

WEEKLY WEATHER AND CROP BULLETIN

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

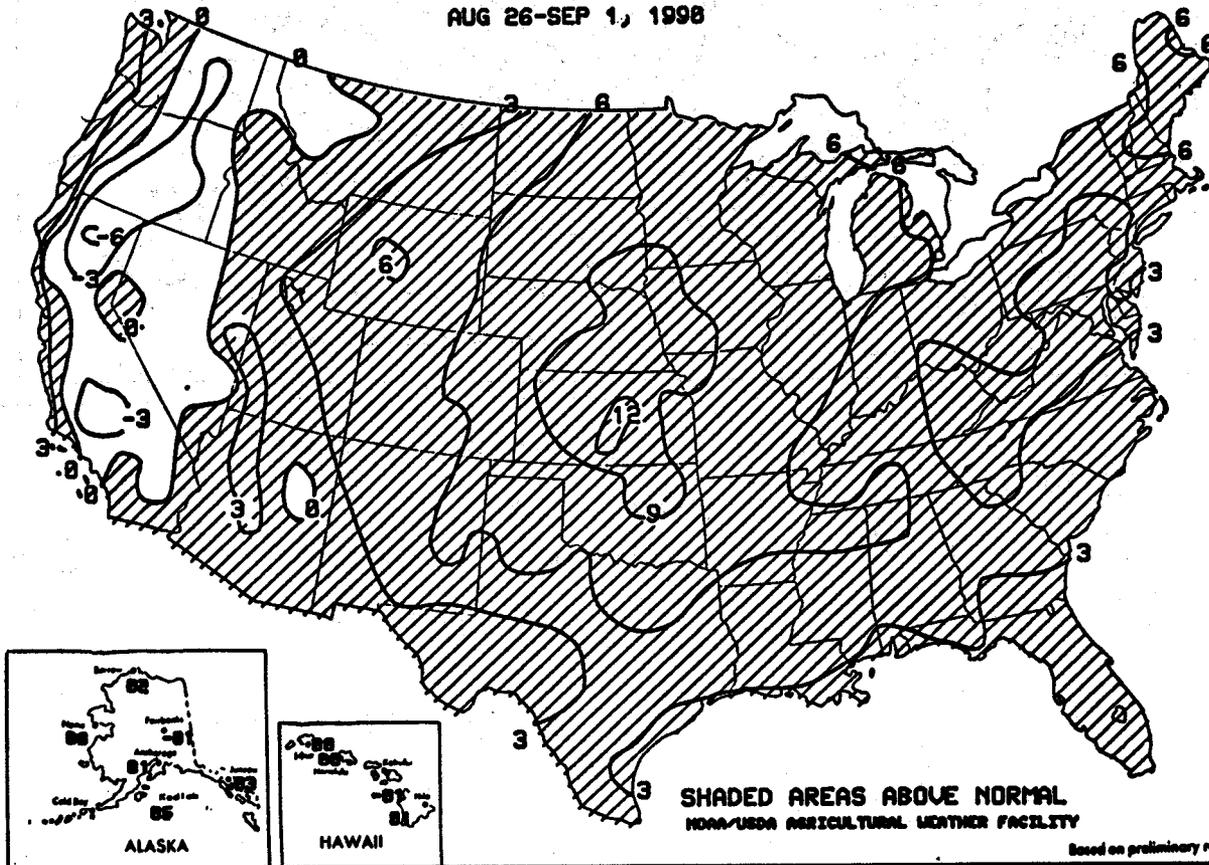
U.S. DEPARTMENT OF AGRICULTURE
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DEPARTURE OF AVERAGE TEMPERATURE FROM NORMAL (°F)
AUG 26-SEP 1, 1990



HIGHLIGHTS

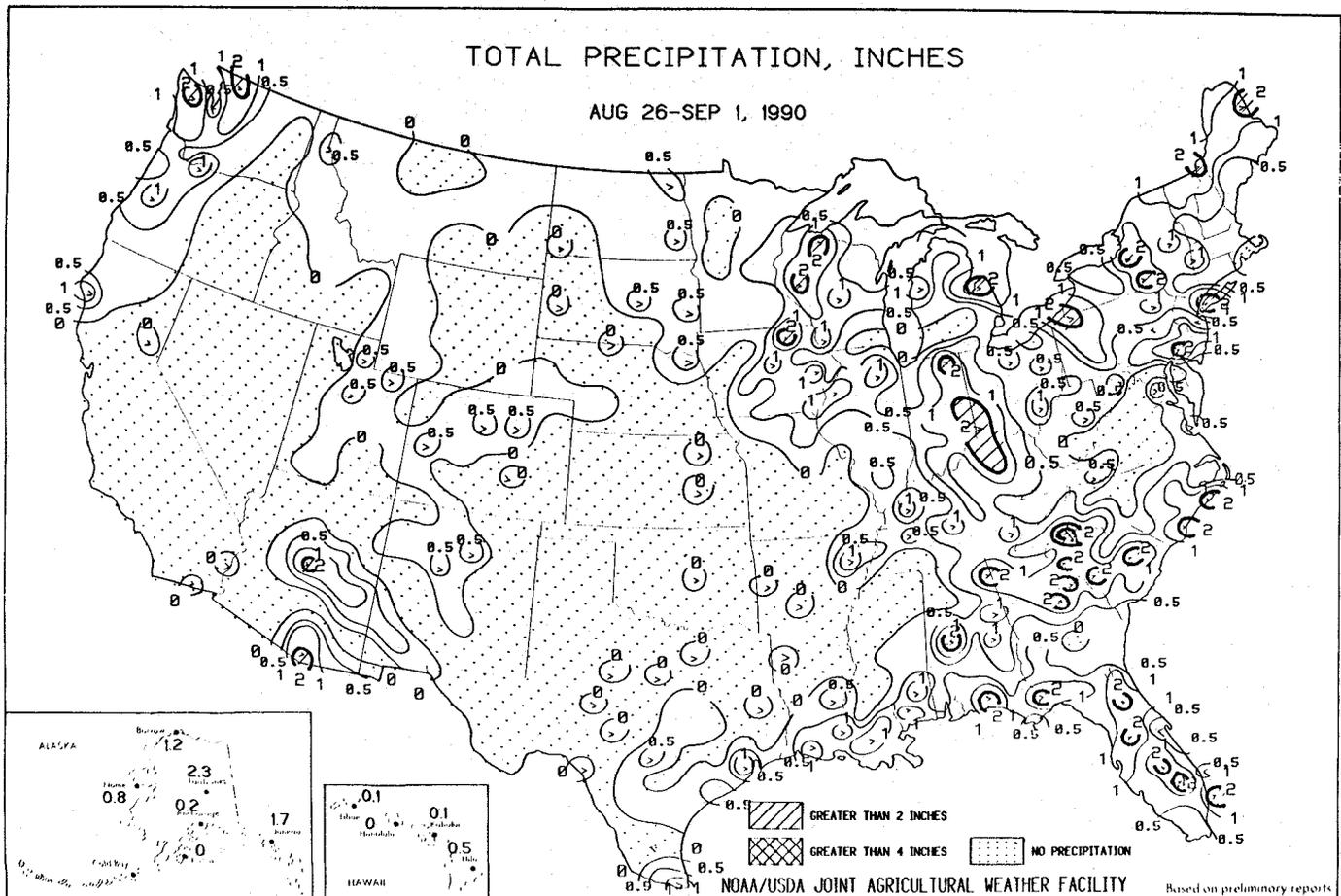
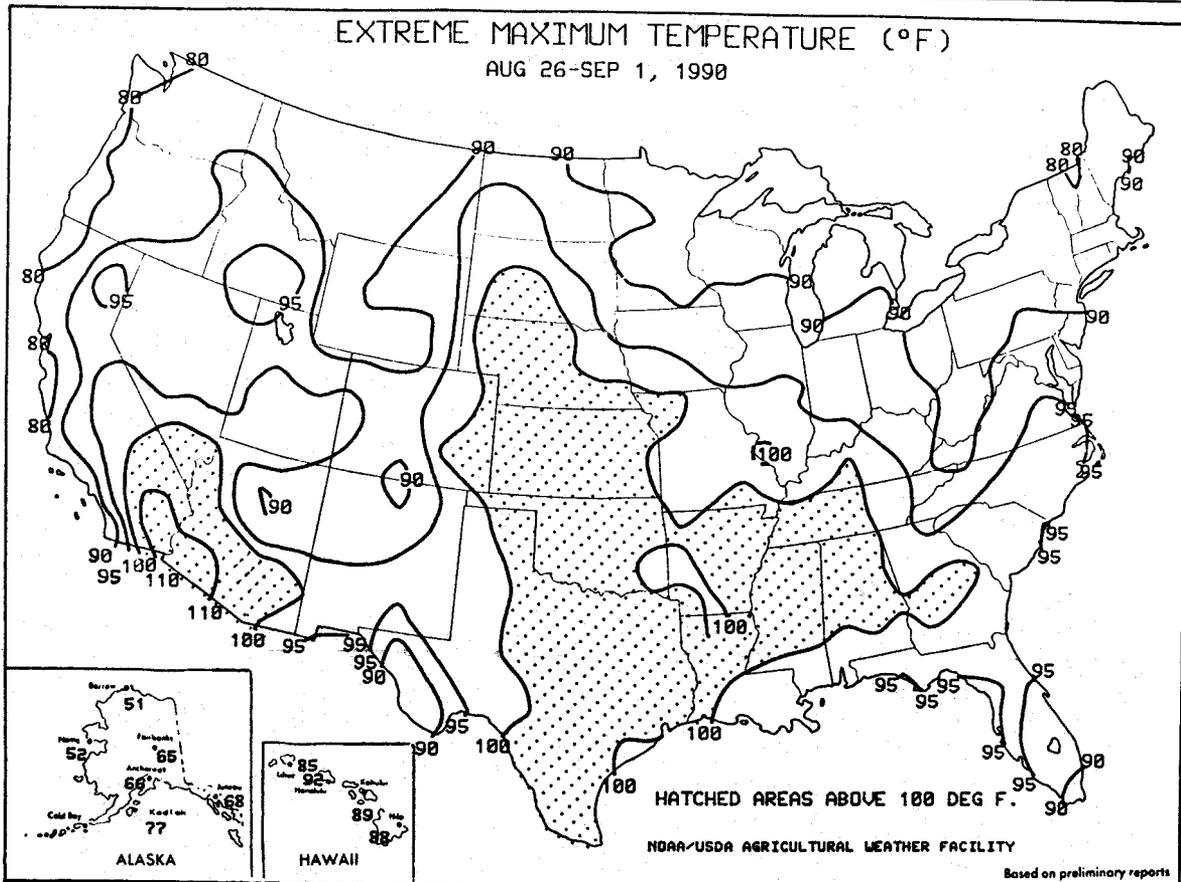
August 26 - September 1, 1990

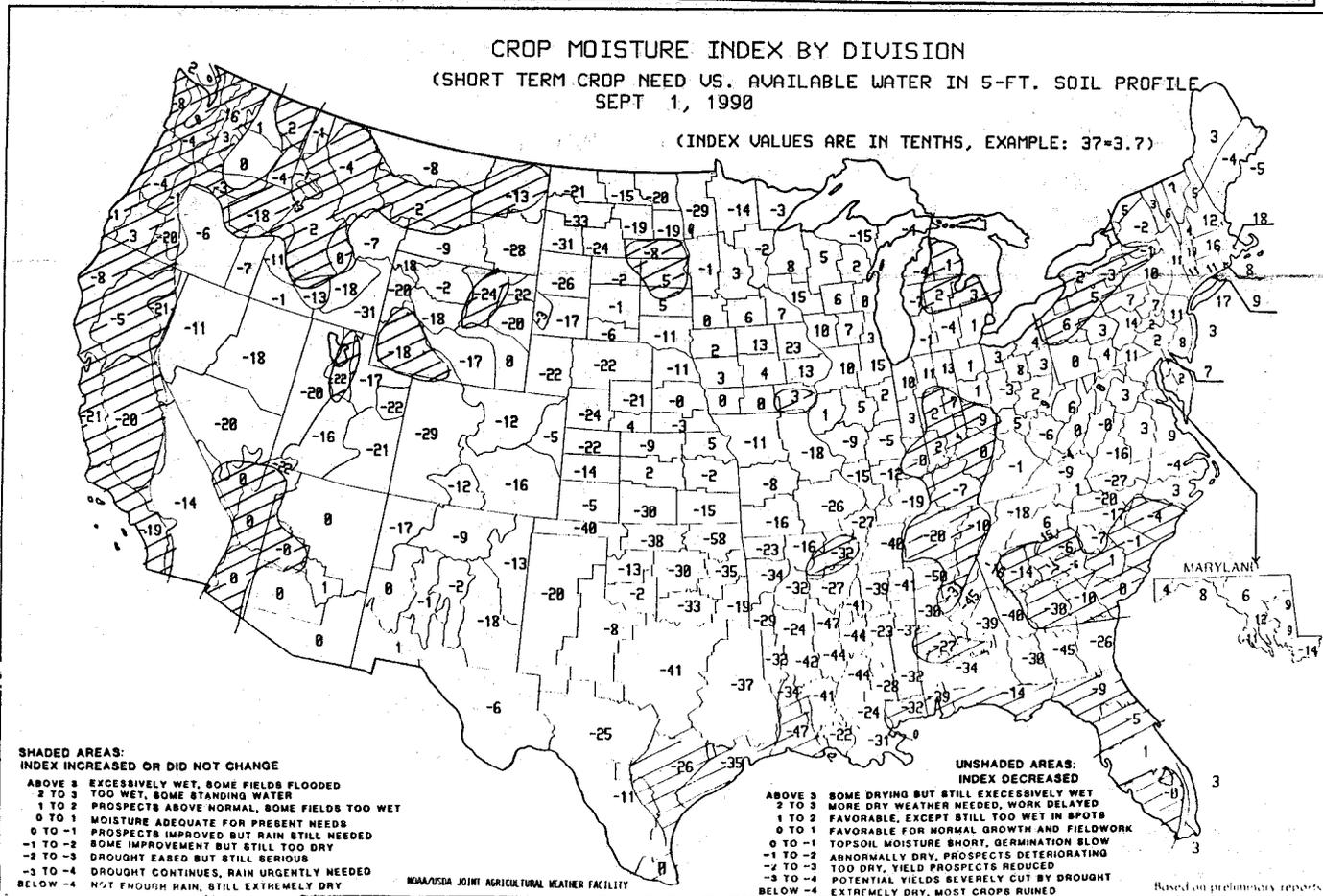
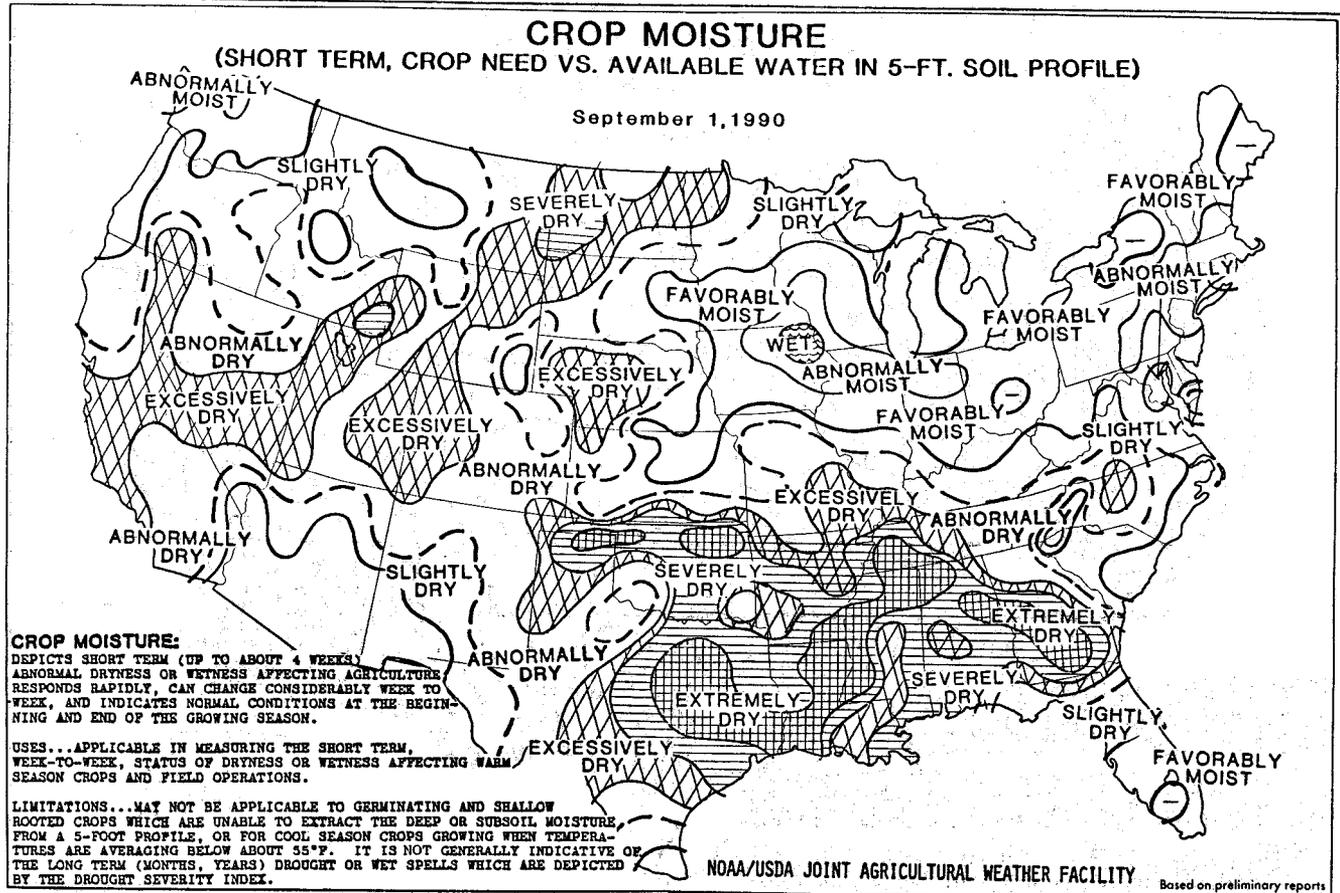
A late-summer heat wave baked much of the Nation as only the interior portions of the Pacific Coast States remained relatively cool. Temperatures soared into triple digits in the central and southern Great Plains and across the Southeast. Afternoon highs reached 108 degrees in central Kansas, where temperatures averaged 12 degrees above normal. Numerous record-high temperatures for the date were broken from the central Rockies and southern Great Plains to the middle and southern Atlantic coast through the week.

Showers and thunderstorms were scattered over the eastern half of the country, the northern Pacific coast, and the Southeast, while dry conditions prevailed in the
(Continued to back cover)

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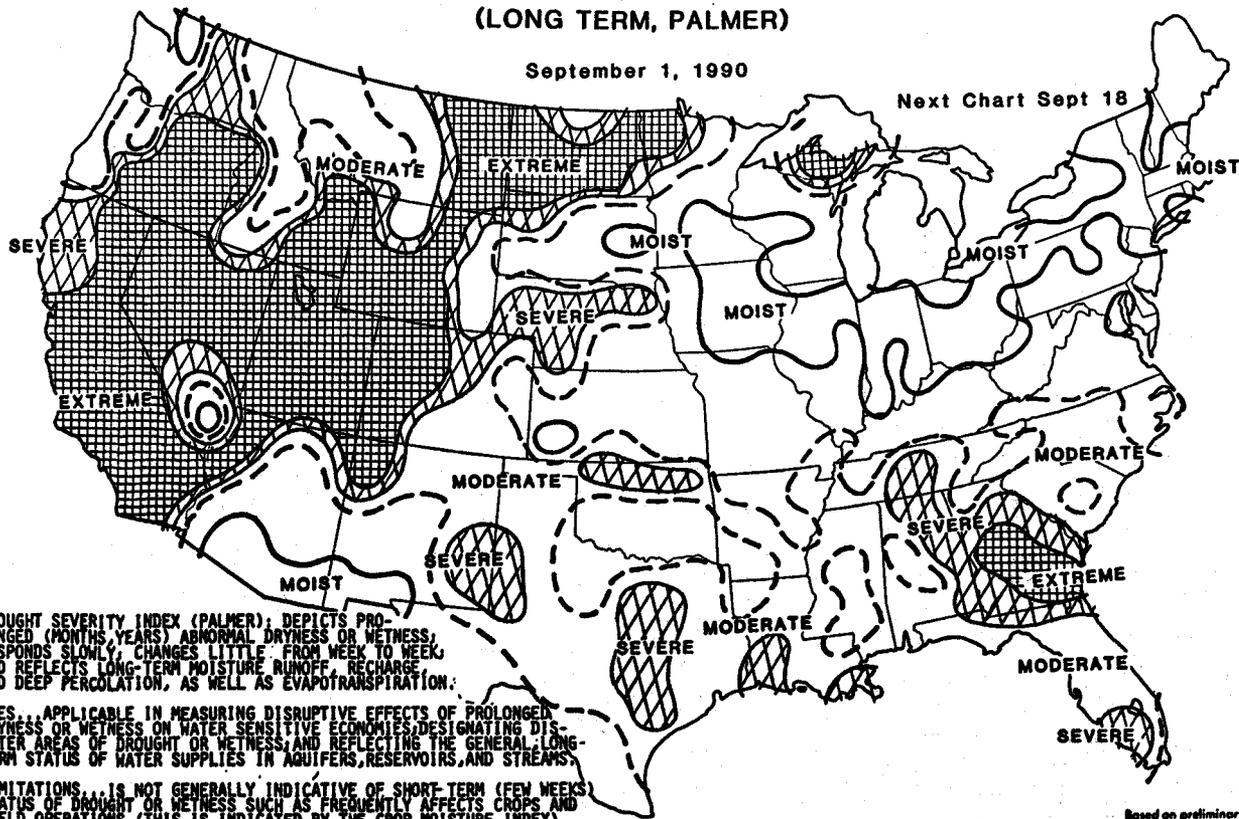




DROUGHT SEVERITY (LONG TERM, PALMER)

September 1, 1990

Next Chart Sept 18



DROUGHT SEVERITY INDEX (PALMER); DEPICTS PROLONGED (MONTHS, YEARS) ABNORMAL DRYNESS OR WETNESS; RESPONDS SLOWLY; CHANGES LITTLE FROM WEEK TO WEEK; AND REFLECTS LONG-TERM MOISTURE RUNOFF, RECHARGE AND DEEP PERCOLATION, AS WELL AS EVAPOTRANSPIRATION.

