

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

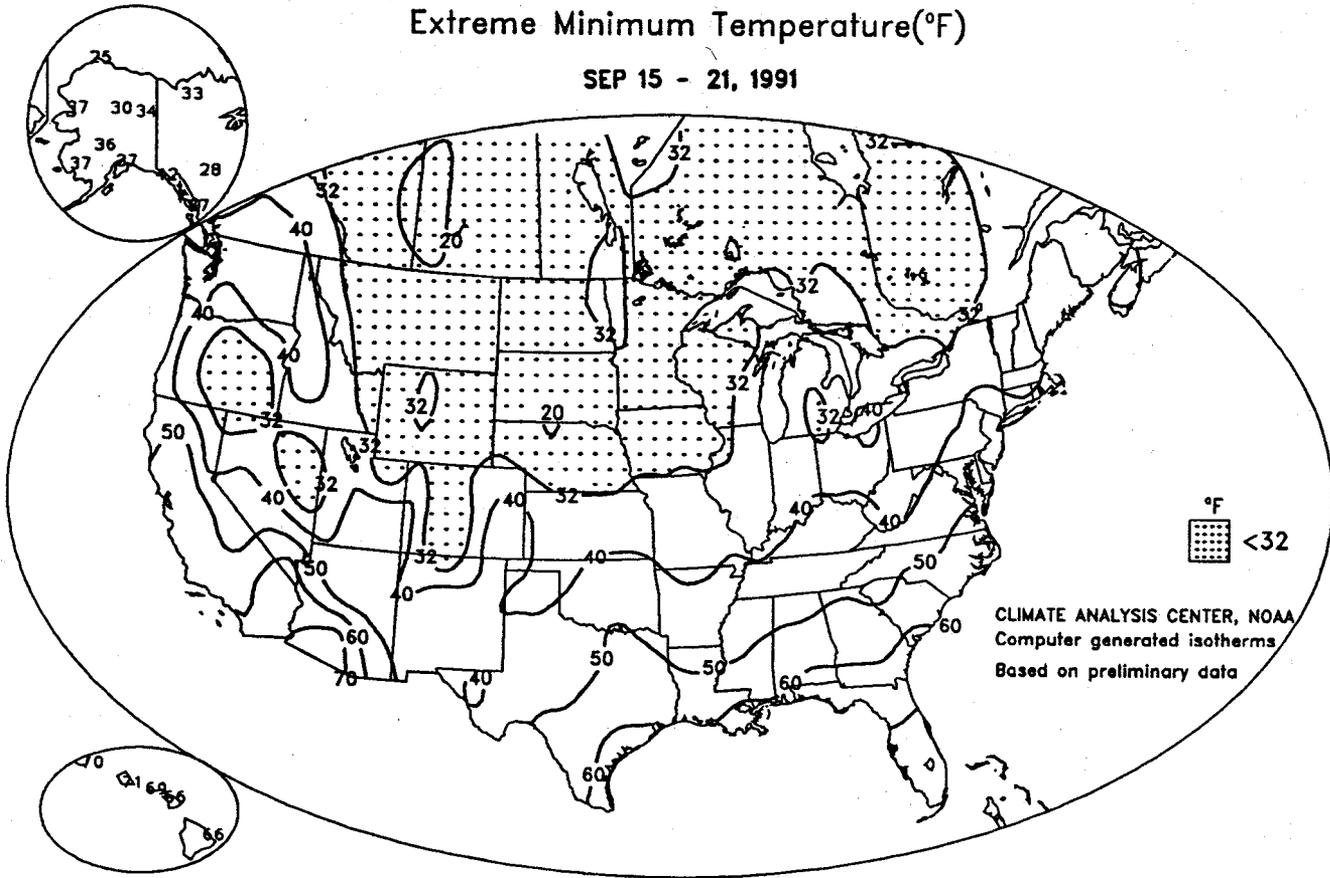
Volume 78, No. 38

Washington, D.C.

September 24, 1991

Extreme Minimum Temperature(°F)

SEP 15 - 21, 1991



CLIMATE ANALYSIS CENTER, NOAA
Computer generated isotherms
Based on preliminary data

HIGHLIGHTS

September 15 - 21, 1991

A Canadian cold front obliterated an early-week heat wave as the Nation's weather pattern made the transition from summer to fall. Record heat in the **East** (70 daily record highs) gave way to record cold in the **Plains** and the **Midwest** (90 daily record lows), while inundating rain fell along the frontal boundary in the **southern Plains**. On Tuesday, temperatures reached the upper 90's as far north as **Baltimore, MD**. **Greer, SC**, weathered its seventh consecutive daily record high. By Thursday, however, sixteen cities and towns in **Iowa** set daily record lows. The reading of 32° F in **Burlington, IA**, and **Peoria, IL**, on the 20th was the first summer freeze on record for both stations. Snow accompanied the chill in portions of the **northern and central Rockies** and **northern Minnesota**. **Duluth, MN**, received a September record 2.4-inch snowfall. Heavy rain pelted **southeastern Oklahoma, central and southwestern Texas**, and **eastern New Mexico** for much of the week, causing widespread flooding. **Oklahoma City, OK**, has already eclipsed its September rainfall record (former wettest was 10.28 inches in

1923). In the **Pacific Northwest**, an unusual warm spell seemed forgotten amidst other weather news. At midweek, the temperature attained a daily record-setting 101° F in **Medford, OR**. At week's end, the **southern Plains** began to dry out as rainfall focused along a new cold front in the **northern Plains**. Elsewhere, mostly dry, seasonably cool weather prevailed.

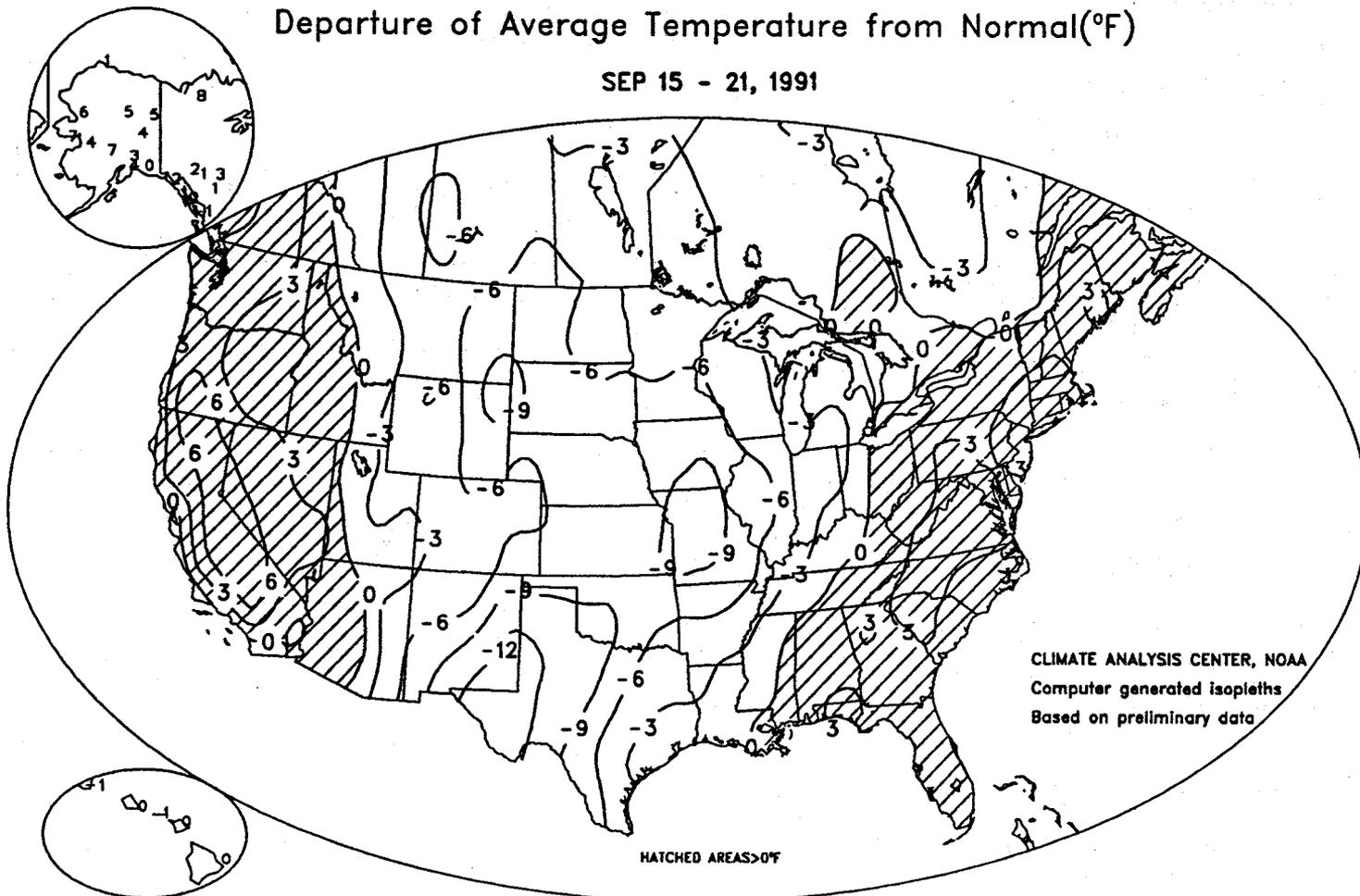
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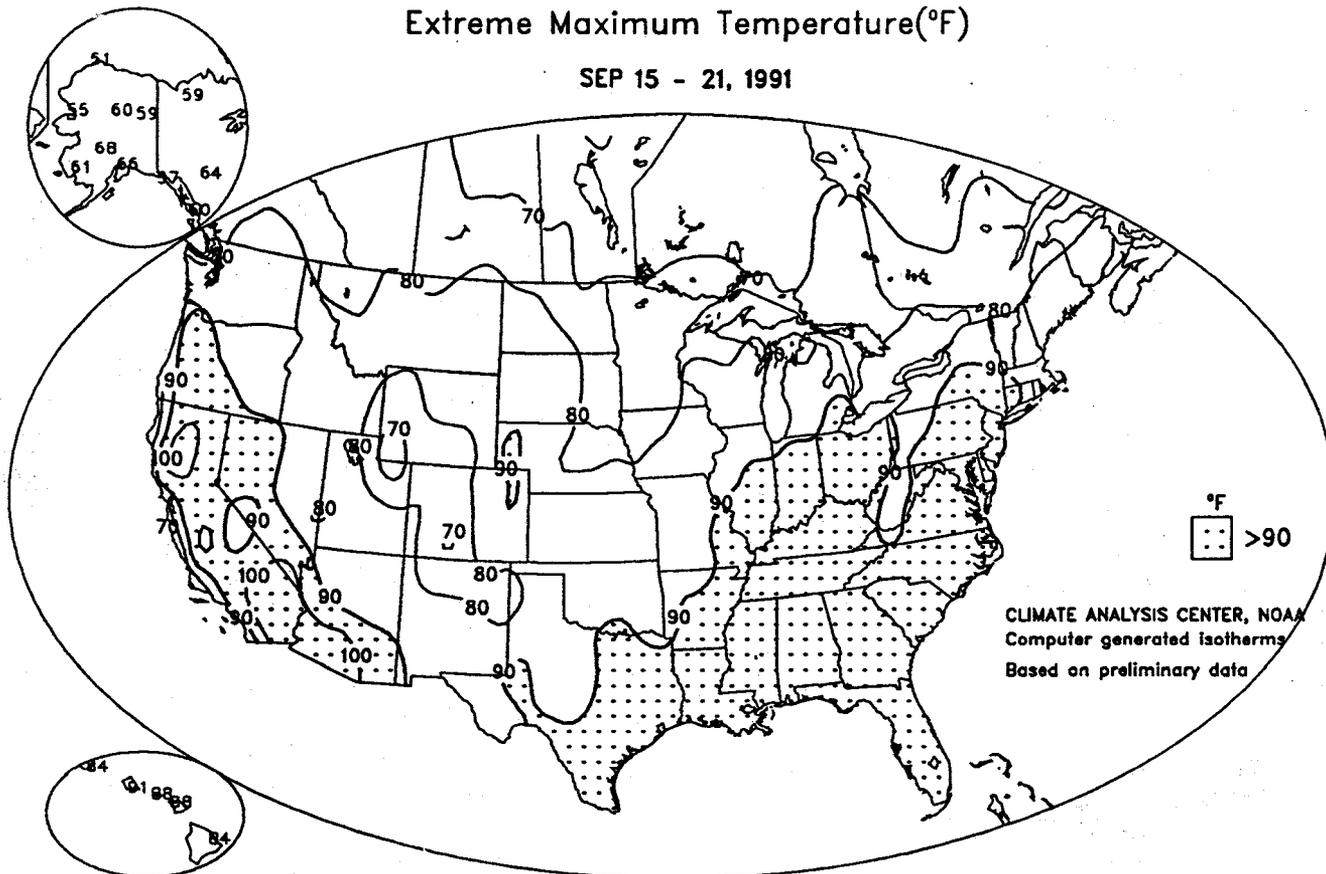
Departure of Average Temperature from Normal(°F)

SEP 15 - 21, 1991



Extreme Maximum Temperature(°F)

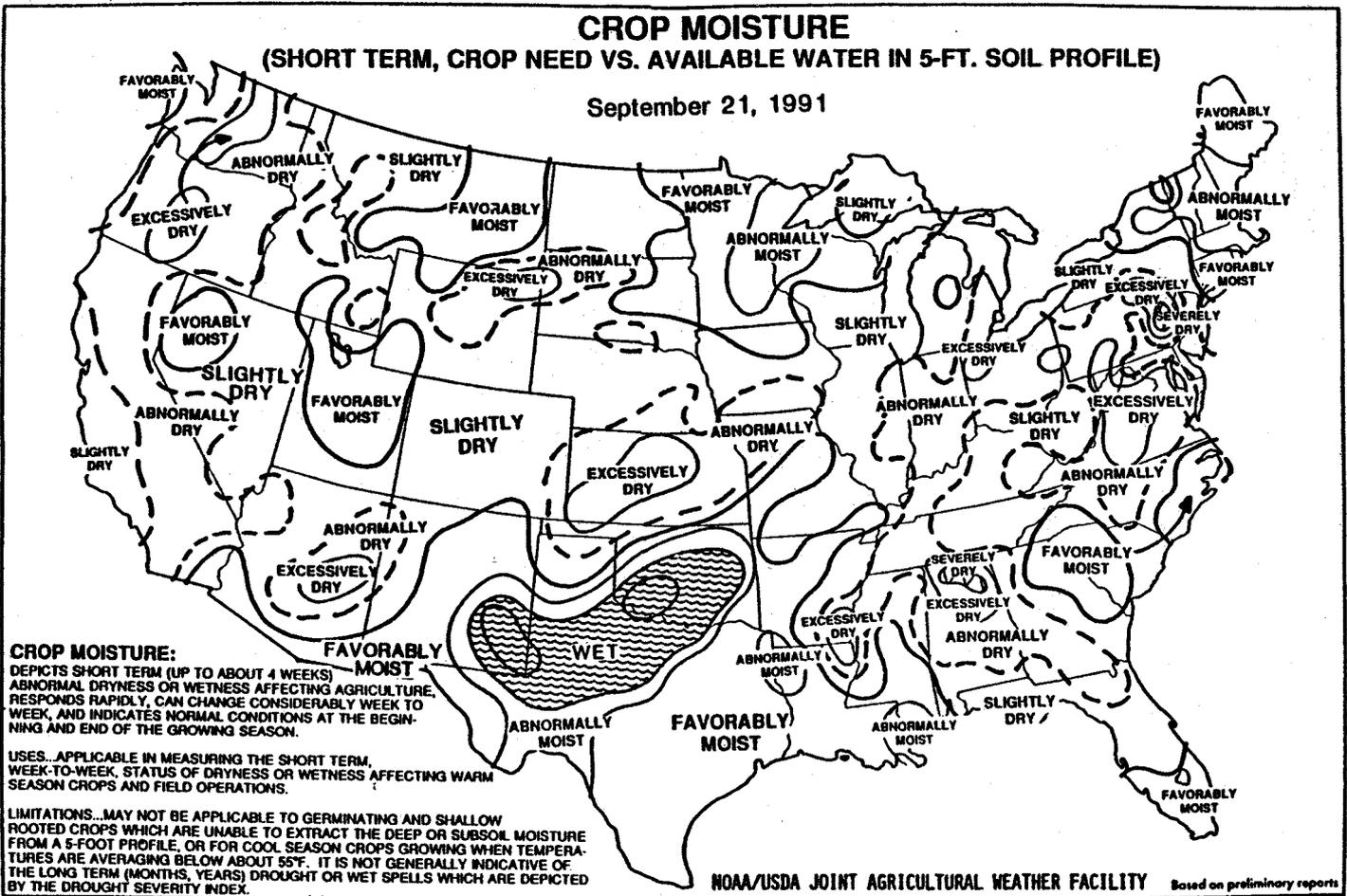
SEP 15 - 21, 1991



CROP MOISTURE

(SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE)

