

WEEKLY WEATHER AND CROP BULLETIN

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

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

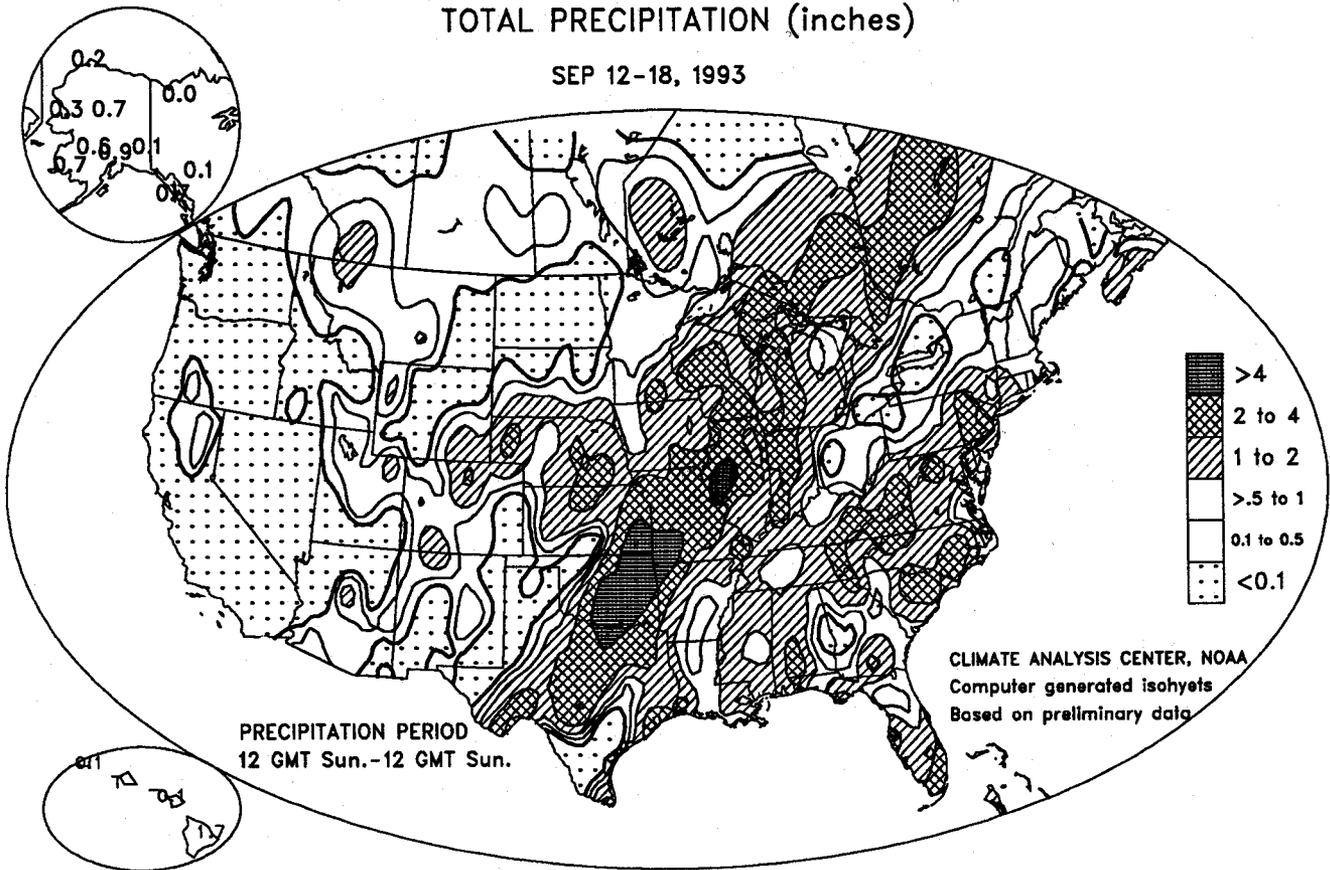
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Washington, D.C.

September 21, 1993

TOTAL PRECIPITATION (inches)

SEP 12-18, 1993



CLIMATE ANALYSIS CENTER, NOAA
Computer generated isohyets
Based on preliminary data

PRECIPITATION PERIOD
12 GMT Sun.-12 GMT Sun.

HIGHLIGHTS

September 12 - 18, 1993

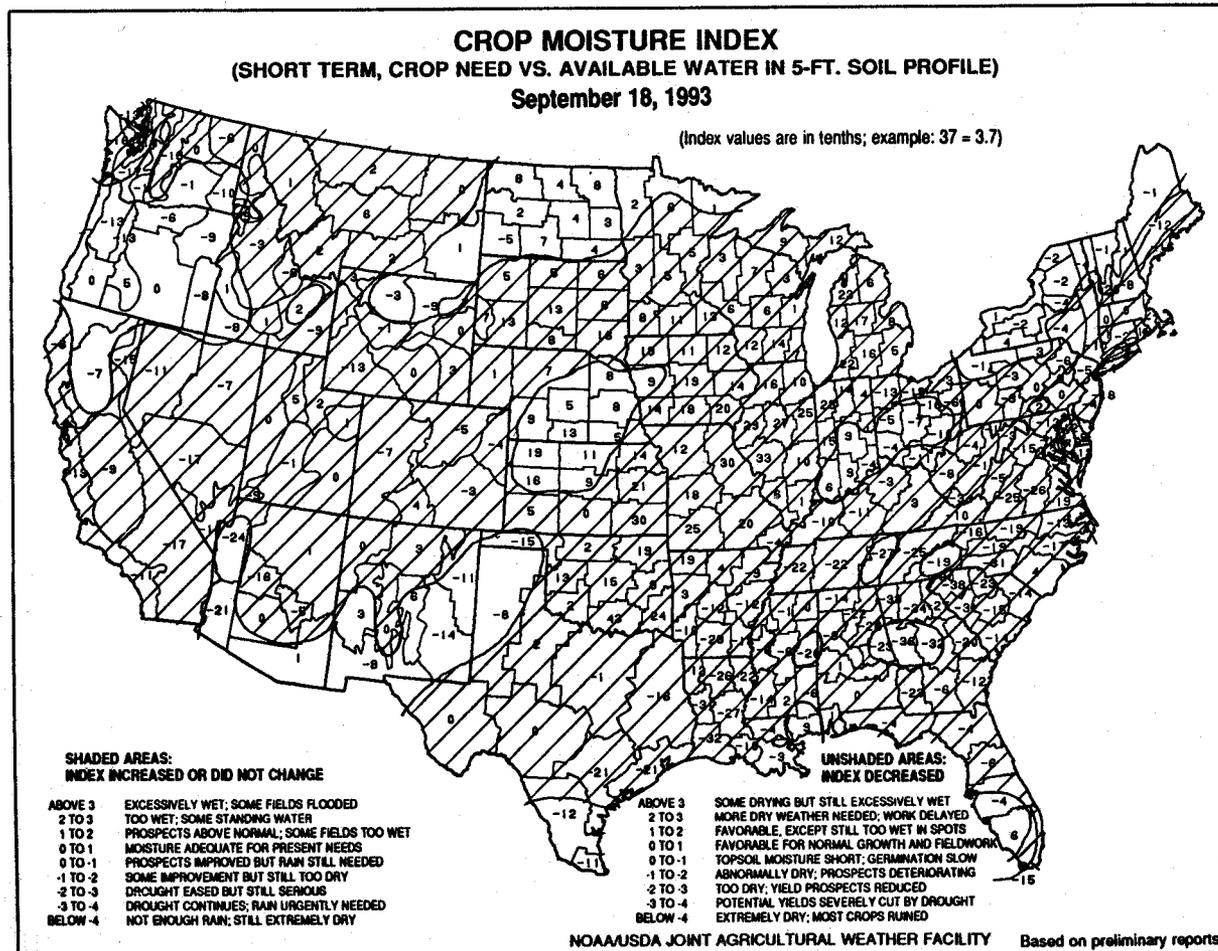
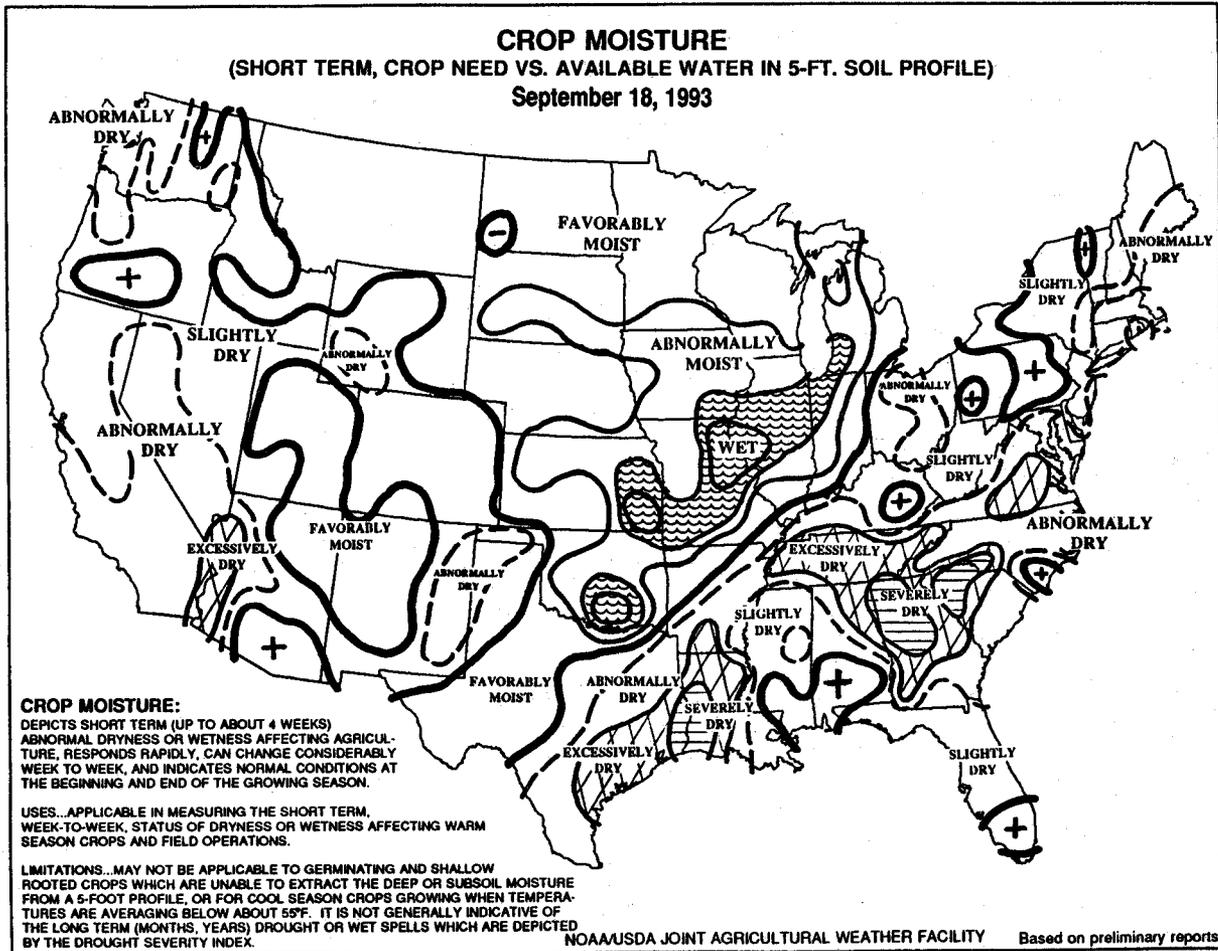
Remnant moisture from the eastern Pacific Hurricane Lidia scurried northward in association with a powerful storm system, drenching areas from Texas to the western Great Lakes States. Unseasonably cold air drove southward in the storm's wake, delivering a freeze from the northern and central Rockies to the western Dakotas and western Nebraska. Temperatures on Sunday soared above 90°F as far north as southern South Dakota. Denver, CO attained 92°F on Sunday, but less than 18 hours later, snow was falling (5.3 inches total) with a temperature of 33°F. Similar changes transpired in other parts of the central High Plains, where Cheyenne, WY recorded its second-snowiest September day (5.5 inches) and Scottsbluff, NE noted its earliest measurable snowfall (2.5 inches on Sept. 13). Meanwhile, inundating rains, in part due to moisture from former

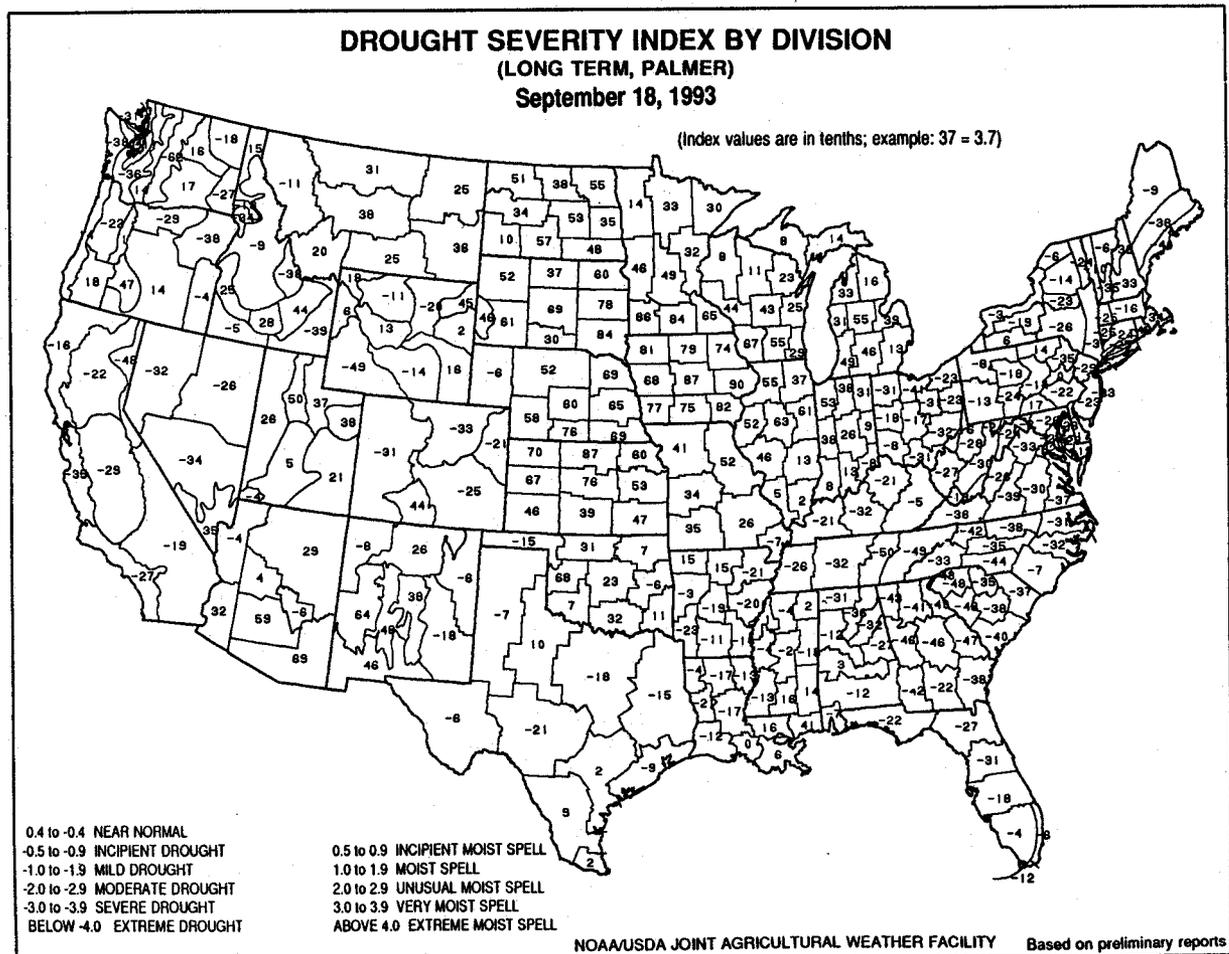
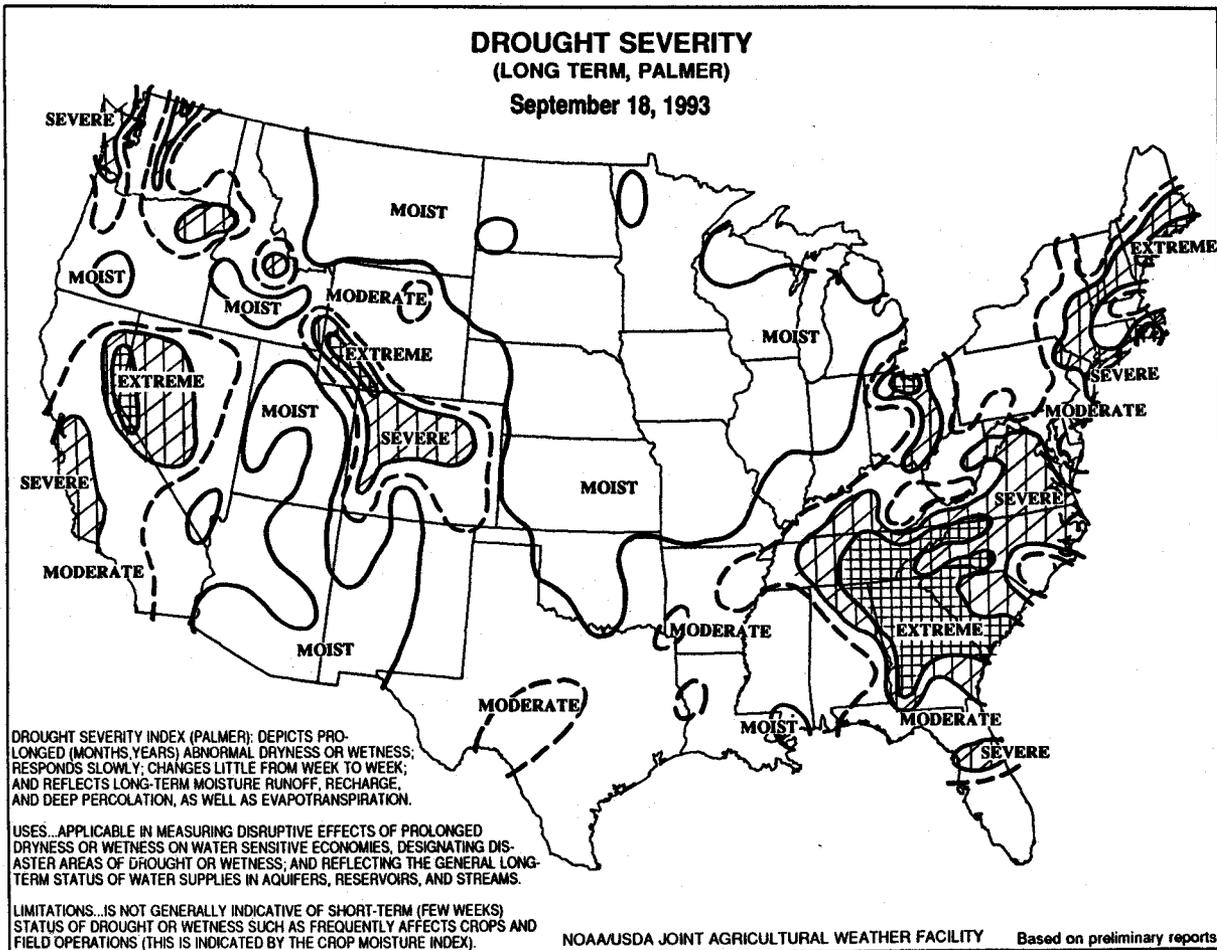
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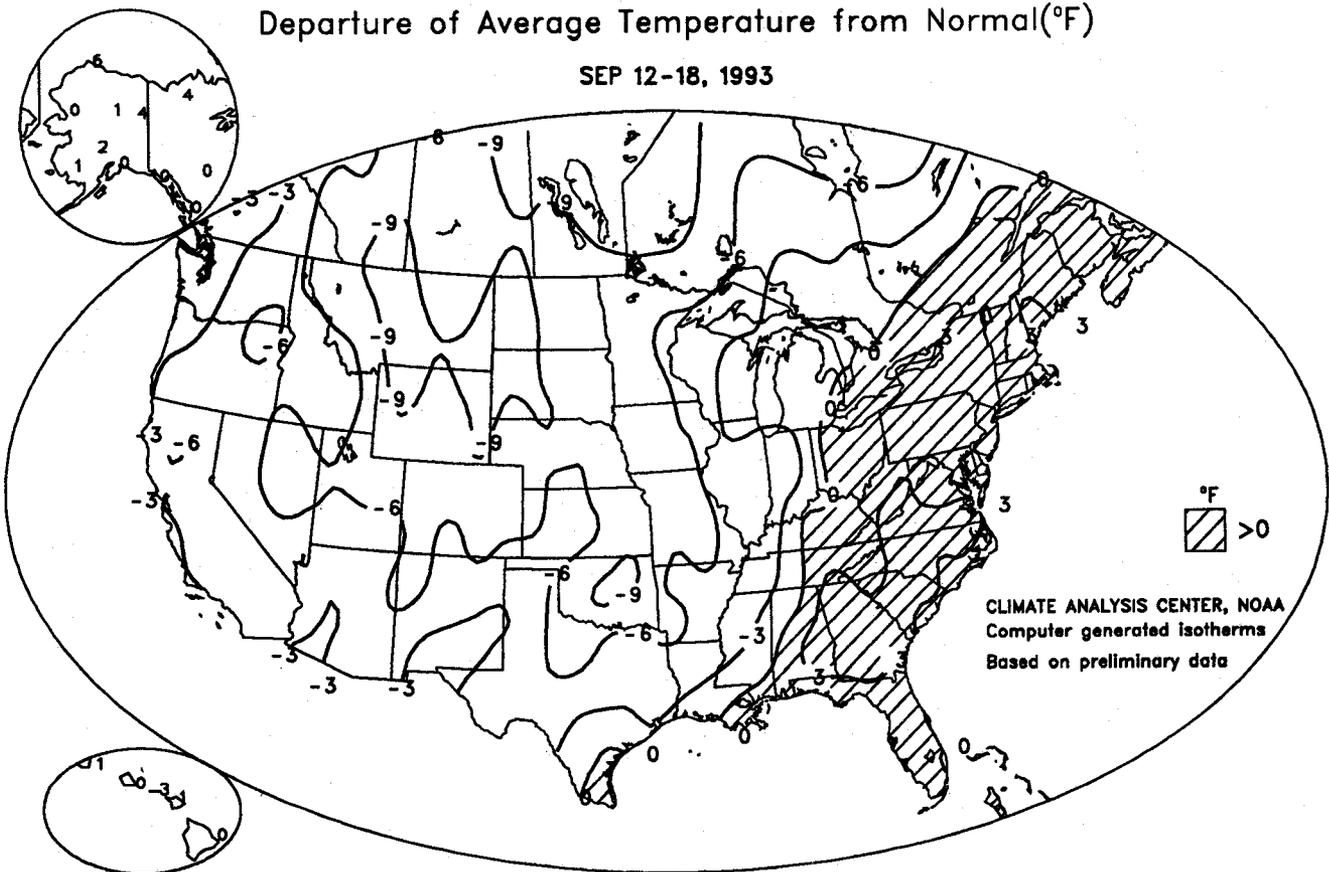
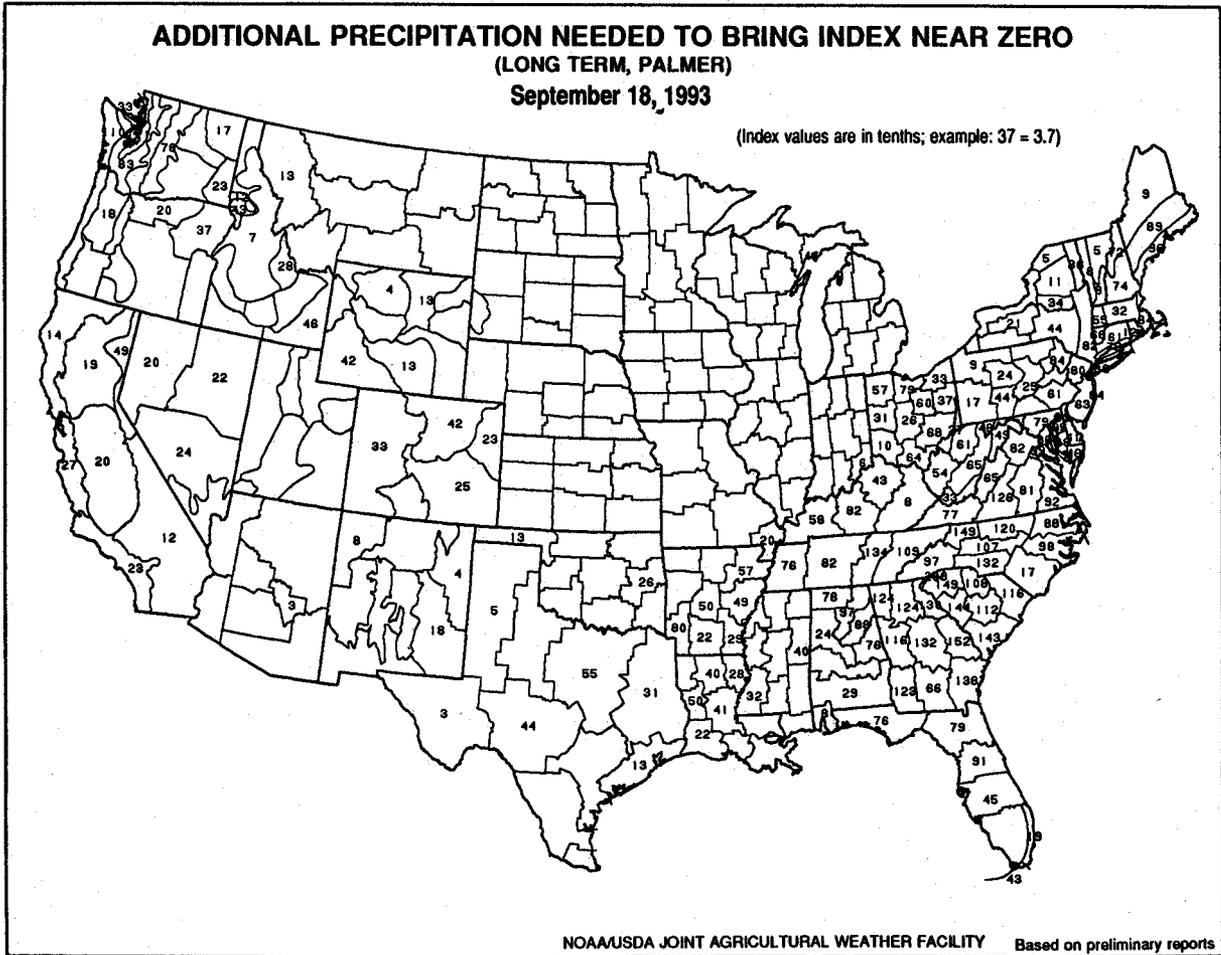
Contents

