

WEEKLY WEATHER AND CROP BULLETIN

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

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

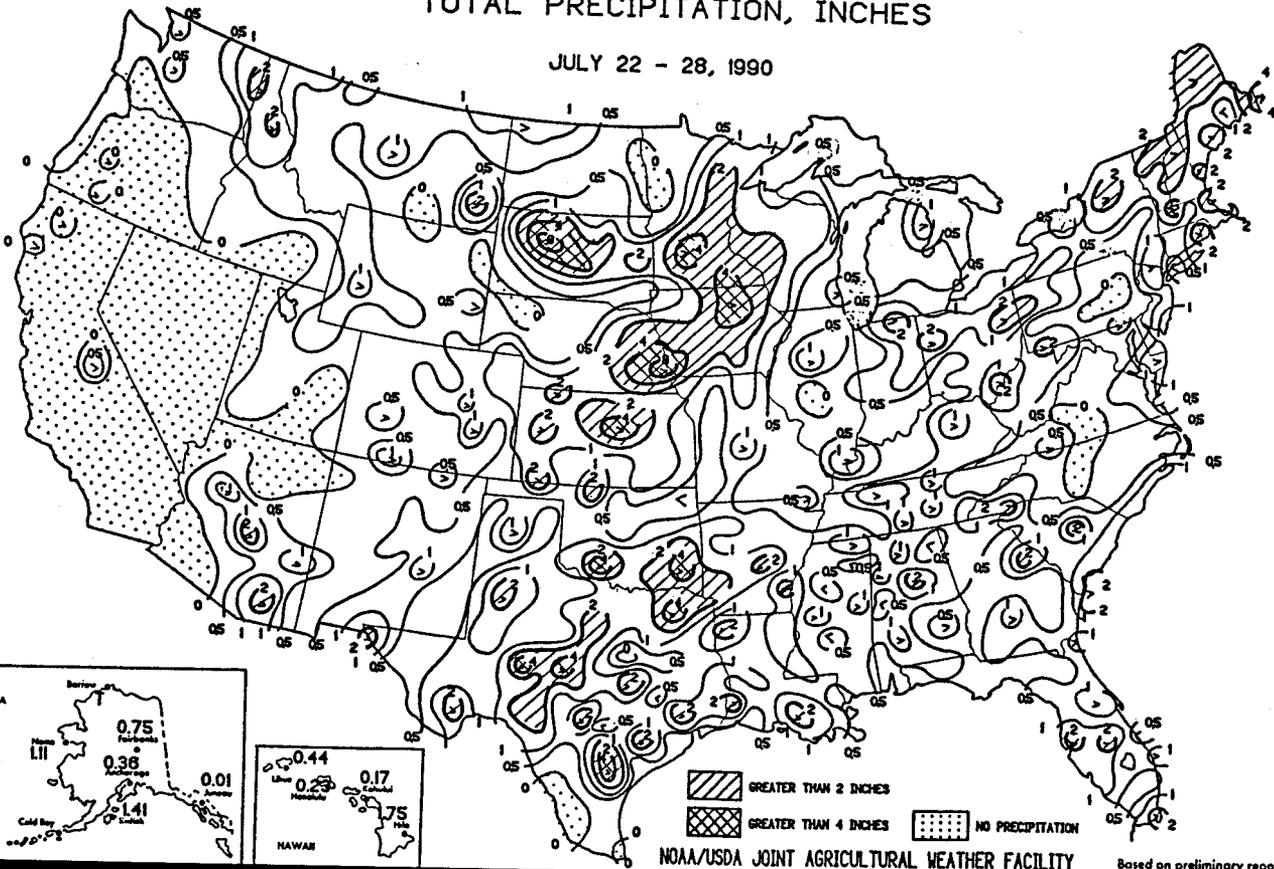
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July 31, 1990

TOTAL PRECIPITATION, INCHES

JULY 22 - 28, 1990



NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

Based on preliminary reports

HIGHLIGHTS

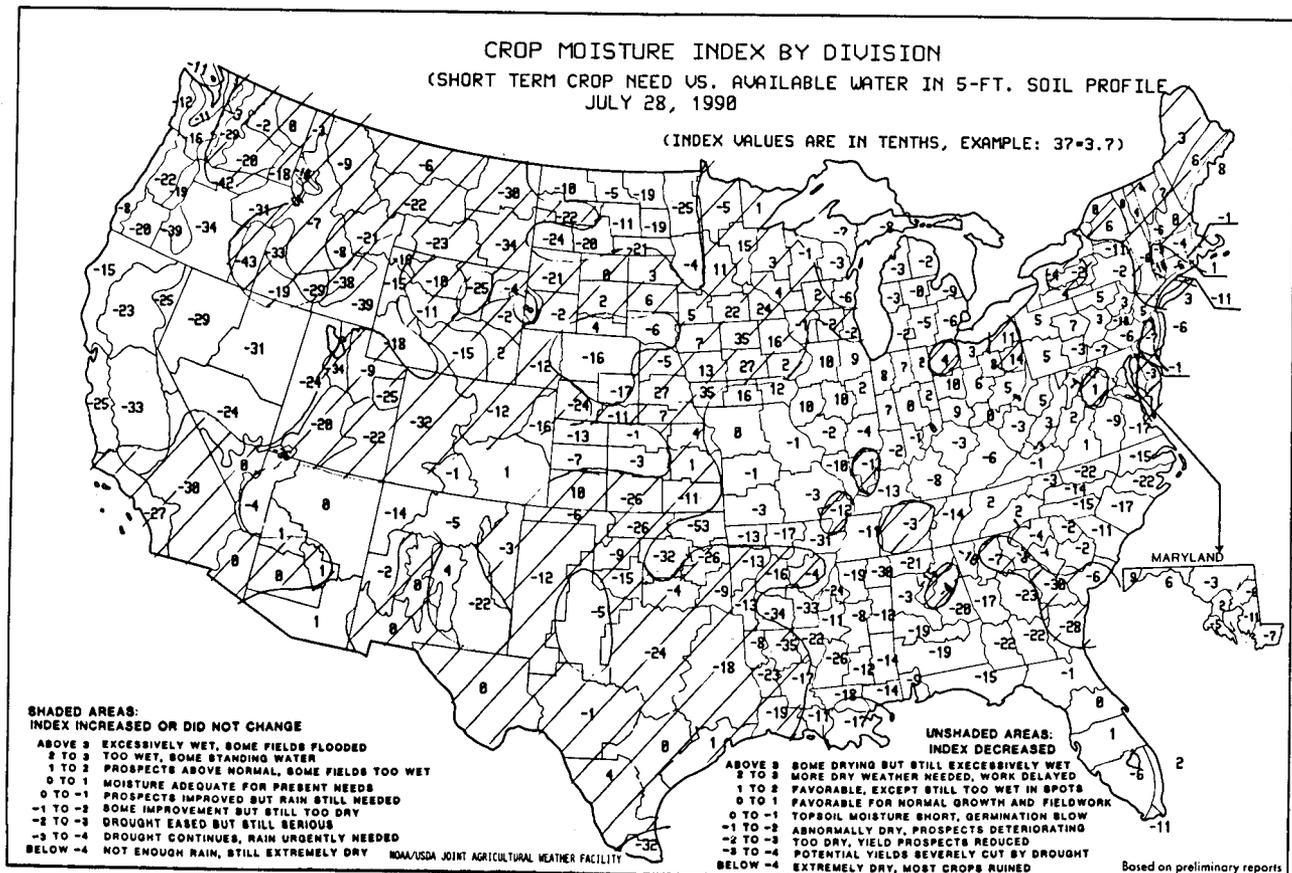
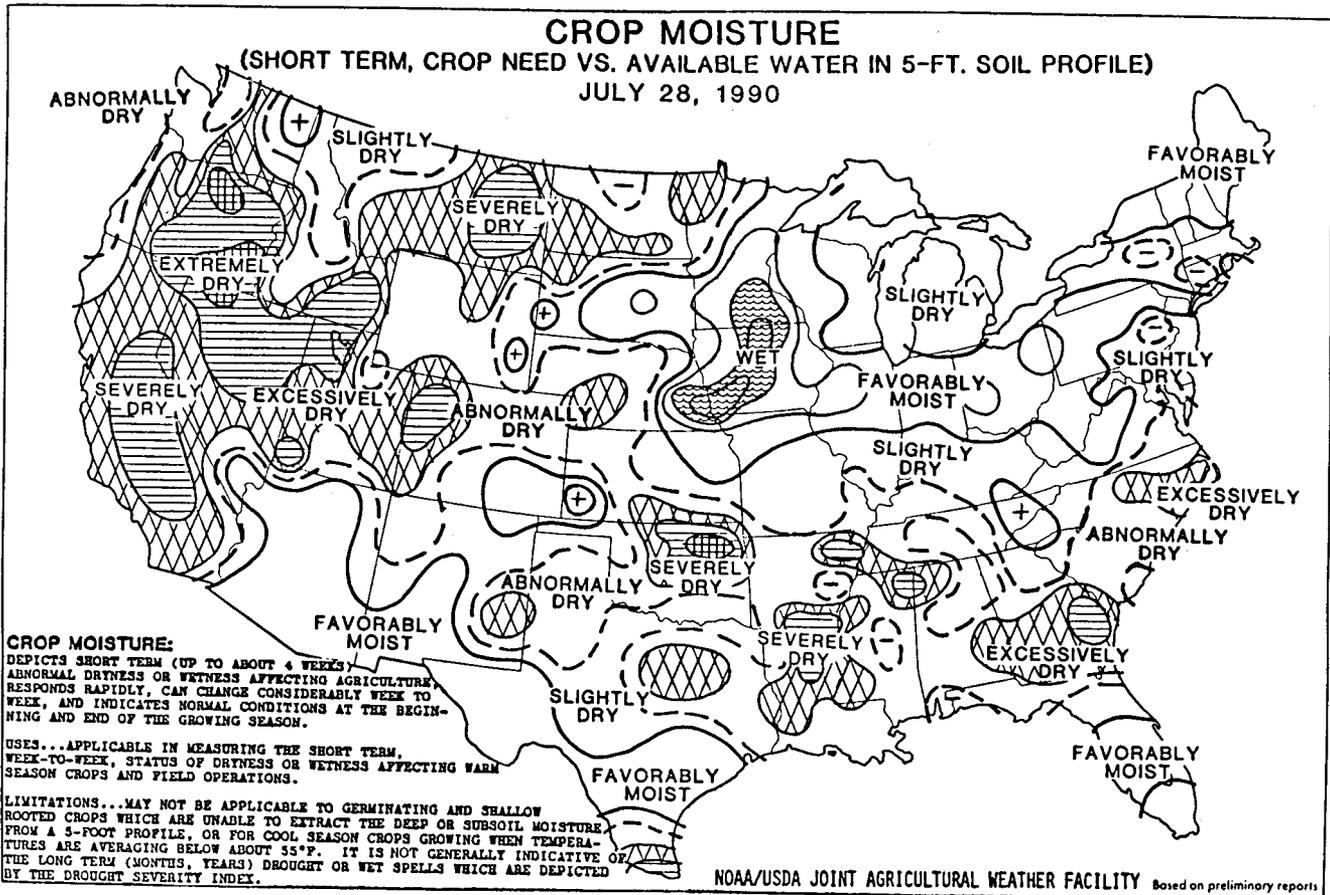
July 22-28, 1990

Intense thunderstorms rumbled across the Great Plains, upper Mississippi Valley, and the Northeast throughout the week, producing hail, high wind, locally torrential rain, and flooding. At the first of the week, showers and thunderstorms continued to develop in the warm, humid air ahead of a frontal system reaching from the southern Plains to the Northeast. At midweek, heavy rain spread from the northern Rockies and northern Plains into the Mississippi Valley. During the latter part of the week, more showers and thunderstorms formed ahead of a slow moving frontal system and drenched the southern Plains to the upper Great Lakes with additional heavy rain. Thunderstorms were scattered through the week along the Gulf and Atlantic coasts and in the Southwest. At week's end, the first tropical storm of the season, Arthur,

dissipated south of Jamaica, while the first hurricane of the season, Bertha, developed in the Atlantic east of Florida.

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National Weather Data for Selected Cities

