

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

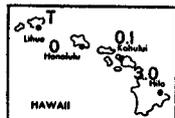
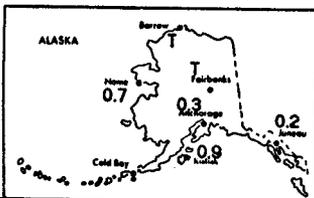
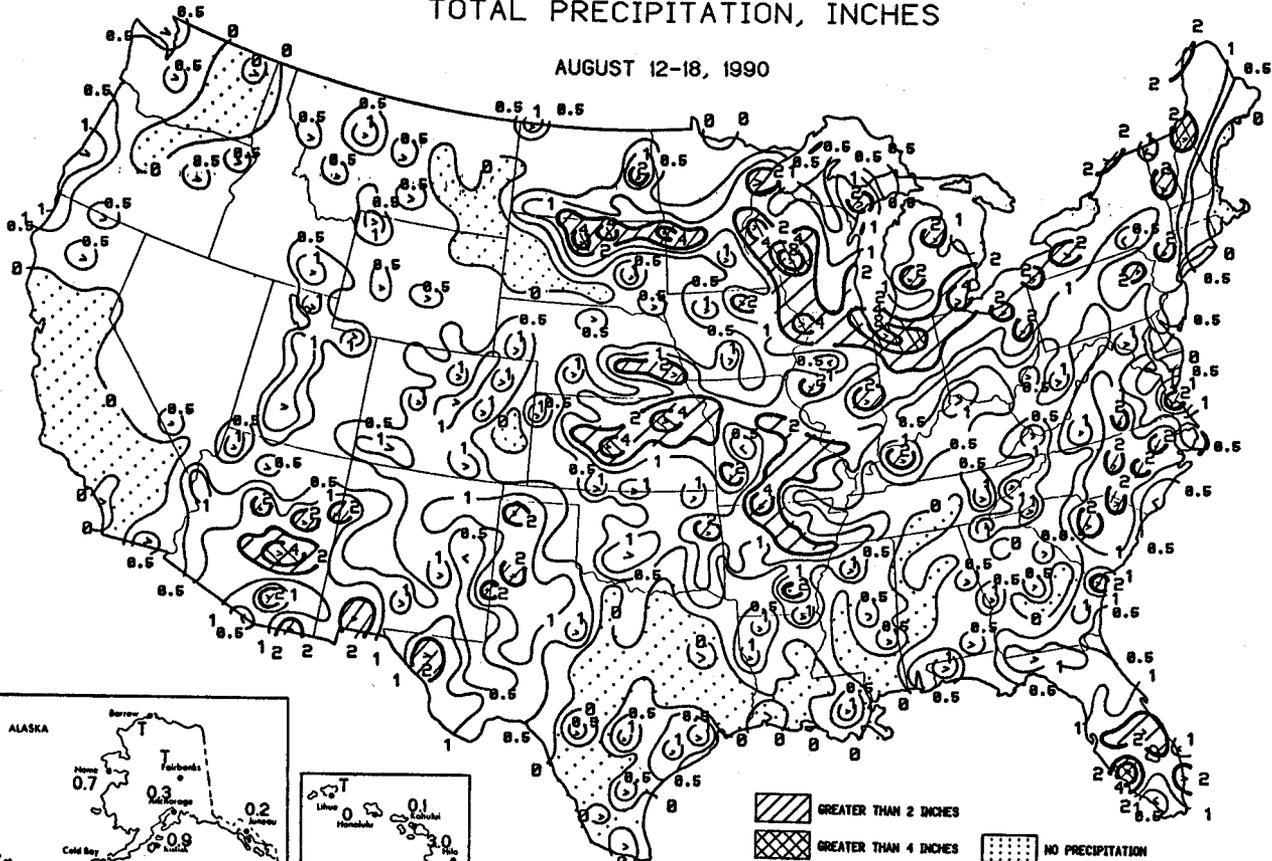
Volume 77, No. 33

Washington, D.C.

August 21, 1990

TOTAL PRECIPITATION, INCHES

AUGUST 12-18, 1990



GREATER THAN 2 INCHES
 GREATER THAN 4 INCHES
 NO PRECIPITATION

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

Based on preliminary reports

HIGHLIGHTS

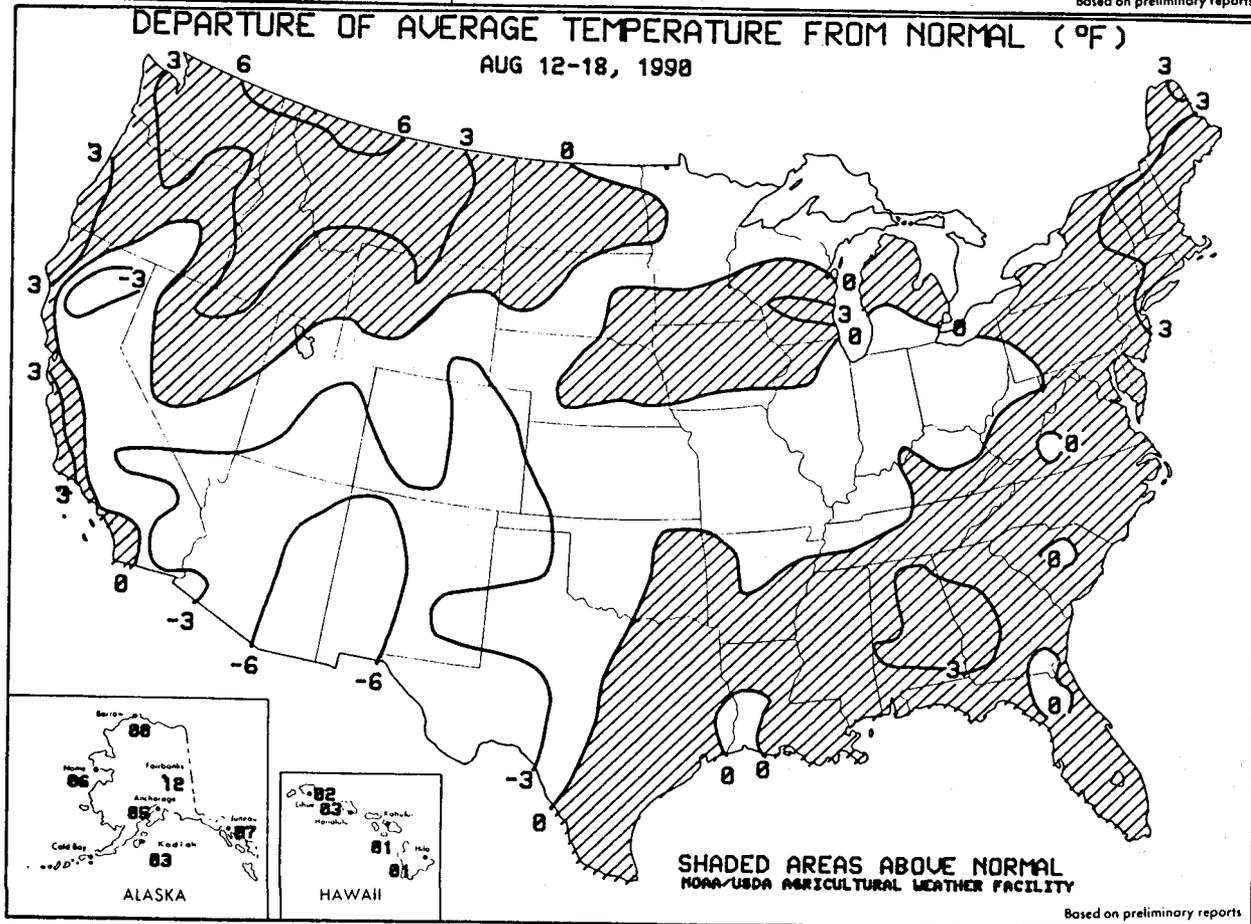
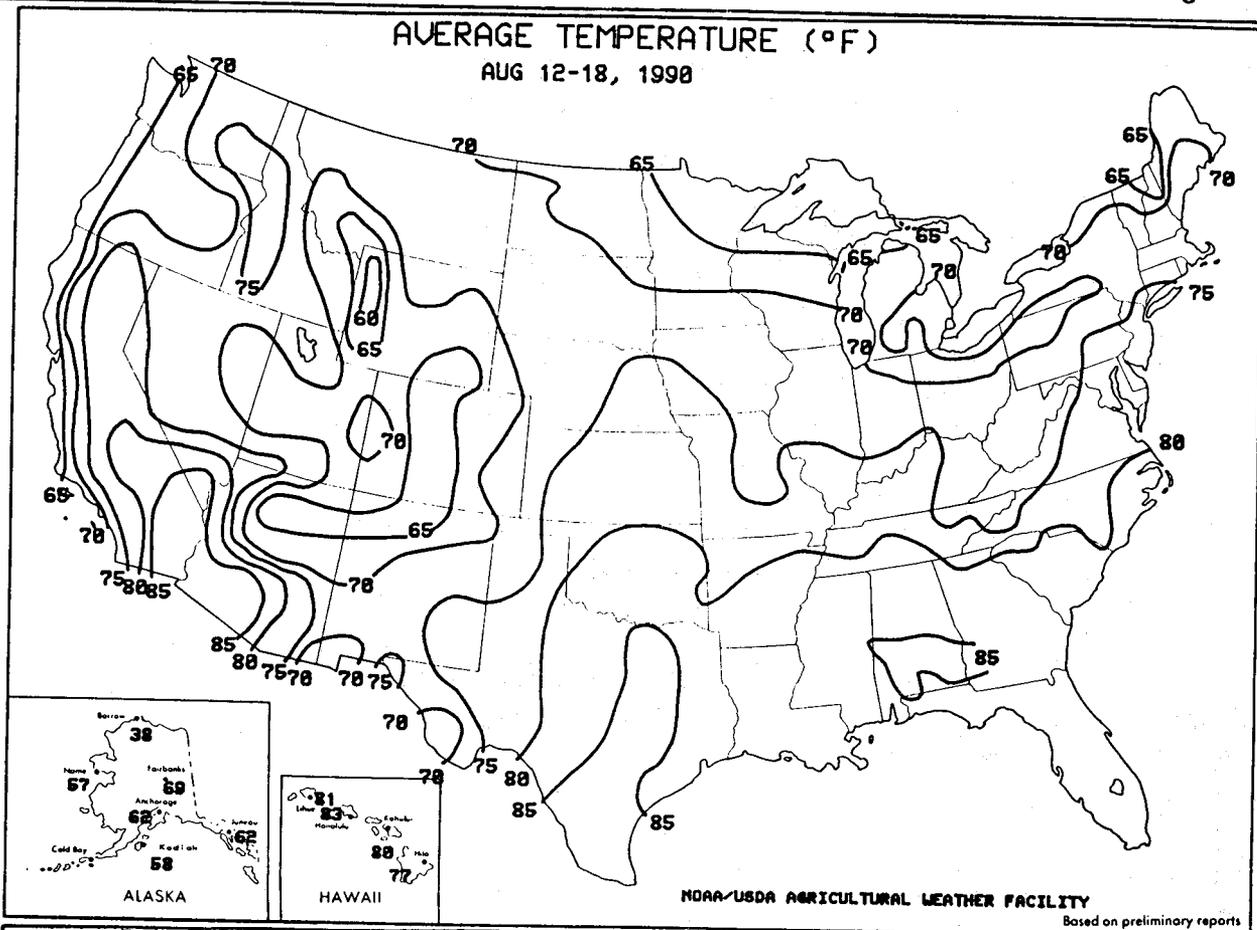
August 12-18, 1990

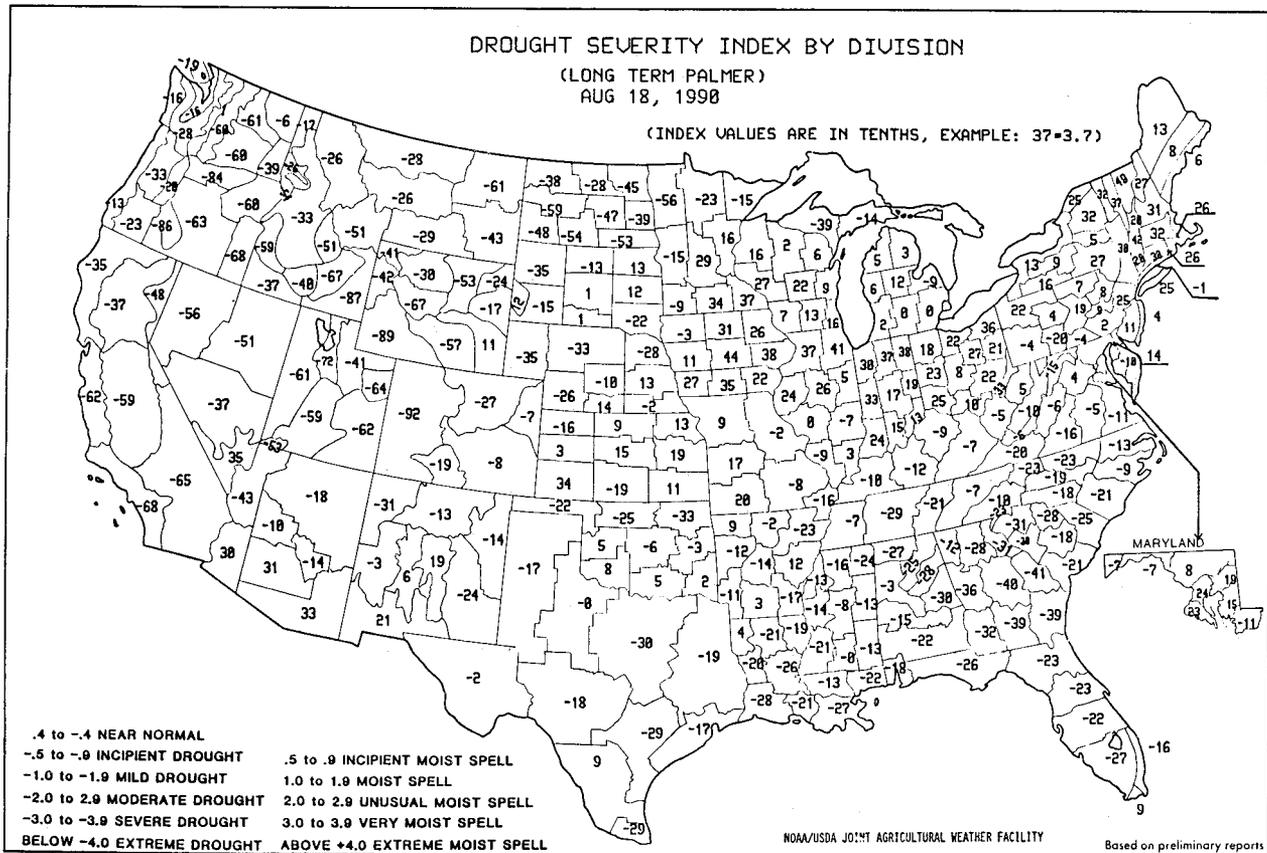
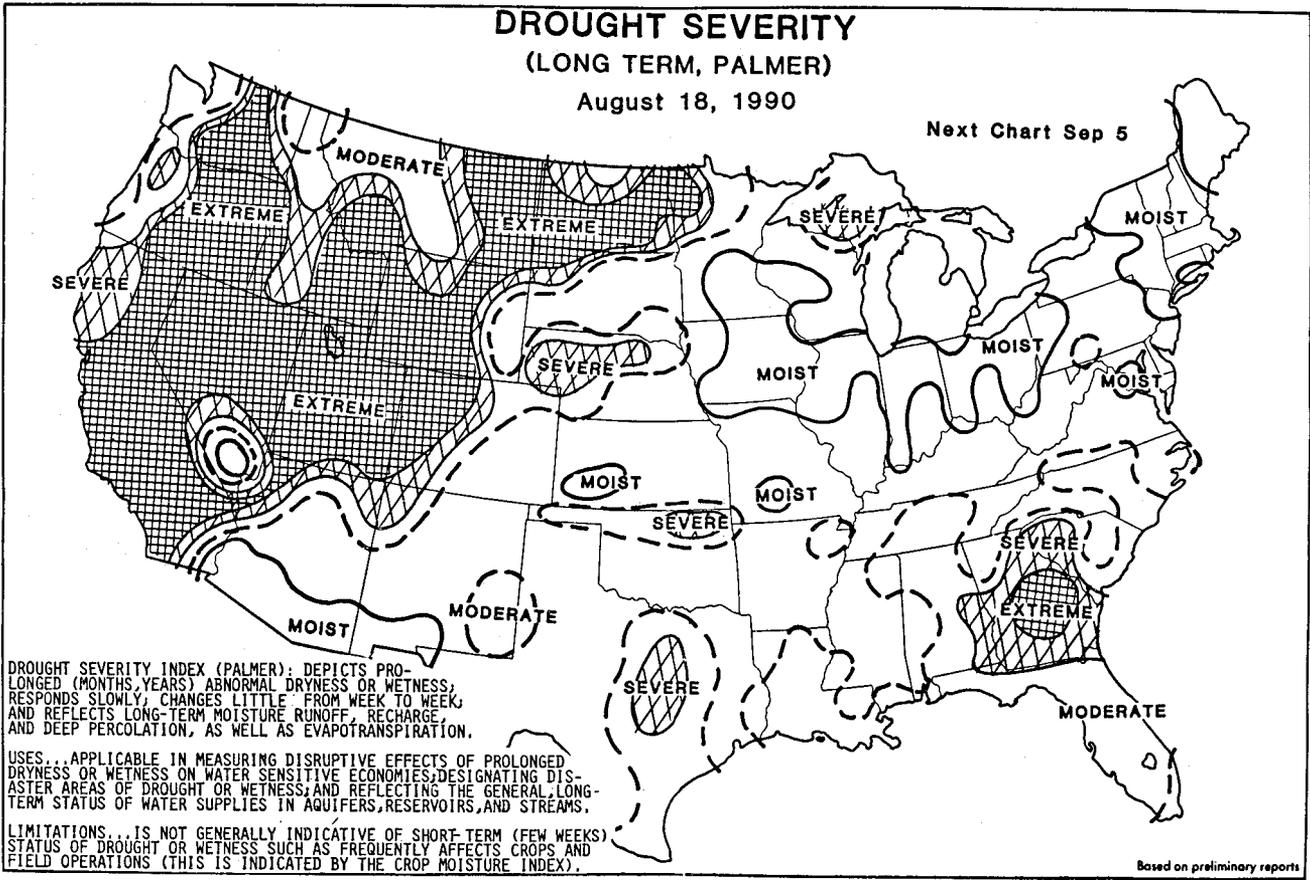
Showers and thunderstorms were widespread over much of the Nation, producing heavy rain and local flooding in the **Southwest** and **Central and North Central States**. At the first of the week, a cold front, advancing eastward, spread moderate to heavy rain from the **middle Mississippi Valley** and **Great Lakes** into the **Northeast**. At midweek, scattered thunderstorms developed in the warm, humid air across the **southern half of the country**. Severe thunderstorms brought locally heavy rain and flash floods to the **Southwest**. **Desert Hill, AZ**, near Phoenix, was deluged with 3.42 inches of rain in less than 2 hours on Tuesday morning. During the latter part of the week, intense thunderstorms rumbled over the **northern and central Plains** into the **middle Mississippi Valley** and

