

WEEKLY WEATHER AND CROP BULLETIN

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

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

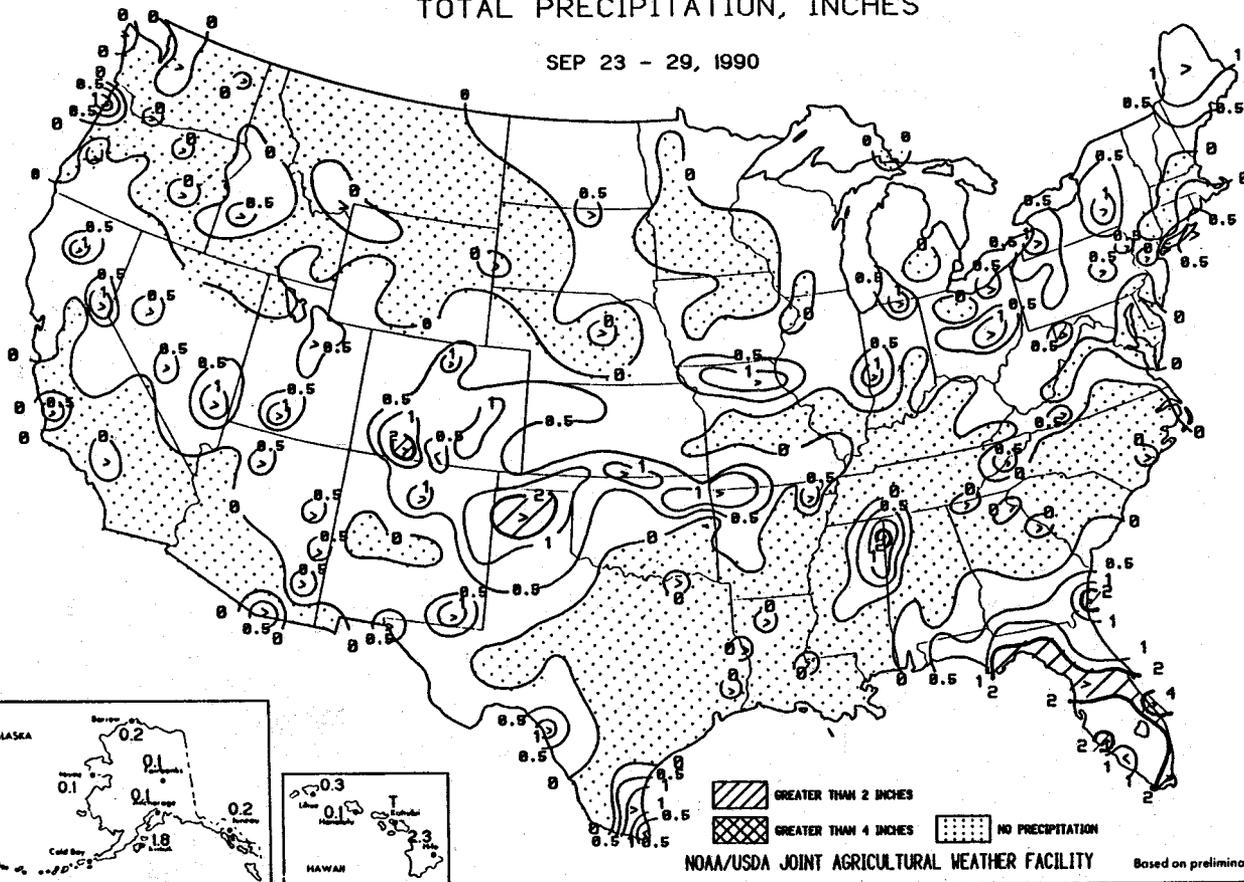
Volume 77, No. 39

Washington, D.C.

October 2, 1990

TOTAL PRECIPITATION, INCHES

SEP 23 - 29, 1990



NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

Based on preliminary reports

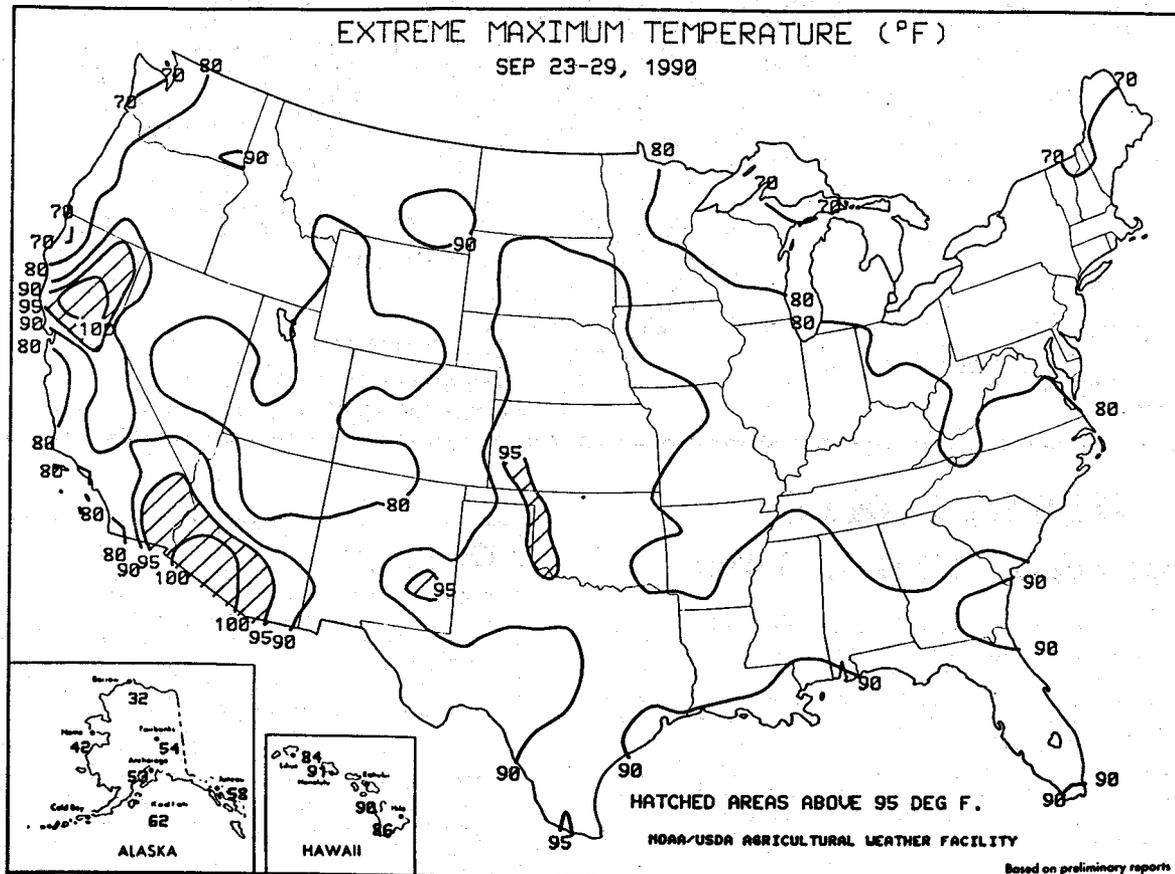
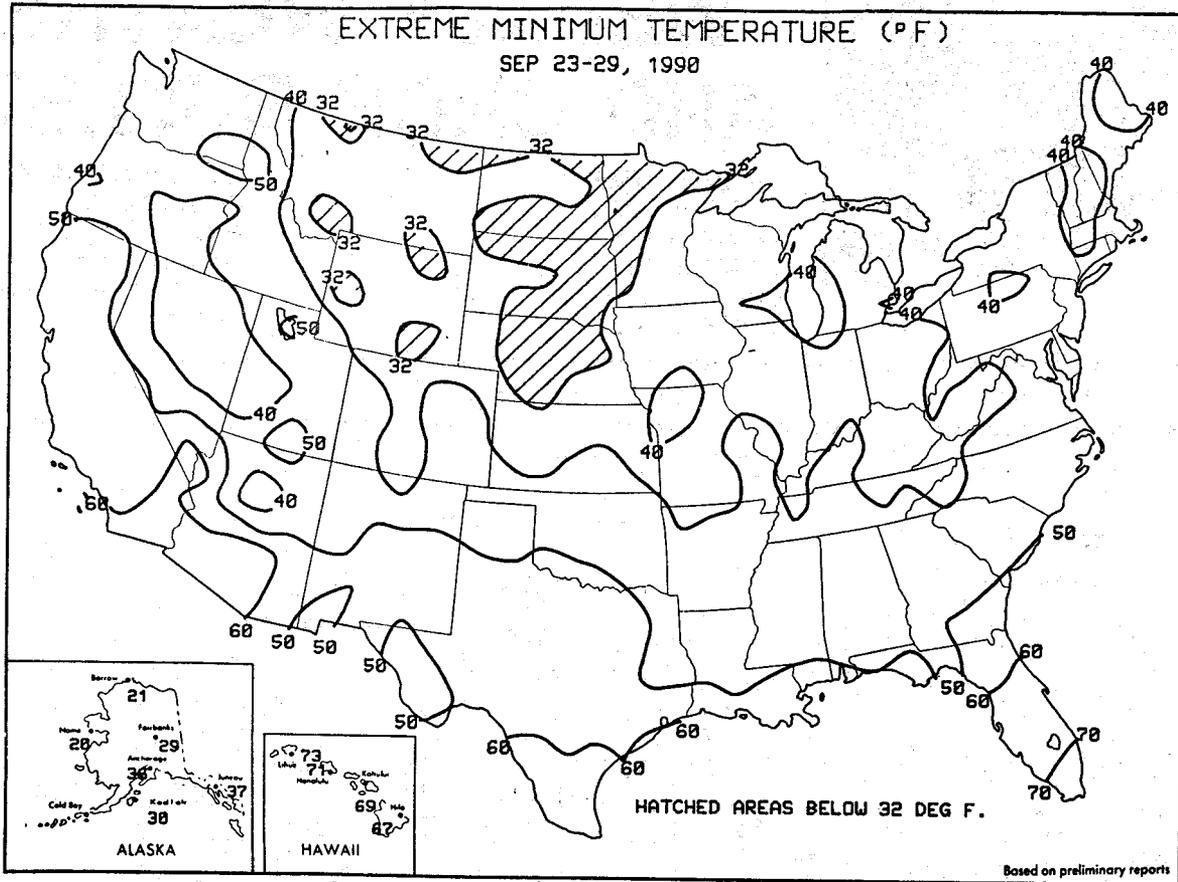
HIGHLIGHTS

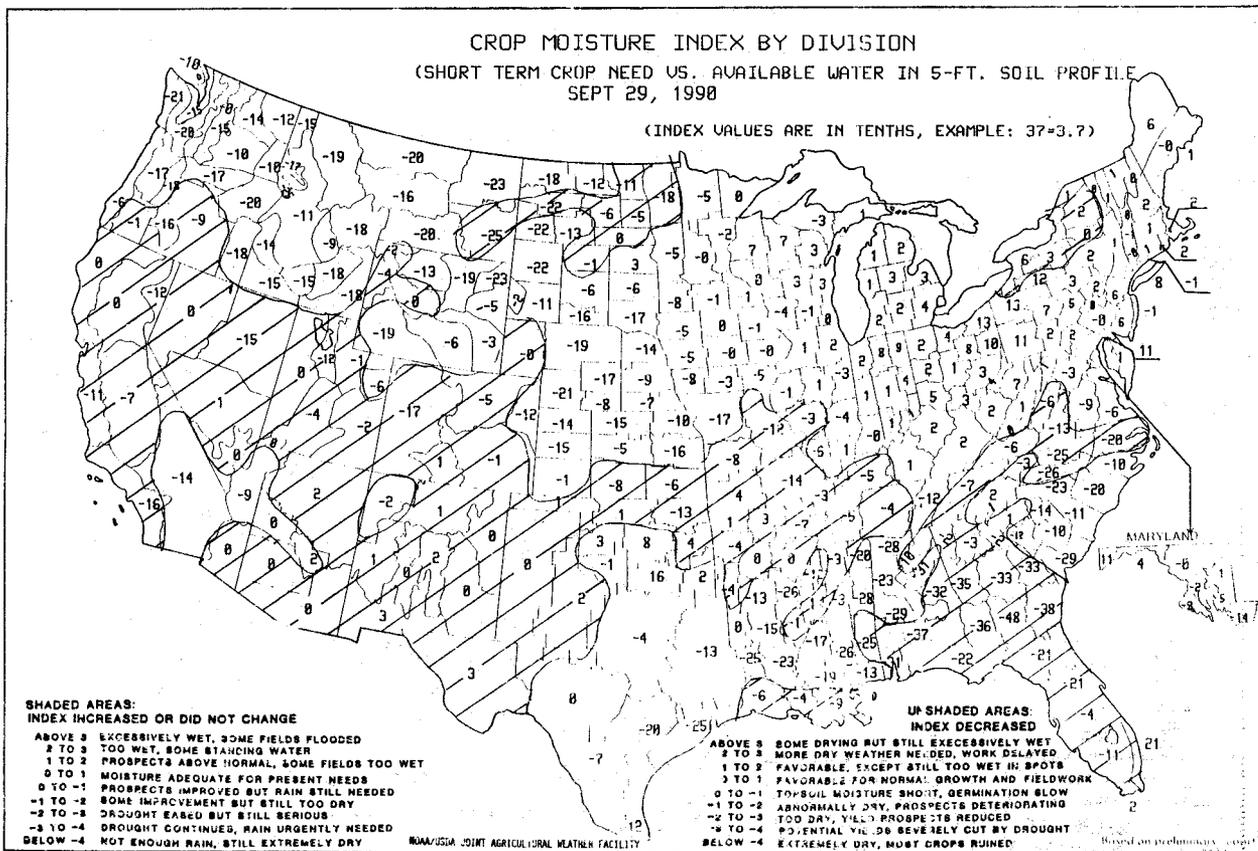
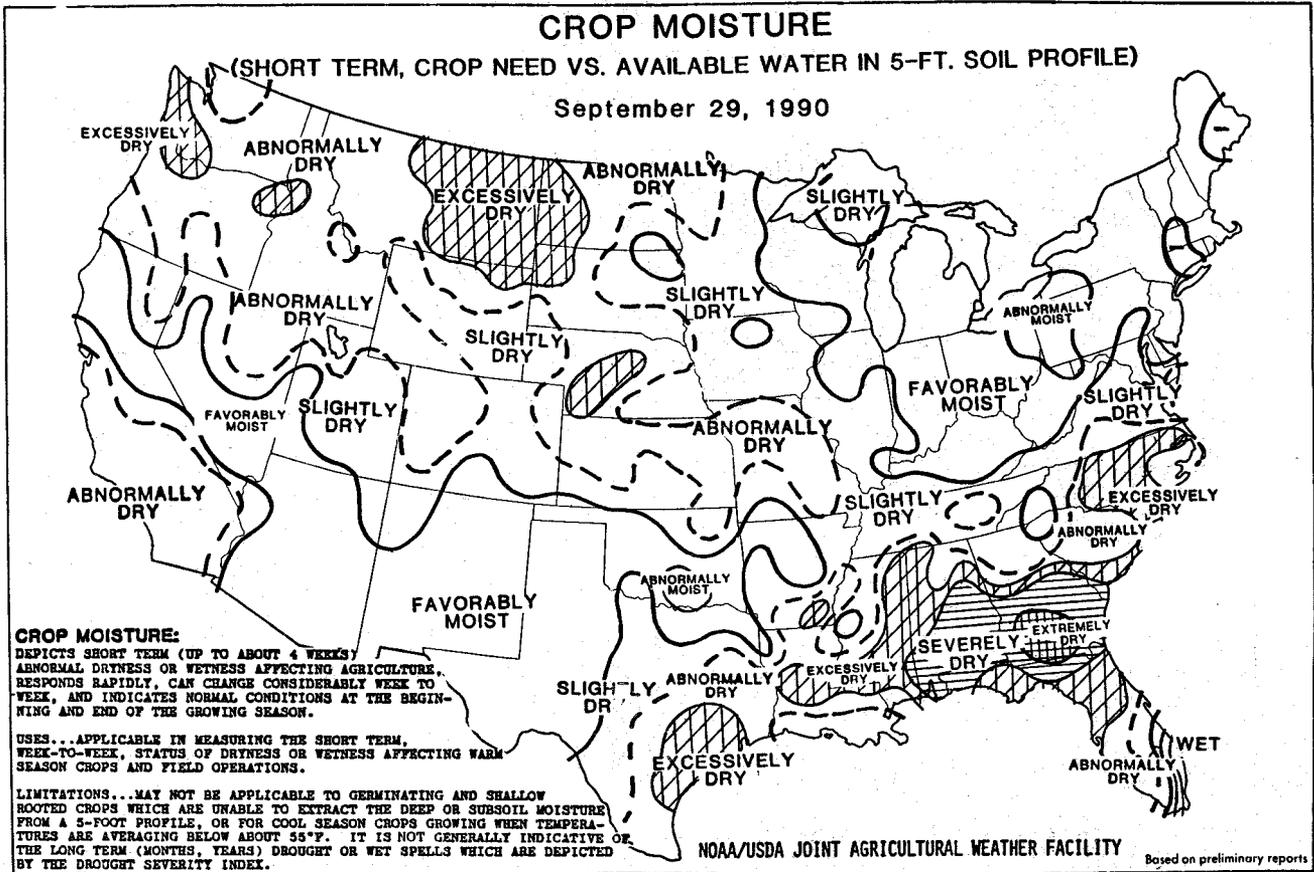
September 23-29, 1990