Weather Data for the Week Ending July 28, 1990

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT	NUMBER OF DAYS							
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																		.01 INCH OR MORE	.50 INCH OR MORE		
AL BIRMINGHAM	85	68	89	61	77	-3	.4	-.8	.2	4.8	66	31.3	94	90	53	0	0	0	3	0	
MOBILE	87	70	90	67	79	-4	1.3	-.5	.9	4.7	47	43.5	118	97	59	2	0	0	3	1	
MONTGOMERY	88	70	92	66	79	-3	.7	-.4	.3	5.2	77	43.3	146	97	55	3	0	0	5	0	
AK ANCHORAGE	71	51	75	49	61	3	T	-.4	T	1.7	72	6.1	104	94	50	0	0	0	1	0	
BARROW	55	39	62	33	47	7	1.2	1.0	.3	1.7	198	2.2	125	100	71	0	0	0	6	0	
FAIRBANKS	81	55	86	51	68	6	T	-.4	T	5.3	211	7.1	151	82	32	0	0	0	0	0	
JUNEAU	71	50	82	48	61	5	1.3	.3	1.3	8.6	153	24.6	109	92	48	0	0	0	1	1	
KODIAK	64	48	71	44	56	2	.7	-.2	.6	129	34.6	115	97	66	0	0	0	2	1		
NOME	56	49	61	47	53	2	1.0	.5	.7	4.5	179	9.7	178	99	83	0	0	0	4	1	
AZ PHOENIX	104	83	112	74	93	1	.3	.2	.3	.7	120	2.9	94	64	29	7	7	0	2	0	
PRESCOTT	86	62	94	59	74	0	2.3	1.5	1.4	6.2	250	10.8	127	76	34	2	0	0	3	2	
TUCSON	97	72	104	66	85	-2	2.2	1.6	1.1	4.4	247	6.6	153	86	32	6	0	0	3	2	
YUMA	106	85	112	79	95	1	.3	.2	.3	.7	1.2	1.2	124	58	27	7	7	0	1	0	
AR FORT SMITH	94	63	99	53	79	-4	.5	-.2	.3	1.3	22	38.9	169	94	35	6	0	0	2	0	
LITTLE ROCK	90	69	96	62	80	-3	T	-.8	T	1.8	30	37.1	127	81	47	4	0	0	0	0	
CA BAKERSFIELD	102	74	108	71	88	3	0	0	0	0	0	2.6	69	65	24	7	0	0	0	0	
EUREKA	65	54	73	53	60	3	T	0	T	.5	90	20.7	93	97	80	0	0	1	0		
FRESNO	102	73	106	70	88	6	0	0	0	0	0	7.4	106	58	25	7	0	0	0	0	
LOS ANGELES	79	68	80	67	73	4	0	0	0	0	0	5.1	61	87	63	0	0	0	0	0	
REDDING	101	73	107	68	87	3	.5	.5	.5	1.3	135	20.3	82	72	24	7	0	0	1	0	
SACRAMENTO	98	63	106	60	80	4	0	0	0	0	0	11.5	108	79	25	7	0	0	0	0	
SAN DIEGO	79	69	81	68	74	4	0	0	0	0	.9	5.9	92	88	64	0	0	0	0	0	
SAN FRANCISCO	73	58	78	56	65	3	T	0	T	8	7.9	64	91	59	0	0	0	1	0		
CO DENVER	83	58	96	53	71	-3	.8	.3	.4	2.7	94	9.6	102	73	35	2	0	0	3	0	
GRAND JUNCTION	92	64	95	59	78	-2	.1	0	.1	.9	133	3.9	97	54	17	6	0	0	1	0	
PUEBLO	88	57	96	53	73	-4	.2	-.2	.2	3.0	129	9.3	157	87	31	4	0	0	1	0	
CT BRIDGEPORT	87	69	90	65	78	4	.1	-.7	.1	3.9	76	23.6	105	92	52	1	0	0	2	0	
HARTFORD	90	68	94	64	79	6	T	-.7	T	5.3	99	26.2	111	91	44	4	0	0	0	0	
DC WASHINGTON	88	71	92	68	80	1	.4	-.5	.4	6.8	116	22.9	109	91	55	3	0	0	2	0	
FL APALACHICOLA	87	73	89	71	80	-2	1.2	-.4	.8	11.9	126	25.2	94	95	64	0	0	0	3	1	
DAYTONA BEACH	89	73	92	70	81	0	1.0	-.2	.9	7.7	75	19.6	81	97	64	2	0	0	3	1	
JACKSONVILLE	91	73	94	71	82	-1	2.3	.8	1.8	6.7	67	15.6	58	95	56	4	0	0	5	1	
KEY WEST	90	80	91	78	85	1	.1	-.7	.1	3.5	46	12.2	71	80	59	4	0	0	3	0	
MIAMI	89	76	91	73	82	0	.9	-.4	.4	10.8	81	29.2	101	91	61	1	0	0	4	0	
ORLANDO	90	73	94	71	82	-1	1.6	-.3	1.2	11.0	88	19.6	72	97	57	4	0	0	3	1	
TALLAHASSEE	90	70	96	65	80	-1	.6	-1.4	.5	7.0	56	26.1	71	100	54	5	0	0	3	0	
TAMPA	92	73	93	71	82	0	1.5	-.2	.8	13.0	128	23.1	97	97	56	6	0	0	4	2	
WEST PALM BEACH	89	76	91	73	83	0	1.1	-.2	.6	15.6	128	29.6	101	92	63	3	0	0	6	1	
GA ATLANTA	86	69	89	65	77	-1	.5	-.6	.4	3.6	55	38.2	127	94	55	0	0	0	3	0	
AUGUSTA	93	69	97	65	81	0	.4	-.6	.2	2.1	31	12.5	47	98	46	6	0	0	4	0	
MACON	88	70	93	68	79	-2	1.5	.5	1.1	4.5	67	21.5	77	97	54	3	0	0	4	1	
SAVANNAH	90	73	95	72	82	0	1.1	-.6	1.0	2.2	21	16.8	59	95	54	5	0	0	4	1	
HI HILO	82	69	84	66	75	0	4.0	1.9	1.8	17.0	146	84.4	120	96	72	0	0	0	6	3	
HONOLULU	89	73	90	70	81	1	.1	0	.1	.4	44	10.2	76	79	49	1	0	0	1	0	
KAHULUI	86	71	88	67	78	0	T	-.1	T	.9	194	14.9	127	93	62	0	0	0	0	0	
LIHUE	83	75	84	73	79	0	.4	0	.2	1.2	40	20.0	85	75	57	0	0	0	2	0	
ID BOISE	95	61	99	56	78	3	0	0	0	.3	23	8.9	124	48	14	7	0	0	0	0	
LEWISTON	96	64	99	61	80	5	0	-.1	0	.8	45	7.0	92	39	13	7	0	0	0	0	
POCATELLO	89	55	94	50	72	0	T	-.1	T	.9	65	6.8	103	67	20	4	0	0	0	0	
IL CHICAGO	82	63	89	57	73	0	1.7	.9	.9	6.5	99	22.4	118	96	56	0	0	0	6	1	
MOLINE	84	65	91	58	75	-1	1.4	.2	.8	12.8	167	34.3	160	95	62	1	0	0	4	1	
PEORIA	81	64	87	60	73	-3	3.5	2.6	1.7	14.1	213	31.9	158	98	63	0	0	0	5	2	
QUINCY	85	64	91	59	74	-3	1.7	.7	1.3	8.9	127	25.9	122	97	58	1	0	0	2	1	
ROCKFORD	82	64	86	57	73	-1	2.9	1.9	2.7	13.4	174	26.9	130	94	60	0	0	0	4	1	
SPRINGFIELD	85	66	90	60	76	-1	2.8	2.0	2.6	13.6	230	33.5	171	89	57	1	0	0	3	1	
IN EVANSVILLE	89	63	93	52	76	-2	.3	-.7	.2	3.7	59	30.8	122	94	45	4	0	0	2	0	
FORT WAYNE	83	64	88	57	73	0	1.6	-.2	.6	8.3	139	28.3	142	97	56	0	0	0	2	1	
INDIANAPOLIS	84	63	88	57	74	-1	1.0	.1	1.0	6.4	92	25.2	110	95	56	0	0	0	2	1	
SOUTH BEND	82	64	88	58	73	0	3.5	2.7	1.2	8.8	137	27.2	131	96	59	0	0	0	6	3	
IA DES MOINES	82	66	87	55	74	-2	.6	-.1	.4	15.3	242	31.2	176	91	58	0	0	0	4	0	
SIoux CITY	85	63	92	54	74	-2	1.0	-.2	.9	6.1	96	17.9	117	91	51	2	0	0	2	1	
WATERLOO	81	63	86	56	72	-2	2.3	1.2	1.4	13.0	173	26.2	137	95	57	0	0	0	3	2	
KS CONCORDIA	90	66	97	55	78	-1	1.9	1.2	1.5	5.8	89	18.1	112	80	41	5	0	0	2	1	
DODGE CITY	90	63	96	58	76	-4	1.1	.4	.7	2.2	44	15.3	122	90	38	3	0	0	3	1	
GOODLAND	86	60	97	52	73	-3	.8	.3	.7	3.7	84	11.4	112	84	36	4	0	0	3	1	
TOPEKA	87	67	92	53	77	-2	2.3	1.4	2.3	8.1	101	20.8	109	88	49	2	0	0	1	1	
WICHITA	91	68	97	55	80	-2	.4	-.4	.4	2.4	36	10.7	65	78	41	6	0	0	1	0	
KY BOWLING GREEN	88	63	93	57	76	-3	.3	-.7	.3	4.1	55	25.3	84	97	49	2	0	0	1	0	
LEXINGTON	84	63	88	58	73	-3	.5	-.6	.5	9.6	126	26.9	98	93	51	0	0	0	2	0	
LOUISVILLE	88	65	94	57	77	-1	1.2	.3	.8	8.1	128	36.6	141	93	46	3	0	0	2	1	
LA ALEXANDRIA	88	72	94	63	80	-3	T	-.1	T	4.2	60	38.2	121	79	49	4	0	0	2	0	
BATON ROUGE	89	71	93	64	80	-2	.4	-1.3	.4	12.6	161	44.1	136	97	54	5	0	0	3	0	
LAKE CHARLES	87	71	92	64	79	-3	.5	-.8	.4	6.7	88	33.4	119	100	60	3	0	0	2	0	
NEW ORLEANS	87	72	91	65	79	-3	.7	-.9	.5	2.9	32	41.7	125	97	60	2	0	0	3	1	

Based on 1951-80 normals

Weather Data for the Week Ending July 28, 1990

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	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																			.01 INCH OR MORE	.50 INCH OR MORE		
SHREVEPORT	89	69	95	60	79	-4	.9	.1	.9	3.9	66	40.6	152	95	49	4	0	0	1	0		
MR CARIBOU	81	62	87	57	71	1.1	1.1	.9	1.1	5.2	89	17.4	96	90	52	4	0	0	1	0		
PORTLAND	88	65	92	63	76	1.1	1.1	.9	1.1	5.2	89	17.4	96	90	52	4	0	0	1	0		
MD BALTIMORE	89	69	96	66	79	2.3	1.4	1.1	1.1	115	23.2	99	91	46	3	0	0	1	1			
SALISBURY	90	70	94	67	80	3	2	1.1	1.1	130	25.0	110	95	50	2	0	0	1	1			
MA BOSTON	91	70	93	65	81	4	3	1.1	1.1	58	23.3	98	97	50	0	0	0	0	0			
CHATHAM	78	66	80	63	72	7	3	1.1	1.1	44	23.6	100	88	45	5	0	0	1	0			
MI ALPENA	82	58	88	53	70	3	3	1.1	1.1	80	27.3	110	96	77	0	0	0	1	0			
DETROIT	84	64	91	59	74	1	2	1.1	1.1	124	18.1	117	97	50	0	0	0	3	0			
FLINT	84	62	89	58	73	2	2	1.1	1.1	104	20.9	120	94	51	2	0	0	3	0			
GRAND RAPIDS	82	63	88	58	72	1	1.3	1.1	1.1	107	16.7	105	94	54	0	0	0	4	1			
HOUGHTON LAKE	78	60	84	52	69	2	2.3	1.6	2.2	82	17.8	98	99	55	0	0	0	6	1			
LANSING	83	63	88	59	73	2	1.9	1.6	2.2	110	15.6	105	94	54	0	0	0	2	1			
MARQUETTE	76	55	83	50	65	0	1.9	1.4	2.2	97	16.9	104	97	58	0	0	0	5	2			
MUSKEGON	78	62	83	58	70	0	.4	1.3	2.2	76	16.8	82	93	55	0	0	0	5	0			
SAULT ST. MARIE	74	54	78	49	64	0	.4	1.3	2.2	99	19.0	117	95	60	0	0	0	2	0			
MN ALEXANDRIA	80	60	87	54	70	-1	.4	1.3	2.2	111	17.9	109	98	63	0	0	0	4	0			
DULUTH	79	55	85	47	67	1	.6	1.1	4	94	15.3	110	91	41	0	0	0	3	0			
INT'L FALLS	79	52	84	50	66	-1	.3	1.3	5	93	15.8	101	95	41	0	0	0	2	0			
MINNEAPOLIS	83	63	87	58	73	-1	.3	1.3	6	115	12.2	94	96	41	0	0	0	3	0			
ROCHESTER	81	62	86	55	72	1	.8	0	4	121	188	23.8	159	89	45	0	0	3	0			
MS GREENWOOD	89	69	93	60	79	1	.9	0	6	12.9	204	28.8	185	91	49	0	0	6	1			
JACKSON	89	68	95	60	79	1	.6	-1.0	1.1	7.7	119	34.5	105	95	53	4	0	1	0			
MERIDIAN	88	68	92	61	78	1	.6	-1.5	1.3	2.7	44	36.7	116	100	53	4	0	3	0			
MO CAPE GIRARDEAU	91	67	93	59	79	1	.6	-1.7	1.3	6.3	88	48.8	148	98	56	4	0	3	0			
COLUMBIA	85	65	89	59	75	1	1.7	1.8	1.4	3.5	57	33.1	126	91	41	6	0	2	1			
KANSAS CITY	86	67	91	56	76	1	1.8	1.2	1.8	11.3	193	37.8	178	94	55	0	0	2	1			
SAINT LOUIS	91	69	95	61	80	1	2.1	1.2	1.7	9.7	129	26.8	132	87	54	1	0	2	1			
SPRINGFIELD	88	65	91	53	76	1	1.7	1.1	1.1	6.0	96	26.3	129	83	44	5	0	4	2			
MT BILLINGS	82	57	98	54	69	-2	1	-1.7	1	7.4	103	42.2	185	90	43	3	0	1	0			
GLASGOW	82	54	97	49	68	-2	1	-2	1	1.0	37	8.3	87	67	29	2	0	0	0			
GREAT FALLS	81	51	94	44	66	-4	1	-2	1	1.3	35	3.7	53	69	24	1	0	1	0			
HAVRE	80	52	94	46	66	-2	1	-2	1	1.9	52	8.8	87	80	25	1	0	0	0			
HELENA	83	55	93	51	69	0	0	-2	0	8	27	3.9	52	74	28	1	0	1	0			
KALISPELL	84	52	88	45	68	1	0	-2	0	9	34	4.5	61	56	18	3	0	0	0			
MILES CITY	84	59	98	52	71	0	0	-2	0	2.6	89	12.6	137	81	26	0	0	0	0			
MISSOULA	87	52	93	46	70	-2	0	-3	0	2.3	58	6.4	69	67	27	1	0	0	0			
NE GRAND ISLAND	86	63	94	52	75	-2	0	-2	0	5	21	7.3	91	66	17	2	0	0	0			
LINCOLN	88	65	97	51	77	-1	.7	1	7	10.1	181	18.5	126	89	45	4	0	1	-1			
NORFOLK	86	63	93	49	74	-1	1.1	1.4	1.0	4.4	72	13.5	83	86	46	4	0	2	1			
NORTH PLATTE	87	60	100	50	73	-2	1.1	1.4	1.1	10.3	156	17.7	116	87	47	3	0	1	1			
OMAHA	85	66	101	58	75	-1	1.6	1.0	.8	3.7	64	11.1	85	86	37	4	0	4	2			
SCOTTSBLUFF	83	57	96	50	70	-3	1.1	1.3	1.1	7.0	106	15.6	90	85	55	3	0	1	1			
VALENTINE	83	58	102	48	71	-4	.8	1.2	1.1	3.4	78	12.1	117	89	37	3	0	3	1			
NV BLY	86	51	89	45	69	0	.1	1.2	1.1	95	6.5	119	79	22	0	0	0	3	0			
LAS VEGAS	103	78	109	71	91	0	.3	1.2	1.6	473	3.3	162	61	22	7	0	0	3	0			
RENO	93	58	97	54	75	5	.3	1.2	1.1	186	4.1	90	77	20	6	0	0	4	0			
WINNEMUCCA	95	56	100	48	76	3	.1	1.1	1.3	29	4.4	91	61	16	7	0	0	4	0			
NH CONCORD	90	60	93	58	75	5	.1	1.1	1.1	55	17.9	94	96	40	3	0	0	1	0			
NJ ATLANTIC CITY	89	68	92	64	78	3	.1	1.1	1.1	3.8	71	19.3	86	96	53	3	0	2	0			
NM ALBUQUERQUE	91	64	93	58	78	-1	1	1.1	1.1	2.2	166	5.4	159	76	23	5	0	2	0			
CLOVIS	86	63	90	59	75	-3	1.2	1.6	1.0	1.4	31	5.1	57	93	39	1	0	2	0			
ROSWELL	91	67	93	64	79	-2	1.2	1.6	1.1	1.4	31	5.1	57	93	39	1	0	2	0			
NY ALBANY	88	65	93	60	76	5	.4	1.1	1.1	45	3.3	76	84	31	5	0	0	2	0			
BINGHAMTON	80	64	83	62	72	3	.4	1.1	1.1	3.9	74	25.3	133	95	44	3	0	3	0			
BUFFALO	80	68	85	64	74	3	.8	1.1	1.1	4.8	81	21.2	107	94	57	0	0	3	0			
NEW YORK	89	74	93	66	82	5	.7	1.1	1.1	5.3	116	26.7	142	86	55	0	0	2	0			
ROCHESTER	83	66	87	62	74	3	1.1	1.5	1.6	4.5	82	25.9	113	87	50	3	0	2	1			
SYRACUSE	86	67	90	62	76	5	1.3	1.5	1.0	4.6	75	24.1	115	93	51	1	0	2	1			
NC ASHEVILLE	80	62	83	56	71	-3	.8	0	1.1	6.4	103	30.8	123	100	61	1	0	4	1			
CHARLOTTE	88	70	91	68	79	0	1.1	1.3	1.1	3.2	51	23.3	92	94	47	3	0	5	0			
GREENSBORO	88	68	91	66	78	1	.4	1.1	1.1	1.5	22	21.7	90	95	50	1	0	4	1			
HATTERAS	85	73	87	72	79	0	.8	1.1	1.1	4.6	59	29.5	106	96	68	0	0	1	0			
NEW BERN	88	72	91	70	80	0	.7	1.1	1.1	3.8	39	27.5	96	97	62	2	0	5	0			
RALEIGH	89	71	92	67	80	2	.7	1.1	1.1	3.2	48	24.2	102	97	62	2	0	4	0			
WILMINGTON	88	72	92	70	80	-1	.6	1.1	1.1	6.7	27.1	93	97	62	2	0	2	1				
ND BISMARCK	81	53	94	47	67	-4	.1	1.1	1.1	5.9	131	8.9	91	97	62	2	0	5	0			
FARGO	80	56	86	47	68	-3	.3	1.1	1.1	6.8	128	12.2	109	90	34	1	0	3	0			
GRAND FORKS	79	54	85	49	66	-3	.5	1.1	1.1	5.7	117	11.0	108	88	41	0	0	2	0			
HILLISTON	81	50	95	47	65	-5	.1	1.1	1.1	2.4	60	5.9	69	92	39	0	0	3	0			
OH AKRON-CANTON	82	63	87	58	73	1	.9	0	1.1	9.6	161	30.4	147	96	56	0	0	3	0			
CINCINNATI	84	63	89	55	74	-2	.6	1.1	1.1	8.5	121	32.3	134	94	54	0	0	3	0			
CLEVELAND	83	65	87	60	74	1	1.9	1.2	1.6	6.0	104	24.6	123	93	51	0	0	2	1			
COLUMBUS	84	65	89	60	74	0	.9	1.2	1.6	11.9	176	30.6	140	95	51	0	0	5	1			

