

WEEKLY WEATHER AND CROP BULLETIN

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

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

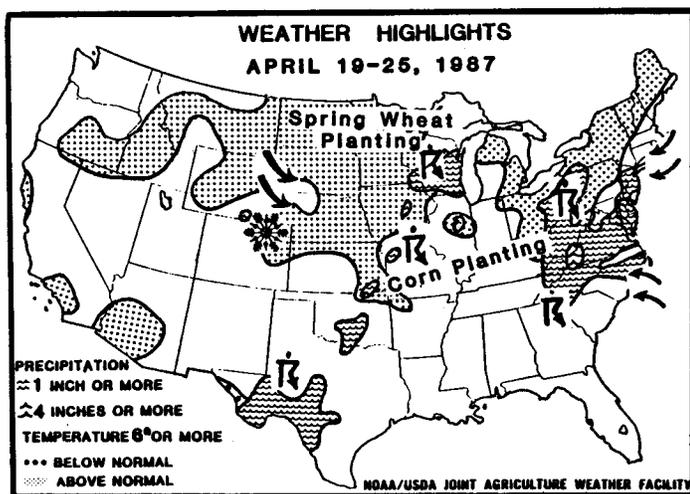
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National Weather Summary

April 19 to 25, 1987



TUESDAY...Very cold weather continued in the Rockies and northern Plains, while the wedge of very warm air moved to the Appalachians. Thunderstorms triggered showers, heavy at times, in southwestern and central Texas. Showers and occasional thunderstorms caused light to moderate rain from Iowa and Illinois into the central Great Lakes. Light rain continued along the northeastern coast.

WEDNESDAY...A storm system, centered in Kentucky, spread rain and showers throughout the Midwest and Great Lakes region. The showers were moderate in parts of Wisconsin and Illinois. Very cold weather continued from the central Rockies to the upper Mississippi Valley, but warming began through the Plains in the afternoon. Unusually warm weather reached up the east coast.

THURSDAY...The storm system moved into the Carolinas and spread moderate to heavy showers from the western Carolinas to western Pennsylvania. Rain covered the entire northeastern quarter of the Nation. Cool weather covered most of the East, while warm temperatures covered the South and pushed northward into the Plains. Showers fell in the northern Rockies and Montana.

FRIDAY...Rain continued in the Northeast. Heavy rain and thunderstorms spread from North Carolina through Virginia to New Jersey. Cool weather continued in the East as very warm weather covered the Great Plains and the Southwest. A few showers fell in southern Texas.

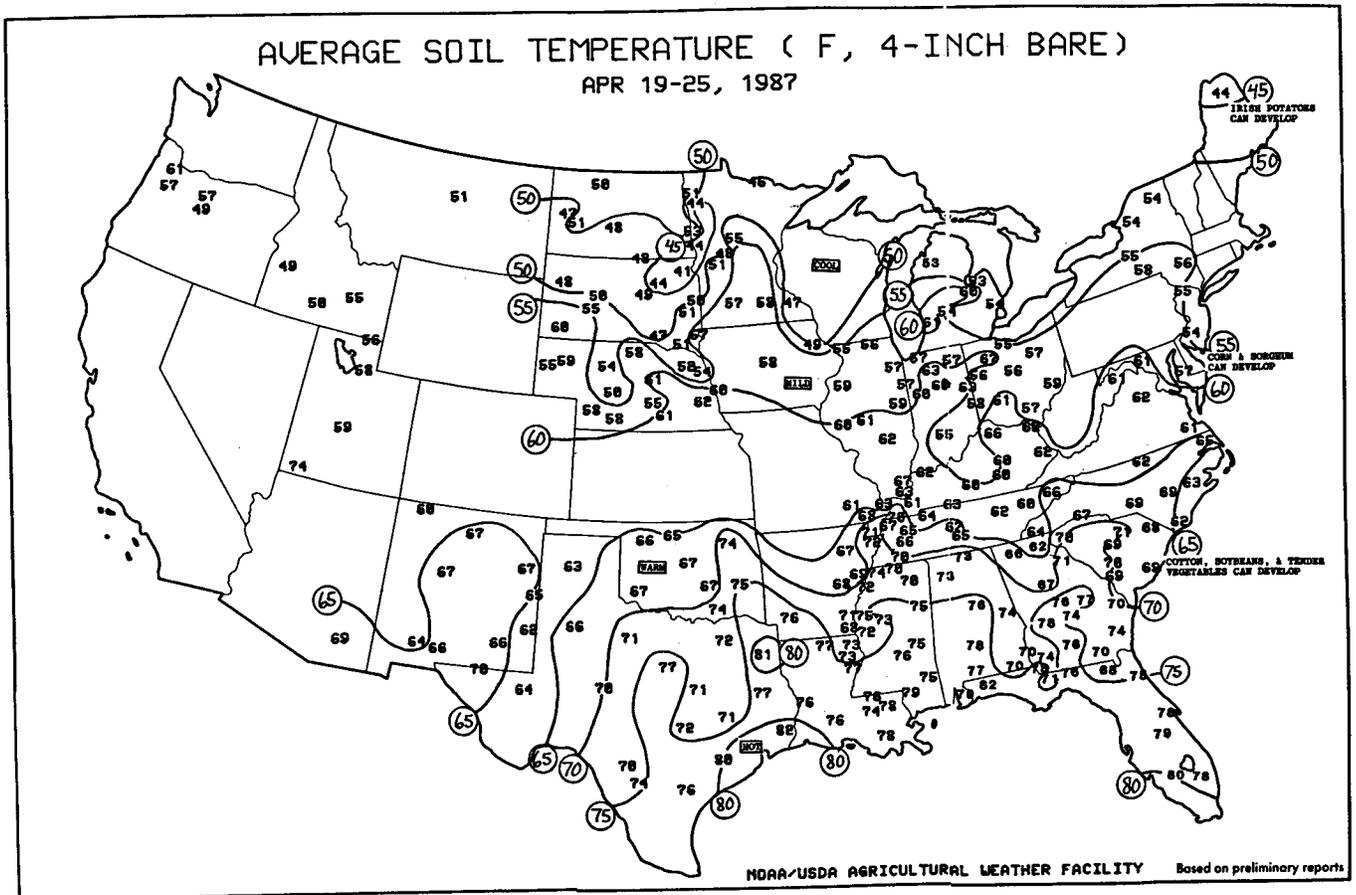
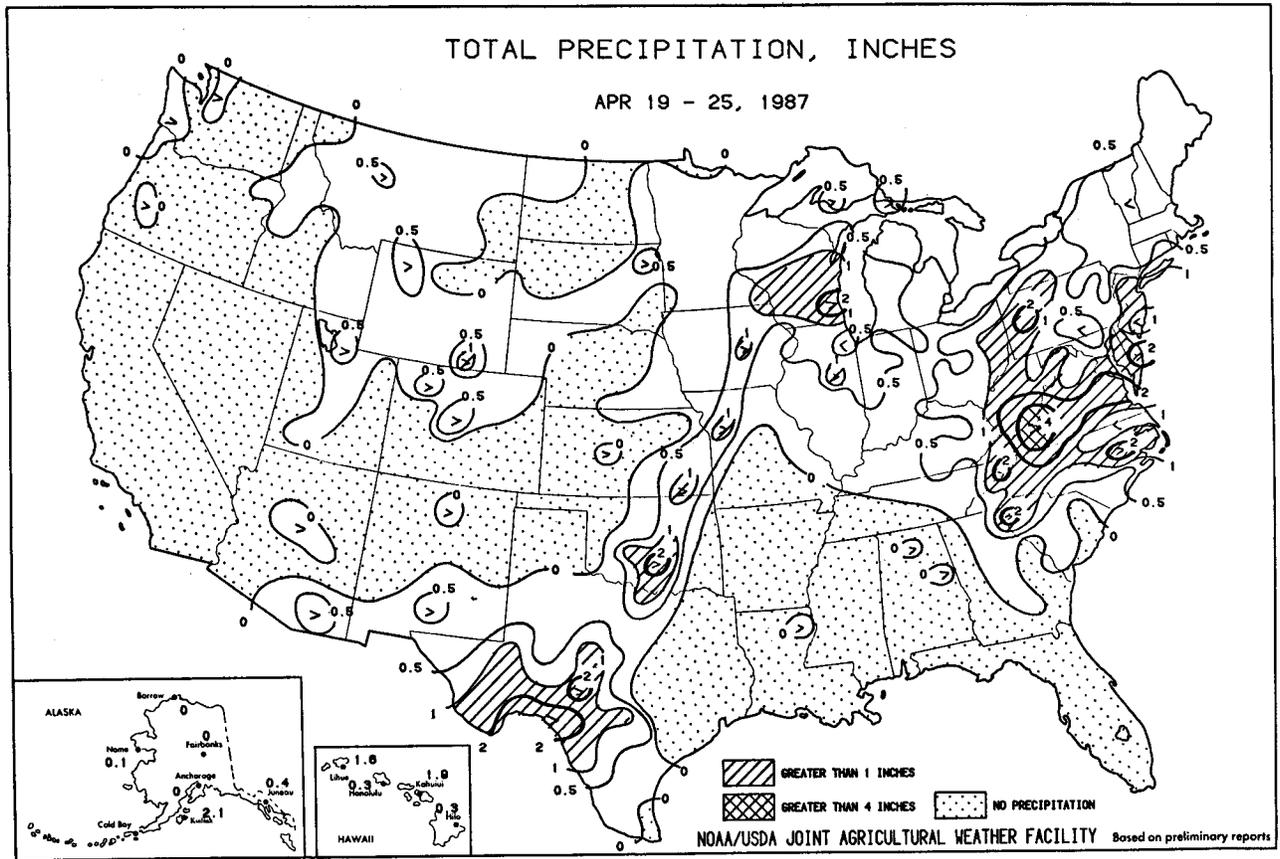
SATURDAY...Rain tapered in the East. Moderate amounts fell along the coast of Virginia and Maryland, and light rain covered North Carolina and Virginia as the system moved out. Warm weather continued in the Plains and Southwest, while unusually cool weather lingered in the East.

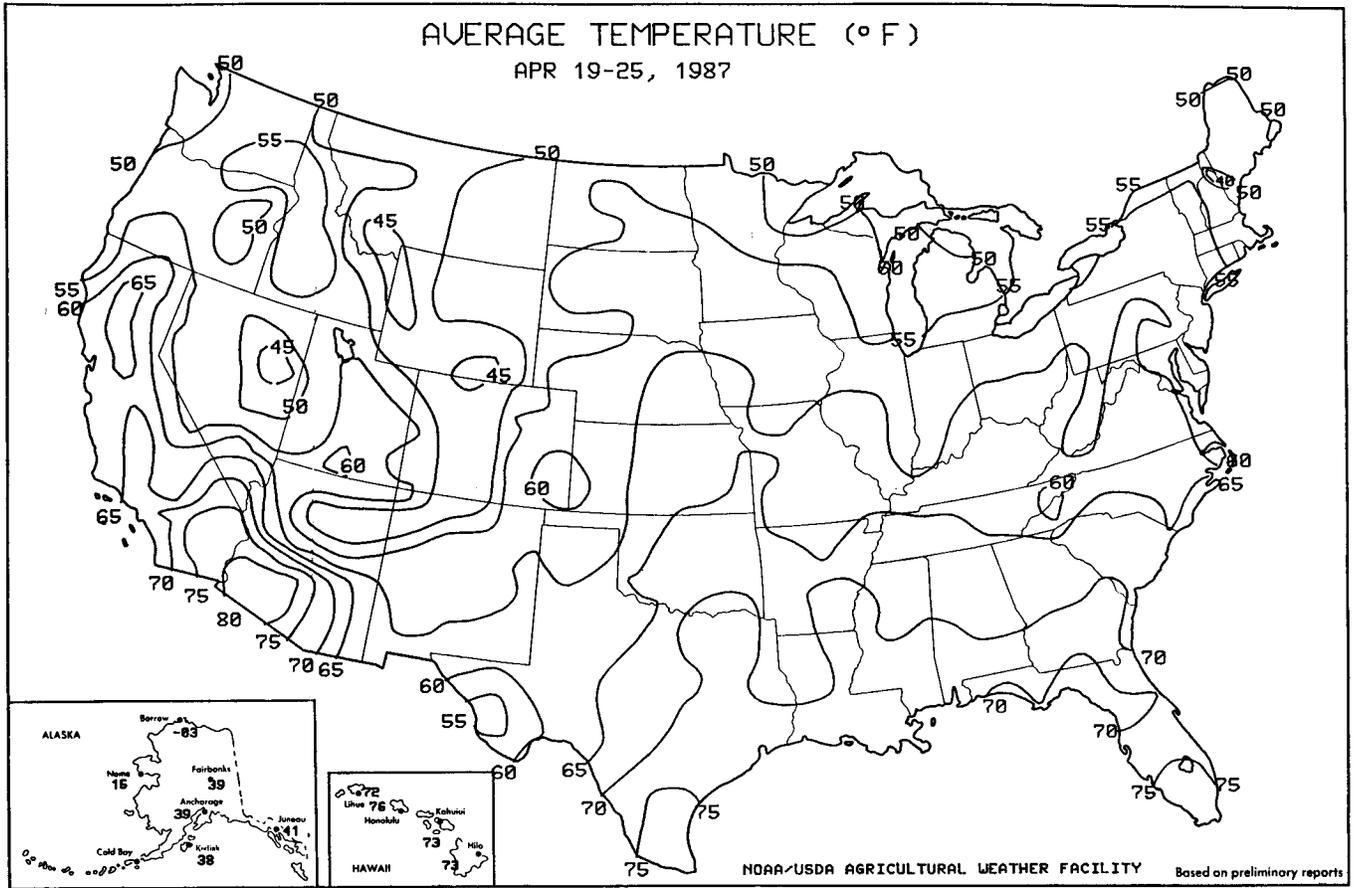
HIGHLIGHTS: A storm system developed in the central Rockies and moved slowly eastward. Snow fell in Colorado and Wyoming, and snow, cold rain, and gusty wind spilled over onto the High Plains. Later, a line of showers and thunderstorms reached from southwestern Texas to Wisconsin. Rain spread across the Midwest, and as the system moved across the central Appalachians, it slowed and drifted to South Carolina. Moderate to heavy rain and thundershowers were triggered from western South Carolina to western Virginia. Lighter showers or drizzle covered the rest of the Mid-Atlantic States. Comparatively cool weather spread eastward from the central Rockies behind a wedge of very warm air. At week's end, unusually warm weather again spread over the Southwest and the Great Plains.

SUNDAY...Snow covered the northern Rockies from eastern Idaho and Montana, through Wyoming, and to northern Colorado. As the day ended, snow, cold rain, and gusty wind moved over the High Plains of Nebraska and South Dakota. At the same time, unusually warm weather spread through the Great Plains to the upper Mississippi Valley.

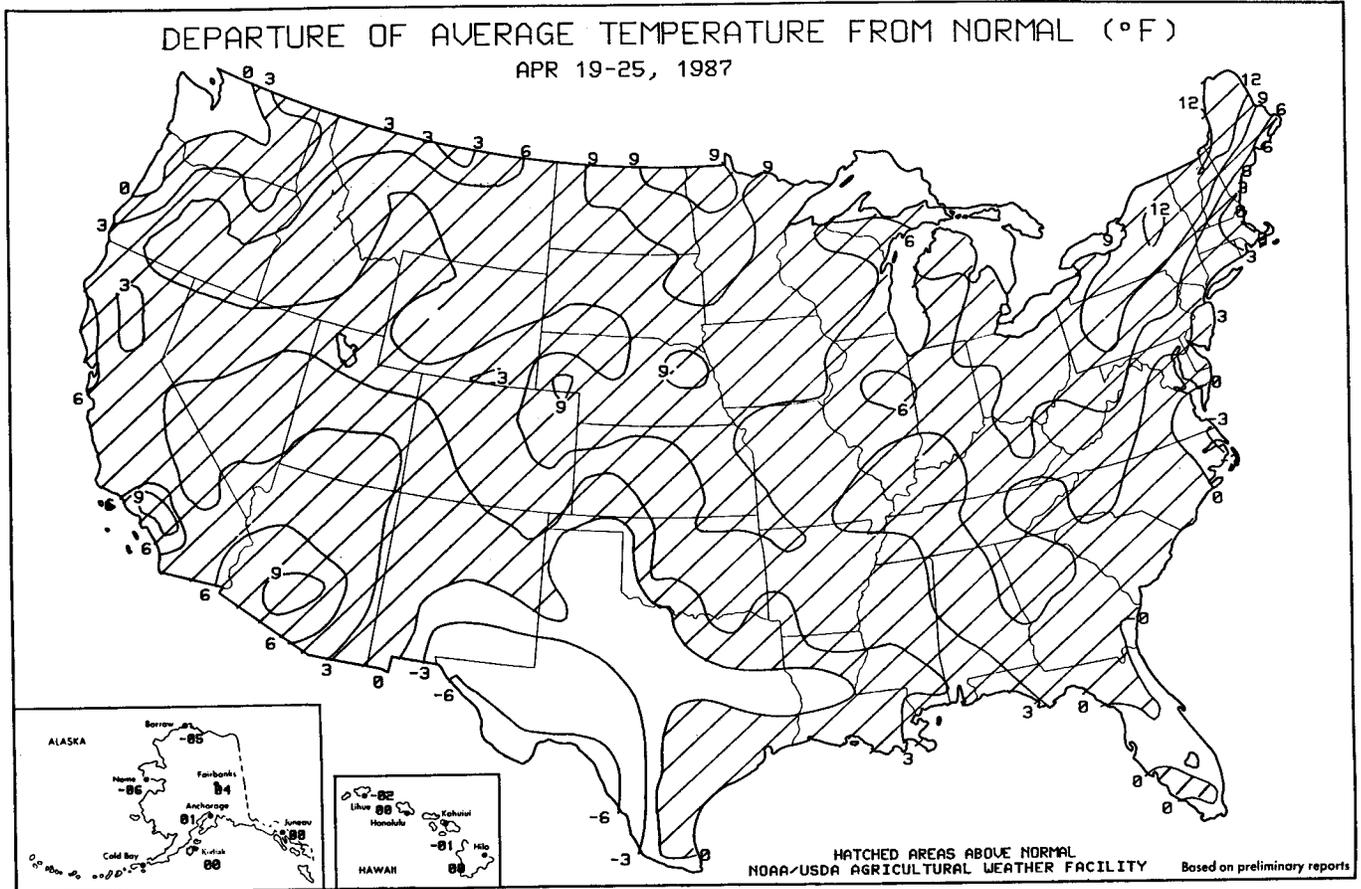
MONDAY...Winter weather with snow, cold rain, and gusty wind continued in parts of Wyoming, Colorado, and western Nebraska. The cold front, moving eastward, triggered a line of showers and a few thunderstorms from southwestern Texas to the upper Mississippi Valley. Unusually warm weather reached from the South to the central Great Lakes. Light rain fell along the east coast from North Carolina through New England.

