

# WEEKLY WEATHER AND CROP BULLETIN

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

U.S. DEPARTMENT OF AGRICULTURE  
Statistical Reporting Service  
and World Agricultural Outlook Board

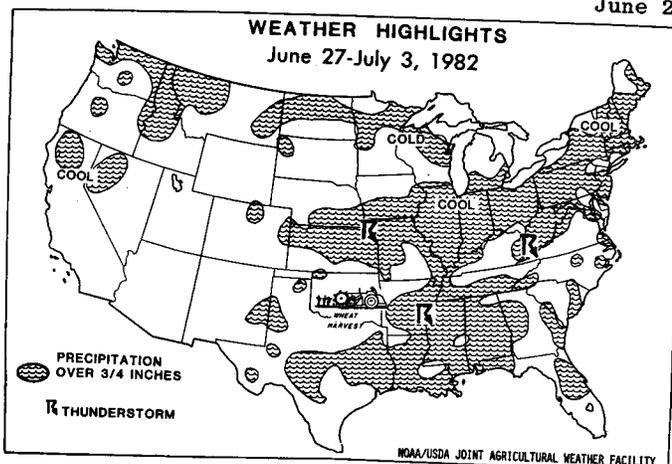
Volume 69, No. 27

WASHINGTON, D.C.

July 7, 1982

## National Weather Summary

June 27-July 3



**HIGHLIGHTS:** Showers and thunderstorms were widespread through the Rockies and eastern United States. A cold front moved into the West and triggered thunderstorms through Washington, Oregon, much of California, and northeastward over the Plateau. Thunderstorms produced hail, high winds, and heavy downpours in parts of the central Plains, damaging some mature winter wheat and delaying harvest. Relatively dry weather in Oklahoma allowed harvesting to make rapid progress. Cool weather enveloped the West early in the week, and temperatures averaged as much as 9 to 12° cooler than normal.

**SUNDAY...**Thunderstorms continued through the night, and some heavy rain fell in central Texas during the morning. Later, thunderstorms developed through the eastern part of the central Plains, the middle and lower Mississippi Valley, and to the east coast. Heavy rain was isolated through much of the area but was most concentrated across the South. Showers and thunderstorms fell along the coasts of Washington and Oregon and over Idaho, Montana, and North Dakota. The Southwest had 100° temperatures, and the nineties reached to Texas and eastern Montana.

**MONDAY...**Thunderstorms spread over the Northwest to central California and northeastward to Montana and across the northern Plains. Some heavy rain and hail fell at isolated points from Montana to the Great Lakes. By contrast, continued dry weather in the mountains of Wyoming posed a serious fire danger. Showers and thunderstorms covered nearly all of the East from the Mississippi River Valley to the east coast except for Florida. Ninety-degree temperatures spread from the South-

west through Utah and Wyoming into parts of South Dakota. The coastal States in the West were much cooler.

**TUESDAY...**Showers and thunderstorms spread through all of California except the southern tip and covered Washington, Oregon, and part of Nevada. Thunderstorms also developed over the eastern slopes of the Rockies and spread through South Dakota and Nebraska to Iowa and Illinois. Thunderstorms again covered the area east of the Mississippi River except for southern Florida. Afternoon temperatures rose to the nineties through the middle and southern Rockies and eastward to Illinois.

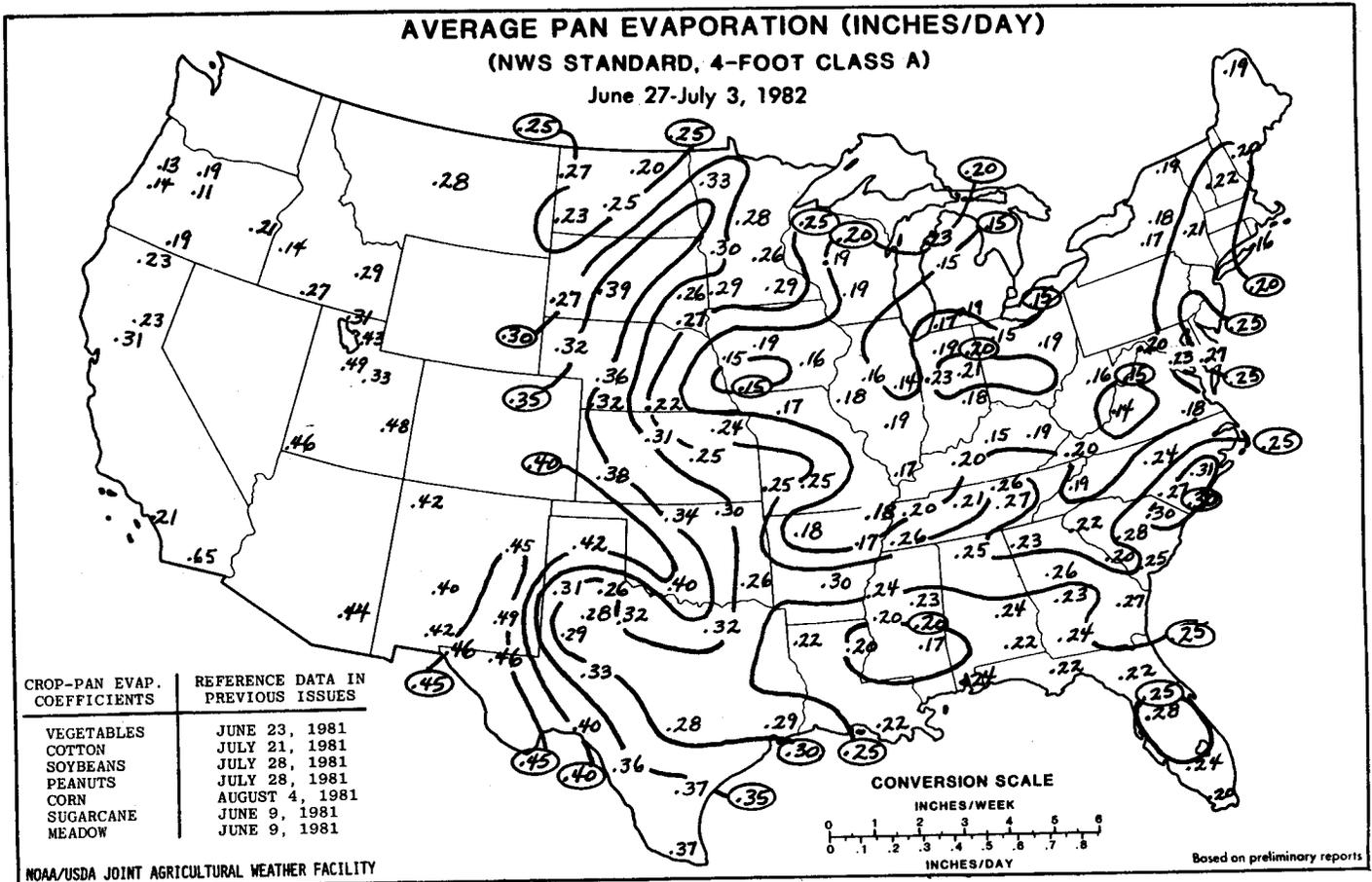
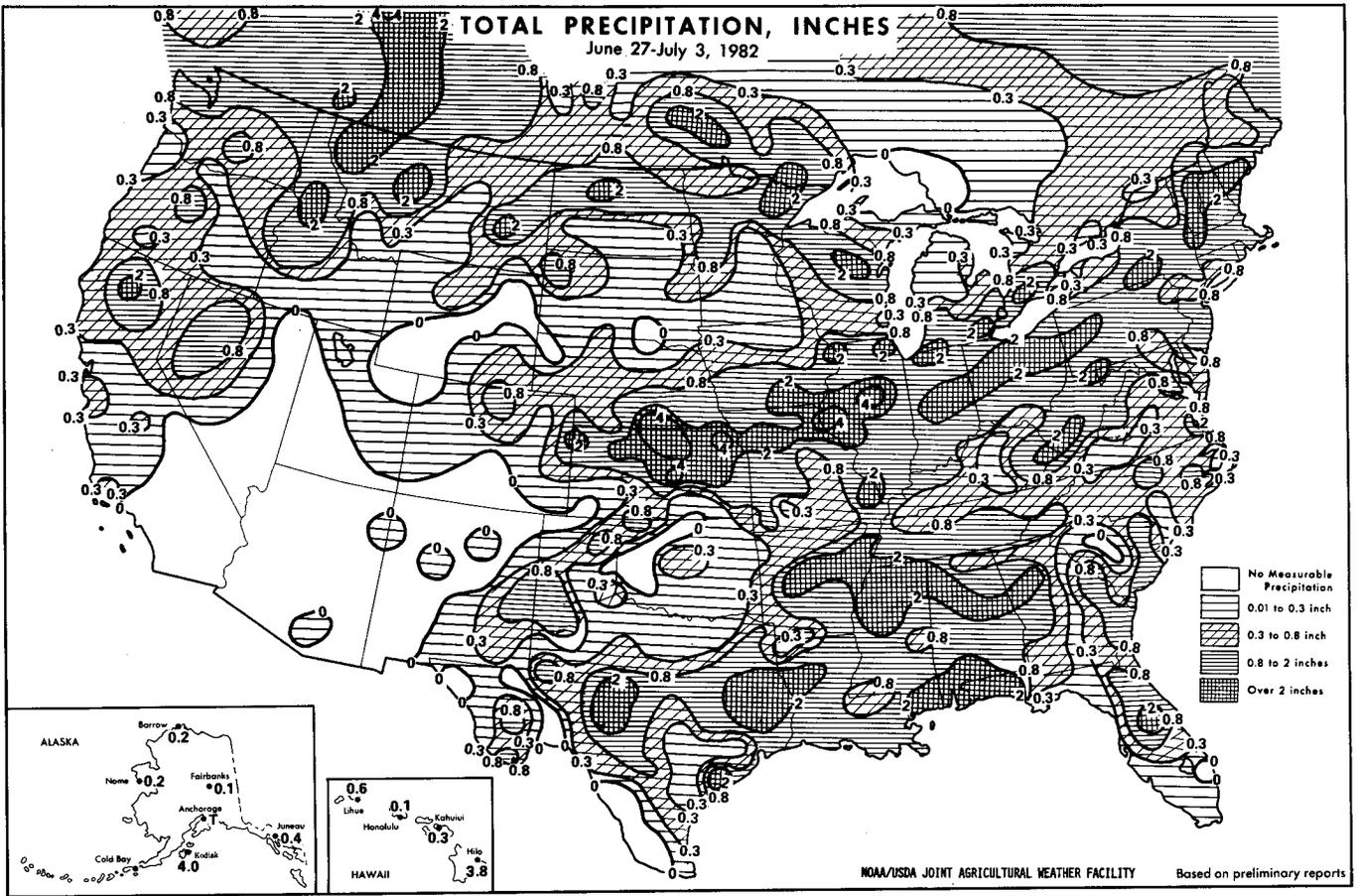
**WEDNESDAY...**Thunderstorms covered most of the Nation except for the north central States. Storms were light through much of the West and widely scattered over the deserts in the Southwest. Moderate to heavy rain accompanied thunderstorms in western Texas, but the greatest concentration of storms hit the central Plains. Heavy rain, hail, and a few tornadoes ranged from Texas to southeastern Nebraska, northern Missouri, and southern Iowa. Cool temperatures in the high thirties and low forties set records in the upper Mississippi Valley and northern Great Lakes.

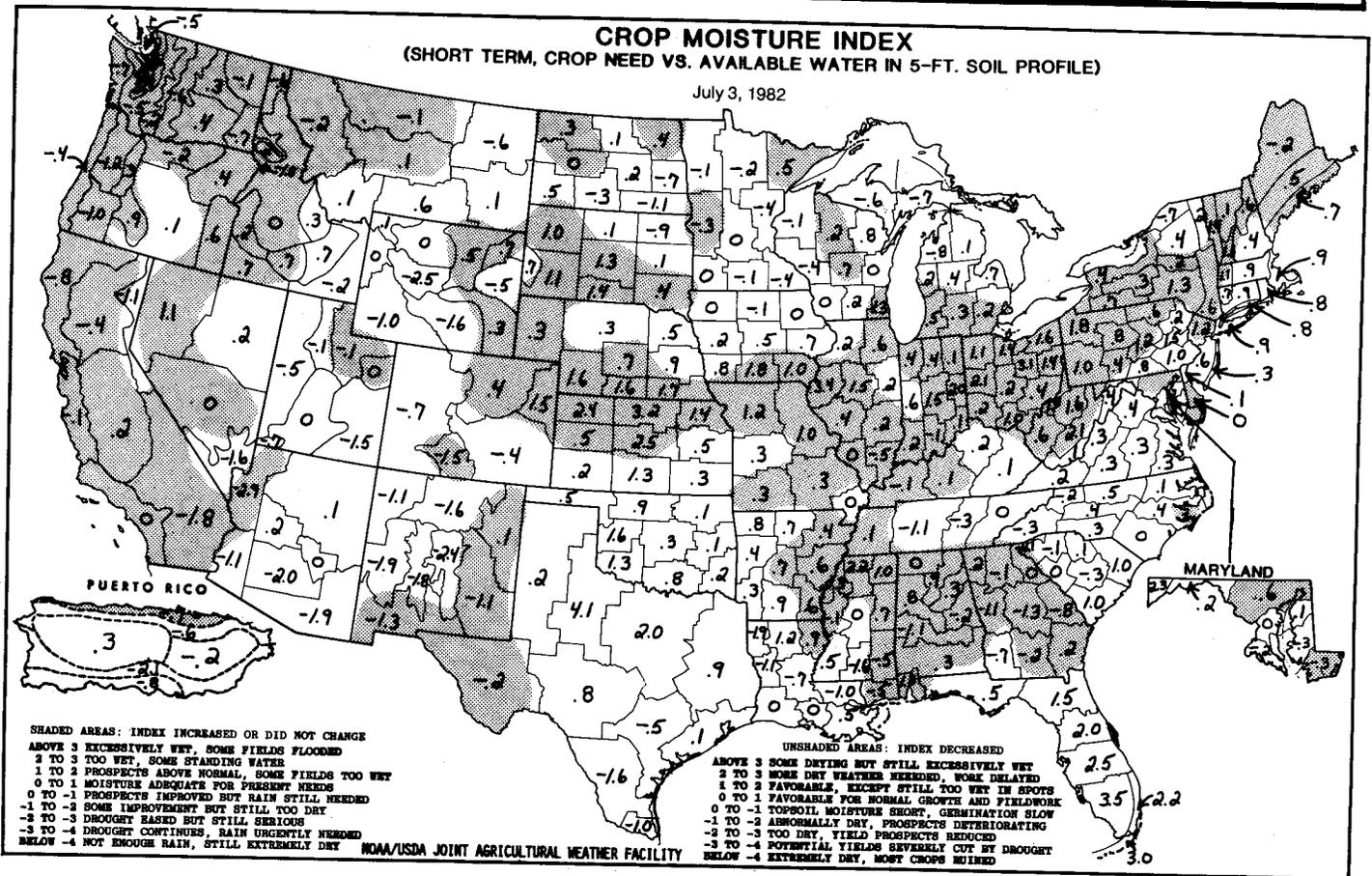
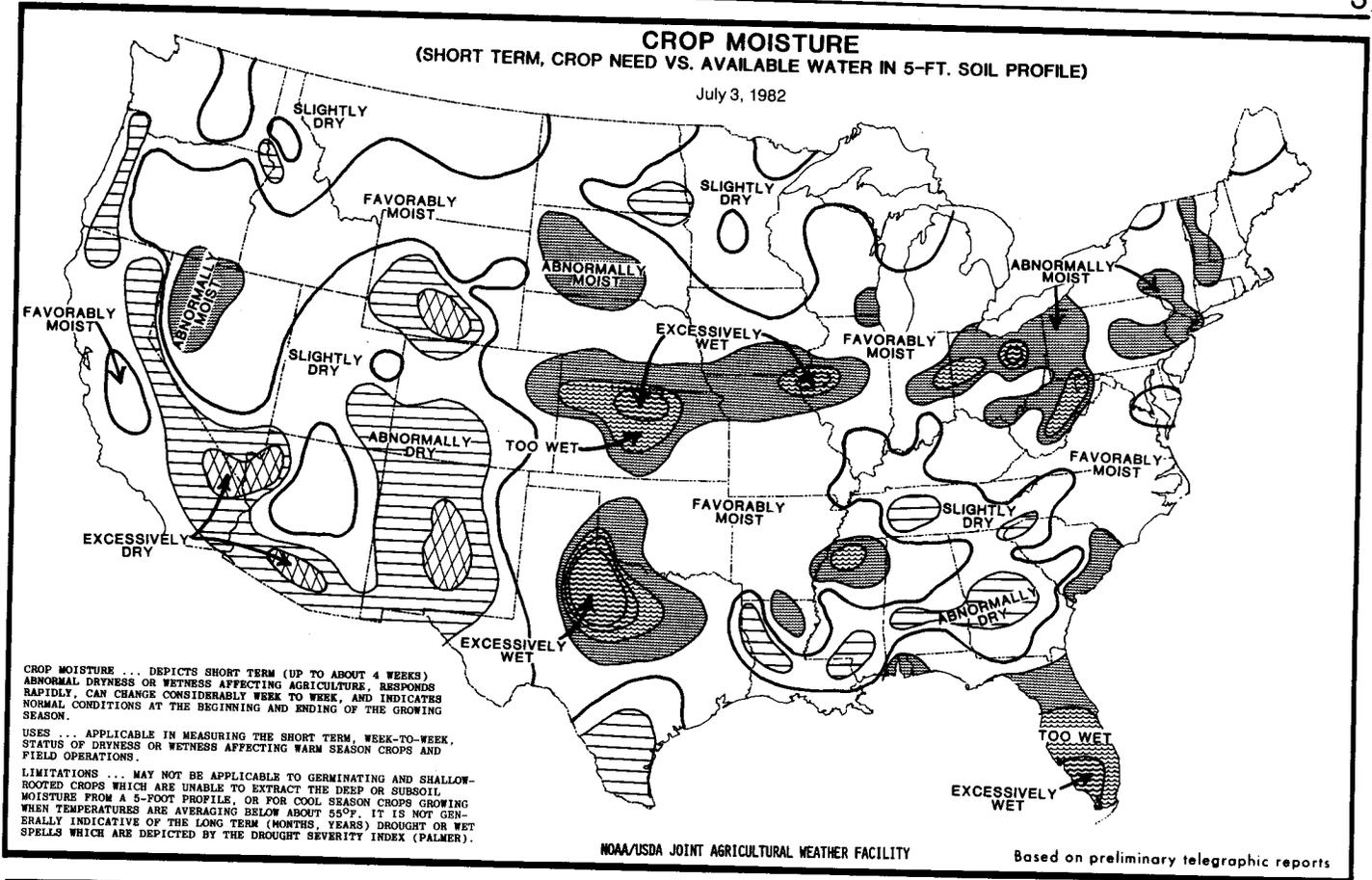
**THURSDAY...**The concentration of thunderstorms and severe weather continued in the central Plains. Flooding and standing water in fields resulted from these severe storms in northeastern Kansas, southeastern Nebraska, southern Iowa, and much of Missouri. Thunderstorms were scattered over the eastern slopes of the Rockies and in the Northwest. High pressure kept the East nearly clear, but temperatures dropped to record lows in West Virginia, Michigan, and New York.

