

# WEEKLY WEATHER AND CROP BULLETIN

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

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

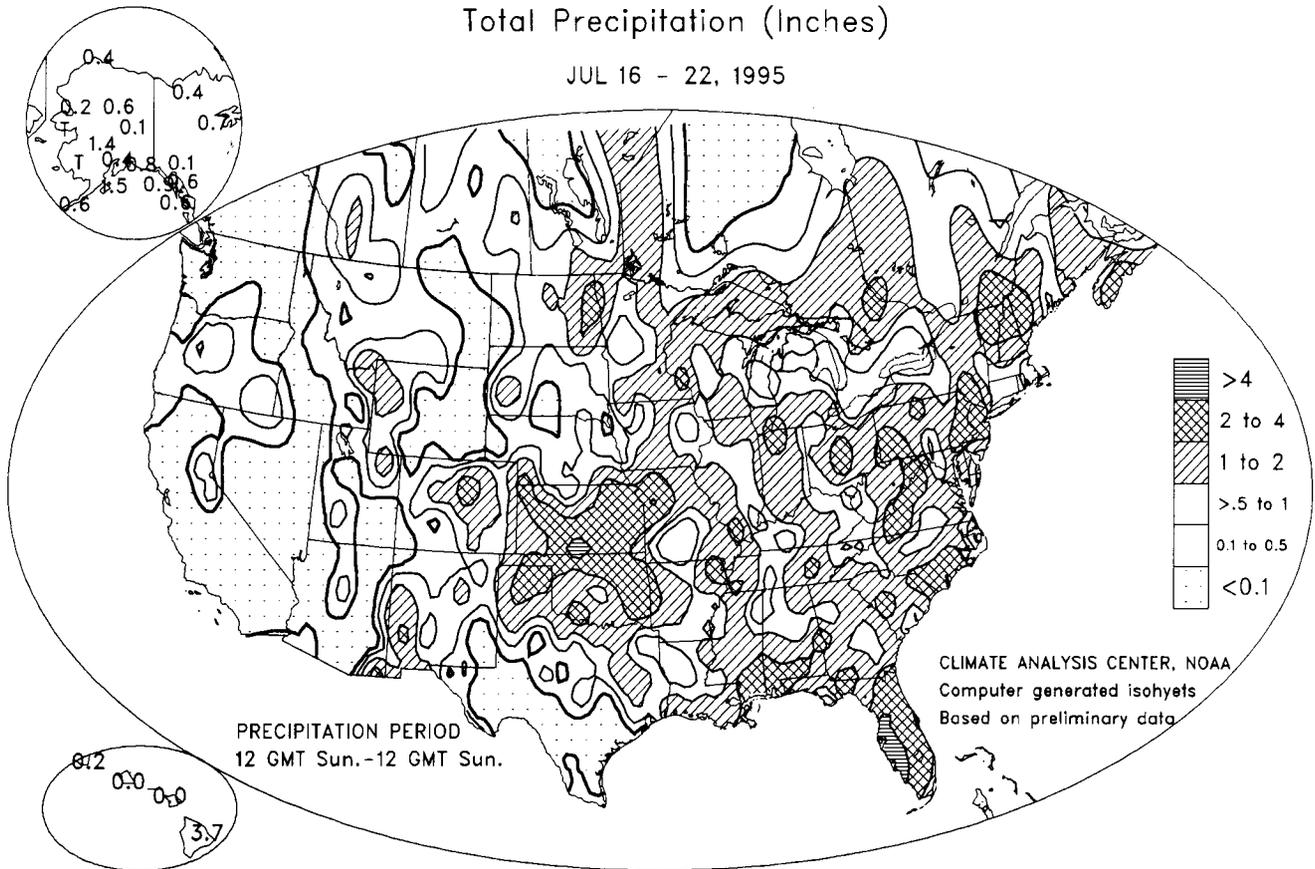
Volume 82, No. 30

Washington, D.C.

July 25, 1995

## Total Precipitation (Inches)

JUL 16 - 22, 1995



## HIGHLIGHTS

July 16 - 22, 1995

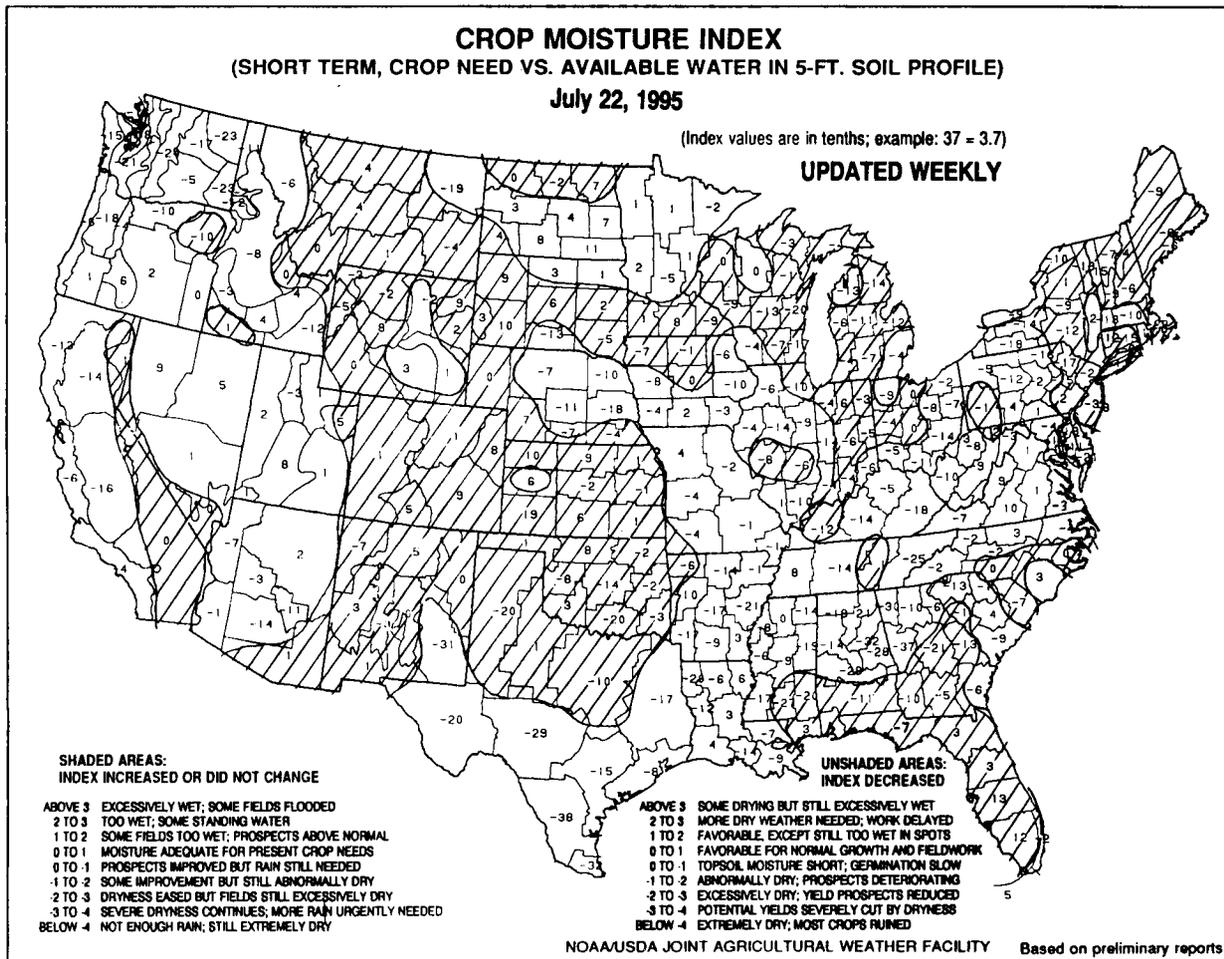
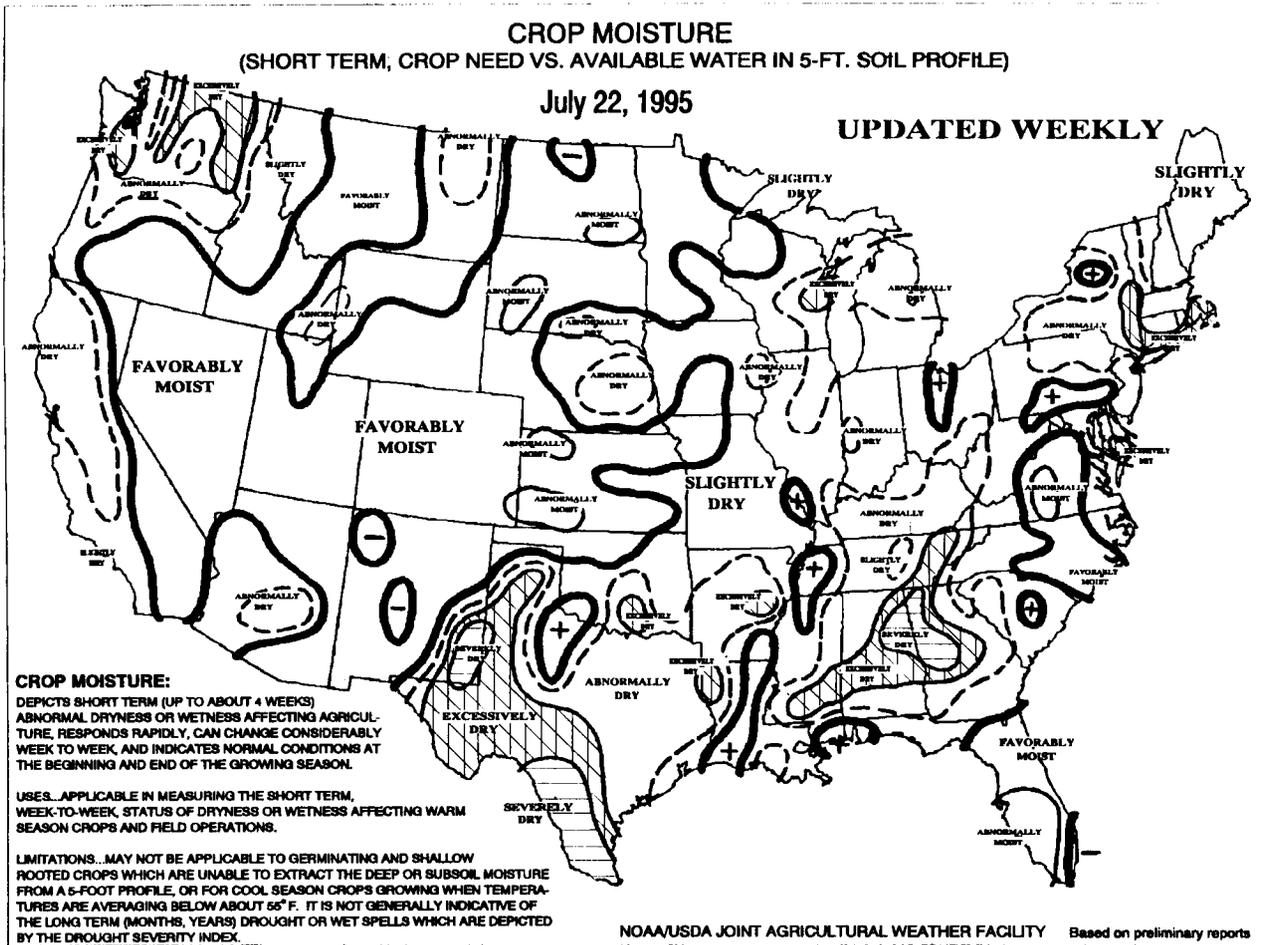
Several cold fronts slipped southeastward from the Canadian Prairies, spelling an end to the dry, hot weather from the **central Plains** to **New England**. **Corn Belt** crops benefited from 1 to 3 days of rainfall that ranged from as little as a quarter-inch in a few spots to locally 2 inches or more, and from high temperatures mostly in the 80's to around 90°F after July 16. Heat intensified, however, in the **Southeast**, where highs regularly approached 100°F and thundershowers offered only scattered relief. Farther south, persistent rainfall locally topped 10 inches in **western Peninsular Florida**. Elsewhere, the **Pacific Northwest's** winter wheat harvest progressed under hot, dry conditions, while the **southern High Plains'** crop areas received beneficial moisture before hot weather arrived at week's end.

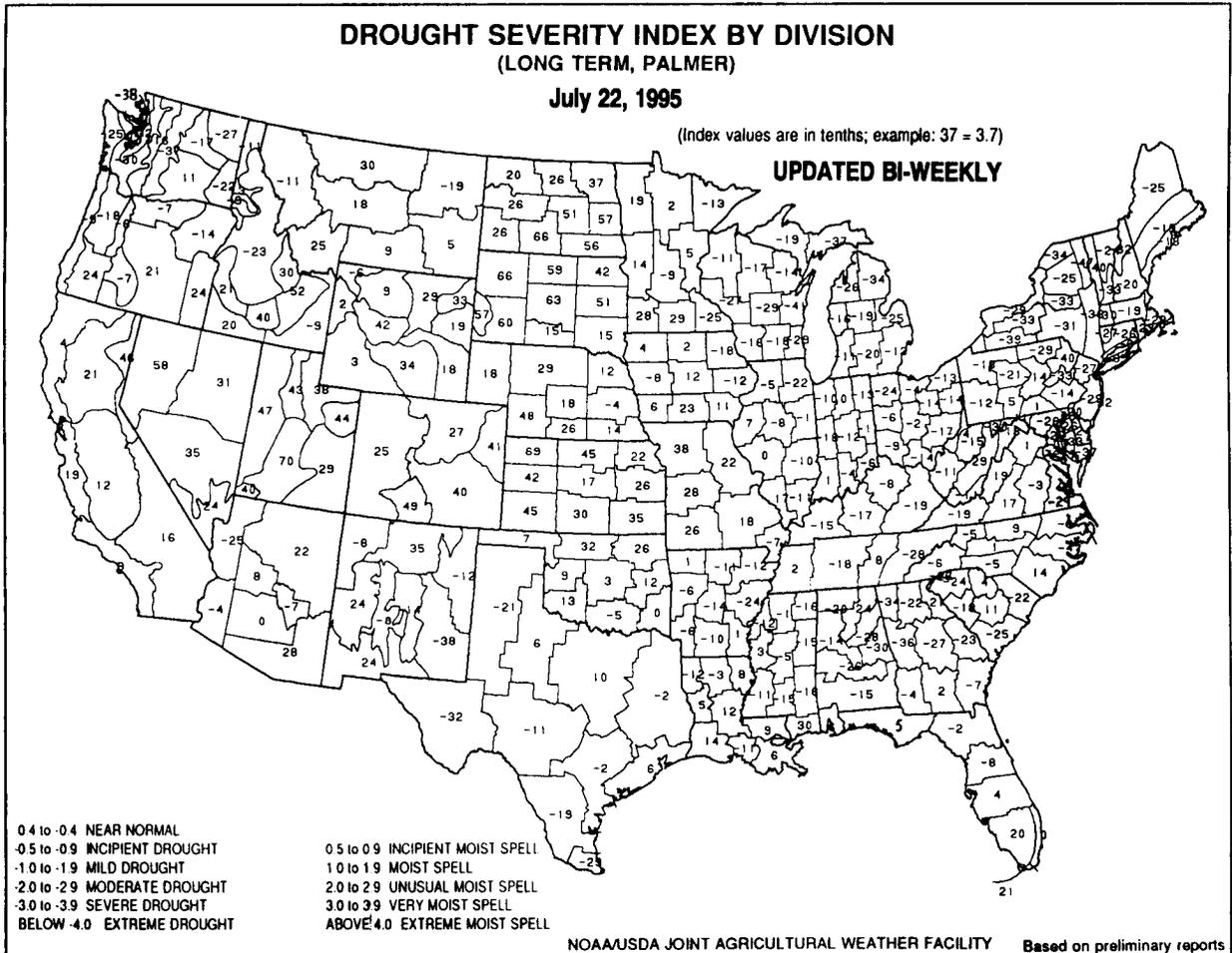
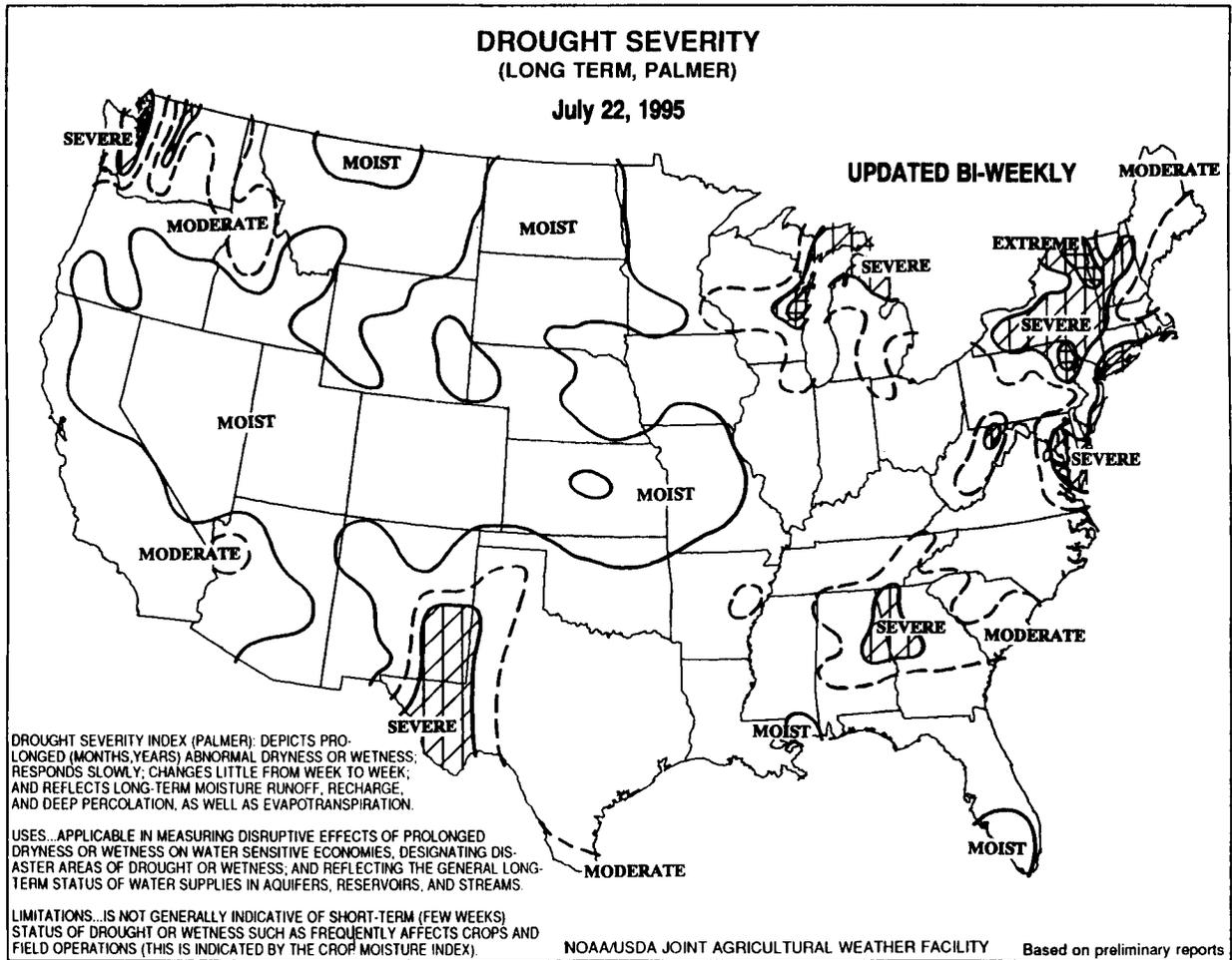
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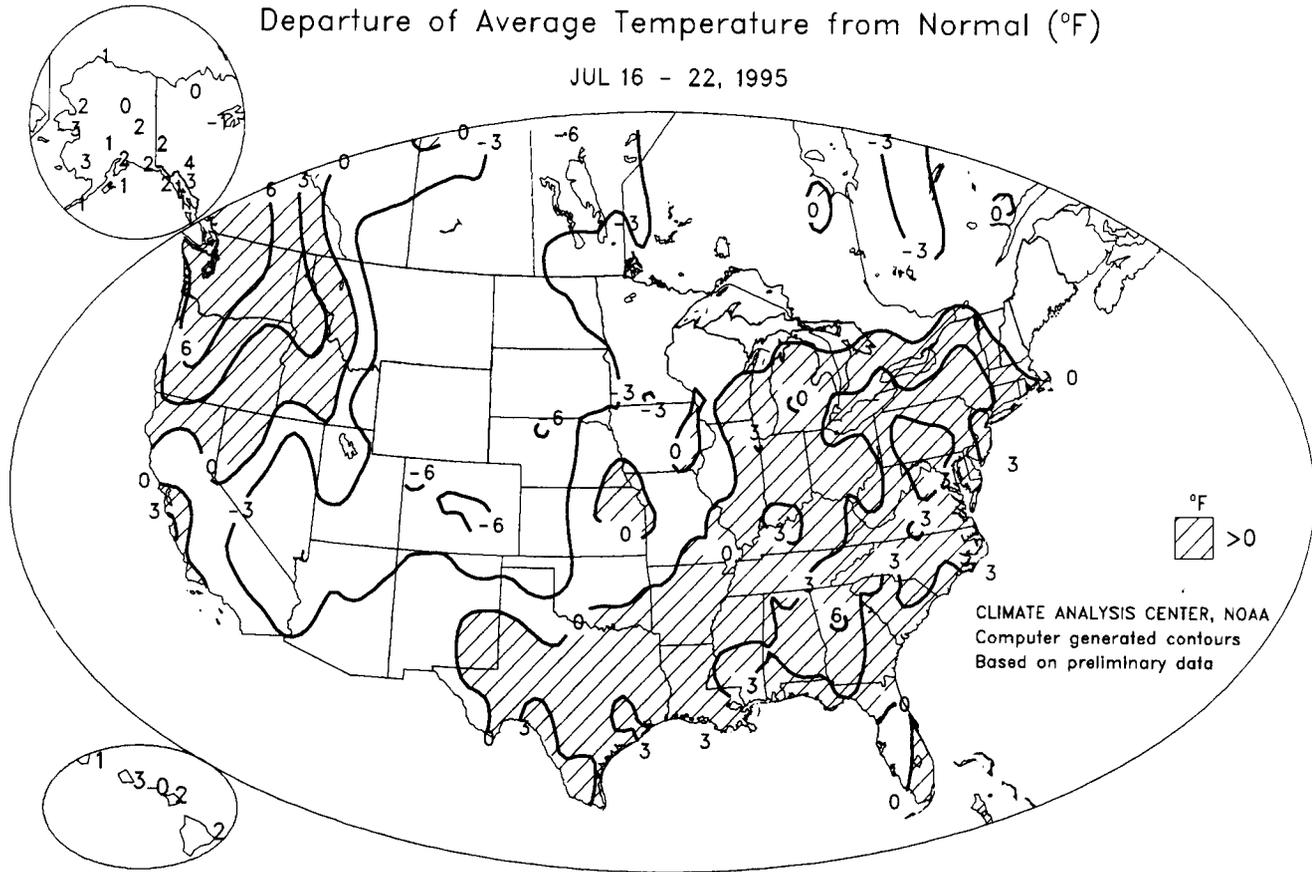
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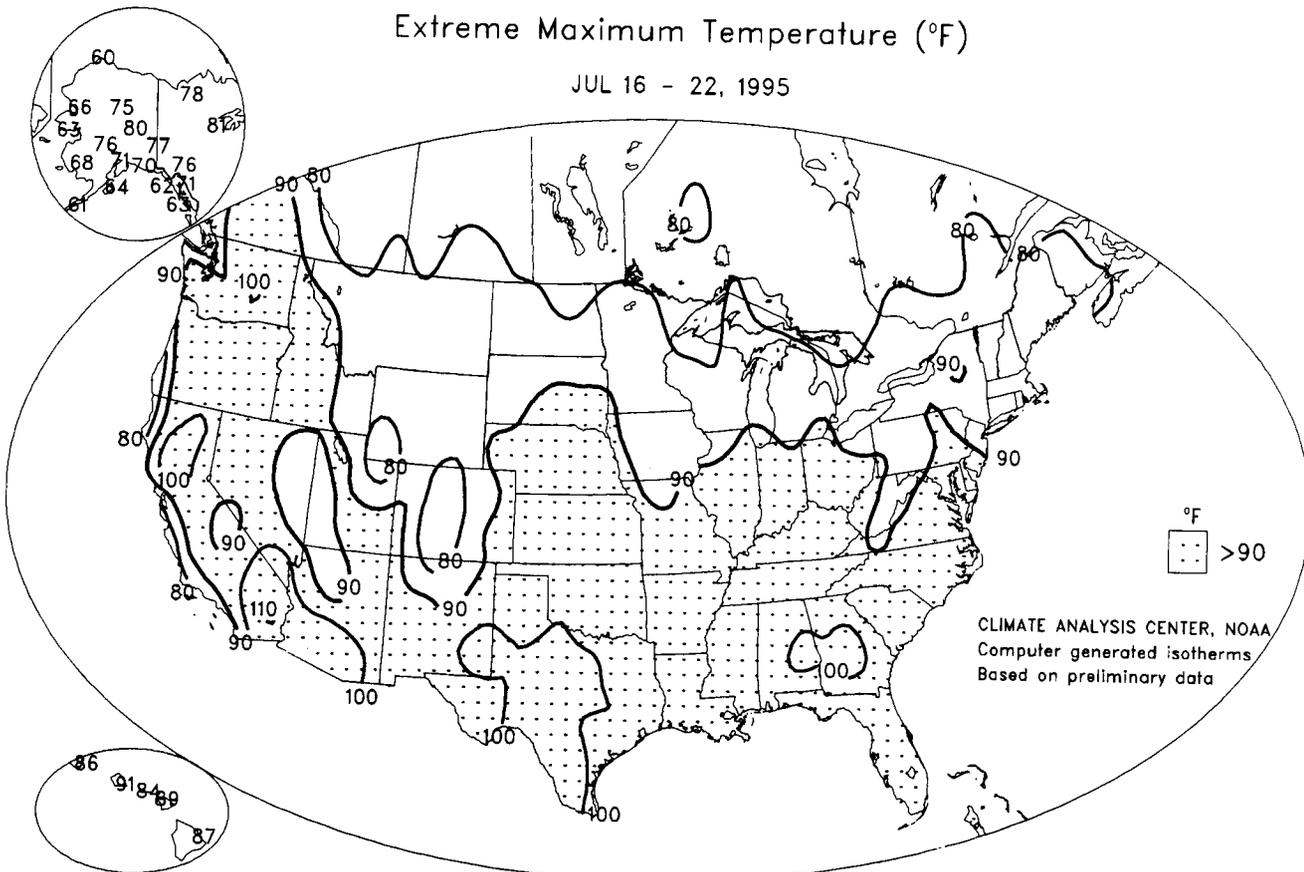
Departure of Average Temperature from Normal (°F)