Contents	Page
National Weather Summary	1
Total Precipitation & Soil Temperature	2
Average Temperature & Departure	3
The Bioclimatology of Corn & The Use of Growing Degree Units	4
Total Growing Degree Days & Departure	5
Pan Evaporation & Explanation of Heating/Cooling Degree Days Summaries	6
Heating Degree Days Summary	7
Cooling Degree Days Summary	8
National Weather Data for Selected Cities	9
National Agricultural Summary	12
Crop Progress and Condition Tables	13
State Summaries of Weather and Agriculture	14
Global Weather Satellite Image	19
International Weather and Crop Summary	20
Subscription and Mailing Permit Information	24





Point values may differ on these computerized maps from the reported values in the tables.



THE BIOCLIMATOLOGY OF CORN

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field corn and has many uses other than animal food. This corn is used to make cereal, corn starch, liquor, alcohol for fuel, and fructose sweeteners. Another variety is sweet corn, which is specifically bred for human consumption. The third common variety is popcorn. The success of popcorn's popping ability lies in the thickness of the kernel's hull and the moisture content of the seeds. Popcorn should be stored in jars in a refrigerator or a cool spot, not in a hot kitchen. The fourth variety is called flint or Indian corn. The kernel of this variety is hard and shiny like flint and is grown mainly for decoration. The multicolored effect comes from cross pollination.

In general, most varieties of corn require temperatures above 50 F before they will germinate. Planted too early in the spring without proper protection against fungus and disease, the seeds will have poor germination with most of them rotting in the soil. Soil temperatures between 75 and 85 F are best for rapid germination. For the home gardener, covering the area to be planted into corn with black plastic early in the spring will warm the soil and produce more rapid germination.

The cardinal temperatures for vegetative growth of most corn varieties are a base temperature of 50 F, an optimum temperature near 86 F, and the critical or upperlimiting temperature about 110 F.

Corn is wind pollinated, and gardeners should plant it in blocks rather than long, single rows. Sweet corn makes rapid growth when the crop is maturing. Keeping sweet corn plants well watered from tasseling to harvesting is particularly important. In very hot and dry weather, the leaves may tend to roll or curl during the middle of the day, even if there is adequate soil moisture. Plants will also transpire water faster than the roots can supply it to the vegetative portion of the plant.

Virtually every civilization in the Americas has depended on corn. The Andean, Mayan, and Aztec civilizations and forest tribes of North America were all founded on corn. Corn also played a crucial role in the founding of the first two English colonies at Jamestown in 1607 and at Plymouth in 1620.

Indian corn was hardly the gold and silver that Ferdinand and Isabella had hoped for when they financed Columbus on his voyages to the new world. But of the novel fruits of the New World's discovery (tobacco, tomatoes, potatoes, eggplant), corn had the most rapid assimilation into the European culture.

The Indian settlers began cultivating the species more than 3,000 years ago. One school of geneticists argues that wild corn did exist and that our varieties are its descendants, probably the results of many natural and artificial mutations in Indian gardens. Others maintain that corn was never wild but was a mutation of the Mexican grass called teosinte.

Regardless of its origin, the seed of corn is too heavy to be scattered by the wind and too tasty for a bird to ferry without eating it. The husk further retards its dissemination, while keeping the kernels safe from depredations of blackbirds, crows, and other scavengers of the air as well as racoons and other surface-bound animals that thrive on seeds. The crop has been greatly dependent on people for its transport to new areas for cultivation.

While the American civilization is not as dependent on corn as the earlier civilizations, corn is still perhaps the single most important product of our soil. Today, four basic types and hundreds of variants have been developed, which allow corn to be grown in many climatic areas too inhospitable to the early varieties. The most common type is dent or

GROWING DEGREE DAY UNITS FOR CORN

Growing degree days are used to relate the cumulative effects of temperature above a given base to plant growth. The base temperature varies with type of crop.

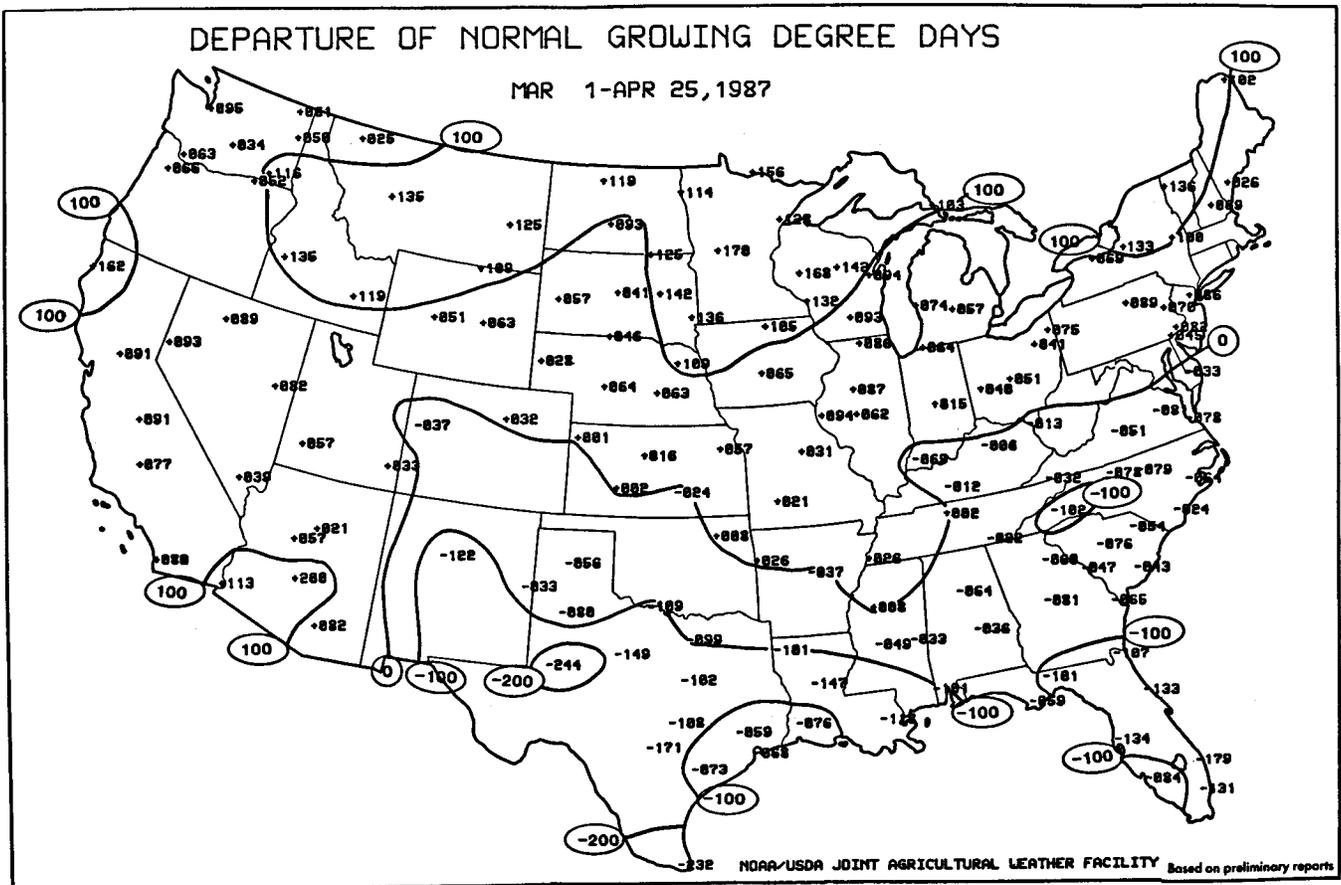
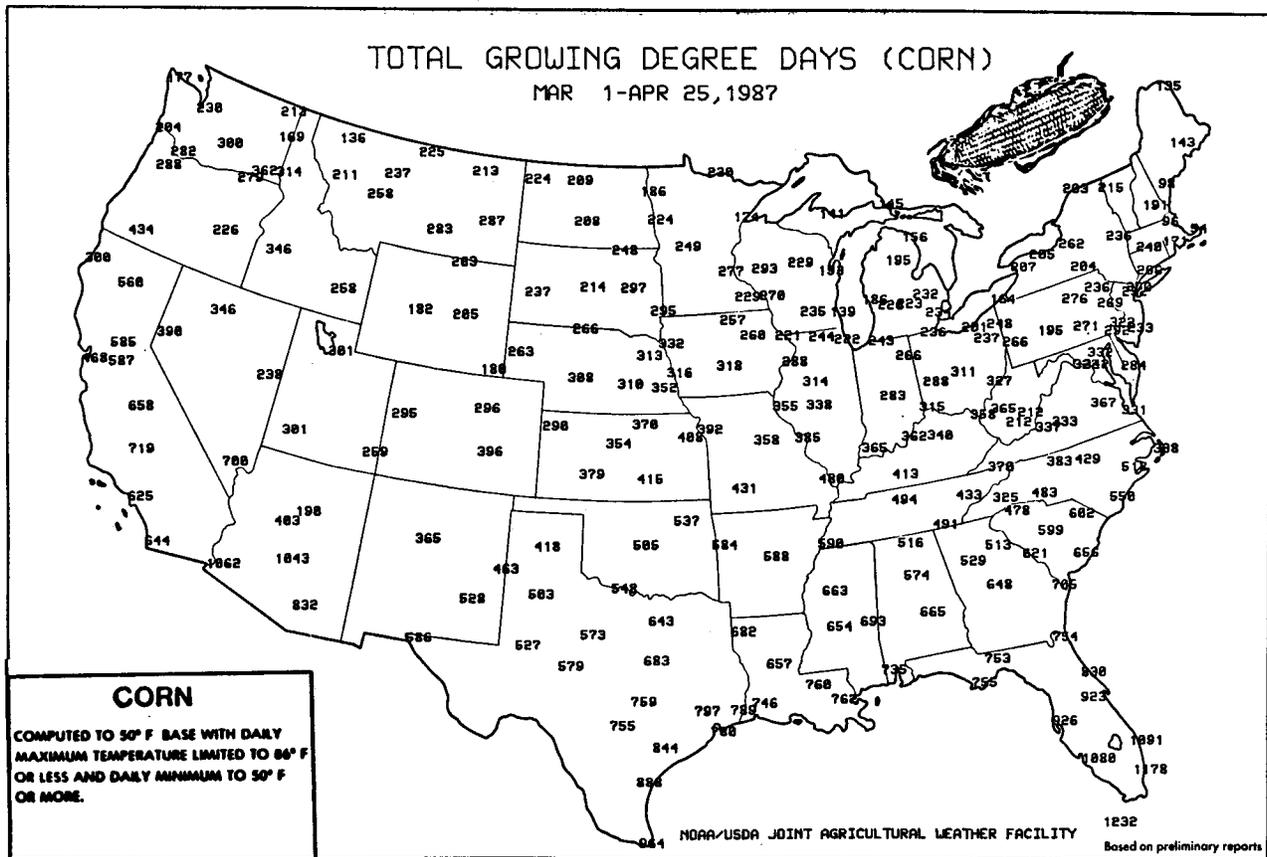
Common practice had been to label corn maturity in days. A 135-day variety presumably will reach maturity 135 days after it is planted. This system did not take into account the complicated physiological processes that control corn growth and development. The number of days required to reach maturity depends on the location of the planting and the weather that the plant is subjected to in a particular growing season. In most years, the period will be about 135 days.

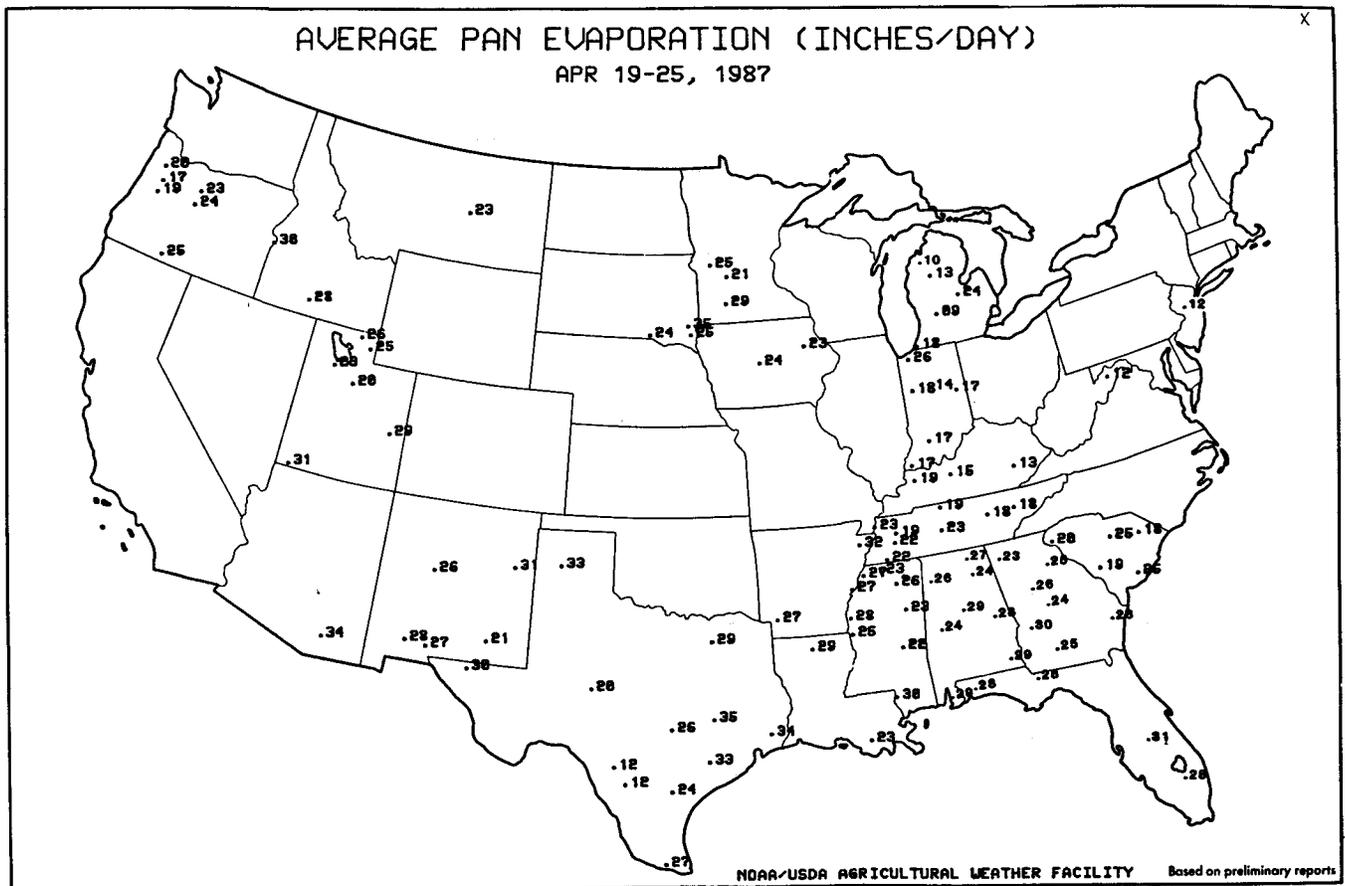
Each day does not contribute equally to the growth of plants. Growth is faster during the warm season than it is in cold weather. In contrast, summer temperature can be too high for optimum growth. Although other factors than temperature determine rate of growth, seed producers usually use the temperature-based Growing Degree Units (GDU) to express maturity.

GDU is calculated by subtracting a base temperature of 50°F from the average of maximum and minimum temperatures for the day (corn does not grow much at temperatures below 50°F). As the temperature rises, corn grows faster if moisture is plentiful. At a temperature higher than 86°F, the roots, however, have increasing difficulty taking in water fast enough to keep the plant growing at full speed. GDU is calculated by the following equation.

$$\text{GDU} = (\text{Max Temp.} + \text{Min. Temp.})/2 - 50$$

Minimum temperatures below 50°F are counted as 50, and temperatures above 86°F are counted as 86. For example, a day with temperature extremes of 82°F and 60°F would have contributed 21 GDU. A day with a high temperature of 90°F and a low of 48°F will be considered as one with temperatures of 86°F and 50°F for calculation. That day would have had 18 GDU.