Page

Highlights & Total Precipitation Map	1
Crop Moisture Maps	2
Drought Severity Maps	3
Precipitation Needed to End Drought & Temperature Departure Map	4
Extreme Maximum & Minimum Temperature Maps ...	5
Growing Degree Day Table	6
National Weather Data for Selected Cities	7
National Agricultural Summary	10
Crop Progress and Condition Tables	11
State Summaries of Weather and Agriculture ...	13
International Weather and Crop Summary	20
Canadian Prairie Seasonal Summary	26
Subscription and Mailing Permit Information ..	28

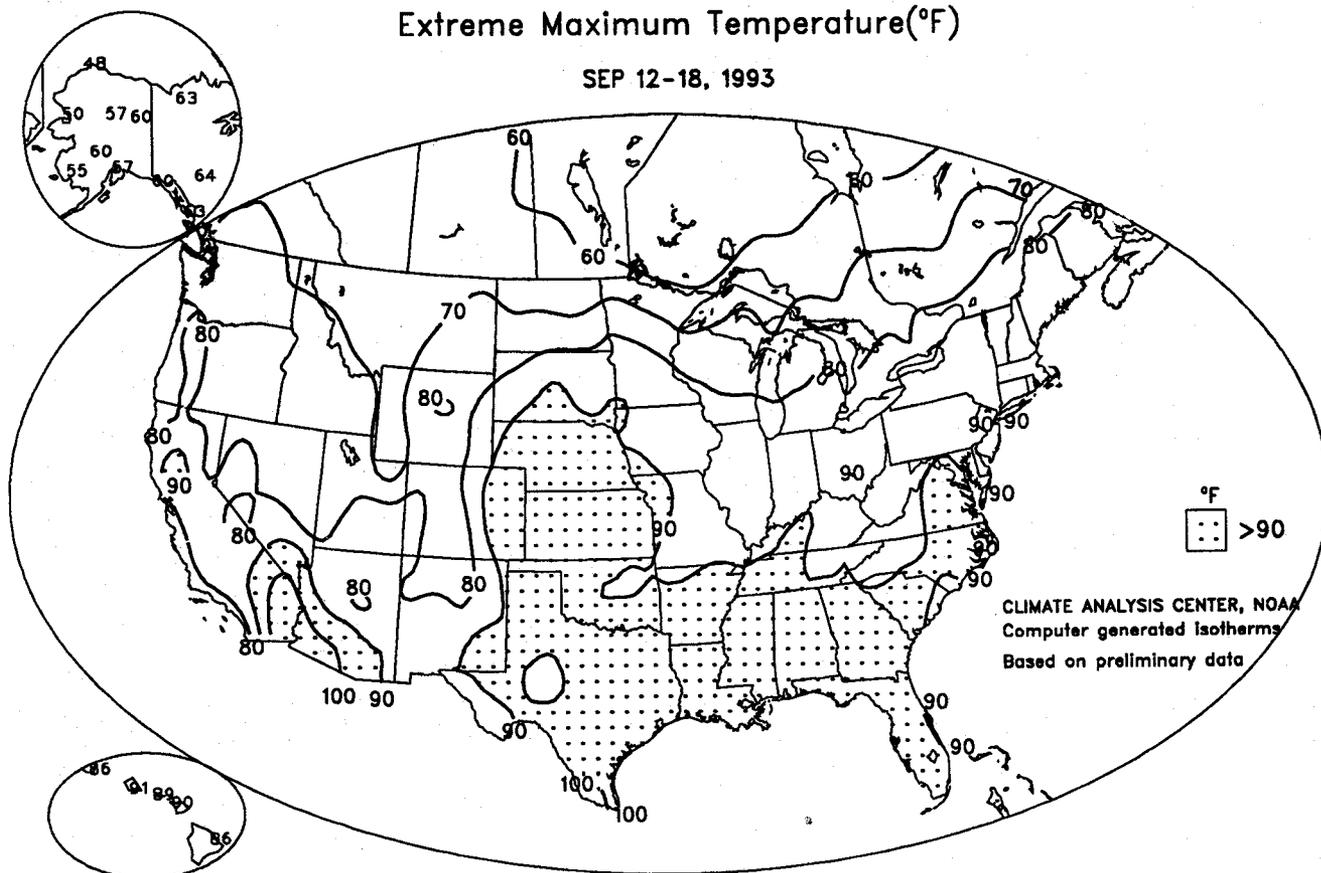






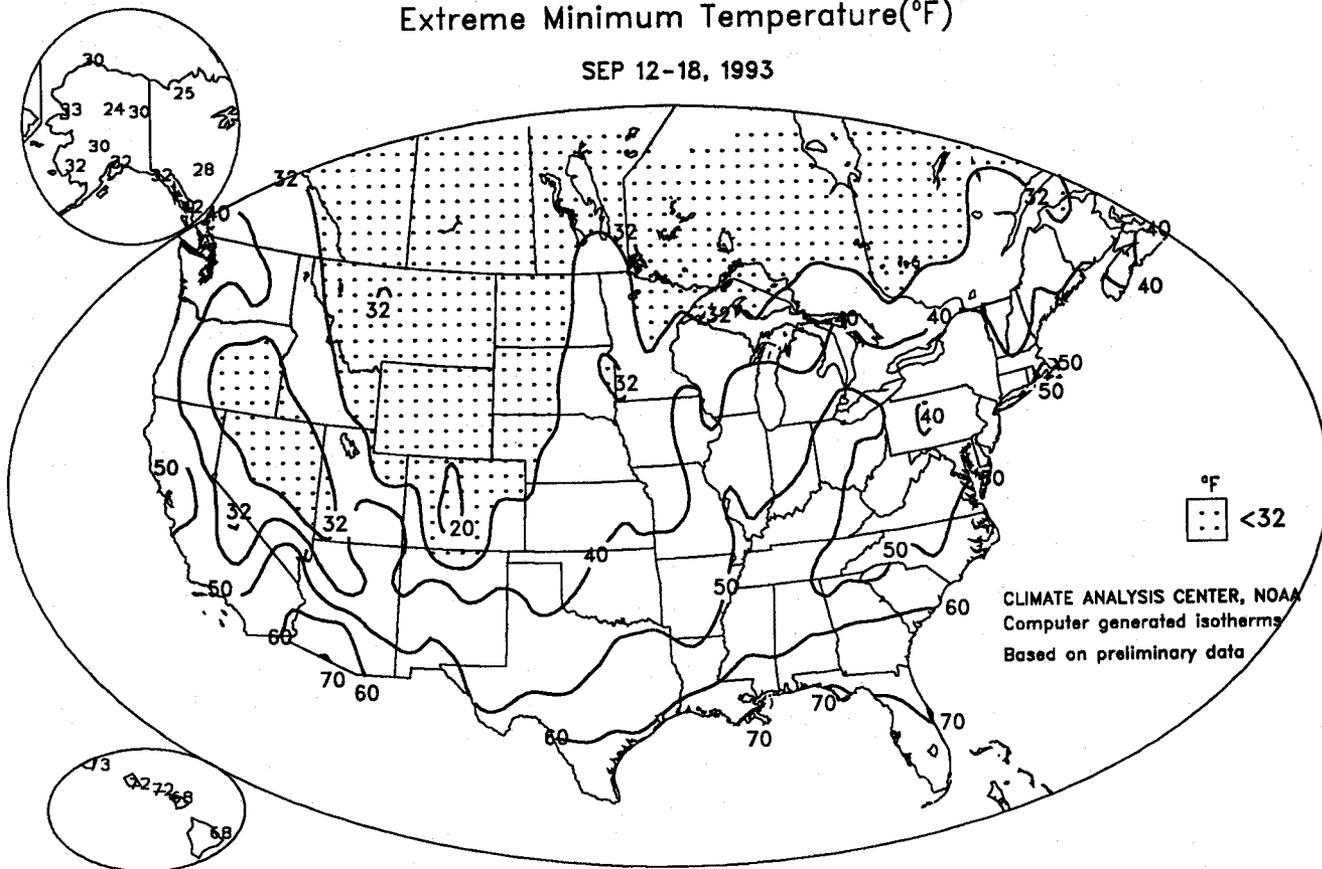
Extreme Maximum Temperature(°F)

SEP 12-18, 1993



Extreme Minimum Temperature(°F)

SEP 12-18, 1993



CUMULATIVE GROWING DEGREE DAYS (CORN*) April 1 - September 18, 1993

STATES AND STATIONS	TOTAL	DEP. FROM NORMAL	STATES AND STATIONS	TOTAL	DEP. FROM NORMAL	STATES AND STATIONS	TOTAL	DEP. FROM NORMAL
AL ANNISTON	3932	+ 91	SALINA	3291	- 121	OK ALTUS	3907	- 88
BIRMINGHAM	3951	+ 26	TOPEKA/BILLARD	3217	- 123	GAGE	3498	- 67
MOBILE	4287	- 132	WICHITA	3424	- 125	HOBART	3772	- 93
MONTGOMERY	4161	+ 159	KY LEXINGTON	3361	+ 119	MCALESTER	4049	+ 104
MUSCLE SHOALS	3932	+ 126	BOWLING GREEN	3578	+ 101	PONCA CITY	3796	+ 41
OZARK	4218	+ 96	PADUCAH	3685	+ 91	TULSA	3750	- 164
TUSCALOOSA	4090	+ 43	LA LAFAYETTE	4430	- 6	OR BAKER	1836	- 152
AZ DOUGLAS	3752	+ 183	LAKE CHARLES	4484	- 34	EUGENE	2039	+ 2
FLAGSTAFF	2208	+ 212	MONROE	4213	+ 25	NORTH BEND	1486	+ 280
PHOENIX	5168	+ 574	NEW ORLEANS	4384	- 78	PENDLETON	2339	- 157
TUCSON	4430	+ 221	SHREVEPORT	4186	+ 107	REDMOND	1810	- 163
YUMA	5221	+ 487	ME AUGUSTA	2288	+ 234	PORTLAND	2256	+ 174
PRESCOTT	3069	+ 392	CARIBOU	1791	+ 219	SALEM	2194	+ 189
AR EL DORADO	3994	- 35	HOULTON	1849	+ 125	SEXTON SUMMIT	1292	- 300
FAYETTEVILLE	3550	+ 107	PORTLAND	2197	+ 259	PA ALLENTOWN	3095	+ 329
FORT SMITH	3959	+ 78	MD SALISBURY	3459	+ 276	PHILADELPHIA	3599	+ 688
JONESBORO	3856	- 37	MA WORCESTER	2326	+ 133	WILLIAMSPORT	2986	+ 321
LITTLE ROCK	4010	+ 119	MI JACKSON	2465	- 78	SC BEAUFORT	4450	+ 257
TEXARKANA	4102	- 73	LANSING	2457	- 104	CHARLESTON	4330	+ 220
CA BAKERSFIELD	3829	- 34	LAKE MCKEON	2416	+ 115	COLUMBIA	4135	+ 147
BLUE CANYON	1758	- 197	PELLSTON	1899	+ 48	FLORENCE	4257	+ 265
DAGGETT	4192	+ 91	SAULT STE. MARIE	1524	- 34	SUMTER/SHAW AFB	4106	+ 146
EUREKA	1384	+ 542	TRAVERSE CITY	2261	+ 126	SD ABERDEEN	2307	- 34
FRESNO	3683	+ 265	MN DULUTH	1442	- 171	HURON	2339	- 240
MARYSVILLE	3485	+ 216	INT'L FALLS	1639	- 129	PIERRE	2362	- 231
MERCED	3450	+ 223	MINNEAPOLIS	2293	---	RAPID CITY	2033	- 360
MT SHASTA	1821	- 245	ROCHESTER	2097	---	SIOUX FALLS	2394	- 238
PASO ROBLES	2896	+ 146	ALEXANDRIA	1988	- 216	WATERTOWN	1970	- 320
RED BLUFF	3356	- 132	MS BILOXI	4526	+ 6	TN BRISTOL	3340	+ 134
RIVERSIDE	3523	+ 320	COLUMBUS	4021	+ 100	CHATTANOOGA	3950	+ 277
SANTA ANA	3658	+ 596	JACKSON	4170	+ 170	CROSSVILLE	3358	+ 441
SAN DIEGO	3095	+ 167	MERIDIAN	4149	+ 98	MEMPHIS	4124	+ 79
SACRAMENTO	3106	+ 86	GREENWOOD	4134	+ 10	NASHVILLE	3810	+ 100
THERMAL	4476	- 80	MO COLUMBIA	3235	+ 25	TX ABILENE	4164	- 9
CO ALAMOSA	1859	- 133	JOPLIN	3549	- 61	AMARILLO	3343	- 41
DENVER	2534	- 26	SPRINGFIELD	3402	+ 29	AUSTIN	4551	+ 59
EAGLE	1902	- 231	VICHY	3370	- 1	BROWNSVILLE	4966	+ 49
GRAND JUNCTION	2948	- 184	MT HELENA	1647	- 263	COLLEGE STATION	4416	- 15
LA JUNTA	3041	- 89	KALISPELL	1608	- 295	DALHART	3197	+ 14
DE DOVER	3352	+ 73	MILES CITY	2112	- 359	DALLAS/FT WORTH	4395	+ 177
WILMINGTON	3438	+ 357	NE GRAND ISLAND	2712	- 223	GALVESTON	4928	+ 129
FL DAYTONA BEACH	4403	- 71	NORFOLK	2683	- 165	HOUSTON/INTCNTL	4537	+ 168
FORT MYERS	4812	+ 77	NORTH PLATTE	2498	- 168	KINGSVILLE/NAS	4929	+ 188
GAINESVILLE	4259	- 132	VALENTINE	2344	- 419	LAREDO	5004	+ 145
JACKSONVILLE	4330	- 93	SCOTTSDRUFF	2358	- 205	LUBBOCK	3846	+ 194
FORT LAUDERDALE	5191	+ 369.	SIDNEY	2304	- 73	MCCALLEN	5039	+ 261
MIAMI	5127	+ 150	NV ELKO	1978	- 251	MIDLAND	4000	+ 10
MILTON	4318	+ 96	ELY	2063	- 26	PALACIOS	4731	+ 7
PENSACOLA	4462	- 39	LAS VEGAS	4572	+ 339	SAN ANTONIO	4607	+ 58
ST PETERSBURG	4826	- 60	RENO	2457	+ 107	VICTORIA	4650	+ 97
TALLAHASSEE	4276	- 22	WINNEMUCCA	2362	- 11	WACO	4369	- 89
TAMPA	4653	- 31	NH CONCORD	2500	+ 259	WICHITA FALLS	3980	- 109
VERO BEACH	4612	+ 24	NJ NEWARK	3649	+ 557	WINK	4132	+ 62
GA W. PALM BEACH	4876	+ 120	NM ALBUQUERQUE	3476	+ 431	UT CEDAR CITY	2598	+ 2
ATHENS	4007	+ 224	CARLSBAD	4075	+ 160	VT BARRE-MONTPELIER	2075	+ 208
AUGUSTA	4167	+ 220	CLOVIS	3432	+ 180	BURLINGTON	2455	+ 300
BRUNSWICK	4407	- 15	GALLUP	2578	+ 35	VA CHARLOTTESVILLE	3565	+ 227
COLUMBUS/METRO	4269	+ 164	TRUTH OR CONSEQ.	3716	+ 174	HAMPTON/LANGLEY	3904	+ 348
MACON	4189	+ 85	NY ALBANY	2667	+ 228	LYNCHBURG	3645	+ 429
SAVANNAH	4412	+ 197	ELMIRA	2558	+ 234	NORFOLK	3885	+ 326
ID BOISE	2362	- 167	GLENS FALLS	2436	+ 205	RICHMOND	3721	+ 264
BURLEY	2177	- 44	ROCHESTER	2499	+ 90	WA BELLINGHAM	1669	+ 194
IDAHO FALLS	1801	- 251	SYRACUSE	2532	+ 144	HOQUIAM	1508	+ 201
POCATELLO	1939	- 272	UTICA	2317	+ 82	SEATTLE-TACOMA	1870	+ 162
IL BELLEVILLE	3460	+ 102	WATERTOWN	2284	+ 32	SPOKANE	1878	- 185
CHICAGO/MIDWAY	2845	- 42	ASHEVILLE	3234	+ 260	TACOMA	1922	+ 101
DECATUR	3097	- 114	FAYETTEVILLE	3967	+ 216	WALLA WALLA	2550	- 79
PEORIA	3081	+ 131	GREENSBORO	3809	+ 345	WENATCHEE	2588	- 67
ROCKFORD	2730	+ 57	HICKORY	3662	+ 224	YAKIMA	2334	- 47
SPRINGFIELD	3202	+ 35	RALEIGH	3844	+ 280	WV HUNTINGTON	3408	+ 397
QUINCY	3066	- 52	WILMINGTON	4145	+ 171	MARTINSBURG	3129	+ 133
IN INDIANAPOLIS	3127	+ 84	NEW BERN	4008	+ 156	MORGANTOWN	3052	+ 158
SOUTH BEND	2750	+ 84	ND BISMARCK	1935	- 261	WI EAU CLAIRE	2166	- 156
TERRE HAUTE	3207	+ 111	DICKINSON	1681	- 389	GREEN BAY	2237	+ 54
IA DES MOINES	2775	- 231	JAMESTOWN	1875	- 278	LACROSSE	2449	- 154
MASON CITY	2327	- 349	MINGOT	1711	- 321	MADISON	2575	+ 31
OTTUMWA	2939	- 85	GRAND FORKS	1967	- 114	WAUSAU	2028	- 124
KS CHANUTE	3368	- 135	OH AKRON-CANTON	2771	+ 176	WY CASPER	2090	- 108
DODGE CITY	3126	- 198	COLUMBUS	3063	+ 227	LANDER	1950	- 209
GARDEN CITY	2989	- 273	DAYTON	3021	+ 50	SHERIDAN	1819	- 282
GOODLAND	2557	- 214	FINDLAY	2680	- 26	WORLAND	2178	- 113
MEDICINE LODGE	3562	- 15	YOUNGSTOWN	2612	+ 183			
RUSSELL	3117	- 167	ZANESVILLE	2950	+ 174			