JUL 16 - 22, 1995



Extreme Maximum Temperature (°F)

JUL 16 - 22, 1995



# National Weather Data for Selected Cities

Weather Data for the Week Ending July 22, 1995

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS					
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE		.50 INCH OR MORE	
																		OR MORE	OR MORE	OR MORE	OR MORE
AL BIRMINGHAM	97	71	99	66	84	4	3	-1.2	2	3.8	50	22.2	67	87	38	7	7	0	1	0	
MOBILE	93	73	97	72	83	1	1.1	.5	.5	7.4	76	45.3	124	98	55	7	7	0	4	1	
MONTGOMERY	98	72	100	70	85	5	1.5	.3	1.1	4.5	50	25.1	74	97	44	0	0	2	2	1	
AK ANCHORAGE	68	54	71	51	61	2	4	.0	.3	1.9	82	5.5	91	82	54	0	0	2	2	0	
BARRON	47	35	60	31	41	1	4	.2	.2	1.3	140	2.1	130	97	75	0	0	3	3	0	
FAIRBANKS	76	54	80	50	65	2	1	.3	.1	2.8	106	4.5	91	88	40	0	0	1	1	0	
JUNEAU	65	52	71	49	59	3	6	.4	.6	4.9	81	..	..	92	71	0	0	6	1	1	
KODIAK	58	49	64	44	54	-1	1.5	.7	1.0	12.5	169	46.9	136	97	82	0	0	1	1	1	
NOOME	53	46	63	44	49	-3	2	.5	2	1.6	64	7.6	130	97	73	0	0	2	2	0	
AZ PHOENIX	103	82	106	76	92	-2	0	.0	0	2	64	3.1	95	45	19	7	7	0	0	0	
PRESCOTT	86	60	90	55	73	0	2	.8	2	4	17	5.4	61	53	21	1	1	1	1	0	
TUCSON	97	75	102	72	86	0	2	.6	2	1	3	3.8	82	57	22	7	7	1	1	0	
YUMA	105	78	107	70	92	-2	2	.1	2	2	129	2.1	182	57	14	7	7	0	0	0	
AR FORT SMITH	93	72	94	68	83	1	7	.0	.6	6.2	112	24.4	105	93	52	6	6	2	2	1	
LITTLE ROCK	94	73	97	71	83	2	2	.5	.2	4.1	62	23.0	83	72	43	7	7	2	2	0	
CA BAKERSFIELD	97	66	101	62	82	-3	2	.0	2	1	109	7.9	205	65	20	7	7	0	0	0	
FURBER	65	55	72	53	60	3	3	.0	2	1.9	327	36.0	171	94	74	0	0	1	1	0	
FRESNO	96	67	98	63	81	-1	2	.0	2	7	957	15.2	218	73	24	7	7	1	1	0	
LOS ANGELES	75	61	79	59	68	-1	1	.1	1	7	>1000	21.0	272	89	62	0	0	1	1	0	
REDDING	97	67	108	64	82	0	2	.0	2	1.8	266	46.6	247	72	22	7	7	0	0	0	
SACRAMENTO	87	60	102	57	74	-2	2	.0	2	5	313	23.8	221	93	41	2	2	0	0	0	
SAN DIEGO	76	64	85	62	70	-1	1	.1	1	5	567	15.9	256	91	65	0	0	1	1	0	
SAN FRANCISCO	71	57	81	54	64	1	0	.0	0	6	500	21.0	171	94	61	0	0	0	0	0	
CO DENVER	81	55	86	50	68	-6	9	.4	.7	4.0	126	11.7	122	87	37	0	0	3	3	1	
GRAND JUNCTION	89	60	93	56	74	-6	1	.1	1	2.0	166	7.9	146	81	22	4	4	0	0	0	
FURBLO	87	56	92	53	72	-6	1	.5	.4	3.6	136	11.5	185	97	32	2	2	6	6	0	
CT BRIDGEPORT	84	70	88	66	77	3	1	.2	.9	2.7	43	16.4	69	84	54	0	0	2	2	1	
HARTFORD	87	64	92	61	75	1	4	.4	.3	2.3	38	16.5	68	92	48	1	1	3	3	0	
DC WASHINGTON	92	75	95	73	84	3	1	.9	1.6	6.1	101	19.2	92	85	46	6	6	3	3	1	
FL PALM BEACH	89	75	90	73	82	1	1	.2	1.0	7.7	59	22.2	61	95	67	2	2	1	1	1	
DAYTONA BEACH	89	73	92	72	81	0	2	.8	1.0	9.8	99	17.3	71	97	62	4	4	0	0	2	
JACKSONVILLE	94	72	100	69	83	2	4	.8	2.3	11.7	122	22.9	87	99	51	5	5	3	3	3	
KEY WEST	91	79	93	76	85	1	5	.3	.4	9.8	128	18.8	102	85	65	6	6	2	2	0	
MIAMI	91	78	96	74	84	2	3	.9	.3	22.7	169	38.5	133	87	58	6	6	2	2	0	
ORLANDO	89	73	95	71	81	-1	2	1.1	1.1	11.6	93	21.5	81	97	57	5	5	5	5	2	
TALLAHASSEE	96	73	100	71	85	3	4	.8	2.2	15.1	115	32.8	86	93	53	7	7	5	5	4	
TAMPA	90	76	92	73	83	1	5	4	1.5	18.0	180	28.7	128	92	66	4	4	6	6	4	
WEST PALM BEACH	90	75	92	72	82	0	8	.5	.7	11.1	90	20.4	67	95	64	6	6	4	4	1	
GA ATLANTA	98	75	99	72	87	8	1	.1	1	4.2	58	22.1	71	88	40	7	7	1	1	0	
AUGUSTA	94	72	97	71	83	2	1	.0	.9	8.4	118	23.6	87	96	52	6	6	2	2	1	
Macon	98	73	102	72	86	4	2	1.4	1.9	6.8	103	23.1	83	95	43	7	7	3	3	1	
SAVANNAH	94	75	98	73	85	3	3	1.7	1.6	11.1	111	23.0	83	92	55	7	7	3	3	3	
KI HILO	85	71	87	66	78	2	3	1.4	1.8	13.6	106	40.7	56	95	66	0	0	6	6	2	
HONOLULU	90	76	91	71	83	3	2	.1	2	1	15	9.8	85	75	48	6	6	0	0	0	
KAUAI	88	73	89	69	80	2	2	.1	2	3	63	8.5	66	79	55	0	0	0	0	0	
LIHUE	85	76	86	73	80	1	2	.4	1	1.7	52	14.9	64	80	65	0	0	3	3	0	
ID BOISE	91	60	93	54	76	1	2	.1	2	1.4	133	8.9	124	70	18	5	5	0	0	0	
LEWISTON	93	64	98	56	79	4	2	.1	2	4.1	237	9.9	133	66	26	6	6	1	1	0	
POCATELLO	87	50	88	44	68	-3	1	.1	0	3.6	244	11.3	156	77	23	0	0	2	2	0	
IL CHICAGO	86	67	93	63	77	3	7	.1	.7	4.2	66	19.5	103	82	44	1	1	2	2	1	
MOLINE	86	66	89	59	76	0	4	.8	.2	5.2	67	23.7	109	90	48	0	0	3	3	0	
PEORIA	85	66	91	60	76	0	2	.7	1	3.4	48	23.3	114	93	48	1	1	3	3	0	
QUINCY	86	66	91	60	76	-1	5	.6	.4	3.4	48	19.3	90	84	45	1	1	2	2	0	
ROCKFORD	84	64	87	59	74	0	2	.7	.2	5.1	68	19.3	98	95	48	0	0	1	1	0	
SPRINGFIELD	87	68	97	59	77	0	1	.3	.8	2.6	44	20.9	106	94	48	2	2	2	2	1	
IN EVANSVILLE	93	72	97	65	82	3	2	.8	.2	6.1	88	33.5	123	81	43	7	7	0	0	1	
FORT WAYNE	84	65	91	61	75	1	5	.3	.3	7.0	115	21.5	110	97	55	1	1	3	3	0	
INDIANAPOLIS	88	68	92	62	77	2	6	.4	.4	4.3	65	20.8	91	92	47	2	2	3	3	0	
SOUTH BEND	83	68	91	61	77	1	4	.8	2.8	8.5	124	22.7	107	95	57	1	1	0	0	2	
IA DES MOINES	85	66	87	63	75	0	1	.7	.8	6.3	84	23.0	119	89	49	0	0	2	2	2	
SIOUX CITY	86	60	91	56	73	-3	2	.7	2	3.2	52	15.3	100	92	45	1	1	0	0	1	
WATERLOO	83	62	88	56	73	0	2	.9	.2	6.0	75	17.1	88	95	51	0	0	1	1	0	
KS CONCORDIA	89	67	93	64	78	-2	3	.5	.2	5.5	78	19.5	113	89	46	3	3	2	2	0	
DODGE CITY	89	64	93	62	77	-4	5	.2	.4	5.8	107	16.0	122	97	48	4	4	0	0	0	
GOODLAND	85	58	91	56	72	-4	2	1.8	1.2	7.4	139	15.9	132	94	44	1	1	6	6	2	
TOPEKA	90	69	92	66	80	1	3	2	2.8	7.8	95	27.1	134	90	44	3	3	0	0	1	
WICHITA	91	68	93	66	79	-1	2	2	1.5	12.7	155	25.3	126	91	49	5	5	0	0	3	
KY BOWLING GREEN	93	70	97	62	81	3	1	1	1	3.1	40	20.7	69	93	52	6	6	1	1	0	
LEXINGTON	89	66	92	61	78	2	2	1	1	8.4	117	31.8	122	92	48	4	4	0	0	1	
LOUISVILLE	91	71	94	66	81	3	9	.2	.9	5.0	75	24.2	92	88	49	3	3	0	0	0	
LA BATON ROUGE	94	75	96	71	84	2	2	1	1	5.8	63	45.4	131	98	61	7	7	2	2	0	
LAKE CHARLES	94	77	96	75	86	3	2	.8	1.1	10.7	124	35.2	121	97	59	7	7	4	4	2	
NEW ORLEANS	94	76	96	72	85	3	6	.8	1.5	6.8	67	48.3	137	94	51	7	7	0	0	2	
SHERBOURNE	94	74	98	72	84	2	4	.5	.2	5.9	84	30.2	104	96	55	7	7	0	0	3	

Based on 1961-90 normals.

Weather Data for the Week Ending July 22, 1995

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS								
	AVERAGE	MAXIMUM	AVERAGE	MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE	MAXIMUM	AVERAGE	MINIMUM	TEMP. °F		PRECIP.	
																				80 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
ME CARIBOU	76	55	83	50	65	-1	.7	.3	.4	2.1	37	17.3	96	88	49	0	0	0	0	0	0	0	0
ME PORTLAND	77	58	84	56	68	-1	1.2	.5	.6	4.5	79	20.6	86	97	57	0	0	0	0	0	0	0	1
ME BALTIMORE	93	73	96	68	83	5	.7	.1	.7	4.9	78	16.5	73	82	44	0	0	0	0	0	0	0	4
ME SALISBURY	93	72	96	64	83	5	.5	.5	.3	3.7	56	15.0	61	95	49	0	0	0	0	0	0	1	0
MA BOSTON	80	65	91	61	73	-1	1.5	.5	.1	2.2	44	14.5	64	84	52	0	0	0	0	0	0	0	0
MA CHATHAM	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
MI ALPENA	79	57	85	51	68	1	1.8	1.1	.8	4.0	78	12.0	80	98	58	0	0	0	0	0	0	0	0
MI DETROIT	85	67	91	61	76	3	1.0	.3	.5	3.4	57	15.4	87	90	52	0	0	0	0	0	0	0	0
MI FLINT	82	63	86	56	73	2	1.1	.5	.6	3.0	58	12.0	77	94	53	0	0	0	0	0	0	0	0
MI GRAND RAPIDS	82	61	86	55	71	-1	1.0	.3	.7	8.8	148	20.7	113	94	53	0	0	0	0	0	0	0	0
MI HOOVER LAKES	81	61	84	53	71	3	.2	.4	.1	5.0	104	13.9	97	92	57	0	0	0	0	0	0	0	0
MI LANSING	82	60	86	50	71	-1	.9	.4	.5	2.6	49	13.8	87	100	52	0	0	0	0	0	0	0	0
MI MARQUETTE	73	53	80	50	63	-3	1.5	.8	.6	4.3	77	18.1	101	95	60	0	0	0	0	0	0	0	0
MI MONTBLOOM	82	60	85	55	71	0	1.2	.3	.2	1.8	49	13.1	84	94	52	0	0	0	0	0	0	0	0
MI SAULT ST. MARIE	72	54	78	48	63	-2	1.2	.6	.5	5.5	109	17.6	106	99	77	0	0	0	0	0	0	0	0
MN ALEXANDRIA	79	60	84	58	70	-2	.2	.5	.2	5.2	82	12.0	83	94	52	0	0	0	0	0	0	0	0
MN DULUTH	75	56	78	50	66	-1	.9	.1	.8	5.8	92	16.5	106	89	43	0	0	0	0	0	0	0	0
MN INT'L FALLS	75	53	79	52	64	-3	.9	.1	.8	6.0	91	12.0	91	98	54	0	0	0	0	0	0	0	0
MN MINNEAPOLIS	81	62	84	59	71	-3	.1	.7	.1	5.6	85	12.7	78	90	49	0	0	0	0	0	0	0	0
MN ROCHESTER	78	59	79	55	68	-3	1.3	.3	.9	5.4	81	15.1	84	96	52	0	0	0	0	0	0	0	0
MS GREENWOOD	95	74	97	70	84	2	1.1	.2	1.0	6.5	88	27.3	93	95	50	0	0	0	0	0	0	0	0
MS JACKSON	94	74	96	71	84	3	2.5	1.5	2.5	8.0	132	33.2	100	97	51	0	0	0	0	0	0	0	0
MS MERIDIAN	97	71	99	70	84	3	.7	.6	.6	3.8	52	30.0	87	99	47	0	0	0	0	0	0	0	0
MO CAPE GIRARDEAU	91	70	97	67	81	1	.9	.1	.9	6.9	115	27.7	103	90	47	0	0	0	0	0	0	0	0
MO COLUMBIA	89	67	92	60	78	0	1.0	.1	.5	10.4	157	37.4	174	96	54	0	0	0	0	0	0	0	0
MO KANSAS CITY	88	67	92	64	77	-1	3.1	2.1	2.7	7.6	96	26.3	127	91	53	0	0	0	0	0	0	0	0
MO SAINT LOUIS	90	71	96	68	81	0	.8	.1	.6	4.1	63	29.3	136	86	46	0	0	0	0	0	0	0	0
MO SPRINGFIELD	89	67	91	60	78	0	.2	.5	.1	8.8	121	31.3	133	91	47	0	0	0	0	0	0	0	0
MT BILLINGS	80	55	88	51	68	-5	.4	.2	.2	4.0	146	12.0	123	77	39	0	0	0	0	0	0	0	0
MT GLASGOW	78	53	85	50	66	-6	.1	.2	.1	6.7	200	10.1	147	89	42	0	0	0	0	0	0	0	0
MT GREAT FALLS	76	50	83	44	63	-6	.5	.3	.4	5.7	173	11.3	115	96	45	0	0	0	0	0	0	0	0
MT HAVER	79	51	88	48	65	-5	.5	.2	.4	7.7	278	11.6	168	93	37	0	0	0	0	0	0	0	0
MT HELENA	83	51	88	46	67	-3	.7	.2	.7	3.5	132	8.4	116	87	32	0	0	0	0	0	0	0	0
MT KALISPELL	80	50	87	44	65	1	.2	.0	.2	5.9	193	11.3	118	94	37	0	0	0	0	0	0	0	0
MT MILES CITY	84	55	93	51	69	-6	.2	.1	.1	4.3	107	10.1	110	88	32	0	0	0	0	0	0	0	0
MT MISSOULA	87	53	92	47	70	3	.7	.2	.7	4.1	168	7.8	95	87	28	0	0	0	0	0	0	0	0
NE GRAND ISLAND	89	62	93	55	76	-1	.7	.1	.4	4.0	66	15.7	102	91	40	0	0	0	0	0	0	0	0
NE LINCOLN	92	65	93	61	78	0	.1	.6	.1	2.2	36	16.5	102	89	40	0	0	0	0	0	0	0	0
NE NORFOLK	88	61	93	56	75	-1	.6	.1	.6	3.6	53	18.1	113	87	41	0	0	0	0	0	0	0	0
NE NORTH PLATTE	85	58	92	51	72	-3	1.1	.4	.5	4.2	75	13.3	101	94	46	0	0	0	0	0	0	0	0
NE OMAHA	90	65	93	60	77	0	.5	.3	.3	1.6	25	16.2	95	88	40	0	0	0	0	0	0	0	0
NE SCOTTSBLUFF	84	56	93	54	70	-5	.1	.4	.1	4.2	99	13.2	125	95	36	0	0	0	0	0	0	0	0
NE VALENTINE	84	55	94	49	70	-6	.3	.5	.1	4.1	70	14.7	107	93	40	0	0	0	0	0	0	0	0
NV ELY	85	45	89	41	65	-3	.7	.2	.7	1.5	109	8.8	149	77	21	0	0	0	0	0	0	0	0
NV LAS VEGAS	101	77	103	73	89	-3	.7	.1	.7	0	0	3.6	165	40	17	0	0	0	0	0	0	0	0
NV RENO	90	57	100	48	74	1	.1	.1	.1	1.5	232	10.0	221	78	19	0	0	0	0	0	0	0	0
NV WHEATBUCCA	91	56	97	50	74	1	.1	.0	.1	1.5	139	8.1	164	72	16	0	0	0	0	0	0	0	0
NE CONCORD	80	58	89	56	69	-1	1.1	.3	1.0	2.9	53	16.0	83	98	51	0	0	0	0	0	0	0	0
NJ ATLANTIC CITY	87	67	91	60	77	2	.7	.2	.4	5.2	98	17.8	80	96	59	0	0	0	0	0	0	0	0
NM ALBUQUERQUE	91	65	95	63	78	-1	.3	.0	.3	.5	35	2.4	61	73	23	0	0	0	0	0	0	0	0
NM CLOVIS	92	66	101	64	79	2	.3	.2	.2	1.5	32	4.5	51	91	34	0	0	0	0	0	0	0	0
NM ROSWELL	96	70	102	68	83	2	.1	.3	.0	..	..	..	..	74	26	0	0	0	0	0	0	0	0
NY ALBANY	86	63	89	58	75	2	.1	.6	.1	3.6	61	13.1	66	91	42	0	0	0	0	0	0	0	0
NY BINGHAMTON	83	62	88	58	73	3	.1	.7	.1	3.0	49	13.7	68	90	48	0	0	0	0	0	0	0	0
NY BUFFALO	82	65	87	59	73	2	.9	.2	.6	2.8	49	15.4	80	85	52	0	0	0	0	0	0	0	0
NY NEW YORK	87	73	90	70	80	3	3.1	2.1	2.9	7.2	111	19.6	83	78	48	0	0	0	0	0	0	0	0
NY ROCHESTER	83	63	87	57	73	2	.9	.2	.3	5.0	102	13.1	79	94	51	0	0	0	0	0	0	0	0
NY SYRACUSE	86	62	88	55	74	3	.5	.3	.5	2.8	42	11.6	57	94	48	0	0	0	0	0	0	0	0
NC ASHVILLE	87	66	90	63	77	3	.1	1.0	.0	11.7	144	31.1	100	96	56	0	0	0	0	0	0	0	0
NC CHARLOTTE	92	72	95	70	82	2	2.3	1.4	1.0	8.7	141	23.6	96	93	49	0	0	0	0	0	0	0	0
NC GREENSBORO	92	71	95	69	81	4	.2	.9	.2	11.2	159	22.2	92	89	51	0	0	0	0	0	0	0	0
NC HATTERAS	90	77	93	73	83	5	.7	.4	.7	10.4	138	29.1	101	85	47	0	0	0	0	0	0	0	0
NC NEW BERN	93	74	94	73	84	4	2.3	.7	2.0	5.0	48	14.6	48	98	59	0	0	0	0	0	0	0	0
NC RALEIGH	92	73	94	69	82	4	.7	.9	.7	10.1	155	26.8	112	92	34	0	0	0	0	0	0	0	0
NC WILMINGTON	90	73	92	71	82	2	4.6	3.0	3.8	19.1	197	39.5	130	98	60	0	0	0	0	0	0	0	0
ND BISMARCK	79	58	83	49	67	-4	.4	.1	.2	5.8	134	13.3	135	95	51	0	0	0	0	0	0	0	0
ND FARGO	80	59	83	56	69	-2	.5	.1	.3	6.7	140	13.4	120	94	54	0	0	0	0	0	0	0	0
ND GRAND FORKS	78	60	82	57	69	-1	5.0	4.4	4.3	11.8	246	16.6	160	93	54	0	0	0	0	0	0	0	0
ND WILLISTON	81	52	86	48	66	-5	.3	.1	.2	3.9	102	9.1	104	94	41	0	0	0	0	0	0	0	0
OH AKRON-CANTON	83	65	90	58	74	2	.2	.7	.2	5.2	86	22.8	110	89	56	0	0	0					