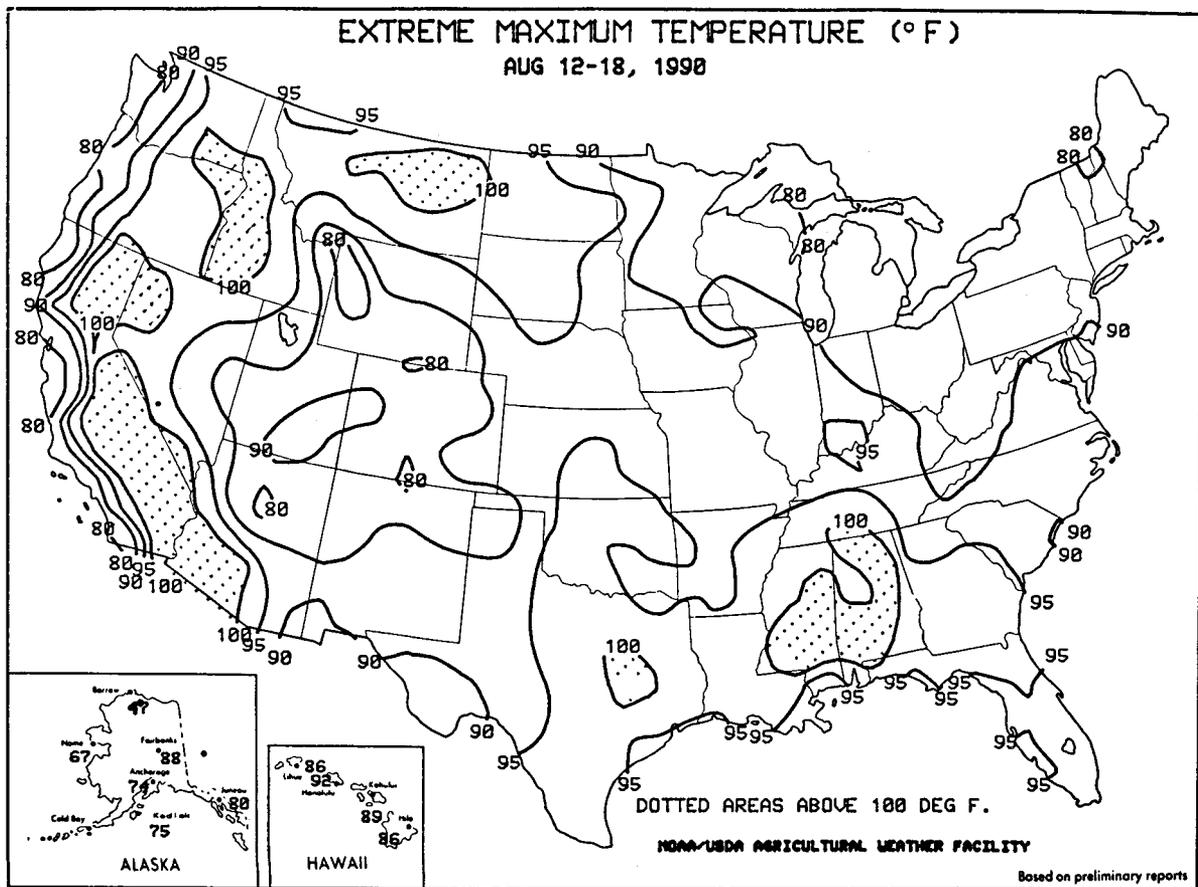
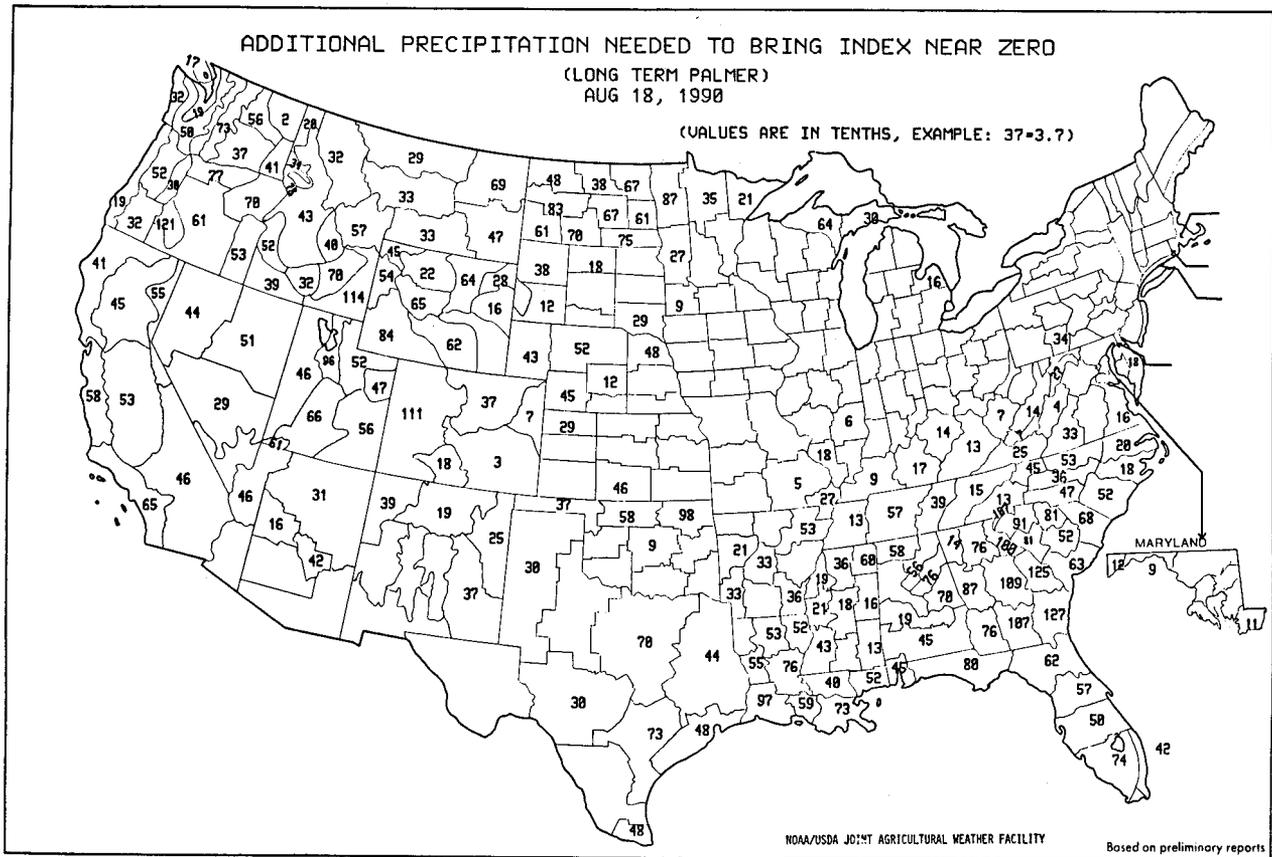
(Continued to p. 19)

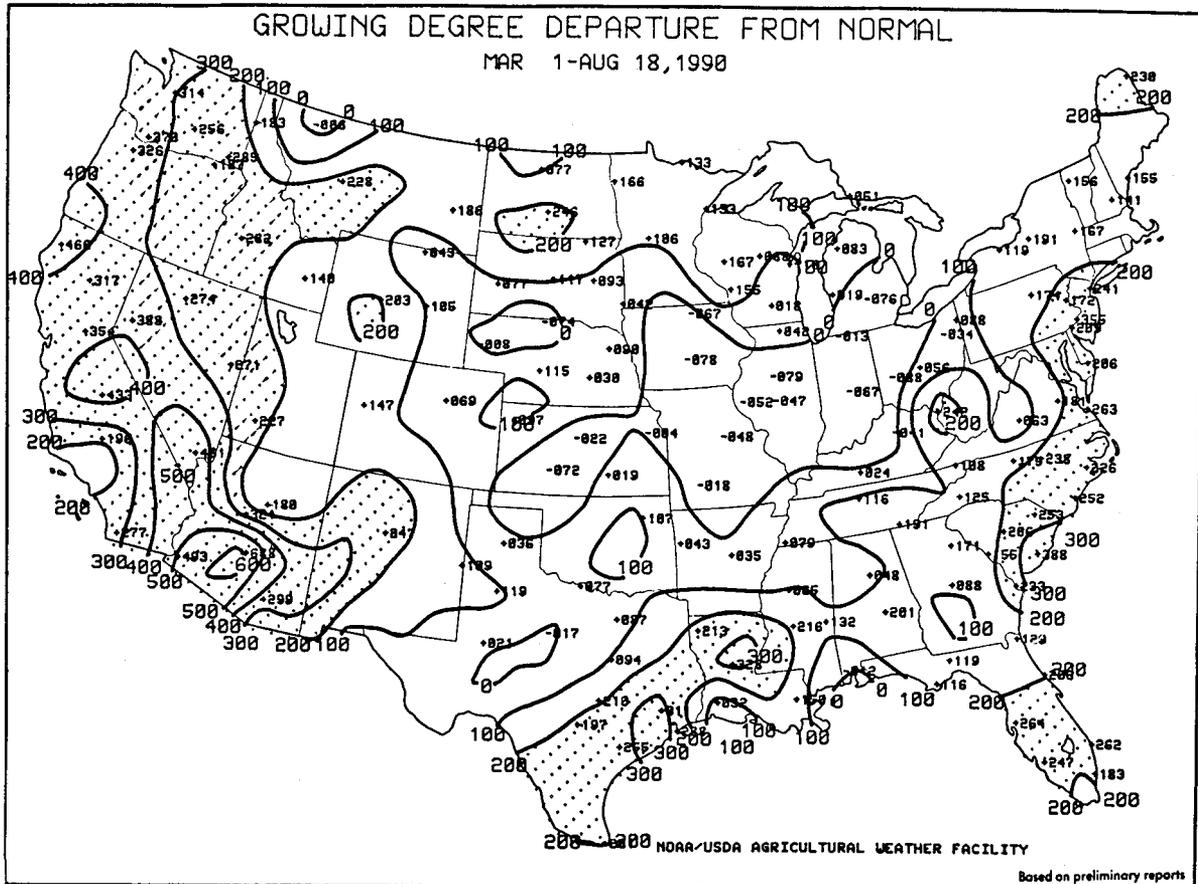
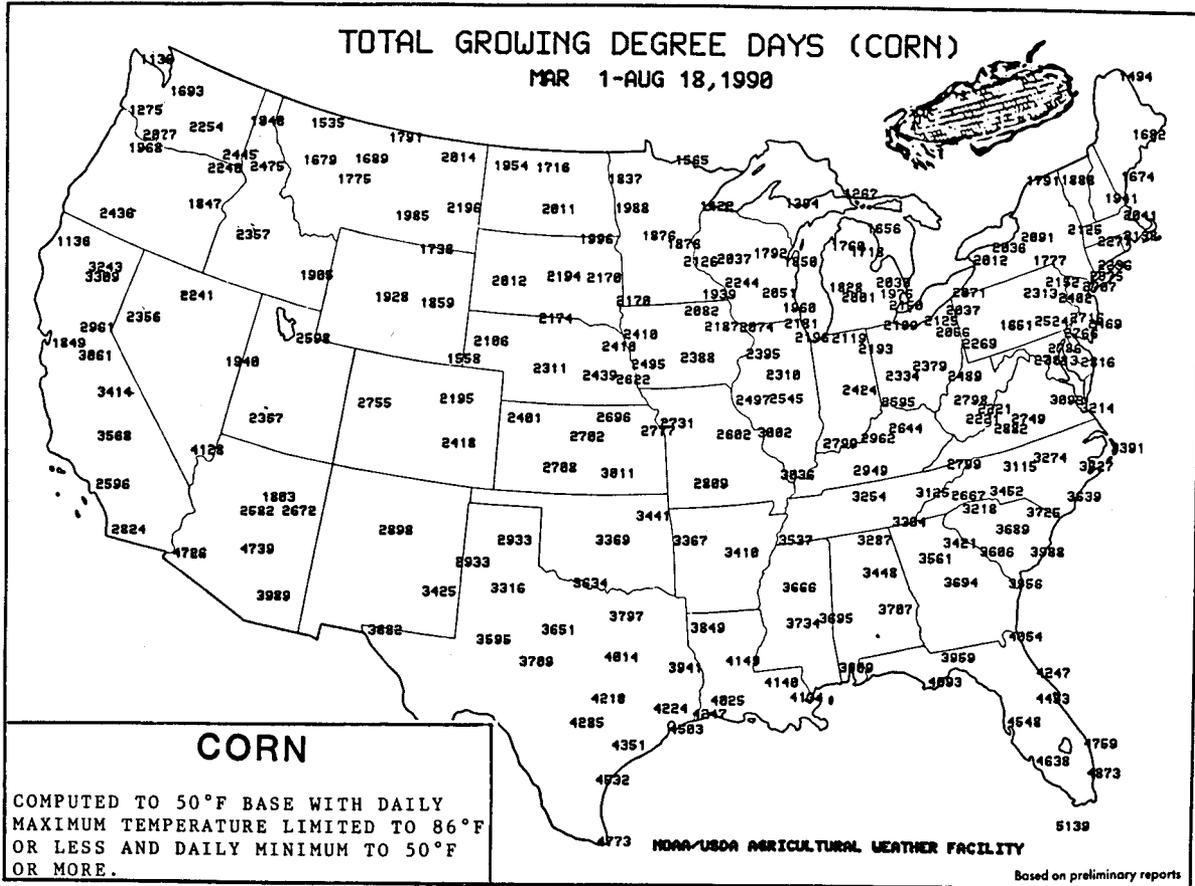
Contents

	Page
Highlights & Total Precipitation	1
Average Temperature & Temperature Departure Maps	2
Crop Moisture Maps	3
Drought Severity Maps	4
Precipitation Needed to End Drought & Extreme Maximum Temperature Maps	5
Growing Degree Days and Departure Maps	6
National Weather Data for Selected Cities	7
National Agricultural Summary	10
Crop Progress and Condition Tables	11
State Summaries of Weather and Agriculture	13
International Weather and Crop Summary	20
Subscription and Mailing Permit Information ..	24









