

WEEKLY WEATHER AND CROP BULLETIN

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

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

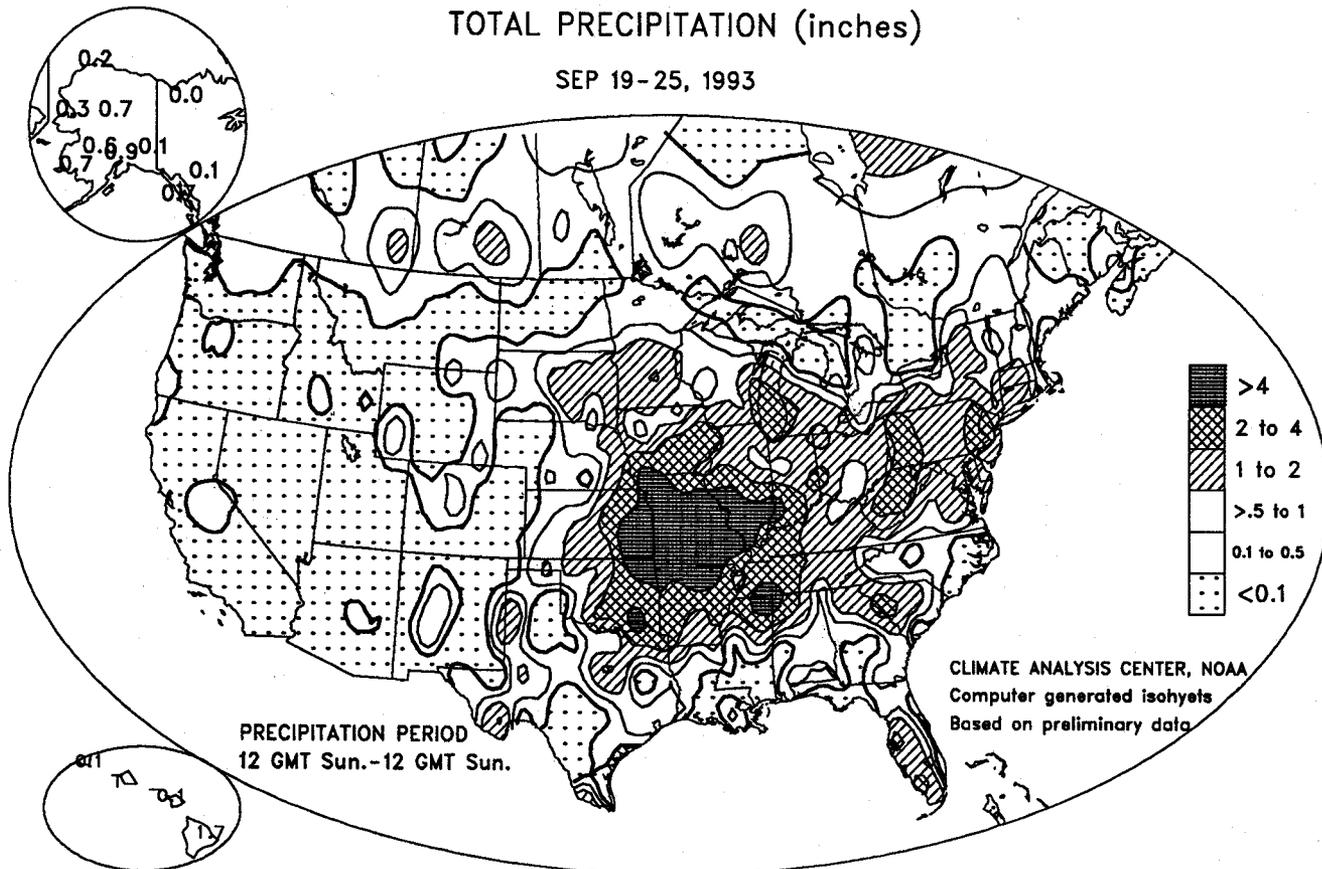
Volume 80, No. 39

Washington, D.C.

September 28, 1993

TOTAL PRECIPITATION (inches)

SEP 19-25, 1993



HIGHLIGHTS

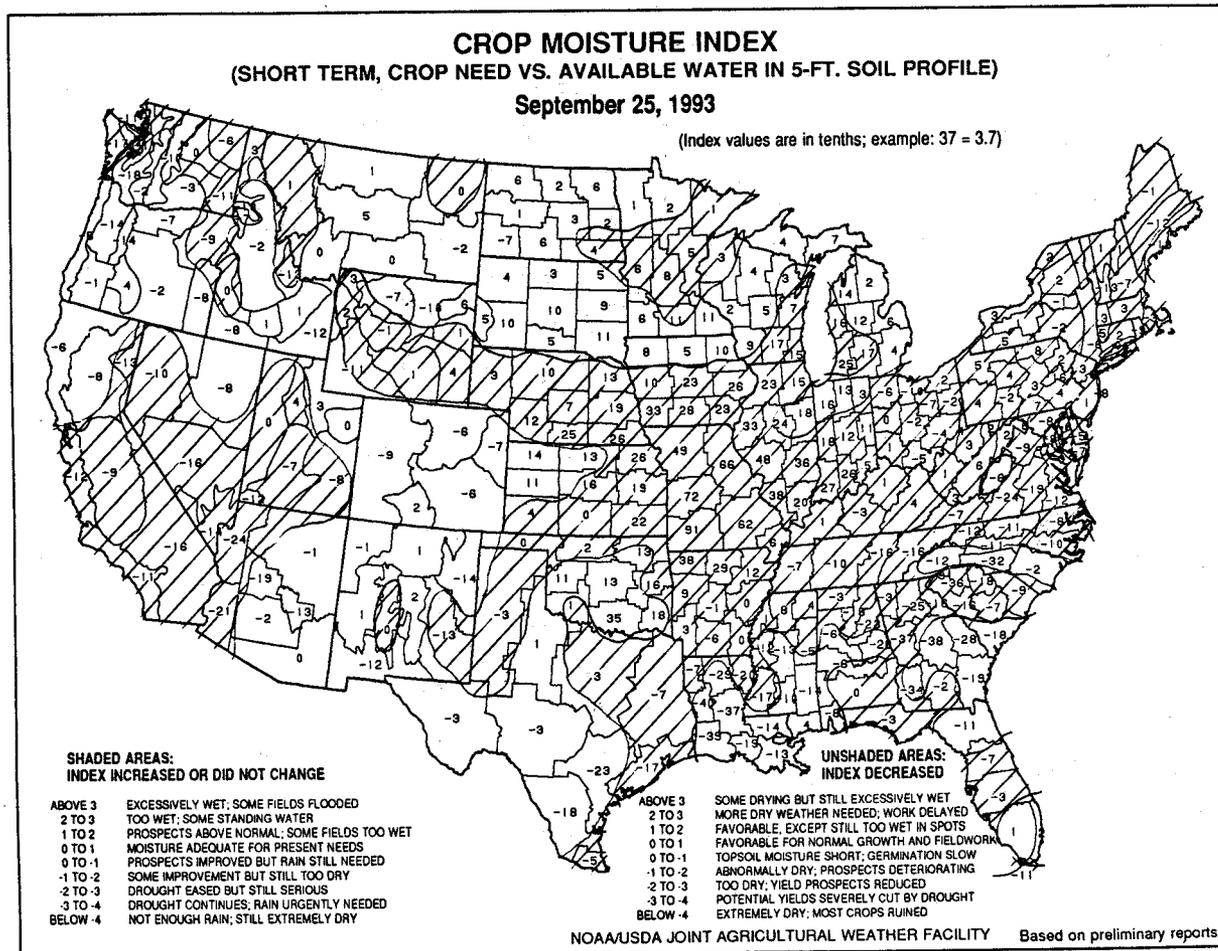
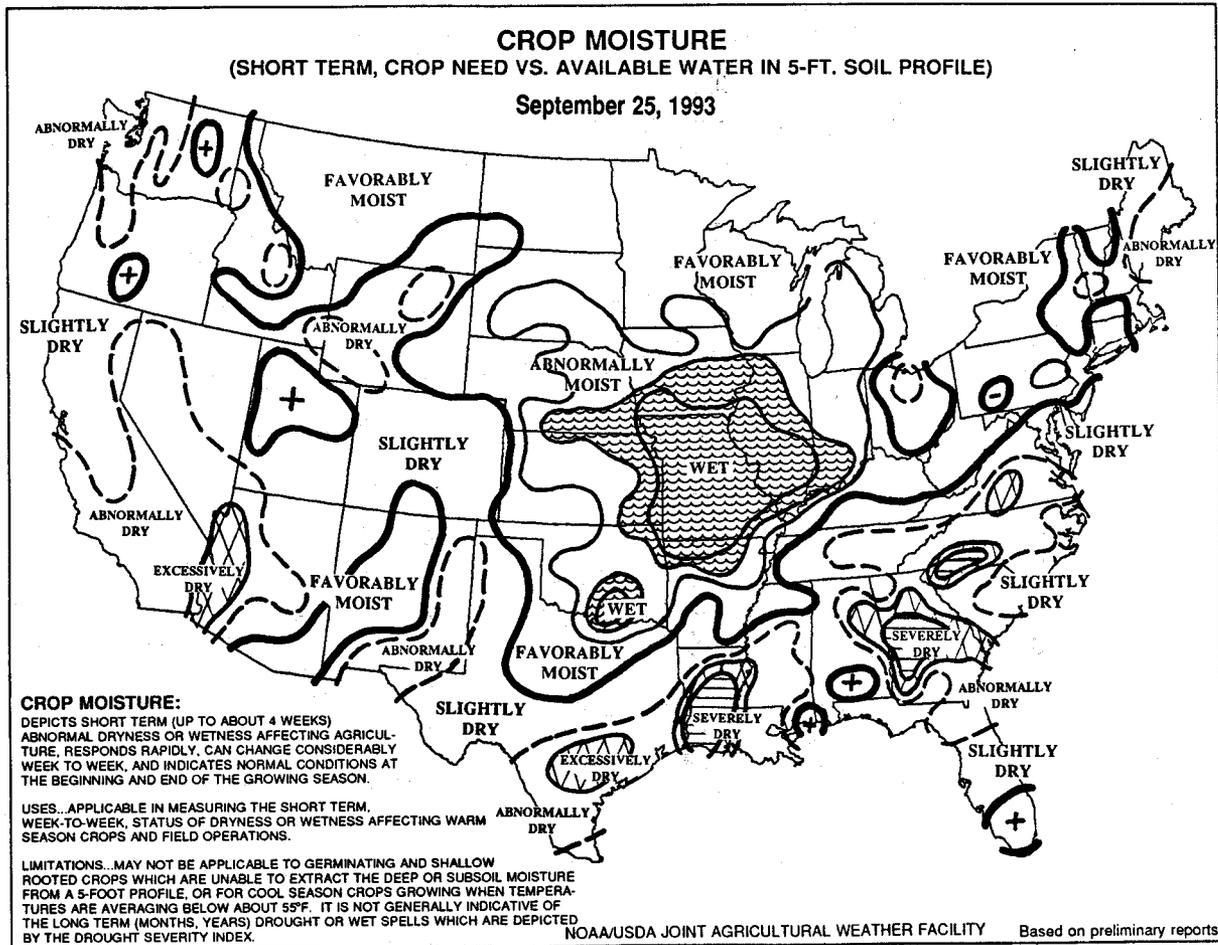
September 19 - 25, 1993

Three rounds of torrential rain brought renewed flooding to the middle Mississippi Valley. Heavier weekly totals included 9.75 inches in Springfield, MO, 6.53 inches in Columbia, MO, and 3.87 inches in Des Moines, IA. Temperatures averaged below normal across the northern half of the Nation, but remained above freezing across the Corn Belt. Early in the week, an inch or more of rain soaked the upper and middle Mississippi Valley. The heavy rain was sandwiched between cool airmasses in the Northwest and the Northeast. The first freeze of autumn occurred in locations such as Binghamton, NY (29°F) and Concord, NH (28°F) on Monday, Boise, ID (30°F) on Tuesday, and Pendleton, OR (30°F) on Wednesday. At midweek, heavy rain re-developed across Missouri and neighboring States, while summer-like heat spread across the South.

(Continued to back cover)

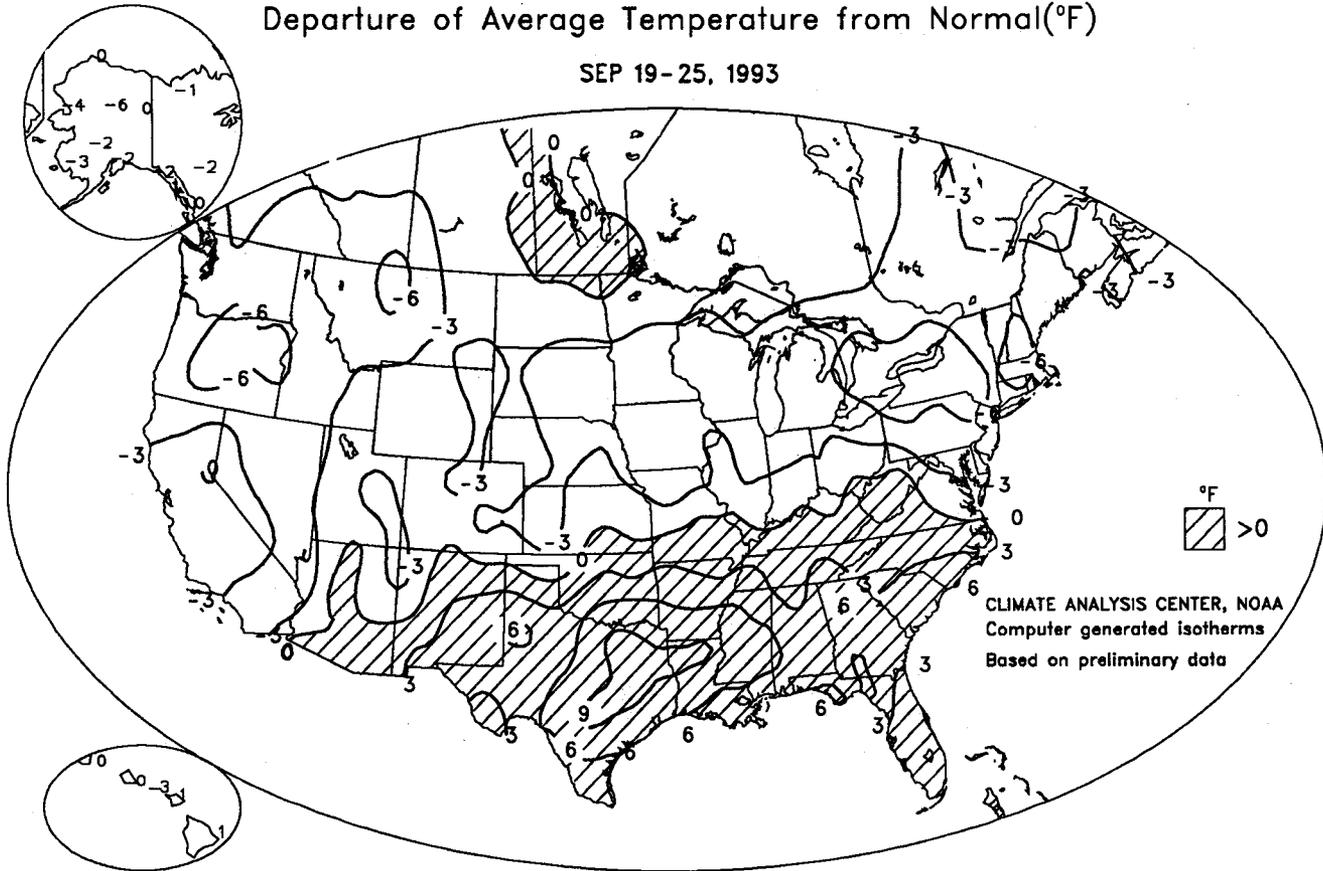
Contents

	Page
Highlights & Total Precipitation Map	1
Crop Moisture Maps	2
Temperature Departure & Extreme Minimum Temperature Maps	3
Growing Degree Day Table	4
National Weather Data for Selected Cities	5
Flood Summary Table	8
National Agricultural Summary	9
Crop Progress and Condition Tables	10
State Summaries of Weather and Agriculture	12
International Weather and Crop Summary	19
Track of Tropical Cyclone Gert	23
Subscription and Mailing Permit Information ..	24



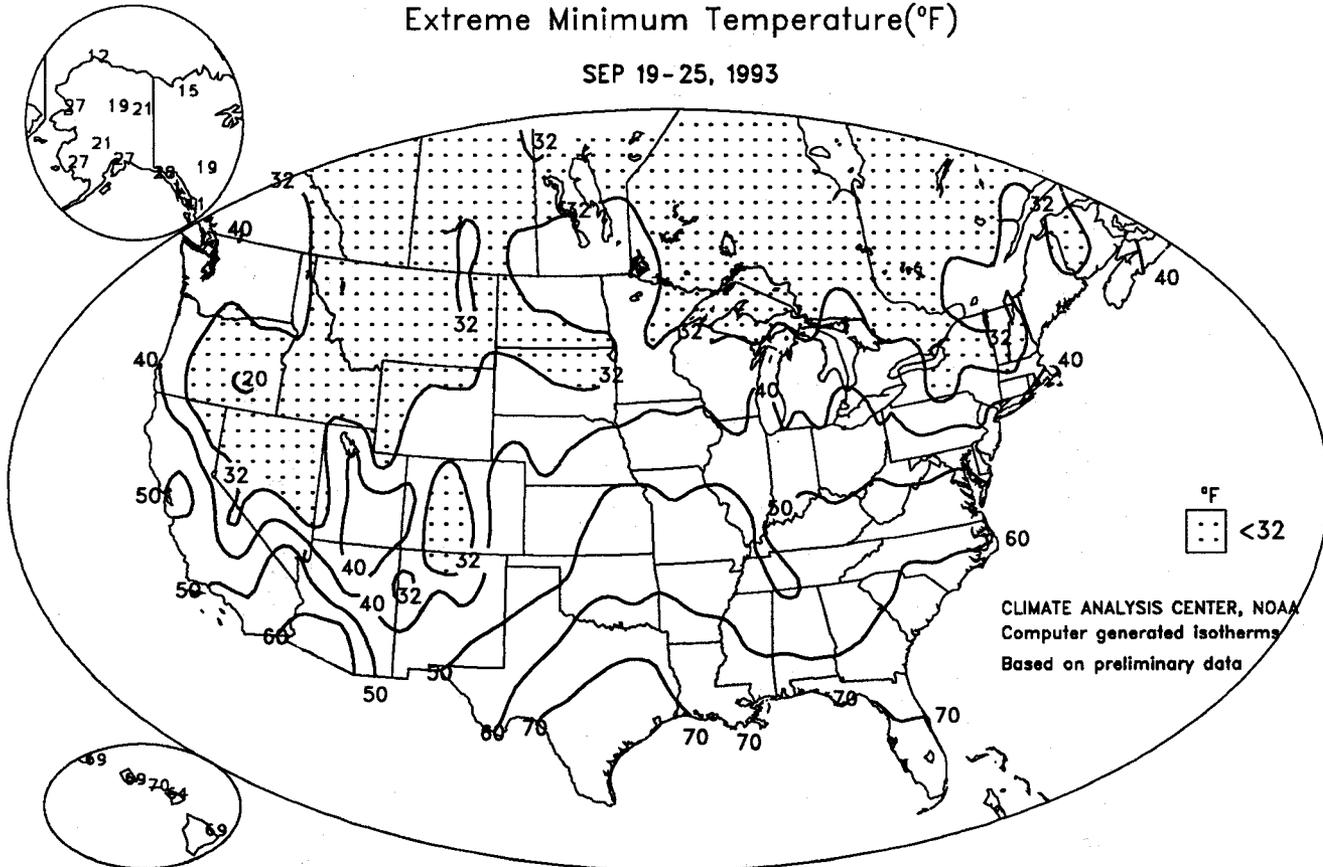
Departure of Average Temperature from Normal(°F)

SEP 19-25, 1993



Extreme Minimum Temperature(°F)

SEP 19-25, 1993



CUMULATIVE GROWING DEGREE DAYS (CORN*)