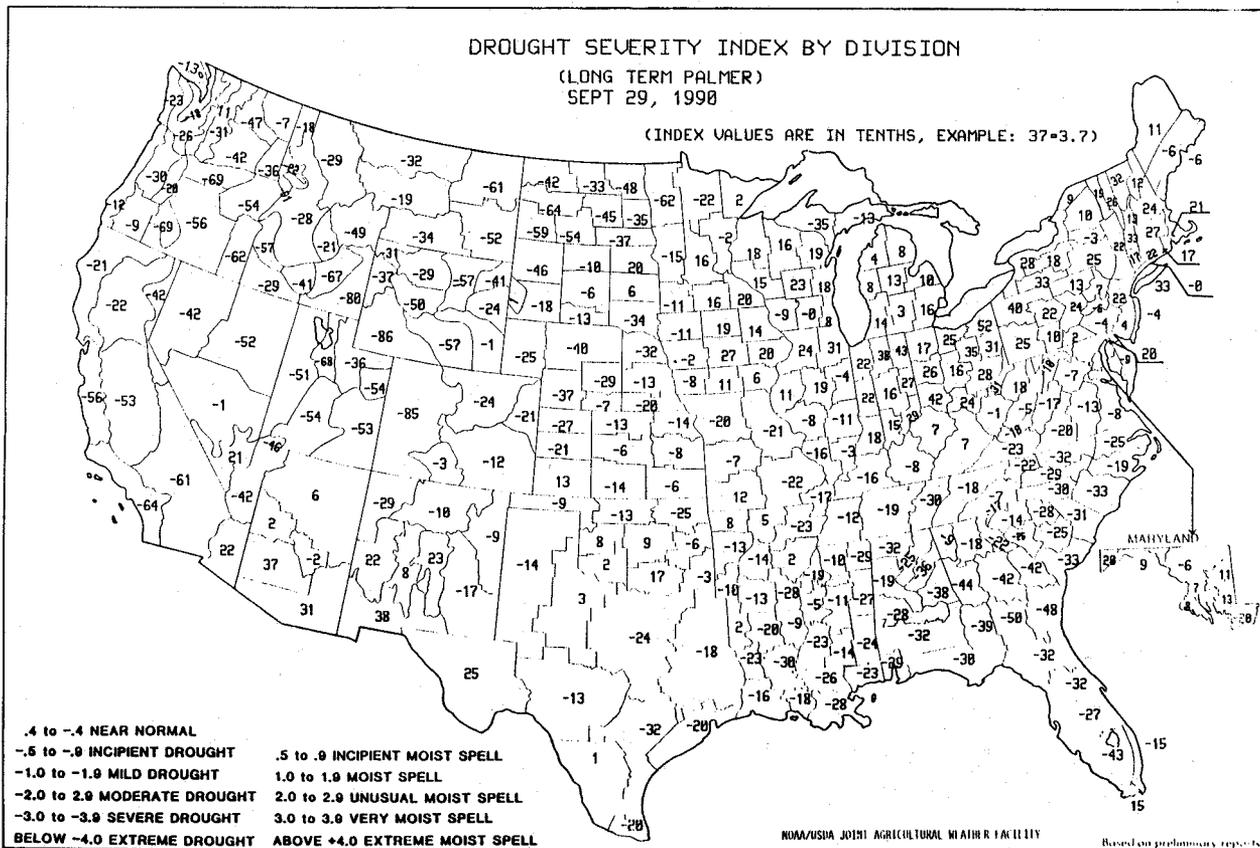
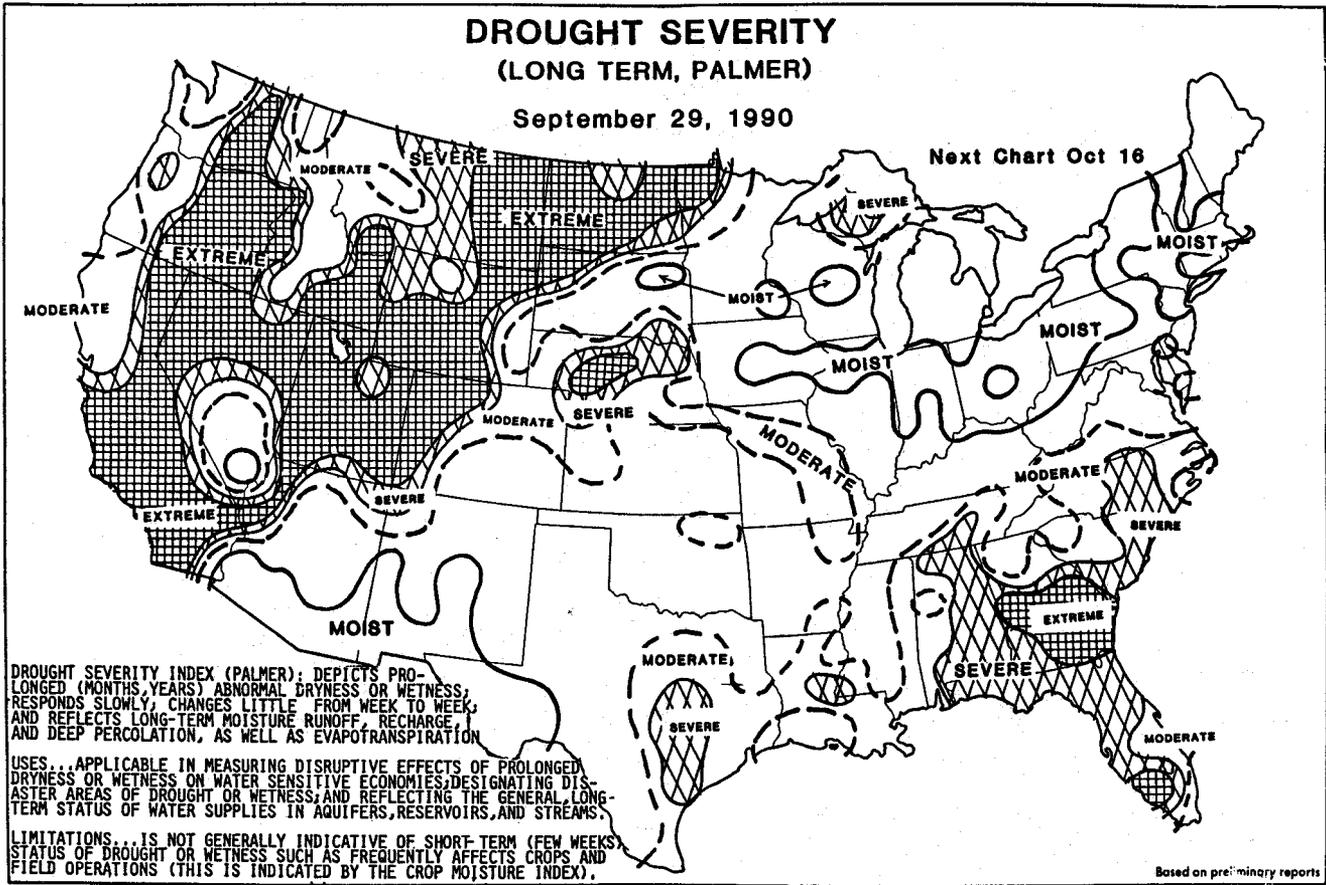
Dry harvest weather prevailed during the first 5 days of the week as widely scattered showers caused only light to moderate rain across the country. At week's end, however, scattered thunderstorms developed along a slow moving frontal system and spread moderate to heavy rains from the **southern Plains**, across the **Corn Belt**, and into the **Northeast**. At the same time, numerous showers and thunderstorms soaked **Florida** with needed rain. Unseasonably cool air spread into the **Southeast** early in the week as a number of record-low temperatures for the date were set on the 24th, 25th, and 26th. In contrast, abnormally warm conditions moved into the **northern and central Plains** and **northern Rockies** as high temperature records were broken on the 25th and 26th. Warm weather continued in the **Northwest**, where temperatures averaged more than 9° F above normal.

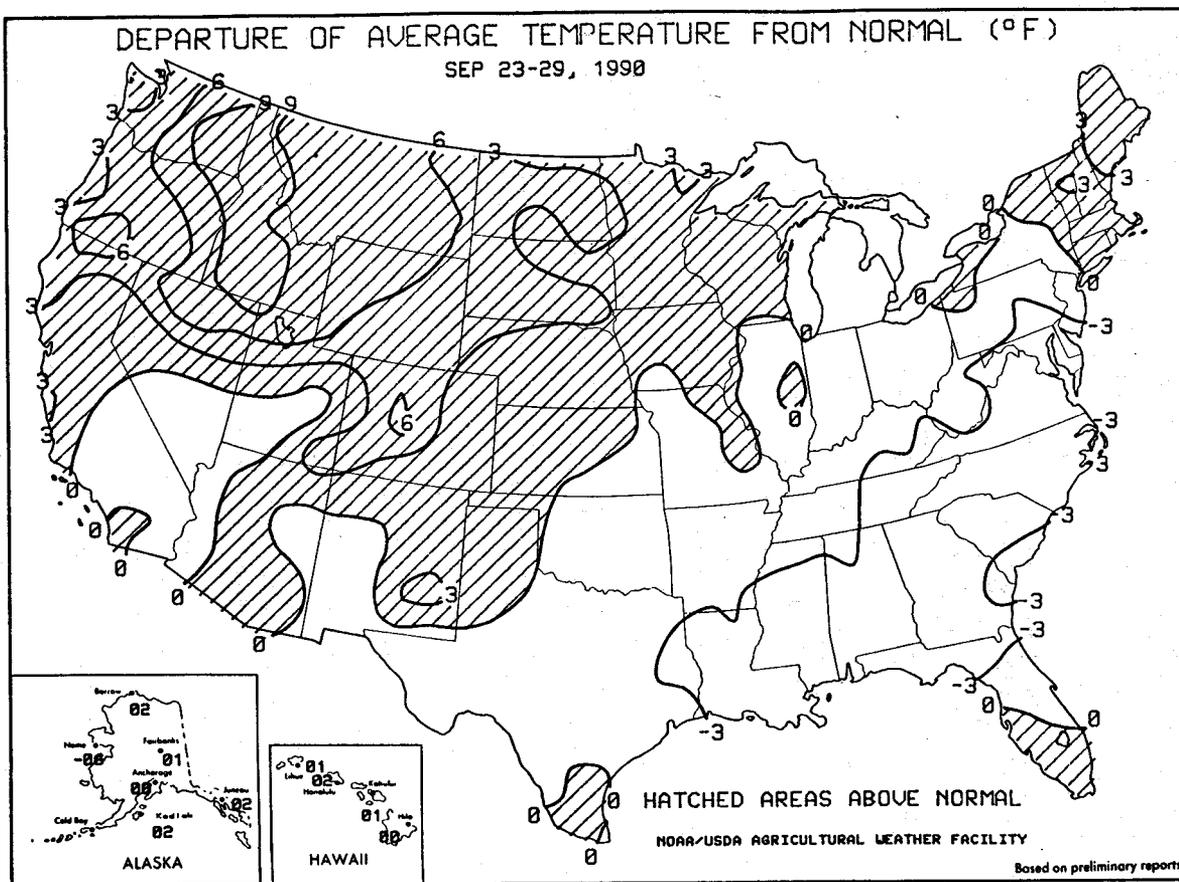
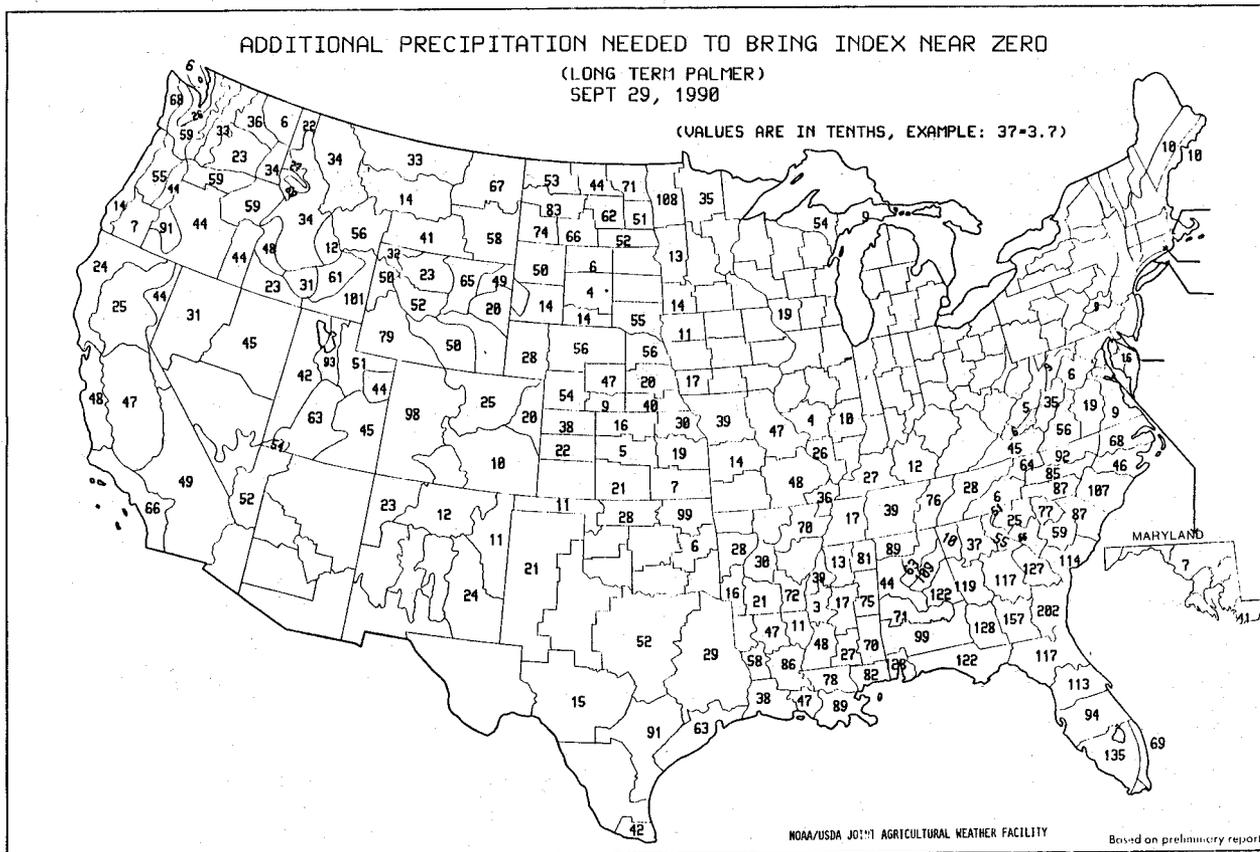
Contents

	Page
Highlights & Total Precipitation	1
Extreme Minimum Temperature & Extreme Maximum Temperature Maps	2
Crop Moisture Maps	3
Drought Severity Maps	4
Precipitation Needed to End Drought & Temperature Departure Maps	5
National Weather Data for Selected Cities	6
Growing Degree Days and Departure Maps	9
National Agricultural Summary	10
Crop Progress and Condition Tables	11
State Summaries of Weather and Agriculture	13
International Weather and Crop Summary & September Temperature/Precipitation Table ..	20
Subscription and Mailing Permit Information ..	24









National Weather Data for Selected Cities

Weather Data for the Week Ending September 29, 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		.50 INCH OR MORE	
																		0	1	0	0
AL BIRMINGHAM	83	52	92	41	68	-3	.0	-.9	.0	2.0	49	34.4	80	84	26	2	0	0	0	0	
MOBILE	83	57	91	50	70	-.2	-.1	-.2	2.6	41	47.8	91	90	34	1	0	0	1	0		
MONTGOMERY	86	52	93	42	69	-.0	-.0	-.0	1.1	23	46.6	120	91	24	2	0	0	0	0		
AK ANCHORAGE	50	38	53	36	44	0	.1	-.5	5.6	237	13.6	124	90	56	0	0	0	0	0		
BARROW	30	25	32	21	28	2	.2	.0	1.6	102	3.9	111	96	63	0	7	4	4	0		
FAIRBANKS	48	32	54	29	40	1	.1	-.1	1.7	163	13.7	168	91	47	0	4	2	2	0		
JUNEAU	53	45	58	37	49	2	3.9	2.2	11.4	186	43.1	122	97	75	0	0	0	3	2		
KODIAK	57	40	62	30	49	2	1.8	-.2	8.9	147	53.2	126	95	58	0	1	7	3	3		
NOME	39	25	42	20	32	-6	T	-.4	1.9	82	17.2	148	84	47	0	7	1	1	0		
AZ PHOENIX	97	74	100	69	85	4	T	-.1	1.1	182	7.1	143	52	20	7	0	0	0	0		
PRESCOTT	79	50	83	45	65	2	.2	-.1	1.8	125	14.3	98	66	24	0	0	1	0	0		
TUCSON	94	65	98	59	79	1	.0	-.3	1.1	88	12.1	140	56	17	7	0	0	0	0		
YUMA	97	71	100	67	84	0	.0	-.1	T	0	1.3	75	45	16	7	0	0	0	0		
AR FORT SMITH	84	54	93	43	69	-1	T	-.7	4.6	148	48.8	163	98	38	2	0	0	0	0		
LITTLE ROCK	81	60	89	49	70	-1	.0	-.0	3.6	86	44.8	120	75	47	0	0	0	0	0		
CA BAKERSFIELD	86	60	96	58	73	-2	T	.0	1.1	83	2.7	69	81	36	1	0	0	0	0		
BUREKA	65	58	69	55	62	5	.2	-.1	1.1	23	21.6	92	95	81	0	0	0	3	0		
FRESNO	85	60	90	58	72	1	T	.0	T	100	7.5	105	83	35	1	0	0	0	0		
LOS ANGELES	74	63	77	61	69	0	.0	.0	T	0	5.1	60	90	62	0	0	0	0	0		
REDDING	89	60	100	54	75	1	1.2	.9	1.0	1.2	116	22.5	86	85	27	3	0	3	1		
SACRAMENTO	87	58	101	55	73	3	.0	-.1	.0	0	11.5	105	88	32	2	2	0	0	0		
SAN DIEGO	75	65	77	63	70	1	.0	.0	T	0	5.9	90	87	61	0	0	0	0	0		
SAN FRANCISCO	74	60	78	57	67	3	T	-.1	T	2	125	8.1	65	91	56	0	0	1	0		
CO DENVER	74	50	84	43	62	3	.2	-.1	1.5	125	14.1	111	89	37	0	0	0	4	0		
GRAND JUNCTION	78	54	82	49	66	2	.1	-.1	1.2	172	5.9	101	71	29	0	0	0	0	0		
PUEBLO	78	50	87	43	64	2	1.0	.8	1.0	1.6	196	14.0	151	85	38	0	0	1	1		
CT BRIDGEPORT	72	54	77	46	63	0	T	-.7	T	1.7	54	32.6	107	91	51	0	0	0	1		
HARTFORD	74	50	81	40	62	2	.0	-.9	T	1.7	45	36.5	113	97	47	0	0	0	0		
DC WASHINGTON	73	53	79	48	63	-4	.1	-.6	1.1	8	26	30.6	102	82	49	0	0	1	0		
FL APALACHICOLA	84	62	90	53	73	-4	3.8	2.0	2.0	5.2	61	32.9	73	91	50	1	0	0	2		
DAYTONA BEACH	86	69	90	62	78	-1	.9	-.6	1.6	25	29.0	75	95	57	1	0	0	2	0		
JACKSONVILLE	86	61	90	51	73	-3	1.7	.3	.9	2.6	41	23.5	54	95	47	1	0	0	2		
KEY WEST	89	77	92	72	83	1	1.2	-.2	1.8	4.7	78	26.5	91	87	56	2	2	2	1		
MIAMI	88	74	93	72	81	0	1.8	-.1	1.2	3.6	47	44.3	97	90	55	3	0	0	0		
ORLANDO	89	69	94	65	79	-1	2.3	.9	1.3	2.5	40	27.7	65	96	49	2	2	2	2		
TALLAHASSEE	86	57	93	45	71	-5	1.6	.3	.8	4.9	78	38.3	72	94	40	2	0	0	2		
TAMPA	90	69	95	65	80	0	1.2	.0	.9	2.1	35	30.6	76	91	46	2	2	2	1		
WEST PALM BEACH	89	73	94	70	81	0	3.5	1.3	3.0	11.5	129	49.0	107	95	55	1	0	0	4		
GA ATLANTA	78	55	84	45	67	-3	.0	-.7	.0	3.0	98	47.1	124	84	38	0	0	0	0		
AUGUSTA	84	50	91	42	67	-4	.0	-.7	.4	12	20.6	58	95	31	1	0	0	0	0		
MACON	83	53	89	45	68	-5	T	-.7	T	1.6	51	24.6	68	91	30	0	0	0	0		
SAVANNAH	85	59	92	50	72	-2	T	-.0	T	1.2	25	26.0	61	90	34	1	0	0	0		
HI HILO	83	69	86	67	76	0	2.3	.7	1.1	17.6	275	113.6	126	94	66	1	0	2	6		
HONOLULU	89	74	91	71	81	1	.1	-.1	.1	7	128	11.2	76	82	46	0	0	2	0		
KAHULUI	87	71	90	69	79	1	T	-.1	T	2	72	16.0	128	84	55	0	0	3	0		
LIHUE	84	74	84	73	79	1	.3	-.4	.1	1.2	58	22.4	79	86	62	0	0	0	0		
ID BOISE	84	55	89	49	70	10	.5	-.4	.5	5	93	10.0	123	68	26	0	0	3	0		
LEWISTON	88	58	92	56	73	13	T	-.2	T	3	8.4	90	49	20	2	0	0	1	0		
POCATELLO	82	44	86	39	63	7	T	-.2	T	.3	54	7.8	99	82	23	0	0	1	0		
IL CHICAGO	72	48	84	40	60	-1	T	-.9	T	1.0	26	31.1	113	88	44	0	0	0	0		
MOLINE	76	47	90	36	62	0	T	-.8	T	1.0	29	42.1	139	92	35	1	0	0	0		
PEORIA	74	48	86	36	61	-1	.2	-.6	.2	1.1	30	41.3	146	96	47	0	0	0	0		
QUINCY	76	51	89	38	64	0	1.2	.3	1.1	2.9	70	32.0	105	94	43	0	0	2	0		
ROCKFORD	72	45	86	36	59	-1	T	-.8	T	.8	23	35.3	120	92	40	0	0	2	0		
SPRINGFIELD	74	50	87	37	62	-2	.2	-.5	.1	1.9	61	39.2	144	96	47	0	0	2	0		
IN EVANSVILLE	77	50	86	39	64	-2	T	-.6	T	2.5	97	37.4	116	96	44	0	0	0	0		
FORT WAYNE	71	47	81	38	59	-2	.1	-.4	.1	1.4	59	38.3	143	93	49	0	0	1	0		
INDIANAPOLIS	73	47	83	35	60	-3	.1	-.5	.1	2.7	102	34.9	115	95	47	0	0	0	0		
SOUTH BEND	70	49	82	40	59	-2	.3	-.4	.2	3.7	120	36.6	127	93	48	0	0	3	0		
IA DES MOINES	74	48	87	39	61	0	.0	-.6	T	1.4	47	37.4	145	86	37	0	0	1	0		
SIOUX CITY	76	46	91	35	61	1	T	-.5	T	.8	34	21.5	98	85	32	1	0	1	0		
WATERLOO	74	44	85	38	59	0	T	-.7	T	1.4	44	37.5	136	89	30	0	0	0	0		
KS CONCORDIA	80	51	93	38	66	2	.2	-.5	.2	1.2	42	22.7	97	79	35	2	0	1	0		
DODGE CITY	80	52	92	38	66	1	.3	-.1	.2	1.5	81	19.8	111	81	38	0	0	2	0		
GOODLAND	76	48	91	37	62	2	.0	-.6	.4	1.5	108	16.9	119	85	38	2	0	3	0		
TOPEKA	82	48	96	35	65	0	.1	-.6	.1	1.5	108	16.9	119	85	38	2	0	3	0		
WICHITA	80	52	94	44	66	-1	.2	-.6	.8	25	27.9	102	95	35	3	0	1	0	0		
KY BOWLING GREEN	79	50	89	40	65	-2	T	-.7	T	1.9	58	15.9	68	86	37	3	0	2	0		
LEXINGTON	74	51	82	38	62	-3	T	-.7	T	5.4	175	34.1	90	97	39	0	0	0	0		
LOUISVILLE	77	53	85	41	65	-1	.1	-.6	.1	2.0	61	34.6	96	96	51	0	0	0	0		
LA ALEXANDRIA	84	57	92	48	70	-4	.0	-.6	.0	2.6	79	42.4	126	89	42	0	0	1	0		
BATON ROUGE	85	57	91	51	71	-4	.0	-.9	.0	3.5	120	45.0	112	96	35	2	0	0	0		
LAKE CHARLES	84	60	90	52	72	-4	.0	-.0	.0	117	55.4	126	96	36	3	0	0	0	0		
NEW ORLEANS	83	59	87	53	71	-5	.0	-.0	.0	9.5	171	44.5	109	97	41	2	0	0	0		
									4.6	80	45.8	97	93	39	0	0	0	0	0		

