

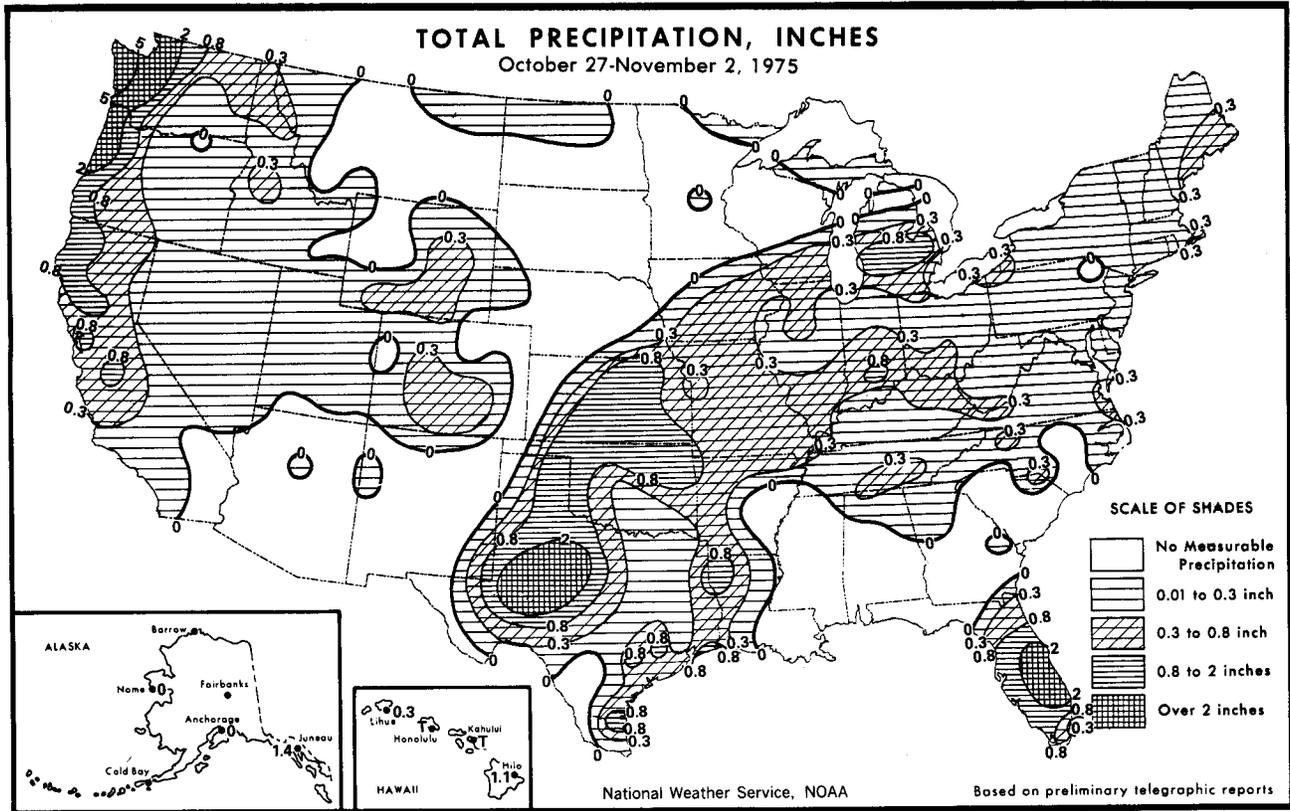
# Weekly Weather & Crop Bulletin

U. S. DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
Environmental Data Service  
U. S. DEPARTMENT OF AGRICULTURE  
Statistical Reporting Service

Volume 62, No. 44

WASHINGTON, D.C.