National Weather Data for Selected Cities

Weather Data for the Week Ending August 18, 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	.01 INCH OR MORE		.50 INCH OR MORE
													90 AND ABOVE						32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	98	70	102	66	84	4	.1	-.7	.1	5.8	51	32.3	87	80	30	7	0	1	0		
MOBILE	95	71	97	68	83	1	.5	-1.0	.5	5.9	36	44.7	103	93	37	7	0	1	0		
MONTGOMERY	101	72	102	65	86	5	.1	-.6	.1	6.7	67	44.8	136	91	32	7	0	1	0		
AK ANCHORAGE	69	54	74	51	62	5	.3	-.2	.2	2.7	64	7.0	92	93	60	0	0	2	2		
BARROW	42	35	47	33	38	0	T	T	T	1.8	101	2.2	84	98	82	0	0	2	2		
FAIRBANKS	80	57	88	52	69	12	T	T	T	7.5	177	9.3	144	89	43	0	0	0	0		
JUNEAU	72	53	80	51	63	8	.2	-.9	.2	14.8	151	30.7	115	93	59	0	0	1	1		
KODIAK	67	49	75	42	58	3	.9	-.2	.9	18.0	174	44.3	131	95	61	0	0	0	1		
NOME	61	52	67	47	57	6	.7	.0	.4	6.9	133	12.1	149	91	68	0	0	6	6		
AZ PHOENIX	94	76	103	70	85	-5	2.0	1.8	1.2	3.8	257	6.0	151	77	37	5	0	3	2		
PRESCOTT	79	56	86	52	68	-3	.7	-.1	.5	7.6	131	12.3	103	77	36	0	0	4	4		
TUCSON	89	68	98	66	79	-6	1.0	.5	.4	7.3	182	9.4	144	91	39	3	0	4	4		
YUMA	101	79	105	76	90	-2	.1	.0	.0	.8	211	1.3	102	63	26	7	0	2	2		
AR FORT SMITH	92	71	97	69	81	0	1.7	1.0	1.2	5.5	65	43.1	168	97	53	6	0	3	1		
LITTLE ROCK	91	72	95	69	82	0	2.3	1.7	1.5	5.7	63	41.0	128	90	55	0	0	2	2		
CA BAKERSFIELD	93	67	103	62	80	-3	.0	.0	.0	T	0	2.6	69	74	28	3	0	0	0		
EUREKA	68	56	72	53	62	5	.5	.4	.3	1.0	127	21.2	94	97	73	0	0	2	0		
FRESNO	92	66	103	60	79	0	.0	.0	.0	T	0	7.4	106	70	28	4	0	0	0		
LOS ANGELES	75	65	79	63	70	-1	T	T	T	33	5.1	61	91	66	0	0	0	0	0		
REDDING	91	63	104	62	77	-4	.7	.6	.5	2.1	165	21.0	84	73	25	3	0	2	0		
SACRAMENTO	88	60	98	58	74	-1	.0	.0	.0	T	0	11.5	108	86	33	2	0	0	0		
SAN DIEGO	76	68	79	66	72	1	T	T	T	.9	>1000	5.9	92	87	65	0	0	1	0		
SAN FRANCISCO	70	59	73	55	64	1	T	T	T	8	7.9	64	92	62	0	0	0	0	0		
CO DENVER	81	56	86	53	68	-4	.8	.5	.4	5.1	115	12.0	109	92	34	0	0	5	0		
GRAND JUNCTION	85	63	90	61	74	-2	T	T	T	1.2	88	4.2	89	71	30	1	0	1	0		
PUEBLO	83	56	91	54	70	-5	.3	-.1	.3	5.9	143	12.2	158	97	40	2	0	2	0		
CT BRIDGEPORT	85	68	88	62	77	3	.2	-.6	.2	7.7	91	27.3	106	88	46	0	0	1	0		
HARTFORD	87	64	92	59	76	4	.5	-.5	.5	12.3	141	33.1	123	93	42	2	0	1	0		
DC WASHINGTON	87	71	91	68	79	1	1.0	.0	1.0	12.3	126	28.4	114	94	53	1	0	1	1		
FL APALACHICOLA	91	74	95	72	83	1	.4	-1.3	.3	13.6	84	26.8	80	96	57	6	0	2	0		
DAYTONA BEACH	91	72	96	69	82	1	.9	-.5	.9	11.9	77	23.8	81	98	57	6	0	2	1		
JACKSONVILLE	93	71	97	68	82	1	.3	-1.5	.2	10.9	65	19.8	59	97	52	6	0	3	0		
KRY WEST	91	79	93	73	85	1	3.1	2.0	2.0	11.9	107	20.7	99	83	62	7	0	4	2		
MIAMI	91	77	94	72	84	1	3.3	1.7	1.8	17.7	93	36.2	105	88	62	5	0	5	0		
ORLANDO	92	74	95	70	83	1	.6	-.9	.2	15.3	81	23.9	71	94	53	6	0	4	0		
TALLAHASSEE	96	71	99	69	83	2	1.4	-.3	.9	11.6	59	30.8	70	99	40	7	0	3	1		
TAMPA	92	75	95	72	84	1	1.3	-.4	.6	16.9	99	27.0	88	94	54	5	0	4	2		
WEST PALM BEACH	92	76	94	72	84	1	1.0	-.3	.8	22.2	130	36.2	106	95	59	7	0	5	1		
GA ATLANTA	92	72	95	70	82	3	.0	-.8	.0	8.0	79	42.6	126	86	41	7	0	0	0		
AUGUSTA	95	68	97	65	82	2	T	-.9	T	5.0	47	15.3	50	100	42	7	0	1	0		
MACON	96	70	98	67	83	2	.1	-.7	.1	5.1	49	22.0	70	95	37	7	0	2	0		
SAVANNAH	92	73	95	70	83	2	2.2	.7	1.6	8.5	50	23.1	66	95	51	7	0	3	2		
HI HILO	85	70	86	68	77	1	3.0	.6	1.1	25.2	121	92.6	116	96	66	0	0	6	3		
HONOLULU	90	77	92	74	83	3	.0	-.1	.0	.6	43	10.5	75	76	46	5	0	0	0		
KAHULUI	87	72	89	69	80	1	.1	.0	.0	1.4	176	15.4	128	97	63	0	0	2	0		
LIHUE	85	76	86	74	81	2	T	-.4	T	2.0	43	20.8	82	75	58	0	0	1	0		
ID BOISE	91	64	104	56	77	5	T	-.1	T	.6	41	9.2	124	55	23	4	0	1	0		
LEWISTON	90	65	103	59	77	5	T	-.2	T	1.1	45	7.7	93	48	22	4	0	0	0		
POCATELLO	88	51	95	48	70	0	.6	.5	.6	1.5	83	7.4	105	80	22	4	0	2	1		
IL CHICAGO	79	63	91	52	71	-1	4.6	3.8	2.9	12.0	126	28.0	127	95	65	1	0	3	2		
MOLINE	83	65	93	58	74	1	1.7	.9	1.3	15.1	133	36.7	146	96	61	1	0	2	1		
PEORIA	80	64	90	55	72	-1	.1	-.6	.1	18.2	186	36.0	154	100	70	1	0	2	0		
QUINCY	82	66	91	61	74	-1	.4	-.5	.3	11.9	111	28.8	116	99	67	2	0	2	0		
ROCKFORD	80	63	91	53	72	0	1.3	.5	.6	16.2	144	29.7	122	93	61	1	0	3	1		
SPRINGFIELD	82	66	91	59	74	0	1.1	.3	1.0	16.5	182	36.4	160	94	64	2	0	2	1		
IN EVANSVILLE	86	66	95	58	76	0	.6	-.1	.5	7.1	76	34.2	120	96	51	3	0	3	1		
FORT WAYNE	80	59	86	51	69	-2	3.7	3.0	1.3	15.3	170	35.4	154	100	59	0	0	4	3		
INDIANAPOLIS	83	61	91	51	72	-2	1.6	.8	1.4	9.7	93	30.6	116	97	56	1	0	2	1		
SOUTH BEND	78	60	87	50	69	-2	1.7	.7	1.3	12.6	127	31.0	128	98	63	0	0	4	1		
IA DES MOINES	83	65	92	58	74	0	.4	-.5	.4	19.2	197	35.1	166	95	60	2	0	2	0		
SIoux CITY	86	64	91	54	75	1	.1	-.6	.1	7.6	82	19.5	107	95	56	2	0	1	0		
WATERLOO	82	63	90	55	73	2	1.2	.4	.8	19.9	178	33.2	146	97	63	1	0	2	1		
KS CONCORDIA	85	68	94	60	77	-2	1.0	.3	.4	9.2	96	21.5	112	91	55	3	0	4	0		
DODGE CITY	89	64	94	57	77	-2	.1	-.5	.0	4.3	56	17.3	115	92	38	5	0	3	0		
GOODLAND	85	61	93	58	73	-1	1.0	.6	.9	7.4	118	15.1	125	91	39	2	0	2	1		
TOPEKA	85	69	91	64	77	-1	2.8	2.0	1.8	14.0	124	26.8	119	94	63	2	0	4	2		
WICHITA	88	70	94	66	79	-1	.5	-.1	.4	5.7	61	14.0	73	89	51	3	0	3	0		
KY BOWLING GREEN	87	66	94	61	77	-1	.6	-.2	.6	7.3	67	28.5	85	100	54	3	0	1	1		
LEXINGTON	84	66	92	62	75	0	.6	-.3	.6	12.1	104	29.4	93	97	54	1	0	2	1		
LOUISVILLE	88	67	96	64	77	1	.3	-.5	.2	8.8	92	37.3	128	88	43	2	0	2	0		
LA ALEXANDRIA	94	72	97	70	83	0	T	-1.0	T	6.3	57	40.3	113	89	47	7	0	0	0		
BATON ROUGE	94	72	96	68	83	2	.0	-1.1	.0	16.1	121	47.5	125	95	40	7	0	0	0		
LAKE CHARLES	93	71	95	69	82	0	.2	-1.0	.1	7.7	62	34.4	104	100	48	7	0	2	0		
NEW ORLEANS	94	71	96	68	82	0	.9	-.4	.9	4.9	33	40.4	103	97	47	7	0	1	1		

Based on 1951-80 normals

Weather Data for the Week Ending August 18, 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		.01 INCH OR MORE		.50 INCH OR MORE	
																TEMP. °F	PRECIP.	0	1	0	1	0	1
SHREVEPORT	95	72	97	71	84	1	.5	-.1	.4	9.0	106	45.6	157	91	43	7	0	0	0	2	0	0	0
ME CARIBOO	77	57	84	50	67	4	1.2	-.3	.7	11.2	118	23.4	107	96	57	0	0	0	0	0	0	1	0
PORTLAND	81	62	86	57	72	5	T	-.6	T	9.1	122	26.6	103	100	58	0	0	0	0	0	0	0	0
MD BALTIMORE	87	67	90	66	77	1	.6	-.4	.6	12.5	121	29.4	110	96	51	1	1	0	0	0	0	0	0
SALISBURY	87	65	91	63	76	0	T	-1.3	T	7.3	64	26.9	94	100	60	2	2	0	0	0	0	0	0
MA BOSTON	86	69	90	66	77	5	.0	-.8	.0	8.5	110	30.0	113	87	45	1	1	0	0	0	0	0	0
CHATHAM	79	65	80	63	72	4	.0	-.9	.0	7.2	90	30.8	109	97	71	0	0	0	0	0	0	0	0
MI ALPENA	77	54	83	45	66	0	.4	-.4	.2	9.3	117	20.9	115	96	58	0	0	0	0	0	0	0	0
DETROIT	82	62	85	55	72	1	2.2	1.5	1.0	9.1	109	24.3	120	95	55	0	0	0	0	0	0	0	0
FLINT	80	60	87	51	70	1	1.5	.7	1.1	7.3	91	18.5	98	95	58	0	0	0	0	0	0	0	0
GRAND RAPIDS	79	60	85	48	70	-1	2.1	1.3	1.9	9.5	114	22.6	108	96	61	0	0	0	0	0	0	0	0
HOUGHTON LAKE	77	58	82	46	67	2	1.1	.5	1.1	8.2	107	19.2	109	97	62	0	0	0	0	0	0	0	0
LANSING	78	60	84	50	69	0	1.6	.9	1.4	8.4	103	19.7	105	97	63	0	0	0	0	0	0	0	0
MARQUETTE	74	50	85	39	62	-1	1.4	.7	1.0	7.0	78	19.1	82	94	58	0	0	0	0	0	0	0	0
MUSKEGON	78	60	86	42	69	0	.5	-.2	.4	5.8	86	20.8	110	92	58	0	0	0	0	0	0	0	0
SAULT ST. MARIE	72	49	80	43	61	-3	1.0	.2	.8	8.6	105	20.6	107	98	63	0	0	0	0	0	0	0	0
MN ALEXANDRIA	79	58	89	51	68	-1	.6	-.2	.6	6.5	70	16.0	94	91	51	0	0	0	0	0	0	0	0
DULUTH	76	49	87	38	62	-2	3.1	2.1	3.1	10.8	105	20.4	105	95	48	0	0	0	0	0	0	0	0
INT'L FALLS	76	52	91	39	64	0	T	-.7	T	10.4	113	15.4	97	88	44	0	0	0	0	0	0	0	0
MINNEAPOLIS	81	61	87	53	71	2	.3	-.6	.3	16.3	168	28.0	154	92	55	0	0	0	0	0	0	0	0
ROCHESTER	81	60	88	50	71	0	1.0	.2	.9	19.4	201	35.2	187	96	59	0	0	0	0	0	0	0	0
MS GREENWOOD	95	71	99	66	83	2	.0	-.6	.0	7.8	82	34.6	96	95	43	6	6	0	0	0	0	0	0
JACKSON	97	68	100	63	83	1	T	-.8	T	3.7	37	37.7	107	97	59	0	0	0	0	0	0	0	0
MERIDIAN	99	67	102	62	83	2	.0	-.7	.0	7.3	67	49.8	136	96	34	7	7	0	0	0	0	0	0
MO CAPE GIRARDEAU	85	68	94	63	76	-1	.5	-.3	.4	5.3	57	35.0	119	99	56	0	0	0	0	0	0	0	0
COLUMBIA	83	66	91	60	75	-2	2.0	1.3	1.9	16.5	192	43.1	179	96	63	2	2	0	0	0	0	0	0
KANSAS CITY	84	69	91	62	77	-2	3.4	2.5	3.1	15.5	141	32.5	137	86	60	0	0	0	0	0	0	0	0
SAINT LOUIS	84	70	94	64	77	0	.8	.3	.5	7.7	87	28.0	122	92	58	0	0	0	0	0	0	0	0
SPRINGFIELD	86	66	93	60	76	-1	1.0	.4	.8	8.9	91	43.6	172	97	55	3	3	0	0	0	0	0	0
MT BILLINGS	89	59	98	54	74	3	.8	.6	.7	1.8	54	9.2	89	72	25	4	4	0	0	0	0	0	0
GLASGOW	87	58	103	53	73	3	.1	-.2	.1	1.9	38	4.2	51	71	30	3	3	0	0	0	0	0	0
GREAT FALLS	90	57	101	51	73	5	1.5	1.2	1.4	3.8	84	10.8	97	72	21	4	4	0	0	0	0	0	0
HAVRE	89	60	99	54	74	6	.1	-.2	.1	1.6	37	4.8	55	67	26	4	4	0	0	0	0	0	0
HELENA	89	54	98	50	72	5	.4	.1	.2	1.8	48	5.3	64	77	22	3	3	0	0	0	0	0	0
KALISPELL	88	52	97	50	70	6	.1	-.2	.1	3.7	93	13.7	134	93	27	3	3	0	0	0	0	0	0
MILES CITY	89	62	99	50	75	2	T	-.3	T	2.7	54	6.9	66	67	26	4	4	0	0	0	0	0	0
MISSOULA	85	53	98	51	69	3	.6	.3	.2	2.9	90	9.0	90	92	34	0	0	0	0	0	0	0	0
NE GRAND ISLAND	85	65	92	58	75	0	2.1	1.5	1.4	14.7	187	23.1	136	94	55	2	2	0	0	0	0	0	0
LINCOLN	87	67	94	60	77	1	2.9	2.1	2.8	13.3	147	22.5	117	92	53	3	3	0	0	0	0	0	0
NORFOLK	86	66	92	57	76	2	.1	-.5	.1	14.2	155	21.6	121	94	49	2	2	0	0	0	0	0	0
NORTH PLATTE	85	61	94	56	73	0	T	-.4	T	5.5	70	12.9	86	96	48	1	1	0	0	0	0	0	0
OMAHA	85	67	92	59	76	0	.2	-.8	.1	10.6	105	19.2	92	89	60	2	2	0	0	0	0	0	0
SCOTTSBLUFF	85	56	90	50	70	-2	.1	-.1	.1	5.3	96	13.9	122	96	34	1	1	0	0	0	0	0	0
VALENTINE	85	57	96	48	71	-1	.2	-.3	.1	6.9	101	14.4	109	71	38	2	2	0	0	0	0	0	0
NV ELY	83	50	89	43	66	0	.1	.0	.1	1.3	74	6.7	111	72	22	0	0	0	0	0	0	0	0
LAS VEGAS	95	74	99	69	85	-3	T	-.1	T	1.6	193	3.3	131	59	22	6	6	0	0	0	0	0	0
RENO	89	56	98	48	72	5	T	-.1	T	1.0	146	4.2	89	55	17	3	3	0	0	0	0	0	0
WINNEMUCCA	90	55	99	50	72	3	.1	.0	.1	.4	29	4.4	88	48	14	4	4	0	0	0	0	0	0
NE CONCORD	85	59	90	53	72	4	.2	-.5	.2	7.3	93	22.4	102	100	44	1	1	0	0	0	0	0	0
NJ ATLANTIC CITY	86	64	89	60	75	1	.9	-.2	.9	7.8	82	23.4	88	99	55	0	0	0	0	0	0	0	0
NM ALBUQUERQUE	81	61	91	57	71	-1	.6	.5	.2	.2	3.8	141	7.0	146	82	38	1	1	0	0	0	0	0
CLOVIS	85	63	91	62	74	-3	.5	-.1	.3	2.7	38	6.4	56	88	39	3	3	0	0	0	0	0	0
ROSWELL	89	65	94	63	77	-2	.6	.1	.5	1.9	49	4.3	69	86	32	3	3	0	0	0	0	0	0
NY ALBANY	85	61	90	55	73	4	.8	-.1	.4	9.1	111	30.5	139	97	48	1	1	0	0	0	0	0	0
BINGHAMTON	79	59	83	53	69	2	.4	-.4	.3	8.0	89	24.4	106	100	59	0	0	0	0	0	0	0	0
BUFFALO	79	63	85	56	71	2	1.8	.4	1.5	8.9	111	30.3	136	92	56	0	0	0	0	0	0	0	0
NEW YORK	87	72	89	70	80	4	.4	-.6	.4	11.3	121	32.7	122	80	44	0	0	0	0	0	0	0	0
ROCHESTER	80	62	86	55	71	1	1.6	.9	.9	9.2	128	25.6	132	98	63	0	0	0	0	0	0	0	0
SYRACUSE	83	62	88	56	73	3	1.1	.3	.4	8.5	89	28.0	115	98	55	0	0	0	0	0	0	0	0
NC ASHEVILLE	87	62	89	59	75	1	.2	-.8	.2	8.7	86	33.0	115	100	50	0	0	0	0	0	0	0	0
CHARLOTTE	91	70	93	68	81	2	.9	-.1	.4	5.3	55	25.4	88	91	44	5	5	0	0	0	0	0	0
GREENSBORO	89	67	93	63	78	1	.2	-.7	.2	2.9	27	23.1	83	95	49	4	4	0	0	0	0	0	0
HATTERAS	88	73	89	70	81	2	.1	-.3	.1	7.5	57	32.4	98	95	57	0	0	0	0	0	0	0	0
NEW BERN	91	71	94	70	81	2	.8	-.6	.6	8.6	55	32.2	93	98	54	5	5	0	0	0	0	0	0
RALEIGH	88	68	92	63	78	1	1.2	-.2	.5	5.4	50	26.5	95	98	55	3	3	0	0	0	0	0	0
WILMINGTON	90	71	93	69	81	1	.4	-.1	.3	15.7	92	35.7	101	100	56	4	4	0	0	0	0	0	0
ND BISMARCK	85	56	97	41	70	1	.3	-.1	.2	6.5	108	9.6	84	90	37	3	3	0	0	0	0	0	0
FARGO	83	58	96	50	70	1	.2	-.5	.1	7.5	93	12.9	93	88	39	2	2	0	0	0	0	0	0
GRAND FORKS	80	55	95	44	67	0	.0	-.3	.0	6.6	90	11.9	94	88	40	1	1	0	0	0	0	0	0
WILLISTON	87	56	100	51	72	2</																	