Based on 1951-80 normals

Weather Data for the Week Ending September 29, 1990

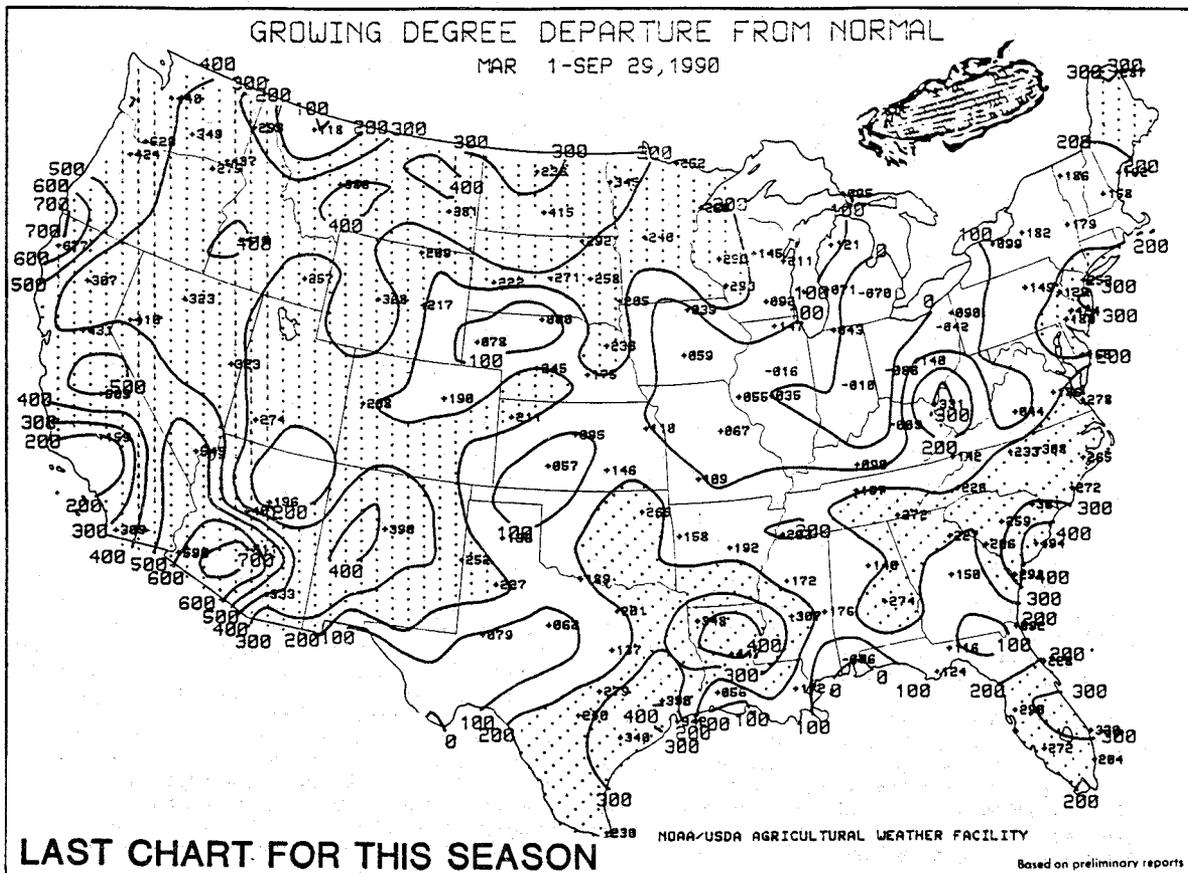
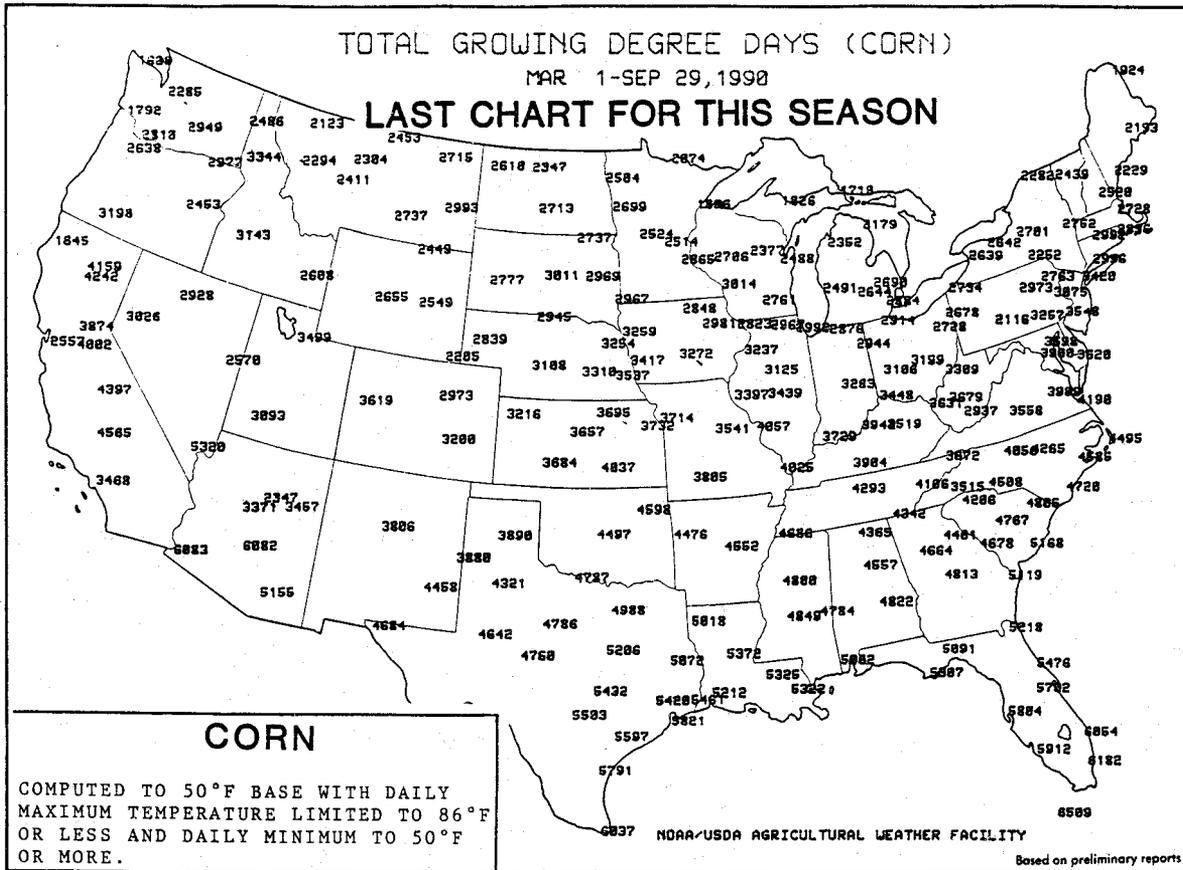
STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS						
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Sep 1	PCT. NORMAL SINCE Sep 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE	MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE		.50 INCH OR MORE	
																		90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
SHREVEPORT	85	56	91	46	71	-3	T	-1.8	T	2.9	92	48.6	146	92	34	4	0	0	0	0	
ME CARIBOU	82	47	69	38	54	4	T	1.1	T	1.9	104	27.7	103	94	67	0	0	2	1		
PORTLAND	67	49	71	42	58	3	T	1.5	T	1.4	95	29.7	98	96	64	0	0	0	0		
MO BALTIMORE	74	49	81	42	61	-4	T	-1.7	T	1.1	32	32.3	101	92	46	0	0	1	0		
MA BOSTON	74	48	80	41	61	-4	T	-1.8	T	1.1	48	29.3	85	98	50	0	0	0	0		
CRATHAM	68	55	71	50	62	2	T	-1.7	T	1.4	44	34.4	109	93	51	0	0	0	0		
MI ALPENA	64	42	78	37	53	-1	T	-1.5	T	1.5	64	33.9	101	95	67	0	0	1	0		
DETROIT	70	49	80	41	60	0	T	-1.4	T	6.0	279	31.6	133	91	51	0	0	3	0		
FLINT	68	45	79	36	56	-1	T	-1.5	T	3.0	131	22.2	99	95	53	0	0	0	0		
GRAND RAPIDS	69	47	79	41	58	-1	T	-1.5	T	4.2	134	27.4	108	96	52	0	0	2	0		
HOUGHTON LAKE	63	42	74	35	52	-2	T	-1.5	T	1.9	70	22.5	105	93	57	0	0	0	0		
LANSING	69	46	80	38	58	0	T	-1.6	T	4.0	139	23.9	104	94	50	0	0	0	0		
MARQUETTE	61	40	69	37	51	0	T	-1.8	T	4.5	118	24.5	86	89	59	0	0	2	0		
MUSKEGON	66	49	74	44	57	-1	T	-1.6	T	3.7	132	24.9	108	92	55	0	0	0	0		
SAULT ST. MARIE	62	44	70	37	53	1	T	-1.9	T	3.9	105	25.0	102	92	54	0	0	0	0		
MN ALEXANDRIA	69	44	81	32	57	3	T	-1.5	T	1.5	67	18.7	90	85	37	0	1	1	0		
DULUTH	66	41	77	32	53	2	T	-1.5	T	6.4	204	28.7	119	93	41	0	1	1	0		
IFT L FALLS	66	39	81	28	52	3	T	-1.6	T	1.1	37	16.9	84	94	44	0	1	3	0		
MINNEAPOLIS	71	46	84	38	58	2	T	-1.5	T	1.9	76	30.1	136	85	34	0	0	0	0		
ROCHESTER	69	44	80	36	57	1	T	-1.7	T	1.3	40	40.0	170	87	42	0	0	0	0		
MS GREENWOOD	83	53	92	45	68	-4	T	-1.8	T	3.9	123	38.5	96	94	34	3	0	0	0		
JACKSON	83	52	92	47	68	-5	T	-1.7	T	4.9	143	43.1	108	100	32	3	0	1	0		
MERIDIAN	86	50	95	43	68	-4	T	-1.8	T	1.7	50	53.0	128	98	28	0	0	0	0		
MO CAPE GIRARDEAU	79	52	89	40	66	-1	T	-1.8	T	1.5	42	36.6	106	96	43	0	0	0	0		
COLUMBIA	78	51	89	37	65	-1	T	-1.9	T	9	25	44.6	153	90	41	2	2	1	0		
KANSAS CITY	80	51	93	40	66	-1	T	-1.9	T	1.3	31	34.1	115	85	35	0	0	0	0		
SAINT LOUIS	79	57	89	45	68	2	T	-1.6	T	8	30	30.3	114	80	39	0	0	0	0		
SPRINGFIELD	78	52	88	39	65	-1	T	-1.9	T	5.7	140	49.6	162	92	47	0	0	1	0		
MT BILLINGS	78	47	90	35	63	7	T	-1.3	T	1	7	9.4	78	58	24	1	1	0	0		
GLASCO	76	43	88	32	59	6	T	-2	T	1	14	5.7	60	61	21	1	0	0	0		
GREAT FALLS	77	43	88	31	60	6	T	-2	T	1	10	12.5	99	60	20	1	0	0	0		
HAVRE	78	44	88	32	61	8	T	-2	T	2	2	5.4	54	18	0	0	0	0	0		
HELENA	78	43	87	35	60	9	T	-2	T	1	14	7.5	78	69	20	0	0	0	0		
KALISPELL	78	38	82	36	58	8	T	-2	T	1	15.8	133	89	23	0	0	0	0	0		
MILES CITY	78	47	91	33	62	7	T	-3	T	2	21	7.5	62	60	22	0	0	0	0		
MISSOULA	81	41	85	36	61	9	T	-2	T	1	6	10.7	105	80	23	0	0	0	0		
NE GRAND ISLAND	79	46	94	33	63	2	T	-1.5	T	7	30	24.2	118	81	27	2	2	0	0		
LINCOLN	79	48	95	35	63	2	T	-1.6	T	6	21	23.1	98	80	30	2	1	0	0		
NORFOLK	78	45	94	30	61	2	T	-1.4	T	1.0	50	23.6	113	79	29	3	1	0	0		
NORTH PLATTE	80	41	92	26	61	3	T	-3	T	3	19	13.4	77	87	25	3	1	0	0		
OMAHA	75	50	91	35	63	1	T	-1.7	T	1.0	28	20.2	78	74	40	2	0	0	0		
SCOTTSBLOFF	78	43	88	36	60	3	T	-2	T	1.0	94	15.1	118	88	28	0	0	1	0		
VALENTINE	79	41	94	27	60	3	T	-2	T	7	48	15.6	101	81	24	3	1	1	0		
NV RLY	69	39	73	35	54	1	T	-1.5	T	3	94	7.4	106	90	30	0	0	3	0		
LAS VEGAS	88	64	92	61	76	-1	T	-1	T	2	63	3.5	115	54	23	2	0	1	0		
RENO	73	46	79	42	60	2	T	-1.3	T	3	135	4.6	91	97	36	0	0	4	0		
WINNEVOCCA	79	47	84	37	63	7	T	-1	T	2	62	5.6	101	76	23	0	0	3	0		
NE CONCORD	71	45	78	35	58	2	T	-1.7	T	2.1	71	28.8	109	99	48	0	0	0	0		
NJ ATLANTIC CITY	73	49	77	40	61	-3	T	-1.6	T	1.7	61	28.4	91	97	51	0	0	1	0		
NM ALBUQUERQUE	77	54	84	51	66	0	T	-1.1	T	1.0	120	8.7	140	86	36	0	0	2	0		
CLOVIS	80	57	90	54	69	3	T	-1.2	T	3.8	209	11.0	78	85	34	1	0	1	1		
ROSELLE	85	59	100	54	72	4	T	-1.4	T	1.6	93	6.5	74	80	33	3	0	1	0		
NY ALBANY	71	46	77	42	59	1	T	-1.7	T	1.2	39	33.7	127	97	49	0	0	0	1		
BINGHAMTON	63	47	73	42	55	-2	T	-1.4	T	7	84	30.3	110	96	63	0	0	3	1		
BUFFALO	67	52	77	46	59	1	T	-1.5	T	4	3.2	98	34.5	126	91	58	0	0	4	0	
NEW YORK	73	58	79	51	65	0	T	-1.7	T	1	1.7	52	38.3	120	85	46	0	0	1	0	
ROCHESTER	68	50	79	45	59	0	T	-1.5	T	2.9	113	28.9	123	96	57	0	0	3	0		
SYRACUSE	68	51	79	45	59	1	T	-1.8	T	3	91	34.3	118	95	58	0	0	5	0		
NC ASHEVILLE	72	45	77	36	59	-5	T	-1.8	T	1.4	39	41.0	120	99	45	0	0	0	0		
CHARLOTTE	79	53	85	45	64	-3	T	-1.8	T	1.8	51	28.9	85	86	33	0	0	0	0		
GREENSBORO	77	49	83	41	63	-3	T	-1.8	T	1.2	33	24.9	75	87	33	0	0	0	0		
RATERS	77	62	84	47	70	-2	T	-1.1	T	2	4	34.5	83	88	49	0	0	1	0		
NEW BRUN	80	54	95	47	67	-1	T	-1.2	T	1.5	26	39.8	93	94	38	0	0	0	0		
RALEIGH	79	50	84	43	65	-3	T	-1.7	T	3	10	27.3	83	94	36	0	0	0	0		
WILMINGTON	81	55	85	47	68	-1	T	-1.2	T	1.4	25	41.6	95	94	42	0	0	0	0		
ND BISMARCK	72	38	89	27	55	2	T	-1.2	T	1.3	94	11.9	89	88	31	0	1	1	0		
FARGO	73	40	89	29	57	3	T	-1.4	T	1.7	96	14.9	90	83	35	0	1	1	0		
GRAND FORKS	71	41	86	31	56	4	T	-1.2	T	1.8	91	15.1	96	85	36	0	1	1	0		
WILLISTON	74	40	89	34	57	4	T	-1.3	T	3	24	8.7	74	80	23	0	0	1	0		
OH AKRON-CANTON	67	49	77	37	58	-2	T	-1.5	T	9.0	315	49.7	176	95	57	0	0	2	0		
CINCINNATI	74	50	82	37	62	-2	T	-1.7	T	4.1	147	42.3	135	93	45	0	0	1	1		
CLEVELAND	68	49	77	38	59	-3	T	-1.3	T	6	7.2	37.9	140	95	58	0	0	3	1		
COLUMBUS	73	49	81	38	61	-1	T	-1.7	T	5.3	197	39.1	132	94	46	0	0	2	1		