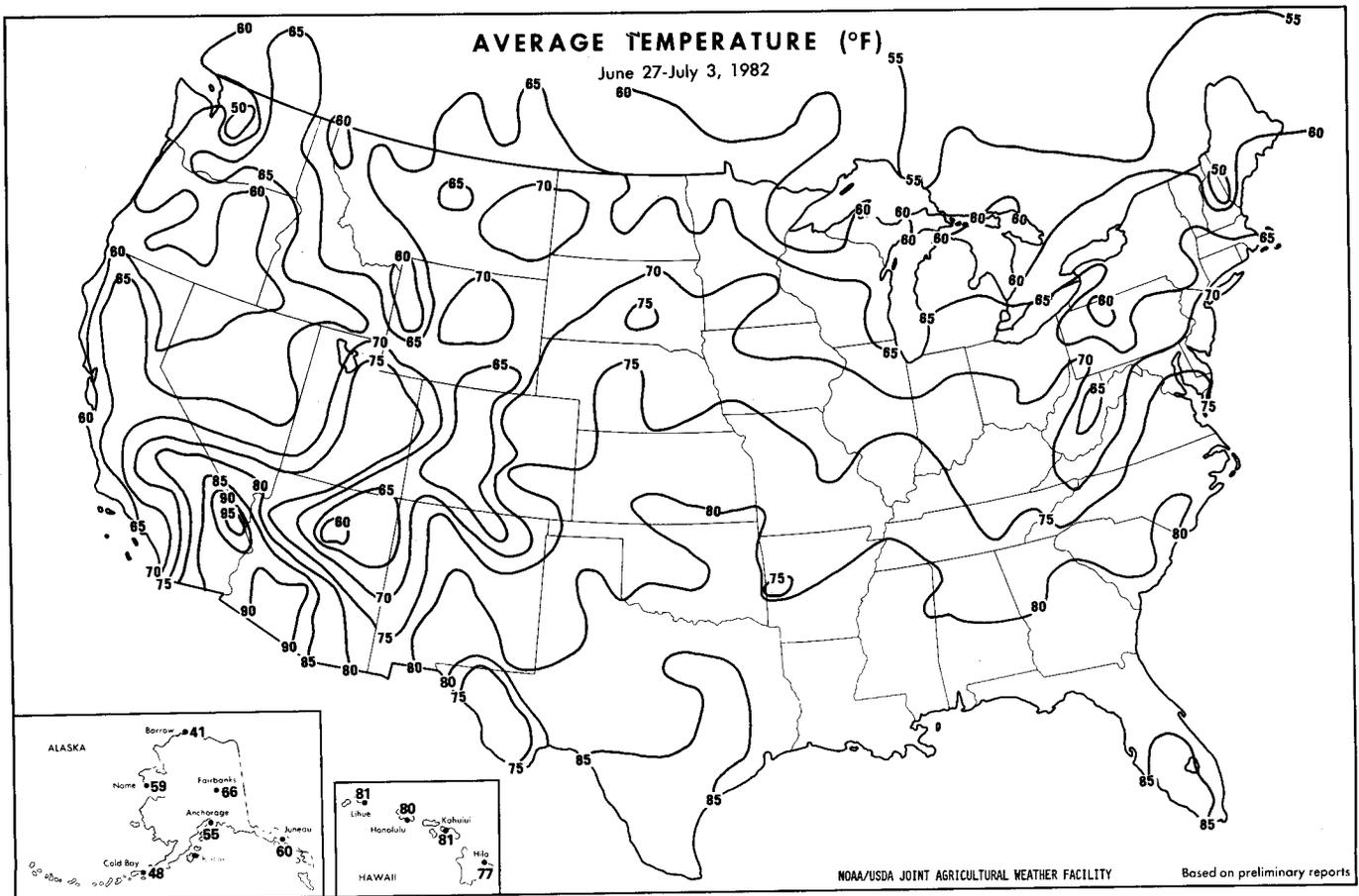
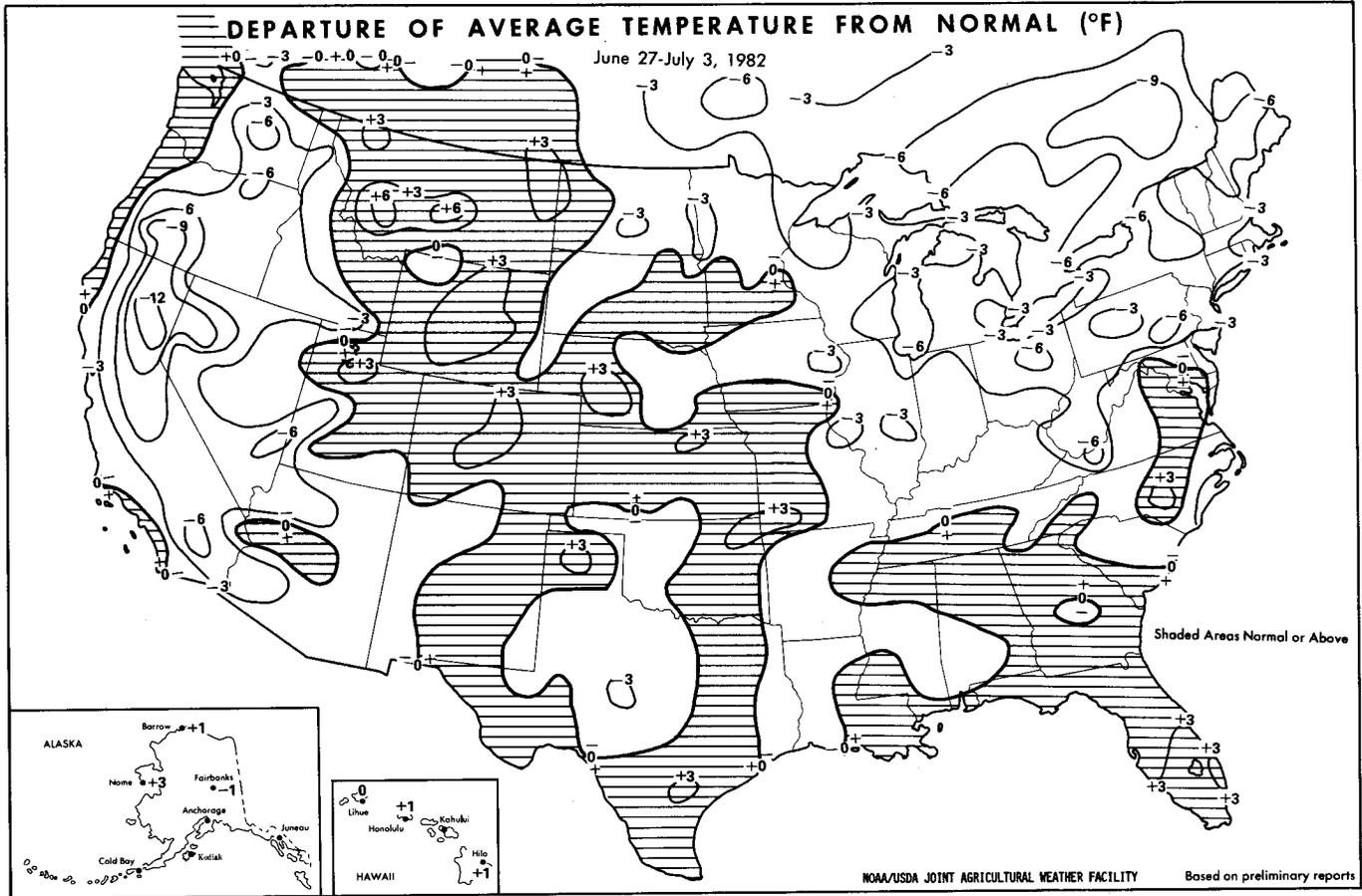
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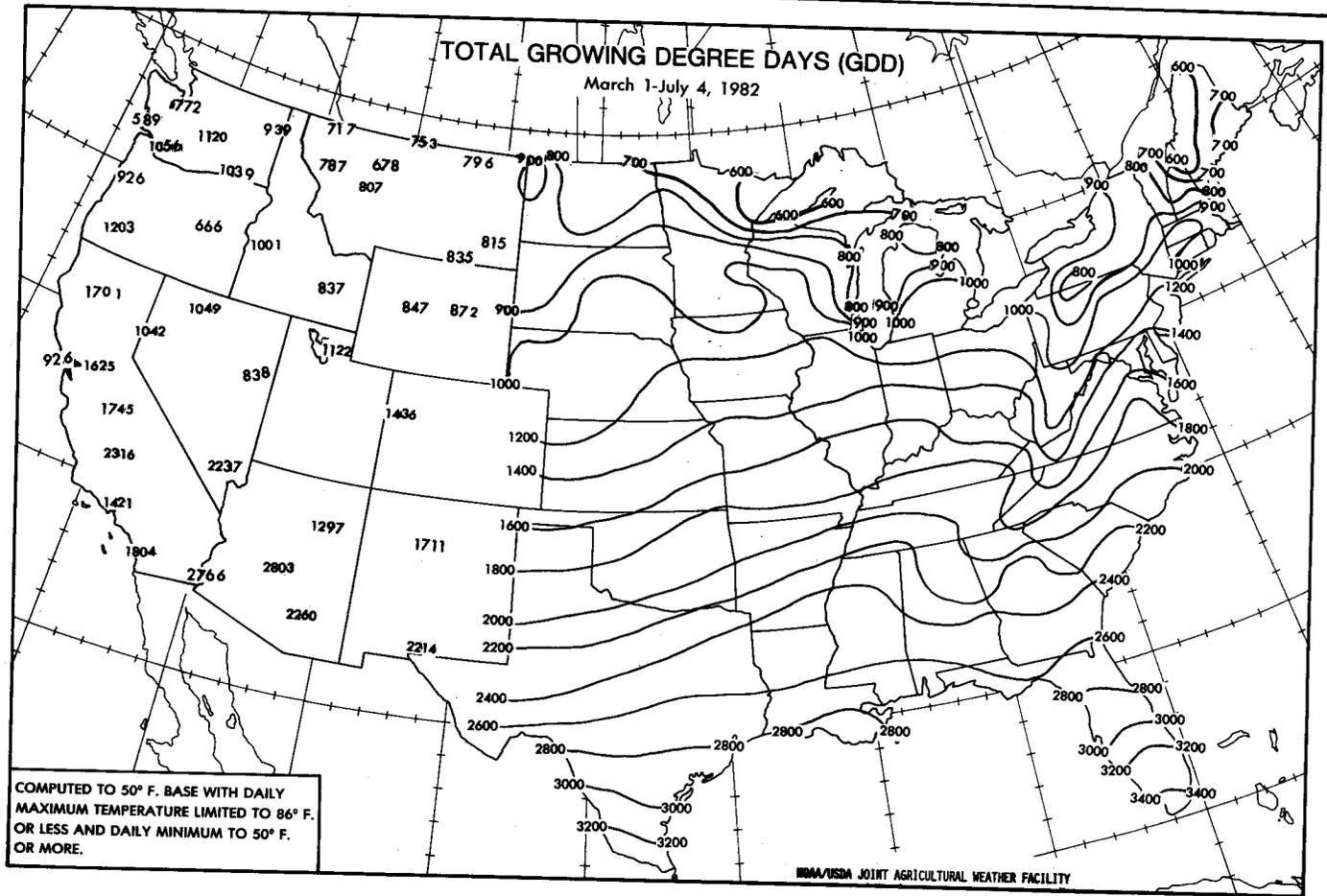
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COOLING DEGREE DAYS (BASE 65°) FOR WEEK ENDING JUL. 4, 1982.  
 BASED ON 1941-70 NORMALS.  
 \* ACCUMULATOR FROM JAN. 1, 1982

STATES AND STATIONS	WEEKLY		SEASONAL ACCUMULATION *		STATES AND STATIONS	WEEKLY		SEASONAL ACCUMULATION *		STATES AND STATIONS	WEEKLY		SEASONAL ACCUMULATION *	
	TOTAL	DEPARTURE*	TOTAL	DEPARTURE*		TOTAL	DEPARTURE*	TOTAL	DEPARTURE*		TOTAL	DEPARTURE*	TOTAL	DEPARTURE*
ALA. BIRMINGHAM	101	101	1111	789	MAINE. PORTLAND	101	101	1111	789	OKLA. OKLAHOMA CITY	101	101	1111	789
ARIZ. PHOENIX	92	92	1092	792	MD. BALTIMORE	101	101	1111	789	OREG. ASTORIA	101	101	1111	789
ARK. LITTLE ROCK	101	101	1111	789	MASS. BOSTON	101	101	1111	789	PENNA. PHILADELPHIA	101	101	1111	789
CALIF. SACRAMENTO	101	101	1111	789	MICH. ANN ARBOR	101	101	1111	789	PA. PITTSBURGH	101	101	1111	789
COLO. DENVER	101	101	1111	789	MINN. MINNAPOLIS	101	101	1111	789	R.I. PROVIDENCE	101	101	1111	789
CONN. HARTFORD	101	101	1111	789	MISS. JACKSON	101	101	1111	789	S. CAROLINA. CHARLESTON	101	101	1111	789
DELA. WILMINGTON	101	101	1111	789	MONT. BILLINGS	101	101	1111	789	S. DAK. SIOUX FALLS	101	101	1111	789
FLA. MIAMI	101	101	1111	789	NEBR. LINCOLN	101	101	1111	789	TEXAS. AUSTIN	101	101	1111	789
GA. ATLANTA	101	101	1111	789	NEV. LAS VEGAS	101	101	1111	789	UTAH. SALT LAKE CITY	101	101	1111	789
IA. DES MOINES	101	101	1111	789	N.H. PORTSMOUTH	101	101	1111	789	VA. RICHMOND	101	101	1111	789
IND. INDIANAPOLIS	101	101	1111	789	N.J. PHILADELPHIA	101	101	1111	789	WIS. MILWAUKEE	101	101	1111	789
IOWA. DES MOINES	101	101	1111	789	N.M. ALBUQUERQUE	101	101	1111	789	WYOM. CHEYENNE	101	101	1111	789
KANS. WICHITA	101	101	1111	789	N.Y. ALBANY	101	101	1111	789					
KY. COLUMBICUS	101	101	1111	789	OHIO. CANTON	101	101	1111	789					
LA. MONROE	101	101	1111	789										



Average Monthly Weather Outlook

Weather Data for the Week Ending July 3, 1982

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 May 30	PCT. NORMAL SINCE May 30	TOTAL, IN., SINCE Jan. 1	PCT. NORMAL SINCE Jan. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F		PRECIPITATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	89	69	94	67	79	0	2.8	1.7	1.4	9.9	206	36.2	131	98	59	4	0	4	2
MOBILE	90	72	94	71	81	0	3.8	2.0	1.5	11.4	154	36.1	114	92	56	4	0	4	3
MONTGOMERY	90	73	95	72	81	1	1.0	.1	.8	5.0	102	35.1	138	83	53	5	0	3	1
AK ANCHORAGE	62	47	69	39	55	-3	T	.4	T	1.6	107	3.5	76	74	42	0	0	1	0
BARROW	47	35	63	31	41	4	.2	.1	.1	.2	50	1.8	120	99	75	0	2	4	0
FAIRBANKS	78	54	85	46	66	5	.1	.3	.1	2.1	117	5.1	121	68	25	0	0	1	0
JUNEAU	69	51	74	44	60	5	.4	.5	.3	2.1	57	20.2	102	76	50	0	0	2	0
KODIAK	50	47	53	46	48	-4	4.0	3.1	1.1	9.3	194	31.8	125	100	88	0	0	6	4
NOME	68	50	78	44	59	10	.2	.2	.1	1.8	150	7.4	148	79	40	0	0	2	0
AZ PHOENIX	105	78	110	73	92	3	T	.1	T	0	0	3.3	127	29	8	7	0	0	0
PRESCOTT	88	57	95	51	73	-1	0	.4	0	0	0	6.4	97	31	9	2	0	0	0
TUCSON	100	68	106	62	84	-1	.1	.1	.1	.1	20	3.5	106	42	10	7	0	1	0
YUMA	101	73	108	68	87	-3	0	0	0	0	+100	1.6	160	39	12	7	0	0	0
AR FORT SMITH	90	70	94	68	80	-1	.4	.4	.4	5.1	111	24.8	107	93	55	5	0	1	0
LITTLE ROCK	90	70	93	66	80	0	2.1	1.5	.9	5.8	157	30.6	118	92	59	5	0	3	2
CA BAKERSFIELD	88	68	96	63	78	-3	T	0	T	0	+100	4.3	116	63	29	3	0	1	0
EUREKA	64	53	68	49	58	2	.3	.2	.1	.8	114	24.4	110	93	70	0	0	4	0
FRESNO	81	61	92	57	71	-7	.3	.3	.2	.3	300	8.6	137	86	41	1	0	2	0
LOS ANGELES	73	61	76	58	67	0	0	0	0	0	+100	8.6	115	84	59	0	0	0	2
RED BLUFF	76	60	85	55	68	-12	1.8	1.7	.8	1.8	360	12.8	99	90	48	0	0	4	0
SACRAMENTO	75	54	83	50	65	-8	.1	.1	.1	.1	100	18.1	156	94	47	0	0	1	0
SAN DIEGO	74	64	75	63	69	1	0	0	0	0	+100	9.0	161	83	60	0	0	0	0
SAN FRANCISCO	66	56	70	53	61	-1	.1	.1	.1	.1	100	22.6	200	83	59	0	0	1	0
CO DENVER	87	58	93	52	72	2	.7	.3	.4	2.9	132	7.1	85	77	25	2	0	2	0
GRAND JUNCTION	94	62	102	57	78	2	.1	.1	.1	.2	50	2.5	66	55	13	6	0	1	0
PUEBLO	93	60	98	55	76	2	0	.4	0	2.5	156	5.5	96	83	22	6	0	0	0
CT BRIDGEPORT	76	60	83	51	68	-4	.7	0	.6	11.1	358	28.5	158	88	56	0	0	2	0
HARTFORD	78	59	82	51	68	-3	.9	.2	.5	13.7	351	30.9	155	84	46	0	0	3	0
DC WASHINGTON	86	68	91	62	77	0	.7	.1	.4	6.9	164	22.3	123	77	44	2	0	2	0
FL APALACHICOLA	90	74	93	70	82	1	.1	-1.5	.1	5.7	88	27.1	117	93	66	4	0	2	0
DAYTONA BEACH	90	73	93	71	81	1	1.1	-.5	.9	10.0	137	29.0	147	94	57	3	0	3	1
JACKSONVILLE	93	74	97	71	83	3	.4	-1.3	.2	9.4	127	24.2	107	96	60	7	0	3	0
KEY WEST	89	81	91	80	85	1	T	-1.1	T	9.3	175	22.1	155	78	63	3	0	1	0
MIAMI	92	78	95	75	85	3	.3	-1.7	.3	13.6	136	35.0	142	88	52	7	0	1	0
ORLANDO	93	73	94	71	83	2	3.6	1.6	3.5	12.3	143	29.2	135	94	51	7	0	3	1
TALLAHASSEE	92	72	95	69	82	1	.5	-1.5	.3	8.0	100	28.6	99	97	56	5	0	3	0
TAMPA	89	76	92	73	83	1	.1	-1.8	.1	11.9	157	23.4	115	92	60	2	0	1	0
WEST PALM BEACH	91	75	94	74	83	2	0	-1.8	0	10.5	114	45.4	181	90	51	5	0	0	0
GA ATLANTA	87	68	92	66	78	0	3.1	2.1	2.3	6.2	138	30.3	116	91	55	2	0	4	1
AUGUSTA	92	72	97	69	82	2	1.9	-.8	1.9	3.8	84	21.7	98	87	50	6	0	1	1
MACON	91	72	97	69	81	0	.5	-.5	.2	2.8	61	25.8	110	94	55	6	0	3	0
SAVANNAH	90	73	94	71	81	1	.6	-1.1	.3	11.9	163	27.7	117	92	55	4	0	3	0
HI HILO	82	71	84	69	77	2	3.8	2.1	1.2	8.9	110	90.7	145	88	68	0	0	7	4
HONOLULU	87	73	89	71	80	0	.1	0	T	.6	120	20.7	170	81	51	0	0	3	0
KAHULUI	87	74	90	73	81	3	.3	.2	.2	.4	100	20.8	194	79	55	1	0	2	0
LIHUE	86	75	88	73	81	3	.6	.3	.4	1.9	106	40.0	190	89	65	0	0	5	0
ID BOISE	78	54	89	48	66	-4	1.0	.9	.7	1.1	92	6.6	92	93	38	0	0	5	1
LEWISTON	75	59	83	54	67	-3	.5	.2	.4	.9	47	6.3	89	89	49	0	0	3	0
POCATELLO	84	52	92	47	68	1	T	-.2	T	.5	36	6.9	103	84	25	4	0	2	0
IL CHICAGO	76	54	83	46	65	-6	1.7	.8	1.5	3.2	68	15.9	99	97	52	0	0	5	1
MOLINE	82	62	88	52	72	-1	1.2	.1	.7	4.5	87	19.0	114	94	58	0	0	3	1
PEORIA	81	63	90	56	72	-2	4.0	3.1	2.8	6.2	138	23.3	132	88	59	1	0	5	2
QUINCY	80	64	88	59	72	-5	5.0	4.0	2.6	9.3	175	24.3	—	97	69	0	0	5	3
ROCKFORD	79	60	84	52	69	-2	1.4	.4	1.0	4.8	98	17.9	104	92	60	0	0	3	1
SPRINGFIELD	84	63	91	58	74	-2	1.4	.4	.6	4.4	92	20.4	119	92	65	1	0	4	1
IN EVANSVILLE	85	67	92	59	76	-1	1.4	.5	.7	4.7	107	27.2	119	92	49	1	0	4	2
FORT WAYNE	79	61	86	53	70	-3	1.3	.4	1.0	6.3	140	24.5	133	88	52	0	0	3	1
INDIANAPOLIS	80	63	85	53	72	-2	3.2	2.3	1.6	6.6	135	26.3	130	86	54	0	0	4	3
SOUTH BEND	76	60	84	50	68	-3	3.0	2.1	1.3	4.7	109	20.0	117	94	58	0	0	4	3
IA DES MOINES	82	66	92	62	74	0	1.8	.8	1.0	2.8	50	20.3	125	81	49	1	0	3	2
SIOUX CITY	82	62	93	60	72	-1	.4	-.5	.4	2.6	50	13.0	95	90	56	2	0	3	0
WATERLOO	80	60	92	54	70	-2	.2	-1.0	.2	4.4	76	18.0	112	90	48	1	0	1	0
KS CONCORDIA	89	69	99	66	79	3	6.5	5.5	2.7	12.0	214	25.0	174	87	51	3	0	4	4
DODGE CITY	93	67	101	61	80	3	T	-.7	T	3.4	92	9.0	90	78	34	6	0	1	0
GOOBLAND	86	60	93	59	73	0	2.2	1.6	1.8	10.0	313	16.6	200	87	39	2	0	2	1
TOPEKA	86	70	96	65	78	1	2.9	1.6	2.4	9.7	147	22.8	130	89	58	3	0	2	1
WICHITA	91	67	98	61	79	0	T	-1.1	T	8.9	171	21.3	150	81	43	5	0	1	0
KY BOWLING GREEN	84	66	89	61	75	-3	.6	-.4	.4	2.7	60	22.9	87	95	55	0	0	4	0
LEXINGTON	82	65	85	56	73	-2	.2	-.9	.1	3.9	78	19.7	83	85	54	0	0	3	0
LOUISVILLE	83	66	88	57	74	-2	.7	-.2	.6	4.6	96	22.7	95	85	55	0	0	3	1
LA ALEXANDRIA	90	72	94	70	81	-1	1.3	.4	.9	6.3	131	23.8	88	80	51	4	0	3	1
BATON ROUGE	91	73	95	70	82	0	.6	-.6	.5	2.5	53	23.8	88	89	52	5	0	4	1
LAKE CHARLES	88	72	91	70	80	-2	.9	-.5	.5	5.0	81	21.9	83	100	69	4	0	2	0
NEW ORLEANS	91	73	93	67	82	1	.8	-.6	.5	5.6	95	25.6	92	98	61	6	0	3	0