Weather Data for the Week Ending August 18, 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	82	61	88	56	72	-2	.8	.1	.6	13.8	154	37.0	155	95	51	0	0	2	1		
TOLEDO	82	60	84	52	71	0	2.1	1.4	1.7	7.3	86	25.1	121	98	53	0	0	3	1		
YOUNGSTOWN	80	59	84	51	69	0	1.6	.9	1.2	12.8	133	28.3	116	100	59	0	0	2	1		
OK OKLAHOMA CITY	90	71	93	69	80	-1	.9	.3	.4	6.7	81	28.5	137	90	49	5	0	4	0		
TULSA	92	73	97	68	83	0	1.0	.3	.6	2.9	30	27.0	107	86	46	4	0	3	1		
OR ASTORIA	70	55	73	47	62	1	.4	.1	.4	4.4	101	46.0	122	96	65	0	0	2	0		
BURNS	84	51	96	46	68	0	.2	.1	.2	.3	30	3.5	59	64	24	3	0	1	0		
MEDFORD	85	60	97	56	73	1	.4	.3	.3	.6	56	8.8	82	77	30	3	0	2	0		
PENDLETON	85	61	100	52	73	1	T	.1	T	.8	60	6.3	89	49	21	2	0	0	0		
PORTLAND	80	61	92	57	70	3	.2	.1	.2	2.5	100	21.0	103	87	44	1	0	1	0		
SALEM	80	55	90	49	68	1	.3	.1	.3	1.9	98	21.6	98	91	45	1	0	2	0		
PA ALLENTOWN	85	63	89	60	74	2	.7	.4	.7	11.4	113	28.8	104	99	48	0	0	1	1		
ERIE	79	64	86	58	72	2	2.1	1.2	1.2	8.2	86	26.7	114	97	63	0	0	3	2		
HARRISBURG	87	64	89	62	76	1	1.1	.3	.7	6.7	75	25.2	101	95	47	0	0	2	1		
PHILADELPHIA	87	68	90	66	78	2	.3	.7	.3	8.4	82	25.7	97	99	53	1	0	1	0		
PITTSBURGH	82	60	87	57	71	0	.7	.0	.7	12.0	130	29.8	120	98	53	0	0	2	1		
SCRANTON	83	61	87	57	72	2	.9	.1	.9	13.0	148	29.2	134	94	47	0	0	1	1		
RI PROVIDENCE	85	65	89	59	75	3	0	.9	0	7.0	86	28.2	103	94	51	0	0	0	0		
SC CHARLESTON	91	74	93	73	83	2	1.1	.4	.8	13.9	78	29.7	83	99	57	7	0	4	1		
COLUMBIA	91	69	94	68	80	0	2.6	1.3	1.9	11.3	86	23.8	70	99	52	6	0	3	2		
FLORENCE	92	70	95	68	81	1	2.3	1.2	1.2	5.6	43	15.2	50	97	49	6	0	3	2		
GREENVILLE	91	67	93	65	79	1	.1	.8	.1	6.4	57	28.3	83	96	42	6	0	1	0		
SD ABERDEEN	84	56	95	43	70	-1	1.3	.9	1.1	11.0	163	15.6	118	97	43	2	0	3	1		
HURON	85	61	95	51	73	1	.4	.1	.2	10.2	151	20.4	148	93	47	1	0	3	0		
RAPID CITY	89	58	96	50	74	1	T	.3	T	4.6	74	12.1	94	83	27	3	0	0	0		
SIOUX FALLS	87	62	93	51	74	2	.1	.6	.1	7.0	86	14.9	89	95	47	3	0	2	0		
TN CHATTANOOGA	92	69	96	66	80	2	.1	.7	.1	10.2	104	46.2	133	97	44	7	0	1	0		
KNOXVILLE	89	68	92	64	78	1	.3	.4	.3	11.6	115	37.4	117	99	47	2	0	1	0		
MEMPHIS	91	74	97	71	82	2	.8	0	.8	6.0	62	36.0	103	87	49	5	0	1	1		
NASHVILLE	91	69	98	63	80	1	T	.7	T	9.3	99	24.5	75	92	43	4	0	1	0		
TX ABILENE	93	71	94	69	82	-2	.1	.5	.1	4.9	82	21.3	146	81	35	7	0	2	0		
AMARILLO	84	63	89	62	74	-4	1.7	1.0	.6	6.0	75	13.4	98	90	48	0	0	5	1		
AUSTIN	97	75	99	72	86	1	.3	.2	.3	5.0	82	18.7	98	95	35	7	0	2	0		
BEAUMONT	93	72	96	70	82	-1	T	.3	T	11.7	83	47.2	137	99	51	7	0	0	0		
BROWNSVILLE	94	76	95	75	85	1	T	.6	T	4.4	80	10.6	85	90	49	7	0	0	0		
CORPUS CHRISTI	96	76	97	72	86	1	T	.8	T	3.2	40	15.2	89	92	45	7	0	0	0		
DEL RIO	92	74	94	73	83	-2	.2	.1	.1	4.6	107	16.5	164	73	40	6	0	2	0		
EL PASO	87	65	92	61	76	-5	.2	0	.2	5.4	190	6.6	152	94	37	2	0	4	0		
FORT WORTH	96	74	97	72	85	0	0	.4	0	6.6	119	35.8	180	82	38	7	0	0	0		
GALVESTON	90	79	92	77	85	1	T	.9	T	6.0	62	24.6	107	78	54	6	0	0	0		
HOUSTON	97	72	99	70	84	1	T	.9	T	7.8	77	29.9	106	90	36	7	0	0	0		
LUBBOCK	88	66	93	63	77	-2	1.5	1.0	.9	5.0	79	11.0	93	89	43	2	0	3	2		
MIDLAND	89	66	93	64	77	-4	.5	.2	.5	3.8	95	8.4	101	92	47	2	0	1	1		
SAN ANGELO	92	68	94	64	80	-3	.1	.3	.1	4.4	112	16.7	160	85	38	6	0	2	0		
SAN ANTONIO	94	76	95	74	85	1	.1	.5	.1	10.8	171	27.6	159	89	42	7	0	1	0		
VICTORIA	94	75	96	73	84	0	.6	.1	.4	15.0	172	26.6	126	93	47	6	0	3	0		
WACO	100	76	102	73	88	2	0	.4	0	2.6	48	22.4	115	86	31	7	0	0	0		
WICHITA FALLS	96	73	98	69	84	-1	T	.5	T	7.0	118	31.2	185	85	39	6	0	0	0		
UT CEDAR CITY	81	58	89	55	70	-3	.4	.1	.2	1.1	50	6.6	101	74	32	0	0	4	0		
SALT LAKE CITY	88	63	94	59	75	0	.3	.1	.2	1.8	80	7.6	75	77	31	3	0	2	0		
VT BURLINGTON	81	60	88	55	71	3	.8	.1	.4	11.5	124	25.0	121	98	56	0	0	4	0		
VA NORFOLK	86	72	91	70	79	1	2.1	.8	2.0	13.8	117	30.8	106	97	61	1	0	2	1		
RICHMOND	87	69	91	66	78	1	T	.2	T	13.2	113	30.6	109	96	55	0	0	0	0		
ROANOKE	86	63	89	59	75	-1	.7	.0	.3	7.3	81	25.3	100	100	57	0	0	5	0		
WA QUILLYUTE	67	55	71	49	61	2	.6	0	.3	8.2	118	60.0	104	100	71	0	0	0	0		
SEATTLE-TACOMA	78	59	89	55	69	4	.1	.2	.1	3.7	137	24.1	117	91	44	0	0	2	0		
SPOKANE	84	59	96	55	72	3	T	.7	T	3.6	170	12.3	124	72	29	3	0	0	0		
YAKIMA	87	58	98	49	73	4	T	.1	T	.3	38	3.5	76	76	27	3	0	1	0		
WV BECKLEY	80	61	82	57	71	2	T	.8	T	8.8	81	25.5	90	96	57	0	0	1	0		
CHARLESTON	86	64	89	62	75	1	T	.9	T	9.0	81	25.3	88	99	49	0	0	1	0		
HUNTINGTON	85	64	89	61	74	-1	.6	.3	.6	9.9	94	30.4	109	99	56	0	0	1	1		
PARKERSBURG	83	62	87	60	73	-1	3.5	2.7	3.4	12.7	126	31.4	121	100	53	0	0	2	1		
WI GREEN BAY	78	59	86	49	68	0	.8	.1	.7	14.7	180	24.5	136	97	61	0	0	2	1		
LACROSSE	84	65	95	54	74	3	2.6	1.8	2.2	15.3	153	26.4	130	96	53	1	0	2	1		
MADISON	82	63	91	51	72	1	1.6	.7	1.2	11.3	115	25.3	124	95	58	1	0	2	1		
MILWAUKEE	80	65	90	57	73	2	3.9	3.2	2.5	12.1	136	29.6	145	91	58	1	0	2	2		
WAUSAU	78	59	87	50	68	1	2.1	1.1	1.2	13.2	129	23.3	113	99	58	0	0	4	2		
WY CASPER	83	52	88	47	67	-2	.2	0	0	4.0	155	8.6	105	85	28	0	0	2	0		
CHEYENNE	77	51	83	47	64	-3	.1	.2	.1	6.3	134	16.1	159	91	39	0	0	2	0		
LANDER	84	56	89	52	70	1	.1	.2	.1	2.6	109	6.6	69	72	24	0	0	1	0		
SHERIDAN	87	54	94	51	70	1	T	.2	T	3.1	84	9.7	91	79	25	3	0	1	0		

Based on 1951-80 normals

National Agricultural Summary

August 13 - 19, 1990

HIGHLIGHTS: Lack of moisture stressed crops in the Delta and portions of the northern Great Plains. Rain improved crop condition in portions of the central and southern Great Plains. Rain fell in much of the Corn Belt, where soil moisture was generally adequate. Soil moisture was short to adequate in the northern Great Plains and Pacific Northwest.

SMALL GRAINS: Winter wheat harvest continued in the Pacific Northwest. Land preparation for seeding the 1991 crop was underway in the southern Great Plains. Spring wheat was mostly good to fair with harvest 67 percent (%) complete, 5 percentage points ahead of the 5-year average. Harvest was ahead of normal in all five major producing States and was nearly complete in South Dakota. North Dakota's harvest was 62% complete, 2 points ahead of normal.

CORN: Corn was in mostly good to fair condition. Forty-nine percent of the acreage had reached the dough stage, 27 points behind normal. Corn dented was 14%, 25 points behind normal. Crop development continued to lag behind normal, especially in Illinois, Kentucky, and Missouri. The percentage of acreage dented lagged 41 and 40 points behind normal in Illinois and Missouri, respectively. Crop condition was good in Illinois, Iowa, and Nebraska and good to fair in Indiana and Ohio. Hail damaged corn in portions of Nebraska. Lack of moisture stressed corn in portions of South Dakota.

SOYBEANS: Soybeans were good to fair with 89% of the acreage in the blooming stage or beyond, 4 points behind normal. Sixty-eight percent of the acreage was setting pods, 12 points behind normal. Crop development continued to lag behind normal, especially in Arkansas, Illinois, Missouri, and Nebraska. In Illinois, 65% of the acreage was setting pods, 31 points behind normal. Crop condition was good to fair in the Corn Belt. Lack of moisture lowered crop condition in the Delta. Crop condition was fair to poor in Alabama and Georgia and fair to good in Louisiana and Mississippi. Rain improved the crop in North and South Carolina.

COTTON: Cotton was good to fair with 12% of the acreage opening bolls, 2 points behind normal. Crop development lagged behind normal in Arkansas, Mississippi, and Missouri but was near or ahead of normal in the other major producing States. Lack of moisture lowered crop condition in Alabama, Louisiana, and Mississippi. Cotton was fair to good in Texas with harvest 7% complete, 1 point behind normal. Rain improved cotton in the Plains. Harvest continued in the Rio Grande Valley and Coastal Bend area and gained momentum along the Upper Coast.

SORGHUM: Sorghum was good to fair with 79% of the acreage headed, 2 points behind normal. Thirty-two percent of the acreage was in the coloring stage, 1

point behind normal. In Texas, sorghum was fair to good with harvest 50% complete, equal to the average. Harvest was active in the Blacklands and along the Upper Coast. Rain improved the crop condition in the Plains area of Texas. Rain also improved sorghum condition in portions of Kansas, where the crop was mostly good to fair.

OTHER FIELD CROPS: Rice was mostly good to fair with 70% of the acreage headed, 11 points behind normal. Heading lagged 30 points behind normal in Arkansas but was near or ahead of normal in the other major producing States. Rice harvest was 47% complete in Louisiana and 40% complete in Texas. Peanut harvest was underway in Alabama and Georgia. Tobacco harvest continued in the major producing States.

FRUIT AND NUTS: Florida's citrus groves were in near excellent condition with adequate moisture. New growth was abundant, and fruit was sizing well with minimal losses due to splitting. Pecans were in fair to poor condition in Georgia. In Texas, recent rains slowed pecan drop but aphids and weevils were a continuing problem. Apple and peach harvests continued in eastern Arizona. In California, early variety almond harvest was active. Light volumes of lemons, oranges, and grapefruit were harvested. Table grape harvest continued. Some Thompson seedless grapes were harvested for wine production. Fresh prune harvest was nearly complete, and dry prune harvest was active. Fruit harvest was active in Oregon. In Washington, golden delicious apple harvest was underway. Rain slowed apple and peach harvests in New York.

VEGETABLES: In Florida, fall vegetable crops continued to progress well. Planting was becoming more active in the central area. Watermelon harvest was nearly complete in Georgia and South Carolina. Louisiana's vegetables were in fair condition. Dry soil conditions slowed sweetpotato harvest. Sweetpotato and watermelon harvests continued in east Texas. Rain delayed vegetable harvests in the High Plains. Fall vegetable planting and land preparation was active in the Rio Grande Valley. Mixed melon harvests continued in central Arizona. In California, broccoli supplies were moderate in the Salinas area and light in the Santa Maria area. Quality was good. Celery supplies were heavy and of generally good quality. Summer potato harvest was 19% complete in Colorado. Fall potatoes were in mostly good condition. North Dakota's potatoes were in fair to poor condition. Potato harvest continued in New England and was underway in New York.

PASTURES AND LIVESTOCK: Pastures were in good to fair condition in the central Great Plains and Corn Belt. Lack of moisture slowed pasture growth in the Delta and portions of the northern Great Plains. In the West, ranges were in mostly fair to poor condition.

Crop Progress

FOR WEEK ENDING AUGUST 19, 1990

	CORN % DOUGH		
	1990	1989	AVG.
CO	38	34	61
GA	100	100	100
IL	59	83	89
IN	50	73	87
IA	35	60	74
KS	80	80	85
KY	50	80	84
MI	10	15	40
MN	28	71	67
MO	73	91	93
NE	70	72	79
NC	90	92	94
OH	49	47	80
PA	30	22	48
SD	45	59	50
TX	96	93	95
WI	22	40	54
17 STATES	49	66	76

THESE 17 STATES PRODUCED 95% OF THE 1989 CORN CROP.

	CORN % DENT		
	1990	1989	AVG.
CO	5	6	17
GA	98	97	99
IL	12	32	53
IN	10	18	37
IA	10	20	42
KS	35	40	40
KY	22	40	53
MI	0	0	10
MN	5	12	27
MO	34	64	74
NE	10	21	31
NC	81	69	80
OH	6	5	32
PA	5	1	10
SD	8	16	16
TX	92	77	78
WI	0	9	17
17 STATES	14	24	39

THESE 17 STATES PRODUCED 95% OF THE 1989 CORN CROP.

	RICE % HEADED		
	1990	1989	AVG.
AR	50	69	80
CA	65	55	55
LA	91	89	91
MS	86	78	88
TX	100	100	98
5 STATES	70	75	81

THESE 5 STATES PRODUCED 97% OF THE 1989 RICE CROP.

	COTTON % BOLLS OPENING		
	1990	1989	AVG.
AL	15	13	11
AZ	42	44	36
AR	1	0	14
CA	8	5	10
GA	22	6	17
LA	25	2	22
MS	8	3	15
MO	0	7	9
NM	7	12	10
NC	9	8	11
OK	1	0	0
SC	9	7	9
TN	5	5	7
TX	13	13	14
14 STATES	12	10	14

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

	GRAIN SORGHUM % HEADED		
	1990	1989	AVG.
AR	75	92	NA
CO	66	68	75
IL	40	90	NA
KS	70	45	70
LA	96	95	97
MS	94	93	97
MO	64	91	91
NE	85	80	91
NM	80	NA	NA
OK	45	99	75
SD	76	74	75
TX	93	83	89
12 STATES	78	NA	NA
EXCL. STATES WITH NA	79	69	81

THESE 12 STATES PRODUCED 98% OF THE 1989 GRAIN SORGHUM CROP.

NA - NOT AVAILABLE.

	GRAIN SORGHUM % COLORING		
	1990	1989	AVG.
AR	38	60	NA
CO	14	5	14
IL	6	29	NA
KS	15	5	10
LA	81	70	75
MS	57	64	72
MO	16	41	49
NE	4	16	20
NM	7	NA	NA
OK	15	40	35
SD	24	26	19
TX	71	66	67
12 STATES	31	NA	NA
EXCL. STATES WITH NA	32	30	33

THESE 12 STATES PRODUCED 98% OF THE 1989 GRAIN SORGHUM CROP.

NA - NOT AVAILABLE.

	SOYBEANS % BLOOM		
	1990	1989	AVG.
AL	81	68	79
AR	55	61	58
GA	87	92	95
IL	92	100	100
IN	99	99	100
IA	100	100	100
KS	90	90	95
KY	75	78	83
LA	94	86	88
MI	95	95	95
MN	99	99	99
MS	81	67	76
MO	79	90	94
NE	98	100	100
NC	72	66	71
OH	92	88	96
SC	74	64	73
SD	99	98	94
TN	72	70	80
19 STATES	89	91	93

THESE 19 STATES PRODUCED 95% OF THE 1989 SOYBEANS CROP.

	SOYBEANS % SETTING PODS		
	1990	1989	AVG.
AL	58	46	54
AR	22	37	45
GA	67	65	72
IL	65	96	96
IN	75	78	85
IA	90	100	98
KS	65	60	75
KY	27	41	45
LA	77	64	68
MI	65	65	65
MN	95	93	95
MS	57	48	50
MO	49	73	79
NE	70	82	91
NC	41	36	36
OH	81	50	87
SC	33	35	38
SD	81	88	81
TN	40	44	56
19 STATES	68	75	80

THESE 19 STATES PRODUCED 95% OF THE 1989 SOYBEANS CROP.

	SPRING WHEAT % HARVESTED		
	1990	1989	AVG.
ID	55	37	39
MN	83	90	70
MT	53	39	48
ND	62	80	60
SD	94	100	92
5 STATES	67	74	62

THESE 5 STATES PRODUCED 89% OF THE 1989 SPRING WHEAT CROP.

