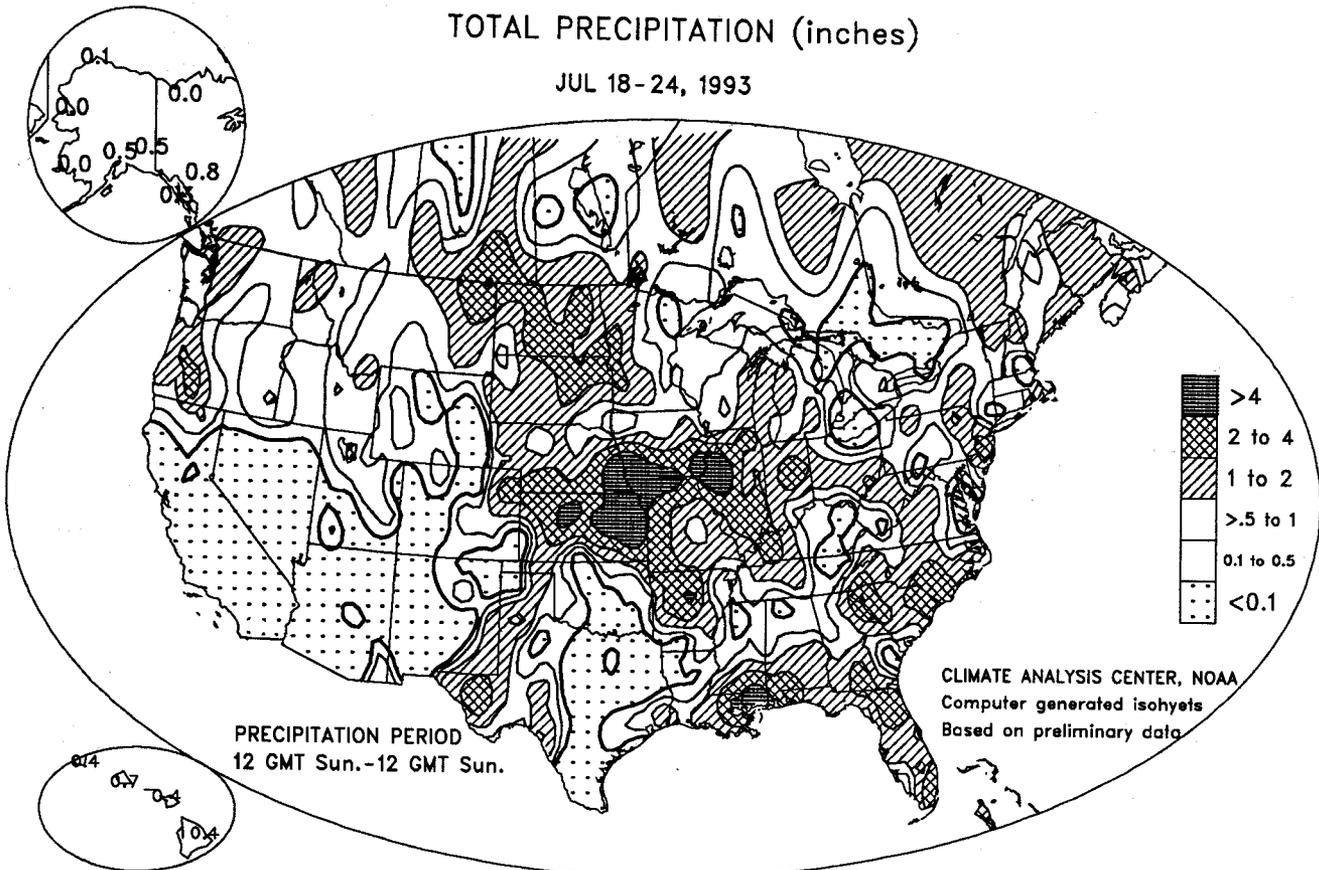
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Washington, D.C.

July 27, 1993

TOTAL PRECIPITATION (inches)

JUL 18-24, 1993



HIGHLIGHTS

July 18 - 24, 1993

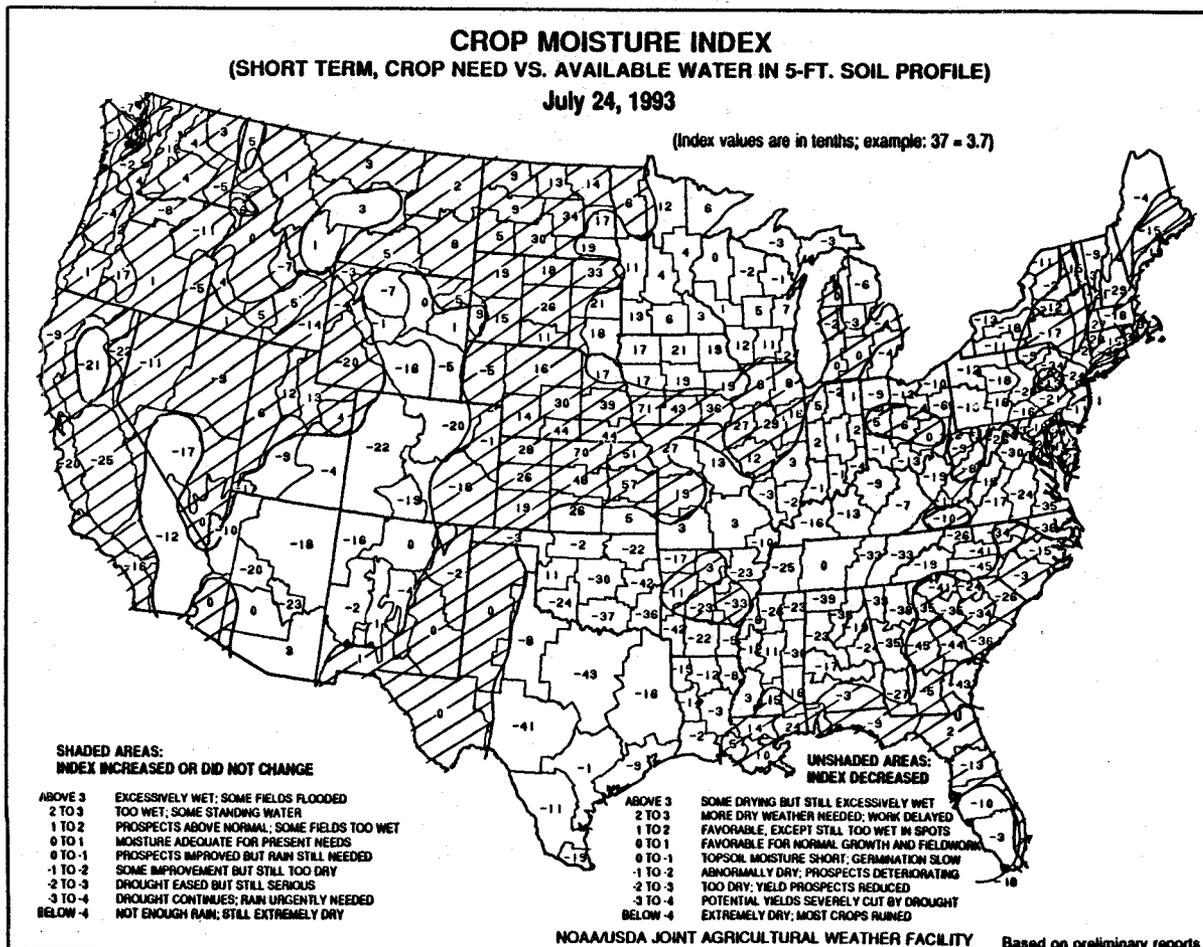
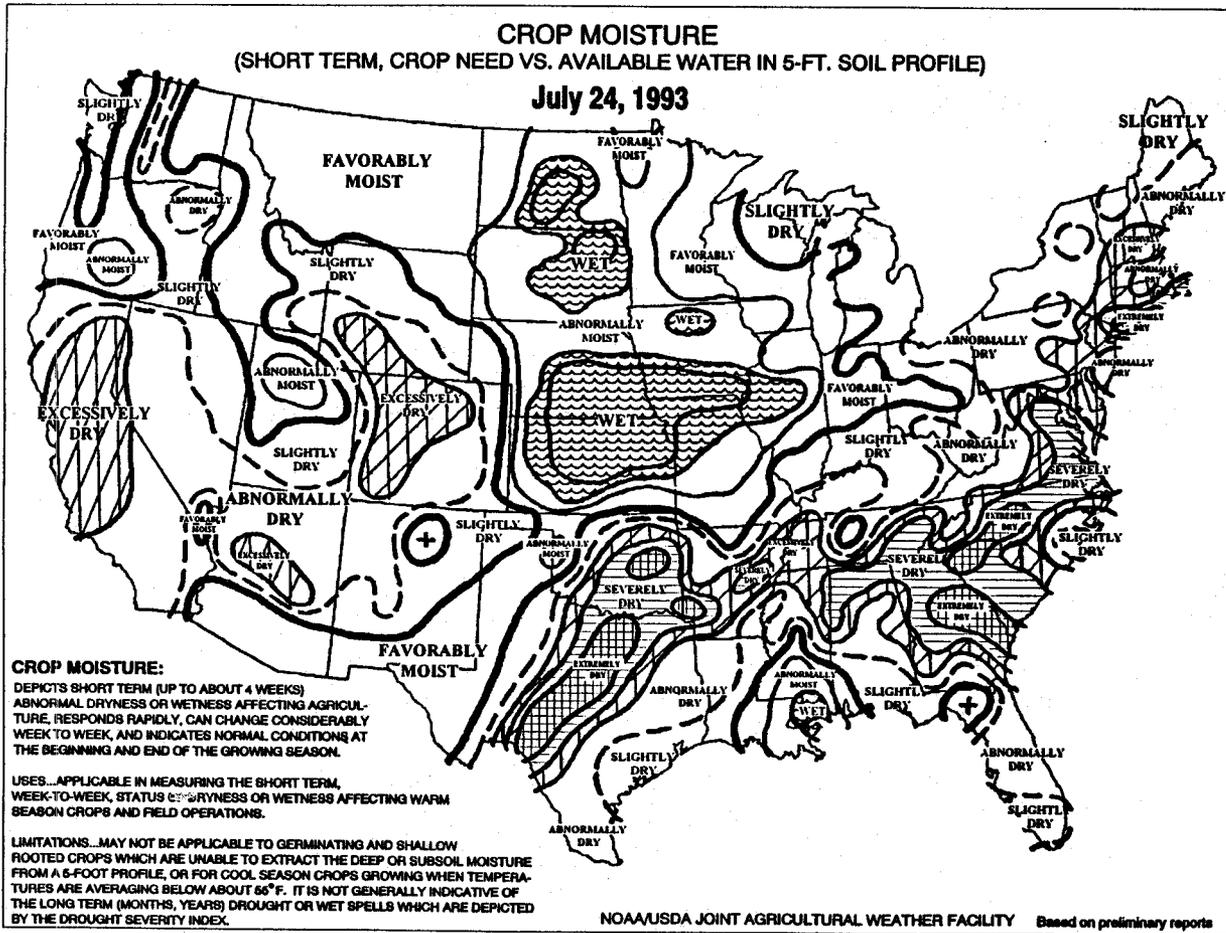
Rain continued to pour into the middle Mississippi and lower Missouri River basins, postponing peak crests and exacerbating the flood emergency. Farther south and east, heat intensified from eastern Texas to the Carolinas, while to the north and west, heavy rain plagued the northern Plains, and an unseasonable chill cloaked the West. Early in the week, the Mississippi River at St. Louis achieved a record flood stage of 46.90 feet, only to be surpassed by a 47.05-foot crest on Tuesday. Continued runoff will deliver a third crest, expected to attain 48 feet, on August 3, according to the National Weather Service. Mississippi River levels have begun to fall north of Burlington, IA, but stressed levees continued to burst along the Missouri-Illinois border. Early in the week, levee failures along the River Des Peres caused extensive flooding in southern St. Louis, MO. On Thursday,

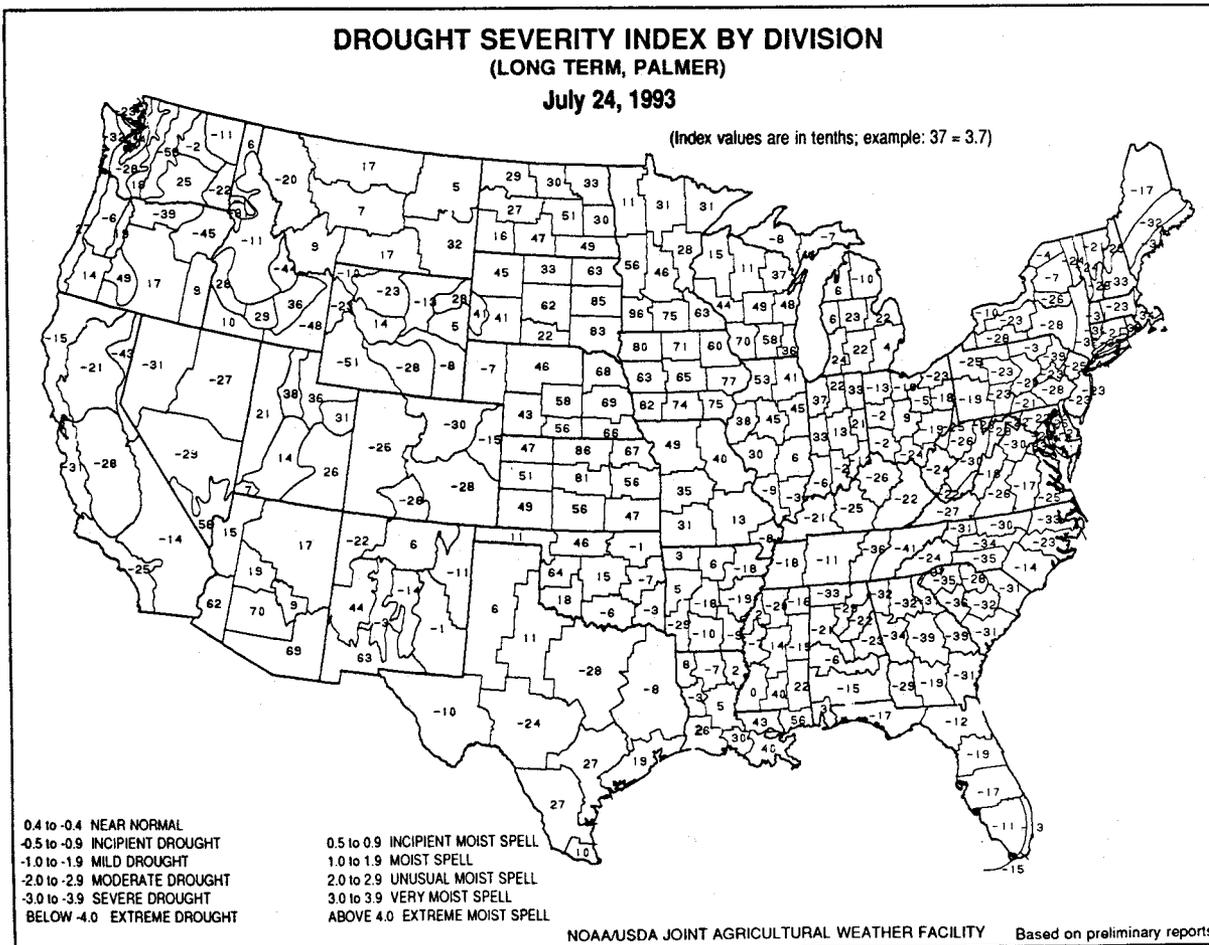
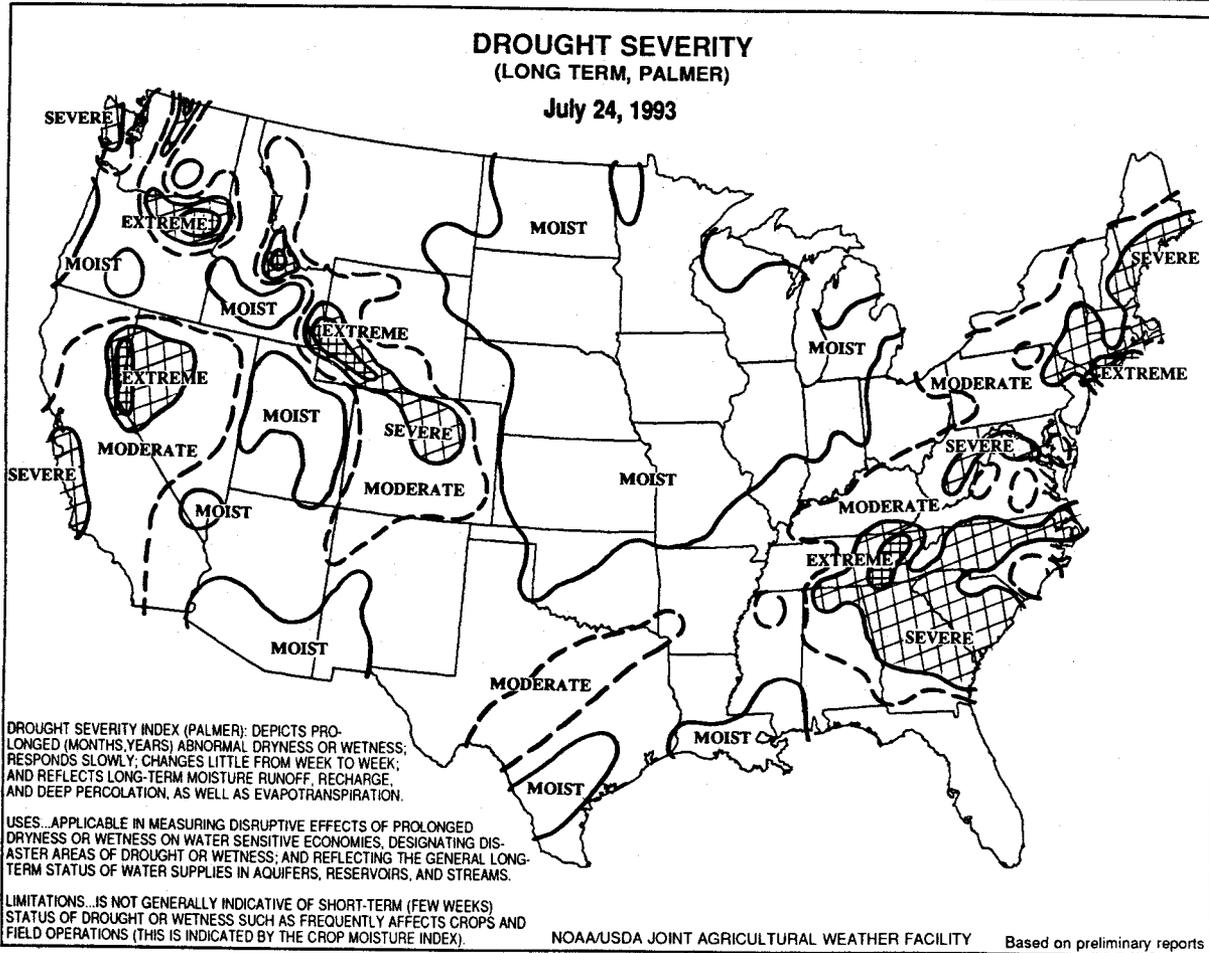
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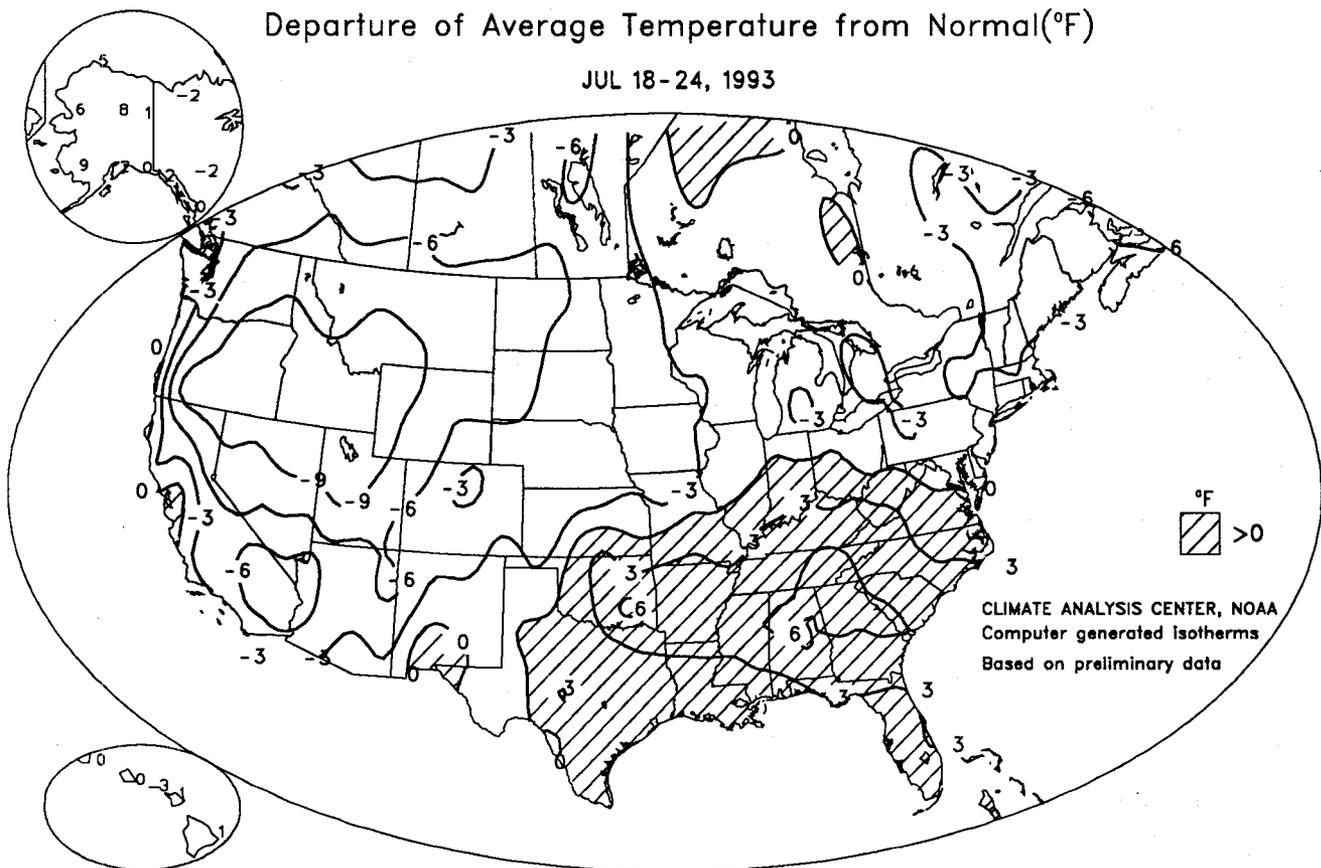
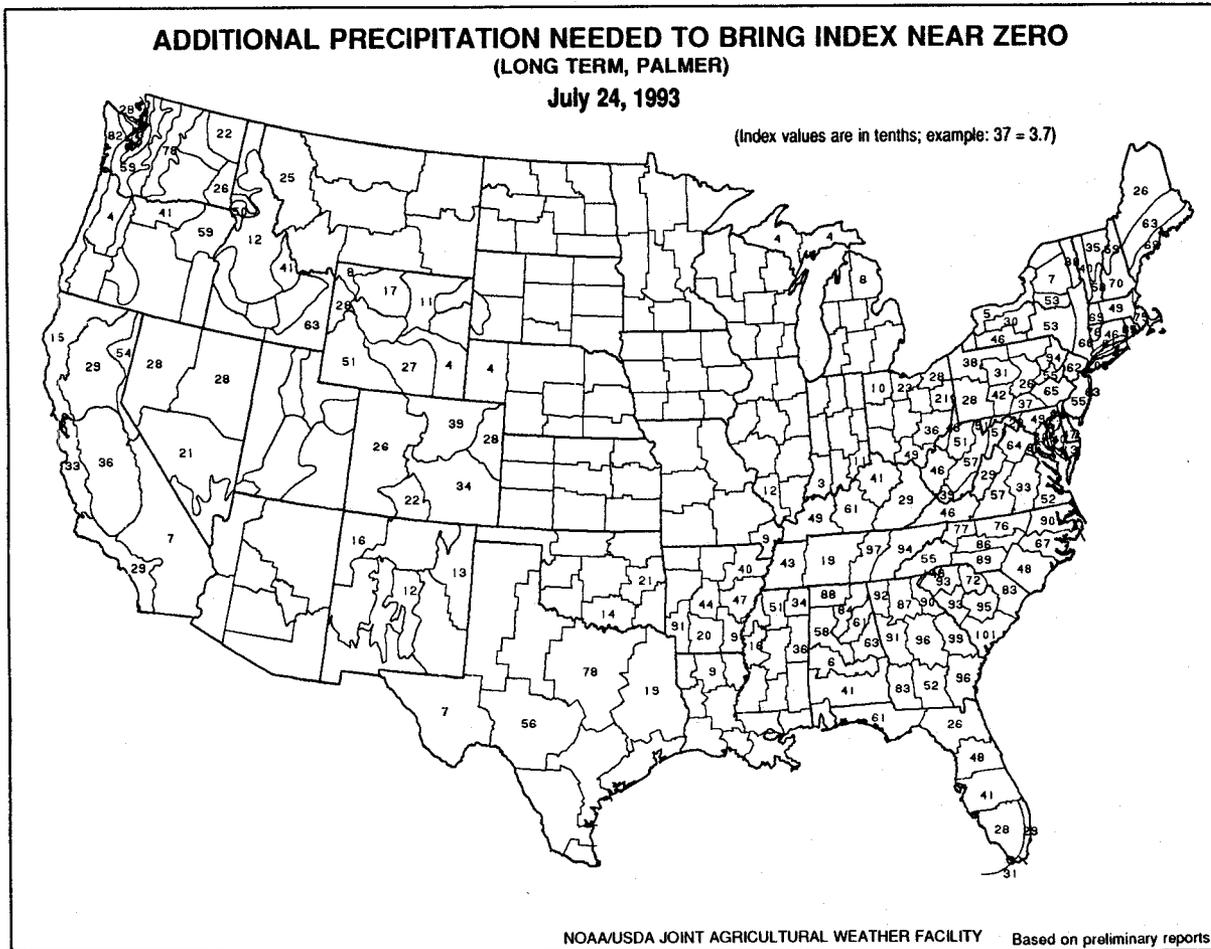
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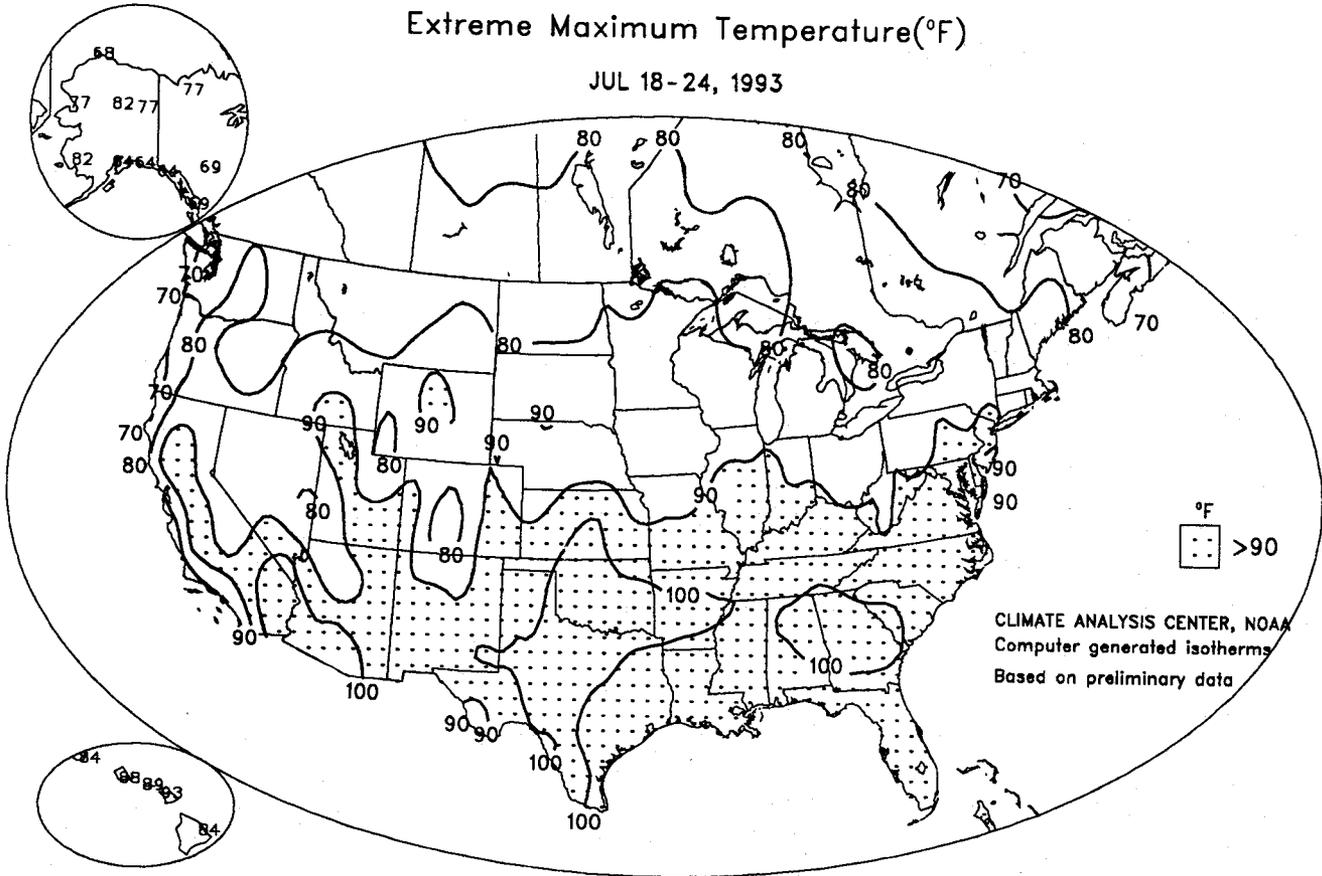






