

WEEKLY WEATHER AND CROP BULLETIN

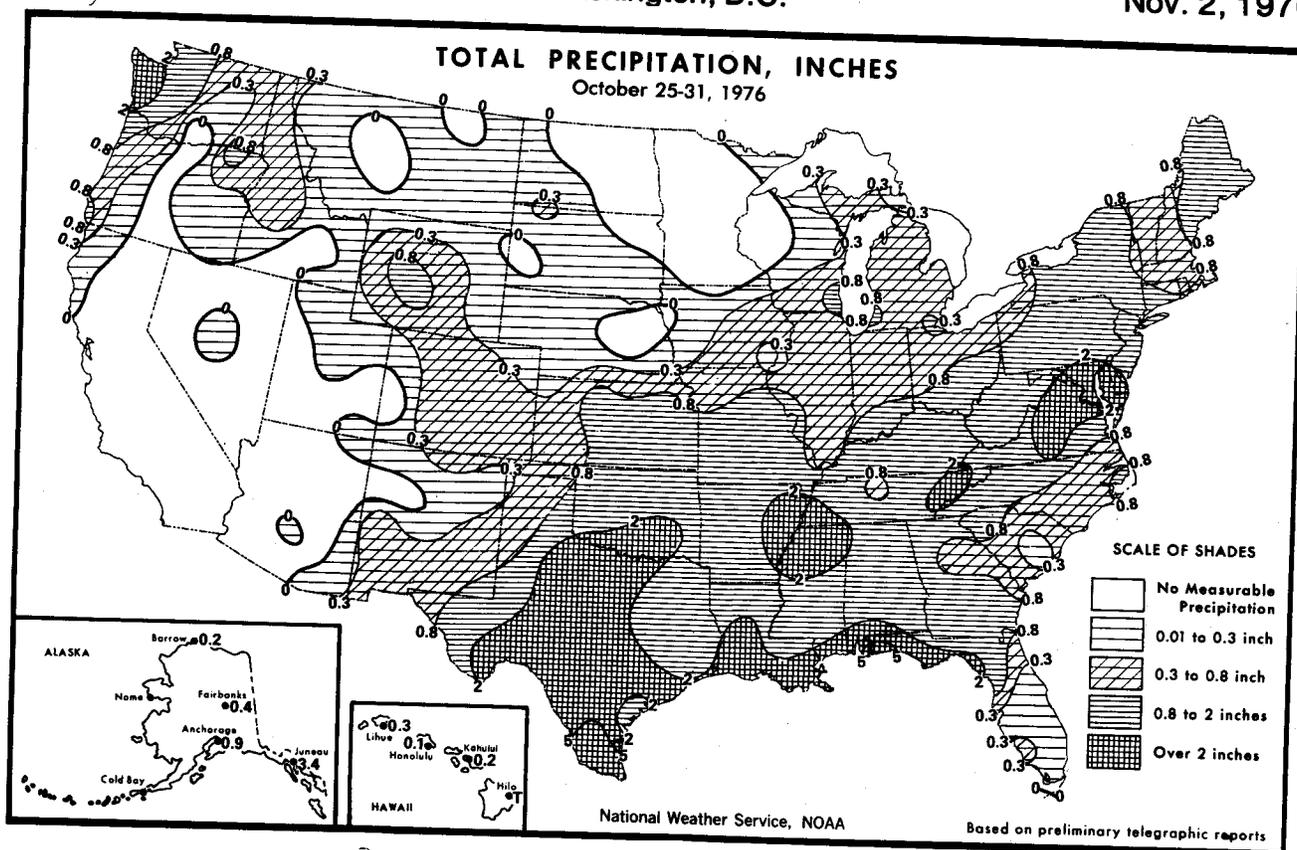
U.S. DEPARTMENT OF COMMERCE
National Weather Service, NOAA

U.S. DEPARTMENT OF AGRICULTURE
Statistical Reporting Service

Volume 63, No. 44

Washington, D.C.

Nov. 2, 1976



National Weather Summary

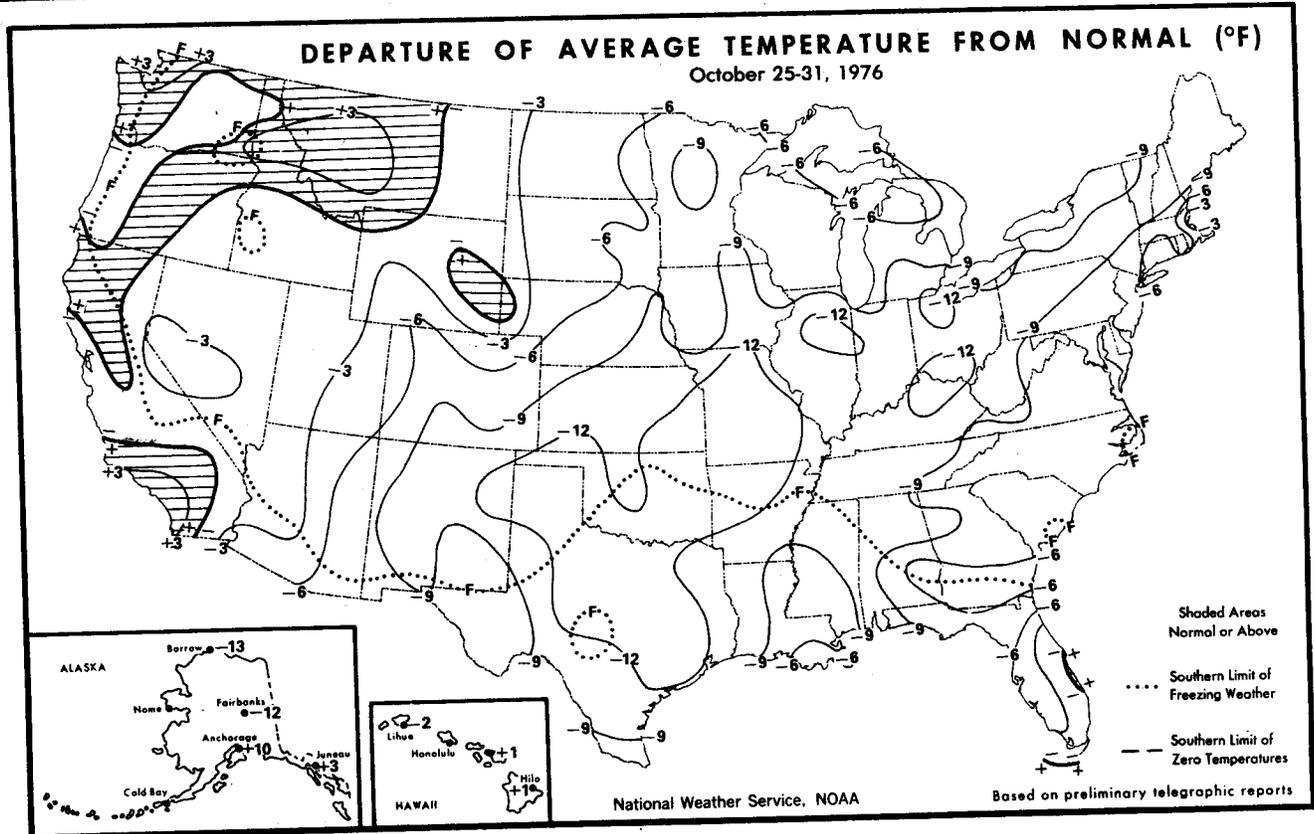
For the Week of October 25-31

HIGHLIGHTS: For the third week in a row temperatures over most of the Nation averaged well below normal. Only the area west of the Continental Divide was near or above normal. The Great Plains, from central Texas through Missouri, was 12 to 14° below normal. Many record low temperatures were set. Amarillo, Tex. had 3.9 inches of snow during the week equalling the record for snow there during the entire month of October. Early in the week, a low pressure center formed on the Gulf of Mexico and remained near stationary for a while as it absorbed enormous amounts of moisture which it later dropped over the U.S. as it moved, slowly at first then rapidly, northeastward. The storm dumped 2.00 to 5.00 inches in Texas and along the Gulf Coast and then lesser amounts as it moved west of the Appalachians and through New England.

As one weather system was moving off the East

Coast on Monday another system moved into the Pacific Northwest. Precipitation fell from the Midsouth through the eastern Great Lakes and New England--in the form of snow in the Lakes area and northern New England. On the other side of the Continent, a major winter storm was brewing in the central Rockies; scattered snow was reported from Wyoming and Montana to the Washington and Oregon Mountains. Rain and showers dampened the Northwest coast. Winter-like temperatures continued to dominate the Plains and upper Mississippi Valley.

The ski buffs were happy Tuesday as heavy snow piled up in the central Rockies. Travelers and stockmen were not as happy later in the day as snow moved into South Dakota, Nebraska and Kansas--mixed with rain in eastern Kansas. Snow also fell in parts of Iowa and the upper Mississippi Valley. Temperatures remained cold through the northern Plains and eastward with afternoon



readings in the 30's. Strong northerly winds buffeted southern California and Arizona. Some rain remained in coastal areas of New England. The East started on another cold wave after only a slight warming from the previous cold weather.

Partly cloudy to cloudy skies prevailed over much of the Nation on Wednesday. However most precipitation was confined to the southern Plains and Rocky Mountains. Rain or snow fell from southern New Mexico through all but eastern Texas. Snow occurred in the New Mexico mountains and in west central Texas. Some of the rain in southern Texas was torrential. Brownsville accumulated over 6.00 inches during the day. Unseasonable cold air set new record low temperatures from the Dakotas to the middle Atlantic States. A record low for so early in the fall was recorded at St. Cloud, Minn. when the mercury dipped to 5°. The very cold air was spreading eastward and southward.

Snow whitened the ground in a large area of southern New Mexico, west central Texas and the Texas Panhandle on Thursday. Rain extended eastward into Oklahoma and through all of Texas into Louisiana. Elsewhere more rain was falling in the Pacific Northwest. The snow at Lubbock, Tex. was the earliest ever recorded at that station. Minimum temperatures Thursday morning again set new records from the upper Mississippi Valley eastward. Detroit, Mich. 22° was the coldest for the date since 1878. Charleston, W.Va. also recorded 22°, a record for the date. The 27° minimum at Baltimore, Md. beat the old record of 31° set in 1961. The cold air continued to move southeastward.

Snow was falling in west Texas Friday morning and the precipitation was spread eastward and northward. A low pressure center in the Gulf of

Mexico was pumping enormous quantities of moisture into the U.S. as it moved northeastward. By the end of the day the precipitation pattern extended from the Texas Panhandle northeastward to southern Wisconsin and eastward to Alabama, Tennessee and Kentucky. Unseasonable cold weather on Friday was reported from Indiana to the middle Atlantic States and south into northern Florida. Some of the record cold temperatures for the date included Indianapolis, Ind. 22°; Richmond, Va. 22°; Augusta, Ga. 26° and Appalachicola, Fla. 41°.

As the storm center moved northeastward on Saturday, the precipitation ended in the Midsouth and in Texas but spread to include most areas east of the Mississippi River. The intensity of the rain lessened somewhat but it was widespread and continuous. The only other area to report rain was the Pacific Northwest coast where light rain presaged the approach of the next weather system. Temperatures remained unseasonable cold over most of the Nation but few records were broken. An exception was Austin, Tex. dropping to a record low for the date of 37°.

The storm center was located in Ohio early Sunday and by the end of the day the now fast moving storm was off Maine coast. The weather was cleared rapidly behind the storm and by the end of the day only showers and a few snow flurries dotted the lower Great Lakes and New England. Elsewhere snow or rain showers fell in the Pacific Northwest. A large high pressure system centered in northern Texas was producing seasonably cool temperatures in the 50's and 60's through the southern Plains, the lower Mississippi Valley, the Ohio Valley and the south. Elsewhere early afternoon temperatures were in the 40's through the Great Lakes, the upper Mississippi Valley, the northern Plains and the northern Plateau.

National Agricultural Summary

For the Week of October 25-31

HIGHLIGHTS: Harvests of corn, soybeans and sorghum advanced rapidly in most of the North Central States but rain saturated fields and slowed progress from Texas northeast through Pennsylvania and New York. Nationwide, at the end of October, 73% of the soybeans and 77% of the corn was harvested. Winter wheat seeding reached 93% complete, nearly equal recent years. Rains helped germination and emergence of dryland stands in the southern Great Plains. Farmers in several western North Central States need rain to aid fall plowing.