Crop Condition PERCENT

FOR WEEK ENDING AUGUST 19, 1990

CORN					
STATE	VP	P	F	G	EX
CO	1	4	17	54	24
GA	12	31	33	15	9
IL	0	4	4	70	22
IN	0	2	18	66	14
IA	0	1	8	73	18
KS	0	3	21	46	30
KY	3	7	42	46	2
MI	0	3	15	50	32
MN	3	15	39	39	4
MO	0	1	31	60	8
NE	0	3	13	60	24
NC	9	33	40	17	1
OH	2	8	29	50	11
PA	1	4	16	43	36
SD	0	9	34	46	11
TX	5	13	35	42	5
WI	1	1	15	79	4
17 STATE	1	5	18	60	16
PREV WEEK	1	4	19	61	15
PREV YEAR	3	11	27	46	13

SPRING WHEAT					
STATE	VP	P	F	G	EX
ID	2	7	23	58	10
MN	3	8	32	52	5
MT	6	24	39	27	4
ND	0	4	32	52	12
SD	1	19	25	33	22
5 STATE	2	11	32	45	10
PREV WEEK	2	8	32	47	11
PREV YEAR	8	12	52	24	4

COTTON					
STATE	VP	P	F	G	EX
AL	0	9	70	21	0
AZ	0	0	37	63	0
AR	0	0	28	60	12
CA	0	0	10	85	5
GA	20	30	31	19	0
LA	0	6	59	35	0
MS	0	7	46	46	1
MO	0	0	60	40	0
NM	0	6	31	57	6
NC	0	0	44	50	6
OK	0	0	40	53	7
SC	1	34	64	1	0
TN	0	7	47	46	0
TX	0	6	46	44	4
14 STATE	1	6	42	48	3
PREV WEEK	1	6	36	52	5
PREV YEAR	0	8	53	36	3

SORGHUM					
STATE	VP	P	F	G	EX
AR	1	6	68	25	0
CO	1	3	26	54	16
IL	0	11	26	45	18
KS	0	1	18	69	12
LA	0	10	40	50	0
MS	0	3	51	46	0
MO	0	1	60	37	2
NE	1	5	26	60	8
NM	5	7	29	59	0
OK	0	0	40	60	0
SD	0	4	26	62	8
TX	1	7	45	43	4
12 STATE	1	4	33	55	7
PREV WEEK	1	10	35	46	8
PREV YEAR	7	17	21	46	9

RICE					
STATE	VP	P	F	G	EX
AR	0	0	41	59	0
CA	0	0	15	75	10
LA	0	0	32	63	5
MS	0	0	64	36	0
TX	0	0	28	72	0
5 STATE	0	0	36	61	3
PREV WEEK	0	1	32	62	5
PREV YEAR	0	2	28	62	8

SOYBEANS					
STATE	VP	P	F	G	EX
AL	4	18	65	13	0
AR	2	14	56	28	0
GA	10	35	42	13	0
IL	0	5	19	69	7
IN	0	2	32	60	6
IA	0	6	21	65	8
KS	0	2	29	56	13
KY	0	10	42	45	3
LA	0	12	52	36	0
MI	0	5	15	50	30
MN	5	17	37	37	4
MS	1	13	65	21	0
MO	0	1	51	45	3
NE	0	1	19	64	16
NC	3	5	48	41	3
OH	3	9	32	45	11
SC	0	11	56	33	0
SD	0	3	39	53	5
TN	0	3	47	43	7
19 STATE	1	8	35	50	6
PREV WEEK	1	5	37	50	7
PREV YEAR	4	11	37	42	6

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 0.50 in.; no rain many locations; Temperatures 3 to 5° above normal.

Days suitable for fieldwork 6.8. Soil moisture 80% very short, 20% short. Drought conditions stressed crops, pastures, livestock, poultry. Corn 96% dented, 91% 1989, 96% avg.; 72% mature, 72% 1989, 81% avg.; 42% harvested, 41% 1989, 42% avg.; 3% very poor, 18% poor, 45% fair, 23% good, 11% excellent. Sorghum 17% harvested, 25% 1989, 18% avg; 5% very poor, 18% poor, 69% fair, 8% good. Cotton 15% bolls opened, 13% 1989, 11% avg.; 9% poor, 70% fair, 21% good. Soybeans 81% blooming, 68% 1989, 79% avg.; 58% setting pods, 46% 1989, 54% avg.; 8% turning yellow, 8% 1989, 9% avg.; 4% very poor, 18% poor, 65% fair, 13% good. Peanuts few fields harvested; 22% very poor, 50% poor, 20% fair, 8% good. Pastures 18% very poor, 53% poor, 28% fair, 1% good. Livestock 8% poor, 53% fair, 39% good. Primary activities: Harvesting hay, corn, sorghum, vegetables; controlling insects in row crops; irrigating crops, vegetables; repairing equipment, fences; routine care of livestock, poultry, catfish.

ALASKA: Warm temperatures with rain late in the week allowed 5 days for harvesting small grain, hay, vegetables. Highs normal at Kenai to 13° above normal at Clearwater. Lows 3° warmer than normal at Palmer AES to 11° above normal in Fairbanks. Seasonal precipitation 2.94 in. drier than normal at Clearwater to 2.58 in. wetter than normal in Fairbanks.

Days suitable for fieldwork 5.0. Topsoil 67% short, 33% adequate. Subsoil 68% short, 32% adequate. Barley harvest 30%; swathed 30%; ripe 40%. Hay 2nd harvest slow as growers were hoping for more growth. Prospects were mostly below average for small grains, hay due to extreme dryness during the crucial growing period, grasshopper infestation in the Tanana Valley.

ARIZONA: Heavy rain, dense dust 13th west central, southwest; heavy thunderstorms, flooding, dropping temperatures 14th, 15th central; record minimum high 14th Phoenix 78°; clearing, drying, warmer 16th to 18th; mostly sunny skies 19th; rainfall 0.03 in. southwest to 4.44 in. central. Temperatures 3 to 8° below normal.

Cotton bolls open 42%, 44% 1989, 36% avg.; light defoliation extreme west; fieldwork delayed early west, halted central; heavy insect infestations central. Alfalfa harvest light central, moderate elsewhere; rain damage mostly severe; crop conditions good. Cauliflower transplanting, vegetable ground preparation west; mixed melon harvest continued central; peach, apple, mixed vegetables harvested east.

ARKANSAS: Temperatures near to slightly above normal. Isolated, heavy rain showers first half of week. Extremes 61°; 102°. Rainfall none to 7.20 in.

Days suitable for fieldwork 6.0. Soil moisture 56% short, 44% adequate. Main activities: Irrigating row crops; applying fertilizer, fungicides, insecticides; scouting for insects, diseases; preparing fields for winter annuals; baling hay. Corn 1% poor, 49% fair, 50% good. Soybeans 55% blooming, 61% 1989, 58% avg.; 22% setting pods, 37% 1989, 45% avg.; 2% very poor, 14% poor, 56% fair, 28% good. Sorghum 75% headed, 92% 1989, 93% 4 year avg.; 38% turning color, 60% 1989, 66% 4 year avg.; 1% very poor, 6% poor, 68% fair,

25% good. Cotton fruiting well where irrigated. Sheath blight, blast continued to be a problem. Fields drained in preparation for harvest. Grape, peach harvest virtually complete. Watermelon harvest continued. Dry conditions hampering pasture growth. Pasture 4% very poor, 47% poor, 46% fair, 3% good. Livestock good.

CALIFORNIA: Clouds over northern two thirds of State dropped temperatures to at or below normal. Some moisture received north coast, Sierra.

Field activities progressed, favorable weather. Rice heading continued, some blackbird damage. Cotton bolls open, most areas. Plant tops scorching, excessive heat. Sunflower, sugarbeet, alfalfa seed harvests ongoing. Safflower harvest underway, except north. Corn silage harvest continued, grain harvest soon. Dry bean harvest active, south. Irrigation, pest control ongoing. Summer fruit harvest continued, active. Harvesting, early variety almonds progressed, later varieties irrigated, prepared for harvest. Early August heat caused Granny Smith apple sizing to slow. Summer citrus (lemons, oranges, grapefruit) harvest continued, light, slow. Date dusting, bagging continued. Fig harvest continued. Picking of table grapes progressed. Some Thompson Seedless grapes, harvested, wine, champagne production. Picking, nectarines, approximately 77% complete. Freestone peach harvest progressed, approximately 90% picked. Harvesting, early variety clingstone peaches continued. Plum harvest, approximately 85% complete. Picking, fresh prunes, nearly complete, while dry prune harvest, active. Some walnut orchards, sunburned due to early August heat, other orchards, whitewashed for protection. Broccoli moderate supply Salinas area, light supply Santa Maria area, generally good quality. Cauliflower moderate supply, wide range quality. Celery heavy supply, generally good quality. Sweet corn harvest active. Sweet potato harvest Fresno Merced areas. Tomato harvest continued. Fall desert melon planting completed, good germination. Livestock remained good. Pasture, range northern third mostly fair some poor. Elsewhere, poor to very poor. Supplemental feeding continued some areas. Water supplies adequate to light northern counties most central, southern counties short supplies.

COLORADO: Cooler than usual with most areas of the State receiving substantial moisture. Precipitation 0.10 to 1.48 in. with some areas not reporting, receiving extensive rainfall. Temperature 2 to 4° below normal throughout the State except the far west where they were near normal.

Days suitable for fieldwork 4.5. Soil moisture 4% very short, 25% short, 68% adequate, 3% surplus. Cool, wet weather slowed crop development, harvests. Alfalfa 2nd cutting 70%, 3rd cutting 17% complete. Barley 62% harvested. Oats 60% harvested. Spring wheat 47% harvested. Dry beans 87% flowered, 5% cut. Dry onions 23% harvested. Summer potatoes 19% harvested. Fall potatoes, sugarbeets good. Range, pasture feed 2% very poor, 10% poor, 24% fair, 49% good, 15% excellent. Livestock good.

FLORIDA: Temperatures 3 to 5° above normal, Panhandle, Big Bend; only 1 to 2° above, elsewhere. Extreme highs around 100° Panhandle, Big Bend; mid 90s elsewhere. Coolest lows mid 60s interior of

western Panhandle to upper 60s elsewhere in north to around 70s, Peninsula. Scattered showers, some thunderstorms provided rains statewide. Precipitation across north under 0.50 in.; local areas recorded over 1.00 in. Rainfall 1.00 to 3.00 in. more common central, southern Peninsula; few local areas recorded over 4.00 in.

Soil moisture short Panhandle, short to adequate northern Peninsula, adequate elsewhere. Some crops showed stress from recent droughty conditions. Corn harvest steady; peanut digging underway. Sugarcane generally good progress. Pastures rated 20% excellent, 33% good, 35% fair, 8% poor, 4% very poor. Cattle fair to good north, good to excellent south. Citrus groves, trees, fruit near excellent. Moisture adequate. Abundant new growth. Fruit sizes advanced; minimal loss due to splitting. Oranges, grapefruit breaking color, white seedless grapefruit shipped 17th. Red grapefruit harvested, ready to pack. Caretakers very active, summer grove care. Hot temperatures, scattered showers over vegetable producing areas. Early fall crops continued good progress. Planting becoming active central areas, starting slowly southern areas.

GEORGIA: Hot week. Temperatures 1 to 3° above normal north, east, 3 to 5° above normal elsewhere. Maximum temperatures 90s central, southwest, few areas 100°. Coolest temperatures upper 60s to low 70s, upper 50s mountain areas. Thunderstorms widely scattered, mostly under 0.50 in. of rain. Over 2.00 in. at Bainbridge, Savannah.

Days suitable for fieldwork 6.1. Soil moisture 27% very short, 40% short, 33% adequate. Corn 97% mature, 89% 1989, 93% avg.; 50% harvested for grain, 29% 1989, 39% avg. Cotton increased pressure from aphids, beet armyworms. Sorghum 5% very poor, 25% poor, 58% fair, 12% good. Peanuts 16% very poor, 39% poor, 33% fair, 12% good; 2% dug, 1% avg.; 1% threshed, 1% avg. Insect populations increasing, conditions declining daily. Soybeans 3% dropping leaves, 1% 1989, 1% avg. Tobacco 49% fair, 51% good; 76% harvested, 93% 1989, 83% avg. Watermelons 97% harvested, 97% 1989, 98% avg. Apples 6% poor, 4% fair, 90% good; 37% harvested, 29% 1989, 33% avg. Pecans 4% very poor, 34% poor, 55% fair, 7% good. Hay 2% very poor, 15% poor, 45% fair, 36% good, 2% excellent; Pasture 4% very poor, 15% poor, 41% fair, 37% good, 3% excellent; Cattle 1% poor, 38% fair, 60% good, 1% excellent. Hogs 4% poor, 27% fair, 68% good, 1% excellent.

HAWAII: High temperatures, passing showers, gentle to moderate trade winds typified weeks weather. Temperatures low 70s to low 90s. Winds 10 to 20 mph. Rainfall none to 2.40 in.

Days suitable for farm work 7.0. Irrigation requirements for crops heavy in many areas. Spray programs to control insects active. Papaya production on up swing. Watermelon harvesting active. Pineapple harvesting continued in full swing. Sugarcane harvesting aided by favorable weather.

IDAHO: Temperatures above normal, precipitation above normal east, below normal elsewhere.

Days suitable for fieldwork 6.0. Soil moisture 20% very short, 31% short, 49% adequate. Potatoes 2% harvested, 2% 1989, 1% avg.; good; 42% turning; 15% vines dying. Spring barley 59% harvested, 42% 1989, 45% avg. Oats 47% harvested, 42% 1989, 43% avg. Alfalfa 2nd cutting 83% harvested, 87% 1989, 84% avg.; 3rd cutting 14% harvested, 7% 1989, 4% avg. Dry peas 97% harvested, 60% 1989, 79% avg. Lentils 95% harvested, 48% 1989, 62% avg. Dry bean harvest early stages. Onions 14% harvested fresh pack. Mint nearly harvested, 86% 1989, 70% avg. Processing sweet corn 20% harvested. Peaches 60% harvested, 50% 1989, 48% avg. Hop harvest just underway southwest. Irrigation water supplies fair,

very poor some areas. Range, pasture 11% very poor, 25% poor, 30% fair, 34% good. Livestock good; moved to late summer ranges.

ILLINOIS: Temperatures normal to 2° above normal north, central; normal to 1° below normal south. Precipitation generally 1.75 to 5.00 in. north; 0.25 to 2.00 in. central, south.

Days suitable for fieldwork 4.75. Soil moisture 18% short, 75% adequate, 7% surplus. Corn silked 97%, 100% 1989, 100% avg. Oats harvested 100%, 100% 1989, 100% avg. Alfalfa 1% very poor, 2% poor, 7% fair, 71% good, 19% excellent. Alfalfa hay third cutting 42%, 61% 1989, 59% avg. Pasture 4% very poor, 3% poor, 11% fair, 63% good, 19% excellent.

INDIANA: Temperatures near normal. Lows low 50s to low 60s, highs 80s to mid 90s. Precipitation 0.50 to 4.00 in. few areas, north.

Days suitable for fieldwork 4.9. Topsoil 18% short, 66% adequate, 16% surplus. Subsoil 6% short, 88% adequate, 6% surplus. Soybeans 31 in. high, 32 in. 1989, 33 in. avg. Alfalfa hay 100% cut twice, 93% 1989, 97% avg. Pasture 1% poor, 28% fair, 63% good, 8% excellent. 1991 winter wheat cropland 15% plowed, 18% 1990, 15% avg. Corn, soybeans development behind average. Heavy rains few areas north, dry conditions south.

IOWA: Temperatures 2 to 3° above normal. Extremes 52°; 93°. Rainfall none to 7.40 in.; average 1.52 in.

Days suitable for fieldwork 5.6. Topsoil 14% short, 70% adequate, 16% surplus. Subsoil 4% short, 87% adequate, 9% surplus. Hay 1% poor, 15% fair, 68% good, 16% excellent. Pasture 1% poor, 12% fair, 64% good, 23% excellent. Third crop alfalfa hay 30% harvested, 51% 1989, 44% avg. Second crop clover hay 85% harvested, 100% 1989, 95% avg. Corn 90% milk stage, 96% 1989, 99% avg. Livestock mostly excellent.

KANSAS: Temperatures 1 to 2° below average across State. Rain fell most areas; low of 0.14 in. southwest to high of 3.60 in. northeast.

Days suitable for fieldwork 3.5. Surface moisture 24% short, 60% adequate, 16% surplus. Subsoil 37% short, 60% adequate, 3% surplus. Corn, sorghum, soybeans slightly behind schedule. Scattered showers provided a major benefit to crops, pastures, livestock. Green bug, chinch bugs were present across State, mainly at light levels, moderate to severe in some locations. Range and pasture still good for time of year. Third cutting of alfalfa hay 75% complete; fourth cutting underway.

KENTUCKY: Temperatures near normal, rainfall 0.25 to 0.50 in. Most rain fell 13th, widely scattered showers rest of week. Cooler early in week, hot, humid weekend. Highs lower to mid 90s.

Days suitable for fieldwork 5.2. Soil moisture 12% very short, 40% short, 48% adequate. Crop development slow, condition of crops mostly fair to good. Burley 66% topped, 14% cut, dark tobacco 75% topped. Pasture 2% very poor, 12% poor, 45% fair, 38% good, 3% excellent. Hay crops fair to good. Armyworms on corn. Aphids, blank shank, blue mold on tobacco.

LOUISIANA: Temperatures 4° below to 1.2° above normal. Extremes 62°; 100°. Rainfall none to 0.65 in.

Days suitable for fieldwork 6.8. Soil moisture 39% very short, 47% short, 14% adequate. Corn mature 98%, 92% 1989, 93% avg.; harvested 69%, 41% 1989, 43% avg.; 4% poor, 31% fair, 65% good. Cotton setting bolls 100%, 97% 1989, 99% avg.; open bolls 25%, 2% 1989, 22% avg.; 6% poor, 59% fair, 35% good. Scouting, pest control, irrigation.

Drought stressed cotton opening, shedding leaves early. Hay final cutting 43%, 24% 1989, 30% avg. Excellent drying conditions for harvest. Peaches harvested 97%, 100% 1989, 100% avg. Rice headed 91%, 89% 1989, 91% avg.; ripe 69%, 53% 1989, 52% avg.; harvested 47%, 39% 1989, 36% avg.; 32% fair, 63% good, 5% excellent. Harvest progressing well. Flooding, management of second crop. Sorghum headed 96%, 95% 1989, 97% avg.; turning color 81%, 70% 1989, 75% avg.; ripe 63%, 28% 1989, 44% avg.; harvested 33%, 9% 1989, 22% avg.; 10% poor, 40% fair, 50% good. Soybeans blooming 94%, 86% 1989, 88% avg.; setting pods 77%, 64% 1989, 68% avg.; turning color 6%, 1% 1989, 3% avg.; 12% poor, 52% fair, 36% good. Soybeans being irrigated where available. Non irrigated crop stressed from heat, dry conditions. Fungicides being applied. Sweet potatoes harvested 13%, 10% 1989, 17% avg.; 10% poor, 60% fair, 20% good, 10% excellent. Harvest slowed with dry conditions to prevent bruising, skinning. Sugarcane planted 4%, 6% 1989, 4% avg.; 10% very poor, 10% poor, 60% fair, 20% good. Some planting beginning. Cane growth has slowed with dry conditions. Livestock 2% poor, 45% fair, 50% good, 3% excellent. Marketing calves, pest control, supplemental feeding beginning with short pastures. Pasture 3% very poor, 32% poor, 47% fair, 18% good. Grass dry, short, need rain. Vegetables 24% poor, 62% fair, 14% good. Harvesting peppers, cucumbers, squash, okra, eggplant. Planting fall tomatoes.

MARYLAND & DELAWARE: MARYLAND: Precipitation 0.79 in. Temperature 76°, normal 75°. Extremes 53°; 95°.