USES... APPLICABLE IN MEASURING DISRUPTIVE EFFECTS OF PROLONGED DRYNESS OR WETNESS ON WATER SENSITIVE ECONOMIES; DESIGNATING DISTRESS AREAS OF DROUGHT OR WETNESS; AND REFLECTING THE GENERAL LONG-TERM STATUS OF WATER SUPPLIES IN AQUIFERS, RESERVOIRS, AND STREAMS.

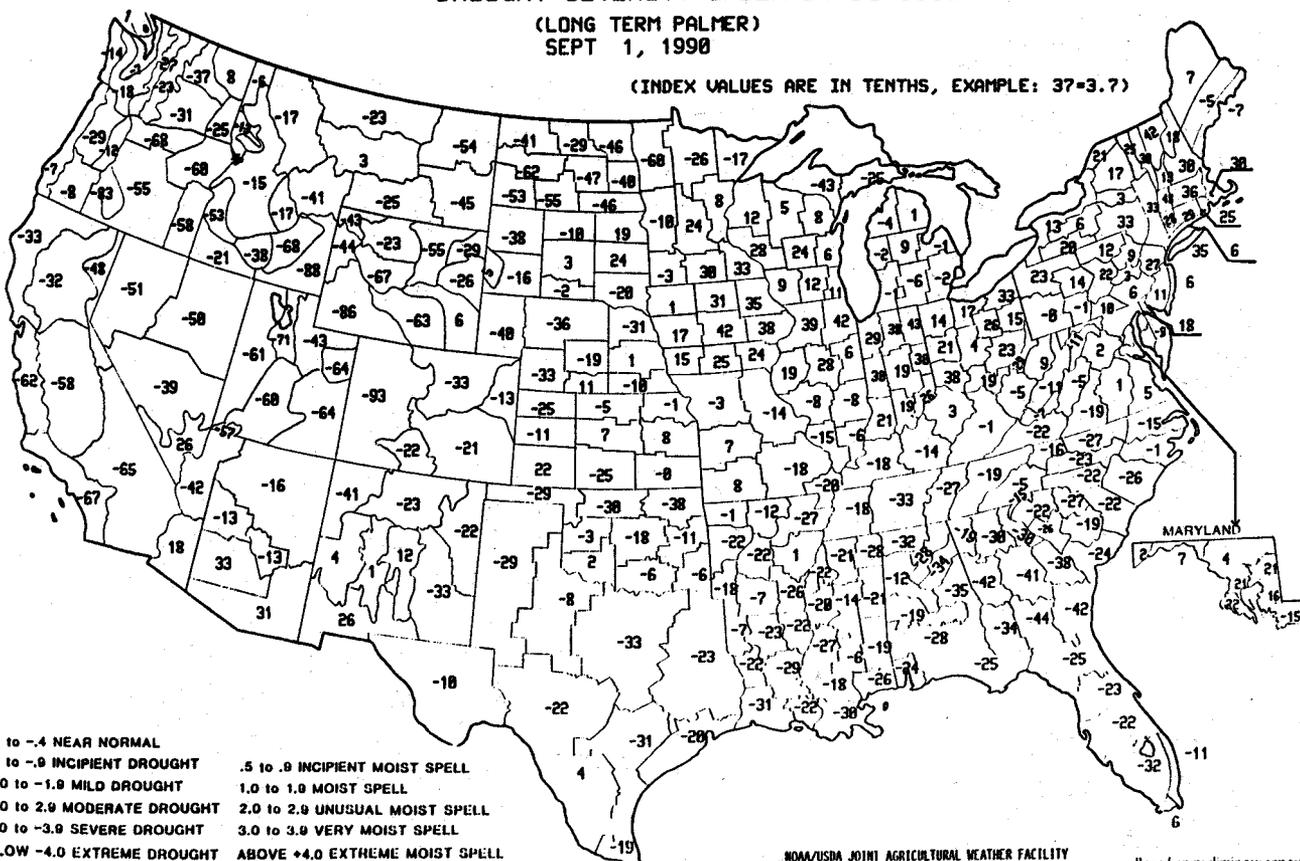
LIMITATIONS... IS NOT GENERALLY INDICATIVE OF SHORT-TERM (FEW WEEKS) STATUS OF DROUGHT OR WETNESS SUCH AS FREQUENTLY AFFECTS CROPS AND FIELD OPERATIONS (THIS IS INDICATED BY THE CROP MOISTURE INDEX).

Based on preliminary reports

DROUGHT SEVERITY INDEX BY DIVISION (LONG TERM PALMER)

SEPT 1, 1990

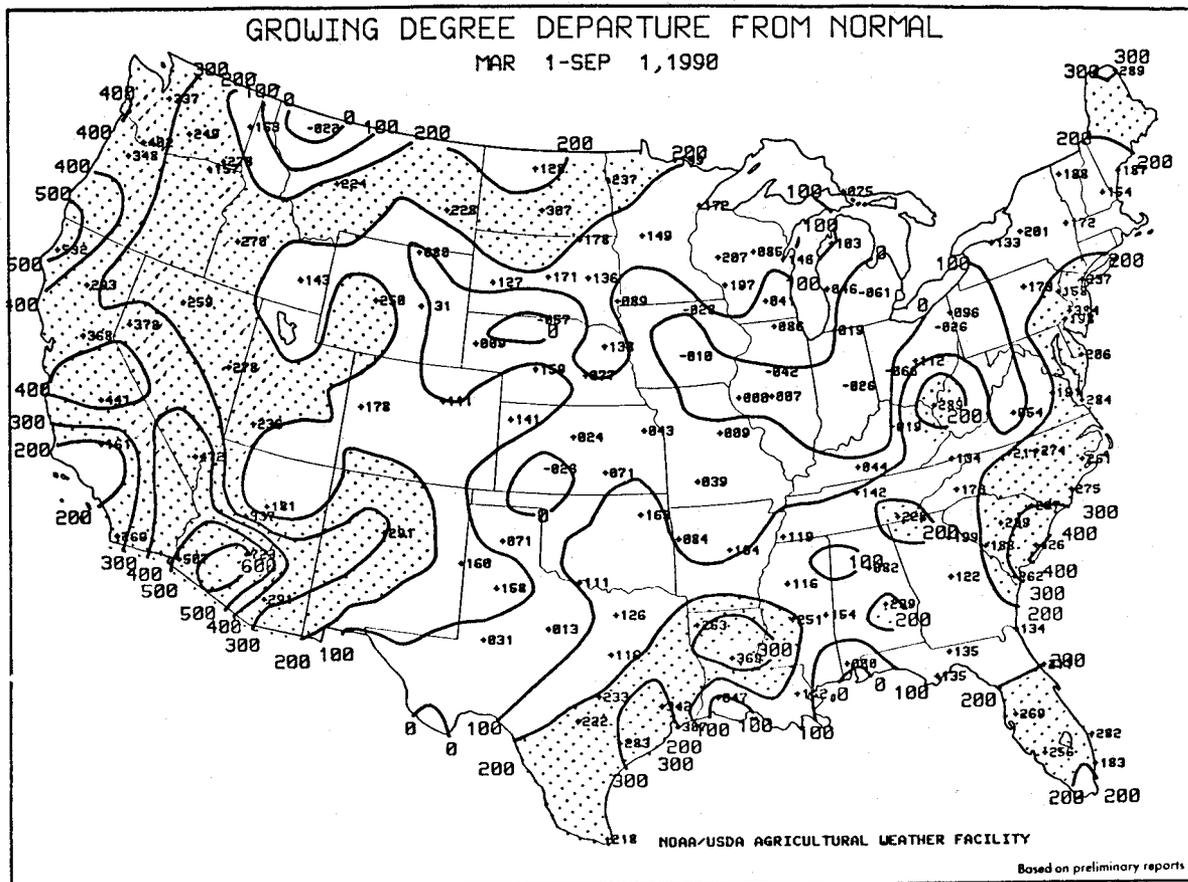
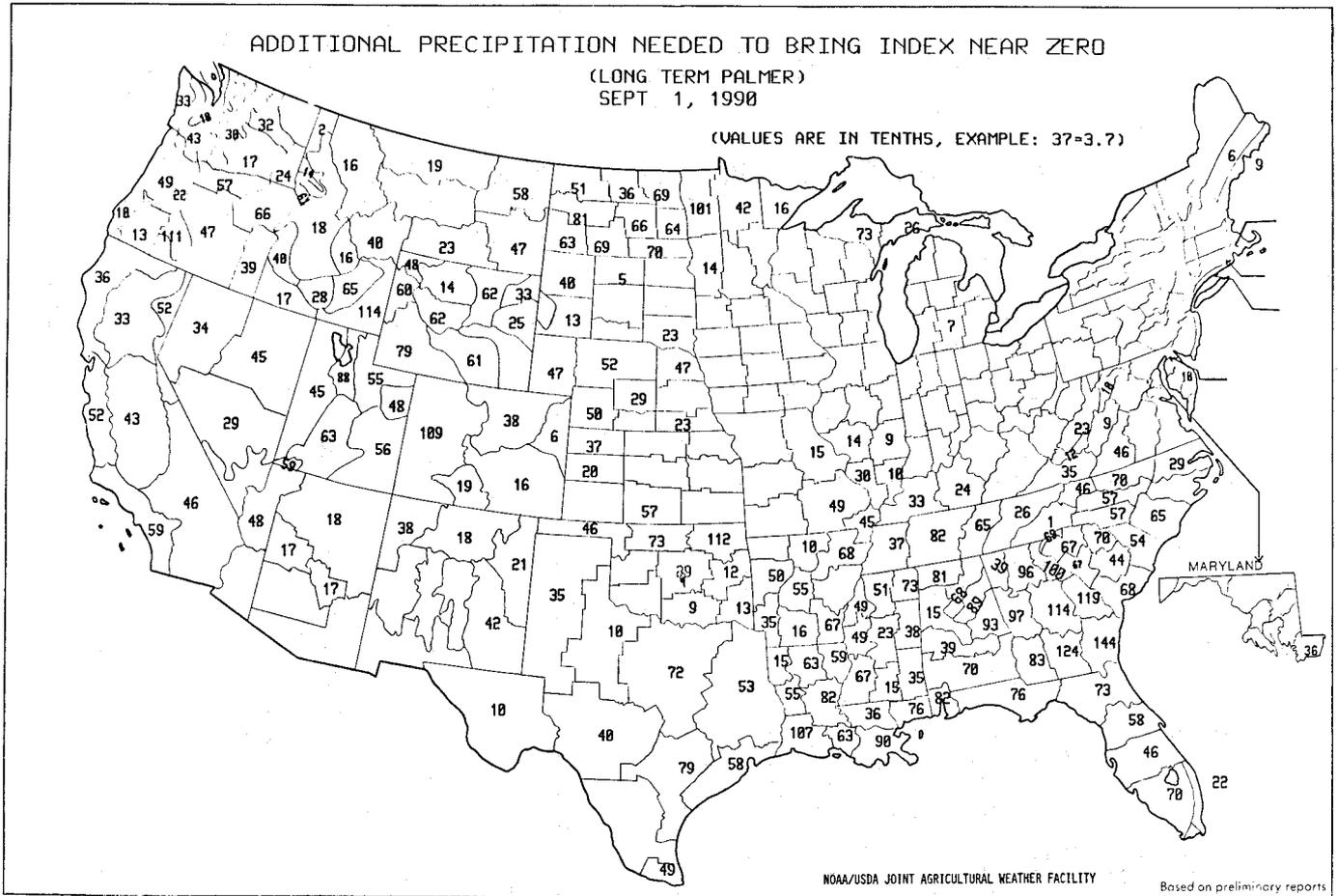
(INDEX VALUES ARE IN TENTHS, EXAMPLE: 37=3.7)



- .4 to -.4 NEAR NORMAL
- .5 to -.9 INCIPIENT DROUGHT
- 1.0 to -1.9 MILD DROUGHT
- 2.0 to 2.9 MODERATE DROUGHT
- 3.0 to -3.9 SEVERE DROUGHT
- BELOW -4.0 EXTREME DROUGHT
- .5 to .9 INCIPIENT MOIST SPELL
- 1.0 to 1.9 MOIST SPELL
- 2.0 to 2.9 UNUSUAL MOIST SPELL
- 3.0 to 3.9 VERY MOIST SPELL
- ABOVE +4.0 EXTREME MOIST SPELL

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

Based on preliminary reports



National Weather Data for Selected Cities

Weather Data for the Week Ending September 1, 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 Sep 1	PCT. NORMAL SINCE Sep 1	TOTAL IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE		32 AND BELOW	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	97	72	102	67	85	6	T	-1.9	T	.0	0	32.4	83	83	32	7	0	0	0
AL MOBILE	94	72	98	69	83	2	T	-1.3	T	.0	0	45.1	97	96	48	6	0	2	0
AL MONTGOMERY	95	72	101	68	84	4	T	-1.1	T	.0	0	45.5	132	95	42	6	0	1	0
AK ANCHORAGE	64	46	66	39	55	1	T	-1.3	T	.0	0	8.0	92	91	53	0	0	3	0
AK BARRROW	43	34	51	30	39	1	T	1.2	T	.0	0	3.4	112	97	75	0	3	6	1
AK FAIRBANKS	56	46	65	39	51	2	T	2.3	T	.0	0	1.9	280	96	67	0	0	7	7
AK JUNEAU	63	48	68	40	56	2	T	1.7	T	.0	0	1.6	837	97	55	0	0	3	1
AK KODIAK	69	48	77	42	58	5	T	-1.3	T	.0	0	44.3	122	91	51	0	0	0	0
AK NOME	51	46	52	39	48	1	T	-1.1	T	.0	0	15.4	162	96	80	0	0	6	0
AZ PHOENIX	102	82	108	77	92	4	T	-2.2	T	.0	0	6.0	136	50	24	7	0	0	0
AZ PRESCOTT	88	58	95	50	73	4	T	-1.4	T	.0	0	12.5	94	67	27	2	0	2	0
AZ TUCSON	99	71	104	69	85	2	T	1.5	T	.0	0	1.1	33	148	79	25	7	0	4
AZ YUMA	106	81	110	70	94	3	T	-1.1	T	.0	0	1.3	88	53	23	7	0	0	1
AR FORT SMITH	101	71	103	67	86	7	T	-1.7	T	.0	0	44.2	164	91	31	7	0	0	0
AR LITTLE ROCK	97	75	102	71	86	7	T	-1.8	T	.0	0	41.2	123	77	40	7	0	0	0
CA BAKERSFIELD	89	60	94	56	75	6	T	.0	T	.0	0	2.6	69	76	31	3	0	0	0
CA BUREKA	68	57	74	54	63	6	T	-1.1	T	.0	0	21.4	94	94	72	0	0	3	0
CA FRESNO	90	60	96	57	75	2	T	-1.1	T	.0	0	7.4	106	79	25	4	0	0	0
CA LOS ANGELES	76	63	78	60	69	-1	T	.0	T	.0	0	5.1	61	89	60	0	0	0	0
CA REDDING	86	58	95	54	72	-7	T	-1.1	T	.0	0	21.4	84	83	27	2	0	1	0
CA SACRAMENTO	89	58	94	56	74	0	T	.0	T	.0	0	11.5	108	87	27	4	0	0	0
CA SAN DIEGO	66	60	83	63	72	1	T	.0	T	.0	0	5.9	91	86	58	0	0	0	0
CA SAN FRANCISCO	76	60	79	58	68	5	T	.0	T	.0	0	7.9	64	88	53	0	0	0	0
CO DENVER	93	58	98	56	76	7	T	-1.0	T	.0	0	12.7	109	64	15	7	0	1	0
CO GRAND JUNCTION	93	63	98	58	78	5	T	-1.1	T	.0	0	4.8	93	38	16	6	0	2	0
CO FURBLO	98	56	102	52	77	5	T	-1.3	T	.0	0	12.4	146	64	15	7	0	1	0
CT BRIDGEPORT	83	66	86	59	74	4	T	-1.4	T	.0	0	30.9	113	87	51	0	0	3	0
CT HARTFORD	86	62	90	56	74	4	T	-1.7	T	.0	0	34.8	121	93	43	1	0	1	0
DC WASHINGTON	88	69	93	64	79	3	T	-1.9	T	.0	0	29.8	111	90	47	4	0	1	0
FL APALACHICOLA	93	76	97	75	84	3	T	-1.4	T	.0	0	27.7	75	94	57	5	0	4	0
FL DAYTONA BEACH	90	72	95	71	81	1	T	-1.5	T	.0	0	27.5	84	98	61	4	0	2	1
FL JACKSONVILLE	95	72	99	68	83	2	T	-1.5	T	.0	0	20.9	56	96	48	7	0	2	0
FL KEY WEST	92	81	93	78	86	2	T	-1.2	T	.0	0	21.8	94	82	57	7	0	2	0
FL MIAMI	90	76	91	74	83	0	T	-1.2	T	.0	0	40.7	107	94	60	4	0	3	0
FL ORLANDO	94	75	96	74	84	2	T	-1.1	T	.0	0	25.3	69	95	47	7	0	2	0
FL TALLAHASSEE	94	71	98	70	83	2	T	-1.4	T	.0	0	33.4	71	99	53	6	0	4	2
FL TAMPA	93	74	96	72	84	2	T	-1.6	T	.0	0	29.2	85	95	55	7	0	3	1
FL WEST PALM BEACH	92	75	94	73	83	1	T	-1.2	T	.0	0	37.5	101	97	56	6	0	2	0
GA ATLANTA	91	71	98	67	81	4	T	-1.8	T	.0	0	44.5	126	93	51	4	0	3	1
GA AUGUSTA	94	71	101	70	83	4	T	1.8	T	.0	0	20.2	63	99	48	6	0	3	1
GA MACON	96	73	102	70	84	4	T	-2.2	T	.0	0	22.9	69	94	38	6	0	2	0
GA SAVANNAH	93	74	98	70	84	4	T	-1.0	T	.0	0	167	25.1	66	93	50	7	0	2
HI HILO	84	69	88	65	77	1	T	-1.5	T	.0	0	96.0	115	92	65	0	0	3	0
HI HONOLULU	90	72	92	70	81	0	T	-1.1	T	.0	0	10.4	73	79	44	6	0	0	0
HI KAHULUI	87	70	89	65	78	-1	T	-1.1	T	.0	0	15.5	127	91	61	0	0	1	0
HI LIHUE	85	74	85	70	79	0	T	-1.3	T	.0	0	21.2	81	76	59	0	0	1	0
ID BOISE	85	53	94	48	69	0	T	-1.1	T	.0	0	9.5	125	62	21	2	0	0	0
ID LEWISTON	84	58	91	55	71	1	T	-1.1	T	.0	0	8.4	97	60	25	1	0	1	0
ID POCATELLO	88	47	97	41	68	2	T	-1.1	T	.0	0	7.5	103	63	13	3	0	0	0
IL CHICAGO	87	65	93	57	76	7	T	-1.9	T	.0	0	30.0	127	92	49	2	0	1	0
IL MOLINE	89	68	96	60	79	8	T	-1.5	T	.0	0	41.1	154	95	54	3	0	2	0
IL PEORIA	88	65	93	57	76	6	T	-1.1	T	.0	0	40.3	162	97	60	3	0	2	1
IL QUINCY	91	68	95	59	79	7	T	-1.8	T	.0	0	29.2	110	96	50	5	0	1	0
IL ROCKFORD	86	65	93	56	76	7	T	-1.4	T	.0	0	34.5	133	92	51	2	0	1	0
IL SPRINGFIELD	90	68	95	57	79	7	T	-1.6	T	.0	0	37.3	153	91	47	4	0	1	0
IN EVANSVILLE	91	64	96	61	78	3	T	-1.3	T	.0	0	34.8	117	99	47	5	0	1	0
IN FORT WAYNE	86	62	91	57	74	4	T	-1.5	T	.0	0	36.8	151	99	53	1	0	2	1
IN INDIANAPOLIS	87	64	93	62	76	4	T	-1.4	T	.0	0	32.2	116	97	48	2	0	1	1
IN SOUTH BEND	86	63	92	57	75	6	T	-1.6	T	.0	0	32.8	127	97	53	2	0	2	0
IA DES MOINES	91	69	97	60	80	9	T	-1.5	T	.0	0	36.0	157	92	51	4	0	1	0
IA SIOUX CITY	90	68	92	62	79	9	T	-1.6	T	.0	0	20.7	106	96	52	5	0	1	0
IA WATERLOO	86	66	91	58	76	9	T	-1.8	T	.0	0	36.1	148	97	60	2	0	0	0
KS CONCORDIA	103	75	106	71	89	15	T	-1.8	T	.0	0	21.5	104	62	23	7	0	0	0
KS DODGE CITY	102	71	104	68	86	11	T	-1.5	T	.0	0	18.3	114	60	19	7	0	0	0
KS GOODLAND	99	60	104	56	80	9	T	-1.4	T	.0	0	15.4	120	70	17	7	0	0	0
KS TOPKA	96	68	100	64	82	8	T	-1.8	T	.0	0	27.0	112	91	42	7	0	0	0
KS WICHITA	105	70	107	65	88	11	T	-1.7	T	.0	0	14.0	69	69	20	7	0	0	0
KY BOWLING GREEN	93	65	103	60	79	4	T	-1.7	T	.0	0	28.7	83	97	40	5	0	1	0
KY LEXINGTON	86	65	93	62	75	2	T	-1.3	T	.0	0	32.7	98	100	57	3	0	1	1
KY LOUISVILLE	91	68	97	65	80	5	T	-1.2	T	.0	0	39.8	130	93	46	5	0	1	0
LA ALEXANDRIA	99	76	101	73	87	6	T	-1.4	T	.0	0	41.6	111	88	40	7	0	3	0
LA BATON ROUGE	96	73	99	70	85	4	T	-1.8	T	.0	0	118	50.5	127	97	45	7	0	3
LA LAKE CHARLES	96	73	101	70	85	4	T	-1.5	T	.0	0	325	35.6	100	99	46	7	0	3
LA NEW ORLEANS	96	73	99	70	84	3	T	-1.6	T	.0	0	9	41.3	98	98	48	7	0	3