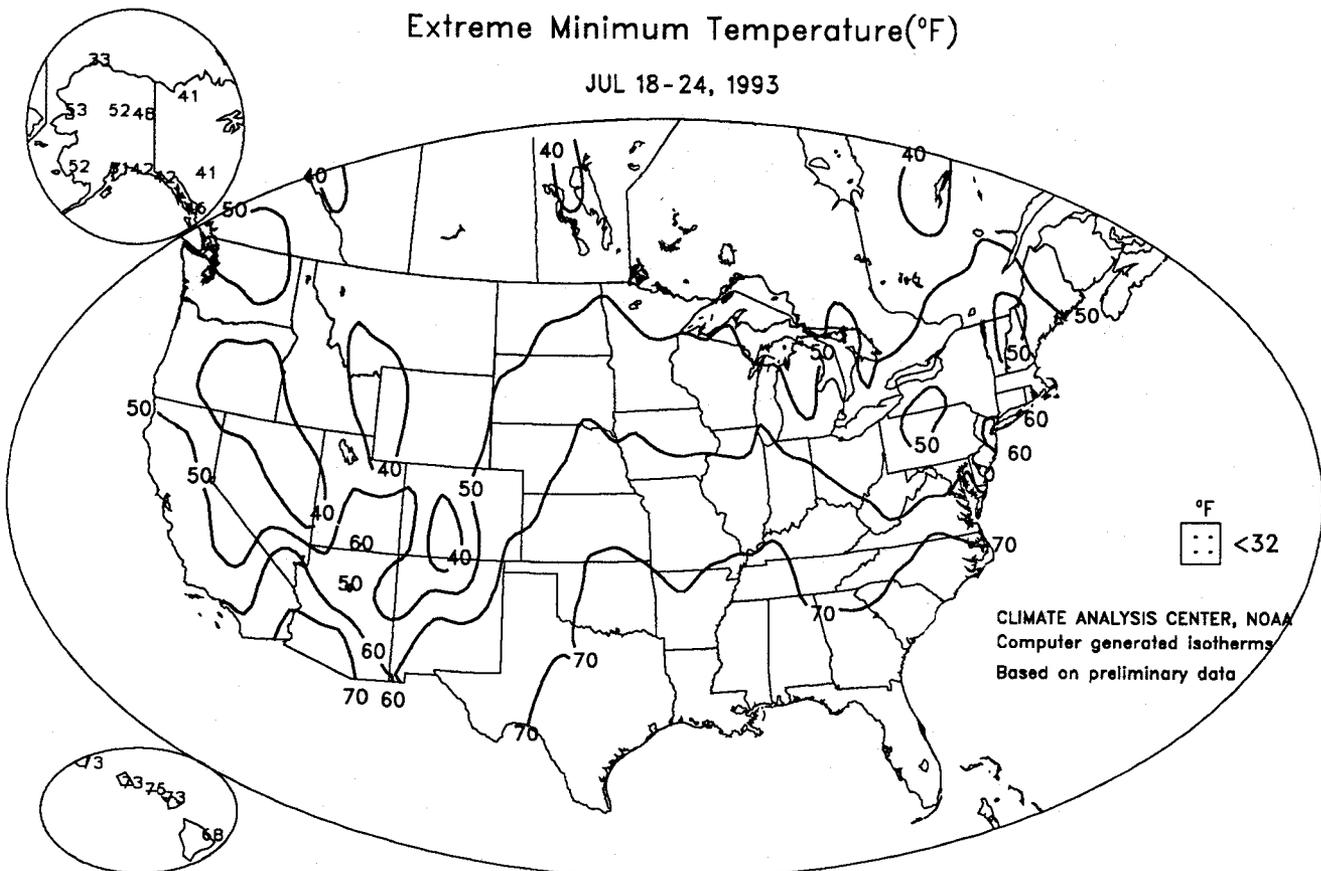
Extreme Maximum Temperature(°F)

JUL 18-24, 1993



Extreme Minimum Temperature(°F)

JUL 18-24, 1993



CUMULATIVE GROWING DEGREE DAYS (CORN*)

April 1 - July 24, 1993

STATES AND STATIONS	TOTAL	DEP. FROM NORMAL	STATES AND STATIONS	TOTAL	DEP. FROM NORMAL	STATES AND STATIONS	TOTAL	DEP. FROM NORMAL
AL ANNISTON	2402	- 4	SALINA	1972	- 91	YOUNGSTOWN	1547	+ 112
BIRMINGHAM	2428	- 25	TOPEKA/BILLARD	1931	- 104	ZANESVILLE	1742	+ 74
MOBILE	2636	- 184	WICHITA	2044	- 141	OK ALTUS	2478	- 42
MONTGOMERY	2556	+ 28	KY LEXINGTON	2041	+ 78	GAGE	2150	- 45
MUSCLE SHOALS	2425	+ 55	BOWLING GREEN	2191	+ 50	HOBART	2325	- 68
OZARK	2608	- 27	PADUCAH	2320	+ 83	MCALESTER	2548	+ 85
TUSCALOOSA	2526	- 19	LA LAFAYETTE	2753	- 94	PONCA CITY	2321	+ 9
AZ DOUGLAS	2393	+ 160	LAKE CHARLES	2820	- 73	TULSA	2299	- 129
FLAGSTAFF	1353	+ 168	MONROE	2639	- 32	OR BAKER	1015	- 126
PHOENIX	3323	+ 469	NEW ORLEANS	2700	- 146	EUGENE	1138	- 30
TUCSON	2817	+ 195	SHREVEPORT	2607	- 1	NORTH BEND	889	+ 215
YUMA	3327	+ 384	ME AUGUSTA	1302	+ 132	PENDLETON	1337	- 113
PRESCOTT	1860	+ 248	CARIBOU	997	+ 99	REDMOND	990	- 152
AR EL DORADO	2485	- 53	HOULTON	1031	+ 35	PORTLAND	1259	+ 71
FAYETTEVILLE	2161	+ 29	PORTLAND	1241	+ 161	SALEM	1262	+ 110
FORT SMITH	2412	- 8	MD SALISBURY	2040	+ 146	SEXTON SUMMIT	578	- 253
JONESBORO	2386	- 62	MA WORCESTER	1339	+ 66	PA ALLENTOWN	1840	+ 207
LITTLE ROCK	2457	+ 3	MI JACKSON	1474	- 31	PHILADELPHIA	2129	+ 401
TEXARKANA	2556	- 76	LANSING	1459	- 66	WILLIAMSPORT	1786	+ 210
CA BAKERSFIELD	2376	- 1	MUSKOGON	1370	+ 49	SC BEAUFORT	2758	+ 110
BLUE CANYON	861	- 162	PELLSTON	1053	- 23	CHARLESTON	2684	+ 105
DAGGETT	2635	+ 97	SAULT STE. MARIE	792	- 79	COLUMBIA	2565	+ 57
EUREKA	879	+ 417	TRAVERSE CITY	1256	+ 26	FLORENCE	2646	+ 140
FRESNO	2292	+ 183	MN DULUTH	749	- 174	SUMTER/SHAW AFB	2532	+ 30
MARYSVILLE	2143	+ 110	INT' L FALLS	934	- 129	SD ABERDEEN	1319	- 54
MERCED	2163	+ 145	MINNEAPOLIS	1323	---	HURON	1343	- 182
MT SHASTA	972	- 209	ROCHESTER	1211	---	PIERRE	1345	- 179
PASO ROBLES	1842	+ 148	ALEXANDRIA	1116	- 179	RAPID CITY	1139	- 235
RED BLUFF	2052	- 79	WARROAD	810	- 303	ST LOUIS FALLS	1375	- 196
RIVERSIDE	2220	+ 273	MS BILOXI	2812	- 76	WATERTOWN	1100	- 244
SANTA ANA	2313	+ 493	CO COLUMBUS	2487	+ 14	TN BRISTOL	2064	+ 113
SAN DIEGO	1966	+ 265	JACKSON	2582	+ 43	CHATTANOOGA	2408	+ 144
SACRAMENTO	1924	+ 71	MERIDIAN	2561	+ 3	CROSSVILLE	2025	+ 256
THERMAL	2907	+ 36	GREENWOOD	2571	- 40	MEMPHIS	2540	+ 6
CO ALAMOSA	1165	- 33	MO COLUMBIA	1971	+ 24	NASHVILLE	2310	+ 21
DENVER	1531	+ 20	JOPLIN	2161	- 56	TX ABILENE	2639	+ 4
EAGLE	1123	- 139	SPRINGFIELD	2049	- 9	AMARILLO	2093	+ 16
GRAND JUNCTION	1770	- 116	VICHY	2057	+ 2	AUSTIN	2869	+ 3
LA JUNTA	1894	- 25	MT BOZEMAN	931	+ 239	BROWNSVILLE	3235	+ 15
DE DOVER	1979	+ 16	HELENA	968	- 120	COLLEGE STATION	2778	- 45
WILMINGTON	2020	+ 208	KALISPELL	917	- 184	DALHART	1979	+ 23
FL DAYTONA BEACH	2749	- 106	MILES CITY	1222	- 216	DALLAS/FT WORTH	2744	+ 77
FORT MYERS	3091	+ 31	NE GRAND ISLAND	1610	- 152	GALVESTON	3085	+ 43
GAINESVILLE	2650	- 170	NORFOLK	1590	- 122	HOUSTON/INTCNTL	2871	+ 66
JACKSONVILLE	2692	- 109	NORTH PLATTE	1507	- 82	KINGSVILLE/NAS	3201	+ 102
FORT LAUDERDALE	3377	+ 234	VALENTINE	1383	- 255	LAREDO	3248	+ 67
MIAMI	3341	+ 94	SCOTTSBLUFF	1435	- 86	LUBBOCK	2459	+ 152
MILTON	2700	- 2	SIDNEY	1368	- 17	MCALLEN	3282	+ 153
PENSACOLA	2752	- 111	NV ELKO	1106	- 172	MIDLAND	2582	+ 28
ST PETERSBURG	3055	- 120	ELY	1172	- 20	PALACIOS	2971	- 62
TALLAHASSEE	2649	- 78	LAS VEGAS	2873	+ 259	SAN ANTONIO	2912	- 7
TAMPA	2934	- 86	RENO	1410	+ 6	VICTORIA	2948	+ 10
VERO BEACH	2940	- 22	WINNEMUCCA	1379	- 27	WACO	2752	- 67
W. PALM BEACH	3143	+ 39	NH CONCORD	1476	+ 148	WICHITA FALLS	2487	- 77
GA ATHENS	2458	+ 103	NJ NEWARK	2184	+ 392	WINK	2657	+ 63
AUGUSTA	2602	+ 127	NM ALBUQUERQUE	2191	+ 289	UT CEDAR CITY	1513	- 3
BRUNSWICK	2702	- 91	CARLSBAD	2625	+ 135	VT BARRE-MONTELLIER	1179	+ 80
COLUMBUS/METRO	2635	+ 47	CLOVIS	2161	+ 127	BURLINGTON	1401	+ 131
MACON	2591	- 8	GALLUP	1636	+ 85	VA CHARLOTTESVILLE	2139	+ 104
SAVANNAH	2742	+ 82	TRUTH OR CONSEQ.	2363	+ 141	HAMPTON/LANGLEY	2339	+ 214
ID BOISE	1354	- 115	NY ALBANY	1570	+ 124	LYNCHBURG	2214	+ 259
BURLEY	1231	- 56	ELMIRA	1519	+ 143	NORFOLK	2338	+ 197
IDAHO FALLS	985	- 191	GLENS FALLS	1428	+ 108	RICHMOND	2239	+ 123
POCATELLO	1071	- 187	ROCHESTER	1439	+ 33	WA BELLINGHAM	964	+ 135
IL BELLEVILLE	2100	+ 28	SYRACUSE	1468	+ 75	HOQUIAM	865	+ 151
CHICAGO/MIDWAY	1667	- 24	UTICA	1329	+ 30	SEATTLE-TACOMA	1038	+ 72
DECATUR	1901	- 59	WATERTOWN	1276	- 16	SPOKANE	1049	- 110
PEORIA	1879	+ 101	NC ASHEVILLE	1942	+ 106	TACOMA	1091	+ 44
ROCKFORD	1640	+ 50	FAYETTEVILLE	2457	+ 124	WALLA WALLA	1447	- 63
SPRINGFIELD	1962	+ 30	GREENSBORO	2331	+ 199	WENATCHEE	1492	- 89
QUINCY	1859	- 31	HICKORY	2225	+ 108	YAKIMA	1393	- 48
IN INDIANAPOLIS	1900	+ 58	RALEIGH	2353	+ 155	WV HUNTINGTON	2078	+ 248
SOUTH BEND	1635	+ 52	WILMINGTON	2561	+ 113	MARTINSBURG	1845	+ 49
TERRE HAUTE	1980	+ 98	NEW BERN	2468	+ 88	MORGANTOWN	1827	+ 81
IA DES MOINES	1648	- 194	ND BISMARCK	1096	- 191	WI EAU CLAIRE	1249	- 148
MASON CITY	1365	- 248	DICKINSON	926	- 262	GREEN BAY	1255	- 25
OTTUMWA	1758	- 69	JAMESTOWN	1037	- 228	LACROSSE	1418	- 140
KS CHANUTE	2033	- 111	MINOT	948	- 238	MADISON	1511	- 5
DODGE CITY	1890	- 119	OH GRAND FORKS	1131	- 105	WAUSAU	1134	- 144
GARDEN CITY	1819	- 159	AKRON-CANTON	1609	+ 73	WY CASPER	1186	- 59
GOODLAND	1553	- 102	COLUMBUS	1806	+ 89	LANDER	1095	- 125
MEDICINE LODGE	2151	- 67	DAYTON	1798	+ 11	SHERIDAN	1050	- 145
RUSSELL	1870	- 107	FINDLAY	1559	- 51	WORLAND	1310	- 53