Days suitable for fieldwork 5.6. Topsoil 5% short, 74% adequate, 21% surplus. Subsoil 16% short, 79% adequate, 5% surplus. Corn good; 96% silked, 88% 1989, 95% avg.; 69% dough, 61% 1989, 69% avg.; 37% dent, 33% 1989, 38% avg.; silage 2% harvested, 3% 1989, 10% avg. Soybeans good; 84% bloomed, 73% 1989, 75% avg.; 57% setting pods, 53% 1989, 50% avg. Tobacco good; 79% bloomed, 61% 1989, 81% avg.; 59% topped, 35% 1989, 45% avg.; 22% harvested, 13% 1989, 18% avg. Oats fair to good; 89% harvested, NA 1989, 95% avg. Sweet corn 68% harvested, 69% 1989, 78% avg. Potatoes 77% harvested, 65% 1989, 68% avg. Watermelons 80% harvested, 74% 1989, 80% avg. Cantaloupes 79% harvested, 78% 1989, 83% avg. Lima beans 29% harvested, 37% 1989, 49% avg. Snap beans 84% harvested, 78% 1989, 83% avg. Tomatoes 82% harvested, 70% 1989, 64% avg. Hay supplies adequate. Alfalfa hay third cut 62% complete, 59% 1989, 73% avg. Other hay second cut 71% complete, 70% 1989, 85% avg. Other hay third cut 14% complete, 9% 1989, 52% avg. Apples fair to good. Apples 18% harvested, 18% 1989, 14% avg. Peaches fair; 68% harvested, 67% 1989, 63% avg. Pasture fair to good.

DELAWARE: Precipitation 0.81 in. Temperature 77°, normal 76°. Extremes 62°; 95°.

Days suitable for fieldwork 6.5. Topsoil 100% adequate. Subsoil 100% adequate. Corn good; 68% dough, 56% 1989, 73% avg.; 31% dent, 18% 1989, 48% avg. Soybeans good; 82% bloomed, 74% 1989, 78% avg.; 28% setting pods, 25% 1989, 42% avg. Sweet corn 74% harvested, 75% 1989, 80% avg. Potatoes 78% harvested, 69% 1989, 73% avg. Watermelons 51% harvested, 63% 1989, 71% avg. Cantaloupes 88% harvested, 75% 1989, 86% avg. Cucumbers 75% harvested, 81% 1989, NA avg. Lima beans 19% harvested, 7% 1989, NA avg. Snap beans 83% harvested, 74% 1989, NA avg. Tomatoes 70% harvested, 68% 1989, 49% avg. Hay supplies adequate. Alfalfa hay third cut 69% complete, 63% 1989, 87% avg. Other hay second cut 100% complete, 95% 1989, 94% avg. Other hay third cut 42% complete, 63% 1989, 59% avg. Apples fair to good; 25% harvested, 31% 1989, 19% avg. Peaches 98% harvested, 91% 1989, 80% avg. Pasture good.

MICHIGAN: Temperatures 1° below to 3° above normal. Extremes 38°; 87°. Precipitation none to 3.34 in. across the State.

Days suitable for fieldwork 5.0. Soil moisture 16% short, 84% adequate. Corn 10% dough, 15% 1989, 40% avg.; 0% dent, 0% 1989, 10% avg.; 3% poor, 15% fair, 50% good, 32% excellent. Soybeans 95% blooming, 95% 1989, 95% avg.; 65% setting pods, 65% 1989, 65% avg.; 5% poor, 15% fair, 50% good, 30% excellent. Pasture 7% poor, 20% fair, 48% good, 25% excellent. Major activities: Working next seasons wheat ground, spraying for insects in fruit trees, harvesting oats, baling 2nd cutting hay. Red haven peaches, apples, apricots are being picked, sweet corn, peppers, green beans, pickles, tomatoes are also being harvested.

MINNESOTA: Temperatures 2° below normal to 2° above normal. Extremes 37°; 96°. Precipitation 0.40 to 2.00 in.; greatest weekly total 5.50 in.

Days suitable for fieldwork 6.1. Topsoil 39% very short, 25% short, 34% adequate, 2% surplus. Spring wheat 92% cut, 86% 1989, 80% avg.; 83% combined 90% 1989, 70% avg. Oats 97% cut 98% 1989, 96% avg.; 93% combined, 97% 1989, 90% avg. Barley 99% cut, 99% 1989, 93% avg.; 98% combined, 97% 1989, 82% avg. Corn 81% in milk, 94% 1989, 95% avg.; 28% in dough, 71% 1989, 67% avg. Soybeans 95% setting pods, 93% 1989, 95% avg.; 4% turning yellow, 1% 1989, 10% avg. Winter wheat 99% harvested, 96% 1989, 93% avg. Rye 93% harvested, 99% 1989, 95% avg. Potatoes 2% harvested, 3% 1989, 3% avg. Sweet corn 26% harvested, 52% 1989, 51% avg. Land 33% plowed, tilled 30% 1989, 28% avg. Field corn 3% very poor, 15% poor, 39% fair, 39% good, 4% excellent. Soybeans 5% very poor, 17% poor, 37% fair, 37% good, 4% excellent.

MISSISSIPPI: Temperatures 1° below normal. Extremes 56°; 102°. Mostly dry statewide with scattered showers. Rainfall 0.14 in., 0.63 in. below normal. Soil temperature 87°.

Days suitable for fieldwork 6.1, 5.8 1989, 5.5 avg. Soil moisture 50% very short, 42% short, 8% adequate. Cotton 100% boll setting, 93% 1989, 98% avg.; 8% open bolls, 3% 1989, 15% avg.; 7% poor, 46% fair, 46% good, 1% excellent. Corn 95% dough, 88% 1989, 95% avg.; 81% dent, 71% 1989, 86% avg.; 50% mature, 34% 1989, 52% avg.; 10% harvested, 8% 1989, 11% avg.; 66% silage harvested, 40% 1989, 59% avg.; 2% poor, 40% fair, 58% good. Rice 86% heading, 78% 1989, 88% avg.; 14% mature, 16% 1989, 64% fair, 36% good. Soybeans 81% blooming, 67% 1989, 76% avg.; 57% podding, 48% 1989, 50% avg.; 6% turning color; 1% very poor, 13% poor, 65% fair, 21% good. Sorghum 94% heading, 93% 1989, 97% avg.; 5% coloring, 64% 1989, 72% avg.; 22% mature, 19% 1989, 31% avg.; 4% harvested, 2% 1989, 7% avg.; 43% silage harvested, 36% 1989, 35% avg.; 3% poor, 51% fair, 46% good. Hay 76% harvested, 65% 1989, 72% avg. Peanuts 22% harvested, 19% 1989. Sweet potatoes 10% harvested, 1% 1989, 6% avg. Watermelons 90% harvested, 83% 1989, 84% avg. Pasture, Livestock good to fair. Activities: Harvesting hay, spraying pesticides on cotton, corn harvesting, sorghum harvesting, cutting silage.

MISSOURI: Temperatures 3° below normal to 1° above normal. Rainfall 3.50 in. northwest, 0.50 in. southeast, 1.00 in. elsewhere.

Days suitable for fieldwork 3.9. Topsoil 18% short, 62% adequate, 20% surplus. Southern third improved; 50% short. Corn progress over 2 weeks behind avg. Corn dent stage 20% north central to 75% southeast. Soybeans podding 27% southwest to 66% northwest. Sorghum coloring 5% north central to 26% southeast. Alfalfa hay third cutting 60%, 83% 1989, 81% avg. Other hay harvested 94%, 100% 1989, 100% avg. Pasture 3% very poor, 5% poor, 23% fair, 54% good, 15% excellent.

MONTANA: Temperature above normal by 2 to 7°. Precipitation statewide. Central division received most moisture, east the least.

Days suitable for fieldwork 6.5. Topsoil 78% short, 22% adequate. Subsoil 75% short, 25% adequate. Barley 3% very poor, 14% poor, 35% fair, 39% good, 9% excellent; 46% harvested, 31% 1989, 47% avg. Oats 5% very poor, 21% poor, 39% fair, 29% good, 6% excellent; 52% harvested, 33% 1989, 44% avg. Pasture, range feed 6% very poor, 13% poor, 32% fair, 39% good, 10% excellent. Second cutting alfalfa harvested 59%, 62% 1989, 65% avg. Other hay harvested 87%, 94% 1989, 94% avg.

NEBRASKA: Temperatures near normal. Extremes 48°; 96°. Precipitation latter half of week none northwest up to 1.62 in. central section.

Days suitable for fieldwork 5.0. Topsoil 33% short, 64% adequate, 3% surplus. Subsoil 43% short, 57% adequate. Alfalfa hay 2% very poor, 3% poor, 50% fair, 40% good, 5% excellent; 55% third cutting, 61% 1989, 56% avg. Dryland crops continue to show stress some southern counties, beginning to show stress other areas. Hail received central part of State, damaged 22,000 acres mostly corn, alfalfa in one county, 3,000 acres of corn in another. Heavy general rains allowed some irrigators to shut down, south. Grasshoppers numbers increasing eastern third of State. Corn growers still spraying spider mites, corn borers. Green bugs causing damage to sorghum southeast. Pasture, range feed supplies 2% very poor, 18% poor, 42% fair, 36% good, 2% excellent. Only unusual movement reported in southwest, some selling continued, in north calves, yearlings starting to move. Livestock good, high humidity caused some stress, east. Main activities: Harvesting hay; weed, insect control; preparing land for fall planting; irrigating; county fair activities. Some alfalfa sown, cover crop planted on idle acres, east, southeast.

NEVADA: Dramatic change, cold low pressure system lowered temperatures by 15 to 20° over northwest, was accompanied by widespread showers. Snow accumulations as low as 8,000 ft. northern Sierra. Temperatures still averaged a few degrees above normal most of State.

Lovelock area alfalfa seed harvest just getting started. Third crop alfalfa hay harvest progressing northern areas. Melon harvest continuing central area. Cattle, sheep mostly good.

NEW ENGLAND: Precipitation none to 1.50 in. most areas, up to 3.00 in. extreme northern Maine. Temperatures mid 60s to low 70s north, to mid 70s south; 2 to 5° above normal. Maximum temperatures mid 80s to low 90s.

Days suitable for fieldwork 5.0. Soil moisture north 50% adequate, 50% surplus; south 84% adequate, 16% surplus. Grazing availability 7% short, 85% adequate, 8% surplus. Pasture 2% poor, 19% fair, 75% good, 4% excellent. Maine potato early harvest for processing underway; good. Rhode Island potatoes 15% harvested, 7% 1989, 12% avg.; good. Connecticut River Valley potatoes 5% harvested, 8% 1989, 8% avg.; good. Maine oat good. Field corn good. Sweet corn 59% harvested, 52% 1989, 50% avg.; good. Second cut hay 59% harvested, 61% 1989, 68% avg.; good. Outdoor tobacco 58% harvested, shade tobacco 65% harvested; good. Apple size medium to large; good. Peaches 43% harvested; good. Pears 18% harvested; good. Raspberries 84% harvested; good. Blueberries 81% harvested; good. Major farm activities: Cutting hay, mowing orchards, harvesting fruits, vegetables.

NEW JERSEY: Temperatures above normal. Extremes 52°; 90°. Rainfall 0.62 in. north, 1.39 in. central, 1.54 in. south. Heaviest 24 hour total

4.50 in. on 19th, 20th. Estimated soil moisture percent field capacity averaged 89% north, 80% central, 73% south. Four inch soil temperatures averaged 72° north, 75° central, 73° south.

Topsoil short to surplus. Some areas received heavy showers on the 19th. Hot humid weather during most of the period was replaced by current cool dry air benefitting crop quality. Fall vegetable planting active. Harvest of summer crops active. Irish potato digging advanced as field conditions permitted. Some southern growers finished harvest. Sweetpotato digging started. Peach harvest active. Summer apple movement steady. Third cutting of hay continued. Field corn, soybean prospects good to excellent. Pasture growth well above normal.

NEW MEXICO: Temperatures several degrees below normal. Extremes 42°; 96°. Nearly all of State received some precipitation. High totals included 3.40 in. at Animas, 2.99 in. at Deming, 2.26 in. at Santa Fe.

Days suitable for fieldwork 5.2. Soil moisture 28% short, 66% adequate, 6% surplus. Rains causing damage to cut alfalfa, also delaying onion, chile harvest. Cooler temperatures slowing cotton progress. Moisture helping land preparation, wheat planting in the High Plains. Livestock, rangeland continuing to improve. Cattle, sheep both fair to good. Range 24% poor, 49% fair, 24% good, 3% excellent.

NEW YORK: Wet week. Rainfall was high in most places, variable. Several areas received over 2.00 in. Rainfall was lightest on Long Island where a third of an in. or less fell. Temperatures 2 to 4° above normal. Extremes 45°; 90°.

Days suitable for fieldwork 4.5. Soil moisture mostly adequate to surplus. Pastures 42% fair, 50% good, 8% excellent. Hay good; corn mostly good to excellent. Wheat harvest 99% complete, 99% 1989, 96% avg. Oats 60% harvested, 63% 1989, 60% avg. Alfalfa 2nd cutting 79% finished, 68% 1989, 73% avg.; 3rd cutting underway. Early potatoes being dug. Dry beans good. Apple, peach harvest slowed by rain. Hudson Valley apples, peaches excellent. Pears sizing nicely. Recent rains increased diseases on vegetables. Harvest in full swing. Some onions in Orange County were damaged by the rain.

NORTH CAROLINA: Temperatures were about normal across the State. Extremes 50°; 94°. Precipitation none to 3.36 in.

Days suitable for fieldwork 5.5. Soil moisture 5% very short, 34% short, 60% adequate, 1% surplus. Pasture 3% very poor, 14% poor, 44% fair, 38% good, 1% excellent. Livestock feed from pasture 73%. Hay second cutting 75%; third cutting 30%. Flue cured tobacco harvested 47%. Corn silage harvested 38%; grain harvested 5%; soft dough 90%; dent 81%; mature 67%. Cotton setting bolls 94%; opening bolls 9%. Soybeans blooming 72%; setting pods 41%. Crop condition: Corn 9% very poor, 33% poor, 40% fair, 17% good, 1% excellent; cotton 44% fair, 50% good, 6% excellent; soybeans 3% very poor, 5% poor, 48% fair, 41% good, 3% excellent; peanuts 29% fair, 59% good, 12% excellent; sorghum 19% poor, 60% fair, 21% good; tobacco 2% poor, 27% fair, 68% good, 3% excellent; sweet potatoes, 8% poor, 28% fair, 61% good, 3% excellent; apples 6% very poor, 25% poor, 38% fair, 31% good; truck crops 2% very poor, 16% poor, 41% fair, 41% good; hay 2% very poor, 13% poor, 46% fair, 39% good. Major activities: Harvesting flue cured tobacco; cutting corn silage; hay harvesting; spraying field crops; harvesting vegetables. Other activities included: Tending livestock; harvesting peaches; harvesting corn for grain, general farm maintenance.

NORTH DAKOTA: Temperatures normal in the eastern districts to 3° above normal northwest, southwest. Precipitation 0.30 in. west central to 0.70 in. northwest.

Days suitable for fieldwork 5.7. Topsoil 55% very short, 42% short, 3% adequate. Subsoil 57% very short, 43% short. Small grain harvest mostly above average pace. Spring wheat 4% poor, 32% fair, 52% good, 12% excellent; 62% combined, 80% 1989, 60% avg. Durum 1% poor, 38% fair, 46% good, 15% excellent; 40% combined, 62% 1989, 45% avg. Oats 9% poor, 46% fair, 39% good, 6% excellent; 76% combined, 85% 1989, 70% avg. Barley 31% fair, 58% good, 11% excellent; 90% combined, 93% 1989, 77% avg. Winter wheat is 98% combined. Late season crops struggling from lack of moisture. Corn for grain 7% poor, 77% fair, 16% good; 5% denting and beyond, 10% 1989, 18% avg. Corn for silage 8% very poor, 18% poor, 48% fair, 24% good, 2% excellent; 4% cut, 3% 1989, 4% avg. Flax 3% very poor, 8% poor, 29% fair, 54% good, 6% excellent; 9% swathed and beyond, 14% 1989, 13% avg. Potatoes 46% very poor, 54% fair; 64% rows filled and beyond, 55% 1989, 89% avg. Dry beans 8% very poor, 9% poor, 55% fair, 28% good; 20% mature and beyond, 10% 1989, 10% avg. Soybeans 11% poor, 59% fair, 30% good; 21% lower leaves yellowing and beyond, 22% 1989, 26% avg. Sunflowers 6% poor, 48% fair, 42% good, 4% excellent; 25% flowers dried or dropped and beyond, 28% 1989, 28% avg. Sugarbeets 17% poor, 66% fair, 17% good. Pastures 18% very poor 53% poor, 25% fair, 4% good. Stockwater 8% very short, 40% short, 52% adequate. Second cutting alfalfa 75% harvested, first cutting other hay 95% harvested.

OHIO: High temperatures upper 70s to mid 80s. Low temperatures upper 50s to mid 60s. Overall temperatures within a degree of normal. Rainfall 0.75 to 3.50 in. Soil temperatures low to mid 70s.

Days suitable for fieldwork 5.6. Soil moisture 14% short, 79% adequate, 7% surplus. Activities: Harvesting crops, preparing land for fall plantings. Corn mostly good, development later than normal, some nitrogen deficiency noted. Soybeans fair to mostly good; crop needs warm, dry weather. Hay mostly good. Pasture 1% very poor, 4% poor, 30% fair, 53% good, 12% excellent. Good haying weather. Cool weather slowed vegetable development. Tobacco topping continued.

OKLAHOMA: Temperatures 3° below normal north central to 1° above normal east central. Precipitation 0.07 in. south central to 2.67 in. southwest.

Days suitable for fieldwork 6.3. Topsoil 40% short, 60% adequate. Subsoil 30% short, 70% adequate. Wheat farmers applying fertilizer, eradicating volunteer wheat, weeds. Cotton 40% fair, 53% good, 7% excellent; 1% open bolls, 0% 1989, 0% avg. Sorghum 40% fair, 60% good; 45% heading, 99% 1989, 75% avg.; 15% coloring, 40% 1989, 35% avg. Corn, peanuts good, soybeans fair. Corn 32% mature, 15% 1989, 35% avg. Peanuts 75% setting pods, 65% 1989, 80% avg. Soybeans 25% setting pods, 40% 1989, 50% avg. Sorghum, soybean development over 1 week behind 5 year avg. Pastures 5% poor, 55% fair, 35% good, 5% excellent. Cattle good; marketings average, prices up slightly from preceding week.

OREGON: Hot, dry weather across State first of week; cool, wet beginning mid week. Temperatures 3 to 6° above normal. All regions had precipitation 0.33 in. The most rain fell at Eugene, 1.29 in.; some areas along east slopes of Cascades.