Based on 1951-80 normals

Weather Data for the Week Ending September 1, 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 Sep 1	PCT. NORMAL SINCE Sep 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
SHREVEPORT	100	73	102	70	86	5	T	-6	T	0	45.6	151	89	36	7	0	0	1	0	0	
ME CARIBOU	78	55	87	46	67	7	.6	-3	.4	.0	24.1	102	96	58	0	0	0	3	0	0	
PORTLAND	84	60	86	52	72	8	T	-7	T	.0	26.7	98	94	43	0	0	0	0	0	0	
MD BALTIMORE	87	65	91	60	76	2	.0	-1.0	.0	.0	31.3	109	93	47	1	0	0	1	0	0	
SALISBURY	86	65	91	57	75	2	.1	-1.1	.1	.0	27.9	90	99	55	2	0	0	1	0	0	
MA BOSTON	82	67	88	62	74	5	.1	-8	.1	.0	32.9	116	85	49	0	0	0	1	0	0	
CHATHAM	78	63	82	60	71	5	T	-9	T	.0	31.5	105	93	68	0	0	0	2	0	0	
MI ALPENA	83	54	88	44	69	6	.9	-2	.9	.0	21.8	111	95	46	0	0	0	0	1	0	
DETROIT	86	67	94	64	76	8	.1	-5	.1	.0	25.4	118	89	49	2	0	0	1	0	0	
FLINT	85	63	90	57	74	8	.0	-7	.0	.0	19.2	94	91	48	1	0	0	0	0	0	
GRAND RAPIDS	84	63	90	56	74	6	T	-7	T	.0	23.2	104	97	54	1	0	0	0	0	0	
HOUGHTON LAKE	81	57	87	45	69	6	.1	-6	.1	.0	20.6	109	94	55	0	0	0	1	0	0	
LANSING	85	63	90	56	74	8	.0	-7	.0	.0	19.9	98	95	52	1	0	0	0	0	0	
MARQUETTE	78	56	84	52	67	7	.2	-7	.1	.0	20.0	81	92	53	0	0	0	2	0	0	
MUSKEGON	84	63	88	53	73	6	T	-7	T	.0	21.1	104	94	51	0	0	0	1	0	0	
SAULT ST. MARIE	78	52	81	44	65	4	.2	-7	.2	.0	21.0	101	99	54	0	0	0	1	0	0	
MN ALEXANDRIA	84	63	88	59	73	8	T	-7	T	.0	17.3	93	88	42	0	0	0	0	0	0	
DULUTH	79	57	84	50	68	8	.7	-2	.5	.0	22.3	106	95	51	0	0	0	2	1	0	
INT'L FALLS	81	55	88	45	68	8	.2	-5	.1	T	15.7	92	95	42	0	0	0	2	0	0	
MINNEAPOLIS	85	64	89	58	75	7	.2	-5	.2	.0	28.3	143	95	48	0	0	0	1	0	0	
ROCHESTER	83	63	89	54	73	8	.1	-7	.1	.0	38.7	190	95	55	0	0	0	1	0	0	
MS GREENWOOD	99	71	102	65	85	6	.0	-6	.0	.0	34.6	93	90	33	7	0	0	0	0	0	
JACKSON	99	70	101	63	85	5	.5	-3	.5	.0	38.2	104	98	36	7	0	0	1	0	0	
MERIDIAN	98	70	102	66	84	4	T	-7	T	T	17	51.3	135	96	40	7	0	0	1	0	
MO CAPE GIRARDEAU	92	66	97	63	79	7	T	-8	T	.0	35.1	113	97	46	6	0	0	1	0	0	
COLUMBIA	93	69	98	64	81	7	.3	-5	.3	.0	43.7	171	92	42	5	0	0	1	0	0	
KANSAS CITY	98	73	102	66	85	9	.0	-9	.0	.0	32.8	128	78	34	7	0	0	0	0	0	
SAINT LOUIS	93	74	101	67	84	9	T	-6	T	.0	29.5	122	80	40	5	0	0	0	0	0	
SPRINGFIELD	97	70	98	61	83	9	.0	-7	.0	.0	43.9	164	85	33	7	0	0	0	0	0	
MT BILLINGS	85	54	89	50	69	3	T	-3	T	.0	9.3	85	71	24	0	0	0	0	0	0	
GLASGOW	82	54	88	50	68	3	.3	-1	.3	.0	5.6	64	76	29	0	0	0	1	0	0	
GREAT FALLS	77	49	85	44	63	-1	T	-3	T	.0	12.4	106	76	29	0	0	0	0	0	0	
HAVRE	80	52	87	44	66	1	.0	-3	.0	.0	5.4	59	76	26	0	0	0	0	0	0	
HELENA	79	48	87	44	63	1	T	-2	T	.0	7.4	84	86	25	0	0	0	1	0	0	
KALISPELL	74	46	82	38	60	-1	.2	-1	.2	.0	15.8	146	96	40	0	0	0	1	0	0	
MILES CITY	88	57	94	53	72	4	T	-3	T	.0	7.3	66	72	25	3	0	0	1	0	0	
MISSOULA	76	44	83	41	60	-2	.2	.0	.2	.0	10.7	116	93	36	0	0	0	1	0	0	
NE GRAND ISLAND	95	66	102	61	80	9	T	-6	T	.0	23.4	129	92	40	6	0	0	0	0	0	
LINCOLN	97	69	102	65	83	11	.0	-8	.0	.0	22.5	108	86	36	7	0	0	0	0	0	
NORFOLK	92	67	96	60	79	9	.3	-3	.3	.3	312	22.8	121	94	46	5	0	0	1	0	
NORTH PLATTE	97	58	104	53	78	9	T	-4	T	T	17	13.1	83	90	28	7	0	0	1	0	
OMAHA	94	72	100	65	83	11	.0	-9	.0	.0	19.3	85	82	46	7	0	0	0	0	0	
SCOTTSBLUFF	95	53	102	50	74	6	.1	-1	.1	.1	175	14.2	120	82	18	6	0	0	2	0	
VALENTINE	93	59	100	53	76	7	T	-5	T	.0	15.0	106	84	29	6	0	0	1	0	0	
NV ELY	86	45	90	38	65	3	.0	-1	.0	.0	6.7	107	42	11	1	0	0	0	0	0	
LAS VEGAS	102	73	106	67	88	2	.0	-1	.0	.0	3.3	120	29	12	7	0	0	0	0	0	
RENO	86	48	92	44	67	2	.0	-1	.0	.0	4.3	88	67	15	2	0	0	0	0	0	
WINNEMUCCA	87	44	94	38	65	0	.0	-1	.0	.0	5.3	103	58	12	3	0	0	0	0	0	
NH CONCORD	84	57	89	48	71	6	.4	-3	.4	T	26.7	114	99	42	0	0	0	1	0	0	
NJ ATLANTIC CITY	86	62	89	55	74	2	.7	-2	.4	.0	26.7	93	99	49	0	0	0	2	0	0	
NM ALBUQUERQUE	92	64	94	62	78	4	.6	-3	.6	.0	7.7	142	64	20	7	0	0	1	0	1	
CLOVIS	94	65	96	62	79	5	.0	-5	.0	.0	7.2	58	67	19	7	0	0	0	0	0	
ROSWELL	97	68	98	64	82	6	.0	-5	.0	.0	4.9	69	61	18	7	0	0	0	0	0	
NY ALBANY	84	58	89	50	71	4	.6	-1	.6	.0	32.4	138	97	46	0	0	0	1	1	1	
BINGHAMTON	77	58	80	49	67	2	2.1	1.3	1.7	T	27.6	112	97	55	0	0	0	2	0	1	
BUFFALO	01	62	86	55	72	5	.5	-5	.4	T	31.3	130	91	49	0	0	0	2	0	0	
NEW YORK	86	70	90	67	78	4	2.3	1.4	1.7	.0	36.6	128	87	45	1	0	0	3	2	0	
ROCHESTER	82	60	84	52	71	4	.2	-6	.2	.0	25.0	124	95	50	0	0	0	2	0	1	
SYRACUSE	82	60	85	51	71	4	3.1	2.3	3.0	T	31.5	121	93	49	0	0	0	2	1	1	
NC ASHEVILLE	85	63	92	61	74	3	1.4	.4	.8	.0	39.5	129	100	54	1	0	0	3	2	1	
CHARLOTTE	91	71	96	67	81	5	1.2	.4	1.1	.0	27.2	89	89	44	5	0	0	3	1	0	
GREENSBORO	90	67	94	62	78	4	T	-9	T	.0	23.7	80	92	42	3	0	0	3	0	0	
HATTERAS	88	75	91	73	82	4	.4	-1.0	.3	.0	34.2	95	90	59	3	0	0	3	0	0	
NEW BERN	91	72	95	68	81	4	.3	-1.2	.2	.0	38.3	102	97	50	4	0	0	2	0	0	
RALEIGH	91	68	96	62	79	4	.1	-9	.1	.0	27.0	91	98	48	4	0	0	1	0	0	
WILMINGTON	92	72	96	69	82	3	2.8	1.4	2.0	.0	40.2	105	95	52	4	0	0	3	2	0	
ND BISMARCK	88	54	93	46	71	6	T	-3	T	.0	10.7	88	88	28	2	0	0	1	0	0	
FARGO	88	59	93	54	74	8	.2	-4	.1	.0	13.2	88	87	31	2	0	0	2	0	0	
GRAND FORKS	84	57	91	53	71	7	.5	-1	.4	.0	13.3	96	88	33	1	0	0	2	0	0	
WILLISTON	84	53	95	45	68	3	.3	.0	.3	.0	8.4	80	87	32	1	0	0	1	0	0	
OH AKRON-CANTON	84	61	88	54	72	4	T	-7	T	.0	40.7	160	94	51	0	0	0	1	0	0	
CINCINNATI	86	64	91	61	75	2	2.3	1.6	1.2	.0	38.1	134	96	52	2	0	0	2	2	0	
CLEVELAND	84	62	91	56	73	4	T	-7	T	.0	30.7	126	94	52	1	0	0	0	0	0	
COLUMBUS	87	64	91	58	76	5	.1	-6	.1	.0	33.9	125	95	46	3	0	0	2	0	0	

Based on 1951-80 normals

Weather Data for the Week Ending September 1, 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 Sep 1	PCT. NORMAL SINCE Sep 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		
																		.01 INCH OR MORE	.50 INCH OR MORE	
DAYTON	85	63	92	57	74	3	.9	.2	.6	.0	0	38.7	154	96	54	1	0	2	1	
TOLEDO	86	62	93	58	74	6	.1	.6	.1	.0	0	26.1	118	95	49	2	0	1	1	
YOUNGSTOWN	84	56	89	48	70	3	.1	.6	.1	.0	0	28.6	110	98	52	0	0	2	0	
OK OKLAHOMA CITY	101	75	104	74	88	9	.0	.6	.0	.0	0	28.9	131	72	27	7	0	0	0	
TULSA	102	77	104	69	90	10	.0	.8	.0	.0	0	27.2	102	71	28	0	0	0	0	
OR ASTORIA	71	56	77	50	64	3	.9	.4	.5	.0	0	47.1	122	95	65	7	0	0	5	
BURNS	78	42	84	37	60	4	.0	.1	.0	.0	0	3.8	62	72	19	0	0	0	0	
MEDFORD	79	54	85	50	67	3	.3	.1	.1	.0	0	9.4	86	92	36	0	0	0	3	
PENDLETON	80	55	89	52	67	2	.2	.1	.1	.0	0	7.0	94	73	31	0	0	0	0	
PORTLAND	78	59	83	56	69	3	.4	.1	.4	.0	0	21.8	104	90	44	0	0	1	0	
SALEM	78	55	83	48	67	2	.5	.3	.4	.0	0	22.1	98	96	43	0	0	3	0	
PA ALLENTOWN	85	61	88	55	73	3	.1	.9	.1	.0	0	30.0	101	96	49	0	0	0	0	
ERIE	81	62	90	54	71	4	3.3	2.3	2.9	.0	0	30.4	119	94	58	1	0	2	1	
HARRISBURG	86	64	92	58	75	3	.7	.1	.6	.0	0	28.8	109	95	48	2	0	2	2	
PHILADELPHIA	88	67	91	64	78	4	.7	.2	.7	.0	0	27.4	97	99	52	3	0	1	1	
PITTSBURGH	84	60	89	55	72	3	.7	.7	.7	.0	0	32.2	123	94	49	0	0	1	1	
SCRANTON	82	59	86	53	70	2	.6	.2	.4	.0	0	31.0	133	95	46	0	0	3	0	
RI PROVIDENCE	85	64	90	57	74	5	.7	.9	.9	.0	0	29.6	101	92	45	1	0	0	0	
SC CHARLESTON	93	74	98	70	84	5	.8	.6	.5	.0	0	29.9	78	98	54	7	0	2	1	
COLUMBIA	95	72	100	69	83	4	.3	.9	.3	.0	0	25.5	70	97	46	6	0	1	0	
FLORENCE	94	72	98	68	83	4	.8	.2	.8	.0	0	18.0	55	96	45	7	0	1	1	
SD GREENVILLE	89	68	96	66	79	2	2.2	1.2	1.4	.0	0	32.7	91	98	51	4	0	2	2	
ABERDEEN	89	60	92	53	74	8	.2	.2	.2	.0	0	16.9	120	94	35	1	0	1	0	
HURON	91	62	96	57	77	8	.1	.4	.0	.0	0	20.7	142	92	36	6	0	2	0	
RAPID CITY	93	60	101	57	76	8	.4	.1	.4	.0	0	12.7	95	72	25	5	0	1	0	
SIoux FALLS	91	66	95	60	78	10	.1	.7	.1	.0	0	15.7	87	96	42	5	0	1	0	
TN CHATTANOOGA	94	69	100	68	82	5	.1	.7	.1	.0	0	46.4	128	97	41	5	0	1	0	
KNOXVILLE	90	67	96	65	79	3	.2	.5	.2	.0	0	38.1	115	97	44	4	0	1	0	
MEMPHIS	98	73	101	69	85	6	.2	.7	.2	.0	0	36.1	99	82	33	7	0	1	0	
NASHVILLE	97	69	103	65	83	6	1.0	.3	1.0	.0	0	25.5	75	93	32	7	0	1	1	
TX ABILENE	99	73	102	71	86	5	.7	.6	.7	.0	0	21.8	138	68	24	7	0	1	0	
AMARILLO	96	66	100	63	81	7	.0	.6	.0	.0	0	13.6	92	65	21	7	0	0	0	
AUSTIN	103	75	106	70	89	6	.1	.6	.0	.0	0	18.8	93	84	27	7	0	3	0	
BEAUMONT	98	74	101	69	86	4	.3	1.0	.3	.0	0	47.5	128	98	42	7	0	1	0	
BROWNSVILLE	96	75	100	70	86	2	1.9	1.0	1.0	.9	573	12.6	89	93	46	7	0	2	2	
CORPUS CHRISTI	97	74	102	72	86	2	.2	1.0	.1	.0	0	14	15.3	80	94	39	7	0	3	0
DEL RIO	98	74	100	72	86	2	.7	.4	.7	.0	0	16.6	151	68	29	7	0	1	0	
EL PASO	96	67	98	63	82	3	.1	.2	.1	.1	120	7.2	148	72	24	7	0	1	0	
FORT WORTH	102	76	106	74	89	6	.7	.5	.7	.0	30	36.1	173	75	28	7	0	1	0	
GALVESTON	94	78	99	75	86	3	.1	1.1	.1	.0	0	24.8	98	87	49	6	0	3	0	
HOUSTON	99	74	104	69	86	4	.3	.7	.3	.0	0	30.2	100	92	36	7	0	1	0	
LUBBOCK	97	68	99	63	83	7	.0	.5	.0	.0	0	11.0	86	65	22	7	0	0	0	
MIDLAND	97	67	99	65	82	3	.0	.4	.0	.0	0	8.4	93	72	24	7	0	0	0	
SAN ANGELO	99	66	100	63	82	1	.2	.3	.2	.2	244	17.7	155	86	25	7	0	1	0	
SAN ANTONIO	99	75	102	70	87	4	.8	.1	.8	.8	683	28.4	152	86	36	7	0	1	1	
VICTORIA	97	75	102	73	86	3	.3	.8	.3	.0	0	27.5	119	97	41	7	0	1	0	
WACO	105	75	109	70	90	6	.7	.5	.7	.0	11	22.5	110	75	25	7	0	1	0	
WICHITA FALLS	104	74	106	71	89	7	.0	.6	.0	.0	0	31.2	173	74	23	7	0	0	0	
UT CEDAR CITY	88	57	94	49	72	3	.0	.3	.0	.0	0	6.6	94	42	15	2	0	0	0	
SALT LAKE CITY	91	62	95	58	76	5	.7	.2	.7	.0	0	7.7	72	47	15	5	0	0	0	
VT BURLINGTON	82	58	89	51	70	5	1.1	.2	.5	.0	0	26.5	118	98	48	0	0	3	0	
VA NORFOLK	87	72	95	66	80	3	.2	1.0	.2	.0	0	36.4	116	92	57	3	0	1	0	
RICHMOND	90	67	97	61	78	3	.7	1.0	.7	.0	0	31.9	106	94	42	4	0	1	0	
ROANOKE	88	64	93	56	76	3	.0	.8	.0	.0	0	27.1	100	96	48	3	0	0	0	
WA QUILLAYUTE	70	52	77	48	61	3	1.4	.6	.9	.0	0	61.6	104	97	57	0	0	3	1	
SEATTLE-TACOMA	74	55	85	50	65	2	.5	.1	.3	.0	20	24.7	117	94	48	0	0	4	1	
SPOKANE	77	49	84	45	63	2	.0	.2	.0	.0	0	13.3	130	89	33	0	0	0	0	
YAKIMA	81	49	86	44	65	1	.1	.0	.1	.0	0	5.5	115	92	32	0	0	1	0	
WV BECKLEY	80	60	85	58	70	3	.7	.8	.7	.0	0	27.0	90	96	56	0	0	0	0	
CHARLESTON	87	65	92	61	76	4	.7	.8	.7	.0	0	27.2	89	98	53	1	0	1	0	
HUNTINGTON	86	64	91	61	75	2	.3	.5	.3	.0	0	32.6	110	99	54	1	0	1	0	
PARKERSBURG	85	64	89	62	75	3	.4	.3	.4	.0	0	34.3	125	99	52	0	0	2	0	
WI GREEN BAY	83	59	90	53	71	6	.2	.5	.2	.0	0	25.5	131	95	49	1	0	2	0	
LACROSSE	86	64	93	57	75	7	1.0	.2	1.0	.0	0	31.2	142	98	47	1	0	1	1	
MADISON	84	61	92	52	73	6	.1	.7	.1	.0	0	27.6	124	97	53	1	0	2	0	
MILWAUKEE	86	67	94	59	76	9	.7	.7	.7	.0	0	30.1	139	89	50	2	0	1	0	
WAUSAU	81	59	88	50	70	6	.4	.5	.4	.0	0	24.9	111	98	47	0	0	2	0	
WY CASPER	89	48	90	44	69	3	.0	.1	.0	.0	0	9.3	109	71	12	3	0	0	0	
CHEYENNE	87	55	94	53	71	7	.3	.0	.1	.0	75	16.5	154	59	16	1	0	3	0	
LANDER	88	55	92	50	71	6	.0	.1	.0	.0	0	6.6	68	43	15	1	0	0	0	
SHERIDAN	86	51	92	49	69	4	.0	.3	.0	.0	0	10.0	89	82	26	2	0	0	0	

Based on 1951-80 normals

National Agricultural Summary

August 27 - September 2, 1990

HIGHLIGHTS: Rain slowed the completion of small grain harvests in portions of the **Pacific Northwest**. Moisture was needed to improve germination for winter wheat seedings in the **central and southern Great Plains**, where soil moisture was short to adequate. Above-normal temperatures accelerated crop development in the **Corn Belt**. Lack of moisture continued to stress crops in the **Delta** and portions of the **Southeast**. Soil moisture was mostly short in the **Delta**, especially in **Alabama** and **Mississippi**.