WEEKLY HEATING/COOLING DEGREE DAYS SUMMARY

Heating/cooling degree days are quantitative indices used to reflect demand for energy to heat or cool houses and businesses. This index is derived from daily temperature observations at 230 major weather stations in the United States. The "heating year" during which heating degree days are accumulated extends from July 1 to June 30, and the "cooling year" during which cooling degree data are accumulated extends from January 1 to December 31. A mean daily temperature (average of the daily maximum and minimum temperatures) of 65°F is the base for both heating and cooling degree day computations. Heating degree days are summations of negative differences between the mean daily temperature and the 65°F base; cooling degree days are summations of positive differences from the same base. For example, cooling degree days for a station with daily mean temperatures during a 7-day period of 67, 62, 70, 74, 78, 65, and 68 are 2, 0, 5, 9, 13, 0, and 3, respectively, for a total for the week of 32 cooling degree days.

The following is a listing of the parameters in the table on the opposite page and their meaning.

WEEK TOTAL - summation of daily values for the week.

WEEK DEV FROM NORM - the difference of the weekly total from the normal (1951-80) week total. Negative values indicate less degree days than normal.

WEEK DEV FROM L YR - the difference of the weekly total from the same period the previous year.

CUM TOTAL - accumulated degree days from the beginning of the season.

CUM DEV FROM NORM - the difference of the accumulated total from the normal accumulated for this period.

CUM DEV FROM L YR - the difference of the accumulated total from the accumulated total of the same period the previous year.

CUM DEV FROM NORM PRCT - the ratio of the current degree days to the normal degree days expressed in percentage.

CUM DEV FROM L YR PRCT - the ratio of the current degree to last year's degree days expressed in percentage.

Cooling Degree Days Summary

CLIMATE ANALYSIS CENTER-NHC-NWS-NOAA
ASSESSMENT AND INFORMATION SERVICES CENTER-NESDIS-NOAA

LAST DATE OF DATA COLLECTION PERIOD IS 4-25-1987
ACCUMULATIONS ARE FROM JANUARY 1
** = NORMAL LESS THAN 100 OR RATIO UNCALCULABLE

Table with columns: STATE CITY, CALL WEEK, WEEK TOTAL, WEEK DEV FROM NORM, WEEK DEV FROM L YR, CUM TOTAL, CUM DEV FROM NORM, CUM DEV FROM L YR, CUM DEV FROM NORM L YR, CUM DEV FROM L YR PRCT. Lists 100+ cities and their cooling degree day data.

National Weather Data for Selected Cities

Weather Data for the Week Ending April 25, 1987

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 MAR. 1	PCT. NORMAL SINCE MAR. 1	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	
AL BIRMINGHAM	83	51	92	47	67	2	0	-1.1	0	5.7	52	17.5	85	89	29	2	0	0	0	
MOBILE	86	59	94	52	73	3	0	-1.2	0	7.0	64	21.4	105	93	33	2	0	0	0	
MONTGOMERY	84	53	91	48	69	2	0	-1.0	0	5.5	58	22.5	123	91	32	2	0	0	0	
AK ANCHORAGE	47	32	50	27	39	1	0	-1.1	0	4	35	2.2	79	88	46	0	4	0	0	
BARROW	4	-10	8	-12	-3	-6	0	-1.1	0	0	9	0.2	29	84	72	0	7	0	0	
FAIRBANKS	51	28	55	23	39	4	0	-1.1	0	1	8	0.8	50	70	26	0	6	0	0	
JUNEAU	45	36	56	32	41	0	0	-1.3	0	4.3	76	11.5	88	92	62	0	1	0	0	
KODIAK	44	33	49	29	39	0	0	-1.2	0	9.8	142	24.7	149	92	63	0	0	0	0	
NOME	25	6	29	1	15	-6	0	-1.1	0	6.6	54	2.0	87	82	57	2	2	0	0	
AZ PHOENIX	93	67	99	57	80	10	0	-1.1	0	3	30	3.0	130	35	15	5	0	0	0	
PRESCOTT	75	40	81	30	57	6	0	0	0	0	35	4.3	80	53	12	0	1	1	0	
TUCSON	85	58	89	50	71	5	0	0	0	1.5	159	3.7	154	65	20	0	0	1	1	
YUMA	94	67	101	62	80	8	0	0	0	0	0	0.4	44	40	13	5	0	0	0	
AR FORT SMITH	83	53	95	44	68	4	0	-1.0	0	5.0	69	11.0	95	86	29	2	0	0	0	
LITTLE ROCK	82	57	94	48	69	5	0	-1.3	0	3.8	41	12.0	71	68	34	2	0	0	0	
CA BAKERSFIELD	87	49	97	42	68	4	0	-1.1	0	1.1	76	3.6	103	57	21	3	0	0	0	
EUREKA	60	47	64	40	54	4	0	-1.6	0	6.8	90	16.7	85	86	69	0	0	0	0	
FRESNO	86	48	94	37	67	6	0	-2.0	0	2.4	94	5.7	88	80	16	3	0	0	0	
LOS ANGELES	76	56	90	51	66	6	0	-2.2	0	0.9	37	2.9	36	83	41	1	0	0	0	
REDDING	83	48	90	43	66	4	0	-1.6	0	7.0	94	19.0	86	73	16	1	0	0	0	
SACRAMENTO	81	46	87	41	63	4	0	-1.3	0	3.2	99	8.6	85	84	26	0	0	0	0	
SAN DIEGO	75	57	87	53	66	5	0	-1.1	0	1.8	80	5.0	86	79	50	0	0	0	0	
SAN FRANCISCO	74	50	84	47	62	6	0	-1.3	0	2.0	51	8.3	70	83	37	0	0	0	0	
CO DENVER	71	39	83	30	55	5	0	-1.1	0	2.4	90	4.3	113	59	20	0	2	1	0	
GRAND JUNCTION	71	40	82	32	56	2	0	-1.2	0	2.2	170	3.7	148	50	15	0	1	0	0	
PUEBLO	77	38	87	26	57	4	0	-1.3	0	0.8	51	2.8	140	59	14	0	1	0	0	
CT BRIDGEPORT	64	50	73	43	57	6	0	-1.3	0	8.0	113	13.2	99	93	63	0	0	1	0	
HARTFORD	66	44	79	33	55	4	0	-1.5	0	9.0	120	15.7	111	94	53	0	0	3	0	
DC WASHINGTON	68	53	84	43	60	1	0	-1.2	0	3.8	65	10.8	96	99	72	0	0	3	0	
FL APALACHICOLA	84	61	87	53	72	3	0	-1.7	0	10.8	159	21.0	150	96	43	0	0	0	0	
DAYTONA BEACH	82	58	89	53	70	-1	0	-1.5	0	8.0	165	16.8	163	96	41	0	0	0	0	
JACKSONVILLE	84	56	88	49	70	0	0	-1.7	0	6.4	109	17.0	137	95	35	0	0	0	0	
KEY WEST	81	68	82	63	75	-4	0	-1.4	0	9.9	414	11.3	185	87	51	0	0	0	0	
MIAMI	87	64	90	60	76	-1	0	-1.9	0	4.3	98	7.8	93	93	33	2	0	0	0	
ORLANDO	86	60	90	55	73	0	0	-1.5	0	12.1	236	15.1	145	97	35	1	0	0	0	
TALLAHASSEE	88	52	93	44	70	2	0	-1.9	0	9.8	109	22.4	120	96	27	3	0	0	0	
TAMPA	82	60	85	54	71	-2	0	-1.4	0	12.4	252	17.2	170	95	44	0	0	0	0	
WEST PALM BEACH	85	63	90	58	74	-1	0	-1.8	0	10.4	200	12.8	122	94	39	1	0	0	0	
GA ATLANTA	82	56	89	50	69	6	0	-1.0	0	6.5	68	18.2	96	78	30	0	0	0	0	
AUGUSTA	82	52	89	46	67	2	0	-1.7	0	5.0	66	21.2	135	97	38	0	0	0	0	
MACON	85	53	92	46	69	2	0	-1.7	0	4.9	60	18.9	112	95	34	2	0	1	0	
SAVANNAH	83	57	88	52	70	2	0	-1.8	0	5.8	91	18.9	149	92	37	0	0	0	0	
HI HILO	81	66	84	63	73	1	0	-2.7	0	9.9	40	23.2	49	92	62	0	0	2	0	
HONOLULU	85	67	86	64	76	0	0	-1.1	0	7	14	1.9	17	89	52	0	0	4	0	
KAHULUI	82	64	85	59	73	-1	0	-1.9	0	1.9	71	6.9	64	91	57	0	0	1	1	
LIHUE	79	66	82	63	72	-1	0	-1.6	0	1.3	5.1	9.0	52	92	65	0	0	4	1	
ID BOISE	75	40	87	24	57	7	0	-1.3	0	2.1	105	4.1	87	63	16	0	2	0	0	
LEWISTON	70	44	77	32	57	5	0	-1.3	0	1.1	54	2.1	50	69	27	0	1	0	0	
POCATELLO	69	33	82	26	51	5	0	-1.1	0	1.1	57	2.8	74	76	22	0	3	1	0	
IL CHICAGO	67	45	86	37	56	5	0	-1.5	0	3.9	66	6.6	76	92	50	0	0	2	0	
MOLINE	69	47	90	37	58	4	0	-1.5	0	3.9	65	5.7	64	89	49	1	0	3	0	
PEORIA	72	48	89	41	60	6	0	-1.1	0	3.7	61	6.0	67	84	41	0	0	3	0	
QUINCY	73	49	90	41	61	5	0	-1.9	0	3.3	53	5.5	60	89	44	1	0	3	0	
ROCKFORD	66	45	89	39	55	5	0	-1.1	0	3.9	64	5.6	65	87	49	0	0	2	1	
SPRINGFIELD	73	49	87	40	61	4	0	-1.7	0	4.7	74	6.9	72	87	40	0	0	2	0	
IN EVANSVILLE	73	46	87	40	59	0	0	-1.9	0	4.4	56	8.7	62	96	47	0	0	2	0	
FORT WAYNE	71	46	86	37	58	6	0	-1.6	0	3.5	59	6.1	61	88	37	0	0	2	0	
INDIANAPOLIS	71	47	84	38	59	4	0	-1.6	0	4.3	65	7.1	61	90	41	0	0	1	0	
SOUTH BEND	68	45	83	34	57	5	0	-1.5	0	3.8	60	7.5	69	93	48	0	0	1	0	
IA DES MOINES	71	49	86	43	60	6	0	-1.5	0	5.9	123	7.7	112	87	49	0	0	4	0	
SIoux CITY	75	46	90	31	60	7	0	-1.5	0	6.5	184	7.1	139	82	35	1	1	1	0	
WATERLOO	69	46	89	40	57	7	0	-1.6	0	4.0	78	5.3	78	87	52	0	0	4	1	
KS CONCORDIA	76	48	88	36	62	6	0	-1.5	0	11.2	308	12.7	249	75	29	0	0	1	0	
DODGE CITY	76	44	89	33	60	3	0	-1.5	0	5.5	190	7.5	197	75	29	0	0	0	0	
GOODLAND	73	41	87	29	57	6	0	-1.3	0	3.0	158	4.3	165	69	25	0	2	0	0	
TOPEKA	78	50	91	43	64	7	0	-1.8	0	8.3	177	12.1	183	79	30	1	0	0	0	
WICHITA	77	47	91	36	62	3	0	-1.6	0	4.7	118	9.5	173	81	29	1	0	0	0	
KY BOWLING GREEN	75	48	84	41	62	2	0	-1.7	0	4.4	49	11.3	64	93	37	0	0	2	0	
LEXINGTON	75	49	85	40	62	5	0	-1.6	0	5.4	65	10.3	69	87	44	0	0	3	0	
LOUISVILLE	76	49	86	40	63	4	0	-1.8	0	5.3	65	10.5	71	90	37	0	0	2	0	
LA ALEXANDRIA	84	52	91	47	68	-1	0	-1.3	0	6.6	69	21.1	108	83	31	3	0	0	0	
BATON ROUGE	86	58	92	54	72	2	0	-1.3	0	7.4	80	22.4	119	86	31	3	0	0	0	
LAKE CHARLES	86	56	91	52	71	1	0	-1.0	0	5.0	80	17.5	123	95	30	1	0	0	0	
NEW ORLEANS	85	60	92	54	73	2	0	-1.1	0	6.7	79	22.8	123	92	40	3	0	0	0	

Based on 1951-80 normals.