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 July 24, 1993

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS								
	AVERAGE	MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE	MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																				.01 INCH OR MORE	.50 INCH OR MORE		
AL BIRMINGHAM	100	73	102	71	87	6	.3	-.9	.3	2.4	31	22.0	65	91	41	7	7	0	0	1	0		
MOBILE	92	74	94	72	83	1	2.2	-.6	1.8	8.6	84	41.6	112	97	63	6	6	0	0	5	1		
MONTGOMERY	99	74	101	73	87	7	1.5	.3	1.5	6.4	68	28.6	84	93	48	7	7	0	0	1	1		
AK ANCHORAGE	66	56	68	54	61	2	.1	-.3	.1	.7	27	4.3	71	88	68	0	0	0	0	3	0		
BARROW	52	38	68	33	45	5	.1	-.2	.0	.8	80	1.6	96	95	67	0	0	0	0	2	0		
FAIRBANKS	58	54	84	50	66	4	.2	-.2	.0	1.6	56	5.2	103	80	38	0	0	0	0	2	0		
JUNEAU	64	52	66	48	58	1	.1	-.9	.1	3.8	61	27.6	115	93	63	0	0	0	0	2	0		
KODIAK	60	51	64	49	56	1	.7	-.1	.6	4.7	61	36.7	106	95	70	0	0	0	0	3	1		
NOME	75	56	85	51	66	14	.0	-.5	.0	1.3	49	6.0	100	78	48	0	0	0	0	0	0		
AZ PHOENIX	103	79	104	77	91	-3	.0	-.2	.0	.0	1	8.7	261	43	13	7	7	0	0	0	0		
PRESCOTT	86	57	87	56	71	-2	.0	-.8	.0	.1	4	12.0	133	53	17	0	0	0	0	0	0		
TUCSON	101	72	103	69	87	0	.0	-.6	.0	.3	14	7.7	161	51	14	7	7	0	0	0	0		
YUMA	103	78	105	77	91	-4	.0	-.1	.0	.0	0	3.3	288	48	15	7	0	0	0	0	0		
AR FORT SMITH	100	75	104	73	88	6	.2	-.5	.2	5.2	91	26.9	115	84	38	7	7	0	0	2	0		
LITTLE ROCK	98	74	101	70	86	4	2.6	1.9	2.0	4.7	69	26.1	94	81	38	7	0	0	2	2	2		
CA BAKERSFIELD	94	65	97	59	79	-5	.0	.0	.0	.5	436	6.6	172	47	19	6	0	0	0	0	0		
EUREKA	63	55	67	53	59	2	.4	.3	.3	1.6	265	29.8	142	93	65	0	0	0	2	0	0		
FRESNO	93	65	97	59	79	-3	.0	.0	.0	1.6	>1000	11.5	165	60	20	6	0	0	0	0	0		
LOS ANGELES	74	64	75	62	69	-1	.0	.0	.0	.7	>1000	18.5	238	85	49	0	0	0	0	0	0		
REDDING	94	65	98	59	79	-3	.0	.0	.0	.7	96	35.3	186	61	19	7	7	0	0	0	0		
SACRAMENTO	91	61	94	55	76	0	.0	.0	.0	1.3	833	19.1	178	78	28	4	0	0	0	0	0		
SAN DIEGO	74	66	75	65	70	-2	.0	.0	.0	.4	433	15.5	250	80	49	0	0	0	0	0	0		
SAN FRANCISCO	73	56	81	54	64	1	.0	.0	.0	.2	133	19.4	158	89	49	0	0	0	0	0	0		
CO DENVER	87	57	94	55	72	-2	.1	-.4	.1	2.4	73	7.7	79	84	25	2	0	0	1	0	0		
GRAND JUNCTION	90	60	96	55	75	-5	.0	-.1	.1	1	6	7.6	139	60	14	4	0	0	1	0	0		
PUEBLO	89	57	92	50	73	-4	.5	.0	.2	2.7	96	8.4	133	88	26	3	0	0	3	0	0		
CT BRIDGEPORT	85	64	89	62	75	0	.1	-.8	.1	1.8	28	17.8	74	65	39	0	0	0	1	0	0		
HARTFORD	83	59	86	56	71	-3	.2	-.6	.2	6.2	100	25.0	102	80	41	0	0	0	1	0	0		
DC WASHINGTON	90	71	96	66	80	0	.0	-.9	.1	2.8	44	21.7	102	75	42	4	0	0	1	0	0		
FL APLACIA BEACH	94	79	95	74	86	5	.2	-1.6	.1	3.3	32	23.1	84	--	--	7	0	0	2	0	0		
DAYTONA BEACH	94	75	97	74	84	3	3.6	2.4	2.5	6.4	63	20.2	82	97	58	7	0	0	3	2	1		
JACKSONVILLE	95	75	97	73	85	4	2.9	1.6	2.1	7.6	76	22.7	85	97	53	7	0	0	3	1	0		
KEY WEST	92	80	93	78	86	2	.2	-.6	.2	2.1	27	18.0	97	79	62	7	0	0	1	0	0		
MIAMI	93	77	96	73	85	2	1.8	-.6	1.2	7.6	55	26.1	89	85	55	7	0	0	3	2	0		
ORLANDO	93	76	95	74	84	2	1.2	-.4	.9	8.4	64	25.1	93	90	57	7	0	0	3	1	0		
TALLAHASSEE	95	74	98	73	85	3	2.6	-.6	1.7	10.7	78	33.9	87	91	51	7	0	0	4	2	1		
TAMPA	92	78	93	75	85	3	.9	-.6	.9	5.6	53	19.6	86	80	58	6	0	0	2	1	0		
WEST PALM BEACH	92	75	94	74	84	1	2.1	-.8	1.2	6.2	49	32.0	104	92	55	7	0	0	5	2	2		
GA ATLANTA	100	75	102	74	88	9	.5	-.7	.4	7.9	106	29.7	95	82	40	7	0	0	3	0	0		
AUGUSTA	100	75	104	74	87	6	.6	-.3	.6	3.8	51	23.3	85	95	48	7	0	0	3	1	0		
MACON	100	76	102	74	88	6	.7	-.3	.5	5.0	73	29.6	106	87	46	7	0	0	2	0	0		
SAVANNAH	98	76	101	75	87	5	1.7	-.2	.9	4.8	46	26.1	93	89	48	7	0	0	4	1	0		
HI HILO	83	71	85	68	77	1	10.4	8.1	3.3	20.5	151	53.9	74	97	79	0	0	0	7	5	0		
HONOLULU	87	75	88	73	81	0	.7	.5	.5	.8	80	2.4	20	80	58	0	0	0	3	1	0		
KAHULUI	88	73	93	73	81	2	.4	.3	.3	.6	117	6.0	47	80	62	1	0	0	3	0	0		
LIHUE	83	74	84	73	79	0	.4	-.1	.2	1.6	47	7.8	33	81	70	0	0	0	5	0	0		
ID BOISE	78	52	86	42	65	-10	.8	.8	.5	3.1	281	11.1	154	83	30	0	0	0	3	1	0		
LEWISTON	75	54	78	50	65	-10	.5	.4	.3	2.6	145	10.0	133	80	36	0	0	0	4	0	0		
POCATELLO	74	48	90	40	61	-11	.5	.4	.5	3.7	242	13.2	181	85	38	1	0	0	3	0	0		
IL CHICAGO	82	64	91	58	73	-1	2.9	2.1	2.9	13.2	201	28.7	150	87	44	1	0	0	3	1	0		
MOLINE	84	66	88	61	75	-1	1.5	.3	.7	17.5	216	34.4	156	95	59	0	0	0	4	2	0		
PRORIA	82	67	92	64	75	-1	5.7	4.7	3.4	15.7	214	33.1	161	96	48	1	0	0	5	2	0		
QUINCY	80	68	88	60	74	-3	.7	-.4	.4	10.8	146	21.5	99	92	62	0	0	0	3	0	0		
ROCKFORD	82	64	87	55	73	-1	1.0	.1	.9	15.3	198	31.7	159	93	55	0	0	0	2	1	0		
SPRINGFIELD	84	68	93	62	76	-1	3.1	2.3	1.3	15.7	254	30.3	151	90	60	1	0	0	5	2	0		
IN EVANSVILLE	92	72	98	69	82	3	.7	-.4	.6	6.5	89	24.5	89	92	49	6	0	0	2	1	0		
FORT WAYNE	83	66	88	62	74	0	.3	-.5	.2	9.8	158	28.8	146	86	50	0	0	0	3	0	0		
INDIANAPOLIS	85	68	89	63	76	1	.8	-.2	.8	9.9	142	25.7	111	84	47	0	0	0	2	1	0		
SOUTH BEND	81	63	90	57	72	-1	.4	-.5	.2	12.2	171	26.3	123	86	49	1	0	0	3	0	0		
IA DES MOINES	78	66	84	60	72	-3	2.4	1.5	1.1	16.5	216	33.3	171	95	66	0	0	0	6	2	0		
SIOUX CITY	81	64	87	58	73	-3	.8	.0	.3	10.5	167	20.9	135	94	55	0	0	0	6	0	0		
WATERLOO	79	64	83	56	72	-2	.5	-.6	.3	18.1	218	33.7	170	97	63	0	0	0	3	0	0		
KS CONCORDIA	86	68	95	66	77	-3	3.1	2.3	1.1	22.4	305	33.1	189	99	62	2	0	0	3	2	0		
DODGE CITY	88	67	97	63	78	-3	2.0	1.3	1.0	9.3	165	19.7	147	92	41	3	0	0	3	2	0		
GOODLAND	81	60	85	58	70	-6	1.3	.7	.9	5.5	101	11.0	90	95	48	0	0	0	3	0	0		
TOPEKA	87	69	91	68	78	-1	3.7	3.0	2.0	12.1	144	30.5	150	95	60	2	0	0	7	1	0		
WICHITA	93	73	99	69	83	2	1.0	.3	.6	7.7	92	23.3	115	87	42	5	0	0	2	1	0		
KY BOWLING GREEN	92	71	94	67	81	3	.9	-.1	.6	6.2	78	21.4	71	98	57	6	0	0	3	1	0		
LEXINGTON	88	69	91	66	79	2	T	-1.2	T	8.1	108	24.4	93	85	43	2	0	0	1	0	0		
LOUISVILLE	90	71	95	68	81	3	T	-1.1	T	7.9	113	27.1	102	86	47	5	0	0	0	0	0		
LA BATON ROUGE	92	75	93	73	83	1	.3	-1.3	.2	7.0	72	42.3	120	95	55	7	0	0	2	0	0		
LAKE CHARLES	92	75	93	74	84	1	-2	-1.0	.2	11.1	123	41.7	142	95	55	7	0	0	1	0	0		
NEW ORLEANS	93	75	95	73	84	2	2.9	1.5	1.6	10.7	101	38.9	109	98	56	7	0	0	3	3	0		
SHREVEPORT	95	75	96	74	85	3	T	-.8	T	16.0	222	38.9	133	94	52	7	0	0	0	0	0		

Based on 1961-90 normals.

Weather Data for the Week Ending July 24, 1993

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY PERCENT			NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE	MAXIMUM	MINIMUM	TEMP. °F		PRECIP.	
																	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
ME CARIBOU	71	52	78	47	62	-4	.5	-.5	.2	6.8	114	19.8	108	94	56	0	0	4	0	
PORTLAND	76	56	81	53	66	-3	.9	-.2	.4	4.8	82	24.6	102	92	46	0	0	3	0	
MD BALTIMORE	87	66	92	59	76	-1	.2	-.4	.4	4.2	65	25.2	110	77	41	0	0	1	0	
SALISBURY	88	64	91	56	76	-1	.2	-.8	.2	2.8	41	26.3	105	94	48	2	0	1	0	
MA BOSTON	84	64	90	62	74	0	.2	-.5	.1	2.8	54	23.5	102	69	39	1	0	2	0	
CHATHAM	76	61	78	58	68	0	.7	-.1	.5	3.8	67	21.8	88	88	43	0	0	2	1	
MI ALPENA	79	54	82	50	66	-1	.7	-.1	.7	5.1	96	13.2	86	97	43	0	0	2	1	
DETROIT	82	64	84	57	73	0	.2	-.6	.1	7.2	118	19.0	106	79	40	0	0	2	0	
FLINT	81	58	83	51	70	-1	.1	-.6	.1	5.7	108	17.2	110	84	37	0	0	1	0	
GRAND RAPIDS	79	59	83	51	69	0	T	-.6	T	7.4	120	22.2	120	89	42	0	0	0	0	
HOUGHTON LAKE	79	56	83	48	68	0	.4	-.1	.4	5.8	116	14.5	100	89	38	0	0	2	0	
LANSING	80	57	83	47	68	-3	.1	-.5	.0	7.4	137	19.7	123	97	50	0	0	2	0	
MARQUETTE	76	53	81	46	65	-1	.9	.3	.9	4.0	70	16.8	93	89	39	0	0	1	0	
MUSKEGON	79	60	82	53	69	-1	.5	.0	.4	5.5	140	17.7	112	92	47	0	0	2	0	
SAULT ST. MARIE	74	51	83	46	63	-2	.1	-.5	.1	6.1	116	17.2	103	94	44	0	0	1	0	
MN ALEXANDRIA	75	60	81	55	68	-4	1.1	.4	.5	10.1	155	20.0	137	95	59	0	0	3	2	
DULUTH	73	56	82	51	65	-2	T	-.8	T	12.0	181	21.8	138	86	47	0	0	1	0	
INT'L FALLS	75	54	82	44	64	-3	.2	-.6	.1	7.7	114	13.3	99	91	47	0	0	3	0	
MINNEAPOLIS	78	63	85	57	70	-4	.2	-.6	.1	11.3	166	20.2	123	88	47	0	0	3	0	
ROCHESTER	77	60	82	55	68	-3	.2	-.8	.2	11.4	164	25.2	154	94	53	0	0	2	0	
MS GREENWOOD	97	76	99	72	87	0	T	-.9	T	4.3	56	28.4	86	97	49	0	0	0	0	
JACKSON	92	74	94	72	83	2	.1	-.9	.1	10.7	169	31.1	93	100	58	7	0	2	0	
MERIDIAN	91	75	98	73	86	3	.6	-.6	.6	6.0	79	34.9	100	93	47	0	0	1	0	
MO CAPE GIRARDEAU	92	73	97	70	83	3	1.9	1.1	.9	7.3	118	28.0	103	92	48	5	0	3	2	
COLUMBIA	87	71	90	66	79	1	1.2	.4	1.1	17.1	249	33.9	156	98	54	2	0	2	1	
KANSAS CITY	85	69	88	68	77	-2	3.2	2.3	.9	16.2	199	34.5	164	95	61	0	0	6	3	
SAINT LOUIS	89	73	95	68	81	1	1.4	.5	.8	11.8	174	31.5	145	86	56	3	0	4	1	
SPRINGFIELD	90	72	93	68	81	3	1.4	.8	1.3	12.9	173	28.6	120	87	50	5	0	2	1	
MT BILLINGS	76	53	84	49	64	-9	.6	.4	.3	6.0	218	9.6	98	86	40	0	0	3	0	
GLASGOW	75	54	81	49	65	-7	2.1	1.7	.7	5.3	152	8.6	122	93	45	0	0	5	2	
GREAT FALLS	72	48	74	41	60	-9	.4	.1	.1	6.6	197	15.5	157	91	42	0	0	5	0	
HAVER	73	52	77	45	63	-8	.2	-.1	.1	5.3	185	8.1	115	91	47	0	0	3	0	
HELENA	72	48	77	44	60	-10	.7	.5	.3	6.6	242	12.3	169	91	41	0	0	7	0	
KALISPELL	68	47	73	41	58	-6	1.2	1.0	.4	9.0	290	16.0	166	96	54	0	0	5	0	
MILES CITY	78	56	85	48	67	-9	1.1	.7	.9	8.7	215	13.7	147	93	49	0	0	4	1	
MISSOULA	71	49	77	43	60	-8	.3	.1	.1	2.9	114	8.9	108	99	45	0	0	4	0	
NE GRAND ISLAND	80	64	85	63	72	-5	1.4	.7	.6	14.4	235	23.0	148	98	58	0	0	4	1	
LINCOLN	81	66	87	64	74	-5	2.2	1.5	1.3	8.1	127	18.7	114	99	68	0	0	3	2	
NORFOLK	81	64	86	60	73	-3	.8	.2	.3	14.5	205	24.7	153	95	49	0	0	5	0	
NORTH PLATTE	81	61	86	59	71	-4	1.6	.9	.8	10.9	186	17.9	135	95	49	0	0	6	1	
OMAHA	79	65	85	63	72	-5	4.3	3.6	1.8	17.4	269	28.9	169	93	57	0	0	5	3	
SCOTTSBLUFF	84	57	92	53	70	-4	2.5	2.1	1.7	8.3	192	14.7	137	93	39	1	0	3	2	
VALENTINE	83	60	92	49	71	-4	1.1	.3	.9	5.8	95	12.6	90	91	43	1	0	2	1	
NV ELY	78	41	84	32	60	-9	.2	.0	.2	1.4	93	7.1	120	84	15	0	1	1	0	
LAS VEGAS	99	74	101	70	87	-5	.0	-.1	.0	.1	22	4.4	199	43	13	7	0	0	0	
RENO	81	51	88	46	66	-6	T	-.1	T	.4	52	4.9	108	80	21	0	0	0	0	
WINNEMUCCA	81	49	87	38	65	-8	.2	.1	.2	1.2	110	6.2	125	85	20	0	0	1	0	
NH CONCORD	82	53	88	49	67	-3	.2	-.6	.1	2.4	43	13.4	68	95	40	0	0	4	0	
NJ ATLANTIC CITY	83	61	88	54	72	-3	1.1	.2	1.1	3.0	54	21.3	94	92	39	0	0	1	1	
NM ALBUQUERQUE	94	63	96	59	78	0	T	-.3	T	.6	39	3.6	89	62	15	7	0	1	0	
CLOVIS	87	64	95	62	76	-2	2.4	1.8	2.2	5.6	116	7.7	85	86	37	3	0	3	1	
ROSWELL	93	67	99	64	80	-1	.7	.3	.4	3.8	133	6.3	114	84	34	5	0	2	0	
NY ALBANY	81	59	86	54	70	-2	.8	.0	.8	4.4	73	21.3	106	82	40	0	0	1	1	
BINGHAMTON	76	56	81	51	66	-4	.3	-.5	.3	5.0	78	22.6	111	84	43	0	0	1	0	
BUFFALO	81	59	86	53	70	-2	.1	-.6	.1	6.1	103	19.7	101	81	37	0	0	1	0	
NEW YORK	86	69	91	66	77	0	.3	-.7	.3	2.9	42	21.4	90	69	33	1	0	1	0	
ROCHESTER	79	58	84	53	68	-2	.7	.1	.7	3.9	76	14.5	86	90	46	0	0	1	1	
SYRACUSE	78	60	84	52	69	-2	1.5	.7	1.5	6.6	98	24.7	119	85	42	0	0	2	1	
NC ASHEVILLE	90	67	93	59	78	5	T	-1.1	T	2.1	25	22.0	70	92	47	4	0	0	0	
CHARLOTTE	95	74	97	73	85	5	.6	-.4	.4	1.7	26	22.8	92	80	41	7	0	5	0	
GREENSBORO	90	71	93	66	81	4	.7	-.3	.4	6.0	81	29.6	122	83	43	4	0	3	0	
HATTERAS	89	74	91	73	81	2	.8	-.3	.5	5.1	65	27.4	94	91	49	3	0	4	1	
NEW BERN	91	74	97	72	83	3	1.4	-.3	1.1	9.1	84	30.8	99	95	57	4	0	5	1	
RALEIGH	91	71	95	68	81	2	.6	-.3	.5	2.3	34	23.3	96	88	42	5	0	3	1	
WILMINGTON	92	75	95	71	84	4	2.4	.8	2.4	9.6	95	33.4	108	97	62	6	0	1	1	
ND BISMARCK	75	56	79	51	65	-6	3.0	2.6	2.2	17.6	397	22.2	223	96	53	0	0	5	1	
FARGO	76	59	81	53	68	-4	1.1	.5	1.1	10.7	218	16.0	140	91	50	0	0	3	1	
GRAND FORKS	75	57	80	51	66	-4	1.6	1.0	1.3	8.3	166	11.0	104	92	61	0	0	5	1	
WILLISTON	75	53	78	46	64	-7	1.0	.5	.6	9.1	230	11.6	131	93	43	0	0	4	1	
OH AKRON-CANTON	83	60	88	52	71	-1	.1	-.9	.1	6.8	108	22.1	106	84	40	0	0	1	0	
CINCINNATI	88	69	92	67	79	3	T	-1.0	T	6.0	84	22.3	90	78	40	2	0	0	0	
CLEVELAND	82	61	86	54	71	-1	T	-.8	T	6.5	101	22.1	110	81	39	0	0	0	0	
COLUMBUS	84	64	88	59	74	1	1.4	.6	1.4	9.3	138	25.7	119	79	38	0	0	2	1	
DAYTON	84	65	89	59	75	0	.5	-.3	.3	10.9	166	32.2	149	83	43	0	0	2	0	

Based on 1961-90 normals.