SMALL GRAINS: Spring wheat harvest was 92 percent complete, 8 percentage points ahead of the 5-year average. North Dakota's harvest was 93% complete, 9 points ahead of normal. Rain slowed small grain harvests and winter wheat seeding in portions of the Pacific Northwest. Winter wheat seeding was underway in portions of the central and southern Great Plains, but moisture was needed to improve germination.

CORN: Corn was in mostly good to fair condition. Eighty-one percent of the acreage had reached the dough stage, 13 points behind normal. Corn dented was 41%, 31 points behind normal. Seven percent of the crop was mature, 19 points behind normal. Above-normal temperatures accelerated the crop, but it still lagged behind normal in most of the major producing States. The percentage of the crop in the dent stage lagged more than 40 points behind normal in Illinois, Indiana, and Minnesota. Crop condition was good to excellent in Illinois and Iowa and good to fair in Nebraska. Lodging was a problem in portions of Ohio. Harvest began in Kentucky.

SOYBEANS: Soybeans were good to fair with 90% of the acreage setting pods, 3 points behind normal. Three percent of the acreage was dropping leaves, 6 points behind normal. Crop development still lagged behind normal in Illinois, Indiana, Iowa, and Missouri but was near normal in most of the other major producing States. In Georgia, lack of moisture caused some premature dropping of leaves. Wind damaged some fields in Ohio. Crop condition was mostly fair to poor in the Delta and Southeast and good to fair in the Corn Belt.

COTTON: Cotton was good to fair with 36% of the acreage opening bolls, 1 point ahead of normal. Crop development lagged behind normal in Arkansas and Missouri but was near or ahead of normal in the other major producing States. Harvest began in Alabama, Arkansas, Georgia, Louisiana, and Mississippi. Defoliation, in preparation for harvest, was underway in the desert areas of California. Harvest continued in Arizona and Texas. Texas' harvest was 20% complete, 8 points ahead of normal. Crop condition was good in California, good to fair in Texas, and fair in Mississippi. Lack of moisture continued to stress the crop in the Delta and portions of the Southeast. Crop condition was fair to poor in Alabama, Georgia, South Carolina, and Tennessee.

SORGHUM: Sorghum was good to fair with 98% of the acreage headed, 3 points ahead of normal. Forty-six percent of the acreage was in the coloring stage, 12 points behind normal. Crop development lagged behind normal in the central Great Plains.

Crop condition was good to fair in Kansas and Nebraska. Harvest was 56% complete in Texas.

OTHER FIELD CROPS: Rice was mostly good to fair with 91% of the acreage headed, 5 points behind normal. Harvest was 25% complete, 2 points behind normal, in the five major producing States. Harvest began in Arkansas. Peanut harvest continued in Alabama, Georgia, and Texas. Peanut condition was mostly poor in Alabama and Georgia. North Carolina's peanuts were in good to fair condition. Tobacco harvest was active in the Southeast. Dry soil conditions slowed sugarcane planting in Louisiana.

FRUIT AND NUTS: Florida's citrus trees were in very good condition, but rain was needed. Fruit sizes were larger than normal. Grapefruit harvest was underway. Georgia's pecans were in fair to poor condition. Insect populations were increasing. Pecan crop prospects were poor in Arkansas. Hot, dry weather stressed the pecan crop in Texas. Lemon harvest continued in Arizona. Grape harvest was active in California. Peach, plum, and nectarine harvests were nearly complete. Grapefruit harvest was nearly complete in the Riverside area. Almond harvesting continued. In New York, the Bartlett pear harvest was nearly complete in the Lake Ontario region.

VEGETABLES: Fall vegetable planting continued in Florida. Crops being planted included celery, cabbage, cucumbers, and tomatoes. Dry soil conditions slowed sweetpotato harvesting in Louisiana. Harvest was one-third complete. Sweetpotato harvest continued in Texas. Carrot and pepper harvests were active in the High Plains area of Texas. In the Rio Grande Valley, vegetable growth was good despite the above-normal temperatures. Fall vegetable planting was active in western Arizona. In California, harvested supplies of broccoli and cauliflower were light. Butte Valley potato harvest was expected to begin soon. Vegetable seed harvests were active in Oregon and Washington. In Oregon, snap bean and broccoli harvests were nearly complete. Potato harvest continued in Colorado and Idaho. North Dakota's potatoes were in poor to fair condition, with 2% of the crop dug.

PASTURES AND LIVESTOCK: Hot, humid weather stressed livestock in the central and southern Great Plains and Delta. Pasture conditions were mostly good in the Corn Belt. Pastures needed rain in the Delta, where condition was fair to poor. In the Great Plains, pastures were mostly fair to good except in North Dakota, where they were poor to fair. Rain improved pasture and range condition in portions of the Pacific Northwest.

Crop Progress

FOR WEEK ENDING SEPTEMBER 2, 1990

RICE
% HEADED

	1990	1989	AVG.
AR	85	91	95
CA	90	90	91
LA	96	98	98
MS	99	98	98
TX	100	100	100

RICE
% HARVESTED

	1990	1989	AVG.
AR	1	2	8
CA	0	0	0
LA	75	61	62
MS	8	0	16
TX	74	80	83

SPRING WHEAT
% HARVESTED

	1990	1989	AVG.
ID	77	77	77
MN	98	97	84
MT	82	69	77
ND	93	97	84
SD	100	100	98

5 STATES 91 94 96

5 STATES 25 23 27

5 STATES 92 91 84

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

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

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

CORN
% DOUGH

	1990	1989	AVG.
CO	74	70	86
GA	100	100	100
IL	80	96	98
IN	83	96	99
IA	82	94	96
KS	99	95	97
KY	84	90	98
MI	40	65	80
MN	79	99	96
MO	87	100	100
NE	96	95	97
NC	100	98	99
OH	82	80	92
PA	59	45	74
SD	83	85	78
TX	100	100	100
WI	59	68	80

CORN
% DENT

	1990	1989	AVG.
CO	30	35	55
GA	99	99	100
IL	42	73	86
IN	28	58	77
IA	45	67	77
KS	70	60	75
KY	47	80	84
MI	10	15	40
MN	20	61	68
MO	62	89	94
NE	55	66	71
NC	90	81	92
OH	31	22	64
PA	13	9	32
SD	37	49	48
TX	100	91	93
WI	11	24	48

CORN
% MATURE

	1990	1989	AVG.
CO	9	10	8
GA	97	97	99
IL	3	16	32
IN	2	8	31
IA	0	20	31
KS	30	35	40
KY	11	24	37
MI	0	0	3
MN	0	2	13
MO	14	37	52
NE	1	10	14
NC	81	65	74
OH	1	0	14
PA	2	0	5
SD	14	9	12
TX	68	62	62
WI	1	3	11

17 STATES 81 91 94

17 STATES 41 60 72

17 STATES 7 15 26

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

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

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

SOYBEANS
% SETTING PODS

	1990	1989	AVG.
AL	76	66	75
AR	73	72	76
GA	78	92	92
IL	94	100	100
IN	97	98	99
IA	100	100	100
KS	90	90	90
KY	65	64	73
LA	92	89	89
MI	90	90	90
MN	99	99	99
MS	80	65	76
MO	76	95	96
NE	99	99	100
NC	70	63	67
OH	95	86	97
SC	65	63	65
SD	98	100	96
TN	70	78	89

SOYBEANS
% DROPPING LEAVES

	1990	1989	AVG.
AL	6	7	3
AR	0	0	2
GA	9	3	6
IL	0	5	14
IN	1	3	12
IA	0	9	13
KS	5	10	15
KY	10	7	11
LA	3	2	3
MI	2	1	2
MN	7	4	12
MS	8	0	0
MO	0	4	4
NE	4	8	7
NC	0	0	0
OH	1	1	9
SC	0	0	0
SD	15	20	18
TN	0	0	0

COTTON
% BOLLS OPENING

	1990	1989	AVG.
AL	41	19	33
AZ	80	72	68
AR	8	0	39
CA	45	40	54
GA	49	15	35
LA	87	22	57
MS	73	7	55
MO	14	12	35
NM	33	47	42
NC	28	17	35
OK	3	2	10
SC	37	12	33
TN	22	8	30
TX	21	20	21

19 STATES 90 91 93

19 STATES 3 5 9

14 STATES 36 21 35

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

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

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

GRAIN SORGHUM

	% HEADED		
	1990	1989	AVG.
AR	95	100	NA
CO	85	87	92
IL	71	100	NA
KS	98	80	90
LA	99	100	100
MS	99	99	99
MO	85	99	99
NE	100	99	100
NM	99	NA	NA
OK	90	100	95
SD	97	89	93
TX	100	94	97
12 STATES	97	NA	NA
EXCL. STATES WITH NA	98	90	95

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

NA - NOT AVAILABLE.

GRAIN SORGHUM

	% COLORING		
	1990	1989	AVG.
AR	59	86	NA
CO	39	23	34
IL	10	62	NA
KS	25	20	40
LA	91	91	92
MS	85	76	87
MO	34	70	77
NE	35	54	61
NM	16	NA	NA
OK	30	65	70
SD	47	51	47
TX	80	70	75
12 STATES	46	NA	NA
EXCL. STATES WITH NA	46	47	58

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

NA - NOT AVAILABLE.

Crop Condition
PERCENT

FOR WEEK ENDING SEPTEMBER 2, 1990

CORN

STATE	VP	P	F	G	EX
CO	0	3	14	64	19
GA	12	41	25	18	4
IL	0	1	4	71	24
IN	0	2	16	72	10
IA	0	0	6	76	18
KS	0	2	16	45	37
KY	3	10	32	51	4
MI	0	5	15	50	30
MN	1	11	31	50	7
MO	0	2	26	65	7
NE	2	2	18	64	14
NC	7	30	38	25	0
OH	2	8	27	48	15
PA	0	2	18	47	33
SD	0	3	28	54	15
TX	1	1	30	64	4
WI	0	1	13	78	8
17 STATE	1	4	16	63	16
PREV WEEK	1	4	17	61	17
PREV YEAR	3	8	25	50	14

GRAIN SORGHUM

STATE	VP	P	F	G	EX
AR	1	7	61	31	0
CO	1	8	22	56	13
IL	0	9	20	67	4
KS	0	4	29	51	16
LA	0	13	31	56	0
MS	0	0	63	36	1
MO	0	7	54	38	1
NE	1	6	29	61	3
NM	0	7	13	80	0
OK	0	2	8	90	0
SD	0	19	13	63	5
TX	1	4	49	46	0
12 STATE	0	5	35	54	6
PREV WEEK	0	5	34	53	8
PREV YEAR	1	21	29	39	10

SOYBEANS

STATE	VP	P	F	G	EX
AL	13	33	53	1	0
AR	2	14	47	37	0
GA	16	36	43	5	0
IL	0	2	16	71	11
IN	0	1	23	69	7
IA	0	1	26	64	9
KS	0	1	27	51	21
KY	0	11	42	43	4
LA	0	17	44	33	6
MI	0	5	15	50	30
MN	2	7	42	43	6
MS	14	45	28	11	2
MO	0	3	49	47	1
NE	4	4	33	55	4
NC	0	6	40	52	2
OH	2	10	28	46	14
SC	0	5	58	37	0
SD	0	3	23	67	7
TN	10	21	54	13	2
19 STATE	2	8	32	51	7
PREV WEEK	1	7	33	50	9
PREV YEAR	1	8	36	48	7

RICE

STATE	VP	P	F	G	EX
AR	0	0	36	64	0
CA	0	0	15	75	10
LA	0	0	22	78	0
MS	0	2	67	26	5
TX	0	0	37	63	0
5 STATE	0	0	33	65	2
PREV WEEK	0	0	37	60	3
PREV YEAR	0	0	30	64	6

COTTON

STATE	VP	P	F	G	EX
AL	2	31	66	1	0
AZ	0	0	44	44	12
AR	0	4	20	66	10
CA	0	0	10	85	5
GA	15	27	38	20	0
IA	0	11	22	67	0
MS	7	21	44	23	5
MO	0	5	65	30	0
NM	0	11	22	56	11
NC	0	0	35	56	9
OK	0	0	30	60	10
SC	1	45	53	1	0
TN	10	21	56	13	0
TX	0	1	34	59	6
14 STATE	2	7	34	52	5
PREV WEEK	1	6	43	46	4
PREV YEAR	0	9	47	40	4

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 0.25 in. northwest, southeast; 1.00 to 3.00 in. few locations northeast, southwest. Temperatures 4 to 6° above normal north; 2 to 4° above normal elsewhere.

Days suitable for fieldwork 6.6. Soil moisture 73% very short, 27% short. Drought conditions continued to stress crops, pastures, livestock, poultry. Corn 92% mature, 85% 1989, 95% avg.; 49% harvested, 49% 1989, 54% avg.; 5% very poor, 16% poor, 47% fair, 26% good, 6% excellent. Sorghum 26% harvested, 43% 1989, 30% avg.; 5% very poor, 27% poor, 58% fair, 10% good. Cotton 41% bolls opened, 19% 1989, 33% avg.; few fields harvested; 2% very poor, 31% poor, 66% fair, 1% good. Soybeans 94% blooming, 82% 1989, 91% avg.; 76% setting pods, 66% 1989, 75% avg.; 16% turning yellow, 19% 1989, 16% avg.; 6% dropping leaves, 7% 1989, 3% avg.; 13% very poor, 33% poor, 53% fair, 1% good. Peanuts 10% dug, 11% 1989, 6% avg; 4% combined, 4% 1989, 1% avg.; 38% very poor, 56% poor, 6% fair. Pastures 28% very poor, 57% poor, 15% fair. Livestock 8% poor, 70% fair, 22% good. Primary activities: Harvesting hay, corn, sorghum, peanuts, vegetables; controlling pests in soybeans; irrigating crops, vegetables; defoliating, harvesting cotton; providing supplemental feed to cattle; repairing, maintaining harvest equipment; routine care of livestock, poultry, catfish.

ALASKA: Rain, cooler temperatures prevailed. Highs 8° below normal at Clearwater to 3° above normal at Anchorage. Lows 2° below normal at Kenai to 5° above normal at Clearwater. Seasonal precipitation 2.97 in. Drier than normal at PMC Butte to 4.33 in. wetter than normal at Fairbanks.

Days suitable for hay, grain harvest 2.0. Barley harvest 40% swathed; 10% ripe; 50% unchanged from the previous week due to rain. Topsoil 8% short, 88% adequate, 4% surplus. Subsoil 12% short, 82% adequate, 6% surplus. Hay harvested 2nd delayed due to rain. Commercial harvest of potatoes, 20% complete, growers harvesting despite wet weather.

ARIZONA: Mostly sunny north, west; thunderstorms southeast 26th. Increased moisture, thunderstorms 27th to 31st, severe thunderstorms southwest, southeast. Monsoon activity continued September 1st, heavy rains northwest, southwest. Temperatures 1° below to 4° above normal.

Cotton 80% open, 72% 1989, 68% avg.; 44% fair, 44% good, 12% excellent; defoliation light to moderate west, central; light harvest continued southwest; insects light southeast, severe south central, moderate elsewhere; boll rot central, fruit shed west. Alfalfa hay good; harvest activity active; insects light; weeds light to moderate. Corn for grain good. Lemon harvest progressed, planting fall vegetables active west. Mixed melon harvest continued, raisins shipped central. Apples, mixed vegetables harvested east. Cattle, calves fair to mostly good; stockwater, soil moisture short to mostly adequate; ranges providing average feed supplies; sheep, lambs fair to good.

ARKANSAS: Temperatures 3 to 8° above normal. Widely scattered showers northeast. Extremes 55°; 106°. Rainfall none to 1.80 in.

Days suitable for fieldwork 7.0. Soil moisture 93% short, 7% adequate. Main activities: Irrigating cotton, sorghum, soybeans; applying herbicides, fungicides, insecticides; harvesting corn, rice, sorghum; preparing wheat ground; baling

hay. Corn 18% harvested, 46% 1989, 55% avg.; 1% poor, 26% fair, 73% good. Soybeans 89% blooming, 86% 1989, 72% avg.; 4% yellowing, 4% 1989, 6% avg.; 2% very poor, 14% poor, 47% fair, 37% good. Sorghum 95% headed, 100% 1989, 99% 4 year avg.; 59% turning color, 86% 1989, 87% 4 year avg.; 1% very poor, 7% poor, 61% fair, 31% good. First bale of cotton ginned. Rice yields good. Group III soybean yields down. Pecan prospects poor. Pasture 13% very poor, 60% poor, 27% fair. Water ponds drying up. Poultry losses due to extreme heat, dry conditions.

CALIFORNIA: Low pressure brought some rainfall to north State over weekend. Strong high pressure built during week for warming, drying trend. Minor disturbance moved through north around mid week bringing clouds, cooling. Light thunderstorm activity over Sierra.

Field activities progressed, open weather. Rice heading slowed, cool temperatures. Early fields drained, harvest preparation. Good cotton development, final irrigation most fields. Defoliation underway, desert areas. Alfalfa, dry beans treated, insects, worms. Dry bean, silage corn, safflower, sugar beet, sunflower harvests continued. Early grain corn harvest began. Fall field preparation underway. Apple harvest continued, picking Granny Smith, Golden Delicious varieties. Avocados developed normally. Dates progressed well. Fig harvest ongoing. Grape harvest advanced. Thompson Seedless, Carignane, Grenache varieties harvested for wine production. Varieties packed for table consumption: Flame Seedless, Thompson Seedless, Red Globe, Ruby Seedless, Ribier, Exotic. Raisin grapes were picked placed on trays for drying, approximately 75% down. Stone fruit harvest slowed, more than 90% of Freestone peaches, plums, nectarines packed. Asian pears, Early Foothill pomegranates harvested, packed. Prune harvest in full swing, varied sizes, quality. Grapefruit picking winding down in Riverside. Navel orange progressing well. Almond harvesting continued, large yields expected. Some pistachio growers shaking trees others treated to control insects. Walnut orchards treated for codling moth, husk fly. Broccoli light supply, generally good quality. Cauliflower light supply, wide range quality. Celery heavy supply, variable quality. Sweet corn harvest continued. Iceberg head lettuce moderate supply, wide range quality. Tomato harvest continued. Butte Valley potato growers preparing early variety fields for harvest. Livestock good statewide. Pasture, range fair northern third of State. Water supplies adequate. Elsewhere, water short, conditions poor supplemental feeding.

COLORADO: Hot dry weather dominated the State with very little precipitation received. Precipitation for the week trace to 0.20 in. Temperatures 5 to 5° above normal.