Weather Data for the Week Ending April 25, 1987

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 MAR. 1	PCT. NORMAL SINCE MAR. 1	TOTAL, IN., SINCE JAN. 1	PCT. NORMAL SINCE JAN. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMPERATURE °F		PRECIPITATION	
																		°F	°F	.01 INCH OR MORE	.50 INCH OR MORE
SHREVEPORT	85	54	93	43	69	2	0	-1.1	0	1.9	25	12.0	79	86	29	2	0	0	0	0	
ME CARIBOU	65	38	82	28	52	11	.2	-1.4	.2	2.5	54	5.1	57	87	25	0	2	2	0	0	
PORTLAND	58	40	66	31	49	4	.1	-1.8	.1	9.4	130	14.7	101	96	62	0	2	4	0	0	
MD BALTIMORE	68	52	80	41	60	4	.3	-1.5	.2	2.8	43	10.9	87	93	61	0	0	3	0	0	
SALISBURY	64	50	76	42	57	1	2.3	1.6	1.5	6.8	100	16.1	119	99	79	0	0	0	5	2	
MA BOSTON	53	42	57	37	47	-4	.3	-1.6	.2	11.8	163	19.9	134	100	80	0	0	0	3	0	
CHATHAM	52	43	58	39	48	1	1	-1.8	.1	10.9	150	21.2	134	96	81	0	0	0	4	0	
MI ALPENA	62	36	86	24	49	5	.1	-1.5	.1	1.9	47	3.7	53	96	42	0	0	2	2	0	
DETROIT	69	45	86	36	57	7	.1	-1.7	.1	4.2	81	7.1	82	87	39	0	0	0	1	0	
FLINT	68	43	83	33	56	7	.3	-1.4	.3	3.2	68	4.8	63	91	46	0	0	2	0	0	
GRAND RAPIDS	66	43	83	34	54	5	.6	-1.3	.4	3.6	65	4.7	52	85	45	0	0	0	3	0	
HOUGHTON LAKE	62	40	83	26	51	6	.3	-1.3	.2	1.5	38	3.2	47	86	44	0	0	1	2	0	
LANSING	67	42	82	30	54	6	.2	-1.4	.2	2.5	53	3.9	50	88	42	0	0	1	2	0	
MARQUETTE	59	37	84	28	48	6	.6	0	.5	4.1	99	7.1	96	91	39	0	0	2	3	0	
MUSKOGON	64	43	79	33	53	5	.6	-1.1	.5	4.3	83	6.5	71	88	47	0	0	0	3	1	
SAULT STE. MARIE	61	39	81	29	50	9	.6	0	.2	2.1	54	4.7	60	90	33	0	0	2	3	0	
MN ALEXANDRIA	69	44	86	34	56	11	.1	-1.5	.1	1.5	51	2.8	62	74	30	0	0	0	1	0	
DULUTH	62	35	76	27	48	7	.1	-1.4	.1	.7	21	1.7	31	76	32	0	0	3	2	0	
INT'L FALLS	67	36	83	24	52	10	T	-1.4	T	1.0	43	1.8	46	73	24	0	4	0	0	0	
MINNEAPOLIS	68	45	84	30	56	7	.1	-1.4	.1	.8	23	1.5	30	76	35	0	0	1	1	0	
ROCHESTER	66	45	85	38	56	8	.7	-1.1	.6	2.3	61	3.2	60	88	50	0	0	0	5	1	
MS GREENWOOD	86	55	94	49	70	4	0	-1.3	0	6.4	59	16.0	78	89	28	3	0	0	0	0	
JACKSON	85	55	94	51	70	3	0	-1.3	0	6.6	64	21.5	110	93	32	3	0	0	0	0	
MERIDIAN	85	54	95	49	70	3	0	-1.2	0	4.9	43	25.0	120	95	32	2	0	0	0	0	
MO CAPE GIRARDEAU	78	49	90	42	64	—	.1	-1.9	.1	4.3	49	8.4	57	93	43	2	0	0	1	0	
COLUMBIA	73	49	90	43	61	3	T	-1.9	T	3.5	54	6.5	64	93	49	1	0	0	0	0	
KANSAS CITY	76	50	89	40	63	4	.3	-1.6	.3	5.1	95	8.1	104	80	37	0	0	0	1	0	
SAINT LOUIS	72	51	89	44	62	3	.1	-1.7	.1	3.9	63	7.3	72	84	44	0	0	0	3	0	
SPRINGFIELD	76	50	89	41	63	5	T	-1.0	T	6.1	90	13.4	128	83	39	0	0	0	0	0	
MT BILLINGS	68	39	80	31	53	6	.2	-1.3	.2	1.8	69	2.3	55	74	30	0	0	1	1	0	
GLASGOW	63	38	74	31	51	5	.3	-1.1	.3	1.7	201	1.9	127	83	37	0	0	1	2	0	
GREAT FALLS	64	40	74	31	52	7	.3	-1.1	.3	2.3	113	2.6	68	81	31	0	0	1	2	0	
HAVRE	61	34	73	26	48	2	.3	0	.3	1.4	94	1.6	64	80	29	0	0	2	2	0	
HELENA	64	35	75	25	50	5	.4	-1.2	.3	1.9	130	2.0	77	92	35	0	0	3	2	0	
KALISPELL	64	35	70	29	49	4	T	-1.3	T	3.7	219	5.0	116	89	30	0	0	3	0	0	
MILES CITY	68	39	79	29	54	6	T	-1.4	T	1.0	60	1.2	43	69	30	0	0	2	0	0	
MISSOULA	68	37	76	23	52	6	T	-1.2	0	1.6	101	2.2	58	80	28	0	0	2	1	0	
NE GRAND ISLAND	77	45	89	35	61	8	0	0	0	8.0	220	8.8	180	77	27	0	0	0	0	0	
LINCOLN	77	48	92	35	62	8	.1	-1.6	.1	9.3	222	9.9	168	84	32	1	0	0	2	0	
NORFOLK	75	47	90	36	61	9	0	-1.6	0	8.0	245	9.0	200	81	31	1	0	0	0	0	
NORTH PLATTE	74	39	89	24	57	6	T	-1.5	T	2.7	107	4.4	129	78	24	0	0	2	0	0	
OMAHA	72	49	90	40	61	6	.2	-1.5	.2	6.6	156	7.3	124	79	44	1	0	0	2	0	
SCOTT'S BLUFF	73	36	87	26	55	6	.2	-1.2	.2	2.1	100	4.3	148	78	24	0	0	2	1	0	
VALENTINE	72	36	85	22	54	6	T	-1.5	T	2.9	129	4.3	148	76	25	0	0	2	1	0	
NV ELY	67	23	77	12	45	2	T	-1.2	T	1.1	69	2.5	83	63	17	0	0	6	0	0	
LAS VEGAS	84	53	93	46	69	3	0	0	0	.6	107	2.2	147	28	10	3	0	0	0	0	
RENO	75	34	83	23	55	7	T	-1.1	T	1.1	96	2.3	72	62	12	0	0	3	0	0	
WINNEMUCCA	75	27	86	16	51	4	0	-1.2	0	1.4	103	2.4	86	57	13	0	0	6	0	0	
NH CONCORD	65	41	76	28	53	6	.2	-1.6	.1	6.9	127	9.9	93	95	53	0	0	3	2	0	
NJ ATLANTIC CITY	61	48	74	44	55	2	.6	-1.2	.4	8.9	132	16.7	124	99	79	0	0	0	4	0	
NM ALBUQUERQUE	72	44	78	38	58	1	T	-1.1	T	1.1	134	2.3	144	49	15	0	0	0	0	0	
CLOVIS	77	44	90	39	61	1	0	-1.2	0	.4	35	2.3	115	57	18	1	0	0	1	0	
ROSWELL	74	46	81	36	60	-2	T	-1.1	T	.4	61	2.7	100	74	24	0	0	0	0	0	
NY ALBANY	69	47	82	36	58	9	.1	-1.6	.1	6.3	116	10.8	108	91	45	0	0	0	1	0	
BINGHAMTON	67	46	79	34	57	10	.6	-1.1	.6	6.0	110	9.7	94	90	48	0	0	0	1	1	
BUFFALO	67	44	84	35	56	8	.3	-1.4	.2	6.4	116	10.2	94	91	44	0	0	0	2	0	
NEW YORK	65	50	75	45	58	3	.8	0	.6	8.9	124	15.2	113	97	64	0	0	0	3	1	
ROCHESTER	67	45	82	37	56	7	.4	-1.2	.3	4.7	100	7.2	77	89	43	0	0	0	2	0	
SYRACUSE	72	46	84	34	59	10	.3	-1.5	.3	4.6	79	8.3	75	87	39	0	0	0	2	0	
NC ASHEVILLE	72	48	82	45	60	2	.6	-1.2	.5	6.5	85	16.2	115	94	47	0	0	0	3	1	
CHARLOTTE	76	56	88	47	66	3	.6	-1.1	.4	6.1	81	16.2	107	89	47	0	0	0	2	0	
GREENSBORO	72	54	85	45	63	3	2.5	1.7	1.7	11.3	174	19.9	149	94	52	0	0	0	2	2	
HATTERAS	63	53	74	50	58	-3	2.0	1.2	1.1	13.7	208	28.6	185	100	82	0	0	0	4	2	
NEW BERN	72	58	81	48	65	1	1.4	.7	.7	7.2	120	18.3	131	94	63	0	0	0	2	2	
RALEIGH	72	54	84	45	63	1	.7	.1	.7	7.6	125	19.7	152	96	62	0	0	0	2	1	
WILMINGTON	75	56	83	47	66	1	.5	-1.2	.3	5.5	84	16.4	121	97	64	0	0	0	3	0	
ND BISMARCK	68	37	81	25	53	7	T	-1.4	T	1.5	79	3.3	118	80	30	0	0	1	0	0	
FARGO	70	40	86	29	55	9	T	-1.5	T	.6	26	1.7	52	70	27	0	0	2	0	0	
GRAND FORKS	69	38	85	28	53	9	.2	-1.2	.2	.6	33	2.1	68	74	25	0	0	0	1	0	
WILLISTON	65	40	76	33	53	7	.1	-1.3	.1	2.0	125	2.5	100	76	30	0	0	0	2	0	
OH AKRON-CANTON	71	46	83	37	58	7	.7	0	.4	6.0	100	8.3	78	90	40	0	0	0	2	0	
CINCINNATI	74	49	85	41	62	5	.3	-1.5	.3	7.5	108	10.0	79	83	37	0	0	0	1	0	
CLEVELAND	67	45	82	40	56	5	.4	-1.4	.2	6.6	115	9.0	87	93	49	0	0	0	2	0	
COLUMBUS	74	48	86	38	61	7	.3	-1.5	.7	3.9	65	5.6	51	89	37	0	0	0	2	0	

Based on 1951-80 normals.

Weather Data for the Week Ending April 25, 1987

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 MAR. 1	PCT. NORMAL SINCE MAR. 1	TOTAL, IN., SINCE JAN. 1	PCT. NORMAL SINCE JAN. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F			
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	72	46	84	35	59	5	.5	-.3	.3	5.2	88	7.3	70	95	41	0	0	3	0
TOLEDO	68	44	87	34	56	6	.2	-.6	.1	3.4	67	5.8	65	93	39	0	0	2	0
YOUNGSTOWN	72	45	84	33	59	8	.8	0	.4	5.8	94	8.2	75	93	42	0	0	2	0
OK OKLAHOMA CITY	81	53	94	44	67	5	.3	-.4	.3	2.7	63	9.3	141	77	28	1	1	1	0
TULSA	82	54	94	46	68	4	.3	-.7	.2	2.9	45	10.6	104	82	28	2	0	2	0
OR ASTORIA	59	37	63	32	48	-1	T	-.4	T	11.3	253	26.8	229	96	53	0	1	1	0
BURNS	69	32	77	22	50	5	0	-.1	0	1.7	103	3.9	85	85	0	4	0	0	0
MEDFORD	79	39	85	27	59	7	0	-.2	0	1.8	65	6.9	84	87	22	0	1	0	0
PENDLETON	67	40	71	32	53	1	T	-.2	T	1.4	77	3.6	77	75	31	0	1	0	0
PORTLAND	66	42	71	34	54	3	0	-.5	0	6.5	118	16.1	103	86	36	0	0	0	0
SALEM	66	38	70	30	52	2	0	-.5	0	6.0	94	17.1	96	93	39	0	2	0	0
PA ALLENTOWN	68	48	79	38	58	5	.3	-.6	.3	6.0	84	11.0	81	97	55	0	0	2	0
ERIE	64	45	76	34	54	6	.2	-.4	.1	5.8	99	9.0	87	92	50	0	0	2	0
HARRISBURG	69	54	80	42	59	5	.3	-.4	.3	4.3	70	9.6	81	96	56	0	0	2	0
PHILADELPHIA	68	51	77	42	60	4	1.0	-.2	.9	4.7	69	10.5	83	95	63	0	0	2	1
PITTSBURGH	72	48	83	36	60	7	1.8	1.0	1.3	7.4	117	10.4	90	79	37	0	0	2	2
SCRANTON	70	48	80	38	59	8	.5	-.2	.5	5.5	107	8.8	94	90	48	0	0	2	0
RI PROVIDENCE	62	45	77	38	54	3	.3	-.6	.2	11.3	149	16.3	107	99	68	0	0	2	0
SC CHARLESTON	79	57	85	52	68	2	0	-.6	0	6.9	106	18.7	143	95	45	0	0	0	0
COLUMBIA	80	53	90	48	67	1	T	-.8	T	5.8	70	19.5	117	94	42	1	0	1	0
FLORENCE	79	56	86	50	67	2	T	-.6	T	5.7	86	16.3	121	92	46	0	0	0	0
GREENVILLE	78	54	87	50	66	4	1.2	.3	1.2	7.2	75	19.2	105	95	46	0	0	1	1
SD ABERDEEN	70	39	80	27	55	7	T	-.5	T	2.1	83	3.3	92	78	28	0	2	0	0
HURON	74	41	84	27	58	9	.2	-.3	.2	5.2	186	6.5	163	82	29	0	1	1	0
RAPID CITY	69	36	80	29	53	5	T	-.5	T	1.2	45	2.9	81	70	28	0	4	0	0
SIoux FALLS	73	43	89	33	58	8	T	-.6	T	3.5	102	3.9	80	79	33	0	0	0	0
TN CHATTANOOGA	81	51	90	46	66	4	0	-1.0	0	6.8	67	20.3	101	91	33	1	0	0	0
KNOXVILLE	77	50	86	44	63	2	.1	-.7	.1	5.3	60	14.6	83	95	40	0	0	1	0
MEMPHIS	81	55	94	49	68	4	0	-1.3	0	7.1	69	14.6	76	81	33	2	0	0	0
NASHVILLE	80	50	87	44	65	3	T	-1.0	T	2.2	24	8.6	48	83	36	0	0	1	0
TX ABILENE	78	53	93	43	66	-2	.8	.2	.6	2.4	82	6.5	133	84	39	1	0	2	1
AMARILLO	74	41	88	32	58	-1	0	-.3	0	1.5	89	3.6	133	73	24	0	0	0	0
AUSTIN	83	61	89	57	72	2	0	-.8	0	1.8	44	5.6	68	85	35	0	0	0	0
BEAUMONT	88	57	92	53	72	2	0	-1.0	0	1.2	19	17.0	115	95	27	2	0	0	0
BROWNSVILLE	84	66	87	62	75	-1	T	-.4	T	2.0	114	6.7	149	98	49	0	0	0	0
CORPUS CHRISTI	85	63	88	58	74	0	.1	-.4	.1	1.6	70	9.8	185	98	41	0	0	1	0
DEL RIO	73	59	88	52	66	-7	3.0	2.5	1.4	4.0	187	7.6	217	93	75	0	0	6	2
EL PASO	73	50	79	46	61	-5	.3	.2	.2	.8	167	1.3	100	71	26	0	0	3	0
FORT WORTH	83	55	92	46	69	2	.1	-1.0	.1	1.8	32	6.7	73	81	33	1	0	1	0
GALVESTON	80	65	86	64	72	2	0	-.7	0	.7	17	9.4	98	86	43	0	0	0	0
HOUSTON	89	56	93	54	73	2	0	-.9	0	1.4	24	8.1	65	90	28	4	0	0	0
LUBBOCK	77	47	92	34	62	-1	.1	-.2	.1	.5	30	2.5	96	73	23	1	0	1	0
MIDLAND	74	51	90	42	62	-4	.6	.4	.5	1.9	169	3.9	195	93	42	1	0	2	0
SAN ANGELO	77	53	91	47	65	-3	.8	.3	.7	2.5	119	7.6	211	91	49	1	0	2	1
SAN ANTONIO	82	60	89	55	71	0	1.2	-.5	1.2	2.6	74	8.5	125	88	43	0	0	1	1
VICTORIA	87	60	89	57	74	1	T	-.7	T	.4	13	7.1	95	92	35	0	0	0	0
WACO	83	55	91	50	69	0	0	-1.0	0	3.3	66	7.3	84	86	38	2	0	0	0
WICHITA FALLS	80	50	94	42	65	0	.3	-.5	.2	2.2	53	8.1	133	89	37	1	0	2	0
UT BLANDING	70	36	79	23	53	4	0	-.2	0	2.1	154	4.6	124	56	25	0	0	0	0
CEDAR CITY	70	35	77	23	53	4	T	-.2	T	2.2	114	3.9	118	72	18	0	3	1	0
SALT LAKE CITY	68	42	83	31	55	4	.6	-.1	.6	2.2	63	5.1	82	74	25	0	1	1	1
VT BURLINGTON	69	42	83	28	55	10	.2	-.5	.2	2.2	48	4.6	58	86	34	0	1	1	0
VA NORFOLK	61	53	65	44	57	-3	2.1	1.5	1.4	6.0	97	19.0	145	98	87	0	0	3	2
RICHMOND	68	53	82	43	61	0	3.4	2.8	2.1	9.0	150	17.1	139	96	71	0	0	2	2
ROANOKE	72	50	84	45	61	3	4.6	3.9	2.6	15.4	246	24.4	200	98	60	0	0	3	3
WA COLVILLE	66	37	71	26	51	3	T	-.3	T	4.3	209	6.5	114	79	42	0	1	0	0
QUILLAYUTE	59	35	65	29	47	0	T	-1.5	T	19.8	108	42.2	94	97	45	0	1	1	0
SEATTLE-TACOMA	60	40	66	34	50	0	T	-.5	T	7.3	129	15.3	96	89	40	0	0	0	0
SPOKANE	64	36	69	26	50	2	0	-.3	0	3.1	141	5.5	87	81	30	0	2	0	0
YAKIMA	70	36	75	25	53	2	0	-.1	0	1.6	153	3.3	106	80	23	0	2	0	0
WV BECKLEY	68	47	81	39	57	4	3.7	3.0	2.0	9.3	136	16.2	120	92	51	0	0	3	2
CHARLESTON	77	49	90	45	63	5	.9	.1	.6	5.3	76	11.8	87	95	42	1	0	2	1
HUNTINGTON	75	50	88	43	62	4	1.0	-.2	.8	7.1	103	13.0	100	95	46	0	0	2	1
PARKERSBURG	75	50	85	41	62	6	1.4	-.7	1.4	5.3	83	8.4	71	91	42	0	0	2	1
WI GREEN BAY	63	44	84	39	53	7	1.1	.5	.7	3.7	90	4.5	71	85	50	0	0	3	1
LA CROSSE	68	47	89	40	58	7	1.8	1.0	.9	4.5	105	5.9	97	81	46	0	0	2	2
MADISON	66	44	85	35	55	6	1.7	1.0	1.2	4.4	95	5.7	84	89	50	0	0	3	1
MILWAUKEE	59	42	81	37	51	4	2.0	1.2	1.5	5.8	107	8.2	99	91	60	0	0	3	1
WAUSAU	64	43	86	35	54	7	.7	-.1	.4	2.4	56	3.0	49	83	38	0	2	2	0
WY CASPER	67	36	79	29	52	7	.2	-.2	.2	1.7	80	4.6	144	85	22	0	3	2	0
CHEYENNE	64	33	77	23	49	4	.3	0	.2	1.9	96	2.9	107	79	26	0	4	2	0
LANDER	70	38	79	29	54	10	.4	-.1	.4	3.7	127	6.3	158	67	18	0	3	1	0
SHERIDAN	67	36	78	25	51	6	T	-.5	T	1.6	59	2.8	67	81	32	0	1	1	0
PR SAN JUAN	91	77	92	76	84	5	T	-1.0	T	10.3	205	12.7	126	90	74	6	0	0	0

Based on 1951-80 normals.

National Agricultural Summary

April 20 to 26, 1987

HIGHLIGHTS: Wetness hampered seeding and spring plowing in the eastern Corn Belt, while dryness slowed planting in the Delta and Southeast. Warm temperatures promoted wheat growth, but development lagged behind normal in most areas. Inadequate moisture developed in the Southeast, the Delta, Utah, New Mexico, and Oregon. Soil moisture was adequate in most other areas.

Winter wheat was mostly good. Crop condition was fair to good in the Delta. Heading reached 9 percent (%) of the acreage, compared with 30% in 1986 and the 11% 5-year average. Spring wheat was 43% seeded, 19 percentage points ahead of the average. Montana was the only State behind the average and by only 3 points. Corn planting climbed 6 points ahead of the previous week to 13% completion. South Dakota was the only major producing State that had not planted corn. Cotton was 24% seeded, 2 points above normal. Planting was underway in all States except Oklahoma. Sorghum seeding reached 17% completion. Planting was not underway in the central and northern Great Plains. Rice planting reached the halfway point, 15 points above normal. Soybeans were planted in Georgia, Texas, and Ohio. Livestock was mostly good.

SMALL GRAINS: Small grains and winter wheat were mostly good, except in the Delta where condition was fair to good. Winter wheat was 9% headed in the 20 major producing States, 21 points behind 1986 and 2 points below the average.

Warm days and ample moisture improved wheat in Kansas. Wheat suffered the worse freeze damage in south-central areas. Russian wheat aphids were present in several counties, and treatment was underway. Nebraska's wheat was mostly good. Growth was good with light winterkill. Eighty-two percent of Montana's wheat was greening and growing.

Oklahoma's wheat was mostly fair to good. Warm temperatures promoted rapid growth, except in the freeze-damaged northwestern areas. Jointing neared completion with 10% of the acreage in the heading stage. Weeds and insects caused problems in northern Oklahoma. Small grain growth improved in Texas, but additional damage showed almost daily. Wheat was moisture stressed in many areas, when heading increased moisture needs to fill heads. Wheat was turning color in south-central and southern Texas.