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 18, 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	TEMP. °F		PRECIP.
													90 AND ABOVE				32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	85	64	89	54	74	1	1.3	.3	.9	4.0	168	29.0	71	94	60	0	0	3	1
MOBILE	88	70	91	64	79	1	1.7	.3	1.3	3.2	83	48.4	97	86	0	0	4	0	
MONTGOMERY	90	69	95	62	80	4	.5	-.4	.3	1.3	56	36.2	95	59	0	0	1	0	
AK ANCHORAGE	55	41	58	32	48	-1	1.2	.6	.9	2.5	152	10.9	103	95	63	0	0	2	0
BARROW	42	34	49	30	38	-7	.5	.3	.2	1.1	274	4.0	122	91	67	4	4	5	0
FAIRBANKS	54	40	69	28	47	1	.5	.3	.2	1.3	200	8.1	100	91	63	0	0	3	0
JUNEAU	57	45	63	39	51	1	1.2	-.4	.7	1.6	43	33.2	97	98	72	0	0	1	0
KODIAK	59	46	62	43	52	2	.1	-1.6	.1	2.2	55	48.3	108	93	59	0	0	0	0
Nome	46	36	51	28	41	.9	.9	-.3	.5	1.9	121	11.0	102	95	62	0	0	5	1
AZ PHOENIX	94	73	98	66	84	-2	.1	-.1	.1	.1	11	9.3	183	55	20	6	0	1	0
PRESCOTT	77	51	81	39	64	-1	.1	-.4	.1	.1	6	13.6	92	73	26	0	0	2	0
TUCSON	90	64	95	57	77	-4	.4	-.0	.4	.5	43	13.1	151	77	23	3	0	1	0
YUMA	95	75	102	65	85	-2	.0	-.1	.9	.1	55	3.6	170	64	21	1	1	0	0
AR FORT SMITH	80	58	92	50	69	-5	1.0	-.3	.9	2.5	131	31.9	111	89	50	0	0	2	0
LITTLE ROCK	80	58	94	48	69	-5	.5	-.6	.5	.8	29	30.6	90	81	51	1	1	0	0
CA BAKERSFIELD	85	58	92	51	71	-6	.0	-.0	.0	.0	0	6.6	164	56	19	3	0	0	0
EUREKA	62	52	71	48	57	0	.0	-.2	.0	T	7	30.4	139	89	59	0	0	0	0
FRESNO	84	56	93	51	70	-5	.0	-.1	.0	.0	0	11.5	162	72	28	0	0	0	0
LOS ANGELES	73	63	74	57	68	-2	T	-.1	T	T	0	18.5	227	83	62	0	0	0	0
REDDING	84	54	91	50	69	-5	.0	-.2	.0	.0	0	36.3	182	75	24	2	0	0	0
SACRAMENTO	80	53	89	51	66	-5	.0	-.1	.0	.0	0	19.1	174	86	76	0	0	0	0
SAN DIEGO	71	63	74	60	67	-4	.1	-.1	T	T	0	15.5	241	76	26	0	0	0	0
SAN FRANCISCO	69	54	76	51	62	-3	.0	-.0	.0	T	0	19.4	157	86	56	0	0	0	0
CO DENVER	70	42	92	32	56	-6	1.9	1.6	1.1	2.2	286	10.7	86	83	41	1	1	0	0
GRAND JUNCTION	75	49	89	36	62	-6	.3	-.1	.2	.4	67	9.4	132	68	21	0	0	2	0
PUEBLO	76	41	92	31	58	-8	T	-.2	T	T	27	12.4	131	87	28	0	0	0	0
CT BRIDGEPORT	74	60	85	48	67	1	1.8	1.0	.6	2.7	147	23.3	78	86	66	0	0	4	0
HARTFORD	74	56	88	44	65	1	.6	-.3	.3	2.7	121	31.0	99	89	67	0	0	1	0
DC WASHINGTON	80	64	92	53	72	0	.9	-.1	.5	2.0	99	28.0	100	90	66	0	0	4	0
FL APALACHICOLA	89	75	91	71	82	3	.4	-1.4	.4	2.8	58	37.0	89	97	67	0	0	3	0
DAYTONA BEACH	88	72	89	68	80	0	1.0	-.5	.5	2.2	55	25.9	72	97	62	0	0	2	0
JACKSONVILLE	90	71	94	68	80	1	1.7	.0	1.7	6.6	153	32.7	87	99	62	4	0	0	0
KEY WEST	88	78	91	74	83	0	2.9	1.5	1.2	3.5	98	25.4	90	84	69	2	0	5	0
MIAMI	88	76	90	74	82	0	3.2	1.4	1.8	11.6	246	46.1	108	87	67	1	0	5	0
ORLANDO	90	73	92	70	82	0	T	-1.5	T	4.2	107	37.8	97	95	59	6	0	1	0
TALLAHASSEE	92	70	94	67	81	2	.1	-1.2	.1	1.6	44	41.9	81	91	53	7	0	6	0
TAMPA	92	73	93	72	83	1	3.2	1.8	1.5	5.3	133	30.5	85	95	56	6	0	2	0
WEST PALM BEACH	88	75	91	73	81	-1	3.6	2.0	1.7	4.7	111	43.5	102	94	68	1	0	2	0
GA ATLANTA	88	68	91	60	78	5	2.0	1.2	1.7	3.0	142	36.8	96	80	55	2	0	1	0
AUGUSTA	93	65	98	56	79	4	1.9	1.2	1.9	2.0	105	28.4	81	96	47	6	0	2	0
MACON	92	67	95	60	80	4	.2	-.4	.2	1.0	58	37.1	108	91	48	5	0	1	0
SAVANNAH	91	71	93	66	81	4	.5	-.5	.5	5.6	184	36.8	91	92	52	6	0	3	0
HI HILO	84	69	86	68	77	1	.8	-1.1	.2	3.7	72	73.5	82	91	66	0	0	5	0
HONOLULU	89	74	91	72	82	1	.0	-.2	.0	.6	162	4.0	32	77	52	4	0	2	0
KAHULUI	88	72	90	68	80	1	T	.0	T	T	27	7.5	55	78	57	1	0	0	0
LIHUE	86	75	86	73	80	1	.1	-.4	.1	.5	37	10.7	40	80	61	0	0	2	0
ID BOISE	72	46	78	33	59	-4	T	-.2	T	T	0	10.9	133	76	28	0	0	0	0
LEWISTON	71	46	75	42	58	-6	T	-.2	T	T	6	10.9	122	68	26	0	0	1	0
POCATELLO	68	39	74	27	53	-6	.2	.1	.2	.3	54	15.7	183	89	32	0	2	2	0
IL CHICAGO	68	55	80	50	61	-3	1.8	.9	1.4	2.5	104	38.2	144	87	61	0	0	4	0
MOLINE	70	54	89	44	62	-3	1.3	.4	.8	2.3	93	46.0	154	92	57	0	0	2	0
PEORIA	71	55	87	49	63	-3	2.8	1.9	1.6	6.8	286	47.5	176	89	55	0	0	4	0
QUINCY	69	54	88	43	61	-6	2.0	.9	1.7	4.5	159	30.0	102	86	62	0	0	3	0
ROCKFORD	68	54	83	49	61	-3	1.2	.3	.6	1.7	72	36.7	134	95	67	0	0	2	0
SPRINGFIELD	73	55	88	49	64	-4	1.6	.8	1.1	3.7	179	38.2	146	89	53	0	0	3	0
IN EVANSVILLE	78	58	89	54	68	-3	1.2	.4	1.1	3.0	155	30.1	90	82	53	0	0	2	0
FORT WAYNE	74	54	86	50	64	-1	1.4	.8	1.1	3.3	200	33.8	132	91	56	0	0	3	0
INDIANAPOLIS	73	53	85	47	63	-4	1.5	.9	.9	4.2	232	36.6	123	92	60	0	0	3	0
SOUTH BEND	70	53	83	44	62	-3	2.2	1.4	2.1	5.3	241	36.2	129	89	58	0	0	3	0
IA DES MOINES	68	48	89	38	58	-6	1.6	.7	1.4	1.9	82	48.4	182	93	58	0	0	3	0
STOUK CITY	69	45	89	33	57	-6	.4	-.3	.2	1.0	53	28.7	137	92	59	0	0	3	0
KS WATERLOO	67	49	89	44	58	-4	1.2	.4	1.0	1.7	76	48.3	181	99	69	0	0	3	0
CONCORDIA	74	48	92	34	61	-6	1.6	.9	1.6	2.2	115	41.0	173	84	52	1	0	3	0
DODGE CITY	80	49	97	36	65	-4	.1	-.4	.0	.2	13	23.2	128	82	40	1	0	3	0
GOODLAND	72	42	94	31	57	-8	.2	-.2	.1	.3	27	17.3	111	83	43	1	1	3	0
TOPEKA	73	50	93	40	61	-7	2.0	1.1	2.0	2.8	119	39.6	145	93	56	1	0	3	0
WICHITA	78	51	93	37	65	-6	.1	-.8	.1	.8	35	28.4	105	85	45	1	0	1	0
KY BOWLING GREEN	80	59	92	53	70	0	.5	-.4	.5	1.6	70	24.1	65	91	63	3	0	2	1
LEXINGTON	78	59	89	54	69	0	.7	.0	.7	2.3	113	32.0	96	86	56	0	0	2	1
LOUISVILLE	80	61	91	55	70	0	.7	-.1	.6	1.7	86	35.3	107	85	60	2	0	4	1
LA BATON ROUGE	86	68	93	62	77	-2	.8	-.4	.6	.8	27	47.8	104	97	67	4	0	2	0
LAKE CHARLES	86	67	93	62	76	-2	.5	-.8	.2	.5	15	45.4	115	91	68	2	0	4	0
NEW ORLEANS	88	73	92	68	80	2	.8	-.5	.5	2.4	68	43.7	93	95	74	3	0	3	0
SHREVEPORT	84	61	97	52	72	-4	1.3	.4	1.3	1.3	60	44.3	126	91	60	2	0	1	1

Based on 1961-90 normals.

Weather Data for the Week Ending September 18, 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	MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																			.01 INCH OR MORE	.50 INCH OR MORE		
ME CARIBOU	68	46	82	36	57	3	.3	-.5	.2	4.0	187	27.6	108	92	52	0	0	0	2	0		
PORTLAND	73	53	90	40	63	0	.5	-.3	.3	1.6	87	28.1	96	90	57	1	0	0	2	0		
MD BALTIMORE	79	60	91	47	69	0	1.1	.3	.4	1.9	87	29.7	100	91	63	1	0	0	4	0		
SALISBURY	80	60	89	44	70	1	1.0	.1	.9	1.9	82	35.5	105	97	69	0	0	0	2	1		
MA BOSTON	75	59	91	52	67	2	.3	-.4	.1	2.8	150	28.2	98	87	58	1	0	0	3	0		
CHATAM	70	59	74	49	64	2	1.3	.4	.6	2.4	114	25.6	83	94	59	0	0	0	3	1		
MI ALPENA	66	44	80	34	55	2	.3	-.4	.2	.9	47	20.4	95	96	59	0	0	0	3	0		
DETROIT	74	57	87	52	66	2	.8	.2	.4	2.7	147	24.4	102	82	57	0	0	0	3	0		
FLINT	68	53	82	47	61	-1	2.1	1.3	1.4	2.7	121	25.1	114	89	61	0	0	0	3	2		
GRAND RAPIDS	67	53	82	48	60	2	2.9	1.9	2.2	5.1	193	35.4	139	93	64	0	0	0	3	1		
HOUGHTON LAKE	65	49	77	36	57	-1	1.0	.2	.6	1.4	67	21.9	106	94	62	0	0	0	4	1		
LANSING	69	53	83	47	61	1	1.8	.9	1.7	2.5	104	28.1	124	93	68	0	0	0	2	1		
MARQUETTE	60	41	75	31	51	-1	2.6	1.7	1.6	3.3	137	24.5	100	93	62	0	1	2	2	2		
MUSKOGON	67	52	79	43	60	2	1.0	.0	.8	1.9	77	28.7	130	91	62	0	0	0	2	1		
SAULT ST. MARIE	65	45	76	38	55	-1	2.3	1.4	1.5	3.5	153	23.5	101	93	61	0	0	0	5	2		
MN ALEXANDRIA	63	41	82	35	52	-1	.5	-.1	.5	.6	35	22.9	112	96	60	0	0	0	1	1		
DULUTH	56	42	66	38	49	-5	.3	-.6	.2	1.1	46	27.3	118	92	59	0	0	0	2	0		
INT'L FALLS	55	39	61	29	47	-7	.8	-.1	.7	1.4	70	18.9	98	95	61	0	1	2	1	1		
MINNEAPOLIS	64	46	84	38	55	-6	.7	-.1	.6	.8	45	28.1	125	90	64	0	0	0	2	1		
ROCHESTER	63	47	82	41	55	-4	1.6	.8	1.6	1.7	76	34.8	149	95	69	0	0	0	2	1		
MS GREENWOOD	84	61	95	54	72	-3	1.6	.8	1.5	1.6	84	31.6	82	89	58	3	0	0	2	1		
JACKSON	82	64	92	60	73	-2	1.3	.6	1.2	1.9	104	35.6	90	95	59	2	0	0	2	1		
MERIDIAN	84	64	91	57	74	-2	.7	-.1	.4	1.4	63	40.1	96	92	67	2	0	0	3	0		
MO CAPE GIRARDEAU	77	56	89	51	67	1	1.9	1.1	1.9	4.4	200	35.3	105	91	60	0	0	0	2	1		
COLUMBIA	72	51	88	41	62	-4	2.8	1.9	1.9	5.5	235	48.3	173	94	56	0	0	0	2	2		
KANSAS CITY	72	49	92	37	61	-7	3.3	2.2	3.1	4.0	136	42.9	148	91	59	1	0	0	3	1		
SAINT LOUIS	73	58	89	51	66	-5	2.6	1.8	1.8	4.4	231	41.0	150	85	53	0	0	0	2	2		
SPRINGFIELD	74	53	88	41	64	-6	4.9	3.7	3.2	8.3	283	39.6	126	89	52	0	0	0	2	2		
MT BILLINGS	61	40	69	35	50	-9	1.1	.7	1.0	1.7	204	13.0	111	89	43	0	0	0	2	1		
GLASGOW	62	37	68	32	49	-8	.7	-.2	.5	.5	74	15.0	160	85	38	0	2	0	0	0		
GREAT FALLS	56	37	66	34	47	-10	.6	-.3	.5	1.2	155	20.3	162	92	50	0	0	0	3	1		
HAVRE	59	35	69	28	47	-10	.1	-.2	.1	.3	42	12.7	137	93	42	0	2	1	0	0		
HELENA	60	38	68	32	49	-7	.6	-.3	.5	1.0	135	17.3	182	92	43	0	1	2	1	1		
KALISPELL	61	34	67	29	48	-6	1.0	.7	.7	1.3	157	19.3	159	93	44	0	4	3	1	1		
MILES CITY	65	38	76	30	52	-4	.1	-.2	.1	.1	17	17.2	149	89	42	0	1	1	0	0		
MISSOULA	62	35	70	29	49	-7	.2	-.1	.1	.3	46	11.2	108	91	41	0	2	3	0	0		
NE GRAND ISLAND	71	45	93	34	58	-4	.6	-.1	.5	.9	47	29.6	142	90	54	1	0	0	3	1		
LINCOLN	70	46	91	31	58	-7	1.2	.4	1.1	1.8	83	21.6	95	97	57	1	0	0	3	1		
NORFOLK	69	46	92	32	58	-6	.8	.3	.5	1.9	122	30.3	145	90	58	1	1	3	0	0		
NORTH PLATTE	69	43	95	34	56	-4	.4	.0	.3	.7	72	23.1	139	90	53	1	0	0	3	0		
OMAHA	70	49	90	38	59	-6	1.2	.3	.8	1.5	64	37.1	159	88	60	1	0	0	3	1		
SCOTTSDALE	65	41	89	27	53	-9	1.8	1.5	1.1	2.0	317	19.6	153	90	45	0	1	5	2	2		
VALENTINE	65	42	92	29	53	-10	.4	-.2	.2	.9	58	17.3	91	83	46	1	1	4	0	0		
NV RLY	67	33	75	26	50	-4	.1	-.1	.1	.2	25	8.2	108	82	22	0	3	2	0	0		
LAS VEGAS	88	66	98	57	77	0	.0	-.1	.0	.0	0	4.6	156	45	14	3	0	0	0	0		
RENO	75	44	83	40	59	-4	.7	-.1	.0	.0	0	4.9	95	78	20	0	0	0	0	0		
WINNEVOCCA	73	39	79	29	56	-4	.4	-.1	.0	.0	14	6.3	111	84	22	0	0	2	1	0		
NH CONCORD	72	51	89	34	62	-3	1.1	.7	.8	2.1	126	19.1	75	94	56	0	0	0	2	1		
NJ ATLANTIC CITY	77	60	88	43	68	-3	.7	-.1	.6	1.7	90	28.5	97	95	71	0	0	0	2	1		
NM ALBUQUERQUE	79	52	83	48	66	-3	.2	-.1	.1	.3	40	6.9	104	75	25	0	0	0	2	0		
CLOVIS	81	51	89	43	66	-2	.2	-.3	.2	.5	34	12.3	87	89	32	0	0	0	1	1		
ROSWELL	85	55	93	46	70	-3	.1	-.4	.1	.8	59	9.2	93	84	23	3	0	0	3	0		
NY ALBANY	72	53	85	45	63	1	.7	-.1	.3	2.2	121	30.0	115	87	60	0	0	0	3	0		
BINGHAMTON	69	52	81	43	61	1	1.0	-.2	.4	2.4	116	30.6	115	89	60	0	0	0	5	0		
BUFFALO	73	56	88	49	65	3	.1	-.7	.1	1.7	78	26.0	97	79	50	0	0	0	4	1		
NEW YORK	77	62	91	56	70	1	1.8	1.0	.9	2.8	133	30.9	101	84	60	1	0	0	4	1		
ROCHESTER	73	55	88	47	64	2	.1	-.6	.1	2.9	154	19.5	86	84	55	0	0	0	1	0		
SYRACUSE	73	55	87	45	64	2	.2	-.7	.2	2.0	87	32.4	119	84	54	0	0	0	1	0		
NC ASHEVILLE	82	57	85	44	69	3	.7	-.0	.0	1.0	35	29.3	71	95	51	0	0	0	1	0		
CHARLOTTE	87	66	90	54	77	4	.6	-.2	.5	.8	38	27.4	87	85	52	1	0	0	2	1		
GREENSBORO	86	64	89	49	75	5	1.9	1.1	1.9	2.7	126	35.1	112	92	54	0	0	0	1	1		
HATTERAS	84	67	87	58	76	1	.4	-.8	.2	2.1	65	38.6	97	91	58	0	0	0	3	0		
NEW BERN	87	66	93	56	76	2	1.0	-.2	.6	2.4	73	35.5	83	94	61	2	0	0	2	1		
RALEIGH	85	65	88	50	75	3	1.1	.3	.9	3.1	154	28.3	91	95	59	0	0	0	2	1		
WILMINGTON	87	69	90	58	78	4	3.4	1.7	3.2	6.8	155	46.9	107	92	69	1	0	0	3	1		
ND BISMARCK	62	35	73	27	48	-5	.4	-.4	.0	.1	7	24.9	191	88	41	0	3	0	0	0		
FARGO	65	39	84	34	52	-6	.2	-.3	.2	.2	14	18.6	119	89	47	0	0	0	1	0		
GRAND FORKS	61	40	70	33	51	-4	.7	-.5	.0	.4	30	19.4	130	89	51	0	0	0	1	0		
WILLISTON	61	32	69	22	46	-10	.1	-.2	.1	.2	19	17.4	153	90	38	0	4	1	0	0		
OH AKRON-CANTON	75	56	85	51	65	1	.5	-.3	.4	2.5	120	26.7	98	81	52	0	0	0	2	0		
CINCINNATI	76	58	88	53	67	-1	.4	-.3	.4	1.8	100	28.3	92	85	58	0	0	0	2	0		
CLEVELAND	75	59	88	53	67	3	.5	-.3	.5	2.8	133	27.8	105	78	55	0	0	0	1	1		
COLUMBUS	80	57	90	50	69	4	.3	-.4	.3	1.1	55	27.5	98	86	48	1	0	0	2	0		
DAYTON	76	55	86	48	66	-1	.4	-.2	.2	2.2	141	37.7	139	84	51	0	0	0	2	0		

Based on 1961-90 normals.

Weather Data for the Week Ending September 18, 1993

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT	NUMBER OF DAYS							
	AVERAGE	MAXIMUM	MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Sept 1	PCT. NORMAL SINCE Sept 1		TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE	MAXIMUM	MINIMUM	TEMP. °F		PRECIP.
													90 AND ABOVE						32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
TOLEDO	74	57	88	52	66	2	.4	-1.2	.3	3.0	165	22.9	95	88	50	0	0	0	0	0	0
YOUNGSTOWN	73	55	85	49	64	2	.2	-1.6	.2	2.0	93	24.9	91	84	54	0	0	0	1	1	0
OK OKLAHOMA CITY	76	52	88	44	64	-9	1.7	.8	1.2	2.7	119	29.2	116	93	55	0	0	0	3	3	0
TULSA	75	52	89	42	64	-10	3.4	2.3	2.4	5.6	202	33.3	112	97	57	0	0	0	3	3	2
OR ASTORIA	65	46	72	43	56	-3	T	-1.7	T	.1	7	34.4	89	97	49	0	0	0	0	0	0
BURNS	67	36	77	27	52	-3	.0	.0	.0	.0	0	8.0	121	86	27	0	2	2	0	0	0
MEDFORD	80	44	88	40	62	-4	T	-2.2	T	0	0	12.9	123	86	28	0	0	0	0	0	0
PENDLETON	72	45	75	41	59	-5	T	-1.1	T	0	0	11.8	151	85	28	0	0	0	0	0	0
PORTLAND	76	51	84	46	63	0	T	-1.4	T	0	0	22.3	104	85	35	0	0	0	0	0	0
SALEM	76	46	82	40	61	-1	T	-1.3	T	0	0	25.4	113	89	32	0	0	0	1	1	0
PA ALLENTOWN	75	56	88	43	66	1	2.3	1.4	1.0	4.2	171	36.3	114	94	63	0	0	0	4	4	2
ERIE	74	58	87	50	66	1	.3	-1.8	.3	2.2	84	24.4	86	80	49	0	0	0	0	0	0
HARRISBURG	77	60	90	46	69	2	1.6	.7	.8	5.9	205	35.0	118	93	61	1	1	0	4	4	2
PHILADELPHIA	79	62	89	53	71	4	2.9	1.9	2.3	3.9	154	30.9	92	82	61	0	0	0	4	4	1
PITTSBURGH	76	57	88	46	67	2	.3	-1.4	.3	1.9	103	27.1	98	83	51	0	0	0	2	2	0
SCRANTON	74	55	85	43	65	2	.7	-1.1	.3	3.6	178	26.2	99	91	57	0	0	0	5	5	0
RI PROVIDENCE	74	58	87	48	66	2	.8	.0	.4	1.9	90	27.4	87	91	65	0	0	0	3	3	0
SC CHARLESTON	88	69	90	62	79	2	1.4	.2	.8	3.9	124	42.7	103	94	60	1	1	0	0	0	1
COLUMBIA	90	65	93	52	77	3	1.2	.4	1.2	2.5	102	28.9	74	96	53	3	3	0	1	1	0
FLORENCE	89	68	92	52	79	4	.3	-1.5	.1	1.6	71	26.0	76	95	57	3	3	0	4	4	0
GREENVILLE	87	62	89	49	75	3	.6	-1.4	.6	1.3	55	30.1	79	95	49	0	0	0	2	2	1
SD ABERDEEN	65	41	87	33	53	-6	.2	-1.3	.2	.3	24	24.5	138	90	47	0	0	0	0	0	0
BURON	65	44	82	35	54	-7	.3	-1.1	.3	.3	28	25.5	152	93	57	0	0	0	3	3	0
RAPID CITY	64	39	85	24	51	-9	.4	-1.1	.3	.9	118	17.2	122	85	42	0	2	1	3	3	0
STOUK FALLS	67	45	93	32	56	-5	.6	-1.1	.4	.6	33	32.5	170	93	60	1	1	1	2	2	0
TN CHATTANOOGA	88	62	93	50	75	2	.6	-1.4	.5	.9	35	28.9	74	94	52	2	2	0	0	1	1
KNOXVILLE	85	61	91	49	73	3	.8	.1	.8	1.5	83	29.2	84	93	53	1	1	0	2	2	1
MEMPHIS	80	59	91	54	70	-4	.9	-1.1	.9	1.6	73	30.2	82	92	52	3	3	0	3	3	1
NASHVILLE	81	62	90	55	71	-1	.5	-1.3	.4	1.2	53	31.0	89	91	57	1	1	0	3	3	0
TX ABILENE	83	57	90	47	70	-6	1.6	.9	1.6	1.7	89	13.6	75	83	45	1	1	0	1	1	0
AMARILLO	81	50	91	39	65	-4	.1	-1.4	.1	.8	59	16.1	98	82	31	1	1	0	1	1	0
AUSTIN	90	66	94	59	78	-3	.2	-1.5	.2	.3	14	21.9	96	80	38	4	4	0	2	2	0
BEAUMONT	87	68	92	61	77	-2	1.2	-1.4	.6	1.2	30	52.7	129	94	66	3	3	0	3	3	1
BROWNSVILLE	91	73	98	64	82	0	1.1	-1.4	1.1	1.1	31	18.2	97	92	57	6	6	0	1	1	1
CORPUS CHRISTI	91	73	98	65	82	1	.4	-1.9	.4	.6	18	29.7	134	87	54	4	4	0	1	1	0
DEL RIO	86	66	93	58	76	-3	.2	-1.5	.1	.7	41	13.3	73	80	48	2	2	0	2	2	0
EL PASO	86	62	90	55	74	-1	.2	-1.2	.1	1.3	119	8.2	127	71	31	3	3	0	3	3	0
FORT WORTH	85	61	96	51	73	-3	2.3	1.2	1.3	2.5	91	22.8	85	85	47	2	2	0	2	2	2
GALVESTON	84	71	91	62	78	-2	2.0	.6	1.2	3.7	100	34.3	113	86	69	2	2	0	4	4	2
HOUSTON	87	65	93	57	76	-2	.8	-1.6	.7	.8	23	46.4	125	89	55	3	3	0	3	3	1
LUBBOCK	83	54	93	42	68	-3	T	-1.6	T	.2	13	11.6	80	85	36	2	2	0	0	0	0
MIDLAND	81	57	89	47	69	-5	.4	-1.4	.2	1.1	54	13.9	122	92	50	0	0	0	3	3	0
SAN ANGELO	82	59	87	47	71	-5	1.3	.5	1.3	1.3	66	13.1	89	89	51	0	0	0	1	1	1
SAN ANTONIO	90	67	96	57	79	-1	.3	-1.5	.2	.5	23	27.8	125	83	41	5	5	0	2	2	0
VICTORIA	90	68	93	60	79	0	.1	-1.4	.1	1.0	25	42.9	135	90	51	4	4	0	2	2	0
WACO	86	60	96	51	73	-6	2.6	1.8	1.6	2.6	132	21.9	96	94	47	3	3	0	3	3	2
WICHITA FALLS	82	54	96	46	68	-7	2.5	1.5	2.3	2.8	112	23.7	100	94	46	2	2	0	3	3	1
UT CEDAR CITY	74	44	84	27	59	-4	T	-2.1	T	.1	16	8.0	95	65	22	0	1	2	2	0	0
SALT LAKE CITY	70	49	81	42	59	-6	.2	-1.1	.1	.2	31	14.7	127	87	37	0	0	0	3	3	0
VT BURLINGTON	72	54	83	43	63	4	.3	-1.5	.3	1.8	86	24.5	99	84	58	0	0	0	1	1	0
VA NORFOLK	87	66	92	53	76	4	.4	-1.5	.4	3.0	121	27.2	80	89	53	2	2	0	1	1	0
RICHMOND	84	63	93	48	74	3	.4	-1.4	.1	1.6	76	31.5	99	93	62	2	2	0	3	3	0
ROANOKE	81	59	88	44	70	2	.8	.0	.6	3.5	165	28.6	96	95	56	0	0	0	3	3	1
WA QUILLAYUTE	65	45	74	40	55	-2	T	-1.1	T	.1	4	44.8	72	95	49	0	0	0	1	1	0
SEATTLE-TACOMA	70	49	75	46	60	-1	T	-1.4	T	.2	3	20.6	97	90	38	0	0	0	1	1	0
SPOKANE	66	40	71	34	53	-6	.2	.0	.1	.2	35	10.6	100	88	34	0	0	0	2	2	0
YAKIMA	72	39	76	33	56	-5	T	-1.1	T	.7	12	4.7	94	91	32	0	0	0	1	1	0
WV BECKLEY	78	57	84	44	68	4	.8	.0	.4	2.0	99	27.8	91	91	52	0	0	0	3	3	0
CHARLESTON	79	57	92	44	68	0	1.0	-1.2	.7	2.2	111	27.2	87	91	54	2	2	0	3	3	1
HUNTINGTON	78	58	88	46	68	0	.9	-1.1	.7	2.7	132	30.0	94	89	52	0	0	0	3	3	1
PARKERSBURG	78	58	88	44	68	0	.2	-1.4	.2	1.5	80	28.2	90	90	57	0	0	0	1	1	0
WI GREEN BAY	68	50	78	40	59	1	.9	-1.1	.5	1.4	86	28.2	130	95	58	0	0	0	3	3	1
LACROSSE	66	50	82	44	58	0	.8	-1.1	.8	1.0	39	37.7	157	96	61	0	0	0	1	1	0
MADISON	68	51	82	41	59	0	2.3	1.4	1.6	2.6	112	39.5	161	91	61	0	0	0	4	4	2
MILWAUKEE	69	55	82	49	62	0	1.2	-1.4	.7	1.4	65	31.2	128	82	56	0	0	0	3	3	1
WAUSAU	65	46	76	39	56	0	2.2	-1.1	1.7	3.1	114	30.7	122	95	58	0	0	0	2	2	1
WY CASPER	66	41	79	30	53	0	.3	-1.1	.2	.9	172	13.2	136	86	36	0	2	3	3	2	0
CHEYENNE	60	37	83	24	48	0	1.5	-1.2	.8	2.5	299	14.8	121	90	47	0	2	5	5	2	0
LANDER	63	39	77	28	51	0	.2	-1.1	.2	.2	39	13.0	130	81	31	0	1	2	2	0	0
SHERIDAN	61	36	79	24	48	0	.9	-1.3	T	.4	52	14.3	128	90	44	0	2	1	1	0	0