Weather Data for the Week Ending July 24, 1993

STATES AND STATIONS	TEMPERATURE °F.						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS					
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL, IN., SINCE Jun 1	PCT. NORMAL SINCE Jun 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																		90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
TOLEDO	86	62	90	53	74	1	.1	-.6	.1	5.6	89	18.1	99	87	39	1	0	2	0		
YOUNGSTOWN	83	55	87	47	69	-2	.1	-.9	.1	4.5	63	18.1	86	90	33	0	0	0	0		
OK OKLAHOMA CITY	96	74	99	70	85	3	.5	-.5	.5	3.8	60	24.6	124	81	42	7	0	0	0		
TULSA	96	76	100	72	86	2	.5	-.1	.5	5.9	85	25.0	108	88	44	7	0	1	1		
OR ASTORIA	65	55	68	48	60	0	1.0	.7	.5	5.1	151	33.2	93	96	68	0	0	6	0		
BURNS	71	43	77	33	57	-10	.5	.4	.3	1.1	96	7.6	139	85	36	0	0	2	0		
MDFORD	78	49	86	43	64	-10	.7	.6	.3	1.9	242	11.7	124	97	35	0	0	4	0		
PENDLETON	75	54	80	49	65	-9	.3	.2	.1	2.1	233	9.6	141	84	32	0	0	3	0		
PORTLAND	71	57	80	52	64	-4	1.0	.9	.6	3.6	182	21.5	112	96	56	0	0	4	0		
SALEM	73	55	80	46	64	-3	.2	-.1	.1	4.0	223	24.7	120	89	48	0	0	4	0		
PA ALLENTOWN	84	62	91	58	73	-1	.9	-.1	.9	6.7	96	26.3	109	77	37	1	1	1	0		
ERIE	79	63	81	54	71	-1	.4	-.4	.4	5.8	86	18.4	88	87	50	0	0	1	0		
HARRISBURG	86	64	92	58	75	-2	.2	-.6	.2	5.8	87	25.3	109	85	38	1	0	1	0		
PHILADELPHIA	86	68	92	66	77	2	.4	-.6	.4	3.3	42	21.6	83	68	34	3	0	1	0		
PITTSBURGH	84	60	89	53	72	-2	.2	-.6	.2	5.7	86	22.2	103	77	34	0	0	1	0		
SCRANTON	84	59	90	53	72	-2	.2	-.7	.2	2.5	36	18.4	90	81	31	1	0	1	0		
RI PROVIDENCE	83	62	87	58	73	-1	.5	-.3	.4	2.5	44	23.2	92	81	44	0	0	2	0		
SC CHARLESTON	95	77	97	74	86	4	1.3	-.3	1.3	7.5	64	30.7	104	95	61	7	0	2	1		
COLUMBIA	98	74	100	72	86	5	.6	-.7	.4	2.3	25	23.6	81	92	43	7	0	2	0		
FLORENCE	97	76	100	75	87	6	1.8	-.5	1.0	3.9	45	19.1	74	95	49	7	0	4	0		
GREENVILLE	95	71	97	67	83	5	.7	-.3	.6	.9	10	27.9	91	90	42	7	0	3	1		
SD ABERDEEN	78	61	84	53	70	-3	1.3	.6	6	12.7	216	18.8	146	94	58	0	0	5	5		
HURON	78	62	85	57	70	-5	2.0	1.4	1.2	12.9	235	21.9	166	94	49	0	0	3	1		
RAPID CITY	76	56	86	53	66	-7	.8	-.4	.6	6.6	140	13.9	124	93	47	0	0	3	1		
SIOUX FALLS	79	64	85	60	72	-3	.8	.3	.7	14.0	255	28.5	206	94	54	0	0	5	5		
TN CHATTANOOGA	99	74	102	71	87	8	.8	-.1	.7	2.9	40	25.9	81	90	41	7	0	0	1		
KNOXVILLE	95	71	98	67	83	6	.6	-.1	.7	2.9	38	21.7	75	87	44	7	0	0	0		
MEMPHIS	98	77	99	76	88	5	.5	-.9	.7	5.1	78	24.9	82	84	49	7	0	0	0		
NASHVILLE	94	74	97	72	84	4	1.1	-.2	1.0	9.0	134	28.1	100	90	48	7	0	3	1		
TX ABILENE	98	73	103	70	86	1	.2	-.3	.2	4.1	91	10.1	78	78	31	7	0	2	0		
AMARILLO	88	66	95	64	77	-2	.8	-.3	.6	6.2	108	10.9	97	81	38	3	0	2	1		
AUSTIN	96	75	98	73	86	1	.0	-.4	.0	4.0	74	20.9	113	89	40	7	0	0	0		
BEAUMONT	94	75	96	73	84	1	2.2	1.0	1.6	13.8	142	44.4	146	99	58	7	0	4	2		
BROWNSVILLE	94	77	94	75	85	1	.0	-.4	.0	6.7	160	17.1	144	92	52	7	0	0	0		
CORPUS CHRISTI	92	75	93	73	84	0	0	-.5	0	12.0	229	28.4	190	96	55	7	0	0	0		
DEL RIO	96	74	101	72	85	1	.5	-.1	.5	6.3	146	10.1	75	82	43	7	0	1	0		
EL PASO	96	71	98	68	84	2	.3	-.1	.2	2.4	133	4.3	124	73	23	7	0	3	0		
FORT WORTH	98	78	101	77	88	4	0	-.5	.0	3.8	74	19.5	92	80	35	7	0	2	0		
GALVESTON	91	82	92	79	87	3	.1	-.8	.0	3.4	45	30.1	141	78	65	7	0	0	0		
HOUSTON	96	75	98	72	86	3	.1	-.9	.7	12.2	127	43.5	150	91	49	7	0	0	0		
LUBBOCK	93	70	98	65	81	1	.2	-.3	.2	4.5	99	9.5	97	82	36	5	0	1	0		
MIDLAND	93	69	100	67	81	0	.7	-.3	.3	4.0	150	8.4	118	89	40	5	0	0	0		
SAN ANGELO	97	73	102	69	85	2	.8	-.6	.7	1.8	56	9.2	86	82	34	6	0	2	1		
SAN ANTONIO	97	76	99	75	87	2	.0	-.4	.0	6.4	116	27.3	158	85	41	7	0	0	0		
VICTORIA	94	76	96	75	85	2	.0	-.9	.7	11.6	146	40.3	171	93	52	7	0	0	0		
WACO	97	75	99	75	86	0	.0	-.4	.0	2.2	44	18.5	99	88	42	7	0	0	0		
WICHITA FALLS	99	75	105	71	87	2	.3	-.1	.3	3.9	75	19.7	108	82	37	7	0	0	0		
UT CEDAR CITY	85	53	88	48	69	-6	.3	.0	.3	1.0	84	7.8	128	44	18	0	0	1	0		
SALT LAKE CITY	80	57	94	51	69	-10	.9	.7	.6	2.1	134	13.6	139	78	32	1	0	3	1		
VT BURLINGTON	78	59	86	53	68	-3	.7	-.1	.3	5.0	80	16.6	93	92	49	0	0	3	0		
VA NORFOLK	89	72	91	66	81	2	.1	-.2	.7	3.1	41	22.8	89	82	45	4	0	1	0		
RICHMOND	91	68	95	61	80	1	.8	-.4	.6	3.3	44	25.8	106	85	37	5	0	3	1		
ROANOKE	90	68	94	63	79	3	.1	-.9	.0	3.5	57	23.8	106	78	38	4	0	3	0		
WA QUILLAYUTE	63	53	69	47	58	-1	.5	-.1	.2	4.4	87	43.2	77	97	62	0	0	5	0		
SEATTLE-TACOMA	67	55	75	51	61	-5	.6	-.5	.3	3.3	158	20.0	105	95	59	0	0	4	0		
SPOKANE	70	52	73	49	61	-9	.6	-.4	.4	2.4	132	9.0	96	94	43	0	0	4	0		
YAKIMA	76	48	81	43	62	-8	.4	.0	.7	.9	130	4.0	94	90	34	0	0	1	0		
WV BECKLEY	84	63	88	60	73	3	.4	-.7	.4	4.6	61	22.1	91	87	46	0	0	1	0		
CHARLESTON	89	65	91	60	77	2	.2	-.9	.2	6.6	88	21.9	90	87	38	4	0	1	0		
HUNTINGTON	89	68	91	64	78	4	.1	-.2	.7	6.7	92	22.9	92	84	42	3	0	1	0		
PARKERSBURG	85	63	90	58	74	4	1.3	.2	1.3	5.1	70	22.6	93	95	44	1	0	1	1		
WI GREEN BAY	78	59	85	53	68	-5	.9	-.2	.9	12.4	214	23.2	152	88	45	0	0	2	1		
LACROSSE	79	62	86	55	71	-3	.3	-.5	.3	13.7	200	30.5	182	98	54	0	0	1	0		
MADISON	82	61	85	51	72	-1	.1	-.8	.0	14.4	213	29.6	169	89	47	0	0	3	0		
MILWAUKEE	80	65	89	60	72	1	.3	-.5	.3	10.1	170	25.1	140	84	49	0	0	3	0		
WAUSAU	78	58	82	53	68	-3	.3	-.5	.3	10.1	170	25.1	140	84	49	0	0	3	0		
WY CASPER	82	52	92	49	67	-5	.4	-.8	.1	9.4	134	22.3	130	95	53	0	0	3	0		
CHEYENNE	79	54	87	51	66	-3	.2	-.3	.2	3.3	131	10.7	130	86	28	2	0	2	0		
LANDER	80	51	90	47	65	-7	.1	-.1	.1	5.3	106	10.1	109	88	29	0	0	2	0		
SHERIDAN	76	50	86	45	63	-7	.7	.6	.5	6.5	217	13.0	138	93	43	0	0	4	1		

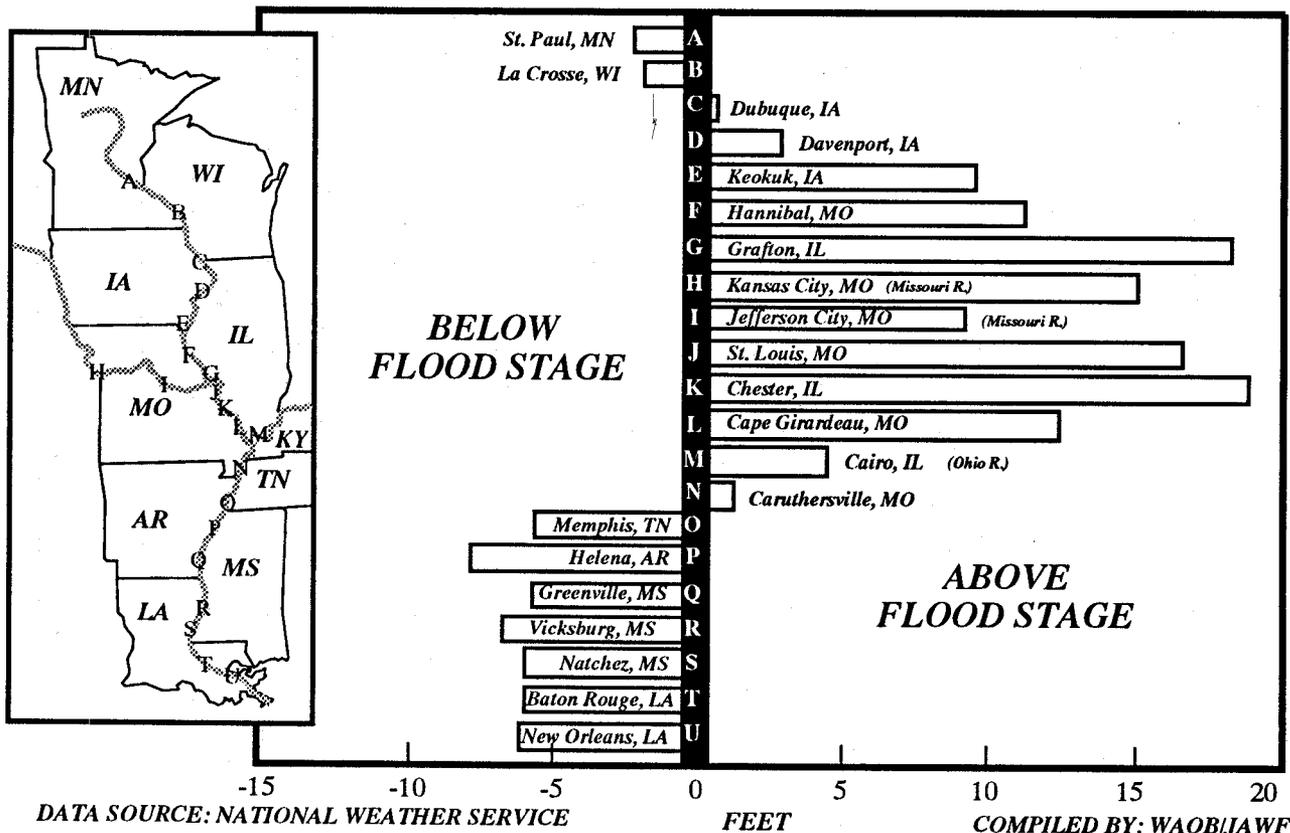
Based on 1961-90 normals.

Rainfall Exacerbates Flooding

On July 13, the National Weather Service forecast the Mississippi River to crest at St. Louis, MO at 15 feet above flood stage on July 18. The forecast was correct, but subsequent rainfall has forced hydrologists to continually update their estimates to account for second and, in some cases, third crests along the middle Mississippi and the lower Missouri Rivers. The latest forecast for St. Louis, issued on July 26, calls for the third crest to attain a height of 18 feet above flood stage on August 3. All three crests established records for river height at St. Louis, shattering the mark set in late April 1973. Along the Missouri River at Kansas City, MO, a secondary crest is expected to push the river to a record level of nearly 17 feet above flood stage on July 27, and to break the previous high-water mark set in mid-July 1951. A crest on July 10 rose to 8 feet above flood stage.

Such an extended period of high river levels has severely taxed, and caused numerous failures of, earthen levees, especially along the lower Missouri River and the middle Mississippi River, where portions of the rivers have been above flood stage for more than 1 month. However, below the confluence of the Mississippi and the Ohio Rivers, the Mississippi basin broadens and deepens, and it is still expected to contain the majority of the upstream floodwaters. At Caruthersville, MO, the first crest arrived on July 26, pushing the river only 1.5 feet above flood stage. Farther south, the Mississippi River is expected to remain 4 to 7 feet below flood stage from Memphis, TN to New Orleans, LA, with the first crest reaching New Orleans about August 5. Updated crest data for the lower Mississippi Valley will be issued when the third crest reaches St. Louis in early August.

MISSISSIPPI RIVER BASIN FLOODING Departure From Flood Stage As of July 26, 1993



National Agricultural Summary

July 19 - 25, 1993

HIGHLIGHTS: Rain continued over the central part of the Nation, causing more flooding and damage to crop and livestock farms. Below normal temperatures were reported over the western third of the United States as record breaking high's were experienced in the South and Southeast. Warnings were issued in Alabama and Mississippi for high heat indices. Where weather and field conditions permitted, farm activities included fertilizer and insecticide applications and harvest of row crops, small grains, fruit, and vegetables.

SMALL GRAINS: Winter wheat harvest in the 19 major wheat-producing States reached 68 percent (%) complete, compared with 77% by this time in 1992 and 84% average. Harvest was complete in the Southeast and neared completion in Texas. In the central Great Plains, harvest continued where weather and field conditions permitted. States along the Mississippi River continued to report increased flooding. Spring wheat development remained more than 1 week behind average. For the five major producing States, no harvest activity was reported. Spring wheat condition declined slightly, with 81% of the crop rated good to excellent, compared with 83% last week. Continued wet conditions raised concerns among small grain producers in South Dakota. Small grain fields in the Northeast needed more rainfall.

CORN: Corn silking progress in the 17 major producing States reached 30%, compared with 51% a year ago and 61% average. Corn in the dough stage was 5% compared with 8% last year and 14% average. Crop development in the Midwest has been delayed by late plantings and below normal temperatures. In areas where soil moisture has been adequate, the crop has fared well. Scattered showers brought relief to crops in the Southeast. South Dakota's crop needs more sunshine to progress normally. Corn condition was 49% good to excellent, unchanged from the previous week.

SOYBEANS: Soybean blooming progress was 39%, compared with 58% last year and 60% average. Setting pods averaged 7% compared with 15% a year ago and 22% average. Progress in the Midwest was delayed by late plantings and cool temperatures. Dry conditions in the Southeast hampered crop growth. Although scattered showers brought some relief, more rain is needed. The condition of the crop declined slightly from last week but remained in mostly fair to excellent condition.

COTTON: Acreage of cotton squaring and setting boll continued ahead of normal. Cotton squaring in the 14 major producing States reached 91%, compared with 81% last year and 89% average. Cotton setting bolls was 58%, compared with 52% last year and 54% average. The condition of the crop declined slightly as 57% of the crop was rated good to excellent, unchanged from last week. Scattered showers brought relief to dryland fields in the southeast. Some fields were defoliated in the Rio Grande Valley of Texas, as limited harvest began. Some producers sprayed for boll weevils and worms in the Low Plains, where late planted fields were stressed from hot, windy conditions.

SORGHUM: Grain sorghum headed at 32%, compared with 36% last year. The 5-year average for the 12 major producing States (excluding New Mexico) was 39%. Continued wet conditions in

the Midwest caused sorghum condition to decline. Only 56% of the crop was rated good to excellent, compared with 60% last week. Harvesting continued in many parts of Texas, with good yields reported.

RICE: Rice heading in the five major producing States reached 23%, compared with 41% last year and 32% average. Rice condition improved slightly with 70% good, compared with 64% good last week. Sheath blast was reported in some Arkansas fields.

OTHER FIELD CROPS: Scattered showers and thunderstorms brought some relief to the Southeast. Crops such as peanuts, tobacco, and hay showed improvement where maturity was not too advanced. Dry conditions in Georgia have caused some damage to peanut pegs. Regrowth in hay fields showed some improvement but needed more moisture. Late planted tobacco in Tennessee was in poor condition due to low soil moisture. Across the Midwest and Pacific Northwest, cool, damp weather delayed field and crop activity. In parts of the Midwest where flooding was not a problem, excessive moisture delayed harvesting and damaged some hay. These problems were also reported in parts of the Northeast. Cool weather delayed onion development in Oregon. Early potato harvest continued in Washington.

FRUIT AND NUTS: Most Florida citrus groves received some rainfall and new crop fruit progressed normally. The Valencia orange harvest advanced in California, although producers had to treat the crop for red scale. California's stone fruit harvest also advanced. Damage from rains a couple of weeks ago was still evident in Oregon fresh market cherries. Scab problems continue to be reported in Texas pecans, and more rain is needed for the crop. California walnuts and almonds were treated for insects.

VEGETABLES: Producers in Florida and Texas prepared land for fall planting. Tomato transplanting began in north Florida. Vegetables elsewhere in the Southeast showed stress from dry conditions. The active harvest in New Jersey and New York gained momentum. In the Santa Maria and Salinas areas of California, harvest activity for celery and other vegetables was heavy.

PASTURE AND LIVESTOCK: Pastures in the South and Southeast received some moisture during the week, with conditions in those areas rated fair. Supplemental feeding was reported in Tennessee and Texas. Rain over the central part of the Nation and upper Great Plains kept pastures in good condition. In parts of the Nation where moisture has been heavy, livestock showed stress due to mud and humidity. Some rain fell over the western third of the Nation, with heaviest amounts experienced in the Northwest. Cool temperatures in the west eased the stress of dry conditions. Nationally, livestock were rated in generally good condition.

Crop Progress

for the Week Ending July 25, 1993

COTTON
(Percent Squaring)

	Current	Last Wk	1992	Avg.
AL	88	83	97	98
AZ	100	99	100	99
AR	99	96	100	99
CA	100	90	100	100
GA	97	95	100	99
LA	100	95	99	96
MS	98	94	100	96
MO	100	98	98	100
NM	90	85	88	96
NC	80	75	83	87
OK	97	88	53	73
SC	94	87	96	93
TN	100	98	99	97
TX	83	77	60	80
14 States	91	86	81	89

These 14 States produced 99 of the 1992 cotton crop.