Based on 1951-80 normals

Weather Data for the Week Ending July 28, 1990

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS					
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																		.01 INCH OR MORE	.50 INCH OR MORE	.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	83	65	88	58	74	-1	1.4	.6	1.1	11.5	188	34.6	166	92	52	0	0	2	1		
TOLEDO	84	65	91	59	74	2	2.2	.5	.2	4.3	75	22.0	123	95	51	1	0	3	0		
YOUNGSTOWN	82	63	85	57	72	2	2.2	.7	.1	7.5	120	23.0	109	94	55	0	0	2	0		
OK OKLAHOMA CITY	89	68	93	60	78	1	1.4	1.4	1.4	3.1	52	24.9	134	90	45	3	0	2	1		
TULSA	93	71	97	64	82	-1	1.1	1.6	.2	1.2	17	25.3	112	75	36	7	0	1	0		
OR ASTORIA	72	52	82	47	62	2	2.0	.2	0.0	3.9	119	45.5	124	93	56	0	0	0	0		
BURNS	91	54	96	48	73	3	3.0	.1	0.0	1.1	16	3.3	59	51	13	5	0	0	0		
MEDFORD	100	61	105	54	80	7	7.0	4.4	4.4	.3	34	8.5	81	71	18	7	0	0	0		
PENDLETON	94	61	98	58	78	3	3.0	.0	0.0	.6	74	6.2	92	38	12	7	0	0	0		
PORTLAND	91	58	99	54	75	7	7.0	.0	0.0	2.3	128	20.9	106	84	28	4	4	0	0		
SALEM	93	52	100	47	72	6	6.0	.0	0.0	1.6	107	21.3	98	87	22	0	0	0	0		
PA ALLENTOWN	87	66	91	61	76	2	2.0	.1	.9	6.0	97	23.4	98	86	48	2	0	0	0		
ERIE	81	67	86	62	74	4	4.0	.4	4.8	7.7	23.3	116	93	61	3	0	0	0	0		
HARRISBURG	88	66	91	63	77	1	1.0	.6	.2	4.5	76	23.0	105	95	50	3	0	0	0		
PHILADELPHIA	89	71	92	67	80	3	3.0	.3	.4	5.5	85	22.8	100	96	52	4	0	0	0		
PITTSBURGH	82	63	86	58	72	0	2.0	1.2	1.1	10.2	168	27.9	129	98	59	0	0	2	1		
SCRANTON	84	66	88	61	75	3	3.0	.3	.6	8.9	155	25.1	134	92	48	0	0	0	0		
RI PROVIDENCE	89	69	91	65	79	6	6.0	.7	1.0	3.3	69	24.5	101	91	51	3	0	0	0		
SC CHARLESTON	89	74	92	72	81	0	2.5	.8	1.3	7.8	68	24.8	84	97	60	5	0	0	0		
COLUMBIA	91	71	95	69	81	0	1.5	.2	1.3	5.9	74	18.5	64	98	48	6	0	0	0		
FLORENCE	92	73	94	72	82	1	.9	.4	.5	2.6	30	12.1	47	97	48	0	0	0	0		
GREENVILLE	86	67	89	63	77	-2	1.2	.2	.1	4.2	57	26.2	86	96	53	0	0	0	0		
SD ABERDEEN	81	54	89	48	67	-1.6	1.2	.4	1.1	9.2	186	13.8	120	96	41	1	0	0	0		
RURON	82	57	92	51	69	-1.5	1.7	.2	1.6	8.6	177	18.8	158	89	45	2	0	0	0		
RAPID CITY	81	58	97	53	70	-4	1.1	.7	.7	3.3	70	10.8	95	88	43	2	0	0	0		
SIoux FALLS	83	59	96	49	71	-3	1.0	.4	.9	6.5	118	14.4	103	90	48	2	0	0	0		
TN CHATTANOOGA	87	67	91	61	77	-2	1.6	.5	1.5	7.5	117	43.5	139	96	49	2	0	0	0		
KNOXVILLE	85	66	89	60	75	-3	1.5	.5	.5	8.9	129	34.7	121	96	52	0	0	0	0		
MEMPHIS	89	69	95	60	79	-3	3.0	.9	0	4.2	68	34.2	109	89	47	3	0	0	0		
NASHVILLE	88	66	91	58	77	-2	1.8	.1	.7	6.2	99	21.4	73	90	46	3	0	0	0		
TX ABILENE	82	67	91	60	75	-10	1.6	1.2	1.0	2.4	61	18.7	149	93	52	1	0	0	0		
AMARILLO	88	63	91	61	76	-4	2.1	1.5	1.3	2.2	42	9.6	87	89	37	2	0	0	0		
AUSTIN	86	70	93	67	78	-7	2.2	1.8	1.8	4.0	91	17.7	102	100	56	3	0	0	0		
BEAUMONT	88	72	94	65	80	-3	2.7	1.3	2.5	8.5	97	44.0	150	96	57	3	0	0	0		
BROWNSVILLE	93	77	95	75	85	1	.2	.1	.1	2.6	71	8.9	83	91	53	7	0	0	0		
CORPUS CHRISTI	89	75	93	72	82	-2	1.8	.3	.5	2.2	40	14.2	97	95	64	3	0	0	0		
DEL RIO	86	71	92	68	78	-8	2.7	2.4	.9	2.8	98	14.8	169	86	53	1	0	0	0		
EL PASO	94	68	99	63	81	-2	1.3	.2	.5	2.8	28	1.7	53	85	29	6	0	0	0		
FORT WORTH	89	68	96	63	79	-7	1.8	.3	.5	3.3	87	32.5	179	92	46	3	0	0	0		
GALVESTON	86	77	88	73	81	-2	3.0	2.2	1.6	7.0	116	25.7	132	82	59	0	0	0	0		
HOUSTON	88	71	94	64	80	-4	1.2	.6	.1	5.3	77	27.4	110	93	55	3	0	0	0		
LUBBOCK	87	65	92	64	76	-4	1.7	.2	.7	.9	19	6.8	70	90	43	3	0	0	0		
MIDLAND	86	67	92	63	76	-6	1.3	.1	.2	.5	19	5.1	74	94	49	2	0	0	0		
SAN ANGELO	83	67	91	63	75	-9	2.3	2.1	2.3	2.4	90	14.6	161	92	55	2	0	0	0		
SAN ANTONIO	85	70	92	64	77	-7	7.5	7.1	4.0	9.3	215	26.1	170	94	60	2	0	0	0		
VICTORIA	87	73	92	72	80	-4	12.4	11.8	7.6	13.9	218	25.5	135	98	68	3	0	0	0		
WACO	90	69	99	65	80	-6	1.6	.2	.3	1.5	40	21.3	119	95	45	4	0	0	0		
WICHITA FALLS	91	70	98	64	80	-6	1.7	.4	.4	3.5	83	27.7	182	89	41	3	0	0	0		
UT CEDAR CITY	90	58	94	55	74	-1	1.0	.2	.7	.7	58	6.1	113	72	20	5	0	0	0		
SALT LAKE CITY	91	66	97	60	79	0	1.0	.2	.2	.8	55	6.7	71	58	19	5	0	0	0		
VT BURLINGTON	85	65	91	61	75	5	2.6	1.8	1.7	6.3	107	19.7	114	92	47	1	0	0	0		
VA NORFOLK	89	73	93	70	81	2	1.1	-1.1	.1	7.1	104	24.1	100	97	62	3	0	0	0		
RICHMOND	91	69	94	67	80	2	2.3	1.2	2.0	6.8	98	24.3	104	96	51	4	0	0	0		
ROANOKE	87	67	91	64	77	1	1.1	-1.1	.1	4.4	78	22.4	102	96	52	1	0	0	0		
WA QUILLAYUTE	77	48	87	44	63	3	0	-6.0	0	7.4	160	59.1	107	97	43	0	0	0	0		
SEATTLE-TACOMA	85	57	94	51	71	6	0	-1.0	0	3.6	196	24.0	122	86	32	2	0	0	0		
SPOKANE	89	57	95	53	73	3	0	-1.0	0	2.0	126	10.7	114	54	15	1	0	0	0		
YAKIMA	95	57	100	50	76	5	0	0	0	.3	46	3.5	79	70	16	7	0	0	0		
WV BRCKLEY	80	60	83	55	70	0	.6	-4.5	.5	6.2	86	23.0	93	97	54	0	0	0	0		
CHARLESTON	86	65	90	60	76	1	1.5	-7.3	.3	6.5	95	22.8	93	99	50	1	0	0	0		
HUNTINGTON	86	63	90	59	74	-2	1.1	-1.0	.1	6.1	92	26.5	110	95	48	1	0	0	0		
PARKERSBURG	84	62	88	59	73	-2	.9	0	.5	7.0	106	25.7	114	99	51	0	0	0	0		
WI GREEN BAY	81	61	86	57	71	1	1.6	-2.3	.3	11.6	218	21.4	141	96	51	0	0	0	0		
LACROSSE	84	66	90	60	75	2	1.5	-3.3	.3	9.9	148	21.0	123	94	47	1	0	0	0		
MADISON	81	63	86	58	72	0	2.0	1.1	.8	7.1	111	21.1	124	96	58	0	0	0	0		
MILWAUKEE	80	64	87	58	72	1	1.4	.6	.9	7.1	118	24.5	140	93	59	0	0	0	0		
WAUSAU	79	60	85	53	70	0	.7	-2.2	.6	8.1	124	18.2	107	96	48	0	0	0	0		
WY CASPER	83	54	94	49	68	-3	1.4	1.1	.8	2.6	135	7.2	95	83	29	3	0	0	0		
CHEYENNE	76	53	91	45	65	-5	1.2	.8	1.0	3.5	105	13.2	152	82	43	1	0	0	0		
LANDER	84	55	95	49	70	-2	1.5	1.4	.9	1.9	95	5.8	64	74	29	4	0	0	0		
SHERIDAN	80	52	95	50	66	-4	1.6	.4	.5	2.8	95	9.4	95	86	36	2	0	0	0		

Based on 1951-80 normals

National Agricultural Summary

July 23-29, 1990

HIGHLIGHTS: Rain improved crop condition in portions of the **Great Plains, Corn Belt, and Delta.** Soil moisture was surplus to adequate in **Iowa** and adequate to surplus in **Illinois, Indiana, and Ohio.** Crop development continued to lag behind normal in most of the **Corn Belt.** Soil moisture was generally adequate in the **Great Plains, except in Montana and North Dakota,** where soil moisture was short to adequate. Soil moisture was short to adequate in most of the **Delta and Southeast.** In the **West,** soil moisture was short to adequate.

SMALL GRAINS: Winter wheat harvest was 89 percent (%) complete, equal to the 5-year average. Harvest progressed well in Colorado and South Dakota but lagged behind normal in Montana. Montana's crop was in good to fair condition. Crop condition was good to fair in the Pacific Northwest. Rain slowed harvest in eastern Washington. Harvest advanced rapidly in Michigan and progressed well in the eastern Corn Belt.

Spring wheat was mostly good to fair with harvest 5% complete, 9 percentage points behind normal. Harvest began in Idaho, Montana, and North Dakota. Lodging was a problem in some areas of South Dakota.

CORN: Corn was in mostly good to fair condition with 56% of the acreage in the silking stage or beyond, 26 points behind normal. Eight percent of the acreage was in the dough stage, 13 points behind normal. Rain and below-normal temperatures improved crop condition in many areas. In the Corn Belt, crop condition was good, but development continued to lag behind normal, especially in Missouri and Illinois. Corn was fair to poor in Georgia and North Carolina. Harvest continued in Georgia and Texas.

SOYBEANS: Soybeans were in mostly good to fair condition with 54% of the acreage blooming, 17 points behind normal. Sixteen percent of the acreage was setting pods, 19 points behind normal. Crop development continued to lag behind normal in the Corn Belt, especially in Illinois, Missouri, and Nebraska. Crop condition was good to fair in the Corn Belt. Excess moisture was causing some yellowing and root rot in Ohio. Crop development was near or ahead of normal in the Delta and Southeast. Rain improved crop condition in portions of the Delta. Crop condition was fair or fair to good in the Delta and Southeast. Rain improved emergence for late planted soybeans in Arkansas.

COTTON: Cotton was good to fair with 97% of the acreage squaring, 4 points ahead of normal. Seventy percent of the acreage was setting bolls, 5 points ahead of normal. Crop development was near or ahead of normal except in Missouri and Tennessee. Rain improved crop condition in portions of the Delta. In Texas, harvest continued but was slowed by rain in the Coastal Bend area. Rain improved crop condition in the Plains and Hill Country. Crop condition was good in California and Arizona.

BORGHUM: Sorghum was in mostly fair to good condition with 32% of the acreage headed, 10 points behind normal. Nineteen percent of the acreage was turning color, equal to the average. Crop

development lagged behind normal in Missouri and Nebraska. Rain improved crop condition in the Great Plains and Delta. In Texas, harvest continued but lodging was a problem in some areas.

OTHER FIELD CROPS: Rice was mostly good to fair with 29% of the acreage headed, 12 points behind normal. Rice harvest continued in Louisiana and Texas. Peanut condition was good to fair in Georgia and North Carolina and good to excellent in Alabama. Tobacco was fair to good in Kentucky and good to fair in Tennessee. Tobacco harvest continued in Georgia and the Carolinas. Sugarcane was in fair to good condition in Louisiana.

FRUIT AND NUTS: Rain improved tree condition in Florida's citrus producing areas. New foliage growth was abundant. Peach harvest continued in the Delta and Southeast. Pecans were in fair to good condition in Georgia. Rain improved pecan development in Texas. Grape harvest was complete in central Arizona. Early variety apple harvest began in California. Table grape harvest gained momentum in Riverside County. Cherry harvest was complete in Hood River County, Oregon. Apricot and peach harvests were active in Washington. Cherry harvest was nearly complete in Michigan and peach and plum harvests were underway.

VEGETABLES: In Florida, land preparation for fall vegetable plantings continued. Planting was underway in some areas. Watermelon harvest continued in Georgia and South Carolina. Irish potato harvest was nearly complete in North Carolina. In Louisiana, sweetpotatoes were in good to fair condition with harvest 3% complete. Onion, potato, and carrot harvests continued in the High Plains area of Texas. In central Arizona, carrot harvest was complete and melon harvest continued. Cantaloupe, honeydew, and mixed melon harvests were active in California. In Oregon, snap bean and cucumber harvests were underway in the Willamette Valley. Early potato harvest began in Malheur County. Potato harvest continued in Washington. Potatoes were in good condition in Idaho and good to fair in Idaho. Colorado's summer potato harvest was 2% complete. Sweet corn harvest began in New York.