April 1 - September 25, 1993

STATES AND STATIONS	TOTAL	DEP. FROM NORMAL	STATES AND STATIONS	TOTAL	DEP. FROM NORMAL	STATES AND STATIONS	TOTAL	DEP. FROM NORMAL
AL ANNISTON	4096	+ 105	SALINA	3395	- 129	OK ALTUS	4084	- 62
BIRMINGHAM	4118	+ 40	TOPEKA/BILLARD	3315	- 137	GAGE	3624	- 66
MOBILE	4487	- 114	WICHITA	3544	- 130	HOBART	3944	- 64
MONTGOMERY	4337	+ 174	KY LEXINGTON	3473	+ 114	MCALISTER	4238	+ 143
MUSCLE SHOALS	4092	+ 142	BOWLING GREEN	3711	+ 108	PONCA CITY	3944	+ 55
OZARK	4406	+ 117	PADUCAH	3821	+ 97	TULSA	3902	- 158
TUSCALOOSA	4263	+ 56	LA LAFAYETTE	4635	+ 17	OR BAKER	1901	- 162
AZ DOUGLAS	3898	+ 187	LAKE CHARLES	4692	- 13	EUGENE	2122	- 2
FLAGSTAFF	2299	+ 231	MONROE	4412	+ 61	NORTH BEND	1539	+ 274
PHOENIX	5370	+ 592	NEW ORLEANS	4585	- 63	PENDLETON	2410	- 176
TUCSON	4606	+ 222	SHREVEPORT	4390	+ 149	REDMOND	1870	- 180
YUMA	5426	+ 502	ME AUGUSTA	2338	+ 220	PORTLAND	2339	+ 173
PRESCOTT	3187	+ 407	CARIBOU	1831	+ 213	SALEM	2280	+ 189
AR EL DORADO	4182	- 3	HOULTON	1888	+ 112	SEXTON SUMMIT	1347	- 318
FAYETTEVILLE	3705	+ 135	PORTLAND	2245	+ 242	PA ALLENTOWN	3158	+ 301
FORT SMITH	4138	+ 109	MD SALLSBURY	3559	+ 259	PHILADELPHIA	3696	+ 684
JONESBORO	4013	- 22	MA WORCESTER	2356	+ 97	WILLIAMSPORT	3048	+ 296
LITTLE ROCK	4189	+ 149	MI JACKSON	2519	- 108	SC BEAUFORT	4646	+ 281
TEXARKANA	4303	- 33	LANSING	2511	- 135	CHARLESTON	4525	+ 247
CA BAKERSFIELD	3978	- 45	MUSKEGON	2467	+ 92	COLUMBIA	4315	+ 170
BLUE CANYON	1826	- 214	PELLSTON	1945	+ 46	FLORENCE	4443	+ 293
DAGGETT	4347	+ 83	SAULT STE. MARIE	1563	- 33	SUMTER/SHAW AFB	4286	+ 170
EUREKA	1426	+ 539	TRAVERSE CITY	2314	+ 117	SD ABERDEEN	2359	- 43
FRESNO	3827	+ 269	MN DULUTH	1473	- 174	HURON	2390	- 260
MARYSVILLE	3625	+ 220	INT'L FALLS	1682	- 121	PIERRE	2429	- 241
MERCED	3586	+ 226	MINNEAPOLIS	2335	---	RAPID CITY	2095	- 372
MT SHASTA	1896	- 257	ROCHESTER	2135	---	SIoux FALLS	2450	- 252
PASO ROBLES	3019	+ 150	ALEXANDRIA	2025	- 229	WATERTOWN	2012	- 337
RED BLUFF	3493	- 145	MS BILOXI	4741	+ 33	TN BRISTOL	3458	+ 130
RIVERSIDE	3649	+ 309	COLUMBUS	4205	+ 130	CHATTANOOGA	4115	+ 300
SANTA ANA	3791	+ 586	JACKSON	4359	+ 200	CROSSVILLE	3482	+ 457
SAN DIEGO	3216	+ 150	MERIDIAN	4331	+ 119	MEMPHIS	4308	+ 111
SACRAMENTO	3235	+ 82	GREENWOOD	4326	+ 43	NASHVILLE	3962	+ 114
THERMAL	4624	- 114	MO COLUMBIA	3332	+ 10	TX ABILENE	4356	+ 22
CO ALAMOSA	1941	- 121	JOPLIN	3687	- 52	AMARILLO	3479	- 23
DENVER	2608	- 34	SPRINGFIELD	3533	+ 40	AUSTIN	4771	+ 97
EAGLE	1975	- 234	VICHY	3491	+ 6	BROWNSVILLE	5184	+ 64
GRAND JUNCTION	3062	- 177	MT HELENA	1698	- 269	COLLEGE STATION	4632	+ 20
LA JUNTA	3139	- 94	KALISPELL	1647	- 314	DALHART	3320	+ 31
DE DOVER	3435	+ 32	MILES CITY	2185	- 356	DALLAS/FT WORTH	4605	+ 221
WILMINGTON	3526	+ 335	NE GRAND ISLAND	2788	- 235	GALVESTON	5163	+ 160
FL DAYTONA BEACH	4606	- 66	NORFOLK	2751	- 179	HOUSTON/INTCNL	4753	+ 205
FORT MYERS	5025	+ 83	NORTH PLATTE	2574	- 173	KINGSVILLE/NAS	5153	+ 219
GAINESVILLE	4451	- 128	VALENTINE	2413	- 433	LAREDO	5224	+ 169
JACKSONVILLE	4525	- 94	SCOTTSBLUFF	2429	- 216	LUBBOCK	4019	+ 237
FORT LAUDERDALE	5422	+ 390	SIDNEY	2374	- 80	MCALLEN	5258	+ 284
MIAMI	5351	+ 162	NV ELKO	2048	- 266	MIDLAND	4171	+ 31
MILTON	4513	+ 116	ELY	2145	- 20	PALACIOS	4954	+ 37
PENSACOLA	4666	- 22	LAS VEGAS	4736	+ 341	SAN ANTONIO	4827	+ 91
ST PETERSBURG	5045	- 49	RENO	2556	+ 109	VICTORIA	4865	+ 125
TALLAHASSEE	4471	- 9	WINNEMUCCA	2449	- 14	WACO	4581	- 57
TAMPA	4860	- 26	NH CONCORD	2541	+ 226	WICHITA FALLS	4173	- 72
VERO BEACH	4817	+ 28	NJ NEWARK	3737	+ 537	WINK	4313	+ 93
W. PALM BEACH	5089	+ 130	NM ALBUQUERQUE	3611	+ 454	UT CEDAR CITY	2696	+ 9
GA ATHENS	4179	+ 250	CARLSBAD	4243	+ 185	VT BARRE-MONTPELIER	2109	+ 186
AUGUSTA	4346	+ 243	CLOVIS	3579	+ 213	BURLINGTON	2504	+ 285
BRUNSWICK	4612	+ 2	GALLUP	2685	+ 50	VA CHARLOTTESVILLE	3677	+ 219
COLUMBUS/METRO	4455	+ 184	TRUTH OR CONSEQ.	3866	+ 197	HAMPTON/LANGLEY	4040	+ 345
MACON	4366	+ 98	NY ALBANY	2720	+ 201	LYNCHBURG	3765	+ 434
SAVANNAH	4612	+ 223	ELMIRA	2615	+ 212	NORFOLK	4027	+ 328
ID BOISE	2438	- 176	GLENS FALLS	2485	+ 182	RICHMOND	3844	+ 260
BURLEY	2240	- 56	ROCHESTER	2547	+ 57	WA BELLINGHAM	1707	+ 177
IDAHO FALLS	1871	- 247	SYRACUSE	2582	+ 114	HOQUIAM	1560	+ 186
POCATELLO	2013	- 272	UTICA	2358	+ 52	SEATTLE-TACOMA	1926	+ 152
IL BELLEVILLE	3578	+ 100	WATERTOWN	2336	+ 12	SPOKANE	1928	- 206
CHICAGO/MIDWAY	2916	- 69	NC ASHEVILLE	3354	+ 273	TACOMA	1980	+ 90
DECATUR	3187	- 138	FAYETTEVILLE	4132	+ 235	WALLA WALLA	2631	- 94
PEORIA	3168	+ 121	GREENSBORO	3945	+ 353	WENATCHEE	2658	- 87
ROCKFORD	2797	+ 39	HICKORY	3800	+ 234	YAKIMA	2407	- 61
SPRINGFIELD	3292	+ 15	RALEIGH	3993	+ 295	WV HUNTINGTON	3525	+ 406
QUINCY	3145	- 78	WILMINGTON	4339	+ 203	MARTINSBURG	3205	+ 107
IN INDIANAPOLIS	3217	+ 67	NEW BERN	4180	+ 173	MORGANTOWN	3141	+ 143
SOUTH BEND	2812	+ 55	ND BISMARCK	1994	- 260	WI EAU CLAIRE	2208	- 172
TERRE HAUTE	3299	+ 90	DICKINSON	1742	- 383	GREEN BAY	2282	+ 39
IA DES MOINES	2846	- 257	JAMESTOWN	1924	- 283	LACROSSE	2497	- 177
MASON CITY	2380	- 374	MINOT	1772	- 306	MADISON	2629	+ 10
OTTUMWA	3011	- 105	GRAND FORKS	2026	- 105	WAUSAU	2062	- 142
KS CHANUTE	3490	- 136	OH AKRON-CANTON	2836	+ 150	CASPER	2159	- 107
DODGE CITY	3222	- 212	COLUMBUS	3157	+ 217	LANDER	2014	- 210
GARDEN CITY	3076	- 290	DAYTON	3104	+ 27	SHERIDAN	1887	- 279
GOODLAND	2634	- 223	FINDLAY	2754	- 47	WORLAND	2254	- 106
MEDICINE LODGE	3686	- 19	YOUNGSTOWN	2671	+ 157			
RUSSELL	3216	- 175	ZANESVILLE	3034	+ 160			

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 September 25, 1993

STATES AND STATIONS	TEMPERATURE °F					PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS										
	AVERAGE	MAXIMUM	AVERAGE	MINIMUM	EXTREME	EXTREME	AVERAGE	DEPARTURE	WEEKLY	DEPARTURE	GREATEST IN	TOTAL, IN.,	PCT. NORMAL	TOTAL, IN.,	PCT. NORMAL	AVERAGE	MAXIMUM	AVERAGE	MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH	OR MORE	.50 INCH	OR MORE
			HIGH	LOW		FROM NORMAL	TOTAL, IN.	FROM NORMAL	24-HOUR, IN.	SINCE Sept 1	SINCE Sept 1	SINCE Jan 1	SINCE Jan 1	SINCE Jan 1	SINCE Jan 1										
AL BIRMINGHAM	88	62	91	55	75	3	.2	-1.7	.1	4.3	129	29.2	70	97	45	2	0	2	0	0	0	0	0	0	
MOBILE	93	71	94	66	82	3	.1	-1.3	.1	3.2	63	48.4	95	94	49	6	0	0	0	0	0	0	0	0	
MONTGOMERY	94	64	96	57	79	3	.1	-1.7	.1	1.4	45	36.4	85	94	40	7	0	1	0	0	0	0	0	0	
AK ANCHORAGE	50	37	59	27	44	3	.3	-1.4	.4	2.7	121	11.2	99	82	51	0	0	2	0	0	0	0	0	0	
BARROW	32	23	34	13	28	3	.4	-1.3	.2	1.5	288	4.4	129	87	71	0	0	0	0	0	0	0	0	0	
FAIRBANKS	46	29	57	19	37	3	.9	-1.7	.8	2.2	264	9.0	108	87	45	0	0	4	0	0	0	0	0	0	
JUNEAU	52	45	56	40	48	3	3.5	1.9	1.5	5.2	94	36.8	102	100	85	0	0	0	0	0	0	0	0	0	
KODIAK	54	39	59	31	47	3	.9	-1.8	.4	3.1	53	49.2	106	88	57	0	0	1	0	0	0	0	0	0	
NOME	41	28	43	21	35	3	.1	-1.5	.0	2.0	93	11.1	98	90	57	0	0	6	0	0	0	0	0	0	
AZ PHOENIX	99	71	104	67	85	3	.0	-1.2	.0	.1	8	9.3	177	41	15	7	0	0	0	0	0	0	0	0	
FRESNO	84	47	94	43	66	3	.0	-1.4	.0	.1	5	13.6	90	92	19	1	0	0	0	0	0	0	0	0	
TUCSON	97	64	103	57	80	3	.0	-1.4	.0	.5	32	13.1	145	91	17	7	0	0	0	0	0	0	0	0	
YUMA	100	72	103	66	86	3	.0	-1.1	.0	.1	44	3.6	166	54	15	7	0	0	0	0	0	0	0	0	
AR FORT SMITH	87	67	93	61	77	3	3.6	2.9	1.6	6.1	229	35.6	120	91	67	7	0	0	0	0	0	0	0	0	
LITTLE ROCK	88	65	93	60	72	3	1.2	-1.1	.7	2.0	53	31.8	90	89	60	2	0	0	0	0	0	0	0	0	
CA BAKERSFIELD	88	57	93	55	72	3	.0	-1.1	.0	.0	0	6.6	162	50	16	2	0	0	0	0	0	0	0	0	
EUREKA	61	47	69	45	54	3	.0	-1.3	.0	.0	4	30.4	137	93	59	0	0	0	0	0	0	0	0	0	
FRESNO	88	54	93	51	71	3	.0	-1.1	.0	.0	0	11.5	160	79	18	0	0	0	0	0	0	0	0	0	
LOS ANGELES	72	61	74	58	67	3	.0	-1.1	.0	.0	0	18.5	225	90	71	0	0	0	0	0	0	0	0	0	
REDDING	89	52	96	46	71	3	.0	-1.2	.0	.0	0	36.3	180	62	12	2	0	0	0	0	0	0	0	0	
SACRAMENTO	86	51	91	48	69	3	.0	-1.1	.0	.0	0	19.1	172	88	23	1	0	0	0	0	0	0	0	0	
SAN DIEGO	72	62	73	59	67	3	.0	-1.1	.0	.0	0	15.5	239	85	65	0	0	0	0	0	0	0	0	0	
SAN FRANCISCO	74	51	85	49	62	3	.0	-1.1	.0	.0	0	19.4	156	91	48	0	0	0	0	0	0	0	0	0	
CO DENVER	71	45	85	40	58	3	.0	-1.3	.0	2.3	214	10.7	84	88	38	0	0	0	0	0	0	0	0	0	
GRAND JUNCTION	80	50	87	43	65	3	.0	-1.3	.0	.4	48	9.4	128	76	16	0	0	0	0	0	0	0	0	0	
PUEBLO	75	41	90	33	58	3	.0	-1.2	.0	.2	23	12.5	129	87	32	1	0	0	0	0	0	0	0	0	
CT BRIDGEPORT	67	51	72	44	59	3	.8	.0	.5	3.5	135	24.0	78	91	47	0	0	0	0	0	0	0	0	0	
HARTFORD	65	45	75	35	55	3	.9	.0	.3	3.7	116	31.9	100	94	53	0	0	0	0	0	0	0	0	0	
DC WASHINGTON	72	58	76	53	65	3	.9	.1	.5	2.9	103	28.8	100	91	62	0	0	0	0	0	0	0	0	0	
FL APALACHICOLA	91	72	93	68	81	3	.6	-1.1	.4	3.4	52	37.6	87	91	62	0	0	0	0	0	0	0	0	0	
DAYTONA BEACH	88	71	89	68	80	3	.3	-1.1	.3	2.5	46	26.2	70	94	62	0	0	0	0	0	0	0	0	0	
JACKSONVILLE	91	69	92	66	80	3	.7	-1.1	.7	7.4	124	33.5	85	98	56	7	0	0	0	0	0	0	0	0	
KEY WEST	89	80	90	78	84	3	.1	-1.3	.1	3.6	73	25.5	87	79	63	2	0	0	0	0	0	0	0	0	
MIAMI	89	78	91	76	84	3	.7	-1.1	.6	12.2	190	46.8	105	83	57	2	0	0	0	0	0	0	0	0	
ORLANDO	91	72	93	70	82	3	.5	-1.1	.5	4.7	90	38.3	95	94	53	7	0	0	0	0	0	0	0	0	
TALLAHASSEE	95	69	96	66	82	3	.2	-1.0	.1	1.8	36	42.1	79	94	46	7	0	0	0	0	0	0	0	0	
TAMPA	92	73	94	70	83	3	.5	-1.1	.4	5.8	110	31.0	83	91	52	7	0	0	0	0	0	0	0	0	
WEST PALM BEACH	90	75	90	70	82	3	.7	-1.7	.7	4.7	79	43.6	98	91	59	5	0	0	0	0	0	0	0	0	
CA ATLANTA	90	66	92	63	78	7	.6	-1.2	.6	3.5	122	37.3	96	83	41	4	0	0	0	0	0	0	0	0	
AUGUSTA	91	65	94	61	78	5	1.4	-1.7	.8	3.4	132	29.7	84	94	50	6	0	0	0	0	0	0	0	0	
MACON	93	64	96	57	79	5	.7	-1.6	.7	1.0	43	37.1	106	90	41	7	0	0	0	0	0	0	0	0	
SAVANNAH	91	71	94	68	81	6	.9	.0	.9	6.5	166	37.7	92	92	50	6	0	0	0	0	0	0	0	0	
HI HILO	84	71	87	69	77	1	1.6	-1.4	1.2	5.3	74	75.1	82	92	68	0	0	0	0	0	0	0	0	0	
HONOLULU	87	72	91	69	80	-1	.7	-1.2	.7	.6	102	4.0	31	82	59	1	0	0	0	0	0	0	0	0	
KAHULUI	90	71	94	65	80	2	.7	-1.6	.7	.8	317	8.2	60	75	52	4	0	0	0	0	0	0	0	0	
LIHUE	86	72	86	69	79	0	.7	-1.6	.7	.5	25	10.7	39	81	61	0	0	0	0	0	0	0	0	0	
ID BOISE	71	39	78	30	55	-5	.0	-1.2	.0	.0	0	10.9	130	88	20	0	0	0	0	0	0	0	0	0	
LEWISTON	70	43	75	37	57	-5	.0	-1.2	.0	.0	4	10.9	119	57	24	0	0	0	0	0	0	0	0	0	
POCATELLO	71	37	75	26	54	-3	.0	-1.2	.0	.3	39	15.7	179	84	20	0	0	0	0	0	0	0	0	0	
IL CHICAGO	67	49	77	38	58	-5	1.5	-1.7	1.2	4.1	124	39.8	145	97	55	0	0	0	0	0	0	0	0	0	
MOLINE	68	54	76	43	61	-1	1.6	-1.7	1.6	4.0	116	47.7	155	95	63	0	0	0	0	0	0	0	0	0	
PEORIA	70	54	74	47	62	-2	.9	-1.0	.9	7.6	234	48.3	173	95	66	0	0	0	0	0	0	0	0	0	
QUINCY	67	55	73	50	61	-4	2.0	-1.9	.7	6.5	164	31.9	105	91	67	0	0	0	0	0	0	0	0	0	
ROCKFORD	66	49	78	37	58	-3	2.0	-1.1	1.9	3.7	113	38.6	137	98	65	0	0	0	0	0	0	0	0	0	
SPRINGFIELD	70	54	76	47	62	-3	2.1	-1.3	1.4	5.7	204	40.3	150	96	68	0	0	0	0	0	0	0	0	0	
IN EVANSVILLE	75	59	82	53	67	-1	2.6	-1.9	1.3	5.5	211	32.7	95	96	68	0	0	0	0	0	0	0	0	0	
FORT WAYNE	70	52	75	42	61	-2	.8	-1.2	.6	4.1	181	34.6	132	95	61	0	0	0	0	0	0	0	0	0	
INDIANAPOLIS	70	54	75	46	62	-2	1.1	-1.4	.9	5.2	215	37.6	124	97	74	0	0	0	0	0	0	0	0	0	
SOUTH BEND	66	48	70	38	57	-5	1.2	-1.4	.7	6.6	215	37.5	129	94	54	0	0	0	0	0	0	0	0	0	
IA DES MOINES	67	51	73	47	59	-2	3.9	-3.0	3.3	5.8	181	52.3	191	96	55	0	0	0	0	0	0	0	0	0	
SIOUX CITY	67	48	77	40	58	-3	.3	-1.3	.3	1.3	53	29.0	134	97	51	0	0	0	0	0	0	0	0	0	
WATERLOO	67	49	75	40	58	-1	1.2	-1.4	.5	2.8	94	49.5	180	100	68	0	0	0	0	0	0	0	0	0	
KS CONCORDIA	71	54	89	50	63	-2	.9	-1.2	.4	3.1	121	41.9	172	98	59	0	0	0	0	0	0	0	0	0	
DODGE CITY	75	53	95	47	64	-3	.7	-1.3	.7	.3	52	23.9	129	93	51	1	0	0	0	0	0	0	0	0	
GOODLAND	71	46	89	42	59	-2	.7	-1.3	.7	.2	22	17.4	109	94	43	0	0	0	0	0	0	0	0	0	
TOPEKA	73	56	90	50	64	-2	3.3	-2.4	1.6	6.0	188	42.9	152	97	70	0	0	0	0	0	0	0	0	0	
WICHITA	81	56	96	53	68	-1	.9	-1.0	.8	1.8	54	29.3	105	95	55	2	0								