COTTON
(Percent Setting Bolls)

	Current	Last Wk	1992	Avg.
AL	52	41	72	74
AZ	95	85	94	89
AR	75	49	72	71
CA	60	25	75	72
GA	67	55	77	78
LA	88	75	93	78
MS	55	36	88	78
MO	66	27	54	73
NM	54	32	50	53
NC	60	45	40	62
OK	52	21	5	23
SC	74	65	43	60
TN	68	32	45	52
TX	45	34	27	32
14 States	58	40	52	54

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

GRAIN SORGHUM
(Percent Headed)

	Current	Last Wk	1992	Avg.
AR	38	23	81	54
CO	2	1	2	5
IL	8	3	36	31
KS	4	1	5	10
LA	74	50	90	74
MS	62	46	87	74
MO	21	11	38	37
NE	0	0	3	18
NM	2	1	11	NA
OK	23	15	14	28
SD	2	1	2	12
TX	69	64	69	69
12 States	32	27	36	NA
Excl. States with NA	32	28	36	39

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

SOYBEANS
(Percent Blooming)

	Current	Last Wk	1992	Avg.
AL	36	26	35	46
AR	27	23	31	20
GA	34	23	42	44
IL	56	33	77	77
IN	63	37	72	70
IA	30	15	78	78
KS	30	15	45	50
KY	46	28	40	38
LA	48	35	62	41
MI	40	25	35	40
MN	25	9	44	68
MS	33	17	49	41
MO	28	14	53	51
NE	34	11	55	63
NC	19	8	19	23
OH	67	50	63	60
SC	30	18	21	21
SD	19	9	50	61
TN	27	11	31	25
19 States	39	23	58	60

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

SOYBEANS
(Percent Setting Pods)

	Current	Last Wk	1992	Avg.
AL	10	5	15	15
AR	7	3	12	6
GA	12	4	14	15
IL	13	3	25	36
IN	7	0	14	20
IA	5	0	23	33
KS	4	2	10	20
KY	10	6	11	9
LA	21	9	28	16
MI	0	0	0	5
MN	5	0	8	22
MS	6	1	15	16
MO	5	0	14	16
NE	5	0	5	14
NC	0	0	1	11
OH	16	5	14	20
SC	6	1	6	5
SD	0	0	6	20
TN	4	0	8	6
19 States	7	2	15	22

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

GRAIN SORGHUM
(Percent Coloring)

	Current	Last Wk	1992	Avg.
AR	9	NA	20	8
CO	0	NA	0	0
IL	0	NA	4	3
KS	0	NA	0	0
LA	12	NA	31	27
MS	10	NA	25	30
MO	0	NA	0	0
NE	0	NA	0	0
NM	0	NA	0	NA
OK	5	NA	4	6
SD	0	NA	0	0
TX	55	NA	56	57
12 States	21	NA	22	NA
Excl. States with NA	21	NA	23	23

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

CORN
(Percent Silking)

	Current	Last Wk	1992	Avg.
CO	11	4	24	22
GA	100	98	100	99
IL	55	21	83	83
IN	53	15	58	63
IA	6	1	57	62
KS	70	50	75	80
KY	80	60	80	72
MI	10	5	10	35
MN	1	0	10	38
MO	38	21	76	77
NE	29	9	58	69
NC	90	84	92	91
OH	40	17	42	51
PA	19	7	7	21
SD	0	0	13	36
TX	75	71	85	90
WI	3	0	12	35
17 States	30	14	51	61

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

CORN
(Percent Dough)

	Current	Last Wk	1992	Avg.
CO	0	NA	1	0
GA	91	NA	91	93
IL	5	NA	14	24
IN	3	NA	8	18
IA	0	NA	0	9
KS	10	NA	20	30
KY	13	NA	12	11
MI	0	NA	0	0
MN	0	NA	0	0
MO	11	NA	26	29
NE	0	NA	3	6
NC	65	NA	58	63
OH	0	NA	0	7
PA	0	NA	0	0
SD	0	NA	0	0
TX	61	NA	61	70
WI	0	NA	0	0
17 States	5	NA	8	14

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

WINTER WHEAT
(Percent Harvested)

	Current	Last Wk	1992	Avg.
AR	100	100	100	100
CA	97	90	97	97
CO	57	43	83	83
GA	100	100	100	100
ID	2	1	16	7
IL	90	83	87	97
IN	94	70	62	88
KS	80	75*	96	100
MI	40	15	20	55
MO	70	55	89	100
MT	0	0	1	18
NE	28	13	70	89
NC	100	100	100	100
OH	90	50	26	81
OK	100	99	100	100
OR	8	3	43	24
SD	2	0	14	67
TX	99	96	100	100
WA	9	5	35	17
19 States	68	62*	77	84

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

* Revised from last week.

**SPRING WHEAT
(Percent Headed)**

ID	Current	Last Wk	1992	Avg.
AR	84	62	100	98
MN	99	98	99	99
MT	86	73	94	98
ND	94	83	97	99
SD	100	95	100	100
5 States	94	85	97	99

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

**SPRING WHEAT
(Percent Harvested)**

ID	Current	Last Wk	1992	Avg.
ID	0	NA	4	2
MN	0	NA	0	8
MT	0	NA	0	6
ND	0	NA	0	6
SD	0	NA	1	28
5 States	0	NA	0	9

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

**RICE
(Percent Headed)**

ID	Current	Last Wk	1992	Avg.
AR	8	3	30	13
CA	0	0	0	1
LA	61	52	76	64
MS	20	15	40	33
TX	44	30	71	81
5 States	23	17	41	32

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

**Crop Condition
(Percent)**

for the Week Ending July 25, 1993

RICE

State	VP	P	F	G	EX
AR	0	0	8	92	0
CA	0	0	20	80	0
LA	0	0	66	34	0
MS	0	0	84	16	0
TX	0	0	14	78	8
5 State	0	0	29	70	1
Prev Week	0	0	36	64	0
Prev Year	0	0	34	63	3

SPRING WHEAT

State	VP	P	F	G	EX
ID	0	1	24	61	14
MN	2	11	29	52	6
MT	0	4	13	60	23
ND	0	0	13	69	18
SD	0	1	19	62	18
5 State	0	2	17	64	17
Prev Week	0	2	15	64	19
Prev Year	2	5	25	58	10

CORN

State	VP	P	F	G	EX
CO	0	2	11	55	32
GA	18	19	52	9	2
IL	0	2	18	67	13
IN	0	1	25	65	9
IA	4	26	51	17	2
KS	0	8	26	52	14
KY	0	3	43	51	3
MI	2	8	20	50	20
MN	19	40	31	8	2
MO	5	18	38	35	4
NE	0	6	34	54	6
NC	17	40	39	4	0
OH	1	3	21	50	25
PA	1	8	27	45	19
SD	3	19	39	36	3
TX	1	2	22	58	17
WI	5	14	41	39	1
17 State	4	14	33	41	8
Prev Week	4	12	35	41	8
Prev Year	1	3	20	57	19

SORGHUM

State	VP	P	F	G	EX
AR	1	5	54	40	0
CO	0	3	17	68	12
IL	0	0	34	62	4
KS	0	9	29	45	17
LA	0	3	55	42	0
MS	0	14	56	30	0
MO	3	14	48	32	3
NE	3	24	32	36	5
NM	8	8	45	39	0
OK	0	0	16	84	0
SD	2	27	45	26	0
TX	0	6	31	52	11
12 State	1	10	33	47	9
Prev Week	1	6	33	50	10
Prev Year	0	2	21	61	16

COTTON

State	VP	P	F	G	EX
AL	2	19	30	49	0
AZ	0	0	10	85	5
AR	0	0	38	62	0
CA	0	0	0	95	5
GA	7	17	45	31	0
LA	0	0	45	55	0
MS	0	16	72	12	0
MO	0	13	49	38	0
NM	0	0	50	43	7
NC	0	14	54	30	2
OK	0	0	18	82	0
SC	2	73	25	0	0
TN	0	1	10	89	0
TX	0	1	42	55	2
14 State	0	5	38	55	2
Prev Week	0	4	39	53	4
Prev Year	4	7	40	43	6

SOYBEANS

State	VP	P	F	G	EX
AL	0	19	58	23	0
AR	0	16	54	30	0
GA	14	34	38	14	0
IL	0	4	31	57	8
IN	0	0	28	64	8
IA	3	30	52	13	2
KS	0	16	21	48	15
KY	0	3	31	65	1
LA	0	7	53	35	5
MI	1	4	25	50	20
MN	15	46	31	6	2
MS	0	1	85	14	0
MO	7	17	51	25	0
NE	0	9	44	44	3
NC	3	17	61	19	0
OH	1	4	23	51	21
SC	6	52	42	0	0
SD	4	28	44	24	0
TN	0	1	41	58	0
19 State	3	16	41	35	5
Prev Week	3	13	42	38	4
Prev Year	0	3	24	61	12

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

State Summaries of Weather and Agriculture

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

ALABAMA: Rainfall none to 0.83 in. north; none to 1.50 in. central; 0.38 to 3.64 in. south. Temperatures 2 to 7° above normal north; 3 to 8° above normal central; normal to 4° above normal south. Lows 65 to 73° north; 67 to 73° central; 69 to 74° south. Highs 96 to 102° north; 97 to 102° central; 93 to 97° south.

Days suitable for fieldwork 6.4. Soil moisture 73% short, 24% adequate, 3% surplus. Corn silked 95%, 97% 1992, 99% avg.; dented 47%, 57% 1992, 63% avg.; mature 18%, 29% 1992, 36% avg.; harvested 2%, 5% 1992, 9% avg.; 30% very poor, 10% poor, 40% fair, 20% good. Sorghum planted 95%, 100% 1992, 100% avg.; 12% poor, 57% fair, 31% good. Peanuts pegged 73%, 82% 1992, 92% avg.; 18% fair, 82% good. Pasture 4% very poor, 31% poor, 41% fair, 24% good. Primary activities: Cultivating, spraying fields, harvesting vegetables, general care of livestock, poultry, catfish.

ALASKA: Periodic showers common in parts of Tanana Valley, Kenai Peninsula received rain late, while Mat-Su remained very dry.

Days suitable for baling hay 3. Barley 15% fair, 80% good, 5% excellent. 60% barley, 75% of oats turning color. Last year at this time only 25% of small grains had turned color. Hay harvest 95% complete, 25% ahead of last years schedule. Height of 2nd crop hay averaged 11 in. brome, 9 in. timothy. 85% commercial potato fields bloom compared to 55% 1992. Commercial vegetable harvest continues. Topsoil 55% short, 45% adequate. Subsoil 65% short, 35% adequate.

ARIZONA: Precipitation limited to thunderstorms 23rd, far southeastern areas. Sunny, warm throughout the State. Temperatures varied normal to 8° below normal. Extremes 40°; 96° higher elevations; 60°; 108° deserts.

Cotton squaring 100%, 100% 1992, 99% avg.; setting bolls 95%, 94% 1992, 89% avg. Activities included: Irrigating, fertilizing, pesticide applications, pest monitoring, cultivating. Cotton 10% fair, 85% good, 5% excellent. Insects, weeds mostly light. Whitefly, aphids increasing in western areas. Alfalfa mostly good. Harvest active all areas. Weeds light to moderate, insects mostly light; disease light. Central area cantaloupe, honeydews, watermelons, green onions, grapefruit harvested. Tomatoes, cabbage, apples, peaches harvested eastern production areas.

ARKANSAS: Hot, temperatures a bit above normal. Scattered showers statewide first part of week. Heaviest rain in the northern two-thirds of the State. Extremes 62°; 106°. Rainfall none to 6.26 in.

Days suitable for fieldwork 7. Slow rate of crop growth. Soil moisture 79% short, 21% adequate. Fruit harvest continued. Cotton, soybeans cultivation continued. Sheath blast reported in some rice fields. Producers continued to apply nitrogen to rice fields. Cotton fields sprayed for aphids, weevils. Corn, cotton, soybeans, sorghum irrigation continued. Corn 2% poor, 39% fair, 59% good. Sunflowers fair. Extreme heat caused stress in poultry flocks. Livestock good, external parasites reported in some areas. Hay cutting continued. Pastures good.

CALIFORNIA: Temperatures little below normal. Mostly dry except for scattered showers.

Hot, dry weather permitted good progress field activities. Small grain harvest nearing completion, followed by straw baling, ground preparation second crop seedings. Rice growing well, development behind normal. Herbicide applications ongoing. Cotton excellent growth. Fields irrigated, cultivated, sprayed lygus, mites. Whitefly populations building up desert areas. Seed alfalfa irrigated. Corn silage harvest underway; some fields treated mites. Safflower sprayed aphids. Few fields harvested desert areas. Over-wintered sugarbeets harvested, new crop fields hand weeded, treated insects. Alfalfa, sudan grass cut hay. Summer fruit harvest active including peaches, pears, plums, nectarines, table grapes, Valencia oranges. Grape vineyards treated for mildew. Walnuts, prunes, almonds treated for various insect problems. Broccoli harvest moderate central coast. Bell pepper harvest ongoing Merced, Kern, Fresno counties. Central coast cauliflower harvest moderate. Santa Maria

celery harvest heavy; Salinas, moderate. Fresh market tomato harvesting continued San Joaquin County. Processing tomato harvest continued San Joaquin, Sacramento valleys. Garlic harvest continued Fresno, Tulare, San Benito, San Joaquin counties. Harvest of head, leaf, romaine lettuce moderate central coast. Onions harvested Kern, San Joaquin counties. Red onion harvest continued in San Benito County. Honeydews, cantaloupes harvested Fresno County. Watermelon harvest progressed Fresno, San Joaquin, Tulare counties. Watermelon harvest began San Jacinto district of Riverside County. Other crops harvested included: cucumbers, eggplant, green beans, green onions, snap beans, squash, sweet corn, cherry, roma tomatoes, oriental vegetables. Range, pasture conditions fair to good. Spring water supplies drying, ranchers more dependent on well water. Cows good condition, calf weights excellent. Cattle pastured on beet tops few areas. Extreme fire hazard exists. Bees active seed alfalfa, melon fields.

COLORADO: Persistent weather pattern caused dry conditions over the western slope, moist unstable across eastern Plains. Widely scattered thunderstorms southeast less than 0.50 in. Stronger thunderstorms northeast produced 0.50 to 5.00 in. Temperatures 2 to 4° below normal west of Divide, 3 to 7° below normal east of Divide.

Days suitable for fieldwork 5.4. Soil moisture 6% very short, 38% short, 49% adequate, 7% surplus. Hail damaged some crops in three different areas of Yuma county. Heavy rain also fell with these storms. Alfalfa 2nd cutting 33%, 34% 1992, 34% avg. Spring barley harvested 11%, 13% 1992, 24% avg. Oats harvested 13%, 27% 1992, 27% avg. Dry beans flowering 27%, 31% 1992, 26% avg. Corn silking 11%, 24% 1992, 22% avg. Sorghum headed 2%, 2% 1992, 5% avg. Winter wheat harvested 57%, 83% 1992, 83% avg. Fall potato 10% poor, 20% fair, 50% good, 20% excellent. Dry onion 3% poor, 11% fair, 60% good, 26% excellent. Corn 2% poor, 11% fair, 55% good, 32% excellent. Sugarbeets 2% poor, 10% fair, 65% good, 23% excellent. Livestock good to excellent. Pasture, range feed mostly good.

FLORIDA: Temperatures 2 to 4° above normal. Highs; upper 90s except middle 90s lower southeast coast. Lows; lower 70s. Rainfall north 2 to 5 days, 1 to 4 days central, south. Rainfall 1.00 to 2.00 in. local amounts from less than 0.25 in. to near 4.00 in.

Soil moisture in field crop areas short to adequate over most of State. Haying, tobacco harvesting, active. Tobacco market open, active. Growers cutting corn silage, preparing for corn grain harvesting. Cotton, peanuts, soybean, sugarcane making good progress. Most citrus groves, trees, new crop fruit very good to excellent condition. Adequate moisture most areas. Abundant new growth where grove care is adequate. New crop fruit progressing normally. Valencia, grapefruit harvest down to last few groves. Caretakers cutting cover crops, spraying, fertilizing. Typical hot, humid summer weather across vegetable producing areas. Growers preparing fields for fall crops north, central, east coast areas. Tomato transplanting started, north. Harvesting limited volume summer crops for local markets. State's pastures fair to excellent. Scattered showers covering most areas. Pasture 25% fair, 65% good, 10% excellent. States cattle herds fair to good.

GEORGIA: Very hot, humid. Several record maximum temperatures were established. Most stations reported a maximum of 97 to 102°, Augusta 104°, July 19th. Coolest 70 to 75°, few mountain locations low to mid 60s. Temperatures 4 to 8° above normal north half, 3 to 6° above normal south half. Rain 0.25 in. to locally 1.00 to 3.00 in. Heaviest rain 4.10 in. Tifton Experiment Station.

Days suitable for fieldwork 6.1. Soil moisture 58% very short, 32% short, 10% adequate. Corn 18% very poor, 19% poor, 52% fair, 9% good, 2% excellent; 100% silked, 100% 1992, 99% avg.; 91% dough, 91% 1992, 93% avg.; 69% dent, 71% 1992, 78% avg.; 20% mature, 22% 1992, 33% avg. Cotton 7% very poor, 17% poor, 45% fair, 31% good; 97% squaring, 100% 1992, 99% avg.; 67% setting bolls, 77% 1992, 78% avg. Sorghum 2% very poor, 38% poor, 46% fair, 14% good; 99% planted, 100% 1992, 99% avg. Peanuts 3% very poor, 18% poor, 25% fair, 54% good; 99% blooming, 100% 1992, 100% avg.; 89% pegging, 92% 1992, 93% avg. Soybeans 14% very poor, 34% poor, 38% fair, 14% good; 34% blooming, 42% 1992, 44% avg.; 12%

setting pods, 14% 1992, 15% avg. Tobacco 4% very poor, 12% poor, 42% fair, 38% good, 4% excellent; 28% harvested, 51% 1992, 49% avg. Watermelons 23% very poor, 21% poor, 40% fair, 16% good; 87% harvested, 93% 1992, 89% avg. Other vegetables 2% very poor, 22% poor, 46% fair, 30% good. Apples 14% very poor, 32% fair, 54% good; 5% harvested, 3% 1992, 6% avg. Peaches 14% very poor, 7% poor, 17% fair, 62% good; 88% harvested, 85% 1992, 90% avg. Pecans 1% very poor, 6% poor, 18% fair, 62% good, 13% excellent. Hay 28% very poor, 43% poor, 29% fair. Pasture 25% very poor, 34% poor, 34% fair, 7% good. Cattle 1% very poor, 4% poor, 68% fair, 26% good, 1% excellent. Hogs 3% very poor, 1% poor, 38% fair, 56% good, 2% excellent.

HAWAII: Tropical depression Dora, tropical storm Eugene brought much needed rain to State ending 25th. Remnants of Dora along with a low pressure area west of Kauai brought a lightning, thunder show, heavy downpours on 21st lingering into 22nd. On 23rd, Eugene brought windy, rainy conditions. Islanders were inconvenienced with scattered power outages, traffic jams, winds, some flooding felt during the week.

Rains partially restored diminishing water supplies. Showers, beneficial for most crops, growers reported no major damage to crops. Normal farming activities delayed or interrupted by the rain, muddy conditions. Island experienced variable showers beginning 20th, lingering into weekend. Eastern areas had wet weather with thundershowers at midweek. Volcano, cloudy conditions with heavy showers. Snow also fell. Maui, Molokai, Lanai began with warm, dry weather earlier in the week turning cloudy, windy, showery. On Maui, heavy showers mainly affected western Maui with some flooding, road closures.

Heavy rains caused no major crop damage, slowed normal farming activities. Some fields were muddy, added moisture was generally beneficial to most crops. Banana shipments expected. Orchards received cloudy, rainy weather. Production remained. On Kauai, orchards made fair to good progress, harvesting is expected light for on-island sales. Snap bean plantings made steady progress. Light to moderate supplies are anticipated for the coming week, mainly for on-island sales. On Oahu, picking is expected light from small acreage. Chinese cabbage shipments are expected moderate. Disease, insect damage were problems for some plantings. Cucumber plantings in eastern areas were hampered recent cloudy, wet weather. Vine, fruit sets were generally fair with regular spraying efforts controlling insect infestation. Tomato shipments should increase as fields begin harvesting. Glenwood output light. Some fruit splitting occurred. Green pepper shipment should increase. Crop condition fair, crop progress good. Watermelon crop poor to good.

IDAHO: Temperatures 9 to 14° below normal. Precipitation 0.72 to 2.01 in. north; 0.15 to 0.38 in. southwest; 0.31 to 0.91 in. south central; 0.01 to 0.76 in. east.

Days suitable for fieldwork 5. Soil moisture 4% short, 77% adequate, 19% surplus. Winter wheat 1% harvested, 66% turning color, 32% headed, 1% booted. Spring wheat 1% not yet jointed, 2% jointed, 13% booted, 65% headed, 19% turning color. Spring barley 1% not yet jointed, 2% jointed, 10% booted, 65% headed, 22% turning color. Oats harvested 4%, 20% 1992, NA avg. Potatoes emerged 100%, 100% 1992, 100% avg. Potatoes not yet 12" high 9%, 12" high 36%, closing middles 55%. Potatoes 2% poor, 15% fair, 72% good, 11% excellent. Sugarbeets thinned 100%, 100% 1992, 100% avg. Alfalfa first cutting 98%, 100% 1992, 99% avg. Alfalfa second cutting 26%, 47% 1992, 35% avg. Cherries harvested 94%, 100% 1992, 98% avg. Peaches harvested 8%, 33% 1992, NA avg. Mint first cutting 9%, 43% 1992, 23% avg. Irrigation water supplies 5% fair, 67% good, 28% excellent. Activities: Haying, grass seed harvest, irrigation, cultivation, mint harvest, seed corn detasseling, harvest preparation. Pasture, range 95% of normal. Livestock good.