SMALL GRAINS: Rains over most of the southern Great Plains helped dryland winter wheat stands in Texas, Kansas and Oklahoma. The moisture also promoted growth of winter wheat for pastures. By the end of October seeding of the 1977 winter wheat crop advanced to 93% compared with 94% last year and the 95% average.

Rains in Texas eased dry conditions but also delayed planting. Rains greatly benefitted dryland fields on the Texas High Plains. Producers have turned cattle onto early seeded fields. Farmers need dry weather to finish planting. Texas growers have seeded only 84% of their crop, trailing last year and normal. Oklahoma growers finished seeding the 1977 crop; 75% of the acreage has emerged compared with 50% last year and 82% average. Good moisture should help the Kansas wheat crop. Planting in Kansas stood at 95%, the same as last year and the average.

CORN: Harvest advanced rapidly throughout most of the Corn Belt aided by low precipitation. Harvest of the United States corn crop advanced 14 points from the previous week to 77% finished by October 31, trailing last year's unusually fast pace by only 2 points but surpassing the average by over 20 points. In the eastern North Central States combining reached 63% complete, lagging 70% last year but ahead of the 53% average. The recent fast harvest pace strained transportation and storage facilities in some States. In the western North Central States where dry clear weather speeded maturity and drying of the corn crop, harvest advanced to 89% complete, surpassing both 86% in 1975 and 52% average. Harvest was complete in the Dakotas and in the final stages in Iowa and Minnesota. Normally the Iowa harvest is only about half complete.

Harvest in the South Atlantic States reached 80% complete and in the South Central States 75%, both figures nearly equal the rate last year.

COTTON: Cotton harvesting made good progress in spite of some rainy weather through some of the major cotton States. Picking in the 11 major Southern States was 33% complete, ahead of the 32% last year at this time but trailing the 36% average.

Cotton harvest lagged in Texas where precipitation halted fieldwork. Texas growers had picked only 19% of the crop, behind 1975's 29% and the 25% average. Freezing temperatures defoliated most of the crop and stripping should begin when conditions permit. In Oklahoma, frost killed most of the cotton plants and stripping will begin when bolls dry. Only 4% of the Oklahoma crop was picked compared with 1% in 1975 and 9% average. In Arkansas frost popped open some green bolls. Harvest reached 52% complete, trailing 1975's

59% but ahead of the 49% average. In the west, cotton harvest advanced in Arizona, New Mexico and California.

SOYBEANS: Soybean combining in the United States advanced to 73% complete, surpassing 69% last year and the 65% average.

In the eastern North Central States harvest was 95% finished, slightly behind last year but surpassing the average. Combining was virtually complete in Illinois and Ohio, Indiana and Wisconsin reached 90% complete. In the western North Central States harvest reached 92% compared with 84% in 1975 and 82% average. Harvest was complete in Minnesota, Iowa and the Dakotas. Harvest in the South Central States at 48% complete kept pace with last year but surpassed the average.

OTHER CROPS: Sorghum grain harvesting in the six major States advanced to 85% complete by the end of October. This rate trailed the fast pace set last year but exceeded the average pace by 16 points. In Texas rains stopped harvest about midweek. In Oklahoma most late frost-damaged sorghum can be salvaged.

Rice harvest was almost complete in the Delta and California. Rains delayed the second cutting of the Texas rice crop and cool temperatures slowed crop development. Arkansas growers reached 95% complete, disked harvested fields and knocked down levees.

Peanut digging advanced to 75% complete in Virginia, 89% in North Carolina, 70% in Oklahoma and 64% in Texas. Several of the peanut producing States received rains which slowed harvest operations. In Texas unharvested nuts began rotting.

FRUITS AND NUTS: Apple harvest was almost complete in the United States with the exception of some picking in the Northwest and the Appalachian production areas. Florida citrus growers irrigated groves. Cool weather helped produce a good early fruit color. Orange and grapefruit harvests were active. Heavy rains in Texas halted the citrus harvest. In California citrus growers picked lemons and mandarins.

VEGETABLES: Vegetable supplies increased from Florida although cooler temperatures slowed plant growth. Shipments of various vegetables including sweet corn, celery, cucumbers and tomatoes increased 47% from the previous week. In Texas heavy rains in southern areas curtailed vegetable harvest. In northern areas of Texas frost killed warm season vegetables and early snows stopped harvests of hardier crops including carrots and cabbage. California asparagus cutting just began. Vegetable harvests from the desert valley approached full stride. Elsewhere in California vegetable harvests declined.

PASTURE AND LIVESTOCK: Subnormal temperatures slowed grass growth notably in the northern areas and higher elevations. Pastures were in poor condition in the western North Central States. Elsewhere pastures ranked fair to good. In the northern Great Plains farmers fed crop stubble to stretch valuable forage supplies. Cattlemen have moved most of their herds from summer ranges.

Temperature and Precipitation Data for the Week Ending Midnight, L.s.t., October 31, 1976

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
ALA. Birmingham . . .	50	-9	1.2	+ .6	La. Baton Rouge . . .	57	-7	1.8	+1.2	Youngstown . . .	38	-10	.6	- .1
Mobile . . .	56	-9	2.6	+2.2	Lake Charles . . .	56	-10	2.9	+2.1	OKLA. Okla. City . . .	47	-10	1.3	+ .8
Montgomery . . .	55	-6	1.1	+ .6	New Orleans . . .	60	-6	3.0	+2.5	Tulsa . . .	46	-12	1.0	+ .4
ALASKA Anchorage . . .	39	+10	.9	+ .6	Shreveport . . .	53	-10	1.3	+ .6	OREG. Astoria . . .	50	0	1.6	- .3
Barrow . . .	-4	-13	.2	+ .1	MAINE Caribou . . .	30	-10	1.1	+ .3	Burns . . .	43	0	1.1	- .2
Fairbanks . . .	4	-12	.4	+ .3	Portland . . .	36	-9	1.1	+ .2	Medford . . .	48	-1	1.1	- .5
Juneau . . .	41	+3	3.4	+1.7	MD. Baltimore . . .	46	-7	2.8	+2.1	Pendleton . . .	49	+1	.3	0
Kodiak . . .	---	---	---	---	MASS. Boston . . .	50	-2	.4	- .4	Portland . . .	51	+1	.6	- .4
Nome . . .	---	---	---	---	Chatham . . .	46	---	1.5	---	Salem . . .	48	-2	.7	- .5
ARIZ. Flagstaff . . .	40	-3	T	- .3	MICH. Alpena . . .	38	-5	.7	+ .3	PA. Allentown . . .	43	-7	1.5	+ .8
Phoenix . . .	66	-1	.1	0	Detroit . . .	38	-10	.4	- .2	Erie . . .	40	-7	.7	- .1
Tucson . . .	59	-6	T	- .1	Flint . . .	39	-8	.7	+ .1	Harrisburg . . .	44	-7	1.5	+ .9
Winslow . . .	45	-7	T	- .1	Grand Rapids . . .	38	-9	.7	+ .1	Philadelphia . . .	45	-8	1.4	+ .8
Yuma . . .	67	-4	0	- .1	Houghton Lake . . .	37	-6	.4	- .2	Pittsburgh . . .	38	-11	.9	+ .3
ARK. Fort Smith . . .	46	-12	.9	+ .1	Lansing . . .	37	-10	.6	+ .1	Scranton . . .	40	-8	1.0	+ .4
Little Rock . . .	46	-12	1.6	+ .9	Marquette . . .	39	-5	.6	0	R. I. Providence . . .	42	-8	.8	- .1
CALIF. Bakersfield . . .	63	0	0	0	Muskegon . . .	40	-7	.5	- .1	S. C. Charleston . . .	55	-7	.3	- .2
Eureka . . .	54	+1	.1	- .9	S. Ste. Marie . . .	36	-6	T	- .7	Columbia . . .	52	-8	.3	- .2
Fresno . . .	58	-2	0	- .2	MINN. Duluth . . .	32	-8	T	- .5	Greenville . . .	49	-8	1.2	+ .5
Los Angeles . . .	70	+4	0	- .2	Internat Falls . . .	30	-7	T	- .3	S. D. Aberdeen . . .	38	-4	T	- .2
Red Bluff . . .	61	+1	0	- .4	Minneapolis . . .	38	-6	T	- .4	Huron . . .	36	-8	.2	- .1
San Diego . . .	68	+4	0	- .2	Rochester . . .	35	-9	T	- .3	Rapid City . . .	42	-3	T	- .1
San Francisco . . .	58	-1	T	- .3	St. Cloud . . .	33	-9	T	- .3	Sioux Falls . . .	38	-6	1.1	- .1
Stockton . . .	61	+2	0	- .2	MISS. Jackson . . .	53	-8	1.0	+ .4	TENN. Chattanooga . . .	48	-8	1.8	+1.1
COLO. Denver . . .	41	-6	.7	+ .5	Meridian . . .	51	-9	.9	+ .4	Knoxville . . .	47	-9	2.2	+1.5
Grand Junction . . .	44	-5	0	- .2	MO. Columbia . . .	41	-12	1.1	+ .5	Memphis . . .	47	-11	2.3	+1.6
Pueblo . . .	41	-8	.7	+ .5	Kansas City . . .	40	-13	.6	0	Nashville . . .	46	-10	.8	+ .3
CONN. Bridgeport . . .	47	-6	1.1	+ .4	St. Louis . . .	42	-12	.8	+ .2	TEX. Abilene . . .	47	-14	3.4	+2.9
Hartford . . .	43	-5	.8	0	Springfield . . .	42	-12	.9	+ .2	Amarillo . . .	40	-14	.5	+ .2
D. C. Washington . . .	48	-7	3.0	+2.4	MONT. Billings . . .	45	+1	1.1	0	Austin . . .	53	-13	2.1	+1.5
FLA. Apalachicola . . .	59	-8	2.2	+1.8	Glasgow . . .	39	+4	0	- .1	Beaumont . . .	55	-11	2.0	+1.2
Daytona Beach . . .	68	-2	.2	- .7	Great Falls . . .	43	+2	T	- .1	Brownsville . . .	67	-6	7.1	+6.6
Ft. Myers . . .	70	-4	.3	- .3	Havre . . .	43	+3	0	- .1	Corpus Christi . . .	60	-10	1.8	+1.4
Jacksonville . . .	60	-7	.4	- .3	Helena . . .	43	+3	0	- .1	Dallas . . .	---	---	---	---
Key West . . .	78	0	T	-1.0	Kalispell . . .	38	0	1.1	- .2	Del Rio . . .	57	-10	2.2	+1.9
Lakeland . . .	67	-4	T	- .4	Miles City . . .	41	-2	1.1	0	El Paso . . .	50	-9	.5	+ .4
Miami . . .	74	-2	1.1	-1.3	Missoula . . .	42	+3	T	- .2	Fort Worth . . .	51	-12	1.6	+1.1
Orlando . . .	71	0	T	- .6	NEBR. Grand Island . . .	40	-8	T	- .1	Galveston . . .	58	-11	2.1	+1.6
Tallahassee . . .	59	-6	1.4	+ .9	Lincoln . . .	40	-9	T	- .3	Houston . . .	54	-13	1.1	+ .2
Tampa . . .	67	-5	.2	- .2	Norfolk . . .	39	-8	T	- .2	Lubbock . . .	45	-11	1.0	+ .7
W. Palm Beach . . .	75	0	.2	-1.3	N. Platte . . .	37	-8	T	- .1	Midland . . .	52	-9	1.3	+1.1
GA. Atlanta . . .	48	-10	.8	+ .2	Omaha . . .	42	-7	.2	- .1	San Angelo . . .	51	-12	3.5	+3.2
Augusta . . .	53	-7	.6	+ .2	Valentine . . .	39	-5	1.1	- .1	San Antonio . . .	55	-11	2.4	+1.9
Macon . . .	54	-7	.7	+ .2	NEV. Ely . . .	39	-2	T	- .1	Victoria . . .	56	-12	1.4	+ .7
Savannah . . .	57	-6	.4	0	Las Vegas . . .	60	-1	0	- .1	Waco . . .	51	-14	1.5	+1.0
HAWAII. Hilo . . .	76	+1	1.6	-1.2	Reno . . .	43	-3	0	- .1	Wichita Falls . . .	48	-13	2.5	+2.0
Honolulu . . .	79	+1	T	- .5	Winneucca . . .	43	-1	T	- .2	UTAH. Blanding . . .	41	-5	0	- .3
Kahului . . .	77	0	.1	- .3	N. H. Concord . . .	36	-9	.7	0	Salt Lake City . . .	45	-2	T	- .3
Lihue . . .	78	+1	.2	- .9	N. J. Atlantic City . . .	46	-7	1.3	+ .4	VT. Burlington . . .	37	-8	.6	0
IDAHO. Boise . . .	45	-2	.3	+ .1	Trenton . . .	46	-7	1.1	+ .5	VA. Lynchburg . . .	46	-8	2.7	+2.1
Lewiston . . .	50	+3	.6	+ .3	N. MEX. Albuquerque . . .	43	-10	T	- .1	Norfolk . . .	51	-7	.7	+ .1
Pocatello . . .	42	-1	T	- .2	Roswell . . .	48	-7	.7	+ .1	Richmond . . .	48	-7	1.4	+ .7
ILL. Cairo . . .	48	-9	.7	0	N. Y. Albany . . .	38	-9	.7	+ .1	Roanoke . . .	44	-9	1.8	+1.1
Chicago . . .	41	-9	.7	+ .1	Binghamton . . .	36	-10	1.8	+ .3	WASH. Colville . . .	41	0	.2	- .2
Moline . . .	40	-9	.3	- .2	Buffalo . . .	38	-9	.8	0	Omak . . .	40	-1	.3	0
Peoria . . .	38	-12	.7	+ .2	New York . . .	48	-6	1.0	+ .3	Quillayute . . .	49	+1	2.9	- .1
Rockford . . .	38	-9	.4	- .2	Rochester . . .	41	-7	.8	+ .2	Seattle-Tacoma . . .	52	+3	1.6	+ .5
Springfield . . .	41	-10	.6	0	Syracuse . . .	39	-9	1.0	+ .2	Spokane . . .	41	-2	.4	0
IND. Evansville . . .	43	-10	1.0	+ .4	N. C. Asheville . . .	45	-8	1.3	+ .6	Walla Walla . . .	49	0	1.1	+ .7
Ft. Wayne . . .	39	-10	.3	- .4	Charlotte . . .	49	-8	.5	- .1	Yakima . . .	44	-1	T	- .2
Indianapolis . . .	39	-11	.7	+ .1	Greensboro . . .	47	-8	1.2	+ .6	W. Va. Beckley . . .	39	-10	1.3	+ .7
South Bend . . .	40	-8	.8	+ .1	Hatteras . . .	55	-7	1.4	+ .3	Charleston . . .	41	-11	1.4	+ .8
IOWA. Burlington . . .	41	-9	.2	- .3	Raleigh . . .	49	-7	.7	+ .1	Huntington . . .	42	-11	1.8	+1.3
Des Moines . . .	41	-8	.3	- .1	Wilmington . . .	54	-7	.4	- .2	Parkersburg . . .	41	-11	1.4	+ .9
Dubuque . . .	38	-8	.6	0	N. DAK. Bismarck . . .	37	-4	T	- .1	WIS. Green Bay . . .	37	-7	.2	- .2
Sioux City . . .	38	-9	T	- .3	Fargo . . .	34	-7	T	- .2	La Crosse . . .	39	-7	0	- .4
KANS. Concordia . . .	41	-10	.5	+ .2	Williston . . .	37	-3	.2	+ .1	Madison . . .	38	-7	.6	+ .2
Dodge City . . .	40	-12	.6	+ .3	OHIO. Akron-Canton . . .	38	-11	.6	0	Milwaukee . . .	38	-8	1.1	+ .7
Goodland . . .	38	-9	.3	+ .1	Cincinnati . . .	39	-13	1.0	+ .5	WYO. Casper . . .	42	0	.4	+ .2
Topeka . . .	41	-11	1.4	+ .9	Cleveland . . .	40	-9	.7	+ .1	Cheyenne . . .	40	-3	1.1	- .1
Wichita . . .	42	-12	1.4	+1.0	Columbus . . .	38	-11	.9	+ .4	Lander . . .	37	-4	1.1	+ .8
KY. Lexington . . .	41	-12	1.1	+ .5	Dayton . . .	39	-11	.7	+ .2	Sheridan . . .	40	-2	T	- .2
Louisville . . .	44	-9	1.2	+ .6	Toledo . . .	36	-12	.2	- .4	P. R. San Juan . . .	80	+1	4.3	+3.0