Nov. 4, 1975



### NATIONAL WEATHER SUMMARY

For the week of October 27-November 2

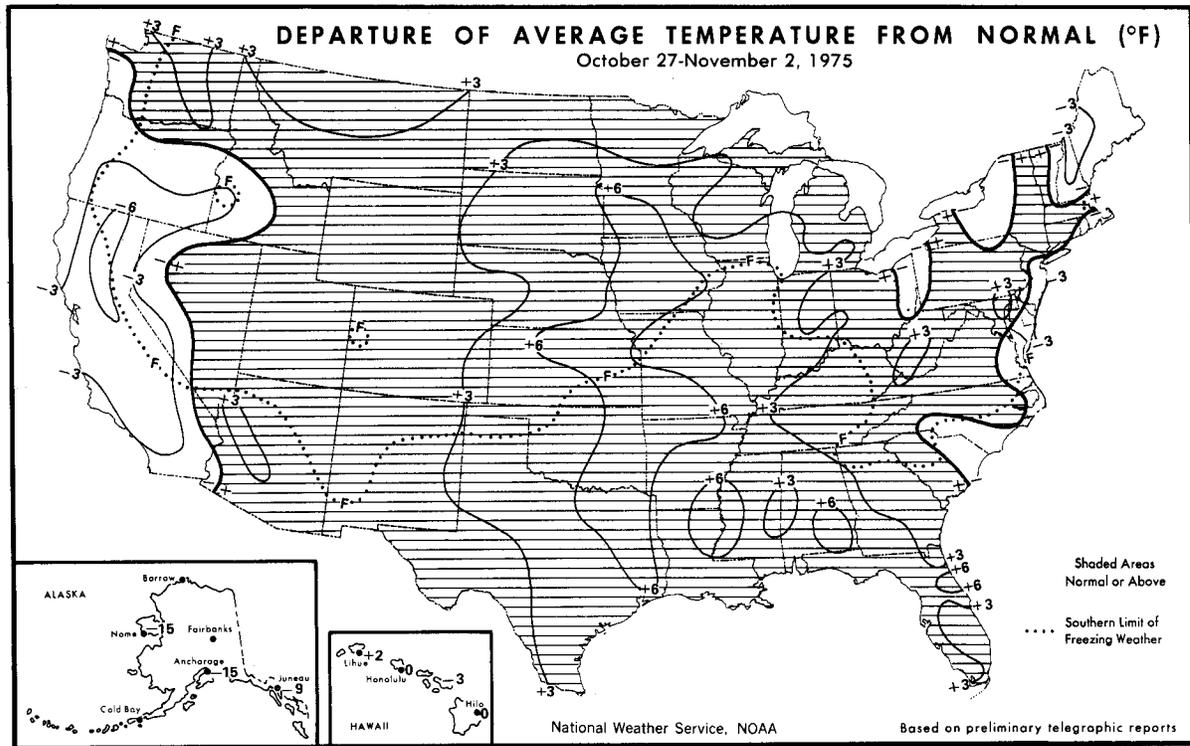
**HIGHLIGHTS:** Fair, mild weather during the week favored much of the Nation, especially the Plains region, where temperatures were unseasonably warm. Cooler weather was confined to the central West Coast and extreme Northeast. Precipitation focused on the Northwest and parts of Texas and Florida, and more general rains spread across the middle Mississippi Valley and upper Great Lakes region. In the Rockies heavy snow blanketed higher elevations of Utah and Wyoming.

A snow storm in the central Rockies at the beginning of the week dumped most of its load on Utah and Wyoming, where a band of heavy snow pushed southward through the mountains. Over half of the 6 inches of snow that blanketed Casper, Wyo. on Monday accumulated in only 8 hours. In addition, travelers were cautioned about other locally heavy snows in the higher elevations of northern Utah.

Weekend showers--mostly rain but occasionally snow--persisted in the Northwest from northern California and Oregon along the Washington coast into the Intermountain region. In contrast sunny skies prevailed from New England through the Ohio and middle Mississippi Valleys, the southern Plains and Rockies, and across the Southwest. A few leftover thundershowers rumbled across Florida, but by Monday most rains had called it quits along the mid-Atlantic Coast.

Even though the snow storm diminished on Tuesday morning winter still had a firm grasp on much of the Nation. In parts of the Plains, daytime temperatures were locked in the freezing range. Meantime cool air followed a southeasterly course through the upper Great Lakes, and from the central Mississippi Valley, and southern Plains into the Ohio Valley.

Light drizzle marked the leading edge of the



frontal system, where clouds piled up from the central and eastern Gulf Coast through the Ohio Valley region. In the West light showers swept across western Washington and Oregon and some snow drifted into western Montana.

Cool, clear weather greeted a large part of the Nation's midsection on Wednesday morning. As high pressure centers settled over Minnesota and Wyoming, the mercury skidded into the 20's from the upper Mississippi Valley into the northern and central Rockies. A few spots in Minnesota, Colorado, and Wyoming even dipped into the teens.

Meanwhile a ridge of high pressure from the western Great Lakes into the central Rockies pulled more chilly air into the Northeast. The approaching cold air touched off showers and occasional thundershowers from the lower Great Lakes to eastern Texas and Louisiana.