September 21, 1991

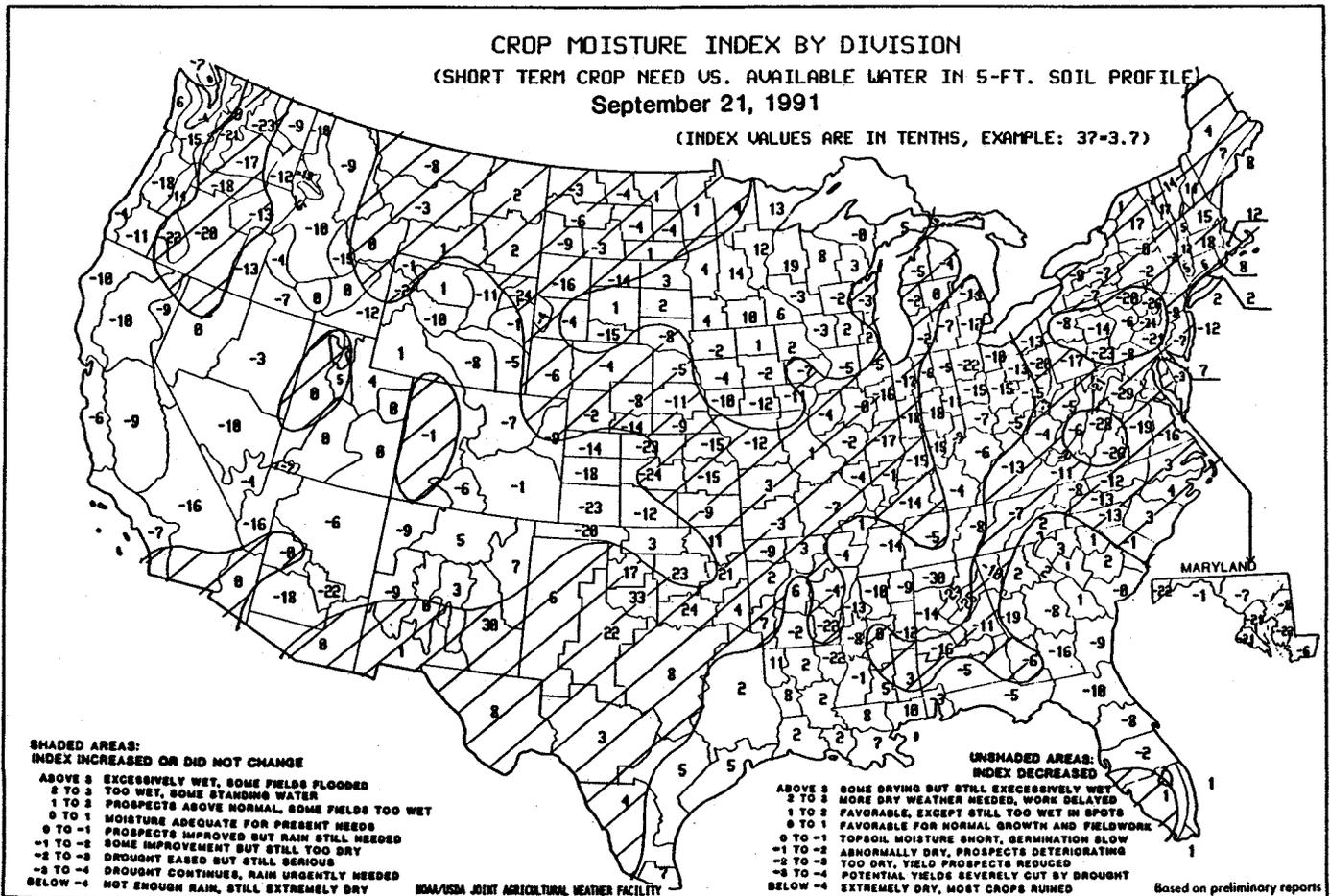


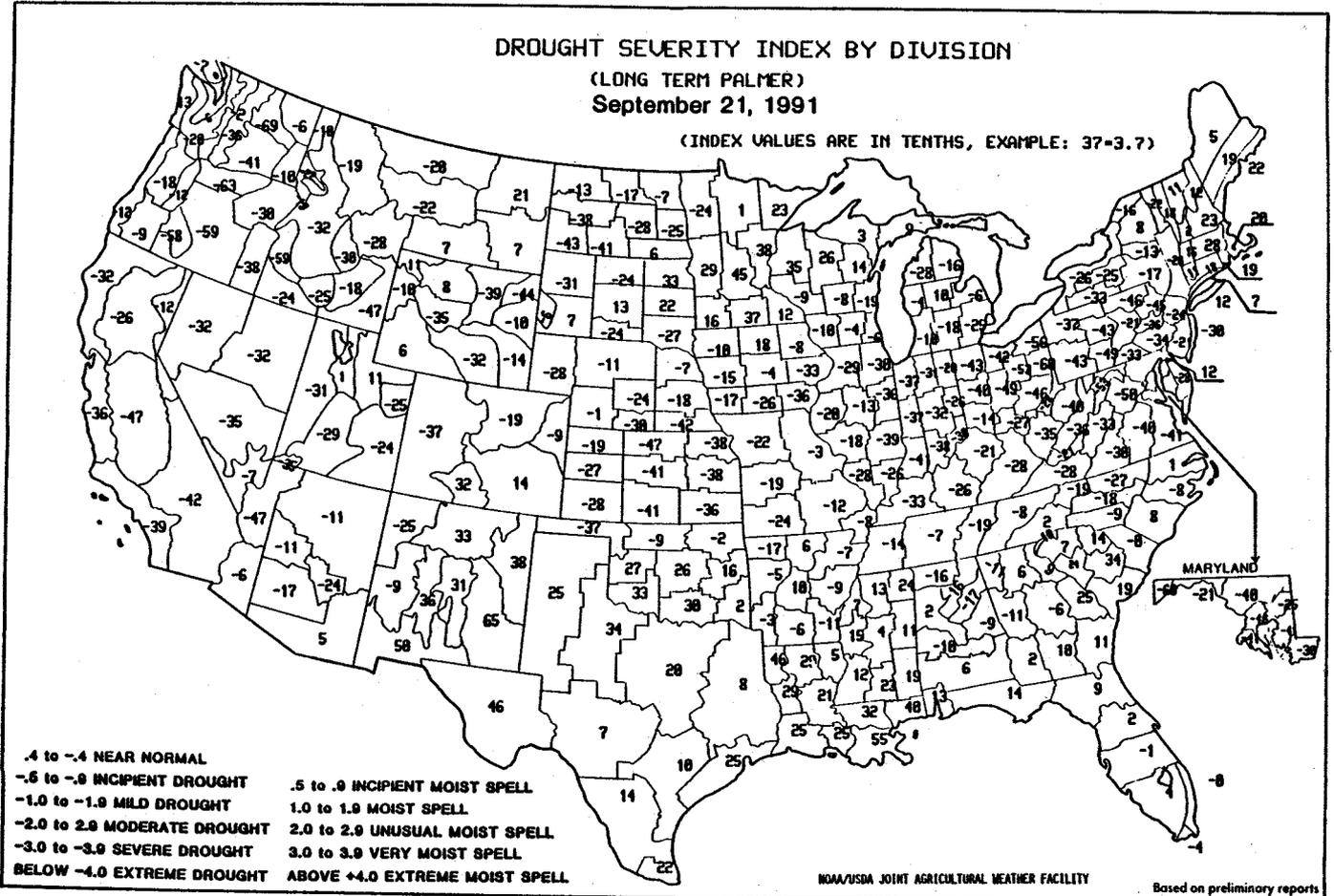
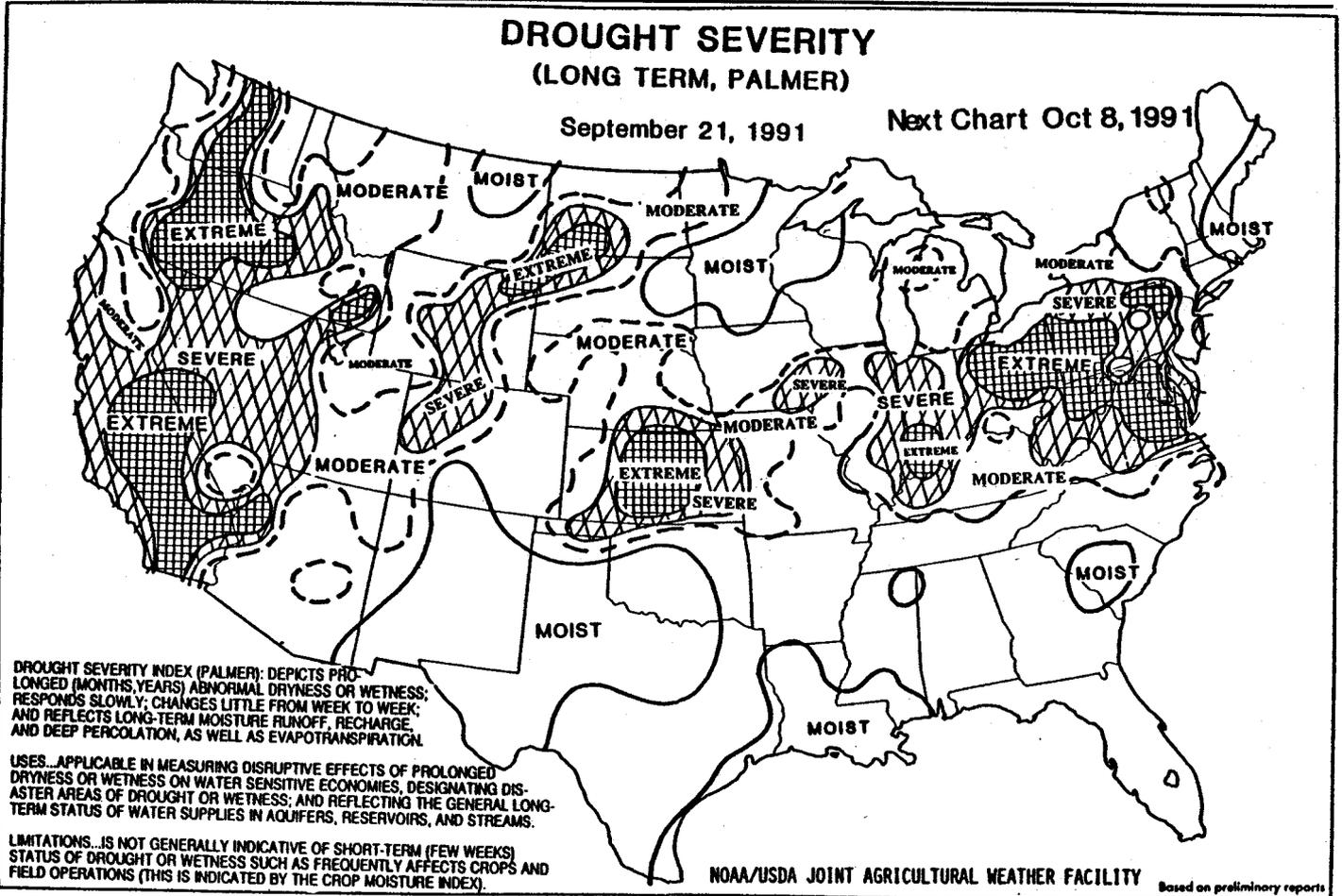
CROP MOISTURE INDEX BY DIVISION

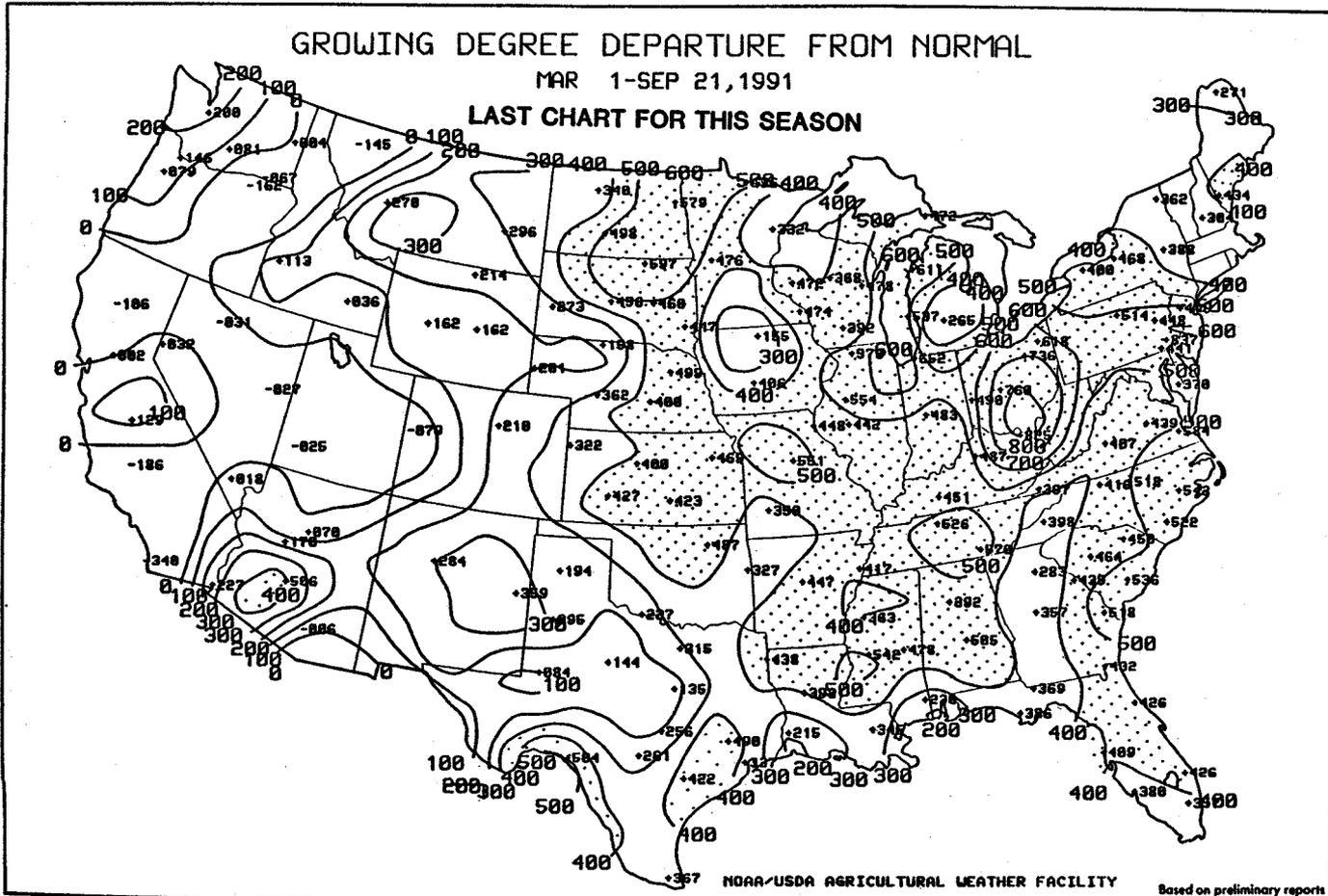
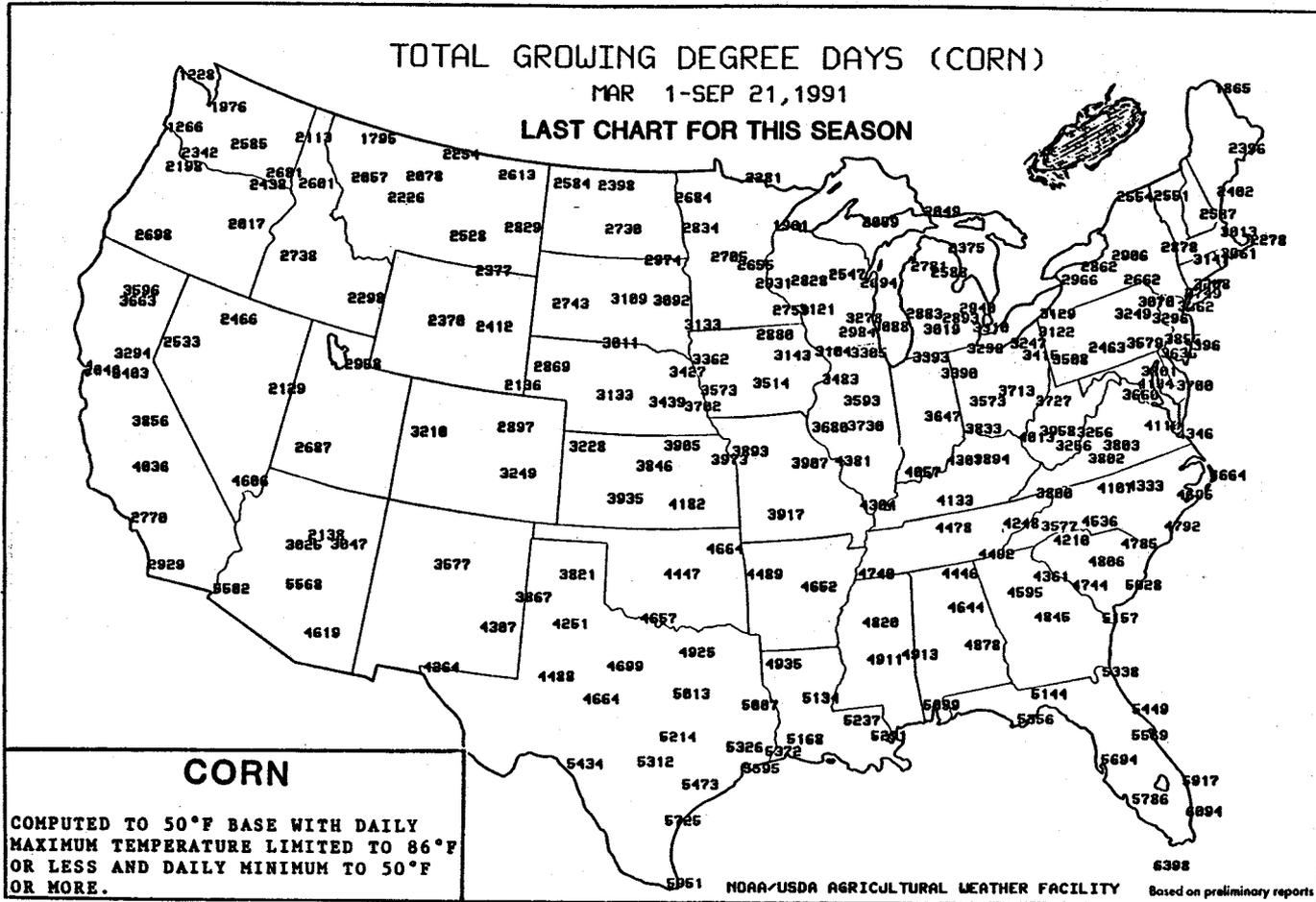
(SHORT TERM CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE)