PASTURES AND LIVESTOCK: Pastures were in mostly good to fair condition in the Corn Belt and Great Plains. Pastures were in good to excellent condition in Illinois and Iowa. Some supplemental feeding continued in Nebraska. North Dakota's pastures were fair to poor. Rain improved pasture and range condition in Texas. In the Delta and Southeast, pastures were mostly fair. In the West, pasture and ranges were mostly fair to good but needed rain.

CROP PROGRESS
FOR WEEK ENDING JULY 29, 1990

	RICE % HEADED		
	1990	1989	AVG.
	AR	4	13
CA	5	5	7
LA	64	61	69
MS	46	37	49
TX	81	87	87
5 STATES	29	33	41
THESE 5 STATES PRODUCED 97% OF THE 1989 RICE CROP.			

	CORN % SILKING		
	1990	1989	AVG.
	CO	43	42
GA	100	100	100
IL	68	92	96
IN	62	74	87
IA	55	81	91
KS	85	75	85
KY	60	83	85
MI	30	55	65
MN	35	49	70
MO	59	95	96
NE	70	75	86
NC	99	90	95
OH	56	39	74
PA	26	18	43
SD	33	49	43
TX	94	88	94
WI	20	46	61
17 STATES	56	71	82
THESE 17 STATES PRODUCED 95% OF THE 1989 CORN CROP.			

	CORN % DOUGH		
	1990	1989	AVG.
	CO	5	3
GA	97	97	98
IL	11	26	44
IN	4	8	25
IA	0	0	9
KS	30	25	30
KY	8	15	27
MI	0	0	5
MN	0	0	0
MO	18	40	56
NE	3	4	13
NC	67	65	72
OH	7	1	24
PA	0	0	0
SD	0	0	0
TX	75	72	75
WI	0	0	0
17 STATES	8	12	21
THESE 17 STATES PRODUCED 95% OF THE 1989 CORN CROP.			

	GRAIN SORGHUM % HEADED		
	1990	1989	AVG.
	AR	36	64
CO	15	1	13
IL	8	48	NA
KS	10	10	20
LA	88	67	83
MS	83	66	75
MO	24	58	60
NE	7	21	41
NM	37	NA	NA
OK	30	55	40
SD	9	19	19
TX	74	67	71
12 STATES	32	NA	NA
EXCL. STATES WITH NA			
	32	34	42
THESE 12 STATES PRODUCED 98% OF THE 1989 GRAIN SORGHUM CROP.			
NA - NOT AVAILABLE.			

	GRAIN SORGHUM % COLORING		
	1990	1989	AVG.
	AR	0	0
CO	0	0	0
IL	0	0	NA
KS	0	0	0
LA	43	23	38
MS	37	30	31
MO	0	0	0
NE	0	0	0
NM	0	NA	NA
OK	5	10	10
SD	0	0	0
TX	58	59	58
12 STATES	17	NA	NA
EXCL. STATES WITH NA			
	19	19	19
THESE 12 STATES PRODUCED 98% OF THE 1989 GRAIN SORGHUM CROP.			
NA - NOT AVAILABLE.			

	SPRING WHEAT % HARVESTED		
	1990	1989	AVG.
	ID	3	0
MN	6	14	17
MT	1	0	6
ND	2	7	11
SD	19	40	35
5 STATES	5	11	14
THESE 5 STATES PRODUCED 89% OF THE 1989 SPRING WHEAT CROP.			

	WINTER WHEAT % HARVESTED		
	1990	1989	AVG.
	AR	100	100
CA	98	99	99
CO	93	91	93
GA	100	100	100
ID	10	5	13
IL	99	100	100
IN	99	99	100
KS	100	100	100
MI	85	65	85
MO	100	100	100
MT	9	5	22
NE	98	96	98
NC	100	100	100
OH	96	94	98
OK	100	100	100
OR	39	30	41
SD	79	86	78
TX	100	100	100
WA	25	23	28
19 STATES	89	88	89
THESE 19 STATES PRODUCED 88% OF THE 1989 WINTER WHEAT CROP.			

	SOYBEANS % BLOOM		
	1990	1989	AVG.
	AL	49	39
AR	9	24	24
GA	54	59	57
IL	57	85	90
IN	60	71	84
IA	75	95	91
KS	40	40	60
KY	36	50	54
LA	59	50	54
MI	55	45	55
MN	80	73	86
MS	53	30	43
MO	32	68	74
NE	55	73	85
NC	28	20	25
OH	53	36	63
SC	31	26	28
SD	60	67	68
TN	28	35	43
19 STATES	54	64	71
THESE 19 STATES PRODUCED 95% OF THE 1989 SOYBEANS CROP.			

	SOYBEANS % SETTLING PODS		
	1990	1989	AVG.
	AL	30	17
AR	0	4	11
GA	27	29	26
IL	17	48	57
IN	12	19	31
IA	30	50	54
KS	10	20	25
KY	6	11	16
LA	32	18	26
MI	10	4	10
MN	16	33	40
MS	18	12	18
MO	8	30	40
NE	6	24	36
NC	4	7	7
OH	12	5	30
SC	8	4	8
SD	21	21	20
TN	8	11	17
19 STATES	16	27	35
THESE 19 STATES PRODUCED 95% OF THE 1989 SOYBEANS CROP.			

	COTTON % SQUARING		
	1990	1989	AVG.
AL	100	100	100
AZ	100	100	99
AR	100	99	100
CA	100	100	100
GA	100	100	99
LA	97	97	99
MS	100	90	98
MO	100	100	100
NM	99	99	99
NC	95	89	94
OK	90	65	80
SC	96	94	97
TN	100	100	100
TX	94	80	87
14 STATES	97	88	93

THESE 14 STATES PRODUCED 99% OF THE 1989 COTTON CROP.

	COTTON % SETTING BOLLS		
	1990	1989	AVG.
AL	91	68	84
AZ	98	99	93
AR	90	72	90
CA	90	90	90
GA	97	88	90
LA	88	66	85
MS	91	54	86
MO	87	93	93
NM	70	80	73
NC	85	65	74
OK	45	15	35
SC	83	63	74
TN	62	70	76
TX	50	39	42
14 STATES	70	57	65

THESE 14 STATES PRODUCED 99% OF THE 1989 COTTON CROP.

Crop Condition PERCENT

FOR WEEK ENDING JULY 29, 1990

CORN					
STATE	VP	P	F	G	EX
CO	1	3	24	64	8
GA	16	23	44	17	0
IL	0	1	11	76	12
IN	0	3	17	67	13
IA	0	0	13	72	15
KS	0	8	30	47	15
KY	3	7	56	32	2
MI	0	3	17	50	30
MN	0	2	35	53	10
MO	0	1	52	45	2
NE	0	3	18	58	21
NC	4	26	48	22	0
OH	3	9	32	47	9
PA	0	4	20	48	28
SD	0	1	16	67	16
TX	8	18	32	37	5
WI	0	0	14	76	10
17 STATE	1	3	21	62	13
PREV WEEK	1	4	21	62	12
PREV YEAR	1	5	23	56	15

SORGHUM					
STATE	VP	P	F	G	EX
AR	0	1	71	28	0
CO	0	1	27	56	16
IL	0	0	46	47	7
KS	0	3	37	51	9
LA	0	5	39	56	0
MS	0	1	42	57	0
MO	0	9	60	31	0
NE	2	6	33	50	9
NM	0	10	60	30	0
OK	0	60	30	10	0
SD	0	6	12	72	10
TX	3	18	48	29	2
12 STATE	1	10	41	42	6
PREV WEEK	2	11	46	39	2
PREV YEAR	2	7	29	40	22

SPRING WHEAT					
STATE	VP	P	F	G	EX
ID	2	11	14	58	15
MN	2	0	36	49	13
MT	5	21	37	32	5
ND	0	0	35	52	13
SD	3	8	22	54	13
5 STATE	2	6	33	48	11
PREV WEEK	4	6	29	50	11
PREV YEAR	9	15	52	21	3

RICE					
STATE	VP	P	F	G	EX
AR	0	0	33	67	0
CA	0	0	15	75	10
LA	0	0	33	67	0
MS	0	6	38	55	1
TX	0	0	17	69	14
5 STATE	0	1	29	67	3
PREV WEEK	0	0	32	65	3
PREV YEAR	0	2	29	63	6

COTTON					
STATE	VP	P	F	G	EX
AL	0	0	27	67	6
AZ	0	0	0	100	0
AR	0	0	32	68	0
CA	0	0	10	85	5
GA	8	3	62	26	1
LA	0	0	50	50	0
MS	0	2	16	75	7
MO	0	0	82	18	0
NM	0	13	25	62	0
NC	0	0	25	68	7
OK	0	0	65	35	0
SC	0	7	83	10	0
TN	4	3	24	59	10
TX	0	16	50	30	4
14 STATE	0	8	39	49	4
PREV WEEK	3	3	43	48	3
PREV YEAR	1	18	40	37	4

SOYBEANS					
STATE	VP	P	F	G	EX
AL	0	0	26	74	0
AR	0	5	56	39	0
GA	13	10	69	8	0
IL	0	1	36	59	4
IN	0	1	34	59	6
IA	0	4	24	62	10
KS	0	1	37	53	9
KY	0	12	53	34	1
LA	0	4	34	54	8
MI	0	2	16	52	30
MN	1	1	37	55	6
MS	10	5	46	25	14
MO	0	4	60	34	2
NE	0	3	19	66	12
NC	0	6	47	47	0
OH	3	9	31	47	10
SC	0	23	48	29	0
SD	0	1	11	78	10
TN	0	3	29	59	9
19 STATE	1	4	36	52	7
PREV WEEK	1	4	35	53	7
PREV YEAR	1	6	31	53	9

VP - VERY POOR P - POOR F - FAIR G - GOOD EX - EXCELLENT

State Summaries of Weather and Agriculture

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

ALABAMA: Rainfall under 1.00 in. Temperatures within 1° of normal.

Days suitable for fieldwork 5.9. Soil moisture 53% short, 47% adequate. Dry conditions existed most areas; additional rainfall needed. Corn 99% silked, 98% 1989, 99% avg.; 79% dented, 64% 1989, 74% avg.; 49% mature, 42% 1989, 50% avg.; 14% harvested, 17% 1989, 13% avg.; 2% poor, 52% fair, 34% good, 12% excellent. Few fields sorghum harvested; 13% fair, 87% good. Cotton 91% setting bolls, 68% 1989, 84% avg.; 27% fair, 67% good, 6% excellent. Peanuts 98% pegging, 98% 1989, 94% avg.; 1% fair, 75% good, 24% excellent. Soybeans 49% blooming, 39% 1989, 46% avg.; 30% setting pods, 17% 1989, 21% avg.; 26% fair, 74% good. Pastures 17% poor, 42% fair, 38% good, 3% excellent. Livestock 30% fair, 70% good. Primary activities: Controlling insects in row crops; applying fungicides to peanuts; planting fall vegetable crops; harvesting hay, corn, fruits, vegetables; mowing pastures; routine care of livestock, poultry, catfish.

ALASKA: Dry weather continued to stress crops in the principal growing areas of the Railbelt. Highs 3° below normal at Kenai to 5° above normal at Big Delta. Lows 1 to 7° above normal. Precipitation 2.63 in. Drier than normal at Clearwater to 3.06 in. wetter than normal at Fairbanks.

Days suitable for fieldwork 5.0. Second crop hay height 6 in. Oats 85% dough; 15% turning color. Barley 60% dough; 40% turning color. Potato bloom 90%. Commercial vegetable harvest continues.

ARIZONA: Intense thunderstorms, hail central 22nd, 24th caused flooding; monsoon weakened 25th; drier air, sunny, warmer 26th to 28th; rainfall none southwest to 3.15 in. southeast. Temperatures 4° below to 1° above normal. Extremes 70°; 109° deserts, 43°; 96° mountains.

Cotton squaring 100%, 100% 1989, 99% avg.; bolls setting 98%, 99% 1989, 93% avg.; 100% good; cotton boll worms controls applied southeast; wet conditions prevented herbicide applications south central. Alfalfa mostly good; cut hay damaged by wind, rain central; rain damage mostly moderate; harvest progress mostly moderate to active. Grape, carrot harvest completed central; mixed melon harvest continued. Cabbage, pinto bean, chilies, peaches harvested east. Cattle, calves fair to good; stockwater, soil moisture short to adequate; below average to average feed supplies; sheep, lambs fair to good.

ARKANSAS: Mild week, temperatures near normal. Scattered rain showers first half of week. Extremes 58°; 108°. Rainfall 0.03 to 3.83 in.

Days suitable for fieldwork 6.0. Soil moisture 69% short, 31% adequate. Main activities: Irrigation; cultivation, applying herbicides, insecticides, fertilizer; cutting, baling hay. Corn 3% poor, 33% fair, 56% good, 8% excellent. Soybeans 100% planted, 96% 1989, 99% avg.; 99% emerged, 92% 1989, 97% avg.; 5% poor, 56% fair, 39% good. Sorghum 36% headed, 64% 1989, 71% 4 year avg.; 1% poor, 71% fair, 28% good. Cotton fruiting well, spraying for insects. Sheath blight, blast in rice. Rain helped soybean emergence. Watermelon harvest continuing, good quality. Peach, grape harvest progressing. Cooler temperatures reduced cattle stress. Mosquitoes, flies still a problem.

CALIFORNIA: Seasonably warm temperatures. Weekend thunderstorms evident over Sierra.

Irrigation, spraying, other activities progressed. Rice grew well, hot weather, some head development. Small grains matured, harvest near complete. Safflower harvest active San Joaquin, southern Sacramento Valleys. Cotton boll set progressed, cotton showing, southern counties. Sugar beet harvest continued. Alfalfa seed harvest underway, Fresno County. Seeding second crop corn, dry beans active, near complete. Alfalfa, hay crops normal progress, some rain damage north. Early variety apple harvest began; sprayed for codling, oriental fruit moths. Bagging dates, Riverside County. Grapes irrigated; treated for pests, mildew. Picking table grapes gained momentum. Freestone peaches 71%, nectarines 60%, plums packed 69%. Peaches sprayed for pests. Cling peach extra early variety harvest complete; early variety harvest begun. Bartlett pear harvest continued; Asian pear harvest begun. Summer grapefruit progressed, valencia orange harvest slow. Oranges sprayed for red scale, thrips. Almonds sprayed for navel orangeworm; last irrigation, early variety hullsplit. Walnuts treated for husk fly. Broccoli light supply, generally good quality. Cantaloupe, honeydew, mixed melons harvest active. Cauliflower moderate supply, variable quality. Celery heavy supply, generally good quality. Sweet corn harvest active. Iceberg head lettuce moderate supply, variable quality. Processing market tomatoes being harvested. Strawberries diverted juice, freezing, Watsonville area. Livestock remain generally good statewide. Pasture, range good to fair northern third, fair to very poor elsewhere. Range grasses dried rapidly. Supplemental feeding continued some areas. Water supplies diminished rapidly; adequate to light northern, light to non existent in central, southern areas. Some dry ponds necessitate water hauling.

COLORADO: Showers, thunderstorms continued through the week. Temperatures cooler than normal, 5 to 8° below normal in the most River Basins.

Days suitable for fieldwork 5.1. Soil moisture 7% very short, 18% short, 72% adequate, 3% surplus. Alfalfa second cutting 51% cut. Barley 78% turning color; 40% harvested. Oats 96% headed, 67% turning color; 41% harvested. Spring wheat 65% turning color; 21% harvested. Winter wheat 93% harvested. Dry beans flowered 45%; sorghum headed 15%. Corn silked 43%; 5% dough. Summer potatoes 2% harvested. Dry onions, fall potatoes, sugarbeets all mostly good. Livestock mostly good. Pasture, range feed 1% very poor, 6% poor, 30% fair, 53% good, 10% excellent.

FLORIDA: Temperatures within 1 to 2° of normal. Extremes 63°; 98°. Minimal rainfall northwest; elsewhere, totals mostly under 1.00 in. with local totals near 3.00 in.