ILLINOIS: Major flooding problems, above normal rainfall persisted over western State last week. Precipitation totals of 1.50 in. to 5.00 in. in central third of State, 0.20 to 1.00 in. far north, south, around 8.20 in. in west central area in Monmouth. Temperatures mostly 2 to 5° above normal. Highs lower 80s; lower 90s. Lows mid 60s; mid 70s. Continued rains, flooding in the west destroyed crop acres, while crops inland were showing some signs of stress due to standing water. Soil moisture 23rd 2% short, 29% adequate, 69% surplus. Overall, crops mostly good to fair. Minimal progress was made harvesting wheat, hay due to wet conditions.

Days suitable for fieldwork 2.5. Corn silking, soybeans blooming both reached the half way point of their development stages last week. Pasture was 98% of normal.

INDIANA: Temperatures near normal north to 2 to 5° above normal south, mean readings between 71 to 83. Highs varied 80° north to low 90s south. Lows mid 60s to mid 70s. Rainfall 0.20 in. or less over the central, eastern parts of State. Western area of State received 0.50 to 0.75 in. with some reports of greater than 1.00 in. Corn, soybeans continued to develop well. Southern areas of the State are in need of rain.

Days suitable for fieldwork 5. Pastures 94% of normal, 95% last week. Topsoil 15% short, 69% adequate, 16% surplus. Subsoil 3% short, 82% adequate, 15% surplus. Corn 70 in. high, 73 in. 1992, 66 in. avg. Soybean 22 in. high, 28 in. 1992, 22 in. avg. Oats combined 39%, 25% 1992, 55% avg. Alfalfa 2nd cutting 66%, 49% 1992, 70% avg.

IOWA: New flood of record Nishnabotna River far southwest. Rainfall 0.18 in. (northeast) to 11.85 in. (southwest); average 2.06 in. (normal 0.86 in.). Temperatures near normal extreme east central, southeast, below normal elsewhere (4.9° below normal central). Extremes 52°; 92°.

Days suitable for fieldwork 1.6. Topsoil 5% adequate, 95% surplus. Subsoil 2% adequate, 98% surplus. Corn tasseled 15%, 82% 1992, 83% normal. Soybean acreage cultivated for the first time 40%, 99% 1992, 100% normal. Oat acreage turning color 80%, 100% 1992, 100% normal; harvested 8%, 37% 1992, 69% normal. First crop alfalfa hay harvested 90%, 100% 1992, 100% normal. Second crop alfalfa hay harvested 15%, 58% 1992, 73% normal. First crop clover hay harvested 68%, 100% 1992, 100% normal. Winter wheat harvested 15%, 67% 1992, 90% normal. Oat 8% very poor, 25% poor, 49% fair, 17% good, 1% excellent. Winter wheat 10% very poor, 31% poor, 48% fair, 10% good, 1% excellent. Pasture condition 1% very poor, 5% poor, 18% fair, 51% good, 25% excellent. Hay 1% very poor, 5% poor, 30% fair, 50% good, 14% excellent. Wet conditions continue to slow crop maturity. Access to fields is limited due to wet conditions. Some crops are yellow due to rainfall, flood, lack of sunshine. Livestock are showing signs of stress due to the mud, rain, high humidity.

KANSAS: Temperatures normal northeast, 1° above normal southeast, normal elsewhere. Stagnant weather patterns continued to bring severe weather. Rainfall well above normal over all districts. Precipitation 0.75 in. south central to 6.03 in. east central.

Days suitable for fieldwork 1.5. Topsoil 4% short to very short, 35% adequate, 61% surplus. Subsurface moisture 3% short to very short, 39% adequate, 58% surplus. North central 0.0 days suitable. Central, northeast, east central 0.5. State level percent harvested published in the July 19th release should have been 75% instead of 85%. All district percentages were correct as published. Wheat harvested 25th, 80%, 96% 1992, 100% avg. Corn silking 70%, 75% 1992, 80% avg.; dough stage 10%, 20% 1992, 30% avg.; 66% good to excellent, 26% fair, 8% poor to very poor. Sorghum headed 4%, 5% 1992, 10% avg.; 62% good to excellent, 29% fair, 9% poor to very poor. Soybeans blooming 30%, 45% 1992, 50% avg.; setting pods 4%, 10% 1992, 20% avg.; 63% good to excellent, 21% fair, 16% poor to very poor. Second cutting alfalfa 65%, 85% 1992, 96% avg. Third cutting 5%, 15% 1992, 30% avg. Pastures mostly good to excellent.

KENTUCKY: Hot, humid. Highs 90 to 95°, 3 to 5° above normal. Lows lower 70s, 3 to 5° above normal. Precipitation highly variable. Many locations dry, isolated spots received 1.00 to 2.00 in. Rain 0.60 in. west, remaining areas averaged less than 0.25 in.

Day suitable for fieldwork 5.3. Soil moisture 23% very short, 45% short, 31% adequate, 1% surplus. Tobacco 9% poor, 48% fair, 40% good, 3% excellent. Burley blooming or beyond 39%, 57% 1992, 40% avg. Pasture, hay mostly good to fair.

LOUISIANA: Temperatures 0.8 to 2.7° above normal. Extremes 66°; 98°. Rainfall none northwest, west central to 2.57 in. east central.

Days suitable for fieldwork 5.0. Soil moisture 23% short, 56% adequate, 21% surplus. Corn 5% poor, 48% fair, 47% good; 100% silked, 100% 1992, 100% avg.; 94% dough stage, 98% 1992, 95% avg.; 13% mature, 61% 1992, 50% avg.; 1% harvested, 1% 1992, 2% avg. Crop rapidly nearing maturity. Hay 98% first cutting, 94% 1992, 91% avg.; 10% final cutting, 26% 1992, 6% avg. Final cuttings active. Peaches 75% harvested, 90% 1992, 83% avg. Rice 8% ripe, 23% 1992, 16% avg.; 1% harvested, 8% 1992, 6% avg. Began harvesting a few fields. Sorghum 0% ripe, 4% 1992, 4% avg. Soybeans 100% planted,

100% 1992, 99% avg.; 96% emerged, 100% 1992, 99% avg. Rapid growth with hot weather, disease pressure moderate. Sweet potatoes 13% poor, 27% fair, 60% good; 92% planted, 100% 1992, 98% avg.; 0% harvested, 8% 1992, 4% avg. Sugarcane 1% poor, 4% fair, 85% good, 10% excellent. Seedbed preparation active. Livestock 22% fair, 72% good, 6% excellent. Pastures 3% poor, 7% fair, 89% good, 1% excellent. Vegetables 7% poor, 62% fair, 28% good, 3% excellent.

MARYLAND & DELAWARE: **MARYLAND:** Precipitation 0.51 in. Temperature 76.0°, normal 76.1°. Extremes 44°, 96°.

Days suitable for fieldwork 6.5. Topsoil 60% very short, 40% short. Subsoil 35% very short, 50% short, 15% adequate. Small grains mostly good. Wheat 100% harvested, 91% 1992, 95% avg. Rye 95% harvested, 83% 1992, 91% avg. Oats 95% turned, 81% 1992, N/A avg.; 40% harvested, 20% 1992, 48% avg. Corn poor to fair; 55% silked, 54% 1992, 59% avg.; 9% dough, 7% 1992, 15% avg. Soybean fair; 19% bloomed, 21% 1992, 29% avg. Sorghum 13% headed, 4% 1992, 10% avg. Tobacco 17% bloomed, 31% 1992, 34% avg. Pasture very poor, needs rain; hay supplies adequate. Alfalfa hay 94% second cut, 83% 1992, 86% avg. Other hay 67% second cut, 50% 1992, 46% avg. Sweet corn 30% harvested, 32% 1992, 40% avg. Watermelons 26% harvested, 9% 1992, 19% avg. Cantaloupes 48% harvested, 16% 1992, 31% avg. Potatoes 32% harvested, 25% 1992, 32% avg. Tomatoes 17% harvested, 13% 1992, 29% avg. Peaches, apples good; peaches 15% picked, 13% 1992, 21% avg.

DELAWARE: Precipitation 0.56 in. Temperature 74.0°, normal 77.0°. Extremes 57°, 90°.

Days suitable for fieldwork 7.0. Topsoil 50% very short, 50% short. Subsoil 25% very short, 75% short. Corn mostly poor to fair; 81% silked, 69% 1992, 78% avg.; 12% dough, 2% 1992, 10% avg. Soybeans poor to mostly fair; 23% bloomed, 25% 1992, 21% avg. Alfalfa hay 96% second cut, 99% 1992, 94% avg.; 22% third cut, 4% 1992, 19% avg. Other hay 79% second cut, 47% 1992, 60% avg. Pasture very poor; hay supplies mostly short to adequate. Sweet corn 38% harvested, 22% 1992, 30% avg. Cantaloupes 42% harvested, 7% 1992, 26% avg. Watermelons 15% harvested, 6% 1992, 12% avg. Potatoes 35% harvested, 17% 1992, 16% avg. Tomatoes 16% harvested, 6% 1992, 14% avg. Peaches fair to good; 25% harvested, 9% 1992, 35% avg. Apples good.

MICHIGAN: Extremes 43°, 90°. Precipitation 0.07 to 1.90 inches.

Days suitable for fieldwork 6.0. Soil moisture 30% short, 65% adequate, 5% surplus. Dry beans 40% blooming, 20% 1992, 30% avg.; 5% very poor, 10% poor, 35% fair, 40% good, 10% excellent. Oats 90% headed, 95% 1992, 99% avg.; 35% turning, 20% 1992, 75% avg.; 5% ripe, 5% 1992, 25% avg.; 2% very poor, 8% poor, 30% fair, 45% good, 15% excellent. Wheat 100% turning, 95% 1992, 99% avg.; 85% ripe, 90% 1992, 95% avg. Potatoes 10% harvested, 2% 1992, 5% avg. Hay 50% second cutting, 20% 1992, 35% avg.; 2% very poor, 3% poor, 20% fair, 50% good, 25% excellent. Pasture 90% of normal. Major activities included: Cutting hay, irrigating, harvesting cherries, sweet corn, wheat.

MINNESOTA: Temperatures 1 to 5° below normal. Extremes 44°, 87°. Precipitation 0.17 in. below normal in east to 0.62 in. above normal in west. Precipitation 0.41 to 2.00 inches. Greatest weekly precipitation was 2.91 inches.

Days suitable for fieldwork 3.7. Topsoil 30% adequate, 70% surplus. Spring wheat 21% turning ripe, 32% 1992, 68% avg. Oats 43% turning ripe, 56% 1992, 82% avg. Barley 31% turning ripe, 28% 1992, 79% avg. Corn 68% cultivated once, 100% 1992, 100% avg.; 36 in. height, na in., 1992, na in. avg.; 11% tasseled, 40% 1992, 60% avg. Soybeans 50% cultivated once, 100% 1992, 100% avg.; 13 in. height, 21 in. 1992, 24 in. avg.; 25% blooming, 44% 1992, 68% avg.; 5% setting pods, 8% 1992, 22% avg. Spring wheat 2% very poor, 11% poor, 29% fair, 52% good, 6% excellent. Oats 2% very poor, 11% poor, 34% fair, 48% good, 5% excellent. Barley 1% very poor, 9% poor, 26% fair, 58% good, 6% excellent. Corn 19% very poor, 40% poor, 31% fair, 8% good, 2% excellent. Soybeans 15% very poor, 46% poor, 31% fair, 6% good, 2% excellent. Dry beans 16% very poor, 21% poor, 52% fair, 9% good, 2% excellent. Sugarbeets 6% very poor, 21% poor, 46% fair, 25% good, 2% excellent.

MISSISSIPPI: Temperatures 84°, 2.8° above normal. Extremes 66°, 101°. Coastal area received over 3.00 in. of rainfall while the remaining sections acquired less than 2.50 in. of rain. State 1.15 in.,

0.06 in. above normal. Soil temperatures 89°.

Days suitable for fieldwork 5.9, 3.7 1992, 4.3 avg. Soil moisture 12% very short, 40% short, 27% adequate, 12% surplus, 9% excessive. Corn 89% silked, 98% 1992, 94% avg.; 50% dough, 78% 1992, 71% avg.; 16% dent, 53% 1992, 48% avg.; 10% mature, 12% 1992, 16% avg.; 5% silage harvested, 25% 1992, 27% avg.; 2% very poor, 9% poor, 45% fair, 43% good, 1% excellent. Cotton 98% squaring, 100% 1992, 96% avg.; 55% setting bolls, 88% 1992, 78% avg.; 16% poor, 72% fair, 12% good. Rice 20% heading, 40% 1992, 33% avg.; 84% fair, 16% good. Sorghum 62% heading, 87% 1992, 74% avg.; 10% turning color, 25% 1992, 30% avg.; 14% poor, 56% fair, 30% good. Soybeans 97% emerged, 97% 1992, 94% avg.; 33% blooming, 49% 1992, 41% avg.; 6% podding, 15% 1992, 16% avg.; 1% poor, 85% fair, 14% good. Sweet potatoes 57% fair, 43% good. Watermelons 35% harvested, 60% 1992, 58% avg.; 11% poor, 67% fair, 22% good. Hay 71% harvested, 74% 1992, 61% avg. Peaches 84% harvested, 90% 1992, 86% avg.; 5% very poor, 15% poor, 58% fair, 22% good. Livestock 17% fair, 80% good, 3% excellent. Pasture 87% of normal. Activities: Insect control.

MISSOURI: Temperatures slightly below normal northwest to slightly above normal south. Rainfall 2.50 in., ranging less than 1.00 in. central, southeast, to over 6.00 in. northwest. Several northwestern, north central counties over 8.00 in. Severe flooding continues along Missouri, Mississippi rivers.

Days suitable for fieldwork 2.4, varying 0.4 northwest to 6.1 southeast. Topsoil 11% short, 16% adequate, 73% surplus. Corn tasseling 55%, 89% 1992, 88% avg. Varying from 100% surplus west central, northern districts to 67% short southeast. Row crops in most areas continue well behind normal most areas. Oats harvested 41%, 64% 1992, 89% avg. Crop progress declined in rain soaked north. Second crop alfalfa 47%, 78% 1992, 88% avg. Other hay 74%, 87% 1992, 90% avg. Pasture 5% poor, 19% fair, 51% good, 25% excellent.

MONTANA: Temperatures were well below normal. Precipitation 0.50 in. southwest to 1.60 in. southeast.

Days suitable for fieldwork slightly over 1.6. Topsoil 1% short, 68% adequate, 31% surplus. Subsoil 6% short, 72% adequate, 22% surplus. Winter wheat 1% very poor, 4% poor, 16% fair, 47% good, 32% excellent. Barley 4% poor, 21% fair, 48% good, 27% excellent. Oats 2% poor, 15% fair, 63% good, 20% excellent. Sugarbeets 2% poor, 9% fair, 84% good, 5% excellent. First cutting alfalfa hay 56% complete, 86% 1992, 92% avg. Other hay 38% complete, 66% 1992, 73% avg. Pasture, range feed 97% of normal, up 6 points from last week.

NEBRASKA: Temperatures 3 to 6° below normal. Precipitation 0.33 in. west to 10.00 to 15.00 in. southeast. Locally heavy rains over the State with major flooding southeast.

Days suitable for fieldwork 1.8. Topsoil 1% short, 26% adequate, 73% surplus. Subsoil 1% short, 40% adequate, 59% surplus. Winter wheat 8% very poor, 14% poor, 39% fair, 36% good, 3% excellent; 98% ripe, 98% 1992, 99% avg.; 28% harvested, 70% 1992, 89% avg. Corn 6% poor, 34% fair, 54% good, 6% excellent; 29% silked, 58% 1992, 69% avg. Soybeans 9% poor, 44% fair, 44% good, 3% excellent; 34% blooming, 55% 1992, 63% avg.; 5% setting pods, 5% 1992, 14% avg.; limited weed control activities due to field conditions. Sorghum 3% very poor, 24% poor, 32% fair, 36% good, 5% excellent. Dry beans 34% fair, 66% good; 29% blooming; 1% setting pods. Alfalfa 11% poor, 30% fair, 55% good, 4% excellent; second cutting 39%, 73% 1992, 82% avg. Wild hay 26% fair, 63% good, 11% excellent. Pasture, range 107% of normal.

NEVADA: Scattered showers received in northern, central areas; precipitation trace to 0.75 in. Temperatures below normal in central, northern areas; near normal south.

Small grain harvest getting underway. Garlic harvest just starting. Second cutting alfalfa well underway north; third, fourth cutting extreme south. Stockwater generally adequate most areas.

NEW ENGLAND: Precipitation 0.09 to 1.10 in. north; 0.06 to 0.72 in. south. Temperatures 62 to 69° north; 67 to 75° south. Maximum temperatures 76 to 88° north; 82 to 89° south. Minimum temperatures 44 to 56° north; 47 to 62° south.

Days suitable for fieldwork 6.5. Soil moisture 47% very short, 45% short, 8% adequate. Available grazing 30% very short, 64% short, 6% adequate. Fieldwork progress 1 to 2 days behind schedule. Pasture 55% of normal. Potatoes across the region fair to good. Maine oat

good to excellent. Field corn fair to good. First cutting hay 95% harvested, 95% 1992, 95% avg.; fair to good. Second cutting hay 20% harvested, 25% 1992, 30% avg.; poor to fair, except Vermont, good. Shade tobacco good in Connecticut; fair to good Massachusetts. Outdoor tobacco good to fair. Sweet corn harvested 15%; fair. Peach, pear, highbush blueberry set average. Highbush blueberries 35% harvested. Cranberry set heavy to average. Apple set, fruit drop average; scab infection average to light. Strawberry set average; 100% harvested. Major farm activities: Applying herbicides, insecticides. Harvesting second cutting of hay where available. Harvesting vegetables: Peas, beans, cauliflower, broccoli, sweet corn among others. Strawberry harvest finished. Continuing highbush blueberry, raspberry harvest. Fruit fly traps being monitored. European Red Mites, apple maggots noted in orchards. Dry all farmers equipped to do so are irrigating.

NEW JERSEY: Temperatures below normal. Extremes 49°; 93°. Rainfall 0.34 in. north, 2.33 in. central, 1.10 in. south. Heaviest 24 hour total 3.16 in. on 19th, 20th. Estimated soil moisture, in percent field capacity, averaged 46% north, 79% central, 61% south. Four inch soil temperatures 70° north, 73° central, 74° south.

Soil moisture content short to adequate depending on area. Recent rainfall during the period greatly improved non-irrigated crop prospects. However, more rain is still needed. Irrigation of crops still being used. Good volume of peppers, squash, tomatoes, corn available. Moderate supply of cucumbers, eggplant, melons are available. Light volume of cabbage, leafy greens, green onions also available. Very light harvest for peaches of Red Haven variety. Blueberry harvest is past its peak. Wheat harvest complete. Most grain crops, pastures still need more rain.

NEW MEXICO: Temperatures very close to normal. Extremes 36° northwest; 106° southeast. Scattered showers affected most of the State the first few days of the week, then the weather turned warm, dry. Higher precipitation included several locations around 1.50 in., one area slightly over 2.00 in.

Days suitable for fieldwork 6.1. Soil moisture 81% short, 19% adequate. Crop conditions: Alfalfa 26% fair, 71% good, 3% excellent. Corn 18% fair, 82% good. Chile 6% poor, 19% fair, 75% good. Onions mostly good; harvest continues. Apples 46% fair, 54% good; fruit set light to average. Pecans fair to good. Cattle, sheep poor to excellent, showing improvement. Range, pasture 68% of normal.

NEW YORK: Warm week. Many places climbed to 80s, few spots in southeast passed 90°. Overnight readings in 50s to mid 60s. Precipitation below normal most areas. Rainfall almost none to over 1.60 in.

Days suitable for fieldwork 6.1. Soil moisture very short to adequate. Areas in the east are very dry. Little rain received since end of April. Pastures in these areas are burned, hay crops are short. Pasture 80% of normal. Hay good condition. First cutting alfalfa near completion, second cutting 36% finished, 23% 1992, 32% avg. Winter wheat good condition, harvest progressing rapidly. Potatoes good condition, irrigation used where available. Dry beans good. Lake Ontario fruit region received needed rain. Apples, peaches good to excellent, pears good condition. Peach harvest was just starting. Pears sizing well. Sweet cherry harvest complete. Tart cherry harvest active, crop poor to good. Vegetable growers irrigating where possible. Strawberry harvest ended, field renovation active. Sweet corn harvest gained momentum, quality good. Onions good. Tomato harvest expected to begin next week. Harvest of other vegetable crops active.

NORTH CAROLINA: Temperatures 2 to 5° above normal. Precipitation 5.39 in. at Laurinburg to no rain at a few locations.