Weather Data for the Week Ending September 25, 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 Sept 1	PCT. NORMAL SINCE Sept 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE	MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																			.01 INCH OR MORE	.50 INCH OR MORE	.01 INCH OR MORE	.50 INCH OR MORE
ME CARIBOU	61	38	66	31	49	-2	.1	.7	.1	4.1	140	27.7	106	88	39	0	2	2	0	0		
PORTLAND	63	41	70	33	52	-4	.1	.6	.1	1.7	67	28.3	94	88	45	0	0	0	0	0		
MD BALTIMORE	71	54	74	50	63	-4	.5	.2	.2	2.4	83	30.2	99	96	53	0	0	0	0	0		
SALISBURY	75	53	79	47	64	-3	.7	.1	.1	2.6	82	36.2	105	96	61	0	0	0	0	0		
MA BOSTON	67	50	72	43	58	-4	.2	.5	.1	3.0	116	28.4	97	89	41	0	0	0	0	0		
CHATHAM	64	52	67	46	58	-3	.5	.4	.5	3.0	98	26.1	82	93	49	0	0	0	0	0		
MI ALPENA	62	37	68	32	50	-6	.1	.6	.1	1.0	38	20.5	93	98	51	0	1	1	0	0		
DETROIT	67	51	71	43	59	-2	.9	.3	.5	3.6	146	25.3	103	94	52	0	0	0	0	0		
FLINT	63	44	66	36	54	-6	.8	.1	.4	3.6	117	26.0	114	96	53	0	0	0	0	0		
GRAND RAPIDS	63	46	71	38	55	-4	1.8	.8	1.2	6.9	192	37.3	141	99	55	0	0	0	0	0		
HOUGHTON LAKE	61	40	66	34	51	-5	.2	.6	.1	1.6	55	22.1	103	94	52	0	0	0	0	0		
LANSING	64	45	68	36	54	-4	1.5	.7	.1	4.0	123	29.6	126	99	63	0	0	0	0	0		
MARQUETTE	62	39	68	27	50	-1	.5	.9	.4	3.4	99	24.5	96	92	49	0	1	1	0	0		
MUSKEGON	63	45	71	37	54	-5	1.8	.9	1.1	3.7	112	30.5	133	100	59	0	0	0	0	0		
SAULT ST. MARIE	61	36	69	29	49	-5	.3	.6	.1	3.7	120	23.7	98	97	49	0	1	2	0	0		
MN ALEXANDRIA	60	43	71	35	52	-4	1.1	.5	.7	1.7	74	24.0	114	91	60	0	0	0	0	0		
DULUTH	58	41	68	33	50	-2	.4	.4	.2	1.5	47	27.7	116	97	57	0	0	0	0	0		
INT'L FALLS	62	38	71	33	50	-1	.3	.4	.2	1.7	63	19.2	96	96	50	0	0	0	0	0		
MINNEAPOLIS	61	44	66	37	53	-5	1.0	.4	.6	1.8	76	29.1	126	95	59	0	0	0	0	0		
ROCHESTER	60	44	64	36	52	-5	1.0	.2	.4	2.7	91	35.8	148	97	66	0	0	0	0	0		
MS GREENWOOD	94	68	96	61	81	8	.4	.8	.4	1.6	59	31.6	80	93	44	7	0	0	0	0		
JACKSON	92	68	93	60	80	6	.6	.7	.4	1.9	77	35.6	88	98	44	7	0	0	0	0		
MERIDIAN	95	66	97	58	80	7	.4	.8	.4	1.4	46	40.1	94	92	43	7	0	0	0	0		
MO CAPE GIRARDEAU	78	61	87	54	69	1	2.9	.8	1.2	7.3	241	38.1	111	91	69	0	0	0	0	0		
COLUMBIA	72	55	87	51	64	-1	6.5	.6	2.1	12.1	368	54.8	190	99	74	0	0	0	0	0		
KANSAS CITY	70	55	86	51	63	-3	3.6	.4	1.5	7.6	185	46.5	155	96	71	0	0	0	0	0		
SAINT LOUIS	74	60	79	55	67	-1	4.3	.6	1.8	8.7	332	45.4	162	97	66	0	0	0	0	0		
SPRINGFIELD	78	60	88	54	69	2	9.2	.1	3.1	17.4	433	48.7	150	94	68	0	0	0	0	0		
MT BILLINGS	68	40	76	33	54	-2	.2	.3	.1	1.7	146	13.1	108	89	29	0	0	0	0	0		
GLASGOW	66	38	75	33	52	-2	.1	.1	.1	.6	70	15.1	158	93	38	0	0	0	0	0		
GREAT FALLS	60	34	69	29	47	-7	.5	.2	.4	1.7	160	20.7	163	94	41	0	0	0	0	0		
HAVRE	60	34	72	25	47	-7	.2	.2	.4	3.5	12.7	134	95	44	0	3	3	1	0	0		
HELENA	64	34	70	28	49	-4	.3	.0	.3	1.3	126	17.6	180	94	37	0	0	0	0	0		
KALISPELL	61	32	68	28	47	-4	.3	.1	.3	1.6	148	19.6	158	97	44	0	0	0	0	0		
MILES CITY	70	41	81	34	55	-2	.7	.2	.1	1.2	17.2	146	79	36	0	0	0	0	0	0		
MISSOULA	66	31	72	25	48	-5	.2	.2	.3	3.6	11.2	106	93	31	0	0	0	0	0	0		
NE GRAND ISLAND	70	49	85	44	60	-2	.7	.0	.3	1.5	62	30.3	141	95	53	0	0	0	0	0		
LINCOLN	68	52	80	47	60	-3	1.9	1.1	.6	3.7	124	23.4	100	99	68	0	0	0	0	0		
NORFOLK	69	48	82	42	59	-2	1.3	.7	.5	3.2	151	31.6	148	95	52	0	0	0	0	0		
NORTH PLATTE	71	45	88	38	58	-1	.2	.4	.7	5.3	23.1	136	94	50	0	0	0	0	0	0		
OMAHA	67	51	76	46	59	-3	1.9	1.1	.8	3.4	109	39.0	162	97	60	0	0	0	0	0		
SCOTTSBLUFF	70	42	84	39	56	-3	.1	.2	.1	2.1	237	19.7	151	89	33	0	0	0	0	0		
VALENTINE	69	45	79	39	57	-4	.3	.2	.3	1.2	59	17.6	90	87	40	0	0	0	0	0		
NV ELY	73	28	75	25	51	-4	.0	.3	.0	.2	17	8.2	105	85	14	0	0	0	0	0		
LAS VEGAS	91	61	95	58	76	-2	.0	.1	.0	.0	0	4.6	153	41	14	5	0	0	0	0		
RENO	78	40	84	36	59	1	.0	.1	.0	.0	0	4.9	94	85	11	0	0	0	0	0		
WINNEMUCCA	74	35	80	25	55	-3	.0	.1	.0	.0	10	6.3	109	84	14	0	2	2	0	0		
NH CONCORD	61	38	71	28	50	-7	.4	.2	.4	2.5	109	19.5	75	97	50	0	2	2	0	0		
NJ ATLANTIC CITY	70	50	76	40	60	-4	.6	.1	.3	2.3	90	29.1	97	96	54	0	0	0	0	0		
NM ALBUQUERQUE	85	54	89	47	69	3	.2	.0	.2	.5	58	7.2	104	70	21	0	0	0	0	0		
CLOVIS	86	57	91	48	71	5	.2	.3	.2	.6	34	12.5	85	92	27	2	0	0	0	0		
ROSWELL	91	60	95	49	75	4	.1	.4	.1	.9	49	9.2	90	72	22	5	0	1	0	0		
NY ALBANY	64	43	71	31	53	-6	.1	.5	.1	2.3	94	30.2	113	97	49	0	1	1	0	0		
BINGHAMTON	60	42	67	29	51	-6	.5	.3	.2	2.8	100	31.0	114	96	54	0	1	4	0	0		
BUFFALO	64	41	71	36	52	-8	.6	.1	.4	2.3	79	26.7	97	89	46	0	0	0	0	0		
NEW YORK	69	55	75	48	62	-4	.7	.1	.3	3.5	122	31.6	101	87	45	0	0	0	0	0		
ROCHESTER	63	42	70	34	53	-7	.4	.3	.2	3.2	127	19.9	85	95	51	0	0	0	0	0		
SYRACUSE	64	43	71	34	54	-6	.4	.4	.4	2.4	76	32.9	117	93	49	0	0	0	0	0		
NC ASHEVILLE	78	56	82	50	67	3	.3	.6	.3	1.3	35	29.6	70	97	55	0	0	0	0	0		
CHARLOTTE	81	64	87	61	73	2	.1	.7	.1	.9	31	27.5	85	84	56	0	0	0	0	0		
GREENSBORO	78	60	85	57	69	1	.1	.7	.1	2.8	94	35.2	109	90	62	0	0	0	0	0		
HATTERAS	82	68	84	62	75	2	.2	1.0	.2	2.3	52	38.8	95	82	57	0	0	0	0	0		
NEW BERN	83	65	86	60	74	2	.1	1.1	.1	2.4	55	35.5	81	93	55	0	0	0	0	0		
RALEIGH	81	61	87	56	71	2	.1	.6	.1	3.2	117	28.4	89	90	58	0	0	0	0	0		
WILMINGTON	88	69	91	65	79	7	.2	1.3	.2	7.0	120	47.2	104	93	55	3	0	0	0	0		
ND BISMARCK	66	38	76	26	52	-2	.2	.2	.2	.3	20	25.1	188	96	42	0	3	1	0	0		
FARGO	66	43	76	31	54	-1	.3	.2	.1	.5	27	18.8	117	96	50	0	1	3	0	0		
GRAND FORKS	66	42	76	36	54	1	.3	.2	.3	.8	39	19.7	128	86	47	0	0	0	0	0		
WILLISTON	67	37	74	29	52	-2	.1	.2	.1	.3	25	17.5	150	95	38	0	3	1	0	0		
OH AKRON-CANTON	67	48	70	40	58	-4	.9	.1	.6	3.4	119	27.6	99	96	56	0	0	0	0	0		
CINCINNATI	72	54	76	49	63	-2	.9	.3	.6	2.7	110	29.3	93	98	67	0	0	0	0	0		
CLEVELAND	68	49	71	42	58	-4	1.4	.6	1.2	4.2	143	29.1	107	93	51	0	0	0	0	0		
COLUMBUS	72	54	76	47	63	1	.4	.3	.4	1.5	57	27.9	98	96	66	0	0	0	0	0		
DAYTON	70	51	73	44	61	-3	2.3	1.7	2.2	4.5	209	40.0	144	95	63	0	0	0	0	0		

Based on 1961-90 normals.

Weather Data for the Week Ending September 25, 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 Sept 1	PCT. NORMAL SINCE Sept 1	TOTAL, IN., SINCE Jan 1		PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.
													.01 INCH OR MORE						.50 INCH OR MORE	.01 INCH OR MORE	.50 INCH OR MORE
TOLEDO	69	50	74	40	59	-2	.7	.1	.7	3.7	150	23.6	95	96	59	0	0	3	1		
YOUNGSTOWN	66	44	70	36	55	-5	.6	-.2	.5	2.6	87	25.5	91	95	52	0	0	2	0		
OK OKLAHOMA CITY	84	64	90	59	74	3	.7	-.3	.6	3.3	105	29.8	114	97	66	2	0	2	1		
TULSA	81	62	90	58	72	1	1.3	.1	.7	6.9	176	34.5	112	99	70	1	0	3	2		
OR ASTORIA	64	43	70	38	54	-4	.0	-.8	.0	-.1	5	34.4	87	97	51	0	0	0	0		
BURNS	69	26	77	19	48	-5	.0	-.1	.0	.0	0	8.0	118	71	20	0	6	0	0		
MEDFORD	80	36	88	34	58	-5	.0	-.2	.0	.0	0	12.9	121	91	16	0	0	0	0		
PENDLETON	70	42	78	30	56	-5	.0	-.1	.0	.0	0	11.8	149	88	27	0	0	0	0		
PORTLAND	73	46	80	42	59	-2	.0	-.4	.0	.0	0	22.3	102	92	39	0	0	0	0		
SALEM	74	39	80	35	57	-3	.0	-.4	.0	.0	0	25.4	111	93	32	0	0	0	0		
PA ALLENTOWN	67	46	71	37	57	-6	.7	-.2	.5	4.9	148	37.0	114	95	53	0	0	4	0		
ERIE	64	49	67	42	56	-6	1.3	.3	.7	3.5	96	25.7	87	89	54	0	0	3	1		
HARRISBURG	67	52	71	46	60	-4	1.0	.2	.6	7.1	240	36.7	121	90	59	0	0	4	1		
PHILADELPHIA	71	56	78	47	64	-1	1.0	.1	.6	4.9	141	31.9	93	87	53	0	0	4	1		
PITTSBURGH	69	51	72	43	60	-2	1.0	.3	.8	2.9	114	28.1	100	93	54	0	0	3	1		
SCRANTON	64	43	70	33	54	-7	1.2	.4	.5	4.8	172	27.4	100	95	53	0	0	4	1		
RI PROVIDENCE	67	48	72	39	57	-5	.2	-.6	.1	2.1	72	27.6	85	92	49	0	0	3	0		
SC CHARLESTON	88	70	92	67	79	4	.9	-.1	.9	4.8	116	43.5	103	95	59	2	0	1	1		
COLUMBIA	87	67	91	60	77	5	1.4	-.7	1.2	3.9	123	30.3	76	96	55	2	0	2	1		
FLORENCE	87	68	91	63	77	5	.6	-.1	.6	2.2	74	26.6	76	94	49	2	0	2	1		
GREENVILLE	82	60	87	54	71	2	.2	-.8	.1	1.5	44	30.3	78	91	59	0	0	2	0		
SD ABERDEEN	64	41	74	31	53	-4	.9	.4	.8	1.2	69	25.3	139	97	60	0	1	1	1		
BURON	64	42	75	32	53	-5	1.5	1.1	1.4	1.8	122	26.9	157	98	58	0	1	1	1		
RAPID CITY	67	42	75	36	55	-3	.6	.3	.6	1.5	140	17.7	124	89	46	0	0	2	1		
STOUX FALLS	65	46	73	35	55	-3	1.3	.6	1.3	1.9	73	33.7	170	98	64	0	0	1	1		
TN CHATTANOOGA	89	61	92	55	75	5	.1	-.9	.1	1.0	28	29.0	73	95	48	4	0	0	0		
KNOXVILLE	81	58	85	52	69	1	2.2	1.4	1.8	3.7	143	31.4	88	97	59	0	0	2	1		
MEMPHIS	89	66	93	58	78	6	2.1	1.3	.9	3.7	125	32.4	86	94	52	3	0	4	2		
NASHVILLE	83	60	89	53	72	2	1.8	1.0	1.2	3.0	101	32.9	93	95	55	0	0	4	2		
TX ABILENE	89	70	94	63	80	5	.7	-.1	.7	2.4	90	14.3	76	86	46	6	0	1	1		
AMARILLO	84	56	91	48	70	3	.2	-.2	.2	1.0	58	16.3	97	93	39	2	0	1	0		
AUSTIN	98	76	99	75	87	8	.0	-.8	.0	.3	10	21.9	93	90	40	7	0	0	0		
BEAUMONT	93	75	94	71	84	7	.3	-1.1	.3	1.5	28	53.0	125	96	59	7	0	1	0		
BROWNSVILLE	92	76	95	73	84	3	.8	-.7	.5	1.9	37	19.0	94	95	60	7	0	4	1		
CORPUS CHRISTI	93	76	95	74	85	5	.0	-1.3	.0	.6	13	29.7	127	94	52	7	0	0	0		
DEL RIO	94	74	95	73	84	6	.0	-.7	.0	.7	29	13.3	71	85	50	7	0	0	0		
EL PASO	91	64	95	51	77	5	.7	-.3	.0	1.3	90	8.3	120	72	28	4	0	2	0		
FORT WORTH	94	74	98	68	84	11	.6	-.6	.4	3.1	78	23.3	84	88	45	6	0	2	0		
GALVESTON	90	81	91	78	85	7	.5	-.9	.3	4.2	83	34.8	110	83	65	5	0	2	0		
HOUSTON	94	75	96	74	85	7	.1	-1.2	.1	.9	19	46.6	121	96	50	7	0	2	0		
LUBBOCK	90	63	94	56	77	8	.0	-.6	.0	.2	11	11.6	77	84	32	4	0	1	0		
MIDLAND	88	65	93	59	76	4	1.0	.3	1.0	2.1	76	14.9	122	87	48	4	0	2	1		
SAN ANGELO	88	69	93	65	79	5	.7	-.2	.7	2.0	70	13.8	88	91	48	5	0	1	1		
SAN ANTONIO	97	76	99	75	87	9	.1	-.8	.1	.5	18	27.9	121	90	41	7	0	1	0		
VICTORIA	93	75	94	74	84	7	.8	-.7	.6	1.8	33	43.7	131	96	54	7	0	4	1		
WACO	95	74	97	72	85	8	.7	-.9	.0	2.6	91	21.9	93	94	47	7	0	0	0		
WICHITA FALLS	90	69	93	61	80	7	.2	-.8	.2	3.0	86	23.9	96	92	56	5	0	1	0		
UT CEDAR CITY	78	40	80	33	59	-2	.0	-.2	.0	.1	12	8.0	93	76	12	0	0	0	0		
SALT LAKE CITY	75	48	83	44	62	-4	.0	-.3	.0	.2	21	14.7	124	83	26	0	0	0	0		
VT BURLINGTON	63	41	69	31	52	-1	.7	.0	.7	2.5	89	25.2	99	95	48	0	1	1	1		
VA NORFOLK	78	62	85	57	70	0	.5	-.4	.4	3.5	105	27.7	80	84	57	0	0	2	0		
RICHMOND	77	58	84	54	67	-1	1.0	.3	.7	2.6	92	32.6	100	98	61	0	0	4	1		
ROANOKE	74	58	82	55	66	1	.7	-.1	.4	4.2	143	29.2	96	95	59	0	0	3	0		
WA QUILLAYUTE	62	40	66	34	51	-5	.1	-1.2	.1	.2	6	44.9	71	98	52	0	0	2	0		
SEATTLE-TACOMA	65	46	69	43	56	-3	.0	-.5	.0	.0	2	20.6	94	95	46	0	0	0	0		
SPOKANE	64	36	71	32	50	-6	.1	.0	.1	.3	47	10.8	99	94	36	0	1	1	0		
YAKIMA	70	33	77	30	52	-7	.0	-.1	.0	.0	9	4.7	93	92	31	0	5	0	0		
WV BECKLEY	71	55	75	49	63	2	.8	.0	.5	2.8	100	28.6	91	95	63	0	0	5	0		
CHARLESTON	75	57	81	53	66	0	2.3	1.6	1.5	4.5	165	29.5	92	95	63	0	0	3	2		
HUNTINGTON	75	58	78	51	66	3	1.4	.7	1.2	4.1	149	31.5	96	97	63	0	0	3	1		
PARKERSBURG	73	55	78	51	64	-1	1.1	.4	.6	2.6	102	29.3	92	98	62	0	0	4	1		
WI GREEN BAY	62	45	65	38	53	-4	1.2	.5	1.2	2.7	91	29.4	131	98	59	0	0	3	1		
LACROSSE	62	47	69	41	54	-5	.0	-.8	.0	1.0	29	37.7	152	98	64	0	0	0	0		
MADISON	63	46	72	35	55	-4	1.0	.2	.6	3.6	113	40.4	159	95	63	0	0	4	1		
MILWAUKEE	65	51	79	45	58	-1	2.5	1.8	1.8	3.9	136	33.8	134	94	63	0	0	3	2		
WAUSAU	60	42	64	35	51	-5	.7	-.3	.5	3.8	102	31.4	120	92	57	0	0	3	1		
WY CASPER	69	43	78	39	56	1	.7	-.2	.0	.9	121	13.2	133	86	33	0	0	0	0		
CHEYENNE	62	41	78	38	52	-3	.7	.4	.7	3.2	290	15.5	124	84	41	0	0	1	1		
LANDER	68	40	77	38	54	-2	.2	-.1	.1	.4	44	13.2	128	78	29	0	0	2	0		
SHERIDAN	69	35	81	27	52	-2	.2	-.2	.2	.6	52	14.5	125	94	25	0	2	1	0		

Based on 1961-90 normals.