Weather Data for the Week Ending July 22, 1995

STATES  AND  STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS							
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE	MAXIMUM	MINIMUM	80 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																			.01 INCH OR MORE	.50 INCH OR MORE	.01 INCH OR MORE	.50 INCH OR MORE
OH TOLEDO	89	66	96	60	78	5	.1	-.6	.1	4.7	77	17.4	96	88	50	3	0	2	0			
OH YOUNGSTOWN	85	65	89	59	75	4	.3	-.6	.1	4.4	64	17.1	85	95	51	0	0	4	0			
OK OKLAHOMA CITY	92	70	94	67	81	-1	.2	-.4	.2	5.4	87	18.1	95	91	46	0	0	1	0			
OK TULSA	93	72	95	70	82	-2	1.2	-.6	.8	11.3	168	31.3	136	87	48	6	0	2	1			
OR ASTORIA	72	57	89	51	65	4	.1	-.1	.1	2.9	89	35.7	101	94	69	0	0	0	0			
OR BURNS	88	49	92	43	68	1	.2	-.1	.1	1.6	140	9.0	163	85	23	1	0	1	0			
OR MEDFORD	94	62	102	58	78	5	.2	-.1	.2	2.6	345	14.2	151	85	28	0	0	0	0			
OR PENDLETON	95	63	99	56	79	5	.4	-.1	.2	2.5	276	11.3	167	75	28	0	0	0	0			
OR PORTLAND	89	63	99	61	76	8	.0	-.1	.0	3.9	199	21.6	113	81	37	0	0	0	0			
OR SALEM	90	60	101	54	75	8	.0	-.1	.0	1.8	105	25.0	121	85	33	0	0	2	0			
PA ALLENTOWN	86	67	89	61	77	2	2.8	1.9	2.1	6.5	98	21.2	89	95	50	0	0	0	0			
PA ERIE	82	68	86	65	75	3	.3	-.5	.2	2.5	38	15.6	75	89	56	0	0	3	0			
PA HARRISBURG	86	69	90	64	78	2	1.6	.8	.9	8.2	127	19.8	86	85	47	0	0	3	1			
PA PHILADELPHIA	91	73	94	70	82	7	1.2	-.2	1.0	2.8	37	14.6	57	85	52	0	0	2	1			
PA PITTSBURGH	85	67	91	62	76	4	2.2	1.3	2.1	6.4	100	17.4	81	86	50	0	0	1	1			
PA SCRANTON	86	66	91	61	76	4	.6	-.3	.6	3.5	52	12.6	62	90	47	0	0	2	0			
RI PROVIDENCE	84	66	89	63	75	1	.4	-.3	.3	3.6	65	18.7	75	89	52	0	0	3	1			
SC CHARLESTON	94	75	96	72	85	3	.8	-.8	.7	9.7	86	21.1	73	94	56	7	0	2	1			
SC COLUMBIA	97	74	100	72	85	4	2.6	1.4	2.2	14.5	168	30.0	103	91	45	7	0	3	1			
SC FLORENCE	94	73	97	72	84	3	2.0	.7	1.7	8.8	106	25.3	99	98	52	0	0	3	0			
SC GREENVILLE	95	72	98	70	84	5	.5	-.5	.3	5.7	70	25.6	84	94	46	0	0	3	1			
SD ABERDEEN	81	57	85	53	69	-4	-.4	-.9	-.1	.7	3.5	62	14.8	117	95	47	0	0	2	0		
SD HURON	84	58	91	54	71	-4	.5	-.1	.4	3.9	72	19.5	150	93	42	0	0	3	0			
SD RAPID CITY	79	57	85	54	68	-5	1.6	1.1	.6	7.2	156	15.2	137	91	48	0	0	2	0			
SD SIOUX FALLS	86	61	95	57	73	-1	.1	-.5	.1	4.3	80	39.2	141	91	43	0	0	2	1			
TN CHATTANOOGA	94	69	97	65	82	3	1.2	.0	1.1	5.5	79	27.0	86	88	41	0	0	3	0			
TN KNOXVILLE	93	68	96	64	81	4	.1	-1.0	.1	4.1	55	26.0	91	92	45	6	0	2	1			
TN MEMPHIS	93	73	96	69	83	0	.8	-.1	.7	10.5	168	31.4	104	92	48	0	0	0	0			
TN NASHVILLE	93	71	96	64	82	2	.3	-.6	.3	5.0	78	27.9	100	92	45	7	0	2	1			
TX ABILENE	96	72	100	68	84	0	.1	-.4	.0	2.2	50	12.4	97	79	34	6	0	4	1			
TX AMARILLO	87	65	95	64	76	-3	1.2	.6	1.0	5.3	95	12.1	109	93	45	3	0	2	0			
TX AUSTIN	97	75	99	72	86	1	.7	-.4	.7	3.0	56	19.8	108	92	40	7	0	2	1			
TX BEAUMONT	93	74	94	73	84	1	.9	-.3	.6	12.6	133	32.3	107	100	60	7	0	0	0			
TX BROWNSVILLE	94	77	95	75	86	1	.7	-.4	.7	1.5	36	3.0	26	94	54	7	0	2	0			
TX CORPUS CHRISTI	96	75	98	73	86	1	.7	-.4	.7	3.0	59	13.9	94	94	50	7	0	0	0			
TX DEL RIO	101	77	104	73	89	5	.0	-.4	.0	1.0	24	6.9	52	80	40	7	0	2	0			
TX EL PASO	93	68	98	68	80	-2	.2	-.2	.1	2.0	117	3.6	109	78	30	5	0	0	0			
TX FORT WORTH	98	76	99	73	87	3	.7	-.5	.7	4.3	87	27.9	132	86	44	7	0	0	0			
TX GALVESTON	93	82	96	81	88	4	.7	-.9	.7	.2	3	10.1	48	82	57	7	0	3	0			
TX HOUSTON	97	74	99	71	86	3	.4	-.6	.3	5.1	54	24.1	84	94	51	7	0	3	0			
TX LUBBOCK	94	69	99	66	82	2	.5	.0	.3	3.0	68	7.2	75	83	32	6	0	3	0			
TX MIDLAND	95	71	99	67	83	1	.1	-.3	.1	3.7	144	8.2	117	82	32	0	0	3	0			
TX SAN ANGELO	99	72	102	67	86	3	.7	-.2	.7	1.4	45	12.6	119	76	29	7	0	0	0			
TX SAN ANTONIO	97	76	99	73	86	1	.0	-.5	.0	5.3	99	13.8	80	88	35	7	0	0	0			
TX VICTORIA	97	76	97	74	86	3	.7	-.9	.7	3.7	48	16.2	70	93	41	7	0	0	0			
TX WACO	96	74	99	70	85	-1	.2	-.3	.1	2.2	46	22.8	123	93	41	7	0	2	0			
TX WICHITA FALLS	97	73	99	71	85	0	.7	-.4	.7	5.5	105	15.4	84	89	43	7	0	1	0			
UT CEDAR CITY	87	55	94	49	71	-4	.7	-.3	.7	1.6	140	7.8	131	63	19	1	0	0	0			
UT SALT LAKE CITY	90	63	93	57	77	-2	.2	.0	.1	1.8	120	12.8	132	70	20	6	0	0	0			
VT BURLINGTON	83	64	89	57	73	2	1.8	1.0	1.6	3.6	60	12.1	69	89	44	0	0	4	1			
VA NORFOLK	94	76	97	71	85	7	.7	-.5	.7	5.5	74	18.8	75	88	51	7	0	2	1			
VA RICHMOND	93	71	95	65	82	4	1.2	.0	1.1	4.2	59	17.8	74	89	26	7	0	2	1			
VA ROANOKE	90	67	93	62	79	3	.6	-.3	.3	11.7	198	27.5	124	88	49	3	0	2	0			
WA OQUILLAYOTE	77	55	96	49	66	7	.1	-.5	.1	4.0	80	46.1	82	93	55	1	0	1	0			
WA SEATTLE-TACOMA	83	61	93	55	72	6	.0	-.2	.0	2.4	117	18.8	99	78	39	2	0	0	0			
WA SPOKANE	90	58	93	54	74	4	.0	-.1	.0	3.2	183	13.7	147	74	20	4	0	0	0			
WA YAKIMA	94	57	98	54	76	5	.0	.0	.0	.9	145	5.5	128	73	21	6	0	0	0			
WV BECKLEY	83	63	87	57	73	3	.5	-.6	.5	6.5	90	24.1	101	87	53	0	0	1	0			
WV CHARLESTON	88	66	94	59	77	2	1.1	-.1	1.1	6.5	91	26.9	112	95	49	2	0	1	1			
WV HUNTINGTON	90	66	94	60	78	4	.3	-.9	.2	6.9	99	26.3	108	94	46	4	0	2	0			
WV PARKERSBURG	88	65	93	59	77	2	.7	-1.0	.7	4.3	63	..	..	96	47	4	0	0	0			
WI GREEN BAY	81	61	86	55	71	1	.2	-.5	.1	2.4	43	10.5	70	93	50	0	0	3	0			
WI LACROSSE	83	64	86	61	74	0	..	..	..	..	..	..	..	96	49	0	0	2	1			
WI MADISON	85	63	87	57	74	2	1.1	-.2	.8	4.8	73	17.2	99	87	47	0	0	3	0			
WI MILWAUKEE	82	65	88	60	73	2	.7	-.1	.5	2.7	47	14.1	79	91	50	0	0	3	0			
WI WAUSAU	77	60	80	56	69	-2	1.2	-.3	.7	5.7	85	12.0	71	95	52	0	0	4	1			
WY CASPER	83	51	89	47	67	-5	.7	-.3	.7	4.0	166	14.3	174	87	29	0	0	1	0			
WY CHEYENNE	76	52	83	49	64	-5	.5	.1	.1	5.6	157	14.4	158	80	41	0	0	2	0			
WY LARAMIE	81	54	86	50	68	-4	1.1	-.9	1.0	3.7	178	14.7	168	77	27	0	0	3	1			
WY SHERIDAN	80	53	89	46	67	-4	.2	-.1	.1	4.2	144	12.0	128	92	43	0	0	3	0			
PZ SAN JUAN	90	78	93	75	84	1	.8	-.2	.8	7.5	107	28.3	118	85	63	6	0	4	1			

Based on 1961-90 normals.



## National Agricultural Summary

July 17 - 23, 1995

**HIGHLIGHTS:** Hot weather across the southern half of the Nation depleted soil moisture levels and lowered crop condition ratings. In the Corn Belt, hot weather and dry soils were offset by widespread showers and cooler weather that brought relief to some areas. In the Southeast, continued hot weather increased crop moisture needs, lowering soil moisture to critical levels, forcing producers to irrigate. Row crop development increased dramatically for the week as a result of the continued hot weather but remained behind average. Scattered, weekend showers brought much needed moisture to the central Great Plains, but more rain was needed. Increased grasshopper and corn borer counts were reported in the upper Great Plains. Farmers expressed concern over the variability of crop growth and development caused by the heat wave following the late spring planting. Favorable weather in the Pacific Northwest allowed harvest activity to make good progress. Cattle and swine herds were recovering from last week's extreme heat, but broiler producers in the Delta reported excessive losses.

The **winter wheat** crop in the 19 major producing States was 74 percent (%) harvested, 4 percentage points behind the 5-year average. The wheat harvest was virtually complete across the Midwest, where the previous week's hot weather accelerated the wheat crop's development. Midweek rains did not delay the wheat harvest in Kansas, where wheat harvested was 98% complete, up 8 points from last week, 3 points ahead of the average. Harvest activity in the Pacific Northwest remained slightly behind normal, but better-than-expected yields were reported. In the Texas High Plains, scattered showers did not slow harvest activity.

**Spring wheat** condition was rated as good to fair with 80% of the acreage headed, 16 points behind normal. Small grain development advanced rapidly in North Dakota, where the crop was mostly good, with 65% of the acreage headed, 31 points behind normal. Spring wheat development progressed rapidly in Montana and South Dakota, advancing 13 points from the previous week.

**Corn** condition for the 17 major producing States declined slightly from last week due to the hot weather across the Midwest. Depleted soil moisture supplies resulting from last week's heat wave across the Corn Belt raised producers' concern for corn during the vulnerable silking stage. Corn development remained behind schedule, with 30% of the crop silking, compared with 69% last year and 50% for the average. Corn acreage silked was 51 points behind the average in Kansas, and 32 points behind in Missouri and South Dakota. In Illinois, 55% of the crop was rated as good to excellent, down from last week. Average corn height in Michigan for the week was 57 inches, compared with the 58-inch average.

**Cotton** squaring was 94% complete, up 8 points from last week and 5 points ahead of the average for the Nation. Cotton condition was good to fair with 57% of the crop setting bolls, 3 points ahead of the average. Cotton condition in Alabama and Georgia was down from a week ago due to the continued hot weather and dry soil conditions. Seasonable weather boosted cotton development in California, where 95% of the cotton was squaring, up 15 points from last week and 4 points behind the average. California cotton fields were sprayed for aphids, lygus mites, and whitefly, with open bolls reported in the desert. Cotton setting bolls in Arkansas and California increased from last week by 37 and 35 points, respectively. Oklahoma's cotton

squaring at 75% complete was up 41 points from the previous week. Insect pressure was increasing in the Delta and Southeastern States, forcing producers to apply additional insecticides. Hot weather in Texas pushed cotton development, leaving cotton squaring at 90% complete, 13 points ahead of normal. Cotton squaring was behind the average by 13 points in New Mexico. Across the Southeast, cotton fields were in desperate need of rain. Cotton fields in the Texas plains showed signs of heat stress, with irrigation steady and producers spraying for bollworms and boll weevils.

**Sorghum** condition was mostly good to fair with 29% of the sorghum acres headed, 4 points behind the average. Grain sorghum fields in Texas matured rapidly as the heat intensified by the weekend. Texas' sorghum fields were 81% headed, 10 points ahead of the average, while Oklahoma sorghum fields were 10 points behind the average. Crop development lagged behind normal in the Midwestern States due to hot weather. Sorghum turning color was 21 complete, 3 points ahead of the average for the Nation. Crop condition declined in New Mexico and Texas due to a lack of moisture, while harvest activity was beginning in central Texas.

**Rice** condition was mostly good to fair, with 30% of the crop headed. Cool mornings slowed rice development in California, where fields were treated for broadleaf weeds and grasses. Some rice fields in Arkansas were affected by black sheath rot and insect problems. Louisiana rice producers were applying fungicides to control sheath blight problems. Rice condition in Mississippi rated good to excellent, declined from last week, while condition improved in California and Texas.

**Soybean** condition was mostly good to fair, with 40% of the crop blooming, 12 points behind the average. Soybean development lagged behind normal in Illinois, Indiana, Kansas, Missouri, and Nebraska. Soybean blooming was 30 points behind the average in Missouri, while blooming was 30 points ahead of the average in Louisiana. Soybean condition declined from last week after persistent hot weather and increasingly dry soil in the Southeast and Tennessee Valley. Soybeans were beginning to set pods in the Ohio Valley, where problems with weeds and Japanese beetles were reported. Delta soybean farmers were scouting fields for insect and disease problems. The average soybean height in Minnesota was 19 inches, compared with 20 inches for the average.

# Crop Progress and Condition

## Week Ending July 23, 1995

### Winter Wheat Percent Harvested

	Jul 23 1995	Prev Week	Prev Year	5-Yr Avg
AR	100	100	99	100
CA	97	95	98	96
CO	45	25	98	79
GA	100	100	100	100
ID	2	0	7	5
IL	99	94	98	93
IN	99	92	97	87
KS	98	90	100	95
MI	53	15	47	42
MO	99	94	100	90
MT	0	0	2	1
NE	51	31	98	75
NC	89	86	100	100
OH	98	*73	97	76
OK	100	99	100	100
OR	9	1	24	21
SD	16	2	65	43
TX	96	92	100	99
WA	7	1	18	15
ALL	74	66	84	78

\* Revised. These 19 States produced 92% of the 1994 winter wheat crop.