+100 = NORMAL & ACTUAL NEAR THE SAME

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

Weather Data for the Week Ending July 3, 1982

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 May 30	PCT. NORMAL SINCE May 30	TOTAL, IN., SINCE Jan. 1	PCT. NORMAL SINCE Jan. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F		PRECIPITATION		
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
ME SHREVEPORT	90	72	93	69	81	-1	.2	-.5	.1	1.8	46	16.2	66	94	58	5	0	2	0	
ME CARIBOU	69	50	75	46	60	-3	.4	-.5	.1	3.2	78	15.0	99	86	48	0	0	5	0	
ME PORTLAND	71	52	78	48	62	-4	1.8	1.2	1.8	7.5	214	25.1	127	87	46	0	0	3	0	
MD BALTIMORE	85	63	92	50	74	-1	.5	-.4	.5	6.1	142	22.0	113	86	48	1	0	2	1	
MD SALISBURY	86	66	89	56	76	0	.6	-.3	.6	5.3	126	21.5	105	96	50	0	0	2	0	
MA BOSTON	77	62	83	57	70	-2	1.1	.5	.9	13.9	376	29.3	140	77	44	0	0	2	1	
MA CHATHAM	71	58	79	55	65	-1	1.3	-.1	.7	5.5	111	23.3	140	77	44	0	0	2	1	
MI ALPENA	76	45	82	39	61	-3	.1	-.5	.1	3.7	116	11.2	91	86	66	0	0	4	1	
MI DETROIT	79	59	82	49	69	-2	2.1	1.4	1.5	4.7	121	16.8	107	92	51	0	0	2	0	
MI FLINT	77	57	81	49	67	-2	.4	-.6	.2	3.5	90	10.9	77	93	50	0	0	3	2	
MI GRAND RAPIDS	78	55	84	44	66	-4	1.3	-.8	.8	3.5	90	15.5	102	92	51	0	0	2	0	
MI HOUGHTON LAKE	74	48	80	44	61	-4	.7	-.8	.7	3.9	100	14.2	112	89	45	0	0	2	2	
MI LANSING	77	55	82	43	66	-4	.1	-.6	.1	4.1	105	12.1	79	96	55	0	0	1	0	
MI MARQUETTE	73	47	81	43	60	-3	.1	-.8	.1	1.4	29	14.8	95	95	41	0	0	3	0	
MI MUSKEGON	76	55	83	44	65	-4	.2	-.4	.2	3.3	106	16.1	112	92	51	0	0	3	0	
MI SAULT STE. MARIE	72	42	77	37	57	-5	.7	-.7	.7	1.7	45	15.1	113	92	40	0	0	1	0	
MN ALEXANDRIA	78	58	88	51	68	0	1.4	.5	1.1	3.5	73	12.9	108	90	48	0	0	0	0	
MN DULUTH	71	46	80	37	58	-4	1.0	0	.6	2.5	50	13.3	96	85	44	0	0	2	1	
MN INT'L FALLS	73	49	81	41	61	-3	.4	-.6	.2	3.1	66	10.6	94	99	53	0	0	4	0	
MN MINNEAPOLIS	84	59	93	55	71	-1	.2	-.8	.2	1.9	40	13.2	107	81	36	2	0	1	0	
MN ROCHESTER	80	58	89	52	69	0	.2	-.9	.1	2.2	40	16.2	118	89	45	0	0	2	0	
MS GREENWOOD	89	72	92	70	80	-1	2.3	1.5	1.8	6.2	151	30.7	118	96	67	3	0	4	1	
MS JACKSON	89	72	94	71	81	0	1.4	.5	.7	6.7	163	28.5	110	98	63	4	0	4	1	
MS MERIDIAN	91	70	96	67	81	0	.8	-.3	.5	4.6	102	28.1	104	94	56	5	0	3	1	
MO CAPE GIRARDEAU	87	68	93	64	77	-1	2.1	1.4	1.3	6.8	148	29.8	132	96	56	3	0	4	2	
MO COLUMBIA	85	67	91	61	76	0	.6	-.4	.5	6.9	130	21.1	116	99	67	3	0	2	0	
MO KANSAS CITY	87	69	94	65	78	2	1.3	.1	1.3	9.6	152	25.3	141	94	55	3	0	4	2	
MO SAINT LOUIS	86	66	91	59	76	-1	1.5	.5	.8	8.2	161	23.9	128	93	52	2	0	2	1	
MO SPRINGFIELD	90	69	93	66	79	3	.3	-.8	.2	6.9	125	21.4	106	94	58	5	0	3	2	
MT BILLINGS	80	58	87	55	69	1	.1	-.4	.1	4.8	178	11.8	140	82	46	0	0	1	0	
MT GLASGOW	80	57	87	53	69	2	.5	0	.3	1.2	41	7.0	125	84	45	0	0	4	0	
MT GREAT FALLS	76	56	81	52	66	1	2.2	1.6	1.3	3.1	91	11.8	128	84	45	0	0	4	2	
MT HAVRE	78	57	82	51	67	1	.8	.3	.4	.8	30	8.6	132	83	42	0	0	4	0	
MT HELENA	80	56	86	52	68	4	1.8	1.3	1.6	2.9	107	8.2	126	83	36	0	0	5	1	
MT KALISPELL	75	56	83	50	65	4	3.9	3.5	2.7	4.6	177	11.9	145	97	51	0	0	6	3	
MT MILES CITY	85	60	93	56	72	2	2.0	1.4	1.8	5.2	149	9.8	124	84	37	3	0	3	1	
MT MISSOULA	76	55	84	50	65	2	1.5	1.1	.9	2.3	100	10.6	151	96	52	0	0	6	1	
NE GRAND ISLAND	83	64	94	60	73	-1	1.3	.4	1.2	5.0	100	20.3	156	93	58	1	0	4	1	
NE LINCOLN	86	67	95	63	76	1	1.5	.5	.9	6.6	118	18.8	131	97	63	2	0	3	1	
NE NORFOLK	82	62	91	57	72	-1	.5	-.5	.3	2.4	44	14.7	111	86	49	2	0	3	0	
NE NORTH PLATTE	89	64	98	60	77	5	.7	-.1	.6	2.6	60	11.3	108	85	39	4	0	2	1	
NE OMAHA	82	65	91	60	73	0	1.6	.6	1.2	4.5	80	19.8	133	93	64	1	0	2	1	
NE SCOTTSBLUFF	84	58	91	53	71	1	.2	-.3	.1	6.8	219	11.2	132	86	38	2	0	3	1	
NE VALENTINE	79	44	89	35	62	-1	.4	-.3	.3	2.3	59	11.1	118	86	35	3	0	3	0	
NV ELY	78	58	97	52	73	2	.4	-.3	.3	2.3	59	11.1	118	86	35	3	0	3	0	
NV LAS VEGAS	95	71	107	64	83	-4	0	-.1	0	0	0	5.7	121	56	21	0	0	0	0	
NV RENO	73	50	83	41	61	-5	.4	.4	.3	1.0	333	4.2	102	83	34	0	0	3	0	
NH WINNEMUCA	72	49	89	45	61	-7	1.8	1.7	.8	2.3	209	4.6	88	79	39	0	0	4	2	
NH CONCORD	76	51	81	42	63	-5	1.3	.5	1.2	8.0	205	22.3	134	85	43	0	0	3	1	
NJ ATLANTIC CITY	83	63	88	52	73	0	.9	0	.5	4.2	105	18.4	88	92	56	0	0	2	1	
NM ALBUQUERQUE	94	62	99	55	78	1	.7	.3	.6	.8	47	2.4	49	81	29	5	0	2	1	
NM CLOVIS	90	65	97	61	77	1	1.3	.7	1.2	2.8	93	5.7	82	32	4	0	2	1		
NM ROSWELL	93	66	100	62	80	1	.7	.3	.6	.8	47	2.4	49	81	29	5	0	2	1	
NY ALBANY	75	54	82	45	65	-6	1.9	1.2	1.1	6.6	189	20.0	132	95	52	0	0	3	2	
NY BINGHAMTON	73	55	82	48	64	-4	3.3	2.4	1.9	8.1	198	21.6	123	92	52	0	0	4	2	
NY BUFFALO	75	56	83	51	66	-4	.2	-.4	.2	3.4	131	20.0	124	92	48	0	0	1	0	
NY NEW YORK	76	64	81	60	70	-5	.5	-.2	.4	4.7	134	20.3	106	83	53	0	0	2	0	
NY ROCHESTER	75	55	81	50	65	-5	.6	0	.6	4.0	133	14.3	96	91	52	0	0	1	1	
NY SYRACUSE	75	54	83	47	64	-6	1.1	.4	1.1	5.0	139	16.7	97	97	53	0	0	1	1	
NC ASHEVILLE	84	63	92	59	74	1	1.0	0	1.0	4.4	94	25.7	117	98	53	1	0	2	1	
NC CHARLOTTE	85	68	91	65	77	-2	.4	-.6	.2	4.8	145	23.9	116	93	53	1	0	3	0	
NC GREENSBORO	84	65	90	55	75	-1	.8	-.2	.6	9.2	200	28.3	142	96	61	1	0	2	1	
NC HATTERAS	83	67	86	60	75	-2	.1	-.2	.1	5.5	96	31.2	136	99	63	0	0	2	0	
NC NEW BERN	84	67	88	62	76	-3	.8	-.7	.8	5.7	86	23.6	95	91	56	0	0	2	1	
NC RALEIGH	88	66	93	57	77	0	1.4	.4	.9	9.1	207	27.4	138	91	50	2	0	2	1	
NC WILMINGTON	86	68	90	63	77	-2	.6	-.1	.4	7.6	110	27.6	118	87	51	2	0	2	2	
ND BISMARCK	78	52	90	45	65	-3	.2	-.5	.2	2.0	51	8.7	101	93	44	1	0	2	0	
ND FARGO	78	53	91	43	65	-3	.4	-.4	.3	1.9	50	7.1	76	90	39	1	0	2	0	
ND GRAND FORKS	76	53	85	42	64	-3	1.5	.8	1.0	3.4	89	9.3	102	97	51	0	0	3	1	
ND WILLISTON	80	60	90	55	70	3	1.4	.7	1.2	2.9	78	8.8	107	88	52	1	0	2	1	
OH AKRON-CANTON	78	57	86	49	67	-4	2.8	2.0	1.0	5.4	126	20.0	110	87	51	0	0	4	3	
OH CINCINNATI	82	64	87	54	73	-1	.9	-.1	.6	4.8	107	24.0	112	82	46	0	0	3	1	
OH CLEVELAND	77	57	85	49	67	-3	2.8	2.0	1.0	6.1	161	19.4	111	91	53	0	0	3	3	
OH COLUMBUS	80	60	86	49	70	-3	1.2	.3	.8	3.7	79	20.5	102	96	55	0	0	3	1	

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

Weather Data for the Week Ending July 3, 1982

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 May 30	PCT. NORMAL SINCE May 30	TOTAL, IN., SINCE Jan. 1	PCT. NORMAL SINCE Jan. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE		PRECIPITATION		
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
DAYTON	80	62	84	53	71	-3	2.0	1.1	.9	4.5	98	24.4	128	92	55	0	0	5	2	
TOLEDO	79	58	85	48	68	-4	1.1	.3	.8	3.0	73	15.4	99	96	56	0	0	3	1	
YOUNGSTOWN	76	53	84	43	65	-5	1.6	.8	1.1	5.9	144	20.1	106	98	57	0	0	4	1	
OK OKLAHOMA CITY	91	69	94	65	80	0	.4	.4	.4	5.0	102	24.5	146	94	50	5	0	1	0	
TULSA	92	74	97	69	83	0	T	.9	T	4.5	83	19.6	103	88	47	5	0	1	0	
OR ASTORIA	65	55	67	53	60	2	.1	.3	.1	1.3	50	40.2	124	92	67	0	0	2	0	
BURNS	70	47	85	40	59	-6	.2	.1	.1	1.1	122	6.1	95	70	37	0	0	3	0	
MEDFORD	76	55	83	50	65	-3	.3	.2	.1	1.0	100	9.2	88	88	44	0	0	3	0	
PENDLETON	72	55	79	52	64	-6	.4	.2	.3	.6	50	5.3	78	89	42	0	0	3	0	
PORTLAND	72	58	79	55	65	0	.3	.1	.2	1.9	112	20.6	111	83	54	0	0	3	0	
SALSM	71	56	77	50	64	-4	.3	.1	.1	1.6	107	21.1	100	90	55	0	0	4	0	
PA ALLENTOWN	78	58	83	50	68	-5	1.8	.9	.8	8.5	202	24.7	123	97	56	0	0	3	2	
ERIE	73	56	81	50	65	-3	.9	.1	.4	6.4	156	19.8	116	83	54	0	0	3	0	
HARRISBURG	77	59	85	50	68	-7	.1	.8	.1	8.0	121	24.2	115	97	56	0	0	1	0	
PHILADELPHIA	81	63	88	55	72	-3	1.2	.3	.8	6.8	158	27.0	146	91	53	0	0	2	1	
PITTSBURGH	78	55	85	46	66	-5	2.0	1.2	.9	4.1	95	19.4	104	91	52	0	0	5	1	
SCRANTON	76	57	85	46	66	-5	.8	.1	.5	7.4	176	21.8	135	92	57	0	0	3	0	
RI PROVIDENCE	77	61	81	54	69	-1	1.2	.6	.9	11.5	371	29.6	150	77	43	0	0	2	1	
SC CHARLESTON	88	72	91	71	80	1	1.9	.1	1.9	9.8	129	26.4	112	90	56	3	0	1	1	
COLUMBIA	90	69	96	65	79	-1	T	1.1	T	5.2	108	23.5	105	90	46	2	0	0	0	
FLORENCE	87	69	91	65	78	-2	1.2	.1	.6	6.5	118	23.9	115	95	55	3	0	2	2	
GREENVILLE	85	68	94	66	77	-1	.2	.8	.1	4.4	96	28.1	114	90	54	1	0	3	0	
SD ABERDEEN	83	56	93	48	70	0	T	.8	T	---	---	---	88	44	1	0	0	2	0	
HURON	85	60	93	57	72	1	.2	.5	.1	2.2	52	10.3	99	93	48	2	0	2	0	
RAPID CITY	78	57	87	52	68	-1	.2	.6	.1	3.1	76	12.4	118	92	55	0	0	3	0	
SIOUX FALLS	85	60	94	55	72	1	.1	.8	.1	2.3	47	9.9	76	89	40	2	0	1	0	
TN CHATTANOOGA	88	68	94	64	78	0	1.3	.2	.6	2.9	64	27.8	102	94	49	2	0	4	1	
KNOXVILLE	85	67	90	60	76	-1	.5	.5	.2	4.2	93	30.3	124	97	58	1	0	5	0	
MEMPHIS	90	76	95	72	83	2	2.0	1.2	1.0	7.2	176	34.2	127	88	59	4	0	4	2	
NASHVILLE	89	70	92	65	79	0	.6	.2	.5	3.2	80	26.1	106	92	52	3	0	4	0	
TX ABILENE	92	72	94	66	82	-1	.7	.1	.6	3.9	122	13.8	115	85	43	6	0	2	1	
AMARILLO	93	67	98	61	80	3	.2	.5	.2	4.6	124	8.1	91	76	32	5	0	1	0	
AUSTIN	94	74	95	68	84	0	T	.5	T	3.0	86	15.9	96	91	46	7	0	1	0	
BEAUMONT	89	73	93	70	81	-1	1.9	.7	1.8	9.4	162	33.1	132	95	67	4	0	2	1	
BROWNSVILLE	96	80	97	78	88	4	.2	.3	.2	.2	6	14.4	147	82	46	7	0	1	0	
CORPUS CHRISTI	93	76	95	73	85	1	.3	.2	.3	.8	27	14.6	119	96	56	7	0	3	0	
DEL RIO	96	76	100	72	86	0	.3	0	.1	2.5	114	7.3	87	81	45	7	0	3	0	
EL PASO	100	69	105	65	84	2	.2	.1	.2	.2	22	1.3	50	63	15	7	0	1	0	
FORT WORTH	94	73	95	71	84	0	T	.5	T	4.3	130	26.5	151	88	46	7	0	1	0	
GALVESTON	87	78	88	74	83	0	1.1	.1	1.0	4.5	94	16.7	95	89	71	0	0	3	1	
HOUSTON	96	76	98	74	86	3	T	1.0	T	1.1	21	15.2	68	85	42	7	0	1	0	
LUBBOCK	90	66	94	60	78	-1	1.1	.5	.7	5.2	158	13.2	145	91	43	5	0	3	1	
MIDLAND	95	69	99	68	82	0	1.0	.7	.6	1.6	89	6.4	105	88	33	7	0	4	1	
SAN ANGELO	91	71	95	64	81	-2	2.0	1.6	1.7	6.3	274	14.3	163	88	42	6	0	2	1	
SAN ANTONIO	95	74	98	69	85	1	.4	.2	.4	1.4	44	11.7	89	92	43	7	0	1	0	
VICTORIA	95	77	96	74	86	2	T	.7	T	1.1	3	16.1	103	89	48	7	0	1	0	
WACO	94	74	95	70	84	0	.9	.5	.8	4.0	129	19.1	111	88	52	7	0	2	1	
WICHITA FALLS	94	69	97	66	82	-3	.1	.6	.1	7.9	198	28.8	200	95	44	7	0	1	0	
UT BLANDING	85	53	92	48	69	-1	.1	.1	.1	.1	17	4.7	98	54	15	1	0	1	0	
CEDAR CITY	85	54	94	43	70	0	0	.1	0	.3	60	7.0	159	34	12	2	0	0	0	
SALT LAKE CITY	90	62	98	53	76	4	.1	.1	.1	.7	50	8.2	96	56	15	4	0	2	0	
VT BURLINGTON	72	52	79	46	62	-7	.7	.2	.4	5.3	126	16.3	112	93	44	0	0	2	0	
VA NORFOLK	87	68	90	61	77	0	2.8	1.7	1.6	5.6	122	22.3	114	89	46	2	0	2	0	
RICHMOND	88	67	92	59	78	1	.4	.7	.2	6.0	130	21.6	113	92	51	3	0	2	0	
ROANOKE	84	61	89	51	73	-1	.2	.6	.1	5.5	134	23.0	124	91	48	0	0	2	0	
WA COLVILLE	71	57	80	54	64	-1	1.0	.7	.4	2.5	139	10.8	126	94	67	0	0	6	0	
QUILLAYUTE	63	52	68	51	57	0	1.3	.6	.8	2.7	69	63.0	123	98	71	0	0	5	1	
SEATTLE-TACOMA	68	56	73	53	62	0	.9	.6	.6	1.2	71	20.6	110	84	55	0	0	6	0	
SPOKANE	71	56	79	52	64	-2	1.2	1.0	.4	1.5	100	8.7	95	97	59	0	0	5	2	
WV YAKIMA	75	55	81	48	65	-3	1.7	1.6	1.0	1.8	225	4.9	114	89	44	0	0	4	1	
BECKLEY	76	56	80	46	66	-4	2.0	1.0	1.6	4.9	102	21.1	96	99	61	0	0	4	1	
CHARLESTON	82	59	87	51	71	-4	1.5	.5	1.1	8.2	195	26.2	128	96	55	0	0	4	1	
HUNTINGTON	81	59	86	51	70	-5	.7	.2	.5	5.9	144	23.7	116	97	56	0	0	3	0	
PARKERSBURG	82	60	87	49	71	-2	1.1	.1	1.1	5.3	100	20.1	88	96	43	0	0	2	1	
WI GREEN BAY	77	53	86	47	65	-3	1.0	.2	1.0	2.7	68	11.5	91	95	47	0	0	2	1	
LA CROSSE	81	58	91	47	69	-2	.4	.6	.4	1.3	27	9.9	70	99	48	1	0	1	0	
MADISON	77	53	83	45	65	-4	.5	.5	.4	3.5	71	14.8	105	97	54	0	0	3	0	
MILWAUKEE	73	53	79	50	63	-5	.2	.6	.1	3.3	79	16.9	120	88	55	0	0	2	0	
WAUSAU	78	52	85	46	65	-2	1.9	.9	1.4	7.3	140	18.0	123	92	44	0	0	3	1	
WY CASPER	87	55	91	48	71	4	T	.3	T	4.2	233	8.9	133	75	25	2	0	0	0	
CHEYENNE	79	54	85	50	66	1	.4	.1	.3	4.4	169	9.1	114	85	36	0	0	2	0	
LANDER	87	55	94	47	71	5	T	.3	T	1.4	67	4.9	55	60	17	2	0	0	0	
SHERIDAN	86	55	93	47	70	4	.6	0	.6	4.5	132	9.2	94	79	35	2	0	1	1	
PR SAN JUAN	90	77	91	75	83	3	2.2	.9	1.4	5.5	83	27.0	115	89	62	4	0	4	2	

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

## June Weather Summary

**HIGHLIGHTS:** Thunderstorms covered nearly all of the Nation--only a few points in the Southwest were without showers. Heavy downpours of rain in parts of the central and southern Plains damaged some crops, and standing water did further damage. An unusual amount of hail fell in northwestern Texas and caused severe damage to cotton and other crops. Tropical storm Alberto formed and dissipated in the southeastern Gulf of Mexico but caused severe weather and heavy rain over southern Florida. Cooler than normal temperatures over the northern and central portions of the Nation slowed crop growth. A heat wave dominated the Pacific Northwest early in the month but unusually cool temperatures enveloped that area at month's end.