Wheat turned color in Alabama and Louisiana. Jointing neared completion in the Southeast and Delta. Ninety-four percent of Louisiana's wheat reached the heading stage.

Wheat, barley, and oats grew rapidly in California. Dryland small grains were under moisture stress. Small grains filled heads well in Arizona. The green color continued fading with 20% of the acreage turning color. Oregon's wheat was good to excellent. Producers initiated irrigation in some eastern counties.

Spring wheat was 43% seeded, nearly doubling the 24% average. Seeding leaped 28 points ahead of the previous week and was ahead of normal in all States except Montana. Spring wheat emerged well in Idaho. Emergence was 18 points above the average in Minnesota.

CORN: Corn planting reached 13% completion in the 17 major producing States, compared with 16% in 1986 and the 11% average. Seeding was underway in all States except South Dakota. Rain slowed planting in the eastern Corn Belt States. Seeding was up 14 points from the previous week in both Colorado and Georgia. Kansas was up 15 points, and Missouri registered a 22-point increase.

COTTON: Cotton was 24% seeded, 2 points ahead of normal but slightly behind the previous year. Seeding was ahead of normal in Tennessee, Texas, Arkansas, California, and Missouri but not more than 5 points. Dry weather aided seeding in Alabama and pushed completion 40 points ahead of the 23% average. Cotton planting was finished in the Rio Grande Valley and south Texas. The warm weather improved growth. Favorable weather accelerated early seedling development in Arizona.

SORGHUM: The 11 major sorghum producing States seeded 17% of their acreage. Seeding normally reaches 20% completion by now and was 22% finished in 1986. Seeding lagged behind normal and 1986 in Louisiana, Mississippi, Oklahoma, and Texas. Seeding had not begun in the central and northern Great Plains and in Illinois.

OTHER CROPS: Soybeans were seeded in Georgia, Texas, and Ohio. Seeding was 1% finished in Georgia and 8% finished in Texas.

Rice jumped from 24% seeded the previous week to 50% and was 15 points above average. Mississippi was the only State behind normal with a 7-point deficit. Texas producers flushed heavily to achieve emergence. Rice pre-flooding continued in California. Producers were flushing seeded rice in Arkansas because of low moisture.

Peanut planting moved into North Carolina, where 7% of the acreage was seeded. Planting trailed the normal pace in Georgia, Texas, and South Carolina. The lack of moisture hampered seeding in Texas and some Southeastern States.

Georgia's tobacco acreage was 78% transplanted, compared with 95% normally. Nearly half of South Carolina's tobacco acreage was transplanted. Transplanting was proceeding 2 times slower than average in North Carolina. Tobacco plants ranged from just emerged to the size of a silver dollar in Kentucky. Ninety percent of the tobacco plants were emerged in Tennessee.

FRUIT AND NUTS: Georgia peaches were good to fair. Fruit trees were in full bloom in Kentucky. Peach bloom was well advanced in New Jersey. South Carolina's peach prospects are good. Apples reached full bloom in Washington.

Florida's citrus was very good. The lack of rain caused irrigation in all areas. Trees began setting new crop fruit. Texas citrus producers irrigated steadily to combat dryness.

Avocado, nectarine, freestone peach, and navel and valencia orange harvests were active in California. Walnut bloom was complete, and almond set was heavy. Grapes were thinned, sprayed, and irrigated. Grapefruit and valencia oranges were packed in Arizona. Citrus groves were good.

VEGETABLES: Extremely light rainfall forced Florida's vegetable producers to irrigate. Vegetable harvest was active. Tomatoes, potatoes, sweet corn, cucumbers, green peppers, cabbage, and celery were volume leaders. Vegetable replanting continued in Texas. Inadequate moisture caused irrigation in the High Plains and in east Texas. California vegetable harvest consisted mostly of artichokes, asparagus, broccoli, cauliflower, and celery. Cool-season vegetable harvest ended in Yuma, Arizona. Lettuce shipments had almost ended in the Salt River Valley.

PASTURES AND LIVESTOCK: Livestock was mostly good. Pastures were mostly good. Warm temperatures promoted growth.

CROP PROGRESS

FOR WEEK ENDING APRIL 26, 1987

**GRAIN SORGHUM
% PLANTED**

	1987	1986	AVG.
ARK	40	24	NA
ILL	0	0	0
KANS	0	0	0
LA	36	62	48
MISS	25	40	30
MO	3	6	3
NEBR	0	0	0
OKLA	1	5	3
S DAK	0	0	0
TENN	10	18	6
TEX	54	64	62

11 STATES 18 22 NA

EXCL. STATES WITH NA 17 22 20

THESE 11 STATES PRODUCED 96% OF THE 1986 GRAIN SORGHUM CROP.

NA - NOT AVAILABLE.

**COTTON
% PLANTED**

	1987	1986	AVG.
ALA	63	29	23
ARIZ	85	90	88
ARK	12	14	8
CALIF	75	70	70
GA	9	10	20
LA	19	39	19
MISS	11	25	17
MO	10	7	5
N MEX	5	5	6
N C	24	33	24
OKLA	0	0	0
S C	17	39	33
TENN	10	15	9
TEX	15	15	13

14 STATES 24 25 22

THESE 14 STATES PRODUCED 100% OF THE 1986 COTTON CROP.

**CORN
% PLANTED**

	1987	1986	AVG.
COLO	15	14	15
GA	88	90	88
ILL	12	27	12
IND	8	11	5
IOWA	10	5	4
KANS	20	35	15
KY	20	43	20
MICH	3	3	3
MINN	17	1	1
MO	23	44	25
NEBR	5	9	3
N C	42	83	62
OHIO	8	8	12
PA	8	9	6
S DAK	0	0	0
TEX	75	91	82
WIS	3	0	0

17 STATES 13 16 11

THESE 17 STATES PRODUCED 94% OF THE 1986 CORN CROP.

**RICE
% PLANTED**

	1987	1986	AVG.
ARK	51	46	21
CALIF	5	3	2
LA	67	76	63
MISS	35	90	42
TEX	85	94	84

5 STATES 50 55 35

THESE 5 STATES PRODUCED 97% OF THE 1986 RICE CROP.

**SPRING WHEAT
% PLANTED**

	1987	1986	AVG.
IDAHO	89	62	56
MINN	67	7	16
MONT	37	51	40
N DAK	24	9	13
S DAK	65	13	43

5 STATES 43 19 24

THESE 5 STATES PRODUCED 94% OF THE 1986 SPRING WHEAT CROP.

**WINTER WHEAT
% HEADED**

	1987	1986	AVG.
ARK	50	78	NA
CALIF	85	80	75
COLO	0	1	0
GA	54	77	74
IDAHO	0	0	0
ILL	1	6	1
IND	0	0	0
KANS	0	5	1
MICH	0	0	0
MO	7	11	3
MONT	0	0	0
NEBR	0	0	0
N MEX	0	0	NA
N C	6	19	NA
OHIO	0	0	0
OKLA	10	90	10
OREG	0	0	0
S DAK	0	0	0
TEX	31	70	40
WASH	0	0	0

20 STATES 10 30 NA

EXCL. STATES WITH NA 9 30 11

THESE 20 STATES PRODUCED 91% OF THE 1986 WINTER WHEAT CROP.

NA - NOT AVAILABLE.

WEEKLY CROP CONDITION PERCENT

WINTER WHEAT					
STATE	VP	P	F	G	EX
ARK	7	9	49	32	3
COLO	0	2	18	61	19
GA	0	3	28	66	3
IDAHO	0	0	17	70	13
ILL	0	0	6	74	20
IND	0	1	22	65	12
KANS	1	4	23	42	30
MICH	5	20	40	30	5
MO	3	8	44	43	2
MONT	0	0	1	85	14
NEBR	0	0	15	74	11
N MEX	0	0	43	57	0
OHIO	1	4	23	59	13
OKLA	0	0	60	40	0
OREG	0	0	6	33	61
S DAK	0	0	21	58	21
TEX	1	16	43	40	0
WASH	0	0	5	85	10

VP - VERY POOR P - POOR
F - FAIR G - GOOD EX - EXCELLENT

State Summaries of Weather and Agriculture

These summaries provide brief descriptions of crop and weather conditions important on a national scale. More detailed data are available in Weather and Crop Bulletins published each Monday by NASS State Statistical Offices in cooperation with the National Weather Service.

ALABAMA: No significant rainfall recorded. Temperatures averaged 1 to 30 above normal.

Days suitable for fieldwork 6.4. Soil moisture 66% short, 34% adequate. Fieldwork on normal schedule. Dry conditions promoted field activities some areas, hampered other. Lack of moisture caused planting delays. Corn 76% planted, 79% 1986, 65% avg. Cotton 63% planted, 29% 1986, 23% avg. Sorghum 14% planted, 13% 1986, 11% avg. Peanuts 18% planted, 21% 1986, 18% avg. Wheat 60% headed, 65% 1986, 56% avg.; 7% turning color, 3% 1986; 43% fair, 55% good, 2% excellent. Livestock mostly good. Pastures fair to good. Pasture feed supply adequate to short. Primary activities: Planting row crops; land preparation; topdressing wheat; fertilizing cropland, pastures; spraying orchards; stocking fish ponds; soil testing; garden preparation; routine care of livestock, poultry.

ARIZONA: Strong cold storm system crossed State on 19th set off numerous showers over southeast with largest amount just over 0.50 in. Skies cleared during night, with much colder air, minimum readings on 20th 10 to 20° lower than previous morning. Amounts of moisture ranged from traces to 0.75 in. southeast. Maximum temperatures last half of week reached 70s high country, 80s at 5,000 ft., 95 to 102° lower deserts. Few localities reported record or near record readings. Averages 1 to 10° above seasonal normals.

Cotton planting advanced all producing areas, crop generally good. Emergence, stand establishment, early seedling development accelerated west under favorable conditions. Early plantings showed second pair true leaves. Cultivation, irrigation proceeded as needed. Cool season vegetables completed Yuma. Lettuce shipments almost completed Salt River Valley, to begin Aguila, continued Marana-Eloy. Potato harvest slow, accelerating through 5th. Grapefruit, valencia oranges packed; groves good. Melons, grapes progressed. Market for quality hay active, hay readily clearing market. Crop good to excellent. Second cutting underway west, curing conditions fair to good. Field corn growth advanced west, stands 12 to 15 in. Wheat, barley 91% heading, 20% turning color; grain filling out well; green color fading. Peanut planting underway.

ARKANSAS: Extremely hot, cold front lowered temperatures near midweek. By weekend temperatures rose again. Very dry week. Temperature extremes 38°; 97°. Rainfall none to 0.10 in.

Days suitable for fieldwork 7.0. Lack of soil moisture caused flushing of rice. Rice 40% fair, 54% good, 6% excellent. Sorghum emergence 12%. Sorghum 23% fair, 71% good, 6% excellent. Oats 41% headed. Corn 86% planted. Major activities: Fertilizing pastures; control weeds; establish Bermuda grass; prepare land for planting; plant corn, cotton, rice, sorghum, cultivate corn; perform insect, disease control on wheat.

CALIFORNIA: Generally dry, warm weather over State. High pressure over western U.S., similar summertime pattern. Temperatures averaged well above normal. Exception northern mountains temperatures little below normal. Thunder showers developed Sierra Nevada, record high temperatures Central Valley.

Warm weather high planting activity. Dryland grain moisture stress. Wheat, barley, oats grew rapidly. Applied grasshopper, aphid control. Oats cut for hay. Rice ground seeding, flooding. Alfalfa cut for hay. Weevil control applied. Seed alfalfa preparation. Corn, cotton planting emerged. Sugarbeets thinned, irrigated, weeded. Grapes progressed normal. Thinning, spraying, irrigating active. Kiwifruit pre-bloom. Haas avocado, desert nectarine, freestone peach, navel, valencia orange harvests active. Almond set heavy. Walnut bloom completed. Artichokes heavy, good quality, Salinas. Harvest continued, Santa Cruz-San Mateo Coast. Asparagus harvest continued, Sacramento Valley, Delta, Firebaugh District, Los Angeles-Orange County, excellent quality. Strawberries, south coast, processed due warm weather. Fields, Tulelake-Butte Valley, fumigated. Picking 2 weeks, Sacramento Valley. Broccoli heavy, Salinas, Santa Maria, good quality. Packing 95% complete, Patterson-Newman. Warm weather, Fresno, speeded up maturity, over abundance on market. Harvest active, Oxnard, non-desert areas Riverside County. Cauliflower heavy Salinas, moderate Santa Maria, good quality. Warm temperatures, Fresno, caused over supply. Celery harvest active Oxnard, Los Angeles-Orange County, good quality. Land preparation continued, Salinas-Watsonville. Sweet corn light but increased, Coachella Valley. Fields growing well Delta, Westside. Cucumbers progressed well, Fresno; hot house cucumbers, central valley, picked, packed. Lettuce fairly heavy, San Joaquin Valley; moderate Salinas, Santa Maria, quality variable. Harvest fairly active but winding down, Huron District; packing continued, Los Angeles, Orange County. Watermelon, mixed melon planting progressed Westside, Merced-Atwater, Modesto-Turlock. Desert crop looked normal, small fruit starting. Spring onion harvest, Westside, next few weeks. Dehydrator onion fields, Tulelake-Butte Valley being planted, irrigated. Freezer pea harvest underway, Gustine. Fall potato packing sheds, Tulelake-Butte Valley, operating full-time. Fields continued to be worked. Spring potato planting continued, Kern. Sweetpotato fields, planted Merced-Atwater. Planting tomatoes for processing, fresh market active statewide. Planted fields progressed well. Crops, Palo Verde Valley, started set fruit. Ranges, pastures drying rapidly warm weather. Range feed lower elevations continued mature. Stock water remained short. Movement livestock summer pastures began. Marketing livestock continued active.

COLORADO: Temperatures 4 to 6° above normal. Northern mountains several inches of snow on 20th. Showers, traces to 0.60 in., 24th thru 26th Kansas and Platte River Basins.

Days suitable for fieldwork 5.5. Soil moisture adequate. Small grains, livestock good. Corn planting underway. Calving, lambing approximately 85% complete.

FLORIDA: Few midweek thunderstorms northeast produced only isolated rainfall, otherwise no rain. High pressure over Mississippi Valley brought temperatures into 90s Panhandle with several records set. Dry, weak cold front moved through State night of 24th, dropping temperatures statewide to near normal for weekend.

Soil moisture central, south generally adequate, but short some localities. Topsoil moisture mostly short north, Panhandle. Corn good progress. Peanut planting underway. Wheat fair to good, some

Hessian Fly damage. Peach crop prospects good. Land preparation active spring crops. Dry soils, cool nights slowed grass growth. Southern Peninsula pastures fair to good; elsewhere, poor to fair. Cattle fair to good. Calf marketings increased. Citrus groves very good. Rain needed; irrigation all areas. New crop fruit setting. Abundant new foliage. Current crop valencias, grapefruit holding well. Valencia harvest very active; grapefruit movement only from east coast. Caretakers very active. Warm days, mild nights vegetable producing areas. Rainfall extremely limited; irrigation active. Winds light to moderate. Harvest active. Volume leaders: Tomatoes, potatoes, sweet corn, cucumbers, green peppers, cabbage, celery. Good supplies snap beans, carrots, eggplant, escarole-endive, lettuce, radishes, squash, strawberries. Watermelon supplies continued light.

GEORGIA: Temperatures 2 to 3° above normal. Hot 20th, hotter midweek. Record highs of 88° Atlanta, Columbus; 92° Macon 21st, more record highs 22nd. Temperatures cooled 23rd. Rainfall with front scattered, very light. Weekend 25th, 26th mild, dry.

Days suitable for fieldwork 6.0. Soil moisture 2% very short, 65% short, 33% adequate. Corn 42% fair, 54% good, 4% excellent. Cotton 17% poor, 28% fair, 55% good. Sorghum grain 11% planted, 17% 1986, 15% avg. Peanuts 14% planted, 14% 1986, 21% avg. Soybeans 1% planted, 1% 1986, 2% avg. Tobacco 1% poor, 45% fair, 43% good, 11% excellent; 78% transplanted, 96% 1986, 95% avg. Watermelons poor to good, mostly fair; 88% planted, 88% 1986, 88% avg. Wheat 99% jointing, 100% 1986, 98% avg.; 87% boot, 90% 1986, 89% avg. Rye fair to mostly good. Other small grains fair to mostly good. Apples fair to mostly good; 95% blooming, 99% 1986, 95% avg. Peaches 9% very poor, 2% poor, 42% fair, 47% good; 100% blooming, 100% 1986, 100% avg. Pasture 2% poor, 21% fair, 74% good, 3% excellent. Cattle fair to mostly good. Hogs fair to mostly good. Topsoil dry many areas slowed planting late in period. Rain needed most main crop growing areas. Main activities: Planting corn, tobacco, watermelons, other vegetables. Land preparation for planting, spraying, fertilizing. Irrigating drier areas.

HAWAII: Crops benefited from alternating periods of heavy rainfall, sunshine. Some areas received over 2 in. of rain in a 24-hour period. Winds were variable becoming gusty on 26th. Overall crop condition fair to good. Winds 5 to 30 mph. Temperatures ranged mid 60s to mid 80s. Rainfall ranged 0.40 to 7.10 in.

Days suitable for fieldwork 7.0. Banana production steady. Papaya harvesting increased with lifting of ban to U.S. mainland. Chinese cabbage harvest remained active. Light to moderate production for other vegetables.