Days suitable for fieldwork 6.2. Soil moisture 39% very short, 42% short, 19% adequate. Crop condition: Pasture 12% very poor, 38% poor, 44% fair, 6% good; Field tobacco 1% very poor, 15% poor, 63% fair, 20% good, 1% excellent; Irish potatoes 32% poor, 54% fair, 14% good; corn 17% very poor, 40% poor, 39% fair, 4% good; hay 9% very poor, 36% poor, 46% fair, 9% good; peaches 8% poor, 65% fair, 27% good; truck crops 33% poor, 53% fair, 14% good; cotton 14% poor, 54% fair, 30% good, 2% excellent. Peanuts 6% poor, 58% fair, 36% good; soybeans 3% very poor, 17% poor, 61% fair, 19% good; sweet potatoes 2% very poor, 16% poor, 49% fair, 31% good, 2% excellent; apples 10% poor, 79% fair, 11% good; sorghum 12%

very poor, 32% poor, 49% fair, 7% good; hay, roughage supplies 5% very short, 36% short, 57% adequate, 2% surplus. Irish potatoes harvested 95%, 88% 1992, 90% avg.; peaches harvested 60%, 76% 1992, 68% avg.; flue-cured tobacco harvested 13%, 19% 1992, 16% avg.; cotton squared 80%, 83% 1992, 87% avg.; setting bolls 60%, 40% 1992, 62% avg.; corn silked 90%, 92% 1992, 91% avg.; soft dough 65%, 58% 1992, 63% avg.; soybeans flowered 19%, 19% 1992, 23% avg. Second cutting of hay crop is 68% completed. Third cutting of the Hay crop is 14% completed. Major activities: Irrigating crops, topping tobacco. Other activities included: Scouting cotton, peanuts; harvesting vegetables; cutting hay; tending livestock; general farm maintenance.

NORTH DAKOTA: Heavy rain again last week. Unofficial amounts reported of 5.00 to 10.00 in. Many areas experienced flooding of small streams, widespread ponding. Precipitation 0.09 in. east central to 5.57 in. west central. Temperatures 5 to 7° below normal. Extremes 42° north central, west central; 82° south central.

Days suitable for fieldwork 1.7. Topsoil 30% adequate, 70% surplus. Subsoil 57% adequate, 43% surplus. Small grains mostly good, development behind last year and average due to cool wet weather. Spring wheat 13% fair, 69% good, 18% excellent; durum 4% fair, 66% good, 30% excellent; barley 14% fair, 69% good, 17% excellent; oats 15% fair, 71% good, 14% excellent; winter wheat 4% poor, 25% fair, 58% good, 13% excellent. Hard red spring wheat 7% turning and beyond, 14% 1992, 53% avg. Durum wheat 3% turning and beyond, 5% 1992, 34% avg. Oats 5% turning and beyond, 24% 1992, 57% avg. Barley 14% turning and beyond, 27% 1992, 70% avg. Winter wheat 49% turning and beyond, 83% 1992, 94% avg. Heavy rains, cool weather effecting development of late season crops, except for potatoes. Corn 13% very poor, 59% poor, 24% fair, 4% good; flax 8% poor, 11% fair, 60% good, 21% excellent; sugarbeets 23% fair, 77% good; potatoes 1% fair, 99% good; dry beans 2% very poor, 30% poor, 48% fair, 20% good; soybeans 9% very poor, 47% poor, 43% fair, 1% good; sunflowers 25% poor, 50% fair, 25% good. Dry beans 13 in. avg. height, 14 in. 1992, 18 in. avg.; flax 14 in. avg. height, 16 in. 1992, 16 in. avg.; soybeans 13 in. avg. height, 18 in. 1992, 22 in. avg.; sunflowers 24 in. avg. height, 29 in. 1992, 39 in. avg.; potatoes 25 in. avg. height, 18 in. 1992, 19 in. avg.; corn 25 in. avg. height, 38 in. 1992, 50 in. avg. Flax 49% blooming and beyond, 58% 1992, 73% avg.; dry beans 4% not fully podded, 11% 1992; soybeans 26% blooming and beyond, 50% 1992, 79% avg.; potatoes 95% blooming and beyond, 65% 1992, 87% avg.; 60% rows filled, 52% 1992; corn 2% tasseling to silking, 5% 1992, 45% avg. Range, pasture 101% of normal. Hay crop 76% of normal. Alfalfa hay first cutting 55% complete, second cutting 3%, other hay 22%. Stockwater supplies 68% adequate, 32% surplus.

OHIO: High temperatures in the 80s, 1 to 2° above normal. Maximum temperatures did reach the 90s in southern areas by weekend. Low temperatures in the low to mid 60s were as much as 4° above normal in southern areas. Precipitation was generally light with totals commonly under 0.25 in. but some areas had over 1.00 in. With some exceptions, rainfall for the season (since April 1st) is short of normal with much of shortfall developing the past few weeks. Growing degree day totals since April 1st around 1700 in most of the north to around 2000 in parts of the south. These totals generally exceeded normal by 150 to 250.

Days suitable for fieldwork 6.2. Topsoil moisture 20% short, 72% adequate, 8% surplus; wet west-central, rain needed north. Oats ripe 68%, 1992 32%, 59% avg.; oats harvested 12%, 1992 5%, 34% avg. Summer apples harvested 12%, 1992 10%, 24% avg. Alfalfa 2nd cut harvested 70%, 1992 40%, 63% avg.; other hay 45%, 1992 24%, 38% avg. Oats 2% very poor, 8% poor, 35% fair, 49% good, 6% excellent. Pasture 1% very poor, 4% poor, 28% fair, 54% good, 13% excellent. Hay 3% poor, 25% fair, 57% good, 15% excellent. Many farmers in north in need of rain to relieve heat stress, promote good pollination in corn. Some double cropping of soybeans after wheat in recent weeks as higher prices have made late plantings worth the risk to some farmers. Potato harvest is just now getting underway.

OKLAHOMA: Temperatures normal Panhandle to 5° above normal northeast, east central, southeast. Precipitation none in central, south central, southeast to 0.31 in. Panhandle, west central.

Days suitable for fieldwork 6.3. Topsoil 44% short, 56% adequate. Subsoil 22% short, 78% adequate. Corn 96% tasselling, 97% 1992, 85% avg.; 23% milk to soft, 54% 1992, 35% avg.; 4% mature, 2% 1992, 4% avg. Sorghum 16% fair, 84% good; 23% heading, 14% 1992,

28% avg.; 5% milk to soft, 4% 1992, 6% avg. Soybeans 99% planted, 90% 1992, 100% avg.; 90% up to stand, 80% 1992, 100% avg.; 15% flowering, 23% 1992, 28% avg. Peanuts 12% fair, 88% good; 69% pegging, 67% 1992, 62% avg.; 44% setting pods, 18% 1992, 20% avg. Cotton 18% fair, 82% good; 97% squaring, 53% 1992, 73% avg.; 52% setting bolls, 5% 1992, 23% avg. Alfalfa 96% 2nd cut, 79% 1992, 100% avg.; 40% 3rd cut, 26% 1992, 63% avg. Pastures 95% of normal. Cattle prices lower. Marketings average.

OREGON: Temperature coast 2° above normal, western valley 4° below normal, eastern areas 7° below normal. Record breaking low temperatures several eastern locations, mid to upper 30s. Precipitation coast, western valleys 0.50 to 1.50 in., Cascade foothills to high plateau 1.00 to 2.50 in., eastern sections 0.30 to 0.50 in., except northeastern areas 1.00 in.

Soil moisture 8% short, 88% adequate, 4% surplus. Wheat 8% harvested. Barley 12% harvested. Grain harvest delayed, wet conditions. Hay harvest continued, slowed by showers. Grass seed harvest continues, most acreage in windrows, too wet to combine. Willamette Valley snap beans, peas, broccoli harvest continued. Columbia Basin pea harvest winding down, early potato harvest underway, watermelon harvest underway. Cranberry fruit sizing continued, showing red blush on surface fruit; southern coast. Raspberry harvest winding down, (some rot), blackberry harvest continued, blueberry harvest continued (heavy crop), boysenberry harvest continues, early variety peach harvest underway, early variety apples ripening; Willamette Valley. Hood River, The Dalles district cherry harvest concluding, rain continued cracking fresh market crop, damaged fruit diverted to canneries; cannery and brine harvest continued. Livestock good to excellent. Range, pastures above normal, 111% of normal.

PENNSYLVANIA: Temperatures 76°, 6° above normal. High temperature 93° at Williamsport on 22nd. Low 42° at Rector on 24th. Precipitation averaged 0.39 in., 0.50 in. below normal.

Days suitable for fieldwork 6. Soil moisture 80% short, 20% adequate. Corn height 55 in., 50 in. 1992, 46 in. avg. Soybean 3% very poor, 5% poor, 26% fair, 49% good, 17% excellent. Barley 98% turning yellow, 99% 1992; 89% ripe, 86% 1992; 74% harvested, 66% 1992. Wheat 100% turning yellow, 94% 1992; 89% ripe, 79% 1992; 64% harvested, 27% 1992.; 3% very poor, 3% poor, 32% fair, 49% good, 13% excellent. Oats 87% turning yellow, 67% 1992; 42% ripe, 24% 1992; 16% harvested, 5% 1992; 1% very poor, 16% poor, 35% fair, 39% good, 9% excellent. Alfalfa first cutting 100% complete, 100% 1992. Second cutting alfalfa 65% complete, 41% 1992. Quality of hay made 2% poor, 21% fair, 77% good. First cutting of timothy clover 98% complete, 96% 1992. Feed from pastures poor to very poor. Peach 18% below avg., 76% avg., 6% above avg. Apple 10% below avg., 70% avg., 20% above avg. Activities: Making hay, filling silos; baling straw; harvesting small grains; hauling manure; caring for livestock.

PUERTO RICO: Rainfall 1.47 in. 0.18 in. above normal. Highest rainfall 4.75 in. Pica Del Este, 4.44 in. San Lorenzo 3S, 3.45 in. Dorado 3WNW. Highest 24 hour total 3.60 in. San Lorenzo 3S July 23. WSFO San Juan Mean temperature 83.6, 1.6° above normal, rainfall 2.29 in. 1.17 in. above normal. Temperatures 82o on the coasts, 75 to 76° in the interior. Temperature 83.7° Roosevelt roads to 65.6° Cerro Maravilla. Extremes 63°; 99°.

SOUTH CAROLINA: Rainfall 1.30 in. Temperatures 4 to 6° above normal.

Days suitable for fieldwork 6.5. Soil moisture 55% very short, 36% short, 9% adequate. Corn very poor to poor; 80% dough, 88% 1992, 80% avg.; 31% mature, 15% 1992, 31% avg; 7% harvested, 3% 1992, 3% avg. Sorghum poor; 94% planted, 82% 1992, 90% avg.; 4% harvested, 6% 1992, 4% avg. Tobacco poor to fair; 89% topped, 96% 1992, 96% avg.; 14% harvested, 42% 1992, 32% avg. Cantaloupes poor to fair; 73% harvested, 81% 1992, 76% avg. Watermelons poor to fair; 78% harvested, 84% 1992, 80% avg. Cucumbers poor to fair; 83% harvested, 83% 1992, N/A avg. Fall hay poor; 27% harvested, 31% 1992, 25% avg. Peaches poor to fair; 57% harvested, 55% 1992, 62% avg. Pasture poor.

SOUTH DAKOTA: Temperatures 2 to 8° below normal. Extremes 46°; 88°. Rainfall was again widespread, generally 0.50 to 1.50 in. with some locations in the north, south central receiving 2.00 to 4.00

in. Maximum 4.22 in.

Days suitable for fieldwork 2.2. Topsoil 34% adequate, 66% surplus. Subsoil 49% adequate, 51% surplus. Winter wheat 3% poor, 12% fair, 66% good, 19% excellent. Rye 4% poor, 20% fair, 62% good, 14% excellent. Oats 3% poor, 16% fair, 70% good, 11% excellent. Barley 2% poor, 20% fair, 58% good, 20% excellent. Flax 16% fair, 73% good, 11% excellent. Sunflowers 3% very poor, 6% poor, 8% fair, 73% good, 10% excellent. Some winter wheat harvested last week, fields remain very wet, farmers concerned about the rest of the harvest. Weeds continue to be a problem. Row crops were progressing very unevenly across the State. Sunshine, warm weather is needed for the crops to progress. Livestock 1% fair, 70% good, 29% excellent. Pasture 101% of normal. Hay in some areas was reported to be moldy as it sat in windrows for too long.

TENNESSEE: Temperatures generally 1 to 9° above normal. Extremes 62°; 102°. Rain varied throughout the State due to scattered thunderstorms providing all the precipitation. Jackson recorded nearly 2.00 in. of rain while Memphis, Chattanooga, Knoxville reported no rain for the period.

Days suitable for fieldwork 5.9. Soil moisture 30% very short, 48% short, 22% adequate. Corn 87% tasseling, 94% 1992, 81% avg.; 25% dough stage, 38% 1992, 33% avg.; 4% dent stage, 12% 1992, 11% avg.; 3% very poor, 9% poor, 42% fair, 43% good, 3% excellent. Cotton 100% squaring, 99% 1992, 97% avg.; 68% setting bolls, 45% 1992, 52% avg.; 1% poor, 10% fair, 89% good. Sorghum 54% headed, 61% 1992, 48% avg.; 1% poor, 51% fair, 47% good, 1% excellent. Soybeans 27% blooming, 31% 1992, 25% avg.; 4% setting pods, 8% 1992, 6% avg.; 1% poor, 41% fair, 58% good. Tobacco 14% topped, 31% 1992, 21% avg.; 1% very poor, 14% poor, 57% fair, 27% good, 1% excellent. Pastures 8% very poor, 25% poor, 47% fair, 19% good, 1% excellent. Cattle 2% very poor, 7% poor, 34% fair, 56% good, 1% excellent. Tobacco growth and development limited throughout the summer, but sparse amounts of rain have kept the crop alive in most areas. Some late-set tobacco received little or no rain, finally succumbed to the poor growing conditions. More fields will follow if more rain isn't received soon. Black shank and premature blooming are common in tobacco fields this year. Late-planted soybeans benefitted from limited rain in west; areas without rainfall slipped to fair condition. Cooler temperatures, additional moisture needed for good pod set. There was just enough rain to allow cotton to maintain its rapid development. High temperatures have pushed the setting of bolls nearly a week ahead of normal. Boll weevil, bud worm controls have been effective. Aphid activity increasing in many cotton fields, farmers were busy spraying. Since pastures are showing no signs of growth because of heat and lack of rain, many cattle producers are feeding hay. Farm ponds are rapidly drying up, putting more stress on cattle.

TEXAS: Temperatures ran above normal for most areas last week. Stable air mass kept rainfall near zero over eastern two thirds of State. Some coastal showers moved inland, provided some moisture for eastern coastal plains. Bulk of rain, was over West. Moist flow from Mexico circled around the stable air to the East, provided fuel for daily rains. Some storms became heavy in far West and provided unseasonable rainfall. Slightly above normal rainfall recorded in Trans-Pecos area. Temperatures averaged at or above normal except rolling Plains, Rio Grande Plains. Although only slightly above normal many areas highest temperatures so far this season. Weather pattern is expected to continue into near future.

Crops: Corn harvest continued to expand in Coastal Bend, South Texas, Rio Grande Valley, has begun in parts of Upper Coast, Central Texas. In Blacklands, crop was drying down rapidly. Crop made good progress in High Plains. Corn 85% normal, 89% 1992. Cotton fields were defoliated in Rio Grande Valley where limited harvesting began. Some producers sprayed for boll weevils, worms in Low Plains where some late planted fields were stressed from hot, windy conditions. Fruit retention good on irrigated fields in High Plains. Cotton 77% normal, 55% 1992. Rice stink bug controls were sprayed in some fields along Upper Coast. Fields continued to head, crop still lags behind normal progress. Rice 87% normal, 84% 1992. Grain sorghum: Harvesting progressed rapidly in Coastal Bend, South Texas, Rio Grande Valley. Good yields were reported. Harvest preparations were made in Blacklands, Central Texas, East Texas, Edwards Plateau as some limited harvesting had begun. Sorghum 79% normal, 83% 1992. Small grains wheat harvesting nearly completed. Peanut planting rapidly winding down. Crop made good progress. Leaf spot present in some fields in Low Plains. Producers in Central Texas cultivating to

control grasses, weeds. Peanut 79% normal, 86% 1992. Soybeans planting completed across State. Crop in Blacklands setting pods. Some fields along Upper Coast were sprayed for stink bug control. Crops continued to progress well, but a good rain is needed in all areas.

Commercial Vegetables: Rio Grande Valley land preparation continued for planting fall vegetables. San Antonio-Winter Garden peppers continued make good progress. East Texas harvesting of watermelons, cantaloupes continued. Hot temperatures and dry conditions have encouraged insects, disease in some fields. High Plains harvest of sweet corn, cucumbers, potatoes, onions continued. Trans-Pecos onion, cantaloupe harvesting continued. Peppers made good progress. Peaches late varieties ripening in Cross Timbers. Harvesting generally winding down. Pecan scab still a problem in Central Texas. Nut droppage heavy in part of Edwards Plateau. Cross Timbers area made good progress, potential for good crop. Most areas need rain.

Range and Livestock: Except for High Plains, ranges, pastures continued to deteriorate from lack of rainfall, hot temperatures. Hay baling active across state, but some producers in East Texas have suspended cutting due to dry conditions. Livestock condition remained good in most areas. Supplemental feeding has increased. In the Edwards Plateau, ranchers preparing to shear goats.

UTAH: Temperature 6° below normal, minimums 5° below normal. Precipitation was moderate in the northern mountains, north central, western divisions, extremely light to zero precipitation for the rest of the State.

Days suitable for fieldwork 6.6 Soil moisture 56% short, 44% adequate. Irrigation water supply 5% short, 95% adequate. Stockwater supply 1% short, 99% adequate. Hay, other roughage supplies 2% short, 79% adequate, 19% surplus. Winter wheat ripe 62%, 96% 1992, 80% avg.; harvested 6%, 51% 1992, 40% avg. Spring wheat ripe 40%, 74% 1992, 56% avg.; harvested 2%, 27% 1992. Barley ripe 50%, 79% 1992, 59% avg.; harvested 11%, 30% 1992. Oats ripe 28%, 55% 1992, 30% avg.; harvested for hay or silage 59%, 66% 1992. Corn height 44 in., 63 in. 1992, 55 in. avg. Corn tasseling 18%, 53% 1992, 34% avg. Alfalfa hay 2nd cutting 52% complete, 84% 1992, 61% avg. Other hay cut 63%, 75% 1992, 68% avg. Sweet cherries 100% picked. Tart cherries 33% picked. Pasture, range good to excellent.

VIRGINIA: Temperatures near to above normal. Extremes 51°, 98°. Scattered showers, thunderstorms.

Days suitable for fieldwork 5.8. Topsoil 36% very short, 54% short, 10% adequate. Pasture 12% very poor, 51% poor, 37% fair. Alfalfa 1% very poor, 27% poor, 56% fair, 16% good. Other hay 11% very poor, 23% poor, 61% fair, 5% good. Wheat 100% harvested, 99% 1992, 99% avg. Potatoes 70% harvested. Corn silked 61%, 60% 1992, 65% avg. Corn dough stage 22%, 20% 1992, 26% avg.; dented 2%, 7% 1992, 11% avg.; 8% very poor, 37% poor, 48% fair, 7% good. Peanut 60% fair, 40% good. Soybeans 100% planted, 99% 1992, 99% avg.; blooming 24%, 20% 1992, 25% avg.; setting pods 10%, 7% 1992, 10% avg.; 6% very poor, 50% poor, 40% fair, 4% good. All tobacco 14% poor, 70% fair, 16% good. Flue tobacco 3% harvested, 6% 1992, 6% avg. Peach harvest continued. Summer apple harvest just beginning. Livestock 2% very poor, 6% poor, 38% fair, 52% good, 2% excellent. Corn tasselling prematurely. Non-irrigated vegetables showing signs of extreme stress. Disease pressure in peanuts reduced by hot, dry conditions. Irrigating, topping tobacco, harvesting cucumbers, supplemental feeding to livestock.

WASHINGTON: Temperatures ran 7° below normal to 1° below normal in the west, and 13° below normal to 7° below normal in the east. Precipitation 0.51 in. to 1.79 in. west; 0.02 in. to 2.18 in. east.

Days suitable for fieldwork 4.6. Soil moisture 16% short, 81% adequate, 3% surplus. Irrigation water supply 19% short, 81% adequate. Hay and other roughage 1% short, 99% adequate. Range

and pasture 14% poor, 14% fair, 71% good, 1% excellent. Winter wheat dryland 5% fair, 95% good; irrigated 100% good. Spring wheat dryland 5% fair, 95% good; irrigated 100% good. Barley dryland 10% fair, 80% good, 10% excellent; irrigated 100% good. Potatoes 100% good. Winter wheat and winter barley harvests continued to be delayed due to wet weather. First cutting of mint continued in central part of the State. Hay crop continued to be damaged by continuous rain, with wet weather delaying second cutting of alfalfa. Raspberry harvest neared completion in some areas. Soft fruit harvest was underway in the central part of the State.

WEST VIRGINIA: Temperature 74°. Extremes 52°, 98°. Precipitation 0.62 in.