Soil moisture northern Peninsula short to adequate; other areas mostly adequate. Tobacco harvest, marketing active. Corn, hay harvest active. Cotton, peanuts, soybeans, sugarcane made good progress. Pasture 17% excellent, 50% good, 33% fair. Cattle fair to excellent. Rain, thundershowers improved tree condition, abundant new growth. New crop fruit holding well, minimum dropage. Maturity testing underway. Caretakers controlling cover crops; limited spraying, young tree fertilizing continues. New plantings many

areas. Hot weather continued over vegetable producing areas. Light supply summer vegetables available mostly local markets. Field preparations, fall crops active. Planting continued limited, gaining momentum.

GEORGIA: Temperatures 1 to 2° above normal. Extremes 99° at Savannah, 56° at Blairsville. Rainfall under 0.50 in. Greatest total 4.96 in. near Savannah. Rain only 1 day most locations.

Days suitable for fieldwork 5.4. Soil moisture 12% very short, 39% short, 47% adequate, 2% surplus. Corn 89% dent, 80% 1989, 89% avg.; 60% mature, 37% 1989, 58% avg.; 7% harvested for grain, 3% 1989, 8% avg. Cotton 1% bolls open, 1% 1989, 3% avg. Sorghum 2% very poor, 12% poor, 71% fair, 15% good. Peanuts 11% poor, 47% fair, 42% good; 100% pegging, 100% 1989, 96% avg.; insect, disease control active. Very late planted soybeans poor or very poor. Tobacco 38% fair, 59% good, 3% excellent; 54% harvested, 60% 1989, 51% avg. Watermelons 93% harvested, 92% 1989, 93% avg. Apples 13% poor, 49% fair, 38% good; 15% harvested, 2% 1989, 11% avg. Peaches 98% harvested, 94% 1989, 95% avg. Pecans 2% very poor, 16% poor, 54% fair, 28% good; aphid buildup heavy. Hay 6% very poor, 16% poor, 47% fair, 31% good; growing well. Pasture 2% very poor, 20% poor, 44% fair, 33% good, 1% excellent; much improved north. Cattle, hogs fair to good. Main activities: Spraying pesticides for cotton, peanuts, harvesting tobacco, corn, watermelons, irrigating.

HAWAII: Fair weather over most of State. Showerband passed through island chain towards weekend causing some rainfall mostly windward areas, higher elevations. Winds 10 to 20 mph. Temperatures high 60s to high 80s. Rainfall none to 3.90 in.

Days suitable for farm work 7.0. Crops made good progress during week. Passing showers benefitted banana orchards, production increasing. Added soil moisture benefitted pastures some localities.

IDAHO: Temperatures below normal. Precipitation above normal north, below normal east.

Days suitable for fieldwork 6.0. Soil moisture 11% very short, 25% short, 63% adequate, 1% surplus. Spring wheat 82% turning color. Spring barley 5% harvested, 1% 1989, 4% avg.; 82% turning color. Potato good; 77% closing middles; 10% turning color. Oats 9% harvested, 4% 1989, 4% avg. Dry peas 6% harvested, 1% 1989, 12% avg. Lentils 3% harvested, 0% 1989, 3% avg. Peaches 26% harvested, 8% 1989, 15% avg. Mint 35% harvested. Irrigation water good to fair. Livestock good. Feed supplies east matured rapidly mid elevation ranges. Range, pasture 8% poor, 38% fair, 44% good, 4% excellent.

ILLINOIS: Temperatures generally normal to 2° below normal across State. Precipitation generally 0.25 to 1.00 in., isolated areas more than 1.00 in.

Days suitable for fieldwork 4.50. Soil moisture 7% short, 75% adequate, 18% surplus. Oats 1% poor, 27% fair, 66% good, 6% excellent; turning color 97%, 100% 1989, 100% avg.; ripe 80%, 98% 1989, 99% avg.; harvested 49%, 83% 1989, 88% avg. Alfalfa 1% poor, 11% fair, 71% good, 17% excellent. Alfalfa hay second cutting 77%, 97% 1989, 93% avg. Pasture 2% poor, 8% fair, 66% good, 24% excellent.

INDIANA: Temperatures 1 to 4° below normal. Lows low to mid 60s, highs low to upper 80s. Precipitation up to 3.00 in.

Days suitable for fieldwork 4.0. Topsoil 2% short, 78% adequate, 20% surplus. Subsoil 2% short, 80% adequate, 18% surplus. Corn 70 in. high, 77 in. 1989, 76 in. avg. Soybeans 22 in. high, 23 in. 1989, 25 in. avg. Oats 70% harvested,

69% 1989, 81% avg. Alfalfa hay 80% cut twice, 75% 1989, 86% avg. Pasture 21% fair, 73% good; 6% excellent. Corn continues to have good growth, development aided by rain, favorable growing conditions.

IOWA: Temperatures 1 to 2° below normal. Extremes 53°; 91°. Precipitation 0.33 to 10.17 in; average 2.62 in. January to July period is wettest in 118 years.

Days suitable for fieldwork 3.4. Topsoil 48% adequate, 52% surplus. Subsoil 3% short, 68% adequate, 29% surplus. Winter wheat 95% harvested, 100% 1989, 100% avg. Hay 2% poor, 20% fair, 64% good, 14% excellent. Pasture 2% poor, 10% fair, 58% good, 30% excellent. Oats 60% harvested, 94% 1989, 95% avg. Second crop alfalfa hay 75% harvested, 93% 1989, 90% avg. Corn 80% tasseled, 97% 1989, 99% avg. Livestock excellent. Feedlots extremely muddy.

KANSAS: Temperatures high 70s except south central 80°. Slightly above normal north central, west central; slightly below normal elsewhere. Rain fell most areas; low of 0.79 in. south central to high of 2.62 in. north central, southwest. Locally heavy 7.81 in. Minneapolis; 5.59 in. Milford Lake; 4.63 in. Yates Center.

Days suitable for fieldwork 5.0. Topsoil 48% short, 44% adequate, 8% surplus. Subsoil 51% short, 49% adequate. Corn good growth, on schedule; sorghum, soybeans generally behind schedule. Moderate to heavy rains relieved drought stress central, northern areas, locally heavy hail damage in scattered areas. South central, southeast areas still need rain. Range, pasture good for time of year. Alfalfa hay, second cutting complete; third cutting good progress. Hay prospects boosted by last weeks rain.

KENTUCKY: Temperatures slightly below normal, highs mid to upper 80s; lows, low to mid 60s. Precipitation light, spotty. Little or no rain west. East near 0.20 in. Isolated locations 0.50 to 1.50 in.

Days suitable for fieldwork 4.8. Soil moisture 9% very short, 38% short, 51% adequate, 2% surplus. All crop conditions improved. Scattered heavy rains previous weekend caused some water damage to low lying crop acres. Corn prospects variable with late planted corn benefitting most from rain. Soybean spraying active. Burley tobacco 12% topped. Tobacco 6% poor, 57% fair, 33% good, 4% excellent. Some tobacco damage from previous heavy showers. Hay, pastures improved. Pasture 1% very poor, 8% poor, 40% fair, 42% good, 9% excellent.

LOUISIANA: Temperatures near normal. Extremes 66°; 98°. Rainfall 0.32 to 1.50 in.

Days suitable for fieldwork 5.5. Soil moisture 46% short, 51% adequate, 3% surplus. Corn dough stage 100%, 93% 1989, 96% avg.; mature 86%, 47% 1989, 49% avg.; harvested 2%, 4% 1989, 6% avg.; 21% fair, 68% good, 11% excellent. Cotton squaring 97%, 97% 1989, 90% avg.; setting bolls 88%, 66% 1989, 85% avg.; open bolls 0%, 0% 1989, 4% avg.; 50% fair, 50% good. Hay first cutting 99%, 86% 1989, 96% avg.; final cutting 12%, 1% 1989, 3% avg. Peaches harvested 86%, 83% 1989, 91% avg. Rice headed 64%, 61% 1989, 69% avg.; ripe 19%, 13% 1989, 14% avg.; harvested 9%, 3% 1989, 8% avg.; 33% fair, 67% good. Second crop management south. Sorghum headed 88%, 67% 1989, 83% avg.; turning color 43%, 23% 1989, 38% avg.; ripe 4%, 2% 1989, 7% avg.; 5% poor, 39% fair, 56% good. Spraying for corn earworm, webworms south. Soybeans emerged 98%, 97% 1989, 99% avg.; blooming 59%, 50% 1989, 54% avg.; setting pods 32%, 18% 1989, 26% avg.; 4% poor, 34% fair, 54% good, 8% excellent. Sweet potatoes planted 99%, 95% 1989, 99% avg.; harvested 3%, 1% 1989, 3% avg.; 30% fair, 60% good, 10% excellent.

Cucumber beetle spraying central. Sugarcane 9% poor, 58% fair, 33% good. Borer scouting, spraying continued. Livestock 2% poor, 25% fair, 73% good. Pasture 5% poor, 55% fair, 40% good. Vegetable 3% very poor, 6% poor, 66% fair, 25% good.

MARYLAND & DELAWARE: **MARYLAND:** Precipitation 0.75 in. Temperature 78°, normal 76°. Extremes 49°; 95°.

Days suitable for fieldwork 5.5. Topsoil 25% short, 65% adequate, 10% surplus. Subsoil 15% short, 75% adequate, 10% surplus. Corn good; 80% silked, 55% 1989, 74% avg.; 34% dough, 12% 1989, 31% avg. Soybeans good; 43% bloomed, 33% 1989, 36% avg.; 13% setting pods, 7% 1989, 9% avg. Small grains fair to good. Wheat 99% harvested, 93% 1989, 99% avg. Oats 62% harvested, 45% 1989, 67% avg. Rye 93% harvested, 93% 1989, 93% avg. Potatoes 50% harvested, 39% 1989, 40% avg. Snap beans 69% harvested, 61% 1989, 68% avg. Tomatoes 48% harvested, 38% 1989, 35% avg. Sweet corn 50% harvested, 43% 1989, 52% avg. Cucumbers 86% harvested, 87% 1989, 81% avg. Lima beans 8% harvested, 18% 1989, 20% avg. Cantaloupes 45% harvested, 49% 1989, 52% avg. Watermelons 43% harvested, 27% 1989, 33% avg. Hay supplies adequate. Alfalfa hay second cut 88% complete, 81% 1989, 94% avg. Other hay second cut 43% complete, 45% 1989, 73% avg. Apples fair to good. Peaches fair to good. Peaches 35% harvested, 22% 1989, 34% avg. Pasture fair.

DELAWARE: Precipitation 0.77 in. Temperature 79°, normal 77°. Extremes 64°; 94°.

Days suitable for fieldwork 6.4. Topsoil 100% adequate. Subsoil 100% adequate. Corn good; 91% silked, 87% 1989, 87% avg.; 13% dough, 20% 1989, 23% avg. Soybeans good; 23% bloomed, 23% 1989, 29% avg. Potatoes 30% harvested, 13% 1989, 30% avg. Snap beans 64% harvested, 69% 1989, 68% avg. Tomatoes 32% harvested, 18% 1989, 15% avg. Sweet corn 36% harvested, 48% 1989, 48% avg. Cucumbers 35% harvested, 73% 1989, 61% avg. Cantaloupes 53% harvested, 44% 1989, 42% avg. Watermelons 25% harvested, 14% 1989, 14% avg. Hay supplies adequate. Alfalfa hay second cut 94% complete, 92% 1989, 98% avg. Other hay second cut 64% complete, 85% 1989, 78% avg. Apples good. Peaches 81% harvested, 38% 1989, 26% avg. Pasture fair to good.

MICHIGAN: Temperatures 3° below to 3° above normal. Extremes 40°; 89°. Precipitation none to 0.97 in. across State.

Days suitable for fieldwork 6.0. Soil moisture 22% short, 75% adequate, 3% surplus. Corn 30% silked, 55% 1989, 65% avg.; 0% dough, 0% 1989, 5% avg.; 3% poor, 17% fair, 50% good, 30% excellent. Soybeans 55% blooming, 45% 1989, 55% avg.; 10% setting pods, 4% 1989, 10% avg.; 2% poor, 16% fair, 52% good, 30% excellent. Wheat 85% harvested, 65% 1989, 85% avg. Pasture 5% poor, 30% fair, 40% good, 25% excellent. Major activities: Harvesting wheat, hoeing dry beans, spraying for leaf hoppers, ground work for fall planting. Cherry harvest nearing completion. Plum, peach harvest beginning. Vegetable harvest continuing at normal pace.

MINNESOTA: Temperatures 1 to 2° below normal. Extremes 43°; 96°. Precipitation none to 4.30 in., greatest weekly total 5.06 in.

Days suitable for fieldwork 4.6. Topsoil 9% very short, 24% short, 43% adequate, 24% surplus. Spring wheat 85% turning ripe, 84% 1989, 81% avg.; 16% cut, 28% 1989, 30% avg.; 6% combined 14% 1989, 17% avg. Oats 95% turning ripe, 96% 1989, 93% avg.; 43% cut 69% 1989, 63% avg.; 15% combined, 40% 1989, 44% avg. Barley 87% turning ripe, 97% 1989, 90% avg.; 54% cut, 51% 1989, 45% avg.; 21% combined, 24% 1989, 27% avg. Corn 55% tasseling, 81% 1989, 88% avg.; 10% in milk, 15% 1989, 24% avg. Soybeans 80% blooming, 73% 1989, 86% avg.; 16% setting pods, 33% 1989, 40% avg. Winter wheat 29%

harvested, 67% 1989, 61% avg. Rye 22% harvested, 69% 1989, 61% avg. Field corn 2% poor, 35% fair, 53% good, 10% excellent. Soybeans 1% very poor, 1% poor, 37% fair, 55% good, 6% excellent. Spring wheat 2% very poor, 36% fair, 49% good, 13% excellent.

MISSISSIPPI: Temperatures 1° below normal. Extremes 60°; 99°. Mostly dry statewide. Rainfall 0.48 in., 0.62 in. below normal. Soil temperature 87°.

Days suitable for fieldwork 5.7, 3.8 1989, 5.3 avg. Soil moisture 8% very short, 49% short, 43% adequate. Cotton 100% squaring, 90% 1989, 98% avg.; boll setting 91%, 54% 1989, 86% avg.; 8% very poor, 5% poor, 32% fair, 37% good, 18% excellent. Corn 95% silking, 91% 1989, 95% avg.; 75% dough, 63% 1989, 77% avg.; 50% dent, 38% 1989, 54% avg.; 21% mature, 8% 1989, 14% avg.; 15% silage harvested, 17% 1989, 27% avg.; 12% poor, 28% fair, 59% good, 1% excellent. Rice 46% heading, 37% 1989, 49% avg.; 6% poor, 38% fair, 55% good, 1% excellent. Soybeans 100% planted, 94% 1989, 100% emerged, 78% 1989, 53% blooming, 30% 1989, 43% avg.; 18% podding, 12% 1989, 18% avg.; 10% very poor, 5% poor, 46% fair, 25% good, 14% excellent. Sorghum 83% heading, 66% 1989, 75% avg.; 37% coloring, 30% 1989, 31% avg.; 1% poor, 42% fair, 57% good. Peaches 90% harvested, 87% 1989, 86% avg.; 30% very poor, 28% poor, 15% fair, 26% good, 1% excellent. Hay 61% harvested, 40% 1989, 60% avg. Peanuts 2% harvested. Pasture, livestock good to fair. Activities: Cultivating row crops, cutting hay, spraying pesticides, irrigating cotton, trimming pastures.

MISSOURI: Temperatures 3 to 6° below normal. Rainfall 0.79 in., heaviest north, least south.