IDAHO: Dry conditions, isolated rainfall, Panhandle received 1.00 in. Temperatures at to above normal.

Nearly 7.0 days suitable for fieldwork. Fieldwork progressed well. Soil moisture short most areas. Small grains emerged well. Potato planting well underway. Fruit trees blooming, some frost damage. Hay, roughage supplies good to excellent. Livestock good, lambing, calving virtually complete. Winter wheat 17% fair, 70% good, 13% excellent. Spring wheat 6% planted, 8% avg. Activities included: Planting, fertilizing, irrigating.

ILLINOIS: Temperatures averaged 2 to 4° above normal north, 1 to 3° above normal south. Precipitation averaged 0.50 to 1.00 in. north; 0.25 to 0.50 in. south.

Days suitable for fieldwork 3.3. Soil moisture 7% short, 79% adequate, 14% surplus. Corn 12% planted, 27% 1986, 12% avg. Winter wheat 6% fair, 74% good, 20% excellent; 1% headed, 6% 1986, 1% avg. Oats 95% seeded, 94% 1986, 70% avg. Alfalfa 8% fair, 74% good, 18% excellent. Pasture 11% fair, 74% good, 15% excellent; supplying 60% livestock roughage requirements, 59% 1986, 48% avg.

INDIANA: Temperatures 2 to 5° above average. Lows 30s, highs 80s. Precipitation widespread, from 0.50 to 1.00 in. west central, north central to 0.25 to 0.50 in. elsewhere. Four inch soil temperatures 4 to 6° warmer than usual, ranged from low 50s to low 60s.

Fieldwork averaged 2.7 days. Topsoil moisture 5% short, 66% adequate, 29% surplus. Subsoil moisture 16% short, 75% adequate, 9% surplus. Spring cropland 90% tilled, 86% 1986, 74% avg. Wheat 25% jointed, 30% 1986, 28% avg. Wheat 10 in. high, 8 in. 1986, 8 in. avg. Oats 92% seeded, 87% 1986, 80% avg. Oats 3 in. high, 3 in. 1986, 2 in. avg. Clover 90% seeded, 88% 1986, 80% avg. Tobacco beds 100% seeded, 90% 1986. Pastures 1% poor, 32% fair, 61% good, 6% excellent. Rain slowed tilling, planting.

IOWA: Warm, dry week. Temperatures 5° above normal, 54° northeast to 61° southwest. Precipitation 0.20 in. southwest to 1.10 in. northeast.

Days suitable for fieldwork 3.7. Topsoil moisture 1% short, 80% adequate, 19% surplus; subsoil moisture 86% adequate, 14% surplus. Winter wheat 16% fair, 77% good, 7% excellent; hay 3% poor, 12% fair, 70% good, 15% excellent. Corn 10% planted, 5% 1986, 4% avg.; oats 85% sown, 89% 1986, 69% avg.; 40% emerged, 44% 1986, 27% avg. Seedbed preparation 70% completed; fertilizer application 70% completed, 63% 1986, 61% avg. Fertilizer supplies 96% adequate, 4% surplus. Pasture 1% poor, 9% fair, 64% good, 26% excellent. Livestock good to excellent. Very little disease reported.

KANSAS: Temperatures averaged 50s except low 60s southeast; 5° above normal. No rainfall west, spotty amounts east with 0.50 to 0.75 in. readings few locations.

Days suitable for fieldwork 4.5. Soil moisture 9% short, 69% adequate, 22% surplus. Wheat condition improved with warmer days, ample moisture. Worst freeze damage south central. Jointing 85%, well ahead of 60% avg. Russian wheat aphid present 18 counties, some treatment underway. Greenbug activity high, beneficials active, may control soon. Wheat streak mosaic light levels. Range, pasture good to excellent. Alfalfa plagued by alfalfa weevil, blue alfalfa aphid. Spring black stem caused defoliation in alfalfa.

KENTUCKY: Warm, dry weather early. Midweek light rain persisted until weekend. Temperatures 2 to 10° above normal with lows in 40s, highs lower 70s to 80s. Rainfall averaged 1.00 in. below normal with most stations reporting 0.50 in. or less.

Days suitable fieldwork 4.5 days. Soil moisture 9% short, 83% adequate, 8% surplus. Corn 20% planted, 11% emerged. Tobacco 86% emerged, 70% 1986, 67% avg. Plant range just emerged to silver dollar. Some ready for setting early May. Plants 1% poor, 24% fair, 69% good, 6% excellent. Wheat, barley good. Hay fields, pastures good growth. Alfalfa weevil expanded dramatically, spraying as needed. Fruit trees full bloom. Apple frost damage moderate, if any, peach damage slight to severe.

LOUISIANA: Temperature 1° below to 2° above normal. Temperature extremes 43°; 95°. Only traces of rain reported.

Days suitable for fieldwork 6.6. Soil moisture 62% short, 38% adequate. Spring plowing 84% complete, 93% 1986, 81% avg. Corn fair; 86% planted, 96% 1986, 86% avg.; 70% emerged, 93% 1986, 80% avg. Cotton 19% planted, 39% 1986, 19% avg.; 3% emerged, 18% 1986, 7% avg. Rice 67% planted, 76% 1986, 63% avg.; 47% emerged, 62% 1986, 50% avg. Sorghum 36% planted, 62% 1986, 48% avg.; 19% emerged, 44% 1986, 31% avg. Sweetpotatoes 6% planted, 19% 1986, 14% avg. Winter wheat fair; 94% headed, 95% 1986, 78% avg.; 10% turning color, 23% 1986, 17% avg. Hay first cutting 5%, 7% 1986, 6% avg. Sugarcane fair to good; vegetables fair; pastures, livestock fair to good. Main activities: Spring plowing; planting corn, cotton, rice, sorghum, vegetables; cutting hay; applying fertilizer, herbicides. Dry weather causing delay in planting of all crops.

MARYLAND & DELAWARE: Maryland: Temperatures averaged 61^o, 56^o normal; lowest temperature 38^o; highest temperature 87^o. Precipitation averaged 0.35 in.

Days suitable for fieldwork 4.0. Topsoil moisture adequate. Subsoil moisture adequate. Acreage prepared for planting 65%. Wheat, barley, rye, oats good to excellent. Peaches 95% bloomed, 90% avg. Apples 60% bloomed, 65% avg. Corn 15% planted. Snap beans 25% planted.

Delaware: Temperatures averaged 60^o, 56^o normal. Precipitation averaged 0.94 in.

Days suitable for fieldwork 4.0. Topsoil moisture surplus. Subsoil moisture adequate. Acreage prepared for planting 70%. Wheat, barley, rye good. Peaches 100% bloomed, 90% avg. Apples 75% bloomed. Corn 5% planted.

MICHIGAN: Temperatures ranged 3 to 8^o above normal. Temperature extremes 24^o; 87^o. Precipitation ranged from 0.10 to 1.00 in. across State. Rain needed upper Peninsula, northern lower Peninsula.

Winter wheat good. Activities: Fertilizing, working ground, sowing oats, alfalfa, barley, corn; transplanting celery, sugarbeets 70% planted, spraying fruit trees, cherries full bloom southwest, picking asparagus, attending farm auctions, marketing grain, livestock, fruits, vegetables. Livestock excellent. Feed supplies adequate.

MINNESOTA: Temperatures averaged 5 to 8^o above normal. Temperature extremes 22^o; 92^o. Precipitation averaged 0.34 to 0.46 in. below normal. Precipitation totals averaged 0 to 0.07 in. northwest, 0 to 0.09 in. north central, 0 to 0.12 in. northeast, 0 to 0.14 in. west central, 0 to 0.10 in. central, 0 to 0.08 in. east central, 0 to 0.14 in. southwest, 0 to 0.17 in. south central, 0.50 to 1.05 in. southeast. Greatest weekly total 2.09 in.

Days suitable for fieldwork 5.8. Topsoil moisture 10% very short, 42% short, 47% adequate, 1% surplus. Spring wheat 67% planted, 7% 1986, 16% avg.; 20% emerged, none 1986, 2% avg. Oats 82% planted, 24% 1986, 26% avg.; 36% emerged, 2% 1986, 4% avg. Barley 52% planted, 6% 1986, 12% avg.; 8% emerged, none 1986, 1% avg. Corn 54% land prepared, 10% 1986, 11% avg.; 17% planted, 1% 1986, 1% avg. Soybeans 26% land prepared, 2% 1986, 3% avg.; 1% planted, none 1986, none avg. Sunflowers 1% planted, none 1986, none avg. Flax 1% planted, none 1986, none avg. Sugarbeets 72% planted, 1% 1986, 12% avg. Potatoes 8% planted, 2% 1986 2% avg. Green peas 43% planted, 21% 1986, 19% avg. Sweet corn 6% planted, none 1986, none avg. Fall seeded small grains greened 9% poor, 41% fair, 47% good, 3% excellent. Hay fields greened 8% poor, 47% fair, 42% good, 3% excellent. Pasture greened 8% poor, 47% fair, 41% good, 4% excellent.

MISSISSIPPI: Temperatures 1 to 5^o above normal; extremes 40^o; 95^o. High pressure system from Gulf to Great Lakes resulted in fair weather, no rain reported during week.

Days suitable for fieldwork 6.1, 5.9 1986, 3.9 avg. Soil moisture 3% very short, 27% short, 55% adequate, 15 surplus. Corn 9% poor, 46% fair, 45% good; 69% planted, 82% 1986, 64% avg.; 38% emerged, 65% 1986, 44% avg. Wheat 1% very poor, 5% poor, 38% fair, 50% good, 6% very good; 99% jointing, 99% 1986, 98% avg.; 55% heading, 88% 1986, 63% avg. Watermelons 54% planted, 46% 1986, 48% avg. Peanuts 16% planted, 11% 1986, 11% avg. Sweetpotatoes 11% planted, 12% 1986, 10% avg. Rice 35% planted, 90% 1986, 42% avg. Sorghum 25% planted, 40% 1986, 30% avg.; 3% emerged, 23% 1986. Cotton 11% planted, 25% 1986, 17% avg. Hay, feed grain supplies adequate.

MISSOURI: Temperatures averaged 4^o above normal. Precipitation spotty, less than 0.10 in.

Days suitable for fieldwork 3.9. Topsoil moisture 5% short, 80% adequate, 15% surplus. Oats 93% sown, 94% 1986, 77% avg. Tillage for spring planted crops 70%, 71% 1986, 60% avg. Pastures 3% poor, 35% fair, 59% good, 3% excellent.

MONTANA: Temperatures averaged 3 to 7^o above normal; lowest 9^o, highest 85^o. Most precipitation southwest, 5 to 12 in. snow early week. Dry northwest, southeast. Scattered showers remainder. Precipitation amounts less than 0.10 to 0.66 in.

Days suitable for fieldwork 5.5. Topsoil moisture 20% short, 76% adequate, 4% surplus. Subsoil moisture 7% short, 88% adequate, 5% surplus. Winter wheat 1% fair, 85% good, 14% excellent. Winter wheat 18% greened, 82% green; growing. Spring wheat 37% planted, 51% 1986, 40% avg. Barley 40% planted, 58% 1986, 51% avg. Sugarbeets 44% planted, 43% 1986, 39% avg. Oats 29% planted, 52% 1986, 42% avg. Spring wheat 2% emerged. Barley 8% emerged. Sugarbeets 1% emerged. Oats 4% emerged. Calving 88% complete, 89% 1986, 87% avg. Lambing 78% complete, 80% 1986, 80% avg. Cattle, calf death losses 65% below avg., 33% avg., 2% above avg. Sheep, lamb death losses 59% below avg., 41% avg.

NEBRASKA: Warm, mild week. Temperatures averaged 6 to 8^o above normal, extremes 24^o; 92^o. Precipitation averaged less than 0.10 over entire State.

Days suitable for fieldwork 5.4. Soil moisture 9% short, 83% adequate, 8% surplus. Subsoil moisture 74% adequate, 26% surplus. Corn 5% planted, 9% 1986, 3% avg. Planting expected to increase rapidly with continued warm temperatures drying soil. Winter wheat 15% fair, 74% good, 11% excellent. Winterkill light with continued good growth. Oats 85% sown, 85% 1986, 68% avg. Range, pasture good to excellent. Livestock generally good, calving neared completion many areas.

NEVADA: Temperatures averaged above normal for fourth consecutive week. Storm early in period produced decidedly cold weather. Killing frosts widespread. Strong winds reported extreme south. Precipitation limited to very light amounts early. Temperature extremes 9^o; 69^o.

Good progress fieldwork, planting operations. Alfalfa hay harvest full swing extreme south. Planting fall potato crop gained momentum.

NEW ENGLAND: Precipitation averaged 0.05 to 0.25 in. Maine, New Hampshire, Vermont, western and central Massachusetts, 0.25 to 0.50 in. coastal Massachusetts, Rhode Island, coastal Connecticut, 0.50 to 0.75 in. northwestern and central Connecticut. Temperatures averaged 6 to 10^o above normal north, 3^o above normal south. Frost most areas except southern coast.

Major farm activities: Plowing, spreading manure, preparing machinery for spring planting.

NEW JERSEY: Temperatures averaged above normal north, below normal central, south. Extremes 28^o; 82^o. Rainfall averaged 1.16 in. north, 1.02 in. central, 1.20 in. south. Heaviest 24-hour total 1.70 in. on 24th, 25th. Estimated soil moisture percent field capacity averaged 94% north, 92% central, 91% south. Four inch soil temperatures averaged 56^o north, 55^o central, south.

Some fields continued too wet for preparation, planting. Warmer weather would be beneficial. Harvest of early vegetables, greens increased. Planting continued. Peach bloom well advanced. Apple, blueberry bloom began. Strawberry transplanting continued. Fruit spraying active as conditions permitted. Fall sown grains, hay showing improved growth; some rye grazed.

NEW MEXICO: Temperatures averaged near normal throughout State. Temperatures 16^o northern mountains to 82^o southern desert. Thunder showers over south late week. Amounts meager, totals less than 0.10 in.

Days suitable for fieldwork 6.9. Soil moisture 46% short, 46% adequate, 8% surplus. Hail, wind, freeze damage none. Alfalfa 45% fair, 41% good, 11% excellent, cutting expected to start next 2 weeks. Limited planting cotton underway. Barley 13% fair, 87% good. Wheat jointing heavily, booting, very little heading to date. Pecans 34% poor, 33% good, 33% excellent; assessment of freeze damage continued. Cattle 46% fair, 54% good. Sheep 30% fair, 70% good. Ranges 8% poor, 38% fair, 54% good.

NEW YORK: Week started unseasonably warm, temperatures 15 to 20^o above normal. Seasonable temperatures on 22nd. Light rainfall west late on 23rd, east on 25th. Cooler than normal on 25th.

Days suitable for fieldwork 6.0. Soil moisture adequate. Oat planting 18% complete, 18% 1986, 12% avg. Corn planting started. Barley planting, alfalfa seeding underway. Nitrogen applied to wheat. Onion, sweet corn planting continued. Cherries full bloom. Pastures good.

NORTH CAROLINA: Temperatures average near normal to 4^o above normal across State. Temperature extremes 38^o; 88^o. Precipitation ranged from 0.20 to 4.28 in. across State.

Days suitable for fieldwork 2.9. Soil moisture 45% adequate, 55% surplus. Small grains fair to mostly good. Irish potatoes 30% fair, 70% good. Pasture fair to mostly good. Tobacco plantbeds 7% poor, 25% fair, 68% good. Tobacco plant supplies 14% short, 86% adequate. Flue-cured tobacco 9% planted, 21% 1986, 18% avg. Peanuts 7% planted, 7% 1986, 6% avg. Sorghum 5% planted, 9% 1986, 11% avg. Major farm activities: Planting corn; land preparation; tobacco plantbed care; setting tobacco; tending livestock; transplanting Christmas trees, ornamentals; machinery repair, maintenance; planting truck crops, cotton; spraying peaches, apples; general farm maintenance.

NORTH DAKOTA: Warm, dry, windy. Temperatures 9 to 12^o above normal. Extremes 21^o; 90^o. Precipitation widely scattered, most 0.14 in. west central.

Days suitable for fieldwork 6.9. Topsoil moisture below average 27% short, 73% adequate. Planting well ahead of average, some areas need rain. Percent planted spring wheat 24%, 9% 1986, 13% avg.; durum 7%, 4% 1986, 6% avg.; barley 22%, 7% 1986, 13% avg.; oats 20%, 13% 1986, 13% avg.; sugarbeets 65%, 4% 1986, 10% avg. Calving, lambing neared completion, good condition.

OHIO: Temperatures averaged 2 to 5^o above normal. Average lows in 40s. Average highs mid 60s to low

70s. Extremes mid 30s to 80s. Precipitation 0.10 to 0.50 in. Soil temperatures upper 50s to low 60s.

Days suitable for fieldwork 3.7. Soil moisture 2% short, 68% adequate, 30% surplus. Farm activities: Planting corn, oats, earliest soybeans, potatoes, sugarbeets, miscellaneous vegetables; spreading fertilizer, pesticides. Warm, sunny weather speeded plant growth. Winter wheat average 6 in. high, 8 in. 1986. Potatoes 38% planted, 36% 1986, 20% avg. Tobacco plantbeds 93% sown, 93% 1986. Grasslands good. Fruit good.

OKLAHOMA: Temperatures averaged 1^o below normal southwest to 4^o above normal east central. Precipitation averaged none Panhandle, west central, southeast to 0.50 in. central.