IMPACTS OF THE 1993 FLOODS

Heavy rains brought renewed flooding to the middle Mississippi Valley last week, affecting areas still recovering from the spring-summer flood. The following table summarizes impacts from the earlier floods, which affected a nine-State area in the upper and middle Mississippi Valley primarily from mid-June through early August. Dollar damage estimates are based on information from the Office of Hydrology, National Weather Service (NWS). Crop data comes from USDA. Additional information was supplied by the Climate Analysis Center, NWS, and the Office of Hydrology.

- o **At least 48 lives lost**
- o **Preliminary damage estimates ranging from \$10 to \$20 billion, probably the costliest flood of this century (in both nominal and real dollars)**
- o **The second costliest weather disaster this century (second to Hurricane Andrew in Florida and Louisiana, August, 1992)**
- o **More than 54,000 individuals evacuated from their homes**
- o **At least 50,000 homes destroyed or damaged**
- o **Seventy-seven small towns along rivers completely flooded**
- o **Nearly half a million individuals left without potable running water**
- o **Out of 1,347 non-Federal levees, 1,043 (77%) breached or damaged**
- o **Out of 229 Federal levees, 40 (17%) breached or damaged**
- o **Approximately 1,000 miles of navigable rivers closed to navigation**
- o **Both corn (7.2 bil. bu.) and soybean (1.9 bil. bu.) production the lowest since 1988; dropping 24% and 13%, respectively, from 1992**
- o **Nearly 8 million acres (12,200 square miles, an area more than twice the size of Connecticut) of crops not planted or lost after planting due to flooding or excessive rains**
- o **Previous peak flood crest of 1973 exceeded for over 3 weeks at St. Louis**
- o **Some locations on the Mississippi River in flood for almost 6 consecutive months, including Hannibal and Clarksville, MO**

National Agricultural Summary

September 20 - 26, 1993

HIGHLIGHTS: Rain fell over much of the eastern half of the Nation last week, causing planting and harvesting delays. Heavy amounts fell over the middle Mississippi Valley, damaging crops and flooding low-lying fields. Temperatures averaged below normal over the northern half of the country, with frost generally found in the areas that had received a killing freeze in mid-September, although scattered light frost was reported in the Northeast. Temperatures in the South remained rather warm.

SMALL GRAINS: Winter wheat planted in the 19 major wheat-producing States reached 38 percent (%), compared with 46% by this time in 1992 and 40% average. Planting progress accelerated in Colorado, Oklahoma, Oregon, and Nebraska. Excessive moisture hindered progress in South Dakota and Kansas. Some fields in Texas and the Southeast needed additional moisture. The spring wheat harvest reached 78% complete, compared with 88% last year and 97% average. Shriveled kernels were a problem for some spring wheat fields in Idaho. The late-planted and slow-maturing crop has caused harvest to be behind average in all five States. Harvests of barley, rye, and oats continued in the northern Great Plains and Northwest, with progress behind average.

CORN: Corn in the dough stage in the 17 major producing States reached 96%, compared with 98% a year ago and 99% average. Corn in the dent stage was 86%, compared with 88% last year and 95% average. Although denting progress was behind average, it was ahead of last year's progress in 13 of the 17 major States. Around 40% of the Nation's crop was rated mature, compared with 42% last year and 70% average. Crop maturity was ahead of last year and average in the Southeast and the upper Ohio Valley. Crop maturity in Illinois, Indiana, Michigan, and Wisconsin was ahead of last year but behind average. Corn harvest was completed on 7% of the Nation's acreage, compared with 7% last year and 17% average. Harvest progress was ahead of last year and average in the Southeast. The cool conditions caused corn condition to decline slightly with 49% of the crop rated good to excellent, compared with 50% last week.

SOYBEANS: Soybeans dropping leaves in the 19 major producing States occurred on 45% of the acreage, compared with 60% last year and 62% average. Soybean harvest advanced, with 2% of the acreage harvested, compared with 6% last year and 11% average. Harvesting progress was ahead of average in the lower Mississippi and Ohio Valleys. This week's rain over the Ohio Valley was beneficial to the late-planted soybeans. Soybean condition increased slightly with 46% of the crop good to excellent, compared with 45% last week.

COTTON: Cotton boll opening progress in the 14 producing States advanced to 75%, compared with 57% last year and 63% average. Progress was ahead of average in all major producing States. Cotton harvest, at 14%, compared with 11% last year and 13% average. Harvest progress was behind average in the lower Mississippi Valley. Yields from early harvested fields in Tennessee were adversely affected by previous insect problems. For the Nation, cotton crop condition decreased, with 50% good to excellent, compared with 46% last week.

SORGHUM: Grain sorghum coloring in the 12 major States averaged 90%, compared with 80% last year and 90% average. Coloring progress was equal or ahead of average in the Mississippi Delta, Texas, Kansas, and Illinois. Sorghum maturity reached 52%, compared with 46% last year and 64% average. In Texas,

Mississippi, and New Mexico, crop maturity was ahead of average. Sorghum harvested at 33% equaled last year and compared with an average of 37%. Harvest progress was ahead of average in Texas, Oklahoma, and New Mexico. Last week's scattered light frost in Kansas damaged some sorghum leaves. Sorghum crop condition was described as 65% good to excellent, compared with 62% last week.

RICE: Progress of the rice harvest reached 47%, compared with 69% last year and 57% average. Harvest progress lagged last year and average in all five States. Rice condition declined slightly from last week, with 61% rated good to excellent.

OTHER FIELD CROPS: Dry conditions caused the Georgia peanut crop to be rated over 40% poor and very poor. In Virginia, the dry weather and insects caused the crop to be 100% poor or very poor. In Texas, scattered showers helped some dry-land peanut fields. However, continued dry conditions in the Texas Blacklands have reduced dry-land peanut yield potential. Tobacco harvest in North Carolina, Kentucky, and Tennessee continued with progress behind normal. Weather conditions in Tennessee allowed late-set tobacco to make good growth and provided good curing conditions. The potato harvest advanced. Progress was equal to normal in Maine, ahead of normal in Colorado and North Dakota, and behind normal in Minnesota. Almost 25% of the crop was harvested in Idaho. Wet conditions hindered the potato harvest in Wisconsin.

FRUIT AND NUTS: The Florida citrus groves remained in good condition with adequate moisture. Some fruit split was reported in wet areas. In California, the Valencia orange harvest neared completion and the new crop navel orange harvest progressed. Apple harvests advanced nationally, with cool temperatures bringing good color to the fruit. The almond harvest neared completion in California. The walnut and pistachio harvests advanced. The Texas pecan crop showed potential for a good to excellent crop.

VEGETABLES: Winter vegetable planting continued in California, Arizona, Texas, and Florida. Frost damage occurred to some vegetables in New York and New Jersey. The harvesting of sweet corn for processing in Minnesota continued to lag average. Some pepper and tomato fields in the Rio Grande Valley of Texas suffered insect damage. Some vegetable fields in east Texas needed rain. Cooler conditions along California's central coast were beneficial for broccoli and cauliflower crops.

PASTURE AND LIVESTOCK: Pasture feed conditions remained average to good across the Nation except in the Southeast, and along parts of the Gulf coast, where they continued poor to fair. Pasture feed conditions across the central parts of the Nation remained about the same or improved slightly with this week's rain. Feed supplies across the country were mostly adequate, although producers in Tennessee were concerned about a possible winter feed shortage. In the West, the movement of livestock from summer ranges to fall pastures continued. Nationally, livestock conditions rated good.

Crop Progress

for the Week Ending September 26, 1993

SOYBEANS
(Percent Dropping Leaves)

	Current	Last Wk	1992	Avg.
AL	30	28	24	30
AR	17	9	16	11
GA	37	26	37	37
IL	56	27	73	71
IN	70	41	71	66
IA	35	15	68	76
KS	55	35	70	65
KY	35	25	37	34
LA	56	34	51	35
MI	55	25	50	60
MN	22	9	73	88
MS	35	8	47	37
MO	37	14	60	50
NE	51	23	57	76
NC	19	14	20	17
OH	90	70	64	62
SC	4	2	9	8
SD	40	28	60	89
TN	34	21	28	30
19 States	45	24	60	62

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

COTTON
(Percent Bolls Opening)

	Current	Last Wk	1992	Avg.
AL	75	72	50	75
AZ	100	98	98	95
AR	72	60	62	69
CA	95	85	100	94
GA	86	74	52	66
LA	92	90	94	89
MS	91	74	90	89
MO	81	73	46	69
NM	69	50	56	68
NC	90	81	54	78
OK	60	40	23	39
SC	90	85	79	76
TN	91	85	75	77
TX	60	53	31	41
14 States	75	67	57	63

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

COTTON
(Percent Harvested)

	Current	Last Wk	1992	Avg.
AL	6	N/A	2	20
AZ	21	N/A	21	11
AR	8	N/A	5	7
CA	1	N/A	5	1
GA	12	N/A	2	11
LA	15	N/A	16	23
MS	5	N/A	9	19
MO	0	N/A	0	9
NM	0	N/A	0	0
NC	9	N/A	0	0
OK	2	N/A	0	0
SC	12	N/A	3	8
TN	9	N/A	2	8
TX	27	N/A	20	18
14 States	14	N/A	11	13

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

SOYBEANS
(Percent Harvested)

	Current	Last Wk	1992	Avg.
AL	2	N/A	1	4
AR	3	N/A	6	1
GA	0	N/A	0	0
IL	2	N/A	13	19
IN	2	N/A	9	14
IA	1	N/A	4	14
KS	1	N/A	10	10
KY	2	N/A	3	2
LA	15	N/A	15	9
MI	0	N/A	0	2
MN	1	N/A	2	17
MS	4	N/A	9	6
MO	0	N/A	5	5
NE	0	N/A	10	15
NC	0	N/A	0	0
OH	8	N/A	2	7
SC	0	N/A	0	0
SD	0	N/A	0	18
TN	1	N/A	0	0
19 States	2	N/A	6	11

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

WINTER WHEAT
(Percent Planted)

	Current	Last Wk	1992	Avg.
AR	3	0	4	1
CA	1	1	0	0
CO	73	45	82	62
GA	1	1	2	3
ID	24	14	46	32
IL	1	1	4	6
IN	5	4	6	12
KS	30	20	45	40
MI	20	15	15	25
MO	6	4	6	10
MT	20	6	58	62
NE	70	47	82	73
NC	10	9	10	10
OH	4	2	4	8
OK	51	26	46	35
OR	51	16	24	25
SD	80	65	84	79
TX	43	31	48	44
WA	69	50	76	62
19 States	38	24	46	40

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

CORN
(Percent Harvested)

	Current	Last Wk	1992	Avg.
CO	0	0	0	4
GA	90	81	81	85
IL	2	1	4	21
IN	3	2	2	13
IA	3	1	3	15
KS	25	15	30	45
KY	30	14	19	23
MI	1	0	1	3
MN	0	0	0	8
MO	15	11	18	32
NE	1	0	2	12
NC	64	53	45	48
OH	5	3	0	5
PA	1	0	1	3
SD	0	0	0	12
TX	78	71	72	78
WI	2	0	0	4
17 States	7	5	7	17

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

CORN
(Percent Dough)

	Current	Last Wk	1992	Avg.
CO	98	97	96	98
GA	100	100	100	100
IL	99	97	99	99
IN	100	100	100	100
IA	92	85	99	100
KS	100	100	100	100
KY	100	100	100	100
MI	100	100	85	96
MN	90	86	99	99
MO	100	100	100	100
NE	100	100	100	100
NC	100	100	100	100
OH	100	100	100	100
PA	97	95	92	94
SD	91	86	97	100
TX	100	100	100	100
WI	86	71	81	95
17 States	96	93	98	99

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

CORN
(Percent Dent)

	Current	Last Wk	1992	Avg.
CO	86	71	83	89
GA	100	100	100	100
IL	96	94	90	97
IN	99	97	99	97
IA	78	64	93	99
KS	96	95	90	98
KY	99	98	98	98
MI	100	70	50	80
MN	61	40	87	97
MO	93	89	97	100
NE	95	91	94	98
NC	100	98	100	100
OH	97	95	94	93
PA	76	68	54	64
SD	62	52	80	96
TX	100	99	98	99
WI	68	42	63	85
17 States	86	76	88	95

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

CORN
(Percent Mature)

	Current	Last Wk	1992	Avg.
CO	23	15	32	48
GA	100	100	100	100
IL	54	36	44	76
IN	56	36	46	65
IA	34	20	56	85
KS	75	65	80	90
KY	86	73	73	74
MI	25	7	5	30
MN	6	3	17	64
MO	58	43	77	87
NE	34	16	38	76
NC	97	94	95	96
OH	45	30	24	36
PA	16	9	7	18
SD	20	11	24	74
TX	89	83	86	94
WI	16	9	15	50
17 States	40	27	42	70

These 17 States produced 94 of the 1992 corn crop.

**SORGHUM
(Percent Coloring)**

	Current	Last Wk	1992	Avg.
AR	100	98	100	95
CO	56	48	61	77
IL	90	84	89	89
KS	90	80	65	85
LA	100	99	100	99
MS	99	97	100	99
MO	86	78	93	91
NE	85	74	83	94
NM	76	67	89	92
OK	86	74	90	98
SD	72	45	58	90
TX	95	91	85	92
12 States	90	82	80	90

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

**SORGHUM
(Percent Mature)**

	Current	Last Wk	1992	Avg.
AR	87	77	93	88
CO	23	20	25	32
IL	43	20	49	61
KS	30	15	15	45
LA	93	90	100	96
MS	93	80	100	91
MO	54	38	64	61
NE	20	5	15	65
NM	13	8	7	9
OK	27	22	16	39
SD	18	11	20	66
TX	82	78	76	79
12 States	52	42	46	64

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

**SORGHUM
(Percent Harvested)**

	Current	Last Wk	1992	Avg.
AR	52	44	75	61
CO	0	0	0	5
IL	1	0	4	6
KS	3	2	2	15
LA	78	69	92	85
MS	65	49	80	71
MO	18	12	21	24
NE	0	0	1	12
NM	1	0	0	1
OK	11	9	5	6
SD	0	0	0	14
TX	72	70	69	66
12 States	33	31	33	37

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

**SPRING WHEAT
(Percent Harvested)**

	Current	Last Wk	1992	Avg.
ID	72	61	100	99
MN	84	73	73	94
MT	38	33	85	96
ND	81	68	90	98
SD	99	99	100	100
5 States	78	68	88	97

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

**RICE
(Percent Harvested)**

	Current	Last Wk	1992	Avg.
AR	36	23	62	44
CA	10	5	35	13
LA	84	76	90	89
MS	31	26	68	55
TX	79	72	97	98
5 States	47	38	69	57

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

**Crop Condition
(Percent)**

for the Week Ending Sept. 26, 1993

RICE

State	VP	P	F	G	EX
AR	0	0	29	71	0
CA	0	0	5	85	10
LA	0	0	75	25	0
MS	0	0	57	38	5
TX	0	0	35	65	0
5 State	0	0	39	59	2
Prev Week	0	0	38	61	1
Prev Year	N/A	N/A	N/A	N/A	N/A

CORN

State	VP	P	F	G	EX
CO	3	8	26	52	11
GA	15	19	41	25	0
IL	0	1	10	77	12
IN	0	1	18	76	5
IA	1	21	63	14	1
KS	0	0	19	63	18
KY	0	0	62	38	0
MI	1	4	20	50	25
MN	19	44	33	4	0
MO	0	20	54	26	0
NE	1	5	30	61	3
NC	10	33	46	11	0
OH	3	12	36	42	7
PA	3	9	34	42	12
SD	6	15	50	25	4
TX	0	5	15	70	10
WI	1	7	39	50	3
17 State	3	13	35	43	6
Prev Week	3	12	35	44	6
Prev Year	1	3	16	63	17

SOYBEANS

State	VP	P	F	G	EX
AL	0	19	50	31	0
AR	0	3	59	38	0
GA	14	38	37	11	0
IL	0	1	12	77	10
IN	0	1	17	75	7
IA	1	15	63	20	1
KS	0	0	20	62	18
KY	0	0	58	41	1
LA	0	18	62	20	0
MI	1	4	20	50	25
MN	18	39	37	6	0
MS	0	2	78	20	0
MO	1	8	56	35	0
NE	0	1	33	64	2
NC	1	15	57	26	1
OH	3	11	35	43	8
SC	14	25	44	17	0
SD	4	24	49	21	2
TN	0	9	39	50	2
19 State	3	11	40	41	5
Prev Week	3	11	41	40	5
Prev Year	1	3	20	63	13

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

SORGHUM

State	VP	P	F	G	EX
AR	0	13	46	41	0
CO	0	6	30	52	12
IL	0	0	16	76	8
KS	0	1	25	54	20
LA	0	5	55	40	0
MS	0	0	59	41	0
MO	0	4	58	36	2
NE	0	10	47	43	0
NM	6	23	30	41	0
OK	0	2	29	68	1
SD	1	11	55	28	5
TX	0	3	20	70	7
12 State	0	4	31	57	8
Prev Week	0	6	32	51	11
Prev Year	0	2	18	58	22

COTTON

State	VP	P	F	G	EX
AL	0	19	60	21	0
AZ	0	0	15	75	10
AR	0	0	40	60	0
CA	0	0	0	85	15
GA	3	25	57	15	0
LA	0	10	75	15	0
MS	0	32	58	10	0
MO	0	9	82	9	0
NM	0	0	25	65	10
NC	0	16	64	18	2
OK	0	0	53	47	0
SC	7	40	51	2	0
TN	0	23	36	41	0
TX	0	4	34	56	6
14 State	0	9	41	46	4
Prev Week	1	10	43	43	3
Prev Year	1	5	52	38	4

State Summaries of Weather and Agriculture

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

ALABAMA: Rainfall 0.04 to 3.81 in. north; 0.39 to 2.44 in. central; 0.03 to 0.42 in. south. Temperatures 1 to 6° above normal north; 1 to 7° above normal central; 2 to 6° above normal south. Lows 49 to 60° north; 51 to 59° central; 54 to 66° south. Highs 86 to 92° north; 89 to 96° central; 93 to 96° south.

Days suitable for fieldwork 6.2. Soil moisture 59% short, 41% adequate. Corn harvested 68%, 65% 1992, 76% avg. Sorghum harvested 28%, 34% 1992, 53% avg.; 14% poor, 73% fair, 13% good. Peanuts dug 31%, 51% 1992, 59% avg.; combined 21%, 38% 1992, 47% avg.; 33% poor, 67% fair. Wheat seeded 8%, 12% 1992, 14% avg. Pasture feed 3% very poor, 17% poor, 43% fair, 37% good. Primary activities: Defoliating cotton, harvesting vegetables, sorghum, cotton, corn, land preparation for seeding small grains, general care of livestock, poultry, catfish.