### Soybeans Percent Blooming

	Jul 23 1995	Prev Week	Prev Year	5-Yr Avg
AL	34	17	40	33
AR	29	13	38	25
GA	44	23	45	41
IL	32	17	75	67
IN	48	18	78	67
IA	62	31	90	61
KS	7	3	71	45
KY	28	21	52	41
LA	74	51	55	44
MI	47	20	38	36
MN	55	35	84	56
MS	62	54	58	36
MO	10	4	60	40
NE	15	6	86	53
NC	20	11	27	21
OH	57	*24	69	65
SC	21	14	25	23
SD	40	18	71	48
TN	27	17	31	23
ALL	40	21	69	52

\* Revised. These 19 States produced 94% of the 1994 soybean crop.

### Cotton Percent Squaring

	Jul 23 1995	Prev Week	Prev Year	5-Yr Avg
AL	98	96	92	94
AZ	100	99	100	100
AR	100	100	100	100
CA	95	80	99	99
GA	100	97	98	98
LA	100	100	100	100
MS	100	100	100	97
MO	100	98	100	99
NM	78	75	94	91
NC	79	65	88	87
OK	75	34	86	76
SC	97	88	92	94
TN	99	98	100	96
TX	90	79	86	77
ALL	94	86	93	89

These 14 States produced 99% of the 1994 cotton crop.

### Cotton Percent Setting Bolls

	Jul 23 1995	Prev Week	Prev Year	5-Yr Avg
AL	72	44	57	61
AZ	70	55	92	91
AR	74	37	80	72
CA	40	5	61	59
GA	84	75	80	73
LA	96	88	93	84
MS	82	59	89	72
MO	50	30	69	59
NM	30	20	72	54
NC	53	25	62	59
OK	6	3	29	22
SC	60	37	58	63
TN	70	37	65	47
TX	41	28	47	37
ALL	57	38	63	54

These 14 States produced 99% of the 1994 cotton crop.

### Spring Wheat Percent Headed

	Jul 23 1995	Prev Week	Prev Year	5-Yr Avg
ID	92	75	99	92
MN	98	90	99	99
MT	92	79	98	92
ND	65	45	92	96
SD	98	85	100	100
ALL	80	64	95	96

These 5 States produced 98% of the 1994 spring wheat crop.

### Sorghum Percent Headed

	Jul 23 1995	Prev Week	Prev Year	5-Yr Avg
AR	58	35	73	52
CO	0	0	4	5
IL	2	1	20	22
KS	1	0	27	11
LA	83	63	82	78
MS	70	61	78	67
MO	16	10	39	29
NE	0	0	35	14
NM	0	0	11	7
OK	10	6	25	20
SD	3	1	11	6
TX	81	78	75	71
ALL	29	26	44	33

These 12 States produced 98% of the 1994 sorghum crop.

### Sorghum Percent Coloring

	Jul 23 1995	Prev Week	Prev Year	5-Yr Avg
AR	4	NA	19	9
CO	0	NA	0	0
IL	0	NA	4	3
KS	0	NA	0	0
LA	30	NA	18	23
MS	22	NA	30	23
MO	0	NA	2	1
NE	0	NA	0	0
NM	0	NA	0	0
OK	2	NA	6	4
SD	0	NA	0	0
TX	68	NA	61	57
ALL	21	NA	19	18

These 12 States produced 98% of the 1994 sorghum crop.

### Rice Percent Headed

	Jul 23 1995	Prev Week	Prev Year	5-Yr Avg
AR	13	3	30	16
CA	1	0	0	0
LA	61	52	63	64
MS	42	20	37	31
TX	73	62	81	66
ALL	30	20	38	30

These 5 States produced 96% of the 1994 rice crop.

# Crop Progress and Condition

Week Ending July 23, 1995

Corn Percent Silking				
	July 23 1995	Prev Week	Prev Year	5-Yr Avg
CO	1	0	50	26
GA	100	99	100	99
IL	46	13	90	73
IN	42	13	73	59
IA	14	0	78	42
KS	25	17	87	76
KY	71	55	82	71
MI	24	1	31	24
MN	42	11	39	20
MO	29	23	75	61
NE	3	0	86	56
NC	94	92	95	92
OH	35	8	47	46
PA	37	14	31	22
SD	0	0	45	32
TX	87	80	82	83
WI	20	3	42	24
ALL	30	12	69	50

These 17 States produced 91% of the 1994 corn crop.

Soybeans Crop Condition by Percent					
State	VP	P	F	G	EX
AL	3	15	63	19	0
AR	0	4	26	56	14
GA	0	12	55	33	0
IL	2	16	45	34	3
IN	2	9	40	45	4
IA	1	8	30	51	10
KS	0	11	22	63	4
KY	1	3	48	42	6
LA	1	10	28	57	4
MI	1	11	22	44	22
MN	1	6	31	46	16
MS	2	6	21	55	16
MO	2	18	40	37	3
NE	5	17	44	32	2
NC	1	5	35	53	6
OH	1	9	30	44	16
SC	0	0	22	78	0
SD	0	10	37	41	12
TN	0	1	22	57	20
ALL	1	10	35	45	9
Prev Wk	1	9	35	46	9
Prev Yr	0	1	16	64	19

Cotton Crop Condition by Percent					
State	VP	P	F	G	EX
AL	3	25	49	23	0
AZ	1	15	33	31	20
AR	0	4	25	49	22
CA	0	0	5	85	10
GA	0	23	49	28	0
LA	0	6	19	63	12
MS	1	5	17	65	12
MO	2	8	40	43	7
NM	0	0	46	45	9
NC	3	7	38	44	8
OK	0	2	22	74	2
SC	0	0	38	62	0
TN	0	1	14	61	24
TX	2	15	31	45	7
ALL	1	10	28	52	9
Prev Wk	2	7	33	49	9
Prev Yr	0	2	26	60	12

Corn Crop Condition by Percent					
State	VP	P	F	G	EX
CO	1	6	23	53	17
GA	3	14	42	40	1
IL	2	12	42	40	4
IN	2	8	35	49	6
IA	1	6	28	51	14
KS	0	6	24	61	9
KY	1	6	40	43	10
MI	1	6	20	52	21
MN	1	6	21	47	25
MO	2	17	47	28	6
NE	2	10	39	46	3
NC	1	3	9	61	26
OH	2	7	27	46	18
PA	2	3	12	54	29
SD	0	3	32	49	16
TX	2	8	15	53	22
WI	1	4	24	52	19
ALL	1	8	31	48	12
Prev Wk	1	7	30	50	12
Prev Yr	0	2	12	55	31

Sorghum Crop Condition by Percent					
State	VP	P	F	G	EX
AR	0	3	28	60	9
CO	0	5	30	48	17
IL	2	5	51	42	0
KS	0	4	23	69	4
LA	0	9	27	64	0
MS	0	3	20	70	7
MO	2	11	46	38	3
NE	10	11	43	32	4
NM	25	20	42	12	1
OK	0	3	12	85	0
SD	0	3	32	49	16
TX	1	7	42	36	14
ALL	2	7	34	50	7
Prev Wk	1	6	31	53	9
Prev Yr	0	3	25	64	8

Spring Wheat Crop Condition by Percent					
State	VP	P	F	G	EX
ID	0	0	5	54	41
MN	5	11	53	30	1
MT	1	5	17	48	29
ND	1	7	25	61	6
SD	0	2	36	57	5
ALL	1	6	28	54	11
Prev Wk	1	7	29	53	10
Prev Yr	1	8	25	57	9

Rice Crop Condition by Percent					
State	VP	P	F	G	EX
AR	0	2	18	61	19
CA	0	0	40	60	0
LA	0	3	22	64	11
MS	0	6	25	55	14
TX	0	0	0	50	50
ALL	0	2	21	59	18
Prev Wk	0	1	20	62	17
Prev Yr	0	0	19	74	7

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

## State Summaries of Weather and Agriculture

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

**ALABAMA:** Rainfall 0.06 to 2.47 in. north; none to 1.57 in. central; 0.55 to 3.32 in. south. Temperatures 2 to 8° above normal statewide. Lows 61 to 68° north, 61 to 71° central; 64 to 73° south. Highs 94 to 100° north, 94 to 104° central; 95 to 99° south.

Days suitable for fieldwork 6.5. Topsoil 44% very short, 45% short, 11% adequate. Corn dented 69%, 50% 1994, 54% avg.; mature 35%, 19% 1994, 25% avg.; 12% very poor, 16% poor, 49% fair, 22% good, 1% excellent. Sorghum 6% very poor, 36% poor, 49% fair, 9% good. Peanuts pegged 81%, 57% 1994, 79% avg.; 3% very poor, 6% poor, 46% fair, 45% good. Livestock 9% poor, 64% fair, 24% good, 3% excellent. Activities: Cultivating, spraying crops. General care of livestock, poultry, catfish.

**ALASKA:** Most crop growing areas received some measurable precipitation by weekend.

Days available for haying 3. Soil moisture 35% short, 65% adequate. Hay harvest 55% complete compared to 70% 1994. Height of 2nd crop timothy, brome 2 to 10 in. Condition of barley 30% fair, 70% good. Barley 65% in dough or earlier, with 35% turning color. Oats were 100% in dough or earlier. Commercial potatoes were 30% in bloom compared to 20% 1994. Commercial vegetable harvest continues.

**ARIZONA:** Temperatures 1° to 5° below normal. Extremes 38°; 98° higher elevations; 61°; 112° deserts. Mostly upper elevation precipitation reported; 0.01 to 2.45 inches.

Alfalfa growth being slowed by heat; small grain harvest concludes. Small grains harvested, 100% 1994, 100% avg. Alfalfa 19% fair, 47% good, 34% excellent. Harvest 41% light, 1% moderate, 58% active. Cantaloupe, honeydew, watermelon continued to be harvested central areas. Also being harvested central areas were carrots, cabbage, green onions. Western growers shipped cantaloupe honeydews. Eastern growers picking light but steady volume of tomatoes. Citrus harvest nearing completion western, central Arizona. Grape harvest steady in central vineyards.

**ARKANSAS:** Temperatures slightly below normal, rainfall above normal north, while temperatures averaged above normal with little or no rainfall elsewhere. Extremes 61°; 100°. Precipitation 0.12 to 3.18 in.

Days suitable for fieldwork 6. Soil moisture 56% short, 40% adequate, 4% surplus. Sheath blight, blast, black sheath rot reported in rice in Prairie county. Damage to rice in Lafayette county due to insects. Tomato harvest 50% complete in Cleburne county. Peach harvest ongoing in several counties. Cantaloupe harvest in Crawford county, watermelon harvest in Hempstead county, grape harvest in White county. Hay harvest continued. Insect, parasite treatment of cattle statewide. Anaplasmosis reported in some herds in Little River county.

**CALIFORNIA:** Persistent trough of low pressure caused below normal temperatures. Afternoon thunderstorms brought precipitation, mountain ranges.

Field activities progressed normally. Grain harvests, wheat, barley, oats, virtually complete, except higher elevations. Straw baled from small grain stubble. Rice treated for broadleaf weeds, grasses, weevils. Rice growth slowed, cool morning temperatures. Sugarbeet harvest was ongoing. Corn treated for armyworms, cutworms, mites. Cotton bloomed, set bolls, San Joaquin Valley; showed open bolls, some desert area fields. Fields sprayed for aphids, lygus, mites, whitefly. Safflower, seed alfalfa treated for insects. Safflower bloomed. Alfalfa, oats, sudangrass, cut for hay. Some growers sprayed alfalfa fields for armyworms. Grape growers irrigated vineyards, treated for mildew, mites, leafhoppers. Harvested Kern County table grapes, Perlette, Flame Seedless, Superior Seedless. Stone fruit harvested central, southern regions. Harvest Gala apples began, San Joaquin Valley. Late apple varieties sprayed for codling moth, Sonoma County. Walnut orchards

sprayed for codling moth, husk fly. Plum harvesting was active all areas. Bartlett pear picking continued, Sacramento area. Almond orchards treated for mites, navel orange worm, hull splitting. Pecans irrigated, Fresno County. Valencia orange, grapefruit, avocado harvests continued. New crop Navel oranges treated for red scale. Broccoli, cauliflower harvested, Monterey, San Luis Obispo counties. Harvested carrots, Kern County. Celery harvested Monterey, Ventura, San Luis Obispo counties. Garlic harvested Kern, San Benito counties. Lettuce fields, Monterey, San Luis Obispo counties harvested. Melons picked Sacramento, San Joaquin, desert valleys. Red, white, yellow onions harvested, San Joaquin Valley. Bell peppers, chili peppers harvested, desert areas, San Joaquin Valley. Harvest of spring potatoes, Kern County on decline. Fall potatoes, Tulelake-Butte Valley area progressed well. Sweet corn harvested, Sacramento, San Joaquin valleys, desert areas. Sweet potatoes, Merced County, treated for worms. Harvest, fresh market tomatoes continued, Sacramento, San Joaquin valleys. Harvest, processing tomatoes picked up speed, San Joaquin Valley. Ground prepared, fall vegetables, Imperial County. Other crops harvested: oriental vegetables, cherry tomatoes, eggplant, gourds, green beans, green onions, okra, radishes, squash, spinach, peas, tomatillos, turnips, zucchini. Fire danger high, rangeland continued drying. Range feed conditions adequate, for time of year. Movement livestock, higher elevations continued; nearly completed some areas. Mountain pastures, very good. Supplemental feeding continued. Cattle, sheep, good.

**COLORADO:** A storm moved in on 17th bringing heavy rain with large hail to some areas in east. This pattern continued throughout week in east with numerous locations reporting over 1.00 in. of rain. Temperatures for week started off below normal but were back to normal by weekend.

Days suitable for fieldwork 4.8. Topsoil moisture 2% very short 16% short, 72% adequate, 10% surplus. Subsoil moisture 1% very short, 19% short 74% adequate, 6% surplus. Winter wheat 84% ripe, 100% 1994, 96% avg.; 5% very poor, 8% poor, 20% fair, 37% good, 30% excellent. Spring wheat 83% headed, 96% 1994, 92% avg.; 18% turning color, 29% 1994, 31% avg.; 0% harvested, 14% 1994, 7% avg.; 9% poor, 10% fair, 59% good, 22% excellent. Spring barley 35% turning color, 53% 1994, 60% avg.; 3% harvested, 15% 1994, 17% avg.; 4% poor, 19% fair, 68% good, 9% excellent. Oats 50% turning color, 93% 1994, 71% avg.; 10% harvested, 55% 1994, 30% avg.; 7% poor, 16% fair, 64% good, 13% excellent. Dry onions 2% very poor, 4% poor, 17% fair, 62% good, 15% excellent. Sugarbeets 2% poor, 21% fair, 62% good, 15% excellent. Summer potatoes 2% very poor, 6% poor, 18% fair, 58% good, 16% excellent. Fall potatoes 10% poor, 10% fair, 70% good, 10% excellent. Dry beans 11% flowered, 51% 1994, 30% avg.; 1% very poor, 3% poor, 17% fair, 57% good, 22% excellent. Alfalfa 20% 2nd cutting, 70% 1994, 43% avg.; 5% poor, 17% fair, 62% good, 16% excellent. Livestock good to excellent.

**DELAWARE:** Precipitation 0.34 in., normal 0.93 in. Temperature 81.4°, normal 76.4°. Extremes 65°; 101°. High temperatures upper 90s to low 100s. Lows in the upper 60s.

Days suitable for fieldwork 6.8. Topsoil 21% very short, 54% short, 21% adequate, 4% surplus. Subsoil 29% very short, 43% short, 24% adequate, 4% surplus. Winter wheat 100% harvested, 95% 1994, 98% avg. Corn 8% very poor, 13% poor, 42% fair, 37% good; 72% silked; 65% 1994; 73% avg.; 8% dough, 9% 1994, 8% avg. Soybeans 13% poor, 43% fair, 44% good; 32% bloomed, 32% 1994, 23% avg. Sorghum 94% fair, 6% good; 6% headed, 8% 1994, 9% avg. Other hay 89% 2nd cutting, 52% 1994, 58% avg.; 24% 3rd cutting, 7% 1994, 5% avg. Alfalfa hay 24% 3rd cutting, 21% 1994, 14% avg. Cantaloupes 12% harvested, 19% 1994, 28% avg. Potatoes 35% harvested, 17% 1994, 20% avg. Sweet corn 21% harvested, 38% 1994, 30% avg. Tomatoes 7% harvested, 21% 1994, 15% avg. Watermelons 6% harvested, 9% 1994, 12% avg. Apples 11% fair, 89% good. Peaches 12% fair, 88% good; 20% harvested, 30% 1994, 33% avg. Hay supply short to adequate. Vegetable harvest in full swing.

**FLORIDA:** Temperatures 1 to 6° above normal most areas, some spots in Peninsula 1 to 4° below normal. Lows upper 60s most areas except mid 70s southeast coast. Highs 100° several locations Panhandle, lower 90s central, south. Rainfall mostly 1.00 to 3.00 in., with several central, south locations reporting over 5.00 in.

Soil moisture short to adequate Panhandle, scattered areas surplus, northern Peninsula adequate, central, southern Peninsula adequate to surplus moisture. Hay making active. Heat, labor problems delaying tobacco harvest some. Tobacco marketing started July 18. Corn for grain harvest started. Cotton, peanuts, soybeans, sugarcane good growth. Scattered showers over most of State. Commercial harvesting sweet corn, watermelons, tomatoes complete. Many vegetable growers preparing fields, laying plastic for fall crop. Tomato transplanting started northern areas. Citrus groves very good condition. Moisture adequate. New growth abundant, very little irrigation. New crop fruit sizing well. Late bloom showing up in lightly fruited groves shocked by recent heavy rains. Caretakers cutting cover crops, reworking ditches, spraying, fertilizing. Cattle fair 25%, good 60%, excellent 15%.

**GEORGIA:** Hot week, temperatures 3 to 7° above normal. Maximum temperatures frequently in mid to upper 90s with few stations topping 100°. Coolest temperatures mostly mid 60s northeast mountains to low 70s elsewhere. Scattered thunderstorms nearly each day of week. Rainfall varied from less than 0.25 in. to locally 1.00 to 3.00 in.

Days suitable for fieldwork 6.2. Soil moisture 46% very short, 41% short, 13% adequate. Crop conditions fall again. Soil moisture levels lowest since late May. Rain critically needed most crop growing areas. Pastures declining causing increase of supplemental feeding of cattle drier areas. Insect pressure on increase in cotton. Tobacco harvest active, corn harvest off to fast start. Irrigation very active where facilities available. Corn 99% dough, 98% 1994, 94% avg.; 89% dent, 86% 1994, 80% avg.; 45% mature, 38% 1994, 32% avg.; 4% harvested for grain, 1% 1994, 1% avg. Hay 5% very poor, 29% poor, 40% fair, 26% good. Peanuts 14% poor, 55% fair, 30% good, 1% excellent; 100% pegging, 100% 1994, 94% avg. Sorghum 2% very poor, 12% poor, 60% fair, 26% good; 100% planted, 98% 1994, 99% avg. Soybeans 20% setting pods, 22% 1994, 16% avg. Tobacco 13% poor, 54% fair, 33% good; 54% harvested, 47% 1994, 46% avg. Watermelons 52% poor, 35% fair, 13% good; 95% harvested, 91% 1994, 90% avg. Other vegetables 14% poor, 57% fair, 29% good. Apples 16% fair, 84% good; 2% harvested, 4% 1994, 7% avg. Peaches 21% poor, 33% fair, 46% good; 94% harvested, 96% 1994, 92% avg. Pecans 5% poor, 86% fair, 9% good. Cattle 8% poor, 49% fair, 43% good. Hogs 3% poor, 48% fair, 49% good.

**HAWAII:** Remnant moisture from former Hurricane Barbara brought some rainfall to State at midweek. Shower activity most prevalent windward areas of all islands. Leeward areas remained mostly hot, dry. Record-tying high temperatures most of the week. Temperatures low 70s to low 90s. Rainfall varied none to 6.50 in.

Rain replenished soil moisture supplies windward crop areas, leeward areas remained relatively dry. Banana production continued seasonal increase. Hot temperatures slowing crop progress some vegetables.

**IDAHO:** Temperatures 3° below normal to 4° above normal. Precipitation none to 0.03 in. north, none to 0.01 in. southwest, none to 0.03 in. southcentral, none to 0.38 in. southeast. Extremes 40°; 100°.

Days suitable for fieldwork 7. Topsoil 13% short, 87% adequate. Irrigation water supplies 32% good, 68% excellent. Alfalfa hay first cutting 98%, 99% 1994, 99% avg.; 2nd cutting 22%, 41% 1994, 32% avg. Cherries harvested 99%, 100% 1994, 96% avg. Dry peas harvested 9%, 5% 1994, 5% avg. Mint first cutting 8%, 25% 1994, 20% avg. Oats harvested 2%, 6% 1994, 7% avg. Peaches harvested 11%, 25% 1994, 18% avg. Potatoes 12 in. high 87%, 98% 1994, 96% avg. Potatoes closing middles 68%, 78% 1994, 67% avg.; 3% poor, 14% fair, 57% good, 26% excellent. Spring barley headed 85%, 99% 1994, 92% avg.; turning color 31%, 65% 1994, 41% avg.; 3% fair, 51% good, 46% excellent. Spring wheat turning color 30%, 63% 1994, 39% avg. Winter wheat turning color 99%, 99% 1994, 99% avg.; turning color 81%, 92% 1994, 75% avg.; harvested 2%, 7% 1994, 5% avg.; 10% fair, 63% good, 27% excellent. Activities: Irrigating, fertilizing, applying pesticides,

checking potato fields for late blight, applying preventative fungicides, preparing machinery for grain harvest, cutting mint, cutting alfalfa.