Days suitable for fieldwork 5.7. Soil moisture 13% very short, 65% short, 22% adequate. Tobacco 9% fair, 91% good. Hay 7% very poor, 22% poor, 45% fair, 26% good; 95% 1st cut, 30% 2nd cut. Pastures 18% very poor, 23% poor, 51% fair, 8% good; 82% of normal. Cattle 5% very poor, 7% poor, 3% fair, 85% good. Sheep 30% poor, 31% fair, 39% good. Apples good. Peaches fair to poor. Wheat 94% harvested. Oats 4% poor, 65% fair, 31% good; 92% ripe, 36% harvested. Corn 10% poor, 57% fair, 33% good; 30% silked, 5% dough stage. Soybeans 58% fair, 42% good; 100% emerged, 37% blooming. Gardens 5% very poor, 5% poor, 32% fair, 58% good. Farm activities: General maintenance, moving livestock, harvesting oats, peaches, cutting hay, combining wheat.

WISCONSIN: Significantly drier conditions were experienced by State. Heavy rains only occurred 24th night into 25th depositing over an inch of rain over parts of southern, eastern area. Temperature 69°; 2° below normal. Extremes 42°, 91°. Precipitation 0.60 to 1.50 in.

Days suitable for fieldwork 5.9. Soil moisture 4% short, 56% adequate, 40% surplus. Pasture 92% of normal, 73% 1992, 63% avg. General condition of crops: 1% very poor, 13% poor, 42% fair, 43% good, 1% excellent. Oats 1% very poor, 14% poor, 29% fair, 52% good, 4% excellent; Oats harvested 3%, 2% 1992, 14% avg. Corn 5% very poor, 14% poor, 41% fair, 39% good, 1% excellent; height 44 in., 55 in. 1992, 61 in. avg.; silked 3% 12% 1992, 36% avg. Soybean 2% very poor, 9% poor, 34% fair, 49% good, 6% excellent. 2nd cut alfalfa 23% harvested, 34% 1992, 49% avg. Winter wheat harvested 8% harvested, 6% 1992, 12% avg. Those crops that have survived the excess moisture flourished in last weeks favorable temperatures while others remain yellow, stunted. Insects such as leafhoppers in alfalfa, armyworms in corn are beginning to worsen. Fungal diseases are also a problem this year in various crops. Alfalfa harvest was the major activity among State farmers last week. There are still many reports of first crop being taken off the field. Much second crop was not yet ready to be harvested during the dry weather. Reporters statewide commented that the corn crop is steadily improving with some fields just beginning to tassel and silk. One reporter mentioned that an additional nitrogen application has helped to rescue his corn crop. Harvesting of oats began last week, while some fields are just starting to turn color. Winter wheat harvest is in full force for some; others comment that it will not be ready for another two weeks.

WYOMING: Temperatures generally 3 to 11° below normal. Precipitation was normal to above normal in the north, normal to below normal in the south. Douglas, Colony received the largest amounts of precipitation at 0.80 to 0.90 in. respectively.

Days suitable for fieldwork 5.2. Topsoil 19% short, 81% adequate. Subsoil 22% short, 78% adequate. Spring wheat 4% mature, 21% 1992, 32% avg. Oats 8% mature, 11% 1992, 20% avg. Barley 10% mature, 45% 1992, 42% avg. Winter wheat 61% mature, 63% 1992, 69% avg.; 6% harvested, 14% 1992, 25% avg. Corn tasseled 8%, 28% 1992, 35% avg. Dry beans 56% in bloom, 51% 1992, 57% avg. Alfalfa 1st cutting completed 88%, 83% 1992, 94% avg. Alfalfa 2nd cutting completed 1%, 9% 1992, 10% avg. Other hay harvested 54%, 49% 1992, 56% avg. Corn 42% fair, 58% good. Sugarbeets 30% fair, 47% good, 23% excellent. Other crops mostly good. Stockwater adequate to surplus.

International Weather and Crop Summary HIGHLIGHTS

July 18 - 24, 1993

FSU: Heavy rain soaked Belarus, and disrupted winter grain harvesting in western Ukraine as well. In the New Lands, wetness prevailed over the Urals, while beneficial showers fell in Kazakhstan.

EUROPE: Winter grain harvesting likely advanced in the west; beneficial rain helped corn development in Hungary.

AUSTRALIA: Rains benefited wheat across portions of eastern Australia.

EASTERN ASIA: Widespread showers continued to aid summer crops across China.

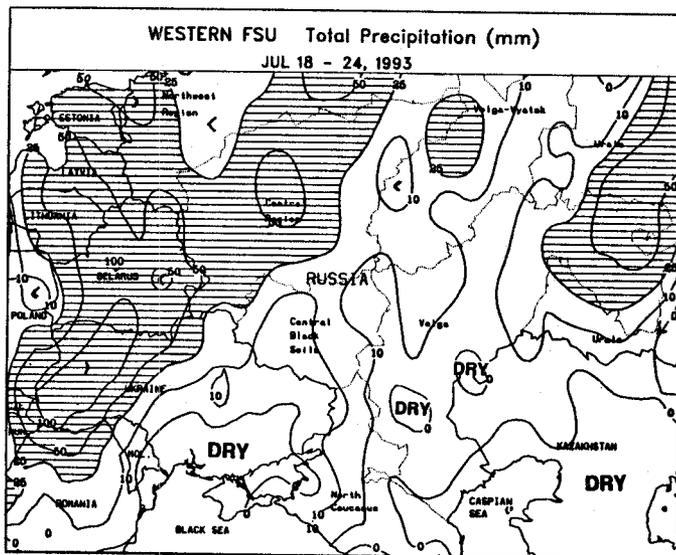
SOUTH ASIA: Drier weather helped crop development in central India. Flooding continued in eastern and northwestern parts of the region.

SOUTHEAST ASIA: Hot, dry weather stressed Indochina's immature rice and corn crops.

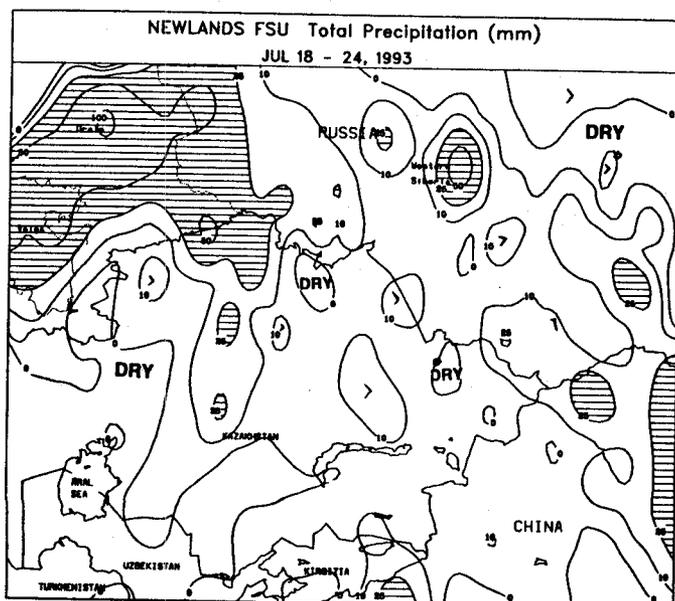
SOUTH AMERICA: Warmer temperatures favored winter wheat across southern Brazil.

CANADA: Damp conditions worsened Prairie grain and oilseed prospects.

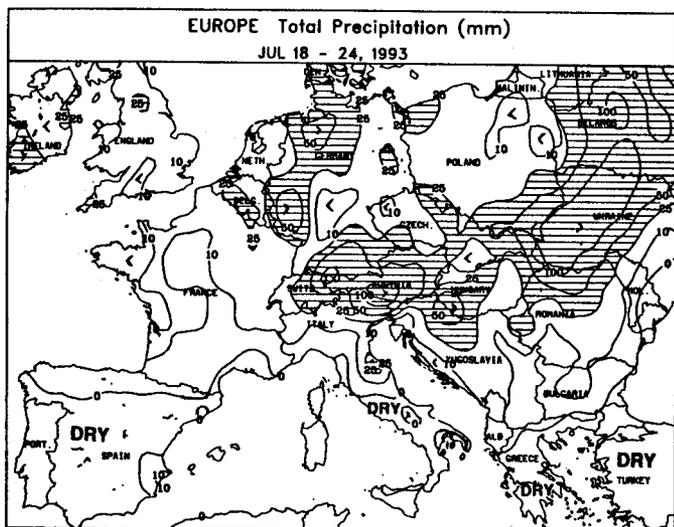
MEXICO: Seasonal rains continued to favor corn.



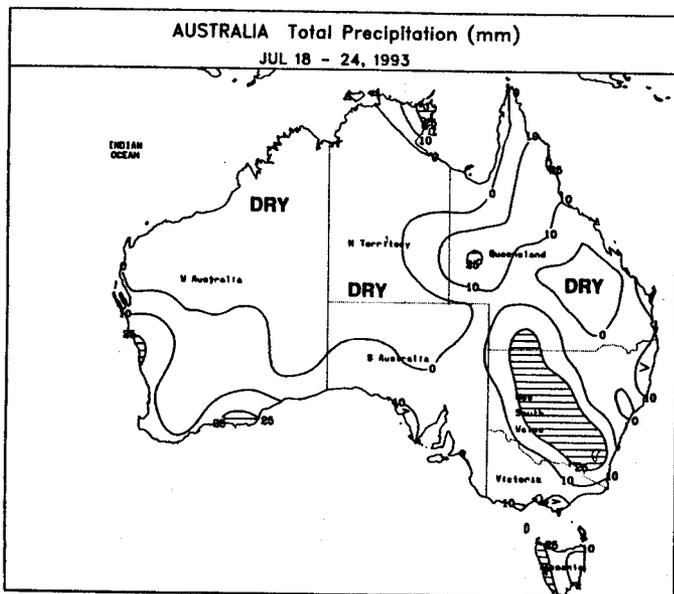
FSU-WESTERN: Soaking rain continued over Belarus, Lithuania, and western Ukraine, with weekly rainfall amounts ranging from 50 to over 100 mm. The locally heavy rain disrupted winter grain harvesting and maintained unfavorably wet field conditions for summer crop growth. Wet weather has persisted over western areas for the past 4 weeks. Elsewhere, dry weather over eastern Ukraine and the lower Volga with only light showers (10 mm or less) over Black Soils Region and upper Volga favored fieldwork. Weekly rainfall of 25-50 mm in Central Region and portions of Volga Vyatsk also promoted spring grain development and winter grain filling. Temperatures averaged 2-4 degrees Celsius (C) above normal over all but far western crop areas, promoting crop growth. Temperatures averaged near to slightly below normal in the soggy western areas.



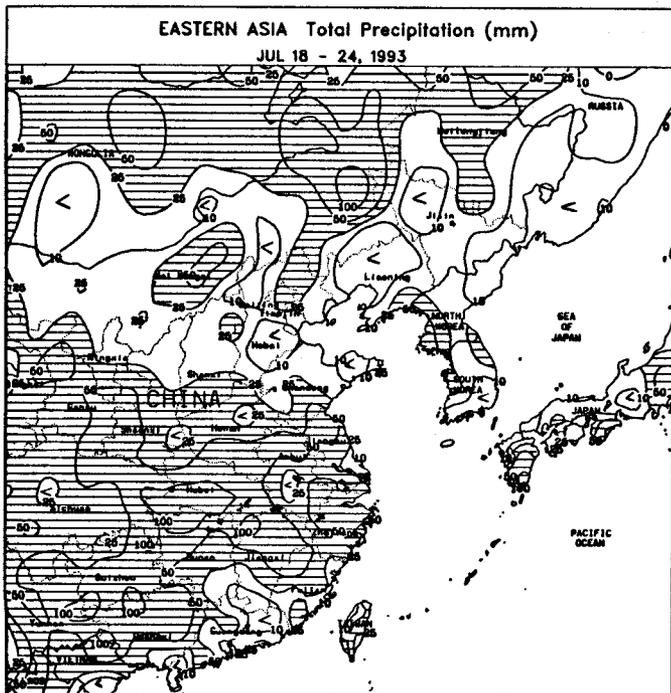
FSU-NEW LANDS: Locally heavy rain (50-100 mm) soaked much of the Urals, providing ample moisture for spring grains but causing some excess wetness following the previous week's rainfall. In Kazakhstan, beneficial showers (10-25 mm, with isolated heavier amounts) continued to favor reproductive spring grains, although areal coverage diminished from the previous week. Widespread light showers (less than 10 mm) prevailed across the remaining spring grain area, with only scattered areas experiencing dryness. Weekly temperatures averaged 2-4 degrees C above normal in the east and near to slightly below normal in the west and south.



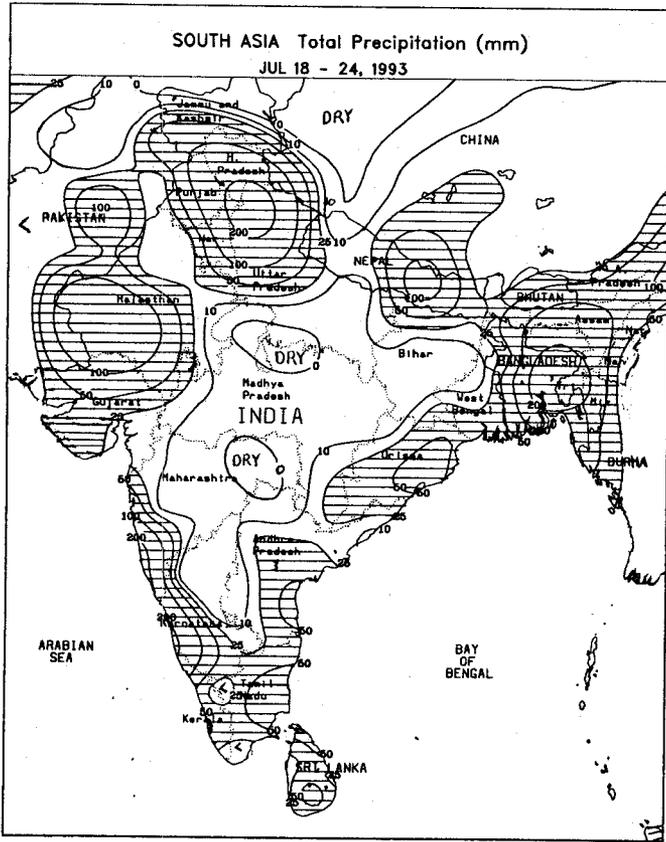
EUROPE: Periodic showers covered nearly all of Europe, with the exception of the Mediterranean region from Spain to Greece. Some winter grain harvesting likely occurred in France and England, where weekly rainfall ranged from 10 to 25 mm. Locally heavier rain (25-50 mm) soaked portions of Germany that had received substantial rainfall the previous week. Much-needed rain (10-50 mm) fell over Hungary, where corn is advancing through reproductive phases of development with limited soil moisture reserves. Showers maintained favorable growing conditions in Poland, while locally heavy rain (25-75 mm) fell over northern Romania. Rainfall diminished further south in the Balkan region, with only light showers (10 mm or less) in Bulgaria. Weekly temperatures averaged slightly below normal for the week. Widespread rain (15-50 mm or more) covered Scandinavian crop areas.



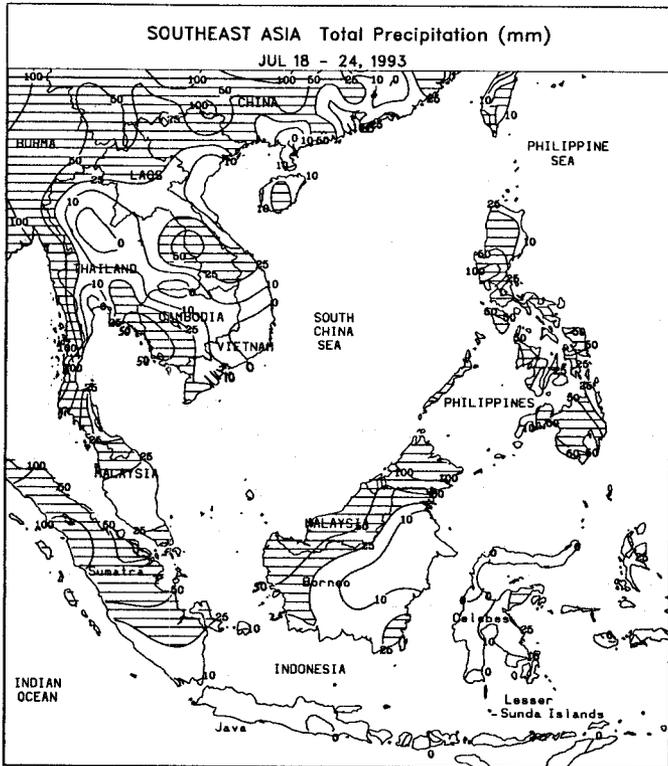
AUSTRALIA: Beneficial rain (6-46 mm) fell across most of New South Wales, favoring pastures and vegetative winter wheat. Dry, warm weather (temperatures averaged 2-4 degrees C above normal) reduced soil moisture reserves across southern Queensland and northern New South Wales. Light to moderate rain (6-20 mm) kept topsoils moist across the southern and western wheat areas.



EASTERN ASIA: Widespread moderate to heavy showers (25-115 mm) covered most of central and southern China, aiding rainfed summer crops and boosting irrigation levels. The rains alleviated dryness across Henan and Hubei. Light to moderate rain (10-30 mm) fell across Manchuria and the North China Plain, keeping soils moist for vegetative to reproductive summer crops. Across most of China, soil moisture and irrigation levels should be adequate to abundant. Temperatures averaged 2 to 5 degrees C below normal across central and northern China, while temperatures in southern China were slightly above normal.



SOUTH ASIA: Drier, warmer weather covered a large section of central India, aiding vegetative growth of grains, oilseeds, and cotton. Much-needed rain (5-91 mm) covered chronically dry areas of India's southern interior that missed last week's rain. In the east, moderate to heavy showers (25-50 mm, with local showers exceeding 100 mm) worsened local flooding in primary rice areas of India, Bangladesh, and Nepal. In the northwest, variable rainfall (15-100 mm or more) exacerbated local flooding from northern Pakistan to New Delhi but benefited vegetative oilseeds and cotton in Gujarat and Rajasthan. Both areas received drier weather at week's end, bringing some relief to flooded areas.



SOUTHEAST ASIA: Mostly dry, warm weather covered primary rice and corn areas of Indochina. Temperatures in the mid- to upper 30's C stressed Thailand's immature corn, as pockets of moderate rain (25-99 mm) brought only local relief. Moderate to heavy showers (50-100 mm or more) helped main rice areas of peninsular Thailand and northwestern Malaysia, but light rain (6-24 mm) covered western Malaysia's oil palm crop. In the Philippines, scattered showers (25-189 mm) helped immature grains and sugarcane.

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U.S. DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration
National Weather Service/Climate Analysis Center
Managing Editor **Douglas Le Conte**
Editor **Brad Rippey** (202) 720-1444
Meteorologists **David Secora**
Vilhelm Bjerknes, Jeff Savadel, and Brian Morris.

Subscriptions **Joyce Houston** (202) 720-7917

U.S. DEPARTMENT OF AGRICULTURE

Economics Management Staff
E.M.S. Editor **Sharon Lee**
National Agricultural Statistics Service
Agricultural Statistician . . **David Mueller** (202) 720-2157
State Summaries Editor . . . **Klara Haskins** (202) 720-8033
World Agricultural Outlook Board
Agricultural Weather Analysts . . **Ray Motha** (202) 720-9805
Tom Puterbaugh, Mark Brusberg, and Bob Stefanski.

(Continued from front cover)

Kaskaskia Island, IL, a 23.5-square-mile Mississippi River island formed by channel-cutting floodwaters more than 100 years ago, disappeared under the surging river. Later in the week and farther north, multiple breaks in the 55-mile Sny levee (south of Quincy, IL) inundated agricultural lowlands and forced the evacuation of the Illinois towns of East Hannibal, Hull, and Fall Creek. Along the Missouri River, several water treatment plants from Brownville, NE to near St. Joseph, MO succumbed to rising waters, leaving 85,000 people without potable water. Meanwhile in Des Moines, IA, water service (for non-drinking purposes) was restored on July 22 to 250,000 customers who had spent 11 days without tap water. Farther north, heavy rainfall caused widespread flash flooding in parts of eastern Montana and the Dakotas. River flooding continued on the Red River (Hudson Bay drainage basin) along the North Dakota-Minnesota border. In Hawaii, the disorganized remnants of eastern Pacific Hurricanes Dora and Eugene delivered copious rainfall to eastern areas. Hilo, HI recorded 10.44 inches during the week.

Elsewhere, a dozen daily record lows in the Northwest contrasted with nearly two dozen daily record highs in the Southeast. Near-freezing temperatures were observed in the Great Basin, including a reading of 32°F at Ely, NV. On Saturday, snow accumulated in the central Rockies at elevations above 10,000 feet. But in the Southeast, topsoil moisture reserves dwindled further, as daily bouts with oppressive heat were inadequately squelched by scattered afternoon thundershowers. Small wildfires ignited by lightning charred portions of the Carolinas. Chattanooga, TN concluded the week with its 29th consecutive day with a high of 90°F or more. Birmingham, AL attained 100°F 5 days in a row, its fourth longest string on record. In Atlanta, GA, highs ranged between 99°F and 102°F on each day during the week. Farther west, heat intensified and rain was scarce. Little rain has fallen from southern Arkansas to eastern Texas since the remnants of Tropical Storm Arlene drenched the region. No measurable rain has fallen in Austin, TX since June 26.

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