Soil moisture 79% short, 21% adequate; improved slightly from last two weeks. Barley 62% harvested, 61% 1989, 76% avg. Rain interrupted fieldwork some counties. Grain harvest continued in full swing Wallowa, Klamath Counties. Hay cutting, baling continued east, Willamette Valley.

Vegetable seeds, hops also harvested. Grass seed field burning, straw removal, tillage also started. Bartlett pears harvested Medford, Hood River, Willamette Valley. Early apples picked; Gravenstein variety Willamette Valley; Gala variety Milton Freewater; also Hood River. Peaches, apricots harvested Willamette Valley, Wallowa Co. Blackberry harvest continued west, also some everbearing strawberries. Sweet corn, cucumber harvesting continued Willamette Valley. Tomatoes, peppers harvested Hermiston area. Early potatoes harvested Malheur Co., good quality. Livestock good across State despite short stockwater southeast. Range, pasture 34% poor, 47% fair, 19% good.

PENNSYLVANIA: A near normal week for late summer across the Commonwealth. Temperature 72°, 2° below normal. Extremes 50°; 92°. Precipitation 0.75 in., 0.09 in. below normal.

Days suitable for fieldwork 5. Soil moisture 18% short, 74% adequate, 8% surplus. Corn 81% silk, 72% 1989, 90% avg.; 30% dough, 22% 1989, 48% avg.; 5% dent, 1% 1989, 10% avg.; 1% very poor, 4% poor, 16% fair, 43% good, 36% excellent. Soybean 3% poor, 16% fair, 47% good, 34% excellent. Wheat harvest 99% complete, 98% 1989. Oat harvest 85% complete, 73% 1989. Barley harvest 100% complete, 100% 1989. Tobacco harvest 10% complete, 9% 1989. Potato harvest 20% complete, 23% 1989. Second cutting alfalfa 83% complete, 74% 1989. Third cutting alfalfa 31% complete, 26% 1989. Fourth cutting alfalfa 3% complete, 0% 1989. Second cutting clover timothy 64% complete, 52% 1989. Quality of hay made mostly good. Pasture 2% very poor, 10% poor, 75% fair, 13% good. Apple harvest 15% complete, 16% 1989. Peach harvest 49% complete, 31% 1989. Grapes harvest 4% complete, 0% 1989. Fall plowing 14% complete, 12% 1989. Activities: Harvesting hay, haylage, barley, wheat, potatoes, tobacco, oats, fruits, vegetables; repairing fence; weed control; hauling manure; spreading fertilizer; maintaining machinery; caring for livestock.

PUERTO RICO: Rainfall 1.33 in. was 0.27 in. below normal. Rainfall was 5.38 in. at San Juan City; 4.74 in. at Pico Del Este Luquillo; 3.85 in. at Canovanas. Highest 24 hour total 4.42 in. at San Juan City. Temperatures 82 to 84° on the Coast, 75 to 80° in the Interior. Mean station temperature 67° at Pico del Este Luquillo to 88° at Ponce 4E. Extremes 61°; 95°.

SOUTH CAROLINA: Temperatures 1° above normal in the southern portion of the State to 2 to 3° above normal in northwest. Rainfall 0.20 in. northwest to 1.60 in. central part.

Days suitable for fieldwork 5.7. Soil moisture 14% very short, 47% short, 37% adequate, 2% surplus. Cotton 1% very poor, 34% poor, 64% fair, 1% good, 99% setting bolls, 92% 1989, 94% avg.; 9% open bolls, 7% 1989, 9% avg. Soybeans 11% poor, 56% fair, 33% good, 74% blooming, 64% 1989, 73% avg.; 33% setting pods, 35% 1989, 38% avg.; 1% leaves turning, 3% 1989, 2% avg. Corn poor to fair, 91% matured, 70% 1989, 73% avg.; 41% harvested, 11% 1989, 16% avg. Sorghum fair, 20% harvested, 17% 1989, 13% avg. Tobacco fair, 65% harvested, 64% 1989, 65% avg.; 5% stalks destroyed, 4% 1989, 5% avg. Peanuts fair, 1% harvested, 1% 1989, 1% avg. Watermelons fair, 89% harvested, 89% 1989, 92% avg. Cantaloupes fair, 87% harvested, 85% 1989, 89% avg. Peaches fair, 92% harvested, 92% 1989, 94% avg. Pastures 14% very poor, 27% poor, 47% fair, 12% good.

SOUTH DAKOTA: Temperatures 4° below to 4° above normal. Extremes 41°; 101°. Precipitation below normal west, south, above normal north central, northeast. Maximum 4.48 in. Growing season precipitation generally above normal east, below

normal west. Range 3.56 in. below to 7.28 in. above normal. Growing degree days 253 units above to 188 units below normal.

Days suitable for fieldwork 6.0. Subsoil 27% critically short, 48% short, 25% adequate. Topsoil 29% critically short, 48% short, 22% adequate, 1% surplus. Range, pasture 4% very poor, 5% poor, 47% fair, 42% good, 2% excellent. Corn 9% poor, 34% fair, 46% good, 11% excellent. Other crops mostly good. Grasshoppers problems, musk, Canada thistle problems. Dry weather causing moisture stress in row crops. Major activities: Spraying, fallow work, soil tillage, hauling water, fencing.

TENNESSEE: Cold front moved southward across State 13th producing significant rainfall west. Remainder of week dry statewide. Temperatures generally seasonable early week, much above average late week.

Days suitable for fieldwork 5.8. Soil moisture 24% very short, 44% short, 32% adequate. Corn 68% dough, 86% 1989, 92% avg.; 42% dent, 50% 1989, 68% avg.; 8% mature, 12% 1989, 20% avg.; 2% very poor, 8% poor, 48% fair, 42% good. Cotton 5% open bolls, 5% 1989, 7% avg.; 7% poor, 47% fair, 46% good. Sorghum 85% headed, 94% 1989, 95% avg.; 24% turning color, 50% 1989, 62% avg.; 2% very poor, 52% fair, 46% good. Soybeans 72% blooming, 70% 1989, 80% avg.; 40% setting pods, 44% 1989, 56% avg.; 3% poor, 47% fair, 43% good, 7% excellent. Tobacco 80% topped, 68% 1989, 72% avg.; 2% poor, 24% fair, 73% good, 1% excellent. Burley tobacco 14% harvested, 18% 1989, 20% avg. Dark fired tobacco 18% harvested, 20% 1989, 19% avg. Dark air cured tobacco 18% harvested, 20% 1989, 17% avg. Pastures 1% very poor, 15% poor, 42% fair, 38% good, 4% excellent. Cattle 1% poor, 26% fair, 69% good, 4% excellent. Primary activities: Spraying crops; topping, spraying tobacco; preparing for fall seeding.

TEXAS: Line of instability stretched from Big Bend through High Plains, steered storms across west. Widespread rains produced some flooding around river valleys. Old frontal boundary east moved northward, triggered storm activity Red River early week. South remained mostly dry despite rise in heat, humidity. Rainfall above normal High Plains, Trans Pecos, north, south below normal. Temperatures averages reflected cloud cover associated with rainfall. High Plains, Trans Pecos, Edwards Plateau averages below normal. Temperatures elsewhere normal.

Crops: Corn fields Plains need warmer temperatures further drying. Producers expect good yields. Harvest continued Blacklands, yields disappointing many fields. Aflatoxin problems minor. Harvest continued east down to Upper Coast. Harvest virtually completed most other areas. Corn mature 64%, 62% 1989, 64% avg.; harvested 56%, 49% 1989, 48% avg. Grain sorghum fields improved Plains with rain. Green bug activity increasing, spraying occurring as weather allowed. Harvest continued Blacklands. Harvest progressed east, Upper Coast without much delay. Harvest virtually complete other areas. Sorghum mature 68%, 59% 1989, 57% avg.; harvested 50%, 46% 1989, 50% avg. Cotton fields Plains could still benefit from last weeks rainfall; warmer temperatures vitally needed. Many fields beyond help before rain, will not make much. Bollworm activity increasing. Bolls opening Blacklands. Some defoliating southern Blacklands. Progress good Trans Pecos warmer weather also needed. Harvest increasing central, also defoliating activities. Harvest continued Coastal Bend, Valley. Harvest gaining momentum Upper Coast. Cotton setting bolls 93%, 82% 1989, 91% avg.; harvested 7%, 8% 1989, 8% avg. Land preparations small grains slowed Plains by rainfall; moisture will help planting. Some planting for winter

pasture has occurred. Producers other areas beginning land preparations. Soybeans good progress Plains. Harvest continued Blacklands, yields not improving much. Later varieties Upper Coast need rain. Harvest early varieties continued. Rice harvest continued Upper Coast, fair to good yields. Rice harvested 40%, 52% 1989, 54% avg. Peanuts show good progress Cross Timbers, Hill Country. Minimal disease problems occurring. Peanuts good progress south central. Other field crops: Peanuts 0% harvested, 0% 1989, 1% avg. Soybeans harvested 6%, 1% 1989, 1% avg.

Commercial Vegetables: Rio Grande Valley, land preparations, planting activity increasing. Eastern State, sweetpotato, watermelon harvest continued. Harvest other vegetables winding down. Fall planting increasing. High Plains, harvest carrots, cucumbers, cabbage, peppers delayed by rain. Potato harvest also delayed some. Trans Pecos, some remaining cantaloupes lost to excessive rain. Chili harvest slowed by rain. Pecans shell hardening stage many areas. Nut drop slowed some with recent rains. Weevils, aphids continued problems.

Range and Livestock: Ranges, pastures continued improve many areas. Drying conditions east, south slowed growth. More rain needed. Haying operations steady many areas. Livestock conditions remained good. Range, pasture 2% very poor, 17% poor, 44% fair, 31% good, 6% excellent.

UTAH: Temperatures about 3° above normal in northern part, about normal in central, southern parts of State. Precipitation was light to moderate except for Uinta Basin which was almost zero.

Days suitable for fieldwork 5.6. Soil moisture 81% short, 19% adequate. Rain showers interrupted harvest activities late in week. Winter wheat 98% harvested, 96% 1989, 89% avg. Barley 84% harvested, 77% 1989, 81% avg. Spring wheat 82% harvested, 78% 1989, 74% avg. Oat acreage harvested for grain, 64% completed; harvested for hay 93%. Alfalfa hay second crop 98% cut, 98% 1989, 96% avg.; third crop 20% cut; 21% 1989, 15% avg. Field corn in dough stage 32%, 38% 1989, 45% avg. Fruit growers picking early peaches. Moisture improved range conditions. Range, pasture 3% very poor, 47% poor, 50% fair.

VIRGINIA: Temperatures 2° above normal. Light to moderate precipitation none to over 2.00 in.

Days suitable for fieldwork 5.0. Topsoil 7% very short, 17% short, 66% adequate, 10% surplus. Corn silked 90%, 94% 1989, 90% avg.; dough stage 58%, 61% 1989, 61% avg.; dent stage 41%, 40% 1989, 42% avg.; mature 21%, 18% 1989, 19% avg.; 8% poor, 54% fair, 36% good, 2% excellent; silage 3% harvested, 3% 1989, 5% avg. Soybeans bloomed 70%, 75% 1989, 67% avg.; setting pods 47%, 54% 1989, 42% avg.; 10% poor, 35% fair, 49% good, 6% excellent. Flue tobacco harvested 32%, 27% 1989, 17% avg. Fire harvested 34%, 29% 1989, 17% avg. Burley 1% harvested, 1% 1989, 1% avg. Sun cured harvested 18%, 10% 1989, 10% avg. All tobacco 1% poor, 29% fair, 70% good. Peanut 20% fair, 80% good. Some spraying for leaf spot disease on peanuts. Pasture 4% very poor, 11% poor, 43% fair, 38% good, 4% excellent. Alfalfa 2% very poor, 11% poor, 26% fair, 56% good, 5% excellent. Other hay 4% very poor, 14% poor, 34% fair, 46% good, 2% excellent. Livestock mostly fair to good. Lambs marketed. Fruit trees sprayed, fruit harvest continued. Planting cucumbers, snap beans, fall greens. Vegetable harvest continued.

WASHINGTON: Temperatures normal to 9° above normal east; 3 to 7° above normal west. Precipitation none to 0.32 in. east; none to 0.23 in. west.

Days suitable for fieldwork 7.0. Soil moisture 70% short, 30% adequate. Range, pasture 1% very

poor, 30% poor, 39% fair, 30% good. Hay, other roughage 15% short, 85% adequate. Winter wheat 5% poor, 30% fair, 33% good, 32% excellent; harvested 91%, 87% 1989, 85% avg. Spring wheat harvested 75%, 68% 1989, 72% avg. Barley harvested 83%, 69% 1989, 72% avg. Alfalfa hay, 3rd cutting, 39%, 38% 1989, 36% avg. Potatoes harvested 14%, 13% 1989, 13% avg. Hot, dry weather allowed the small grain harvest to advance rapidly. Yields have varied, overall yields have been good at above average or average. The golden delicious apple harvest was underway. The pear, peach, nectarine harvests continue. The green pea harvest was 92% complete. Many varieties of vegetables were harvested. Pasture conditions deteriorated in western areas, livestock were placed on feed.

WEST VIRGINIA: Temperature 73°, 0 to 3° above normal. Extremes 53°; 93°. Precipitation 1.23 in.

Days suitable for fieldwork 5.5. Soil moisture 20% very short, 20% short, 60% adequate. Pasture 12% poor, 22% fair, 61% good, 5% excellent. Cattle, sheep good to fair. Wheat fair to good; 80% harvested. Oats good; 93% ripe; 93% harvested. Corn excellent; 85% silked; 57% dough. Hay good; second cutting 44% complete; third cutting 19% complete. Apples, peaches poor. Tobacco good; 46% topped. Farm activities: Making hay, clipping pastures, small grain harvesting, topping, harvesting tobacco.

WISCONSIN: Temperature 70°, 1° above normal. Extremes 38°; 95°. Precipitation 1.60 to 3.90 in. Localized flooding in central, southern areas.

Days suitable for fieldwork 4.4. Soil moisture 46% short, 52% adequate, 2% surplus. Pasture 2% very poor, 8% poor, 30% fair, 50% good, 10% excellent. General condition of crops 13% fair, 82% good, 5% excellent. Soybean 86% of normal; 3% turned, 2% 1989, 4% 3 year avg. Corn 1% very poor, 1% poor, 15% fair, 79% good, 4% excellent; 22% in dough, 40% 1989, 54% avg.; 0% in dent, 9% 1989, 17% avg. Second cut hay 87% completed, 86% 1989, 85% avg. Third cut hay 17% completed, 12% 1989, 18% avg. Oats 77% harvested, 78% 1989, 82% avg. Winter wheat 89% harvested, 94% 1989, 97% avg.

WYOMING: Temperatures below normal. Precipitation above normal.

Days suitable for fieldwork 6.0. Topsoil 36% short, 64% adequate. Winter wheat 10% mature, 10% 1989, 5% avg.; 90% harvested, 90% 1989, 95% avg. Barley 30% mature, 40% 1989; 70% harvested, 60% 1989. Spring wheat 5% turning color, 0% 1989; 40% mature, 40% 1989; 55% harvested, 60% 1989. Oats 20% turning color, 0% 1989; 50% mature, 45% 1989; 30% harvested, 55% 1989. Dry beans 95% setting pods, 90% 1989, 85% avg.; 10% leaves turning color, 15% 1989, 15% avg. Corn mostly all tasseled, 75% 1989, 85% avg.; 70% silked, 65% 1989, 70% avg.; 60% milk, 55% 1989, 45% avg.; 10% dough, 15% 1989, 20% avg. Alfalfa second cutting 55% complete, 65% 1989, 60% avg. Other hay 85% harvested, 85% 1989, 85% avg. 1991 winter wheat 5% seeded. Ranges, pastures 5% poor, 80% good, 15% excellent. Stockwater 35% short, 65% adequate. Calf, lamb weights mostly unchanged from a year ago.

(Continued from front cover)

Great Lakes, causing locally torrential rain and flooding. Rainfall of 5-7 inches was reported across northern Indiana. Dry weather prevailed across parts of the Gulf Coast States. Hot weather continued over the interior of the **Northwest** early in the week as temperatures again climbed into the hundreds. Relatively cool air remained over the **Southwest**, while record-high temperatures for the date were broken across the **Southeast** at week's end.

International Weather and Crop Summary

HIGHLIGHTS

August 12-18, 1990

USSR ... In Western USSR, the small grains harvest continues to progress slowly northward, with some interruptions caused by intermittent showers. In the New Lands, variable showers cover spring grains, filling in the north and maturing in the south.

EUROPE ... Light to moderate rain and cooler temperatures help reduce stress in the northwest. Moderate to heavy rain favors summer crops in the northeast.

EASTERN ASIA ... Heavy rain causes flooding in central and eastern sections of China. Hot, dry weather stresses crops in the southeast.

SOUTH ASIA ... Much needed rain covers India's primary groundnut regions.

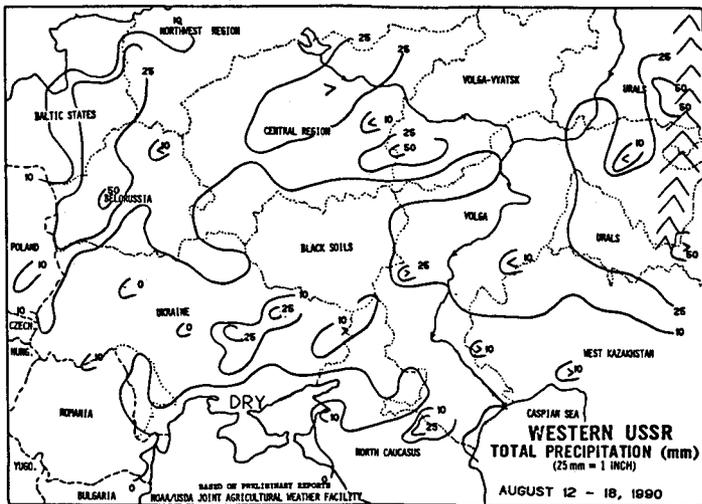
SOUTHEAST ASIA ... Typhoon Yancy brings heavy showers to the northern Philippines.

SOUTH AMERICA ... Showers help wheat growth in eastern growing areas of Argentina and in south-central Brazil. Unseasonable warmth promotes early wheat growth.