Based on 1951-80 normals

Weather Data for the Week Ending September 29, 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	TEMP. °F		PRECIP.			
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE		
DAYTON	71	49	80	37	60	-3	.6	.1	.4	2.6	113	41.3	151	94	49	0	0	2	0		
TOLEDO	71	46	81	38	58	-2	.2	.5	.7	1.7	69	27.8	113	94	48	0	0	1	0		
YOUNGSTOWN	68	50	78	39	59	0	.2	.5	.1	5.1	171	33.7	117	95	56	0	0	2	0		
OK OKLAHOMA CITY	82	58	92	48	70	0	0	.8	.7	7.4	221	36.2	143	85	42	2	0	1	0		
TULSA	83	59	92	47	71	1	1.4	.4	1.4	4.3	102	31.5	103	87	41	2	0	1	1		
OR ASTORIA	66	55	72	48	61	4	.7	.9	.7	.7	22	47.8	115	94	68	0	0	0	0		
BURNS	79	42	83	38	61	5	.5	.1	.1	9	3.9	58	71	21	0	0	1	0			
MEDFORD	85	54	91	50	69	7	.1	.1	.1	19	9.6	82	89	30	2	0	2	0	0		
PENDLETON	84	54	87	53	69	8	.0	.2	.0	0	7.0	87	60	25	0	0	0	0	0		
PORTLAND	74	57	83	53	66	5	.5	.5	.7	.3	22	22.2	98	92	52	0	0	0	0		
SALEM	75	50	82	46	62	3	.0	.0	.4	28	22.6	94	97	52	0	0	0	0	0		
PA ALLENTOWN	70	45	79	38	58	-3	.3	.5	.0	1.9	49	31.8	95	98	55	0	0	1	0		
ERIE	68	55	80	49	61	2	.3	.6	.2	7.3	190	37.6	129	88	60	0	0	2	0		
HARRISBURG	70	49	79	42	60	-4	.1	.7	.1	1.0	29	29.8	100	96	54	0	0	1	0		
PHILADELPHIA	73	53	79	46	63	-2	.2	.7	.7	1.7	52	29.1	92	99	57	0	0	0	0		
PITTSBURGH	69	49	80	41	59	-2	.2	.2	.2	5.7	214	37.8	131	96	52	0	0	1	0		
SCRANTON	68	47	77	42	58	-2	.1	.6	.1	3.1	100	34.1	130	95	52	0	0	1	0		
RI PROVIDENCE	72	51	77	44	62	-2	.2	.8	.2	2.3	66	31.9	98	97	52	0	0	1	0		
SC CHARLESTON	84	60	90	51	72	-1	.1	.9	.1	.2	4	30.1	70	93	35	1	0	2	0		
COLUMBIA	82	52	89	43	67	-5	.0	.8	.0	2.6	63	28.1	69	95	34	0	0	0	0		
FLORENCE	81	53	88	43	67	-4	.0	.8	.7	19	18.7	52	90	35	0	0	0	0			
GREENVILLE	77	49	83	42	63	-6	.0	.1	.0	2.1	47	34.8	86	96	41	0	0	0	0		
SD ABERDEEN	74	42	89	31	58	3	.3	.3	.3	3.0	211	20.0	129	85	35	0	1	1	0		
BURON	78	41	95	29	60	3	.3	.3	.6	44	21.3	134	85	25	3	1	1	0	0		
RAPID CITY	76	46	90	33	61	4	.0	.2	.0	2.5	247	15.1	106	64	26	1	0	0	0		
SIOUX FALLS	76	44	92	33	60	3	.1	.4	.1	.5	17	16.2	78	82	26	1	0	1	0		
TN CHATTANOOGA	78	51	85	44	64	-4	.0	-1.0	.0	3.7	88	50.0	124	99	39	0	0	0	0		
KNOXVILLE	75	51	82	42	63	-5	.0	.7	.0	2.6	92	40.7	113	97	43	0	0	0	0		
MEMPHIS	82	57	90	47	69	-2	.0	.8	.0	5.2	149	41.3	104	83	38	2	0	0	0		
NASHVILLE	80	53	89	43	67	-2	.0	.8	.0	2.4	67	27.9	75	90	37	0	0	0	0		
TX ABILENE	82	61	88	53	72	-1	.0	.7	.0	4.8	163	26.6	142	85	40	0	0	0	0		
AMARILLO	83	55	93	46	69	3	2.4	2.1	2.3	2.7	164	16.3	99	81	33	3	0	2	1		
AUSTIN	87	65	92	60	76	0	.0	.9	.0	1.8	51	20.5	87	81	35	4	0	0	0		
BEAUMONT	86	62	91	55	74	-2	.0	-1.1	.0	5.2	101	52.8	125	97	38	2	0	0	0		
BROWNSVILLE	90	69	93	65	79	-1	.1	-1.2	.0	3.9	77	15.6	82	95	48	3	0	1	0		
CORPUS CHRISTI	89	68	91	63	79	-1	.1	-1.4	.1	2.7	42	18.0	71	88	46	4	0	1	0		
DEL RIO	84	66	89	60	75	-3	.7	.0	.7	4.2	160	20.8	154	70	41	0	0	1	1		
EL PASO	81	57	90	54	69	-3	.6	.3	.6	2.4	181	9.6	155	96	41	1	0	2	1		
FORT WORTH	87	61	93	53	74	-1	.0	.8	.0	1.2	35	37.2	154	79	30	4	0	0	0		
GALVESTON	83	71	87	65	77	-1	.0	-1.3	.0	6.9	116	31.7	102	79	44	0	0	0	0		
HOUSTON	88	60	92	52	74	-2	.0	-1.2	.0	1.6	32	31.8	91	87	30	4	0	0	0		
LUBBOCK	82	57	94	53	70	1	.6	.1	.5	1.3	63	12.3	84	83	35	3	0	2	1		
MIDLAND	82	59	90	55	71	-1	.1	.4	.1	2.9	144	11.3	102	96	43	1	0	1	0		
SAN ANGELO	81	60	87	54	70	-3	.1	.7	.0	6.2	213	23.7	166	93	45	0	0	1	0		
SAN ANTONIO	86	63	89	58	75	-2	.0	.9	.0	3.5	98	31.1	140	84	37	0	0	0	0		
VICTORIA	88	65	91	59	76	-1	.0	-1.4	.0	3.6	59	31.1	107	89	39	4	0	0	0		
WACO	87	63	93	55	75	-1	.0	.8	.0	6.6	215	29.1	124	87	36	4	0	0	0		
WICHITA FALLS	85	60	93	51	73	0	.0	.8	.0	1.8	54	33.0	156	91	40	3	0	0	0		
UT CEDAR CITY	72	47	77	40	59	-1	.2	.0	.1	1.1	122	7.7	97	85	35	0	0	3	0		
SALT LAKE CITY	78	54	81	48	66	5	.2	.0	.1	.6	67	8.2	72	83	31	0	0	4	0		
VT BURLINGTON	66	50	75	47	58	3	.0	.7	.0	1.2	40	27.3	108	93	55	0	0	2	0		
VA NORFOLK	76	54	81	47	65	-4	.1	.8	.1	1.0	24	37.4	106	96	47	0	0	1	0		
RICHMOND	77	50	82	43	63	-3	.1	.7	.1	1.9	57	33.8	101	95	41	0	0	1	0		
ROANOKE	75	49	83	41	62	-3	.0	.7	.0	1.9	61	28.9	97	94	42	0	0	0	0		
WA QUILLAYUTE	66	52	70	44	59	4	.0	.8	.4	.7	62.0	95	94	67	0	0	1	0	0		
SEATTLE-TACOMA	69	54	75	50	62	4	.0	.6	.1	3	24.7	107	96	60	0	0	0	0	0		
SPOKANE	82	49	87	45	66	10	.0	.2	.0	0	13.3	122	69	22	0	0	0	0	0		
YAKIMA	85	46	89	43	66	8	.0	.1	.0	.0	12	5.5	109	87	23	0	0	0	0	0	
WV BECKLEY	68	46	76	38	57	-2	.2	.6	.2	2.0	56	28.9	87	93	44	0	0	1	0	0	
CHARLESTON	74	49	83	42	62	-2	.3	.3	.3	4.2	144	31.4	94	97	46	0	0	1	0	0	
HUNTINGTON	74	49	83	39	62	-3	.1	.5	.1	5.3	181	37.8	117	96	44	0	0	1	0	0	
PARKERSBURG	73	50	80	41	62	-2	.1	.6	.1	2.8	101	37.1	123	96	45	0	0	1	0	0	
WI GREEN BAY	68	46	76	38	57	1	.1	.6	.1	5.1	168	30.6	136	93	50	0	0	2	1	0	0
LACROSSE	72	47	82	41	59	1	.0	.7	.0	1.4	40	32.6	129	94	40	0	0	1	0	0	0
MADISON	71	45	83	41	58	1	.0	.6	.0	1.6	56	29.2	117	94	47	0	0	0	0	0	0
MILWAUKEE	70	51	83	42	61	2	.1	.5	.1	1.9	68	32.0	131	85	46	0	0	2	0	0	0
WAUSAU	67	45	75	37	56	1	.3	.6	.3	4.1	108	29.0	111	95	45	0	0	1	0	0	0
WY CASPER	76	41	83	34	59	4	.0	.2	.0	.5	73	9.8	107	74	25	0	0	2	1	0	0
CHEYENNE	72	45	80	35	58	4	.1	.1	.0	.8	79	17.2	148	82	35	0	0	3	0	0	0
LANDER	74	47	82	42	60	6	.0	.2	.0	1.4	178	8.1	77	75	30	0	0	3	0	0	0
SHERIDAN	78	44	89	32	61	7	.0	.3	.0	.3	23	10.2	84	72	23	0	1	0	0	0	0

Based on 1951-80 normals



National Agricultural Summary

September 24-30, 1990

HIGHLIGHTS: Winter wheat planting was 45 percent (%) complete, 3 percentage points behind the 5-year average. Corn harvest was 14% complete, 7 points behind average. Soybean harvest 10% complete, 8 points below average. Harvest of cotton was 21%, 2 points ahead of normal. Sorghum was 28% harvested, 4 points behind normal.

Dry, warm weather in the Plains improved crop development. Frost was reported in the northern Plains, but crop damage was minimal. Soil moisture was short in the Mountain States, North West, central Plains, and the Southeast. An average of at least 5 days suitable for field work was reported in all States except Pennsylvania and Oklahoma.

SMALL GRAINS: Winter wheat planting advanced 21 points and was 45% complete, 3 points behind normal. Nineteen percent of the crop was emerged, 5 points behind average. Planting advanced 30 or more points from last week in Kansas, Montana, and Nebraska. Oregon planting was 50% complete, 30 points above average. In Colorado, Nebraska, and South Dakota, planting was over 80% complete. However, Colorado and Nebraska crop emergence was at least 12 points behind average. Southeast Nebraska had grasshopper problems in emerged wheat fields, with aphids causing damage in the west.

CORN: Corn was mostly good with 75% of the crop mature, 12 points behind normal. Harvest was 14% complete, 7 points behind normal. Crop maturity and harvest lagged behind normal in most of the major producing States. In Nebraska, North Carolina, and South Dakota, maturity and harvest were above average. Many Nebraska growers were harvesting at higher moisture levels than normal to reduce crop loss from corn borer.

SOYBEANS: Soybeans were mostly good to fair with 63% of the acreage dropping leaves, 22 points more than last week but 10 points below normal. Harvest was 10% complete, 8 points behind normal. Percentage dropping leaves lagged over 20 points behind normal in Illinois, Indiana, and Kentucky. However, Alabama and Georgia were 19 points above average in dropping leaves. Illinois had 11% harvested, 23 points below average.

COTTON: The cotton crop was mostly good to fair. Seventy-four percent of the acres were opening bolls, 6 points above average. Harvest was 21% complete, 2 points ahead of normal. Alabama had 53% of the crop harvested, 27 points ahead of average. Arkansas had 9% harvested, 18 points behind normal. Recent rains in the Cross Timbers area of Texas helped later bolls fill out. Harvest was near completion in the Upper Coast and the south.

SORGHUM: Sorghum was mostly good to fair with 71% of the acres mature, 4 points ahead of normal. Harvest was 28% complete, 4 points behind average. Arkansas had 52% harvested, 29 points behind normal. Southeastern Nebraska sorghum growers reported lodging due to insect and heat stress.

OTHER FIELD CROPS: Rice harvest was 53% complete, 17 points behind normal. Arkansas and Mississippi harvest was 36 and 23 points, respectively, behind normal. Alabama peanuts were mostly poor with 86% dug and 77% combined, 32 and 36 points above average, respectively. Georgia peanuts were poor to very poor with 64% combined, 12 points above

average. Dry soils prevented digging in some areas. Kentucky tobacco harvest was very active with good quality. Burley was 90% cut, 5 points behind normal. Tennessee burley tobacco was 94% harvested, 2 points above average. Fired and dark tobacco was harvested, 3 points ahead of normal. North Dakota sunflowers were mostly fair and 87% of the bracts turned brown, compared with 68% average. Wyoming dry beans were 60% combined, 5 points below average. Idaho potatoes were 34% harvested, 3 points above average, while hops were 90% harvested, 4 points below average.

FRUIT AND NUTS: Georgia pecans were mostly fair with 3% harvested, 2 points above average. Texas pecan harvest was slowed by wet conditions in the south, with nuts cracking open in many areas. Apple harvest in Pennsylvania was 47% complete, 2 points above last year. Arizona lemon harvest continued in the west, and fall melon harvest continued in the central areas. Florida had good size fruit for this date, with weekend rains in all citrus areas replenishing surface moisture. New England apples were in good condition, 50% harvested with size medium to large. Peaches were fair to good and 98% harvested. California almond, pistachio, and walnut harvest gained momentum. Almond stockpiles were fumigated to control Navel orangeworms. Olive harvest started.

VEGETABLES: Arizona fall vegetable planting continued in the west, while fall lettuce harvest began in the east. Florida reported first radishes were dug. Texas Rio Grande Valley spring vegetable planting began with production of fall vegetables increasing. East Texas sweetpotato and New Mexico chile harvest continued. Oregon harvest of potatoes, sweet corn, cauliflower, and broccoli continued. California safflower harvest was winding down, and the raisin harvest was 99% complete. Broccoli was generally good and in moderate supply. Celery had a heavy supply with good quality, while iceberg lettuce was in light supply and variable quality.

PASTURES AND LIVESTOCK: Pastures were at least fair in most States, except the Southeastern States and South Dakota. Livestock in most States were reported in fair or better conditions. Recent rains in Arizona and New Mexico improved pasture and range conditions. Pasture conditions in Alabama and Georgia continued to suffer from lack of moisture. Cattle in Nebraska were being moved to stalks after fields were harvested. Livestock in Oregon were moved from summer ranges. Oklahoma reported cattle good with marketings stable and prices steady to higher from last week.

Crop Progress

FOR WEEK ENDING SEPTEMBER 30, 1990

RICE
% HARVESTED

	1990	1989	AVG.
AR	32	61	68
CA	25	10	21
LA	94	91	93
MS	55	53	78
TX	99	99	99

5 STATES 53 63 70

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

COTTON
% BOLLS OPENING

	1990	1989	AVG.
AL	96	70	88
AZ	100	96	95
AR	80	65	87
CA	100	100	99
GA	90	67	78
LA	99	94	96
MS	98	77	92
MO	84	78	82
NM	85	92	82
NC	89	80	93
OK	60	50	45
SC	87	80	86
TN	90	78	88
TX	51	44	42

14 STATES 74 65 68

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

COTTON
% HARVESTED

	1990	1989	AVG.
AL	53	10	26
AZ	15	11	8
AR	9	7	27
CA	2	2	3
GA	39	4	17
LA	52	22	43
MS	38	4	36
MO	11	15	27
NM	1	1	1
NC	9	0	0
OK	0	0	2
SC	27	5	14
TN	22	8	24
TX	18	15	17

14 STATES 21 10 19

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

WINTER WHEAT
% PLANTED

	1990	1989	AVG.
AR	0	0	3
CA	0	0	0
CO	81	81	89
GA	2	2	5
ID	45	56	54
IL	7	8	12
IN	12	14	17
KS	55	60	55
MI	35	50	25
MO	10	13	17
MT	70	70	52
NE	85	80	84
NC	8	5	5
OH	7	12	16
OK	30	55	40
OR	50	25	20
SD	89	88	88
TX	43	58	53
WA	72	69	65

19 STATES 45 52 48

THESE 19 STATES PRODUCED 91% OF THE 1990 WINTER WHEAT CROP.

SOYBEANS
% DROPPING LEAVES

	1990	1989	AVG.
AL	56	43	37
AR	13	14	22
GA	65	40	46
IL	65	82	89
IN	61	66	89
IA	80	93	92
KS	75	60	75
KY	24	42	45
LA	46	53	44
MI	66	75	80
MN	99	99	96
MS	43	41	46
MO	49	57	63
NE	92	80	85
NC	24	19	14
OH	68	45	80
SC	6	15	13
SD	99	98	89
TN	34	42	45

19 STATES 63 66 73

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

SOYBEANS
% HARVESTED

	1990	1989	AVG.
AL	14	9	8
AR	0	0	4
GA	4	1	3
IL	11	24	34
IN	4	7	23
IA	15	40	25
KS	15	5	15
KY	1	2	3
LA	16	19	13
MI	1	5	5
MN	18	32	29
MS	11	6	8
MO	5	4	9
NE	20	9	15
NC	0	0	0
OH	4	2	14
SC	0	0	0
SD	27	24	20
TN	4	1	1

19 STATES 10 16 18

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

WINTER WHEAT
% EMERGED

	1990	1989	AVG.
AR	0	0	0
CA	0	0	0
CO	49	37	61
GA	0	1	3
ID	14	16	16
IL	0	1	3
IN	7	4	5
KS	20	20	25
MI	10	20	0
MO	1	0	5
MT	33	30	24
NE	45	42	59
NC	0	0	0
OH	0	0	0
OK	5	10	15
OR	10	6	6
SD	61	68	64
TX	18	21	27
WA	40	37	41

19 STATES 19 20 24

THESE 19 STATES PRODUCED 91% OF THE 1990 WINTER WHEAT CROP.

CORN
% HARVESTED

	1990	1989	AVG.
CO	6	5	7
GA	94	86	92
IL	10	16	29
IN	5	7	18
IA	12	15	19
KS	50	30	45
KY	19	28	37
MI	2	2	4
MN	5	4	12
MO	28	34	42
NE	15	8	12
NC	64	50	56
OH	4	1	10
PA	2	2	6
SD	11	11	9
TX	86	79	83
WI	2	3	7

17 STATES 14 14 21

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

CORN
% MATURE

	1990	1989	AVG.
CO	71	72	74
GA	100	100	100
IL	70	94	97
IN	52	72	90
IA	96	98	97
KS	90	90	90
KY	65	81	90
MI	20	40	55
MN	81	89	82
MO	91	96	98
NE	95	89	88
NC	100	97	99
OH	33	18	68
PA	20	15	37
SD	87	87	83
TX	98	98	98
WI	41	69	70

17 STATES 75 83 87

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

GRAIN SORGHUM
% MATURE

	1990	1989	AVG.
AR	81	94	NA
CO	51	42	49
IL	26	82	NA
KS	50	35	55
LA	96	100	100
MS	89	87	94
MO	45	73	80
NE	85	76	82
NM	84	0	0
OK	60	35	55
SD	84	80	71
TX	92	79	78

12 STATES 71 60 NA

EXCL. STATES WITH NA 71 59 67

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

NA - NOT AVAILABLE.

GRAIN SORGHUM
% HARVESTED

	1990	1989	AVG.
AR	52	75	81
CO	27	5	5
IL	2	18	29
KS	10	10	15
LA	88	94	93
MS	77	65	81
MO	12	33	38
NE	7	8	14
NM	8	0	0
OK	5	10	10
SD	20	23	14
TX	63	63	63

12 STATES 28 29 32

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

Crop Condition
PERCENT

FOR WEEK ENDING SEPTEMBER 30, 1990

GRAIN SORGHUM

STATE	VP	P	F	G	EX
AR	0	13	68	19	0
CO	2	4	26	56	12
IL	0	7	26	66	1
KS	0	6	31	52	11
LA	0	13	31	56	0
MS	1	9	35	55	0
MO	0	0	56	44	0
NE	1	13	46	34	6
NM	0	5	41	54	0
OK	0	5	80	15	0
SD	0	2	22	69	7
TX	0	7	49	44	0
12 STATE	0	7	42	46	5
PREV WEEK	1	7	40	45	7
PREV YEAR	4	13	34	37	12

SOYBEANS

STATE	VP	P	F	G	EX
AL	18	23	45	14	0
AR	0	24	55	21	0
GA	41	31	27	1	0
IL	0	4	14	76	6
IN	0	2	20	71	7
IA	0	1	23	67	9
KS	10	18	30	27	15
KY	3	11	49	34	3
LA	0	8	70	22	0
MI	0	3	17	55	25
MN	0	5	40	48	7
MS	18	34	40	8	0
MO	0	6	61	33	0
NE	0	16	60	22	2
NC	2	22	39	35	2
OH	2	8	29	50	11
SC	0	22	55	23	0
SD	0	3	26	66	5
TN	2	23	59	16	0
19 STATE	2	9	35	48	6
PREV WEEK	2	11	36	46	5
PREV YEAR	2	8	37	47	6

CORN

STATE	VP	P	F	G	EX
CO	1	3	15	63	18
GA	26	30	35	5	4
IL	0	2	6	84	8
IN	0	3	11	76	10
IA	0	1	8	77	14
KS	0	2	14	53	31
KY	2	14	42	41	1
MI	0	5	15	50	30
MN	0	4	33	56	7
MO	0	0	44	55	1
NE	1	4	26	60	9
NC	9	31	39	21	0
OH	1	7	26	52	14
PA	0	5	19	50	26
SD	0	3	16	67	14
TX	0	2	29	64	5
WI	0	1	7	79	13
17 STATE	1	4	18	66	11
PREV WEEK	1	4	20	63	12
PREV YEAR	2	8	24	54	12

COTTON

STATE	VP	P	F	G	EX
AL	1	11	82	6	0
AZ	0	0	18	82	0
AR	0	5	22	73	0
CA	0	0	10	85	5
GA	18	26	43	6	7
LA	0	0	38	62	0
MS	7	3	47	30	13
MO	0	0	88	12	0
NM	0	6	22	72	0
NC	0	8	41	46	5
OK	0	0	42	50	8
SC	0	63	37	0	0
TN	3	16	71	10	0
TX	0	1	42	55	2
14 STATE	1	4	40	52	3
PREV WEEK	2	6	41	48	3
PREV YEAR	1	10	56	30	3

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 0.50 in. few areas south; much lighter elsewhere. Temperatures near to slightly below normal north, 2 to 4° below normal south.