Days suitable for fieldwork 6.6. Soil moisture 10% very short, 39% short, 51% adequate. Alfalfa 2nd cutting 83% complete, 3rd cutting 41% harvested. Barley 85% harvested. Oats 78% harvested. Spring wheat 65% harvested. Dry beans 14% cut; 6% threshed. Dry onions 50% harvested. Summer potatoes 58% harvested. Corn crop has begun to catch up with 74% in the dough, 30% dented; 9% mature. Corn silage harvest has begun in some areas of the State. Winter wheat seeding continues

active, 17% complete. Pasture, range feed 2% very poor, 10% poor, 32% fair, 45% good, 11% excellent. Livestock mostly fair to good.

FLORIDA: Hot across north; temperatures 2 to 40 above normal. Elsewhere, temperatures around normal. Extreme highs reached mid, upper 90s north, mostly mid 90s elsewhere except low 90s lower east coast. Coolest lows mid 60s Panhandle to upper 60s elsewhere. Rain fell most reporting stations, 1.00 to 3.00 in. common, many local areas under 0.59 in.

Soil moisture short Panhandle, short to adequate northern Peninsula, mostly adequate other areas. Aflatoxin found in both peanuts, late corn. Peanut harvest active; corn harvest, haying steady. Tobacco harvest complete. Sugarcane good progress. Pastures 20% excellent, 35% good, 35% fair, 10% poor. Cattle fair to good north, good to excellent south. Citrus trees, groves very good; more rain needed, however. Lakes, ponds, streams low. Fruit sizes large for this time of year. Fresh shipments red, white grapefruit, Hamlin, Navel oranges, K Early Citrus Fruit. Caretakers cultivating, spraying, pruning, burning dead trees. Hot days, warm nights over vegetable producing areas. Rainfall limited northern areas, more plentiful central, southern areas. Planting gained seasonally. Crops planted included celery, cabbage, cucumbers, eggplant, peppers, squash, tomatoes.

GEORGIA: Hot week, temperatures 2 to 5° above normal. Much of central, south reached 100°, 103° at Dublin, Albany. Coolest temperatures near 60° mountains, low 70s along coast. Scattered thunderstorms few locations, mainly north, east central, extreme south. Local totals 1.00 to 3.00 in. Still some areas less than 0.25 in., particularly central.

Days suitable for fieldwork 5.8. Soil moisture 21% very short, 52% short, 25% adequate, 2% surplus. Corn 73% harvested for grain, 56% 1989, 65% avg. Cotton some improvement, development ahead last year and avg.; 3% harvested, 1% avg. Sorghum 2% very poor, 41% poor, 43% fair, 14% good; 12% harvested for grain, 27% 1989, 20% avg. Peanuts 18% very poor, 43% poor, 34% fair, 5% good; 10% dug, 9% 1989, 9% avg.; 6% threshed, 3% 1989, 3% avg.; some quality problems, worms, other insects increasing. Some soybean fields dropping leaves, pods prematurely. Tobacco 5% poor, 52% fair, 43% good; 92% harvested, 98% 1989, 95% avg. Apples 1% very poor, 10% poor, 15% fair, 74% good; 44% harvested, 35% 1989, 44% avg. Pecans 1% very poor, 36% poor, 56% fair, 7% good; weevil, stinkbug populations building. Hay 3% very poor, 21% poor, 50% fair, 25% good, 1% excellent. Pasture 6% very poor, 19% poor, 44% fair, 30% good, 1% excellent; fall armyworms increasing. Cattle, hogs fair to good, stressed by hot weather, poultry stressed. Main activities: Harvesting peanuts, cotton, sorghum, hay, silage, controlling pests in cotton, peanuts, soybeans, irrigating.

HAWAII: Heat wave continues to dominate island weather. Showers remain light to moderate. Winds variable 5 to 20 mph while temperatures high 60s to low 90s. Rainfall none to 2.60 in.

Days suitable for farm work 7.0. Heavy irrigation remains necessary in all areas. Papaya production plentiful. Sugar, pineapple harvest steady.

IDAHO: Temperatures above normal, except north below normal. Below normal precipitation statewide.

Days suitable for fieldwork 7.0. Soil moisture 18% very poor, 23% poor, 58% adequate, 1% surplus. Winter wheat 93% harvested, 86% 1989, 92% avg. Spring wheat 77% harvested, 77% 1989, 77% avg. Spring barley 76% harvested, 77% 1989, 79% avg.

Potato good; 67% turning; 23% vines dying; 7% harvested, 6% 1989, 4% avg. Oats 64% harvested, 68% 1989, 72% avg. Alfalfa hay 2nd cutting 89% harvested, 94% 1989, 95% avg.; 3rd cutting 31% harvested, 32% 1989, 18% avg. Dry beans 9% harvested, 11% 1989, 16% avg. Onions 33% harvested, 13% 1989, 17% avg. Hops 13% harvested. Sweet corn for processing 61% harvested. Peaches 88% harvested, 76% 1989, 74% avg. Plums 55% harvested. Some winter wheat planted on dryland in the east. Irrigation water supplies were good. Range, pasture 9% very poor, 12% poor, 43% fair, 35% good, 1% excellent. Livestock good; some shipping in east.

ILLINOIS: Temperatures 3 to 7° above normal across State. Precipitation generally less than 0.50 in., isolated areas 1.00 in.

Days suitable for fieldwork 5.50. Soil moisture 21% short, 73% adequate, 6% surplus. Soybeans turning yellow 5%, 20% 1989, 35% avg. Alfalfa 1% poor, 17% fair, 64% good, 18% excellent. Alfalfa hay third cutting 59%, 73% 1989, 77% avg. Pasture 1% poor, 20% fair, 65% good, 14% excellent.

INDIANA: Temperatures 3 to 6° above normal. Lows upper 50s to mid 60s, highs mid to upper 80s. Precipitation 0.25 to 3.00 in. few areas.

Days suitable for fieldwork 3.7. Topsoil 5% short, 61% adequate, 34% surplus. Subsoil 2% short, 73% adequate, 25% surplus. Soybeans 5% turning yellow, 13% 1989, 35% avg. Tobacco 18% harvested, 20% 1989, 34% avg. Pasture 20% plowed, 26% 1989, 29% avg. Warm week helped corn, soybean development.

IOWA: Temperatures 7 to 10° above normal. Extremes 51°; 100°. Rainfall none to 2.65 in.; average 0.52 in.

Days suitable for fieldwork 5.0. Topsoil 7% short, 71% adequate, 22% surplus. Subsoil 4% short, 84% adequate, 12% surplus. Hay 2% poor, 14% fair, 68% good, 16% excellent. Pasture 1% poor, 16% fair, 57% good, 26% excellent. Third crop alfalfa hay 70% harvested, 80% 1989, 76% avg. Livestock mostly good. States livestock herds under considerable stress as high temperatures, humidity blanketed the State this past week. Some early movement of calves to sale barns were noted.

KANSAS: Temperatures 10 to 14° above average. No precipitation, except for central, south central, east central districts which averaged 0.01 in. to 0.02 in.

Days suitable for fieldwork 6.5. Surface moisture 72% short, 28% adequate. Subsoil moisture 56% short, 42% adequate, 2% surplus. Corn, sorghum, soybeans slightly behind schedule. Insects were present across State, mainly at light levels but moderate to severe in some locations. Range, pasture still good for time of year. Third cutting of alfalfa hay 96% complete; fourth cutting 25% complete. Working wheat fields, applying fertilizer, irrigation, cutting hay remain the major activities.

KENTUCKY: Temperatures 2 to 3° above normal. Highs upper 90s, lows lower 60s. Rainfall 0.25 to 0.50 in. over most of State. North central areas 2.00 in. rain 29th.

Days suitable fieldwork 4.6. Soil moisture 13% very short, 29% short, 55% adequate, 3% surplus. Even with rain received, all areas would benefit from soaking rain. Tobacco mostly fair to good. Barley 35% cut, 44% 1989, 49% avg. Dark tobacco 32% cut, 47% 1989, 49% avg. Housed tobacco curing well. Various degrees problems reported form black shank, blue mold, aphids. Labor reported short in some areas. Harvesting corn for grain just started. Corn silage 10% cut. Armyworms active

some fields. Hay, pastures fair to generally good. Cutting hay where regrowth occurred.

LOUISIANA: Temperatures 3 to 5° above normal. Extremes 53°; 103°. Rainfall none to 0.82 in.

Days suitable for fieldwork 6.4. Soil moisture 42% very short, 49% short, 7% adequate, 2% surplus. Corn harvested 90%, 75% 1989, 74% avg. Cotton open bolls 87%, 22% 1989, 57% avg.; harvested 2%, 0% 1989, 2% avg.; 11% poor, 22% fair, 67% good. Hay final cutting 63%, 48% 1989, 50% avg. Rice headed 96%, 98% 1989, 98% avg.; ripe 84%, 74% 1989, 77% avg.; harvested 75%, 61% 1989, 62% avg. Second crop management continued, south. Sorghum headed 99%, 100% 1989, 100% avg.; turning color 91%, 91% 1989, 92% avg.; ripe 78%, 66% 1989, 75% avg.; harvested 61%, 41% 1989, 51% avg.; 13% poor, 31% fair, 56% good. Soybeans blooming 98%, 98% 1989, 98% avg.; setting pods 92%, 89% 1989, 89% avg.; turning color 28%, 12% 1989, 14% avg.; shedding leaves 3%, 2% 1989, 3% avg.; 17% poor, 44% fair, 33% good, 6% excellent. Most fields still suffering from drought. Pod set is thin. Sweet potatoes harvested 33%, 21% 1989, 33% avg.; 16% poor, 46% fair, 23% good, 15% excellent. Harvest slowed due to dry ground. Sugarcane planted 16%, 30% 1989, 21% avg.; 9% very poor, 8% poor, 50% fair, 33% good. Many farmers still waiting for rain to commence planting. Livestock 7% poor, 33% fair, 60% good. Pasture 7% very poor, 31% poor, 44% fair, 18% good. Very short. Hay feeding was occurring in worst areas. Vegetables 3% very poor, 34% poor, 52% fair, 11% good.

MARYLAND & DELAWARE: **MARYLAND:** Precipitation 0.18 in. Temperature 77°, normal 73°. Extremes 56°; 93°.

Days suitable for fieldwork 5.4. Topsoil 5% short, 80% adequate, 15% surplus. Subsoil 85% adequate, 15% surplus. Corn good; 88% dough, 87% 1989, 89% avg.; 62% dent, 65% 1989, 71% avg.; 6% mature, 15% 1989, 21% avg.; silage 12% harvested, 14% 1989, 28% avg. Soybeans good; 95% bloomed, 90% 1989, 93% avg.; 79% setting pods, 74% 1989, 76% avg.; 11% setting pods, 1% 1989, 6% avg. Tobacco good; 94% bloomed, 89% 1989, 94% avg.; 84% topped, 62% 1989, 74% avg.; 49% harvested, 44% 1989, 47% avg. Sweet corn 83% harvested, 89% 1989, 91% avg. Potatoes 97% harvested, 74% 1989, 81% avg. Watermelons 92% harvested, 93% 1989, 91% avg. Cantaloupes 90% harvested, 92% 1989, 93% avg. Lima beans 40% harvested, 66% 1989, 68% avg. Snap beans 87% harvested, 93% 1989, 91% avg. Tomatoes 84% harvested, 86% 1989, 85% avg. Hay supplies adequate. Alfalfa hay third cut 84% complete, 89% 1989, 91% avg. Alfalfa hay fourth cut 12% complete, 22% 1989, 23% avg. Other hay second cut 90% complete, 90% 1989, 93% avg. Other hay third cut 24% complete, 25% 1989, 57% avg. Apples fair to good; 23% harvested, 37% 1989, 25% avg. Peaches fair; 85% harvested, 82% 1989, 83% avg. Pasture good.

DELAWARE: Precipitation 1.26 in. Temperature 77°, normal 74°. Extremes 57°; 91°.

Days suitable for fieldwork 6.3. Topsoil 100% adequate. Subsoil 100% adequate. Corn good; 91% dough, 91% 1989, 96% avg.; 64% dent, 62% 1989, 78% avg.; 9% mature. 17% 1989, 26% avg.; silage 25% harvested, 14% 1989, 31% avg. Soybeans good to excellent; 98% bloomed, 90% 1989, 97% avg.; 74% setting pods, 64% 1989, 75% avg. Sweet corn 87% harvested, 86% 1989, 90% avg. Potatoes 91% harvested, 76% 1989, 85% avg. Watermelons 80% harvested, 94% 1989, 91% avg. Cantaloupes 96% harvested, 97% 1989, 97% avg. Cucumbers 80% harvested, 89% 1989, NA avg. Lima beans 36% harvested, 22% 1989, 37% avg. Snap beans 90% harvested, 79% 1989, NA avg. Tomatoes 86% harvested, 86% 1989, 72% avg. Hay supplies adequate. Alfalfa hay third cut 95% complete, 76% 1989, 94% avg. Alfalfa hay fourth cut 16% complete,

12% 1989, 37% avg. Other hay third cut 50% complete, 74% 1989, 77% avg. Apples fair to good; 30% harvested, 38% 1989, 24% avg. Pasture good.

MICHIGAN: Temperatures 2 to 4° above normal. Extremes 43°; 94°. Precipitation none to 2.22 in. across State.

Days suitable for fieldwork 6. Soil moisture short to adequate throughout State. Corn 40% dough, 65% 1989, 80% avg.; 10% dent, 15% 1989, 40% avg.; 0% mature, 0% 1989, 3% avg.; 5% poor, 15% fair, 50% good, 30% excellent. Soybeans 90% setting pods, 90% 1989, 90% avg.; 2% dropping leaves, 1% 1989, 2% avg.; 5% poor, 15% fair, 50% good, 30% excellent. Pasture 5% poor, 20% fair, 45% good, 30% excellent. Major activities: Baling second, third cutting hay, starting dry bean harvest, working wheat ground for fall planting, apple harvest continues picking of McIntosh is about to begin. Several hundred acres of tomatoes.

MINNESOTA: Temperatures 8 to 10° above normal. Extremes 43°; 94°. Precipitation 0.03 to 0.13 in.; greatest total 0.70 in.

Days suitable for fieldwork 5.0. Topsoil 16% very short, 20% short, 58% adequate, 6% surplus. Corn 79% in dough, 99% 1989, 96% avg.; 20% denting, 61% 1989, 68% avg. Soybeans 26% turning yellow, 29% 1989, 46% avg.; 7% dropping leaves, 4% 1989, 12% avg. Dry beans 15% harvested, 12% 1989, 15% avg. Potatoes 10% harvested, 12% 1989, 13% avg. Sweet corn 54% harvested, 79% 1989, 75% avg. Flax 26% harvested, 30% 1989, 33% avg. Winter wheat 25% seeded, 29% 1989, 31% avg. Rye 25% seeded, 33% 1989, 31% avg. Field corn 5% silage, 7% 1989, 10% avg. Land 48% plowed, tilled, 53% 1989, 47% avg. Field corn 1% very poor, 11% poor, 31% fair, 50% good, 7% excellent. Soybeans 2% very poor, 7% poor, 42% fair, 43% good, 6% excellent.

MISSISSIPPI: Temperatures 4° above normal. Extremes 60°; 104°. Mostly dry statewide. Rainfall 0.17 in., 0.67 in. below normal. Soil temperatures 90°.

Days suitable for fieldwork 6.5, 5.7 1989, 5.1 avg. Soil moisture 84% very short, 15% short, 1% adequate. Cotton 73% open bolls, 7% 1989, 55% avg.; 4% harvested; 7% very poor, 21% poor, 44% fair, 23% good, 5% excellent. Corn 100% dough, 96% dent, 86% 1989, 94% avg.; 73% mature, 51% 1989, 78% avg.; 22% harvested, 20% 1989, 31% avg.; 80% silage harvested, 62% 1989, 80% avg.; 1% very poor, 9% poor, 48% fair, 40% good, 2% excellent. Rice 99% heading, 98% 1989, 98% avg.; 34% mature, 48% 1989, 55% avg.; 8% harvested, 0% 1989, 16% avg.; 2% poor, 67% fair, 26% good, 5% excellent. Soybeans 96% blooming, 90% 1989, 93% avg.; 80% podding, 65% 1989, 76% avg.; 18% turning color, 15% 1989, 19% avg.; 14% very poor, 45% poor, 28% fair, 11% good, 2% excellent. Sorghum 99% heading, 99% 1989, 99% avg.; 85% coloring, 76% 1989, 87% avg.; 54% mature, 41% 1989, 67% avg.; 20% harvested, 15% 1989, 31% avg.; 85% silage harvested, 50% 1989, 59% avg.; 63% fair, 36% good, 1% excellent. Hay 80% harvested, 77% 1989, 79% avg. Peanuts 30% harvested, 28% 1989, 36% avg. Sweet potatoes 16% harvested, 14% 1989, 21% avg. Watermelons 96% harvested, 94% 1989. Pasture, livestock fair to poor. Activities: Corn, sorghum harvesting, harvesting cotton, some hay.

MISSOURI: Temperatures 2° above normal southeast, 7 to 10° above normal elsewhere. Rainfall very minor, most areas none.

Days suitable for fieldwork 6.6. Topsoil 48% short, 51% adequate, 1% surplus. Subsoil 28% short, 71% adequate, 1% surplus. Corn, soybean development 2 weeks behind avg. Corn dented ranges 40% north central, southwestern districts to 86% southeast. Soybean development most advanced northern districts, least advanced southeast. Sorghum 3

weeks behind avg. Sorghum coloring ranges 59% southeast to 26% or less other areas. Alfalfa 3rd cutting 81%, 89% 1989, 90% avg. Pasture 2% very poor, 16% poor, 32% fair, 46% good, 4% excellent.

MONTANA: Temperatures slightly below normal west, up to 5° above normal east. Precipitation was light, widely scattered.

Days suitable for fieldwork 5.6. Topsoil 49% short, 49% adequate, 2% surplus. Subsoil 58% short, 42% adequate. Barley 78% harvested, 60% 1989, 72% avg. Oats 79% harvested, 65% 1989, 75% avg. Second cutting alfalfa harvested 80%, 72% 1989, 80% avg. Corn silage 3% harvested, 13% 1989, 18% avg. Winter wheat 1% seeded, 2% 1989, 2% avg.

NEBRASKA: Temperatures 6° above normal northwest up to 12° above normal east. Extremes 50°; 105°. Light precipitation latter part of week, none northwest up to 0.50 in. northeast.

Days suitable for fieldwork 6.9. Topsoil 74% short, 25% adequate, 1% surplus. Subsoil 61% short, 39% adequate. Alfalfa hay 1% very poor, 14% poor, 39% fair, 41% good, 5% excellent; 85% third cutting, 79% 1989, 79% avg. Soybeans 20% turning color, 25% 1989, 29% avg. Winter wheat 1% sown, 4% 1989, 5% avg. Most sown in Panhandle, some east, southeast. Moisture needed before planting will ready get going. Sorghum beginning to mature in a few areas. Green bugs still a problem southeast. Some corn producers began cutting silage, others preparing to cut. Drought damaged corn, sorghum cut for silage, southwest. Some dryland corn not fit for silage. Corn borers, spider mites still active Central part of State. Dryland crops stressed by hot dry weather. Corn beginning to or had fired, southern half of State. Soybeans wilting southeast. Hot weather speeding up crop development, concern that at this rate yields, test weights could be reduced. Large hail storm wiped out many fields, northeast, lesser damaged fields stressed even more by heat. Large numbers of grasshoppers, southern half of State. Dry edible bean harvest got underway, should gain speed this week west, southwest. Many operators began to irrigate again, at least one more time to help finish crops. Pasture, range feed supplies 3% very poor, 16% poor, 56% fair, 22% good, 3% excellent. Hot, dry weather hard on pastures, especially cool season grasses. Little movement reported, some selling reported southwest, north due to drought. Heat, high humidity stressed livestock, eastern half of State causing reduced weight gains. Flies a problem west.

NEVADA: High pressure system resulted in no precipitation, temperatures above normal. Extremes 30°; 106°.

Digging 1990 potato crop started, mostly for processing only. Alfalfa seed combining full swing most areas. Hot, dry weather ideal for harvesting all remaining acreage hay, small grain crops. High elevation summer ranges furnishing only marginal grazing. Some cattle already down on winter low elevation ranges.

NEW ENGLAND: Precipitation none to 0.88 in. Maine, New Hampshire, Massachusetts, Connecticut; none to 1.47 in. Vermont, Rhode Island, up to 3.62 in. selected stations northern Maine. Temperatures high 60s to low 70s north, to mid 70s south; 6 to 8° above normal north, 5 to 6° above normal south. Maximum temperatures mid to upper 80s north, mid 80s to low 90s south.

Days suitable for fieldwork 6.0. Soil moisture north 7% short, 67% adequate, 26% surplus; south 5% short, 76% adequate, 19% surplus. Grazing availability 9% short, 91% adequate. Pasture 21% fair, 71% good, 8% excellent. Maine potato 6% harvested, 5% 1989, 5% avg.; good. Rhode Island potatoes 48% harvested, 35% 1989, 40% avg.; good.