Based on 1941-70 Normals

Publication of the Weekly Weather and Crop Bulletin began in 1872 as the Weekly Weather Chronicle. It is now issued under general authority of the Act of January 12, 1895 (44 USC 213), 53 Cong., 3d Session. Contents of the Bulletin may be reprinted freely, with proper credit.

Standard copy for the Bulletin is prepared by R. E. Felch, L. M. Denny, O. W. Byrd

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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, NOAA.

ALABAMA: Temperatures averaged 7° below normal with low of 24°. Rains on 26th and 30th, amounts ranged from 0.50 to 2.50 in.

Fieldwork: 4.4 days suitable. Soil moisture mostly adequate. Major activities: Harvesting cotton, soybeans and corn and seeding small grains. Cotton harvest 22% complete, 21% 1975, 46% average. Corn harvest 78% complete, 66% 1975 and 67% average. Soybean harvest 43% complete, 34% 1975 and 43% average. Seeding small grains 63% complete, 61% 1975 and 68% average. Sweetpotato harvest at peak. Pecans poor condition. Pasture adequate.

ARIZONA: Showers eastern half mostly less than 0.25 in. Totals 0.50 to 0.75 in. White Mountains, along New Mexico border. Cool weather midweek, normal by 31st. Temperatures 1 to 9° below normal.

Cotton picking accelerating. Harvest grain sorghum gaining momentum. Corn harvested, good yields. Sugarbeet harvest active. Land preparation, planting small grains full swing. Planting, renovation alfalfa hay underway. Cabbage, broccoli and cantaloups progressing satisfactorily. Small amounts lettuce harvested. Lemon harvest continuing. Oranges sizing normally. Ranges at higher elevations dormant. Desert ranges dry. Fall calving, lambing continues. Livestock movement to winter pastures active.

ARKANSAS: Unusually cold and wet. Means ranged from 52 to 44°. Extremes: 67 and 25°. Rainfall ranged 5.26 in. to 0.75 in.

Soybeans 37% harvested, 50% year ago, average 39%. Cloudy, damp weather delayed harvest. Cotton harvest 52% complete, 59% last year, average 49%. Frost caused some green bolls to pop open. Open bolls 88% of acreage, same as last year. Rice harvest 95% complete, 99% last year, average 96%. Harvested fields disked and levees knocked down. Sorghum harvest 97% complete, 93% year ago, average 92%. Wheat planting 55% complete, 66% last year, average 61%. Oat planting 67% complete. Good stands. Hay harvest virtually complete. Pastures short except southern third.

CALIFORNIA: Precipitation in extreme northern sections 0.10 in., Los Angeles almost 0.25 in. Temperatures slightly above normal along the south coast and near to slightly below elsewhere. Greatest variations in southeast interior and Cascade-Sierra areas where departures were 5 to 7° below normal.

Harvesting all crops continues. Rice harvest nearing completion. Sugarbeet tonnage above average, but sugar content low. Cotton harvest going strong, some second picking. Pruning continues central valley. Harvest new crop avocados, lemons, mandarins underway. Most vegetable harvest coming to close. Desert valley harvests started approaching full stride. Melons continue at peak harvest. Asparagus harvesting just beginning. Livestock range grass suffering, lack of rain. Supplemental feeding continues. Lambing begun, calving continues.

COLORADO: Snow over east 26th, 27th ranging from 3 to 6 in. over eastern plains, from 6 to 24 in. mountains near and east Divide. Clear and cool late week. Temperatures 7° below normal.

Winter wheat emergence 94%, 79% 1975, 88%

average. Grain sorghum harvested 43%, 61% 1975, 39% average; ripe 91%. Forage harvested 86%, 97% 1975. Corn for grain harvested 43%, 69% 1975, 47% average. Sugarbeet harvested 70%, 86% 1975, 77% average. Fall potato harvest complete. Alfalfa fourth cutting 96%. Topsoil moisture adequate, subsoil short. Ranges and pastures fair, livestock good.

FLORIDA: Relatively cold north, cool central, south. Temperatures below normal 5 to 7° extreme north, 3 to 4° central, south. Moderate rainfall north 0.50 to 1.00 in., relatively light remainder Peninsula averaging 0.25 in. or less.

Soil moisture mostly adequate south, west; short central, northeast. Soybean, cotton harvest active. Gathering pecans active. Some hay still being made. Planting small grains continues. Sugarcane harvest underway. Pastures mostly fair to good. Cooler weather, less frequent showers reduced grass growth some areas. Ranchers continue seeding small grain for winter grazing. Cattle, calves, good condition. Rain needed citrus growing areas. Irrigation being applied. Cool weather contributing to good early fruit color. Orange and grapefruit harvest active. Vegetable supplies increasing. Most crops now harvesting. Cooler temperatures slowing plant growth, increasing fruit set. Sweet corn shipments declined somewhat, still active. Good quality celery harvesting, central area. Good cucumber supplies available. Tomato shipments light, increasing. Most other crops showed some increase. Overall shipments increased 47% over previous week.

GEORGIA: Temperatures 6 to 8° below normal ranging from upper 40's mountains to near 60° south. Rainfall 1.25 in. extreme northwest and extreme southeast to near 0.50 in. elsewhere. Rainfall over weekend near 0.50 in. north and central to less than 0.25 in. extreme south.

Soil moisture adequate north half, adequate to surplus south. Fieldwork: 4 days suitable. Wet fields slowed harvest. Cotton condition fair to good, 85% open, 29% harvested, last year 35%, average 55%. Soybeans fair to good 11% combined, last year 26%, average 30%. Corn fair to mostly good, 79% harvested, 71% last year, average 69%. Pecans mostly fair to good, 14% picked, last year 21%. Apples 99% harvested. Pastures fair to good. Cattle fair to mostly good. Hogs good. Wheat 38% planted, same as year ago. Rye 60% planted, last year 64%. Other small grains 59% planted.

HAWAII: Weather favorable. Some light showers higher elevation but most areas dry.

Irrigation and spraying continue frequent. Supplies of leafy crops light others adequate. Papaya supplies moderate to heavy. Pineapple harvesting light. Sugar harvesting slowing. Pasture moisture adequate east other areas dry.

IDAHO: Temperature extremes: 68 and 12°. Precipitation 0.79 in. to trace.

Harvest virtually complete. Sugarbeets 65%, potatoes 100%. Winter wheat 100% planted, 75% emerged. Winter barley 100% planted, 70% emerged.

ILLINOIS: Temperatures 9 to 12° below normal.

Cool sixth straight week. Precipitation 0.33 in. west, 1.00 in. southeast; some snow Lake Michigan 27th.

Corn 68% harvested, 81% 1975, 59% average; long lines at elevators; storage space becoming scarce. Grain sorghum 70% harvested. 1977 winter wheat 94% seeded, 97% 1975, 94% average. 1977 corn and soybean acreage 35% plowed, 38% 1975, 31% average. Pastures fair; supplying 50% live-stock roughage requirements, 60% 1975, 73% average. Soil moisture 58% short, 40% adequate, 2% surplus; first surplus moisture since early August. Fieldwork: 5.0 days suitable.

INDIANA: Cold temperatures 11° below normal and ranged from 16 to 58°. Rainfall: 1.00 to 1.30 in. south, 0.50 to 0.80 in. central, 0.30 to 0.50 in. north. Sunshine 45% of possible. Soil temperatures 5° below normal.

Fieldwork: 4 days suitable. Topsoil moisture adequate. Subsoil moisture short to mostly adequate. Corn 55% harvested, 1975 60%, average 45%. Soybeans 90% combined, 1975 90%, average 70%. Wheat 90% seeded, 1975 90%. Wheat 60% emerged. Land for 1977 seeded crops 20% plowed, month ahead of 1975. Apples 95% picked, 1975 90% picked. Pastures declined, poor to fair.

IOWA: Cold fourth consecutive week. Light rain 29th to 30th.

Cool temperatures provided excellent harvest conditions. Light snow and rain provided some relief from dry conditions. Fall plowing slow, 30% complete. Harvest moving rapidly, soybeans virtually complete, corn nearing completion. Fieldwork: 6 days suitable. Corn yields varying, grain storage tight off farm. Corn harvest 95%, 85% 1975, 51% average. Grain sorghum harvest 92% complete. Topsoil and subsoil moisture short. Pasture and hay regrowth slow, livestock good condition, supplemental feeding in all areas.