Once again cool temperatures were the rule for the Northeast quarter of the Nation on Thursday. At dawn temperatures in the teens and twenties chilled the Great Lakes region, where Pellston, Mich. dropped to a record low of 14°. A high pressure center held temperatures in the 40's from the lower Great Lakes to the mid-Atlantic Coast and southern New England. From eastern New York into northern New England, the air was about 10 degrees cooler.

Meantime areas along the Gulf Coast enjoyed seasonably warm weather, as did southern California and parts of the central and northern Plains. Limited precipitation gave way to clear skies over much of the Nation as sunshine brightened most of the Gulf Coast region northwest into Kentucky, the

middle Mississippi Valley, central Plains, and southern Rockies.

Record low readings on Friday morning signaled a chilly weekend for much of the Northeast. Paced by Bradford, Pa., the lowest for the Nation with 12°, Erie, Pa. plunged to a record low of 24°, Buffalo, N.Y. sank to 22°, and Youngstown, Ohio halted at 21°. In fact, cooler air dominated most of the U.S. Afternoon highs ranged from the mid 30's in extreme northern Maine to upper 80's in southwest Texas.

Brisk winds in the Midwest gusted to over 30 mph from the southern Plains and middle Mississippi Valley into the upper Great Lakes region, where temperatures in the 60's and 70's were common. In the West winds topped 80 mph in Cutbank, Mont.

November got off to a pleasant start on Saturday with sunny skies over most of the Southeast, Southwest, northern Rockies and Plains, and most of New England.

At the same time, Saturday ended a very dry October for much of the Plains States, where St. Joseph, Mo. measured only a trace of rain for the entire month. Some other dry spots: Omaha, Nebr. 0.01 in.; Topeka, Kans. 0.05 in.; and Lubbock, Tex. 0.06 in.

A frontal system on Sunday made parts of the Midwest, lower Plains, and Northwest exceptions to the favorable weather pattern. Scattered showers spread from Michigan through Kansas into Texas, easing the dry spell in some areas. In the Pacific Northwest a cold front trailing across Washington triggered rain as it pulled cooler moist air inland from the Pacific.

**NATIONAL AGRICULTURAL SUMMARY**

For the Week of October 27-November 2

**HIGHLIGHTS:** Harvest of row crops continued to make good advancement. Nationwide, corn for grain was 82% harvested and soybeans were three-fourths finished by November 2, much ahead of normal. Winter wheat seeding reached 86% finished. Rains aided germination and assured stands in many of the previously dry areas.

**SMALL GRAINS:** Rain in varying amounts over much of the southern Great Plains should help previously "dusted in" wheat and promote growth in areas to be used for winter pasture. By November 2, seeding of the 1976 winter wheat crop reached 86% complete, trailing 1974 and normal levels of 89%.

Rains eased dry conditions in the eastern two-thirds of Kansas and much of Oklahoma and Texas; however, dry western areas of Kansas, the Oklahoma Panhandle, and the western High Plains of Texas still need rain. Seeding was only 95% complete in Kansas, 91% in Texas, and 81% in Oklahoma, behind 1974 and normal levels in all three States. Wheat condition ranges from poor in the dry areas of the Great Plains to mostly good in the eastern North Central States.

**CORN:** Aided by above normal temperatures, corn harvesting made excellent progress in most major States. Harvest of the Nation's corn crop advanced 14 points from the previous week to 82% finished by November 2, far ahead of the 62% last year and average 58%.

In the North Central States, corn harvest was 83% complete, out pacing 59% a year ago and normal 55%. Harvest surpassed the four-fifths mark in eight of the eleven States in this region. Last year harvest in only two States had reached this point. Corn harvest was furthest ahead in Minnesota at 92% finished. In Iowa, combining made excellent progress, even though many storage facilities are full. Harvest was 87% complete versus only half done in 1974. Illinois corn reached 85% finished against only 47% a year ago.

Harvest in the South Atlantic States was 81% complete, while harvest in the South Central advanced to 75%.

**COTTON:** Cotton harvesting made the best progress of any week so far this season. Picking in the 11 major Southern States was 33% finished by November 2, still behind last year's 36% and normal 40%.

Cotton harvesting was generally on schedule in Texas with 29% picked, and ahead of schedule in Arkansas and South Carolina at 59% complete and in Missouri with 88% picked. Progress in the other major Southern States trailed the 1974 and average levels. Cotton in Mississippi was in poor to fair condition and only 27% has been harvested.

In the West, cotton harvest continued in California and New Mexico; and made satisfactory progress in Arizona with 40% picked.

**SOYBEANS:** Soybean combining continued to make good progress in many major areas and by November 2, harvest was 75% finished nationwide, versus 68% in 1974 and the average 65%.