**ILLINOIS:** Summertime weather with scattered thunderstorms at times prevailed across State. A weak cold front pushed through early on with high pressure dominating midweek. Warm, more humid weather with scattered showers, storms returned for weekend as high moved east, another front approached from west. Temperatures -4 to +3° from normal. Highs were mostly in middle to upper 80s. Much of State saw rain sometime during period, mainly after midweek. Rainfall 0.20 in. to over 1.00 in.

Days suitable for fieldwork 6.2. Topsoil 10% very short, 52% short, 37% adequate, 1% surplus. Corn, soybean crop conditions declined during the week due to dry, hot conditions, were relieved by precipitation, cooler temperatures at the end of the week. Corn 2% dough, 19% 1994, 18% avg.; less than 1% dented, 2% 1994, 3% avg. Soybeans 4% setting pods, 25% 1994, 26% avg. Oats 91% turning yellow, 99% 1994, 91% avg.; 54% ripe, 90% 1994, 70% avg.; 24% harvested, 51% 1994, 38% avg.; 1% very poor, 6% poor, 47% fair, 38% good, 8% excellent. Alfalfa 71% second cutting, 89% 1994, 76% avg.; 4% third cutting, 10% 1994, 10% avg.; 1% very poor, 8% poor, 30% fair, 52% good, 9% excellent.

**INDIANA:** Rather typical summer weather with scattered thunderstorms at times prevailed across State. A cold front pushed through early on with high pressure dominating midweek. Warmer, more humid weather returned heading into weekend as high moved east, another front approached from west. Temperatures -3 to +3° from normal with many areas averaging within a degree or two of normal. Highs were mostly in middle to upper 80s. Evansville 93°. Lows mainly in middle 60s. Evansville and Terre Haute reported highest daily temperature of 95°. Crawfordsville reported coolest reading with a low of 54°. Much of State saw rain sometime during period, amounts tended to vary over short distances. Heaviest rainfall was generally in central, south. Rainfall 0.20 in. to over 1.00 in. A few areas received over 2.00 in. of rain, a few had less than 0.10 in.

Days suitable for fieldwork 5.6. Topsoil 11% very short, 42% short, 46% adequate, 1% surplus. Subsoil 5% very short, 36% short, 58% adequate, 1% surplus. Wheat harvest virtually complete. Scattered showers helped relieve dry soil conditions in some areas, crops still need rain. Farmers are concerned with variability of growth, development in corn, soybeans. Alfalfa second cutting 62% complete, 81% 1994, 68% avg.

**IOWA:** Temperatures near normal southeast to 2° below normal northwest. Extremes 54°; 93°. Scattered nocturnal thunderstorms throughout week, especially over weekend. Rainfall totals 0.03 in. west central to 2.24 in. south central; state average 0.85 in. (normal 0.91 in.).

Days suitable for fieldwork 5.4. Topsoil short 24%, adequate 74%, surplus 2%. Subsoil moisture short 10%, adequate 84%, surplus 6%. Corn cultivated 1st time 97%, 100% 1994, 91% avg.; tasseling 34%, 93% 1994, 59% avg. Soybeans setting pods 12%, 51% 1994, 24% avg. All hay 1% very poor, 5% poor, 32% fair, 56% good, 6% excellent; alfalfa hay second cutting 54%, 72% 1994, 52% avg. Clover hay first cutting 96%, 100% 1994, 93% avg.; 2nd cutting 12%, 30% 1994, 27% avg. Oats 1% very poor, 11% poor, 36% fair, 47% good, 5% excellent; turning color 97%, 100% 1994, 93% avg.; harvested 19%, 60% 1994, 43% avg. Winter wheat harvested 87%, 87% 1994, 67% avg. Livestock recovering from extreme heat of last reporting week. Flies remain a problem for livestock.

**KANSAS:** Temperatures near normal except northwest 6° above normal, southwest 4° above normal. Precipitation was variable. Rainfall over 2.00 in. west central, northeast to less than 0.50 in. north central.

Days suitable for fieldwork 5.0. Soil moisture remains short some areas. Topsoil 1% very short, 21% short, 71% adequate, 7% surplus. Subsurface 1% very short, 11% short, 86% adequate, 2% surplus. Wheat harvest nearly finished. Because of late planting, cool, wet weather during May, June, fall crops behind schedule. Alfalfa cut second time 90%, 99% 1994, 88% avg. Cut third time 10%, 31% 1994, 21% avg. Farmers busy past week putting up hay, finishing harvesting wheat, working wheat ground.

**KENTUCKY:** Weather warmer, mostly dry until showers over weekend. Temperatures 2 to 4° above normal, many high temperatures reached middle to upper 90s. Low temperatures mostly upper 60s to lower 70s, coolest southeast. Rainfall below normal most locations. Many areas 0.25 to 0.75

in. below normal, with few 1.00 in. or more below normal. Louisville was one exception with 1.78 in. rainfall, 0.75 in. above normal.

Days suitable fieldwork 5.9. Hot, dry conditions stressed crops with weekend showers bringing some relief. Topsoil 26% very short, 52% short, 21% adequate, 1% surplus. Subsoil mostly short to adequate. Crop conditions generally declined, farmers concerned over corn in critical pollination stage. Many soybeans blooming, beginning to set pods. Tobacco 1% very poor, 15% poor, 41% fair, 38% good, 5% excellent. Burley 28% blooming or beyond with 11% topped. Dry, hot conditions slowed blue mold development, but tobacco being attacked by a number of diseases, insects. Dark tobacco 38% topped. Hay crops, pastures are declining in condition, need a general rain.

**LOUISIANA:** Temperatures near to 2° above normal. Extremes 69°; 98° Rainfall 0.32 in. northwest to 1.53 in. northeast.

Days suitable for fieldwork 5.3. Soil moisture 27% short, 61% adequate, 12% surplus. Corn 3% very poor, 13% poor, 35% fair, 46% good, 3% excellent; 94% dough stage, 95% 1994, 93% avg.; 45% mature, 48% 1994, 45% avg.; 3% harvested, 2% 1994, 2% avg. Corn harvest under way. Cotton boll weevil counts increased in scattered areas, forcing cotton producers to apply more insecticides. Hay 38% second cutting, 14% 1994, 10% avg. Dry conditions aided hay baling. Peaches 46% fair, 44% good, 10% excellent; 75% harvested, 89% 1994, 84% avg. Rice 13% ripe, 10% 1994, 14% avg.; 6% harvested, 5% 1994, 6% avg. Rice producers applied fungicides to combat sheath blight. Sorghum 4% ripe, 1% 1994, 3% avg. Soybeans 41% setting pods, 25% 1994, 18% avg. Soybean growers were busy scouting fields for insects, disease. Sugarcane 3% poor, 23% fair, 60% good, 14% excellent. Sugarcane fallow work continued with many areas still needing rain. Sweet potatoes 4% poor, 15% fair, 60% good, 21% excellent; 0% harvested, 0% 1994, 3% avg. Vegetables 2% very poor, 14% poor, 36% fair, 44% good, 4% excellent. Livestock 3% poor, 21% fair, 63% good, 13% excellent. Broiler producers lost excessive number of birds to heat. Livestock growers were busy applying fertilizer to pastures.

**MARYLAND:** Precipitation 0.65 in., normal 0.88 in. Temperature 81.8°, normal 76.0°. Extremes 48°; 102°. Low temperatures upper 40s to 70°. Highs were mainly in the 90s to low 100s.

Days suitable for fieldwork 6.3. Topsoil 14% very short, 27% short, 59% adequate. Subsoil 13% very short, 24% short, 63% adequate. Winter wheat 17% fair, 50% good, 33% excellent; 92% harvested, 98% 1994, 97% avg. Rye 1% poor, 10% fair, 89% good; 90% harvested, 90% 1994, 91% avg. Corn 3% very poor, 9% poor, 20% fair, 47% good; 21% excellent; 62% silked, 59% 1994, 57% avg.; 8% dough, 3% 1994, 12% avg. Soybeans 6% very poor, 11% poor, 25% fair, 53% good, 5% excellent; 24% bloomed, 26% 1994, 25% avg.; 4% setting pods, 2% 1994, 5% avg. Sorghum 3% very poor, 14% poor, 33% fair, 46% good, 4% excellent; 9% headed, 10% 1994, 19% avg. Tobacco 20% fair, 70% good, 10% excellent; 54% bloomed, 19% 1994, 26% avg. Other hay 58% 2nd cutting, 62% 1994, 51% avg. Alfalfa hay 88% 2nd cutting, 95% 1994, 90% avg.; 15% 3rd cutting, 29% 1994, 18% avg. Cantaloupes 35% harvested, 37% 1994, 32% avg. Potatoes 41% harvested, 58% 1994, 32% avg. Sweet corn 26% harvested, 39% 1994, 34% avg. Tomatoes 30% harvested, 22% 1994, 23% avg. Watermelons 22% harvested, 26% 1994, 21% avg. Apples 1% fair, 60% good, 39% excellent. Peaches 8% fair, 80% good, 12% excellent; 10% harvested, 23% 1994, 21% avg. Activities: Harvesting of vegetables.

**MICHIGAN:** Extremes 46°; 92°. Precipitation none to 1.85 in. across the State. Temperatures near normal with moderate precipitation. Rain was welcomed, more will be needed.

Days suitable for fieldwork 5.5. Crops improved with warm temperatures, rain. Rains slowed wheat, hay harvest. Topsoil 7% very short, 34% short, 57% adequate, 2% surplus. Subsoil 7% very short, 32% short, 60% adequate, 1% surplus. Corn height 57 in., 60 in. 1994, 58 in. avg.; silking, 24%, 35% 1994, 27% avg.; in milk, 2%, 0% 1994, 2% avg. Drybeans blooming 25%, 25% 1994, 30% avg.; setting pods 5%, 3% 1994, 2% avg.; 1% very poor, 5% poor, 18% fair, 57% good, 19% excellent. All hay second cutting 45%, 35% 1994, 39% avg.; 2% very poor, 6% poor, 26% fair, 52% good, 14% excellent. Oats headed 95%, 95% 1994, 95% avg.; turning yellow 58%, 64% 1994, 58% avg.; 3%

very poor, 16% poor, 41% fair, 38% good, 2% excellent. Wheat turning yellow 96%, 100% 1994, 97% avg.

**MINNESOTA:** Temperatures 2 to 3° below normal for the State. Extremes 49°; 91°. Precipitation was spotty southwest receiving 1.00 to 2.00 in. above normal. Greatest weekly total was 3.70 in.

Days suitable for fieldwork 3.9. Topsoil 1% very short, 7% short, 64% adequate, 28% surplus. Spring wheat turning ripe 32%, 66% 1994, 50% avg. Oats turning ripe 56%, 90% 1994, 67% avg. Barley turning ripe 32%, 76% 1994, 58% avg. Corn height 65 inches, 65 inches in 1994, 58 inches avg.; tasseling 42%, 82% 1994, 43% avg. Soybean height 19 inches, 25 inches 1994, 20 inches avg.; 55% blooming, 83% 1994, 56% avg. Soybeans 9% setting pods, 25% 1994, 12% avg. Oats 5% very poor, 12% poor, 49% fair, 32% good, 2% excellent. Barley 3% very poor, 14% poor, 55% fair, 26% good, 2% excellent. Sunflowers 1% very poor, 5% poor, 28% fair, 55% good, 11% excellent.

**MISSISSIPPI:** Temperatures 2° above normal. Extremes 61°; 100°. Soil temperatures 88°. Precipitation 0.85 in., 0.11 in. below normal. Rainfall ranged 0.22 in. southwest district to 2.15 in. central district.

Days suitable for fieldwork 5.5. Soil moisture 12% very short, 36% short, 46% adequate, 6% surplus. Corn 99% silked, 100% 1994, 93% avg.; 79% dough, 86% 1994, 72% avg.; 42% dent, 37% 1994, 35% avg.; 3% mature, 6% 1994, 11% avg.; 8% silage harvested, 12% 1994, 19% avg.; 1% very poor, 10% poor, 25% fair, 56% good, 8% excellent. Soybeans 100% planted, 100% 1994, 100% avg.; 100% emerged, 100% 1994, 96% avg.; 62% blooming, 58% 1994, 36% avg.; 34% setting pods, 20% 1994, 12% avg.; 2% very poor, 6% poor, 21% fair, 55% good, 16% excellent. Hay 70% harvested warm, NA 1994, NA avg.; 2% very poor, 13% poor, 37% fair, 39% good, 9% excellent. Peaches 60% harvested, 90% 1994, 85% avg.; 3% very poor, 3% poor, 20% fair, 55% good, 19% excellent. Peanuts 21% fair, 49% good, 30% excellent. Sweet potatoes 11% fair, 30% good, 59% excellent. Watermelons 74% harvested, 63% 1994, 52% avg.; 5% poor, 38% fair, 30% good, 27% excellent. Cattle 1% very poor, 7% poor, 27% fair, 50% good, 15% excellent. Main activities: Irrigating crops; controlling insects in cotton; harvesting hay, corn silage. Heat, dry weather are having a detrimental effect on livestock, crops. Poultry, swine producers have experience some losses due to the heat. Farmers are busy irrigating corn, cotton, soybeans to help improve conditions.

**MISSOURI:** Temperatures near normal across State, 2° below normal at Kansas City, to 2° above normal at Kirksville. Precipitation 1.36 in., ranging from 0.84 in. southwest, to 2.10 in. southeast.

Days suitable for fieldwork 5.5. Topsoil 2% very short, 29% short, 64% adequate, 5% surplus. Corn silking progress ranges from around 10% northern third to 100% southeast. Soybean development furthest behind northern districts, less than 10% blooming, planting had been delayed 3 to 4 weeks by bad weather. Sorghum just beginning to head most of State, except for southcentral, southeast districts, where 24%, 34% have headed, respectively. Oats harvested 74%, 95% 1994, 71% avg. Alfalfa second cutting 66%, 92% 1994, 76% avg. Other hay 82%, 92% 1994, 85% avg.

**MONTANA:** Temperatures were near to above normal west of the Continental Divide, below normal east of the Divide. Thunderstorms were the cause of large precipitation amounts over the last few days of week. Some hail damage reported, mostly in the northeast district.

Days suitable for fieldwork 5.4. Topsoil 2% very short, 20% short, 71% adequate, 7% surplus. Subsoil moisture 3% very short, 22% short, 68% adequate, 7% surplus. Crop condition remains very good. Reports of hail damage across State, mostly in northeast district. Winter wheat 74% turning, 95% 1994, 82% avg. Spring wheat 16% turning, 42% 1994, 30% avg. Barley 3% poor, 16% fair, 59% good, 22% excellent; 90% headed, 97% 1994, 92% avg.; 20% turning, 48% 1994, 32% avg. Oats 1% very poor, 4% poor, 23% fair, 53% good, 19% excellent; 87% headed, 95% 1994, 92% avg.; 21% turning, 37% 1994, 31% avg. First cutting alfalfa hay 80%, 95% 1994, 83% avg.; 2nd cutting 2%, 8% 1994, 5% avg. First cutting other hay 60%, 82% 1994, 66% avg.

**NEBRASKA:** Temperatures near normals east, 3 to 5° below normals west. Scattered precipitation amounts averaging less than 0.20 in. north central district to about 1.00 in. southwest, southeast districts.

Days suitable for fieldwork 5.9. Topsoil 20% very short, 42% short, 37% adequate, 1% surplus. Subsoil 2% very short, 28% short, 70% adequate. Wheat 70% ripe, 99% 1994, 96% avg.; crop development slowed in Panhandle due to cool temperatures, high humidity; scattered hail has taken toll on crop, particularly in southern Panhandle. Oats 40% harvested, 73% 1994, 53% avg. Dry bean 11% blooming, 72% 1994. Corn borer, grasshopper counts noted in eastern part of State. Pastures were beginning to show signs of deterioration in many areas across State. However, the Panhandle pastures have benefited from favorable weather, were mostly good. A good rain is needed to help regrowth. Most areas continued to provide adequate grazing for cattle.

**NEVADA:** Scattered showers and strong thunderstorms occurred through week. Strong thunderstorms along Utah border near Wendover produced 1/2 inch hail, 46 mph winds on 22nd. Temperatures below normal all divisions except northwest. Temperatures 3° below normal extreme south, normal northwest. Extremes 33° Mountain City; 112° Laughlin. Precipitation 0.14 in. northwest, 0.02 northeast, 0.04 south central, 0.02 extreme south. Most rainfall at Boca, 1.12 in. Flooding along Walker River in Mason Valley, Yerington began receding.

Cooler than normal temperatures benefitted crops south, further slowed crop development north. Condition of crops generally good south, good to excellent north. Field preparation for fall planting underway extreme south. Heading of small grains approached completion in central and northern areas. Rains slowed haying efforts statewide. Fourth cutting of alfalfa nearing completion south; first cutting complete north, second cutting underway west-central. Harvest of native and grass hays in full swing. Potato, onion, garlic crops in good condition. Flood irrigation replacing sprinkler watering in onions. Garlic maturing. Ranges, pastures drying seasonally, conditions still mostly good to excellent. Main activities: Haying; irrigating; weed, insect control, working livestock.

**NEW ENGLAND:** Precipitation 0.66 to 2.78 in. north, 0.27 to 1.30 in. south. Temperatures 64 to 74° north, 68 to 77° south. Maximum temperatures 82 to 89° north, 82 to 92° south. Minimum temperatures 48 to 63° north, 53 to 67° south.

Days suitable for fieldwork 5.9. Topsoil 10% very short, 48% short, 42% adequate. Subsoil 21% very short, 52% short, 27% adequate. Maine potatoes good/fair. Rhode Island potatoes good. CT River Valley potatoes good/fair, <5% harvested, <5% 1994, <5% avg. Maine oats good/fair. Maine barley good/fair. Field corn good/fair. Sweet corn 99% emerged, good/fair, 10% harvested, 10% 1994. Shade tobacco good, 25% harvested, 15% 1994. Outdoor tobacco good/fair, <5% harvested, <5% 1994. First hay crop 99% harvested, 90% 1994, 95% avg.; good/excellent. Second cut hay 20% harvested, 30% 1994, 25% avg.; good/fair. Apples set avg.; good, size avg.; <5% harvested. Peaches set avg.; good/fair; size avg.; 5% harvested. Pears set avg.; size avg.; good/fair. Strawberries set avg.; good/fair, size avg.; 99% harvested, 99% 1994. Cranberries set above avg.; size avg.; excellent/good. Highbush blueberries set avg.; good; size avg.; 30% harvested, 20% 1994. Wild blueberries set above avg.; excellent/good; size avg. Showers, cooler temperatures moved through region last week. Most areas are still below precipitation normals for this time of year. Major farm activities: Irrigating, fertilizing, cultivating, picking fruits, vegetables, applying herbicides, insecticides.

**NEW JERSEY:** Temperatures slightly above normal. Extremes 53°; 93°. Rainfall 1.50 in. north, 1.63 in. central, 0.87 in. south. Heaviest 24 hour total was 1.56 in. on the 17th to 18th. Estimated soil moisture, in percent of field capacity, 87% north, 83% central, 65% south.

Days suitable for fieldwork 6. Topsoil moisture reported as adequate. Good volume of eggplant, squash, cucumbers, peppers, tomatoes, green beans. Moderate supply of beets, green onions, cabbage. Limited volume of lettuce, escarole, parsley, spinach. Wheat combining is well-advanced in all areas. Soybean double-crop planting continuing throughout the State. Second hay cuttings still occurring as weather permits. Blueberry harvest is just past its peak. The volume of blueberries is reported as good. Peach harvesting is light, increasing.

**NEW MEXICO:** First monsoonal burst of the season hit State as tropical moisture surged northward through Mexico. Every station

reported some measurable rainfall. Highest totals were 4.11 in. at Silver City, 2.18 in. at Clayton. Rainy period ended abruptly as unseasonably dry air filtered in from the west over the weekend. Dry air allowed temperatures to dip to 32° at Quemado Lake, 39° at Chama on the 23rd.

Days suitable for fieldwork 5.5. Soil moisture 14% very short, 53% short, 33% adequate. Alfalfa 2% poor, 21% fair, 47% good, 30% excellent. Wheat 70% very poor, 22% poor, 6% fair, 2% good. Corn 4% poor, 14% fair, 72% good, 10% excellent. Cotton 46% fair, 45% good, 9% excellent; 78% squaring, 94% 1994, 91% avg.; 30% setting bolls, 72% 1994, 54% avg. Sorghum 25% very poor, 20% poor, fair 42%, 12% good, 1% excellent. Chile 1% very poor, 9% poor, 54% fair, 34% good, 2% excellent. Onions 6% poor, 23% fair, 47% good, 24% excellent. Pecans 14% very poor, 7% poor, 9% fair, 59% good, 11% excellent. Apples 19% poor, 74% fair, 7% good. Cattle 15% poor, 37% fair, 45% good, 3% excellent. Sheep 10% poor, 34% fair, 52% good, 4% excellent.

**NEW YORK:** Hot, humid week. Temperatures 65 to 80°. Extremes 46°; 94°. All areas received rainfall. Rainfall 0.06 in. in Albany to 4.41 in. Stillwater. Locally heavy amounts from heavy thunderstorms.

Days suitable for fieldwork 5.7. Soil moisture very short to short. Crops showing signs of stress. Pasture conditions again declined. First hay cutting finished. Poor second crop regrowth. Corn tasseling out on short stalks. Will cut silage yields. Oat harvest started. Sweet, tart cherry harvest half completed. Apples, peaches in good condition. Grapes showing stress from dryness. Berry size small, set spotty. Vegetable harvest gained momentum. Onions showing heat, moisture stress.