Days suitable for fieldwork 4.3. Topsoil 17% short, 74% adequate, 9% surplus, southern one third mostly short. Corn silking 33% east central to 97% southwest. Row crops mostly fair to good all districts. Oat harvest 88%, 100% 1989, 100% avg. Second cutting alfalfa 86%, 98% 1989, 98% avg. Third cutting 16%, 22% 1989, 38% avg. Other hay cut 87%, 90% 1989, 93% avg. Pasture 7% poor, 35% fair, 50% good, 8% excellent.

MONTANA: Temperatures below normal. Precipitation statewide with amounts up to 3.49 in. Northwest, north central divisions over an inch.

Days suitable for fieldwork 5.5. Topsoil 66% short, 32% adequate, 2% surplus. Subsoil 71% short, 29% adequate. Winter wheat 2% very poor, 5% poor, 23% fair, 50% good, 20% excellent. Barley 3% very poor, 10% poor, 30% fair, 47% good, 10% excellent; 10% ripe, 8% 1989, 14% avg. Oats 4% very poor, 18% poor, 43% fair, 31% good, 4% excellent; 9% ripe, 10% 1989, 16% avg. Pasture, range feed 6% very poor, 12% poor, 30% fair, 44% good, 8% excellent. Second cutting alfalfa harvested 11%, 18% 1989, 28% avg. Other hay harvested 79%, 67% 1989, 74% avg.

NEBRASKA: Temperatures 3° below normal. Extremes 45°; 99°. Precipitation 0.15 in. north to 5.42 in. east.

Days suitable for fieldwork 4.9. Topsoil 36% short, 54% adequate, 10% surplus. Subsoil 46% short, 54% adequate. Alfalfa 2% very poor, 12% poor, 38% fair, 36% good 12% excellent; 90% second cutting, 85% 1989, 91% avg.; 7% third cutting; 12% 1989, 10% avg. Second cutting less than first, no third cutting unless rain received some areas. Rain slowed winter wheat harvest in Panhandle early part of week. Corn borers north, northeast, east. Corn 5 to 10 day behind normal development due to cool nights. Hail damage some corn, north, south. Grasshoppers, chinch bugs still causing damage east, southeast. Oats 85% harvested, 85% 1989, 90% avg. Concern about condition of fields in

northeast that were swathed, then rained on before combining. Local heavy rains caused erosion, low land flooding, eastern third of State. Areas missed by spotty rains, showing varying degrees of stress, south, southwest areas worst. Pasture, range 6% very poor, 23% poor, 30% fair, 35% good, 6% excellent. Little cattle movement except southwest where pastures were short, brown. Some operators feeding hay to supplement pastures. Fieldwork: Harvesting small grains, haying, irrigating, walking soybeans, working summer fallow, insect, weed control, preparing fields for fall planting.

NEVADA: Hot, dry weather continued another week. Widely scattered thunderstorms produced more wind than precipitation. Only one station recording measurable precipitation.

Baling second crop alfalfa hay most areas. Good progress wild or meadow hay. Quality excellent due lack precipitation. Small grain harvest moving northward. Hot, dry weather accelerating maturity. 1990 potato acreage starting blooming stage. Stockwater sources drying rapidly.

NEW ENGLAND: Precipitation 0.10 to 1.50 in. Connecticut, 0.90 to 1.70 in. New Hampshire, Vermont, 0.20 to 4.50 in. Massachusetts, Rhode Island, 0.90 to 5.40 in. Maine. Temperatures high 60s to low 70s north, low to mid 70s south; 1 to 3° above normal. Maximum temperatures mid to high 80s north, to low 90s south.

Days suitable for fieldwork 5.0. Soil moisture north 16% short, 72% adequate, 12% surplus, south 34% short, 49% adequate, 17% surplus. Grazing availability 11% short, 85% adequate, 4% surplus. Pasture 3% poor, 34% fair, 57% good, 6% excellent. Maine, Rhode Island, Connecticut River Valley potatoes good. Maine oats good. Field corn condition good. Sweet corn condition good. First cut hay 95% harvested, 94% 1989, 95% avg.; good. Second cut hay 40% harvested, 30% 1989, 36% avg.; good. Outdoor, shade tobacco good. Apples sizing well, scab infection light to average. Blueberries 25% harvested, good. Cranberries good. Major farm activities: Cutting hay, harvesting vegetables, tobacco, blueberries, cultivating vegetables, spraying for insects, disease.

NEW JERSEY: Temperatures near normal. Extremes 57°; 95°. Rainfall 0.18 in. north, 0.99 in. central, 0.76 in. south. Heaviest 24 hour total 1.85 in. on 23rd, 24th. Estimated soil moisture percent field capacity averaged 71% north, 64% central, 51% south. Four inch soil temperatures averaged 74° north, 76° central, 77° south.

Soil moisture ranged short to excessive, adequate most areas. Summer vegetable harvest active. Scattered irish potato digging for local markets continued. Blueberry harvest nearing completion. Peach picking active. Light harvest of summer variety apples continued. Combining of wheat, rye, oats active as conditions permitted. Early field corn in silk stage. Second cutting hay advanced. Pasture growth good.

NEW MEXICO: Temperatures 1 to 2° below normal statewide. Measurable precipitation most locations except extreme northwest.

Days suitable for fieldwork 5.9. Soil moisture 59% short, 38% adequate, 3% surplus. Severe hail received on 22nd in Torrance county. Livestock, rangeland conditions improving with continued rains. Cattle, sheep both fair to good. Range 6% very poor, 53% poor, 35% fair, 6% good.

NEW YORK: Very warm week. Highs mid 80s to low 90s. Lows mid 50s to mid 60s. Widely scattered thunderstorms each day affecting small percentage of State.

Days suitable for fieldwork 5.7. Soil moisture mostly adequate. Some areas getting dry, need rain. Pastures 25% fair, 69% good, 6% excellent. Hay, oats, wheat good. Oat, wheat harvests gaining momentum. Hay harvest in full swing. First cutting of alfalfa virtually finished. Second cutting 35% complete, 30% 1989, 35% avg. Clo tim harvest 98% complete, 86% 1989, 92% avg. Some potatoes in Orange County nearly ready for digging. Corn in most areas was tasselling, some areas silking. Sweet corn harvest underway. Strawberry harvest active in some areas. Wide range of vegetables being harvested. Orange County onion excellent condition. Growers expecting very good yields. Harvest near.

NORTH CAROLINA: Temperatures 3° below normal in the Mountains. Piedmont temperatures 1° below to 1° above normal. Coastal Plains 1 to 2° above normal for the week. Precipitation none to 1.80 in.

Days suitable for fieldwork 6.0. Soil moisture 14% very short, 49% short, 37% adequate. Pasture 2% very poor, 18% poor, 50% fair, 30% good. Livestock feed from pasture 74%. Hay second cutting 49%. Irish potatoes harvested 96%; peaches harvested 79%; flue cured tobacco harvested 27%. Corn silked 99%; corn soft dough 70%; corn dent 48%; cotton squared 95%; cotton setting bolls 85%; soybeans blooming 28%; tobacco topped 87%. Crop: Corn 4% very poor, 6% poor, 48% fair, 22% good; cotton 25% fair, 68% good, 7% excellent; soybeans 6% poor, 47% fair, 47% good; peanuts 33% fair, 67% good; tobacco 1% poor, 29% fair, 66% good, 4% excellent; sweet potatoes 40% fair, 60% good; peaches 4% very poor, 34% poor, 35% fair, 23% good; apples 22% poor, 35% fair, 43% good; truck crops 12% poor, 45% fair, 43% good; hay 2% very poor, 10% poor, 54% fair, 33% good, 1% excellent. Major activities: Spraying, harvesting, topping, irrigating flue cured tobacco; hay harvesting; cultivating, spraying field crops; harvesting vegetables. Other activities included: Tending livestock; harvesting irish potatoes; harvesting peaches; general farm maintenance.

NORTH DAKOTA: Temperatures 1° below normal southeast, southwest to 1° above normal northwest, northeast. Precipitation 0.14 in. northeast to 0.66 in. north central. Southeast, southwest report over 1.50 in. rainfall deficit from normal.

Days suitable for fieldwork 6.5. Topsoil 14% very short, 64% short, 22% adequate. Subsoil 33% very short, 55% short, 12% adequate. Spring wheat 35% fair, 52% good, 13% excellent; 8% swathed or combined, 26% 1989, 23% avg. Durum 31% fair, 57% good, 12% excellent; 4% swathed or combined, 12% 1989, 11% avg. Winter wheat 11% poor, 44% fair, 40% good, 5% excellent; 41% swathed or combined, 69% 1989, 70% avg. Oats 51% fair, 41% good, 8% excellent; 18% swathed or combined, 32% 1989, 32% avg. Barley 32% fair, 64% good, 4% excellent; 30% swathed or combined, 48% 1989, 40% avg. Late season crops: Corn 1% poor, 21% fair, 75% good, 3% excellent; 51% tasseling to silking and beyond, 62% 1989, 72% avg. Flax 2% poor, 21% fair, 70% good, 7% excellent; 4% turning to ripe, 11% 1989, 12% avg. Potatoes 46% fair, 54% good; 50% rows filled, 29% 1989, NA avg. Soybeans 12% fair, 80% good, 8% excellent; 3% fully podded, 1% 1989, 9% avg. Dry beans 23% fair, 72% good, 5% excellent; 90% bloom and beyond, 77% 1989, 80% avg. Sunflower 25% fair, 62% good, 13% excellent; 13% bloom and beyond, 19% 1989, 27% avg. Sugarbeets 25% fair, 60% good, 15% excellent. Pastures 7% very poor, 32% poor, 39% fair, 22% good. Stockwater 3% very short, 34% short, 63% adequate. Hay crop harvest nearly complete; first cutting alfalfa 99%, other hay 83%.

OHIO: Daily high temperatures low to mid 80s. Lows 50s to lower 60s; about 4° below normal. Rainfall 0.15 in. or less which was 0.70 to 0.95

in. below normal. Growing degree days 166 to 188° in the north to 188 to 210° in the south.

Day suitable for fieldwork 4.2. Soil moisture 1% short, 78% adequate, 21% surplus. Activities include: Baling hay, straw, cultivating row crops, spraying for insects, weeds, combining oats, harvesting fresh market tomatoes, peppers, topping tobacco plants, seeding alfalfa. Army worms still present across the mid section of the State. Silking advanced to 56%, cooler nights have slowed development. Excessive soil moisture is taking its toll on the soybean crop causing leaf yellowing as well as root, stem rot. Winter wheat harvest finishing up in the northeast. Oat harvest is nearly one third complete. Sporadic showers upset drying, curing process of 2nd cutting alfalfa. Pasture 3% poor, 31% fair, 53% good, 13% excellent. Fresh market vegetable harvest continuing statewide. Southern counties reporting some angular leaf spot, blue mold on tobacco plants. Summer apple harvest one third complete around the State.

OKLAHOMA: Temperatures 4° below normal southwest to 1° below normal central. Precipitation 0.04 in. northeast to 2.22 in. southeast.

Days suitable for fieldwork 6.3. Topsoil 80% short, 20% adequate. Subsoil 65% short, 35% adequate. Wheat 100% harvested, 100% 1989, 100% avg.; 92% ground plowed, 80% 1989, 95% avg.; 5% seedbed prepared, 5% 1989, 5% avg. Cotton 65% fair, 35% good; 90% squaring, 65% 1989, 80% avg.; 45% setting bolls, 15% 1989, 35% avg. Sorghum 60% poor, 30% fair, 10% good; 30% heading, 55% 1989, 40% avg.; 5% coloring, 10% 1989, 10% avg. Soybeans 25% flowering, 40% 1989, 40% avg.; 3% setting pods, 10% 1989, 10% avg. Peanuts 85% pegging, 75% 1989, 75% avg.; 35% setting pods, 25% 1989, 30% avg. Corn 80% tasselling, 90% 1989, 95% avg.; 25% milk to soft, 35% 1989, 70% avg.; 2% mature, 2% 1989, 15% avg. Alfalfa 80% third cutting, 75% 1989, 65% avg.; 10% fourth cutting, 5% 1989, 5% avg. Pastures 5% very poor, 3% poor, 80% fair, 12% good. Cattle good; marketings average, prices down slightly from last week.

OREGON: Minimal rainfall. All areas no more than traces of precipitation. Enterprise 0.50 in. rainfall in one day. Daytime highs in 90s to 100s across State except coast. Temperatures, 1 to 2° above normal. Highest temperature 102° Hermiston, Grants Pass.

Soil moisture 87% short, 13% adequate. Barley 37% harvested, 27% 1989, 44% avg. Grass seed harvest continued Willamette Valley. Garlic harvest underway. Mint harvest beginning. Cherry harvest completed Hood River Co. Tart cherry harvest nearly completed Willamette Valley. Pruning cherry orchards Wasco Co. Red Haven peaches mid harvest Hood River, Willamette Valleys. Blueberry harvest continuing Washington, Multnomah Counties. Raspberry harvest complete Benton Co. Gravenstein apple harvest began Benton Co.; will begin next week Hood River area. Bartlett pear harvest expected second week August Hood River, excellent crop. Cranberry development good along southern coast. Harvest underway snap beans, cucumbers Willamette Valley. Sweet corn tasseling western areas. Fall cole crops planted Willamette Valley. Potatoes growing well, early fields harvested, Malheur County. Livestock good to excellent. Stockwater shortage south central areas. Range, pasture 4% poor, 48% fair, 31% good, 17% excellent.

PENNSYLVANIA: Dry week with near normal temperatures. Temperature 72°, 1° above normal. Extremes 49°; 92°. Precipitation 0.31 in., 0.55 in. below normal.

Days suitable for fieldwork 5.0. Soil moisture 12% short, 73% adequate, 15% surplus. Corn 26% silk, 18% 1989, 43% avg.; height 55 in., 51 in.

1989, 58 in. avg.; 4% poor, 20% fair, 48% good, 28% excellent. Soybean 2% very poor, 4% poor, 24% fair, 45% good, 25% excellent. Barley 1% heading or headed, 0% 1989; 5% turning yellow, 3% 1989; 24% ripe, 23% 1989; 70% harvested, 74% 1989. Wheat 1% heading or headed, 0% 1989; 3% turning yellow, 4% 1989; 36% ripe, 22% 1989; 60% harvested, 74% 1989. Wheat 3% very poor, 8% poor, 19% fair, 53% good, 17% excellent. Oats 18% heading or headed, 19% 1989; 33% turning yellow, 38% 1989; 32% ripe, 33% 1989, 17% harvested, 10% 1989; 4% poor, 19% fair, 52% good, 25% excellent. First cutting alfalfa 99% complete, 95% 1989. Second cutting alfalfa 58% complete, 44% 1989. First cutting clover timothy 96% complete, 90% 1989. Hay stands mostly good to fair. Pasture 2% very poor, 10% poor, 65% good, 23% excellent. Peach 36% below avg., 64% avg. Apple 13% below avg., 84% avg., 3% above avg. Activities: Harvesting hay, haylage, barley, oats, wheat, fruit, vegetables; repairing fence; weed control; hauling manure; spreading fertilizer; maintaining machinery; caring for livestock.

PUERTO RICO: Rainfall 1.46 in. was 0.17 in. above normal. Highest rainfall 3.90 in. at Maricao, 3.00 in. at San Lorenzo, 2.45 in. at Yauco. Highest 24 hour total was 1.80 in. at Canovanas. Temperatures 80 to 82° on the Coasts, 74 to 77° in the Interior with Mean Station 66° at Pico Del Este Luquillo to 84° at Roosevelt Roads N.S. Extremes 63°; 94°.

SOUTH CAROLINA: Temperatures 2° below normal in northwest to 2° above normal on the south coast. Rainfall less than 0.10 in. to greater than 3.00 in. over the State.