September 21, 1991

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







National Weather Data for Selected Cities

Weather Data for the Week Ending September 21, 1991

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 Sept 1	PCT. NORMAL SINCE Sept 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE	MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP.	
																			.01 INCH OR MORE	.50 INCH OR MORE		
AL BIRMINGHAM	88	63	97	49	76	2	T	-1.0	T	.3	9	42.6	102	89	40	4	0	0	0	0	0	
MOBILE	88	68	94	58	78	0	T	-1.3	T	.3	28	71.4	140	92	48	4	0	0	0	0	0	
MONTGOMERY	89	67	98	57	78	2	T	-1.1	T	1.8	53	53.5	142	95	46	4	0	0	1	1	0	
AK ANCHORAGE	58	45	66	38	52	4	.3	-.3	.1	2.6	149	11.2	109	92	55	0	0	4	4	0	0	
BARRON	36	27	51	25	32	1	.2	-.1	-.1	.3	69	1.2	36	99	85	0	7	5	5	0	0	
FAIRBANKS	61	36	71	32	48	4	.1	-.2	.0	1.1	137	7.2	90	94	44	0	2	2	2	0	0	
JUNEAU	53	48	57	46	51	2	3.6	2.1	1.0	9.4	220	50.9	153	99	87	0	0	7	7	4	4	
KODIAK	56	45	60	37	51	1	1.3	-.2	.9	5.0	118	60.0	148	96	66	0	0	4	4	1	1	
NOME	52	45	57	38	49	7	1.3	-.7	.4	2.0	115	10.6	95	96	75	0	0	6	6	0	0	
AZ PHOENIX	98	77	104	75	88	4	.0	-.1	.0	.8	163	4.3	89	49	24	7	0	0	0	0	0	
PRESCOTT	83	51	88	49	67	2	.1	-.2	-.1	1.4	119	11.1	77	71	24	0	0	2	2	0	0	
TUCSON	91	66	101	62	79	2	1.5	1.2	1.3	1.5	152	7.8	94	70	29	3	0	3	3	1	1	
YUMA	100	78	106	71	89	2	.2	-.2	-.2	.4	218	2.2	138	56	23	7	0	2	2	0	0	
AR FORT SMITH	76	58	94	48	67	2	3.6	2.8	1.6	4.5	204	28.7	99	92	52	1	0	3	3	3	3	
LITTLE ROCK	79	59	90	45	69	5	.3	-.8	-.2	1.7	56	42.0	116	80	55	2	2	2	2	0	0	
CA BAKERSFIELD	99	67	101	65	83	6	.0	-.0	-.0	.0	0	4.6	116	52	20	7	0	0	0	0	0	
EUREKA	61	49	64	47	55	2	.0	-.2	-.0	.0	6	17.8	77	96	77	0	0	0	0	0	0	
FRESNO	98	64	101	62	81	7	.0	-.0	-.0	.0	0	8.5	120	73	19	7	0	0	0	0	0	
LOS ANGELES	72	61	78	60	67	3	T	T	T	T	0	8.0	95	94	66	0	0	0	0	0	0	
REDDING	101	59	109	53	80	5	.0	-.3	-.0	.0	0	17.3	67	62	15	7	0	0	0	0	0	
SACRAMENTO	94	56	98	52	75	5	.0	-.1	-.0	.0	0	12.7	117	82	21	6	0	0	0	0	0	
SAN DIEGO	75	64	78	61	69	6	.2	-.2	-.2	.3	233	11.1	174	91	65	0	0	1	0	0	0	
SAN FRANCISCO	70	54	74	53	62	2	T	-.0	-.0	.3	0	11.3	91	96	60	0	0	1	0	0	0	
CO DENVER	72	43	86	36	57	3	.1	-.2	-.0	.3	34	16.3	131	82	27	0	0	2	0	0	0	
GRAND JUNCTION	77	48	84	45	63	3	.1	-.2	-.0	2.1	414	6.2	115	58	20	0	0	0	0	0	0	
PURBLO	74	44	91	40	59	2	.2	-.0	-.2	1.3	213	10.6	117	83	31	1	0	1	1	0	0	
CT BRIDGEPORT	76	61	89	45	69	3	1.3	.5	.9	1.5	65	29.5	100	90	55	0	0	3	3	1	1	
HARTFORD	77	56	92	39	66	4	.9	-.0	.5	1.6	56	33.0	105	97	57	2	0	3	3	1	1	
DC WASHINGTON	84	65	96	51	74	4	.7	-.0	.0	2.1	91	20.3	70	88	50	4	0	0	0	0	0	
FL APALACHICOLA	89	74	94	68	81	3	T	-2.0	T	1.0	16	86.8	201	95	60	4	0	0	1	1	0	
DAYTONA BEACH	90	73	92	71	82	2	1.2	-.3	1.2	2.4	56	59.0	159	95	59	5	0	0	1	1	0	
JACKSONVILLE	91	69	95	64	80	1	.4	-1.0	.4	1.4	29	67.2	160	97	56	4	0	2	2	0	0	
KEY WEST	90	78	91	76	84	1	.8	-.7	.4	4.8	109	32.6	119	89	61	5	0	5	5	0	0	
MIAMI	89	76	91	75	83	1	2.7	-.8	1.7	5.6	100	42.9	99	95	59	4	0	6	2	2	1	
ORLANDO	92	74	95	73	83	2	1.5	-.0	1.5	2.1	45	53.2	130	99	51	6	0	2	2	1	1	
TALLAHASSEE	94	70	98	67	82	4	T	-1.5	T	T	1	68.0	131	95	43	6	0	0	0	0	0	
TAMPA	93	73	95	71	83	2	1.0	-.4	1.0	3.3	71	40.4	104	98	52	7	0	1	1	1	1	
WEST PALM BEACH	89	76	91	74	82	1	1.0	-1.3	.4	3.3	51	62.4	144	94	61	3	0	4	4	0	0	
GA ATLANTA	85	67	97	54	76	3	.1	-.7	.0	.2	8	47.7	128	91	53	4	0	2	2	0	0	
AUGUSTA	89	65	98	51	77	3	.8	-.0	.7	1.0	40	51.6	149	100	47	5	0	2	1	1	0	
MACON	88	66	97	54	77	2	.3	-.4	.3	.4	16	47.3	133	97	48	5	0	1	0	0	0	
SAVANNAH	88	71	95	63	79	3	T	-1.2	T	.3	6	63.7	153	93	53	5	0	0	0	0	0	
HI HONO	83	69	84	67	76	0	2.2	-.8	1.2	5.0	108	121.4	138	98	68	0	0	6	2	2	0	
HONOLULU	89	73	91	71	81	1	.3	.1	.3	.3	79	11.4	78	80	46	2	0	1	0	0	0	
KAHULUI	86	69	88	66	78	1	.6	.6	.5	1.0	582	10.3	83	87	59	0	0	3	0	0	0	
LIHUE	84	72	85	70	78	1	.6	.1	.2	1.0	72	25.1	91	90	62	0	0	3	0	0	0	
ID BOISE	80	47	87	42	64	1	.0	-.1	.0	.1	31	6.4	80	58	18	0	0	0	0	0	0	
LEWISTON	78	50	83	46	64	2	.0	-.2	.0	.2	46	8.8	96	58	19	0	0	0	0	0	0	
POCATELLO	75	38	85	31	56	2	.0	-.1	.0	.4	102	10.8	141	79	20	0	1	0	0	0	0	
IL CHICAGO	71	48	91	36	59	4	.3	-.6	-.2	2.3	76	22.7	85	89	39	1	0	4	4	0	0	
MOLINE	71	44	87	30	58	6	.3	-.6	-.2	2.5	94	21.7	74	96	38	0	2	2	2	0	0	
PEORIA	70	46	88	32	58	7	1.2	-.4	1.1	3.4	130	23.0	84	94	41	0	1	4	4	1	1	
QUINCY	68	47	84	34	58	9	.6	-.4	.3	2.6	88	25.2	86	88	41	0	0	5	0	0	0	
ROCKFORD	69	47	88	33	58	5	.1	-.8	.1	4.5	171	21.5	76	89	39	0	0	2	2	0	0	
SPRINGFIELD	71	47	89	34	59	8	.3	-.5	.1	4.2	182	26.6	101	98	43	0	0	3	0	0	0	
IN EVANSVILLE	77	54	94	37	65	4	.7	-.1	.7	2.4	126	22.1	70	95	44	2	0	1	1	1	1	
FORT WAYNE	72	49	91	34	60	4	T	-.6	T	2.0	112	30.4	116	88	40	1	0	1	0	0	0	
INDIANAPOLIS	75	52	94	36	63	3	T	-.6	T	.3	15	25.8	87	88	38	2	0	1	0	0	0	
SOUTH BEND	70	51	91	36	60	3	.1	-.7	.1	2.1	92	22.6	80	92	45	1	0	1	0	0	0	
IA DES MOINES	70	44	85	33	57	7	.1	-.6	.1	.9	40	29.0	116	86	38	0	0	2	0	0	0	
SIoux CITY	68	42	78	29	55	8	T	-.6	T	2.0	111	20.5	96	86	39	0	1	1	0	0	0	
WATERLOO	65	43	83	27	54	7	.2	-.6	.1	2.9	117	32.9	123	94	45	0	2	2	0	0	0	
KS CONCORDIA	74	49	86	33	61	5	T	-.7	T	.2	10	15.3	67	68	28	0	0	0	0	0	0	
DODGE CITY	76	49	90	39	63	6	.0	-.4	.0	.2	15	7.3	42	68	24	1	0	0	0	0	0	
GOODLAND	72	45	89	39	58	5	.0	-.3	.0	.8	72	19.9	143	78	29	0	0	0	0	0	0	
TOPEKA	73	49	88	35	61	7	.4	-.4	.4	2.2	87	21.4	81	91	35	0	0	1	0	0	0	
WICHITA	72	51	84	38	61	8	.2	-.6	.2	2.1	86	21.3	94	83	40	0	0	1	0	0	0	
KY BOWLING GREEN	81	57	97	42	69	1	.2	-.5	.2	2.1	94	33.5	91	99	58	3	0	2	0	0	0	
LEXINGTON	78	56	92	42	67	1	.1	-.7	.0	.9	38	29.4	83	90	45	1	0	3	0	0	0	
LOUISVILLE	79	58	95	44	69	0	.4	-.4	.3	2.3	95	28.3	86	84	40	2	0	2	0	0	0	
LA ALEXANDRIA	85	65	93	51	75	2	T	-.7	T	1.2	55	60.2	152	92	46	4	0	0	0	0	0	
BATON ROUGE	87	67	94	55	77	1	3.6	2.6	2.6	5.4	165	62.5	145	94	51	4	0	4	4	3	3	
LAKE CHARLES	86	68	92	56	77	1	1.8	.4	1.8	3.2	77	61.2	155	91	55	4	0	1	1	0	0	
NEW ORLEANS	88	70	93	66	79	1	.8	-.6	.5	2.7	62	94.9	206	95	54	4	0	2	2	0	0	

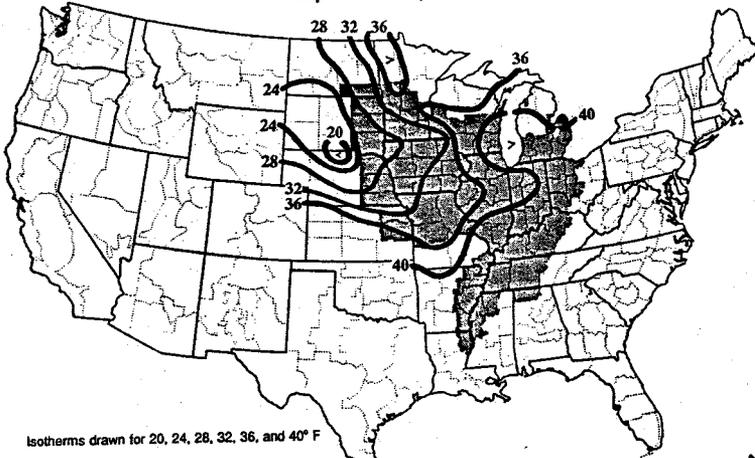
Based on 1951-80 normals

Weather Data for the Week Ending September 21, 1991

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 Sept 1	PCT. NORMAL SINCE Sept 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
SHREVEPORT	84	62	94	50	73	-3	.1	-.7	.1	2.1	92	65.6	202	93	48	0	0	0	0		
ME CARIBOU	64	46	79	34	55	2	1.2	-.4	.6	1.3	52	25.0	96	91	58	0	0	0	1		
PORTLAND	70	51	86	38	61	3	1.8	1.0	1.1	2.2	99	42.7	146	97	61	0	0	0	4		
MD BALTIMORE	83	62	98	47	73	5	1.0	.3	.6	1.6	62	19.8	64	92	48	2	0	0	2		
SALISBURY	83	60	91	44	71	3	1.7	.9	1.4	2.2	77	34.6	102	97	51	2	0	0	2		
MA BOSTON	76	59	90	45	67	3	1.6	.8	.9	2.5	105	27.5	90	92	57	1	0	0	3		
CHATHAM	69	58	78	50	64	2	.3	-.5	.3	.5	19	22.8	70	91	74	0	0	0	3		
MI ALPENA	66	48	81	34	57	0	.7	-.0	.4	2.1	93	24.1	111	96	47	0	0	0	4		
DETROIT	72	52	93	36	62	-1	T	-.5	T	.7	40	20.8	90	86	42	1	0	0	0		
FLINT	70	47	91	33	59	-2	T	-.5	T	.3	16	22.7	103	89	43	1	0	0	1		
GRAND RAPIDS	67	50	86	34	59	-3	.4	-.4	.2	2.6	114	30.0	122	91	47	0	0	0	4		
HOUGHTON LAKE	64	49	80	30	56	0	.9	-.3	.6	2.6	131	23.5	113	89	53	0	1	4	1		
LANSING	69	46	89	28	57	-3	.1	-.6	.1	.7	34	21.6	97	93	47	0	1	1	0		
MARQUETTE	60	42	82	31	51	-2	.6	-.4	.4	2.4	86	24.2	88	93	64	0	3	4	0		
MUSKOGON	67	52	83	35	59	-1	1.4	.7	.6	2.8	136	27.4	124	83	49	0	0	0	4		
SAULT ST. MARIE	63	45	81	32	54	0	1.1	-.2	.5	4.0	143	21.3	91	95	58	0	1	6	1		
MN ALEXANDRIA	62	42	79	33	52	-5	.3	-.2	.3	4.2	250	26.1	129	88	46	0	0	0	3		
DULUTH	59	40	79	31	49	-4	1.6	.8	1.1	8.6	361	34.3	147	91	57	0	1	5	1		
INT'L FALLS	58	37	74	27	48	-4	1.2	.5	.5	4.0	175	22.7	117	95	56	0	4	5	0		
MINNEAPOLIS	62	43	80	31	53	-7	.1	-.5	.1	5.0	273	27.4	127	86	48	0	1	1	0		
ROCHESTER	62	40	80	28	51	-7	T	-.7	T	1.7	69	26.9	118	93	51	0	2	1	0		
MS GREENWOOD	86	61	96	48	74	-1	.5	-.3	.3	1.0	43	50.5	129	93	44	4	0	2	0		
JACKSON	87	63	97	50	75	-1	.2	-.6	.2	1.1	41	50.1	128	97	45	4	0	0	1		
MERIDIAN	88	65	97	52	76	1	2.8	2.0	2.8	3.0	118	57.5	142	91	41	4	0	1	1		
MO CAPR GIRARDEAU	75	56	91	39	65	-1	.5	-.4	.5	2.0	73	30.1	89	88	46	1	0	0	1		
COLUMBIA	69	48	87	35	59	-10	1.8	.9	1.4	3.1	113	24.9	89	90	45	0	0	5	1		
KANSAS CITY	71	49	86	33	60	-9	1.1	.0	1.0	2.1	70	20.9	74	93	41	0	0	3	1		
SAINT LOUIS	74	55	96	41	64	-5	1.1	.4	.8	1.8	96	21.3	82	81	36	1	0	3	1		
SPRINGFIELD	70	51	89	37	60	-8	1.5	.5	.5	2.9	98	25.9	88	91	49	0	0	4	1		
MT BILLINGS	67	42	84	33	54	-4	.9	.6	.7	3.1	357	18.2	155	85	30	0	0	3	1		
GLASGOW	64	37	87	22	51	-6	.5	.3	.4	.6	89	10.3	109	78	28	0	3	2	0		
GREAT FALLS	66	40	82	29	53	-3	.3	.0	1.1	1.0	134	12.4	100	87	34	0	1	4	0		
HAVRE	65	35	81	23	50	-6	.1	-.1	.1	.3	35	8.7	88	84	31	0	3	2	0		
HELENA	68	39	82	31	54	-1	T	-.2	T	1.2	200	9.6	102	87	35	0	1	1	0		
KALISPELL	67	36	78	30	52	-2	.2	.0	.2	.7	84	11.5	99	95	35	0	1	2	0		
MILES CITY	63	40	85	28	51	-8	2.4	2.2	2.0	3.8	494	19.1	162	83	36	0	1	3	1		
MISSOULA	72	40	81	35	56	1	T	-.2	T	.3	45	8.8	89	82	25	0	0	0	0		
NE GRAND ISLAND	71	43	80	27	57	-6	.0	-.6	.0	.7	40	24.4	123	72	29	0	1	0	0		
LINCOLN	73	46	82	29	59	-5	T	-.7	T	.9	44	19.1	83	78	28	0	1	0	0		
NORFOLK	69	42	77	26	56	-7	T	-.5	T	1.5	97	24.1	118	78	32	0	1	1	0		
NORTH PLATTE	70	38	79	26	54	-7	T	-.4	T	1.5	128	16.6	98	87	30	0	2	0	0		
OMAHA	68	46	77	31	57	-8	T	-.8	T	2.0	79	30.7	122	73	41	0	1	0	0		
SCOTTSBLUFF	73	37	92	30	55	-5	T	-.2	T	.8	109	12.4	99	89	23	1	1	1	0		
VALENTINE	70	36	85	17	53	-7	T	-.3	T	.5	49	19.1	125	79	27	0	2	1	0		
NV RLY	78	34	83	25	56	0	.0	-.2	.0	1.3	252	8.2	121	70	19	0	2	0	0		
LAS VEGAS	96	68	99	63	82	3	.0	-.1	.0	.1	22	3.4	114	34	14	7	0	0	0		
RENO	89	46	94	41	67	8	.0	-.1	.0	.6	347	3.9	77	59	11	4	0	0	0		
WINNEMUCA	86	42	93	35	64	6	.0	-.1	.0	.8	324	5.7	106	52	11	4	0	0	0		
NH CONCORD	74	50	88	33	62	3	1.8	1.1	.9	2.1	94	24.3	95	97	55	0	0	4	2		
NJ ATLANTIC CITY	82	58	93	40	70	4	.3	-.2	.2	.6	29	26.5	87	99	52	3	0	2	0		
NM ALBUQUERQUE	74	52	81	49	63	-6	.0	-.2	.0	1.4	234	7.9	133	74	32	0	0	0	0		
CLOVIS	65	49	77	40	57	-11	.3	-.2	.2	3.5	260	19.8	145	92	56	0	0	2	0		
ROSWELL	68	52	84	44	60	-11	1.9	1.5	1.4	4.1	318	17.5	210	94	61	0	0	3	1		
NY ALBANY	74	52	90	39	63	3	1.8	1.1	1.0	2.2	95	23.1	90	95	59	1	0	4	2		
BINGHAMTON	71	53	90	40	62	3	1.5	.8	1.0	2.0	85	23.9	89	95	58	1	0	4	1		
BUFFALO	72	54	89	42	63	2	.5	-.3	.4	.7	30	26.8	101	93	47	0	0	4	0		
NEW YORK	80	64	95	52	72	4	.8	-.1	.8	1.0	39	29.2	94	88	49	2	0	2	1		
ROCHESTER	73	52	90	38	63	1	.5	-.1	.3	.9	48	20.3	89	93	45	1	0	3	0		
SYRACUSE	73	52	92	39	63	1	2.3	1.6	1.2	2.9	124	27.3	97	96	53	1	0	5	2		
NC ASHEVILLE	81	58	92	44	69	3	.7	-.1	.5	.8	30	34.8	105	99	49	1	0	3	1		
CHARLOTTE	86	66	96	51	76	5	.5	-.3	.5	.5	20	37.7	114	89	45	3	0	1	1		
GREENSBORO	84	63	93	49	73	4	1.5	.6	1.4	2.5	95	34.2	107	92	47	3	0	2	1		
HATTERAS	84	69	89	64	76	2	.2	-1.2	.2	.5	13	50.1	126	91	56	0	0	2	0		
NEW BERN	84	66	91	56	75	1	.6	-.8	.5	3.0	72	40.0	96	94	52	2	0	2	1		
RALEIGH	85	63	91	50	74	3	1.0	.2	1.0	1.0	41	28.5	89	93	47	3	0	1	1		
WILMINGTON	85	66	90	53	75	1	.1	-1.2	.1	1.1	26	49.2	116	94	55	2	0	2	0		
ND BISMARCK	64	38	82	23	51	-5	.2	-.1	.1	2.5	247	13.5	104	88	36	0	2	4	0		
FARGO	64	43	78	33	54	-3	.1	-.3	.1	1.2	88	19.3	119	84	43	0	0	3	0		
GRAND FORKS	62	41	75	34	52	-4	1.3	.8	.9	3.2	207	18.5	122	87	45	0	0	5	1		
WILLISTON	59	38	80	27	49	-7	1.7	1.4	1.2	2.5	257	16.4	143	88	46	0	2	3	1		
OH AKRON-CANTON	74	54	91	37	64	1	.3	-.4	.2	1.7	82	16.5	60	97	44	2	0	2	0		
CINCINNATI	76	56	91	42	66	-1	.4	-.3	.3	2.4	114	31.5	103	86	43	2	0	3	0		
CLEVELAND	74	58	93	45	66	2	.8	-.2	.6	2.4	114	23.8	90	91	42	2	0	4	1		
COLUMBUS	77	55	93	38	66	1	.5	-.1	.5	3.4	168	25.3	87	91	39	2	0	3	0		