**NORTH CAROLINA:** Third consecutive week, rainfall below average statewide. Very hot, humid temperatures have caused topsoil moisture to decrease quite rapidly. Some areas have experienced temporary relief from afternoon thundershowers. Overall, crops are progressing near normal in most parts of the State. Temperature 81°, 3° above normal. Extremes 60°; 97°. Precipitation 0.85 in., 0.48 in. below normal.

Days suitable for fieldwork 6.2. Soil moisture 2% very short, 23% short, 65% adequate, 10% surplus. Sorghum 95% planted, 100% 1994, 100% avg. Soybeans 95% planted, 100% 1994, 100% avg. Oats 78% harvested, 100% 1994, 100% avg. Barley 84% harvested, 100% 1994, 100% avg. Rye 91% harvested, 100% 1994, 99% avg. Irish potatoes 87% harvested, 99% 1994, 93% avg. Peaches 48% harvested, 75% 1994, 69% avg. Corn 68% in dough, 67% 1994, 64% avg.; 28% dented, 39% 1994, 27% avg. Tobacco 71% topped, 73% 1994, 76% avg. Crop conditions continue to remain mostly fair to good, with the exception of vegetables, wheat which still remains to be harvested. Wheat 4% very poor, 49% poor, 34% fair, 13% good; Irish potatoes 10% poor, 20% fair, 70% good; apples 7% fair, 90% good, 3% excellent; peaches 3% poor, 8% fair, 76% good, 13% excellent; truck crops 22% very poor, 22% poor, 34% fair, 21% good, 1% excellent; peanuts 1% poor, 17% fair, 70% good, 12% excellent; sorghum 29% fair, 68% good, 3% excellent; sweetpotatoes 3% very poor, 11% poor, 30% fair, 53% good, 3% excellent; hay 3% poor, 25% fair, 67% good, 5% excellent; tobacco in fields 6% very poor, 11% poor, 40% fair, 39% good, 4% excellent; hay, roughage supplies 6% short, 83% adequate, 11% surplus. Activities: Planting soybeans, sorghum; harvesting, marketing flue-cured tobacco; harvesting small grains, vegetables; topping tobacco; spraying, cultivating crops; cutting hay; tending livestock; repairing equipment, general farm maintenance.

**NORTH DAKOTA:** Repeated thunderstorms moved through the State. Temperatures 5° below normal west central to 2° below normal northeast. Extremes 46° southwest; 88° south central. Precipitation 0.24 in. southeast to 1.90 in. northeast.

Days suitable for fieldwork 5. Soil moisture supplies above average. Topsoil 1% very short, 5% short, 79% adequate, 15% surplus. Subsoil 1% very short, 4% short, 81% adequate, 14% surplus. Small grain development advanced rapidly, entered the turning stage, well behind average. Durum wheat 2% turning and beyond; 5% 1994; 12% avg.; barley 8% turning and beyond; 28% 1994; 40% avg.; oats 3% turning and beyond; 24% 1994; 30% avg. Late season crop development continued behind average. Flaxseed 30% blooming and beyond; 62% 1994; 64% avg.; sunflowers 3% blooming and beyond; 13% 1994; 7% avg.; potatoes 73% blooming and beyond; 82% 1994; 83% avg.; dry edible beans 6% podding and beyond; 35% 1994, avg. NA; soybeans 14% podding and beyond; 41%

1994; 27% avg.; corn 27% tasseling; 49% 1994; 30% avg. Average height of late season crops: flaxseed 13 in.; corn 51 in.; dry edible beans 16 in.; soybeans 22 in.; sunflower 36 in.; potatoes 23 in. Small grain condition: Hard red spring wheat 1% very poor 7% poor, 25% fair, 61% good, 6% excellent.

**OHIO:** Temperatures above normal keeping crop moisture demands elevated. Temperatures 1 to 3° above normal south, 2 to 4° above normal north, mean readings varying from 73 to 78°. Maximum temperatures low to upper 80s, mean lows between 62 to 66°. Extreme heat stress was not noted as temperatures were no higher than mid 80s to lower 90s. While precipitation was widespread, totals were mostly sub-normal. Only the areas from Oxford to Columbus, scattered locations northern Ohio reported totals excess of an inch. Elsewhere amounts were 3/4 in. or less, minimums of 1/4 in. or less noted northwest.

Days suitable for fieldwork 5.8. Soil moisture 6% very short, 34% short, 54% adequate, 6% surplus. Wheat harvest nearly complete. Yield improved as harvest progressed north, open weather prevailed. Corn development is still behind last year, warm weather has speeded development. No significant insect damage in corn. Corn condition varies greatly even in limited geographic areas. Well drained soils have crops in excellent condition, low lying areas have crops in much poorer condition. Soybeans are infested with weeds more than normal. Japanese beetles are reaching the economic threshold throughout state. Continued planting of soybeans behind early wheat harvest. Condition of double cropped beans emerged is good to excellent. Oats harvest remains behind last year. Oat acreage harvested is expected to increase rapidly due to record temperatures in northeast. Quality of baled hay improved greatly. Limited livestock deaths from heat related causes. Milk, egg production is off sharply due to record heat.

**OKLAHOMA:** Temperatures 3.7° below normal Panhandle district to 2.2° above normal southeast district. Precipitation 0.86 in. south central to 2.76 in. east central.

Days suitable for fieldwork 5.4. Topsoil 7% very short, 44% short, 44% adequate, 5% surplus. Subsoil 5% very short, 24% short, 68% adequate, 3% surplus. Wheat 82% plowed, 91% 1994, 82% avg.; 4% seedbed prepared, 6% 1994, 3% avg. Oats 71% plowed, 98% 1994, 89% avg. Barley 50% plowed, 98% 1994, 80% avg. Corn 42% tasseling, 99% 1994, 90% avg.; 19% milk-to-soft, 46% 1994, 30% avg.; 1% mature, 3% 1994, 3% avg. Soybeans 91% up-to-stand, 98% 1994, 89% avg.; 41% flowering, 50% 1994, 28% avg.; 20% setting pods, 24% 1994, 7% avg. Peanuts 65% pegging, 59% 1994, 57% avg.; 16% setting pods, 23% 1994, 21% avg. Alfalfa 2% poor, 28% fair, 66% good, 4% excellent; 55% 3rd cutting, 72% 1994, 52% avg.; 4% 4th cutting, 7% 1994, 2% avg. Livestock 17% fair, 79% good, 4% excellent. Prices for feeder steers, heifers steady to \$3.00/cwt lower.

**OREGON:** Temperatures above normal, statewide. Coastal areas 3° above normal, western interior valleys 8° above normal, Columbia Gorge, Mid-Columbia region 8° above normal, elsewhere 5° above normal. Precipitation quite variable. Coast less than 0.10 in., northern third of the State dry, southern two-thirds 0.67 in. Severe thunderstorms, hail, flash flooding southwestern sections.

Days suitable for fieldwork 6.1. Topsoil 16% short, 84% adequate. Subsoil 10% short, 88% adequate, 2% surplus. All barley harvested 15%. Hay harvest continued statewide, late first cuttings, some second cuttings. Winter wheat harvest underway average to above average yields. Mid-Columbia potato harvest nearing, sweet corn hail damage. Malheur County sugarbeet powdery mildew problems, some potato blight problems. Klamath Basin sugarbeets good. Willamette Valley grass seed harvest full swing good drying weather, green bean harvest well underway, sweet corn, summer squash harvest underway, raspberry harvest finished, Marion blackberry harvest past peak, other blackberries started to ripen, blueberry harvest continued, hazelnuts good, tart cherry harvest completed. Hood River Valley pears, apples sizing average to above average. Willamette Valley nursery industry crops growing well, hot temperatures increased irrigation, normal summer maintenance activities underway, Christmas tree shearing, top work continued. Livestock good to excellent. Pastures, summer grazing areas above average grass, no water shortages.

**PENNSYLVANIA:** Frontal system brought some relief from heat, humidity. State weather data not available. Scattered showers, thunderstorms. Rainfall varied 0.25 to 2.00 in. Extremes 50°; 94°.

Days suitable for fieldwork 5.1. Soil moisture 5% very short, 26% short, 65% adequate, 4% surplus. Avg. corn height 57 in., 59 in. 1994, 52 in. avg. Soybeans planted 100% complete, 100% 1994, 100% avg.; 1% very poor, 2% poor, 17% fair, 61% good, 19% excellent. Barley 100% turning yellow, 100% 1994, 97% avg.; 92% ripe, 95% 1994, 89% avg.; 79% harvested, 83% 1994, 74% avg. Winter wheat 100% turning yellow, 98% 1994, 97% avg.; 89% ripe, 89% 1994, 86% avg.; 68% harvested, 68% 1994, 54% avg. Oats 92% heading or headed, 97% 1994, five year average not available, 68% turning yellow, 77% 1994, 78% avg.; 25% ripe, 43% 1994, 41% avg.; 7% harvested, 12% 1994, 16% avg.; 3% poor, 22% fair, 61% good, 14% excellent. Alfalfa 1st cutting 98% complete, 100% 1994, 99% avg.; 2nd cutting 48% complete, 65% 1994, 57% avg. Timothy clover 1st cutting 90% complete, 94% 1994, 96% avg. Timothy clover 2nd cutting 9% complete, 28% 1994, 13% avg. Quality of hay made 4% very poor, 12% poor, 25% fair, 34% good, 25% excellent. Peach 3% poor, 12% fair, 60% good, 25% excellent. Apple 2% very poor, 5% poor, 16% fair, 54% good, 23% excellent. Activities: Harvesting wheat, barley, oats; spraying corn, soybeans; making hay; cutting haylage; filling silos; fixing fences; machinery maintenance; hauling manure; caring for livestock.

**PUERTO RICO:** No weather data available.

**SOUTH CAROLINA:** Temperatures 5° above normal with a maximum of 100° a minimum of 64°. Rainfall 1.20 in.

Days suitable for fieldwork 5.9. Soil moisture 1% very short, 27% short, 67% adequate, 5% surplus. Barley 95% harvested, 100% 1994, 99% avg.; 4% poor, 64% fair, 4% good 28% excellent. Corn 99% silked, 100% 1994, 99% avg.; 87% doughed, 90% 1994, 86% avg.; 26% matured, 44% 1994, 36% avg.; 2% poor, 40% fair, 54% good, 4% excellent. Rye 100% harvested, 100% 1994, 99% avg.; 20% very poor, 3% poor, 75% fair, 2% good. Sorghum 90% planted, 95% 1994, 91% avg.; 7% harvested, 4% 1994, 4% avg.; 7% poor, 57% fair, 28% good 8% excellent. Sweet potatoes 98% planted, 100% 1994, 98% avg.; 36% fair, 42% good, 22% excellent. Tobacco 95% topped, 96% 1994, 94% avg.; 32% harvested, 35% 1994, 31% avg.; 23% fair, 77% good. Peaches 56% harvested, 72% 1994, 63% avg.; 9% fair, 91% good. Watermelons 85% harvested, 79% 1994, 81% avg.; 85% fair, 15% good. Cantaloupes 82% harvested, 73% 1994, 77% avg.; 82% fair, 18% good.

**SOUTH DAKOTA:** Temperatures generally 1 to 6° below normal. Extremes 36°; 95°. Rainfall for week was variable, overall close to normal. A few places east of Missouri River reported no rainfall. Several stations in, near Black Hills, elsewhere reported a little over an inch of rain. Heaviest precipitation 4.14 in. at Flandreau, 2.63 in. at Milesville.

Days suitable for fieldwork 5.5. Topsoil 8% very short, 23% short, 59% adequate, 10% surplus. Subsoil 13% short, 63% adequate, 24% surplus. Winter wheat 81% ripe, 98% 1994, 81% avg.; 26% swathed, 33% 1994, 39% avg. Winter wheat 3% poor, 19% fair, 66% good, 12% excellent. Winter rye 95% ripe, 90% 1994, 75% avg.; 34% swathed, 34% 1994, 41% avg.; 8% harvested, 28% 1994, 25% avg. Winter rye 24% fair, 45% good, 31% excellent. Barley 96% headed, 100% 1994, 100% avg.; 37% turning color, 86% 1994, 82% avg.; 2% ripe, 47% 1994, 47% avg.; 6% poor, 23% fair, 66% good, 5% excellent. Oats 97% headed, 100% 1994, 100% avg.; 47% turning color, 86% 1994, 83% avg.; 8% ripe, 50% 1994, 59% avg.; 3% poor, 37% fair, 55% good, 5% excellent. Spring wheat 37% turning color, 82% 1994, 76% avg.; 1% ripe, 32% 1994, 34% avg. Flax 71% blooming, 69% 1994, 66% avg.; 0% ripe, 3% 1994, 6% avg.; 11% poor, 3% fair, 84% good, 2% excellent. Corn tasseled, 4%, 69% 1994, 39% avg.; height 49 in., 64 in. 1994, 51 in. avg.; 84% cultivated twice, 94% 1994, 81% avg. Sunflowers 2% blooming, 15% 1994, 10% avg.; 2% poor, 22% fair, 56% good, 20% excellent. Soybeans setting pods 1%, 22% 1994, 13% avg. Winter grains made significant progress during the week allowing winter wheat harvest to get into full swing in some areas. Grasshoppers were becoming an increasing problem, especially in the western counties. Second cutting alfalfa 42% complete, 47% 1994, 34% avg. Other hay 65% harvested, 58% 1994, 54% avg. Livestock 6% fair, 73% good, 21% excellent. Stockwater supplies 72% adequate, 28% surplus.

**TENNESSEE:** Temperatures 3° above normal middle, west, near normal in east, 4° below normal on Plateau. Extremes 58°; 97°.

Days suitable for fieldwork 6.0. Topsoil 18% very short, 42% short, 39% adequate, 1% surplus. Subsoil 15% very short, 32% short, 52% adequate, 1% surplus. Corn 3% poor, 13% fair, 48% good, 36% excellent; 96% tasseling, 86% 1994, 82% avg.; 52% dough, 36% 1994, 29% avg.; 12% dent, 10% 1994, 8% avg. Cotton; 1% poor; 14% fair, 61% good, 24% excellent; 70% setting bolls, 65%, 1994, 47% avg. Sorghum 1% poor, 11% fair, 63% good, 25% excellent; 55% headed, 33% 1994, 39% avg. Tobacco 3% very poor, 11% poor, 50% fair, 35% good, 1% excellent; 27% topped, 26% 1994, 22% avg. Soybeans 1% poor, 22% fair, 57% good, 20% excellent; 27% blooming, 31% 1994, 23% avg.; 7% setting pods, 6% 1994, 4% avg. Alfalfa 7% poor, 34% fair, 53% good, 6% excellent; 95% 2nd cutting, 97% 1994, 96% avg. Other hay 2% very poor, 12% poor, 36% fair, 44% good, 6% excellent.

**TEXAS:** A stationary low pressure trough over Red River region extending into Panhandle combined with upper level disturbances, brought scattered showers, thunderstorms to High Plains, Low Rolling Plains, North Central Texas. Above normal departures were +0.03, +0.24, +0.27 in., respectively. Late afternoon, evening thunderstorms brought normal rainfall amounts to Lower Rio Grande Valley. The remainder was relatively dry due to a dominant surface high pressure. Below normal departures for rainfall ranged from -0.25 in. Southern Texas division to -0.79 in. Upper Coast. Many locations in west Texas received over one inch of rainfall. Dalhart received 2.07 in. of rainfall. Many locations in south, east, central Texas did not receive any rainfall. This weather pattern also helped to keep temperatures predominantly at or above normal. Only Low Rolling Plains recorded below normal temperatures with a departure of -3°. High Plains, north central, southern Texas areas all recorded normal temperatures. Above normal departures +2.0° in four districts to +3.0° in two districts. Average four inch soil temperatures ranged from 78° in Bushland to 98° in Beeville, Eagle Lake. Extremes 67°; 109°.

**Crops:** Small grains: High Plains, harvest continued to push toward completion. Scattered showers caused minimal delays to most harvest activities. Land preparations for next year's crops got underway throughout south Texas. Oats 88% harvested, 95% 1994, 94% avg. Corn: Harvest virtually completed in Valley, and increasing in Coastal Bend, along Upper Coast. Hot, dry temperatures allowing most fields to dry fast. Harvest began in a few fields in Blacklands. Most fields in Plains made good progress and were tasseling. Irrigation was steady across Plains. Statewide 83% normal, 83% 1994; 65% dough, 64% 1994, 64% avg.; 55% dented, 52% 1994, 49% avg.; 33% mature, 38% 1994, 33% avg.; 7% harvested, 13% 1994; 11% avg. Cotton: Some dry-land fields in Plains continued to show signs of stress due to lack of significant moisture, progress remained good. Irrigation was steady on most fields. Bollworms, boll weevils were showing up in some fields, producers were spraying to control them. In Edwards Plateau scattered showers helped cotton growth. A few early fields were harvested along Coastal Bend. Defoliation activity steady in Valley, through South Texas. Statewide condition was 71% normal, 77% 1994; 10% bolls opening, 9% 1994, 6% avg. Grain sorghum: Harvest continued along Upper Coast, Coastal Bend, throughout many areas in south Texas. Harvest got underway in some fields throughout Blacklands. Scattered showers across Plains and Cross Timbers gave some relief to most fields. Statewide condition was 75% normal, 76% 1994; 56% mature, 50% 1994, 41% avg.; 44% harvested, 38% 1994, 26% avg. Rice: Continued to make good progress as flooding continued in most fields. Statewide condition was 100% normal, 95% 1994; 3% harvested, 8% 1994, 5% avg. Peanuts: Continued to show signs of good prospects as most fields had good stands and growth progressed well. Heavy irrigation was beginning in some areas where hot, dry conditions prevailed. In South Texas, some producers were spraying for armyworms. Statewide condition 82% normal, 83% 1994; 99% planted, 100% 1994, 98% avg. Soybeans: In Blacklands, harvest of early beans continued. Along Upper Coast most fields showed excellent crop sets, continued to make good progress. Sunflowers 98% planted, 100% 1994, 99% avg.

**Commercial Vegetables:** Rio Grande Valley: Citrus fruit continued to show good signs of enlargement. The citrus leaf minor continued to cause problems. San Antonio- Winter Garden: Lland preparation was

beginning for fall vegetables. Melon harvest was nearly complete. East Texas: Harvest of watermelon, tomatoes, squash, peas, cantaloupes continued with good production. Trans Pecos: Cantaloupe, onion harvest slowed due to hot temperatures. High Plains: Potato, onion harvest continued with good yields, quality being reported. Pecans: Most nuts continued to show good signs of development. Irrigation was beginning in areas where water was available. Most trees still have a heavy nut set. Peaches: Harvest of most late variety peaches continued.

**Range and Livestock:** Range, pasture forage continued to decrease under hot, dry temperatures, but showed signs of improvement in areas where scattered showers fell. Haying operations beginning again in some areas. Ranchers were beginning to spray for ticks and flies in Edwards Plateau. Light supplemental feeding began in a few areas. Most livestock remained in good condition but were showing signs of heat stress.

**UTAH:** Temperature maxima were 2° below normal; minima were slightly above normal. Precipitation was generally light across the State. A few locations were hit with isolated showers which deposited moderate amounts of precipitation in brief periods of time.

Days suitable for fieldwork 6.8. Topsoil 31% short, 65% adequate, 4% surplus. Subsoil moisture 24% short, 72% adequate, 4% surplus. Irrigation water supply 5% short, 89% adequate, 6% surplus. Stockwater supply 8% short, 80% adequate, 12% surplus. Barley heading or better 91%; harvested 7%, 32% 1994. Oats heading or better 79%; harvested for hay or silage 50%, 78% 1994. Winter wheat harvested 8%, 50% 1994, 29% avg. Corn height 32 in., 53 in. 1994, 48 in. avg. Alfalfa hay 2nd cutting 27%, 54% 1994, 52% avg. Other hay cutting 57%, 74% 1994, 66% avg. Sweet cherries picked 87% complete. Tart cherries picked 15% complete. Major farm, ranch activities were haying, cultivating, irrigating, spraying fruit trees, picking cherries.

**VIRGINIA:** Temperatures above normal. Extremes 52°; 101°. Precipitation near normal.

Days suitable for fieldwork 5.8. Topsoil 7% very short, 34% short, 54% adequate, 5% surplus. Subsoil 2% very short, 35% short, 57% adequate, 6% surplus. Other hay 1% very poor, 2% poor, 14% fair, 69% good, 14% excellent. Alfalfa hay 1% poor, 9% fair, 76% good, 14% excellent. Apple 1% poor, 1% fair, 70% good, 28% excellent. Peaches harvested 15%, 0% 1994, average not available. Barley harvested 100%, 100% 1994, 100% avg. Wheat harvested 93%, 100% 1994, 94% avg. Oats harvested 72%, 99% 1994, 93% avg. Corn silked 60%, 58% 1994, 43% avg.; dough 16%, 22% 1994, 14% avg.; 1% very poor, 2% poor, 15% fair, 64% good, 18% excellent. Soybean 3% very poor, 15% poor, 31% fair, 39% good, 12% excellent; blooming 10%, 24% 1994, 10% avg. Peanut 1% fair, 73% good, 26% excellent. Cotton 3% poor, 6% fair, 87% good, 4% excellent. Flue tobacco 40% fair, 34% good, 26% excellent; harvested 7%, 3% 1994, 2% avg. Dark fired tobacco condition 35% fair, 50% good, 15% excellent. Burley tobacco 33% very poor, 44% poor, 18% fair, 5% good. Sun tobacco 60% fair, 40% good. Summer potato harvested 47%, 67% 1994, 70% avg. Hot, dry conditions affecting late corn varieties, burley tobacco, some vegetables. Heavy concentration on hay cutting and clipping pastures. Topping, suckering tobacco, spraying for tobacco budworms. Dry weather, blue mold continuing to spread in tobacco southwestern counties. Tobacco fields in areas that received isolated storms have experienced fertilizer leaching. Spraying peanuts for leaf spot disease, applying growth regulators to cotton. Picking peaches, vegetables, summer apples, potatoes, melons.