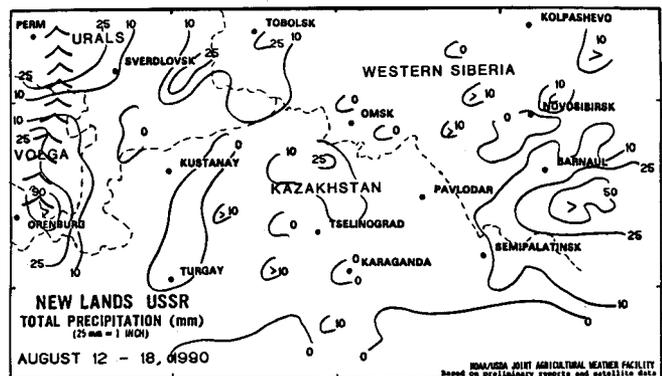
AUSTRALIA ... Rain benefits winter grains across much of the south. Dryness favors sugarcane harvest in the northeast.

CANADA ... Scattered showers maintain generally favorable conditions for immature grains and oilseeds.

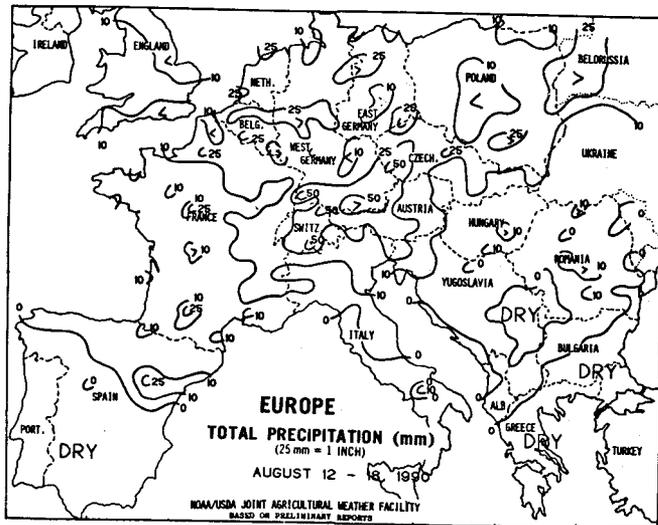
MEXICO ... Rain favors immature crops and boosts irrigation reserves.



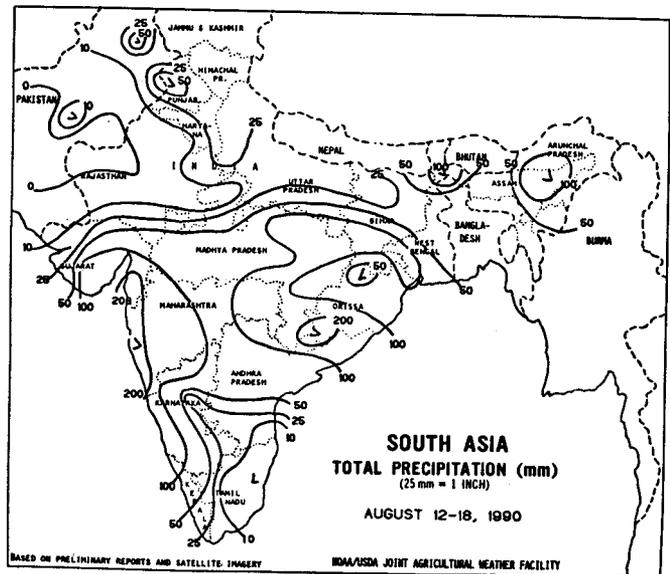
USSR ... In Western USSR, the small grains harvest continued to progress slowly. Preparations for planting the 1991 winter grain crop were underway in the north. Intermittent showers over the Baltic States, Belorussia, the Central Region, and the Volga Vyatsk Region produced widespread light to moderate rainfall (10-30mm, with local amounts in excess of 40mm), causing some interruptions in harvesting. As of August 13, reports indicate small grains and pulses have been harvested on over a third of the sown area. This year's harvest pace is occurring at a slower rate than last year. Mostly dry weather in the Black Soils Region helped harvesting. Further south, the small grain harvest was virtually complete in the Ukraine and North Caucasus. Corn, sunflowers, and sugarbeets were in the filling stages. Dry weather covered most areas except for patchy areas in the eastern Ukraine and eastern North Caucasus where thunderstorms produced local precipitation amounts ranging from 10 to 27mm.



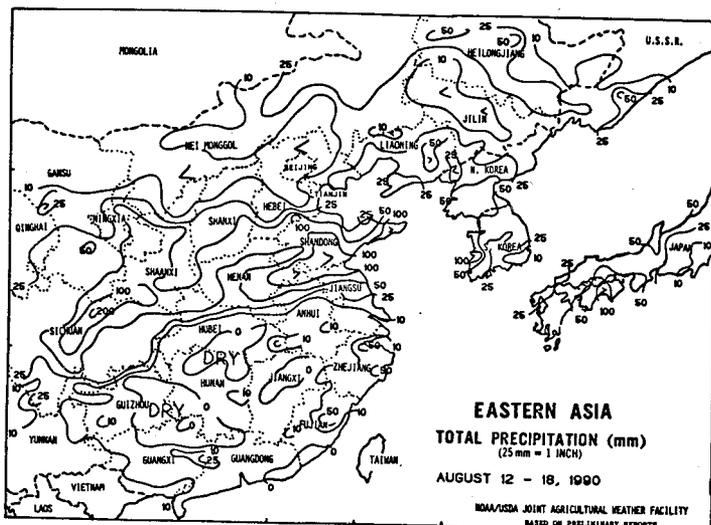
In the New Lands, spring grains were grain-filling in the northern Urals and the northern portion of West Siberia. Crop progress ranged from maturing to mature in the southern Urals, Kazakhstan, and the southern portion of West Siberia, where early harvesting was likely occurring. Wet weather (25-50mm) covered western crop areas adjacent to the Urals as well as southeastern crop areas in Altay Krai. Variable showers (5-20mm) covered central crop areas. Weekly average temperatures were 2-4 degrees C above normal over most of the region except in the southeast, where temperatures were 1-2 degrees C below normal.



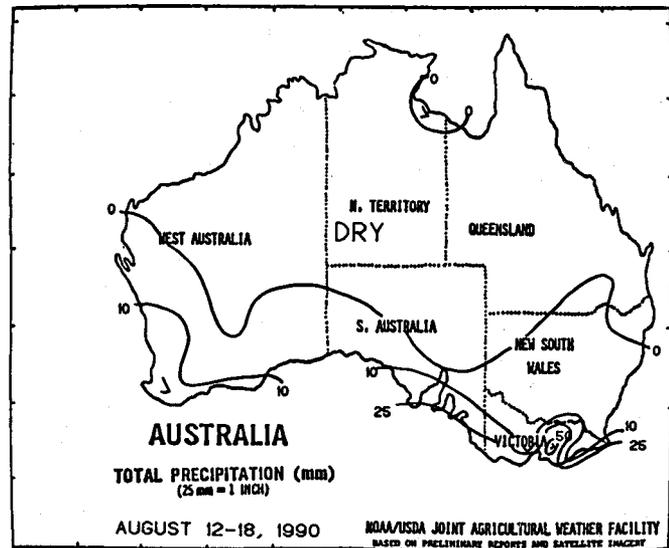
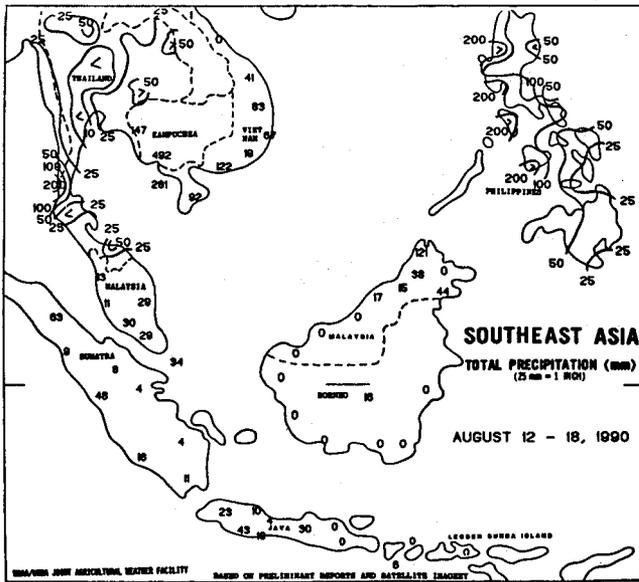
EUROPE ... A pair of cool fronts brought cooler temperatures (daily maximum temperatures 18-24 degrees C) and light to moderate rain (5-15mm, with isolated amounts greater than 15mm) to much of northwestern Europe following unseasonable heat (daily maximum temperatures 30-36 degrees C) on the 12th and 13th. The cooler weather helped reduce moisture stress for corn, sunflower, and sugarbeet crops, although below-normal rainfall since early July has left soil moisture levels abnormally low in most areas of the region. In the northeast, scattered moderate to heavy rain (15-30mm, with isolated amounts greater than 30mm) delayed late winter wheat harvest but favored filling summer crops. Seasonably dry and warm weather covered most crop areas in southern Europe. Mean weekly temperatures were near to above normal across the continent.



SOUTH ASIA ... Late-week heavy showers (94-139mm) over the primary groundnut regions of India's Gujarat state greatly improved moisture reserves for vegetative to reproductive crops. Moderate to heavy showers (50-100mm or more) continued elsewhere over central and much of southern India, although most crop areas of Karnataka and southern Andhra Pradesh received less than 25mm. Beneficially drier weather continued for the second week over most primary rice areas from Uttar Pradesh eastward, but locally heavier amounts (50-171mm) in the eastern states exacerbated flooding. In the north, highly variable rainfall (5-72mm) improved irrigation reserves in northern Pakistan and northern India. Seasonably warm weather (highs ranging from 35 to 40 degrees C), however, maintained high evaporative losses.

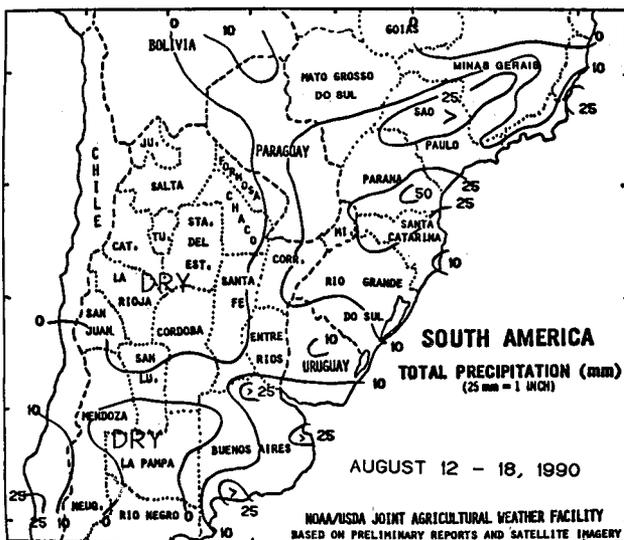


EASTERN ASIA ... A near stationary frontal system brought widespread heavy rain (25-100mm, with scattered amounts in excess of 100mm) from Sichuan northeastward to Shandong and South Korea, keeping soils in the North China Plain at saturation and delaying corn harvest in Sichuan. Torrential rain (100-200mm, with isolated amounts greater than 200mm) in sections of northern Sichuan, eastern Henan, Shandong, and northern Jiangsu likely caused flooding. In contrast, unseasonably hot (daily maximum temperatures 35-39 degrees C) and dry weather covered the Yangtze Valley and coastal southern China, stressing filling single-crop and vegetative late crop rice. Heavy rain (25-100mm, with isolated amounts greater than 100mm) continued to increase soil moisture levels for summer crops in southern Japan, although high temperatures (daily maxima 33-36 degrees C) accelerated evapotranspiration loss rates. In Taiwan, heavy showers (25-65mm) fell late in the week due to the approach of Typhoon Yancy.

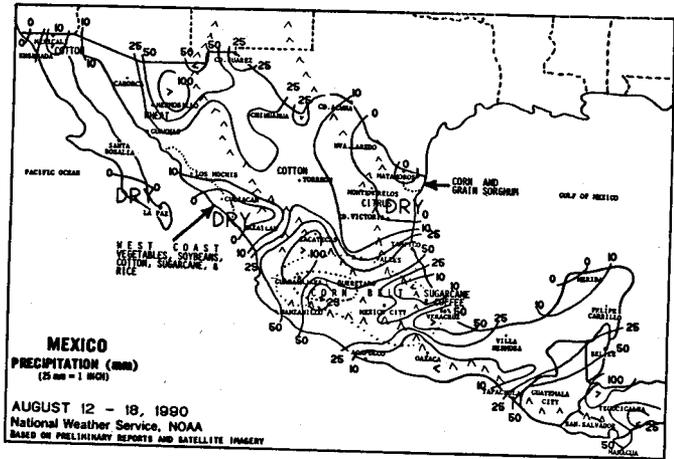
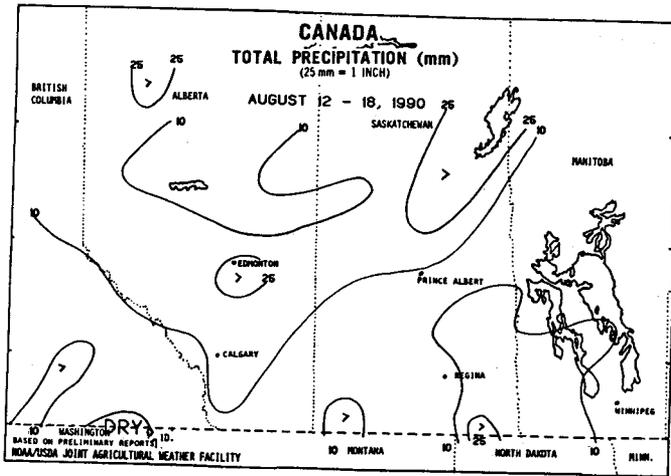


SOUTHEAST ASIA ... Typhoon Yancy passed to the northeast of Luzon Island, Philippines, bringing moderate to heavy rain (50-100mm or more) to northern and west-central crop regions. Local flooding from inundating rains (200-316mm) occurred over some west-coastal areas. Seasonable showers (25-50mm or more) covered most other Philippine crop areas. In Thailand, mostly dry, warmer-than-normal weather returned to northern and central grain regions, favoring maturing crops, but maintaining higher-than-usual evaporative losses. In contrast, seasonable showers (25-50mm or more) continued over major rainfed rice areas of northeastern Thailand, the Khorat Plateau, and from Bangkok southeastward to southern Vietnam. Most Thai grain regions reach their rainfall peak during August and September, allowing for a buildup of irrigation reserves for secondary plantings.

AUSTRALIA ... Light to moderate rain (5-15mm) continued across crop areas of Western Australia and south-central South Australia, maintaining generally favorable conditions for winter grains. Scattered moderate to heavy rain (15-25mm) fell in southeastern South Australia and western Victoria, while light rain (less than 10mm) covered Victoria and northern New South Wales. Seasonable dryness in Queensland favored sugarcane harvest and planting in coastal eastern sections. Mean weekly temperatures were near to below normal across most crop areas. Near freezing temperatures (daily minimum temperatures 1 to -1 degree C) produced scattered frost in sections of south-central New South Wales on the 18th.



SOUTH AMERICA ... In Argentina, beneficial showers (10-47mm) fell over southern and eastern Buenos Aires, promoting early wheat growth. Mostly dry weather prevailed over northern wheat areas, including northwestern Buenos Aires, northeastern La Pampa, Santa Fe, and Cordoba. In southern Cordoba, light showers (1-7mm) provided minimal topsoil moisture. Unseasonably warm weather (weekly mean temperatures averaging 4-7 degrees C above normal) until midweek increased soil moisture loss and wheat growth. Wheat planting has progressed on schedule. In south-central Brazil, widespread showers (10-51mm) covered the wheat growing areas, benefiting early growth in the south and grain development in the north. The moisture in Sao Paulo and southeastern Minas Gerais favored citrus and coffee tree growth.



CANADA ... Scattered showers (5-25mm or more) maintained generally favorable conditions for immature grains and oilseeds across the northern Prairie growing regions. Variable rainfall (3-36mm) also covered the southern crop areas, but pockets of drier- and warmer-than-normal weather in the southwest favored maturing spring wheat. Temperatures averaged near to slightly below normal over Saskatchewan and Manitoba. In general, moisture reserves are adequate in most crop regions for normal growth, but warmer weather is needed the next few weeks to aid crop development, which is behind schedule in many areas due to cool, wet weather during the planting season.

MEXICO ... Substantial rain fell again in numerous crop areas. Weekly rainfall ranged from 25 to 100mm or more in the northwest and north-central rangelands, boosting irrigation reservoirs and favoring crop growth. Showers (less than 10mm) diminished along the west coast farming region, but locally heavy rain (50-180mm) soaked western portions of the Southern Plateau Corn Belt. Variable rain (less than 10mm to more than 50mm) moistened the remainder of the Plateau, where immature corn has sufficient moisture. Mostly light showers (less than 15mm) fell over the Yucatan peninsula. Dry weather returned to the northeast, allowing crop harvesting.

The Weekly Weather and Crop Bulletin (ISSN 0043-1974) is published weekly and jointly prepared by the U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA) and the U.S. Department of Agriculture (USDA). Publication began in 1872 as the Weekly Weather Chronicle. It is issued under general authority of the Act of January 12, 1895 (44-USC 213), 53d Congress, 3d Session. NOAA is responsible for managing, printing, and distributing the bulletin. The contents may be reprinted freely, with proper credit.

Annual subscriptions: domestic \$35, foreign \$50 (in U.S. funds by international money order or check drawn on U.S. bank) payable to U.S. Department of Commerce, NOAA. POSTMASTER: Send address changes to Weekly Weather and Crop Bulletin, NOAA/USDA, Joint Agricultural Weather Facility, USDA South Building, Room 5844, Washington, D.C. 20250. Order subscriptions from the office and address listed above. Second class postage paid at Washington, D.C. and additional mailing offices.

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Weather Service/Climate Analysis Center
Managing Editor Douglas Le Comte
Meteorologists Tom Heddinghaus (202) 382-1444
Vilhelm Bjerknes, Bob Stefanski, Wes Byrd, and Jeff Savadel

Subscriptions (202) 447-7917 . . Joyce Houston

U.S. DEPARTMENT OF AGRICULTURE
Economics Management Staff
Editor Sharon Lee
National Agricultural Statistics Service
Agricultural Statistician . . . Tom Kurtz (202) 447-2157
World Agricultural Outlook Board
Agricultural Weather Analysts. . Ray Motha (202) 447-5716
Tom Puterbaugh, Mark Brusberg, and Jeff Andresen

NOAA/USDA Joint Agricultural
Weather Facility
Room 5844 USDA South Building
Washington, D.C. 20250

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

WEEKLY NEWS BULLETIN
SECOND CLASS

SECOND CLASS MAIL
POSTAGE AND FEES PAID
NOAA PERMIT NO.
ISSN 0043 1974