Based on 1951-80 normals

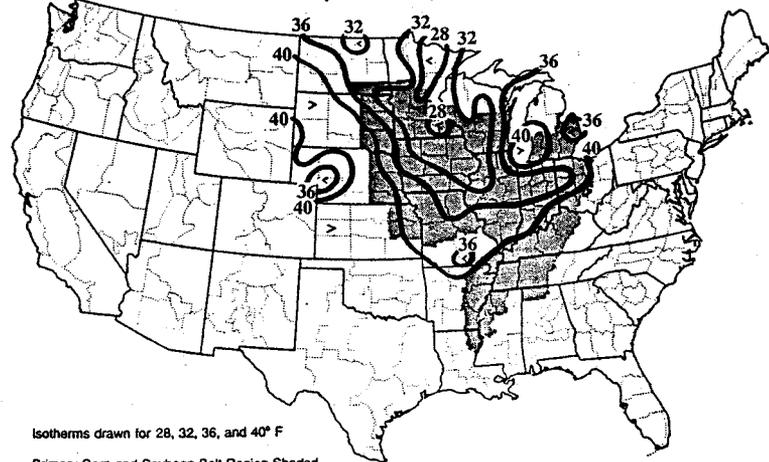
Minimum Temperatures (° F)
Primary Corn and Soybean Growing Region
September 19, 1991



Isotherms drawn for 20, 24, 28, 32, 36, and 40° F
Primary Corn and Soybean Belt Region Shaded

NOAA / National Climatic Data Center

Minimum Temperatures (° F)
Primary Corn and Soybean Growing Region
September 20, 1991



Isotherms drawn for 28, 32, 36, and 40° F
Primary Corn and Soybean Belt Region Shaded

NOAA / National Climatic Data Center

Early Freeze Hits the Midwest

The calendar still said summer, but that did not halt the temperature's nose-dive in Valentine, NE. At dawn on Thursday, September 19, the thermometer registered 17° F, demolishing the daily record of 27° F, set in 1896. Farther east, on the western fringe of the primary Corn and Soybean Belt, temperatures sagged into the mid 20's in eastern South Dakota and northeastern Nebraska. Subfreezing minimums were recorded as far east as southwestern Minnesota, central Iowa, and northwestern Missouri (fig. 1). Nearly 4 dozen daily record lows were broken throughout the Plains and the western Corn Belt.

On the 20th, parts of southern Minnesota and northeastern Iowa experienced minimums in the upper 20's (fig. 2). An additional 25 record lows were set from the Corn Belt to Texas. The cold outbreak, although unusually harsh for the third week of September, was short lived. The Canadian-origin, sun-warmed airmass reached the East by the 22nd, setting a few more record lows and inducing scattered frost in the eastern Corn Belt and the Northeast before losing its chill.

The freeze damaged some immature crops in the western Corn Belt. Early reports indicate that damage was mostly confined to Iowa and Minnesota, and mainly to soybeans rather than corn. In Iowa, where the overall condition of the soybean crop deteriorated slightly last week, the impact was greatest in the north-central part of the State. In Minnesota, where soybean conditions also deteriorated slightly, the impact was reportedly greatest in the south-central region. In Nebraska, though temperatures were lower, crops escaped serious damage because they were mature. Temperatures remained above freezing in Texas, but wet, cold weather on the plains dealt cotton "a serious setback," according to the State crop report.

This early freeze is similar in some ways to the freeze that struck the Midwest in September 1974, though the impact is much less severe this year because more of the crop is mature. On September 21-23, 1974, temperatures dropped into the 20's across the Dakotas, Iowa, and Wisconsin. Even Toledo, OH, reported a reading of 26° F on the 23rd.

--Brad Rippey and Douglas Le Comte

National Agricultural Summary

September 16 - 22, 1991

HIGHLIGHTS: General rains across much of the South provided beneficial moisture for fall-seeded crops but slowed harvesting activities. Heavy amounts in Texas caused the most concern among producers. Frost damage to late maturing soybeans was felt as far south as northern Missouri. Minnesota reported killing frost on September 18 and 19, which ended the growing season for late soybeans. Iowa experienced frost throughout the State.

SMALL GRAINS: Winter wheat seeding was 29% complete, 3 points behind average. Planting progressed rapidly in Nebraska, Colorado, Montana, South Dakota, and Washington as fair weather prevailed across most of the region. In Kansas, wheat planting progressed well in the western third and was slow elsewhere because of short surface moisture. Some emergence noted. Nebraska planting conditions were good in the West and dry in the south and southeast. Heavy rain caused some replanting in the West. Washington winter wheat seeding continued in the central areas. Rain is needed for good seedbed moisture in most areas. Texas rainfall delayed small grain planting. Wet conditions caused many fields to germinate rapidly. Armyworms plagued many fields.

CORN: Corn was mostly rated in fair to good condition with 83% of the crop mature, well ahead of the average of 69% mature for this date. Corn maturity advanced most in the northern and western Corn Belt, but posted rapid gains in nearly all major corn producing States except Illinois, where the crop was nearly all mature last week. Harvest progress stood at 22% compared to 12% average for the date. Illinois corn harvest was 47% complete, well ahead of the average 15%. Indiana, Kansas, and Missouri posted strong harvest advancement. Harvest in other Corn Belt states progressed modestly. Heavy winds in northern Nebraska caused some lodging and stalk breakage. Heavy rains delayed corn harvest in the High Plains of Texas, where some stalk lodging was also reported.

SOYBEANS: Soybeans remained in mostly fair to good condition, with 57% of the crop dropping leaves, 5 points ahead of the average. Soybean leaf drop advanced most in Michigan, Minnesota, and Nebraska, where large temperature changes accelerated crop development. Harvest was active through much of the Corn Belt and stood at 10% nationwide, compared to 7% average. Frost damage to late-maturing soybeans was felt as far south as northern Missouri. Harvest completion was reported at 25% in Illinois, 19% in Indiana, and 16% in Ohio, with South Dakota and Nebraska's harvests close behind at 15% and 13%, respectively. Missouri producers report some discoloration of beans.

COTTON: Cotton was mostly rated fair to good. Boll opening was reported in 59% of the crop, the same as the average for the date. Harvest was 12% complete compared to 14% average. Early cotton harvest was slowed across much of the Southeast due to light to moderate rainfall. Boll opening progressed most in Georgia, Alabama, Mississippi, Tennessee, and California. Insect pressure in Arkansas continued to affect late cotton. Many fields have been defoliated. Cotton defoliation gained momentum in California. Louisiana producers reported evidence of budworm on green cotton, and central areas had some boll rot reported in the northeast. In Texas, cotton was

dealt a serious setback from heavy rainfall and cold temperatures were on the High Plains. Wet, cold weather caused much concern among most producers. Growth and maturity have been hampered. Control measures began for pink bollworms in the Trans-Pecos. Yields and grades declined with frequent rainfall in central Texas.

SORGHUM: Sorghum was mostly fair to good with 63% mature, 7 points ahead of average. Sorghum maturity advanced rapidly in the northern production States of Nebraska and South Dakota, while smaller advances were evident in the southern production areas. Harvest was 35% complete, compared to the 26% average for the date. Greatest harvest progress occurred in Arkansas, Illinois, Louisiana, and Nebraska. Harvest remains ahead of normal in Texas. However, cool weather slowed maturity in the High Plains. In Kansas, cold weather may have hurt some immature stands. Some southeastern Nebraska producers were concerned about stalk rot.

OTHER FIELD CROPS: Rice harvest reached 50% completion, compared to the 56% average. California rice harvest has begun, while Texas is nearing completion at 98%. Minnesota flax was 76% harvested, 77% average for the date. Sugarbeet harvest in Minnesota stood at 8%, compared to 6% average. Sunflower was 10% harvested, 10% average. Alabama reported peanut digging and combining were active. Idaho dry bean harvest at 38% complete was well behind the 67% average. Kentucky burley tobacco was 90% cut, compared to the 84% average. Dark tobacco was 83% cut. North Carolina tobacco harvest stood at 89% for flue-cured and 88% for burley. Tennessee burley harvest reached 90% completion, slightly ahead of the 86% average. Dark fired tobacco harvest at 85% was on average for the date. Dark air-cured tobacco harvest at 80% was slightly behind the 86% average. Virginia burley harvest at 80% was ahead of the 62% average, and sun tobacco harvest at 90% was on average. Peanut harvest in Virginia had just begun. Georgia peanuts were reported as 43% threshed, somewhat ahead of the 34% average.

FRUITS AND NUTS: Arizona was actively harvesting lemons and had harvested watermelons, cantaloupe, vegetables, peaches, apples, and pistachios. California grape harvest was active. Ninety percent raisin grapes were on trays, 20-30% rolled, and 14% boxed. Walnut harvest continued. Almond and pistachio harvests were in full swing. Granny Smith and gala apple harvesting and packing were active. Jonathan apples were ready for picking. Late peaches, nectarines, plums, and figs harvesting continued. Prune harvest nearly complete. Pomegranate harvest continued. Barhi dates were picked. Naval oranges continued to mature well. Lemon harvest was active. Grapefruit harvest continued slowly. In Idaho, apple harvest was 12% complete, 21% average. Plum and prune harvest was 99% complete, 96% average. New Jersey apple

(Continued to back cover)

CROP PROGRESS

For Week Ending September 22, 1991

Rice			
	% Harvested		
	1991	1990	Avg.
AR	41	16	45
CA	1	5	3
LA	86	90	88
MS	22	40	56
TX	98	97	98

5 States 50 42 56

These 5 states produced 98% of the 1990 rice crop.

Winter Wheat			
	% Planted		
	1991	1990	Avg.
AR	1	0	0
CA	0	0	0
CO	54	58	67
GA	5	1	3
ID	25	20	26
IL	4	2	3
IN	6	6	8
KS	25	15	30
MI	20	20	10
MO	7	4	7
MT	42	40	36
NE	59	52	61
NC	7	3	3
OH	4	2	4
OK	29	10	30
OR	16	18	8
SD	72	73	73
TX	34	30	39
WA	40	57	52

19 States 29 23 32

These 19 states produced 91% of the 1990 winter wheat crop.

Grain Sorghum			
	% Coloring		
	1991	1990	Avg.
AR	89	91	96
CO	81	80	82
IL	94	65	87
KS	85	90	80
LA	99	97	99
MS	96	96	98
MO	93	75	90
NE	99	94	95
NM	73	72	NA
OK	93	97	95
SD	93	92	88
TX	92	98	93

12 States 91 92 NA

Excl. States with NA 91 92 89

These 12 states produced 98% of the 1990 grain sorghum crop.

NA - not available.

Cotton			
	% Bolls Opening		
	1991	1990	Avg.
AL	68	88	79
AZ	85	100	92
AR	56	73	78
CA	80	85	86
GA	72	82	69
LA	80	96	90
MS	81	95	89
MO	74	75	73
NM	50	84	76
NC	90	75	81
OK	18	44	27
SC	84	77	71
TN	74	77	78
TX	43	42	34

14 States 59 65 59

These 14 states produced 99% of the 1990 cotton crop.

Corn			
	% Mature		
	1991	1990	Avg.
CO	46	59	54
GA	100	100	100
IL	98	42	81
IN	93	31	70
IA	82	77	88
KS	90	80	80
KY	88	54	76
MI	65	10	30
MN	61	37	63
MO	91	61	86
NE	91	65	72
NC	97	98	97
OH	68	17	43
PA	44	8	20
SD	92	55	66
TX	86	96	95
WI	67	25	4

17 States 83 51 69

These 17 states produced 95% of the 1990 corn crop.

Grain Sorghum			
	% Mature		
	1991	1990	Avg.
AR	74	67	83
CO	35	26	30
IL	68	22	65
KS	35	30	35
LA	85	91	96
MS	79	86	90
MO	60	27	60
NE	91	49	61
NM	11	9	NA
OK	23	65	37
SD	73	44	51
TX	81	90	74

12 States 62 54 NA

Excl. States with NA 63 55 56

These 12 states produced 98% of the 1990 grain sorghum crop.

NA - not available.

Cotton			
	% Harvested		
	1991	1990	Avg.
AL	10	25	18
AZ	6	9	6
AR	6	3	13
CA	0	0	0
GA	6	27	14
LA	7	41	28
MS	9	24	22
MO	10	5	14
NM	0	0	0
NC	7	NA	NA
OK	0	2	1
SC	7	12	6
TN	8	3	12
TX	19	16	16

14 States 12 NA NA

Excl. States with NA 12 15 14

These 14 states produced 99% of the 1990 cotton crop.

NA - not available.

Corn			
	% Harvested		
	1991	1990	Avg.
CO	4	2	3
GA	91	91	87
IL	47	4	15
IN	25	2	10
IA	8	5	11
KS	50	35	30
KY	35	11	22
MI	7	0	2
MN	3	1	6
MO	43	14	26
NE	14	7	7
NC	56	52	39
OH	15	0	0
PA	7	1	2
SD	15	3	3
TX	71	79	76
WI	5	0	3

17 States 22 8 12

These 17 states produced 95% of the 1990 corn crop.

Grain Sorghum			
	% Harvested		
	1991	1990	Avg.
AR	51	34	64
CO	6	7	4
IL	23	1	15
KS	15	5	5
LA	78	84	84
MS	44	61	68
MO	25	8	24
NE	19	2	4
NM	0	3	NA
OK	6	2	9
SD	11	11	5
TX	73	60	60

12 States 35 23 NA

Excl. States with NA 35 23 26

These 12 states produced 98% of the 1990 grain sorghum crop.

NA - not available.

	Soybeans % Dropping Leaves		
	1991	1990	Avg.
AL	16	40	28
AR	10	6	10
GA	33	44	30
IL	75	33	64
IN	86	32	60
IA	47	45	66
KS	70	55	50
KY	33	18	32
LA	14	34	29
MI	80	35	50
MN	72	79	82
MS	9	28	32
MO	42	26	40
NE	84	59	59
NC	19	13	8
OH	100	42	56
SC	9	2	5
SD	94	80	75
TN	20	26	37

19 States 57 39 52

These 19 states produced 95% of the 1990 soybeans crop.