KANSAS: Beneficial moisture with amounts ranging from 0.50 to 1.50 in. Heavy snow of 4 to 9 in. fell in 100 mile wide band from Quinter to Ness City to Great Bend 26th. Unseasonably cool temperatures ranged from 38° in west to from 40 to 43° in central and east; 9 to 12° below normal.

Good moisture should aid 1977 wheat crop. Wheat 95% planted, same as last year and average. Row crop harvest slowed by moisture. Sorghum 75% harvested, same as last year, 50% average. Soybeans 75% harvested, 70% last year, 60% average. Corn 70% harvested, 85% last year, 55% average. About a week more of sugarbeet harvest remains.

KENTUCKY: Growing season ended with temperatures dropping to 15 to 25°. Temperatures averaged 40 to 45°, 5 to 10° below normal. Rainfall 1.00 to 1.75 in.

Fieldwork: 3.5 days favorable. Farmers harvesting corn and soybeans, seeding wheat and fall plowing. Burley tobacco 20% stripped, 13% last year and 15% average. Corn harvest slowed by rains, now 65% finished, 66% last year and 67% average. Soybean combining likewise delayed, 49% completed, 56% year ago and average 57%. Heavy loss late soybeans due killing freezes. Moisture in grains declining sharply. Long back-ups at elevators delaying farmer grain deliveries as much as 24 hours. Fall wheat seeding 56% completed, considerably behind last year's 72% and normal 74%. Pastures going into winter in fair to good shape. Winter hay supply considered adequate on 75% of farms.

LOUISIANA: Temperatures 4° to 8° below normal. Extremes: 79 and 34°. Rain 29th to 30th averaging 1.00 in. north to 3.00 in. south.

Soil moisture short. Fieldwork: 5.1 days suitable. Cotton harvested 69%, 25% last year, 41% average. Soybeans harvested 78%, 63% year ago, 56% average. Sugarcane good, scattered lodging; 17% harvested, 23% last year, 18% average. Sucrose and purity good. Sweetpotatoes 90% dug, 87% last year. Transplanting strawberries underway. Oats 82% planted, 77% last year. Wheat 74% planted, 72% year earlier. Last cutting hay 98% complete. Pastures fair; fall sown pastures slow development. Cattle fair to good.

MARYLAND & DELAWARE: Temperatures 10° below normal ranging from upper 20's to mid-60's. Precipitation widespread, amounts 1.00 to 2.00 in. Seasonal temperatures on weekend.

Soil moisture surplus. Pastures average to above average. Corn for grain 70%, behind average. Soybeans 25%, behind average. Tobacco stripping ahead of schedule.

MICHIGAN: Temperatures ranged from 57 to 90°. Precipitation sparse to average in south, ranged from 0.04 in. east Upper to 0.69 in. northwest Lower.

Fieldwork: 6 days suitable. Grain corn 65% picked. Winter wheat planting complete. Soybeans 85% combined. Sugarbeets 85% dug. Potatoes virtually complete. Pasture feed short. Fall plowing 15% complete. Cabbage and cauliflower near completion.

MINNESOTA: Cool, dry. Temperatures 6 to 10° below normal. Much below normal first to above normal last of week. Extremes: 69 and 1°. Precipitation ranged from none or trace to less than 0.10 in. north central.

Harvest nearing completion most areas. Only southeastern has much corn to pick. Soil moisture very short, which could cause winter injury to pasture, hay stands, fall planted crops. Many farmers applying minimum tillage to corn, soybean stubble to catch snow, prevent erosion. Corn 95% picked, 1975 88%, normal 69%.

MISSISSIPPI: Temperatures 5 to 8° subnormal. Extremes: 30 and 80°.

Soil moisture short south, adequate elsewhere. Fieldwork: 4.1 days suitable. Cotton 61% harvested, 24% 1975, 49% average. Soybeans 95% mature, 77% 1975; 56% harvested, 41% 1975, 39% average. Rice 97% harvested 81% 1975, 92% average. Corn 81% harvested, 76% 1975, 69% average. Sorghums 94% harvested, 88% 1975, 84% average. Hay crops 97% harvested, 94% 1975, 95% average. Peanuts 95% harvested, 92% average. Sweetpotatoes: 93% harvested, 88% 1975, 84% average. Pecans 21% harvested, 25% 1975. Winter wheat 78% planted, 79% 1975, 66% average. Oats 88% planted, 85% 1975, 74% average. Soybeans in fair to good condition. Cotton in fair to poor condition. Pastures in fair to poor condition.

MISSOURI: Temperatures 9 to 10° below normal except Bootheel, 5° below normal. Precipitation 0.75 in. northwest and west Ozarks, 1.00 to 1.50 in. elsewhere.

Fieldwork: 4.0 days suitable. Soybeans 77% harvested, 82% 1975, 64% normal. Corn 82% harvested, 88% 1975, 60% normal. Grain sorghum 82% harvested, 89% 1975, 66% normal. Cotton 48% harvested, 83% 1975, 59% normal. Winter wheat seeding 75% complete, 83% 1975. Fall plowing for spring crops 39% complete, 43% 1975. Condition

of pastures 72% poor, 28% fair. Soil moisture supply short.

MONTANA: Mild and dry. Temperatures near to 3° above normal. Warmest midweek. Precipitation well below 0.10 in. with none some areas. Showers 31st produced 0.20 to 0.30 in. high valleys west of Divide.

Topsoil moisture short to adequate west and south central, mostly short elsewhere. Winter wheat condition mostly fair north central and northeast, fair to good central and south central. Mostly good west and ranging poor to good southeast. Sugarbeet harvest nearing completion with good yields. Potato harvest virtually complete. Cattle 80%; sheep 85% moved from summer ranges. Livestock feed supplies for winter adequate or better. Cattle condition good except southeast where fair to good.

NEBRASKA: No precipitation. Temperatures 8° below normal except little above in Panhandle.

Fieldwork: 6 days suitable. Topsoil moisture short. Subsoil moisture short. Corn 75% harvested, 60% normal and 85% 1975. Moisture content in upper teens. Some farmers allowing further field drying. Sorghum 95% harvested, normal 80%, 1975 100%. Soybeans 95% harvested, normal 90%, 1975 100%. Wheat condition 3% poor, 51% fair, 38% good, 8% excellent. Sugarbeet harvest nearing completion. Cattle gleaning stalk fields, some grazing wheat fields. Supplemental feeding for those on pastures.

NEVADA: Clear, sunny weather prevailed. No precipitation.

Winter wheat seeding completed. Potato digging in wind-up stage. Movement of cattle and sheep to winter ranges nearing completion.

NEW ENGLAND: Temperatures well below normal with lows 10 to 20° below normal 26th to 29th. Precipitation from 0.80 to 1.25 in. with 1 to 4 in. snow in northern sections.

NEW JERSEY: Temperatures averaged 10° below normal, averaging 39° north, 43° south and 44° coastal areas. Extremes: 17 and 65°. Rainfall well above normal, averaging 1.46 in. north, 2.01 in. south and 1.40 in. coastal section.

Light supplies of hardy vegetables available. Apple and cranberry harvest in clean-up stage. Corn for grain and soybean harvest active as weather permits.

NEW MEXICO: Some light snow northern mountains 25th. Snow developing southwest 26th spreading throughout south and most of eastern plains 27th and 28th. Clearing and rapid warming 29th to 31st.

Topsoil moisture adequate, subsoil moisture short. Ranges good south, fair north, livestock good. Precipitation interrupted harvest activity of most crops. Cotton fair, 30% harvested. Alfalfa harvest neared completion, very little damaged in windrow by storm. Grain sorghum 80% harvested. Some fields damaged by early freeze baled for cattle feed. Corn harvest 90% complete, good yields. Dryland winter wheat fair, 70% acceptable stand. Irrigated winter wheat good, 95% acceptable stand. Sugarbeets excellent, peanuts good.

NEW YORK: Cool, wet. Temperatures several degrees below normal. Extremes: 60 and 10°. Precipitation as showers and snow furries totaling 0.50 to 1.50 in. Several inches of snow in Adirondacks.

Corn harvest slowed by wet field conditions. Grain corn harvest behind 1975.

NORTH CAROLINA: Temperatures below normal. Precipitation above normal in mountains, below normal elsewhere.

Fieldwork: 3.7 days suitable. Soil moisture adequate. Corn for grain 87% harvested, 1975 82%, average 78%. Soybeans 10% harvested, 1975 11%. Cotton 28% picked, 1975 33%, average 45%. Peanuts 89% dug, 1975 98%; threshing 78% complete, 1975 92%, average 81%. Sorghum grain 80% harvested, 1975 62%. Sweetpotatoes 84% dug, 1975 82%. Small grain 35% seeded, 1975 50%, average 53%. Pasture conditions fair to good.

NORTH DAKOTA: Temperatures 2 to 5° below normal except northwest normal. Extremes: 76 and 4°. Precipitation 0.02 to 0.25 in. below normal, except southwest 0.90 in. above normal. Weekend fair and mild.

Harvest of all crops virtually complete. Pasture and ranges poor.

OHIO: Temperatures continues below normal. Record lows. Extremes: 12 and 58°. Precipitation 0.26 in. north to 1.75 in. south.

Fieldwork: 4 days favorable. Main activities: Corn, soybean and sugarbeet harvest. Limited fertilizing, fall plowing and tobacco stripping. Normal high moisture in corn and soybeans, quality good. No unusual transportation problems. Early sugarbeet yields disappointing. Harvest completed: Corn 50%, same as last year and average. Sugarbeets 50%, 40% last year, 50% average. Popcorn 65%, 55% last year and average. Apple and grape harvests winding up. Winter wheat seeding virtually complete, slightly ahead of schedule, 65% emerged. Cool weather slowed germination, condition good. Pasture condition fair to good. Soil moisture adequate, some areas surplus.

OKLAHOMA: Temperatures 10 to 14° below normal. Precipitation ranged from 0.10 in. northeast to 1.75 in. east central. Weekend cool with light to moderate rain.

Light rain in most areas should help ease short topsoil moisture. Runoff needed for ponds. Wheat seeding now at wind-up stage, with over 75% acreage up to stand, ahead of under 50% year ago, and 82% average. Insect problems eased off by cool weather. Fall oats and barley seedings near 65% up to stand, ahead 55% year earlier. Condition good to fair for all small grains. Corn harvest 93% complete, ahead of near 90% a year ago. Most late sorghums hurt by frost will be salvaged. Harvest 66% complete, compared with near 70% year ago, 50% average. Most cotton killed by freeze, stripping will get under way when bolls dry. Only 4% of crop picked to date, 1% year ago, 9% average. Peanut digging 70% complete, behind 75% year ago, ahead of 45% average. Soybeans combining about 33% complete, later than year ago. Ranges lost some condition because of cold weather. Livestock mostly good to fair.

OREGON: Temperatures normal to 2 or 3° above normal. Extremes: High 60's, mid 20's west; high 60's, high teens east. Nearly all stations received moisture. The coast averaged over 1.00 in.; over 0.75 in. fell in Willamette Valley. Rain light in east and generally less than 0.25 in.

Fall seeding and land preparation nearly complete. Lack of moisture in east for germination of seed. Some greenbug problem in east. Hay and silage harvest essentially over. Corn for grain

continues. Cattle in good flesh. Cattle market soft.

PENNSYLVANIA: Very cool but sunny. Breezy with rain beginning and weekend. Temperatures 8 to 11° below normal. Temperatures mostly 20's to 40's. Extremes: 9 and 64°. Rainfall 0.50 in. northwest to 1.50 in. southeast. Few snow flurries northwest mountains 27th and 31st.

Activities included picking apples and corn harvest.

PUERTO RICO: Island rainfall 1.01 in. or 2.62 in. below normal. Temperatures averaged about 80° on coast and 75° interior. Extremes: 93 and 57°.

Sugarcane growth good. Fertilizing and cultivating active. Rains slowed coffee harvest and drying. Soil moisture stimulating insect attacks. Tobacco planting started. Pasture conditions good. Planting fertilizing and cultivating main activities. Food crops developing well.

SOUTH CAROLINA: Temperatures below normal, highs mostly in 60's, lows mostly in 30's. Extremes: 75 and 21°. Hard freeze 28th, 29th. Rainfall above normal northwest, near normal elsewhere.