Days suitable for fieldwork 5.8. Soil moisture 11% very short, 68% short, 21% adequate. Cotton 7% poor, 83% fair, 10% good; 96% squaring, 94% 1989, 97% avg.; 83% setting bolls, 63% 1989, 74% avg. Soybeans 23% poor, 48% fair, 29% good; 31% blooming, 26% 1989, 28% avg.; 8% setting pods, 4% 1989, 8% avg. Corn poor to fair, 94% dough stage, 74% 1989, 83% avg.; 66% matured, 31% 1989, 35% avg.; 5% harvested, 1% 1989, 3% avg. Sorghum fair, 5% harvested, 5% 1989, 6% avg. Tobacco fair to good, 98% topped, 96% 1989, 97% avg.; 40% harvested, 28% 1989, 29% avg. Peanuts fair. Watermelons fair, 85% harvested, 74% 1989, 80% avg. Cantaloupes fair, 80% harvested, 76% 1989, 78% avg. Peaches fair, 76% harvested, 69% 1989, 73% avg. Pastures 3% very poor, 32% poor, 60% fair, 5% good.

SOUTH DAKOTA: Temperatures 0 to 6° below normal. Extremes 32°; 100°. Precipitation above normal central, north central, northeast, east central; maximum 4.78 in. Growing season precipitation above normal in the east, central, below normal west. Range 8.37 in. above to 3.43 in. below normal. Growing degree days 216 units above to 169 units below normal.

Days suitable for fieldwork 4.3. Subsoil 11% critically short, 36% short, 51% adequate, 2% surplus. Topsoil 6% critically short, 22% short, 64% adequate, 7% surplus. Range, pasture 4% very poor, 13% poor, 18% fair, 52% good, 13% excellent. Other crop conditions mostly good. Damp, cool weather except northwest still dry. Corn borer, army worm, grasshopper, weed problems. Rust, scab, lodging problems in small grains. Major activities combining, haying, cultivating, spraying, fallow work.

TENNESSEE: Frontal system brought showers to State early week followed by high pressure, dry weather remainder of week. High temperatures averaged near normal, lows generally below normal. Precipitation below normal.

Days suitable for fieldwork 5.5. Soil moisture 2% very short, 34% short, 64% adequate. Corn 76% tasseling, 98% 1989, 95% avg.; 25% dough, 46% 1989,

55% avg. 10% dent, 16% 1989, 25% avg.; 1% very poor, 2% poor, 43% fair, 52% good, 2% excellent. Cotton 62% setting bolls, 70% 1989, 76% avg.; 4% very poor, 3% poor, 24% fair, 59% good, 10% excellent. Sorghum 38% headed, 67% 1989, 71% avg.; 2% very poor, 32% fair, 66% good. Soybeans 28% blooming, 35% 1989, 43% avg.; 8% setting pods, 11% 1989, 17% avg.; 3% poor, 29% fair, 59% good, 9% excellent. Tobacco 24% topped, 22% 1989, 28% avg.; 40% fair, 60% good. Pastures 1% very poor, 38% fair, 60% good, 1% excellent. Cattle 19% fair, 78% good, 3% excellent. Insects, diseases prevalent. Pond levels low.

TEXAS: Significant rain concentrated south beginning week. Cold front stalled over north drifted northward again, brought rains north central. Low pressure continued north, west central, bringing more rain. Rainfall departures from normal not very large for various growing areas. Rainfall above normal far west, below normal northern Panhandle. Weak surges of cool air kept temperatures below normal.

Crops: Corn Plains continued look generally good. Most fields dough stage. Harvest activities resumed Blacklands, central. Yields average; some fields fallen over. Harvest resumed Coastal Bend, Valley, Upper Coast. Some fields these areas also fallen over. Corn dented 58%, 60% 1989, 62% avg.; mature 55%, 40% 1989, 44% avg.; harvested 27%, 23% 1989; 14% avg. Grain sorghum fields responding showers Plains, Cross Timbers. Fields heading, beginning to turn color. Harvest resumed Blacklands, yields varying widely. Later fields Hill Country may benefit from good rains. Heavy rains two weeks ago central, south caused additional falling over, making harvest difficult. Yields affected. Harvest almost over Valley, Coastal Bend. Sorghum mature 51%, 35% 1989, 42% avg.; harvested 33%; 33% 1989; 30% avg. Most irrigated cotton fields Plains very good progress. Dryland fields in question; recent rains improved many fields. Plants setting bolls. Bollworm populations increasing some. Bolls beginning to open Blacklands, recent rains may still help fields. Fields Hill Country responding well to rain. Bolls opening central, rain may have been too late to help many fields. Producers defoliating fields Upper Coast. Harvest continued Valley. Scattered showers Coastal Bend delayed harvest some. Cotton 7% open bolls, 10% 1989, 8% avg.; 3%, 3% 1989, 2% avg. Soybean conditions improved Upper Coast, plants showing good pod development. High Plains fields looking good, showing excellent growth. Fields east looking very good. Rice producers continued drain fields, increase harvest activities. Heading later fields remained behind schedule. Rice harvested 3%, 6% 1989, 5% avg. Peanut fields Plains, Cross Timbers improved progress. Growth improved central. Excessive rains past two weeks caused problems some south central fields.

Commercial Vegetables: Rio Grande Valley, peppers coming up to stands. Land preparations continued. San Antonio Winter Garden, cantaloupes running down. Some land preparation occurred as ground dried. Eastern areas harvest operations continued intermittently between showers. High Plains, onion, potato, carrot harvest continued, weather permitted. Trans Pecos, chile pepper harvest beginning. Onion, cantaloupe harvest continued. Late variety peach harvest continued Hill Country, central. Harvest almost complete east. Rainfall helped pecan development many parts State. Aphids continued cause problems some groves.

Range and Livestock: Producers most of the State saw ranges, pastures improve last week, recent rains promoted good growth, greening. Many pastures still remained short, improving. Hay

yields may increase with rain. Livestock good over State. Range, pasture, 3% very poor; 22% poor; 48% fair; 24% good; 3% excellent.

UTAH: Temperatures 1° below normal in northern half, 2° above normal in southern half of State. Precipitation was light to moderate.

Days suitable for fieldwork 6.8. Soil moisture 92% short, 8% adequate. Irrigation, second crop hay cutting, small grain harvest, main activities. Winter wheat harvest 52% completed, 50% 1989, 50% avg. Barley harvest 35% completed, 30% 1989, 37% avg. Spring wheat harvest 28% completed, 19% 1989, 24% avg. Oat acreage ripe 36%, 34% 1989, 40% avg. Oat for grain, hay being harvested some areas. Corn height 58.0 in.; tasseling 38%, 42% 1989, 56% avg. Second cutting alfalfa hay 68% completed, 70% 1989, 62% avg. Box Elder County apricot, tart cherry quality fair. Picking early peaches Grand County. Non irrigated range, pasture 5% very poor, 16% poor, 79% fair. Range expected to degrade rapidly without expedient rain showers.

VIRGINIA: Temperatures about 2° above normal most of State. West, southern part 1° below normal. Extremes 48°; 100°. Scattered showers 0.50 in. Statewide.

Days suitable for fieldwork 6.2. Topsoil moisture 12% very short, 45% short, 38% adequate, 5% surplus. Corn 70% silked, 62% 1989, 64% avg.; dough state 31%, 30% 1989, 25% avg.; 2% very poor, 14% poor, 57% fair, 27% good. Soybeans all planted, 97% for both last year and avg. Soybeans bloomed 31%, 34% last year, 22% avg. Soybeans in pods 9%, 20% 1989, 7% avg.; 3% poor, 69% fair, 28% good. Flue tobacco 9% harvested, 3% for both last year and avg. All tobacco 52% fair, 48% good. Topping continued. Peanut 33% fair, 67% good. Potato harvest over 90% completed. Peach harvest over 50% completed. Pasture 3% poor, 66% fair, 28% good, 3% excellent. Alfalfa 50% fair, 45% good, 5% excellent. Other hay 3% poor, 60% fair, 37% good. Livestock mostly good. Vegetable harvest continued. Land preparation for cucumber and snap bean planting. Spraying peanuts for leafspot, spider mites.

WASHINGTON: Temperatures 6° below normal to 2° above normal, east; 1° below normal to 3° above normal, west. Precipitation none in. to 2.29 in., east; none to 0.05 in., west.

Days suitable for fieldwork 5.9. Soil moisture 50% short, 50% adequate. Range, pasture 6% very poor, 20% poor, 42% fair, 32% good. Hay, other roughage 23% short, 75% adequate, 2% surplus. Winter wheat 43% fair, 52% good, 5% excellent; 25% harvested, 23% 1989, 28% avg. Spring wheat harvested 9%, 9% 1989, 13% avg. Barley harvested 24%, 18% 1989, 25% avg. Alfalfa hay, 2nd cutting, 72%, 74% 1989, 71% avg. Potatoes harvested 6%, 5% 1989, 3% avg. Small grain harvest continued, slowed by recent wet weather. Dry pea, hay harvests were also hampered by the weather. The potato harvest continued. Raspberries, blueberries, nectarines, apricots, and peaches were harvested during the week. Sweet corn, green beans, squash, melons, cucumbers, and leafy vegetables were harvested in the State.

WEST VIRGINIA: Temperature 71°. Extremes 51°; 93°. Precipitation avg. 0.05 in., 0.68 in. to 1.06 in. below normal.

Days suitable for fieldwork 5.1. Soil moisture 10% short, 76% adequate, 14% surplus. Pasture 4% fair, 87% good, 9% excellent. Cattle, sheep good. Wheat, barley good. Wheat 94% ripe, 53% harvested. Barley 97% harvested. Oats good; 89% headed, 72% ripe. Corn good, 54% silked, 21% dough. Hay good; first cutting 94% complete, second cutting 27% complete. Apples, peaches poor. Tobacco fair, 8%

topped. Farm activities: Making hay, clipping pastures, small grain harvesting, farm maintenance, caring for livestock.

WISCONSIN: Temperature 71°, at normal. Extremes 41°; 91°. Precipitation 0.90 to 2.30 in.

Days suitable for fieldwork 5.2. Soil moisture 33% short, 63% adequate, 4% surplus. Pasture 3% poor, 25% fair, 57% good, 15% excellent. General crops 11% fair, 79% good, 10% excellent. Soybean 85% of normal. Corn 14% fair, 76% good, 10% excellent; height 65 in., 70 in. 1989, 69 in. avg.; 20% silked, 46% 1989, 61% avg. Second cut hay 56% completed, 58% 1989, 61% avg. Oats 4% harvested, 18% 1989, 29% avg. Winter wheat 22% harvested, 47% 1989, 63% 4 year avg.

WYOMING: Temperatures below normal. Above normal precipitation.

Days suitable for fieldwork 6.0. Topsoil 48% short, 52% adequate. Subsoil 44% short, 56%

adequate. Winter wheat 25% turning color, 15% 1989, 10% avg.; 50% mature, 40% 1989, 45% avg.; 25% harvested, 45% 1989, 45% avg. Barley 15% headed, 20% 1989, 20% avg.; 30% turning color, 45% 1989, 40% avg.; 50% mature, 30% 1989, 35% avg.; 5% harvested, 5% 1989, 5% avg. Spring wheat 15% headed, 5% 1989, 15% avg.; 50% turning color, 45% 1989, 40% avg.; 30% mature, 35% 1989, 35% avg.; 5% harvested, 15% 1989, 10% avg. Oats 50% headed, 15% 1989, 30% avg.; 25% turning color, 45% 1989, 40% avg.; 20% mature, 35% 1989, 25% avg.; 5% harvested, 5% 1989, 5% avg. Dry beans 45% in bloom, 75% 1989, 65% avg.; 30% setting pods, 20% 1989. Potatoes 90% in bloom, 70% 1989, 70% avg. Corn 45% tasseled, 40% 1989, 45% avg.; 5% silked, 15% 1989, 15% avg. Alfalfa hay second cutting 5% complete, 25% 1989, 15% avg. Other hay 60% harvested, 60% 1989, 60% avg. Row crops, spring planted small grains mostly good. Ranges, pastures 20% poor, 75% good, 5% excellent. Stockwater 45% short, 55% adequate.

International Weather and Crop Summary

HIGHLIGHTS

July 22-28, 1990

USSR ... In Western USSR, wet weather covers the north, slowing winter grain maturation and delaying early season harvests. Dry weather helps harvests in the south but limits moisture for corn. In the New Lands, widespread variable rain benefits filling spring wheat.

EUROPE ... Early hot, dry weather stresses summer crops in the southwest. Mostly dry conditions in the northwest favor continued rapid progress in winter grains harvest.

EASTERN ASIA ... Heat continued to stress crops in sections of southeastern China and Japan. Cool, wet weather delays spring wheat harvest in Manchuria.

SOUTH ASIA ... Showers maintain favorable conditions for vegetative to reproductive summer crops in most northern, central, and eastern areas.

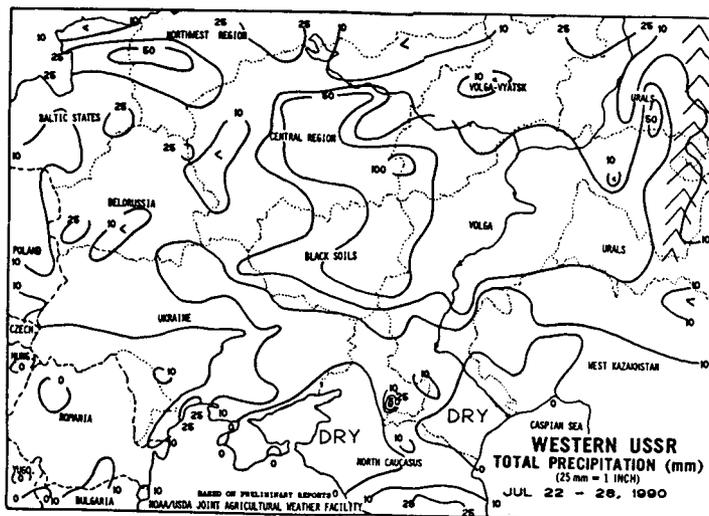
SOUTHEAST ASIA ... Highly variable rain covers Thailand's primary grain areas. Inundating rain covers the northwestern Philippines.

SOUTH AMERICA ... Cold air pushes into southern coffee areas of Brazil. In Argentina, dry, cool weather helps late wheat planting.

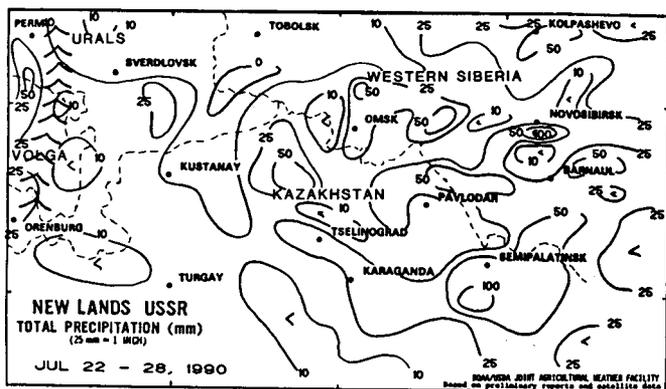
AUSTRALIA ... Heavy rain favors winter grains in Western Australia. Unseasonably warm weather continues in eastern crop areas.

CANADA ... Showers benefit reproductive to filling spring wheat in the southwest.

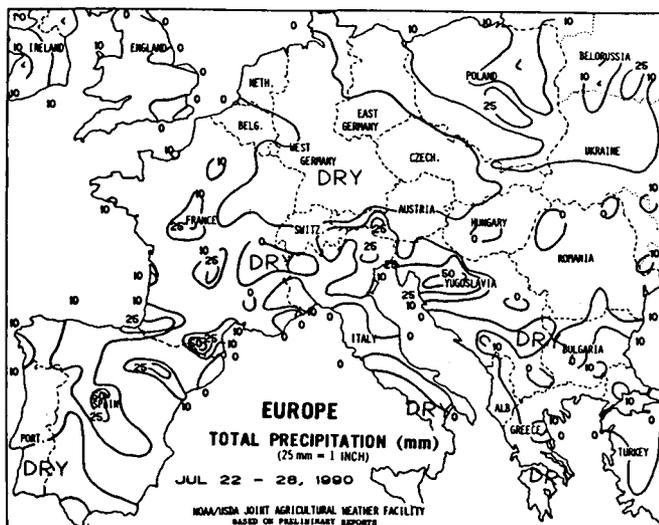
MEXICO ... Rain benefits immature crops except in the northeast, where dryness persists.