	Soybeans % Harvested		
	1991	1990	Avg.
AL	2	5	5
AR	0	0	0
GA	1	1	1
IL	25	2	15
IN	19	1	13
IA	4	0	6
KS	10	5	4
KY	2	0	2
LA	0	12	4
MI	5	0	1
MN	4	4	11
MS	1	6	4
MO	4	0	3
NE	13	6	6
NC	0	0	0
OH	16	0	0
SC	0	0	0
SD	15	5	4
TN	0	0	0

19 States 10 2 7

These 19 states produced 95% of the 1990 soybeans crop.

Crop Condition

PERCENT

Cotton

State	VP	P	F	G	EX
AL	0	9	44	44	3
AZ	0	0	0	75	25
AR	0	10	25	65	0
CA	0	0	10	90	0
GA	0	0	22	78	0
LA	0	4	37	59	0
MS	0	0	44	45	11
MO	0	15	52	33	0
NM	0	10	50	40	0
NC	0	0	14	82	4
OK	0	0	39	61	0
SC	0	0	80	20	0
TN	5	6	57	32	0
TX	0	11	40	43	6
14 State	0	7	36	52	5
Prev Week	0	2	36	56	6
Prev Year	1	7	42	47	3

For Week Ending September 22, 1991

Grain Sorghum

State	VP	P	F	G	EX
AR	5	9	55	31	0
CO	0	12	29	54	5
IL	0	4	35	61	0
KS	14	26	43	13	4
LA	0	23	53	24	0
MS	0	13	47	40	0
MO	5	27	49	19	0
NE	11	22	44	21	2
NM	0	0	6	80	14
OK	0	0	31	69	0
SD	0	10	43	41	6
TX	0	0	27	60	13
12 State	6	14	39	35	6
Prev Week	8	13	34	39	6
Prev Year	1	7	40	45	7

Corn

State	VP	P	F	G	EX
CO	0	2	16	74	8
GA	0	0	24	57	19
IL	11	14	36	34	5
IN	7	38	47	8	0
IA	0	2	40	51	7
KS	3	10	28	28	31
KY	0	12	64	22	2
MI	1	6	25	45	23
MN	2	4	27	63	4
MO	4	13	58	24	1
NE	5	8	30	50	7
NC	0	0	21	77	2
OH	10	23	42	22	3
PA	18	26	31	21	4
SD	2	11	26	46	15
TX	0	0	10	71	19
WI	2	4	17	60	17
17 State	4	11	34	43	8
Prev Week	4	12	36	40	8
Prev Year	1	4	20	63	12

Soybeans

State	VP	P	F	G	EX
AL	0	10	35	55	0
AR	0	0	38	62	0
GA	0	3	44	53	0
IL	3	12	32	46	7
IN	2	17	58	23	0
IA	2	9	37	49	3
KS	11	43	36	8	2
KY	1	7	69	22	1
LA	3	18	35	44	0
MI	1	4	25	45	25
MN	2	8	29	56	5
MS	0	0	41	59	0
MO	5	20	53	22	0
NE	9	22	50	18	1
NC	1	0	32	67	0
OH	5	19	40	31	5
SC	0	5	37	52	6
SD	0	8	29	52	11
TN	0	3	43	44	10
19 State	3	12	39	42	4
Prev Week	3	11	44	38	4
Prev Year	2	11	36	46	5

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 totals mostly under 0.25 in; 1.00 to 2.00. isolated areas. Temperatures averaged 1 to 4° below normal; near normal south.

Days suitable for fieldwork 6.1. Soil moisture 70% short, 30% adequate. Corn 85% harvested, 84% 1990, 73% avg.; 2% poor, 18% fair, 75% good, 5% excellent. Sorghum 54% harvested, 68% 1990, 54% avg.; 50% fair, 50% good. Peanuts 58% dug, 73% 1990, 41% avg.; 46% combined, 61% 1990, 29% avg.; 49% fair, 51% good. Cotton 68% bolls opened, 88% 1990, 79% avg.; 10% harvested, 25% 1990, 18% avg.; 9% poor, 44% fair, 44% good, 3% excellent. Soybeans 98% setting pods, 97% 1990, 95% avg.; 33% turning color, 62% 1990, 49% avg.; 16% dropping leaves, 40% 1990, 28% avg.; 8% mature, 25% 1990, 17% avg.; 2% harvested, 5% 1990, 5% avg.; 10% poor, 35% fair, 55% good. Winter wheat 9% seeded, 12% 1990, 13% avg. Pastures 13% poor, 43% fair, 43% good, 1% excellent. Livestock 15% fair, 83% good, 2% excellent. Primary activities: Harvesting corn, hay, sorghum, soybeans; digging, combining peanuts; defoliating, harvesting cotton; scouting, controlling insects in soybeans; planting small grains; mowing pastures; marketing livestock; general care of livestock, poultry, catfish.

ARIZONA: Sunny, hot, humid throughout period. Sunny 15th, 16th. Thunderstorms, southeast, southcentral, 17th, 18th. Rain showers central, 19th, 20th; Scatterd showers, east, 21st. Precipitation ranged from trace to 1.50 ins. southcentral; avg. temperatures 5° below to 4° above normal; ranges 34° to 91° higher elevations, 50° to 105° desert.

Cotton bolls opening 85%, 100% 1990, 92% avg.; Cotton harvested 6%, 9% 1990, 6% avg; activities included monitoring of insects, defoliating, harvesting; cotton 75% good, 25% excellent; weed, insect infestations light to moderate. Alfalfa harvest moderate; weed, insect infestations light to moderate; rain damage light; alfalfa rated good. Lemons harvested, west. Watermelons, cantaloup harvested, central. Mixed vegetables harvested central, east. Peaches, apples, pistachios harvested, east.

ARKANSAS: Temperatures were average, cooling to below average by week's end. Rainfall varied across the state. Temperature 36°; 95°. Rainfall 0.03 to 3.55 in. Days suitable for fieldwork, 5. Soil moisture supplies were 9% short, 83% adequate, 8% surplus.

Corn harvested 84%, 67% 1990, 85% avg. Corn condition 1% poor, 44% fair, 55% good. Pasture condition 5% poor, 25% fair, 52% good, 18% excellent. Alfalfa condition 20% poor, 19% fair, 61% good. Other hay condition 18% poor, 27% fair, 55% good. Livestock good. The main farming activities of the week were: harvesting rice, cotton, grain sorghum, corn, hay, and apples; scouting crops for insects, diseases; applying pesticides; seeding supplemental cool season forage. Insects continued to put medium to heavy pressure on late cotton. Many fields had been defoliated.

CALIFORNIA: Strong high pressure dominated the weather pattern pushing temperatures much above normal. The only rain reported during the week was in the southernmost end of the State as subtropical moisture crept in.

Open weather permitted progress field activities. Discing wheat stubble continued. Rice harvest active most areas. Field draining still underway. Cotton defoliation gained momentum. Irrigation, treatments lygus, mites, whiteflies ongoing. Harvest continued Riverside County. Alfalfa seed, corn grain, corn silage, dry bean, safflower, sugar beet harvests progressed. Sugar beets treated mildew. Alfalfa greenchopped, sprayed worm control. Harvests alfalfa, sudan hay normal. Field preparation small grains continued. Grape harvest active. Fresno County, 90% raisin grapes on trays, 20 to 30% rolled, 14% boxed. Harvest walnuts continued. Almond harvest full swing, mid varieties shaken. Pistachios picked. Some treated navel orange worm. Granny Smith, Gala apples harvested, packed. Fuji apples two weeks late. Jonathan apples ready for picking. Late peaches, nectarines, plums, figs, continued harvest, packing, San Joaquin Valley. Prune harvest nearly complete. Harvest continued, Early Foothill pomegranates, beginning Wonderfals. Ash whitefly caused damage in Sanger District. Barhi date picked, others dusted. Naval oranges continued to mature well. Riverside County lemons harvested. Harvest Other Area grapefruit continued slowly. Broccoli moderate supply, generally good quality. Cauliflower moderate supply, variable quality. Celery heavy supply, generally good quality. Iceberg lettuce moderate supply, variable quality. Fall crop lettuce being irrigated. Processing tomato, cantaloup harvest winding down Westside. Lettuce planting continued Desert area. Sweet potato harvest continued. Early variety Norkota potato harvest underway Tulelake McArthur area. Range conditions very poor-good northern State. Southern areas very poor to fair. Supplemental feeding continued.

COLORADO: Cool and mostly dry conditions prevailed over most of the state during the week. Two cold fronts, one on the 17th and the other on the 21st kept temps. down but produced very little precip. Avg. temps for the period were mostly 5° to 9° below normal except in the San Luis Valley where they avg. 3° to 4° degrees below normal.

Days suitable for fieldwork 5.9. Soil moisture 1% very short, 24% short, 73% adequate, 2% surplus. Third cutting alfalfa 62% complete, 56% 1990, 62% avg; fourth cutting underway. Oats 89% harvested, 95% 1990, 92% avg. Dry beans 53% harvested, 47% 1990, 48% avg. Sorghum is 35% mature, 26% 1990, 30% avg; sorghum and corn harvest just underway. Fall potatoes 20% harvested, 10% 1990, 25% avg. Corn 46% mature, 59% 1990, 54% avg; corn silage 73% harvested, 67% 1990, 70% avg. Corn 2% poor, 16% fair, 74% good, 8% excellent; sorghum 12% poor, 29% fair, 54% good, 5% excellent. Onion harvest 74% complete, 82% 1990, 61% avg. Winter wheat 54% seeded 58% 1990, 67% avg. Livestock mostly good. Pasture, range feed excellent.

FLORIDA: Temperatures Panhandle 3 to 4° above normal. Central and south, within 2° of normal. Highs, upper 90s, lows lower 60s. Showers daily central, south; weekly rainfall 0.5 in. or less. Panhandle received only isolated showers.

Soil moisture adequate. Peanut harvesting, haying active. Sugarcane planting gaining momentum. Cotton, soybeans, sugarcane made normal progress. State's pastures mostly good to excellent. Pasture ratings 10% fair, 75% good, 15% excellent. State's herds mostly good to excellent. Groves very good condition. Sub-surface moisture adequate, rainfall varied, interior counties irrigating, fruit splitting wet areas. Early bloom harvest continues. Young tree Hamlin harvest increasing. White and colored grapefruit movement active. Caretakers cutting cover crops. Spraying and fertilizations continue. Southern vegetable areas hot, wet; drier northern areas. Planting continued in southern localities. Northern squash, eggplant, hydroponic cucumber harvest underway.

GEORGIA: Temperatures 2° below normal to 2° above normal. Highs low, middle 90's. Lows in low, middle 40's mountains; low, middle 50's central; low 60's extreme south and southeast. Rain 1 to 2 days. Showers and thundershowers northern third amounts under 0.50 in. Local areas 1.00 to 2.00 in. Showers elsewhere under 0.33 in., amounts varied none to 1.00 in.

Days suitable for field work 6.2. Soil moisture 16% very short, 54% short, 29% adequate, 1% surplus. Sorghum 19% fair, 80% good, 1% excellent; 53% harvested for grain, 50% 1990, 48% avg. Peanuts 47% fair, 53% good; 59% dug, 56% 1990, 48% avg.; 43% threshed, 42% 1990, 34% avg. Soybeans 99% setting pods, 99% 1990, 100% avg. Rye 10% planted, 4% 1990, 7% avg. Other small grains 5% planted, 5% 1990, 4% avg. Apples 14% very poor, 10% fair, 76% good; 73% harvested, 69% 1990, 69% avg. Pecans 2% very poor, 10% poor, 63% fair, 25% good. Hay and pastures fair to mostly good. Livestock good.

HAWAII: Low pressure system causing unstable air brought rainfall, heavy many areas to most of State latter half of week. Farm activities slowed, halted due to wet, muddy conditions. Ban on sugarcane burning eastern areas because of worsening volcanic haze. Temperatures varied high 60s to low 90s. Rainfall 0.03 to 5.30 in.

Days suitable for fieldwork 7.0. Most island crops progressed well with beneficial weather. Insect spraying continued active to maintain crop progress. Watermelon harvest was light. Cavendish banana output and sweet corn picking continued active. Sugar harvesting delayed. Papaya output light to moderate.

IDAHO: No weather data available.

Days suitable for fieldwork 7. Soil moisture 15% very short, 36% short, 49% adequate, 0% surplus. Winter wheat 99% harvested. Spring wheat 94% harvested. Spring barley 96% harvested. Potato condition good; 88% vines dying/killed, 16% harvested. Oats 92% harvested, 93% 1990, 97% average. Third cutting alfalfa 48% complete, 58% 1990, 65% average. Sugarbeet harvest 7% complete, 14% 1990, 6% average. Apple harvest 12% complete, 23% 1990, 21% average. Plum and prune harvest 99% complete, 99% 1990, 96% average. Hops 83% harvested, 50% 1990, 78% average. Onions 57% harvested, 61% 1990, 61% average. Sweet corn harvest 82% complete. Dry bean harvest 38% complete, 71% 1990, 67% average. Corn for silage harvest 33% complete. Activities: fall plowing,

planting of winter wheat and harvesting of potatoes, dry beans, onions, sweet corn and sugarbeets. Irrigation water supplies good. Livestock in good to excellent condition. Pasture and range conditions 79% of normal.

ILLINOIS: Temperatures avg. 3° to 12° below normal. Rainfall generally .10 in. to .20 in. in central to northern part of state, while southern half of state varied from .40 in to 1.10 in.

Days suitable for fieldwork 6.00. Soil moisture 64% short, 35% adequate and 1% surplus. Soybeans turning yellow 93%, 66% 1990, 88% avg. Pasture condition as a % of normal, where 100% = normal, was 72%.

INDIANA: Temperatures averaged 3° to 8° below normal. Highs mid 60's to low 70's. Lows low 40's to mid 50's. Precipitation totals varied 0.10 to 1.35 inches. Rain scattered, heavier south.

Fieldwork averaged 6.3 days. Topsoil moisture 65% short, 35% adequate. Subsoil moisture 79% short, 21% adequate. Soybeans turning color 98%, 65% 1990, 84% avg. Tobacco harvested 84%, 58% 1990, 76% avg. Winter wheat seeding 6%, 6% 1990, 8% avg. Silo filling 93%, 36% 1990, 69% avg. Pasture 50% of normal. Wheat acres plowed 45%, 43% 1990, 45% avg. Fall apple harvest 55%. Cool weather brought first frost. Corn and soybean harvest in full swing.

IOWA: Temperatures 8 to 10° below normal. Extremes 24 to 85°. Precipitation 0.00 to 0.62 in.; average 0.12 in. Nearly a statewide freeze on 19-20th. Earliest freeze on record at Burlington.

5.3 days suitable for fieldwork. Topsoil moisture 25% short, 65% adequate, 10% surplus; Subsoil moisture 30% short, 68% adequate, 2% surplus. Pasture condition 80% of normal. Corn 97% in dent stage, 100% 1990, 100% avg. Soybeans 75% leaves turning color, 83% 1990, 93% avg. Third cutting alfalfa 93% harvested, 100% 1990, 96% avg. Winter wheat 22% planted, 17% 1990, 16% avg. Livestock in good to excellent condition.

KANSAS: Temperatures avg. 3° below normal over entire State. Record lows recorded some northeastern localities. Rainfall avg. 0.00 in. to 0.20 in. central, west; 0.80 to 1.30 in. east.

Days suitable for fieldwork 6.0. Surface moisture 77% short, 23% adq. Subsurface moisture 83% short, 17% adq. Wheat planting good progress western third; slow elsewhere because of short surface moisture. Some emergence noted. Corn harvest good progress. Cold weather may have hurt some immature stands corn, sorghum, soybeans. Range, pasture condition generally poor. Stock water short to very short. Some ranchers hauling water to maintain herds. Fourth cutting alfalfa 60% complete.

KENTUCKY: Near record high temperatures, followed by near record low temperatures. Cold front moved across 18th. Temperatures averaged mid 60s, 2 - 3° below normal. Rain varied greatly, averaged 0.25 to 0.50 in.

Days suitable for fieldwork 5.1. Soil moisture 7% very short, 49% short, 44% adequate. Burley tobacco 90% cut, compared to 75% 1990, 84% avg. Dark tobacco 83% cut. Corn harvest active, soybean harvest beginning. Pastures improving where rain received, mostly fair condition.

LOUISIANA: Average temperatures ranged from 2.7° to 0.2° below normal. Temperature extremes 47°, 96°. Rainfall averaged from .02 in., northeast to 1.41 in., east-central.

Days suitable for fieldwork: 5.3. Soil moisture supplies: 16% short, 80% adequate, 4% surplus. Corn 100% harvested, 100% 1990, 98% avg. Heavy budworm egg lay on green cotton, central. Some boll rot, northeast. Hay 68% final cutting, 82% 1990, 78% avg. Rice 100% headed, 100% 1990, 100% avg.; 91% ripe, 96% 1990, 97% avg. Second crop management continued southwest. Soybeans 99% setting pods, 100% 1990, 100% avg.; 27% leaves turning color, 71% 1990, 55% avg. Insects and disease prevalent most fields, statewide. Sweetpotatoes 1% poor, 61% fair, 38% good; 46% harvested, 52% 1990, 57% avg. Sugarcane 11% fair, 69% good, 20% excellent; 70% planted, 47% 1990, 66% avg. Vegetables 3% very poor, 8% poor, 59% fair, 30% good. Pastures 1% poor, 1% fair, 18% good, 80% excellent. Livestock 20% fair, 71% good, 9% excellent.

MARYLAND & DELAWARE: **MARYLAND:** Precipitation 1.38 in. Temperature 74.7°, normal 67.5°. Extremes 36°; 99°.