Freeze stopped development all affected areas. Soil moisture generally adequate. Corn, cotton, sorghum, soybean, peanut harvest continues. Planting of small grains, winter grazing underway. Corn harvested 96% 1976, 92% 1975, 85% average. Soybeans harvested 5% 1976, 13% 1975, 13% average. Cotton harvested 38% 1976, 56% 1975, 57% average. Peanuts harvested 83%. Sorghum harvested 60% 1976, 52% 1975, 51% average. Wheat planted 19% 1976, 30% 1975, 23% average. Oats planted 38%. Barley planted 33%. Winter grazing planted 75% 1976, 78% 1975, 76% average.

SOUTH DAKOTA: Cold early, warm by weekend. Temperatures 3 to 11° below normal. Extremes: 8 and 72°. Precipitation mostly under 0.10 in. greatest amount 0.33 in. Moisture deficit in east ranges up to 13.2 in. below normal.

Row crops virtually all harvested, record early pace. Winter wheat and rye growth stopped by cold weather and lack of moisture. Stubble fields providing temporary livestock feed. Farmers preparing for winter.

TENNESSEE: Considerable rain totaling 3.50 to 5.50 in. west and between 2.00 to 3.00 in. middle and east. Temperatures 10° below normal.

Heavy rains delaying harvest of corn, cotton and soybeans. Frosts damaged late planted cotton and soybean fields. Fieldwork: 2.8 days suitable. Soil moisture 69% adequate, 31% surplus. Corn harvest delayed by rain and high moisture content. Corn 55% harvested, 60% last year, 63% average. Cotton progress over 2 weeks behind. Heavy rains delaying harvest. Cotton 72% open bolls, 85% last year, 87% average. Cotton 27% harvested, 47% last year, 52% average. Soybeans 85% mature, 90% last year, 85% average. Soybeans 33% harvested, 40% last year, 35% average. Frosts damaged some late planted soybean fields. Burley tobacco 45% stripped, same as last year and average. Fall plowing 78% completed, 81% last year, 84% average. Wheat 67% seeded, 67% last year, 70% average. Oats 90% seeded, 85% last year, 91% average. Barley 87% seeded, 85% last year, 90% average.

TEXAS: Cold fronts moved through 25th, 27th, bringing cold, precipitation. Snow in Panhandle, far west 27th and 28th. Temperatures 6 to 12° below normal. Rain 25th, 27th through 29th

above normal, ranging from 0.75 in. above normal in Panhandle, far west to 2.00 in. above normal central, 4.00 in. above normal southern tip. Upper Gulf Coast precipitation near normal of 1.00 in.

Fieldwork virtually halted by rain and snow midway thru week. Snow blanketed many fields on High Plains. Harvesting should resume soon after clear weather arrived over the weekend. Cotton harvest halted by precipitation. Freezing on plains caused widespread defoliation. Harvest 19% complete, 29% 1975, 25% average. Sorghum harvest made good progress until midweek. Combining 90% done, 96% 1975, 79% average. Corn harvesting interrupted by rain, snow. Harvest 97% complete, 99% 1975, 91% average. Peanuts most areas suffering from excess moisture, unharvested nuts beginning to rot. Harvest 64% complete, 91% 1975, 79% average. Soybean harvest delayed, now 42% complete compared with 75% in 1975, average of 49%. Rice 2d cutting delayed by rain. Cool slowed crop development. Wheat aided by rain. Planting completion delayed, 84% complete, 91% 1975, 94% average. Rain greatly benefits dryland fields on northern High Plains. Dry weather now needed so planting can be completed.

Heavy rains halted harvest of most vegetables, citrus in lower Rio Grande Valley. Onion, lettuce fields making slow progress. Harvests delayed by wet weather in many other areas. Early snow brought harvest to standstill on Plains.

Ranges average to good. Cool slowed growth most areas. Cattle remain good. Screwworms subsiding; still reported central, south.

UTAH: Lightly scattered showers early week associated with passage of cold front. Accumulated amounts of moisture generally quite light. Temperatures ranged from near normal to 5° below normal.

Harvest of late summer crops continued. Excellent harvest conditions speeded up sugar-beet harvest. Potato digging and silage corn chopping completed but corn for grain gathering still in progress. Movement of livestock to fall and winter ranges completed. Range feed prospects not so bright as year ago.

VIRGINIA: Temperatures 9° below normal. Rain during middle of period averaged about 2.50 in. Extremes: 70 and 18°.

Fieldwork: 2.5 days suitable. Topsoil moisture: 49% adequate, 51% surplus. Wet fields remain hinderance to harvesting and seeding. Corn for grain 60% harvested. Corn silage harvest nearly complete. Soybean harvest remaining at 14% complete. Peanut digging 75% complete, 57% combined. Pastures very good condition. Apple harvest virtually complete. Small grain seeding progress: Wheat 45%, barley 66%, oats 69%. Grain sorghum harvest beginning.

WASHINGTON: West: Temperatures near normal east Cascade foothills to 2° above coastal area. Precipitation near normal San Juan to 0.40 in. sub-normal coastal area.

Recent needed for fall crops but delayed vegetable harvest. Silage corn near completion. Potatoes finished. Pastures adequate, growth slow.

East: Temperatures subnormal 1° central basin; 3° Okanogan. Precipitation averaged 0.10 in. below normal.

Apple harvest nearing completion. Grape harvest complete. Potatoes finishing. Digging sugarbeets continues under quota. Fall wheat,

barley seeding continues. Top soil dry. Early stands doing well. Late stands spotty. Greenbug spraying. Cattle off mountain ranges. Pastures dormant. Weaning spring calves, culling cows. Fall calving began.

WEST VIRGINIA: Temperatures well below normal, precipitation above normal. Traces of snow in higher elevations 28th.

Fieldwork: 3.2 days suitable. Picking corn, marketing cattle and general chores main activities. Soil moisture 46% adequate and 54% surplus. Cool wet weather delayed corn picking and planting small grains. Some freeze damage to late maturing corn.

WISCONSIN: Temperatures 6° subnormal. Highs in 40's and 50's. Record lows morning 27th, with some below zero readings north. Precipitation very light north, heavier south where 0.50 to 0.75 in. rain fell 30th. Snow showers along Lake Michigan 26th.

Corn for grain harvest 80% completed. 1975

75%, normal 50%. Moisture content low and corn very dry. Much chopping of stalks for feed and bedding. Soybeans 90% combined, 1975 95%, normal 55%. Soybean yields below normal. Moisture content low and quality good, but bean size small. Fall plowing 23% done, 1975 45%, normal 45%. Too dry for good plowing, most farmers trying disking, digging, or chisel plowing. Winter wheat growth shorter than normal. New seedings in poor to fair condition. Harvesting of fruits and vegetables mostly completed. Soil moisture short. Moisture deficiencies April 1 to November 1 range from 13.5 in. northwest to 4.5 in. southeast.

WYOMING: Temperatures below normal. Precipitation below normal.

Soil moisture short. Major activities: Livestock movement, fall plowing and fertilizing. Potatoes and sugarbeets 92% dug. Some freeze damage to potatoes, may be severe in some areas. Grain corn 45% picked. Winter wheat prospects fair to good.

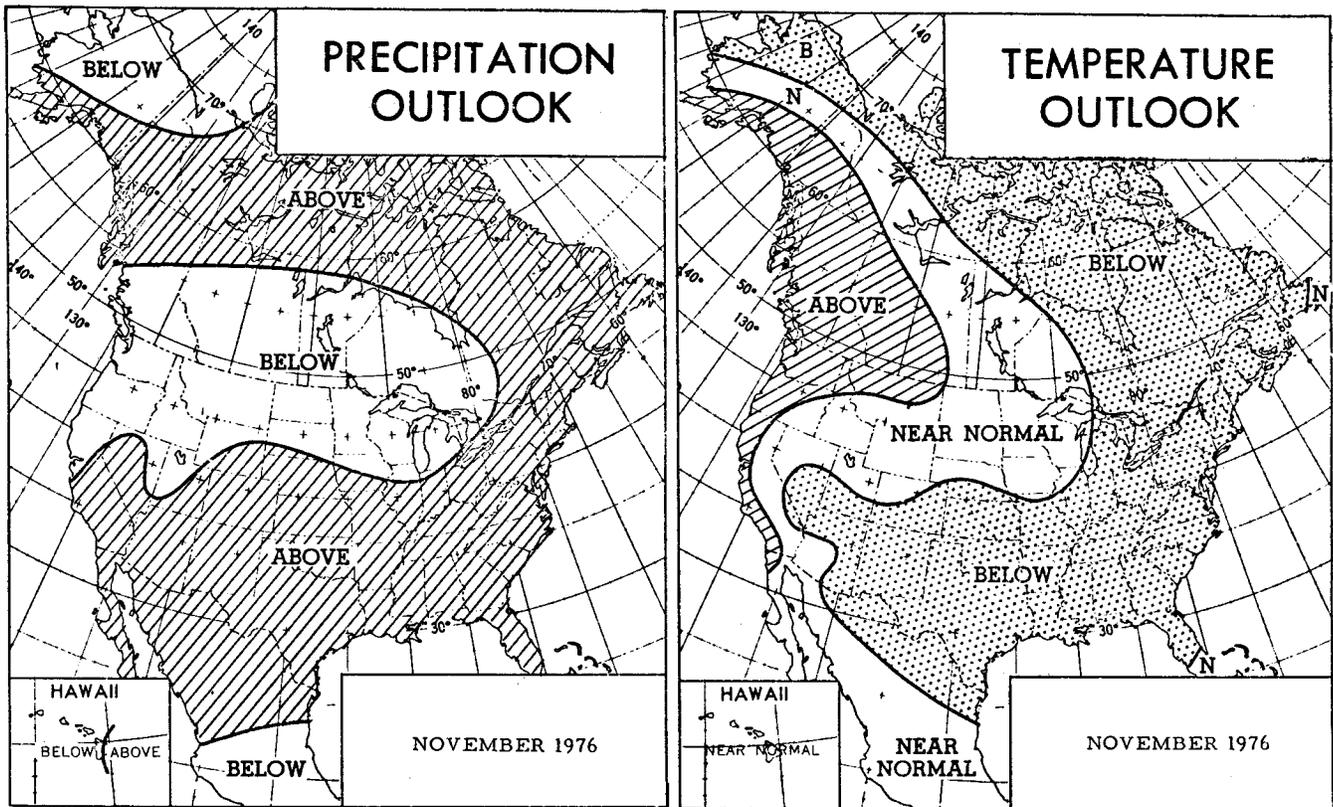
Heating Degree Days (Base 65° F.)