ALASKA: Snow fell Sept. 26th; 4 in. parts of the Tanana Valley effectively ending their harvest season. Matanuska Valley farmers continued to harvest hay, small grains, potatoes.

Days suitable for hay harvest 3, 4 days for grain harvest, 5 days suitable for digging potatoes. Second crop hay harvest 50% complete versus 60% 1992. Barley over 95% harvested, up 10% from 1992. Commercial potato harvest 75% complete compared with 70% 1992. Frozen ground or snowcover will most likely limit further harvest of this year's crop in the Tanana Valley. Topsoil 5% short, 95% adequate. Subsoil 15% short, 85% adequate.

ARIZONA: Sunny, hot statewide, 19th to 22nd. Showers southeast 23rd to 24th. Sunny skies prevailed 25th. Temperatures 6° below to 2° above normal. Extremes 28°; 97° higher elevations: 43°; 106° deserts.

Cotton harvest in full force; 100% bolls open, 98% 1992, 95% avg. 21% harvested, 21% 1992, 11% avg. Weeds light to moderate, insects moderate. Defoliation active all areas. Alfalfa good. Harvest moderate all producing areas. Weeds light to moderate, insects moderate; disease light. Rain damage light all areas. Ground preparation vegetable crops active all areas. Western area lemon harvest continues. Central areas, cantaloupe, watermelons, honeydews, lemons, green onions harvested. Apples, sweet corn, chilies, watermelons harvested eastern production areas.

ARKANSAS: Cool week, temperatures averaging below normal. Scattered showers throughout week, heaviest rainfall occurred in the northern region of State. Extremes 43°; 99°. Rainfall 0.57 to 6.73 in.

Days suitable for fieldwork 6. Moderate rate of crop growth. Soil moisture 42% short, 47% adequate, 11% surplus. Rice, sorghum harvests continued. Soybean irrigation continued. Armyworm larvae infestation in soybean fields. Soybean fields sprayed for loopers. Sunflowers in fair condition. Fruit, vegetable crops in good condition. Corn harvest 82%, 81% 1992, 84% avg. Corn 13% poor, 51% fair, 36% good. Producers continued to report armyworm larvae infestation in pastures. Planting cool season forages continued. Livestock good, external parasites reported.

CALIFORNIA: No rain reported. Week ended with start of warming trend.

Cool, mild weather slowed crop progress. Ground preparation fall planted small grains active. Many dryland producers waiting fall rains to plant. Rice harvest progressed slowly. Growers drained fields. Cotton defoliation active. Harvest active desert areas, started slow central areas. Only latest fields expect additional irrigation. Safflower harvest wound down, finished many areas. Sunflower harvest on schedule. Alfalfa seed harvested, straw baled, transported bio-mass plants. Corn harvest grain, silage continued. Milo maturing. Much acreage final irrigation. Alfalfa hay harvest progressed, good yields, quality. Sugarbeets harvest normal. Seeding next years crop on schedule. Dry bean harvest increased most areas. Table grape harvest continued. Raisin grapes dried, rolled, binned. Wine, juice grape harvest gained momentum. Plum harvest, 80% complete. Peach, prune groves irrigated. Almond harvest wound down, orchard sweeping continued. Ground preparation, walnuts. Walnuts, pistachios harvested. Persimmon, kiwi fruit harvest increased. Harvest, Asian pears wound down. Apple harvest progressed. Tulare County olives harvested. Cool mornings brought color, fall fruit. Valencia orange harvest neared completion. New crop navels progressed. Strawberries harvested. Broccoli and cauliflower harvest steady central coast, variable quality. Cooler weather west side beneficial crop development. Celery harvest steady Salinas-Watsonville, Santa Maria, with good quality reported. Sweet Corn seasonally declining, drawing to close several areas. Iceberg lettuce central coast remained moderately active. Summer melon harvest neared completion several central valley areas. Summer onion, garlic harvest seasonally declining. Processing tomato harvest remained active but declining most remaining districts. Fresh market tomato harvest continued, fall plantings progressed well. Fall potato harvest increasing in the Tulalake area, continue active into October. Sweet potato movement Atwater-Livingston moderate. Other crops harvested peppers, carrots, cabbage, squash. Valley areas remain extremely dry. High mountain range still providing some good feed. Supplemental feeding light. Water supplies good. Cattle in good shape. Some stockers moved to feedlots. Sheep grazed harvested small grain, tomato fields.

COLORADO: Week began with fair skies, mild temperatures over the State. A cold front dropped temperatures around 20° east on the 22nd, low clouds, patchy fog, drizzle that accompanied it persisted in many areas of the east through the 24th. Moisture amounts were generally small. Another system moved through the east over the weekend bringing light showers to northern areas along with high winds. Avg. moisture for the major River Basins for the period was 0.10 in. or less. Avg. temperatures were near normal in the San Luis Valley and west of the Continental Divide. East of the Divide temperatures were from 2 to 6° below normal.

Days suitable for fieldwork 5.5. Soil moisture 5% very short, 32% short, 60% adequate, 3% surplus. Alfalfa 3rd cutting 57%, 60% 1992, 63% avg. Alfalfa 4th cutting 10%, 11% 1992, 9% avg. Oats harvested 94%, 95% 1992, 93% avg. Winter wheat seeded 73%, 82% 1992, 62% avg.; emerged 32%, 49% 1992, 30% avg. Dry beans cut 69%, 75% 1992, 74% avg.; harvested 57%, 53%

1992, 49% avg. Corn denting 86%, 83% 1992, 89% avg.; mature 23%, 32% 1992, 48% avg. Corn silage harvested 59%, 58% 1992, 65% avg. Sorghum turning color 56%, 61% 1992, 77% avg.; mature 23%, 25% 1992, 32% avg. Summer potatoes harvested 68%, 91% 1992, 76% avg. Dry onions harvested 66%, 72% 1992, 69% avg. Fall potatoes harvested 50%, 50% 1992, 25% avg. Corn 3% very poor, 8% poor, 26% fair, 52% good, 11% excellent. Sugarbeets 1% poor, 15% fair, 65% good, 19% excellent. Livestock good to excellent. Pasture, range feed mostly good.

FLORIDA: Temperatures 2 to 5° above normal north, 1 to 3° above normal central, south. Highs; low to mid 90s. Lows; low to mid 60s north, upper 60s to low 70s central, south. Rainfall less than 0.10 to 3.00 in., with heavier amounts reported central Peninsula. Most northern stations under 0.50 in.

Soil moisture generally adequate, scattered areas short. Peanut harvesting active. Cotton harvest gaining momentum. Haymaking active where plant growth adequate. Tobacco marketing activity starting to wind down. Sugarcane planting gaining momentum. Soybeans, sugarcane continue making good progress. Citrus groves very good. Moisture adequate. New growth slowing, a little fruit splitting in wet areas, fruit good. Limited packing of white, colored grapefruit. Caretakers cutting cover crops, spraying, fertilizing. Vegetable planting activity increasing seasonally central, south. Harvesting cherry, plum tomatoes north, radishes, yellow squash central area. Pasture feed fair to excellent; 25% fair, 55% good, 20% excellent. Cattle herds fair to excellent.

GEORGIA: Temperatures 3 to 7° above normal although Atlanta airport 9° above normal. Warmest highs low to mid 90s, northeast mountains mid 80s. Coolest lows upper 40s to low 50s mountains, mid to upper 50s elsewhere north to central, low to mid 60s south. Rain on 1 to 3 days. Rainfall 0.25 to 2.85 in. with heaviest amounts north central. Most central, southwestern stations under 0.25 in.

Days suitable for fieldwork 6.1. Soil moisture 22% very short, 53% short, 25% adequate. Corn few showers early in week, above normal temperatures. Sorghum 4% very poor, 26% poor, 54% fair, 16% good; 52% harvested for grain, 42% 1992, 49% avg. Peanuts 8% very poor, 33% poor, 53% fair, 6% good; 43% dug, 52% 1992, 57% avg.; 28% threshed, 35% 1992, 41% avg.; harvest in full swing. Soybeans need rain, spraying for insects. Tobacco 100% harvested, 100% 1992, 100% avg. Rye 8% planted, 8% 1992, 8% avg. Other small grains 20% poor, 63% fair, 17% good; 4% planted, 4% 1992, 4% avg. Vegetables 1% very poor, 3% poor, 61% fair, 35% good. Apples 15% poor, 31% fair, 54% good; 58% harvested, 61% 1992, 66% avg. Pecans 10% fair, 77% good, 13% excellent. Hay, pastures variable, poor to fair. Supplemental feeding hay heavy north. Cattle mostly fair to good, hogs good.

HAWAII: Unstable weather. Warm, humid conditions prevailed until midweek, then thundershowers, isolated downpours lingered through weekend. Heavy rains caused minor flooding low lying areas, no major damage to agriculture. Water supplies partially restored. Temperatures mid 60s to low 90s. Rainfall none to 3.40 in.

Normal field operations interrupted, delayed by rain. Soil moisture levels generally adequate. Slightly cooler evenings benefitted cool season crops, slowed increase insect populations some areas. Overall, irrigation, spraying for insect, disease control still active. Banana, papaya output steady.

IDAHO: Temperatures 2 to 9° below normal. Freezing temperatures reached most areas. Low of 24° Aberdeen. Precipitation none to 0.15 in. north, none southwest, none to 0.01 in. south central, none to 0.37 in. east.

Days suitable for fieldwork 7. Soil moisture 14% short, 86% adequate. Winter wheat harvested 95%, 100% 1992, 100% avg. Oats harvested 77%, 99% 1992, 97% avg. Potatoes closing middles 1%, turning 76%, harvested 23%; 1% very poor, 6% poor, 24% fair, 65% good, 4% excellent. Alfalfa second cutting 99%, 100% 1992, 100% avg. Alfalfa third cutting 51%, 86% 1992, 73% avg. Dry peas harvested 95%, 100% 1992, 100% avg. Lentils harvested 72%, 100% 1992, 100% avg. Peaches harvested 93%, 100% 1992, 100% avg. Prune, plum harvest complete. Apples harvested 21%, 57% 1992, 28% avg. Hops harvested 94%, 100% 1992, 86% avg. Onions harvested 59%, 87% 1992, 70% avg. Dry beans harvested 63%, 65% 1992, 71% avg. Field corn silage harvested 28%, 79% 1992, 56% avg. Field corn grain harvested 1%, 8% 1992, 4% avg. Sugarbeets harvested 6%, 15% 1992, 11% avg. Irrigation water supplies 1% poor, 8% fair, 68% good, 23% excellent. Activities: Harvesting grain, potatoes, dry beans, sugarbeets, lentils, apples. Green bridge for insect, disease carry-over concern in Nez Perce county. Clearwater county spring wheat large amount shriveled kernels. Aphid problems many parts of southern areas. Pasture, range feed 95% of normal. Livestock good.

ILLINOIS: Excessive rainfall produced flooding in some areas of central, southern areas last week, as the weather was mostly damp, cooler than normal across the State. Temperatures slightly below normal. Highs mid 60s to 70s. Lows mid 40s to mid 50s. Extremes high 30s to mid 40s. Precipitation was wetter than normal, averaging 1.75 to 2.00 in. north, 2.00 to 5.75 in. central, south.

Days suitable for fieldwork 3.0. Crop maturity, condition were both good. Soil moisture supplies increased to 22% adequate, 78% surplus. Soybeans turning yellow 88%, 92% 1992, 91% avg. Alfalfa cut, third crop 83%, 92% 1992, 96% avg. Farm activities: Equipment repairs, harvesting preparations, cutting corn silage, hauling grain, cleaning grain bins, harvesting seed corn, tending livestock, seeding wheat. Pasture feed condition 96% of normal.

INDIANA: High temperatures mid to upper 60s north to the upper 60s to lower 70s south. These readings were 3 to 7° below normal. Lows upper 40s to lower 50s north to the 50s south. Low readings were close to normal over the west 1 to 5° above normal east. Rainfall 1.00 to 1.50 in. north while 1.10 to 5.00 in. central, south. Southwest 4.00 to 5.00 in.

Days suitable for fieldwork 4. Rain slowed most attempts at harvest. Pastures feed 89% of normal, 91% last week. Topsoil 5% short, 64% adequate, 31% surplus. Subsoil 3% short, 79% adequate, 18% surplus. Tobacco harvested 85%, 86% 1992, 79% avg. Wheat acreage tilled 28%, 30% 1992, 45% avg.

IOWA: Temperatures 2 to 4° below normal. Extremes 32°; 77° northwest. Rainfall heavy south one-half, very light northwest. Rainfall 0.01 in. northwest to 4.34 in. east central; average 1.43 in. (normal 0.74 in.).

Days suitable for fieldwork 2.8. Topsoil 26% adequate, 74% surplus. Subsoil 13% adequate, 87% surplus. Soybeans with leaves turning color 74%, 95% 1992, 95% normal. Third crop alfalfa hay harvested 70%, 87% 1992, 97% normal. Second crop clover hay harvested 85%, 100% 1992, 100% normal. Winter Wheat seeded 10%, 16% 1992, 30% normal. Pasture feed 6% poor, 36% fair, 47% good, 11% excellent. Livestock mostly good.

KANSAS: Temperatures normal to 3° below normal across State. Heavy precipitation, localized flooding southeast; average rainfall 2.92 in. Elsewhere 0.49 to 3.72 in.

Days suitable for fieldwork 3.5. Topsoil 18% short to very short, 43% adequate, 39% surplus. Subsurface 1% short to very short, 77% adequate, 22% surplus. Continued cool temperatures, rain kept wheat producers from sowing fields. Seeding made significant progress west, virtually standstill rest of State. Wheat emerged 20%, 20% 1992, 15% avg. Some sorghum leaf damage showing up in areas that received light frost last week. Fourth cutting alfalfa 55%, 60% 1992, 65% avg. Ranges, pastures feed good condition for this time of year, although forage value decreasing as grasses mature.

KENTUCKY: Temperature 66°. Extremes 55°; 73°. Rainfall 1.60 in. Most rain fell in west 2.50 in.

Days suitable for fieldwork 4.4. Soil moisture 4% very short, 45% short, 47% adequate, 4% surplus. Corn mostly fair to good. Harvest beginning on some farms, finished on others. Soybean mostly fair to good. Late soybeans will benefit from rains. Burley 84% cut, 86% 1992 and avg.; dark tobacco cut 88%. Housed tobacco curing well. Limited houseburn. Fall wheat seeding 11% complete, mostly for cover crop. Pasture feed mostly fair to good, improved by rains.

LOUISIANA: Temperatures 4.8 to 7.8° above normal. Extremes 46°; 99°. Rainfall none east central areas to 0.65 in. northwest.

Days suitable for fieldwork 6.2. Soil moisture 31% very short, 39% short, 26% adequate, 4% surplus. Corn 99% harvested, 98% 1992, 99% avg. Virtually complete in most areas. Hay 86% final cutting, 88% 1992, 80% avg. Made good progress. Rice 100% headed, 100% 1992, 100% avg.; 96% ripe, 97% 1992, 97% avg. Harvest was active in the north. Soybeans 81% turning color, 81% 1992, 60% avg.; Harvest of early varieties continued, spraying for insects was active. Sweet potatoes 11% poor, 69% fair, 20% good; 48% harvested, 45% 1992, 53% avg. Harvest continues. Sugarcane 2% poor, 25% fair, 73% good; 86% planted, 40% 1992, 63% avg. Applications of ripener to some fields in preparation for harvest continued while planting was active. Livestock 52% fair, 46% good, 2% excellent. Pastures 19% very poor, 6% poor, 18% fair, 57% good. Vegetables 4% very poor, 16% poor, 58% fair, 22% good.

MARYLAND & DELAWARE: **MARYLAND:** Precipitation 0.65 in., normal 0.77 in. Temperature 62.6°, normal 65.0°. Extremes 40°; 86°.

Days suitable for fieldwork 5.3. Topsoil 17% short, 72% adequate, 11% surplus. Subsoil 11% very short, 33% short, 56% adequate. Barley 11% seeded, 8% 1992, 17% avg. Rye 13% seeded, 5% 1992, 17% avg. Oats 21% seeded, 1% 1992, 2% avg. Corn poor to fair; 100% dent, 85% 1992, 92% avg.; 78% mature, 55% 1992, 68% avg.; 27% grain harvested, 8% 1992, 23% avg.; 76% silage harvested, 38% 1992, 71% avg. Soybean poor to mostly fair; 52% turned, 47% 1992, 48% avg.; 22% shedding leaves, 20% 1992, 22% avg. Sorghum fair to good; 77% turned, 93% 1992, n/a avg.; 24% mature, 43% 1992, n/a avg. Tobacco fair; 98% topped, 100% 1992, 100% avg.; 82% cut, 95% 1992, 93% avg. Pasture feed good; hay supplies short to adequate. Alfalfa hay 75% fourth cut, 48% 1992, 54% avg. Other hay 72% third cut, 71% 1992, 56% avg.; 47% fourth cut, 18% 1992, 14% avg. Apples 47% harvested, 39% 1992, 51% avg.

DELAWARE: Precipitation 0.80 in., normal 0.84 in. Temperature 62.6°, normal 65.8°. Extremes 42°; 77°.

Days suitable for fieldwork 6.5. Topsoil 17% short, 83% adequate. Subsoil 67% short, 33% adequate. Corn poor; 96% dent, 98% 1992, 99% avg.; 83% mature, 47% 1992, 74% avg.; 36% grain harvested, 6% 1992, 34% avg.; 95% silage harvested, 83% 1992, 87% avg. Soybeans fair; 40% turned, 31% 1992, 33% avg.; 20% shedding leaves, 11% 1992, 13% avg. Sorghum fair, 43% turned, 47% 1992, n/a avg.; 12% mature, 10% 1992, n/a avg. Alfalfa hay 52% fourth cut, 63% 1992, 68% avg. Other hay 75% third cut, 82% 1992, 88% avg.; 0% fourth cut, 23% 1992, 18% avg. Pasture feed very poor; hay supplies short. Apples 60% harvested, 36% 1992, 50% avg.

MICHIGAN: Extremes 28°; 73°. Precipitation none to 2.99 in. across the State.

Days suitable for fieldwork 4.0. Soil moisture 55% adequate, 45% surplus. Dry beans 80% mature, 60% 1992, 60% avg.; 30% harvested, 20% 1992, 30% avg.; 2% very poor, 8% poor, 25% fair, 45% good, 20% excellent. Corn silage 25% harvested, 10% 1992, 40% avg. Potatoes 55% harvested, 50% 1992, 55% avg. Sugarbeets 5% harvested, 5% 1992, 3% avg. Hay 60% third cutting, 55% 1992, 65% avg.; 2% very poor, 8% poor, 20% fair, 50% good, 20% excellent. Pasture feed 90% of normal. Major activities: Hauling manure, repairing equipment, picking apples, pears, digging potatoes, harvesting dry beans, some fall tillage.

MINNESOTA: Temperatures near normal to 5° below normal. Extremes 30° 76°. Precipitation 0.03 to 0.44 in. below normal for the northern third, 0.01 to 0.49 in. above normal elsewhere. Precipitation 0.21 to 1.03 in. Greatest weekly precipitation 2.05 in.

Days suitable for fieldwork 2.6. Topsoil 1% short, 36% adequate, 63% surplus. Rye 69% seeded, 76% 1992, 86% avg. Winter wheat 55% seeded, 83% 1992, 89% avg. Spring wheat 84% combined, 73% 1992, 94% avg. Barley 95% combined, 87% 1992, 97% avg. Sweet corn for processing 81% harvested, 82% 1992, 92% avg. Hay grain 39% stubble plowed & tilled, 41% 1992, 65% avg. Potatoes 39% harvested, 48% 1992, 51% avg. Flax 49% harvested, 21% 1992, 71% avg. Dry beans 42% harvested, 47% 1992, 70% avg. Sunflowers 3% harvested, 0% 1992, 15% avg. Sugarbeets 13% harvested, 7% 1992, 10% avg. Corn 90% dough, 99% 1992, 99% avg.; 61% dent, 87% 1992, 97% avg.; 6% mature, 17% 1992, 64% avg.; 12% silage cut, 14% 1992, 50% avg. Soybeans 57% yellowing, 91% 1992, 97% avg.; 22% shedding leaves, 73% 1992, 88% avg.; 3% mature, 18% 1992, 56% avg.; 1% combined, 2% 1992, 17% avg. Corn 19% very poor, 44% poor, 33% fair, 4% good. Soybeans 18% very poor, 39% poor, 37% fair, 6% good.