Connecticut River Valley potatoes 18% harvested, 19% 1989, 19% avg.; good. Maine oats 63% harvested, 50% 1989, 43% avg.; good. Field corn 2% harvested, 7% 1989, 8% avg.; good. Sweet corn 75% harvested, 76% 1989, 78% avg.; good. Second cut hay 82% harvested, 78% 1989, 83% avg.; good. Third crop hay 26% harvested, 39% 1989, 44% avg.; good. Outdoor tobacco 83% harvested, shade tobacco 82% harvested; good. Apples 18% harvested, size medium to large; good. Peaches 61% harvested; good. Pears 42% harvested; good. Blueberries 88% harvested; good. Major farm activities: Cutting hay, mowing orchards, harvesting fruits, vegetables.

NEW JERSEY: Temperatures much above normal. Extremes 50°; 92°. Rainfall 0.87 in. north, 0.61 in. central, 0.65 in. south. Heaviest 24 hour total 0.88 in. on 29th, 30th. Estimated soil moisture percent field capacity averaged 89% north, 72% central, 64% south. Four inch soil temperatures 71° north, 73° central, 74° south.

Soil moisture adequate fieldwork active. Fall vegetable continued good growth under favorable conditions. Summer vegetable further declined. Irish potato harvest almost complete. Light sweet potato digging continued. Late season peach harvest started. Corn silage making began. Third cutting of hay advanced. Soil preparations underway for fall sown grains. Pasture growth continued above normal.

NEW MEXICO: Temperatures nearly 5° above normal. Precipitation light, confined to western half of State. Highest total 0.73 in. at Animas.

Days suitable for fieldwork 6.2. Soil moisture 38% short, 62% adequate. Beginning to dry out across most of State, spotty showers reported. Some chile fields in the Hatch Valley affected by plant disease. Mites in corn, russian aphids in wheat reported on the High Plains. Apple, chile harvest underway. Range 10% poor, 61% fair, 29% good.

NEW YORK: Temperatures 5 to 10° above normal. Extremes 40°; 90°. Precipitation close to normal. Exceptions were in isolated thunderstorms.

Days suitable for fieldwork 4.5. Soil moisture adequate to surplus. Pastures 17% fair, 83% good. Hay good, corn mostly good to excellent. Alfalfa second cutting 90% complete, 87% 1989, 88% avg.; third cutting 20% finished, 26% 1989, 28% avg. Oats 75% harvested, 88% 1989, 87% avg. Bartlett pear harvest in Lake Ontario region neared completion. Excellent size fruit. Heavy rains in Hudson Valley contributed to early drop problems. Paula Red harvest complete. Some Concord, Niagra grapes ready for picking. Bartlett pear harvest in the valley in full swing. In Lake Champlain area, Paula Red harvest remained active. Vegetable harvests continued in full swing.

NORTH CAROLINA: Temperatures 3° above normal in the Piedmont Region, 2° above in the Mountain Region; 3 to 6° above in the Coastal Plain Region. Precipitation none to 2.83 in.

Days suitable for fieldwork 5.8. Soil moisture 4% very short, 22% short, 65% adequate, 9% surplus. Pasture 1% very poor, 6% poor, 35% fair, 54% good, 4% excellent. Livestock feed from pasture 80%. Hay third cutting 40%. Flue cured tobacco harvested 69%. Corn silage harvested 57%; corn for grain harvested 13%; burley tobacco 18%; sweet potatoes 10%; apples 19%. Corn dent 90%; mature 81%; cotton opening bolls 28%; soybeans setting pods 70%. Crop condition: Corn 7% very poor, 30% poor, 38% fair, 25% good; cotton 35% fair, 56% good, 9% excellent; soybeans 6% poor, 40% fair, 52% good, 2% excellent; peanuts 5% poor, 22% fair, 68% good, 5% excellent; sorghum 12% poor, 42% fair, 44% good, 2% excellent; tobacco 24% fair, 73% good, 3% excellent; sweet potatoes, 28% fair, 70% good,

2% excellent; apples 17% poor, 33% fair, 50% good; hay 1% very poor, 5% poor, 41% fair, 53% good. Major activities: Harvesting flue cured tobacco; cutting corn silage; harvesting, topping, spraying burley tobacco; spraying field crops; harvesting corn for grain; harvesting vegetables. Other activities included: Cutting hay; shearing Christmas trees; harvesting apples, sweet potatoes; tending livestock; general farm maintenance.

NORTH DAKOTA: Temperatures 4° above normal west central to 7° above normal east central, southeast, south central. Precipitation 0.10 in. west central to 1.05 in. southeast.

Days suitable for fieldwork 6.6. Topsoil 31% very short, 57% short, 12% adequate. Subsoil 40% very short, 60% short. Small grain crops: Spring wheat 2% very poor, 2% poor, 27% fair, 47% good, 22% excellent; 93% combined, 97% 1989, 84% avg. Durum 22% fair, 64% good, 14% excellent; 81% combined, 90% 1989, 74% avg. Oats 4% very poor, 5% poor, 42% fair, 41% good, 8% excellent; 96% combined, 98% 1989, 91% avg. Barley 1% very poor, 27% fair, 56% good, 16% excellent; 99% combined, 99% 1989, 94% avg. Late season crops: Flax 3% very poor, 2% poor, 26% fair, 59% good, 10% excellent; 29% combined, 24% 1989, 22% avg. Corn for grain 2% poor, 51% fair, 46% good, 1% excellent; 32% denting to dented and beyond, 67% 1989, 64% avg. Corn for silage 12% very poor, 10% poor, 45% fair, 30% good, 3% excellent; 15% cut, 10% 1989, 15% avg. Potatoes 73% poor, 27% fair; 2% dug, 1% 1989, 8% avg. Soybeans 1% poor, 66% fair, 33% good; 20% mature and beyond, 13% 1989, 23% avg. Dry edible beans 7% very poor, 9% poor, 64% fair, 20% good; 20% combined, 5% 1989, 7% avg. Sunflower 1% very poor, 6% poor, 36% fair, 52% good, 5% excellent; 6% bracts turned brown and beyond, 7% 1989, 12% avg. Sugarbeets 13% poor, 58% fair, 29% good. Pastures 26% very poor, 36% poor, 38% fair. Stockwater 3% very short, 48% short, 49% adequate. Hay crop: Second cutting alfalfa 96% complete, other hay 97% complete.

OHIO: Highs mid 80s, lows mid 60s; both 2 to 6° above normal. Rainfall greatest southwest to least in north. Rainfall 2.00 to 0.10 in.; 0.40 to 0.70 in. subnormal except in southwest.

Days suitable for fieldwork 5.2. Soil moisture 3% short, 80% adequate, 17% surplus. Farm activities: Cutting, curing hay; clipping pastures, roadsides, idle land; scouting fields for insects; tilling land for planting grasses, legumes, canola, small grains; spreading manure; harvesting crops. Corn good; some lodging from storms, earliest corn almost mature. Soybeans fair to good; some wind damage, few spider mites infestations, weedy because rain diluted herbicides. Hay good. Pasture 1% very poor, 6% poor 25% fair, 56% good, 12% excellent. Vegetable harvests 10 to 14 days late.

OKLAHOMA: Temperatures 3° above normal southeast to 9° above normal northeast. No precipitation.

Days suitable for fieldwork 7.0. Topsoil 70% short, 30% adequate. Subsoil 55% short, 45% adequate. Wheat 3% planted, 0% 1989, 3% avg. Moisture needed for good germination. Cotton 30% fair, 60% good, 10% excellent; 3% open bolls, 2% 1989, 10% avg. Sorghum 2% poor, 8% fair, 90% good; 90% heading, 100% 1989, 95% avg.; 30% coloring, 65% 1989, 70% avg. Soybeans 45% setting pods, 70% 1989, 75% avg. Corn 12% harvested, 15% 1989, 25% avg. Pastures 5% very poor, 4% poor, 45% fair, 45% good, 1% excellent. Cattle good; marketings stable, prices down from preceding week.

OREGON: Wet, temperatures well above normal coast, Willamette Valley. Wet, cooler southwest. Temperature varied widely east with precipitation. Soil moisture 50% short, 50% adequate. Barley 70% harvested, 70% 1989, 83% avg. Fall tillage

underway, some early seeding eastern areas. Late haying continues. Mint harvest continued Malheur Co. Red clover, bentgrass, vegetable seed harvest Willamette Valley. Hop harvest full swing valley. Apple harvest continues northern Willamette Valley. Blackberries nearly complete Multnomah, Washington Co's. Bartlett pear harvesting virtually complete Anjous beginning Hood River Co. Comice beginning Jackson Co. Pruning, cover crop planting Willamette Valley. Hazelnut maturing some limited brown stain. Cranberry growers preparing for harvest southern coast. Snap bean, broccoli harvest nearly complete. Sweet corn, cucumber harvesting continues. Onions pulled western Oregon, continuing Malheur Co. Watermelon, cantaloupes near end harvest Hermiston area. Potato harvest continues Hermiston, Boardman area, Malheur Co. Potato development behind normal Klamath Co. Livestock good to excellent across State. Rains increased stockwater supplies. Range, pasture 13% poor, 46% fair, 41% good. Western mostly fair, eastern poor to good.

PENNSYLVANIA: Commonwealth experienced a slightly warmer than normal week with slightly below normal precipitation. Temperature 71°, 3° below normal. Extremes 46°, 93°. Precipitation 0.73 in., 0.11 in. below normal.

Days suitable for fieldwork 4. Soil moisture 76% adequate, 24% surplus. Corn 96% silk, 89% 1989, 97% avg.; 59% dough, 45% 1989, 74% avg.; 13% dent, 9% 1989, 32% avg.; 2% mature, 0% 1989, 5% avg.; ensilage corn harvested 2% complete, 8% 1989; 3% poor, 19% fair, 47% good, 31% excellent. Soybean 2% poor, 18% fair, 47% good, 33% excellent. Wheat planted 2% complete, 11% 1989. Oat harvest 97% complete, 94% 1989. Barley planted 5% complete, 12% 1989. Tobacco harvest 40% complete, 44% 1989. Potato harvest 27% complete, 32% 1989. Second cutting alfalfa 93% complete, 85% 1989. Third cutting alfalfa 54% complete, 40% 1989. Fourth cutting alfalfa 9% complete, 12% 1989. Second cutting clover timothy 76% complete, 69% 1989. Quality of hay made mostly fair. Feed from pasture 0% very poor, 3% poor, 65% fair, 32% good. Apple harvest 21% complete, 21% 1989. Peach harvest 72% complete, 70% 1989. Grapes harvest 14% complete, 3% 1989. Fall plowing 25% complete, 24% 1989. Activities: Harvesting hay, haylage, oats, potatoes, corn silage, fruits, vegetables; repairing fence; weed control; hauling manure; spreading fertilizer; maintaining machinery; caring for livestock.

PUERTO RICO: Rainfall of 0.92 in. was 0.90 in. below normal. Highest weekly total 4.58 in. at Adjuntas Aes; 3.92 in. at Lajas Aes; 3.56 in. at Mayaguez PRNC. Divisional temperature 82 to 83° on the Coasts, 76 to 78° in the Interior. Extremes 58°; 97°.

SOUTH CAROLINA: Temperatures 2 to 3° above normal in northwest to 1 to 2° above normal in south. Rainfall 0.60 in. south to nearly 2.00 in. mountains.

Days suitable for fieldwork 5.4. Soil moisture 5% very short, 48% short, 45% adequate, 2% surplus. Cotton 1% very poor, 45% poor, 53% fair, 1% good, 37% open bolls, 12% 1989, 33% avg. Soybeans 5% poor, 58% fair, 37% good, 94% blooming, 85% 1989, 91% avg.; 65% setting pods, 63% 1989, 65% avg.; 3% leaves turning, 4% 1989, 3% avg. Corn poor to fair, 98% matured, 87% 1989, 93% avg.; 58% harvested, 27% 1989, 35% avg. Sorghum fair, 30% harvested, 23% 1989, 19% avg. Tobacco fair, 82% harvested, 79% 1989, 84% avg.; 13% stalks destroyed, 13% 1989, 14% avg. Peanuts fair, 4% harvested, 6% 1989, 3% avg. Watermelons fair, 95% harvested, 94% 1989, 97% avg. Cantaloupes fair, 93% harvested, 94% 1989, 97% avg. Pastures 14% poor, 67% fair, 19% good.

SOUTH DAKOTA: Temperatures 5 to 11° above normal. Extremes 37°; 106°. Precipitation scattered, variable. Maximum 1.25 in. Growing season precipitation above normal east, central, below normal west. Range 6.82 in. above to 4.15 in. below normal. Growing degree days below normal east, above normal west. Range 112 units below to 319 units above.

Days suitable for fieldwork 5.4. Subsoil 22% critically short, 45% short, 32% adequate, 1% surplus. Topsoil 10% critically short, 46% short, 43% adequate, 1% surplus. Range, pasture 5% very poor, 12% poor, 30% fair, 38% fair, 37% good, 8% excellent. Crop conditions mostly good. Silage harvest underway, winter grain seeding progressing. Grasshopper, corn borer, root worm beetle, weed, fly problems. Major activities: Spraying, fall tillage, haying, harvesting silage, winter grain seeding.

TENNESSEE: Hot, dry week. Isolated thunderstorms northeast, Plateau caused scattered damage at mid week. Temperatures 10 to 15° above normal. Most stations recorded no rainfall.

Days suitable for fieldwork 6.0. Soil moisture 52% very short, 28% short, 19% adequate, 1% surplus. Corn 74% dent, 86% 1989, 70% avg.; 28% mature, 28% 1989, 47% avg.; 22% harvested for silage, 37% 1989, 20% avg.; 2% harvested for grain, 2% 1989, 7% avg.; 6% very poor, 12% poor, 60% fair, 21% good, 1% excellent. Cotton 22% open bolls, 8% 1989, 30% avg.; 10% very poor, 21% poor, 56% fair, 13% good. Sorghum 62% turning color, 86% 1989, 85% avg.; 18% mature, 24% 1989, 44% avg.; 8% very poor, 20% poor, 49% fair, 23% good. Soybeans 90% blooming, 98% 1989, 100% avg.; 70% setting pods, 78% 1989, 89% avg.; 10% very poor, 21% poor, 54% fair, 13% good, 2% excellent. Tobacco 92% topped, 90% 1989, 89% avg.; 2% very poor, 2% poor, 29% fair, 65% good, 2% excellent. Burley tobacco 40% harvested, 46% 1989, 47% avg. Dark fired tobacco 44% harvested, 52% 1989, 45% avg. Dark air cured tobacco 34% harvested, 50% 1989, 44% avg. Pastures 16% very poor, 33% poor, 31% fair, 19% good, 1% excellent. Cattle 1% very poor, 6% poor, 43% fair, 49% good, 1% excellent. Harvesting hay, tobacco main activities.

TEXAS: Upper level high pressures forced some early week heat across much State with record breaking temperatures. As week progressed, high weakened, temperatures fell gradually. Precipitation confined mostly coastal sections, as couple of tropical disturbances moved by during week. Temperatures above normal most of State with hottest weather Panhandle southeastward. Showers south kept temperatures near, below normal. Rainfall below normal all areas except Lower Valley, rainfall significantly above average.

Crops: Corn fields maturing rapidly Plains under hot, open weather. Some silage cutting underway, grain harvest begin soon. Most harvest completed Blacklands last week under good harvest weather. Harvest Upper Coast virtually completed. Corn harvested 68%, 62% 1989, 62% avg. Grain sorghum fields Plains turning color, maturing rapidly. Some greenbug treatment occurred. Few later fields could still benefit from rain, wilting occurring. Harvest moved ahead Hill Country, Blacklands under open conditions. Most harvest Upper Coast completed. Sorghum mature 78%, 65% 1989, 62% avg.; harvested 56%, 53% 1989, 55% avg. Cotton enjoyed warmer, open weather Plains, Cross Timbers, most fields showed good development. Bollworm activity remained high some fields, producers busy spraying. Bolls continued to open Blacklands, harvest increasing. Warmer temperatures Trans Pecos helped bolls open. Producers Coastal Bend finishing harvest. Stalk destruction continued Valley. Cotton setting bolls 99%, 96% 1989, 98% avg.; harvested 20%, 11%

1989, 12% avg. Preparations small grain planting good progress Plains, planting activities increasing. Preparations active other areas. Wheat planted 4%, 6% 1989, 6% avg. Soybean harvest continued Blacklands, Upper Coast. Yields low. Later varieties Upper Coast need rain. Fields High Plains drying down rapidly. Rice harvest showed good progress Upper Coast. Yields down some from early expectations. Peanut harvest continued early central fields. Some dryland fields wilting from extreme heat, dry conditions. Fields rapidly maturing Cross Timbers, Hill Country. Dryland fields showing some stress from heat. Disease controls continued. Other field crops: Peanuts 8% harvested, 2% 1989, 3% avg. Soybeans harvested 15%, 3% 1989, 8% avg. Sunflowers harvested 5%, 2% 1989, 2% avg. Oats planted 0%, 1% 1989, 2% avg.

Commercial Vegetables: Rio Grande Valley, peppers, tomatoes good growth despite hot temperatures. Irrigation steady. Land preparation, planting continued. San Antonio Winter Garden, fall melons setting fruit. Land preparation, planting continued. Eastern areas watermelons, peas good supplies. Sweet potato harvest continued. High Plains, harvest operations continued carrots, peppers. Trans Pecos, pepper harvest continued, cantaloupe, onion harvest virtually completed. Pecans showing some effects hot, dry weather, insect damage. Crop widely varied across State.

Range and Livestock: Extreme heat, dry conditions caused ranges, pastures to decline many areas. Haying operations slowed. Supplemental feeding increased with decline in grazing. Livestock conditions now fine, with lack of forage, decline may occur. Heat last week stressed some livestock, poultry. Range, pasture 5% very poor, 14% poor, 48% fair, 27% good, 6% excellent.

UTAH: Temperatures 3° above normal, some stations received precipitation.

Days suitable for fieldwork 6.7. Soil moisture 98% short, 2% adequate. Planting fall grains, harvesting alfalfa hay third cutting, continued. Winter wheat 15% seeded, 19% 1989, 21% avg. Alfalfa hay third crop 45% cut, 61% 1989, 43% avg. Field corn in dough stage 62%, 73% 1989, 75% avg.; dent stage 18%, 26% 1989, 30% avg. Apple, pear harvest underway. Peach harvest continued; yield light Utah, Davis Counties, other locations good. Pre harvest preparation for potato, onion, dry bean crops underway. Non irrigated range, pasture fair.

VIRGINIA: Temperatures 5° above normal. Precipitation very light, less than 0.25 in. statewide.

Days suitable for fieldwork 5.1. Topsoil 3% very short, 6% short, 81% adequate, 10% surplus. Corn in dough stage 80%, 77% 1989, 86% avg.; dented 59%, 62% 1989, 64% avg.; mature 36%, 39% 1989, 38% avg.; 3% poor, 29% fair, 68% good. Corn silage harvested 13%, 10% 1989, 15% avg. Corn grain harvested 5%, 4% 1989, 5% avg. Soybeans bloomed 84%, 92% 1989, 90% avg. Soybeans setting pods 70%, 74% 1989, 66% avg.; 1% poor, 38% fair, 60% good, 1% excellent. Flue tobacco harvested 52%, 49% 1989, 34% avg. Fire tobacco harvested 53%, 71% 1989, 44% avg. Burley tobacco 23% harvested, 19% 1989, 14% avg. Sun tobacco harvested 34%, 35% 1989, 30% avg. All tobacco 2% poor, 34% fair, 62% good, 2% excellent. Spraying for tobacco worms, marketing. Apple, sweet potato, vegetable harvest continued. Pasture, alfalfa, other hay mostly good. Livestock mostly good. Peanut 50% fair, 50% good. Disease pressure heavy due to wet, humid conditions.

WASHINGTON: Temperatures normal to 7° below normal east; 2° above normal to 3° below normal west. Precipitation none to 0.43 in. east; 0.59 to 1.38 in. west.

Days suitable for fieldwork 5.5. Soil moisture 55% short, 30% adequate, 15% surplus. Range, pasture 5% very poor, 23% poor, 30% fair, 42% good. Hay, other roughage 100% adequate. Winter wheat planted 8%, 14% 1989, 17% avg.; harvested 97%, 100% 1989, 99% avg. Spring wheat harvested 93%, 88% 1989, 95% avg. Barley harvested 95%, 85% 1989, 95% avg. Alfalfa hay, 3rd cutting, 65%, 66% 1989, 63% avg. Potatoes harvested 23%, 22% 1989, 21% avg. Rains continued, hampered the completion of the small grain harvest. Some sprout damage was reported in Garfield County. Fall seeding, the preparation for fall seeding continued. Golden Delicious, Gala apple harvests continued. Early Delicious apples harvested along with pears this week. Beet, radish seed harvests underway. The vegetable harvests continued. Rains improved pasture conditions across the State.