Based on 1961-90 normals.

National Agricultural Summary

September 13 - 19, 1993

HIGHLIGHTS: The remnants of Hurricane Lidia brought heavy rains over the central parts of the Nation, which hindered harvest and planting activities. Showers occurred along the Atlantic Coast, bringing beneficial moisture to some late-planted crops. The West remained mostly dry. Early in the week, a hard frost occurred in the northern Great Plains and northern Rockies, which ended their growing season. Scattered frost over the western Corn Belt occurred later in the week, causing light damage to some crops. Temperatures were below-normal over the western three-quarters of the Nation, which hindered crop development.

SMALL GRAINS: Winter wheat planted in the 19 major wheat-producing States reached 24 percent (%), compared with 29% by this time in 1992 and 23% average. Washington, Colorado, South Dakota, and Nebraska continued to make good progress, and planted at least an additional 20% of their acreage. This week's precipitation improved planting and field work prospects. The spring wheat harvest reached 68% complete, compared with 75% last year and 94% average. The harvest gained momentum in Idaho, Montana, and North Dakota. Harvest neared completion in South Dakota. Harvest of other small grains advanced in the Northwest and the upper Great Plains. Wet conditions delayed plantings in the upper Midwest. Rain in the Southeast improved small grain planting prospects.

CORN: Corn in the dough stage in the 17 major producing States reached 93%, compared with 94% a year ago and 98% average. Corn reaching the dough stage in the upper Mississippi Valley was still behind average. Corn in the dent stage was 76%, compared with 75% last year and 89% average. Denting progress was generally behind normal in the western and central Corn Belt. Less than 50% of the crop was dented in Minnesota and Wisconsin. About 27% of the Nation's crop was rated mature, compared with 26% last year and 56% average. Nationally, corn maturity was nearly 2 weeks behind average. Corn harvest was completed on 5% of the Nation's acreage. This compared with 5% last year and 11% average. Cool temperatures continued to slow crop progress across many areas of the Corn Belt. The cool conditions caused corn condition to decline with 50% of the crop rated good to excellent, compared with 53% last week.

SOYBEANS: Soybeans dropping leaves in the 19 major producing States occurred on 24% of the acreage, compared with 36% last year and 43% average. The crop progressed well across the central part of the Nation. Some late-planted fields in the Southeast and central Great Plains improved with the moisture. Nationally, soybean condition declined slightly from last week, with 45% of the crop rated good to excellent, compared with 47% last week.

COTTON: Cotton boll opening progress in the 14 producing States advanced to 67%, compared with 50% last year and 55% average. Progress remained ahead of average in all States except Mississippi and California. Harvest continued in Texas where conditions allowed and gained momentum in Arizona. Scattered showers across the Texas Low Plains did little to help that crop. Recent heavy rains in eastern Arizona caused boll rot in some cotton fields. For the Nation, cotton crop condition decreased, with 46% good to excellent, compared with 54% last week.

SORGHUM: Grain sorghum coloring in the 12 major States averaged 82%, compared with 70% last year and 84% average. Coloring progress remained behind normal from South Dakota to Texas. Sorghum mature reached 42%, compared with 40% last year

and 53% average. In Texas, Oklahoma, and New Mexico, crop maturity was ahead of average. Sorghum harvested at 31% equalled last year and average. Where harvest had started, progress lagged average except in the southern Great Plains. Sorghum crop condition was described as 62% good to excellent, compared with 64% last week.

RICE: Progress of the rice harvest reached 38%, compared with 55% last year and 45% average. Disease problems continued in some Arkansas fields. Harvest in Texas continued, with yields in the Upper Coast district better than expected. Second crop rice progress lagged average in Texas. Rice condition declined from last week, with 62% rated good to excellent.

OTHER FIELD CROPS: Dry conditions in Georgia caused peanut producers to harvest some fields early, while excessive rains hindered harvest of some other fields. Some producers in Virginia irrigated peanut fields in preparation for the harvest. Although scattered showers helped some dry land peanut fields in the Cross Timbers region of Texas, dry land fields in other areas of the State continued to suffer. The tobacco harvest advanced in Kentucky and North Carolina, but progress remained behind average. Late-set tobacco fields in Tennessee benefited from this week's rain. In Louisiana, excessive dry conditions hindered the sweetpotato harvest. The cranberry harvest started in New England. The Wisconsin harvest will start soon. Dry conditions in Ohio prevented a fourth cutting of hay in many areas.

FRUIT AND NUTS: Adequate moisture kept Florida citrus groves in good to excellent condition. The California Valencia orange harvest advanced. Navel oranges suffered sunburn in California. The apple harvest advanced with cooler temperatures in the Northwest and Northeast, aiding apple color development. The walnut harvest began as the almond and pistachio harvests continued in California. Early variety pecans were harvested in Texas.

VEGETABLES: Winter vegetable planting advanced in California, Arizona, Texas, and Florida. Rain showers hampered planting and harvesting in Florida but helped early-seeded and -transplanted crops. The harvesting of sweet corn for processing continued in Minnesota, but progress lagged average. Insect infestations in the fall melon crop in Kern County, CA have producers concerned about yields.

PASTURE AND LIVESTOCK: Pasture feed conditions rated average to good across the Nation except in the Southeast, where they remained poor to fair. Rain improved or maintained pasture feed conditions across the central parts of the Nation. Feed supplies across the country were mostly adequate. In the West, many cattle and calves have moved from summer ranges to fall pastures. Nationally, livestock conditions rated good, although some foot-rot and pink-eye problems were reported in the northern Plains.

Crop Progress

for the Week Ending September 19, 1993

RICE (Percent Harvested)

	Current	Last Wk	1992	Avg.
AR	23	14	47	28
CA	5	0	15	5
LA	76	71	87	83
MS	26	11	52	39
TX	72	61	79	93
5 States	38	29	55	45

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

COTTON (Percent Bolls Opening)

	Current	Last Wk	1992	Avg.
AL	72	52	40	62
AZ	98	95	96	92
AR	60	47	48	56
CA	85	75	100	87
GA	74	68	49	62
LA	90	80	89	83
MS	74	60	82	82
MO	73	46	34	56
NM	50	40	39	47
NC	81	66	38	67
OK	40	30	20	16
SC	85	73	73	65
TN	85	67	55	62
TX	53	43	26	34
14 States	67	55	50	55

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

SPRING WHEAT (Percent Harvested)

	Current	Last Wk	1992	Avg.
ID	61	43	100	96
MN	73	68	60	91
MT	33	20	75	92
ND	68	54	72	94
SD	99	95	96	99
5 States	68	57	75	94

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

WINTER WHEAT (Percent Planted)

	Current	Last Wk	1992	Avg.
AR	0	0	0	0
CA	1	0	0	0
CO	45	20	57	38
GA	1	0	2	2
ID	14	5	29	17
IL	1	0	1	2
IN	4	2	3	5
KS	20	5	25	15
MI	15	5	10	10
MO	4	2	4	5
MT	6	5	24	34
NE	47	20	57	47
NC	9	1	3	5
OH	2	0	1	3
OK	26	14	28	20
OR	16	7	17	13
SD	65	23	63	60
TX	31	20	31	31
WA	50	30	65	47
19 States	24	11	29	23

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

SOYBEANS (Percent Dropping Leaves)

	Current	Last Wk	1992	Avg.
AL	28	25	17	21
AR	9	7	10	7
GA	26	25	24	23
IL	27	7	53	50
IN	41	12	47	47
IA	15	2	35	47
KS	35	15	50	50
KY	25	13	27	25
LA	34	18	34	23
MI	25	14	15	30
MN	9	5	39	68
MS	8	5	38	24
MO	14	4	40	31
NE	23	4	26	52
NC	14	10	12	10
OH	70	31	32	44
SC	2	1	2	5
SD	28	17	29	73
TN	21	10	21	21
19 States	24	9	36	43

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

CORN (Percent Harvested)

	Current	Last Wk	1992	Avg.
CO	0	N/A	0	0
GA	81	N/A	74	80
IL	1	N/A	2	12
IN	2	N/A	1	9
IA	1	N/A	1	8
KS	15	N/A	20	30
KY	14	N/A	13	14
MI	0	N/A	0	1
MN	0	N/A	0	5
MO	11	N/A	13	20
NE	0	N/A	0	7
NC	53	N/A	32	35
OH	3	N/A	0	2
PA	0	N/A	0	1
SD	0	N/A	0	6
TX	71	N/A	63	70
WI	0	N/A	0	0
17 States	5	N/A	5	11

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

CORN (Percent Dough)

	Current	Last Wk	1992	Avg.
CO	97	92	90	96
GA	100	100	100	100
IL	97	94	96	99
IN	100	99	100	100
IA	85	64	95	99
KS	100	99	99	100
KY	100	99	100	100
MI	100	95	70	90
MN	86	71	96	98
MO	100	95	100	100
NE	100	97	100	100
NC	100	95	96	99
OH	100	100	100	100
PA	95	91	87	88
SD	86	76	87	100
TX	100	100	100	100
WI	71	68	65	90
17 States	93	85	94	98

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

CORN (Percent Dent)

	Current	Last Wk	1992	Avg.
CO	71	53	75	80
GA	100	100	100	100
IL	94	71	79	91
IN	97	82	89	91
IA	64	32	74	93
KS	95	80	85	95
KY	98	96	96	96
MI	70	40	25	65
MN	40	25	70	91
MO	89	79	95	97
NE	91	65	85	95
NC	98	94	97	96
OH	95	83	82	85
PA	68	58	42	52
SD	52	41	59	89
TX	99	95	96	99
WI	42	34	39	73
17 States	76	57	75	89

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

CORN (Percent Mature)

	Current	Last Wk	1992	Avg.
CO	15	3	16	33
GA	100	100	100	100
IL	36	14	25	61
IN	36	16	27	51
IA	20	4	31	69
KS	65	50	70	80
KY	73	65	70	67
MI	7	3	1	20
MN	3	2	4	45
MO	43	23	56	74
NE	16	4	17	57
NC	94	88	91	93
OH	30	18	14	23
PA	9	7	4	13
SD	11	4	12	58
TX	83	72	82	88
WI	9	7	6	35
17 States	27	14	26	56

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

SORGHUM
(Percent Coloring)

	Current	Last Wk	1992	Avg.
AR	98	96	100	93
CO	48	41	56	62
IL	84	70	87	81
KS	80	65	50	75
LA	99	97	100	98
MS	97	95	100	97
MO	78	72	89	86
NE	74	57	65	88
NM	67	58	60	77
OK	74	71	82	89
SD	45	28	38	81
TX	91	88	82	88
12 States	82	73	70	84

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

SORGHUM
(Percent Mature)

	Current	Last Wk	1992	Avg.
AR	77	58	89	78
CO	20	18	13	21
IL	20	12	35	49
KS	15	5	10	30
LA	90	87	99	92
MS	80	76	95	85
MO	38	30	53	47
NE	5	0	4	48
NM	8	7	5	6
OK	22	20	13	22
SD	11	8	6	46
TX	78	73	72	75
12 States	42	36	40	53

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

SORGHUM
(Percent Harvested)

	Current	Last Wk	1992	Avg.
AR	44	N/A	62	46
CO	0	N/A	0	0
IL	0	N/A	1	5
KS	2	N/A	1	5
LA	69	N/A	87	77
MS	49	N/A	63	55
MO	12	N/A	16	16
NE	0	N/A	0	6
NM	0	N/A	0	0
OK	9	N/A	4	4
SD	0	N/A	0	5
TX	70	N/A	67	64
12 States	31	N/A	31	31

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

Crop Condition
(Percent)

for the Week Ending September 19, 1993

RICE

State	VP	P	F	G	EX
AR	0	0	33	67	0
CA	0	0	5	85	10
LA	0	0	75	25	0
MS	0	5	45	50	0
TX	0	0	27	73	0
5 State	0	0	38	61	1
Prev Week	0	1	26	72	1
Prev Year	0	1	23	74	2

COTTON

State	VP	P	F	G	EX
AL	0	18	61	21	0
AZ	0	0	15	75	10
AR	0	0	43	57	0
CA	0	0	0	85	15
GA	17	26	42	15	0
LA	0	0	85	15	0
MS	0	33	52	15	0
MO	0	14	76	10	0
NM	0	0	20	73	7
NC	0	9	69	22	0
OK	0	0	51	41	8
SC	3	65	32	0	0
TN	0	14	42	44	0
TX	0	6	41	50	3
14 State	1	10	43	43	3
Prev Week	0	9	37	52	2
Prev Year	0	8	49	38	5

CORN

State	VP	P	F	G	EX
CO	3	7	24	53	13
GA	20	17	48	15	0
IL	0	1	10	75	14
IN	0	1	13	80	6
IA	3	21	62	14	0
KS	0	0	21	58	21
KY	0	0	62	38	0
MI	1	4	20	50	25
MN	15	41	40	4	0
MO	2	20	49	27	2
NE	1	4	29	60	6
NC	17	35	40	8	0
OH	3	13	34	43	7
PA	2	8	30	46	14
SD	2	11	52	34	1
TX	0	5	16	65	14
WI	1	8	41	49	1
17 State	3	12	35	44	6
Prev Week	3	12	32	46	7
Prev Year	1	3	18	62	16

SORGHUM

State	VP	P	F	G	EX
AR	0	6	60	34	0
CO	0	8	19	57	16
IL	0	0	20	74	6
KS	0	2	22	54	22
LA	0	5	62	33	0
MS	0	0	57	43	0
MO	0	8	53	37	2
NE	0	8	46	44	2
NM	5	24	32	39	0
OK	0	2	26	72	0
SD	1	23	48	27	1
TX	0	6	26	55	13
12 State	0	6	32	51	11
Prev Week	0	3	33	53	11
Prev Year	0	3	20	57	20

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

SOYBEANS

State	VP	P	F	G	EX
AL	0	26	44	30	0
AR	0	3	68	29	0
GA	21	39	28	12	0
IL	0	2	14	72	12
IN	0	1	13	79	7
IA	3	16	60	20	1
KS	0	0	25	55	20
KY	0	0	58	42	0
LA	0	13	67	20	0
MI	1	4	20	55	20
MN	13	36	44	7	0
MS	0	25	53	22	0
MO	3	8	54	34	1
NE	0	1	36	60	3
NC	6	14	65	14	1
OH	3	11	33	46	7
SC	14	36	43	7	0
SD	3	15	60	22	0
TN	0	10	50	40	0
19 State	3	11	41	40	5
Prev Week	2	11	40	41	6
Prev Year	1	3	23	62	11

State Summaries of Weather and Agriculture

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

ALABAMA: Rainfall none to 2.09 in. north; none to 2.46 in. central; 0.26 to 2.94 in. south. Temperatures 5° below normal to 3° below normal north; 4° below normal to 4° above normal central; 2 to 5° above normal south. Lows 47 to 61° north; 50 to 66° central; 64 to 70° south. Highs 87 to 91° north; 89 to 95° central; 90 to 94° south.

Days suitable for fieldwork 5.4. Soil moisture 37% short, 61% adequate, 2% surplus. Corn mature 98%, 100% 1992, 100% avg.; harvested 58%, 59% 1992, 68% avg.; 14% very poor, 39% poor, 39% fair, 8% good. Sorghum harvested 25%, 30% 1992, 47% avg.; 8% poor, 61% fair, 31% good. Peanuts dug 19%, 40% 1992, 45% avg.; combined 12%, 37% 1992, 35% avg.; 28% poor, 58% fair, 14% excellent. Wheat seeded 6%, 7% 1992, 10% avg. Pasture 5% very poor, 9% poor, 47% fair, 39% good. Primary activities: Scouting, spraying fields, harvesting vegetables, sorghum, cotton, corn, land preparation for seeding small grains, general care of livestock, poultry, catfish.

ALASKA: Cloudy skies, scattered showers covered most of the State last week.

Day available for haying 1; 4 days suitable for harvesting grain, potatoes. Barley harvest 90% complete; compared to 80% 1992. Second crop hay harvest 40% complete; equal to last years progress. Commercial potato harvest 65% complete, versus 65% 1992, 95% 1991. Winter supplies of straw for State 65% short, 35% adequate. Topsoil 10% short, 90% adequate. Subsoil 25% short, 75% adequate.

ARIZONA: Storm activity over most areas 12th. Showers central, east, 13th. Sunny skies statewide, 14th, 16th. Partly cloudy north, east, 15th. Showers northwest 17th. Temperatures varied 2° to 6° below normal. Extremes 30°; 88° higher elevations, 45°; 105° deserts.

Cotton continues good progress; 98% bolls open, 96% 1992, 92% avg. Harvest gaining momentum, west, central areas, 13% harvested, 14% 1993, 6% avg. Weeds light to moderate, insects moderate. Whitefly, aphids active west. Recent heavy rains have caused some boll rot in eastern 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, squash harvested. Apples, sweet corn, chilies, watermelons harvested eastern production areas.

ARKANSAS: Cool week, temperatures averaging little below normal. Heaviest showers occurred northern region of State. Extremes 41°; 93°. Rainfall 0.10 to 4.27 in.

Days suitable for fieldwork 5. Moderate rate of crop growth. Soil moisture 34% short, 65% adequate, 1% surplus. Producers continued to defoliate cotton fields. Sheath blight, stem root diseases in rice fields. Armyworm larvae infestation in soybean fields. Sunflowers fair. Sorghum harvesting continued. Fruit, vegetable crops good. Corn harvested 76%, 73% 1992, 74% avg.; 3% very poor, 14% poor, 43% fair, 40% good. Producers continued to report armyworm larvae infestation in pastures. Preparations made for planting cool season forages. Livestock good condition, external parasites reported.

CALIFORNIA: High pressure aloft gave way to strong upper level low pressure area bringing strong southwest winds into central valley causing significant cooling. Little moisture associated with this system.