MISSISSIPPI: Temperatures 78°, 4.8° above normal. Extremes 48°; 99°. Northeast region of State received the most rain with over 4.00 in., 4 days of rain. Other regions received a minimal amount of rain. Rainfall 1.06 in., 0.17 above normal. Soil temperatures 81°.

Days suitable for fieldwork 6.0, 3.4 1992, 4.8 avg. Soil moisture 6% very short, 50% short, 38% adequate, 6% surplus. Corn 100% dent, 100% 1992, 100% avg.; 97% mature, 100% 1992, 96% avg.; 63% harvested, 67% 1992, 68% avg.; 93% silage harvested, 97% 1992, 97% avg.; 14% poor, 59% fair, 23% good, 4% excellent. Cotton 91% open bolls, 90% 1992, 89% avg.; 5% harvested, 9% 1992, 19% avg.; 32% poor, 58% fair, 10% good. Rice 71% mature, 96% 1992, 88% avg.; 31% harvested, 68% 1992, 55% avg.; 57% fair, 38% good, 5% excellent. Sorghum 99% turning color, 100% 1992, 99% avg.; 93% mature, 100% 1992, 91% avg.; 65% harvested, 80% 1992, 71% avg.; 88% silage harvested, 97% 1992, 92% avg.; 59% fair, 41% good. Soybeans 65% coloring,

80% 1992, 66% avg.; 35% shedding, 47% 1992, 37% avg.; 4% harvested, 9% 1992, 6% avg.; 2% poor, 78% fair, 20% good. Sweet potatoes 50% harvested, 50% 1992, 53% avg.; 7% poor, 68% fair, 25% good. Wheat 3% planted, 10% 1992, 11% avg. Hay 95% harvested, 95% 1992, 91% avg. Livestock 13% fair, 83% good, 4% excellent. Pasture feed 87% of normal. Activities: Cotton defoliation, rice, soybean, sorghum, cotton harvesting.

MISSOURI: Temperatures 1 to 4° above normal north, south regions, 1 to 3° below normal central regions. Rainfall 5.71 in., varying from 3.39 in. southeast to 7.44 in. southwest.

Days suitable for fieldwork 1.5, ranging from 0.3 north central, to 3.8 south central. Topsoil 1% short, 19% adequate, 80% surplus. Corn harvested by districts: 69% southeast, 25 percent or less other districts. Soybeans turning color 67%, 81% 1992, 76% avg.; mature 54%, 64%, 61% avg. Pasture feed 21% fair, 66% good, 13% excellent.

MONTANA: Temperatures mostly 5° below normal. Precipitation slightly above normal to normal, except below normal east.

Days suitable for fieldwork 5.4. Topsoil 4% short, 84% adequate, 12% surplus. Subsoil 3% short, 82% adequate, 15% surplus. Winter wheat harvested 87% complete, 100% 1992, 100% avg. Barley harvested 48% complete, 89% 1992, 96% avg. Oats harvested 47% complete, 92% 1992, 97% avg. Corn silage harvest at halfway point, sugarbeets, potato harvest starting. Second cutting alfalfa hay 83% complete, 96% 1992, 97% avg. Other hay 86% complete, 100% 1992, 100% avg. Pasture, range feed at 105% of normal, up 2 points from last week.

NEBRASKA: Temperatures 3 to 5° below normal. Scattered precipitation 1.00 in. or less west to 1.50 to 3.00 in. southeast.

Days suitable for fieldwork 2.6. Topsoil 50% adequate, 50% surplus. Subsoil 72% adequate, 28% surplus. Soybeans turning color 92%, 93% 1992, 96% avg. Alfalfa 23% fair, 68% good, 9% excellent; 94% third cutting, 100% 1992; 28% fourth cutting, 31% 1992. Dry beans 10% very poor, 24% poor, 28% fair, 35% good, 3% excellent; 100% leaves dropping; 40% harvested. Frost damage to all affected crops under assessment. Pasture, range feed 102% of normal.

NEVADA: A few thunderstorms in north dropped very little rain. Large difference between high, low temperatures led to near normal temperature for most of State. Extremes 15°; 98°.

Digging potatoes, aided by warm, dry weather, about 35% complete. Alfalfa seed harvest nearly finished. Harvest of onions, corn silage, alfalfa hay continues. Planting garlic, winter wheat underway. Livestock movement to winter ranges in progress.

NEW ENGLAND: Precipitation 0.07 to 0.95 in. north; 0.27 to 2.51 in. south. Temperatures 47 to 53° north; 48 to 59° south. Maximum temperatures 65 to 76° north; 65 to 75° south. Minimum temperatures 26 to 39° north; 25 to 44° south.

Days suitable for fieldwork 4.9. Soil moisture 3% very short, 16% short, 72% adequate, 9% surplus. Available grazing 7% very short, 21% short, 69% adequate, 3% surplus. Fieldwork progress 1 day behind schedule. Pasture feed 78% of normal. Maine potato harvest 40%, 60% 1992, 40% avg. Connecticut, Massachusetts potatoes 70% harvested, 70% 1992, 60% avg. Rhode Island potatoes 75% harvested, 60% 1992, 70% avg. Potato good to fair regionwide. Maine oat good to fair; harvested 90%, 80% 1992, 90% avg. Field corn good to fair;

30% harvested, 20% 1992, 30% avg. Second cutting hay 90% harvested, 90% 1992, 90% avg.; good. Third cutting hay 65% harvested, 55% 1992, 60% avg.; good. Sweet corn harvested 95%, 90% 1992, 95% avg.; good to fair. Apples 30% harvested, size medium, color fair to good, condition good. Peaches 90% harvested, size medium, condition good. Pears 70% harvested, size medium, condition good. Raspberries 85% harvested, size medium, condition good to fair. Cranberries 20% harvested, size medium, condition good. Major farm activities: Chopping corn, harvesting some hay, haylage. Seeding cover crops, pastures. Picking fall vegetables, squash, pumpkins for roadside stands. Picking apples, pears.

NEW JERSEY: Temperatures near normal. Extremes 32°; 86°. Rainfall 2.11 in. north, 2.72 in. central, 0.88 in. south. Heaviest 24 hour total 2.65 in. on 25th, 26th. Estimated soil moisture, in percent field capacity, averaged 74% north, 97% central, 64% south. Four inch soil temperatures averaged 59° north, 62° central, 63° south.

Soil moisture content is still adequate on average for the State. Harvest of fall vegetables remains active. Apple harvest is active with Red Delicious as the main variety. Cranberry harvest is underway. Frost damage of some vegetable crops reported in some areas of northern areas. Some planting of cover crop small grains, harvesting of early planted corn beginning. Pasture feed conditions averaged below normal. Amount of feed requirements pastures, supplying is average.

NEW MEXICO: Temperatures 3 to 4° above normal over the southeast plains, southern desert, close to normal elsewhere. Extremes 20° northwest; 98° southern desert. Precipitation light for the most part. Highest 0.60 in. southeast with a few other locations receiving near 0.25 in.

Days suitable for fieldwork 6.7. Soil moisture 59% short, 40% adequate, 1% surplus. Crop conditions: Alfalfa 22% fair, 74% good, 4% excellent; harvest continues. Corn 25% fair, 62% good, 13% excellent; silage harvest active. Irrigated wheat 10% poor, 40% fair, 40% good, 10% excellent. Dryland wheat 40% poor, 31% fair, 29% good. Wheat planting was 82% complete. Chile harvest active; 2% poor, 7% fair, 77% good, 14% excellent. Apple harvest continued, mostly good. Pecans 2% poor, 20% fair, 78% good. Lettuce mostly good. Cattle fair to excellent. Sheep poor to excellent. Range feed 73% of normal.

NEW YORK: Temperatures 5 to 10° below normal, upper 40s to lower 60s. Warmest close to New York City, Long Island. Extremes 26°; 75°. Precipitation near to above normal, except in Hudson Valley which was below normal. Rainfall 0.25 in to 0.50 in. Hudson Valley, 0.50 to 1.50 in. all other areas except Long Island which received 1.75 in.

Days suitable for fieldwork 5.4. Soil moisture mostly adequate, except in southeast where supplies are short. Pasture feed 84% of normal. Corn fair to good. Silage harvest 25% complete, 7% 1992, 24% avg. Hay mostly good. Third cutting alfalfa 72% finished, 52% 1992, 69% avg. Oat harvest complete. Potato harvest continued. Dry bean harvest in full swing. Concord grape harvest underway in Finger Lakes region. Quality of grapes picked has been excellent. Apple harvest in Hudson Valley 40% complete. McIntosh harvest nearly complete, Delicious, Empire picking to begin this week. Early frost ended season for tender vegetable crops. Onion harvesting continued.

NORTH CAROLINA: Extreme temperatures 50° Asheville to 91° Wilmington. Precipitation 0.32 in. Wilmington to only a trace in New Bern.

Days suitable for fieldwork 5.7. Soil moisture 5% very short, 39% short, 55% adequate, 1% surplus. Crop condition: Pasture 3% very poor, 18% poor, 54% fair, 25% good. Field tobacco 1% very poor, 3% poor, 44% fair, 51% good, 1% excellent. Corn 10% very poor, 33% poor, 46% fair, 11% good. Hay 1% very poor, 9% poor, 68% fair, 22% good. Cotton 16% poor, 64% fair, 18% good, 2% excellent. Peanuts 18% poor, 54% fair, 26% good, 2% excellent. Soybeans 1% very poor, 15% poor, 57% fair, 26% good, 1% very good. Sweet potatoes 9% poor, 45% fair, 46% good. Apples 6% poor, 47% fair, 41% good, 6% excellent. Sorghum 12% poor, 77% fair, 11% good. Hay, roughage supplies 1% very short, 33% short, 65% adequate, 1% surplus. Apples harvested 51%, 60% 1992, 62% avg. Flue-cured tobacco harvested 80%, 93% 1992, 91% avg. Burley tobacco harvested 71%, 67% 1992, 76% avg. Corn for silage harvested 90%, 73% 1992, 82% avg. Corn for grain 64%, 45% 1992, 48% avg. Sorghum for grain 28%, 27% 1992, 31% avg. Sweet potatoes harvested 15%, 25% 1992, 25% avg. Cotton open bolls 90%, 54% 1992, 78% avg. Corn mature 97%, 95% 1992, 96% avg. Soybeans setting pods 98%, 95% 1992, 97% avg. Soybean drop leaf 19%, 20% 1992, 17% avg. Second cutting of the hay crop is 93% completed. Third cutting of the hay crop is 58% completed. Major activities: Harvesting, marketing tobacco, cutting hay, preparing the land for small grain planting. Other activities included: Harvesting vegetables; harvesting apples; cutting corn silage; harvesting corn for grain; defoliating cotton; harvesting sweet potatoes; tending livestock; general farm maintenance.

NORTH DAKOTA: Scattered showers, thunderstorms over State. Temperatures normal northeast, southwest to 2° below normal southeast. Extremes 20° west central; 82° central.

Days suitable for fieldwork 6.3. Topsoil 27% short, 70% adequate, 3% surplus. Subsoil 5% short, 80% adequate, 15% surplus. Small grain harvest continued to be the slowest in recent years despite significant progress. Hard red spring wheat 81% harvested, 90% 1992, 98% avg. Durum wheat 59% harvested, 77% 1992, 95% avg. Oats 92% harvested, 97% 1992, 99% avg. Barley 91% harvested, 96% 1992, 99% avg. Intended winter wheat acres planted 49%, 68% 1992, 80% avg. Intended rye acres planted 54%, 68% 1992, 80% avg. Majority of late season crop acreage struggled to mature as frost damage was again reported in some areas. Corn for grain 27% very poor, 36% poor, 37% fair; corn for silage 2% very poor, 16% poor, 61% fair, 21% good; flax 4% poor, 23% fair, 67% good, 6% excellent; sugarbeets 12% poor, 20% fair, 68% good; potatoes 41% poor, 29% fair, 30% good; dry beans 2% very poor, 24% poor, 51% fair, 23% good; soybeans 10% very poor, 29% poor, 51% fair, 10% good; sunflowers 5% poor, 53% fair, 42% good. Flax 24% harvested, 45% 1992, 80% avg. Corn for grain 7% ripe and beyond, 10% 1992, 60% avg. Corn for silage 43% cut, 42% 1992, 78% avg. Dry beans 23% combined, 24% 1992, 68% avg. Soybeans 4% combined, 7% 1992, 33% avg. Sunflowers 33% bracts turned brown and beyond, 41% 1992, 71% avg. Potatoes 71% dug, 59% 1992, 65% avg. Sugarbeets 8% lifted, 10% 1992, 8% avg. Range, pasture feed 91% of normal.

OHIO: Clouds were common. Temperatures the upper 50s to mid 60s, 2 to 3° below normal north, west central, 1 to 2° above normal central, southeast. Highs mid 60s to low 70s, lows from the mid 40s to upper 50s. Moderate to heavy precipitation occurred mostly on the 25th, 26th when a strong cold front punched through. Common amounts were 1.00 to 1.50 in.

Days suitable for fieldwork 5.5. Topsoil 57% short, 43% adequate. Subsoil short. Processing tomatoes harvested 85%,

69% 1992, 77% avg. Potatoes harvested 70%, 56% 1992, 58% avg. Fall apples harvested 25%, 30% 1992. Grapes harvested 20%, 9% 1992. Alfalfa 3rd cut harvested 94%, 89% 1992, 89% avg.; other hay 66%, 65% 1992. Corn harvested for silage 65%, 28% 1992, 44% avg. Pasture 10% very poor, 23% poor, 38% fair, 27% good, 2% excellent. Hay 3% very poor, 14% poor, 44% fair, 35% good, 4% excellent. Rain curtailed harvest activities, winter wheat planting. Corn moisture is lower than the average at this time; many farmers hope to harvest in full swing this coming week. Potato growers report excellent digging conditions, decent quality. Concord grape harvest began, excellent quality.

OKLAHOMA: Temperatures 3° below normal central to 3° above normal southeast. Precipitation 0.29 in. south central to 2.17 in. east central.

Days suitable for fieldwork 5.4. Topsoil 22% short, 65% adequate, 13% surplus. Subsoil 8% short, 92% adequate. Corn 99% mature, 100% 1992, 96% avg.; 85% harvested, 76% 1992, 72% avg. Soybeans 91% setting pods, 91% 1992, 99% avg.; 44% mature, 35% 1992, 27% avg.; 11% harvested, 7% 1992, 6% avg. Peanuts 6% fair, 91% good, 3% excellent; 47% mature, 41% 1992, 55% avg.; 1% harvested, 6% 1992, 3% avg. Alfalfa 87% 4th cut, 82% 1992, 87% avg.; 24% 5th cut, 33% 1992, 22% avg. Pastures 95% of normal.

OREGON: Temperatures mostly well below normal, statewide. Many locations had frosts including Burns 20°. Dry conditions statewide, Bonneville Dam only measurable amount 0.02 in.

Soil moisture 30% short, 70% adequate. Barley 84% harvested, 1994 crop 23% planted. 1994 winter wheat crop 51% planted, 17% emerged. Frosts are winding down alfalfa cuttings. Willamette Valley red clover, sugarbeets seed crop harvest underway, grass seed fields up, greening, field corn silage harvest underway. Potato, onion harvest continues, statewide. Willamette Valley broccoli underway. Sweet corn harvest continues in many areas. Winter pear harvest full swing, Hood River Valley; Bosc picking ahead of normal, Anjou picking nearing completion, Gala apple harvest nearly complete, Jonagold, Golden Delicious harvest getting started. Winter pear harvest winding down, apple harvest continued; Medford district. Apple picking continued, Milton-Freewater. In Willamette Valley, prune, apple harvests continued; hazelnuts falling, harvest expected about October 1; strawberry, caneberry fields being prepared for winter. Coos County, cranberry growers preparing for harvest. Livestock good to excellent. Range, pasture feed 97% of normal. Springs beginning to dry up, leaving stockwater scarce; eastern areas. Supplemental hay, protein being feed, statewide.

PENNSYLVANIA: Temperature 59°, 3° below normal. Extremes 28°; 78°. Precipitation 1.43 in., 0.59 in. above normal.

Days suitable for fieldwork 4. Soil moisture 16% short, 74% adequate, 10% surplus. Ensilage corn harvested 43% complete, 16% 1992. Corn 3% very poor, 9% poor, 34% fair, 42% good, 12% excellent. Soybean harvest 3% complete, 4% 1992; 7% very poor, 9% poor, 28% fair, 42% good, 14% excellent. Wheat planted 34% complete, 32% 1992. Oats harvest 100% complete, 99% 1992. Barley planted 42% complete, 34% 1992. Tobacco harvest 94% complete, 84% 1992. Potato harvest 65% complete, 64% 1992. Third cutting alfalfa 90% complete, 72% 1992. Fourth-cutting alfalfa 53% complete, 33% 1992. Second cutting clover-timothy 100% complete, 90% 1992. Quality of hay made 40% poor, 35% fair, 25% good. Feed from pastures poor to fair. Apple harvest 50% complete, 44% 1992. Peach harvest 100% complete, 96% 1992. Grapes harvest 51% complete, 47% 1992.

Fall plowing 64% complete, 49% 1992. Activities: Filling silos with corn silage; general farm work; preparing land for small grains; making haylage; caring for livestock.

PUERTO RICO: Island rainfall 1.94 in. was 0.09 in. above normal. Highest weekly rainfall 6.18 in. at Jayuya, 5.86 in. at Morovis, 4.23 in. at Negro-Corozal. Highest 24 hour total 3.22 in. at Morovis on 19th at WSFO San Juan. Mean temperature 83.2° which was 1.2° above normal; rainfall 0.29 in. which was 1.11 in. below normal. Island temperatures 80 to 82° on Coasts, 74 to 78° Interior with mean station temperature 84.3° at Guayama to 69.3° at Pico del Este Luquillo. Extremes 60°; 96°.

SOUTH CAROLINA: Scattered thundershowers, some heavy with damaging winds. Rainfall 0.50 in. Temperatures 3 to 5° above normal.

Days suitable for fieldwork 5.8. Soil moisture 17% very short, 51% short, 32% adequate. Corn poor; 81% harvested, 80% 1992, 76% avg. Sorghum poor; 42% harvested, 48% 1992, 41% avg. Soybeans 14% very poor, 25% poor, 44% fair, 17% good; 96% setting pods, 100% 1992, 97% avg.; 24% leaves turning, 25% 1992, 25% avg.; 4% dropping leaves, 9% 1992, 8% avg.; cotton 7% very poor, 40% poor, 51% fair; 2% good; 90% open bolls, 79% 1992, 76% avg. Tobacco fair; 88% harvested, 100% 1992, 98% avg.; 57% stalks destroyed, 67% 1992, 55% avg. Sweet potatoes fair; 26% harvested, 25% 1992, 33% avg. Fall hay poor to fair; 54% harvested, 78% 1992, 70% avg. Apples fair; 58% harvested, 61% 1992, 76% avg. Pecans fair. Pasture 35% very poor, 50% poor, 13% fair, 2% good.

SOUTH DAKOTA: Temperatures 1 to 5° below normal. Extremes 21°; 81°. Rainfall was scattered, light with the heaviest amounts in the east central, northeast. Maximum 1.76 in.

Days suitable for fieldwork 3.5. Topsoil 2% very short, 12% short, 59% adequate, 27% surplus. Subsoil 2% very short, 22% short, 52% adequate, 24% surplus. Sunflowers 1% very poor, 5% poor, 20% fair, 65% good, 9% excellent. Flax 77% harvested, 67% 1992, 93% avg. Sorghum 29% silage harvested, 26% 1992, 54% avg. Corn 14% silage harvested, 20% 1992, 54% avg. Rain improved winter wheat conditions in some areas. Fields in the eastern third, north central have become very wet. Spotty killing frosts were reported in the north central, northeast. Little corn would make grain in the northwest due to the frost two weeks ago. Winter grains seeding was winding down in most areas. Grass hoppers were reported. Livestock 4% fair, 76% good, 20% excellent. Pasture feed 93% of normal. In some areas pastures were under water, farmers had to start feeding. Haying was winding down in most areas.