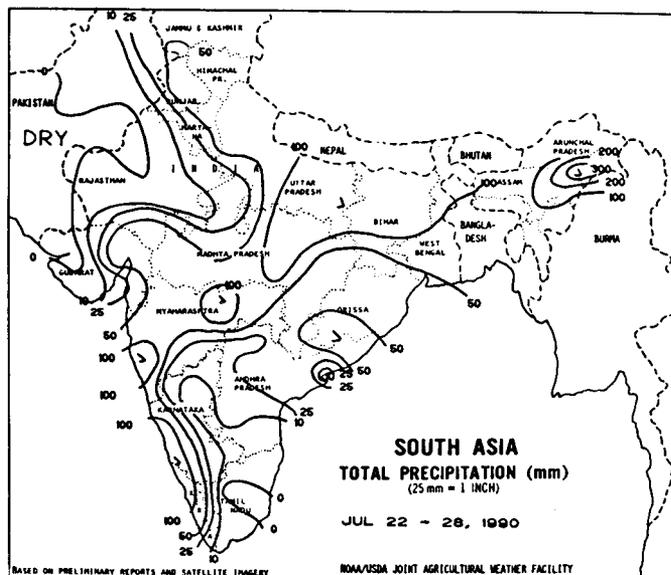
USSR ... In Western USSR, rain continued over crop areas in the Baltic States, Belorussia, and the western portion of the Central Region; however, rainfall (generally 10-25mm) was considerably less than last week. Dry weather is needed in these areas for winter grain maturation, and for harvesting, which was delayed by persistent wetness. Although soaking rain (25-70mm, with local amounts in excess of 70mm) over the eastern portion of the Central Region, the Black Soils Region, and the upper Volga benefited spring grains in the filling stage, it slowed winter grain maturation and halted early harvesting. Generally dry weather (precipitation less than 10mm) over the southern and eastern Ukraine and the North Caucasus helped winter and spring grains harvesting, but limited moisture for corn in the reproductive to filling stages of development. Weekly average temperatures were 1-4 degrees Celsius (C) below normal over the region.



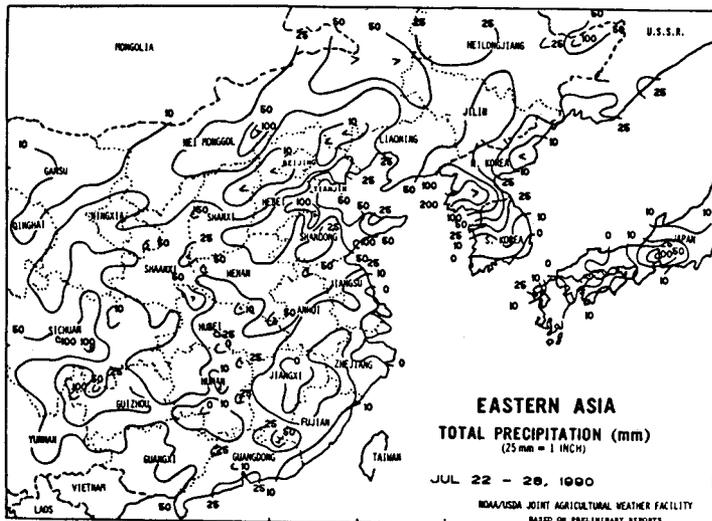
In the New Lands, widespread variable rain (15-40mm, with local amounts in excess of 75mm) continued over the region. Periodic rain since early July has reversed June's unfavorably dry weather pattern in most spring wheat producing areas in Kazakhstan and West Siberia. This past week's rain was mostly beneficial for spring wheat, currently in the grain-filling stage. However, locally heavy rainfall (precipitation in excess of 75mm) in eastern areas produced some flooding.



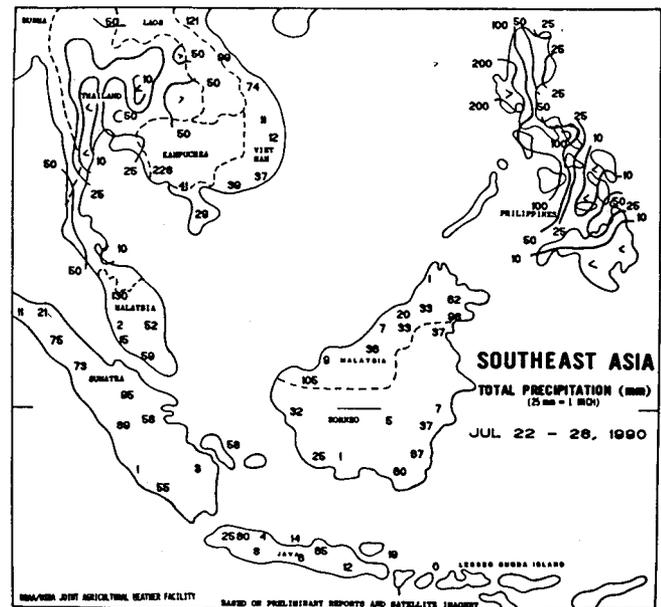
EUROPE ... Mostly dry, hot weather (daily maximum temperatures from 34 to 39 degrees C and weekly average temperatures 2-6 degrees C above normal) stressed reproductive to filling summer crops in sections of France and the Iberian Peninsula early in the week, followed by scattered rain (5-15mm, with isolated amounts greater than 15mm) and cooler temperatures by week's end. In the northwest, light to moderate rain (5-15mm) caused minor delays in winter grain harvest, while mostly dry weather in eastern England, Benelux, and West Germany allowed continued rapid harvest progress. Scattered moderate to heavy rain (15-30mm, with isolated amounts greater than 30mm) favored summer crops across sections of Poland, northern Yugoslavia, and the lower Danube Valley. Much of the remainder of the Balkans remained seasonably dry.



SOUTH ASIA ... Beneficial showers (25-50mm or more) continued across most northern, central, and eastern growing regions, maintaining favorable conditions for vegetative to reproductive summer crops. Rainfall totaled 64-154mm over cotton, groundnut, and sorghum areas of eastern Gujarat and central Maharashtra, boosting moisture reserves following weeks of below-normal rainfall. However, seasonable rains continued to miss the primary groundnut region of western Gujarat, as well as most crop areas from Karnataka and southern Andhra Pradesh southward which received only 1-15mm. Periodic hot weather in southern Andhra Pradesh and northeastern Tamil Nadu maintained high evaporation rates. To the north, local excessive amounts (164-313mm) caused more flooding from northern Bihar to eastern Assam. In Pakistan, seasonable rain (25-46mm) fell in the northeastern Punjab state, increasing irrigation supplies.

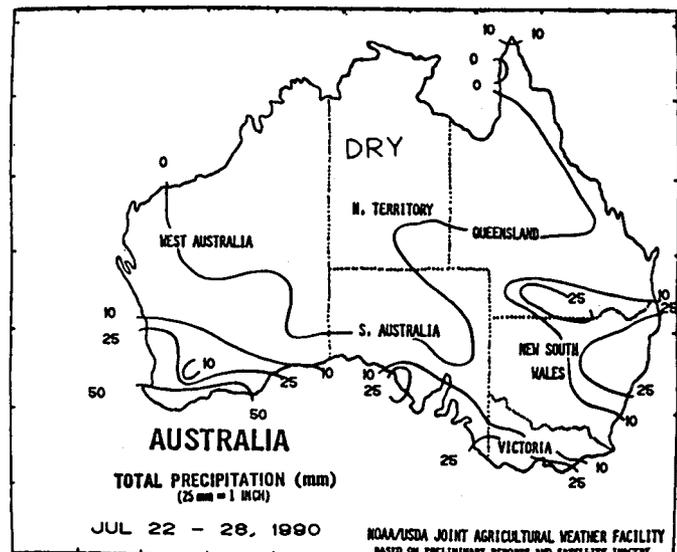


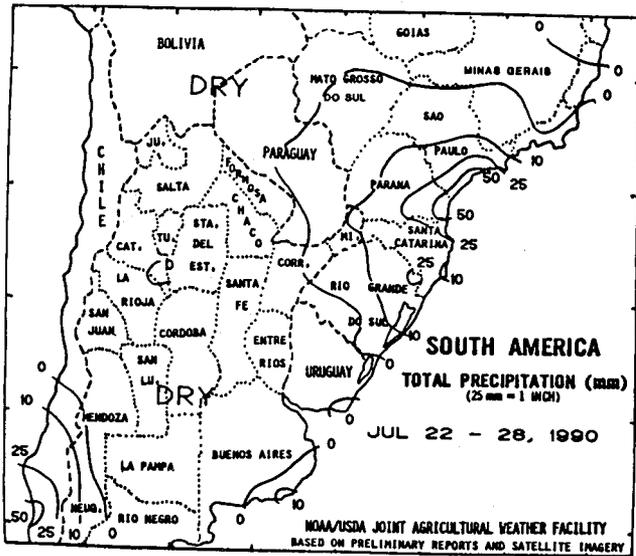
EASTERN ASIA ... Hot weather (daily maximum temperatures 36-40 degrees C) continued to stress single season rice and other spring planted crops across much of southeastern China. Unseasonably warm temperatures (average weekly temperatures 1-3 degrees C above normal) also continued in central and southern Japan. Scattered rain (10-40mm, with isolated amounts in excess of 50mm) reduced the effects of heat in sections of both regions but was insufficient to replenish soil moisture levels following 3 consecutive weeks of below-normal rainfall. In contrast, widespread rain (10-50mm, with scattered amounts greater than 50mm) and cool temperatures (average weekly temperatures 1-4 degrees C below normal) in Manchuria slowed summer crop development and caused delays in spring wheat harvest. Heavy seasonal rains (25-80mm, with scattered amounts in excess of 80mm) fell across much of the North China Plain and Korean Peninsula, including continued torrential rainfall (100-275mm) and flooding in sections of southern North Korea and northern South Korea. From 700 to 1,100mm of rain have fallen in this area since June 1 (approximately 150-300 percent of normal).



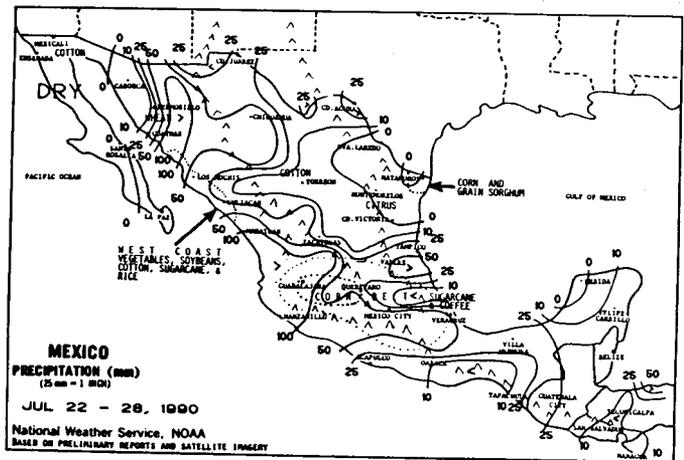
SOUTHEAST ASIA ... Highly variable rainfall covered Thailand's primary corn and rice areas, with most accumulations ranging from 25 to 50mm or more. However, light rain (25mm or less) covered a large portion of central Thailand, including parts of the corn belt, favoring maturing grains. Elsewhere in Indochina, rainfall of 50-100mm or more covered the Thai peninsula as well as the northern half of Vietnam. In the Philippines, very heavy rains (100-300mm or more) the latter half of the week from Tropical Storm Tasha caused flooding and some local crop damage from northwestern Luzon to the west-central islands. Light rain (25mm or less) covered most southern and east-central growing areas.

AUSTRALIA ... Heavy seasonal rain (30-60mm, with isolated amounts greater than 60mm) continued across crop areas of Western Australia, increasing soil moisture for semidormant winter grains. Moderate to heavy rain (15-40mm) also fell across southern crop areas of South Australia and Victoria, while northern crop areas remained mostly dry. In the east, scattered rain (5-40mm, with isolated rainfall greater than 40mm) favored rangeland and winter crops in sections of New South Wales and south-central Queensland. Continued unseasonably warm temperatures (daily maximum temperatures 17-26 degrees C and average weekly temperatures 2-4 degrees C above normal) in southern Queensland and northern New South Wales likely induced early growth and development of winter crops. Seasonably dry weather in northeastern Queensland favored rapid sugarcane harvest progress.

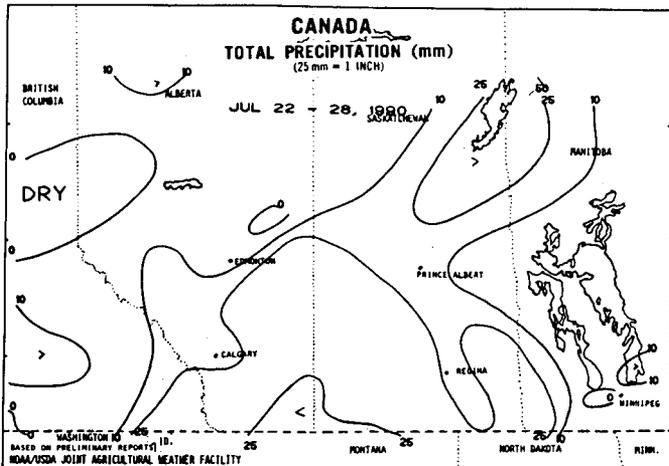




SOUTH AMERICA ... In south-central Brazil, early-week showers produced 10-25mm of rain in northeastern Rio Grande do Sul, Santa Catarina, much of Parana, and eastern Sao Paulo, with locally heavier amounts (30-90mm) toward coastal regions of Parana and Sao Paulo. Mostly dry weather prevailed elsewhere, favoring the coffee harvest. Cooler air pushed into the region late in the week, bringing freezing temperatures as far north as Parana on Saturday. Some frost damage to new tree growth likely occurred in Parana. In Argentina, dry and cool weather prevailed throughout the week, slowing the growth of emerging wheat and reducing moisture loss. The dryness favored late wheat planting. Moisture is limited in western growing areas, but seasonally cool weather during the next month normally maintains low moisture usage.



MEXICO ... Dry weather was confined to the northeast, favoring grains, cotton, and specialty crop harvests but stressing immature, unirrigated crops. Soaking rain (50-100mm or more) continued to provide plentiful moisture in the northwest for irrigation reservoirs, and along the west coast for summer crop development. In the Southern Plateau, widespread, locally heavy showers (50-179mm) fell in western and southern portions, while moderate showers (25-50mm) helped immature corn in north-central growing areas. Light showers (10mm or less) were confined to northeastern corn areas, but moisture is sufficient throughout the corn belt for crop growth. Variable tropical showers covered the south, with mostly light rain over the Yucatan peninsula.



CANADA ... Widespread, moderate to heavy rain (16-39mm) covered southern Alberta and southwestern Saskatchewan, providing much needed moisture for reproductive to filling spring wheat. Rainfall totaled 14-34mm elsewhere in Saskatchewan and portions of Alberta, but drier weather dominated northern Alberta and most of Manitoba. Weekly temperatures averaged near to above normal, favoring crop growth following last week's unseasonably cool weather. Moisture conditions are generally favorable across the Prairies for vegetative to filling spring grains and oilseeds. Following 3 weeks of lighter-than-normal rainfall, however, more rain will be needed over parts of the southeastern Prairies to prevent reductions in yield potential.

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