**FIRST WEEK...**The first five days of June showed heavy downpours from eastern Oklahoma and Kansas into southern Illinois, through much of the east coast States, and into parts of the South. Tropical storm Alberto formed and dissipated in the southeastern Gulf of Mexico but triggered tornadoes and heavy rain over southern Florida. A low pressure system, deepening off Cape Cod, dumped large amounts of rain on southern New England and resulted in severe local flooding. Cooler than normal temperatures prevailed over most of the United States. The central Plains and much of the northern High Plains were more than 90° cooler than the average.

**SECOND WEEK...**Precipitation was confined to the area east of the Rockies, and all of this area except southern Texas received some rain in the form of showers and thunderstorms. Planting progress advanced rapidly in the western Corn Belt in spite of occasional showers, however, cool, wet weather slowed growth of crops already planted. Temperatures through all of the Corn Belt and in the central and northern Plains were 3 to 60° cooler than normal and as much as 90° cooler in parts of Wyoming. The heaviest rainfall hit northeastern Kansas and northern Missouri where deluges caused serious local flooding. Frequent thunderstorms from the central Ohio Valley into Virginia produced some heavy rain, but parts of this area had only light rain.

**THIRD WEEK...**Severe weather was widespread in many areas east of the Rockies. Hailstorms in Texas severely damaged many crops. Cotton in the Lubbock area was especially hard hit, and some wheat fields, ready for harvest, were destroyed. More deluges of rain from northern Texas to eastern Nebraska and into northern Illinois left standing water in fields and overflowed small streams. Tropical moisture caused heavy rain over the Southeast, and a low pressure system along the east coast triggered heavy coastal rain to southern New England. A heat wave in the Pacific Northwest brought average temperatures for the week, up to as much as 9 to 100° above normal from northern California into southern Canada. Cooler than normal temperatures in much of the East continued to slow development of most crops.

**FOURTH WEEK...**Severe weather was concentrated in north central Texas, central Oklahoma, and the Texas Panhandle. More hail damage was reported, and wet fields delayed winter wheat harvest. Thunderstorms were most frequent along the eastern slopes of the Rockies, through the Mississippi Valley, along the gulf coast except for southern Texas, and up the southeastern coast. Tornadoes touched down as far north as lower Michigan. Warm weather continued in the Northwest, but some cooling began at midweek, and the warm tongue of air moved a little eastward. It was still cooler

than normal over most of the East. Averages were up to 90° cooler than normal in the Corn Belt.

The last four days of June were cooler in most of the West, but warm temperatures pushed northward in the Plains and the East. As the month ended, much cooler air moved into the northern Plains. Thunderstorms moved over the West and reached as far south as the California deserts. Thunderstorms covered nearly all of the East, and heavy downpours fell in the central and southern Plains.

## JUNE AGRICULTURAL SUMMARY

### ROW CROP PROGRESS

Nearly continuous rain in western areas of the Corn Belt through the central Plains during May kept farmers out of the fields and forced planting progress to fall behind normal. Timely rains and warm weather in the eastern Corn Belt allowed planting to approach completion by the beginning of June and promoted excellent germination and early growth of crops. Planting progress in the western region fell far behind schedule as producers waited for fields to dry. At the beginning of June, corn planting was 82% finished, behind the average progress of 90%. Planting was 49 percentage points slower than average in Nebraska, 25 points slower in Iowa, and 27 points slower in South Dakota. By the end of the month, corn planting was virtually finished and emerged plants were in fair to good condition. Early-planted fields in the South were in the dough stage, and some had reached the dent stage. Cool weather during June slowed crop development throughout the Corn Belt.

Soybean planting reached 50% completion by the beginning of June, lagging the average progress of 58%. Wet weather caused planting to advance slowly on the central Plains and in the western Corn Belt. Planting in Iowa fell 66 percentage points behind average and, in Nebraska, planting was 57 points behind average. In contrast, planting in Ohio was nearly finished by the beginning of June, 39 points ahead of average. Wet conditions continued to delay planting during much of June. At the end of the month, planting reached 91% completed, 3 points behind average. Planting in Kansas was only 40% finished, well behind the average of 85%. Missouri farmers were also behind -- planting was 73% completed, 19 points behind average. Double-cropped soybean planting gained momentum as small grains were harvested.

At the beginning of June, sorghum planting was 38% finished, lagging the average progress of 55%. Because of wet weather, progress fell 56 percentage points behind average in Nebraska, 22 points behind in South Dakota and 15 points behind in Kansas. June rains continued to slow planting and progress fell further behind schedule. Planting reached 82% complete as June ended, behind the average of 96%. Progress was as much as 30 points behind normal in Kansas and Oklahoma. Scattered harvesting started at the end of the month in Texas. During the last week of June, heavy rains washed out some late-planted fields in the Texas High Plains.

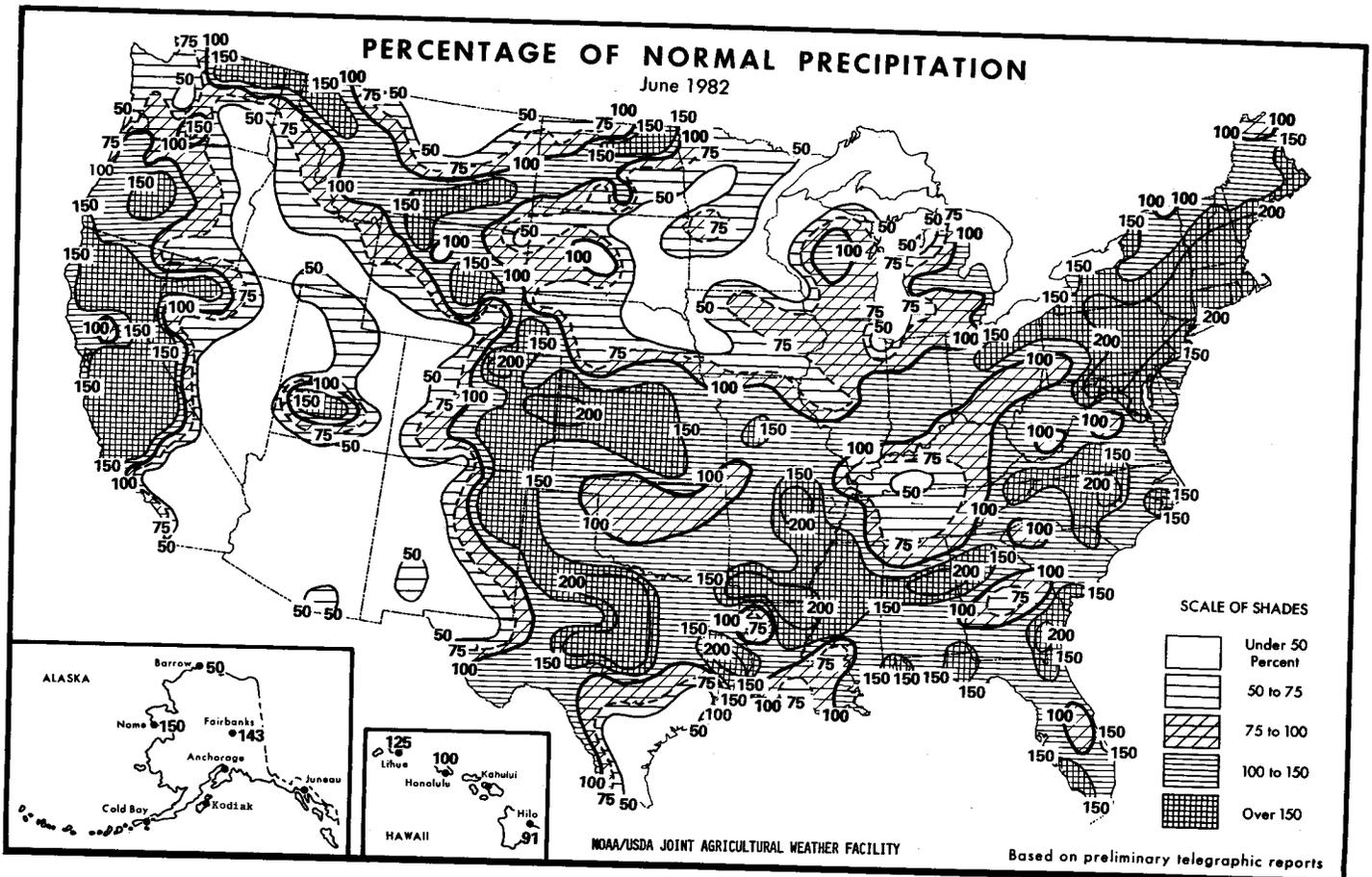
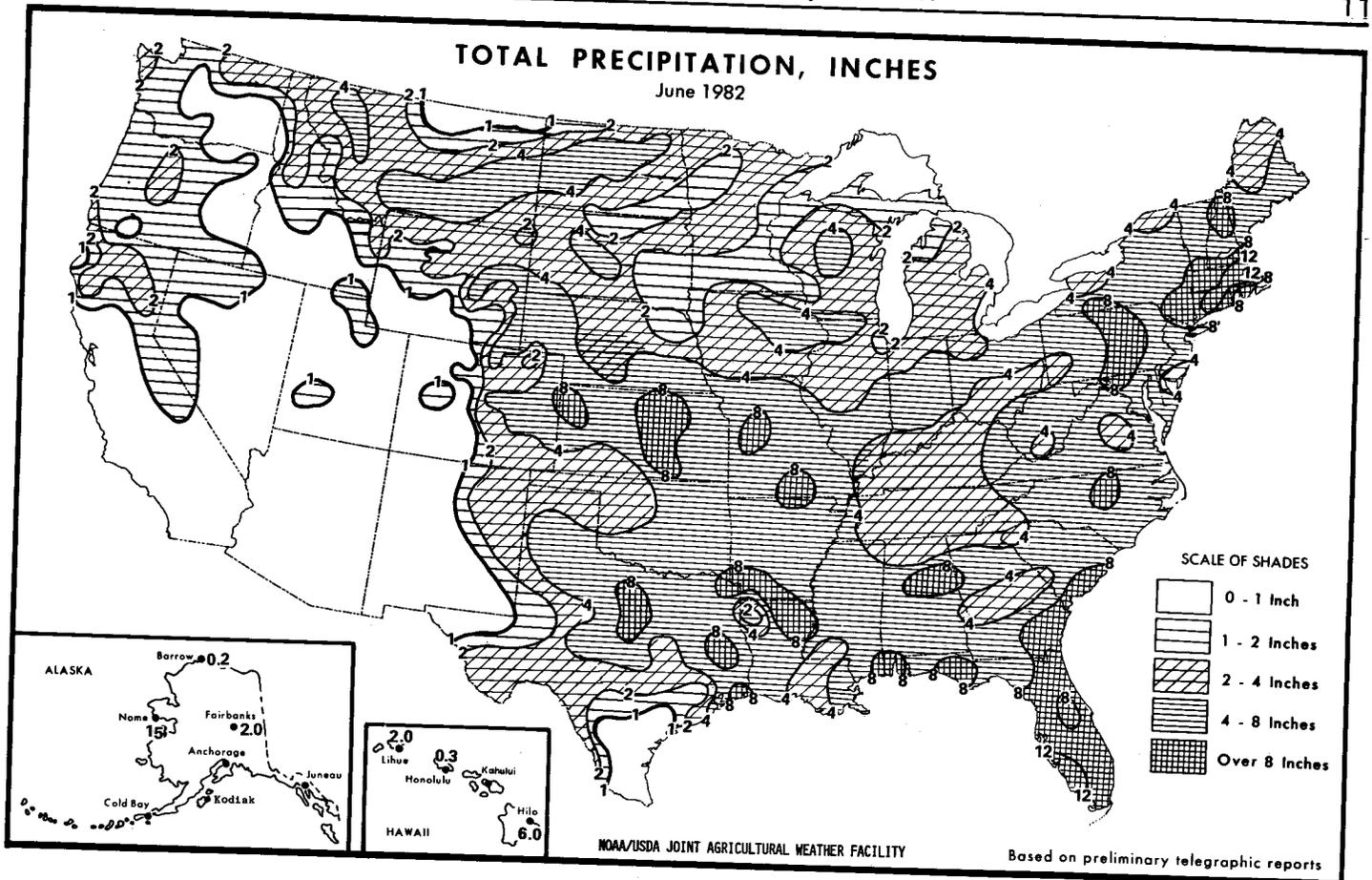
Cotton was 74% planted as June began, behind 1981's progress of 88%. Planting in Texas was only 58% completed, lagging the average of 74%. Producers in California, Missouri, North Carolina, and South Carolina had finished planting the crop. Early-planted fields in southern areas began squaring. Severe weather and hail damaged or destroyed some fields in Texas during the month.

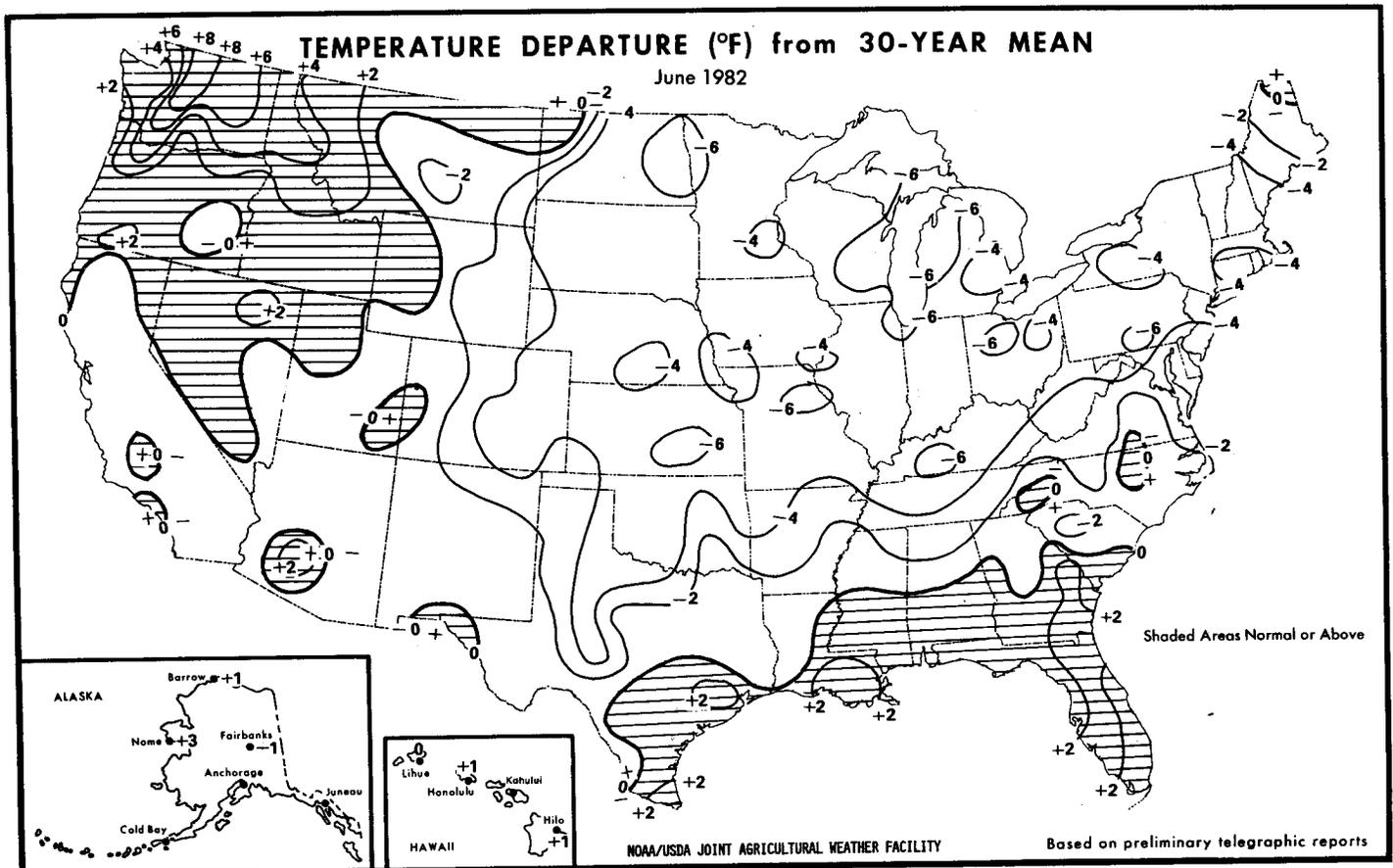
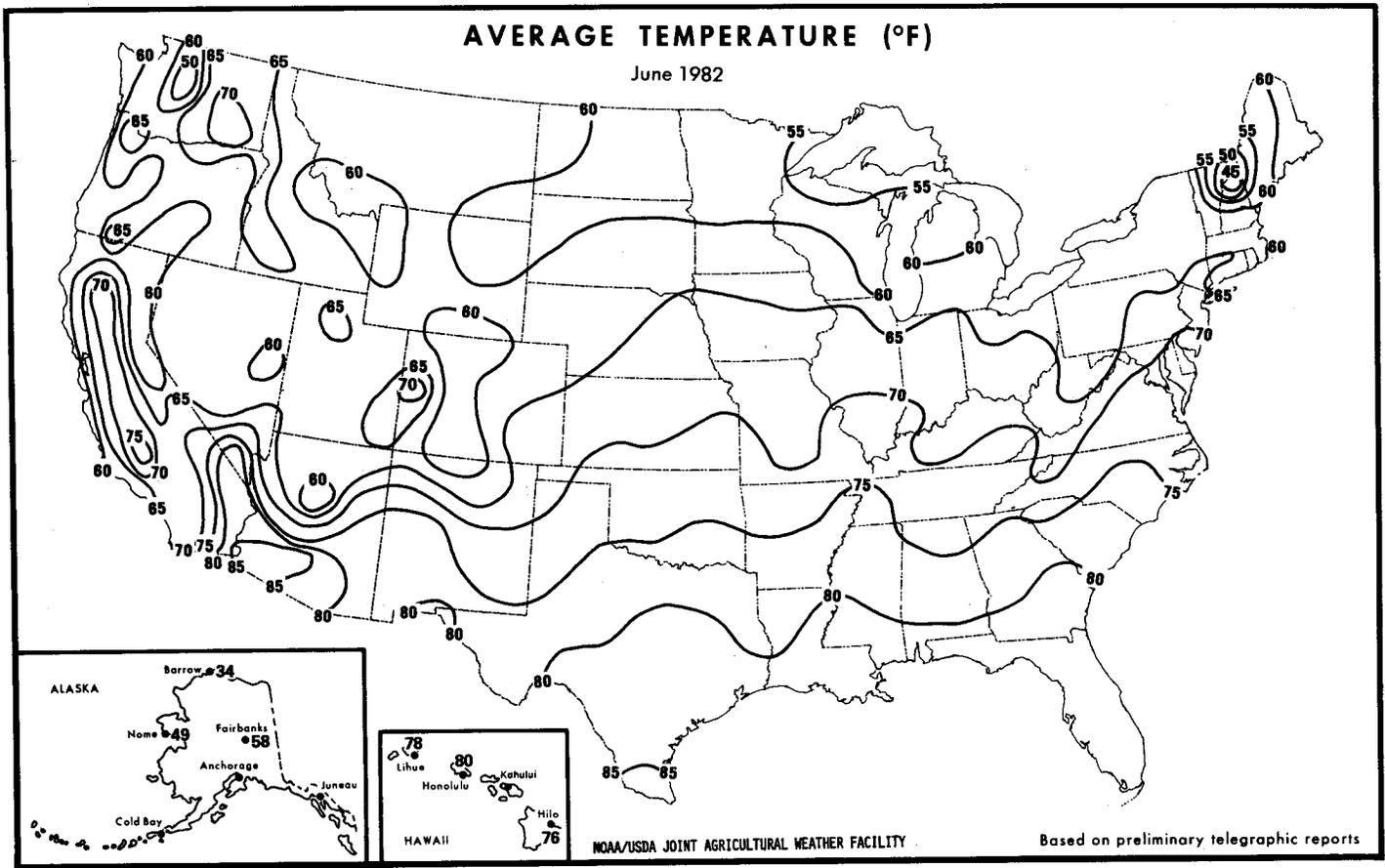
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Temperature and Precipitation Data for June 1982