October 1976

ALA. Birmingham . . .	241	MAINE, Caribou . . .	793	OKLA. Okla. City . . .	306
Mobile . . .	149	Portland . . .	660	Tulsa . . .	317
Montgomery . . .	180	MD. Baltimore . . .	377	OREG. Astoria . . .	361
ALASKA, Anchorage . . .	972	MASS. Boston . . .	393	Burns U. . .	512
Barrow . . .	---	Chatham . . .	413	Medford . . .	338
Fairbanks . . .	1267	MICH. Alpena . . .	663	Pendleton . . .	363
Juneau . . .	---	Detroit . . .	540	Portland . . .	320
Nome . . .	1100	Flint . . .	559	Salem . . .	395
ARIZ. Flagstaff . . .	553	Grand Rapids . . .	591	PA. Allentown . . .	455
Phoenix . . .	2	Houghton Lake . . .	698	Erie . . .	519
Tucson . . .	45	Lansing . . .	619	Harrisburg . . .	418
Winslow . . .	378	Marquette U. . .	659	Philadelphia . . .	387
Yuma . . .	1	S. Ste. Marie . . .	728	Pittsburgh . . .	587
ARK. Fort Smith . . .	317	MINN. Duluth . . .	860	Scranton . . .	519
Little Rock . . .	291	Internatl Falls . . .	883	R. I. Providence . . .	501
CALIF. Bakersfield . . .	13	Minneapolis . . .	632	S. C. Charleston . . .	159
Eureka U. . .	324	Rochester . . .	710	Columbia . . .	219
Fresno . . .	63	St. Cloud . . .	776	Greenville . . .	297
Los Angeles U. . .	0	MISS. Jackson . . .	197	S. DAK. Aberdeen . . .	672
Red Bluff . . .	34	Meridian . . .	235	Huron . . .	706
Stockton . . .	25	MO. Columbia . . .	487	Rapid City . . .	606
San Diego . . .	0	Kansas City . . .	469	Sioux Falls . . .	643
San Francisco . . .	127	St. Louis . . .	456	TENN. Chattanooga . . .	269
COLO. Denver . . .	509	Springfield . . .	415	Knoxville . . .	320
Grand Junction . . .	421	MONT. Billings . . .	582	Memphis . . .	231
Pueblo . . .	507	Glasgow . . .	698	Nashville . . .	359
CONN. Bridgeport . . .	356	Great Falls . . .	572	TEX. Abilene . . .	276
Hartford . . .	467	Havre . . .	826	Amarillo . . .	464
D. C. Washington . . .	306	Helena . . .	615	Austin . . .	170
FLA. Apalachicola . . .	86	KalisPELL . . .	723	Beaumont . . .	149
Ft. Myers . . .	2	Miles City . . .	632	Brownsville . . .	21
Jacksonville . . .	87	Missoula . . .	647	Corpus Christi . . .	59
Key West . . .	0	NEBR. Grand Island . . .	551	Del Rio . . .	127
Lakeland U. . .	10	Lincoln . . .	553	El Paso . . .	215
Miami . . .	0	Norfolk . . .	587	Fort Worth . . .	214
Orlando . . .	4	North Platte . . .	608	Galveston U. . .	96
Daytona Beach . . .	11	Omaha . . .	522	Houston . . .	173
Tallahassee . . .	100	Valentine . . .	613	Lubbock . . .	333
Tampa . . .	11	NEV. Ely . . .	641	Midland . . .	220
GA. Atlanta . . .	277	Las Vegas . . .	39	San Angelo . . .	220
Augusta . . .	191	Reno . . .	419	San Antonio . . .	160
Macon . . .	163	Winneconne . . .	461	Victoria . . .	111
Savannah . . .	142	N. H. Concord . . .	615	Waco . . .	205
IDAHO, Boise . . .	434	N. J. Atlantic City . . .	423	Wichita Falls . . .	365
Lewiston . . .	331	Trenton U. . .	392	UTAH, Blanding R. . .	---
Pocatello . . .	561	N. MEK. Albuquerque . . .	367	Salt Lake City . . .	432
ILL. Cairo U. . .	298	Roswell . . .	275	VT. Burlington . . .	654
Chicago . . .	520	N. Y. Albany . . .	564	VA. Lynchburg . . .	370
Moline . . .	569	Binghamton . . .	653	Norfolk . . .	245
Peoria . . .	556	Buffalo . . .	573	Richmond . . .	332
Rockford . . .	615	New York . . .	324	Roanoke . . .	452
Springfield . . .	497	Rochester . . .	538	WASH. Colville . . .	606
IND. Evansville . . .	391	Syracuse . . .	556	Osak . . .	---
Fort Wayne . . .	540	N. C. Asheville . . .	411	Quillayute . . .	428
Indianapolis . . .	503	Charlotte . . .	299	Seattle-Tacoma . . .	307
South Bend . . .	525	Greensboro . . .	370	Spokane . . .	556
IOWA, Burlington . . .	538	Hatteras R. . .	135	Walla Walla U. . .	339
Des Moines . . .	527	Raleigh . . .	302	Yakima . . .	472
Dubuque . . .	614	Wilmington . . .	172	W. VA. Beckley . . .	566
Sioux City . . .	620	N. DAK. Bismarck . . .	726	Charleston . . .	475
KANS. Concordia . . .	461	Fargo . . .	788	Huntington . . .	460
Dodge City . . .	464	Williston U. . .	740	Parkersburg U. . .	478
Goodland . . .	587	OHIO. Akron-Canton . . .	564	WIS. Green Bay . . .	667
Topeka . . .	471	Cincinnati U. . .	498	Madison . . .	656
Wichita . . .	409	Cleveland . . .	519	Milwaukee . . .	589
KY. Lexington . . .	474	Columbus . . .	538	WYO. Casper . . .	654
Louisville . . .	393	Dayton . . .	535	Cheyenne . . .	664
LA. Baton Rouge . . .	143	Toledo . . .	596	Lander . . .	657
Lake Charles . . .	137	Youngstown . . .	585	Sheridan . . .	696
New Orleans . . .	93				
Shreveport . . .	199				

Preliminary reports from airport locations, except those marked U for urban and R for rural.
*Estimated.

Average Monthly Weather Outlook



World Weather and Crop Update

USSR. Temperatures moderated in the European USSR on the last day or two of October as rain and snow spread over the region. Cold persisted east of the Volga. October was undoubtedly one of the coldest in memory. Freezes damaged late maturing corn, potatoes, and vegetables. Low temperatures induced pastures and fall-sown grains into early dormancy in the north and east and slowed crop growth and development in the south. Unusually heavy snow cover in the north and east protected vegetation from the unseasonable cold.

EUROPE. Wet weather delayed harvesting but benefitted winter grain and pastures in central and eastern Europe. The rains also helped restore soil moisture in the northeast. Farmers took advantage of relatively dry weather in the west to catch up on harvesting, tilling and planting. Rain tapered off in Turkey as October ended; however, prior weeks of rain disrupted farm activities and lowered quality of cotton and other crops.

AMERICAS. Timely rains in Argentina aided winter wheat, which is now heading, and favored other crops as well. Central areas of Brazil continued to get seasonably heavy rain; useful to many crops but a nuisance to winter wheat harvest. The main wheat crop is heading in the south, particularly in Rio Grande do Sul.

ASIA. Rain and snow swept over north and north-east Peoples Republic of China about October 27 followed by wintry temperatures. The precipitation benefitted winter wheat on the North China Plain. Fair weather dominated most of Central Asia although some showers occurred in the coastal region of southeast India and in Sri Lanka.

AUSTRALIA. Rainfall diminished in much of the country with significant amounts mostly limited to the east coast. Crops continued to improve or prosper from earlier rains.

THE HEATING DEGREE DAY STATISTIC: A MEASURE OF FUEL NEEDS

Already winter has crept into many northern States, and for most of the rest of the Nation is just around the corner. Though this year's heating fuel supply prospects may not be as grim as some previous year's, a prolonged cold period over a broad geographic area could cause severe problems. An excellent indicator of an area's demand for heating fuel is the heating degree day statistic, which relates average temperature to fuel needs. Starting with this issue the Bulletin will provide the latest information on the heating degree-day situation.

At the turn of the century heating engineers developed the heating degree-day statistic to integrate temperature and fuel consumption. Concerned only with the outdoor air temperature, the heating degree-day statistic neglects other factors like solar radiation and wind. Many studies have shown that when the daily mean air temperature is 65° or above most buildings require no heat to maintain an inside temperature of at least 70°.

To determine the daily degree-day statistic subtract the daily mean temperature from a base temperature of 65° as shown:

$$65^{\circ} - \frac{\text{max temp} + \text{min temp}}{2.0} = \text{daily heating degree-days}$$

Each degree of mean temperature below 65° is 1 degree-day unit. If the daily mean temperature is 45°, 20 heating degree-days are accumulated. In the same way a daily mean temperature of 25° means 40 degree-day units have been accumulated. About twice as much fuel is needed on a day with 40 heating degree-day units than on a day with 20 heating degree-day units. When the mean temperature exceeds 65°, the heating degree-day value for the day is zero. To determine the degree-days for any given period add the degree-days for each day of the period.

The fuel industry can monitor fuel consumption by keeping up-to-date on the heating degree-day accumulations. Then, forecasts can be converted into heating degree-day statistics and used to determine future fuel needs. High storage costs for oil and gas put a premium on the precise evaluation of use and demand rates for fuel and on the efficient scheduling of fuel deliveries--especially in times of tight supplies.

For the rest of the heating season the Bulletin will feature three maps. The first will show heating degree-days for the week as the percent departure from normal (1941-70); the second, the number of heating degree-days accumulated from July 1, 1976 as the percent departure from normal; and the third, the number of heating degree-days accumulated since July 1, 1976 as the percent departure from last year.

If a map shows a positive departure, the heating degree-day accumulation is greater than the comparative value. This means that temperatures have been colder and fuel consumption has been greater than expected. A negative departure indicates that conditions have been warmer than anticipated. Note the similarity between the weekly percent of normal departure and the temperature departure map on page 2.

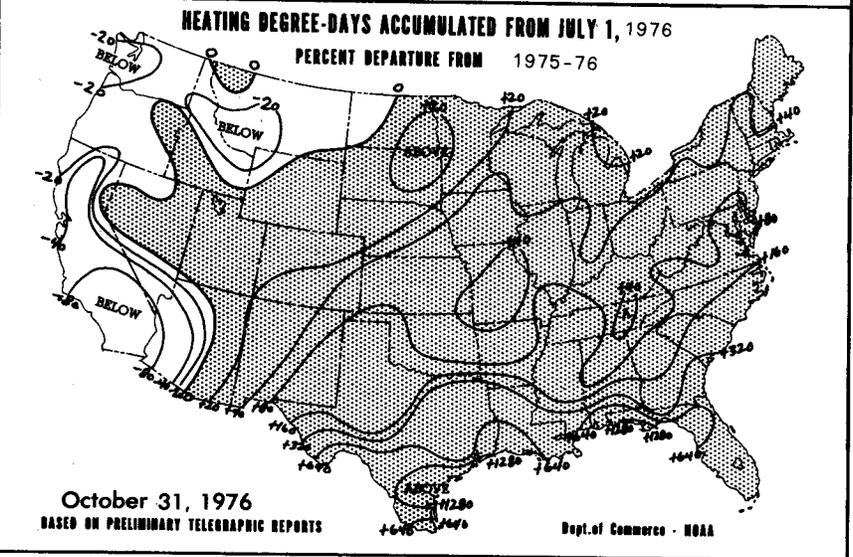
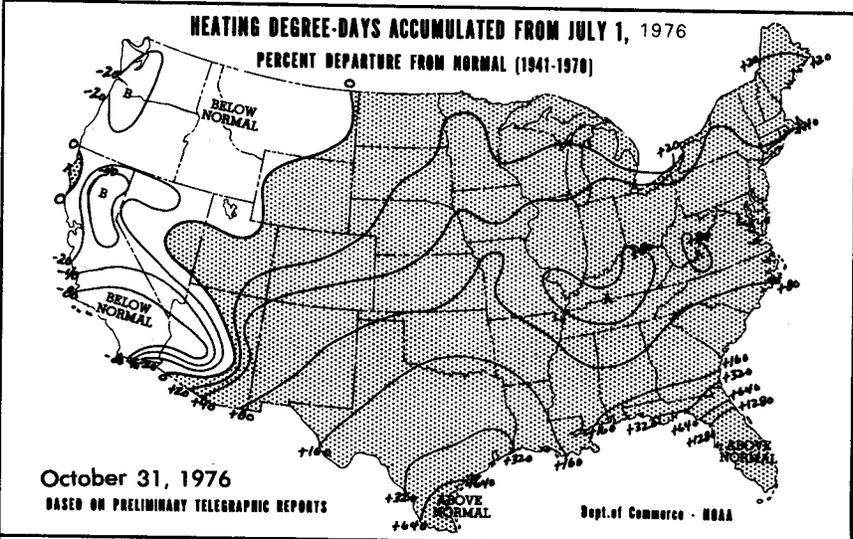
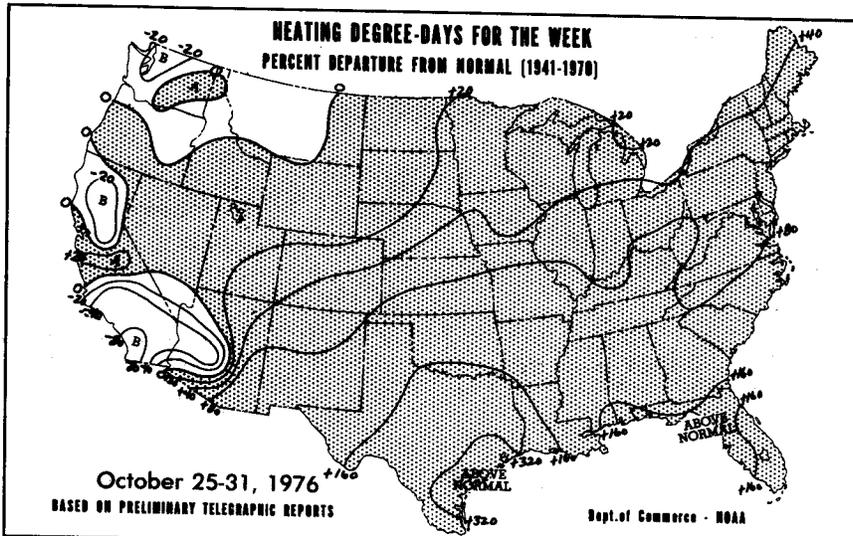
Starting July 1 of this year the heating degree day accumulation up to now has been above normal over the entire Nation east of the Rockies. This means that these areas have been cooler than normal and so have required additional energy to keep homes at a comfortable temperature. Compared to last year these areas have also been colder.