Days suitable for fieldwork 6.7. Soil moisture 60% very short, 33% short, 7% adequate. Dry conditions slowed small grain seedings; stressed pastures, late crops. Corn 92% harvested, 72% 1989, 80% avg. Sorghum 73% harvested, 60% 1989, 62% avg.; 9% very poor, 25% poor, 43% fair, 23% good. Cotton 96% bolls opened, 70% 1989, 88% avg.; 53% harvested, 10% 1989, 26% avg.; 1% very poor, 11% poor, 82% fair, 6% good. Peanuts 86% dug, 82% 1989, 54% avg.; 77% combined, 71% 1989, 41% avg.; 87% poor, 13% fair. Soybeans 99% setting pods, 92% 1989, 99% avg.; 77% turning color, 67% 1989, 64% avg.; 56% dropping leaves, 43% 1989, 37% avg.; 41% mature, 28% 1989, 23% avg.; 14% harvested, 9% 1989, 8% avg.; 18% very poor, 23% poor, 45% fair, 14% good. Winter wheat 16% seeded, 20% 1989, 15% avg. Pastures 27% very poor, 44% poor, 26% fair, 3% good. Livestock 12% poor, 65% fair, 23% good. Primary activities: Harvesting row crops, hay; destroying cotton stalks; irrigating vegetables; mowing pastures; preparing land, seeding winter annuals; providing supplemental feed, water to cattle; routine care of livestock, poultry, catfish.

ALASKA: Sporadic rain, some snow, rain mix with cooler temperatures dominated. Highs 2° below normal at Clearwater, Big Delta to 2° above normal at Wasilla. Lows 1° cooler than normal at Palmer Aes to 4° warmer than normal at Clearwater. Seasonal precipitation 4.98 in. wetter than normal at Fairbanks to 0.87 in. drier than normal at PMC-Butte.

Days suitable for harvesting hay or grain: 2 days, potatoes: 7 days. Topsoil, subsoil basically adequate to surplus. Harvest progress: Barley, oats for grain 99% completed, 2nd crop hay, 30% potatoes, 99% winter hay availability short in the north, adequate central region, surplus on the Peninsula. Livestock good to excellent.

ARIZONA: Showers, thunderstorms 23rd, 24th northeast, extreme north central; sunny south; drier air 25th to 27th, sunny south, partly cloudy north; increasing cloudiness 29th, showers, thunderstorms north, east; precipitation none central, southwest to 0.54 in. north central; temperatures 3° below to 3° above normal.

Cotton 15% harvested, 11% 1989, 8% avg.; defoliation continued; insects moderate, pink boll worm controls applied; weeds rated moderate to light; crop 82% good, 18% fair. Alfalfa harvest continued moderate; good; corn for grain good; harvest underway southeast. Lemon harvest, fall vegetable planting continued west, fall melon harvests continued central; apple, mainly Granny Smith variety, harvest continued east as did mixed vegetables; fall lettuce harvest began east. Cattle, calves good to excellent; soil moisture short to adequate north, adequate central, south central, east; ranges providing average to above average feed supplies; sheep, lambs good to excellent; insect damage light.

ARKANSAS: Cool temperatures first part of week. Above normal temperatures mid week. Scattered showers weekend. Extremes 39°; 93°. Rainfall none to 2.84 in.

Days suitable for fieldwork 7.0. Soil moisture 39% short, 61% adequate. Main activities: Picking cotton; combining corn, rice, grain sorghum; draining rice fields; seeding small grains; fertilizing pastures; baling hay; vaccinating cattle. Corn 85% harvested, 94% 1989, 93% avg.; 49% fair, 51% good. Soybeans 100% setting pods, 99% 1989, 97% avg.; yellowing 33%, 34% 1989, 48% avg.; mature 3%, 4% 1989, 11% avg.; 24% poor, 55% fair, 21% good. Sorghum 85% harvested, 94% 1989, 93% avg.; 13% poor, 68% fair, 19% good. Cotton yields variable. Rice yields fair to good, harvest slow due to downed plants. Harvest of Group V soybeans started. Sorghum yields variable. Corn yields fair to good. Peanut harvest started. Pecan prospects poor. Watermelon harvest near complete. Pasture 6% very poor, 30% poor, 56% fair, 81% good. Livestock good.

CALIFORNIA: Began with low pressure area off southern State coast. Low moved north, brought showers to parts of State, especially along coast and in mountains. Some local rainfall over 1.00 in. Skies cleared by weekend, temperatures began to rise.

Field activities progressed with mostly clear weather. Rice harvest slowed, minor rainfall. Cotton defoliation continued, harvest underway most areas. Dry bean harvest remained active. Sugarbeet, silage, grain corn harvests continued. Safflower harvest winding down. Small grain field preparation continued; some fields cultivated, weed control. Alfalfa, Sudan grass harvests progressed. Granny Smith apple harvest progressed, Fujis started. Soft date harvest gained momentum. Raisin harvest 99% completed. Wine, table grape harvest progressed. Treating harvested vineyards for nematodes continued. Asian pears, Wonderful pomegranates, peaches, plums, nectarines being packed. Predormant spraying of plum orchards continued. Persimmon harvest started. Almond, pistachio, walnut harvests gained momentum. Almond stockpiles fumigated, control Navel orangeworm. Olive harvest started. Valencia orange harvest continued. Desert lemon harvest progressed, grapefruit harvest sluggish. Broccoli moderate supply, generally good quality. Cauliflower moderate supply, wide range of quality. Celery heavy supply, generally good quality. Iceberg head lettuce light supply, variable quality. Tomato harvest continued. Livestock good condition statewide, feeding of hay, supplements. Range conditions generally poor to fair. Water supplies remain short. Sheep grazing of harvested tomato, melon fields in south.

COLORADO: Cooler weather late in the week resulted in precipitation over most of the east. Precipitation a trace to 1.60 in. Temperatures 2 to 3° above normal in the east; 3 to 5° above in the west.

Days suitable for fieldwork 5.8. Soil moisture supplies 10% very short, 41% short, 45% adequate, 4% surplus. Alfalfa 3rd cutting 69% complete; 4th cutting 24% complete. Dry beans 83% cut, 62% threshed. Corn 71% mature, 6% harvested. Corn silage harvest 81% complete. Sorghum 51% mature, 28% harvested. Dry onions 88% harvested. Summer potatoes 75% harvested. Fall potatoes 38% harvested. Sugarbeets 5% harvested. Winter wheat 81% seeded, 49% emerged. Pasture, range feed 2%

very poor, 8% poor, 39% fair, 40% good, 11% excellent. Livestock mostly good to excellent.

FLORIDA: A cool week across State; temperatures some 2 to 5° below normal across north, 1 to 3° below normal over the Peninsula. Extreme maximum temperatures low 90s north, around 90° elsewhere. Coolest lows low, mid 40s Panhandle to mid 60s Peninsula to around 70° southeast coast. Rain over entire State. Amounts north generally under 1.00 in.; local areas recorded 1.00 to 2.00 in. Over Peninsula, 1.00 to 3.00 in. amounts more common; local areas recorded over 5.00 in.

Soil moisture mostly short in all areas except adequate to surplus southern Peninsula. Cotton harvest in full swing. Corn, peanut harvests declining. Dry soil delayed planting small grains for fall, winter pastures. Soybeans under stress from lack of moisture. Sugarcane planting active. Sugarcane for next crop harvest good progress. Pastures 11% very poor, 11% poor, 39% fair, 28% good, 11% excellent. Cattle Panhandle through upper central Peninsula continued fair to good; elsewhere generally good to excellent. Marketing of calves increased. Weekend rains all citrus areas 0.50 to more than 2.00 in. replenished surface moisture. Good early bloom color break. Fruit good size for this date. Early fresh harvest advanced. Caretakers cutting cover crops, spraying, burning trash. Cooler weather, general rainfall over vegetable producing areas. Field preparation, planting continued active central, southern areas. Limited volume cucumbers, squash, sweet corn available. First radishes dug.

GEORGIA: Scattered showers late week, weekend. Central, southern areas 0.25 to 0.75 in. Otherwise another dry week. Temperatures 2 to 4° below normal. Record, near record low temperatures first half week. Coolest mid, upper 30s mountains, mostly mid 40s to low 50s elsewhere. Warmest mid, upper 70s mountains, low, mid 90s south.

Days suitable for fieldwork 6.4. Soil moisture 49% very short, 36% short, 15% adequate. Sorghum 3% very poor, 40% poor, 41% fair, 16% good; 65% harvested for grain, 53% 1989, 51% avg. Peanuts 38% very poor, 31% poor, 28% fair, 3% good; 77% dug, 80% 1989, 66% avg.; 64% threshed, 64% 1989, 52% avg. Dry soils preventing digging in some areas. Wheat 4% very poor, 35% poor, 47% fair, 14% good; 2% planted, 2% 1989, 5% avg.; 0% emerged, 1% 1989, 3% avg. Rye 9% planted, 11% 1989, 16% avg. Other small grains 5% planted, 5% 1989, 9% avg. Apples 1% very poor, 6% poor, 5% fair, 88% good; 72% harvested, 60% 1989, 78% avg. Pecans 9% very poor, 36% poor, 49% fair, 6% good; 3% harvested, 1% avg. Hay 11% very poor, 25% poor, 47% fair, 17% good. Pasture 12% very poor, 28% poor, 40% fair, 20% good. Cattle, hogs fair to mostly good. Main activities: Corn, cotton, soybean harvest, reseeding of pastures, chemical applications for insects.

HAWAII: Fair conditions returned to Island weather. Hot, humid days accompanied by cool, damp evenings prevailed during past week. Winds 5 to 20 mph while temperatures upper 60s to low 90s. Rainfall none to 3.00 in.

Days suitable for farm work 7.0. Papaya, banana production heavy. Sugar, pineapple harvest continuous. New crop ginger root harvest just underway.

IDAHO: Temperatures 6 to 15° above normal. Up to 0.50 in. rain southwest, trace amounts elsewhere.

Days suitable for fieldwork 7.0. Soil moisture 10% very short, 45% short, 45% adequate. Winter wheat 45% planted, 56% 1989, 54% avg.; 14% emerged, 16% 1989, 16% avg. Potatoes 39% harvested, 34%

1989, 31% avg. Sugarbeets 19% harvested, 9% 1989, 10% avg. Alfalfa 3rd cutting 75% harvested, 90% 1989, 78% avg.; fourth, fifth cuttings southwest. Dry beans 94% harvested, 81% 1989, 76% avg. Onions 73% harvested, 65% 1989, 69% avg. Corn for silage 52% harvested. Apples 31% harvested, 33% 1989, 28% avg. Hops 90% harvested, 99% 1989, 94% avg. Range, pasture 1% very poor, 23% poor, 46% fair, 30% good.

ILLINOIS: Temperatures 1 to 2° above normal north, central; 1° below normal south. Precipitation less than 0.50 in. north; generally less than 0.25 in. central, south.

Days suitable for fieldwork 6.25. Soil moisture 21% short, 79% adequate. Corn dented 98%, 100% 1989, 100% avg. Soybeans turning yellow 85%, 96% 1989, 98% avg. Sorghum coloring 79%, 100% 1989. Alfalfa 1% poor, 9% fair, 81% good, 9% excellent. Alfalfa hay third cutting 96%, 100% 1989, 100% avg. Pasture 4% poor, 31% fair, 60% good, 5% excellent.

INDIANA: Temperatures about normal. Lows 30s to mid 40s, highs low to mid 70s. Precipitation 0.25 to 0.50 in.

Days suitable for fieldwork 5.9. Topsoil 5% short, 95% adequate. Subsoil 1% short, 98% adequate, 1% surplus. Soybeans 88% turning yellow, 90% 1989, 97% avg. Tobacco 82% harvested, 87% 1989, 92% avg. Pasture 4% poor, 16% fair, 66% good, 14% excellent. 1991 winter wheat cropland 54% plowed, 54% 1990, 54% avg. Good week for crop development, harvest of corn, soybeans.

IOWA: Temperatures 1 to 3° above normal. Extremes 32°; 92°. Rainfall trace to 0.65 in.; average 0.06 in.

Days suitable for fieldwork 6.8. Topsoil 39% short, 61% adequate. Subsoil 8% short, 92% adequate. Pasture 7% poor, 26% fair, 58% good, 9% excellent. Winter wheat 40% sown, 51% 1989, 37% avg. Availability of grain storage 74% adequate, 26% surplus. Livestock mostly good. Good weight gains.

KANSAS: Temperature normal to 4° above normal. Precipitation generally light, 0.40 to 0.21 in.

Days suitable for fieldwork 6.0. Surface moisture 69% short, 31% adequate. Subsurface moisture 59% short, 41% adequate. Corn, sorghum, soybean harvest, aided by hot, dry weather made good progress generally on schedule. Wheat seeding good progress, on schedule. Emergence good even with short surface moisture. Fourth cutting alfalfa good progress. Ranges, pastures fair to good for time of year. Few livestock problems, feedlots current.

KENTUCKY: Sunny skies prevailed. Weekend cold front brought light rain. Highest temperatures 80s, lows upper 30s. Temperatures mid 60s, near normal. Rainfall light, less than 0.25 in.

Days suitable for fieldwork 5.4. Soil moisture 2% very short, 30% short, 67% adequate, 1% surplus. Corn, tobacco harvest very active. Burley harvest nearing completion 90% cut, 92% 1989, 95% avg. Crop 2% stripped, about avg. for first October. Quality good. Dark tobacco 87% cut, 94% 1989, 97% avg. Soybean harvest just starting. Most beans will be late. Pastures 2% very poor, 4% poor, 31% fair, 53% good, 10% excellent.

LOUISIANA: Temperatures 2 to 5° below normal. Extremes 42°; 94°. Rainfall none to 0.14 in.

Days suitable for fieldwork 6.2. Soil moisture 10% very short, 26% short, 64% adequate. Cotton open bolls 99%, 94% 1989, 96% avg.; harvested 49%, 22% 1989, 43% avg.; 38% fair, 62% good. Hay final cutting 86%, 87% 1989, 85% avg. Rice ripe 99%, 98% 1989, 99% avg.; harvested 94%, 91% 1989, 93% avg. Sorghum turning color 100%, 100% 1989, 100% avg.;

ripe 96%, 100% 1989, 100% avg.; harvested 88%, 94% 1989, 93% avg. Soybeans turning color 79%, 79% 1989, 70% avg.; shedding leaves 46%, 53% 1989, 44% avg.; harvested 16%, 19% 1989, 13% avg.; 8% poor, 70% fair, 22% good. Insecticide spraying continued. Sugarcane planted 63%, 91% 1989, 81% avg.; 11% very poor, 11% poor, 33% fair, 45% good. Sweetpotatoes harvested 64%, 55% 1989, 68% avg. Wheat planted 1%, 0% 1989, 1% avg. Livestock 47% fair, 51% good, 2% excellent. Pasture 2% very poor, 10% poor, 62% fair, 26% good. Vegetables 3% very poor, 23% poor, 60% fair, 11% good, 3% excellent.

MARYLAND & DELAWARE: **MARYLAND:** Precipitation 0.55 in. Temperature 61°, normal 65°. Extremes 39°, 81°.

Days suitable for fieldwork 5.7. Topsoil 5% short, 95% adequate. Subsoil 5% short, 95% adequate. Corn good; 94% dent, 89% 1989, 96% avg.; 70% mature, 65% 1989, 78% avg.; grain 38% harvested, 24% 1989, 41% avg.; silage 77% harvested, 79% 1989, 86% avg. Soybeans fair to good; 59% turned, 50% 1989, 64% avg.; 27% shedding leaves, 23% 1989, 34% avg. Tobacco good; 97% harvested, 95% 1989, 92% avg. Wheat 3% seeded, 2% 1989, 8% avg. Barley 40% seeded, 20% 1989, 27% avg. Rye 35% seeded, 17% 1989, 28% avg. Oats 6% seeded, 1% 1989, 8% avg. Sweetpotatoes 44% harvested, 47% 1989, 43% avg. Hay supplies adequate. Alfalfa hay fourth cut 66% complete, 51% 1989, 64% avg. Other hay third cut 74% complete, 49% 1989, 84% avg.; fourth cut 20% complete, 13% 1989, NA avg. Apples fair to good; 56% harvested, 57% 1989, 57% avg. Pasture good.

DELAWARE: Precipitation 0.88 in. Temperature 61°, normal 66°. Extremes 43°, 78°.

Days suitable for fieldwork 6.5. Topsoil 29% short, 71% adequate. Subsoil moisture 100% adequate. Corn good; 90% mature, 83% 1989, 93% avg.; grain 62% harvested, 45% 1989, 42% avg.; silage 92% harvested, 80% 1989, 92% avg. Soybeans good; 50% turned, 27% 1989, 51% avg.; 20% shedding leaves, 11% 1989, 24% avg. Barley 21% seeded, 11% 1989, 11% avg. Rye 9% seeded, 10% 1989, 9% avg. Lima beans 88% harvested, 66% 1989, 76% avg. Hay supplies adequate. Alfalfa hay fourth cut 87% complete, 64% 1989, 86% avg. Other hay third cut 92% complete, 99% 1989, 97% avg. Other hay fourth cut 60% complete, NA 1989, NA avg. Apples fair to good; 65% harvested, 66% 1989, 45% avg. Pasture fair to good.

MICHIGAN: Temperatures 1° below to 4° above normal. Extremes 34°, 83°. Precipitation none to 0.67 in. across the State.

Days suitable for fieldwork 5.5. Soil moisture 2% short, 81% adequate, 17% surplus. Corn 20% mature, 40% 1989, 55% avg.; 2% harvested, 2% 1989, 4% avg.; 5% poor, 15% fair, 50% good, 30% excellent. Soybeans 66% dropping leaves, 75% 1989, 80% avg.; 1% harvested, 5% 1989, 5% avg.; 3% poor, 17% fair, 55% good, 25% excellent. Winter wheat 35% seeded, 50% 1989, 25% avg.; 10% emerged, 20% 1989, NA avg. Pasture 5% poor, 20% fair, 45% good, 30% excellent. Major activities: Harvesting potatoes, soybeans, dry beans, sugarbeets, corn silage, hay, vegetables, apples, grapes, seeding winter wheat.

MINNESOTA: Temperatures 2 to 3° above normal. Extremes 29°, 91°. Precipitation none to 0.20 in., greatest weekly total 0.27 in.

Days suitable for fieldwork 5.9. Topsoil 14% very short, 27% short, 58% adequate, 1% surplus. Corn 81% mature, 89% 1989, 82% avg.; 5% combined, 4% 1989, 12% avg. Soybeans 99% shedding leaves, 99% 1989, 96% avg.; 60% mature, 85% 1989, 74% avg.; 18% combined, 32% 1989, 29% avg. Sugarbeets 9% harvested, 8% 1989, 13% avg. Dry beans 93% harvested, 82% 1989, 67% avg. Potatoes 62%

harvested, 58% 1989, 63% avg. Flax 90% harvested, 79% 1989, 71% avg. Sunflowers 11% harvested, 8% 1989, 15% avg. Winter wheat 89% seeded, 94% 1989, 87% avg. Rye 91% seeded, 93% 1989, 87% avg. Field corn 55% silage, 63% 1989, 58% avg. Land 72% plowed, tilled, 70% 1989, 66% avg. Soybeans 13% moisture, 12% 1989, 14% avg. Corn 27% moisture, 27% 1989, 26% avg. Field corn 4% poor, 33% fair, 56% good, 7% excellent. Soybeans 5% poor, 40% fair, 48% good, 7% excellent.

MISSISSIPPI: Temperatures 5° below normal. Extremes 38°, 95°. Mostly dry statewide. Rainfall 0.02 in., 0.83 in. below normal. Soil temperatures 76°.

Days suitable for fieldwork 6.4, 2.6 1989, 4.5 avg. Soil moisture 17% very short, 45% short, 38% adequate. Cotton 98% open bolls, 77% 1989, 92% avg.; 38% harvested, 4% 1989, 36% avg.; 7% very poor, 3% poor, 47% fair, 30% good, 13% excellent. Corn 98% mature, 94% 1989, 97% avg.; 73% harvested, 57% 1989, 75% avg.; 99% silage harvested, 97% 1989, 98% avg.; 4% very poor, 10% poor, 22% fair, 59% good, 5% excellent. Rice 86% mature, 90% 1989, 96% avg.; 55% harvested, 53% 1989, 78% avg.; 18% poor, 27% fair, 55% good. Soybeans 98% podding, 98% 1989, 98% avg.; 71% turning color, 68% 1989, 70% avg.; 43% shedding leaves, 41% 1989, 46% avg.; 11% harvested, 6% 1989, 8% avg.; 18% very poor, 34% poor, 40% fair, 8% good. Sorghum 98% coloring, 98% 1989, 99% avg.; 89% mature, 87% 1989, 94% avg.; 77% harvested, 65% 1989, 81% avg.; 94% silage harvested, 90% 1989, 90% avg.; 1% very poor, 9% poor, 35% fair, 55% good. Hay 91% harvested, 89% 1989, 90% avg. Peanuts 84% harvested, 80% 1989, 75% avg. Sweetpotatoes 59% harvested, 53% 1989, 54% avg. Wheat 12% planted, 8% 1989, 11% avg.; 8% emerged, 4% 1989; 5% avg.; 3% very poor, 6% poor, 55% fair, 36% good. Pasture, livestock fair to good. Activities: Preparing winter forage, harvesting crops.