States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches	
	Average	Departure	Total	Departure		Average	Departure	Total	Departure		Average	Departure	Total	Departure
AL BIRMINGHAM	76	-1	8.7	4.7	LA BATON ROUGE	83	-3	2.9	-.9	TOLEDO	64	-5	2.0	-1.4
MOBILE	81	1	11.0	4.9	LAKE CHARLES	80	-1	4.9	-.1	YOUNGSTOWN	62	-5	5.2	-1.6
MONTGOMERY	79	0	4.8	.8	NEW ORLEANS	82	2	5.4	.7	OK OKLAHOMA CITY	72	-5	4.1	-.1
AK ANCHORAGE	--	--	--	--	SHREVEPORT	79	-1	1.8	-1.5	TULSA	75	-2	4.1	-.6
BARRON	34	1	.2	-.2	ME CARIBOU	60	0	3.1	-.3	OR ASTORIA	58	1	1.2	-1.3
FAIRBANKS	58	-1	2.0	.6	PORTLAND	58	-4	6.8	3.7	BURNS	58	-1	.9	-.1
JUNEAU	--	--	--	--	MA BALTIMORE	69	-3	5.7	1.9	MEDFORD	67	3	.9	.0
KODIAK	--	--	--	--	MA BOSTON	63	-5	13.2	10.0	PENDELTON	68	2	.6	-.4
NOME	49	3	1.5	-.5	CHATHAM	59	--	5.5	--	PORTLAND	66	4	1.7	.1
AZ FLAGSTAFF	57	-1	T	-.6	MI ALPENA	56	-5	3.4	.5	PA SALEM	65	4	1.4	.0
PHOENIX	88	3	T	--	DETROIT	64	-4	4.1	-.7	ALLENTOWN	66	-4	7.2	3.7
TUCSON	81	-2	.1	-.1	FLINT	63	-3	3.2	-.2	ERIE	61	-4	6.2	2.7
WINSLOW	71	-1	T	-.3	GRAND RAPIDS	63	-4	2.5	-.9	HARRISBURG	65	-7	8.1	5.0
YUMA	85	-1	0	.0	ROUGHTON LAKE	57	-6	3.2	-.1	PHILADELPHIA	69	-3	5.8	2.1
AR FORT SMITH	73	-5	5.0	1.1	LANSING	62	-5	3.0	-.5	PITTSBURGH	64	-5	3.1	-.4
LITTLE ROCK	75	-3	4.7	1.5	MARQUETTE	54	-5	1.2	-3.0	SCRANTON	66	-4	7.2	3.8
CA BAKERSFIELD	79	2	.4	.3	MUSKEGON	60	-6	2.8	.2	RI PROVIDENCE	64	-2	6.1	3.4
EUREKA	56	1	.8	-.1	SAULT STE. MARIE	52	-7	1.7	-1.6	SC CHARLESTON	79	1	9.2	2.9
FRESNO	73	-1	.3	-.2	MN DULUTH	55	-4	2.0	-2.4	SC COLUMBIA	77	-2	4.2	-.4
LOS ANGELES	64	-1	T	.0	INT'L FALLS	56	-4	2.7	-1.2	SD GREENVILLE	74	-2	3.3	-.8
RED BLUFF	73	-3	1.6	1.1	MINNEAPOLIS	64	-3	1.4	-2.5	SD ABERDEEN	--	--	--	--
SAN DIEGO	67	1	T	-.1	ROCHESTER	62	-4	1.4	-3.2	HURON	63	-4	1.3	-2.5
SAN FRANCISCO	60	-2	.1	.0	SAINT CLOUD	60	-5	2.5	-2.1	RAPID CITY	60	-4	2.9	-.8
STOCKTON	70	-2	.2	.1	MS JACKSON	80	1	6.3	2.9	SIoux FALLS	63	-5	1.2	-3.1
CO DENVER	63	-3	2.3	.4	MERIDIAN	79	0	4.5	.8	TN CHATTANOOGA	74	-2	2.8	-.9
GRAND JUNCTION	72	1	.2	-.4	MO COLUMBIA	68	-5	5.0	.4	KNOXVILLE	73	-3	3.9	.3
PUEBLO	--	--	--	--	KANSAS CITY	69	-4	6.0	.4	MEMPHIS	78	-1	6.7	3.2
CT BRIDGEPORT	64	-4	11.5	8.9	SAINT LOUIS	71	-4	6.0	1.6	NASHVILLE	73	-4	2.3	-1.1
HARTFORD	65	-3	13.6	10.1	SPRINGFIELD	70	-4	5.9	1.2	TX ABILENE	79	-1	4.0	1.2
DC WASHINGTON	73	-2	5.4	1.9	MT BILLINGS	61	-2	5.0	2.4	AMARILLO	72	-3	4.8	1.3
FL APALACHICOLA	81	1	5.6	.3	GLASGOW	62	0	1.0	-1.7	AUSTIN	82	0	3.0	-.1
DAYTONA BEACH	80	1	8.3	1.7	GREAT FALLS	60	-1	3.1	.0	BEAUMONT	81	0	9.3	4.5
FORT MYERS	84	3	15.0	6.1	HAVRE	62	0	.6	-2.0	BROWNSVILLE	87	4	.2	-2.6
JACKSONVILLE	82	3	8.1	1.8	HELENA	61	2	3.0	.6	CORPUS CHRISTI	83	1	.7	-2.0
KFY WEST	83	-1	9.0	4.4	KALISPELL	60	3	4.1	1.5	DEL RIO	84	0	2.4	-.4
MIAMI	82	1	10.8	1.8	MILES CITY	64	-1	5.1	1.8	EL PASO	81	1	.2	-.4
ORLANDO	82	2	6.1	-1.0	MISSOULA	63	-4	1.8	-.3	FORT WORTH	79	-2	4.3	1.2
TALLAHASSEE	81	1	7.4	.8	NE GRAND ISLAND	68	-3	4.5	-1.0	GALVESTON	82	1	4.5	-.4
TAMPA	81	0	8.3	1.8	LINCOLN	67	-5	5.6	-.6	HOUSTON	83	2	1.1	-3.4
WEST PALM BEACH	81	0	10.4	2.3	NORFOLK	65	-5	1.6	-3.3	LUBBOCK	74	-3	5.0	2.2
GA ATLANTA	76	0	6.1	2.4	NORTH PLATTE	63	-5	2.3	-1.5	MIDLAND	79	-1	1.5	.0
AUGUSTA	80	2	3.5	-.2	OMAHA	67	-3	4.0	-.9	SAN ANGELO	78	-4	6.0	4.1
MACON	79	-1	2.7	-1.2	VALENTINE	63	-4	2.1	-1.5	SAN ANTONIO	82	0	1.4	-1.4
SAVANNAH	80	1	9.2	3.3	NV ELY	57	-1	.1	-.8	VICTORIA	83	1	.1	-3.2
HI HILO	76	1	6.0	-.6	LAS VEGAS	82	0	0	-.1	WACO	81	-1	3.9	1.2
HONOLULU	80	1	.3	.0	RENO	62	0	1.1	-2.9	WICHITA FALLS	77	-4	7.4	4.0
KAHULUI	--	--	--	--	WINNEMUCCA	63	1	1.5	.5	UT BLANDING	67	1	.1	-.4
LIHUE	78	0	2.0	-.4	NH CONCORD	61	-4	7.8	4.4	SALT LAKE CITY	68	2	.7	-.6
ID BOISE	66	1	.4	-.7	NJ ATLANTIC CITY	70	0	3.0	-.4	VT BURLINGTON	61	-4	5.0	1.5
LEWISTON	69	4	.5	-1.3	TRENTON	--	--	--	--	VA LYNCHBURG	71	-2	6.5	3.1
POCATELLO	62	0	.5	-.8	NM ALBUQUERQUE	75	0	.1	-.4	NORFOLK	73	-2	4.2	-.6
IL CAIRO	74	-4	2.9	-1.5	ROSWELL	76	-1	.8	-.4	RICHMOND	73	-1	4.0	.5
CHICAGO	62	-6	1.6	-2.6	NY ALBANY	63	-5	6.5	3.5	ROANOK	70	-2	5.0	1.5
MOLINE	66	-5	3.6	-.8	BINGHAMTON	62	-3	7.1	3.5	WA COLVILLE	67	6	2.8	1.1
PEORIA	67	-4	3.1	-.8	BUFFALO	62	-4	3.1	.9	OMAK	71	7	2.6	1.4
ROCKFORD	65	-4	4.3	-.1	NEW YORK	67	-5	4.7	1.8	QUILLAYUTE	57	2	2.4	-1.1
SPRINGFIELD	68	-5	2.5	-1.7	ROCHESTER	64	-3	3.9	1.4	SEATTLE-TACOMA	63	3	1.0	-.5
IN EVANSVILLE	71	-4	3.0	-.6	SYRACUSE	63	-4	4.6	1.5	SPOKANE	67	5	.9	-.5
FORT WAYNE	66	-4	4.9	1.0	NC ASHEVILLE	72	1	4.0	.0	WALLA-WALLA	71	4	.3	-.9
INDIANAPOLIS	68	-4	5.2	1.0	CHARLOTTE	75	-1	4.2	.5	YAKIMA	67	2	1.7	1.0
SOUTH BEND	65	-4	3.1	-.6	GREENSBORO	72	-2	7.3	3.4	WV BECKLEY	65	-2	3.2	-1.0
IA BURLINGTON	68	-3	2.5	-2.2	HATTERAS	73	-1	5.5	-.7	CHARLESTON	69	-3	7.0	3.7
DES MOINES	67	-4	2.6	-2.3	FALEIGH	75	1	8.4	4.7	HUNTINGTON	68	-4	4.5	1.1
DUBUQUE	--	--	--	--	WILMINGTON	76	-2	7.6	2.0	PARKERSBURG	--	--	--	--
SIoux CITY	65	-5	1.8	-2.8	ND BISMARCK	59	-5	2.0	-1.6	WI GREEN BAY	59	-6	2.7	-.7
CONCORDIA	69	-4	8.4	3.4	FARGO	59	-6	1.6	-1.6	LA CROSSE	64	-5	1.4	-3.0
DODGE CITY	70	-4	3.7	.4	WILLISTON	64	1	2.8	-.5	MADISON	60	-6	3.4	-.9
GOODLAND	65	-4	9.5	6.6	OH AKRON-CANTON	65	-3	4.2	.7	MILWAUKEE	60	-5	3.1	-.5
TOPEKA	69	-5	6.0	.2	CINCINNATI	67	-5	3.6	-.2	WY CASPER	60	-2	4.2	2.8
WICHITA	70	-6	8.3	3.8	CLEVELAND	66	-4	5.0	1.7	CHEYENNE	58	-3	4.5	2.1
KY LEXINGTON	69	-4	4.0	-.3	COLUMBUS	66	-4	3.4	-.7	LANDER	61	0	1.4	-.5
LOUISVILLE	69	-4	3.9	-.2	DAYTON	67	-4	4.1	.2	SHERIDAN	60	-1	3.9	-.9
					TOLEDO					PR SAN JUAN	82	1	2.8	-2.8

Based on 1941-70 normals





## National Agricultural Summary

June 28-July 4

**HIGHLIGHTS:** The winter wheat harvest gained momentum in the central Plains, but farther south wet fields continued to delay combining. Farmers had 4 to 7 days suitable for fieldwork in all areas except in parts of the Delta and Alabama where less than 4 days were available. Soil moisture supplies were short to adequate in the Appalachian States and adequate to surplus in most other areas. Corn was in fair to mostly good condition; early-planted fields were in the dent stage of development. Soybeans were 95% planted. Most remaining acreage will be planted with double-cropped soybeans. Sorghum planting reached 88% finished -- progress continued to lag in all States. Cotton was in fair to mostly good condition; 40% of the acreage was squaring. Tobacco growers topped plants and, in some areas, began harvesting the crop. Condition of rice was fair to good. Hay harvests hit full swing as weather permitted. Peach picking moved northward into New Jersey. Summer vegetable harvests gained momentum in northern areas. Pastures and ranges were in fair to mostly good condition. Lush growth covered most areas. Livestock were in good condition.

**SMALL GRAINS:** Winter wheat remained in fair to good condition. Harvesting in the 15 major producing States was 27% complete, behind both last year and average. Combining was underway in the Corn Belt and as far north as Kansas on the Great Plains. The Kansas harvest slowly gained momentum as hot, dry weather made a belated appearance; most activity was confined to southern areas of the State. Windy conditions lodged some stands in Nebraska. Wet fields slowed the Texas harvest, although fields were ripe and ready for combining. Some fields in the northern High Plains were destroyed by severe weather.

Spring wheat was 34% headed, 22 points behind average. Development in all five major States fell behind average due to late planting and a cool spring. The crop was in fair to good condition.

**CORN:** Corn was in fair to good condition except in parts of the eastern Corn Belt and Southeast where good to excellent conditions prevailed. Silking neared completion in many southern areas with most fields in the dough stage and some in the dent stage. Corn in Georgia was 38% dented. Warmer weather and mostly adequate soil moisture improved prospects for the crop.

**SOYBEANS:** Soybean planting in the 18 major producing States was 95% complete, about equal to last year and average. Most of the remaining acreage will be planted with double-cropped soybeans as small grains are harvested. Stands were in fair to mostly good condition.

**SORGHUM:** Sorghum planting in the seven major producing States advanced to 88%, behind last year's progress of 95%. Planting was completed in Nebraska and neared completion in Texas. Progress continued to lag in other States as wet conditions delayed fieldwork. Harvesting in Texas was 3% finished. Good progress spanned the Lower Valley

through the Coastal Bend. Farmers replanted many cotton fields on the High Plains to sorghum.

**COTTON:** In the 14 major producing States, 40% of the cotton acreage was squaring, behind 1981's 53%. Progress ranged from only 1% in Oklahoma to 94% in South Carolina. Plants bloomed and started to set bolls in most areas. The crop was in fair to mostly good condition, although many fields on the High Plains of Texas were in poor to fair condition due to severe weather. Replanting was underway in the storm-damaged areas -- many producers were replanting fields with other crops.

**OTHER CROPS:** Texas peanut planting was 91% finished, 4 points slower than average. In south central areas of the State, rain was needed for germination and growth. By contrast, heavy rains washed out some stands in the Cross Timbers area, and replanting was necessary. In the Southeast, the crop was in fair to good condition. In Georgia, 90% of the acreage had bloomed and 59% was pegging.

Tobacco growers topped plants and, in some areas, began harvesting the crop. Harvesting was 26% finished in Georgia, 10% in South Carolina, and the North Carolina flue-cured crop was 4% harvested.

Rice condition was fair to good. In Texas, 63% of the acreage had headed, behind last year's pace of 80%. Weeds and grass were a problem in some fields.

Hay harvests were active when weather permitted. Wet conditions hindered cutting and lowered quality in some areas.

**FRUITS AND NUTS:** The peach harvest moved northward into New Jersey. Picking in Georgia was 62% finished and in South Carolina the harvest was 38% complete. Florida's citrus groves were in very good condition with adequate soil moisture. Arizona's groves remained in good condition. Fruit developed well in Texas citrus groves. Some pecan trees on the Plains of Texas were severely damaged by high winds. California's strawberry harvest continued active. Cool weather prolonged harvests in southern areas but hurt quality elsewhere. The Desert grapefruit harvest was finished, but was starting in other areas of the State. Almonds and walnuts sized well.

**VEGETABLES:** The summer vegetable harvest gained momentum in northern areas. In New Jersey, sweet corn and tomato harvest was underway. Florida's vegetable shipments declined 41% from the previous week. All crops registered declines. Sweet corn and watermelons were the only crops showing any significant shipments.

California growers continued harvesting a wide variety of crops, although rain and cool weather slowed crop development and harvesting.

**PASTURES AND LIVESTOCK:** Pastures and ranges were in fair to mostly good condition, although a few scattered areas reported good to excellent conditions. Ample moisture and warm weather encouraged lush pasture growth in most areas. Livestock remained in mostly good condition.

**CROP PROGRESS**  
FOR WEEK ENDING JULY 4

WINTER WHEAT % HARVESTED				SPRING WHEAT % HEADED				SOYBEANS % PLANTED				COTTON % SQUARING			
	1982	1981	AVG.		1982	1981	AVG.		1982	1981	AVG.		1982	1981	AVG.
CALIF	65	77	NA	IDAHO	60	64	68	ALA	93	100	100	ALA	80	76	60
COLO	0	4	5	MINN	50	84	70	ARK	91	91	93	ARIZ	90	95	90
IDAHO	0	0	0	MONT	5	40	40	GA	91	93	94	ARK	90	69	77
ILL	45	71	57	N D	22	55	45	ILL	99	98	100	CALIF	10	35	NA
IND	20	35	25	S DAK	70	92	83	IND	100	93	100	GA	85	88	87
KANS	15	75	50					IOWA	100	100	100	LA	90	72	68
MO	29	39	56	5 STATES	34	64	56	KANS	65	80	NA	MISS	92	92	80
MONT	0	0	0					KY	95	86	90	MO	90	60	45
NEBR	0	30	20					LA	95	97	97	N MEX	50	60	NA
OHIO	5	5	10	THESE 5 STATES PRODUCED 92%				MICH	100	100	100	N C	88	61	NA
OKLA	65	95	95	OF THE 1981 SPRING WHEAT CROP.				MINN	99	99	99	OKLA	1	5	10
OREG	0	0	NA	SORGHUM				MISS	95	96	96	S C	94	98	89
S DAK	0	3	2	% PLANTED				MO	86	74	93	TENN	72	60	60
TEX	66	91	87					NEBR	100	100	100	TEX	19	45	NA
WASH	0	0	0					N C	85	93	94				
				COLO	93	92	95	OHIO	100	100	100	14 STATES	40	53	NA
15 STATES	27	54	NA	KANS	70	90	NA	S C	91	93	95	EXCL. STATES			
				MO	88	74	96	TENN	95	89	90	WITH NA	77	71	66
EXCL. STATES				NEBR	100	100	100								
WITH NA	27	54	47	OKLA	80	100	100	18 STATES	95	94	NA				
				S DAK	93	100	100	EXCL. STATES				THESE 14 STATES PRODUCED 99%			
THESE 15 STATES PRODUCED 88%				TEX	98	100	100	WITH NA	96	94	97	OF THE 1981 COTTON CROP.			
OF THE 1981 WINTER WHEAT CROP.				7 STATES	88	95	NA								
				EXCL. STATES				THESE 18 STATES PRODUCED 95%							
				WITH NA	96	97	99	OF THE 1981 SOYBEAN CROP.							
				THESE 7 STATES PRODUCED 92%											
				OF THE 1981 SORGHUM CROP.											
NA - NOT AVAILABLE															

**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 SRS State Offices in cooperation with the National Weather Service.

**ALABAMA:** Temperatures averaged near normal. Rainfall varied.

Soil moisture adequate to surplus. Fieldwork: 3.5 days. Corn silked 83%, 83% 1981, 63% average. Sorghum planted 95%. Soybeans planted 93%. Wheat virtually all harvested. Cotton: Squaring 80%, 76% 1981, 60% average; setting bolls 8%, 14% 1981. Conditions: Cotton, peanuts, livestock, pastures, and sorghum mostly good; corn fair to good. Activities: Planting sorghum and soybeans; cultivating field crops; controlling pests on fruit, vegetables, and crops; harvesting hay, wheat, peaches, summer potatoes and vegetables.