**WASHINGTON:** Temperatures 7 to 10° above normal west; 6 to 11° above normal east. Precipitation none west, east. The week provided warm, dry temperatures around the State.

Days suitable for fieldwork 7.0. Topsoil 1% very short, 35% short, 64% adequate; subsoil 14% short, 86% adequate. Irrigation water supply 100% adequate. High yields reported in winter wheat crops. Aphids were reported in cereal grain crops in the southeast part of the State. Areas hit by earlier hailstorms have reported up to 100% loss of crops that were in the direct path of the storm. Phenomenal growth was reported in corn crop. Late blight control continued in potatoes. Bluegrass, mint, and dry pea harvests were in progress. Turfgrass producers struggled to keep fields irrigated. Peaches, cherries, apricots, raspberries, blueberries, watermelons, early season carrots, peas, broccoli, cauliflower, and

cucumber harvests progressed. Oat hay cutting continued. Non-irrigated pastures were showing drought stress. Pink eye infestations were reported by beef cattle producers. Winter wheat dryland 2% very poor, 10% poor, 21% fair, 59% good, 8% excellent; irrigated, 1% fair, 97% good, 2% excellent. Spring wheat: dryland 10% poor, 37% fair, 42% good, 11% excellent; irrigated, 95% good, 5% excellent. Barley: dryland 10% poor, 43% fair, 34% good, 13% excellent; irrigated, 95% good, 5% excellent. Potatoes 7% fair, 93% good. Corn, 1% fair, 99% good. Hay other roughage supplies 4% short, 85% adequate, 11% surplus. Winter wheat, 7% harvested, 18% 1994, 15% avg. Spring wheat 1% harvested, 9% 1994, 6% avg. Barley 0% harvested, 16% 1994, 12% avg. Alfalfa 1st cutting, 100% harvested, 100% 1994, 100% avg. Alfalfa 2nd cutting, 64% harvested, 70% 1994, 65% avg.

**WEST VIRGINIA:** Temperature 75°. Extremes 49°; 93°. Precipitation 0.47 in. Temperatures 1° above normal in the northcentral region to 3° above normal elsewhere except the northwest region which was 2° above normal. Precipitation 0.24 in. below normal in the northeastern region to 0.76 in. below normal in the southern region. The greatest weekly total precipitation was 1.54 in. reported at Ripley. Seasonal precipitation averages ran from 1.61 in. below normal in the central region to 2.33 in. above normal in the southwest region.

Days suitable for fieldwork 5.5. Topsoil 4% very short, 33% short, 60% adequate, 3% surplus. Barley 90% harvested, 100% 1994, 99% avg. Wheat 30% fair, 65% good, 5% excellent; 96% headed, 100% 1994, 100% avg.; 85% ripe, 100% 1994, 98% avg.; 25% harvested, 86% 1994, 77% avg. Hay 6% poor, 30% fair, 59% good, 5% excellent; first cutting 95%, 96% 1994, 95% avg.; 2nd cutting 20%, 26% 1994, 28% avg. Corn 10% fair, 75% good, 15% excellent; 25% silked, 31% 1994, 33% avg.; 5% dough, 10% 1994. Oats 15% fair, 75% good, 10% excellent; 55% ripe, 80% 1994, 79% avg.; 40% harvested, 48% 1994. Soybeans 2% poor, 20% fair, 78% good; 100% emerged, 100% 1994; 50% blooming, 54% 1994; 15% setting pods, 29% 1994. Tobacco 10% poor, 70% fair, 20% good; 5% topped. Apples 100% good. Peaches 100% good. Cattle 10% fair, 80% good, 10% excellent. Sheep 20% fair, 75% good, 5% excellent. Activities: Cutting hay, clipping pastures, deworming cattle, topping tobacco, repairing fences and equipment, harvesting peaches, oats, wheat, barley.

**WISCONSIN:** Temperature 69°, 2° below normal. Extremes 46°; 92°. Precipitation 0.30 to 1.30 in.

Days suitable for fieldwork 5.0. Soil moisture 56% short, 41% adequate, 3% surplus. General condition of crops 4% poor, 26% fair, 57% good, 13% excellent. Oats 12% poor, 40% fair, 42% good, 6% excellent; harvested 7%, 6% 1994, 7% avg. Winter wheat harvested 12%, 22% 1994, 21% avg. Corn height 65 in., 74 in. 1994, 58 in. avg.; silked 20%, 42% 1994, 24% avg. Second hay harvest 43%, 38% 1994, 37% avg. Soybean 7% poor, 25% fair, 54% good, 14% excellent; blooming 15%, NA 1994, NA avg. Some much needed rains fell over the past week in the western, northern parts of the State. Dry conditions still plagued the eastern part of the State. Corn crop in the northern part of the State was reported to be in good to excellent shape. This is mainly due to timely rainfall. Corn in the central, eastern parts of the State experienced setbacks from heat, were in pretty good shape considering the lack of moisture. Reporters noted that the soybean crop varied greatly depending on time it was planted. Winter wheat being harvested with reports of excellent yields and good test weights. The cranberry crop was damaged slightly by excessive heat during blossom.

**WYOMING:** Temperatures 1 to 5° below normal across State. Extremes 36° Jackson; 95° Greybull. Precipitation 0.10 to 0.40 in. below normal across southern half of the State, while the rest of the State averaged 0.10 to 1.80 in. above normal. Greatest amount of about 2.00 in. received in northeast part of State.

Days suitable for fieldwork 6.3. Topsoil 67% adequate or better. Winter wheat 7% fair, 93% good; 91% turning color, 100% 1994, 92% avg.; 16% mature, 97% 1994, 65% avg. Spring wheat 21% fair, 75% good, 4% excellent; 61% headed, 100% 1994, 95% avg.; 11% turning color, 91% 1994, 60% avg. Oats 5% fair, 91% good, 4% excellent; 58% headed, 94% 1994, 93% avg.; 18% turning color, 62% 1994, 45% avg. Barley 2% fair, 93% good, 5% excellent; 45% turning color, 82% 1994, 68% avg.; 1% mature, 32% 1994, 28% avg. Potatoes 100% good; 50% in bloom, 95% 1994, 72% avg. Dry beans 68% good, 32% excellent; 47% in bloom, 78% 1994, 49% avg. Corn 21% fair, 79% good; 7% tasseled, 60% 1994, 28% avg.; avg. height 41 in. Alfalfa 86% 1st cutting, 99% 1994, 90% avg.; 2nd cutting complete 1%, 20% 1994, 8% avg. Other hay 44% harvested, 64% 1994, 52% avg. Stockwater supplies adequate or better.

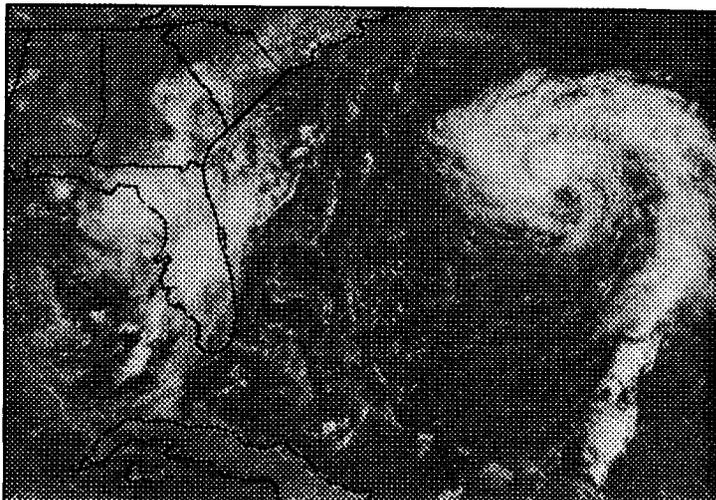
(Continued from front cover)

On Sunday, a final day of heat in the **central Corn Belt** pushed the temperature to 97°F in **Springfield, IL**, but daily-record highs, such as 102°F in **Macon, GA** and 100°F in **Tallahassee, FL**, were confined to the **Southeast**. During the 24 hours ending at 12:00 UTC on Monday, isolated but intense thunderstorms dumped 4.44 inches in **Grand Forks, ND**, 4.16 inches in **Tallahassee**, and 2.82 inches in **South Bend, IN**. Drought-easing rains spread into **New England**, where early-week totals topped an inch in **Portland, ME**, **Concord, NH**, and **Burlington, VT**. Meanwhile, rare mid-summer rainfall in **southern California** set daily records for July 16 in **San Diego** (0.05 inches) and at the **Los Angeles Civic Center** (0.02 inches).

Thunderstorms exited the **East Coast** on Monday, but not before setting daily-rainfall records in **Newark, NJ** (3.50 inches) and **Pittsburgh, PA** (1.97 inches). A day later, **Montgomery, AL** (100°F) and **Olympia, WA** (98°F) notched daily-record highs, while **Amarillo, TX** reported a maximum of only 74°F.

During the 40 hours ending at 4:00 p.m. EDT on July 19, 13.80 inches of rain deluged **Venice, FL**. Nearby **Englewood** received 8.44 inches. Rain returned to the **Central States** at midweek, where totals exceeded 3 inches in **Kansas City, MO** and **Topeka, KS**. Meanwhile, the remnants of the former eastern Pacific Hurricane **Barbara** dropped more than 3 inches of rain on **Hilo, HI**.

Late in the week, hot weather persisted in the **Southeast**, and expanded to encompass the **South Central States**. On Friday, **Columbia, SC** hit 100°F, while **Corpus Christi, TX**, with 98°F, set a daily-record high. A day later, **Houston, TX** tied a daily-record high with 99°F, while **Roswell, NM** attained 102°F. Enough cool air lingered on **Arizona's** **Mongollon Rim** to produce a daily-record low of 38°F in **Flagstaff**.



July 17, 14:45 UTC

# International Weather and Crop Summary

July 16 - 22, 1995

## HIGHLIGHTS

**FSU-WESTERN:** Light rainfall across Ukraine and Russia favored winter grain harvesting but provided limited relief for summer crops at or approaching reproduction.

**FSU-NEW LANDS:** Mostly dry but more seasonable weather prevailed in western areas, while showers continued to favor grains across Siberia.

**EUROPE:** Hot weather developed over western Europe, while showers covered northern Europe.

**SOUTH ASIA:** Soaking rains continued over central India, improving rice, coarse grain, oilseed, and cotton prospects.

**CANADA:** Prairie grains and oilseeds advanced through reproduction, with some areas still short on soil moisture.

**AUSTRALIA:** Showers maintained favorable conditions for vegetative and semi-dormant winter grains.

**EASTERN ASIA:** Showers again brought relief to the North China Plain, while mostly dry weather along the Yangtze Valley aided rice harvesting and eased previous flooding.

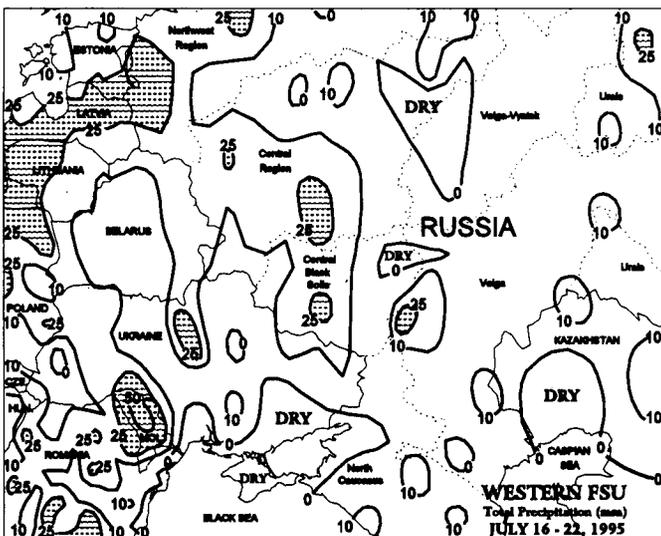
**SOUTHEAST ASIA:** Showers continued across Thailand and Vietnam, with somewhat drier weather in the Philippines.

**SOUTH AMERICA:** Dry weather returned to central Argentina as more rain is needed for winter wheat establishment.

**MEXICO:** Showers benefited vegetative corn across the south and brought relief to the north.

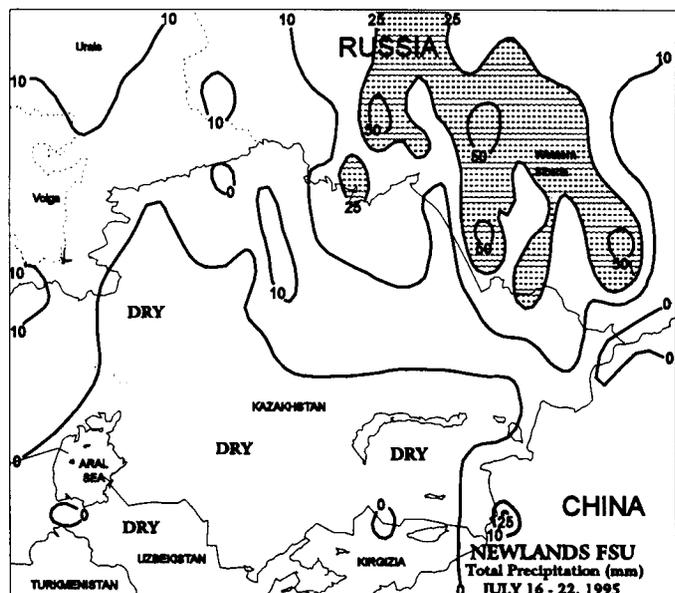
### FSU-WESTERN

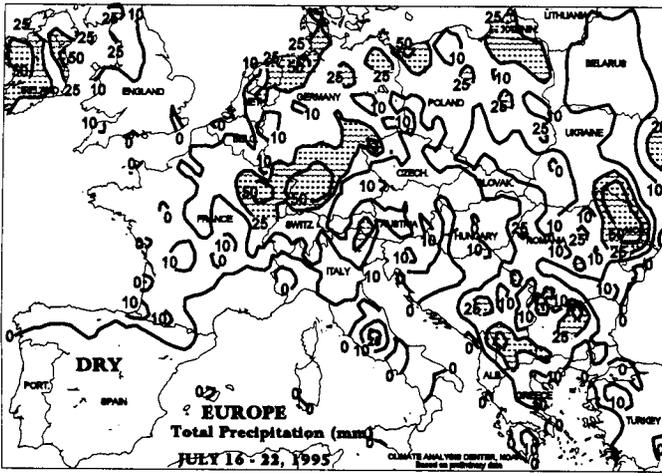
Light rainfall (generally less than 10 mm) over most of Russia and Ukraine did little to alleviate persistent dryness, especially in the Volga Valley. Isolated moderate showers (25-99 mm) eased dryness in Moldova, and limited areas of Ukraine and Central Black Soils, Russia. This pattern continued to favor winter grain harvesting at the expense of summer crops, especially southern Ukrainian corn and sunflowers at or approaching reproduction. Temperatures across most of the region were near to slightly below normal, easing the moisture needs of summer crops.



### FSU-NEW LANDS

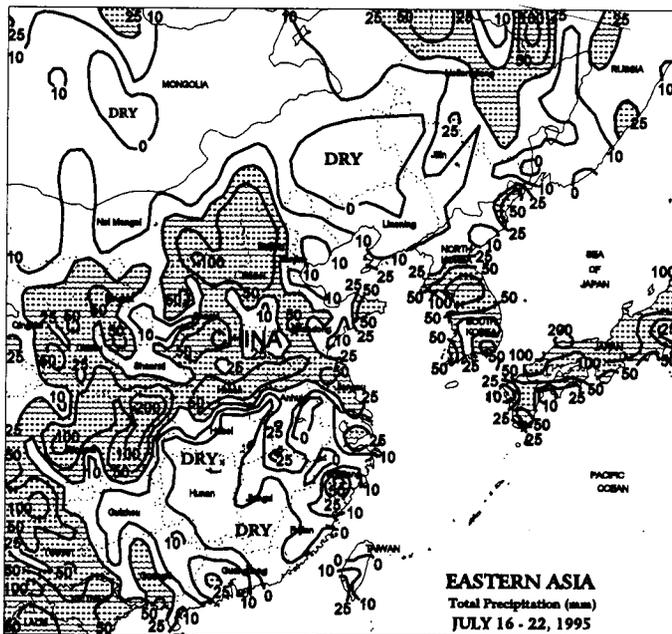
Mostly dry weather persisted over the Urals and much of Kazakhstan, although more seasonable temperatures eased the moisture demands of drought-stressed spring grains. Light to moderate rainfall (6-35 mm, locally to 53 mm) and near-normal temperatures continued to favor spring grains in Western Siberia. Spring grains in the southern Urals and much of Kazakhstan have advanced through reproduction with limited moisture reserves. More abundant moisture reserves have favored spring grains in most of Siberia and northern Kazakhstan as the crop advanced toward and through reproduction.





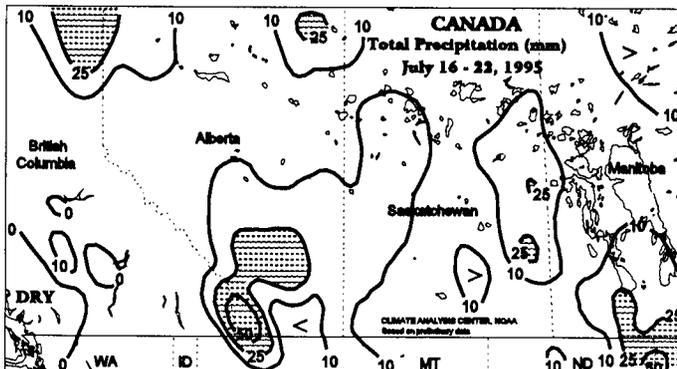
**EUROPE**

Hot weather in western Europe aggravated severe drought conditions in Spain and stressed corn in southern France. Warm, dry weather in northern France and southern England favored winter grain harvesting, but soil moisture is still low for spring-sown crops in England. Showers (10-25 mm) kept soils adequately moist for spring grains and oilseeds across northern Europe, with 25-50 mm of rain soaking topsoils in east-central France and southwestern Germany. Mostly light rain caused little or no interference with harvest activities in east-central Europe, while spotty 25-50 mm rainfall in the Balkan countries kept that area well watered for summer crops. Above-average temperatures throughout Europe accelerated summer crop development.



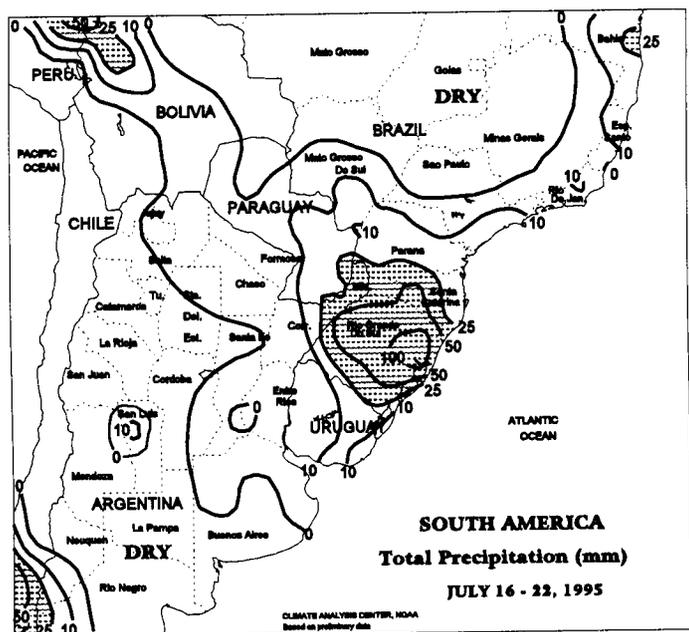
**EASTERN ASIA**

Moderate rain (20-70 mm) improved growing conditions for vegetative to reproductive summer crops across the North China Plain. A second week of significant drought relief (20-60 mm) occurred across the northwestern crop areas (Shanxi, Shaanxi, southern Gansu, and western Nei Mongol), replenishing irrigation supplies in the Yellow River basin and stabilizing spring wheat yield prospects. Light to moderate rain (15-40 mm) favored summer crops in northern Manchuria (Heilongjiang), while drier weather (5-15 mm) prevailed elsewhere in the region. The rice areas of Sichuan received beneficial showers (20-60 mm, with scattered amounts greater than 100 mm). Mostly dry, hot weather (temperatures averaging 2-4 degrees C above normal) prevailed across the Yangtze Valley and southern China, aiding early double-crop rice harvesting and easing flooding. However, continued hot, dry weather will start to deplete irrigation supplies. Moderate to heavy rain (20-120 mm) fell across southern North Korea and northern South Korea, causing some local flooding. On July 23, Typhoon Faye hit extreme southern Korea, just west of Pusan, with sustained winds of 70-80 knots (80-92 mph). The storm brought heavy rain (50-125 mm) only to coastal locations. In Japan, heavy rain (50-175 mm) was reported across western Honshu, causing flooding and possible crop damage, while lighter amounts (10-40 mm) fell elsewhere in the country. Temperatures averaged 1-3 degrees below normal across the Korean Peninsula and northern Japan and 1-2 degrees C above normal in southern Japan.