WEST VIRGINIA: Temperature 73°, 3 to 5° above normal. Extremes 51°; 96°. Precipitation 0.20 in., 0.47 to 0.69 in. below normal.

Days suitable for fieldwork 5.5. Soil moisture 21% short, 79% adequate. Pasture 9% fair, 84% good, 7% excellent. Cattle, sheep good. Wheat good, 97% harvested. Corn good to excellent; 64% dough, 18% mature. Hay good; second cutting 65% complete, third cutting 40% complete. Apples poor. Tobacco good to fair, 92% topped, 32% harvested. Farm activities: Making hay, clipping pastures, small grain harvesting, topping, harvesting tobacco, chopping silage, general farm maintenance.

WISCONSIN: Temperature 72°, 7° above normal. Extremes 41°; 96°. Precipitation none to 0.30 in.

Days suitable for fieldwork 6.3. Soil moisture 8% short, 77% adequate, 15% surplus. Pasture 1% very poor, 1% poor, 15% fair, 71% good, 12% excellent. General condition of crops 12% fair, 79% good, 9% excellent. Soybean 87% of normal. Soybeans 7% turned, 7% 1989, 16% avg. Corn 1% poor, 13% fair, 78% good, 8% excellent; 59% in dough, 68% 1989, 80% avg.; 11% in dent, 24% 1989, 48% avg.; 1% mature, 3% 1989, 11% avg. Third cut hay 36% complete, 31% 1989, 39% avg.

WYOMING: Temperatures above normal. Precipitation below normal.

Days suitable for fieldwork 7.0. Topsoil 67% short, 33% adequate. Subsoil 51% short, 49% adequate. Winter wheat harvest wind up stages. Barley 20% mature, 15% 1989, 15% avg.; 80% harvested, 85% 1989, 80% avg. Spring wheat 10% mature, 10% 1989, 15% avg.; 90% harvested, 90% 1989, 85% avg. Oats 30% mature, 15% 1989, 20% avg.; 70% harvested, 85% 1989, 75% avg. Dry beans 70% turning color, 75% 1989, 75% avg.; 10% windrowed, 10% 1989, 20% avg.; few combined, 0% 1989, 5% avg. Corn 30% milk, 20% 1989, 40% avg.; 55% dough, 50% 1989, 40% avg.; 15% dented, 25% 1989, 15% avg.; 0% mature, 0% 1989, 5% avg. Corn silage harvest starting, 10% 1989. 1991 winter wheat 20% seeded, 20% 1989, 15% avg.; small amount emerged, 5% 1989, 5% avg. Sugarbeet harvest will start mid Sept. Alfalfa second cutting 75% complete, 80% 1989, 80% avg.; third cutting starting, 5% 1989. Livestock good to excellent. Range, pasture 10% poor, 85% good, 5% excellent.

International Weather and Crop Summary

HIGHLIGHTS

August 26-September 1, 1990

USSR ... In Western USSR, showery weather persists over mature small grains in the north. In the New Lands, intermittent showers cover maturing spring grains.

EUROPE ... Heavy rain delays harvest in sections of the north. Scattered rain helps reduce dryness in sections of France, Spain, and Italy.

EASTERN ASIA ... Typhoon Abe moves through Zhejiang and Jiangsu, causing localized flooding and crop damage. Unseasonable dryness continues in sections of southern China.

SOUTH ASIA ... Moderate to heavy rain continues over Gujarat's summer crop areas. Variable rain boosts irrigation reserves in the north and east.

CANADA ... Rainfall was mostly light (1-5mm) across the primary crop regions of Alberta and all but northeastern Saskatchewan, and temperatures averaged near normal, favoring maturing crops. Continued wet weather (10-25mm of rainfall) in northeastern Saskatchewan and parts of southwestern Manitoba caused more harvest problems. Temperatures, however, averaged 2-4 degrees C above normal over much of the southeastern Prairies, helping the drying process.

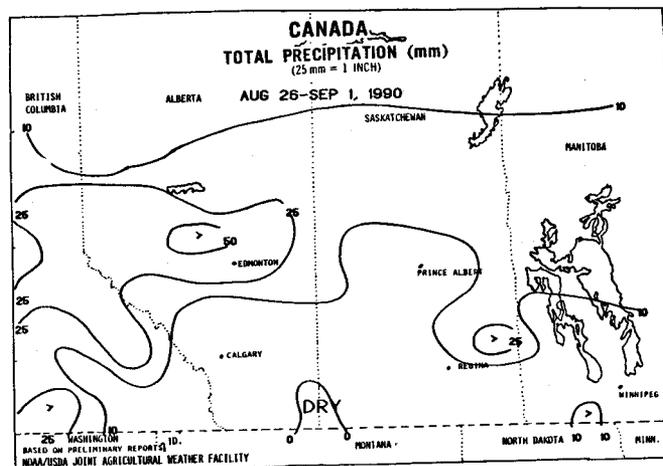
SOUTHEAST ASIA ... Typhoon Betty brings heavy rain to Indochina. Flooding and crop damage persist in the northern Philippines.

SOUTH AMERICA ... In Argentina, mostly dry, cool weather allows completion of wheat planting. Widespread rain falls over south-central Brazil's wheat areas.

AUSTRALIA ... Light to moderate rain maintains generally favorable soil moisture across the south.

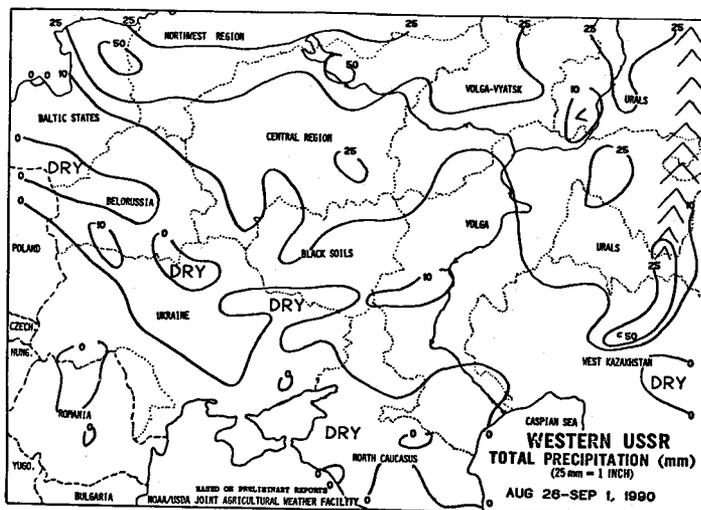
CANADA ... Wet weather delays harvest in the eastern Prairies.

MEXICO ... Mostly dry weather favors harvesting in the north, while variable showers help grain filling corn in the Southern Plateau.

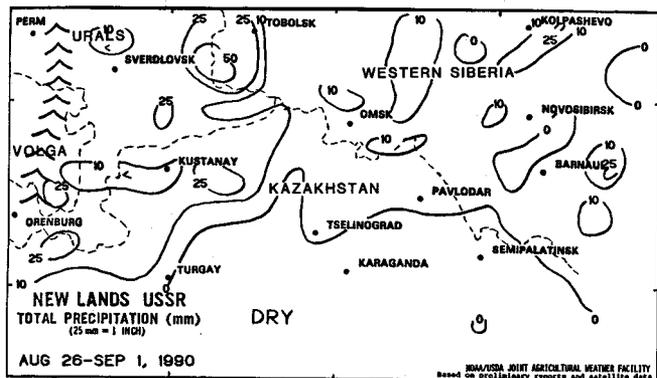


AUGUST 1990

MONTHLY DATA FROM SELECTED FOREIGN CITIES
CLIMATE ANALYSIS CENTER-NMC-NWS-NOAA
*** = DATA NOT AVAILABLE



USSR ... In Western USSR, periodic showers (5-27mm) and cool weather across northern areas continued to slow small grains harvesting. The dampness also slowed winter grain planting, which is normally underway during late August in the extreme north. The periodic rainfall pattern was confined mostly to northern portions of the winter grain region, while mostly dry weather generally prevailed across the south, including the Ukraine, North Caucasus, and southern Volga. Summer crops are generally in the filling stages. Daily high temperatures across the south ranged from the low to mid-20's Celsius (C), except in the southwest Ukraine, where upper 20's C were prevalent. Low temperatures fell below 5 degrees C during midweek in the northwest.

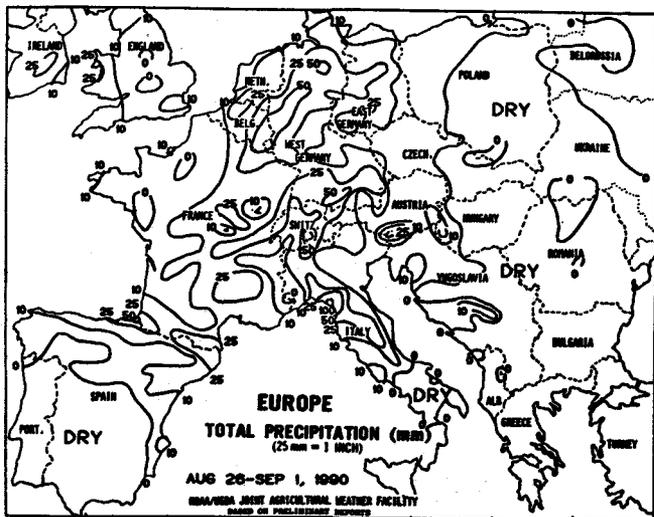


In the New Lands, showery weather also prevailed intermittently during the week. Early harvesting of spring grains is normally underway in the south and progressed some in Kazakhstan. Early-week showers (9-30mm) in western Kazakhstan gave way to mostly drier weather during midweek. Spring grains are maturing in the north, where scattered showers (5-30mm, with isolated amounts in excess of 50mm) fell during most of the week. Sharp temperature contrasts prevailed during the week, with highs reaching only the low to mid-teens (C) in the Urals but averaging in the mid to upper 20's (C) in eastern portions of Kazakhstan and western Siberia. Warm, dry weather continued in the south-central cotton areas.

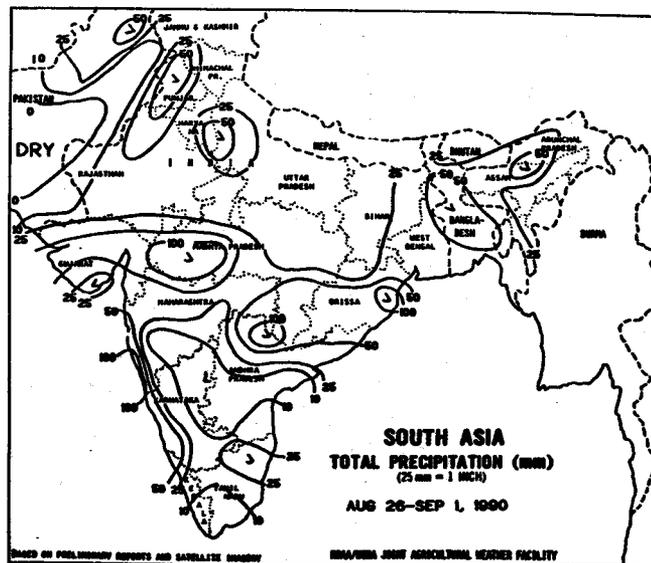
COUNTRY CITY	TEMPERATURE (C)					PRECIPITATION (MM)		
	AVG MAX	AVG MIN	HI MAX	LO MIN	AVG	DPART F/NHM	TOTAL	DPART F/NHM
NORWAY OSLO	20	11	26	4	16	1.7	99.1	0.9
SWEDEN STOCKHOLM	21	12	27	5	17	0.5	39.3	-31.5
FINLAND HELSINKI	20	11	25	6	16	0.0	37.2	-38.4
U KING GLASGOW	19	12	28	7	15	0.1	69.2	-21.7
EDINBURGH	20	12	31	7	16	1.7	38.8	-35.2
BIRMINGHAM	24	13	35	9	19	3.1	32.4	-39.7
LONDON	25	13	35	8	19	3.2	38.4	-18.6
IRELAND DUBLIN	21	13	29	9	17	2.0	49.5	-25.1
ICELND REYKJAVIK	13	9	17	6	11	0.7	66.3	11.0
DENMRK COPENHAGEN	22	13	27	10	18	0.4	30.0	-36.0
LUXEMB LUXEMBOURG	25	15	33	8	20	3.0	116.1	42.6
SWITZL ZURICH	25	14	31	10	20	3.1	49.5	-92.7
GENEVA	27	14	34	8	21	2.4	14.8	-86.3
FRANCE PARIS	28	14	37	8	21	3.3	8.6	-49.0
STRASBOURG	27	14	36	8	20	2.4	37.6	-35.3
BOURGES	29	15	37	9	22	3.4	4.8	-62.2
BORDEAUX	30	17	38	11	23	4.2	18.9	-45.3
TOULOUSE	30	17	38	9	23	3.1	47.4	-0.2
MARSEILLE	29	18	33	14	24	1.0	31.4	5.8
VALLADOLID	32	15	38	5	23	2.5	9.8	-0.1
MADRID	33	18	39	14	26	2.0	23.4	13.0
SEVILLE	36	20	42	18	28	1.6	0.1	-4.4
E GRMY LEIPZIG	26	14	35	9	20	2.6	37.4	-22.0
DRESDEN	26	15	35	10	20	2.4	53.4	-18.6
W GRMY HAMBURG	23	13	34	7	18	2.1	74.5	-9.4
BERLIN	25	15	32	10	20	1.7	35.3	-29.8
DUSSELDORF	26	16	36	10	21	2.6	48.9	-29.1
STUTTGART	26	13	34	6	19	2.3	46.4	-52.2
NURNBERG	26	14	34	6	20	2.8	46.2	-26.9
MUNICH	25	13	32	9	19	2.5	112.5	0.1
AUSTRI VIENNA	27	14	33	11	21	1.6	12.1	-49.9
INNSBRUCK	25	13	31	7	19	1.9	65.0	-54.6
CZECH PRAGUE	26	12	34	7	19	2.0	31.8	-34.0
POLAND WARSAW	24	12	29	6	18	0.2	67.9	12.2
LODZ	24	12	32	6	18	1.2	46.0	-21.1
KATOWICE	24	11	30	6	17	0.8	62.1	-28.8
PRZEMYSL	23	12	30	7	18	0.4	70.5	-7.4
HUNGAR BUDAPEST	28	16	33	11	22	1.8	20.8	-26.2
YUGOSL SARAJEVO	29	13	33	7	20	2.2	37.7	-39.3
ROMANI BUCHAREST	30	14	35	8	22	-0.3	48.5	-3.7
BULGAR SOFIA	28	14	32	9	21	1.1	21.6	-17.2
ITALY MILAN	29	17	32	14	23	1.1	3.9	-90.7
VERONA	31	18	36	16	24	2.2	55.0	-26.3
VENICE	28	18	33	15	23	0.3	81.6	5.3
GENOA	28	22	35	20	25	0.7	64.2	10.4
ROME	29	19	32	16	24	0.4	6.1	-21.1
NAPLES	31	20	34	18	26	2.7	64.4	7.3
GREECE THESSALONIKA	30	19	34	15	25	-1.7	28.0	8.0
LARISSA	31	17	35	13	24	-2.7	66.0	54.0
ATHENS	32	23	35	19	27	-0.9	16.3	11.0
TURKEY ISTANBUL	28	21	31	18	24	1.0	20.4	-0.6
ANKARA	28	12	31	8	20	-3.7	14.4	-22.6
CYPRUS LARNACA	33	21	36	17	27	-0.5	0.1	-0.9
USSR TALLINN	21	12	30	8	16	0.7	113.9	44.5
LENINGRAD	20	13	27	7	17	0.5	24.9	-48.9
KAUNAS	22	12	27	7	17	0.3	61.4	-1.7
MINSK	21	12	27	6	17	0.1	52.6	-25.0
KAZAN	21	12	28	6	17	-0.8	40.9	-23.0
MOSCOW	21	12	28	4	16	-0.3	73.8	-0.2
SVERDLOVSK	21	10	29	2	15	0.7	44.7	-20.0
OMSK	23	11	28	6	17	1.3	26.5	-26.9
KUSTANAY	24	12	30	5	18	-0.1	33.5	2.2
KRASNOYARSK	22	12	27	6	17	2.1	114.9	44.3
NOVOSIBIRSK	22	12	26	5	17	0.6	32.3	-21.0
BARNAUL	22	12	27	8	17	0.2	115.2	62.6
KHABAROVSK	24	15	31	11	20	0.3	243.3	121.6
VLADIVOSTOK	24	18	29	10	21	1.5	222.0	68.6
KIEV	24	14	30	9	19	0.1	76.4	5.4
IAVOV	23	11	30	8	17	0.1	63.3	-20.8
KIROVOGRAD	25	13	38	7	19	-1.1	41.9	-2.2