Heating degree data supplied by National Weather Service Offices are summarized and maps are prepared by the National Meteorological Center, Suitland, Maryland. For monthly normals for all cooperative stations, see Climatology of the United States No. 81. Daily normals appear in Climatology of the United States No. 84. Both publications are available from the National Climatic Center, Asheville, North Carolina 28801.

Table 1. The normal heating degree-day accumulations by months during the primary heating season for fifteen cities across the United States and the 1975-76 accumulations.

City	November		December		January		February		March		Annual Norm	Total 1975/76
	Norm*1975		Norm 1975		Norm 1976		Norm 1976		Norm 1976			
Washington, D.C.	510	328	856	752	911	956	776	524	617	415	4211	3413
Philadelphia, Pa.	564	372	924	866	1014	1120	871	692	716	572	4865	4258
Trenton, N.J.	561	380	933	870	1020	1123	885	758	738	606	4947	4418
New York, N.Y.	528	372	915	857	1017	1111	885	695	741	618	4848	4376
Boston, Mass.	594	395	992	942	1110	1198	969	800	834	733	5621	4897
Buffalo, N.Y.	756	535	1150	1134	1280	1400	1137	958	1020	853	6927	6418
Cleveland, Ohio	702	532	1076	1015	1181	1336	1039	836	896	614	6154	5701
Detroit, Mich.	747	537	1132	1107	1252	1413	1075	914	921	757	6419	5503
Chicago, Ill.	774	532	1175	1029	1305	1389	1089	840	908	674	6497	5660
St. Louis, Mo.	600	498	942	910	1045	1137	837	619	682	505	4750	4455
Omaha, Nebr.	813	695	1218	1051	1389	1219	1106	791	942	757	6601	5347
Minneapolis, Minn.	993	818	1451	1346	1649	1650	1366	1074	1147	1031	8310	7170
Denver, Colo.	768	840	1004	843	1088	1006	902	740	868	859	6016	5637
Salt Lake City, Utah	777	825	1076	989	1147	1207	885	890	787	826	5978	5745
Seattle-Tacoma, Wash.	612	594	760	713	831	712	636	693	648	781	5185	4942

*Normals based on 1941-70.

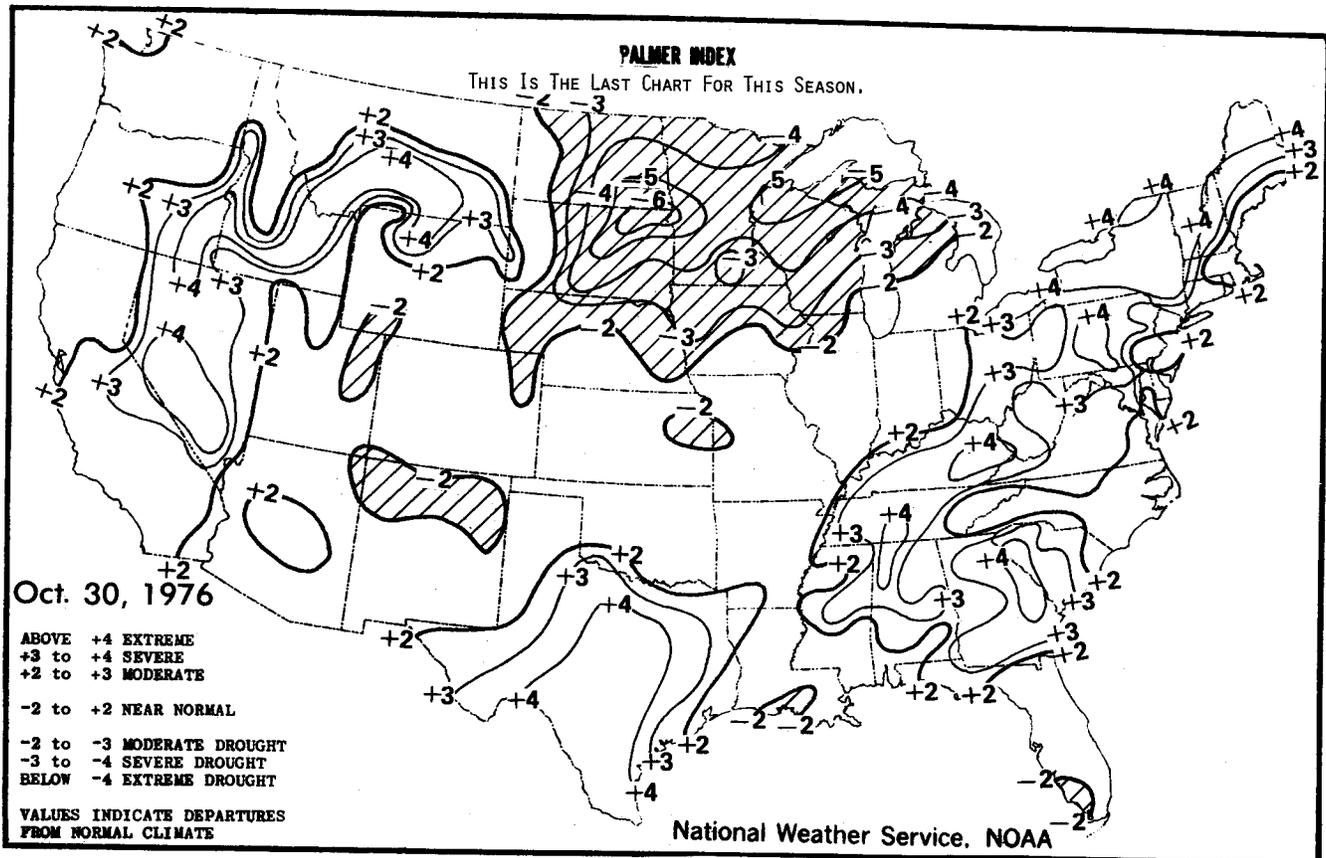


HEATING DEGREE DAYS (BASE 65°) FOR WEEK ENDING OCT. 31, 1976.

STATES AND STATIONS	WEEKLY		SEASONAL ACCUMULATION +			STATES AND STATIONS	WEEKLY		SEASONAL ACCUMULATION +			STATES AND STATIONS	WEEKLY		SEASONAL ACCUMULATION +		
	TOTAL	DEPARTURE*	TOTAL	DEPARTURE*	DEPARTURE FROM 1975-76		TOTAL	DEPARTURE*	TOTAL	DEPARTURE*	DEPARTURE FROM 1975-76		TOTAL	DEPARTURE*	TOTAL	DEPARTURE*	DEPARTURE FROM 1975-76
ALA. BIRMINGHAM...	105	51	25	114	98	MAINE CARIBOU...	52	56	1381	16	226	OKLA. OKLAHOMA CITY...	194	72	861	306	252
MOBILE...	140	51	114	114	114	PORTLAND...	52	56	1044	16	258	OKLA. OKLAHOMA CITY...	194	72	861	306	252
MONTGOMERY...	136	51	186	114	136	PORTLAND...	52	56	1044	16	258	TULSA...	136	72	433	143	135
ARIZ FLAGSTAFF...	169	1	86	114	20	MD BALTIMORE...	137	91	429	139	203	OREG ASTORIA...	102	11	179	103	107
PHOENIX...	41	1	114	114	114	MASS BOSTON...	137	42	481	82	149	BURNS...	102	11	179	103	107
TUCSON...	41	1	114	114	114	MICH ALPENA...	137	42	481	82	149	DEFORD...	102	11	179	103	107
WINSTON...	134	1	42	114	67	DETROIT...	137	42	481	82	149	PENDLETON...	102	11	179	103	107
YUMA...	1	1	114	114	114	FLINT...	137	42	481	82	149	PORTLAND...	102	11	179	103	107
ARK FORT SMITH...	134	78	34	200	141	GRAND RAPIDS...	137	42	481	82	149	SALEM...	102	11	179	103	107
LITTLE ROCK...	129	71	30	123	123	Houghton Lake...	137	42	481	82	149	PA ALLENTOWN...	157	11	179	103	107
CALIF BAKERSFIELD...	13	16	11	144	66	LANSHIRE...	137	42	481	82	149	ALLENTOWN...	157	11	179	103	107
EUREKA...	129	71	30	123	123	LANSING...	137	42	481	82	149	ALLENTOWN...	157	11	179	103	107
FRESNO...	129	71	30	123	123	LANSING...	137	42	481	82	149	ALLENTOWN...	157	11	179	103	107
LOS ANGELES...	129	71	30	123	123	LANSING...	137	42	481	82	149	ALLENTOWN...	157	11	179	103	107
RED BLUFF...	129	71	30	123	123	LANSING...	137	42	481	82	149	ALLENTOWN...	157	11	179	103	107
SAN DIEGO...	129	71	30	123	123	LANSING...	137	42	481	82	149	ALLENTOWN...	157	11	179	103	107
SAN FRANCISCO...	129	71	30	123	123	LANSING...	137	42	481	82	149	ALLENTOWN...	157	11	179	103	107
STOCKTON...	129	71	30	123	123	LANSING...	137	42	481	82	149	ALLENTOWN...	157	11	179	103	107
COLO DENVER...	129	71	30	123	123	LANSING...	137	42	481	82	149	ALLENTOWN...	157	11	179	103	107
GRAND JUNCTION...	129	71	30	123	123	LANSING...	137	42	481	82	149	ALLENTOWN...	157	11	179	103	107
PUEBLO...	129	71	30	123	123	LANSING...	137	42	481	82	149	ALLENTOWN...	157	11	179	103	107
CONN BRIDGEPORT...	134	38	44	133	183	MISS JACKSON...	97	48	204	107	119	S C CHARLESTON...	75	54	170	91	124
HARTFORD...	155	62	62	103	178	MERIDIAN...	97	48	204	107	119	COLUMBIA...	75	54	170	91	124
DEL WILMINGTON...	158	69	43	132	180	MD COLUMBIA...	97	48	204	107	119	GREENVILLE...	75	54	170	91	124
D.C WASHINGTON...	122	52	32	112	190	KANSAS CITY...	97	48	204	107	119	DAK ABERDEEN...	75	54	170	91	124
FLA APALACHICOLA...	41	26	15	132	147	ST LOUIS...	97	48	204	107	119	HURON...	75	54	170	91	124
BAYTON BEACH...	41	26	15	132	147	SPRINGFIELD...	97	48	204	107	119	RAPID CITY...	75	54	170	91	124
PORT HURON...	41	26	15	132	147	MONT BILLINGS...	10	10	725	31	4	SIoux FALLS...	75	54	170	91	124
JACKSONVILLE...	41	26	15	132	147	GLASGOW...	10	10	725	31	4	TENN CHATTANOOGA...	75	54	170	91	124
KEY WEST...	41	26	15	132	147	GREAT FALLS...	10	10	725	31	4	KNOXVILLE...	75	54	170	91	124
LAKELAND...	41	26	15	132	147	HAVRE...	10	10	725	31	4	MEMPHIS...	75	54	170	91	124
MIAMI...	41	26	15	132	147	HELENA...	10	10	725	31	4	NASHVILLE...	75	54	170	91	124
ORLANDO...	41	26	15	132	147	IDAHO CITY...	10	10	725	31	4	TEXAS ARILENE...	75	54	170	91	124
TALLAHASSEE...	41	26	15	132	147	MISSOULA...	10	10	725	31	4	ARLINGTON...	75	54	170	91	124
TAMPA...	41	26	15	132	147	NEBR GRAND ISLAND...	65	14	163	16	1	ATLANTA...	75	54	170	91	124
WEST PALM BEACH...	41	26	15	132	147	NORFOLK...	65	14	163	16	1	BIRMINGHAM...	75	54	170	91	124
GA ATLANTA...	149	66	30	14	125	NORTH PLATTE...	65	14	163	16	1	BIRMINGHAM...	75	54	170	91	124
AUGUSTA...	149	66	30	14	125	OHAMA...	65	14	163	16	1	BIRMINGHAM...	75	54	170	91	124
Macon...	149	66	30	14	125	VALENTINE...	65	14	163	16	1	BIRMINGHAM...	75	54	170	91	124
Savannah...	149	66	30	14	125	NEV ELY...	12	12	105	9	0	BIRMINGHAM...	75	54	170	91	124
IDAHO BOISE...	138	10	55	39	124	LAS VEGAS...	12	12	105	9	0	BIRMINGHAM...	75	54	170	91	124
LEWISTON...	138	10	55	39	124	RENO...	12	12	105	9	0	BIRMINGHAM...	75	54	170	91	124
POCATELLO...	138	10	55	39	124	MINNEAPOLIS...	12	12	105	9	0	BIRMINGHAM...	75	54	170	91	124
ILL CAIRO...	144	79	40	224	189	N.H CONCORD...	60	60	988	237	79	UTAH SALT LAKE CITY...	138	9	482	50	31
CHICAGO...	144	79	40	224	189	N.J ATLANTIC CITY...	60	60	988	237	79	BURLINGTON...	138	9	482	50	31
MOLINE...	144	79	40	224	189	TRENTON...	60	60	988	237	79	VT BURLINGTON...	138	9	482	50	31
PEORIA...	144	79	40	224	189	N.MEX ALBUQUERQUE...	60	60	988	237	79	LYNCHBURG...	138	9	482	50	31
ROCKFORD...	144	79	40	224	189	ROSMELL...	60	60	988	237	79	NORFOLK...	138	9	482	50	31
SPRINGFIELD...	144	79	40	224	189	N.Y ALBANY...	60	60	988	237	79	RICHMOND...	138	9	482	50	31
IND EVANSVILLE...	152	65	43	126	188	BINGHAMTON...	60	60	988	237	79	ROANOKE...	138	9	482	50	31
FORT WAYNE...	152	65	43	126	188	BUFFALO...	60	60	988	237	79	WASH OUILAVUTE...	138	9	482	50	31
INDIANAPOLIS...	152	65	43	126	188	CHARLOTTE...	60	60	988	237	79	SEATTLE TACOMA...	138	9	482	50	31
SOUTH BEND...	152	65	43	126	188	GREENSBORO...	60	60	988	237	79	SPOKANE...	138	9	482	50	31
IOWA BURLINGTON...	172	60	64	212	193	HATTIESBURG...	60	60	988	237	79	HALLA HALLA...	138	9	482	50	31
DES MOINES...	172	60	64	212	193	RALEIGH...	60	60	988	237	79	VARIHA...	138	9	482	50	31
DUBUQUE...	172	60	64	212	193	WILMINGTON...	60	60	988	237	79	VA BECKLEY...	138	9	482	50	31
SIoux CITY...	172	60	64	212	193	N.DAK BISHARCK...	60	60	988	237	79	CHARLESTON...	138	9	482	50	31
KANS CONCORDIA...	166	65	33	148	181	FARGO...	60	60	988	237	79	HUNTINGTON...	138	9	482	50	31
DODGE CITY...	166	65	33	148	181	WILLISTON...	60	60	988	237	79	PARKERSBURG...	138	9	482	50	31
GOODLAND...	166	65	33	148	181	OHIO AKRON-CANTON...	60	60	988	237	79	WIS GREEN BAY...	138	9	482	50	31
GOODYEAR...	166	65	33	148	181	CINCINNATI...	60	60	988	237	79	LACROSSE...	138	9	482	50	31
TOPEKA...	166	65	33	148	181	CLEVELAND...	60	60	988	237	79	MADISON...	138	9	482	50	31
WICHITA...	166	65	33	148	181	COLUMBUS...	60	60	988	237	79	MILLWAUKEE...	138	9	482	50	31
KY LEXINGTON...	171	82	57	272	184	TOLEDO...	60	60	988	237	79	WYO CASPER...	138	9	482	50	31
LOUISVILLE...	171	82	57	272	184	LA BATON ROUGE...	60	60	988	237	79	LAKE CHARLES...	138	9	482	50	31
LA BATON ROUGE...	158	33	13	80	108	NEW ORLEANS...	60	60	988	237	79	SHREVEPORT...	138	9	482	50	31
LAKE CHARLES...	158	33	13	80	108	SHREVEPORT...	60	60	988	237	79						
NEW ORLEANS...	158	33	13	80	108												
SHREVEPORT...	158	33	13	80	108												