MISSOURI: Temperatures normal except Bootheel 4° above normal. Precipitation averaged none to less than 0.50 in. except localized areas north central, northeast, extreme southeast over 1.00 in.

Days suitable for fieldwork 6.3. Topsoil 64% short, 36% adequate. Corn harvested varies 17% east central to 60% southeast. Sorghum coloring 85%, 95% 1989, 98% avg. Sorghum harvested less than 5% all districts except 10% south central, 24% southeast. Soybeans turning color 74%, 84% 1989, 86% avg. Soybeans harvested less than 1% southwest to 6% north central, southeast. Pasture 2% very poor, 14% poor, 66% fair, 17% good, 1% excellent.

MONTANA: Temperatures 2 to 6° above normal east, 7 to 9° above normal elsewhere. There were light showers in southwest.

Days suitable for fieldwork 6.9. Topsoil 80% short, 20% adequate. Subsoil 74% short, 26% adequate. Dry beans 78% harvested, 77% 1989, 73% avg. Corn silage 74% harvested, 82% 1989, 78% avg. Potatoes 25% harvested, 28% 1989, 29% avg. Sugarbeet 7% harvested, 10% 1989, 7% avg. Pasture, range feed 7% very poor, 19% poor, 33% fair, 39% good, 2% excellent. Newly seeded winter wheat 1% very poor, 21% poor, 49% fair, 27% good, 2% excellent.

NEBRASKA: Temperatures 3 to 6° above normal. Extremes 35°, 95°. Precipitation latter half traces up to 0.30 in.

Days suitable for fieldwork 6.9. Topsoil 87% short, 13% adequate. Subsoil 78% short, 22% adequate. Sorghum 99% turning color, 94% 1989, 98% avg. More southeastern growers lodging due to insect, heat damage. Soybeans 100% turning color, 98% 1989, 98% avg. Northeastern, southeastern growers small bean size. Winter wheat 1% very

poor, 19% poor, 47% fair, 31% good, 2% excellent. Rain in Panhandle helped emergence, many southeastern fields too dry for germination. Grasshoppers causing problems in emerged wheat, southeast. Aphids causing damage to early wheat west. Rain needed before winter, entire State. Many corn growers harvesting at higher moisture level than normal, trying to reduce crop loss caused by corn borer damage. Pasture, range 9% very poor, 32% poor, 46% fair, 12% good, 1% excellent. Cattlemen weaning calves or working them prior to weaning. Cattle being moved to stalks after fields harvested. Some supplemental feeding required, southern part of State. Main activities: Harvesting row crops; cutting silage, alfalfa; sowing winter wheat; working calves; harvesting dry edible beans, sugarbeets in west.

NEVADA: Low pressure system generated a moist, unstable airmass that resulted in afternoon, evening rain showers, thunderstorm activities early in week. Temperatures varied from near normal to well above. Extremes 26°; 100°.

Potato digging, combining remaining acreage alfalfa seed delayed by scattered evening showers. Late cuttings alfalfa hay remote areas. Sixth cuttings alfalfa extreme south. Winter grain, garlic planting active.

NEW ENGLAND: Precipitation none to 1.00 in. Temperatures low to high 50s north, mid 50s to low 60s south; 1° to 5° above normal. Maximum temperatures high 60s to high 70s north, mid 70s to low 80s south.

Days suitable for fieldwork 6.0. Soil moisture north 92% adequate, 8% surplus; south 6% short, 89% adequate; 5% surplus. Grazing availability 15% short, 81% adequate, 4% surplus. Pasture 8% poor, 26% fair, 60% good, 6% excellent. Maine potatoes 60% harvested, 62% 1989, 54% avg.; excellent. Rhode Island potatoes 86% harvested, 63% 1989, 74% avg.; good. Connecticut River Valley potatoes 63% harvested, 61% 1989, 52% avg.; good. Field corn 43% harvested, 40% 1989, 47% avg.; good. Sweet corn 96% harvested, 99% 1989, 98% avg.; good. Second cut hay 96% harvested, 97% 1989, 97% avg.; good. Third crop hay 76% harvested, 66% 1989, 73% avg.; good. Apples 50% harvested, size medium to large; good. Peaches 98% harvested; fair to good. Pears 88% harvested; fair to good. Major farm activities: Cutting hay, picking apples, chopping corn, sowing winter cover crops, harvesting vegetables.

NEW JERSEY: Temperatures near normal. Extremes 33°; 82°. Rainfall 0.13 in. north, 0.20 in. central, 0.06 in. south. Heaviest 24 hour total 0.42 in. on 30th, 1st. Estimated soil moisture percent field capacity averaged 92% north, 83% central, 79% south. Four inch soil temperatures 56° north, 60° central, 61° south.

Soil moisture adequate for late season crop growth. Fall vegetable harvest very active. Sweetpotato digging steady. Apples, cranberry harvest active. Harvest of corn for silage, grain active. Soybeans continued to color. Some late hay making continued. Conditions good for germination, growth of fall sown grains, cover crops, new hay fields, pastures. Seeding continued.

NEW MEXICO: Temperatures 2° below normal at Deming to 6° above normal Roswell. Precipitation none at Silver City to 1.22 in. at Clovis.

Days suitable for fieldwork 6.8. Soil moisture 13% short, 84% adequate, 3% surplus. Showers continued across State this week. Rains have hampered some harvest activities. Chile and apple harvest continues. Apples getting good color with cool nights, spider mites reported in trees in San

Juan county. Peanuts in fair, some rot problems due to heavy moisture. Potatoes fair to good. Cattle, sheep fair to excellent. Range 7% poor, 40% fair, 48% good, 5% excellent.

NEW YORK: Temperatures at or above normal across area. Extremes 36°; 83°. Warmest over Hudson Valley, Long Island temperatures 3 to 5° above normal. Rainfall none at Poughkeepsie to 1.87 in. at Jamestown. Most areas received 0.50 in. or more of rain.

Days suitable for fieldwork 6.0. Soil moisture adequate. Pastures 54% fair, 38% good, 8% excellent. Hay, corn good. Alfalfa third cutting 83% complete, 67% 1989, 69% average. Silage corn 36% harvested, 23% 1989, 31% avg. Grain corn harvest underway. Dry bean harvest picked up momentum. Potato digging in full swing. Winter wheat seeding progressed rapidly. In the Finger Lakes region, Niagara grape harvest continued active. Concord grape harvest underway. Apple harvest remained in full swing. Vegetable harvest winding down. Onion harvesting neared completion. Growers moving pumpkins to market for Halloween sales.

NORTH CAROLINA: Temperatures 3 to 7° below normal across the State. Extremes 29°; 87°. Precipitation none to 0.56 in.

Days suitable for fieldwork 6.5. Soil moisture 34% very short, 47% short, 19% adequate. Pasture 6% very poor, 21% poor, 41% fair, 31% good, 1% excellent. Livestock feed from pasture 71%. Harvested: Flue cured tobacco 93%; corn silage 92%; corn for grain 64%; burley tobacco 89%; sweetpotatoes 38%; apples 73%; sorghum 36%; peanuts dug 12%. Cotton opening bolls 89%. Soybeans dropping leaves 24%. Planted: Wheat 8%; oats 11%; barley 14%; rye 23%. Crop condition: Cotton 8% poor, 41% fair, 46% good, 5% excellent; soybeans 2% very poor, 22% poor, 39% fair, 35% good, 2% excellent; peanuts 43% fair, 54% good, 3% excellent; sorghum 2% very poor, 21% poor, 41% fair, 36% good; sweetpotatoes, 35% fair, 63% good, 2% excellent; apples 12% poor, 48% fair, 40% good. Major activities: Harvesting flue cured, burley tobacco; harvesting corn for grain, cutting corn for silage; cutting hay; digging peanuts; harvesting sorghum, sweetpotatoes, apples; planting small grains; land preparation. Other activities included: seeding pastures; harvesting vegetables; spraying field crops; defoliating, harvesting cotton; tending livestock; general farm maintenance.

NORTH DAKOTA: Temperatures 2 to 5° above normal. Precipitation 0.02 southwest to 0.27 central.

Days suitable for fieldwork 6.6. Topsoil 44% very short, 54% short, 2% adequate. Subsoil moisture 61% very short, 39% short. Corn for grain 1% very poor, 2% poor, 81% fair, 16% good; 63% ripe and beyond, 77% 1989, 61% avg. Corn for silage 8% very poor, 18% poor, 52% fair, 22% good; 88% cut, 89% 1989, 76% avg. Flax 3% very poor, 7% poor, 46% fair, 41% good, 3% excellent; 96% combined, 92% 1989, 70% avg. Potatoes 46% very poor, 54% fair; 77% dug, 78% 1989, 75% avg. Soybeans 2% poor, 88% fair, 10% good; 36% combined, 44% 1989, 37% avg. Sugarbeets 17% poor, 56% fair, 27% good; 10% lifted, 9% 1989, 16% avg. Dry beans 1% very poor, 18% poor, 59% fair, 22% good; 89% combined, 75% 1989, 62% avg. Sunflower 2% very poor, 8% poor, 52% fair, 38% good; 87% bracts turned brown, 88% 1989, 68% avg. Winter wheat 92% planted, 96% 1989, 89% avg. Rye 90% planted, 97% 1989, 90% avg. Pastures 31% very poor, 39% poor, 30% fair. Stockwater 18% very short, 50% short, 32% adequate.

OHIO: High pressure brought cold temperatures early which moderated through the period. Highs

upper 60s to mid 70s. Lows mid 40s to low 50s. Few places had lows in the 30s. Rainfall weekend more to 1.40 in.; least amounts north.

Days suitable for fieldwork 5.2. Soil moisture 1% short, 87% adequate, 12% surplus. Field activities: Land preparation; seeding wheat; harvesting corn, soybeans, hay vegetables, fruit. Corn good; European corn borer caused some weak stalk problems. Soybeans good; moisture content of harvested beans 13 to 16%. Winter wheat seeding behind schedule; waiting for crops to be harvested. Hay good. Pastures 1% very poor, 4% poor, 22% fair, 57% good, 16% excellent. Processing tomato harvest late. Sugarbeet harvest 5% complete. Tobacco harvest nearly finished.

OKLAHOMA: Temperatures 2° below south central to 1° above normal northeast. Precipitation none southeast to 1.76 in. northeast.

Days suitable for fieldwork 4.8. Topsoil 12% short, 75% adequate, 13% surplus. Subsoil 35% short, 65% adequate. Wheat 30% planted, 55% 1989, 40% avg.; 5% emerged, 10% 1989, 15% avg. Cotton 42% fair, 50% good, 8% excellent; 60% open bolls, 50% 1989, 45% avg.; 3% harvested, 0% 1989, 2% avg. Sorghum 5% poor, 80% fair, 15% good; 60% mature, 35% 1989, 55% avg.; 5% harvested, 10% 1989, 10% avg. Soybeans 20% mature, 37% 1989, 40% avg. Peanuts 50% mature, 75% 1989, 60% avg.; 2% harvested, 5% 1989, 5% avg. Corn 65% harvested, 80% 1989, 80% avg. Pastures 10% poor, 60% fair, 28% good, 2% excellent. Cattle good; marketings stable, prices steady to higher from preceding week.

OREGON: Temperatures above normal entire State. Largest departures northeast, up to 10° above normal. Mostly dry across state except south central where Klamath Falls had 0.44 in. of precipitation Lakeview 0.31 in. Elsewhere less than 0.20 in. below normal.

Soil moisture 80% short, 20% adequate. Barley 16% planted (including winter, spring intentions), 12% 1990, 14% avg. This season's barley 94% harvested. Fall tillage, including grain seeding, haying activities continued east. Planting grass seed, chopping silage corn, haying, combining Red clover seed west of Cascades. Hazelnut harvest began Willamette Valley. Apple, winter pear picking continued. Caneberry pruning, herbicide spraying in strawberries, cover spraying in peach orchards west. Main cranberry harvest to begin on 1st south coast. Sweet corn, cauliflower, broccoli being harvested although fresh season neared completion Willamette Valley; potato digging nearly finished; fall cole crops harvested, some new plantings. Potato harvest continued eastern areas. Livestock good to excellent. Movement from ranges in progress east. Pastures mostly fair west, except Douglas Co. where supplemental feeding needed. Ranges, pastures generally fair, although improved east. Statewide ranges, pastures 7% very poor, 19% poor, 49% fair, 25% good.

PENNSYLVANIA: A cool, dry week across the State. Temperature 58°, 2° below normal. Extremes 36°; 81°. Precipitation 0.31 in., 0.81 in. below normal.

Days suitable for fieldwork 4. Soil moisture 2% short, 65% adequate, 33% surplus. Corn 96% dough, 93% 1989, 98% avg.; 70% dent, 59% 1989, 82% avg.; 20% mature, 15% 1989, 37% avg.; 2% harvested, 2% 1989, 6% avg. Ensilage corn harvested 27% complete, 32% 1989. Corn 5% poor, 19% fair, 50% good, 26% excellent. Soybean harvest 1% complete, 0% 1989; 5% poor, 22% fair, 51% good, 22% excellent. Wheat planted 29% complete, 32% 1989. Barley planted 50% complete, 52% 1989. Tobacco harvest 98% complete, 99% 1989. Potato harvest 59% complete, 71% 1989. Second cutting alfalfa 98% complete, 99% 1989. Third cutting alfalfa 69%

complete, 69% 1989. Fourth cutting alfalfa 45% complete, 34% 1989. Second cutting clover timothy 89% complete, 89% 1989. Quality of hay made mostly fair. Feed from pasture 0% very poor, 4% poor, 74% fair, 22% good. Apple harvest 47% complete, 49% 1989. Peach harvest 99% complete, 99% 1989. Grapes harvest 55% complete, 47% 1989. Fall plowing 56% complete, 58% 1989. Activities: Harvesting hay, haylage, corn for grain, corn silage, potatoes, tobacco, fruits, vegetables; fall plowing, planting; maintaining machinery; caring for livestock.

PUERTO RICO: Data not available.

SOUTH CAROLINA: Temperatures 2° below; normal in upper Piedmont to 4 to 5° below normal near south coast. No precipitation.

Days suitable for fieldwork 6.2. Soil moisture 19% very short, 66% short, 15% adequate. Cotton 63% poor, 37% fair, 87% open bolls, 80% 1989, 86% avg.; 27% harvested, 5% 1989, 14% avg. Soybeans 22% poor, 55% fair, 23% good, 29% leaves turning, 38% 1989, 33% avg.; 6% shedding leaves, 15% 1989, 13% avg.; 6% matured, 0% 1989, 7% avg. Corn poor to fair, 91% harvested, 74% 1989, 79% avg. Sorghum fair, 56% harvested, 36% 1989, 39% avg. Tobacco 52% stalks destroyed, 54% 1989, 57% avg. Peanuts fair, 23% harvested, 33% 1989, 21% avg. Pastures 17% poor, 64% fair, 19% good.

SOUTH DAKOTA: Temperatures 0 to 9° above normal. Extremes 22°; 99°. Precipitation generally less than 0.10 in. Maximum 0.19 in. Harvest season precipitation 0.50 in. to 1.00 in. above normal Black Hills to northeast, 0.50 in to 1.50 below normal south central, southeast. Rainfall 2.14 in. below to 1.61 in. above normal. Growing degree days 481 units above to 30 units below normal.

Days suitable for fieldwork 6.1. Subsoil 23% critically short, 59% short, 18% adequate. Topsoil 26% critically short, 53% short, 21% adequate. Range, pasture 4% very poor, 14% poor, 46% fair, 28% good, 3% excellent. Other crop mostly good. Frost in all regions. Maturity, harvest ahead of normal. Some soybeans green when frost hit. Slow emergence of winter grains in dry soil. Corn borer, aphid, weed problems. Major activities: Row crop harvest, spraying, working, moving cattle, fencing.

TENNESSEE: High pressure dominated State most of week, producing fair weather. Cold front 30th produced scattered, very light showers. Temperatures, precipitation below normal statewide.

Days suitable for fieldwork 5.7. Soil moisture 8% very short, 42% short, 50% adequate. Corn 88% mature, 94% 1989, 93% avg., 74% harvested for silage, 92% 1989, 92% avg., 38% harvested for grain, 40% 1989, 45% avg. Cotton 90% open bolls, 78% 1989, 88% avg., 22% harvested, 8% 1989, 24% avg.; 3% very poor, 16% poor, 71% fair, 10% good. Sorghum 84% mature, 97% 1989, 91% avg., 28% harvested, 68% 1989, 65% avg. Soybeans 34% shedding leaves, 42% 1989, 45% avg., 18% mature, 18% 1989, 20% avg.; 2% very poor, 23% poor, 59% fair, 16% good. Burley tobacco 94% harvested, 90% 1989, 92% avg. Dark fired tobacco 94% harvested, 96% 1989, 91% avg. Dark air cured Tobacco 94% harvested, 96% 1989, 91% avg. Pastures 4% very poor, 11% poor, 52% fair, 32% good; 1% excellent. Cattle 2% poor, 38% fair, 57% good, 3% excellent. Fall seeding; harvesting tobacco, corn, sorghum, cotton, tobacco main activities.

TEXAS: High pressure kept weather stable large part State during past week. Dry conditions centered southeastern part, extended over much north, southern State. Temperatures slightly cool early week, warming occurred during week. Only above normal rainfall High Plains, Trans Pecos.

Rainfall below normal over rest of State. Temperature at or below normal.

Crops: Corn harvest continued Plains good yields. Weather few delays, damp mornings only real slowdown. Harvest almost complete northeast. Grain sorghum harvest increasing slightly Plains, fields continued mature. Irrigated yields good. Dryland yields mostly below normal. Rains slowed harvest some Hill Country. Mature fields suffer losses isolated heavy rains. Sorghum turning color 99%, 93% 1989, 96% avg. Cotton good maturing progress last week with mild temperatures. Many producers preparing for harvest, some harvest underway isolated areas. Recent rains Cross Timbers helped later bolls finish out. Harvest continued Blacklands, some harvest still continuing central. Damp conditions hindered maturing Trans Pecos. Harvest near completion Upper Coast, south. Milder, open weather allowed small grain producers increase planting activities. Emergence Plains slowed by dry conditions. Planting operations increased Blacklands, central. Armyworms affecting some emerged fields. Cooler temperatures early week aided emergence central. Soybean harvest increased Plains, more fields reached maturity. Harvest continued Blacklands, yields remained poor. Harvest continued Upper Coast. Later fields need rain some insect problems. Rice harvest continued wind down Upper Coast. Last fields being drained. Peanut harvest beginning some dryland fields Cross Timbers, fields dried from last week's rain. Early yields looked good. Harvest continued Blacklands. Harvest beginning Hill Country as conditions allowed. Rain on dug peanuts parts South central may hurt quality. Sugarbeet harvest getting underway High Plains. Other field crops: Peanuts 19% harvested, 7% 1989, 14% avg. Pecans 1% harvested, 0% 1989, 2% avg. Soybeans harvested 35%, 36% 1989, 28% avg. Sugarbeets 1% harvested, 0% 1989, 1% avg. Sunflowers harvested 21%, 13% 1989, 20% avg. Oats planted 24%, 26% 1989, 31% avg.

Commercial Vegetables: Rio Grande Valley, spring planting beginning. Production fall vegetables increasing. Additional citrus being pushed out. San Antonio Winter Garden, planting operations resumed fields dried. Eastern State, sweetpotato harvest continued. Fall planting continued. High Plains, production beginning to wind down many crops. Trans Pecos, pepper harvest slowed by wet conditions. Pecan harvest slowed by wet conditions south following last weeks rain. Nuts cracking open many areas. Harvest beginning central.

Range and Livestock: Ranges, pastures continued improve most areas. Armyworm activity increased, producers increased spraying activity. Forage supplies improved many areas. Stockers continued arrive Plains. Livestock good across State. Pastures Lower Valley could use more rain. Range, pasture 4% very poor, 8% poor, 45% fair, 35% good, 8% excellent.

UTAH: Temperatures 5° above normal in northern half, 2° above normal in southern half. Precipitation was light to heavy throughout State, except for Uinta Basin which was zero.