Cool weather prevailed. Ground preparation fall small grains active. Planting 1994 winter wheat started. Producers waiting fall rain arrival, particularly dryland areas. Rice harvest begun, draining remaining fields. Wild rice harvest concluded some areas. Cotton defoliated most areas, harvest active desert areas, treated aphids, mites. Irrigation water shut off all but latest fields. Safflower harvest winding down, finishing many areas. Alfalfa seed harvested, straw baled for bio-mass plants. Corn grain, silage harvest continued. Milo maturing. Planting new crop sugarbeets progressed. Alfalfa hay harvest progressed, good yields, quality reported. Table grape harvest progressed. Raisins all stages of harvest: Laid down, rolled, binned. Wineries received wine type grapes. Harvest continued late variety plums. Angeleno, Autumn Giant plums 80% harvest volume. Peach, nectarine harvests essentially over. Walnut harvest began. Almond harvest progressed. Some areas sweeping almond orchards, post-harvest weed control. Pomegranate, persimmon harvests continued. Harvest Fuji, Gala, Granny Smith apples and pistachios continued. Harvest progressed Coachella Valley dates, desert area lemons, western Riverside County avocados. Valencia orange harvest progressed. Growers irrigated, sprayed to control weeds, worms. Sunburn new crop Navels. Broccoli shipments central coast moderate, good quality. Broccoli planting underway Coachella Valley, treated worms San Joaquin Valley. Carrot packing continued Fresno area. Cauliflower volume light, variable quality central coast. Celery movement moderate central coast, good quality. Sweet corn harvest ongoing San Joaquin Valley. Head lettuce harvest moderate, variable quality central coast. Fall lettuce planted, treated worms, weeds Coachella Valley. Early fall potato harvest continued Tulalake area. Sweet potatoes San Joaquin Valley going to storage. Processing tomato harvest continued San Joaquin Valley, central coast. Picking of watermelon, cantaloupe, honeydew, crenshaw, other melons continued Coachella, central San Joaquin valleys. Kern County fall melons infected by mites, growers feared losing much crop. Bell pepper packing proceeded central coast. Other crops harvested: Cucumbers, garlic, snap beans, squash, various oriental vegetables. Range, pasture fair to good. Range very dry. Most cattle off range, on pastures. Cows, calves looked good. Numerous small grass fires.

COLORADO: Frost many areas of State on the 14th. This occurred after temperatures near 100° some locations in the east on the 12th. Snow fell (5 in. in Denver); most areas got only trace amounts of moisture. Warmer, drier weather moved back in on the 15th, continued until the 18th when a strong system moved eastward through the State bringing 0.10 to 0.20 in. moisture to most River Basins. Large amounts of hail, heavy rain, damaging winds to the northeast. Over 1.00 in. rain was recorded at Denver with nearly that much at Estes Park, Fort Collins. Temperatures fluctuated wildly, below normal in all areas. Largest departures were in the Eastern Plains where readings of 6 to 9° below normal were common. Most other areas were 3 to 6° below normal.

Days suitable for fieldwork 4.5. Soil moisture 5% very short, 33% short, 55% adequate, 7% surplus. Alfalfa 3rd cutting 56%,

48% 1992, 50% avg.; 4th cutting 9%, 6% 1992, 5% avg. Spring barley harvested 95%, 95% 1992, 95% avg. Oats harvested 90%, 88% 1992, 89% avg. Winter wheat seeded 45%, 57% 1992, 38% avg. Dry beans cut 59%, 62% 1992, 57% avg.; harvested 40%, 38% 1992, 35% avg. Corn denting 71%, 75% 1992, 80% avg.; mature 15%, 16% 1992, 33% avg.; silage harvested 28%, 43% 1992, 47% avg. Sorghum turning color 48%, 56% 1992, 62% avg.; mature 20%, 13% 1992, 21% avg. Summer potatoes harvested 65%, 87% 1992, 68% avg. Dry onions harvested 58%, 64% 1992, 61% avg. Fall potatoes harvested 38%, 20% 1992, 13% avg. Fall potato 2% very poor, 10% poor, 22% fair, 46% good, 20% excellent. Corn 3% very poor, 7% poor, 24% fair, 53% good, 13% excellent. Sugarbeet 1% very poor, 2% poor, 11% fair, 67% good, 19% excellent. Dry bean 1% very poor, 10% poor, 27% fair, 50% good, 12% excellent. Livestock mostly good to excellent. Pasture, range feed mostly good.

FLORIDA: Rain mostly 1.00 to 3.00 in. Rain on 1 to 6 days. Temperatures 1 to 4° above normal. Highs; low to mid 90s except upper 80s east coast. Lows; varied upper 60s to low 70s, except mid 70s lower southeast coast.

Soil moisture adequate, scattered areas surplus moisture. Peanut harvesting active. Starting cotton harvest. Haymaking active where plant growth adequate. Tobacco marketing active. Sugarcane planting gaining momentum. Soybeans, sugarcane continue making good progress. Citrus groves, trees, fruit near excellent condition. Moisture adequate due to daily rains most areas. Abundant new growth. About six fresh fruit packing houses have shipped white, colored grapefruit. Caretakers are cutting cover crops, herbiciding, spraying, fertilizing. Afternoon showers, thunderstorms hampering fieldwork. Central, south, growers preparing land, laying plastic, planting. Harvesting cucumbers, north. Tomato picking to start late September in north. Good plant growth in fall seed/transplanted vegetable crops. Pasture feed 35% fair, 40% good, 25% excellent. Cattle herds fair to excellent.

GEORGIA: Temperatures 3 to 6° above normal. Temperatures low to mid 80s mountains, low to mid 90s elsewhere. Coolest mid 40s to low 50s mountains to 60s elsewhere, except 70° along Atlantic Coast. Scattered thunderstorms produced wide range rain none to 3.00 in.

Days suitable for fieldwork 6.1. Soil moisture 26% very short, 47% short, 27% adequate. Cutting corn silage, grain harvest slows. Cotton 5% harvested, 1% 1992, 7% avg.; armyworms, looper problems for areas, few late fields trying to rebound. Sorghum 6% very poor, 35% poor, 43% fair, 16% good; 42% harvested for grain, 36% 1992, 40% avg. Peanuts 14% very poor, 20% poor, 52% fair, 14% good; 20% dug, 35% 1992, 41% avg.; 9% threshed, 20% 1992, 27% avg.; some peanuts being prematurely dug due to dry weather, digging, harvesting active except areas of heavy rains. Soybeans 94% setting pods, 99% 1992, 98% avg.; spraying for insects, some beans looking better due to rains. Tobacco 4% poor, 50% fair, 46% good; 96% harvested, 100% 1992, 99% avg. Wheat 1% planted, 2% 1992, 2% avg.; waiting for moisture. Rye 4% planted, 5% 1992, 5% avg. Other small grains 1% planted, 3% 1992, 3% avg. Other vegetables 4% poor, 52% fair, 44% good; increasing insect damage, pumpkin harvesting starting. Apples 7% poor, 37% fair, 56% good; 51% harvested, 56% 1992, 59% avg. Pecans 1% poor, 12% fair, 84% good, 3% excellent; limbs breaking, very heavy set. Hay 14% very poor, 45% poor, 27% fair, 14% good; insect problems, some hay harvesting, hay crop improved slightly rain areas. Pasture feed 11% very poor, 31% poor, 38% fair, 20% good; insect problems, some pastures declining while

others improving due to the rains. Overseeding delayed dry northern areas. Supplemental hay feeding continues. Cattle fair to good. Hogs good. Activities: Routine caring for poultry, livestock.

HAWAII: Warm conditions dominated State. Record matching high of 91° on the 19th at Honolulu. Passing showers kept soil moisture levels adequate, added rain still needed, drier areas. Temperatures varied high 60s to low 90s. Rainfall none to 3.00 in.

Growers took advantage of favorable weather, performing routine field operations. Irrigation, spraying for insect, disease control active. Banana, papaya output near last weeks level.

IDAHO: Temperatures 1 to 9° below normal. Precipitation none to 0.89 in. north, none southwest, none to 0.47 southcentral, none to 0.50 east. Hard freezes in central, eastern areas.

Days suitable for fieldwork 7. Soil moisture 13% short, 87% adequate. Winter wheat harvested 93%, 100% 1992, 100% avg. Spring wheat, 39% turning color, 61% harvested. Spring barley, 27% turning color, 73% harvested. Oats harvested 73%, 96% 1992, 93% avg. Potatoes closing middles 5%, turning 83%, harvested 12%; 4% poor, 21% fair, 67% good, 8% excellent. Alfalfa second cutting 98%, 100% 1992, 100% avg.; 3rd cutting 43%, 78% 1992, 59% avg. Dry peas harvested 80%, 100% 1992, 100% avg. Lentils harvested 54%, 100% 1992, 100% avg. Peaches harvested 85%, 100% 1992, 100% avg. Prunes, plums harvested 77%, 100% 1992, 96% avg. Apples harvested 13%, 39% 1992, 18% avg. Hops harvested 89%, 98% 1992, 74% avg. Onions harvested 43%, 68% 1992, 52% avg. Dry beans harvested 30%, 49% 1992, 52% avg. Field corn silage harvested 21%, 56% 1992, 37% avg. Sugarbeets harvested 2%, 9% 1992, 6% avg. Irrigation water supplies 1% poor, 4% fair, 69% good, 26% excellent. Activities: Potato, grain, hay, dry bean, early sugarbeet harvest. Pasture, range feed condition 96% of normal. Livestock good.

ILLINOIS: Cooler, wetter than normal weather occurred across the State bringing lots of rain early in week. Temperatures 1 to 4° colder than normal. Highs 60s to 70s. Lows upper 40s to mid 50s. Precipitation 1.25 to 3.25 in., which was 0.60 to 2.00 in. wetter than normal.

Days suitable for fieldwork 2.75. Crops continue to be reported in generally good condition as soil moisture supplies increased to 2% short, 34% adequate, 64% surplus. Soybeans turning yellow 71%, 81% 1992, 79% avg.; harvested 1%, 4% 1992, 7% avg. Alfalfa cut, third crop 78%, 87% 1992, 81% avg. Farm activities: Harvest preparations, hauling grain, cleaning storage bins, harvesting seed corn, fruits, bailing hay, mowing weeds, tending livestock. Pasture feed 95% of normal.

INDIANA: Temperatures 2 to 4° below normal north, 1 to 3° below normal south. Highs upper 60s north to mid 70s south. Mean lows were between the low 50s to near 60°. Rainfall 1.00 to 2.00 in. was common north with near 1.00 in. west central, central sections. Rainfall decreased to the south, east with amounts of less than 0.50 in. near the Ohio border.

Days suitable for fieldwork 4. Row crops continue to make good strides toward maturity. Harvesting activity is picking up across the State. Pasture feed 91% of normal, 90% last week. Topsoil 5% short, 64% adequate, 31% surplus. Subsoil 6% short, 74% adequate, 20% surplus. Tobacco harvested 75%, 77% 1992, 66% avg. Wheat acreage tilled 24%, 19% 1992, 38% avg.

IOWA: Temperatures 4 to 9° below normal. Extremes 29°; 78°. Scattered frost western third on 15th. Precipitation 0.53 in. southwest to 3.58 in. south central; average 1.50 in. (normal 0.80 in.).

Days suitable for fieldwork 4.0. Topsoil 38% adequate, 62% surplus. Subsoil 16% adequate, 84% surplus. Soybeans with leaves turning color 42%, 77% 1992, 82% normal. Third crop alfalfa hay harvested 55%, 79% 1992, 94% normal. Second crop clover hay harvested 82%, 100% 1992, 100% normal. Pasture feed 1% very poor, 2% poor, 38% fair, 48% good, 11% excellent. Livestock mostly good. Pastures have an abundance of forage, they do not have much feed value.

KANSAS: Temperatures 4 to 7° below normal across State. Heavy precipitation southeast, 3.43 in. Elsewhere amounts varied 0.02 in. to 1.68 in.

Days suitable for fieldwork 5.0. Topsoil 23% short to very short, 70% adequate, 7% surplus. Subsurface moisture 5% short to very short, 88% adequate, 7% surplus. Continued cool temperatures, rain kept corn harvest from gaining momentum. Late disease, lodging in corn. Wheat emerged 5%, 10% 1992, 4% avg. Frost damaged immature sorghum in some low lying areas, extent of damage unknown. Late crop soybeans received badly needed moisture. Frost damage to soybeans was very light. Fourth cutting alfalfa 45%, 45% 1992, 50% avg. Ranges, pastures feed good.

KENTUCKY: High temperatures upper 60s to lower 70s. Lows 50s to 60s, near or slightly above normal. Rain 15th across State. Heaviest precipitation over the south 1.50 to 2.50 in.

Days suitable for fieldwork 4.6. Soil moisture 4% very short, 51% short, 45% adequate. Burley 76% cut, 80% 1992, 81% avg.; dark tobacco cut 80%. Tobacco fields 1% poor, 57% fair, 42% good. Housed tobacco curing well, only light houseburn. Corn fair to good, harvest picking up. Rain beneficial for soybeans, mostly fair to good. Hay 2% very poor, 23% poor, 40% fair, 35% good. Pastures mostly average condition.

LOUISIANA: Temperatures 4.6° below to 0.3° above normal. Extremes 48°; 97°. Rainfall 0.40 in. north central areas to 1.38 in. southeast.

Days suitable for fieldwork 5.5. Soil moisture 10% very short, 58% short, 26% adequate, 6% surplus. Corn 6% poor, 57% fair, 37% good; 98% harvested, 96% 1992, 96% avg.; harvest progressed swiftly, most farmers were beginning to wrap up the last few acres. Cotton 4% harvested, 7% 1992, 13% avg. Defoliation was active in most areas, harvesting was getting underway. Hay 81% final cutting, 87% 1992, 72% avg. Rice 98% headed, 100% 1992, 99% avg.; 89% ripe, 95% 1992, 93% avg. Harvest progressed in the north with the southern half virtually complete. Soybeans 60% turning color, 68% 1992, 46% avg.; 7% harvested, 8% 1992, 5% avg. Early bean harvest began to gain momentum. Sweet potatoes 11% poor, 69% fair, 20% good; 41% harvested, 39% 1992, 44% avg. Dry weather caused bruising which hampered progress. Sugarcane 2% poor, 15% fair, 83% good; 75% planted, 35% 1992, 49% avg. Planting moved swiftly along. Livestock 46% fair, 52% good, 2% excellent. Pasture feed 27% very poor, 19% fair, 54% good. Northern areas experienced deteriorating pastures as the area remained dry. Vegetables 6% very poor, 27% poor, 51% fair, 16% good.

MARYLAND & DELAWARE: **MARYLAND:** Precipitation 1.10 in., normal 0.81 in. Temperature 70.0°, normal 67.5°. Extremes 33°; 93°.

Days suitable for fieldwork 4.8. Topsoil 43% short, 52% adequate, 5% surplus. Subsoil 14% very short, 57% short, 29% adequate. Corn poor to fair; 100% dent, 72% 1992, 86% avg.; 62% mature, 36% 1992, 53% avg.; 18% grain harvested, 6%

1992, 15% avg.; 66% silage harvested, 19% 1992, 57% avg. Soybeans fair; 97% setting pods, 94% 1992, 94% avg.; 36% turned, 31% 1992, 30% avg.; 8% shedding leaves, 10% 1992, 10% avg. Sorghum mostly fair to good; 34% turned, 65% 1992, n/a avg.; 12% mature, 15% 1992, n/a avg. Tobacco poor to fair; 90% topped, 100% 1992, 98% avg.; 62% cut, 85% 1992, 83% avg. Pasture feed poor to fair; hay supplies short to mostly adequate. Alfalfa hay 64% fourth cut, 41% 1992, 45% avg. Other hay 70% third cut, 66% 1992, 46% avg.; 45% fourth cut, 16% 1992, 12% avg. Apples 42% harvested, 29% 1992, 41% avg.

DELAWARE: Precipitation 0.53 in., normal 0.82 in. Temperature 69.8°, normal 68.3°. Extremes 47°; 91°.

Days suitable for fieldwork 5.9. Topsoil 60% short, 40% adequate; subsoil 80% short, 20% adequate. Corn poor; 92% dent, 94% 1992, 97% avg.; 68% mature, 31% 1992, 57% avg.; 19% grain harvested, 3% 1992, 21% avg.; 78% silage harvested, 77% 1992, 75% avg. Soybeans poor to fair; 92% setting pods, 92% 1992, 96% avg.; 25% turned, 18% 1992, 19% avg.; 9% shedding leaves, 6% 1992, 6% avg. Sorghum fair; 27% turned, 18% 1992, n/a avg.; 7% mature, 6% 1992, n/a avg. Alfalfa hay 38% fourth cut, 50% 1992, 55% avg. Other hay 53% third cut, 79% 1992, 82% avg.; 0% fourth cut, 19% 1992, 16% avg. Pasture severe drought to very poor; hay supplies short. Apples 48% harvested, 27% 1992, 42% avg.

MICHIGAN: Extremes 30°; 87°. Precipitation 0.36 to 4.08 in. across State.

Days suitable for fieldwork 4.0. Soil moisture 50% adequate, 50% surplus. Dry beans 90% dropping leaves, 60% 1992, 70% avg.; 60% mature, 25% 1992, 45% avg.; 20% harvested, 5% 1992, 20% avg.; 2% very poor, 8% poor, 30% fair, 40% good, 20% excellent. Corn silage 10% harvested, 10% 1992, 25% avg. Potatoes 55% harvested, 50% 1992, 45% avg. Hay 55% third cutting, 50% 1992, 60% avg.; 2% very poor, 8% poor, 25% fair, 45% good, 20% excellent. Pasture feed 90% of normal. Major activities: Hauling manure, repairing equipment, picking fruit, limited crop harvest, some fall tillage.

MINNESOTA: Temperatures 6 to 8° below normal for State. Extremes 26°; 89°. Precipitation 0.01 to 0.55 in. below normal for northern third and central, 0.16 to 0.60 in. above normal elsewhere. Precipitation 0.13 to 1.50 in. Maximum 2.12 in.

Days suitable for fieldwork 3.9. Topsoil 1% short, 51% adequate, 48% surplus. Rye 52% seeded, 69% 1992, 79% avg. Winter wheat 41% seeded, 68% 1992, 80% avg. Spring wheat 73% combined, 60% 1992, 91% avg. Barley 94% combined, 76% 1992, 94% avg. Sweet corn for processing 70% harvested, 75% 1992, 86% avg. Hay grain 35% stubble plowed/tilled, 34% 1992, 60% avg. Potatoes 31% harvested, 25% 1992, 33% avg. Flax 27% harvested, 10% 1992, 62% avg. Dry beans 33% harvested, 29% 1992, 55% avg. Corn 86% dough, 96% 1992, 98% avg.; 40% dent, 70% 1992, 91% avg.; 3% mature, 4% 1992, 45% avg.; 7% silage cut, 5% 1992, 33% avg. Soybeans 41% yellowing, 70% 1992, 90% avg.; 9% shedding leaves, 39% 1992, 68% avg. Corn 15% very poor, 41% poor, 40% fair, 4% good. Soybeans 13% very poor, 36% poor, 44% fair, 7% good.

MISSISSIPPI: Temperatures 72°, 3.3° below normal. Extremes 46°; 96°. Lower delta region, coastal region received the most rainfall with over 1.00 in. Other regions experienced some precipitation. Rainfall 0.92 in., normal. Soil temperatures 77°.

Days suitable for fieldwork 4.7, 4.9 1992, 4.9 avg. Soil moisture 45% short, 50% adequate, 5% surplus. Corn 100% dent, 100% 1992, 100% avg.; 95% mature, 99% 1992, 93% avg.; 49% harvested, 58% 1992, 57% avg.; 83% silage harvested, 95% 1992,

95% avg.; 4% poor, 63% fair, 33% good. Cotton 74% open bolls, 82% 1992, 82% avg.; 33% poor, 52% fair, 15% good. Rice 57% mature, 87% 1992, 80% avg.; 26% harvested, 52% 1992, 39% avg.; 5% poor, 45% fair, 50% good. Sorghum 97% turning color, 100% 1992, 97% avg.; 80% mature, 95% 1992, 85% avg.; 49% harvested, 63% 1992, 55% avg.; 80% silage harvested, 95% 1992, 89% avg.; 57% fair, 43% good. Soybeans 30% coloring, 70% 1992, 48% avg.; 8% shedding, 38% 1992, 24% avg.; 25% poor, 53% fair, 22% good. Sweet potatoes 40% harvested, 40% 1992, 48% avg.; 60% fair, 40% good. Hay 92% harvested, 92% 1992, 89% avg. Livestock 1% fair, 86% good, 13% excellent. Pasture 88% of normal. Activities: Rice harvesting, cotton defoliation.

MISSOURI: Temperatures averaged 5 to 7° below normal. Rainfall averaged 3.70 in., ranging from 2.00 in. south-central, southeastern districts to 5.00 in. west-central, central districts.

Days suitable for fieldwork 2.5. Topsoil 1% short, 48% adequate, 51% surplus. Corn reaching maturity ranges from less than 40% central and northern districts to 100% southeast. Corn 54% harvested southeast; other districts mostly limited to silage cutting. Soybeans dropping leaves vary from 8% southeast to about 18% northwestern, west-central, central districts. Sorghum mature ranges from 6% or less north-central, northeast, to 81% southeast. Sorghum 31% harvested southeast; not begun most other areas. Cotton harvest begun in earliest fields. Third crop alfalfa harvested 78%, 94% 1992, 98% avg. Pasture condition 1% poor, 26% fair, 64% good, 9% excellent.

MONTANA: Temperatures 6 to 8° below normal. Precipitation statewide; above normal west, central, below normal east.

Days suitable for fieldwork 3.5. Topsoil 9% short, 76% adequate, 15% surplus. Subsoil 10% short, 70% adequate, 20% surplus. Winter wheat harvested 79% complete, 95% 1992, 99% avg. Spring wheat 1% very poor, 4% poor, 14% fair, 45% good, 36% excellent. Barley 1% very poor, 4% poor, 19% fair, 44% good, 32% excellent; harvested 39% complete, 81% 1992, 93% avg. Oats 2% poor, 19% fair, 51% good, 28% excellent; harvested 43% complete, 86% 1992, 94% avg. Sugarbeet 2% poor, 15% fair, 58% good, 25% excellent. Second cutting alfalfa hay 68% complete, 93% 1992, 94% avg. Other hay 84% complete, 100% 1992, 100% avg. Pasture, range feed 103% of normal, down 1 point from last week.

NEBRASKA: Temperatures 6 to 9° below normal. Scattered precipitation 0.50 in. southwest to 1.77 in. east central. Killing frost northwest, locally elsewhere.

Days suitable for fieldwork 5.8. Topsoil 8% short, 89% adequate, 3% surplus. Subsoil 3% short, 87% adequate, 10% surplus. Soybeans turning color 67%, 73% 1992, 84% avg. Alfalfa 18% fair, 79% good, 3% excellent; 88% third cutting, 92% 1992; 15% fourth cutting, 17% 1992. Dry beans 11% very poor, 26% poor, 23% fair, 37% good, 3% excellent; 94% leaves turning, 87% leaves dropping, 31% harvested. Frost damage to all affected crops under assessment, overall crop conditions declined. Pasture, range 103% of normal.

NEVADA: Showers, thundershowers brought mostly trace amounts of precipitation. Cool weather all week and temperatures were below normal in all divisions. Extremes 19°; 104°.

Harvest of onions, alfalfa seed, hay continuing. Digging potatoes progressing normally. Planting winter wheat underway. Livestock generally good, movement to winter ranges getting started.

NEW ENGLAND: Precipitation 0.07 to 1.06 in. north; 0.41 to 1.61 in. south. Temperatures 58 to 65° north; 59 to 68° south. Maximum temperatures 82 to 90° north, south. Minimum temperatures 37 to 49° north; 37 to 54° south.