**ALASKA:** Sunshine and warm temperatures hastened crop growth and haying in Tanana Valley while cloudy windy weather prevailed in the Matanuska Valley. Most areas had 5 to 7 days suitable for haying and fieldwork. Hay harvest half finished. Small grains moderate to rapid growth all areas. Average height ranged 4 to 15 in. compared with 10 to 30 in. a year ago. Very little grain except Tanana Valley had reached the boot stage. Potatoes and vegetables made good growth. Topsoil moisture supplies becoming short. Subsoil moisture adequate. A mixture of sun and clouds provided a generally pleasant week. Temperatures were from near normal up to 6° warmer than normal during the day. Nighttime lows were near normal. Precipitation was spotty but generally light with amounts near 0.25 to 0.33 in. in some locations. Seasonal totals for precipitation range widely.

**ARIZONA:** Sunny skies with warm days, cool nights. Few scattered showers, thunderstorms over eastern areas first half of week. Moisture amounts mostly under 0.25 in. Average temperatures 1 to 5° below normal.

Cotton squaring 90% complete, behind last year's 95%, same as average. Insecticide applications began, western area. Barley harvest winding down, southeast area. Wheat combining finished most areas except southeast where harvest at midpoint. Corn for grain good progress. Sorghum planting continued, established stands seasonal progress. Sugarbeet harvest over 75% complete. Yield, sugar good. Alfalfa baling seasonally active. Dry onion bagging approaching completion. Limited carrot digging. Green onion bunching seasonal. Harvest of processing potatoes completed. Cantaloups, watermelon harvest past peak, honeydews approaching midpoint. Plum season completed. Grape picking past peak. Grapefruit harvest should finish by end of July. Citrus groves in good condition. Northern, southeastern ranges remained mostly fair condition. Ranges poor central, southwestern Desert areas. Livestock fair condition. Water remained problem as high temperatures, lack summer rains caused stock tank water levels to continue dropping.

**ARKANSAS:** Hot temperatures, showers. Highest temperature 98°, lowest 60°. All departures from normal ranged from +2 to -2°. Most rainfall 2.42 in., least 0.18 in.

Four days available for fieldwork. Soil moisture adequate to surplus. Crop growth rapid. Crops in good condition. Soybeans planted 91%, 91% 1981, 93% average; emerged 86%, 79% 1981, 85% average. Cotton squaring 90%, 69% 1981, 77% average; setting bolls just beginning. Wheat harvested 96%, 99% 1981, 98% average. Oats harvested, virtually finished, same as 1981 and average. Peach and tomato harvests at or near peak. Haying poor. Pastures excellent.

**CALIFORNIA:** An upper level, winter-like disturbance along the Pacific coast settled south and pushed cold and moist air, in surges, over much of the State. Showers and thunderstorms, with hail, were common and dumped large out-of-season precipitation totals; even snow at high Sierra elevations. Rainfall totals had to be split between the season just ended and the season just beginning. Cooler than normal temperatures by several degrees were reported from most districts.

Recent rains, cool weather slowed crop development, harvest. Artichokes, asparagus for fresh market, seasonally light. Broccoli harvest plentiful, supply lightening slightly. Cantaloup harvest active Palo Verde Valley. Harvest may start Huron area next week. Carrot harvest moderate, San Joaquin, Salinas Valleys. Cauliflower harvest active Central Coast. Celery harvest active Santa Maria, Oxnard districts. Harvest beginning Salinas Valley. Market onion harvest progressing well San Joaquin Valley. Dehydrator onions, Tulalake-Butte Valley, looking good. Some weeding underway. Harvest in Westside area will begin soon. Spring potato harvest at peak, Kern district. Fall potato fields doing well, Tulalake-Butte Valley area. Strawberry harvest active. Cool weather prolonging harvest southern portion of State, affecting quality elsewhere. Market tomato harvest, Cutler-Orosi area increasing but interrupted due to rain. Harvest Huron district increasing. Processing tomato crop development, Sacramento-northern San Joaquin Valley. Desert watermelon harvest continues. Crop activities slowed due to rains, northern half of State. Cooler temperatures continue to slow growth of crops. Harvest of winter wheat delayed early last week, 65% harvested, 77% last year. Weed control active on rice fields. Cotton progressing, 10% squared, 35% previous year. Cultivation and fertilizing active. Cotton in Imperial Valley setting bolls. Dry beans, corn, milo showing good growth, planting still active. Sugarbeets being cultivated and dusted with crop showing good growth. Some windrowed alfalfa received some damage by rain, northern areas. Haying remains active. Rain over most northern, central areas reduced fire danger, improved moisture conditions. Dry feed quality reduced by rain. Movement livestock summer ranges complete. Tilton apricot suffers drop, brown rot from rain. Normal cultural practices in apples. Hass avocados dominate market. Mission (Black) fig harvest slowed by rain. Thompson Seedless grapes harvest active. Independence, Spring Red, Early Sungrand, Firebite, Red Diamond nectarines moving. Desert grapefruit harvest finished, other areas underway. Red Top, June Lady, Freestone peaches picked with good color and no effect from rain. El Dorado, Queen Rosa plums harvest active. Prunes developing normally. Almonds, walnuts sizing well.

**COLORADO:** Severe thunderstorms brought rain and hail to many localities in northeast; up to 3.00 in. of precipitation. Lighter rainfall in most other locations. Temperatures near normal in most areas. In midweek temperatures over 100° in southeast and west. Cooler earlier and later in the week.

Prospects for most crops continue to improve with recent moisture. Spring grains progressing normally. Barley, 68% headed, and 27% turning color. Sugarbeets, 94% thinned. Dry beans, 97% planted, and 91% emerged. Corn progressing well, and averages 15 in. in height. Sorghum, 93% planted, and 80% emerged. Hay harvest slowed by frequent rains during past few weeks; some scattered hail damage. Winter wheat in fair to good condition, 73% turning color and 16% ripe. Winter wheat also suffered scattered hail damage. Harvest underway in extreme southeast counties. Moisture levels mostly adequate. Four days suitable for fieldwork. Livestock in good condition.

**FLORIDA:** Between periods of sunshine, showers and thunderstorms were scattered over the State, as moist, warm tropical air returned. Highs were in the 90's and most lows in the 70's.

Soil moisture adequate to surplus. Early corn crop maturing rapidly. Silage harvest in full swing some counties, weather permitting. Corn for grain harvest expected to become active in July. Tobacco harvest continues active all areas. Soybeans, peanuts, sorghum making good progress. Hay cutting slowed by showers. Sugarcane making rapid growth. Soybean plantings winding down for season. Pastures good to excellent except parts of Panhandle which was poor to fair. Frequent showers providing abundance of forage but army worms present some areas. Cattle good condition but flies, mosquitoes causing some problems. Citrus groves very good condition. Adequate moisture all areas. Normal summer weather with hot days, warm nights, scattered afternoon showers prevailed in vegetable areas. Daytime highs in 90's; nighttime lows in 70's. Winds mostly light and variable. Total shipments decreased 41% from previous week. Volume declined all vegetables under harvest. Sweet corn and watermelons only crops with significant volume remaining.

**GEORGIA:** Rainfall averaged over 1.00 in. with heavier amounts in northern third of the State. Temperatures generally 2° below normal. Hot on 3rd and 4th with near normal rainfall.

Soil moisture 13% short, 72% adequate, 15% surplus. Four days suitable for fieldwork. Planting soybeans and sorghum, harvesting tobacco, spraying pesticides and making hay main activities. Corn 16% fair, 71% good, 13% excellent, 93% silked, 94% last year, 71% dough stage, 73% last year, 38% dented, 43% last year. Cotton 12% fair, 74% good and 12% excellent, 85% squaring, 88% last year, 87% average, 30% setting bolls, 62% last year, 57% average. Sorghum 87% planted, 85% last year, 81% average. Peanuts 11% fair, 76% good, 13% excellent, 90% blooming, same as last year, 91% average, 59% pegging, 66% last year, 67% average. Soybeans 17% fair, 77% good, 6% excellent, 91% planted, 93% last year, 94% average, 8% blooming, 9% last year. Tobacco 14% fair, 78% good, 8% excellent, 26% harvested, 18% last year and average. Wheat 95% harvested, 98% last year and average. Watermelons 4% poor, 21% fair, 71% good, 4% excellent, 41% harvested, 49% last year, 39% average. Peaches 17% very poor, 12% poor, 21% fair, 50% good, 62% picked, 57% last year, 62% average. Apples 11% very poor, 22% poor, 32% fair, 32% good. Hay crops 17% fair, 74% good, 8% excellent. Pastures 15% fair, 73% good, 12% excellent. Cattle and hogs good.

**HAWAII:** Weather favorable. Skies partly cloudy to cloudy bringing light showers to some crop areas. Some periods of sunshine most major crop areas kept crops in fair to good condition. Spray programs continue to minimize disease and insect damage. Vegetables: Supplies adequate. Green onion and pepper output heavy. Bananas: Supplies light. Papayas: Supplies light to moderate. Frequent spraying to control diseases. Pineapples: Harvesting active. Peak summer flush starting. Sugar: Steady harvesting. Pastures: Generally fair to good. Rains leeward areas beneficial.

**IDAHO:** High pressure provided above normal temperatures the first part of the week. Average temperatures ranged from 4° above normal at Coeur 'D Alene to 2° below normal at Parma. Hot spot for the week was Lewiston with 98° while Stanley recorded a low of 34°. Precipitation was widespread and heavy in the north and southwest with some locations reporting over an inch of rain. The southeast received lesser amounts of 0.10 to 0.40 in. The greatest amount reported was 1.70 in. at Sandpoint.

Rain during last week eliminated stress problems in north. Winter grains in north did not get moisture in time to help much. Rest of State crops in good to very good condition. Potato crop had 20% closing rows, 22% 1981. Winter wheat 93% headed, 9% turning color; last year 92% headed, 14% turning. Spring wheat 62% headed, 64% last year. Barley 61% headed, 64% last year. Cherry harvest 25% complete versus 50% 1981. Corn crop spotty, but good development. First cut alfalfa 61% complete, 84% last year.

ILLINOIS: Temperatures 2 to 9° below normal. Precipitation heavy, 1.00 to 5.00 in.

Winter wheat 90% ripe; 45% combined. Corn 20% excellent, 76% good, 4% fair. Soybeans 99% planted, 98% 1981, 100% average. Soybeans 6% excellent, 78% good, 16% fair. Alfalfa 30% second crop cut; red clover 85% cut. Oats 85% filled; 30% turning yellow, 5% ripe. Pastures 21% excellent, 76% good, 3% fair. Soil moisture 4% short, 74% adequate, 22% surplus.

INDIANA: Fieldwork averaged 4 days. Topsoil and subsoil moisture adequate. Wheat 20% combined, 1981 35%, average 25%. Wheat 70% ripe, 1981 65%, average 65%. Rye 20% combined, 1981 25%, average 25%. Corn 50 in. high, 1981 24 in., average 42 in. Corn good condition. Soybeans 11 in. high, 1981 6 in., average 11 in. Soybeans fair to mostly good. Alfalfa 100% cut first time. Clover 90% cut. Tobacco plants 100% set. Pastures fair to mostly good.

IOWA: Mild, turning hot at the weekend. Light and spotty showers north increasing to excessive amounts over southern counties with amounts to 10 in. in Monroe County. Associated flooding reported in some southern counties.

Topsoil moisture: 11% surplus, 77% adequate, 12% short. Subsoil moisture: 20% surplus, 80% adequate. Soybean acreage emerged: 97%, last year 100%, normal 100%. Oat acreage headed: 95%, last year 100%, normal 98%. First crop alfalfa hay harvested: 97%, last year 100%, normal 100%. First crop clover harvested: 75%, last year 90%, normal 87%. Fieldwork: 5.4 days suitable. Crop conditions: Corn and soybeans, fair to good; pasture, wheat, oats and hay mostly good. Livestock in good condition.

KANSAS: Wet east and north with intensifying heat. Precipitation averaged 2.50 to 3.50 in. central and northern 3 districts, 1.00 to 1.25 in. east central and southeast down to 0.25 in. southwest. Temperatures averaged 77° northwest, 79 to 81° elsewhere, 2 to 4° above normal.

Wheat harvest slowly gaining momentum as hot, dry weather made belated appearance. Wheat 15% harvest, 75% last year, 50% average. Most activity confined to south but most counties have made test cuts. Some low test weights reported. Corn starting to silk, 10% this year, 15% last year, 10% average. Growth excellent. Sorghum planting 70%, 90% last year. Soybean planting moderate progress 65%, 85% last year.

KENTUCKY: Typical summer weather in lower Ohio Valley. Warmest temperatures of year were recorded with afternoon highs at or above 90° in most locations. Average temperatures were only 1 to 2° above normal. Scattered, occasionally heavy, thunderstorms were common. Rainfall totals ranged from 0.10 to more than 3.00 in.

Days suitable for fieldwork averaged 4.7. Soil moisture 28% short, 68% adequate, 4% surplus. Short areas mostly in western third of State. Soybeans 95% planted, 86% last year, 90% average. Corn in good condition, 20% silked or silking, 20% last year, 17% average. Tobacco 15% two feet or taller in height, another 50% between one and two feet. Some early fields blooming. Disease and

insect problems normal. Wheat 88% harvested, 82% last year, 90% average. Alfalfa second cutting 45% complete. Pastures generally good, but need rain.

LOUISIANA: Rainfall averaged 0 to 2.81 in. Temperatures ranged from 2° below normal to 1° above.

Soil moisture was adequate. Days suitable: 2.4. Corn silked 95%, 95% 1981, 89% average; dough stage 65%, 79% 1981, 53% average; mature 16%, 32% 1981; condition good. Cotton squaring 90%, 72% 1981, 68% average; setting bolls 6%, 35% 1981; condition fair to good. Rice headed 29%, 38% 1981, 39% average; condition good. Sorghum planted 98%, 99% 1981, 97% average; sorghum emerged 95%, 94% 1981, 92% average; headed 52%, 51% 1981; condition good. Soybeans planted 95%, 97% 1981, 97% average; emerged 93%, 93% 1981, 92% average; flowering 7%, 10% 1981, 12% average; condition fair to good. Sweetpotatoes transplanted 100%, 94% 1981, 95% average; condition good. Wheat harvested 99%, 100% 1981, 99% average. Sugarcane rated good. Hay first cutting 94%, 91% 1981. Pasture and livestock rated good.

MARYLAND AND DELAWARE: Temperatures 2° above normal. Highs in 80's, lows in 60's. Precipitation minimal with the greatest amount of 1.42 in. and the least of 0.02 in. Weekend breezy with scattered showers, warm days and cool nights.

Maryland: Six days suitable for fieldwork. All small grains had turned color. Harvest in full swing. Barley harvest 80% complete; 95% last year. Wheat 35% combined; 45% last year. Rye 50% harvested; 45% last year. Oats 15% harvested, 20% last year. Soybeans 90% planted; 95% last year, normal 90%. Tobacco 95% planted; 100% planted last year. First cutting of alfalfa hay completed; 95% completed last year. First cutting of other hay was 95% completed; 95% completed last year. First cutting of other hay was 95% completed, 85% last year. One half of the alfalfa hay had been cut for the second time; last year 40% cut. Other hay was 25% cut the second time; last year 10% was cut. Vegetable harvest in full swing with 65% of peas, 15% of snapbeans, and 20% of cucumbers harvested.

Delaware: Six days suitable for fieldwork. Small grain harvest the top job. Barley 100% harvested; 95% last year. Wheat 40% harvested, 65% last year. Rye 15% combined, 25% last year. Soybeans 95% in ground, equal to last year and normal. Alfalfa hay all cut first time, 55% cut the second. Pea harvest was 90% completed, equal to last year. Cucumbers were 10% harvested this year, 20% harvested last year.

MICHIGAN: The cool weather continued with temperatures averaging 2 to 4° below normal. Precipitation averaged less than 0.25 in. except for the southern portion of the Lower Peninsula where between 1.30 and 1.50 in. fell.

Statewide 6 days were suitable for fieldwork. Dry bean planting nearing completion with 98% of the crop in, about one week behind last year and average. Side dressing continues in corn. Height of corn, 26 in., 23 in. last year, 25 in. average. Winter wheat turning color advanced to 60%, 80% last year and 67% average. Oats 65% headed, last year 80% and 66% average. First cut hay harvest 80% complete, 85% last year, 84% average. Strawberry harvest 80% complete, 90% last year and averaged 84%. Good week for fruits and vegetables, warm weather welcomed and progress seen in growth and development.

MINNESOTA: Temperatures generally averaged slightly above normal, but warmed considerably by the end of the week. Averages were from the upper 50's northeast to the lower 70's south and were from 4° below normal to 2° above normal. The highest reported temperature was 100° at Redwood Falls, while

the coolest was 37° at Duluth. Rainfalls were light over the south half of the State. Averages from 0.10 to 0.50 in. While most of the north half averaged from 0.50 to 1.00 in., except for the northeast, which averaged 1.70 in. The greatest reported total was 2.86 in. at Hibbing.

Warm, dry weather helped crop development and enhanced growing conditions. Crops remain substantially behind normal. Topsoil moisture: 38% short and 62% adequate. Jointing: Spring wheat 86%, 1981 97%, normal 91%; oats 91%, 1981 99%, normal 93%; barley 87%, 1981 99%, normal 92%. Heading: Spring wheat 50%, 1981 84%, normal 70%; oats 60%, 1981 90%, normal 76%; barley 53%, 1981 87%, normal 75%. Average height: Field corn 19 in., 1981 26 in., normal 32 in.; soybeans 7 in., 1981 9 in., normal 11 in.; sunflowers 9 in., 1981 17 in., normal 16 in.

MISSISSIPPI: Temperatures 1 to 3° below normal. Extremes: 60 and 99°. Rainfall widespread early in week. Additional rainfall midweek in most northern counties. Greatest 24-hour rainfall 3.90 in.

Soil moisture surplus to adequate in northern two-thirds of State and adequate in southern area. Rainfall limited fieldwork to 3.0 days suitable. Cotton 92% squaring, 92% last year, 80% average; 26% blooming, 58% last year, 36% average; 7% setting bolls, 25% last year, 13% average; condition good. Soybeans 95% planted, 96% last year and average; condition good to fair. Sorghum 96% planted, sweet potatoes 93% planted. Rice condition good. Winter wheat 98% harvested, hay 53%, peaches 41% and watermelons 26%. Pasture condition good.

MISSOURI: Temperatures near average except in the northeast where they averaged 3° below normal. Scattered showers caused some flooding in the west and northeast.

Fieldwork: 5.8 days suitable. Corn 12% tasselled, last year 15%. Grain sorghum 88% planted, last year 74%, normal 96%. Single crop soybeans 61% planted, last year 41%. Wheat 29% harvested, last year 59%, normal 56%. Oats 9% harvested, last year 13%. Alfalfa hay-1st cutting 93% harvested, last year 100%, normal 97%; 2nd cutting 50% harvested, last year 37%, normal 32%. Other hay 57% harvested, last year 62%. Cotton 90% squared, last year 60%. Condition of cotton and corn fair to good. Condition of pasture mostly good. Topsoil moisture supply adequate to surplus.

MONTANA: Heavy showers and thundershowers over scattered areas 28th and 29th. Two to 3.00 in. of rain in short period of time. Destructive hail, large as 2.5 in. in diameter in Helena, from Deer Lodge northeast to Belt. Rainfall mostly 0.75 to 4.00 in. Temperatures averaged 4° above normal in west and southwest, mostly 2° above elsewhere. Maximums in the 90's over some of northeast and southeast.

Topsoil and subsoil moisture adequate. Days suitable for fieldwork: 4. Winter wheat condition fair to good. Percent headed compared with last year and normal: Winter wheat 60, 90, 90; spring wheat and barley 5, 40, 40; oats 5, 45, 35. Sugarbeet thinning 75% complete. First cutting alfalfa hay compared with last and average, 25, 45, 55; wild hay 15, 25, 30. Range feed supplies adequate.

NEBRASKA: Precipitation: Showers plentiful, north central averaged 0.30 in., northeast and central areas about 0.75 in., other areas from 1.30 to 2.40 in. Temperatures: 1° above normal.

Corn good to fair. Early planted fields one month ahead of late planted fields. Winter wheat fair. Turning color 90%, 99% last year and 92% normal. Ripe 10%, 65% a year ago and 50% normal. Harvested 0%, 30% last year and 20% normal. Sor-

ghum fair to good. Soybeans good to fair. Second cutting of alfalfa 6%, 35% last year and 25% normal. Topsoil and subsoil moisture mostly adequate to surplus. Windy conditions continue to down stands of wheat as well as oats. Pasture and range feed supplies mostly adequate to surplus. Days suitable: 4.1.

NEVADA: Storm systems beginning and end of week. First storm produced widespread precipitation and set record cool daytime temperatures west. Snow fell in mountains low as 6500 feet elevation. Second system weaker with light rain north, windy conditions elsewhere. Daytime temperatures about 10° below normal.

Alfalfa first cuttings hay more than two-thirds completed. Afternoon showers caught considerable acreage on ground. Quality lowered many areas. Rainy week improved range feed prospects.