Days suitable for fieldwork 5.9. Soil moisture 85% short, 15% adequate. Major activities: Land preparation, planting fall crops, harvesting alfalfa hay, picking apples. Winter wheat 66% seeded, 64% 1989, 75% avg. Third crop alfalfa hay 92% cut, 96% 1989, 85% avg. Fourth crop alfalfa cutting underway in some areas. Alfalfa seed harvest also ongoing. Corn for grain harvest underway most areas. Apple coloring delayed Kane, Garfield Counties. Onion harvest ongoing. Range, pasture 6% very poor, 41% poor, 46% fair, 7% good. Cattle, sheep being brought off summer ranges.

VIRGINIA: Temperatures below normal. Precipitation was below normal with most receiving less than 0.75 in.

Days suitable for fieldwork 6.1. Topsoil 13% very short, 38% short, 42% adequate, 7% surplus. Corn for grain 43% harvested, 43% 1989, 45% avg. Corn silage 70% harvested, 58% 1989, 71% avg. Corn mature 88%, 89% 1989, 84% avg. Soybeans 1% harvested, 1% 1989, 1% avg. Soybeans 1% very poor, 13% poor, 41% fair, 44% good, and 1% excellent. Peanuts 28% dug, 23% 1989, 12% avg. Peanuts combined 15%, 5% 1989, 7% avg. Peanut 25% poor, 50% fair, 25% good. Flue tobacco 86% harvested, 85% 1989, 76% avg. Fire tobacco harvested 100%, 100% 1989, 85% avg. Burley 80% harvested, 89% 1989, 85% avg. Sun tobacco 94% harvested, 90% 1989, 91% avg. Apple, sweetpotato harvest continued. Oats seeded 25%, 12% 1989, 18% avg. Barley 16% seeded, 12% 1989, 15% avg. Wheat 7% seeded, 2% 1989, 4% avg. Pasture 2% very poor, 20% poor, 28% fair, 43% good, 7% excellent. Livestock mostly fair to good. Harvesting vegetables.

WASHINGTON: Temperatures 5 to 10° above normal, east; 2 to 6° above normal west. Precipitation none.

Days suitable for fieldwork 7.0 Soil moisture 64% short, 36% adequate. Range, pasture 2% very poor, 42% poor, 31% fair, 25% good. Hay, other roughage 7% short, 91% adequate, 2% surplus. Winter wheat planted 72%, 69% 1989, 65% avg. Winter wheat emerged 40%, 37% 1989, 41% avg. Potatoes harvested 48%, 58% 1989, 49% avg. Dry beans harvested 48%, 57% 1989, 73% avg. Corn silage harvested 60%, 70% 1989, 66% avg. Alfalfa hay 3rd cutting 95%, 93% 1989, 94% avg. Fall seeding, and fertilizer application continued. Moisture is needed in many areas. Most of the emerged wheat was in good condition. The apple harvest continued. Cattle were beginning to come off mountain ranges, were being placed on stubble.

WEST VIRGINIA: Temperature 60°, 2° below normal. Extremes 32°; 84°. Precipitation 0.41 in., 0.16 to 0.67 in. below normal.

Days suitable for fieldwork 5.2. Soil moisture 22% short, 78% adequate. Pasture 18% fair, 72% good, 10% excellent. Cattle, sheep good. Corn good; 89% dough, 42% mature, 18% harvested. Hay good; second cutting 89% complete, third cutting 73% complete. Wheat 27% planted. Apples poor. Tobacco good to fair; 89% harvested. Farm activities: Hay, tobacco harvest, chopping silage.

WISCONSIN: Temperature 57°, 1° below normal. Extremes 28°; 86°. Precipitation trace to 0.50 in.

Days suitable for fieldwork 6.5. Soil moisture 12% short, 74% adequate, 14% surplus. Pasture 3% poor, 10% fair, 73% good, 4% excellent. General crops 8% fair, 83% good, 9% excellent. Soybean 87% of normal. Soybeans 47% shed, 58% 1989, 61% avg. Corn 1% poor, 7% fair, 79% good, 13% excellent; 41% mature, 69% 1989, 70% avg. Corn for grain 2% harvested, 3% 1989, 7% avg. Corn silo filling 23% complete, 41% 1989, 46% avg. Third cut hay 70% complete, 77% 1989, 73% avg. Fall tillage 10% complete, 12% 1989, 13% avg.

WYOMING: Temperatures above normal. Precipitation below normal.

Days suitable for fieldwork 7.0. Topsoil 45% short, 55% adequate. Dry beans 95% windrowed, 80% 1989, 70% avg.; 70% combined, 60% 1989, 65% avg. Corn 5% dough, 5% 1989, 10% avg.; 35% dented, 35% 1989, 40% avg.; 45% mature, 55% 1989, 45% avg.; 15% harvested, 5% 1989, 5% avg. Corn silage 70% harvested, 85% 1989, 80% avg. Sugarbeets 10% dug, 25% 1989, 15% avg. Sugar content 15.2%. Potatoes 60% harvested, 80% 1989, 55% avg. 1991 winter wheat 90% seeded, 90% 1989, 85% avg.; 55% emerged, 55% 1989, 55% avg.; mostly fair to good. Prospects for fall grazing mostly good, winter grazing fair to good. Stockwater mostly adequate.

SEPTEMBER 1990

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

International Weather and Crop Summary

HIGHLIGHTS

September 23-29, 1990

USSR ... In Western USSR, dry weather in the south helps summer crop harvests and winter grain planting. Continued unseasonably cool, wet weather in the north slows winter grain establishment. In the New Lands, warm, dry weather allows rapid spring grain harvesting.

EUROPE ... Occasional rain and cool temperatures continue fall fieldwork delays in the north. Scattered rain provides preplanting moisture for winter grains in sections of the south.

EASTERN ASIA ... Warm, mostly dry weather favors fall harvest in the North China Plain. Typhoon Gene brings further heavy rain and flooding to southern Japan.

SOUTH ASIA ... Widespread showers, with some local flooding, continue over most primary summer crop areas.

SOUTHEAST ASIA ... Showers over Indochina improve conditions for immature grains but cause more local flooding.

SOUTH AMERICA ... Mild weather and scattered showers cover Argentina's wheat areas. Wetness continues in south-central Brazil.

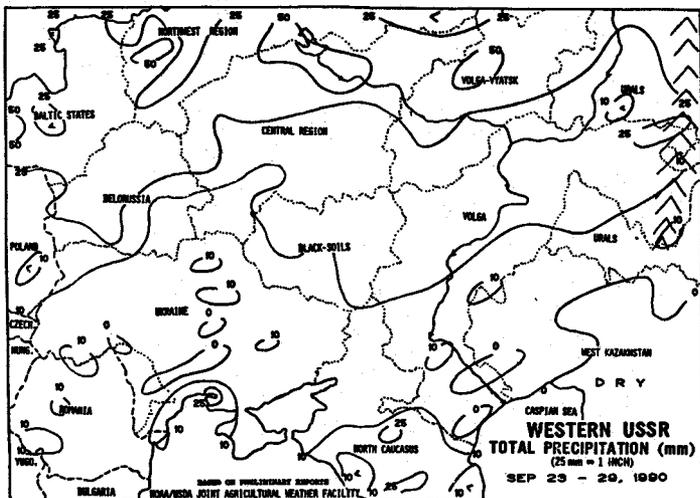
AUSTRALIA ... Rain benefits winter grains across the south. Dryness continues in the east.

CANADA ... Grain and oilseed harvests progress.

MEXICO ... Dry weather promotes northwestern wheat planting. Widespread, variable showers help immature crops but slow harvesting elsewhere.

COUNTRY CITY	TEMPERATURE					PRECIPITATION		
	(C)					(MM)		
	AVG	AVG	HI	LO	AVG	DPART	DPART	
	MAX	MIN	MAX	MIN	F/NRM	TOTAL	F/NRM	
NORWAY OSLO	14	5	18	-5	9	-0.2	37.4	-54.5
SWEDEN STOCKHOLM	13	8	20	0	10	-1.7	207.4	154.7
FINLND HELSINKI	12	6	16	1	9	-1.8	83.7	14.5
U KING GLASGOW	15	8	19	2	12	-1.4	60.8	-37.0
EDINBURGH	16	8	20	2	12	-0.6	32.4	-25.8
BIRMINGHAM	18	9	24	3	14	0.3	39.6	-16.4
LONDON	19	8	25	3	14	-0.1	42.8	-32.5
IRELND DUBLIN	17	9	23	3	13	-0.2	17.2	-56.2
ICELND REYKJAVIK	9	5	13	0	7	-1.3	125.2	57.8
DENMRK COPENHAGEN	16	9	21	3	13	-1.2	103.9	41.9
LUXEMB LUXEMBOURG	17	8	22	3	13	-1.4	35.2	-25.3
SWITZL ZURICH	18	10	23	5	14	0.1	97.4	7.0
GENEVA	22	10	27	4	16	0.8	48.0	-42.1
FRANCE PARIS	21	9	28	2	15	-0.3	25.9	-23.5
STRASBOURG	19	9	24	3	14	-0.6	20.2	-29.9
BOURGES	22	10	27	4	16	0.1	20.4	-43.6
BORDEAUX	26	13	30	8	19	2.4	25.0	-57.3
TOULOUSE	26	14	30	8	20	2.1	15.3	-40.7
MARSEILLE	25	15	28	8	20	-0.1	17.8	-39.5
SPAIN VALLADOLID	28	14	32	9	21	3.1	26.6	-3.2
MADRID	29	15	34	12	22	1.8	25.7	-7.5
SEVILLE	33	20	38	16	26	2.4	1.5	-16.4
E GRMY LEIPZIG	17	10	22	5	13	-0.7	69.8	24.6
DRESDEN	16	10	23	5	13	-1.4	59.6	11.6
W GRMY HAMBURG	16	9	20	3	13	-0.7	138.3	70.2
BERLIN	16	10	22	6	13	-1.2	76.4	26.2
DUSSELDORF	17	10	20	6	14	-1.5	60.7	-1.3
STUTTGART	18	8	23	4	13	-1.3	47.1	-12.6
NURNBERG	17	8	21	2	13	-1.1	72.5	24.1
MUNICH	18	9	24	3	13	-0.5	129.6	56.5
AUSTRI VIENNA	18	10	23	4	14	-1.5	63.6	11.5
INNSBRUCK	19	9	28	5	14	-0.3	71.4	-8.9
CZECH PRAGUE	16	8	23	2	12	-1.4	31.3	-8.8
POLAND WARSAW	15	8	30	1	11	-1.8	77.1	36.0
LODZ	15	8	23	3	12	-1.4	64.7	11.6
KATOWICE	15	8	23	4	12	-1.3	121.5	69.4
PRZEMYSL	16	9	29	2	12	-1.5	61.4	5.8
HUNGAR BUDAPEST	20	10	30	3	15	-1.5	74.8	38.1
YUGOSL SARAJEVO	21	10	27	0	15	1.1	8.6	-93.5
ROMANI BUCHAREST	24	10	34	2	17	-0.8	15.5	-22.0
BULGAR SOFIA	22	10	31	5	16	-0.3	46.4	8.8
ITALY MILAN	25	13	29	8	19	0.8	0.1	-68.6
VERONA	24	13	27	8	18	-0.2	21.1	-43.9
VENICE	23	15	27	9	19	-0.2	19.1	-43.3
GENOA	25	19	29	15	22	-0.1	37.2	-77.6
ROME	26	17	28	12	22	0.7	49.5	-17.8
NAPLES	27	17	30	14	22	1.7	67.9	-19.4
GREECE THESSALONIKA	27	16	33	10	21	-0.8	7.8	-24.7
LARISSA	28	14	35	6	21	-1.0	7.9	-30.8
ATHENS	28	20	33	14	24	-0.6	8.9	-5.5
TURKEY ISTANBUL	24	16	30	10	20	0.3	59.7	18.7
ANKARA	24	7	31	2	15	-2.5	40.1	3.1
CYPRUS LARNACA	30	19	33	16	25	-0.5	0.1	-5.0
USSR TALLINN	12	6	17	0	9	-2.2	68.5	-2.3
LENINGRAD	12	7	20	0	9	-1.8	65.6	6.4
KAUNAS	14	8	26	2	11	-1.2	121.7	67.3
MINSK	13	7	19	3	10	-1.7	161.0	111.9
KAZAN	14	7	19	2	10	-0.8	67.1	25.1
MOSCOW	12	7	19	1	10	-1.2	100.4	37.1
SVERDLOVSK	12	5	19	-2	9	-1.1	74.6	38.8
OMSK	16	6	33	1	11	0.2	23.1	-1.7
KUSTANAY	18	7	33	-2	13	0.7	27.6	1.1
KRASNOYARSK	14	5	25	-3	9	0.4	52.6	10.7
NOVOSIBIRSK	14	6	23	2	10	0.1	38.1	5.1
BARNAUL	16	6	25	2	11	-0.1	35.2	7.2
KHABAROVSK	18	8	27	2	13	-0.1	68.4	-28.7
VLADIVOSTOK	19	13	24	7	16	0.8	151.2	17.3
KIEV	16	9	23	3	13	-0.9	54.7	6.7
LVOV	15	7	29	0	11	-1.9	100.3	46.0
KIROVOGRAD	19	9	29	0	14	-0.2	33.3	-2.7

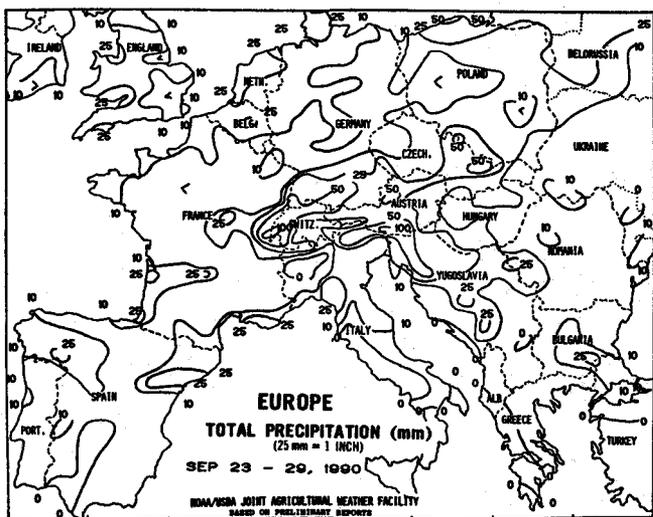
COUNTRY CITY	TEMPERATURE (C)					PRECIPITATION (MM)		COUNTRY CITY	TEMPERATURE (C)					PRECIPITATION (MM)						
	September 1990	AVG MAX	AVG MIN	HI	LO	DPART	F/NRM		September 1990	AVG MAX	AVG MIN	HI	LO	DPART	F/NRM	September 1990	AVG MAX	AVG MIN	HI	LO
USSR	ODESSA	20	13	27	6	17	-0.3	76.7	36.9	TANZAN	DAR ES SALAAM	30	19	32	11	24	0.0	19.1	-11.3	
	YALTA	22	15	29	10	19	-0.4	63.8	29.8	GABON	LIBREVILLE	27	23	29	22	25	-0.5	40.0	-66.1	
	VORONEZH	15	7	22	2	11	-2.1	188.6	145.1	TOGO	LOME	29	24	30	21	26	0.7	109.4	61.5	
	SARATOV	16	9	20	1	13	-0.1	68.5	39.8	B FASO	OUAGADOUGOU	33	23	35	19	28	1.3	105.5	-48.6	
	KHARKOV	17	9	25	4	13	-1.0	29.5	-7.5	IVRY C	ABIDJAN	28	23	30	22	25	0.7	13.1	-51.3	
	VOLGOGRAD	20	10	28	1	15	-0.3	42.8	21.5	MOZAMB	MAPUTO	27	15	35	9	21	-0.1	0.6	-46.3	
	ROSTOV	21	12	29	3	16	0.0	79.6	45.5	ZAMBIA	KABWE	29	14	35	10	21	-0.8	0.7	-0.1	
	ASTRAKHAN	25	13	32	5	19	1.9	17.4	-2.8	ZIMBAB	HARARE	25	12	32	6	18	-0.4	0.7	-9.5	
	KRASNODAR	24	12	31	7	18	0.5	59.6	30.6	S AFRI	PRETORIA	26	12	31	4	19	1.3	7.3	-15.2	
	ORENBURG	20	7	34	-1	14	0.0	18.2	-10.2		KROONSTAD	26	7	31	0	16	0.4	3.8	-21.2	
	TSELINOGRAD	19	7	32	-1	13	1.9	32.4	8.1		JOHANNESBURG	23	8	29	-1	15	-0.1	7.3	-18.3	
	KARAGANDA	21	7	33	-2	14	1.6	18.4	0.6		BETHAL	24	6	29	-2	15	0.2	5.1	-19.9	
	TBILISI	27	16	33	12	22	2.5	29.7	-15.2		DURBAN	22	15	28	10	19	-0.1	49.4	-20.1	
	TASHKENT	31	13	37	9	22	2.0	0.1	-2.0		CAPE TOWN	20	8	31	2	14	0.5	26.8	-10.7	
	ASHKHBAD	34	16	45	11	25	2.0	0.1	-5.4	CANADA	TORONTO	21	10	28	3	15	-0.2	43.5	-20.0	
SYRIA	DAMASCUS	34	14	37	8	24	0.0	0.1	0.1		MONTREAL	19	9	27	3	14	-0.6	79.8	-8.6	
ISRAEL	JERUSALEM	27	16	32	13	21	-0.8	0.1	0.1		WINNIPEG	21	7	33	-2	14	1.6	31.2	-22.1	
PAKIST	KARACHI	33	25	34	23	29	0.1	8.3	-23.2		REGINA	23	6	34	-3	15	2.9	6.6	-30.1	
INDIA	AMRITSAR	33	24	37	19	28	-0.3	166.5	71.9		SASKATOON	22	5	32	-3	13	2.1	6.7	-24.7	
	NEW DELHI	33	26	37	24	29	0.0	273.5	147.9		LETHBRIDGE	25	7	31	-1	16	3.4	5.1	-32.1	
	AHMEDABAD	32	25	34	23	29	-0.1	127.3	-49.7		CALGARY	22	6	30	-2	14	3.5	7.8	-30.4	
	INDORE	29	21	32	18	25	-0.2	303.5	91.8		EDMONTON	20	8	28	1	14	2.9	14.3	-24.9	
	CALCUTTA	32	26	36	24	29	0.2	462.0	157.7		VANCOUVER	20	12	24	7	16	1.8	43.2	-23.9	
	VERAVAL	31	24	32	22	28	0.4	21.5	-85.4	MEXICO	GUADALAJARA	24	16	28	14	20	-0.4	273.7	114.0	
	BOMBAY	30	25	31	23	27	0.4	563.7	254.4		MEXICO CITY	24	13	28	12	18	2.0	192.1	75.0	
	POONA	29	21	31	18	25	-0.4	38.4	-79.3		ACAPULCO	33	25	36	23	29	1.4	79.5	-346.1	
	BEGAMPET	31	23	35	21	27	0.9	99.8	-82.8	BERMUD	ST. GEORGES	29	24	30	21	26	0.7	138.6	-23.6	
	MADRAS	35	25	37	20	30	0.3	181.9	63.1	BAHAMA	NASSAU	32	24	34	17	28	0.8	38.0	-137.4	
	MANGALORE	30	23	31	22	27	0.4	224.3	-42.7	CUBA	HAVANA	31	24	33	21	28	0.6	136.8	-7.6	
H KONG	HONG KONG	30	26	34	17	28	0.6	417.3	96.8	JAMAIC	KINGSTON	34	26	35	24	30	1.5	34.3	-78.1	
N KREA	PYONGYANG	23	13	28	5	18	-0.6	410.5	260.4	P RICO	SAN JUAN	33	25	34	24	29	0.9	58.9	-93.3	
S KREA	SEOUL	26	17	31	10	22	1.2	444.7	302.7	GUADEL	RAIZET	32	23	34	21	28	1.1	56.9	-105.2	
JAPAN	SAPPORO	23	15	33	11	19	2.2	128.0	-14.5	MARTNQ	LAMENTIN	32	24	34	21	28	2.0	44.1	-167.7	
	NAGOYA	29	22	35	17	26	2.7	521.5	312.3	BARBAD	BRIDGETOWN	31	25	32	22	28	0.6	68.8	-76.9	
	TOKYO	28	22	34	17	25	2.3	291.0	98.0	TRINID	PORT OF SPAIN	34	24	37	22	29	2.2	52.7	-133.4	
	YOKOHAMA	28	22	33	17	25	2.2	253.0	53.9	COLOMB	BOGOTA	19	6	21	1	13	-0.1	88.3	30.9	
	KYOTO	29	22	35	15	25	2.6	364.7	163.1	VENEZU	CARACAS	33	26	35	24	29	1.8	67.9	17.9	
	OSAKA	30	23	35	17	26	2.2	460.5	297.6	F GUIA	CAYENNE	32	23	33	22	28	1.3	2.0	-63.5	
THAILN	PHETCHABUN	32	24	34	22	28	0.9	192.1	-39.9	BRAZIL	FORTALEZA	30	24	32	22	27	0.0	35.7	9.7	
	BANGKOK	33	25	35	24	29	0.9	255.0	-86.8		RECFE	28	21	29	20	25	-0.4	131.3	45.2	
MALAYS	KUALA LUMPUR	31	24	34	23	28	1.2	177.6	-7.8		BELO HORIZONTE	26	16	30	12	21	-0.1	37.0	1.3	
VIETNM	HANOI	32	26	36	24	29	1.2	151.5	-102.5		CAMPO GRANDE	29	17	34	5	23	0.0	321.5	259.5	
CHINA	HARBIN	20	8	29	0	14	0.0	58.1	-8.2		FRANCA	25	15	31	7	20	-0.3	36.0	-29.0	
	HAMI	29	9	36	0	19	0.6	2.0	-1.2		RIO DE JANEIRO	23	19	34	14	21	-1.1	124.2	71.2	
	LANCHOW	25	13	29	8	19	3.0	18.1	-27.6		LONDRINA	25	13	33	4	19	-1.2	98.0	-6.2	
	BEIJING	25	16	33	8	21	1.2	75.8	18.7		SANTA MARIA	20	11	28	2	16	-1.2	119.7	-31.2	
	TIENTSIN	26	18	33	11	22	1.0	71.3	27.9		PORTO ALEGRE	21	13	27	7	17	0.3	235.7	111.7	
	LHASA	19	8	24	2	13	-0.5	94.3	29.8	PERU	LIMA	20	15	27	13	17	0.9	0.8	-3.5	
	KUNMING	23	15	27	6	19	1.3	117.0	-2.6	BOLIVI	LA PAZ	15	-1	19	-5	7	-1.2	24.2	-6.9	
	CHENGCHOW	27	17	33	10	22	1.6	58.9	-12.2	CHILE	SANTIAGO	19	5	30	-2	12	0.6	5.8	-18.0	
	YEHCHANG	31	22	35	17	26	3.1	4.0	-106.5	ARGENT	IGUAZU	24	12	32	2	18	***	244.0	***	
	HANKOW	29	22	38	15	25	2.2	38.1	-42.7		FORMOSA	23	14	34	4	19	-1.2	142.6	60.6	
	CHIHKIANG	30	21	35	17	25	2.1	106.3	47.6		CERES	22	8	35	0	15	-1.3	14.5	-27.0	
	SHANGHAI	27	21	32	15	24	0.5	128.2	-22.4		CORDOBA	21	7	35	-2	14	-1.0	5.4	-29.0	
	NANCHANG	29	23	34	17	26	0.5	128.0	52.0		RIO CUARTO	18	7	29	-1	13	-0.9	16.2	-15.5	
	TAIPEI	31	25	34	21	28	1.8	422.0	201.0		ROSARIO	19	7	29	-2	13	-0.8	10.4	-43.3	
	CANTON	32	25	37	23	29	1.7	134.7	-47.1		BUENOS AIRES	18	7	28	-4	13	-0.3	37.1	-25.4	
	NANNING	33	25	40	23	29	2.6	102.1	-16.8		SANTA ROSA	18	6	29	-3	12	-0.5	70.4	34.5	
CNRY I	LAS PALMAS	29	22	32	18	25	1.6	0.1	-5.7		TRES ARROYOS	15	4	25	-5	10	-0.4	29.1	-38.2	
MOROCC	CASABLANCA	27	20	32	17	23	1.7	0.5	-6.1	MIDW I	MIDWAY ISLAND	30	25	32	23	28	1.7	31.8	-84.9	
	MARRAKECH	33	20	42	17	27	2.0	2.6	-2.8	N CALD	NOUMEA	24	17	26	15	21	0.1	38.4	-8.8	
ALGERI	ALGER	33	21	39	16	27	4.0	7.5	-23.2	FIJI	NAUSORI	26	21	30	16	23	0.3	200.9	15.2	
	BATNA	31	17	36	11	24	4.0	13.9	-7.2	SAMOA	PAGO PAGO	30	24	32	21	27	0.8	96.1	-73.7	
TUNISI	TUNIS	33	21	38	16	27	2.9	0.1	-37.1	TAHITI	PAPEETE	30	22	31	21	26	1.3	50.8	-5.7	
NIGER	NIAMEY	36	25	39	20	30	2.1	112.0	15.9	N ZEAL	AUCKLAND	16	8	20	4	12	-0.8	82.2	-16.2	
MALI	TIMBUKTU	40	27	43	21	33	2.4	9.1	-22.4	PA N G	PORT MORESBY	28	23	30	20	26	-0.9	71.0	31.2	
	BAMAKO	32	22	34	20	27	0.8	194.4	-23.9	AUSTRL	DARWIN	32	22	35	20	27	-1.0	0.1	-11.8	
MAURIT	NOUAKHOTT	36	27	43	22	31	2.1	19.0	-16.4		MOREE	22	8	28	2	15	-0.5	15.9	-18.3	
SENEGL	DAKAR	32	26	40	22	29														