Days suitable for fieldwork 5.1. Soil moisture 28% short, 61% adequate, 11% surplus. Available grazing 46% short, 54% adequate. Fieldwork progress 1 day behind schedule. Pasture feed 70% of normal. Maine early potato harvest 20%, 30% 1992, 20% avg. Connecticut, Massachusetts potatoes 55% harvested, 55% 1992, 40% avg. Rhode Island potatoes 75% harvested, 55% 1992, 70% avg. Potato fair to good regionwide. Maine oat fair to good; harvested 90%, 70% 1992, 80% avg. Field corn fair to good; 15% harvested, 10% 1992, 20% avg. Second cutting hay 85% harvested, 90% 1992, 90% avg.; fair to good. Third cutting hay 40% harvested, 40% 1992, 55% avg.; good. Sweet corn harvested 90%, 85% 1992, 90% avg.; fair to good. Apples 20% harvested; size medium; color fair to good; condition good. Peaches 85% harvested; size medium; condition good. Pears 55% harvested; size medium; condition good. Raspberries 85% harvested; size medium; condition fair to good. Highbush blueberries 100% harvested; size medium; condition fair to good. Cranberries 5% harvested; size medium; condition good. Major farm activities: Chopping corn, harvesting third cuttings of hay, haylage. Seeding cover crops, pastures. Picking fall vegetables, squash, pumpkins for roadside stands. Setting up frost protection. Potatoes being harvested. Harvesting tree fruits.

NEW JERSEY: Temperatures near normal. Extremes 29°; 91°. Rainfall 1.03 in. north, 1.86 in. central, 0.68 in. south. Heaviest 24 hour total 2.67 in. on 17th, 18th. Estimated soil moisture, in percent field capacity, averaged 64% north, 83% central, 55% south. Four inch soil temperatures averaged 63° north, 66° central, 68° south.

Soil moisture content remains adequate on average. Although the weather conditions during the summer cut down production of some crops, recent rains have been beneficial. Vegetable, fruit harvest remains active. Peach harvest is complete. Apple harvest is underway. Pasture conditions averaged normal. Amount of feed requirements pastures are supplying is also average.

NEW MEXICO: Cool weather prevailed with the State 5 to 6° below normal. Extremes 27° northwest; 96° southeast. Precipitation fell early in the week with heaviest amounts in the central, west with highest totals over 1.50 in.

Days suitable for fieldwork 6.6. Soil moisture 54% short, 43% adequate, 3% surplus. Crop conditions: Alfalfa 3% poor, 21% fair, 70% good, 6% excellent with harvest active. Corn 5% poor, 5% fair, 85% good, 5% excellent with silage harvest continuing. Cotton 20% fair, 73% good, 7% excellent; 50% bolls open. Winter wheat 79% planted; generally good condition. Chile, onions, lettuce fair to mostly good; chile harvest active. Pecans 11% fair, 89% good. Apples 10% poor, 30% fair, 60% good with picking continuing. Cattle, sheep mostly fair to good; range feed conditions at 73% of normal.

NEW YORK: Well above normal temperatures first half of week, well below normal second half. Extremes 35°; 91°. Scattered showers. Most areas didn't receive more than 0.50 in.

Days suitable for fieldwork 5.3. Soil moisture mostly adequate. Pasture feed 91% of normal. Corn fair to good; silage harvest underway; 8% harvested, 1% 1992, 16% avg. Hay mostly good, harvest continues. Third cutting alfalfa 67% finished, 43% 1992, 58% avg. Potato harvest progressing well. Growers killing vines, digging potatoes. Dry bean harvest 20% complete. Grape harvest increased. Quality good in Finger Lakes region. Apple harvest

also gained momentum. Cool weather favorable for color development. Vegetable harvesting continued. Pumpkins good condition.

NORTH CAROLINA: Temperatures near normal to 5° above normal. Precipitation 3.37 in. at Wilmington to only a trace at several locations.

Days suitable for fieldwork 6.1. Soil moisture 14% very short, 64% short, 22% adequate. Crop condition: Pasture feed 9% very poor, 25% poor, 51% fair, 15% good; field tobacco 1% very poor, 7% poor, 53% fair, 39% good; corn 17% very poor, 35% poor, 40% fair, 8% good; hay 7% very poor, 21% poor, 53% fair, 19% good; cotton 9% poor, 69% fair, 22% good. Peanuts 14% poor, 69% fair, 17% good. Soybeans 6% very poor, 14% poor, 65% fair, 14% good, 1% very good. Sweet potatoes 3% poor, 63% fair, 34% good. Apples 10% poor, 55% fair, 35% good. Sorghum 22% poor, 63% fair, 15% good. Hay, roughage supplies 3% very short, 40% short, 56% adequate, 1% surplus. Apples harvested 40%, 57% 1992, 51% avg. Flue-cured tobacco harvested 73%, 88% 1992, 85% avg. Burley tobacco harvested 39%, 37% 1992, 62% avg. Corn for silage harvested 82%, 67% 1992, 76% avg. Corn for grain 53%, 32% 1992, 35% avg. Sorghum for grain 25%, 20% 1992, 21% avg. Sweet potatoes harvested 12%, 19% 1992, 18% avg. Cotton open bolls 81%, 38% 1992, 67% avg. Corn dented 98%, 97% 1992, 96% avg.; mature 94%, 91% 1992, 93% avg. Soybeans flowered 96%, 95% 1992, 97% avg.; setting pods 91%, 91% 1992, 92% avg.; drop leaf 14%, 12% 1992, 10% avg. Second cutting of the hay crop is 88% completed. Third cutting of the hay crop is 56% completed. Major activities: Harvesting, marketing tobacco, cutting hay. Other activities included: Harvesting vegetables; harvesting apples; cutting corn silage; harvesting corn for grain; defoliating cotton; harvesting sweet potatoes; tending livestock.

NORTH DAKOTA: Below normal temperatures across State. Scattered light precipitation ranged from 0.02 in. southwest to 0.21 in. southeast. Temperatures 4° below normal east central to 7° below normal west central, southwest. Extremes 16° west-central; 90° south-central.

Days suitable for fieldwork 6.1. Topsoil 20% short, 71% adequate, 9% surplus. Subsoil 5% short, 80% adequate, 15% surplus. Frost in scattered areas prematurely terminated the growing season for crops while only damaging others. Hard red spring wheat 68% harvested, 72% 1992, 94% avg. Durum wheat 40% harvested, 52% 1992, 90% avg. Oats 82% harvested, 90% 1992, 98% avg. Barley 84% harvested, 88% 1992, 97% avg. Winter wheat 97% harvested, 99% 1992, 100% avg. Intended winter wheat acres planted 21%, 28% 1992, 53% avg. Intended rye acres planted 19%, 24% 1992, 52% avg. Late season crop development, except for sugarbeets, potatoes, lagged well behind average, similar to last year's late crop. Corn for grain 25% very poor, 47% poor, 27% fair, 1% good; corn for silage 2% very poor, 17% poor, 65% fair, 16% good; flax 2% poor, 30% fair, 63% good, 5% excellent; sugarbeets 12% poor, 20% fair, 68% good; potatoes 41% poor, 2% fair, 57% good; dry beans 2% very poor, 24% poor, 56% fair, 18% good; soybeans 9% very poor, 19% poor, 62% fair, 10% good; sunflowers 7% poor, 54% fair, 39% good. Flax 17% harvested, 17% 1992, 67% avg. Corn for grain 1% ripe and beyond, 1% 1992, 41% avg. Corn for silage 19% cut, 17% 1992, 60% avg. Dry beans 13% combined, 8% 1992, 55% avg. Soybeans 2% combined, 0% 1992, 17% avg. Sunflowers 15% bracts turned brown and beyond, 18% 1992, 51% avg. Potatoes 37% dug, 36% 1992, 40% avg. Sugarbeets 5% lifted, 7% 1992, 4% avg. Range, pasture feed conditions 94% of normal. Alfalfa hay 2nd cutting 93% complete, other hay 93%.

OHIO: Highs reached the mid 80s north to around 90° central, south on the 14th, but average highs in the mid to upper 70s were only 1 or 2° above normal. Lows mid to upper 50s, about 2° above normal. On the coolest mornings lows held in the 40s to low 50s. Precipitation was generally under 0.50 in. and fairly even across the State. Base 50° growing day accumulations were 165 to 200°, 20 to 25° above normal. Totals since April 1st ranged from around 2700 north to 3300 south, 200 to 400 above normal.

Days suitable for fieldwork 5.8. Topsoil 53% short, 47% adequate. Subsoil short. Processing tomatoes harvested 80%, 62% 1992, 67% avg. Potatoes harvested 65%, 46% 1992, 50% avg. Alfalfa 3rd cut harvested 92%, 80% 1992, 82% avg.; other hay 50%, 55% 1992, 54% avg. Corn harvested for silage 47%, 16% 1992, 33% avg. Soybeans harvested 3%, 0% 1992, 2% avg. Pasture feed 12% very poor, 24% poor, 42% fair, 21% good, 1% excellent. Hay 5% very poor, 15% poor, 47% fair, 30% good, 3% excellent. Farmers are complaining about small corn ear size, are preparing to plant wheat in early-harvested soybean fields. Fourth-cutting alfalfa harvest will not take place in many areas due to the dry summer. Grape harvest has started north. Pumpkin harvest is underway, earlier than normal. Tobacco cutting nearing completion south. Livestock producers are feeding hay.

OKLAHOMA: Temperatures 6° below normal Panhandle to 10° below normal central. Precipitation 0.03 in. Panhandle to 6.68 in. south-central.

Days suitable for fieldwork 4.5. Topsoil 16% short, 48% adequate, 36% surplus. Subsoil 11% short, 89% adequate. Corn 86% mature, 100% 1992, 87% avg.; 40% harvested, 58% 1992, 54% avg. Soybeans 88% setting pods, 90% 1992, 95% avg.; 35% mature, 28% 1992, 18% avg.; 8% harvested, 6% 1992, 3% avg. Peanuts 14% fair, 86% good; 98% setting pods, 99% 1992, 99% avg.; 35% mature, 25% 1992, 39% avg. Alfalfa 80% 4th cut, 73% 1992, 82% avg.; 16% 5th cut, 16% 1992, 17% avg. Pastures feed 94% of normal. Feeder prices firm, calf prices steady.

OREGON: Temperatures 5° below normal east of Cascades; western temperatures near normal north, 2 to 4° below normal in southwestern valleys. Precipitation few hundredths of inch along coast; 0.01 in. central eastern areas.

Soil moisture 20% short, 80% adequate. Barley 81% harvested, 1994 crop 20% planted. 1994 winter wheat crop 16% planted. Western areas small grain harvest finishing; hay harvested in Coos, Jackson, Polk, Washington Counties. Eastern areas haying, planting winter wheat, barley. Willamette Valley green bean harvest winding down; sweet corn being harvested; onions being harvested Marion, Washington Counties. Potatoes nearing harvest, Washington County. Potato, carrot, lima bean, onion harvest in full swing, Hermiston-Boardman area. Potato crop good in Malheur County. Potato vines turning or knocked down in Klamath County with some harvesting done. Winter pear harvest full swing, Hood River Valley; Bosc picking ahead of Anjou in some blocks. Bartlett harvest completed in the Valley; Gala apple harvest continued. Winter pear harvest progressed, Bartlett picking complete, Medford district. Apple picking continued, Milton-Freewater. In Willamette Valley, prune, apple harvests continued; hazelnuts falling, harvest expected about October 1st; evergreen blackberry picking completed; strawberry fields being fertilized. Coos County, cranberry growers finishing leaf sampling, preparing for harvest next month. Livestock good to excellent. Range, pasture feed conditions 99% of normal. Yearlings moving to feedlots, Klamath County.

PENNSYLVANIA: Warm early in week; cool late in week. Light rain, drizzle last half of week. Temperature 69°, 4° above

normal. Extremes 35°; 89°. Precipitation 0.73 in., 0.12 in. below normal.

Days suitable for fieldwork 4. Soil moisture 23% short, 71% adequate, 6% surplus. Ensilage corn harvested 26% complete, 12% 1992. Corn 2% very poor, 8% poor, 30% fair, 46% good, 14% excellent. Soybean harvest 2% complete, 2% 1992; 4% very poor, 6% poor, 25% fair, 45% good, 20% excellent. Wheat planted 25% complete, 19% 1992. Oats harvest 100% complete, 97% 1992. Barley planted 25% complete, 19% 1992. Tobacco harvest 88% complete, 79% 1992. Potato harvest 46% complete, 60% 1992. Third cutting alfalfa 80% complete, 69% 1992; 4th cutting 46% complete, 26% 1992. Second cutting clover-timothy 99% complete, 88% 1992. Quality of hay made 9% poor, 46% fair, 45% good. Feed from pastures poor to fair. Apple harvest 45% complete, 40% 1992. Peach harvest 98% complete, 89% 1992. Grapes harvest 45% complete, 36% 1992. Fall plowing 50% complete, 36% 1992. Activities: making hay, filling silos; planting wheat, barley; harvesting potatoes; harvesting corn silage; getting corn grain harvest equipment ready; plowing; cleaning, storing, repairing equipment; hauling manure; fixing fence; caring for livestock.

PUERTO RICO: Rainfall 1.20 in. was 0.65 in. below normal. Highest rainfall 6.64 in. Roosevelt Roads, 4.14 in. Pico del Este, 3.20 in. Vieques. Highest 24 hour total 4.62 in. Roosevelt Roads. Island temperatures ranged from 81° on the coasts, to 75 to 76° in the interior with mean station temperatures ranging from 83.1° at San Juan WSFO, to 65.1° Cerro Maravilla. Extremes 51°; 96°.

SOUTH CAROLINA: Rainfall slightly less than 1.00 in. Temperatures 2 to 4° above normal.

Days suitable for fieldwork 6.3. Soil moisture 37% very short, 54% short, 9% adequate. Corn very poor to poor; 73% harvested, 68% 1992, 65% avg. Sorghum poor; 37% harvested, 44% 1992, 36% avg. Soybeans 14% very poor, 36% poor, 43% fair, 7% good; 91% setting pods, 96% 1992, 93% avg.; 16% leaves turning, 13% 1992, 15% avg.; 2% dropping leaves, 2% 1992, 5% avg. Cotton 3% very poor, 65% poor, 32% fair; 85% open bolls, 73% 1992, 65% avg. Tobacco fair; 80% harvested, 97% 1992, 95% avg.; 40% stalks destroyed, 55% 1992, 44% avg. Sweet potatoes poor to fair; 17% harvested, 17% 1992, 26% avg. Fall hay poor; 52% harvested, 71% 1992, 65% avg. Apples poor; 40% harvested, 50% 1992, 68% avg. Pecans fair. Pasture feed 42% very poor, 42% poor, 15% fair, 1% good.

SOUTH DAKOTA: Temperatures 5 to 10° below normal. Extremes 15°; 94°. Rainfall was widespread with the heaviest amounts in the east. Maximum 2.28 in.

Days suitable for fieldwork 5.2. Topsoil 6% very short, 34% short, 50% adequate, 10% surplus. Subsoil 4% very short, 21% short, 56% adequate, 19% surplus. Sunflowers 1% very poor, 1% poor, 17% fair, 71% good, 10% excellent. Flax 68% harvested, 63% 1992, 90% avg. Sorghum 24% silage harvested, 66% 1992, 43% avg. Corn 10% silage harvested, 6% 1992, 43% avg. Western third of the State received a killing frost 13th night, the frost was spotty across the rest of the State with most of the severe damage in the north. Frost did minimal damage in most areas in the southeast. Central, northwest remained dry. Winter grains seeding progressed well, farmers were still waiting for a rain before planting. Grass hoppers were reported. Livestock 2% fair, 74% good, 24% excellent. Pasture feed conditions 92% of normal. Cattle were being moved to fall pastures in the west, in the east pastures were still producing feed. Pinkeye, footrot in some areas.

TENNESSEE: Temperatures below normal across State except in east which averaged 1° above normal. Extremes 48°; 93°. Precipitation below normal. Rainfall 0.25 to 1.00 in. across State.

Days suitable for fieldwork 4.6. Soil moisture 6% very short, 42% short, 52% adequate. Corn 80% mature, 80% 1992, 77% avg.; 20% grain harvested, 22% 1992, 20% avg.; 75% silage harvested, 65% 1992, 72% avg. Cotton 85% open bolls, 65% 1992, 72% avg.; 3% harvested, 0% 1992, 1% avg.; 14% poor, 42% fair, 44% good. Sorghum 84% mature, 77% 1992, 70% avg.; 37% harvested, 32% 1992, 24% avg. Soybeans 21% dropping leaves, 21% 1992, 21% avg.; 5% mature, 7% 1992, 9% avg.; 10% poor, 50% fair, 40% good. Tobacco 66% burley harvested, 82% 1992, 81% avg.; 73% dark air harvested, 84% 1992, 82% avg.; 78% dark fire harvested, 82% 1992, 79% avg. With improved soil moisture, farmers are gearing up for fall seedings. Soybeans improved with the rain, cooler weather. Early maturing cotton crop enabled producers to get an early start with harvest. Late-set tobacco benefited from timely showers. Harvest still lagging, yield prospects are improved in most areas. Hornworm infestations plaguing some burley fields. Some stripping has already taken place.

TEXAS: Early in week, moisture from former Pacific Hurricane Lidia interacted with strong cold front to trigger heavy rains over central sections of State. Rains were lighter in western, eastern, southern areas. Strong cold surge brought record chill to a number of stations in western, central counties at midweek. Temperatures climbed latter part of week to very warm to hot levels. Precipitation totals were over an inch above normal in Cross Timbers, Blacklands, close to normal on Low Plains, below normal elsewhere. Temperatures ran below normal except in south central district. Readings 10° below normal on southern high plains.

Crops: Corn harvesting of silage for commercial feed yards continued in northern high plains. Harvest of corn for grain continued to expand elsewhere on Plains. Harvest was winding down in East Texas where conditions allowed. Harvest nearly completed in Blacklands. Corn 85% normal, 88% 1992. Cotton small amounts of rain that were received last week in Low Plains will probably be of little help to crop. Cool temperatures also slowed growth. Harvest in full swing in Blacklands where conditions allowed. Harvesting complete in Coastal Bend, winding down in South Central Texas. Cotton 74% normal, 64% 1992. Rice harvest of first crop winding down along Upper Coast where yields appear to be better than expected. Second crop continued to lag behind normal progress. Rice 82% normal, 77% 1992. Grain sorghum South Central Texas, harvest virtually complete. Harvest in Blacklands, East Texas winding down. Harvest in full swing in Low Plains where conditions allowed. Sorghum 81% normal, 83% 1992. Small grains planting made good progress in many areas late last week as moisture conditions for land preparation and planting continued to improve. Some early planted fields have emerged in High and Low Plains. Peanuts some limited harvesting started in Low Plains. Cross Timbers, yield potential for dryland crop appears to be poor, but last weeks rains may help. Dryland crop continued to suffer from lack of rain in South Central Texas. Peanut 67% normal, 83% 1992. Soybeans harvesting delayed by rain in Blacklands where yields appear to be below average. In Cross Timbers, many fields were baled for hay. Harvest in full swing along Upper Coast.

Commercial Vegetables: Rio Grande Valley, onion planting continued, pepper plants made good progress. Some producers sprayed for whitefly on watermelon plants. San Antonio-Winter Garden, newly planted cabbage made normal progress. Land preparation continued for fall planting. East Texas, fall planting continued. Sweet potato harvest continued, some pumpkins were harvested. High Plains, pumpkin harvest was near. Producers

continued to harvest cabbage and watermelon. Trans-Pecos, onions were being planted. Harvest of chili peppers continued. Watermelon harvest was winding down. Pecans trees were being sprayed for weevils in Cross Timbers. Harvest has begun on early varieties in South Texas, Trans-Pecos.

Range and Livestock: Range, pasture conditions continued to improve across most of State. Haying operations resumed in some areas. Supplemental feeding continued. Some livestock operations were culling herds. Many ranchers were preparing ground for winter pasture. Livestock remained good.

UTAH: Temperature maximums 3° below normal, minimums 2° below normal. Precipitation was moderate in the northern mountains, light across the rest of the State except for Dixie which reported none.

Days suitable for fieldwork 6.1. Soil moisture 35% short, 65% adequate. Irrigation water supply 8% short, 92% adequate. Stockwater supply 24% short, 76% adequate. Winter wheat seeded 58%, 63% 1992, 56% avg.; emerged 30%. Oats harvested for grain 85%. Corn mature 42%, 62% 1992, 46% avg.; silage harvested 21%, 65% 1992, 42% avg. Alfalfa hay 3rd cutting 74% complete, 92% 1992, 80% avg.; 4th cutting 12% complete, 31% 1992; seed harvested 73%, 71% 1992. Apples picked 12%, 40% 1992, 29% avg. Pears picked 95%, 99% 1992. Potatoes harvested 22%, 56% 1992, 31% avg. Onions harvested 48%, 68% 1992, 53% avg. Cattle moved from summer range 22%, 34% 1992, 26% avg. Sheep moved from summer range 22%, 30% 1992, 27% avg. Pasture, range feed good to excellent.

VIRGINIA: Temperatures near or slightly above normal. Extremes 32°; 95°. Precipitation variable 0.03 to 1.96 in.

Days suitable for fieldwork 5.7. Topsoil 18% very short, 58% short, 22% adequate, 2% surplus. Pasture feed 18% very poor, 38% poor, 35% fair, 9% good. Corn dented 96%, 95% 1992, 97% avg.; mature 87%, 81% 1992, 76% avg.; silage harvested 57%, 45% 1992, 59% avg.; harvested for grain 39%, 20% 1992, 31% avg. Soybeans 16% very poor, 57% poor, 25% fair, 2% good. Peanuts 20% very poor, 60% poor and 20% fair. Flue tobacco 69% harvested, 79% 1992, 79% avg. Fire tobacco 67% harvested, 97% 1992, 95% avg. Sun tobacco 92% harvested, 87% 1992, 91% avg. Burley tobacco 58% harvested, 66% 1992, 71% avg. Sweet potato harvest about 10% completed. Summer apple harvest nearly completed. Fall apples 25% harvested. Fruit size smaller than normal, cool weather adding color, quality good. Winter wheat 2% seeded, 0% 1992, 3% avg. Oats 2% seeded, 7% 1992, 8% avg. Barley 5% seeded, 6% 1992, 7% avg. Livestock mostly fair to good. Harvesting cucumbers, snapbeans. Some producers irrigated peanuts in preparation of digging.

WASHINGTON: Temperatures 3° below normal to 2° above normal west; 8° below normal to 2° below normal east. Precipitation none to 0.36 in. west; none to 0.32 in. east.

Days suitable for fieldwork 6.6. Soil moisture 14% short, 86% adequate. Irrigation water supply 19% short, 81% adequate. Hay, other roughage 100% adequate. Range, pasture 61% fair, 39% good. Winter wheat dryland 70% good, 30% excellent; irrigated 100% good. Spring wheat dryland 15% fair, 85% good; irrigated 5% fair, 95% good. Barley dryland 80% good, 20% excellent; irrigated 100% good. Potatoes, dry beans, corn, 100% good. Cooler weather dominated last week. Temperatures reached a mid-week low of 33° Yakima, Rosalia, Colfax. Winter grain harvests were completed. Yields were mostly good to excellent, with some record yields reported. Fall field preparation and seeding continued. Hop harvest was winding down. Golden Delicious apple harvest was underway. Red Delicious apples continued to ripen, good color development was

seen due to the cooler weather. D'Anjou, Bosc pear harvests also continued. Pumpkins, cranberries are both expected to produce well this year. Fall vaccinations of calves were underway, sheep were being bred.

WEST VIRGINIA: Temperature 68°. Extremes 36°; 93°. Precipitation 1.14 in.

Days suitable for fieldwork 4.6. Soil moisture 17% very short, 45% short, 38% adequate. Tobacco, 6% fair, 94% good; 60% harvested. Hay 17% very poor, 38% poor, 36% fair, 9% good; 90% 2nd cut, 75% 3rd cut. Pasture feed 25% very poor, 24% poor, 36% fair, 15% good; 62% of normal. Cattle 9% poor, 25% fair, 66% good. Sheep 28% poor, 14% fair, 58% good. Apples poor to fair. Corn 10% poor, 85% fair, 5% good; 100% dough stage, 69% mature, 25% harvested. Soybeans 14% fair, 86% good; 20% dropping leaves. Farm activities: Moving livestock, feeding livestock, cutting hay, harvesting tobacco, chopping silage, harvesting corn, harvesting apples, sowing barley.