Days suitable for fieldwork 6.0. Topsoil moisture 5% short, 95% adequate. Southern fields showed moisture stress. Wheat 60% fair, 40% good; 95% jointing, 100% 1986, 80% avg.; 10% heading, 90% 1986, 10% avg. Warm temperatures prompted rapid growth except freeze-damaged northwest. Weeds, insects troublesome north. Pastures, livestock good. Cattle marketings average, prices down slightly from preceding week.

OREGON: Week began cool, wet; but turned warm, dry. Average temperatures near to slightly above normal. Precipitation rather light with amounts from 0.10 in. at coastal areas and south western valleys to 0.20 in. in north Cascades, northeast, high plateau areas.

Field crops good to excellent. Soil conditions little drier. Topsoil moisture 32% short, 68% adequate. Winter wheat 6% fair, 33% good, 61% excellent. Irrigation initiated some eastern counties. Barley 94% seeded, 67% 1986. Spring seeded onions emerging, mostly all planted. Snap beans, sweet corn being planted early. Most peas seeded western areas. Asparagus harvest strong with excellent quality. Processing carrots also seeded. Apples started blooming in eastern area, other fruit trees finished blooming. Pollination weather good. Caneberries pre-bloom stage. Cranberry development fair to good. Some frost damage to strawberries but damage does not appear severe at this time. Livestock good to excellent.

PENNSYLVANIA: Warm, beginning of week, near normal precipitation. Average temperature 58^o, 8^o above normal. Temperature extremes 28^o; 87^o. Average precipitation 0.75 in., 0.07 in. below normal.

Days suitable for fieldwork 4.0. Soil moisture 4% short, 73% adequate, 23% surplus. Plowing 59% complete, 61% 1986, 43% avg. Corn 8% planted, 9% 1986, 6% avg. Potatoes 43% planted, 25% 1986, 25% avg. Oats 67% planted, 71% 1986, 49% avg. Tobacco beds 76% planted, 52% 1986, 67% avg. Wheat 2% poor, 19% fair, 53% good, 26% excellent. Oats 2% poor, 20% fair, 51% good, 27% excellent. Hay stands mostly good to fair. Feed from pastures mostly average to above average. Peaches 32% pre-pink, 24% 1986; 21% pink stage, 37% 1986; 47% full bloom or past, 39% 1986. Cherries 35% pre-pink, 21% 1986; 28% pink stage, 25% 1986; 37% full bloom or past, 54% 1986. Apples 45% pre-pink, 64% 1986; 39% pink stage, 30% 1986; 16% full bloom or past, 6% 1986. Activities: Planting corn, potatoes, oats; spring plowing; fence repair; hauling manure; spreading fertilizer; machinery maintenance; caring for livestock.

PUERTO RICO: Island average rainfall 0.11 in., 1.15 in. below normal. Highest weekly total 1.10 in. Highest 24-hour total 0.88 in. Temperatures averaged 81° on coasts, 79° interior divisions. Mean station temperatures ranged from 77 to 84°. Extremes 59°, 94°. San Juan mean temperature 84°, 5° above normal. Total rainfall trace, 0.96 in. below normal.

SOUTH CAROLINA: Temperatures averaged near seasonal normals. Few isolated thunderstorms produced 2.00 in. rainfall, marble size hail several upstate counties. Rainfall light other areas.

Days suitable for fieldwork 5.4. Soil moisture 53% adequate, 47% short. Favorable weather for land preparation, planting. Corn good; 82% planted, 91% 1986, 81% avg. Tobacco fair to good; 49% planted, 79% 1986, 72% avg. Cotton fair to good; 17% planted, 39% 1986, 33% avg. Peanut planting just underway; 11% planted, 21% 1986, 18% avg. Small grains good; heading later than normal. Tomatoes good; starting to bloom. Peach prospects good. Pastures good.

SOUTH DAKOTA: Average temperatures ranged 4 to 110 above normal. Extremes 20°, 92°. Black Hills low 12°. Precipitation light.

Days suitable for fieldwork 5.4. Topsoil moisture adequate, surplus southeast, short west central. Spring seeding underway. Feed, water supplies adequate to surplus. Range, pastures good to excellent. Winter wheat, rye mostly good to excellent, minimal winterkill.

TENNESSEE: Average temperatures above normal except Cumberland Plateau, northeast. Week began record breaking warmth. Midwest temperatures seasonal levels. No significant precipitation west, middle. Above normal rainfall extreme northeast amounts 1.00 to 2.00 in.

Days suitable for fieldwork 4.6. Soil moisture 22% short, 75% adequate, 3% surplus. Corn 35% planted, 60% 1986, 30% avg. Tobacco 90% plants up, 80% 1986. Wheat 80% jointed, 80% 1986. Wheat headed 15%, 25% 1986, 14% avg. Wheat 1% poor, 34% fair, 58% good, 7% excellent. Alfalfa 3% very poor, 13% poor, 52% fair, 30% good, 2% excellent. Cattle mostly good. Pastures 2% poor, 32% fair, 62% good, 4% excellent.

TEXAS: Cold front west early last week, heavy thunderstorms developed Big Bend, western areas, Rio Grande. Upper level low pressure system touched off thunderstorm activity far west to Rio Grande Valley. Showers, thunderstorms south, southwest. Precipitation below normal, except Trans-Pecos. Temperatures below normal. Above normal readings Upper Coast, east, south central.

Crops: Corn planting good progress Plains. Irrigation necessary for emergence. Blacklands, central lack of moisture, cooler temperatures early month slowed progress. Cultivation activities continued. Replanted fields south need moisture for emergence. Grain sorghum planting increased across Plains, Cross-Timbers. Moisture needed to establish stands. Planted fields Blacklands behind normal. Sugarcane aphids increased, spraying underway. Aphids problems central, Upper Coast. Producers cultivating fields. Cotton planting completed Rio Grande Valley, south. Growth improved with warmer weather. Land preparations about complete Plains, planting just began. Some pre-watering underway. Emerging Trans-Pecos. Small grains improved growth last week; tended to hide damage caused by late freeze, additional damage showed up almost daily. Fields moisture stressed many areas. Some irrigation underway Plains. Heading increased moisture needed to fill heads. Fields south central, south turning color. Wheat 1% turning color, 12% 1986, 4% avg. Rice planting good progress. Heavy flushing continued

along Upper Coast. Weeds, grass problem, some spraying. Rice 42% emerged, 73% 1986, 51% avg. Peanut producers geared up planting many areas. Some early fields planted Cross-Timbers. Many producers awaiting good rain to replenish soil moisture. Some pre-watering Plains. Peanuts 4% planted, 3% 1986, 5% avg. Sugarbeet planting progressed rapidly High Plains. Irrigation underway. Some early planted fields emerged. Planting behind normal. Sugarbeets 85% planted, 96% 1986, 90% avg. Other field crops: Soybeans 8% planted, 8% 1986, 2% avg. Sunflowers none planted, 7% 1986, 3% avg.

Commercial Vegetables: Rio Grande Valley, onion harvest peaked, yields good. Cabbage, carrot harvest declined. Melons recovered. Early fields set fruit. Irrigation steady citrus groves. San Antonio-Winter Garden vegetables good progress. Onions later than normal. Replanted cucumbers, watermelons good stands. Trans-Pecos cantaloup progress slowed. Little replanting occurred. Onion growth good. Chili development good. East vegetables grew well, could use some moisture. Additional replanting continued. High Plains high winds continued hurt onion sets. Progress delayed. Some irrigation underway. Peaches varying conditions. Pecan trees continued break buds. Trees Upper Coast pre-pollination stage. Many trees central, south blooming.

Range and Pasture: Growth native pastures, ranges slow because dry weather, except Trans-Pecos. Many producers baling small grains. East producers fertilizing pastures. Spraying weeds some areas. Livestock good; feeding increased because lack forage growth. Market steady.

UTAH: Precipitation very light to 0.33 in. north central. Temperature maximums 5 to 10° above normal. Minimums 20 below to 20 above normal.

Days suitable for fieldwork 6.1. Topsoil moisture 69% short, 31% adequate. Spring wheat 82% seeded, 66% 1986, 48% avg.; 44% emerged, 12% 1986, 10% avg. Barley 82% seeded, 70% 1986, 56% avg.; 43% emerged, 47% 1986, 21% avg. Oats 51% seeded, 55% 1986, 44% avg. Winter wheat height 6 in., alfalfa 4 in. Corn planting began south. Apricots, peaches, sweet cherries excellent. Lambing, calving well along, light death loss. Shearing neared completion. Major farm activities: Irrigation, seeding grains, pesticide application, shearing, calving, branding, weed control.

VIRGINIA: Temperatures above normal, ranged 43 to 86°. Moderate rainfall early period, heavy at end. Major river flooding early, minor late.

Days suitable for fieldwork 1.8. Topsoil moisture 27% adequate, 73% surplus. Corn good; planting delayed; 18% complete, 39% 1986, 35% avg. Soybean, peanut, flue tobacco planting not started. Pasture, hay seeding continued slowly. Some fertilizing, liming. Pastures, small grains, apples, peaches good. Potatoes fair. Hay good; scouting, spraying for insects. Ensiling small grains. Livestock good.

WASHINGTON: Temperatures started cool but warmed end of week. Scattered precipitation southeast.

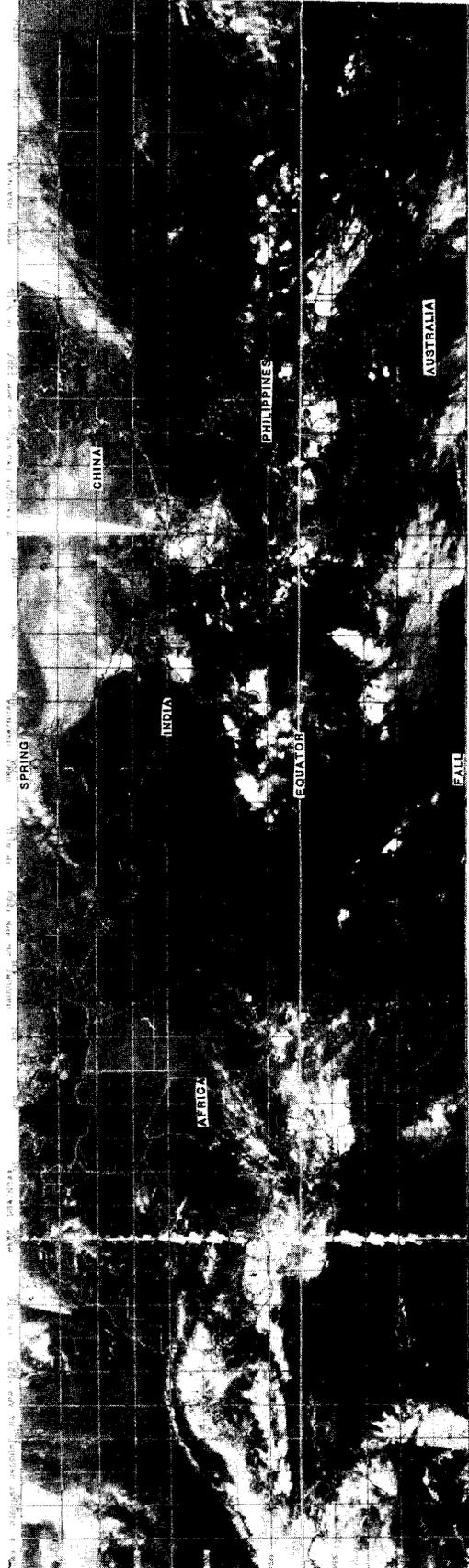
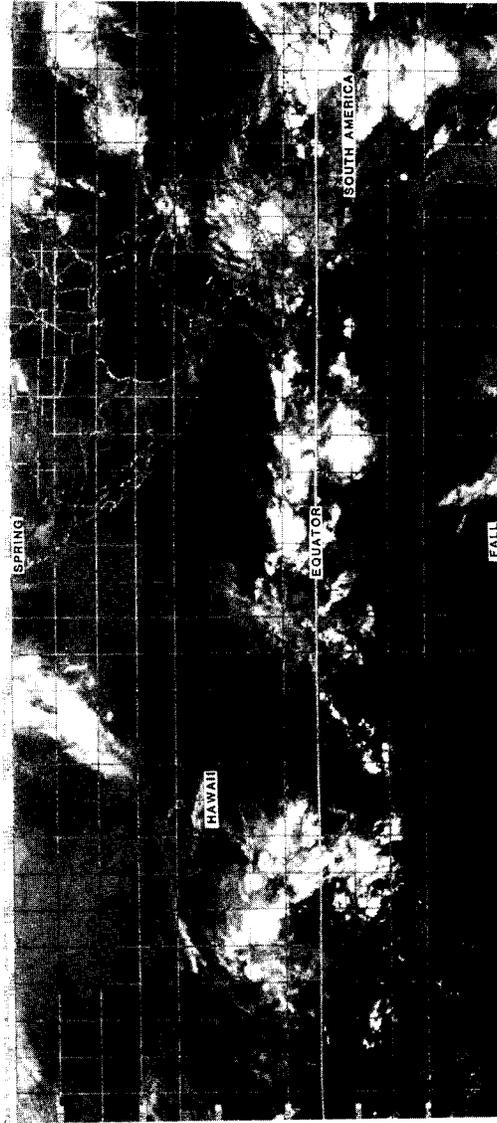
Soil moisture 20% short, 70% adequate, 10% surplus. Winter wheat none headed, none 1986, none avg. Spring wheat planting virtually completed, 85% emerged. Fall grains looking good, spring crops emerging well. Columbia Basin potato planting continued, field corn underway. Apples full bloom. Yakima Valley asparagus harvest active.

WEST VIRGINIA: Average temperature 59°, 40 above normal. Frost several locations 26th. Extremes 31° Greenbank; 92° Creston. Precipitation averaged 1.56 in.; 0.11 in. above normal northeast, southwest; 2.06 in. above normal south.

(Continued to p.23)

GLOBAL WEATHER SATELLITE IMAGE

APRIL 26, 1987



International Weather and Crop Summary

April 19-25, 1987

HIGHLIGHTS:

UNITED STATES ... Wetness hampers seeding and spring plowing in the eastern Corn Belt, while dryness slows planting in the Delta and Southeast. Warm temperatures promote wheat growth, but development lags behind normal in most areas.

WESTERN U.S.S.R. ... Continued unseasonable cold, damp weather causes further delays in fieldwork and winter grain growth.

EUROPE ... Several days of dry weather in the north help fieldwork. Dry weather stresses winter grains in Spain.

SOUTH ASIA ... Favorable harvest weather continues in winter wheat areas of India and Pakistan.

SOUTHEAST ASIA ... Preplanting showers continue in Thailand's rainfed crop areas. Mostly light rain continues in the Philippines.

EASTERN ASIA ... Widespread rain covers most agricultural areas in China.

SOUTH AMERICA ... Dry weather in Argentina and drier conditions in southern Brazil favor summer crop harvesting.

AUSTRALIA ... Dry weather benefits maturing summer grains and cotton in eastern Australia.

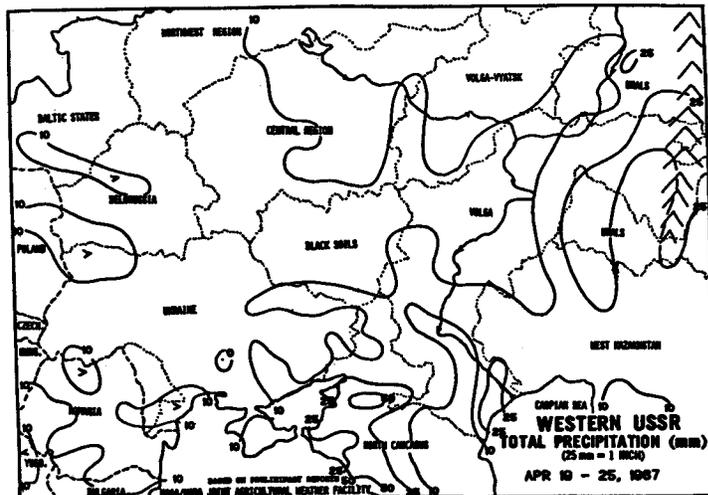
SOUTH AFRICA ... Dry weather in the primary corn regions favors maturing corn and harvest activities.

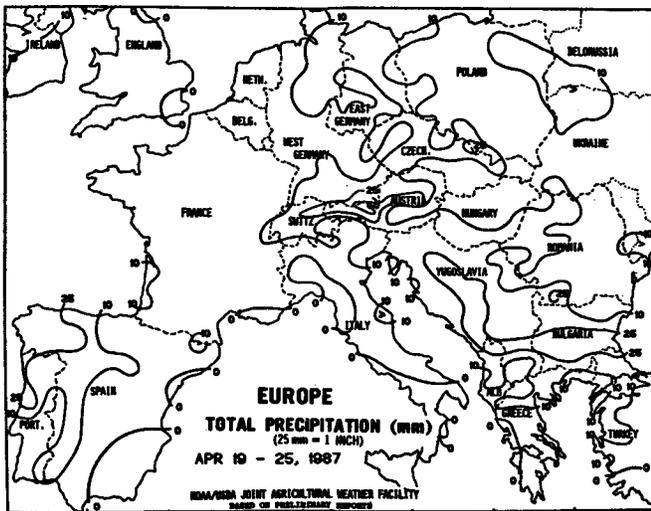
NORTHWESTERN AFRICA ... Unseasonable warm, dry weather covers most crop areas.

Mexico ... Showers favor early crop growth in the east while dry weather promotes wheat harvesting in the northwest.