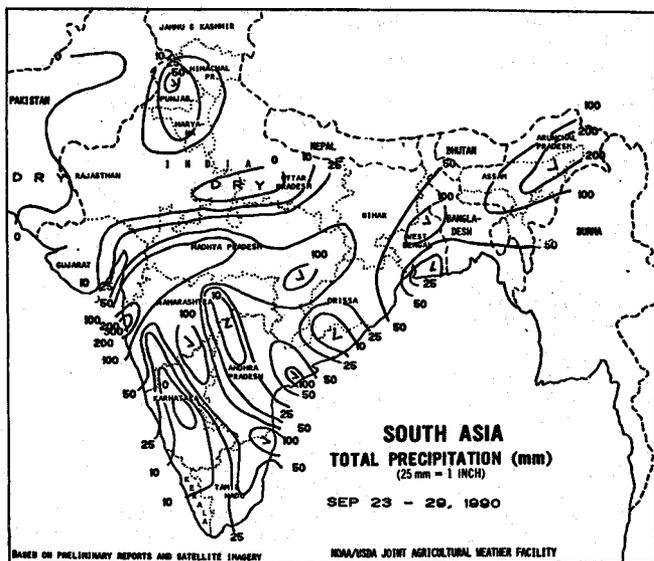
USSR ... In Western USSR, several days of dry weather over the Ukraine, North Caucasus, and the lower Volga helped corn, sugarbeet, and sunflower harvests, as well as winter grain planting. Continued cool, showery weather over the Baltic States, Belorussia, and the Central Region, created further delays in sugarbeet and potato harvests, and slowed winter grain establishment. Precipitation amounts ranging from 16 to 40mm in these areas were accompanied by unseasonably cool weather (weekly average temperatures ranging from 1 to 3 degrees Celsius (C) below normal).



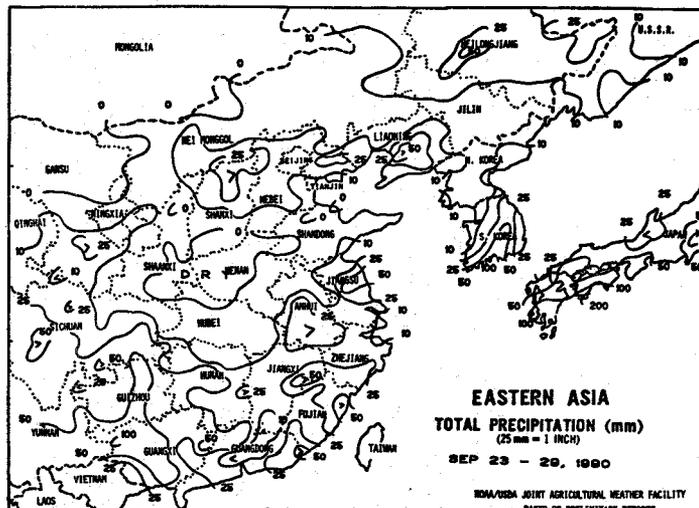
In the New Lands, unseasonably warm, dry weather covered most of the region, allowing the spring grain harvest to progress at a rapid pace. Usually, the spring grain harvest is virtually complete by the end of September. Precipitation amounts in Kazakhstan, West Siberia, and Altay Kray Oblast generally ranged from 2 to 10mm. Greatest amounts of rain (10-28mm) covered crop areas adjacent to the Ural mountains and East Siberia, causing some delays in harvest. In South Central USSR cotton areas, continued unseasonably warm, dry weather favored boll maturation and helped harvesting. Usually, the cotton harvest begins in mid-September and often extends well into November.



EUROPE ... Occasional rain (10-20mm, with scattered amounts greater than 20mm) continued across much of northern Europe, delaying harvest of summer crops and winter grains planting. Delays were lengthened by below-normal temperatures (1-2 degrees C below normal) in most of the region. Scattered, heavy rain (40-60mm, with isolated amounts up to 80mm) on already wet soils in sections of the Netherlands, northern Germany, and Denmark may have caused localized flooding. In the south, scattered rain (5-20mm, with isolated amounts greater than 20mm) caused mostly minor delays in summer crop harvest but provided beneficial soil moisture prior to winter grains planting. However, persistent above-normal rainfall is still needed in most growing areas to alleviate the effects of long-term dryness.

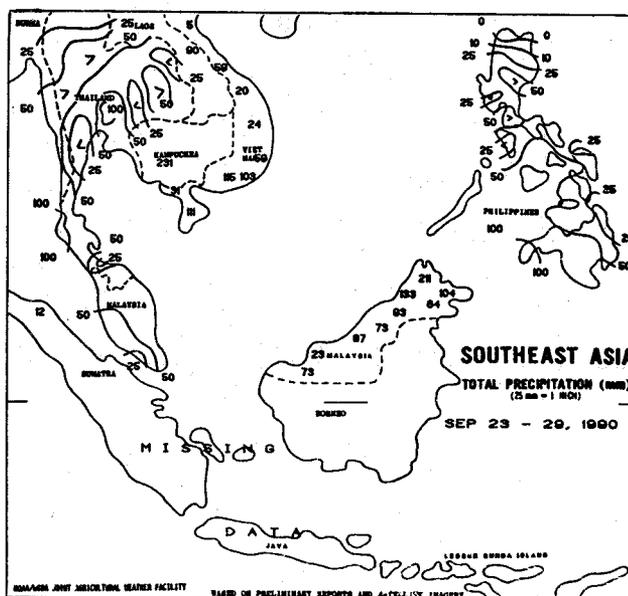


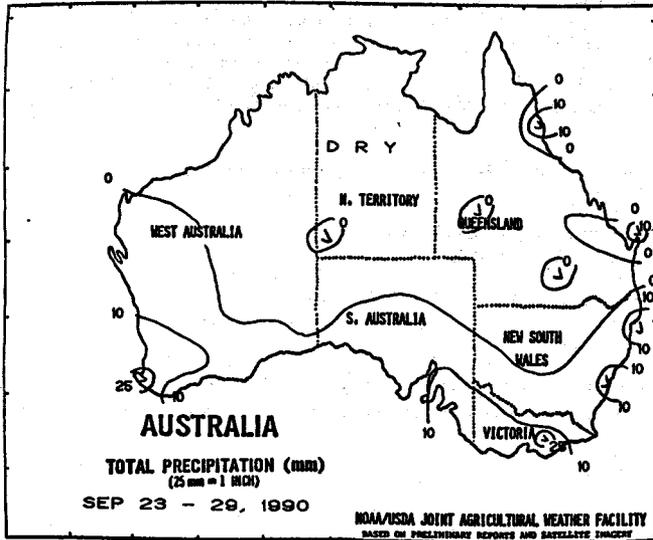
SOUTH ASIA ... Highly variable rainfall (10-100mm or more) maintained favorable conditions for most immature summer crops in central and southern India. However, pockets of drier weather (10mm or less) persisted over Karnataka and portions of Andhra Pradesh and Maharashtra. Heavy rain (100-150mm) for the second week in western Madhya Pradesh caused more local flooding, and local heavy showers (182mm) in southern Maharashtra possibly damaged flowering cotton. Widespread showers maintained adequate to abundant irrigation reserves in the eastern rice regions, but excessive rain (100-200mm or more) caused flooding in Bangladesh and India's Assam state. In northern India, lingering rain (10-50mm) improved local irrigation reserves for wheat planting but maintained unfavorably wet conditions for maturing cotton.



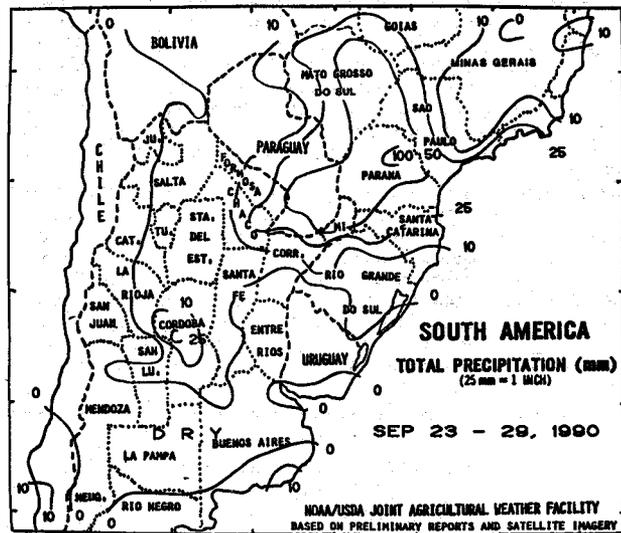
EASTERN ASIA ... Mostly dry and warm (mean weekly temperatures 2-3 degrees C above normal) weather continued over much of Shandong, Henan, northern Anhui, and southern Hebei, allowing rapid progress of corn, soybeans, and early rice harvest. In contrast, widespread rain (10-40mm, with isolated amounts greater than 40mm) and summer crop harvest delays persisted in Manchuria for the second consecutive week. In the south, moderate to heavy rain (15-60mm, with isolated amounts greater than 60mm) favored reproductive to filling late-crop rice in sections of Guangxi, Guangdong, Guizhou, Hunan, and Jiangxi. However, long-term soil moisture still remains below normal in many areas. Typhoon Gene struck Japan's southern Ryukyu, Kyushu, and Shikoku islands on the 28th and 29th, following a path just west of that taken by Typhoon Flo the previous week. The storm brought minimal typhoon-force winds (110-130 km/hr), heavy rains (50-250mm, with isolated amounts up to 400mm), and renewed flooding to many areas.

SOUTHEAST ASIA ... Widespread rain (25-50mm or more) benefited immature rice over Thailand's primary grain regions, but heavy showers (100-184mm) near Bangkok caused local flooding. Temperatures averaged above normal, maintaining higher-than-usual growth rates. Heavy rain (100-150mm) worsened local flooding along the western coast of peninsular Thailand and major rice areas of southern Vietnam. In the Philippines, moderate showers (25-50mm or more) covered most crop regions, improving irrigation reserves for grain plantings. Heavy rain (100mm or more) was limited to local areas of western Mindanao.



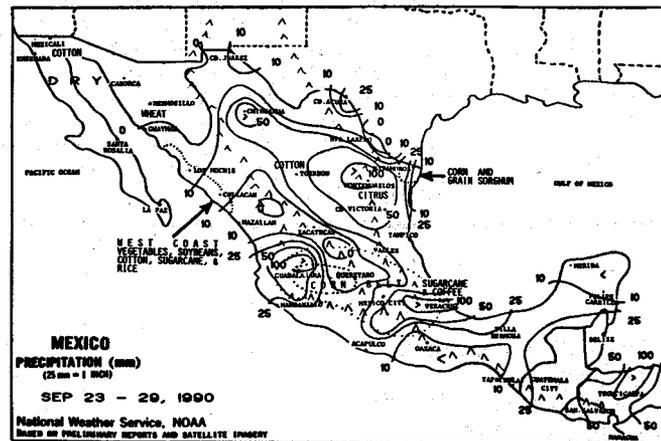


AUSTRALIA ... Light to moderate rain (5-15mm, with isolated amounts greater than 15mm) fell across crop areas of Western Australia, South Australia, and Victoria, benefiting vegetative to heading winter grains. In contrast, mostly dry weather continued across crop areas of northern New South Wales and Queensland, reducing topsoil moisture to abnormally low levels for winter grains. Crop moisture losses were increased by above-normal temperatures (1-3 degrees C above normal) in most eastern growing areas. Persistent dryness in Queensland has also delayed sugarcane planting in eastern coastal areas.



SOUTH AMERICA ... In Argentina, mostly dry weather and seasonable temperatures prevailed over the primary wheat areas of Buenos Aires, eastern La Pampa, and southern portions of Cordoba and Santa Fe. Beneficial showers (5-25mm) were scattered over central and northern Cordoba, but topsoil moisture is deficient or marginal throughout the major corn and wheat areas. Weekly temperatures averaged near normal, improving wheat growing conditions following earlier unseasonable cold weather. In south-central Brazil, locally heavy rain (50-121mm) soaked Parana, southwestern Sao Paulo, and eastern Mato Grosso do Sul. Substantial rain (25-50mm) also fell over southern Paraguay's soybean areas. Northwestern Rio Grande do Sul was also wet (15-30mm or more), while southern Rio Grande do Sul and northern coffee areas in Minas Gerais, where trees are flowering, were mostly dry.

MEXICO ... Dry weather prevailed in northwestern wheat areas, where planting is underway. Widespread showers continued over the remainder of the country, although weekly totals were light (less than 10mm) over most of the west coast farming area, north-central portions of the Southern Plateau, along the southwest coast, and the tip of the Yucatan peninsula. In contrast, locally heavy rain (40-100mm or more) soaked the northeastern mountains, north-central rangelands, and both western and eastern extremities of the Southern Plateau. Late-season rainfall boosted moisture reserves for immature crops but slowed harvesting, which becomes more prevalent during October.



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

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

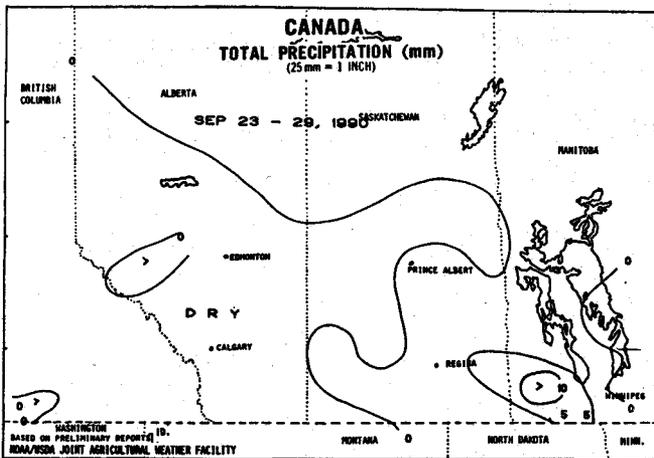
U.S. DEPARTMENT OF COMMERCE

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

Subscriptions (202) 447-7917 . . . **Joyce Houston**

U.S. DEPARTMENT OF AGRICULTURE

Economics Management Staff
Editor **Sharon Lee**
National Agricultural Statistics Service
Agricultural Statistician . . . **Dave Abbe** (202) 447-2157
World Agricultural Outlook Board
Agricultural Weather Analysts . . **Ray Motha** (202) 447-5716
Tom Puterbaugh, Mark Brusberg, and Jeff Andresen.



CANADA ... Dry, warmer-than-normal weather favored rapid harvest progress across the Prairies for most of the week, until late-week showers (1-11mm) caused minor delays in eastern Saskatchewan and Manitoba. Prairie spring wheat and canola harvests are reportedly near completion, while the flaxseed harvest in northern Manitoba and Alberta is about 25 and 70 percent complete, respectively.

NOTICE TO SUBSCRIBERS

As you are probably aware, there has been a major problem in mailing recent issues of the Bulletin. Due to red tape and bureaucratic snafus outside our control, the printing company under the new contract was not able to get second class delivery from the Post Office for issues 35 through 38. This means that all of our September issues were delayed for those readers using the second class option (\$35/year). The back issues were finally all mailed on Saturday, September 29. We believe and hope that all future issues will get mailed and delivered on time. First class issues went out on schedule because they have been handled in our own office and the Postal Service has no special requirements for first class mail. We sincerely regret the delay in getting the Bulletin to you, and will make every effort to ensure that this problem never happens again.

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

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

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USA, \$300

WEEKLY NEWS BULLETIN
SECOND CLASS