WISCONSIN: Cool Canadian air settled over State resulting in below normal temperatures, considerable cloudiness much of week. Temperature 55°, 3° below normal. Extremes 28°; 79°. Precipitation 1.00 to 2.70 in.

Days suitable for fieldwork 2.1. Soil moisture 1% short, 58% adequate, 41% surplus. Pasture feed 85% of normal, 77% 1992, 73% avg. General condition of crops: 4% poor, 39% fair, 57% good. Corn 1% very poor, 8% poor, 41% fair, 49% good, 1% excellent; dough or beyond 71%, 65% 1992, 90% avg.; dent or beyond 42%, 39% 1992, 73% avg.; 9% mature, 6% 1992, 35% avg. Soybean 2% poor, 25% fair, 69% good, 4% excellent; leaves turned 52%, 37% 1992, 59% avg.; leaves shedding 12%, 6% 1992, 29% avg. 3rd cut alfalfa 59% harvested, 51% 1992, 63% avg. Cool, wet conditions dominated last week. Rains throughout the State slowed field activities. Farmers continued chopping corn, hay for silage. Very little progress was made in harvesting activities due to ongoing rain, poor field conditions. Cool temperatures slowed crop development. Since weather conditions didn't cooperate for drying hay, most of the third crop alfalfa harvested last week went for silage. Reporters are indicating that there is a surplus of alfalfa, hay. Corn crop maturing, slowly, need of warm temperatures. Farmers have suggested that corn is progressing slower than soybeans; percent of turning jumped 28 points from last week. Comments have indicated that the crop is progressing nicely, good condition. Planting of winter wheat, rye was slowed by the wet conditions as fields were too muddy to plant. Cranberry harvest will begin soon, early reports indicate good size, color. Tobacco harvest is nearing completion. Blue mold has been reported in some fields. Despite the rainy weather, potatoes are being harvested, crop is being reported as good to excellent.

WYOMING: Freezing temperatures across the State. Temperatures 1 to 7° below normal. Douglas, Jackson lowest temperatures, both with 19°. Precipitation was below normal, except southeast, south central where precipitation was well above normal. Cheyenne, Laramie received the most, around 1.00 in.

Days suitable for fieldwork 5.2. Topsoil 8% short, 92% adequate. Subsoil 18% short, 82% adequate. Spring wheat 62% harvested, 97% 1992, 99% avg. Oats 70% harvested, 90% 1992, 94% avg. Barley 84% harvested, 93% 1992, 94% avg. Winter wheat planted for 1994 harvest 57%, 74% 1992, 69% avg.; emerged 23%, 28% 1992, 29% avg. Corn dented 50%, 61% 1992, 74% avg.; mature 7%, 10% 1992, 27% avg. Dry beans windrowed 77%, 70% 1992, 74% avg.; combined 23%, 41% 1992, 44% avg. Alfalfa 2nd cutting completed 92%. Alfalfa 3rd cutting completed 18%. Frost damage 21% moderate, 79% severe. Cattle, calves moved from summer range 15%. Sheep, lambs moved from summer range 17%.

International Weather and Crop Summary HIGHLIGHTS

September 12 - 18, 1993

FSU: Stormy weather in Russia caused further delays in autumn fieldwork. Wet weather in Ukraine slowed corn harvest but increased moisture for winter grain planting. In the New Lands, generally dry weather favored spring grain harvesting.

EUROPE: Wetness slowed harvesting again in the west, but fieldwork progressed in the east.

SOUTH ASIA: The monsoon was retreating, but showers boosted irrigation for dry season grains and oilseeds.

EASTERN ASIA: Two tropical cyclones hit southern China, damaging sugarcane and rice. Showers slowed rice harvesting in South Korea and Japan.

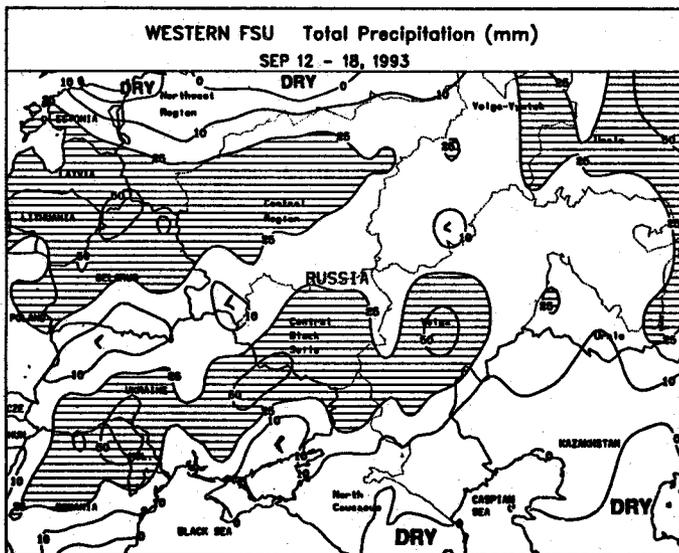
SOUTHEAST ASIA: Drier weather returned to northern Thailand, but showers elsewhere benefited immature grains and sugarcane.

AUSTRALIA: Widespread, timely rain aided vegetative to early reproductive winter wheat across eastern Australia.

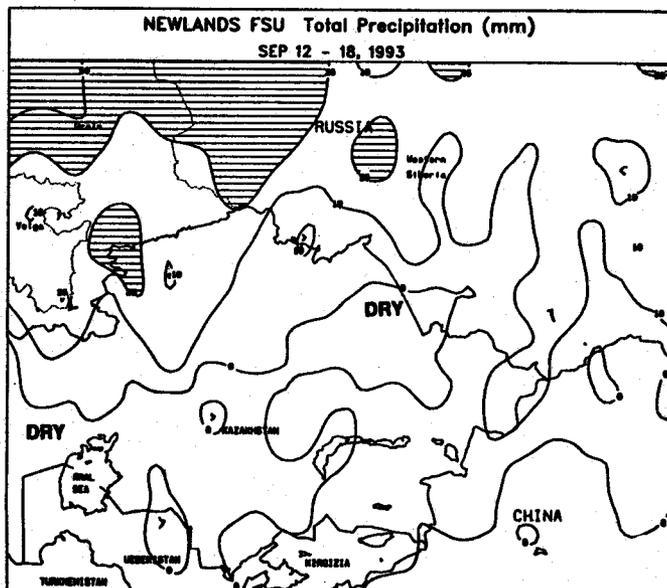
SOUTH AMERICA: Rain favored winter wheat in Argentina, and summer crop planting in southern Brazil.

CANADA: In the Prairies, the first hard freeze of autumn ends the growing season.

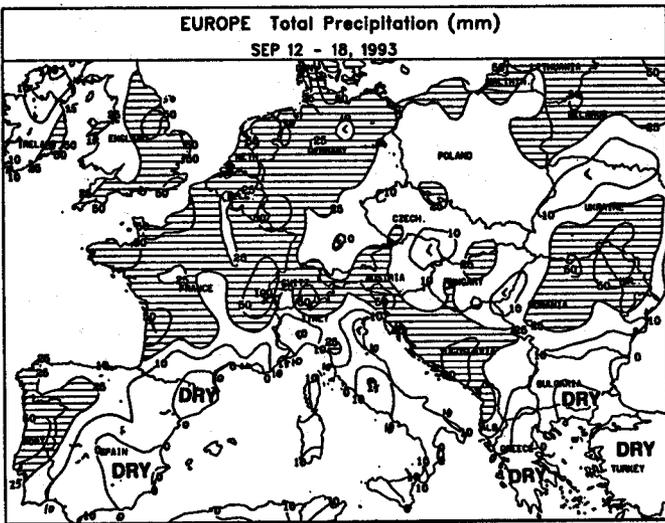
MEXICO: Tropical activity brought heavy rains to the western vegetable and north-central grain areas.



FSU-WESTERN: A stormy weather pattern caused further delay in autumn fieldwork. Greatest amounts of rain (25-50 mm, with local amounts in excess of 50 mm) covered Latvia, Lithuania, northern Belarus, Central Region, Moldova, central Ukraine, southern Black Soils Region, and middle Volga Valley. As of September 13, reports indicated the spring grain harvest in Russia was 63 percent complete, compared with 70 percent last year. In addition, corn harvest was 40 percent complete, while sugar beet and potato harvests were 6 and 20 percent complete, respectively. Winter grain planting in Russia was progressing slowly due to persistent wetness. In Ukraine, dry weather in the south favored corn harvest. Although wet weather in central and northern Ukraine interrupted corn harvest and winter grain planting, it provided abundant moisture for winter grain emergence and early establishment. Weekly average temperatures over the region were 3-6 degrees Celsius below normal in the north and 1-3 degrees Celsius above normal in the south. Scattered frost over the extreme north occurred on typical first freeze dates.

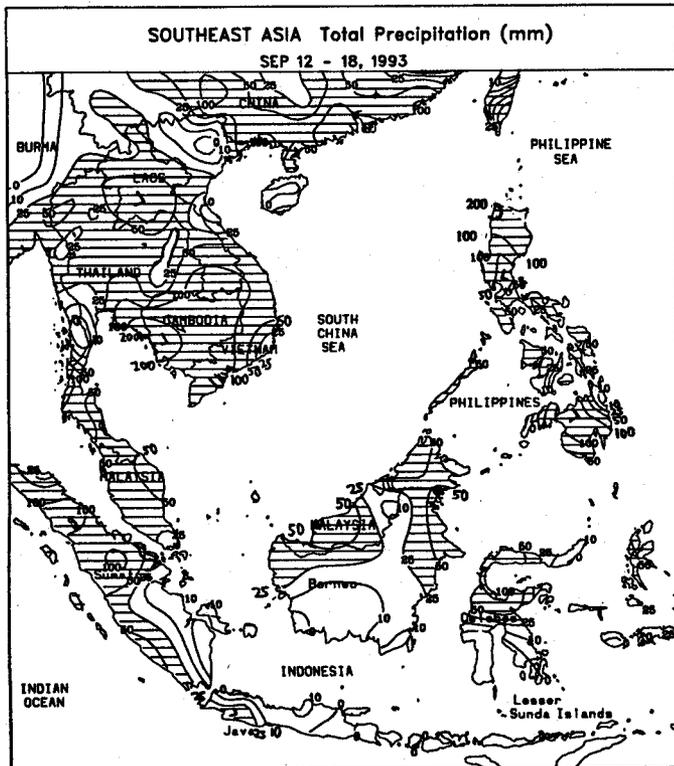
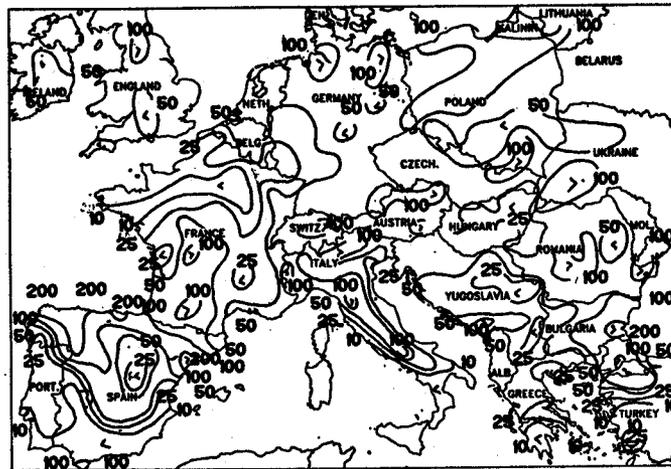


FSU-NEW LANDS: Favorable harvest weather covered most of the region. The exception was in northern Urals and western areas in Siberia, where moderate amounts of rain (greater than 25 mm) interrupted harvest activities. As of September 13, reports indicated the spring grain harvest in Kazakhstan was about 50 percent complete, and was progressing ahead of last year's pace. Weekly average temperatures over the region were 1-2 degrees Celsius below normal. In cotton growing areas of Central Asia, unseasonably warm, dry weather favored boll maturation and early cotton harvesting.

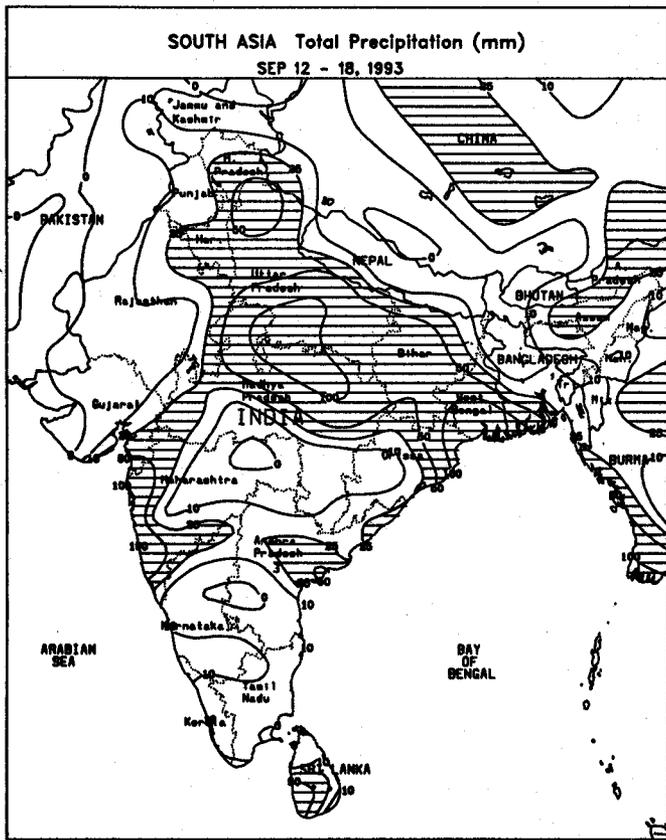


EUROPE: Stormy weather continued to hamper fieldwork, especially in western crop areas. Weekly rainfall averaged 25-50 mm, with scattered 50-100 mm amounts, soaking unharvested small grains, corn, and sugar beets in France, much of England, the Benelux countries, and northern Germany. Wet weather also persisted across the Alpine region, Romania, and the former Yugoslavia, where corn harvesting was slowed by 25-50 mm of rain. Showers (25-90 mm) also continued to moisten soils in western portions of the Iberian peninsula. Autumn harvesting and winter grain planting made some progress in eastern Europe. Rainfall averaged 20 mm or less over much of northeastern Europe, favoring winter crop planting with several dry days helping fieldwork. Mostly dry weather persisted in Bulgaria as well as across much of Scandinavia. Weekly temperatures averaged slightly below normal in the west and slightly above normal in the east.

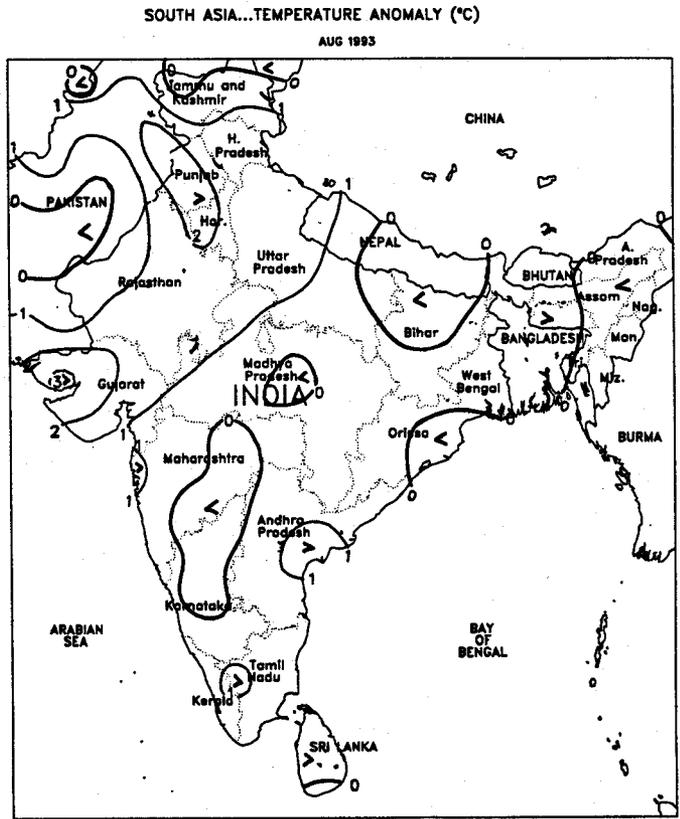
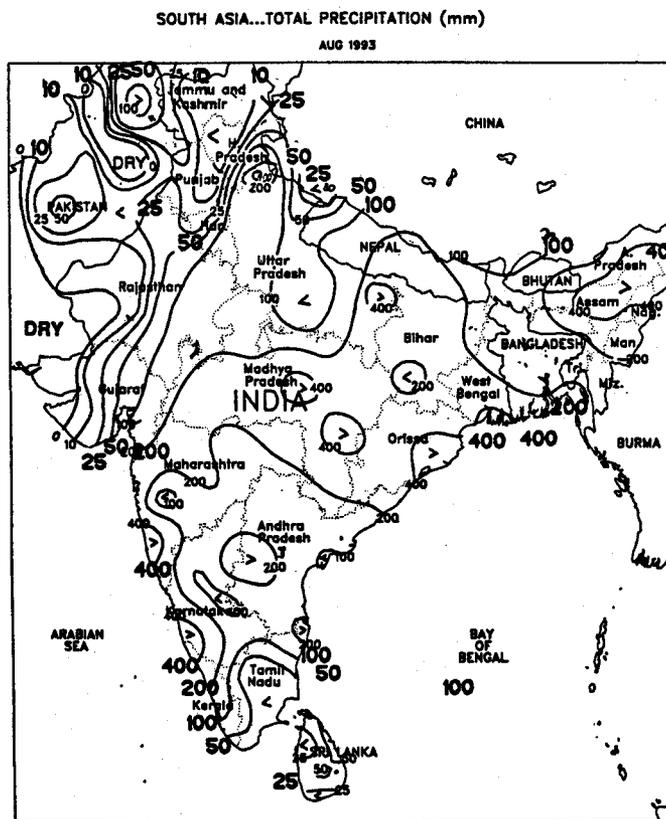
EUROPE...PERCENT OF NORMAL PRECIPITATION
AUGUST 1993

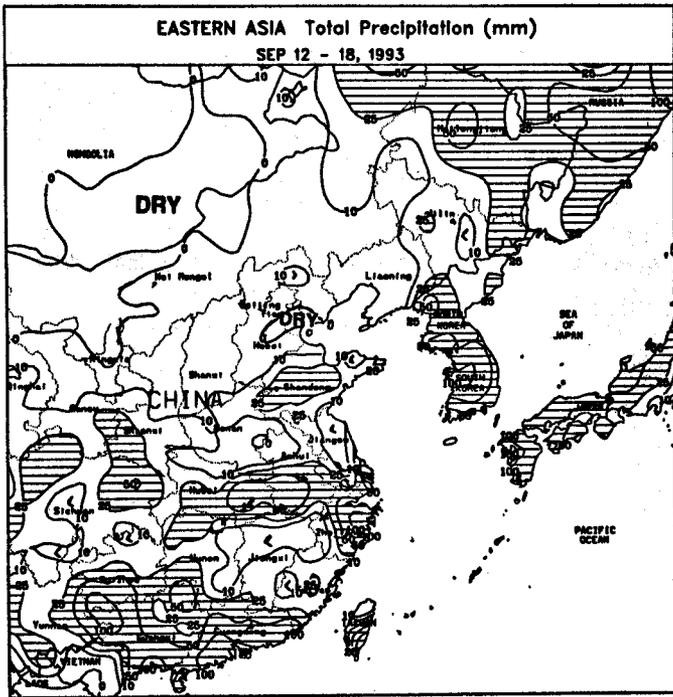


SOUTHEAST ASIA: Widespread showers (25-100 mm or more) over primary rice areas of Indochina helped immature rainfed rice and sugarcane and boosted reservoirs for dry-season planting. Moderate to heavy rain (25-50 mm or more) also fell over peninsular Thailand and most rice and oil palm areas of Malaysia. In the Philippines, showers (25-100 mm, with isolated totals exceeding 200 mm) covered the islands, boosting moisture for immature grains and sugarcane. The rains were partly caused by Tropical Storm Becky which brushed northern Luzon. Typically, in October, prevailing winds over the islands shift from westerly to easterly, resulting in the fall rainy pattern for eastern crop areas.

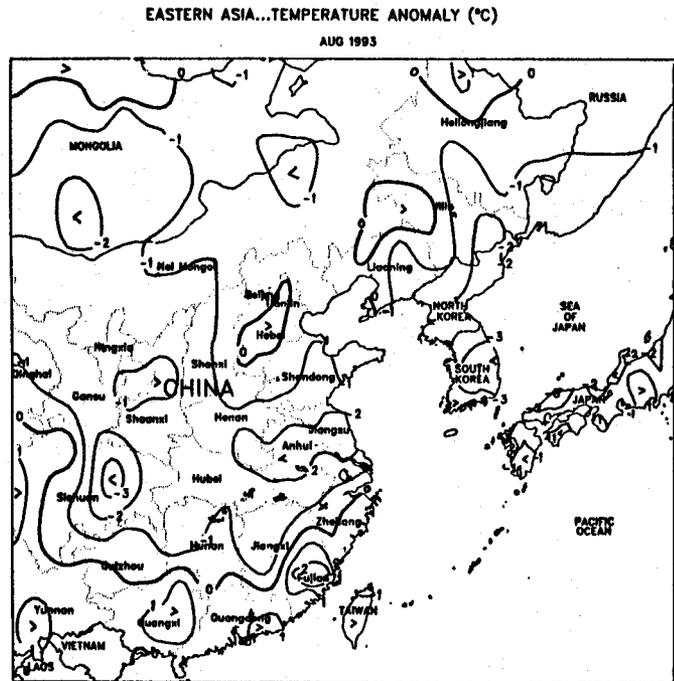
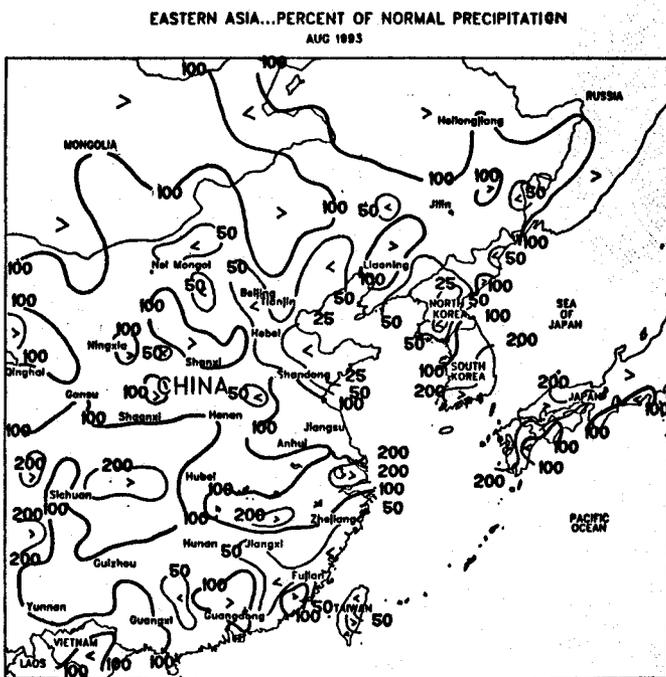


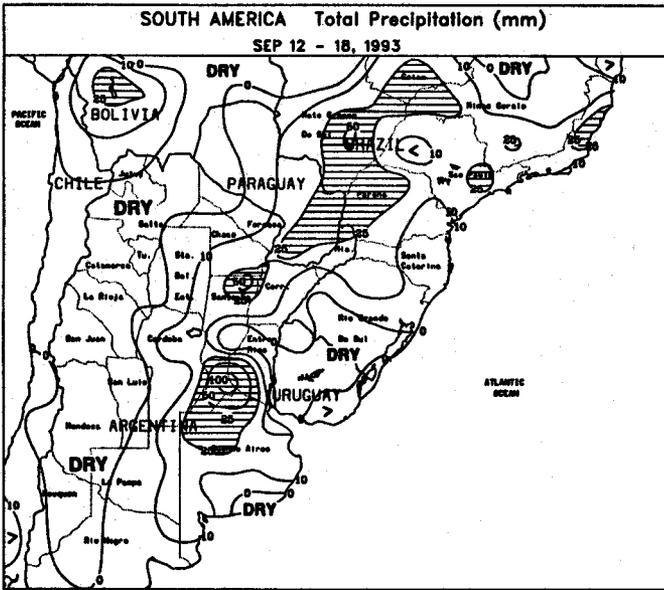
SOUTH ASIA: Rainfall tapered off across northwestern and central India, although moderate showers (25-50 mm or more) continued from western Madhya Pradesh to Pakistan's Punjab State. Moderate to heavy showers (25-100 mm or more) spread across northern India through primary rice areas of the east, boosting irrigation reservoirs for dry season grains and oilseeds. Winter crop planting is usually widespread from October through December. The southwest monsoon is retreating from the northwest. In southern India, drier and warmer conditions aided filling to maturing summer crops as well as fall crop planting. Rainfall over the southern interior usually increases over the next few months as the monsoon retreats southward.