Days suitable for fieldwork 5.1. Topsoil moisture 5% very short, 40% short, 50% adequate, and 5% surplus. Subsoil moisture 18% very short, 50% short, 27% adequate, and 5% surplus. Field corn was in fair condition, soybeans were in fair to good condition, and sorghum and tobacco were in good condition. Field corn 82% mature, 56% 1990, 62% avg.; 87% harvested for silage, 64% 1990, 69% avg.; 33% harvested for grain, 15% 1990, 21% avg. Soybeans 54% turned, 42% 1990, 39% avg.; 23% shedding leaves, 13% 1990, 15% avg. Sorghum 90% turned, N/A 1990, N/A avg.; 85% mature, N/A 1990, N/A avg. Tobacco 93% harvested, 91% 1990, 84% avg. Lima beans 82% harvested, 83% 1990, 87% avg. Barley 10% seeded, 17% 1990, 14% avg. Sweet Potatoes 30% harvested, 7% 1990, 18% avg. Other hay second cut 84% complete, 99% 1990, 95% avg.; third cut 34% complete, 48% 1990, 63% avg.; fourth cut 10% complete, 14% 1990, 12% avg. Alfalfa fourth cut 60% complete, 50% 1990, 47% avg. Hay supplies short to adequate. Pasture poor to fair condition. Apples good condition, 49% harvested, 40% 1990, 40% avg. Activities for the week: Harvesting hay, vegetables, and tobacco; repairing fence; hauling manure; spreading fertilizer; maintaining machinery; and caring for livestock.

DELAWARE: Precipitation 1.66 in. Temperature 73.8°, normal 68.1°. Extremes 48°; 95°.

Days suitable for fieldwork 6.3. Topsoil moisture 60% short, 40% adequate. Subsoil moisture 80% short, 20% adequate. Field corn and soybeans were in fair to good condition, and sorghum was in good condition. Field corn 45% harvested for grain, 31% 1990, 27% avg.; 95% harvested for silage, 80% 1990, 83% avg. Soybeans 47% turned, 25% 1990, 28% avg.; 20% shedding leaves, 5% 1990, 7% avg. Sorghum 76% turned, N/A 1990, N/A avg.; 55% mature, N/A 1990, N/A avg.; 11% harvested, N/A 1990, N/A avg. Cucumbers 94% harvested, 94% 1990, N/A avg. Lima Beans 65% harvested, 75% 1990, 69% avg. Other hay third cut 89% complete, 88% 1990, 92% avg.; fourth cut 64% complete, N/A 1990, N/A avg. Alfalfa hay fourth cut 78% complete, 70% 1990, 65% avg. Hay supplies adequate. Pasture poor to fair condition. Apples good condition, 49% harvested, 54% 1990, 41% avg. Activities: Harvesting hay and vegetables; repairing fence; hauling manure; spreading fertilizer; maintaining machinery; caring for livestock.

MICHIGAN: Temperatures ranged from 0 to 5° below normal. Temperature extremes 94°; 25°. Precipitation ranged from 0 to 1.16 in.

Days suitable for fieldwork 5.5. Soil moisture 35% short, 60% adequate, 5% surplus. Corn 65% mature, 20% 1990, 45% avg.; 7% harvested 0% 1990, 2% avg.; 1% very poor, 6% poor, 25% fair, 45% good, 23% excellent. Soybeans 80% dropping leaves, 35% 1990, 50% avg.; 5% harvested 0% 1990, 1% avg.; 1% very poor, 4% poor, 25% fair, 45% good, 25% excellent. Winter wheat 20% planted, 20% 1990, 10% avg. Pasture condition 80% of normal. Major activities: Hay making, preparing ground for winter wheat, harvesting crops, picking apples, processing grapes, repairing equipment, opening cider mills, dry beans 50 percent harvested, well ahead of normal.

MINNESOTA: Temperatures 3 to 5° below normal. Extremes 24°; 83°. Precipitation none to 2.17 in. Greatest weekly total 3.23.

Days suitable for fieldwork 2.6. Topsoil 1% very short, 1% short, 63% adequate, 35% surplus. Field corn 97% denting, 96% 1990, 98% avg.; 61% mature, 37% 1990, 63% avg.; 3% picked/combined, 1% 1990, 6% avg.; 49% silage cut 27% 1990, 43% avg.; 26% moisture NA 1990, NA avg. Soybeans 72% dropping leaves, 79% 1990, 82% avg.; 41% mature, 27% 1990, 44% avg.; 4% combined, 4% 1990, 11% avg.; 13% moisture, NA 1990, NA avg. Dry beans 82% harvested, 79% 1990, 61% avg. Potatoes 36% harvested, 47% 1990, 50% avg. Flax 76% harvested, 86% 1990, 77% avg. Sugarbeets 8% harvested 3% 1990, 6% avg. Sunflowers 10% harvested, 5% 1990, 10% avg. Sweet corn 84% harvested, 90% 1990, 93% avg. Winter wheat 88% seeded, 85% 1990, 86% avg. Rye 84% seeded, 81% 1990, 84% avg. Hay, small grain 66% stubble plowed/tilled, 66% 1990, 66% avg. Field corn 2% very poor, 4% poor, 27% fair, 63% good, 4% excellent. Soybeans 2% very poor, 8% poor, 29% fair, 56% good, 5% excellent.

MISSISSIPPI: Temperature 74°, 0.9° below normal. Extremes 40°; 98°. Mostly dry statewide. State 0.47 in., 0.50 below normal. Soil temperatures 82°.

Days suitable for fieldwork 5.5, 5.2 1990, 5.2 avg. Soil moisture 9% very short, 42% short, 49% adequate. Corn 91% mature, 94% 1990, 94% avg.; 55% harvest, 53% 1990, 64% avg.; silage harvest 89%, 98% 1990, 97% avg.; 10% poor, 53% fair, 36% good, 1% excellent. Cotton open bolls 81%, 95% 1990, 89% avg.; 9% harvest, 24% 1990, 22% avg.; 44% fair, 45% good, 11% excellent. Peanuts 75% harvest, 78% 1990, 70% avg. Rice 99% heading, 100% 1990, 100% avg.; 62% mature, 75% 1990, 89% avg.; 22% harvest, 40% 1990, 56% avg.; 71% fair, 29% good. Sorghum 96% coloring, 96% 1990, 98% avg.; 79% mature, 86% 1990, 90% avg.; 44% harvest, 61% 1990, 68% avg.; 85% silage harvested, 92% 1990, 87% avg.; 13% poor, 47% fair, 40% good. Soybeans 96% podding, 95% 1990, 95% avg.; 31% coloring, 48% 1990, 54% avg.; 9% shedding leaves, 28% 1990, 32% avg.; 1% harvest, 6% 1990, 4% avg.; 41% fair, 59% good. Sweet potatoes 47% harvested, 55% 1990, 51% avg. Wheat planted 9%, 10% 1990, 9% avg.; 3% emerged, 6% 1990, 4% avg.; 9% poor, 73% fair, 18% good. Hay 93% harvested, 88% 1990, 88% avg. Pecans 2% very poor, 23% poor, 12% fair, 63% good. Livestock 10% fair, 75% good, 15% excellent. Pasture 92% of normal. Activities: Cotton defoliation, harvesting crops, planting winter grazing.

MISSOURI: Temperatures averaged 2° below normal southeast to 9° below normal central, western areas. Rainfall averaged 1.15 in., varying less than 0.50 in. northern third to 2.00 in. many central, east-central, southwestern counties.

Days suitable for fieldwork 4.7. Topsoil moisture supply 40% short, 59% adequate, 1% surplus. Corn mature ranges from 79% northeast

to complete in west central, southeast. Corn harvested, 43% state, varies from 25% north-central, northeast to around 75% west-central, southwest, southeast districts. Some discoloration, frost damage to soybeans in northern counties, extent not yet determined. Soybeans mature 19%, 7% 1990, 17% avg. Maturity ranges 6% southeast district to 32% northwest. Soybeans harvest still just getting started most areas. Sorghum coloring least-advanced southwest district, 79%, most advanced 98% northeast, southeast. Sorghum mature ranges 35% northeast district to 78% southeast. Sorghum harvesting 7% or less north-central, northeast, east-central to 40% complete southeast. Wheat seeded ranges from 2% east-central district to 14% central district, 20% south-central district. Pasture condition 7% very poor, 32% poor, 44% fair, 17% good.

MONTANA: Temperatures near normal west, normal to 10° below normal east. Above normal precipitation northeast, southeast and southcentral; dry west.

Days suitable fieldwork 5.0. Topsoil moisture 33% short, 61% adequate, 6% surplus. Subsoil moisture 49% short, 48% adequate, 3% surplus. Winter wheat emerged 17%, 14% 1990, 14% avg. Spring wheat harvested 97%, 99% 1990, 94% avg. Barley harvested 97%, 98% 1990, 93% avg. Oats harvested 97%, 96% 1990, 93% avg. Potatoes harvested 6%, 12% 1990, 15% avg. Sugar beets harvested 5%, 2% 1990. Dry beans harvested 80%, 59% 1990, 64% avg. Second cutting alfalfa harvested 95%, 95% 1990, 92% avg. Corn silage harvested 48%, 53% 1990, 62% avg. Pasture and range feed condition 89% of normal.

NEBRASKA: Temperatures averaged 5 to 8° below normal. Temperature extremes: 17°; 92°. Only small amounts of precipitation occurred throughout the week.

Days suitable for fieldwork 6.4. Topsoil moisture 62% short, 38% adequate. Subsoil moisture 86% short, 14% adequate. State received killing frost midweek. Generally crops were mature, escaped serious damage. Only late planted, replanted, drought affected slow maturing row crop hurt. Heavy winds caused corn lodging North. Stalk breakage, ear droppage due to corn borer damage. Stalk rot a concern to Southeastern sorghum growers. Some drought damaged sorghum fields never headed, Southeast. Winter wheat 18% emerged, 20% 1990, 28% avg. Good planting conditions West, dry conditions delaying planting South, Southeast. Heavy rain caused some replanting West. Pasture, range 60% of normal. Supplemental feeding for cattle on pasture. Livestock moving to stalk fields as available. Cooler weather allowing improved weight gains.

NEVADA: Temperatures averaged well above normal. Extremes 22°; 104°. No measurable precipitation recorded during the week. A strong ridge of high pressure brought very dry and warm conditions, with record highs over northern areas.

Harvest of onions, alfalfa seed, and hay continuing. Preparations for potato harvest underway. Planting of winter wheat progressing with good weather. Livestock good condition, movement to fall grazing, market continues.

NEW ENGLAND: Precipitation .85 to 3.25 in. Average temperatures mid 50s to high 60s; normal to 4° above normal. Maximum temperatures low 80s to low 90s; minimum temperatures high 20s to mid 40s.

Days suitable for fieldwork 5.3. Frost reported in both north and south, minor damage to vine crops. Soil moisture 0% very short, 19% short, 71% adequate, 10% surplus. Grazing availability 0% very short, 25% short, 75% adequate, 0% surplus. Fieldwork 4.0 days ahead of schedule. Maine potatoes 25% harvested, 24% 1990, 25% avg; condition fair to good. Rhode Island potatoes 76% harvested, 85% 1990, 73% avg; condition fair. Connecticut Valley potatoes 55% harvested, 56% 1990, 42% avg; condition fair to good. Maine oats 98% harvested, 100% 1990, 85% avg; condition good. Field corn 31% harvested, 18% 1990, 26% avg; condition fair to good. Sweet corn 92% harvested, 94% 1990, 93% avg; condition fair to good. Second cut hay 96% complete, condition fair to good. Third cut hay 71% complete, 61% 1990, 60% avg; condition good. Apples 52% harvested, 35% 1990, 35% avg; size small to medium, condition fair. Peaches 96% harvested, size small to medium, condition fair. Pears 85% harvested, size small to medium, condition fair. Cranberry harvest underway, berry size small to average, condition good. Major farm activities: cutting hay, controlling weeds and insects, harvesting apples, peaches, vegetables, potatoes, field corn, planting cover crops.

NEW JERSEY: Temperatures much above normal. Extremes 32°; 96°. Rainfall 1.19 in. north, 0.84 in. central, 0.63 in. south. Heaviest 24 hour total 1.07 in. on 19th, 20th. Estimated soil moisture percent field capacity, 72% north, 64% central, 63% south. Four inch soil temperature 64° north, 69° central, 70° south.

Soil moisture somewhat improved although rain still needed. Late season crops well advanced. Harvest of corn, soybeans began. Irish potato digging active. Fall variety apple harvest increased. Cranberry harvest began. Pasture growth in adequate; supplemental feed necessary.

NEW MEXICO: A strong cold front dropped temperatures to below seasonal averages during mid- and late week. Average temperatures were 10° to 15° below normal across the plains and 3° to 6° below normal elsewhere. The front also produced widespread cloudiness across the state with heavy rainfall over the southeast plains. Generally, less than one inch fell over south-central mountains and southwest valleys.

Days suitable for fieldwork 4.9. Soil moisture 4% short, 77% adequate, 19% surplus. Crop conditions: alfalfa 16% poor, 20% fair and 64% good with rain damage still causing problems. Wheat planting 86% complete. Irrigated wheat 20% fair, 80% good. Dryland wheat 25% fair, 75% good. Corn 7% poor, 7% fair, 79% good, 7% excellent. Chile 11% poor, 11% fair, 78% good with green harvest delayed by wet fields. Lettuce 50% fair, 50% good. Apples poor to good. Pecans fair to good. Cool, wet weather has cotton crop running behind, need warm, dry weather to get bolls open. Cattle and sheep fair to excellent. Range 90% of normal, low of 60%, high of 120%.

NEW YORK: Early week temperatures were summerlike with highs in the 90s, lows 60s. Cooler weather moved in during second half of week. Highs only reached into the 60s, lows dipped to the 30s. A frost occurred in eastern areas during the period. Extremes 26°; 95°. Rainfall was variable. Heaviest amounts, from 2.00 to 3.00 in. were recorded in central, eastern areas. Western areas received the least where under 0.05 in. fell.

Days suitable for fieldwork: 6.3. Soil moisture short to adequate. Pasture condition 46% of normal. Corn, hay in fair to good condition.

Silage corn harvest in full swing. Grain corn harvest underway. Fall plowing active in early harvested fields. Grape harvest remained active. Sugar content very high, overall quality excellent, yields good. Apple picking gaining momentum. Vegetable harvesting continued with only late season crops left. Pumpkin harvest underway. Onion harvest winding down.

NORTH CAROLINA: Temperatures 1 to 5° F above normal. Precipitation none to 3.50 in.

Days suitable for fieldwork 6.1. Soil moisture 4% very short, 48% short, 46% adequate, 2% surplus. Crop condition: corn 21% fair, 77% good, 2% excellent; cotton 14% fair, 82% good, 4% excellent; peanuts 31% fair, 69% good; soybeans 1% very poor, 32% fair, 67% good; hay 1% very poor, 2% poor, 33% fair, 61% good, 3% excellent; Sweet potatoes 34% fair, 61% good, 5% excellent; Apples 4% poor, 19% fair, 70% good, 7% excellent; sorghum 31% fair, 66% good, 3% excellent; Pasture 1% very poor, 7% poor, 37% fair, 53% good, 2% excellent. **HARVESTED:** Flue-cured tobacco 89%; Burley Tobacco 88%; Corn silage 85%; Corn for Grain 56%; sorghum for grain 28%; sweet potatoes 21%; Apples 68%; Peanuts dug 15%; Hay second cutting 94%, third cutting 62%. Cotton opening bolls 90%; soybeans dropping leaves 19%. **PLANTED:** wheat 7%; oats 7%; barley 4%; rye 9%. Major activities included: harvesting tobacco, corn, sorghum, sweet potatoes, truck crops, apples, peanuts, and hay; spraying row crops; harvesting, defoliating cotton; planting small grains. Other activities included: land preparation; tending livestock; equipment repair; general farm maintenance.

NORTH DAKOTA: Temperatures 6 to 9° below normal. Extremes 15° south central; 85° west central. Precipitation 0.38 in. south central to 1.61 northeast.

Days suitable for fieldwork 5.1. Topsoil 8% very short, 36% short, 54% adequate, 2% surplus. Subsoil 21% very short, 63% short, 16% adequate. Corn for grain 2% poor, 24% fair, 72% good, 2% excellent; 25% harvested, none 1990, 6% avg. Corn for silage 3% very poor, 8% poor, 33% fair, 54% good, 2% excellent; 90% cut, 70% 1990, 65% avg. Flax 5% poor, 18% fair, 65% good, 12% excellent; 85% combined, 86% 1990, 69% avg. Potatoes 97% good, 3% avg.; 58% dug, 46% 1990, 56% avg. Soybeans 5% poor, 28% fair, 52% good, 15% excellent; 31% combined, 12% 1990, 20% avg. Dry beans 1% poor, 7% fair, 74% good, 18% excellent; 91% combined, 72% 1990, 57% avg. Sunflower 2% poor, 28% fair, 61% good, 9% excellent; 2% harvested, 2% 1990, 3% avg. Sugarbeets 100% good; 9% lifted, 5% 1990, 7% avg. Winter wheat 68% planted, 82% 1990, 73% avg. Rye 74% planted, 80% 1990, 73% avg. Pasture condition 73% of normal. Stockwater supplies 6% very short, 51% short, 43% adequate.

OHIO: Daily high temperatures averaged in the mid 70s with low temperatures mostly in the mid 40s to lower 50s across the state. Rainfall totals averaged under 0.50 in. Distribution around the state was fairly even but ranged from a 0.04 in. at Caldwell and Jackson in the southern part of Ohio to 0.57 in. in the north in Cleveland. Scattered frost was reported late-week in central Ohio.

Days suitable for fieldwork 6.1. Soil moisture 60% short, 37% adequate and 3% surplus. Pastures 22% very poor, 31% poor, 31% fair, 15% good, 1% excellent. Tomato harvest 84%, 66% 1990, 86% average. Potato harvest 65%, 43%

1990, 54% average. Third cut alfalfa 98%, 99% 1990, 96% average. Third cut other hay 78%, 53%, 1990, 60% average. Corn for silage 86%, 22% 1990, 44% average. Major farm activities: harvesting corn and soybeans, chopping corn for silage and filling silos; making hay; fall tillage, spreading fertilizer for wheat; spraying johnson grass and plowing for weeds.

OKLAHOMA: Temperatures 8° below normal southeast to 13° below normal southwest. Rainfall 0.03 in. Panhandle to 3.49 in. east central.