* BASED ON 1941-70 NORMALS.

+ ACCUMULATION FROM JULY 1, 1976.



THE PALMER AND CROP MOISTURE INDICES

The Palmer Index was designed to evaluate the scope, severity, and frequency of prolonged periods of abnormally wet or dry weather. For this purpose it works reasonably well. However, it does not provide a measure of the current status of agricultural drought; i.e. the effects of short periods of very dry weather. For this reason the Crop Moisture Index was developed to respond rapidly to changes in the soil moisture situation and take into account only those moisture aspects which affect vegetation and field operations.

If one is interested in the overall soil moisture situation, which will integrate the effects of the past weather over weeks and even months, the Palmer Index provides the best evaluation. However, if one is interested in the availability of moisture to meet current demands, the Crop Moisture Index is the most useful. For example, a recent rain might have replenished the soil sufficiently to meet the current demands. However if the Palmer Index is highly negative, one can interpret this to mean that the overall soil moisture situation is very poor.

A negative CMI value means that the demand for moisture, or the potential evapotranspiration, has been greater than available supplies so that actual transpiration has been reduced. On the other hand, positive CMI values mean that either actual evapotranspiration exceeded the expected amount, or

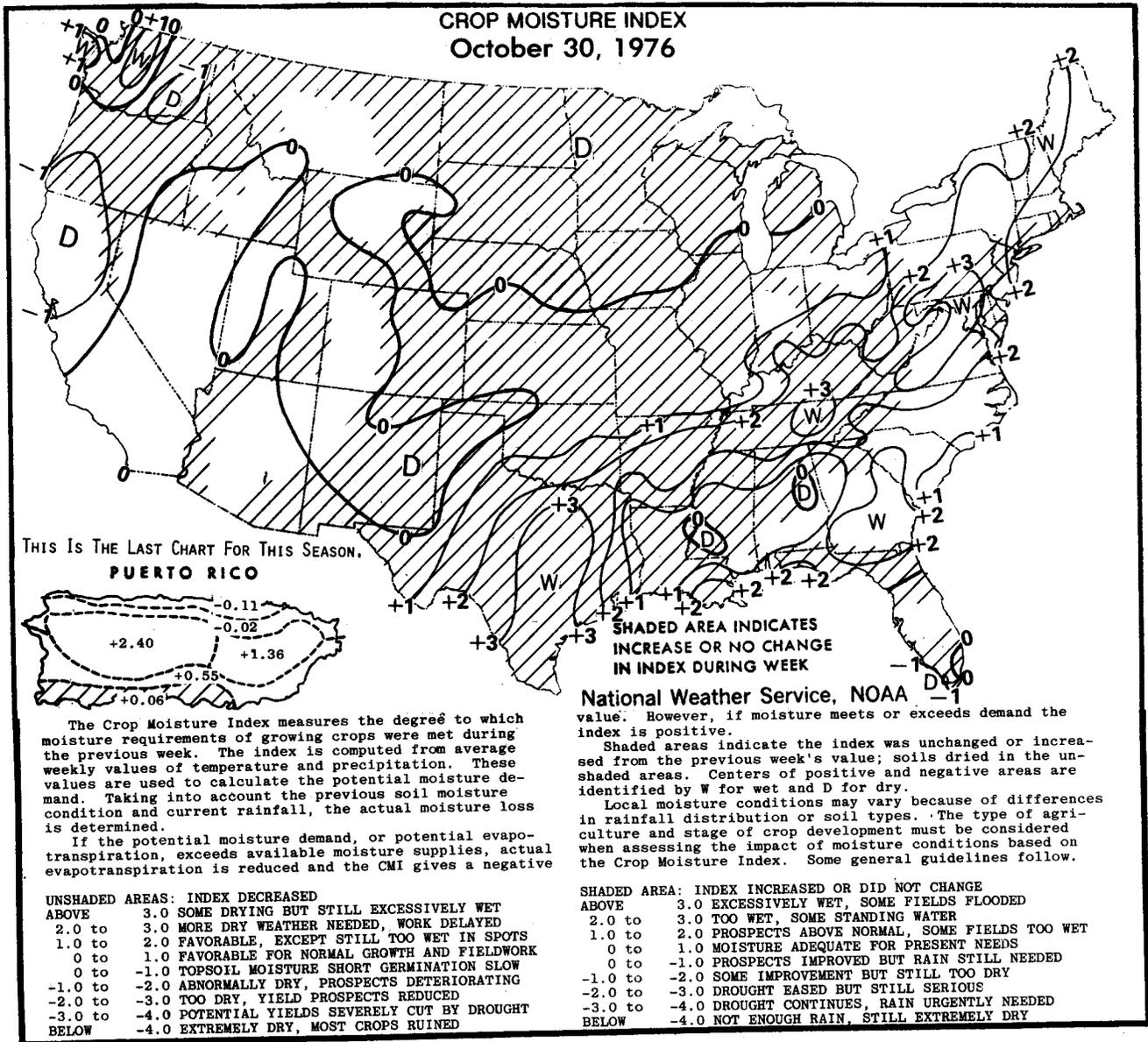
recent rainfall exceeded the moisture requirements of the crops and the additional moisture was added to the soil or was regarded as runoff.

Negative Palmer Index values imply negative abnormalities of either evapotranspiration, the amount of moisture stored in or added to the soil, or of runoff, or a combination of all these types of moisture shortages. In other words, negative PI values simply indicate that the weather has been abnormally dry, and do not specify the exact nature of the effects of the dry weather.

However, positive PI values indicate that the moisture supply either from current or antecedent rainfall exceeded the amount required to sustain soil moisture levels that would be considered as normal and appropriate for the climate of the area.

In brief summary, Palmer Index values are based on all aspects of the moisture situation, but the Crop Moisture values refer only to the crop moisture situation. In addition, the PI values are highly depended on antecedent moisture conditions, whereas CMI values are much more responsive to weekly or current rainfall, or the lack of it.

The CMI map will appear each week in the Bulletin during the season from now through October. The Palmer Index will be published only in the first issue of each month during the same period.





FIRST CLASS MAIL

HARVESTING PROGRESS

Percent of Acreage Harvested
 (As of October 31)

SOYBEANS			
	1976	1975	Avg.
Ala.	43	34	43
Ark.	37	50	39
Ga.	11	26	30
Ill.	100	100	100
Ind.	90	90	70
Iowa	100	1/2	1/2
Kans.	75	70	60
Ky.	49	56	57
La.	78	63	56
Mich.	85	1/2	1/2
Minn.	100	1/2	1/2
Miss.	56	41	39
Mo.	77	82	84
Nebr.	95	100	90
N. C.	10	11	1/2
Ohio	90	90	80
S. C.	5	13	13
Tenn.	33	40	35
U. S.	73	69	65

These 18 States produced 96% of the Nation's soybeans in 1975.

SORGHUM			
	1976	1975	Avg.
Kans.	75	75	50
Mo.	82	89	66
Nebr.	95	100	80
Okla.	66	70	50
S. Dak.	100	100	1/2
Tex.	90	96	79
6-States	85	89	69

These 6 States produced 90% of the Nation's sorghum grain in 1975.

CORN			
	1976	1975	Avg.
Ga.	79	71	69
Ill.	68	81	59
Ind.	55	60	45
Iowa	95	85	51
Kans.	70	85	55
Ky.	65	66	67
Mich.	65	1/2	1/2
Minn.	95	88	69
Mo.	82	88	60
Nebr.	75	85	60
N. C.	87	82	78
Ohio	50	50	50
S. Dak.	100	1/2	1/2
Wis.	80	75	50
U. S.	77	79	56

These 14 States produced 89% of the Nation's corn in 1975.

COTTON			
	1976	1975	Avg.
Ala.	22	21	46
Ark.	52	59	49
Ga.	29	35	55
La.	69	25	41
Miss.	61	24	49
Mo.	48	83	59
N. C.	28	33	45
Okla.	4	1	9
S. C.	38	56	57
Tenn.	27	47	52
Tex.	19	29	25
11-States	33	32	36

These 11 States produced 68% of the Nation's cotton in 1975.

PLANTING PROGRESS

Percent of Acreage Planted
 (As of October 31)

WINTER WHEAT			
	1976	1975	Avg.
Colo.	100	100	100
Ill.	94	97	94
Kans.	95	95	95
Mont.	100	100	100
Nebr.	100	100	100
Ohio	100	1/2	1/2
Okla.	100	1/2	1/2
S. Dak.	100	100	100
Tex.	84	91	94
U. S.	93	94	95

1/Data not available.
 2/Less than 5%.