TENNESSEE: Temperatures slightly above normal. Highs 78 to 89°, lows 57 to 67°. Rainfall was above normal by as much as 1.64 in. Many areas of the State reported over 2.00 in.

Days suitable for fieldwork 5.1. Soil moisture 3% very short, 40% short, 54% adequate, 3% surplus. Corn 91% mature, 89% 1992, 87% avg.; 31% grain harvested, 34% 1992, 34% avg.; 87% silage harvested, 74% 1992, 82% avg. Cotton 91% open bolls, 75% 1992, 77% avg.; 9% harvested, 2% 1992, 8% avg.; 23% poor, 36% fair, 41% good. Sorghum 92% mature, 88% 1992, 81% avg.; 53% harvested, 39% 1992, 38% avg. Soybeans 34% dropping leaves, 28% 1992, 30% avg.; 12% mature, 13% 1992, 14% avg.; 9% poor, 39% fair, 50% good, 2% excellent. Tobacco 82% burley harvested, 89% 1992, 89% avg.; 81% dark air harvested, 91% 1992, 87% avg.; 84% dark fire harvested, 88% 1992, 89% avg. Wheat 4% seeded, 6% 1992, 7% avg.

Pastures 1% very poor, 13% poor, 56% fair, 30% good. Cattle 4% poor, 31% fair, 64% good, 1% excellent. Cooler temperatures, steady rainfall was beneficial for filling of soybean pods, condition improved for second straight week. Harvest has begun on a limited scale in West. Cotton producers got a good jump on harvest, early yields have been dismal in most areas because of the heavy insect pressure during late summer months. Late-set tobacco is showing good growth, curing conditions for that already harvested has been good. Producers are beginning to strip this year's crop. Pastures have rebounded well. Improved soil moisture is facilitating fall seedings. Farmers still trying for a fall hay cutting, possibility of short winter feed supplies has many cattle producers beginning a close culling of cows.

TEXAS: Tropical air mass covered much of Texas last week, provided fuel for daytime storms over southeast portion of State. Moisture from Tropical System Gert brushed lower Rio Grande Valley as it broke up far to the south in Mexico. As week ended, strongest cold front so far this season pushed into northern areas of State. Over weekend a dry, mild air mass took control of the weather. Data show only areas of State that were behind on temperature for week were in Rolling Plains, Southern High Plains. Rest of State slightly ahead of normal on temperatures. As far as rainfall was concerned, High Plains, East Texas exceeded normal rainfall for week. All other areas up to 0.60 in. behind normal.

Crops: Corn grain harvest in full swing in Northern High Plains, early reported yields were fair to good. Harvest was virtually complete in Blacklands, winding down in East Texas. Corn 84% normal, 88% 1992. Cotton harvest full swing in Blacklands where weather conditions were good. A few fields harvested in Northern High Plains. Harvest well under way in Southern High Plains. Cotton 78% normal, 65% 1992. Rice harvest of first crop of rice continued to lag behind normal. Grain sorghum harvest was active in High, Low Plains. Harvest virtually complete in Blacklands. East Texas, Edwards Plateau, harvest winding down. Sorghum 83% normal, 85% 1992. Small grains planting continued to be active across most of State. Additional moisture needed in some areas. Producers in Low Plains, Blacklands applied fertilizers. In Coastal Bend, more rain needed before planting can resume. Peanuts irrigation remained heavy in Edwards Plateau where a few fields were harvested. Limited harvesting continued in Low Plains. Last week's rains provided some relief to crop in Cross Timbers, however, crop remained fair. Dry land fields in Blacklands showed poor potential for harvest, some fields may be baled for hay instead. Peanut 68% normal, 85% 1992. Soybeans High Plains, harvest underway. Harvest winding down in Blacklands.

Commercial Vegetables: Rio Grande Valley, planting of fall vegetables continued. Some fields of pepper, tomatoes had minor problems with insects. Irrigated watermelon crop made good progress. Harvest of early variety oranges began, progress has been slow. San Antonio-Winter Garden, land preparation continued, fall cabbage made favorable progress. East Texas, producers continued to plant fall vegetables. Standing crops made fair growth, rain is needed. High Plains, pumpkin harvest got underway. Cabbage, onion, watermelon harvest continued. A few fields of peppers, cucumbers were harvested. Trans-Pecos, melon harvest about complete. Some fields of pimientos harvested. Pecans: Blacklands showed potential for excellent crop. Producers sprayed for weevils in Edwards Plateau. South Central producers prepared for harvest. Many trees in East Texas loaded with nuts, scab also present.

Range and Livestock: Ranges, pastures greening up from recent rains. Portions of Coastal Bend in need of rain as grass in short

supply. Some livestock continued to be culled from herds. In Blacklands, East Texas, some ranchers having to contend with army worms in pastures. Livestock continued to be in good condition as supplemental feeding decreased.

UTAH: Temperature maximums 2° below normal, minimums 2° below normal. Precipitation was light to moderate across the State except for the north central division which received moderate to heavy precipitation.

Days suitable for fieldwork 6.5. Soil moisture 24% short, 76% adequate. Irrigation water supply 10% short, 90% adequate. Stockwater supply 29% short, 71% adequate. Winter wheat seed 64%, 79% 1992, 67% avg.; emerged 40%. Oats harvested for grain 89%. Corn mature 47%, 76% 1992, 61% avg.; silage harvested 28%, 82% 1992, 62% avg. Alfalfa 3rd cutting 79% complete, 98% 1992, 88% avg.; 4th cutting 17% complete, 52% 1992, 43% avg.; seed harvested 78%, 92% 1992, 62% avg. Apples picked 15%, 75% 1992, 47% avg. Potatoes harvested 29%, 68% 1992, 42% avg. Onions harvested 54%, 81% 1992, 69% avg. Cattle moved from summer range 28%, 45% 1992, 35% avg. Sheep moved from summer range 25%, 46% 1992, 40% avg. Pasture, range good to excellent.

VIRGINIA: Temperatures averaged near normal. Extremes 46°; 87°. Precipitation near normal; 0.03 to 2.54 in.

Days suitable for fieldwork 5.2. Topsoil 7% very short, 58% short, 35% adequate. Pasture feed 11% very poor, 30% poor, 44% fair, 15% good. Corn mature 96%, 93% 1992, 89% avg.; silage harvested 75%, 61% 1992, 75% avg.; harvested for grain 50%, 26% 1992, 42% avg. Soybean 17% very poor, 60% poor, 21% fair, 2% good; 2%, 0% 1992, 2% avg. Cotton defoliation, picking continued. Peanut 40% very poor, 60% poor; dug 9%, 5% 1992, 20% avg. Flue tobacco 76% harvested, 89% 1992, 84% avg. Fire tobacco 92% harvested, 99% 1992, 99% avg. Sun tobacco 99% harvested, 93% 1992, 94% avg. Burley tobacco 76% harvested, 80% 1992, 85% avg. Sweet potato harvest about 50% completed. Fall apples 44% harvested. Fruit size smaller than normal, cool temperatures adding color, quality reported good. Winter wheat 4% seeded, 0% 1992, 4% avg. Oats 13% seeded, 20% 1992, 19 avg. Barley 12% seeded, 10% 1992, 13% avg. Livestock mostly fair to good. Harvesting cucumbers, snapbeans, tomatoes, peppers.

WASHINGTON: Temperatures 4 to 8° below normal west; 3 to 12° below normal east. Precipitation none to 1.01 in. west; none to 0.13 in. east.

Days suitable for fieldwork 6.8. Soil moisture 14% short, 86% adequate. Irrigation water supply 7% short, 93% adequate. Hay, other roughage 6% short, 94% adequate. Range, pasture feed 59% fair, 41% good. Winter wheat dryland 55% good, 45% excellent; irrigated 100% good. Spring wheat dryland 20% fair, 80% good; irrigated 5% fair, 95% good. Barley dryland 80% good, 20% excellent; irrigated 100% good. Potatoes, dry beans, corn, 100% good. Cooler weather once again dominated the State last week. Ten of the 23 reporting weather stations recorded low temperatures at or below freezing last week; some freeze problems were reported in crops, no reports of severe damage were received. Fall field preparation, seeding continued. Seed-zone moisture remained good in most areas, the plants were emerging with few problems. Potato harvest continued, with some Russet Burbanks going into storage. Golden Delicious apple harvest continued across the State. Concord grape harvest began, some growers were still waiting for sugars to increase in vineyards.

WEST VIRGINIA: Temperature 64°. Extremes 44°; 88°. Precipitation 1.81 in.

Days suitable for fieldwork 4.2. Soil moisture 52% short, 48% adequate. Tobacco, 9% fair, 91% good; 70% harvested. Hay, 16% very poor, 20% poor, 49% fair, 15% good; 95% 2nd cut, 80% 3rd cut. Pasture feed 12% very poor, 27% poor, 44% fair, 17% good; 68% of normal. Cattle 13% fair, 87% good. Sheep 4% poor, 10% fair, 86% good. Apples poor to fair. Corn 7% poor, 80% fair, 13% good; 95% mature, 36% harvested. Soybeans 10% fair, 90% good; 42% dropping leaves. Farm activities: Moving livestock, feeding livestock, cutting hay, harvesting tobacco, chopping silage, harvesting corn, harvesting apples, sowing barley, general maintenance.

WISCONSIN: Considerable cloudiness, occasional rain resulted in continued cool temperatures. Temperature 52°; 3° below normal. Extremes 27°; 79°. Precipitation 0.60 to 2.40 in.

Days suitable for fieldwork 3.0. Soil moisture 51% adequate, 49% surplus. Pasture feed condition 84% of normal, 79% 1992, 75% avg. General condition of crops: 3% poor, 34% fair, 62% good, 1% excellent. Corn 1% very poor, 7% poor, 39% fair, 50% good, 3% excellent; 86% in dough, 81% 1992, 95% avg.; 68% in dent, 63% 1992, 85% avg.; 16% mature, 15% 1992, 50% avg.; grain 2% harvested, 0% 1992, 4% avg.; silo filling 8% complete, 8% 1992, 35% avg. Soybean 2% poor, 20% fair, 71% good, 7% excellent; leaves turned 74% 1993, 58% 1992, 77% avg.; leaves shedding 33% 1993, 14% 1992, 47% avg. 3rd cut alfalfa: 66% harvested, 55% 1992, 71% avg. Fall tillage 7% complete, 4% 1992, 9% avg. Cloudy, wet, cool weather conditions continued this past week. Although no killing frost has been reported, some mornings in the north have been very cold. Rains made it difficult for any type of fieldwork; some farmers were able to chop corn, hay for silage. Crops made little progress this past week due to the lack of sunshine and dry days. Most crops were in good condition, still needed more time before the first killing frost. Farmers continued to harvest third crop alfalfa; without several dry days in a row, most cut haylage. Crop continued to mature slowly. Comments have indicated that the maturity level varies within the same field. Farmers began to harvest their corn for high moisture. Soybeans good to excellent, reports indicated that their leaves are turning, dropping fast. One reporter in Rock county commented that harvesting will start soon in some fields. The apple crop is very good, plentiful. Rains have made it difficult to harvest potatoes.

WYOMING: Temperatures were once again below normal; 1° below normal in Saratoga to 8° below normal in Powell. Precipitation was near or above normal in the east, parts of the extreme west; mostly below normal in the western half. Cheyenne received the largest amount of precipitation with 1.23 in.

Days suitable for fieldwork 6.3. Topsoil 27% short, 73% adequate. Spring wheat 82% harvested, 100% 1992, 100% avg. Oats 86% harvested, 95% 1992, 97% avg. Barley 93% harvested, 99% 1992, 98% avg. Winter wheat planted for harvest in 1994 78%, 91% 1992, 82% avg.; emerged 29%, 48% 1992, 44% avg. Corn dented 53%, 79% 1992, 89% avg.; mature 16%, 13% 1992, 45% avg.; harvested 1%, 6% 1992, 8% avg. Corn silage harvested 58%, 69% 1992, 74% avg. Dry beans windrowed 88%, 80% 1992, 88% avg.; combined 40%, 58% 1992, 64% avg. Sugarbeets harvested 6%, 13% 1992, 12% avg. Frost damage during last two weeks 25% moderate, 75% severe. Corn severely damaged, dry beans also damaged. Cattle, calves moved from summer ranges 33%. Sheep, lambs moved from summer ranges 33%. Pasture, range feed good to excellent.

International Weather and Crop Summary
HIGHLIGHTS

September 19 - 25, 1993

FSU: Welcomed dryness helped autumn fieldwork in Belarus, Ukraine, and parts of western Russia. In the New Lands, cold damp weather slowed spring grain harvesting.

EUROPE: Inundating rain halted corn harvesting in France and northern Italy.

SOUTH ASIA: A surge in the monsoon in central and southern India helped immature summer crops and increased moisture for winter crop planting.

EASTERN ASIA: Dry weather favored maturation and harvesting of summer crops across the North China Plain. Showers slowed rice harvesting across central China.

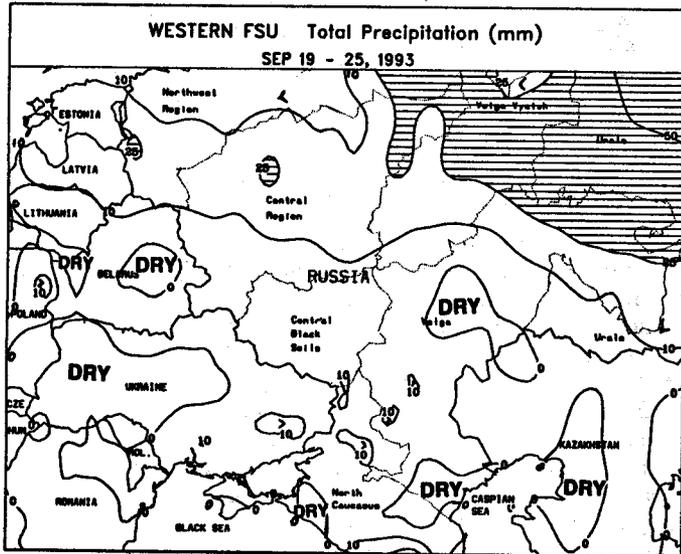
SOUTHEAST ASIA: Widespread showers improved rice prospects across the region.

AUSTRALIA: Sunny, dry weather favored reproductive winter wheat, following recent beneficial rain.

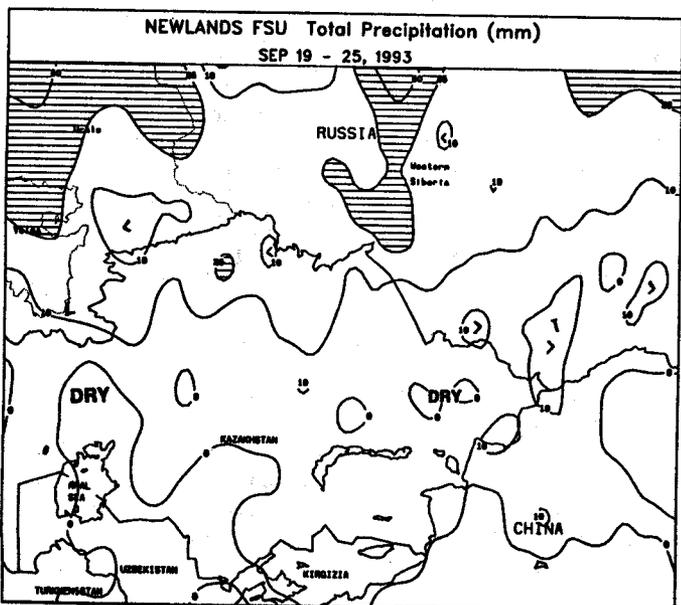
SOUTH AMERICA: Rain increased topsoil moisture for summer crop planting across the region, but delayed winter wheat harvesting in southern Brazil.

MEXICO: Hurricane Gert swept across central Mexico, producing heavy rains and flooding and causing local damage to citrus, coffee, and sugarcane.

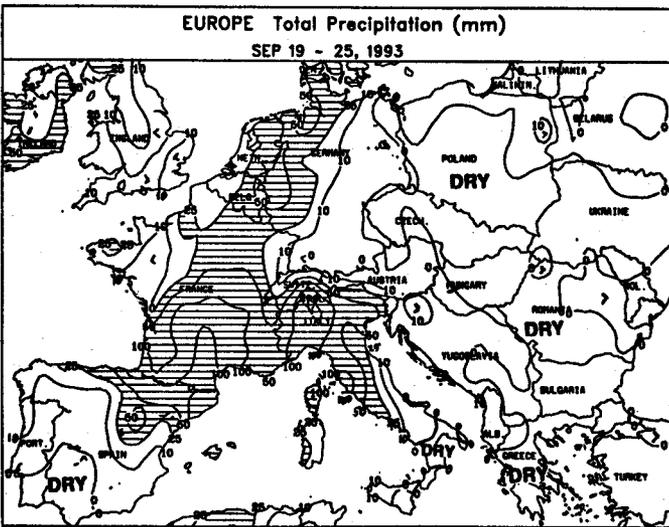
CANADA: Unfavorable harvest conditions plagued the Prairies.



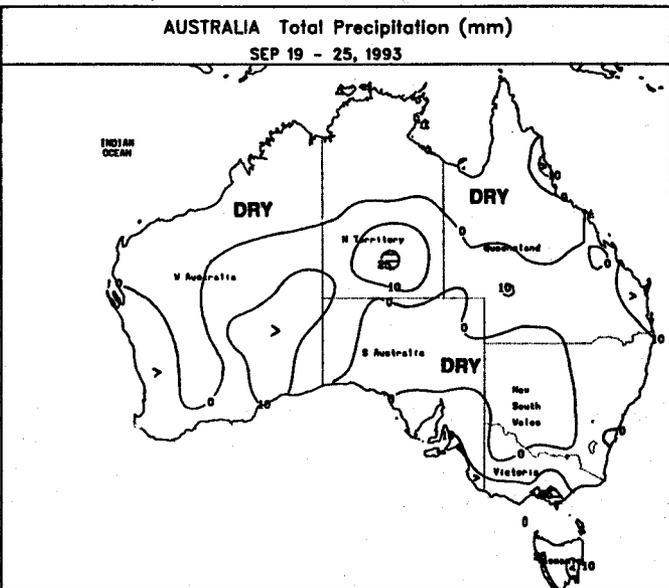
FSU-WESTERN: Welcomed dryness covered Lithuania, Belarus, most of western Russia, and Ukraine, helping spring grain, corn, sugar beet, and sunflower harvests. Precipitation amounts in these areas were below 10 mm. In contrast, light to moderate rain (10-25 mm, with local amounts in excess of 25 mm) slowed fieldwork in Estonia, Latvia, the northern portions of Central Region, northern Volga Vyatsk, and northern Urals. Winter grain planting was well underway in Ukraine and North Caucasus, where the optimum time for planting is mid-September. Topsoil moisture in these areas is adequate for crop emergence. Weekly average temperatures were 2-4 degrees Celsius (C) below normal over the region. Sub-freezing temperatures as far south as northern Ukraine and northern North Caucasus ended the growing season in northern areas and prompted cold hardening in winter grains.