Days suitable for fieldwork 3.8. Topsoil 6% short, 53% adequate, 41% surplus. Subsoil 21% short, 79% adequate. Wheat 29% planted, 10% 1990, 30% avg.; 11% up to stand, 1% 1990, 9% avg. Cotton 18% open bolls, 44% 1990, 27% avg.; 0% harvested, 2% 1990, 1% avg. Cotton good. Sorghum 93% milk to soft dough, 97% 1990, 95% avg.; 23% mature, 65% 1990, 37% avg.; 6% harvested, 2% 1990, 9% avg. Sorghum good. Soybeans 27% mature, 9% 1990, 24% avg.; 7% harvested, 0% 1990, 5% avg. Peanuts 48% mature, 34% 1990, 46% avg.; 2% harvested, 1% 1990, 4% avg. Corn 87% harvested, 57% 1990, 67% avg. Pasture condition 98%. Crop insect activity light to moderate. Cattle good; marketings average; prices mixed.

OREGON: Temperatures above normal, coast, western interior, record temperatures 15th to 18th; cooling trend later in week. East. Lows starting to fall below freezing. Only recorded rain in State: 0.01 inch on 17th at Brookings.

Soil moisture 73% short, 27% adequate. Barley harvest concluding. 1992 winter wheat planted, 16%. 1992 barley planted, 6%. Hay harvest continued; red clover, hops harvest continued. Field preparation for 1992 crop underway. Grass seed, clover, and buckwheat planting started. Bartlett pear harvest continued across state, completed in Hood River, Douglas counties. Anjou pear harvest starting, Hood River Valley. Winter pear harvest completed in Willamette Valley. with less than expected yields. Apple harvest underway in most areas. Blueberry harvest in later stages in Lincoln County. Late season harvest of blackberries and blueberries continued in Lane County. Hazelnut harvest set to start. Sweet corn harvest continued in western areas. Table beets harvest in full swing. Broccoli harvest is winding down. Onions pulled and windrowed in Willamette Valley. Livestock mostly good. Cattle being pulled off eastern areas ranges due to dry conditions; some being sold early. Statewide range, pasture, 3% very poor, 24% poor, 12% fair, 53% good, 7% excellent.

PENNSYLVANIA: Slightly above normal precipitation, below normal temperatures. Average temperature 63°, 2° below normal. Temperature extremes 29°; 95°. Average precipitation 0.91 in., 0.06 in. above normal.

Days suitable for fieldwork 5. Soil moisture 80% short, 20% adequate, 0% surplus. Corn 98% dough, 92% 1990, 94% avg; 85% dent, 54% 1990, 66% avg.; 44% mature, 8% 1990, 20% avg.; 7% harvested, 1% 1990, 2% avg. Ensilage corn harvested 62% complete, 20% 1990. Corn crop condition 18% very poor, 26% poor, 31% fair, 21% good, 4% excellent. Soybean harvest 3% complete, 0% 1990. Soybean crop condition 12% very poor, 21% poor, 37% fair, 27% good, 3% excellent. Wheat planted 34% complete, 17% 1990. Barley planted 41% complete, 28% 1990. Tobacco harvest 94% complete, 88% 1990. Potato harvest 63% complete, 46% 1990. Third cutting alfalfa 82% complete, 66% 1990. Fourth cutting alfalfa 38% complete, 29% 1990. Second cutting clover-timothy 96% complete, 88% 1990. Feed from pastures 40% very

poor, 30% poor, 27% fair, 3% good. Quality of hay made mostly fair. Apple harvest 44% complete, 34% 1990. Peach harvest 98% complete, 94% 1990. Grapes harvest 68% complete, 42% 1990. Fall plowing 51% complete, 46% 1990. Activities: Repairing fence; hauling manure; harvesting hay, tobacco, potatoes, fruits, vegetables, corn silage, corn; maintaining machinery; caring for livestock; and fall plowing and planting.

PUERTO RICO: Island rainfall of 1.16 in. was 0.69 in. below normal. Highest total rainfall was 2.69 in. at Cidra, 2.65 in. at Maricao, 2.54 in. at Central San Francisco. Highest 24 hour total 2.55 in. at Cidra. Divisional temperatures 81 to 82° on the coast, 75 to 79° in the interior with mean station temperatures ranging from 68.5° at Pico Del Este Luquillo to 83.5° at WSFO San Juan. Extremes 61°; 95°.

SOUTH CAROLINA: Daily average temperatures were 1° above normal. Scattered showers and thunderstorms latter part of week. Rainfall varied from 0.30 in. in the northwest to 0.80 in. in the northeast.

Days suitable for fieldwork 5.8. Soil moisture 7% very short, 60% short, 33% adequate. Apples good; 84% harvested, 86% 1990, 62% avg. Corn fair to good; 82% harvested, 85% 1990, 68% avg. Cotton 80% fair; 20% good; 84% open bolls, 77% 1990, 71% avg.; 7% harvested, 12% 1990, 6% avg. Fall hay fair to good; 70% harvested, 55% 1990, 63% avg. Peanuts fair to good; 18% harvested; 12% 1990, 11% avg. Sorghum fair to good; 40% harvested, 46% 1990, 34% avg. Soybeans 5% poor, 37% fair, 52% good, 6% excellent; 98% setting pods, 85% 1990, 93% avg.; 22% leaves turning, 11% 1990, 18% avg.; 9% shedding leaves, 2% 1990, 5% avg. Sweetpotatoes fair to good; 50% harvested, 32% 1990, 24% avg. Tobacco virtually harvested; 63% stalks destroyed, 42% 1990, 42% avg. Winter grazing fair to good, 23% planted, 23% 1990, 27% avg.; 11% emerged, 9% 1990, 14% avg. Pastures fair to good. Livestock good.

SOUTH DAKOTA: Temperatures averaged 5 to 10 degrees below normal last week. Extremes: 94, 11. Light rainfall confined mainly to the northern half of state. Maximum .64 in..

Days suitable 5.4. Topsoil moisture: 18% critical, 47% short, 31% adequate, 4% surplus. Subsoil moisture: 29% critical, 45% short, 23% adequate, 3% surplus. Sunflowers: 3% poor, 37% fair, 51% good, 9% excellent. Livestock: 6% fair, 78% good, 16% excellent. Pasture conditions 82% of normal.

TENNESSEE: Cold front moved through West, Middle on 17th, stalled as stationary front East on 18th. Temperatures averaged 3 to 6° below normal. Rainfall below normal West, Middle; normal East.

Days suitable for fieldwork 5.3. Soil moisture 11% very short, 38% short, 50% adequate, 1% surplus. Corn 84% mature, 79% 1990, 86% avg.; 72% harvested silage, 58% 1990, 84% avg.; 34% harvested grain, 22% 1990, 31% avg. Cotton 74% open bolls, 77% 1990, 78% avg.; 5% very poor, 6% poor, 57% fair, 32% good. Sorghum 68% mature, 72% 1990, 82% avg.; 20% harvested, 12% 1990, 46% avg. Soybeans 20% shedding leaves, 26% 1990, 37% avg.; 12% mature, 8% 1990, 13% avg. Burley tobacco 90% harvested, 83% 1990, 86% avg. Dark Fired tobacco 85% harvested, 79% 1990, 85% avg. Dark Air-Cured tobacco 80% harvested, 83% 1990, 86% avg.

TEXAS: Summer ended as first cold front of season ushered cold, wet weather throughout State. Adverse effects of cold temperatures remain uncertain most crops, harvest operations further delayed by wet conditions. Producers completed some hay baling where conditions allowed, wet weather delayed operations most areas. Pasture conditions improved, plentiful forage. Livestock markets improved. Sheep, goat culling continued in Hill Country.

Crops: Heavy rains delayed corn harvest in High Plains. Some stalk, lodging occurred. Silage harvest virtually complete. High Plains, cooler temperatures slowed sorghum maturity. Warmer weather needed promote maturity. Cotton dealt serious setback from heavy rainfall, cold temperatures on Plains. Wet, cold weather caused much concern among most producers. Growth, maturity have been hampered. Control measures began pink bollworms in Trans-Pecos. Yields, grades declined with frequent rainfall in Central Texas. Recent rainfall delayed small grain planting throughout State. Wet conditions caused many fields germinate rapidly. Armyworms plaguing many fields. Rice harvest along Upper Coast experienced delays late in week. First crop harvest nearly finished. Soybean harvest hampered by wet conditions last week. Soybeans continued dry down. Rain delayed peanut harvest throughout State. Wet, fall-like conditions caused southern blight to spread some fields. Weevil spraying continued in heavily infested areas. Some early planted fields being dug in Central Texas. Statewide peanut condition is rated at 87 percent of normal.

Commercial Vegetables: East Texas, recent rain delayed sweetpotato harvest. High Plains, heavy rains delayed most field activities. Trans-Pecos, chile pepper development continued to improve. Pecan prospects continued look good. Weevil damage heavy in Plains. Other insect problems minimal. Central Texas, shucks were splitting.

Range and Livestock: Ranges, pastures have shown excellent forage growth throughout State. Wet, cool temperatures may slow grass growth. Livestock have continued to improve. Armyworms increased in Central Texas.

UTAH: Temperatures 2° below normal. Precipitation light.

Days suitable fieldwork 6.3. Soil moisture 19% short, 62% adequate, 19% surplus. Winter wheat seeding 73% complete, 54% 1990, 63% avg. Corn 78% dent, 85% 1990, 84% avg.; 29% mature, 58% 1990, 56% avg.; harvest for grain beginning; corn silage 31% harvested, 49% 1990, 48% avg. Alfalfa (third cutting) 73% complete, 79% 1990, 76% avg.; (fourth cutting) 15% complete, 44% 1990, 35% avg. Alfalfa seed harvest 59% complete, 55% 1990, 31% avg. Potatoes 42% harvested, 26% 1990, 26% avg. Dry onions 54% harvested, 57% 1990, 52% avg. Pasture and range mostly good to excellent. Apples 35% harvested, 21% 1990, 32% avg. Peach harvest virtually completed. Pear harvest continues. Cattle moved from summer range 23% complete, 26% 1990, 23% avg. Sheep moved from summer range 23% complete, 44% 1990, 27% avg.

VIRGINIA: Temperatures 8 - 12° above normal. Rainfall was near normal. Extremes 37°; 99°.

Days suitable for fieldwork 6.1. Topsoil moisture 28% very short, 54% short, 11% adequate, and 7% surplus. Corn for grain harvested 45%, 34% 1990, 34% avg. Corn for silage harvested 72%, 70% 1990, 59% avg. Corn mature 85%, 77% 1990, 74% avg. Soybean condition 1% very poor, 46% poor, 37% fair, and 16% good. Flue tobacco harvested

82%, 82% 1990, 69% avg. Fire tobacco harvested 98%, 96% 1990, 96% 1990, 81% avg. Burley tobacco 80% harvested, 75% 1990, 62% avg. Sun tobacco harvested 90%, 92% 1990, 90% avg. Peanuts dug 15%, 7% 1990, 2% avg. Peanuts combined 7%, 3% 1990 and avg. Peanut condition 40% fair and 60% good. Sweetpotato and apple harvest continued. Winter wheat 5% seeded, 6% 1990, 4% avg. Barley 8% seeded, 8% 1990, 7% avg. Oats 10% seeded, 9% 1990, 7% avg. Pasture condition 22% very poor, 51% poor, 14% fair, and 13% good. Livestock mostly good condition. Irrigating and harvesting fall vegetables.

WASHINGTON: Temperatures 5° above normal to 0° below normal, east; 3° above normal to 0° below normal, west. Precipitation none to 0.09 in east; 0 to 0.01 in. west.

Days suitable for fieldwork 7. Soil moisture 55% short, 45% adequate. Hay, other roughage 8% short, 83% adequate, 9% surplus. Irrigation water 3% very short, 97% short. Range, pasture 4% very poor, 47% poor, 28% fair, 21% good. Winter wheat 42% fair, 58% good. Barley 20% fair, 70% good, 10% excellent. Spring wheat 7% poor, 36% fair, 57% good. Potatoes 100% good. Dry beans 100% good. Corn 100% good. Winter Wheat 40% planted, 25% emerged, 100% harvested. Spring Wheat 100% harvested. Spring Barley 100% harvested. Potatoes 36% harvested. Dry peas 100% harvested. Alfalfa hay, 3rd cutting 87%.

Grain harvest was complete across the State. Winter wheat seeding continues in the central portion of the State. Rain is needed for good seedbed moisture in most areas. Farmers are reporting bad recrop seedbed conditions in Spokane County. Alfalfa plantings were completed in central Washington. Potato harvest is in full swing in most parts of the State. Golden Delicious harvest is well underway in central Washington. Sweet corn, carrot harvest is also in full swing throughout the State. Dry range and pastures prevailed across the State. Some cattle were starting to come off the mountain ranges or were redistributed in current rangeland.

WEST VIRGINIA: Avg. temperature 64°. Extremes 30°, 98°. Precipitation avg. .61 in.

Days suitable for fieldwork 5.2. Soil moisture 28% very short, 39% short, 33% adequate. Corn, 10% poor, 57% fair, 33% good;

98% dough stage, 84% mature, 15% harvested. Gardens, fair. Tobacco, good; 100% topped, 81% harvested. Hay, 15% poor, 69% fair, 16% good; 82% second cutting, 84% third cutting. Apples poor. Pastures, 19% very poor, 21% poor, 37% fair, 23% good; 60% of normal. Cattle, good. Sheep, good. Farm activities: general maintenance, fencing, cutting hay, harvesting corn, clipping pastures, chopping silage, spraying orchards, harvesting tobacco, apple harvesting.

WISCONSIN: Temperature 51°, 7° below normal. Extremes 21°; 85°. Precipitation 0.10 to 0.50 in.

Days suitable for fieldwork 4.2. Soil moisture 5% short, 60% adequate and 35% surplus. Pasture condition 79% of normal, 88% 1990, 79% avg. General condition of crops 3% poor, 15% fair, 75% good and 7% excellent. Corn condition 2% very poor, 4% poor, 17% fair, 60% good and 17% excellent. Corn in dent 89%, 76% 1990, 86% avg. Corn mature 67%, 25% 1990, 47% avg. Corn harvested 5%, 0% 1990, 3% avg. Corn silo filling 40% complete, 8% 1990, 29% avg. Soybean condition 7% poor, 12% fair, 68% good and 13% excellent. Soybean leaves 70% shed, 17% 1990, 34% avg. Third crop hay 74% harvested, 65% 1990, 67% avg. Fall tillage 6%, 5% 1990, 8% avg.

WYOMING: Temperatures 2 to 8 degrees below normal, first widespread killing frost September 18. Precipitation above normal north, below normal elsewhere.

Days suitable for fieldwork 5.0. Topsoil moisture 26% short, 60% adequate, 14% surplus. Subsoil moisture 19% short, 77% adequate, 4% surplus. Oats 95% harvested, 95% 1990, 95% avg. Corn small amount milk, 5% 1990, small amount avg.; 15% dough, 25% 1990, 15% avg.; 60% dented, 40% 1990, 50% avg.; 25% mature, 20% 1990, 30% avg.; small amount harvested, 10% 1990, 5% avg. Corn silage 65% harvested, 70% 1990, 60% avg. Dry beans 80% windrowed, 95% 1990, 80% avg.; 50% combined, 65% 1990, 50% avg. Sugarbeets small amount dug, 5% 1990, 10% avg. Potatoes 30% harvested, 55% 1990, 45% avg. 1992 winter wheat 75% seeded, 75% 1990, 70% avg.; 30% emerged, 55% 1990, 35% avg.; fair to mostly good condition. Ranges and pastures good to excellent condition. Livestock feed obtained from pastures 95% Hay, roughage supplies 60% adequate, 40% surplus. Livestock moved from summer ranges: cattle, calves 25%; sheep, lambs 25%.

International Weather and Crop Summary

HIGHLIGHTS

September 15 - 21, 1991

USSR ... In Western USSR, several days of dry weather in the south helps winter grain planting and summer crop harvests. In the New Lands, intermittent rains cover spring grains, slowing the harvest.

EUROPE ... Dryness favors fieldwork in the west; showers moisten topsoils for planting across the north.

EASTERN ASIA ... Favorable harvest weather prevails throughout China. Tropical storms affect Taiwan and Japan.

SOUTHEAST ASIA ... Widespread showers continue over Indochina, but rains fail to reach Indonesia's prime rice areas.

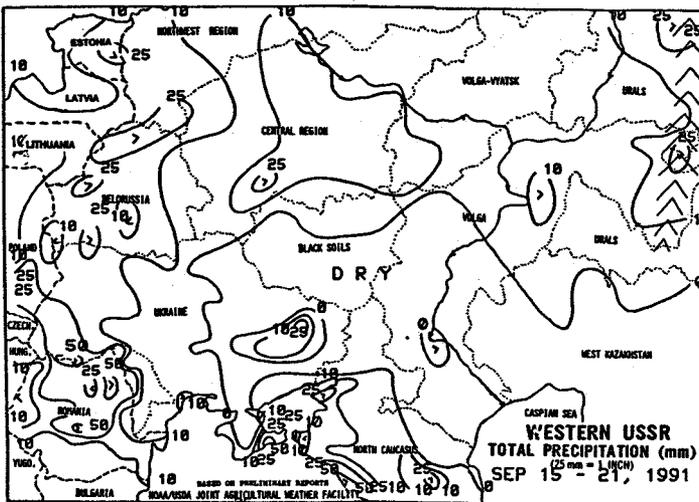
SOUTH ASIA ... Timely showers improve autumn planting prospects over India's southern interior.

SOUTH AMERICA ... Beneficial rain favors coffee flowering and corn germination in portions of southern Brazil. Favorable weather promotes winter wheat heading in Argentina.