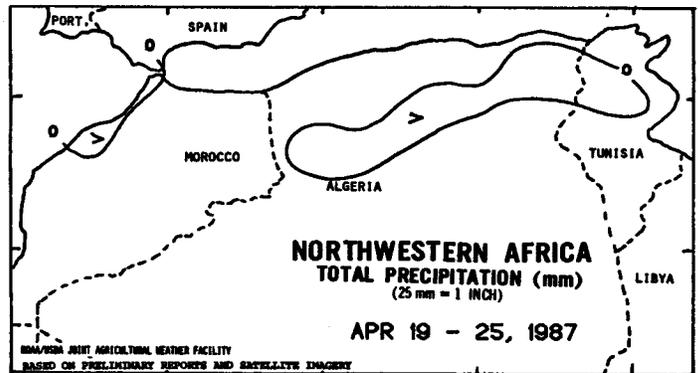
Canada ... Mild weather and light showers cover the Prairie grain belt.

WESTERN U.S.S.R. ... Unseasonable cold weather continued over most crop areas. Light to moderate precipitation (13 to 50mm) continued to cover the Crimea and the North Caucasus, causing further delays in spring planting. Mostly dry weather in the western Ukraine aided spring fieldwork, but continued unseasonable cold weather prevented early planting of summer crops such as corn and sugar beets. Further north, snow covered crop areas in the Black Soils, Central Region, Volga, Volga Vyatsk, and the Urals. Winter grains were in the early vegetative growth stage throughout the western and southern Ukraine and the central North Caucasus. Winter grains over the remainder of the region were dormant. Usually, winter grains have broken dormancy over the entire region by April 25.

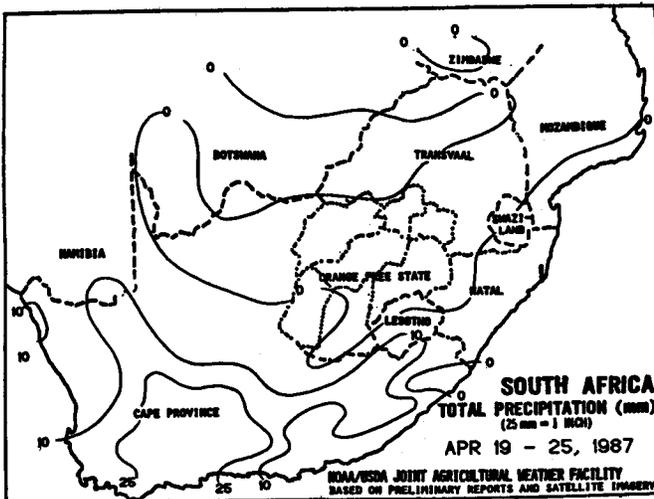




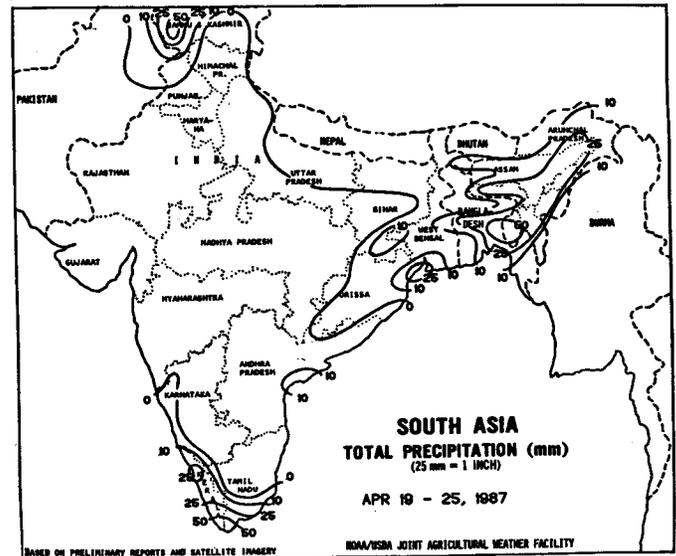
EUROPE ... Several days of dry weather over the northern half of the region aided fieldwork for spring and summer crop planting. Soil moisture over northern Europe was adequate to abundant for wheat in the vegetative stage. In Spain, minimal rain and unseasonable warm weather in the north stressed wheat in the flowering stage. Further south, dry weather stressed wheat in the filling stage. In Italy, dry weather covered vegetative wheat in the Po Valley, where rain is needed to boost low soil moisture. In southeastern Europe, light showers favored vegetative wheat, but unseasonable cool weather prevented drying of soils, limiting fieldwork for summer crop planting.



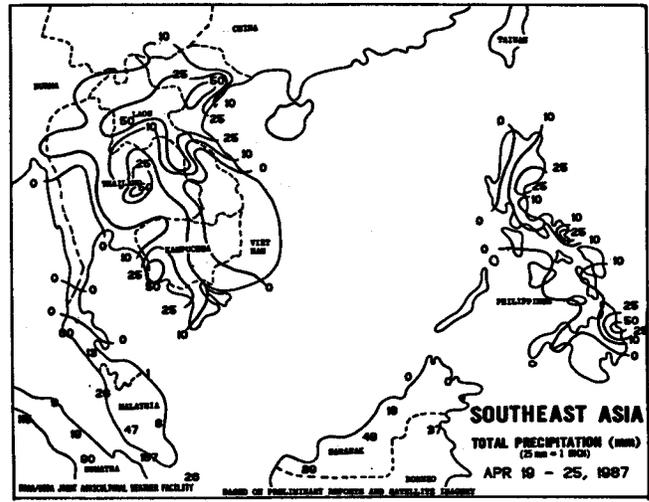
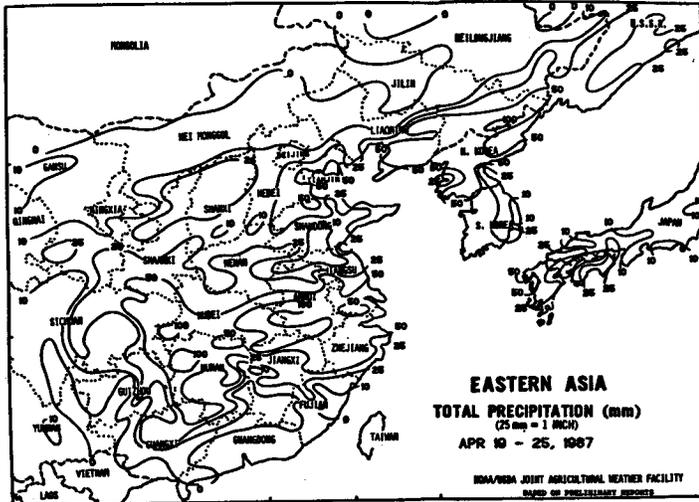
NORTHWESTERN AFRICA ... Unseasonable warm, dry weather covered winter grain areas. Dry weather over Morocco and northwestern Algeria favored crop maturation and helped early harvest. Most winter grains in central Algeria, eastern Algeria, and Tunisia were in the filling stage. Continued dry weather stressed filling wheat in central Algeria. Soil moisture supplies in eastern Algeria and northern Tunisia were likely adequate to meet crop moisture requirements.



SOUTH AFRICA ... Dry weather covered South Africa's primary corn areas, benefiting maturing corn and promoting harvesting. Harvesting usually lasts from April through June throughout South Africa. Beneficial showers (10 to more than 40mm) improved preplanting soil conditions in the winter wheat areas of the southern Cape Province. More rain is needed in the Orange Free State and Transvaal before wheat planting can begin. This is the last weekly summary of the season. Monthly rainfall and temperature analyses will appear on a regular basis.

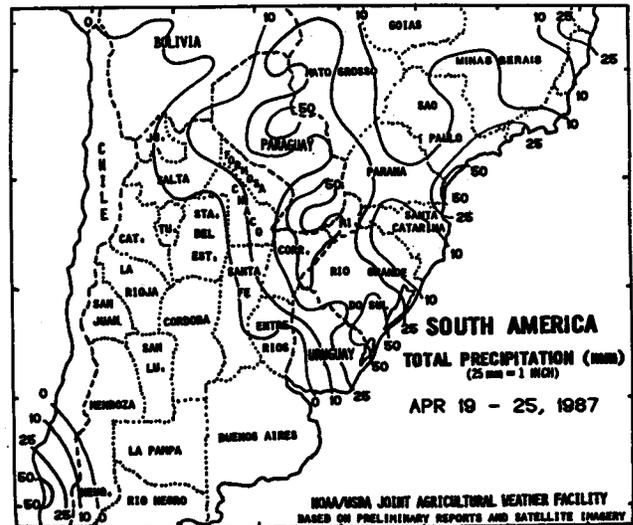
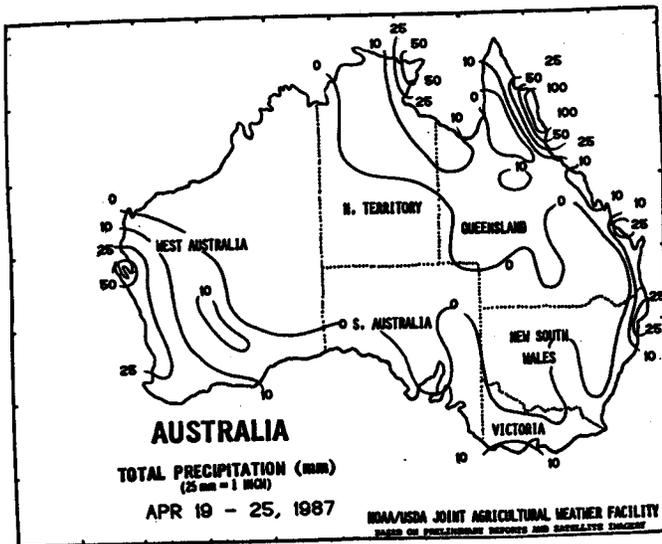


SOUTH ASIA ... Dry, warm weather continued in central India, favoring wheat harvesting. Light rain (less than 7mm) lingered in Pakistan's northern grain areas, but periods of dry weather favored maturing wheat. Light to moderate showers (5 to more than 50mm) continued in India's eastern states and Bangladesh. Showers in southern India were generally confined to west coastal Kerala and Tamil Nadu. Southern India's mostly irrigated summer rice is usually heading to grainfilling.



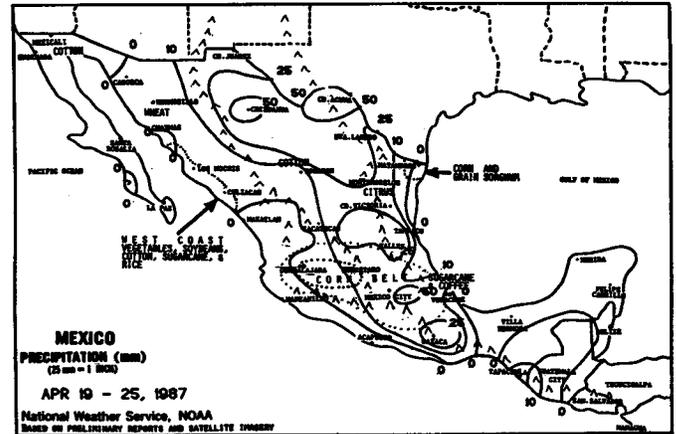
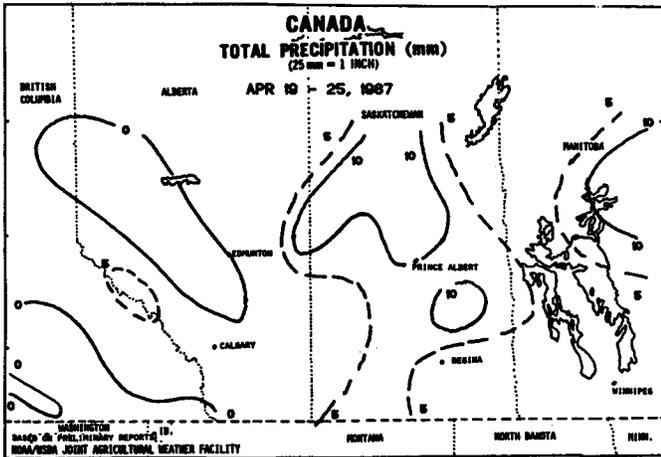
EASTERN ASIA ... Wet weather covered most agricultural areas of China. Moderate to heavy rain (34 to 118mm) in Hubei, southern Henan, Anhui, and Jiangsu favored winter wheat entering the heading stage and increased moisture supplies for intermediate rice planting. Further north, light to moderate rain (13 to 50mm) over Shaanxi, Shanxi, Henan, Hebei, and Shandong benefited wheat approaching the heading stage and increased soil moisture for emergence and early growth of cotton, early corn, and early soybeans. Light to moderate rain in Sichuan benefited filling wheat and early corn in the vegetative stage. Dry weather covered early rice along China's south coast. Irrigation was needed to meet the increasing moisture demands of rice in the heading stage.

SOUTHEAST ASIA ... Beneficial showers (10 to more than 50mm) improved preplanting soil conditions in Thailand's rainfed crop areas. Pockets of light rain (less than 10mm) persisted in the east and northeast. More rain will be needed in these areas in upcoming weeks to promote rice and corn planting in unirrigated areas. Mostly light rain (less than 10mm) covered the Philippines, but heavier rain (10 to more than 50mm) continued in eastern Luzon and eastern Mindanao. Moderate to heavy tropical showers covered Malaysia and western Indonesia, but rainfall was light in eastern Indonesia.



AUSTRALIA ... Dry weather benefited maturing grains and cotton in eastern Australia. Variable showers (15 to more than 100mm) along Queensland's coast benefited vegetative sugarcane. Pockets of minimal rain, however, (less than 6mm) persisted in some southern crop areas, where moisture has been limited throughout the season for normal development. Moderate rain (5 to more than 20mm) in Western Australia promoted preplanting fieldwork in the winter wheat areas. Dry weather continued in the winter grain areas of southeast Australia. Planting usually runs from April to June.

SOUTH AMERICA ... In Brazil, showers and thunderstorms produced 25 to 60mm in southern and western Rio Grande do Sul early in the week. Drier weather late in the week improved harvest conditions following several weeks of substantial rainfall. The wetness has affected the quality of mature soybeans and delayed harvesting, which is behind schedule in the south. In Parana, where 80 to 85 percent of the soybeans have been harvested, weekly rainfall ranged from 9 to 34mm in the crop areas. Similar rainfall covered Mato Grosso do Sul, where harvesting is also in its late stages. In Argentina, dry weather favored crop harvesting throughout the major corn and soybean areas, while mostly light showers (10 to 15mm) slowed cotton harvesting in Chaco and Formosa. Heavier rain (20 to 69mm) fell in the extreme northeast and southern Paraguay. Corn harvesting is over 60 percent complete in Argentina.



CANADA ... Light rain (less than 5mm) covered most grain areas of Manitoba, southeastern and extreme western Saskatchewan, and Alberta. Heavier showers (7 to 15mm) fell over the remainder of Saskatchewan's grain area, providing some beneficial preplanting topsoil moisture. Weekly temperatures generally averaged 7 to 10 degrees C, ranging from 1 to 5 degrees C above normal. Some very early spring planting is underway in the extreme south. The mild spring weather has promoted early fieldwork.

MEXICO ... Substantial showers covered much of eastern Mexico, benefiting early cotton and rangeland growth in north-central areas, and early corn emergence in the eastern half of the Southern Plateau corn belt. Weekly rainfall ranged from 10 to 60mm throughout the region. Mostly dry weather prevailed over the Yucatan peninsula, the extreme northeast, the western half of the Southern Plateau corn belt, the west coast farming region, and the northwest wheat area. The dryness in the northwest favored wheat harvesting.

(Continued from p.18)

Days suitable for fieldwork 4.0. Soil moisture 4% short, 69% adequate, 27% surplus. Oats 55% planted. Corn 1% planted. Pastures fair to good. Feed supplies mostly adequate to short.

WISCONSIN: Temperatures averaged 53°, 4° above normal. Extremes 20°; 89°. Rainfall 0.20 to 2.00 in. Fire hazard northwest, wet southeast.

Days suitable for fieldwork 3.3. Soil moisture 19% short, 48% adequate, 33% surplus. Spring plowing 45% complete, 37% 1986, 24% avg. Corn 3% planted, none 1986, none avg. Oats 56% planted, 42% 1986, 30% avg. Potatoes, peas planting progressed well. Apple trees budding.

WYOMING: Unseasonably warm. Precipitation below normal except Upper Platte Drainage.

Days suitable for fieldwork 6.0. Topsoil moisture 14% short, 86% adequate. Spring wheat 45% planted, 55% 1986, 45% avg.; 15% emerged, 30% 1986, 20% avg. Oats 35% planted, 50% 1986, 35% avg.; 10% emerged, 25% 1986, 10% avg. Barley 70% planted, 65% 1986, 60% avg.; 30% emerged, 40% 1986, 30% avg. Sugarbeets 60% planted, 65% 1986, 65% avg.; 5% emerged, 15% 1986, 10% avg. Corn 5% planted, 10% 1986, 10% avg. Potatoes 10% planted, 20% 1986, 15% avg. Winter wheat mostly good. Alfalfa prospects mostly good. Livestock good. Calves 80% born, 80% 1986, 80% avg. Death loss light to normal. Farm flock: Ewes 85% lambled, 85% 1986, 85% avg.; 85% shorn, 85% 1986, 80% avg. Range flock: Ewes 45% lambled, 50% 1986, 50% avg.; 55% shorn, 45% 1986, 50% avg. Death losses light to normal. Ranges. Pastures fair to good.

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