NEW ENGLAND: Temperatures were a little below normal. July 1st was warmest, with a few readings over the 80° mark in southern and central sections. Most of precipitation fell on the 28th, 29th, and 30th, topping off for some areas a record June rainfall. Latter half of the week was generally dry.

First cutting hay harvest: 51%, 1981 67%, quality subnormal. Maine potatoes: Wide range in size, good condition. Cranberry blossoms 30 to 50% open in early varieties, less than 20% on later varieties. Crop about 7 to 10 days behind normal. Warm-season vegetable development about 1.5 weeks behind normal because of cool weather and surplus soil moisture.

NEW JERSEY: Temperatures averaged 5 to 8° below normal. Extremes: 42° at Charlotteburg on 1st and 90° at Seabrook on 28th. Rainfall averaged 1.54 in. north, 1.60 in. central and 1.15 in. south. Heaviest 24-hour total 2.14 in. at Charlotteburg on 29th and 30th. Estimated soil moisture, in percent of field capacity averaged: 90% north, 68% central and 71% south. Four inch soil temperature averaged: 66° north, 69° central and 69° south.

Fieldwork: 4.6 days suitable. Soil moisture levels continue good. Summer vegetable volume increasing. Limited early variety peach harvest begun. Blueberry movement increasing. Apples sizing well. Grain combining and hay making interrupted by frequent rain. Barley combining well advanced. Wheat harvest begun. Soybean planting continues following barley and wheat harvest. Field corn and early planted soybean growth good.

NEW MEXICO: Average temperatures were near normal. Rain and hail interrupted outdoor activities. Hail damage was light to moderate in most areas: However, in some areas the damage was severe.

Soil moisture in short to adequate supply. Cotton remains in good condition. Growth remains slow in some areas due to cool nighttime temperatures. Alfalfa fields remain in good condition. Grain sorghum and corn in good condition. Harvest of wheat and barley progressing slowly due to rain and hail. Harvest approximately 70% complete. Peanuts in good condition. Insect damage to peanut fields has been light. Pecans and chile in good condition. Ranges in fair condition and continuing to show improvement. Cattle and sheep in good summer flesh. Cotton squaring 50%, 60% 1981.

NEW YORK: Temperatures below normal. Rain in first part of week cleared to provide good late week work conditions.

Corn growth slow. Early oats headed. Early wheat turning. First cut alfalfa 50% done, 55% 1981, 67% average. Clover-Timothy 30% done, 45% 1981, 55% average. Grass silage harvest 60% complete, 70% 1981, 76% average. Potato planting complete; crop condition good. Sweet corn planting

complete. Snap bean planting slowed by wet conditions.

**NORTH CAROLINA:** Temperatures: Near normal. Precipitation: From less than 0.10 in. at some stations to nearly 1.50 in. at others. Very scattered Statewide.

Fieldwork: 5.2 days Statewide. Soil moisture: 15% short, 70% adequate, and 15% surplus. Conditions: Pasture, cotton, peanuts, soybeans, hay, sweetpotatoes, and truck crops mostly good; field tobacco, Irish potatoes fair to mostly good; corn mostly good to excellent; apples fair to good. Plantings: Soybeans 85%, 1981 93%, 94% average. Harvests: Irish potatoes 64%, 1981 75%, 67% average; wheat 85%, 1981 96%, 86% average; oats 87%, 1981 98%, 91% average; barley 91%, 1981 99%, 94% average; rye 88%, 1981 98%, 91% average; flue-cured tobacco 4%, 1981 3%; hay 59%, 1981 66%, 65% average. Phenological stages: Cotton squared 88%, 1981 61%; cotton setting bolls 9%, 1981 8%; corn silked 73%, 1981 63%; corn in dough stage 17%, 1981 32%; soybeans blooming 2%, 1981 1%. Major farm activities: Harvesting small grains and planting soybeans.

**NORTH DAKOTA:** Temperatures averaged from 3° above normal northeast to 6° below normal southeast. Extremes: 33° west central to 94° south central. Precipitation was 0.23 in. above normal. Wettest areas were northwest and northeast which averaged over 1.25 in.

Hot weather late in week pushed crop development but left areas in southeast under drought stress. Elsewhere, weekend showers helped maintain soil moisture. Levels above normal except southeast. Weekend storms also brought scattered hail and wind damage. Overall, crop prospects good but crop growth remains behind normal. Hard red spring wheat about 10 days behind. Sunflower about one week. The percents heading or beyond with last year and average were: Hard red spring wheat 22, 55, 45; durum 13, 39, 34; barley 33, 64, 52; and oats 23, 56, 46. The average heights of fields compared to last year and normal were: Sunflower 9, 12, 15; corn 13, 15, 20; and soybeans 7, 8, 10. Potatoes, flax, and dry beans just beginning to bloom.

**OHIO:** Daytime temperatures averaged 3 to 5° below normal; lows below normal but not as great. Highs averaged mid-70's to around 80°; lows from upper 50's to around 60°. Growing degree day accumulations 12 to 18 below normal. Precipitation above normal with totals as high as 4.15 in. Only few stations reported less than 1.00 in.

Crop conditions generally good; recent higher temperatures speeded growth. Winter wheat harvest starting; second crop soybean planting following quickly. Corn development averaged 14 leaves emerged; early fields tasseling. Insect infestations light, but increasing. Winter wheat ripe 25%, 45% 1981, 40% average. Winter wheat harvested 5%, 5% 1981, 10% average. Alfalfa hay, 1st cut harvested 95%, 90% 1981, 95% average. Alfalfa hay, 2nd cut harvested 15%, 10% 1981, 15% average. Other hay, 1st cut harvested 90%, 75% 1981, 90% average. Other hay, 2nd cut harvested 5%, 5% 1981, 5% average. Oats ripe 0%, 5% 1981, 10% average. Tobacco transplanted 90%, 100% 1981, 100% average. Days favorable: 5. Pasture condition fair to good. Soil moisture 82% adequate, 18% surplus.

**OKLAHOMA:** Rainfall averaged from 0.01 in. in the west central and northeast divisions to 0.45 in. in the southeast. Temperatures ranged from 1° below normal in the southwest and south central to 2° above normal in the northeast and east central.

Warm temperatures and gusty winds sapped excess surface moisture, enabling harvest of wheat to progress substantially. Wheat harvesting: 65%, 95% 1981, 95% average. Sorghum up to stand: 55%,

90% 1981, 85% average. Cotton up to stand: 75%, 90% 1981, 95% average. Days suitable for fieldwork: 6.0.

**OREGON:** Unusually wet weather; up to 1.40 in. of rain in Willamette Valley; 2.50 in. southern coast; eastern areas received 0.50 to 1.50 in. Temperatures 2° above normal along coast; 2° below normal in central and extreme eastern areas.

Winter wheat 79% turning color; 84% last year; none harvested. Recent rains knocked some grain down. Harvest of grass seeds slowed by rains; some seed shattering; yields appear down. Haying continues, some rain damage. Barley harvest picking up. Strawberry harvest winding down as raspberry harvest gets in full swing. Cherry picking continues; very little cracking from rain. Thinning apples and pears. Early blueberry harvest starting. Filbert moth sprays being applied. Green pea harvest continues. Potatoes good condition. Some hail and rain damage to onions and potatoes in Malheur County. Walla Walla sweet onion harvest continues. Sweet corn and snap bean growth a little slow; condition good. Lettuce harvest started. Livestock condition good. Recent rains improved range and pasture growth. Fire danger high in some eastern locations.

**PENNSYLVANIA:** Warmest week so far this season but still 4 to 6° below normal. Highs mostly in 70's and 80's and lows 50's and 60's with extremes 91 and 35°. Showers and/or thundershowers on 5 days produced rainfall totals from near 1.00 in. Lower Susquehanna and Poconos to over 4.00 in. parts of northwest mountains with most other areas measuring 1.50 to 2.00 in.

Four days suitable. Moisture adequate to surplus. Activities: Planting soybeans; spraying; making hay and haylage; clipping pastures; and harvesting strawberries, cherries, and barley. Soybean planting 92% complete, last year 94%. Barley 29% ripe and 8% harvested, last year 34% ripe and 26% harvested. Wheat 62% turning yellow and 8% ripe, last year 57% turning yellow and 20% ripe. Oats 77% headed and 5% turning yellow, last year 74% headed and 12% turning yellow. Average corn height 23 in., last year 26 in. First crop alfalfa 79% harvested, last year 88%. Second crop alfalfa 8% harvested, last year 21%. First crop Clo-Tim 67% harvested, last year 78%. Quality of hay made fair to good. Feed from pastures average to above average.

**PUERTO RICO:** Island average rainfall 0.53 in. or 0.66 in. below normal. Temperatures averaged about 82 to 81° on Coasts and 79 to 76° Interior Divisions. Extremes: 95 and 63°.

**SOUTH CAROLINA:** Temperatures were normal for the period, with afternoon's reaching the low 90's. Rainfall came in the form of scattered showers and thunderstorms.

Soil moisture was mostly adequate with 5 days suited for fieldwork. Corn condition good, 93% silked, same as a year ago, 81 average; 42% dough stage, 57 last year, 48 average; 9% mature, 11 a year ago. Cotton condition fair to good, insect spraying active, 94% squaring, 98 a year, 89 average; 39% setting bolls, 64 last year, 38 average. Tobacco fair to good, 80% topped, 83 last year, and 72 average; 10% of the crop harvested, 9 last year, 10 average. Soybean condition good, double-cropped soybeans slow to be planted, 91% planted, 93 last year, 95 average. Coastal Plains picking Loring's, overall conditions fair to good. Harvesting active in the Ridge area. Percent harvested 38, 34 last year, 35 average. Watermelon condition good, 16% harvested, 35 last year, 32 average. Tomatoes fair condition, 85% harvested, 91 a year ago, 80 average. Wheat condition fair to good, 92% harvested, 99 last year, 97 average.

**SOUTH DAKOTA:** Temperatures averaged near normal. Extremes: 103 and 46°. Precipitation heaviest in south central with up to 2.14 in. Most stations under 1.00 in. Northeast and parts of north central, central and east central received below normal precipitation for year. Rest of State above normal.

Five days suitable. Small grains in good condition. Moisture supplies continue to dwindle major portion of spring grain areas. Haying, cultivating and preparing for small grain harvest major activities. Range and pastures remain in excellent condition, second best rating in recent history. Sorghum planted 93%, 1981 100%, average 100%. Sunflower planted 97%, 1981 100%, average 100%. Flax emerged 98%, 1981 100%. Flax blooming 32%, 1981 44%, average 52%. Corn height (inches) 15, 1981 23, average 24. Corn acreage cultivated once 84%, 1981 63%, average 61%. Spring wheat acreage in boot stage or beyond 90%, 1981 100%, average 98%. Oats acreage in boot stage or beyond 93%, 1981 100%, average 98%. Barley acreage in boot stage or beyond 92%, 1981 100%, average 98%. Winter wheat acreage heading 98%, 1981 100%, average 100%. Spring wheat acreage heading 70%, 1981 92%, average 83%. Oats acreage heading 77%, 1981 97%, average 88%. Barley acreage heading 79%, 1981 97%, average 87%. Winter wheat acreage turning color 41%, 1981 87%, average 76%. Rye acreage turning color 36%, 1981 88%, average 73%.

**TENNESSEE:** All crops in good condition and progressing well. About 5 days available for fieldwork. Soil moisture 42% short, 57% adequate, 1% surplus. Soybeans 95% planted, 89% 1981, 90% average. Cotton squaring 72%, 60% 1981, 60% average. Corn silking 23%, 33% 1981, 24% average. Wheat harvest 87%, 86% 1981, 88% average. Oat harvest 76%, 77% 1981, 81% average. Alfalfa 2nd cutting 83%, 78% 1981, 73% average. Tobacco in good condition, pastures fair, livestock good.

**TEXAS:** Weather: Weak cold front lingered over Panhandle, South Plains. Temperatures about 2° above normal Valley. Remainder State near normal. Rainfall near normal Edwards Plateau and South Texas and above normal along Upper Coast. Remainder State below normal.

Warm, sunny weather most State, although high humidity prevented fields drying many areas. Replanting underway Plains, many cotton fields seeded alternate crops. Some corn, cotton, sorghum fields Blacklands and South Central Texas damaged heavy winds. Hot, dry winds depleting soil moisture South Texas, additional rainfall welcomed. Many cotton fields High Plains fair to poor condition following severe weather. Replanting underway most storm-damaged areas, many producers replanting sorghum, soybeans or sunflowers. Root rot, seedling disease evident several stands. Blowing sand problem Low Plains, some young fields burned. Dry conditions problem South Texas, Coastal Bend, additional moisture needed good boll development. Reported condition across State was 44% of normal with 3% excellent; 18% good; 23% fair; 51% poor; and 5% failure. This compares with 84% of normal last year. Sorghum harvest good progress from Lower Valley through Coastal Bend. Planting High Plains gaining momentum with drying conditions. Many cotton fields replanted to sorghum. Midge populations increasing most areas. Weeds problem Edwards Plateau. Condition across the State was 81% of normal with 12% excellent; 55% good; 29% fair; and 4% poor. This compares with 93% of normal last year. Many corn fields High Plains recovering recent storms. Some yield reduction expected scattered locations, since several hail-damaged fields near tassel stage. Stands Central Texas rapidly maturing, many fields hard dough stages. Statewide condition was 87% of normal with 20% excellent; 56% good; and 24% fair. This com-

pare with 89% of normal last year. Wet fields, high humidity slow wheat harvest across State. Although grain ripe and ready for harvest, combines unable to get into many fields. Weeds problem most unharvested fields. Harvest active Plains where conditions permit, yields below average several storm-damaged stands. Some unharvested fields Northern High Plains completely destroyed by recent severe weather. Lodging problem Low Plains, some fields not be harvested. Reported condition across the State was 64% of normal with 1% excellent; 29% good; 58% fair; and 12% poor. This compares with 76% of normal last year. Many dry-planted peanut fields South Central Texas need rain. Cross-Timbers heavy rains washed out some stands, replanting necessary. Rice good progress along coast, although weeds, grass problem some stands. Condition was 87% of normal with 7% excellent; 78% good; and 15% fair. This compares with 92% of normal last year. Cotton planted 100%, 100% 1981, 100% average. Cotton squaring 19%, 45% 1981. Cotton setting bolls 11%, 19% 1981. Cotton open bolls 0%, 2% 1981. Rice headed 63%, 80% 1981. Rice turning color 0%, 0% 1981. Sorghum planted all purposes 98%, 100% 1981, 100% average. Sorghum headed 59%, 65% 1981. Sorghum turning color 41%, 48% 1981. Sorghum mature 14%, 19% 1981. Sorghum harvested for grain 3%, 8% 1981, 7% average. Wheat turning color 99%, 100% 1981. Wheat harvested for grain 66%, 91% 1981, 87% average. Peanuts planted 91%, 88% 1981, 95% average. Soybeans planted 77%, 77% 1981, 93% average. Sunflowers planted 69%, 86% 1981, 93% average.

**Vegetables:** Laredo, melon harvest nearing completion. San Antonio-Winter Garden, harvest cantaloups, cucumbers, watermelons, onions active. Some areas East Texas, tomatoes rotting in fields. Watermelons making good progress. Trans-Pecos, cantaloup harvest begin mid-month. Potato harvest active, although potatoes small some areas. Plains, several onion fields destroyed by recent severe weather. Some fields left not sizing well because thrip and hail damage. Potatoes making good development. Peach harvest active. On Plains some trees severe wind damage during recent storms. Some orchards limbs broken, and bark was taken off some trees. Pecan producers spray second generation casebearer. Some trees Plains severely wind damaged.

**Range and pasture:** Pastures, ranges good to excellent condition. Despite heavy week populations some areas, forage abundant and grazing good. Hot, dry winds drying pastures South Texas. Grasshoppers problem Low Plains to South Central Texas. Livestock good to excellent condition. With recent crop losses High Plains, many producers buying cattle to supplement income.

**UTAH:** Scattered shower and thunderstorm activity about midweek and again over weekend. Accumulated amounts moisture generally light to moderate but locally heavy few localities. Average temperatures continued slightly above normal, ranging from 3° below normal to 4° above. Pan evaporation quite high ranging from a little over 2 in. to near 3.3 in.

Seven good days available for fieldwork. Hay harvest, corn cultivation, irrigation major field activities. Some fruit picking started southern areas. Most small grains headed out, turning color rapidly. Some lodging noted in irrigated grain crops. First crop hay virtually harvested. Corn made good progress, needs more warm weather. Seasonally high summer winds in western range areas sapping soil moisture. Livestock on ranges now in use in good condition.

**VIRGINIA:** Warm, humid air was replaced by drier air on 30th. Scattered showers became more numerous as another front entered the State on 3rd.

Rainfall ranged from zero to 1.25 in. Temperatures averaged slightly below normal.

Farmers spent a busy week in the fields prior to the Independence Day weekend. Topsoil moisture rated 2% surplus, 58% adequate, 40% short. Days suitable for fieldwork: 4.9. Baling hay from second cuttings was a frequently reported activity. Small grain harvest entering the final stages with 69% of the wheat harvested, 81% 1981, 65% average. Barley 84% combined, 95% 1981, 85% average. Harvest of oats 53% complete, 52% 1981, 47% average. Double-crop soybeans still being planted in small grain fields shortly after harvest. All soybean acreage now 85% planted, 96% 1981, 86% average. Full-season soybeans rated good to excellent. Corn in excellent condition, 35% silking, 25% 1981. A few fields showed signs of wilting. Showers late in the week should provide good conditions for pollination of early corn. Peanuts rated in good to excellent condition; land plaster, and fungicide applications were reported. Harvest of flue-cured tobacco expected to begin early next week in southern areas, but most areas expect harvest to begin the last week of July. Pastures rate good to excellent and hay rated good. Commercial vegetable harvest increased.

WASHINGTON: Low pressure off the coast dominated the weather. A moderate, moisture laden west to southwesterly flow of mostly unstable air produced above average rainfall with most of the precipitation falling on 26th and 30th. Omak reported a total of 2.59 in. Daytime high temperatures were below normals but lows were above normal; as a result, averages were near the seasonal normals.

West: Warm weather in June gave good starts to tomatoes, corn, beans, squash, and cucumbers. Strawberries abundant and at peak season. Raspberries beginning to ripen. Cole crops and peas being harvested. Rainfall was helpful to pasture growth and livestock in good condition. Hay supplies adequate.

East: Rains benefited spring wheat and barley, but delayed haying operations. Corn and potatoes in good condition. Potato harvest should begin around mid-month. Peas below average overall, but rain and cool weather should help late peas. Walla Walla sweet onions slightly smaller in size, but total crop amount average. Dry beans showing varied growth. Cherry harvest complete in early area. Severe rain damage to much of remaining crop. Pears and apples in Omak-Okanogan area had considerable hail damage. Livestock and pasture in good condition with fair to dry conditions in a few areas. Hay supplies adequate.

WEST VIRGINIA" Temperatures below normal. High 92°, low 35°. Precipitation above normal. Range 5.65 to 0.16 in.

Soil moisture adequate to short. Days worked averaged 3.9. Main activities: Hay harvesting, gardening, grain harvesting. Wheat fair to good condition: 52% headed, 37% ripe, 11% harvested;

68%, 26%, and 6% in 1981. Barley fair to good condition; 26% headed, 39% ripe, 35% harvested; 25%, 55%, and 20% in 1981. Oats good to fair condition; 12% pre-headed, 74% headed, 9% ripe, and 5% harvested; 34%, 60%, 5%, and 1% in 1981. Corn good to fair condition; 98% planted, 95% emerged; 100% and 98% in 1981. Tobacco fair to good; 97% set; 90% in 1981. Hay fair to good condition; first cutting 69% complete; 56% in 1981; second cutting 11% complete, 11% in 1981. Pastures good to fair condition. Peaches poor to fair condition. Apples fair to good condition. Gardens good to fair condition. Hay supplies adequate. Other feed supplies adequate.

WISCONSIN: The week started and ended on a warm note. Cooler temperatures prevailed during midweek with a record low of 45° being recorded in Madison on the 30th. Temperatures averaged 10° below normal with a low reading of 37° reported in Rhineland and Superior on the 30th and in Lake Thompson and Morse on 1st. The warmest reading, a more summer-like 96°, was recorded in La Crosse and Eau Claire on the 4th. Rainfall varied widely. Most precipitation totals were in the 0.50 to 1.50 in. range.