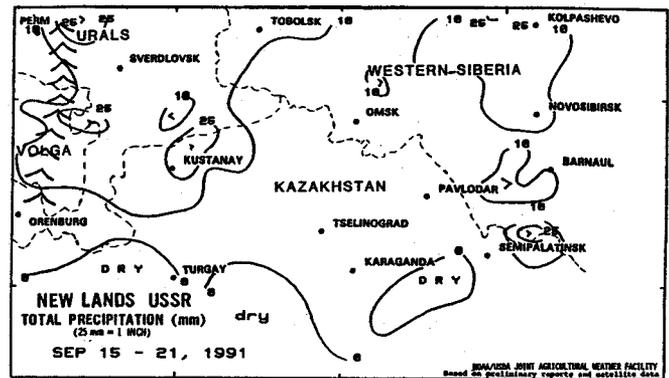
AUSTRALIA ... Queensland remains dry but generally favorable conditions exist for winter wheat heading elsewhere.

CANADA ... Light precipitation causes minor grain and oilseed harvest delays.

MEXICO ... Tropical Storm Ignacio brings widespread moisture throughout the country.

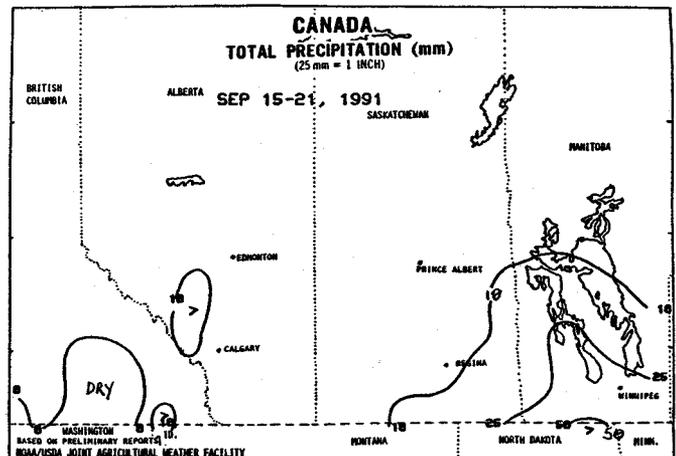


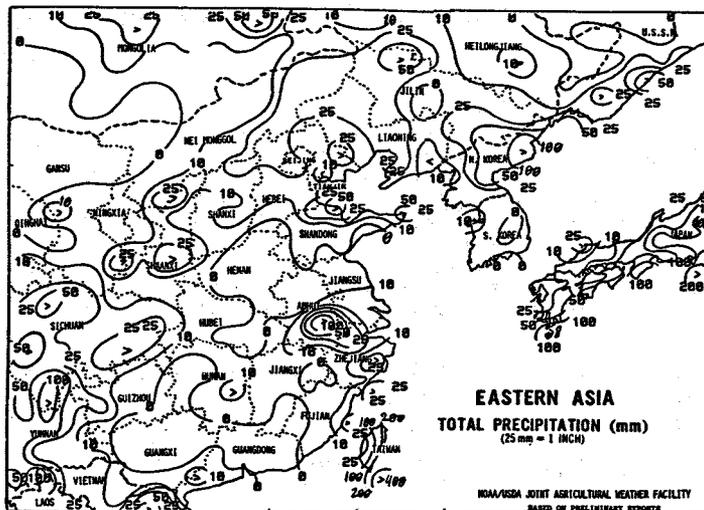
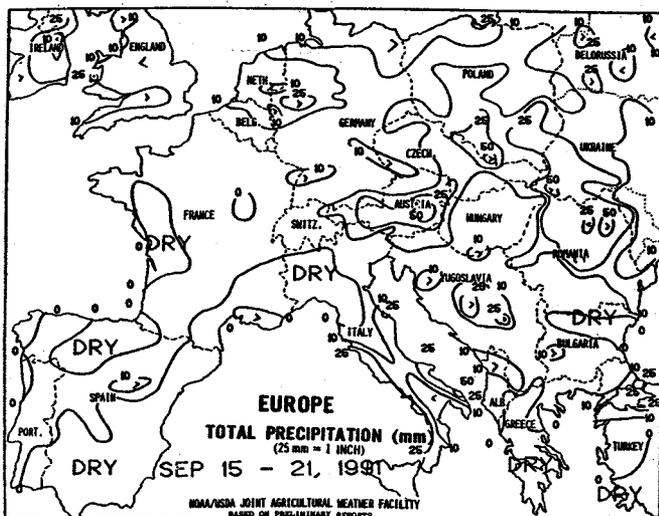
USSR ... In Western USSR, corn, sunflower, sugarbeet, and potato harvests were well underway. Planting of the 1992 winter grain crop was progressing in the Ukraine and North Caucasus. Light to moderate showers (10-38mm) over Lithuania, Latvia, Estonia, Belorussia, the western Ukraine, and the Central Region complicated conditions for potato and sugarbeet harvests. Mostly dry weather in the eastern Ukraine, southern Black Soils Region, Volga Valley, and the northern North Caucasus helped corn, sugarbeet, and sunflower harvests as well as winter grain planting. Weekly average temperatures were 1-3 degrees Celsius (C) above normal over the region.



In the New Lands, intermittent rain covered spring grains over most of the region. Greatest amounts of precipitation (12-37mm) fell over crop areas in the northern Urals, areas in and around Kustanay, Novosibirsk, and Barnaul, interrupting harvest. Rainfall over the remainder of the region was less than 10mm, causing only minor harvest delays. A cold front at week's end dropped minimum temperatures at or below freezing as far south as northern Kazakhstan. Weekly average temperatures were 1-3 degrees C below normal in the west and 1-3 degrees C above normal in the east. In south-central USSR cotton areas, warm, dry weather favored boll maturation and early harvesting.

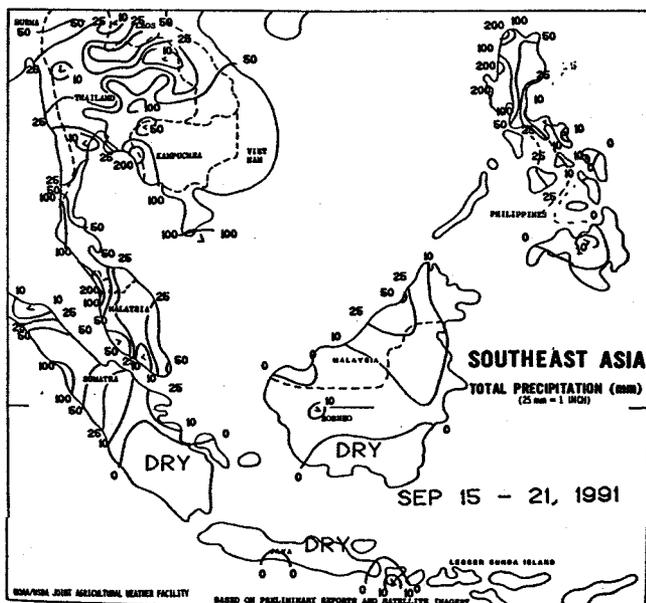
CANADA ... Light precipitation (1-5mm) caused minor harvest delays in northern crop regions of Alberta and Saskatchewan. Grain and oilseed harvests are winding down in Alberta and Saskatchewan, with progress reported at or above 75 percent in most areas. In Manitoba, moderate precipitation (10-35mm) improved moisture for fall seeded crops, but spring grain and oilseed harvests are virtually complete.



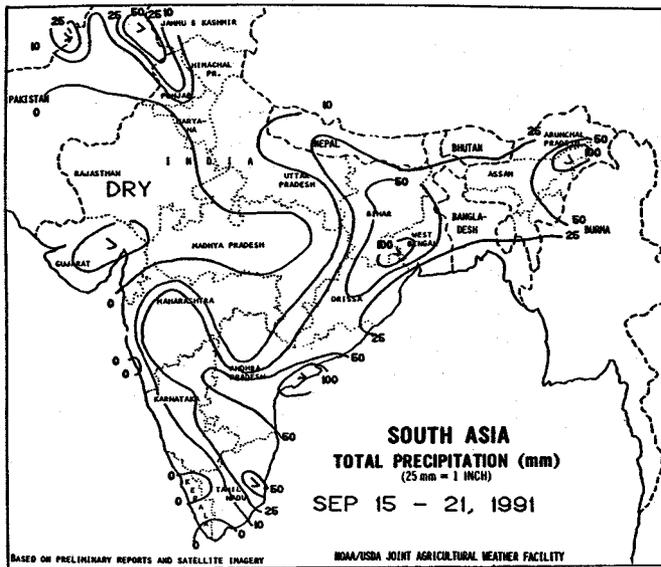


EUROPE ... The weather pattern reversed itself from the previous week. Drier weather prevailed over France, the Iberian peninsula, and Italy's Po Valley, favoring summer crop harvesting and winter grain planting preparations, following the previous week's rain. Mostly light showers (1-7mm) fell in England, but heavier rain (10-29mm) moistened topsoils in Ireland. Significant showers (10-32mm) conditioned topsoils for winter crop planting across much of the Benelux countries, northern Germany, Poland, and Czechoslovakia. Lighter rainfall amounts (4-9mm) were scattered across northern and eastern Europe, including most of Hungary and the Balkan region. Wet weather (25-74mm of weekly rainfall) interfered with harvesting of corn and other summer crops in northern Romania and southern Italy. Weekly temperatures averaged near to above normal, which helped crop maturation across the continent.

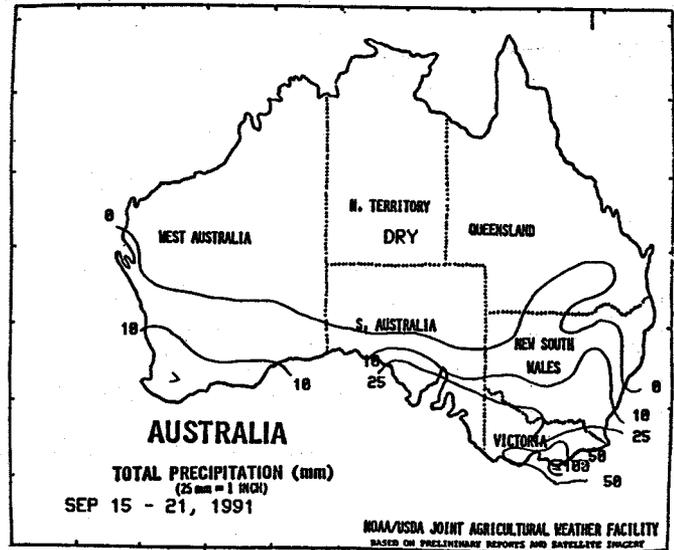
EASTERN ASIA ... Light to moderate rain (6-30mm) fell across Manchuria, but summer crop harvesting progressed despite some delays. The southern half of the North China Plain (Shandong and Henan) was mostly dry, aiding harvesting, while harvest progress was hampered in northern portions due to light to moderate rain (8-25mm). Moderate rain (18-36mm) fell across southwestern China (Yunnan and Sichuan), with locally heavier amounts delaying summer crop harvesting. The Yangtze Valley and southern China experienced mainly dry weather, which aided corn and soybean harvesting and maturing late double-crop rice. However, southern Anhui received 12-123mm, which may have caused local flooding. Tropical Storm Nat, which remained in the Luzon Strait for most of the week, dumped 150-400mm of rain along Taiwan's eastern coast, causing flooding. Typhoon Luke brushed southeastern Japan on September 19th, producing 100-250mm of rain and local flooding.



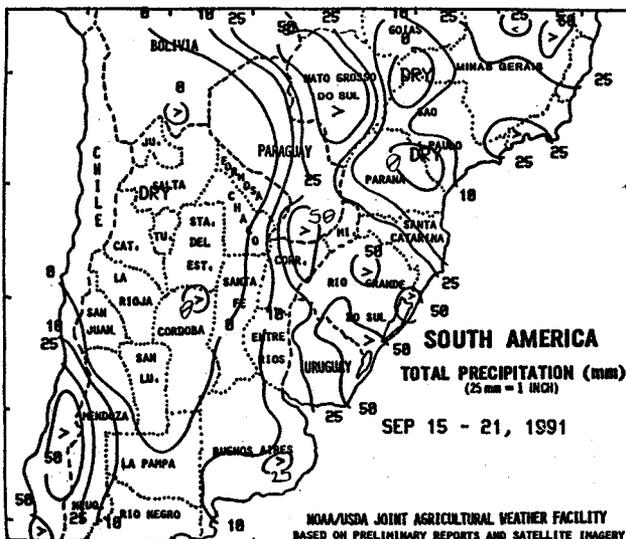
SOUTHEAST ASIA ... Continuing, moderate to heavy showers (25-50mm or more, with local amounts of 100-230mm) covered Indochina, increasing reservoirs for dry season grain planting but causing some more flooding. The showers extended southward along the Malay Peninsula through western Malaysia, and seasonable rain (25-110mm) covered local areas of eastern Malaysia and northern Sumatra. However, dry weather persisted in southern Indonesia. Seasonal rains, normally increasing by now throughout the region, are urgently needed in Java to replenish moisture reserves for the upcoming main season rice planting, usually in full swing by November. In the Philippines, heavy rain (50-250mm) from Tropical Storm Nat worsened local flood problems in western Luzon. Moderate showers (15-65mm) benefited rice and sugarcane in the western Visayan Islands, but unseasonable dryness continued elsewhere.



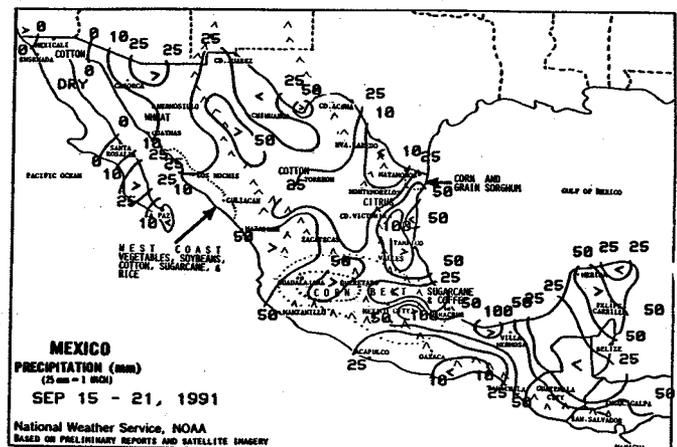
SOUTH ASIA ... Widespread showers (10-126mm) improved prospects for autumn crop planting in India's southern interior as far north as western Maharashtra. An increase in rainfall is expected this time of year in the southern interior as the monsoon recedes from northern crop regions. In the east, moderate to heavy rain (25-50mm or more) continued over primary rice areas from eastern Uttar Pradesh and Orissa eastward, increasing irrigation reserves for dry season plantings, but maintaining flood levels in Bangladesh. Elsewhere, unseasonable showers (40-83mm) in northern Pakistan and north-central India boosted local reservoirs for winter wheat planting but was unfavorable for maturing cotton and rice.



AUSTRALIA ... Winter wheat conditions deteriorated further in Queensland and northern New South Wales as little or no rain fell. Future rains can only stabilize conditions at this point of the season. Further south in the rest of New South Wales, Victoria, and South Australia, moderate rains (13-41mm) aided reproductive winter wheat. The winter grain region of Western Australia received 2-13mm, which kept conditions favorable for reproductive winter wheat. Weekly temperatures averaged near normal in the east and 1-3 degrees C below normal in the west.



SOUTH AMERICA ... In southern Brazil, light to moderate rain (12-41mm) fell in the main coffee areas of Sao Paulo and Minas Gerais, aiding coffee flowering and corn germination. However, the rains missed northern and central Parana, which further stressed coffee trees and germinating corn but aided winter wheat harvesting. Further south, moderate rains covered Rio Grande do Sul, boosting topsoil moisture for the upcoming soybean planting season. In Argentina, light rains (16-33mm) covered southern Buenos Aires while other crop areas were mostly dry. Favorable conditions existed for winter wheat heading with near-normal temperatures and adequate soil moisture.



MEXICO ... Early in the week, Tropical Storm Ignacio hit the southern coast of Mexico between Manzanillo and Acapulco, bringing locally heavy rains in excess of 150mm along the coast and in mountainous areas causing flooding. While Ignacio was relatively weak, with sustained winds of 40-50 knots (46-58mph), moisture from the storm swept northward into interior and northwestern Mexico. Widespread moderate to heavy rains (25-75mm) delayed corn harvesting, but boosted soil moisture for winter wheat planting and reservoir levels for west coast crops.

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(Continued from p. 11)

harvest active. Cranberry harvest was beginning. New York grape harvest remained active, with the sugar content very high, overall quality excellent, and yields good. Apple picking is gaining momentum. Oregon Bartlett pear harvest continued. Anjou pear harvest started and winter pear harvest was completed, with less than expected yields. Apple harvest was underway in most areas. Blueberry harvest was in later stages. Late-season harvest of blackberries and blueberries continued. Hazelnut harvest was set to start. South Carolina apples were 84% harvested, 62% average. Utah apples were 35% harvested, 32% average. Peach harvest was virtually completed, while pear harvest continued. New England cranberry harvest was underway with berry size small to average but condition reported as good.

VEGETABLES: Colorado onion harvest was 74% complete, slightly ahead of 61% average. Fall potato harvest at 20%, compared to 25% average. Mixed vegetable harvest continued in central and eastern Arizona. California reported broccoli in moderate supply and generally good quality and cauliflower was in moderate supply and variable quality. Celery heavy supply was generally good.

Harvest of cantaloupes and tomatoes for processing was winding down. Lettuce planting continued. Idaho onion harvest was 57% completed, 61% average for the date. New York vegetable harvest continued with only late season crops left. Pumpkin harvest was underway. In Oregon, table beet harvest was in full swing while broccoli harvest was winding down. Most onions have been pulled. In Texas, rain delayed sweetpotato harvest. Chili pepper development continued to improve. Minnesota potato harvest reached 36% completion, compared to 50% average. Maine potatoes were 25% harvested, exactly on average for the date, in fair to good condition. Rhode Island potatoes were 76% harvested, 73% average and condition was fair. Connecticut potatoes were 55% harvested, 42% average. Washington potato harvest was in full swing. Idaho potato condition was good with 16% harvested.

PASTURES AND LIVESTOCK: Pasture and range feed conditions in the Rockies and southern Plains were good or better, while the West continues to endure dry conditions. Cattle movement off of summer ranges continued in the Western States. The northern Plains and East reported more variable conditions.

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