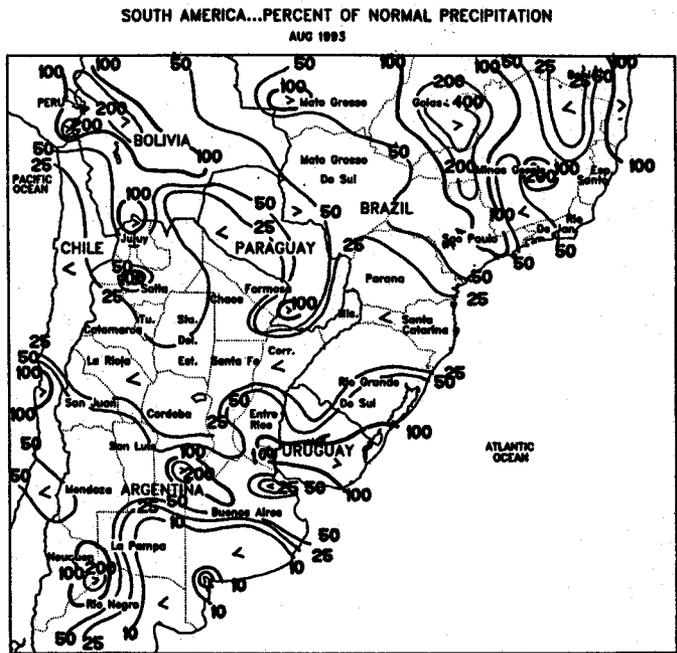
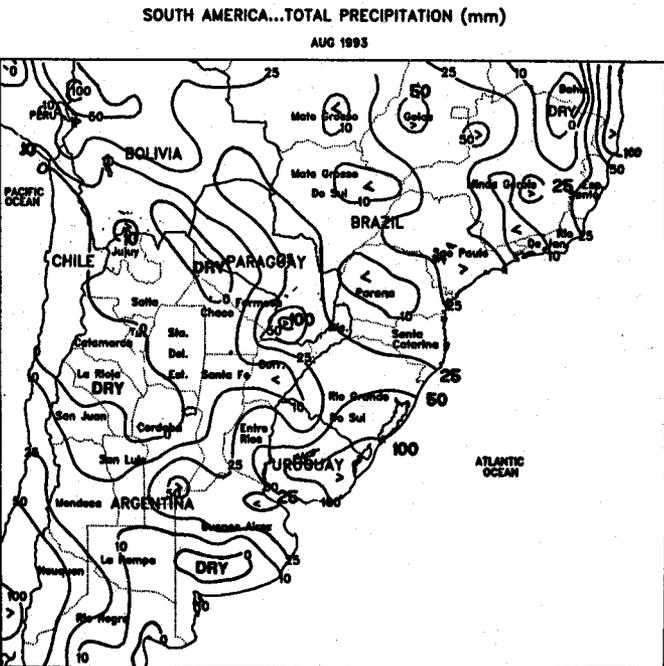


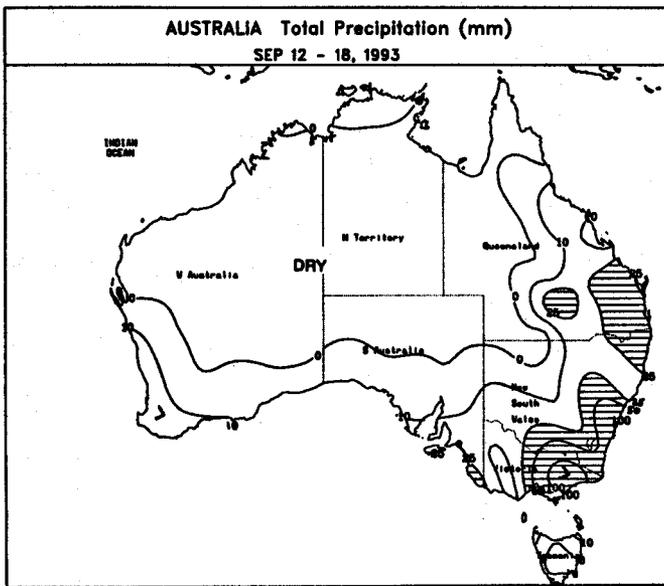
EASTERN ASIA: Tropical Cyclone Abe hit southern China on September 12 (eastern Guangdong), with 100-115 mph sustained winds. However, Abe was very compact and brought only localized heavy rain and damage. Later in the week, on September 17, Tropical Cyclone Becky hit western Guangdong with sustained winds of 60-75 mph. Becky produced widespread heavy rain (weekly totals of 60-150 mm, with isolated amounts greater than 200 mm) across Guangdong and Guangxi, damaging sugarcane and maturing rice. Typically, late double-crop rice matures during September and is ready to harvest during October and November. Further north, moderate to heavy rain (30-125 mm) was concentrated across the Yangtze Valley, delaying single-crop rice harvesting. Scattered showers (10-50 mm) fell across the North China Plain and Manchuria, slowing summer crop harvesting. Temperatures averaged 2-4 degrees C above normal across most of China. Across South Korea and southern Japan, moderate to heavy rains (35-140 mm) further delayed rice maturation and slowed rice harvesting.



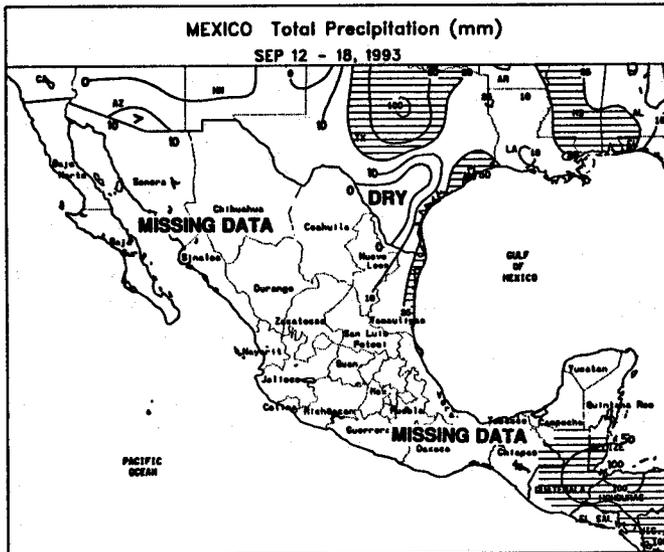


SOUTH AMERICA: In Argentina, moderate showers (10-45 mm, with isolated amounts greater than 150 mm) fell across northern Buenos Aires and southern Santa Fe, favoring vegetative winter wheat. During the past several weeks, rainfall has greatly improved topsoil moisture, which was becoming limited across the region. Across southern Brazil, widespread light to moderate showers (15-35 mm) favored topsoil moisture for summer crop planting. Temperatures averaged 2-4 degrees C above normal in Argentina and near normal across southern Brazil.

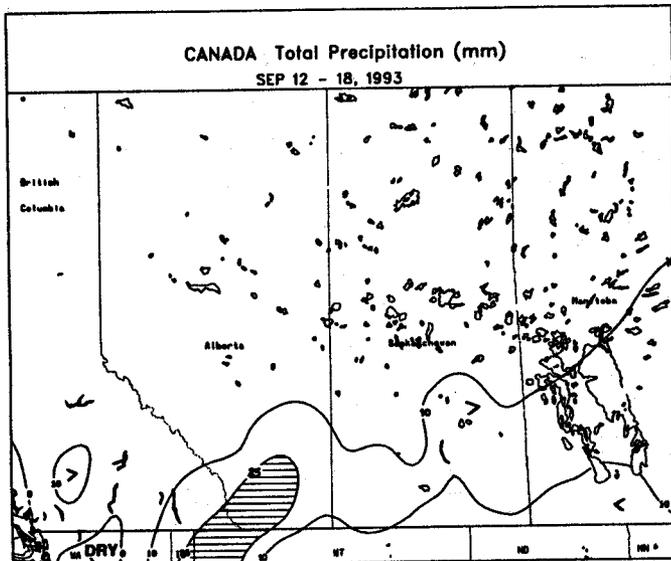




AUSTRALIA: Widespread moderate rains (16-40 mm) covered the wheat areas in southern Queensland southward into Victoria, boosting soil moisture for vegetative to early reproductive winter wheat. Cumulative rainfall for September 1-18 has already exceeded the monthly normal for most stations in eastern Australia. Light rain (3-15 mm) kept soils moist across Western and South Australia's wheat areas. Temperatures averaged 1-3 degrees C below normal in the east and near normal in the west.



MEXICO: Rainfall and temperature data were missing for the entire country, and rainfall intensity was based from satellite imagery. Early in the week, Hurricane Lidia hit the west coast of Mexico near Culiacan, Sinaloa with 85-95 mph sustained winds. Lidia entered and passed over the main irrigated vegetable area bringing heavy rain, possibly causing some replanting and damage. As Lidia dissipated over land, it still produced widespread heavy rain from Sinaloa northeastward into the states of Durango and Chihuahua. Tropical Cyclone Gert, which meandered across Central America bringing heavy rain (25-100 mm), crossed the Yucatan peninsula on September 18 producing heavy rains, benefiting germinating corn. The storm then entered the Gulf of Campeche (southern portion of the Gulf of Mexico), where it was poised to hit the east-central coast of Mexico.



CANADA: The first hard freeze of autumn hit most Prairie crop regions on September 13 and 14, with minimum temperatures at most locations ranging from -2 to -5 degrees C. While arriving on schedule, the freeze affected crops well behind in development due to this season's cool summer. Temperatures this low not only end the growing season for grains and oilseeds but also cause some damage to immature crops. The freeze missed portions of southern Manitoba, including the Red River Valley. Precipitation (10-36 mm, some falling as snow) accompanying the cold weather slowed harvests and worsened quality prospects. Drier weather is needed over the next few weeks to finish grain and oilseed harvest without further reductions in quality.

Canadian Prairie Seasonal Summary

The 1993 growing season across the Prairie Provinces was marked by a persistent pattern of cool, wet weather that slowed crop development, reduced grain and oilseed quality, and, more recently, hampered grain harvests. Consequently, the hard freezes that occurred on September 13 and 14 (which came somewhat later than normal, climatologically) damaged crops that remained unharvested due to immaturity and inclement weather. The following is a summary of the growing season to date, including a comparison with 1992 conditions.

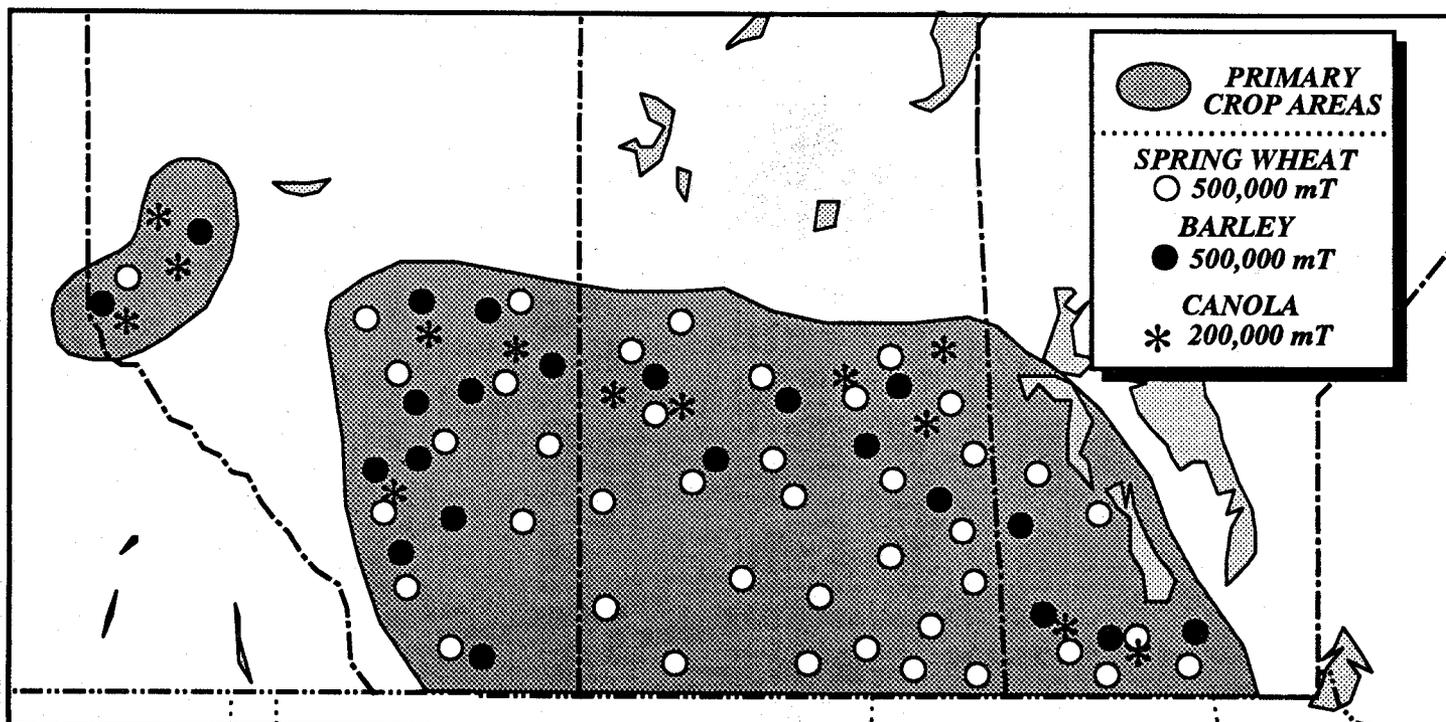
In 1992, the first autumn freeze came early to much of Alberta and Saskatchewan, resulting in some crop damage. In Manitoba, although the first hard freeze was about on schedule, some damage was reported to crops planted late or re-planted due to a late spring frost. Beginning about mid-August, wet weather dominated the Prairies, resulting in some quality reductions as grains ripened in cool, cloudy weather. The wetness carried over into harvests, placing fieldwork behind the normal pace. The summer of 1992 ended in the Prairies with a drying trend developing over northwestern growing areas. These conditions, coupled with a warmer- and drier-than-normal winter, resulted in poor subsoil moisture reserves in Alberta and much of Saskatchewan as spring of 1993 approached. In contrast, unfavorable autumn wetness in the eastern growing areas translated into a favorable sub-soil moisture profile as 1993 approached.

The 1993 growing season began in May a bit on the dry side, but June rainfall was widespread and timely for crop establishment. Late-spring frosts were not a widespread problem but, like 1992,

a cooling trend became established over the eastern Prairies early in the summer, maintaining lower-than-normal growth rates. By July, the cooling trend had expanded to cover most of the Prairies. This summer's rainfall (June - August) exceeded that of 1992 across the Prairies, providing ample moisture for crop development (figs. 1 and 2). However, excessive wetness in many locations resulted in reduced quality and raised disease concerns. In Manitoba, conditions were especially wet, particularly during reproductive phases of development when grains were susceptible to disease. Temperatures, however, were not as cool as 1992 relative to normal, and crops developed at a slightly higher rate (figs. 3 and 4). In mid-August, a strong storm moving from southern Alberta to Manitoba soaked ripening wheat across the southern districts and spurred severe weather that likely resulted in some lodging.

When the first autumn freeze of 1993 hit, harvests were well behind schedule due to both the lateness of the crop and the exceedingly poor weather for fieldwork. Grains in many locations reportedly were not swathed for fear of sprouting as the crop awaited combining. Canola harvest was the most advanced; in the weeks preceding the freeze, harvesting of "green" canola advanced in lieu of a potential killing freeze, which could have caused extensive physical damage to the pods (similar precautions were reportedly taken last year). Moderate to heavy showers ahead of this cold air mass worsened quality prospects of maturing crops in northern growing areas.

As harvest progress increases over the next few weeks, drier weather is needed to prevent further reductions in quality.



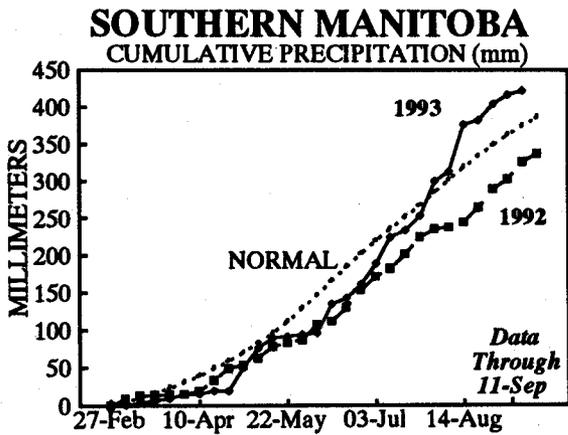


Fig. 1

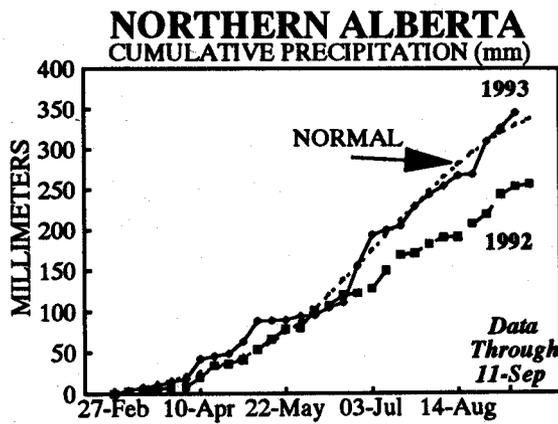


Fig. 2

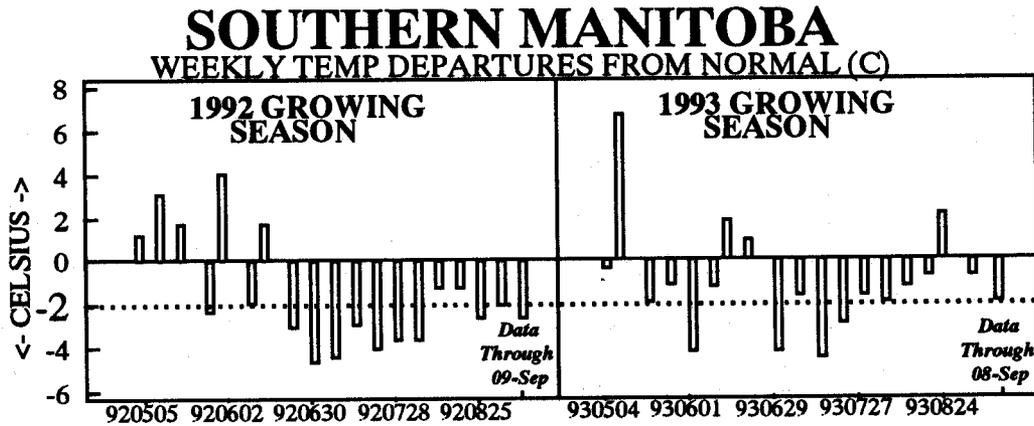


Fig. 3

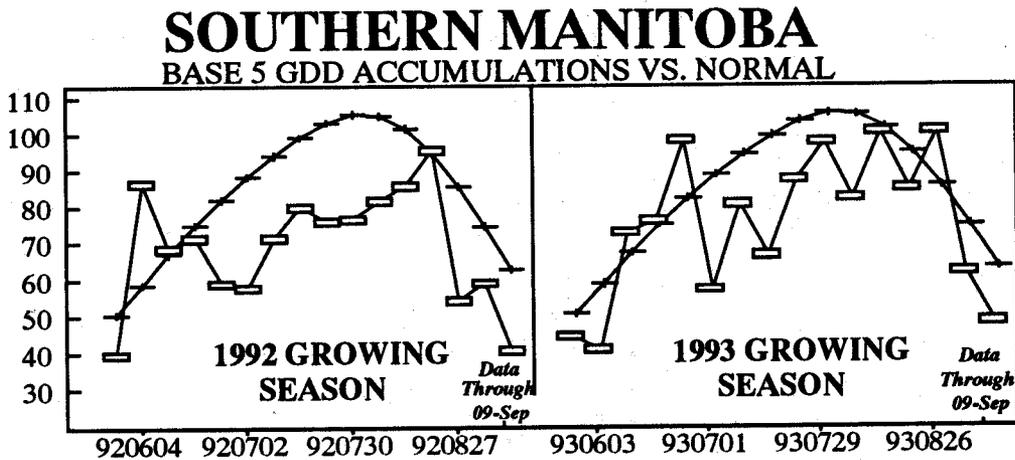


Fig. 4

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(Continued from front cover)

Hurricane Lidia, arrived on Monday in Texas. While the rain helped ease long-term moisture deficits in the southern Plains, it also caused flash flooding and was accompanied by more than a dozen tornadoes. East-central Oklahoma endured up to 8 inches of rain on Monday night. Farther north rainfall totaled 4.85 inches in Springfield, MO and 2.84 inches in Peoria, IL. By midweek, cold air spread southward through the Plains and eastward across the Corn Belt. Temperatures dipped into the upper 30's as far south as Amarillo, TX, and frost occurred as far east as eastern Nebraska. Midweek minima included 31°F in Lincoln, NE (earliest freeze on record) and 32°F in Sioux Falls, SD. Another harbinger of autumn included the fact that the Nation's highest temperature on Thursday (99°F at Coolidge and Gila Bend, AZ) failed to top 100°F for the first time since May 8. But the Eastern States clung to summer weather until late in the week. Temperatures soared to 90°F as far north as Portland, ME. New York City (Central Park) registered its 39th day this year of 90°F heat, tying the record set in 1991. But at week's end, significant rains and cooler weather pressed to the east coast. Rainfall exceeded an inch from the Mississippi Delta to the Middle Atlantic States. Totals surpassed 2 inches in locations such as Philadelphia, PA (2.90 inches) and Wilmington, NC (3.37 inches). Meanwhile, a new storm took form over the central Rockies, spreading heavy rain into the central Plains and western Corn Belt.

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