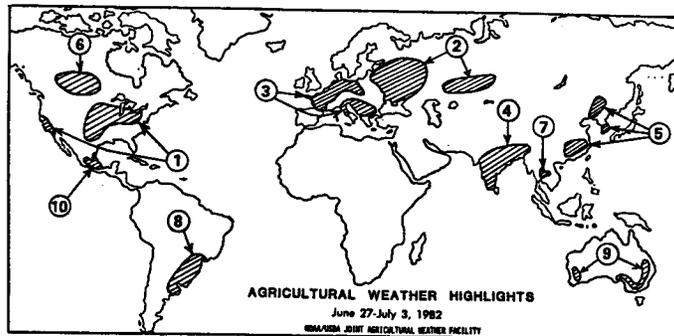
Fieldwork: 5 days suitable. Corn height averages 18 in., 28 in. 1981, 25 in. average. All nine crop reporting districts have reported below average growing degree day accumulations. State-wide growing degree days, since April 1, have averaged 14% below normal. Good progress with the first crop hay harvest was reported. Currently 84% of the State's first crop acreage has been harvested, 83% 1981, 78% average. Some isolated fields of second crop have been harvested in south. Pastures rated at 87% of normal, 79% 1981, 84% average. Oats headed 53%, 77% 1981, 61% average. Numerous reporters related problems with red lead disease in oats. Topsoil moisture supplies were rated 17% short, 79% adequate and 4% surplus. Moisture supplies were rated shortest in the northwest and north central districts.

WYOMING: Temperature averages above seasonal most parts with east only section little cooler than normal. Not much precipitation, most stations 0.20 to 0.50 in. below normal. Exception in Lower Platte Drainage receiving 3.50 in.

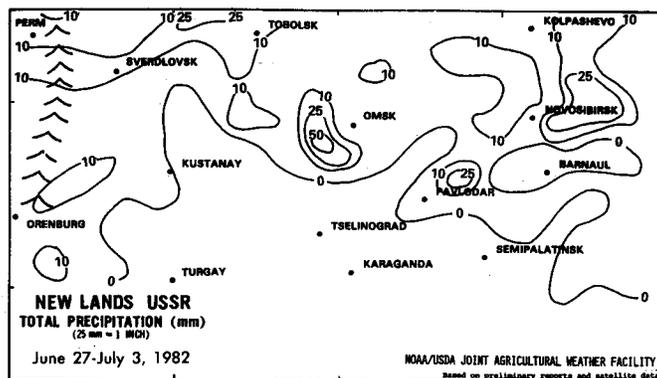
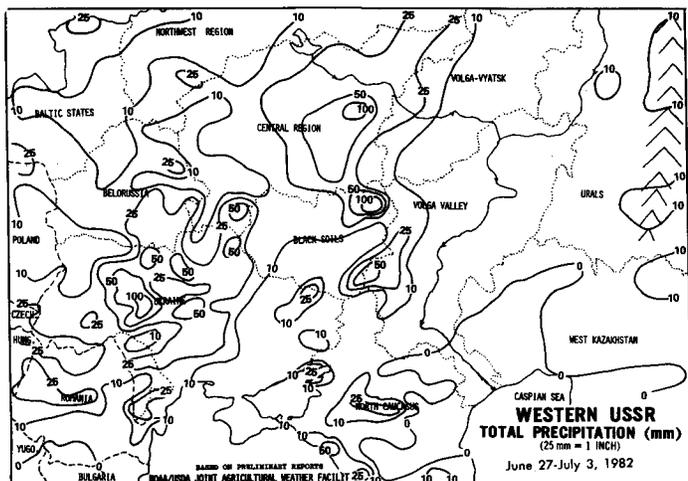
Topsoil moisture adequate 77% State. Average 6 days suitable fieldwork. Small grains maturing slower than normal. Winter wheat headed: 85%; year ago - most. Winter wheat turning color: 10%; year ago 65%; normal 63%. Spring wheat headed: 30%; year ago 55%; normal 62%. Oats headed: 15%; year ago 50%; normal 57%. Barley headed: 40%; year ago 65%; normal 72%. Crops fair to good condition. Alfalfa hay harvested: 20%; year ago 60%; normal 61%. Other hay harvested: 5%; year ago 10%; normal 20%. Ranges, pastures mostly good condition. Stock water adequate most areas.

# International Weather and Crop Summary

June 27-July 3



1. **UNITED STATES:** Hot, dry conditions in parts of the central Plains accelerates the wheat harvest, while wet fields delay work further south. Slightly cool temperatures cause slow crop growth in the Corn Belt. Heavy downpours in northeastern Kansas hurt some crops, and cool, wet weather delays fruit and vegetable programs in California.
2. **USSR:** Widespread showers benefit crops in European areas; continued unfavorably dry weather in the New Lands reduces spring grain prospects.
3. **EUROPE:** Showers benefit west and northern grain areas; unfavorably dry weather continues to stress crops in the southeast.
4. **SOUTH ASIA:** Monsoon rains slacken over much of India; conditions are too dry in the west and northwest.
5. **EASTERN ASIA:** Flood threat eases in the Yangtze Valley; conditions in Manchuria and South Korea remain unfavorably dry.
6. **CANADA:** Beneficial showers aid vegetative growth, but mild weather needed for crop development.
7. **SOUTHEAST ASIA:** Rainfall is variable; some rainfed corn and rice areas are too dry.
8. **SOUTH AMERICA:** Much-needed dryness improves conditions for wheat planting and coffee harvesting in Brazil; cool weather covers Argentina's wheat area.
9. **AUSTRALIA:** Continued dry weather dims wheat prospects in eastern crop areas; light showers dampen southern and western areas.
10. **MEXICO:** Hot, dry weather favors grain harvesting but stresses rainfed, immature crops.



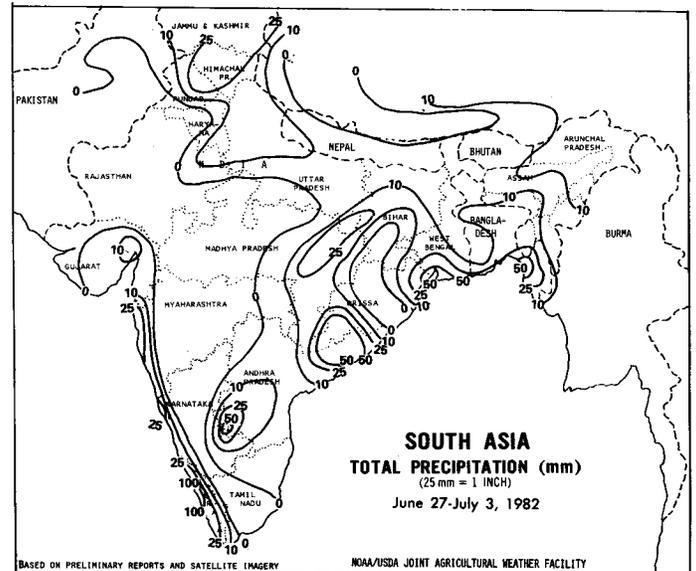
**USSR:** Showers continued over many crop areas of European USSR. Locally heavy amounts of rainfall, around 100 mm, fell on parts of the Central Region, eastern Black Soils, and central Ukraine. Reports indicated that soil moisture supplies were good in many areas, but excessive wetness existed in the eastern Black Soils Region. By contrast, a light precipitation pattern continued from the eastern Ukraine, northeastward through the northern North Caucasus into the eastern Volga Valley. The winter grain harvest began in the North Caucasus and in areas adjacent to the Black Sea Coast. Harvest activity will progress northward during July. Weekly temperatures continued below normal over most of European USSR.

Reports indicated that spring grains showed average growth in most areas, but corn was 1 to 2 weeks behind normal development for this time of year due to persistent cool weather.

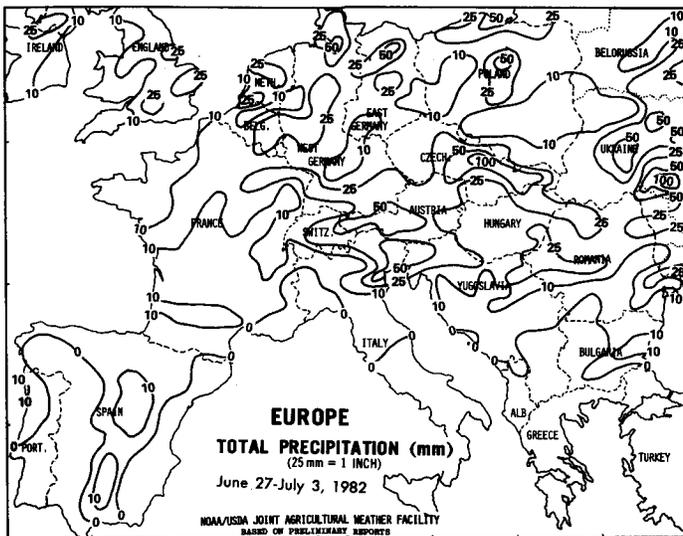
In the New Lands, a large portion of the region continued dry. Rain occurred over limited crop areas when thunderstorms produced locally heavy rains west of Omsk. Lighter amounts fell over crop areas around Sverdlovsk and Novosibirsk. Spring grains grown in more southern areas entered the critical heading stage, as expected, and grains in central and northern areas should advance into heading by mid-July. Yield prospects, particularly in southern areas, will likely be reduced due to continued dry weather. Temperatures during the week continued above normal in the west but fell to below-normal readings in the central and east by the end of the week.



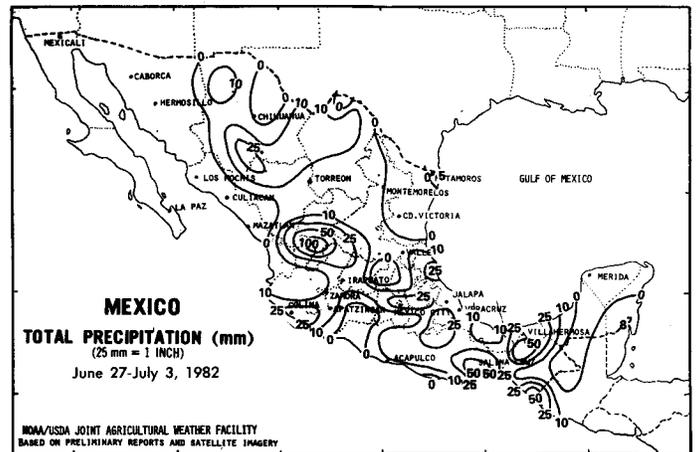
**SOUTH AMERICA:** Heavy rain fell early in the period over Brazil's southern wheat area, causing further planting delays and soil erosion in Rio Grande do Sul. Drier weather later in the week was beneficial not only for late planting of wheat in the south but also for harvesting coffee beans in Parana, Sao Paulo, and neighboring states. In Argentina, some showers fell in the wheat areas of Buenos Aires, but weekly totals were generally light except in eastern portions of the Province. Temperatures dropped slightly below average in Argentina with the wheat crop in a nearly dormant state. Minimum temperatures remained well above freezing in Brazil's coffee-producing region.



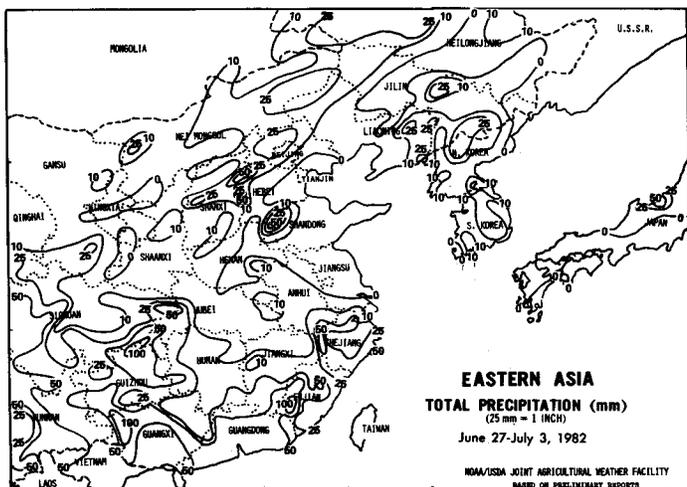
**SOUTH ASIA:** Rainfall slackened markedly across the region. Much of India had no rainfall, and in many areas, the rainfall resulted from only sporadic showers. Only along the southwestern coast did persistent, though below-normal, rain continue. Moisture conditions remained generally favorable in Bangladesh and most of central and southeastern India, but this weather pattern must be regarded as unusual monsoon behavior. Western and northwestern parts of India have not seen monsoon rains yet this year. Irrigation supplies in Uttar Pradesh, Haryana, and Punjab may be good due to exceptional rains in April and May, but these should only be enough to get the crop started. Dry weather dominated Pakistan, but the monsoon normally does not arrive there until about this time of year. Light rain in the Indian State of Gujarat helped little. Planting of cotton and peanuts has been delayed with the monsoon's arrival now close to 3 weeks late.



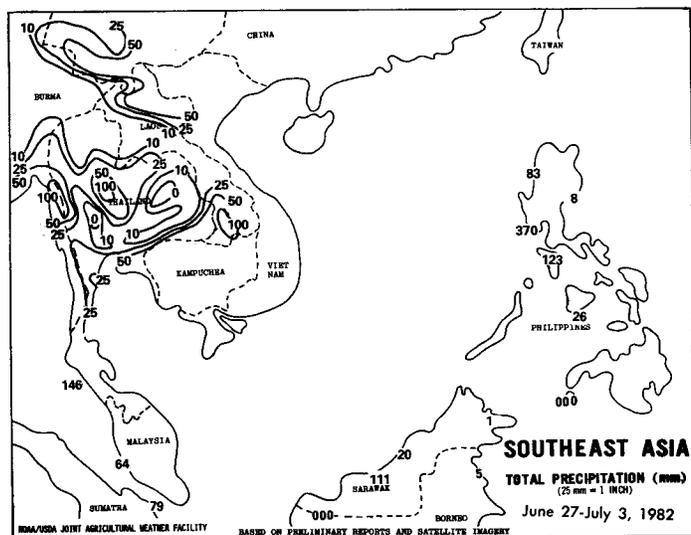
**EUROPE:** Light rain fell from England southward into France, maintaining favorable moisture conditions for most crops. Winter grains were in the normal heading stage, and corn was still in the vegetative stage. In northern Europe, showers, heavy in some areas, improved moisture conditions. Unfavorably dry weather continued over Italy, Yugoslavia, and Bulgaria, dimming crop prospects. Corn, in the vegetative stage, will require more rain in upcoming weeks as the crop enters the critical reproductive stage. Weekly temperatures dipped below normal over much of the region with well-below-normal temperatures reported in Poland.



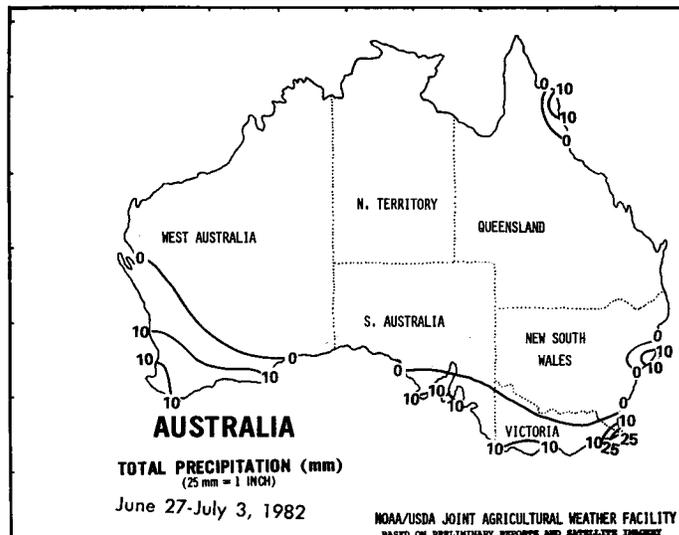
**MEXICO:** Hot, dry weather was ideal for harvesting grain sorghum and early corn in the northeast and for development of irrigated cotton and soybeans in the northwest. However, most of the rainfed citrus along the east coast and corn in the southern Plateau continued stressed from lack of moisture. The rainy season, with heavy showers, resumed over some watersheds in the southern and western mountains.



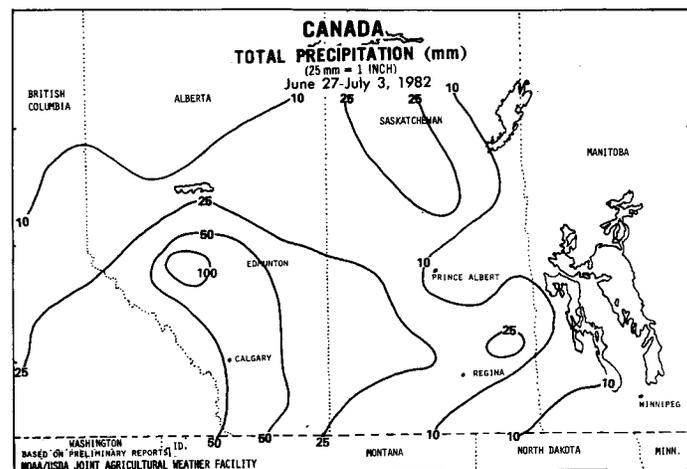
**EASTERN ASIA:** Nearly all agricultural areas of China except the southern coast had drier weather. The flood threat in the Yangtze Valley appeared to be abating, and there were no reports of serious crop damage. A tropical storm drifted into Guangdong on the southern coast, dumping above-normal rainfall on some crop areas. The moisture was detrimental to early harvesting of the first rice crop, but likely did not create any serious problems. Little or no rain fell on the North China Plain and in the Manchurian Valley. Most crop areas on the North China Plain should have adequate moisture; temperatures in the southern part were substantially below normal. Conditions in the Manchurian Valley were unfavorable for soybeans in the flowering stage and spring wheat in the filling stage. Recurring episodes of hot, dry weather stressed these moisture-deficient crops. In South Korea, little or no rain fell, and conditions in some major rice areas became seriously dry. Temperatures stayed near normal, easing the plants' need for moisture, but irrigation water should be running short.



**SOUTHEAST ASIA:** Rainfall remained variable over Thailand. Generous rains fell near Bangkok, in parts of the east, and over much of the corn area. However, a broad area of nonirrigated rice in the east should be short of moisture, and dry pockets existed in the corn area. A third consecutive week of below-normal rains in northern Thailand did little to replenish reservoir supplies. Satellite imagery indicated that below-normal rainfall in Kampuchea and Vietnam was about the same as in Thailand.



**AUSTRALIA:** Dry weather prevailed again in the parched crop areas of Queensland and New South Wales. Some showers fell over extreme southern portions of the continent but most wheat areas received little moisture. The prolonged dry spell in eastern wheat areas, which usually produces about 60 percent of the total wheat crop, has had a deleterious impact on crop prospects. Sown wheat has had little moisture for germination and emergence, and dry topsoils have delayed planting beyond the optimum sowing period in Queensland and New South Wales. Planting can take place until early August, weather permitting, but late sowings often lead to reduced crop yields because of the shorter growth cycle. Moisture conditions are more favorable for early growth in South Australia, and Western Australia which, combined, produce nearly 40 percent of the wheat crop.



**CANADA:** All crop areas of the Prairie Provinces received some rainfall during the week; the heaviest amounts (greater than 50 mm) fell over western crop areas of Alberta, and the lightest amounts (less than 10 mm) dampened southeastern Saskatchewan and adjacent areas of Manitoba. Crop development was rated good to excellent with favorable moisture supplies in most areas except southeastern Saskatchewan where limited rainfall in recent weeks reduced crop conditions to fair. Early-seeded wheat entered the heading stage; most of the crop was still in vegetative growth, lagging last year's crop progress by about a week. Overall, prospects remained very good, but warmer weather would aid development. Weekly temperatures averaged in the low twenties ( $^{\circ}$ C) during the day and around 10 to 12  $^{\circ}$ C at night.

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## FIRST CLASS MAIL

### National Weather Summary

(continued from front page)

FRIDAY...Scattered thunderstorms still formed over the Northwest and spread into North Dakota. The fair weather high pressure that had dominated the East drifted into the Southeast and was followed by thunderstorms which covered the area from Wisconsin to Pennsylvania and the east coast southward to Tennessee and North Carolina. Early morning fair skies meant more record-breaking low temperatures from West Virginia to Michigan and into Pennsylvania.

SATURDAY...Light thunderstorms persisted in the Northwest and became moderate to heavy in North Dakota and northern Minnesota. Showers and thunderstorms covered the Southeast from the middle Mississippi River Valley through Virginia and southward through Alabama, Georgia, and Florida. Morning temperatures were not as cold in the East, and afternoon highs rose into the nineties through the South and the Plains.

(continued from page 9)

### WINTER WHEAT HARVEST

The 1982 winter wheat harvest was underway in extreme southern areas of the Nation at the beginning of June. Progress ranged up to 23% finished in Georgia. Combining started shortly after mid-month in the Corn Belt. Wet soil prevented combines from entering fields ready for

harvest in southern Kansas. At the end of June, harvesting was 14% compared to an average of 30 percent finished in the 15 major producing States. Combining in Kansas began during the last week of the month. Wind, rain, and hail damaged some Kansas fields. The condition of the Nebraska crop continued to decline as harvest neared and losses from disease became more apparent. Hail destroyed some fields in the northern High Plains of Texas. Harvesting was active in the remaining fields of this area as weather permitted.

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