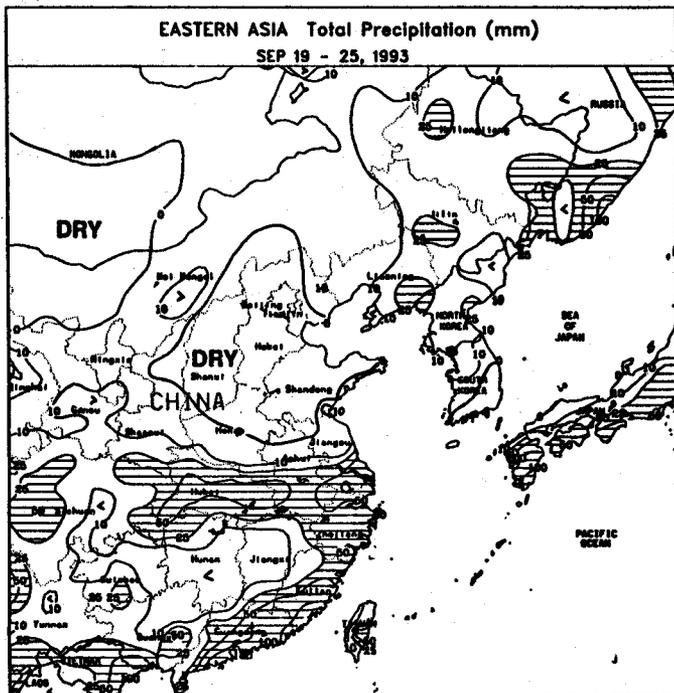
FSU-NEW LANDS: Cold, damp weather covered most areas, slowing the spring grain harvest. Precipitation amounts in northern Kazakhstan, Urals, and West Siberia, generally ranged from 10 to 30 mm, with snow reported in the extreme north. Sub-freezing temperatures (-2 to -5 degrees C) were widespread, ending the growing season. This past week's cold, damp weather prompted concerns about whether the spring grain harvest will reach completion. Warm, dry weather is needed to ensure a successful harvest completion before winter. In cotton areas of Central Asia, warm, dry weather favored boll maturation and harvest. Reports indicate the cotton harvest in Uzbekistan is running about 20 days later than usual. Delays resulted from spring replanting followed by unseasonably cool weather during the growing season, which slowed crop development.



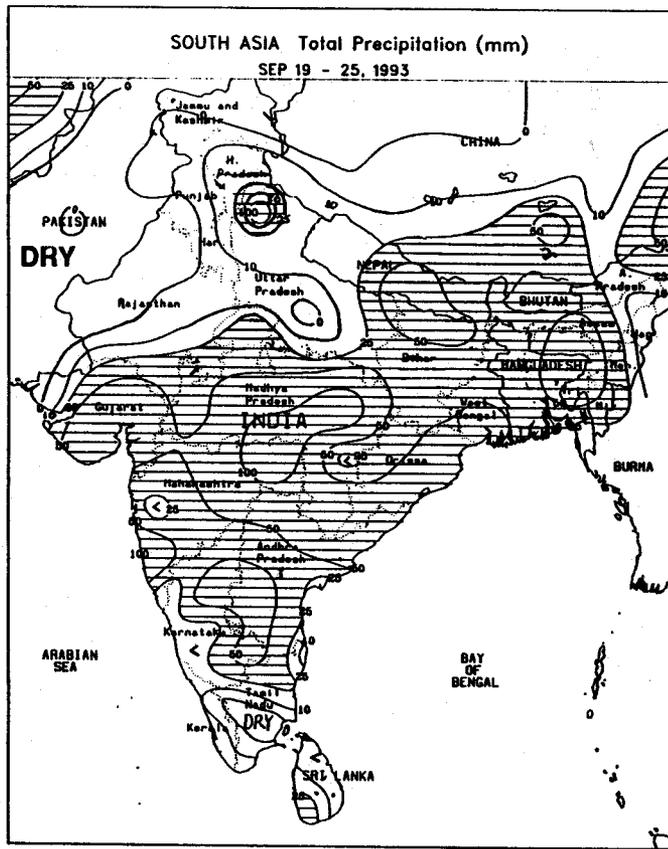
EUROPE: A stalled weather system over western Europe produced heavy rain and flooding in southern France and northwestern Italy. Rainfall of 50 to over 100 mm were common across the southern half of France, northeastern Spain, and northern Italy. The excessive wetness halted corn harvesting in one of Europe's major growing areas. Substantial showers (20-60 mm) also fell over northern France, northwestern Germany, and Denmark, hampering fieldwork. Persistent light showers in the United Kingdom slowed grain and oilseed harvesting. In contrast, favorably dry weather prevailed across eastern Europe, promoting corn and oilseed harvesting. However, soil moisture is low in east-central Europe for winter grain planting. Dry weather favored corn harvesting in Bulgaria. Seasonal rainfall from May to September 1993 averaged 75 percent to less than 50 percent of normal in Slovakia, Hungary, Bulgaria, and the Adriatic region. In Scandinavia, mostly dry weather helped late-harvest activities.



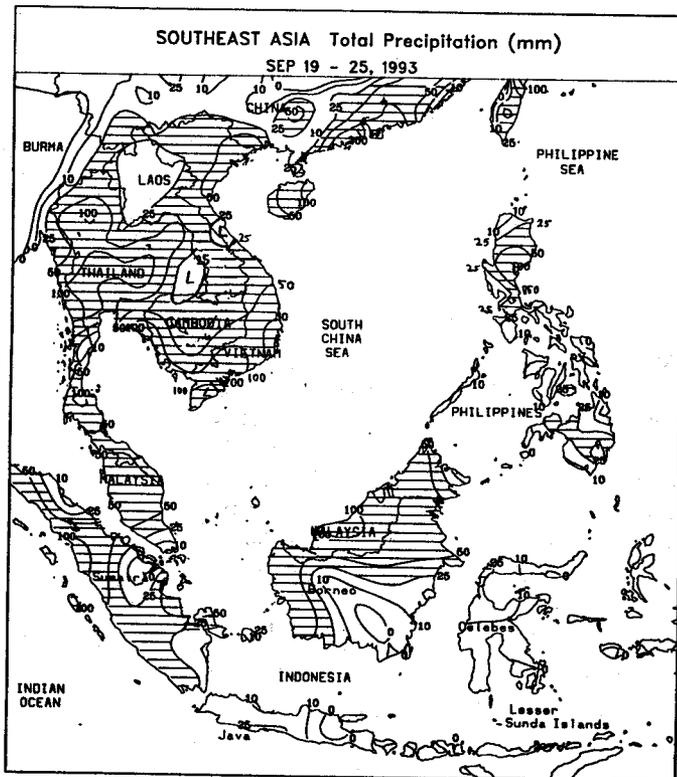
AUSTRALIA: Sunny, mostly dry weather prevailed across the major wheat areas, favoring vegetative to reproductive winter wheat, which benefited from several weeks of rain. Temperatures averaged 1-3 degrees C below normal across the wheat regions.



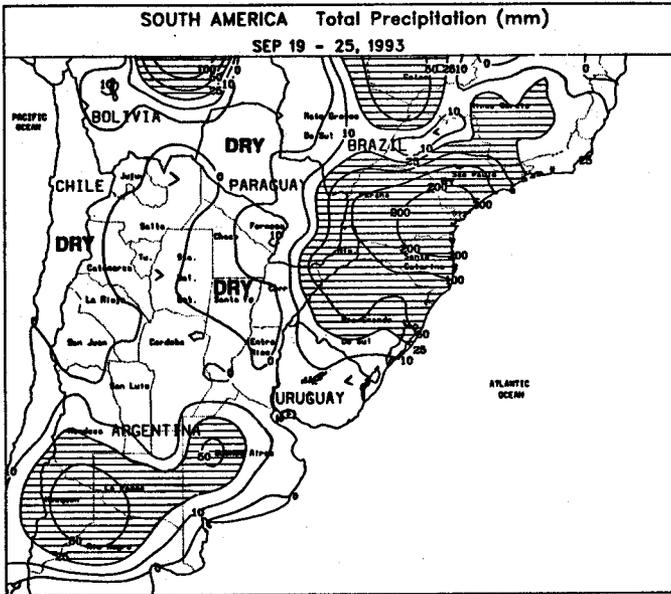
EASTERN ASIA: Mostly dry, warm weather favored corn, soybean, and cotton maturation and harvesting across the North China Plain, while scattered rain (3-30 mm) slowed fieldwork across Manchuria. Moderate showers (20-70 mm) fell across the Yangtze Valley, delaying single-crop rice harvesting. Dry weather prevailed across interior southern China, favoring maturing double-crop rice, while moderate to heavy showers (20-150 mm) fell across the southeastern coast. The rainfall across the region was partly due to approaching Typhoon Dot. Dry weather favored rice harvesting across South Korea, while moderate to heavy rain (25-130 mm) slowed rice harvesting across southern Japan. Temperatures averaged 2-4 degrees C above normal across the North China Plain and southern China and were near normal elsewhere.



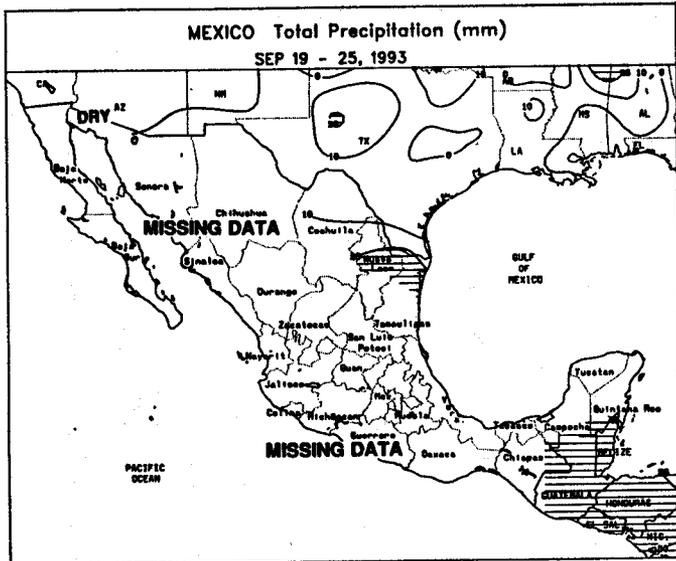
SOUTH ASIA: A late surge in the monsoon brought moderate to heavy rain (25-50 mm, with isolated totals exceeding 100 mm) to central and southern India, benefiting immature summer crops and increasing moisture for winter crop planting. Gujarat's rainfed crop region received its first significant rainfall (50-85 mm) in 2 months, coming too late to significantly improve groundnut prospects. However, cotton, which is typically flowering and setting bolls at this time across central India, can still benefit from the late-season rain. An increase in local rainfall is not unusual as the monsoon retreats, especially over India's southern interior, which experiences a rainfall maxima in October and November. The monsoon, however, is usually completely withdrawn from central India by mid-October, leaving little time to replenish moisture reserves.



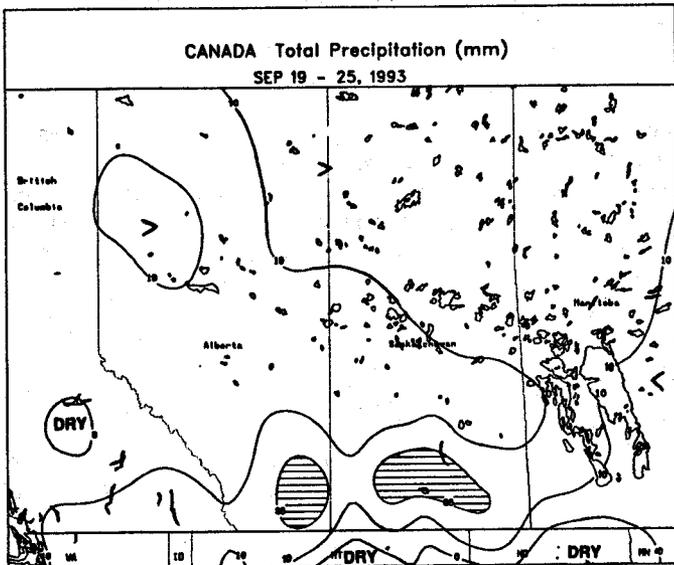
SOUTHEAST ASIA: Widespread showers (25-100 mm or more) continued over Indochina, improving moisture levels for main-season rice. Although excessive amounts (150-221 mm) produced local flooding across Thailand, the recent surge in rainfall has improved dry-season prospects in irrigated crop areas, especially along the Chao Phraya, that have trended below normal for much of the rainy season. The beneficial rains extended southward into Malaysia, covering most rice and oil palm areas. Rainfall increased over Java, with central and western rice areas receiving 10-33 mm. The rainy season is just beginning in Indonesia, and rice planting will become widespread in November and December. In the Philippines, showers were scattered and generally light (10-45 mm), although a tropical depression brought moderate showers (35-100 mm or more) to grain and sugarcane areas of central Luzon.



SOUTH AMERICA: In southern Brazil, widespread soaking showers (30-150 mm, with isolated amounts greater than 200 mm) covered Rio Grande do Sul and Parana, increasing soil moisture for soon to be planted soybeans. However, these rains delayed winter wheat harvesting. In the north across Mato Grosso and Goias, scattered showers (20-100 mm) benefited germinating soybeans. In Argentina, scattered light to moderate rain (10-50 mm) fell across Buenos Aires, favoring vegetative winter wheat and increasing topsoil moisture for sunflowerseed planting. Temperatures averaged 2-4 degrees C below normal across Argentina and extreme southern Brazil, while the rest of southern Brazil averaged 2-4 degrees C above normal.



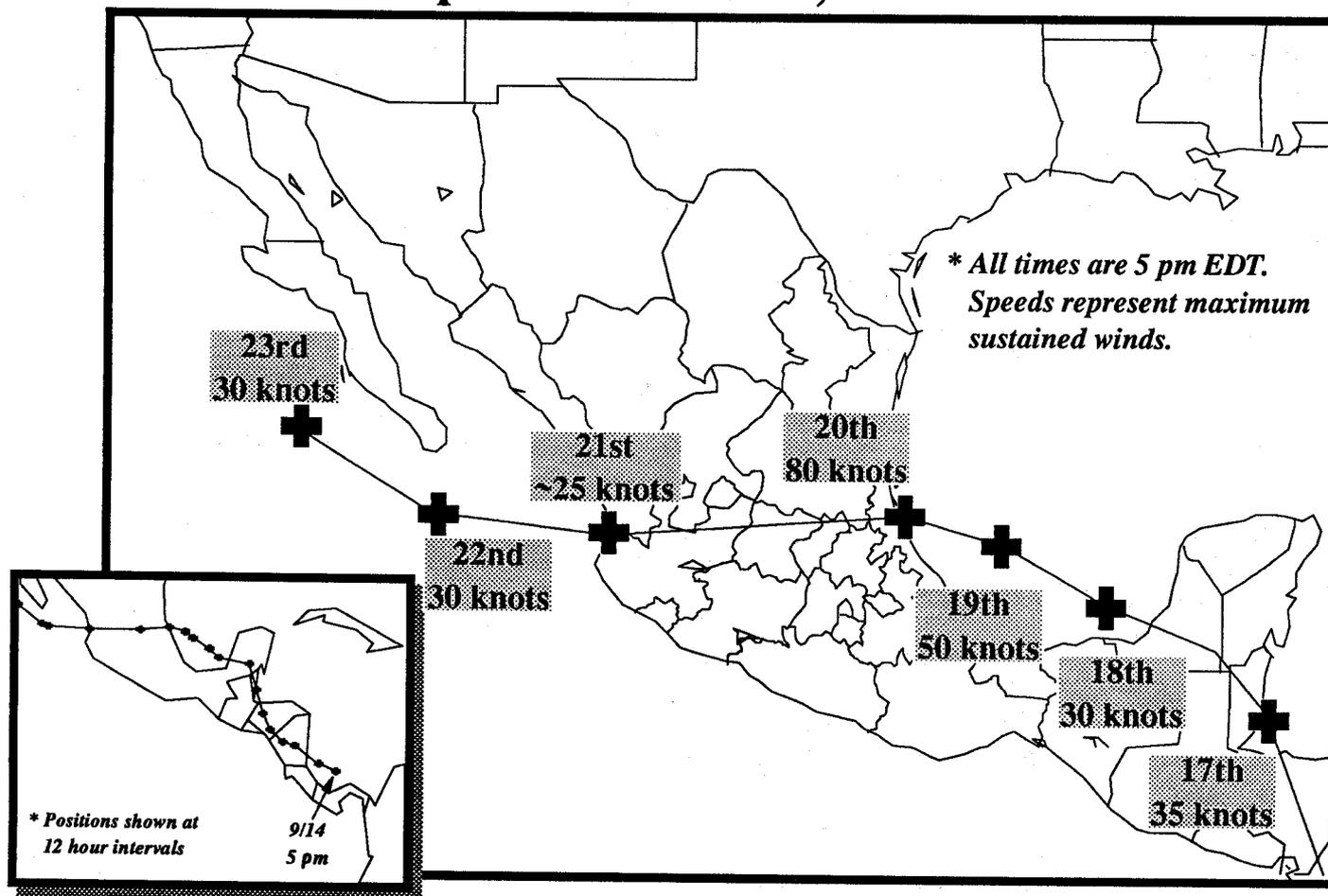
MEXICO: Rainfall and temperature data were missing for the entire country and rainfall intensity was based on satellite imagery. Hurricane Gert slammed into east-central Mexico on September 20, just south of Tampico in northern Veracruz, with sustained winds of 85-95 mph. The storm produced heavy rains, especially once it hit the eastern Sierra Madre, causing flooding and mudslides. The remnants of Gert produced heavy rains and possible flooding across central and western Mexico. Heavy rains also fell across the northwestern vegetable areas, causing some planting delays.



CANADA: A band of moderate showers (20-41 mm) swept from southern Alberta to western Manitoba, further hampering fieldwork and maintaining unfavorable conditions for standing grain and oilseeds. Temperatures averaged 1-4 degrees C below normal over Alberta and western Saskatchewan and near normal elsewhere, with minimum temperatures ranging from -2 to 5 degrees C. Southern Manitoba continued to experience only scattered frost, but Alberta's Peace River Valley recorded its first hard freeze (-5 degrees C). In Ontario, cool, dry weather prevailed, aiding maturing summer crops. Frost was limited to fringe crop areas in the north and east.

Gert

September 14 - 25, 1993



Gert, the seventh named tropical system of the 1993 Atlantic hurricane season, spun a meandering course through Central America and Mexico between September 14 and 23. Due to Gert's proclivity for remaining near, or over, land, it only briefly attained hurricane strength (over the Bay of Campeche on September 20), but delivered extremely heavy rainfall (often 100 millimeters or greater) and gusty winds along its path. Across Central America, Gert possibly caused damage to bananas. The storm attained tropical storm status on three separate occasions (before moving into Nicaragua, prior to crossing the Yucatan Peninsula, and after entering the Bay of

Campeche), and nearly survived a traversal of Mexico's central plateau. Twenty-four hours after striking northern Vera Cruz, Mexico, with sustained winds of up to 90 miles per hour, Gert emerged south of Baja California with an identifiable circulation. The storm caused local damage to coffee, citrus, and sugarcane across coastal east-central Mexico and the highlands of the eastern Sierra Madre. Before weakening over cooler eastern Pacific waters on September 25, Gert produced a final flurry of heavy rainfall in northwestern Mexico, and contributed moisture to a cold front that produced more than 17 inches of rain in 24 hours in Pittsburg, KS on September 24 and 25.

--Brad Rippey and Bob Stefanski
Graphics by Jeff Savadel

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

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

U.S. DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration
National Weather Service/Climate Analysis Center
Managing Editor **Douglas Le Comte**
Editor **Brad Rippey** (202) 720-1444
Meteorologists **David Secora**
Vilhelm Ejerknæs and Jeff Savadel

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)

Columbia, MO endured its second 2-inch rainfall of the week, resulting in widespread flash flooding. Farther south, daily record highs were set in more than 2 dozen cities, including Austin, TX (98°F) and Monroe, LA (98°F). Late in the week, remnant moisture from former Hurricane Gert was entrained into a developing low pressure over the south-central United States. Gert, which had been a heavy rain producer during its week-long traversal of Central America and Mexico, helped to fuel incredible rains on and near the Ozark Plateau. More than 17 inches of rain inundated Pittsburg, KS in 24 hours on Friday and early Saturday. Major flash flooding ensued along many tributaries of the Arkansas and Missouri Rivers from northeastern Oklahoma to southwestern Missouri. Farther north, across Iowa and Illinois, flash flooding was widespread but less severe. The Mississippi River at St. Louis, MO, which fell below flood stage for the first time in 80 days on September 13, has risen more than 9 feet since, in response to recent heavy rainfall. September rainfall has exceeded 17 inches in Springfield, MO, and reached 12 inches in Columbia, MO. Prior to the flood of 1993, the Mississippi River's depth on Saturday at St. Louis would have been the fifth greatest on record.

**WEEKLY NEWS BULLETIN
FIRST CLASS**

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

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

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300