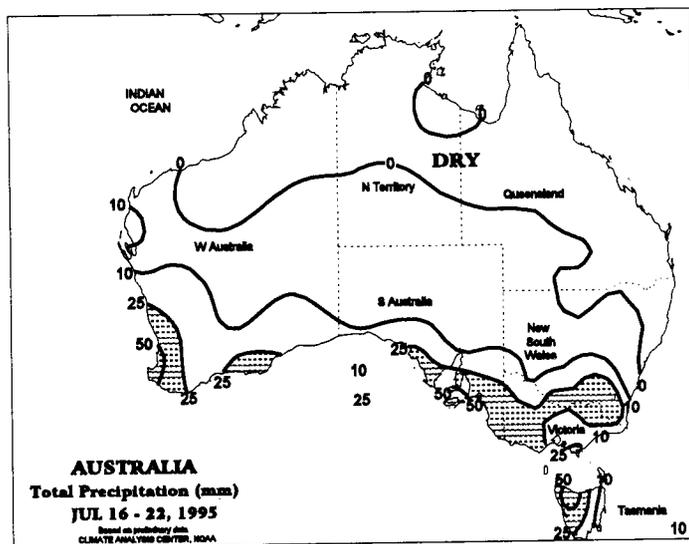
**CANADA**

Scattered, mostly light rain (10 mm or less) covered the Prairies, although a few areas received more than 25 mm. Temperatures were generally 1-3 degrees C below normal, reducing crop moisture demands. However, spring grains and oilseeds were advancing through reproduction, and the increasing drying trend has necessitated soaking rains throughout the region. Driest areas continued to be across the north and east, although locally moderate rain (20-30 mm) brought additional relief to sections of northeastern Saskatchewan. In the east, scattered showers (5-30 mm) brought some relief to corn and soybeans in Ontario and Quebec, stressed by recent outbreaks of hot, dry weather.



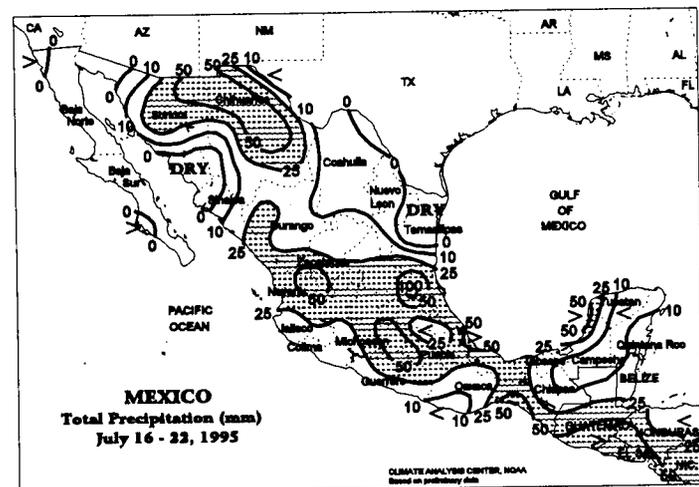
**SOUTH AMERICA**

Dry weather returned to central Argentina, where rain is needed for winter wheat establishment. The dryness has likely delayed wheat planting in southern Buenos Aires. Minimum temperatures of -3 to -8 degrees C were reported across the region, burning back early planted wheat. In southern Brazil, light to moderate rain (10-80 mm, with amounts greater than 100 mm in portions of eastern Rio Grande do Sul) fell from southern Mato Grosso do Sul and northern Parana southward, aiding vegetative wheat. Light to moderate rain (10-40 mm) fell across eastern Bahia and northern Espirito Santo, aiding main-season cocoa, but slowing mid-year cocoa harvesting. Seasonably dry weather prevailed across the interior of southern Brazil. Temperatures averaged 2-4 degrees C below normal across central Argentina and extreme southern Brazil, and 1-3 degrees C above normal across the rest of southern Brazil.



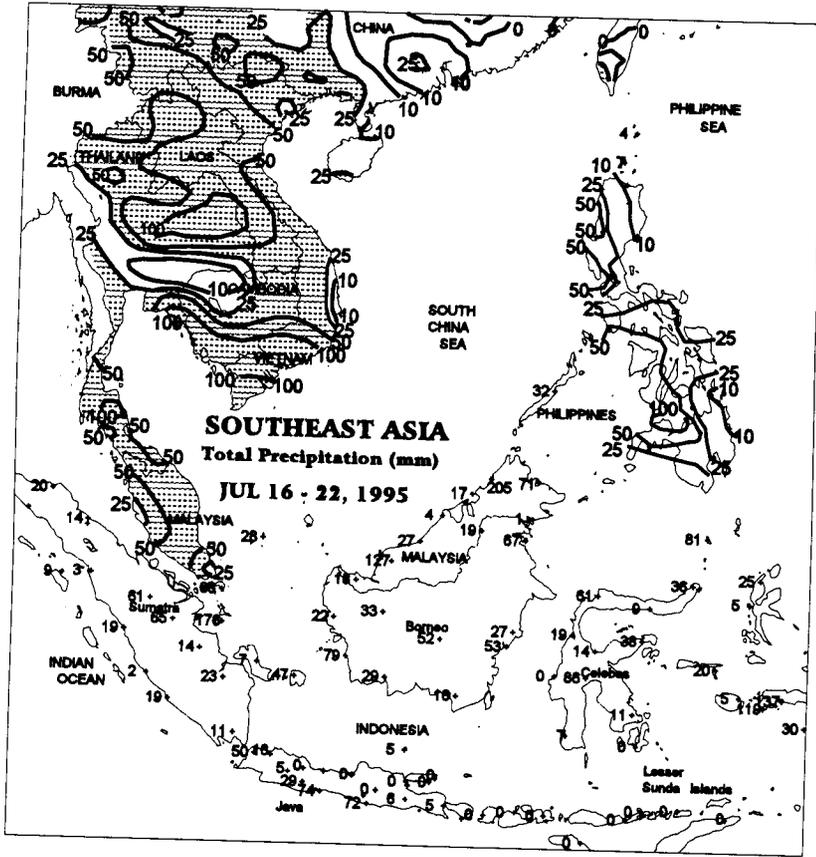
**AUSTRALIA**

Widespread showers (12-45 mm) continued throughout western and southeastern winter grain areas. Mostly dry weather continued over northeastern crop areas of New South Wales and throughout Queensland, where sugarcane harvesting progressed. Temperatures were generally near normal in the east but slightly below in the west. In New Zealand, cool weather (lows of -1 to -5 degrees C) occurred in northern South Island and central North Island, where precipitation totaled 20-60 mm.



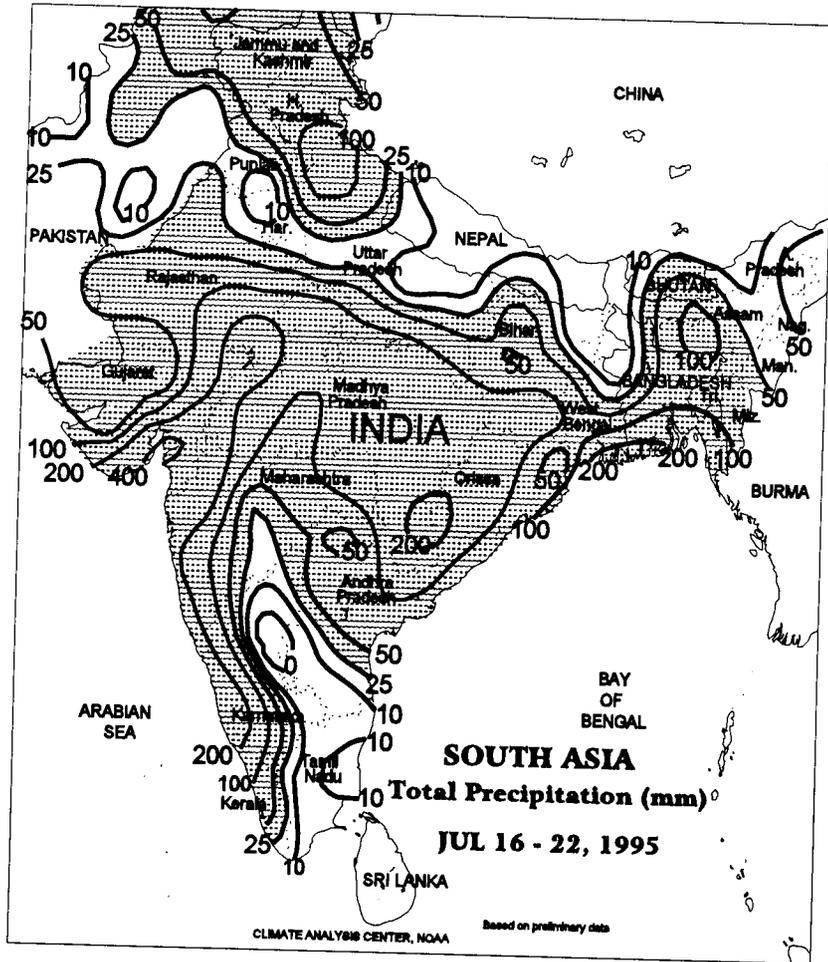
**MEXICO**

Widespread showers (15-70 mm) continued across the southern Plateau corn belt, benefiting vegetative to reproductive corn. After an erratic start to the rainy season, consistent rains have improved corn yield prospects. Moderate showers (25-80 mm) fell across the north (Sonora and Chihuahua) bringing needed drought relief. However, hot, dry weather (temperatures 1-3 degrees C above normal) prevailed across the northeast, further stressing crops and depleting irrigation supplies. Temperatures averaged 1-2 degrees C above normal across the main corn belt and Yucatan Peninsula.



**SOUTHEAST ASIA**

Moderate to heavy showers (20-100 mm, with isolated amounts greater than 150 mm) covered eastern Thailand, benefiting rice but causing local flooding. Moderate showers (20-70 mm) and near-normal temperatures in the west and north aided corn and sugarcane. Portions of south-central Thailand received less than 20 mm. In Vietnam, seasonal showers (25-50 mm in the north; 50-150 mm in the south) kept irrigation supplies adequate for rice. In the Philippines, light to moderate showers (10-60 mm) fell across Luzon and east-central islands, which was somewhat below normal for this time of the year. Heavier amounts (40-125 mm) were reported across the west-central islands and Mindanao, benefiting rice, corn, and sugarcane.



**SOUTH ASIA**

This was the best week of the monsoon season, with most areas receiving widespread showers. For the second week, soaking rain (50-100 mm or more, locally exceeding 200 mm) covered a broad section of central India, benefiting grains, oilseeds, and rice. Rainfall totaled 30 to 45 mm in groundnut areas of western Gujarat, where late planting was underway. Rainfall averaged less than 25 mm over much of the southern interior, while in Maharashtra primary sorghum, sugarcane, and cotton areas received beneficial rain of 20 to 80 mm. Light to moderate showers (10-40 mm, with locally heavy amounts greater than 100 mm) covered most of north-central India and northeastern Pakistan, aiding rice, sugarcane, and cotton.

CLIMATE ANALYSIS CENTER, NOAA Based on preliminary data

## Update on the 1995 Indian Monsoon

After a generally normal progression through Indochina, the southwest monsoon has progressed poorly through South Asia until recently, resulting in acute seasonal moisture deficits in many major crop areas. The following is a brief description of the rainy season to date and its impact on the region's agriculture.

The monsoon usually reaches India's eastern and southernmost states around June 1. Although usually identified by the arrival of heavy rains, the circulation pattern associated with the monsoon is characterized by southwesterly surface winds and easterly winds at the jet stream level. This year, while the circulation pattern appeared to favor the normal start-up of seasonal rainfall, rains were late in arriving over India's southern interior. An unusually low amount of cloud cover over the Indian Ocean, particularly the Bay of Bengal, was an indication of the lack of moisture available to the region. Also plaguing the region was a persistent mass of hotter-than-usual air over Pakistan and northwestern India, apparently linked to the high pressure system that dominated countries of the Former Soviet Union. As a result, most major crop areas experienced much drier and warmer-than-normal weather during the first 2-3 weeks of June. Rice areas of eastern India and Bangladesh, where the monsoon generally performed well in its early stages, experienced flooding in the far east. Some rainfed areas in the east recently received relief from previous unfavorable dryness (fig. 1).

During the week of June 18-24, central and northern India and northern Pakistan received their first heavy rains of the season, spurring late plantings of oilseeds, cotton, and coarse grains. The rain was especially timely in Madhya Pradesh, which produces 80 percent of India's soybeans, although some persistent dry pockets in the soybean belt prevented widespread planting. Unfortunately, the rains missed Gujarat, a primary groundnut, cotton, and millet producer. The heavy rains in the north, which came a few weeks before the normal arrival of the monsoon, boosted irrigation reserves for cotton and rice. The following week, the rains pulled out of the north but most primary soybean and sorghum areas continued to receive beneficial rain (fig. 2).

In early July, the monsoon continued its erratic performance, as unseasonable heat and dryness returned to central and western India, stressing newly emerged crops. However, on about July 10, the mon-

soon intensified throughout the region, bringing cooler, wetter weather to primary oilseed, cotton, and coarse grain areas, abating stress. Western Gujarat's rainfed groundnut and cotton areas began receiving rain, albeit lighter-than-usual, by the third week in July, approximately 4 weeks late. In fact, the dominant pattern across Asia that had impeded the monsoon's northward progress in June and early July (a southward displacement of the jet stream westerlies from Afghanistan to southern China) broke down, allowing easterly winds to finally reach their northward extent.

Overall crop impact of the weak monsoon has so far been variable. Southern and central Indian grain, oilseeds, and cotton have experienced major planting delays. Assuming normal rainfall for the remainder of the season, Gujarat would suffer the most as most rainfed regions would receive less than 500 millimeters for the growing season, insufficient for normal groundnut and cotton development. As shown in figure 3 (see back cover), normal rainfall declines in August and September just when the late-planted crop would need wetter conditions the most. However, other cotton and groundnut areas, as well as soybean areas centered around western Madhya Pradesh, could potentially receive adequate moisture for normal development. In the north, while most cotton and rice is irrigated, this season's above-normal temperatures taxed irrigation reserves and likely accelerated crop development. Historically, rainfall in September, when the monsoon is usually withdrawing from the north, can be detrimental to cotton in Pakistan and northern India by reducing quality and promoting pest and disease outbreaks. India's rice, grown intensively in the less-drought-prone areas of the east, has fared the best so far in 1995, with most areas receiving near- to above-normal rainfall. For the week ending July 22, beneficial, widespread rain covered northern, central, and western crop areas (see the South Asian summary on p. 22 for further details).

The last widespread monsoon failure was in 1987, when drought severely affected agricultural production (*WWCB*, Vol. 74, No. 23 to 40). That year, record dryness and heat dominated the northwest all summer long. So far in 1995, the most recent close analog for rainfall is 1985, although temperatures this season have been far hotter through early July (*WWCB* Vol. 72, No. 22 to 40).

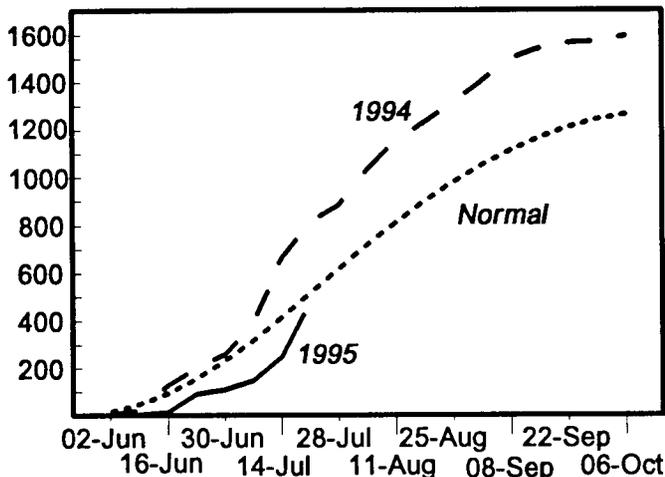


Figure 1 Cumulative rainfall (mm) for rainfed rice areas (Orissa and eastern Madhya Pradesh)

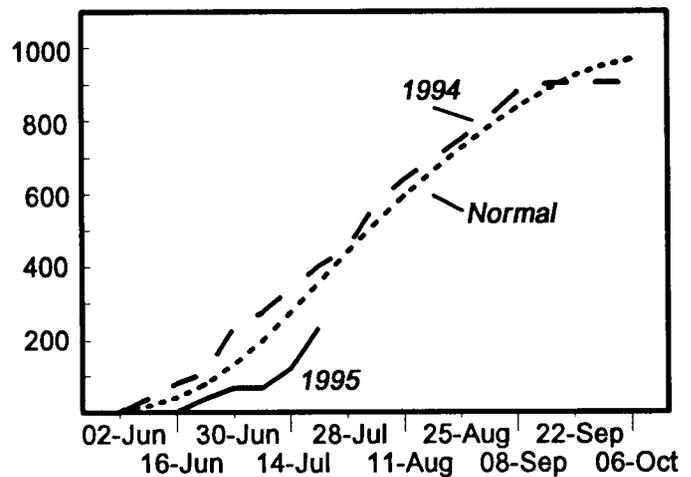


Figure 2 Cumulative rainfall (mm) for soybean areas (western Madhya Pradesh)

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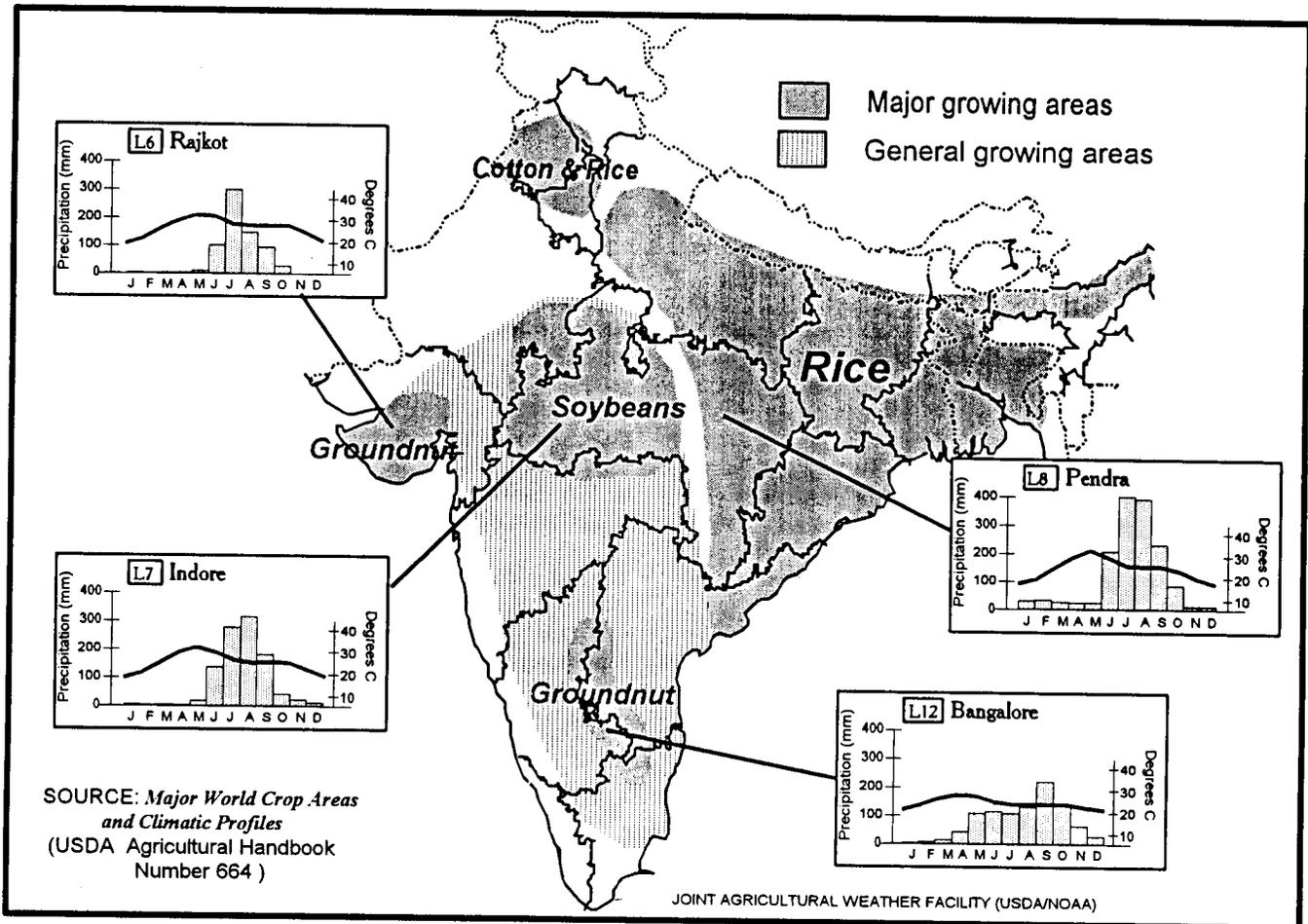


Figure 3 Major crop areas with selected station normals

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