BASED ON PRELIMINARY REPORTS

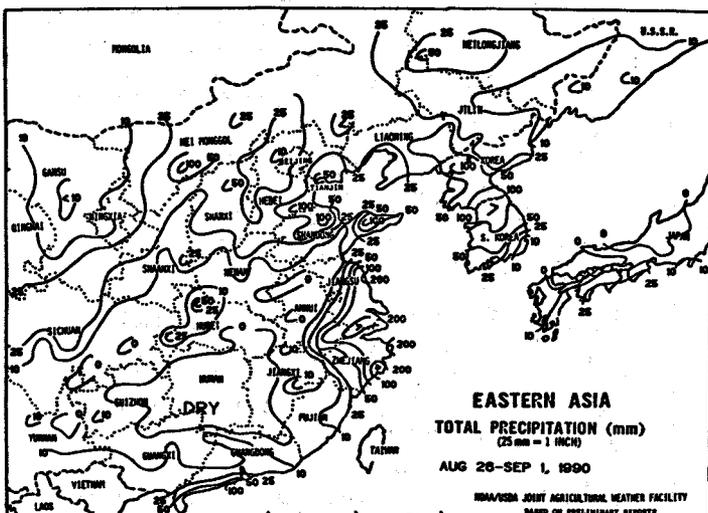
COUNTRY CITY	TEMPERATURE					PRECIPITATION			COUNTRY CITY	TEMPERATURE					PRECIPITATION			
	(C)					(MM)				(C)					(MM)			
	AVG	AVG	HI	LO	DPART	AVG	F/NRM	TOTAL		DPART	F/NRM	AVG	AVG	HI	LO	DPART	AVG	F/NRM
August 1990									August 1990									
USSR	26	17	29	14	21	0.0	11.7	-21.5	TANZAN	29	18	31	15	24	-0.2	1.0	-24.1	DAR ES SALAAM
	27	19	31	7	23	-0.7	43.6	17.7	GABON	27	22	28	20	24	-0.1	5.2	-1.3	LIBREVILLE
	22	12	28	7	17	-1.5	59.1	0.4	TOGO	28	23	31	14	25	0.6	16.0	-10.1	LOME
	21	14	26	7	17	-2.1	63.6	24.2	B FASO	32	23	37	20	28	1.5	143.0	-102.3	OUAGADOUGOU
	24	14	30	7	19	-0.9	51.0	-32.3	IVRY C	26	22	28	21	24	-0.3	23.3	-5.8	ABIDJAN
	25	14	29	6	19	-3.0	24.6	-5.8	MOZAMB	26	14	35	10	20	0.1	7.1	-9.1	MAPUTO
	27	15	31	10	21	-1.4	8.4	-33.1	ZAMBIA	25	10	31	7	18	-0.6	0.1	0.1	KABWE
	29	16	33	10	23	-0.9	8.9	-6.7	ZIMBAB	23	9	29	5	16	0.3	0.1	-1.9	HARARE
	28	15	31	10	22	-1.1	42.0	-13.9	S AFRI	22	8	29	3	15	1.0	0.1	-5.4	PRETORIA
	23	12	29	6	18	-1.8	67.8	39.5		21	3	29	-3	12	0.4	23.0	11.0	KROONSTAD
	23	12	32	5	17	-0.3	26.7	-7.2		19	5	26	0	12	-0.1	0.1	-6.2	JOHANNESBURG
	23	11	28	6	17	-0.6	64.3	35.5		20	2	26	-5	11	-0.7	0.1	-9.9	BETHAL
	29	19	34	16	24	-0.5	41.6	-3.4		22	14	27	9	18	0.8	116.0	65.3	DURBAN
	35	18	39	14	26	1.4	0.1	-2.9		18	8	26	1	13	0.4	50.2	-29.0	CAPE TOWN
	37	22	42	16	29	0.3	0.1	-0.7	CANADA	26	15	31	11	20	0.6	112.7	35.9	TORONTO
SYRIA	36	16	40	12	26	-0.6	0.1	0.1		26	16	29	10	21	1.0	84.3	-7.6	MONTREAL
ISRAEL	29	17	34	15	23	-0.6	0.1	0.1		28	13	33	4	20	1.8	17.0	-58.2	WINNIPEG
PAKIST	32	25	36	21	28	-0.8	47.3	-6.3		26	12	34	7	19	0.9	23.9	-20.8	REGINA
INDIA	33	26	37	23	30	-0.2	157.0	-27.0		25	11	35	4	18	0.8	5.9	-31.8	SASKATOON
	34	27	36	23	30	0.7	312.9	64.8		26	12	36	6	19	1.5	16.4	-30.8	LETHBRIDGE
	31	25	35	23	28	-0.4	456.2	236.7		23	10	33	3	17	1.6	58.4	2.9	CALGARY
	29	22	32	21	25	0.4	474.7	183.9		23	12	33	3	17	1.1	72.5	-5.4	EDMONTON
	33	27	35	25	30	0.8	260.3	-27.8		24	14	32	10	19	1.9	38.1	-3.0	VANCOUVER
	29	24	31	22	26	-1.0	275.5	92.5	MEXICO	26	16	29	14	21	0.8	371.3	160.0	GUADALAJARA
	29	25	31	24	27	0.3	875.5	215.0		23	13	28	12	18	1.2	157.3	53.9	MEXICO CITY
	27	22	29	21	24	-0.4	202.7	86.7		33	26	35	24	29	0.6	90.0	-182.0	ACAPULCO
	29	23	34	21	26	0.0	241.0	74.8		30	25	32	19	27	0.2	121.6	-24.5	BERMUD ST. GEORGES
	35	26	38	24	30	0.5	92.9	-63.1	BAHAMA	33	24	34	20	28	0.5	256.2	69.2	NASSAU
	28	23	30	21	25	-0.8	****	435.0	CUBA	32	25	34	22	29	1.1	34.6	-64.7	HAVANA
H KONG	32	28	36	25	30	1.7	149.1	-264.3		34	26	35	21	30	1.1	2.6	-93.9	JAMAIC KINGSTON
N KREA	28	20	33	16	24	-0.1	268.4	36.5		32	25	33	23	28	0.5	86.9	-61.1	P RICO SAN JUAN
S KREA	31	23	36	19	27	1.6	281.8	57.8		32	24	33	22	28	1.3	85.1	-59.2	GUADEL RAIZET
JAPAN	27	20	32	17	24	2.4	140.5	5.9		31	25	33	22	28	2.0	55.2	-188.6	MARTINQ LAMENTIN
	34	25	36	22	29	2.4	102.0	-68.3		31	26	31	24	28	0.8	37.4	-110.8	BARBAD BRIDGETOWN
	32	26	36	23	29	2.5	183.6	46.3		32	23	34	22	28	1.5	199.9	-34.1	TRINID PORT OF SPAIN
	32	26	34	24	29	2.5	110.1	-22.1		18	8	21	3	13	0.5	33.9	-3.8	COLOMB BOGOTA
	35	25	38	19	30	2.9	59.0	-100.9		32	25	37	23	28	1.2	63.5	12.6	VENEZU CARACAS
	35	26	38	21	30	2.3	23.0	-80.2		32	23	34	21	27	1.3	133.7	-31.1	F GUIA CAYENNE
THAILN	33	24	36	23	29	1.1	134.9	-61.0	BRAZIL	31	23	33	21	27	0.4	15.7	-14.6	FORTALEZA
	33	26	35	22	29	0.9	172.3	-25.6		27	21	29	18	24	-0.3	317.0	148.7	RECIFE
	33	24	35	22	28	1.8	115.7	-26.8		24	15	30	12	19	-0.7	71.8	62.0	BELO HORIZONTE
MALAYS	34	28	38	21	31	2.4	55.1	-287.8		29	17	33	7	23	2.2	70.8	41.8	CAMPO GRANDE
VIETNM	27	17	31	11	22	0.1	66.4	-30.8		24	14	29	7	19	-0.3	62.0	51.1	FRANCA
CHINA	33	15	42	10	24	-1.4	1.5	-2.0		23	18	31	15	20	-1.5	72.9	22.3	RIO DE JANEIRO
	28	15	35	12	21	0.4	129.6	44.2		24	12	29	4	18	-0.4	114.2	56.9	LONDRINA
	30	22	33	17	26	1.4	151.3	-61.0		22	10	31	-1	16	0.5	19.8	-106.2	SANTA MARIA
	31	23	34	20	27	1.0	99.4	-63.0		23	10	31	0	16	0.9	18.8	-95.2	PORTO ALEGRE
	21	10	24	7	15	-0.4	144.0	11.7	PERU	19	14	21	11	16	0.1	2.4	-1.2	LIMA
	26	16	28	13	21	2.0	91.8	-110.5	BOLIVI	14	-3	16	-9	6	-2.2	8.1	-7.5	LA PAZ
	31	22	35	19	26	0.4	125.5	6.2	CHILE	19	4	25	-2	11	1.8	43.2	-5.3	SANTIAGO
	35	25	40	22	30	2.2	60.4	-115.5	ARGENT	24	13	31	2	18	***	366.7	***	IGUAZU
	34	26	37	23	30	1.4	118.5	-1.0		25	14	32	5	19	2.9	106.4	58.4	FORMOSA
	34	23	37	19	28	1.2	42.8	-80.7		25	10	33	-1	17	3.5	2.0	-22.1	CERES
	32	26	37	18	29	1.3	162.7	36.7		23	9	33	-1	16	4.4	0.1	-10.7	CORDOBA
	33	26	37	23	30	0.3	180.8	77.6		21	9	31	-1	15	3.9	7.1	-9.8	RIO CUARTO
	33	27	38	25	30	2.2	384.0	99.0		22	8	29	-1	15	3.8	20.2	-18.4	ROSARIO
	35	27	39	25	31	2.8	47.1	-180.6		19	8	28	-1	14	3.3	19.7	-43.2	BUENOS AIRES
	36	26	39	25	31	3.4	29.9	-185.7		20	6	26	-6	13	3.5	0.1	-16.5	SANTA ROSA
CNRY I	31	23	38	21	27	3.2	0.1	0.1		16	5	22	-4	11	2.7	19.7	-22.1	TRES ARROYOS
MOROCC	28	21	37	19	25	2.2	0.1	-0.8	MIDW I	29	25	31	23	27	0.8	81.2	-84.5	MIDWAY ISLAND
	39	23	45	18	31	3.4	0.1	-2.0	N CALD	24	18	28	15	21	0.9	38.1	-31.5	NOUMEA
ALGERI	32	19	36	15	26	0.8	0.1	-4.1	FIJI	27	20	31	18	24	1.0	245.2	46.8	NAUSORI
	31	16	35	13	24	-0.4	51.7	31.6	SAMOA	29	24	31	21	27	0.6	60.1	-119.8	PAGO PAGO
TUNISI	32	21	37	16	27	0.3	18.0	9.5	TAHITI	29	22	30	20	25	1.1	162.9	117.8	PAPEETE
NIGER	35	25	38	22	30	2.3	80.8	-113.3	N ZEAL	15	9	18	4	12	0.6	190.3	65.4	AUCKLAND
MALI	39	27	44	20	33	2.6	54.2	-25.8	PA N G	28	22	30	17	25	-0.9	57.8	30.1	PORT MORESBY
	31	23	35	20	27	1.3	143.0	-158.1	AUSTRL	30	19	33	13	25	-1.3	0.1	-2.8	DARWIN
MAURIT	32	25	40	18	29	0.2	55.0	14.5		16	5	21	-1	10	-2.0	20.4	-17.5	MORRE
SENEGL	30	26	32	22	28	0.7	100.0	-83.5		20	9	27	3	14	-1.7	10.2	-35.6	BRISBANE
CHAG A	28	24	30	22	26	0.4	44.0	-139.9		16	9	21	4	12	-0.7	88.5	-27.5	PERTH
LIBYA	34	21	38	17	27	-0.2	0.1	0.1		16	6	23	-1	11	-0.7	31.6	-5.4	CHEDUNA
	30	21	36	17	26	-0.8	0.1	0.1		14	8	17	5	11	-0.5	67.0	17.9	



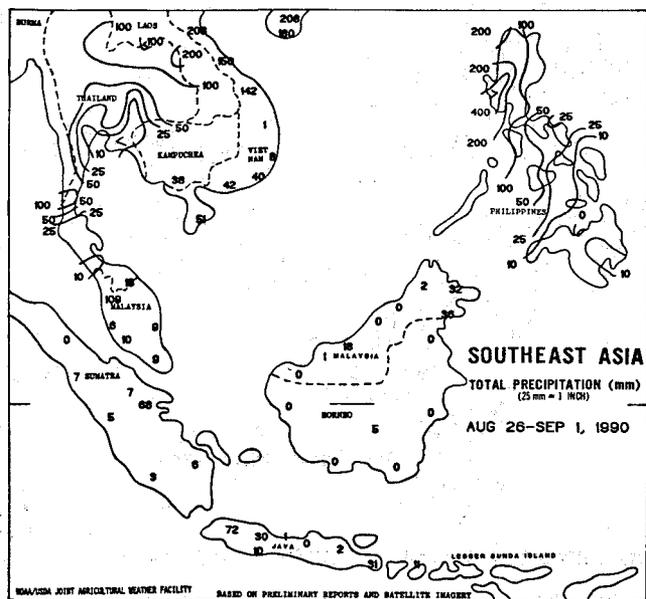
EUROPE ... Heavy rain (25-50mm, with scattered amounts greater than 50mm) continued across Benelux and much of West Germany, delaying drydown and harvest of spring planted crops. Very heavy rain (50-90mm) in sections of southern Belgium and West Germany's central Rhine Valley likely caused localized flooding late in the week. Elsewhere, scattered rain (5-25mm, with isolated amounts greater than 25mm) across southern France, northern Spain, and northern Italy slowed drydown of summer crops but helped reduce long-term dryness. In the east, dry weather covered most crop areas. Drier-than-normal weather has persisted across much of the southeast since spring, reducing yield potential of summer crops and leaving soils abnormally dry prior to winter grain planting. Much warmer-than-normal temperatures (mean weekly temperatures 2-5 degrees C above normal) over northern Europe accelerated filling of late planted summer crops.



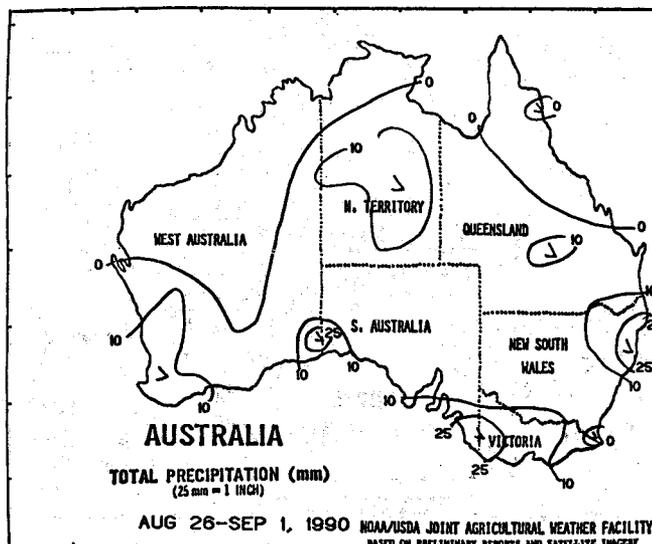
SOUTH ASIA ... Moderate to heavy showers (25-50mm or more) continued over the summer crop areas of Gujarat and western Madhya Pradesh, worsening local flooding and crop damage following 2 weeks of excessive rainfall. Mostly light to moderate rain (1-34mm) covered India's southern interior from Maharashtra southward, with much of the southern tip of India reporting a seasonable increase in rainfall (16-31mm). Moderate showers (25-50mm or more) maintained moisture reserves over most eastern rice areas, although unseasonably dry weather continued over Uttar Pradesh and northern Bihar. In the north, rainfall was highly variable, with local amounts of 20-86mm benefiting irrigation reserves in northern Pakistan and north-central India. The southwest monsoon usually recedes from the north during the first 2 weeks of September, marking the end of the summer rainy season.



EASTERN ASIA ... Typhoon Abe struck southeastern coastal Zhejiang on the 31st and moved northward across northern Zhejiang, southern Jiangsu, and into the Yellow Sea on the 1st. The storm brought high winds (130-150 km/hour) and torrential rains (100-250mm, with isolated amounts up to 400mm) to much of eastern Zhejiang and southeastern Jiangsu, likely damaging maturing single crop rice, cotton, and sugarcane. Earlier in the week on the 28th, Typhoon Becky brought brief heavy rain (50-100mm) to much of Hainan Island as it moved to the south of the island. In contrast, unseasonable dryness continued over much of interior southern China, continuing a drier-than-normal trend during the past 3-6 weeks. Elsewhere, a slow-moving frontal system brought further heavy rain (25-125mm) and localized flooding to sections of eastern Shandong and the central Korean Peninsula.

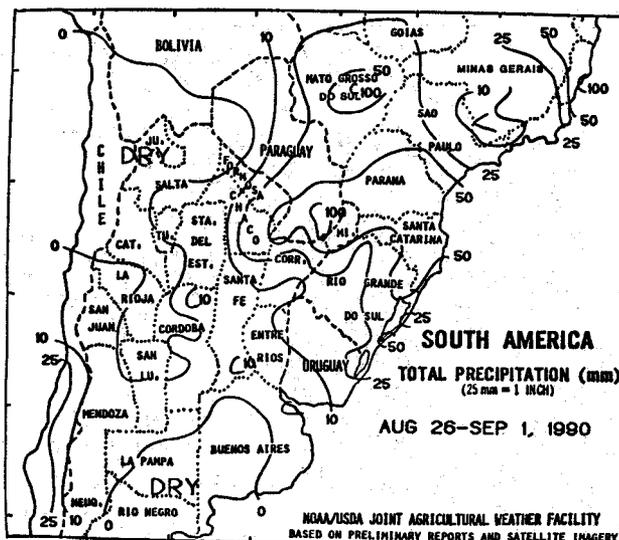


SOUTHEAST ASIA ... Typhoon Becky hit northern Vietnam with inundating rains (100-200mm or more) and sustained winds of about 65 knots, causing some flooding and crop damage. Moderate to heavy rain (50-100mm or more) from the storm as it dissipated over Indochina was welcome over Thailand's northern rice areas, following the recent drying trend. Excessive rain (157-242mm), however, caused local flooding in northeastern Thailand. In the Philippines, more heavy rain (100-300mm or more), due mainly to Typhoon Betty and late-week tropical activity, worsened flooding and crop damage in northern and western Luzon. Luzon's west-central coast received 200-400mm or more for the last 2-3 weeks. Rainfall continued to be light (25mm or less) in most central and southern crop areas.

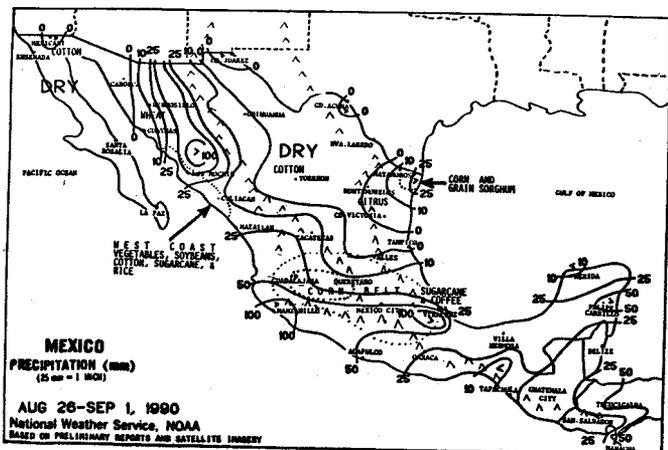


AUSTRALIA ... Widespread light to moderate rain (5-15mm, with isolated amounts greater than 15mm) fell across crop areas of Western Australia, South Australia, and Victoria, maintaining generally favorable off-season soil moisture for winter grains. Scattered, mostly light rain (less than 10mm) favored early development of winter grains across southeastern Queensland, although below-normal temperatures (mean weekly temperatures 1-2 degrees C below normal) slowed growth rates. Mostly dry weather continued nearly optimal conditions for sugarcane harvest in eastern coastal Queensland. Mean weekly temperatures were near to below normal in most crop areas.

SOUTH AMERICA ... In Argentina, mostly dry weather allowed completion of winter wheat planting in nearly all major growing areas. Temperatures dropped to below seasonal levels, following the previous week's warmth. In fact, minimum temperatures fell below freezing throughout the wheat belt on the 28th, slowing early-season growth. Light showers (1-4mm, with only local areas exceeding 10mm) were confined to southern portions of Cordoba and Santa Fe and fringe winter wheat areas of northern Buenos Aires. In south-central Brazil, locally heavy showers fell again in Parana's wheat areas, maintaining wet field conditions for maturing wheat. Weekly rainfall averaged more than 50mm in Parana. Widespread rain (19-50mm) covered the remaining wheat areas and extended into citrus/coffee areas of Sao Paulo and Minas Gerais.

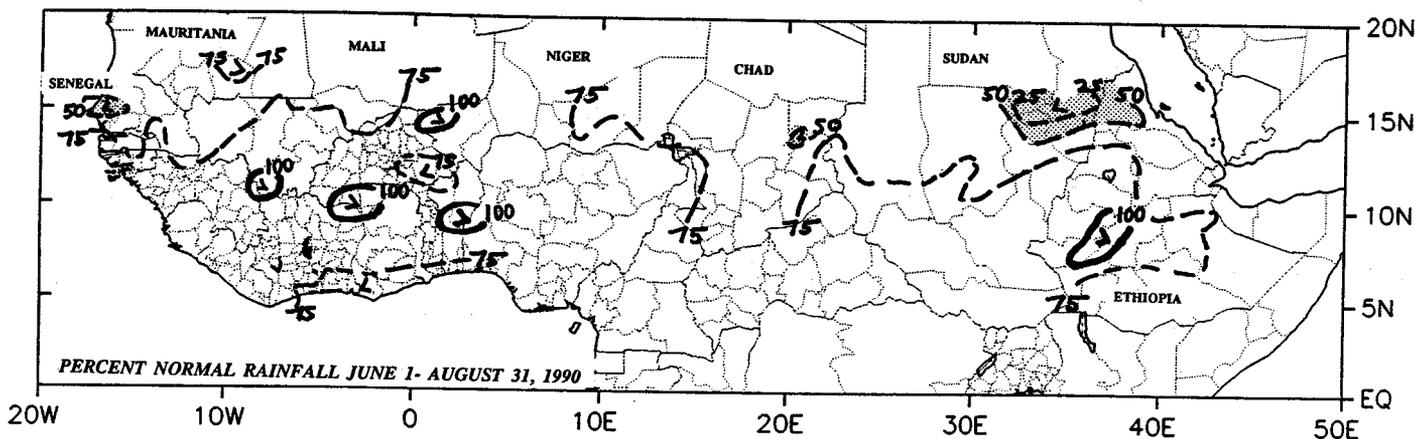


NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS AND SATELLITE IMAGERY



MEXICO ... Scattered, locally heavy showers (10-50mm or more, with a local report of 154mm) fell in the northwestern mountains, while mostly dry weather prevailed across much of the north. Summer crop harvesting generally progressed without weather delays from the west coast farming region to the northeast grain and vegetable region. In the Southern Plateau, scattered light to moderate showers (10-25mm or more) covered most growing areas although early corn harvesting progressed some. Locally heavy rain (92-188mm), however, near Veracruz likely caused some flooding. The corn harvest extends over several months, with a significant portion of the current crop still in the grain filling stages. Tropical showers were scattered across southern Mexico, but rainfall was mostly light (10-25mm or more) in the Yucatan Peninsula.

GROWING SEASON RAINFALL IN THE SAHEL



Growing season rainfall across the Sahel countries of Africa and eastward through Sudan and Ethiopia has been below the long-term mean in most places since June. June-August 1990 rainfall, expressed as a percentage of the 30-year mean, is shown in the above map. For most of this region, the bulk of the annual rainfall comes from June through September. The country most affected by dryness is Sudan, where season-to-date rainfall has been one-half of normal in the northern farmlands in the east. The drought-affected area includes the northern part of the country's primary rain-fed crop region. Below-normal rainfall has also affected crops and pastures in northern Ethiopia, where dryness last year contributed to food shortages. In contrast, above-normal rainfall has kept the ground wet in southwest Ethiopia, where flooding has recently been reported.

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(Continued from front cover)

Great Plains. Thunderstorms spawned deadly tornadoes that struck **Plainfield, IL**, and killed 24 people on Tuesday. Intense thunderstorms continued to rake the **Midwest** on Wednesday, producing large hail, high wind, and heavy rain. Severe weather extended into the **Atlantic Coast States** on Thursday and erupted across **southern Texas** at week's end.

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