In the North Central States, harvest reached 94% complete, ahead of last year's 85% and the

usual 81%. Combining is virtually complete in Illinois, Iowa, Minnesota, Nebraska, and South Dakota; and was 75% complete in Kansas, 82% in Missouri, and 90% in Ohio. Drying rates and above normal rainfall slowed harvesting in Indiana.

Harvest in the South jumped 12 points to 42% complete, still ahead of last year and normal. Combining was 45% finished in Mississippi and half done in Arkansas. Progress ranged from only 12% done in North Carolina to 75% in Texas.

**OTHER CROPS:** Sorghum grain harvesting continued much ahead of last year and normal in the seven major States. By November 2, combining was 91% finished versus 56% in 1974 and the average 73%. Harvest was virtually complete in Nebraska and South Dakota, 96% in Texas, and 80% in Kansas.

Tobacco stripping was ahead of schedule in Kentucky with 13% done. In Tennessee stripping advanced to 44% complete.

Sugarbeet lifting was only 45% complete in Ohio, 86% in Colorado, 90% in Nebraska, and was nearing completion in Michigan and Montana.

Florida sugarcane is in good condition and harvest will begin by midmonth. Harvest was 26% complete in Louisiana, ahead of both last year and normal.

Peanut harvest was 91% complete in Texas, versus only 59% a year ago, while in Oklahoma 81% was threshed against the average 49%.

Fall plowing was making good progress in most North Central States and progress was generally ahead of normal.

**FRUITS AND NUTS:** Apple harvesting is about done in most States although picking continued in a few scattered orchards. Harvests of California almonds and walnuts were active, but running late. Pecans were 21% gathered in Georgia and harvest was active in Louisiana and Texas. New crop citrus is progressing well in California and the Desert grapefruit harvest is underway. Citrus movement continues relatively light in Texas, while harvest was progressing well in Florida.

**VEGETABLES:** The Florida vegetable crops were in good to very good condition and harvest was increasing on cucumbers, eggplant, peppers, snap beans, sweet corn, and squash. In Texas, supplies were available for cabbage, carrots, cucumbers, eggplant, lettuce, green peppers, squash, and tomatoes. Moderate supplies of broccoli, cauliflower, carrots, and celery were available in the California Salinas area. Planting and seeding vegetables continued active in Florida and Texas.

**PASTURES AND LIVESTOCK:** Rain and above normal temperatures improved pasture conditions in many areas and brightened prospects for winter grazing on wheat fields in the southern Great Plains. Livestock are making good use of corn stalks in areas where harvest is complete. Movement of livestock to winter pasture continues in several States, but supplemental feeding is necessary where pasture feed is short. Winter feed supplies are adequate in most States, but hay supplies vary from area to area.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., Nov. 2, 1975

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 . . .	62	+ 4	T	-.6	La. Baton Rouge . . .	69	+ 5	0	-.7	Youngstown . . .	46	- 1	T	-.7
Mobile . . .	69	+ 5	0	-.5	Lake Charles . . .	70	+ 5	.1	-.7	OKLA. Okla. City . . .	61	+ 5	.1	-.3
Montgomery . . .	67	+ 6	T	-.5	New Orleans . . .	70	+ 5	T	-.5	Tulsa . . .	63	+ 6	.9	+ .3
ALASKA Anchorage . . .	13	-15	0	-.3	Shreveport . . .	67	+ 5	1.2	+ .5	OREG. Astoria . . .	49	- 1	4.4	+2.4
Barrow . . .	---	---	---	---	MAINE. Caribou . . .	37	- 2	T	-.8	Burns . . .	40	- 2	.1	-.2
Fairbanks . . .	---	---	---	---	Portland . . .	44	- 1	.4	-.5	Medford . . .	45	- 3	.4	-.2
Juneau . . .	28	- 9	1.4	-.2	MD. Baltimore . . .	53	+ 1	.1	-.6	Pendleton . . .	48	+ 1	T	-.3
Kodiak . . .	---	---	---	---	MASS. Boston . . .	53	+ 2	.2	-.6	Portland . . .	49	0	1.8	+ .7
Nome . . .	7	-15	0	-.3	Chatham . . .	51	---	.5	---	Salem . . .	48	- 1	2.1	+ .9
ARIZ. Flagstaff . . .	43	+ 1	T	-.3	MICH. Alpena . . .	43	+ 1	0	-.5	PA. Allentown . . .	49	0	T	-.7
Phoenix . . .	69	+ 3	0	-.1	Detroit . . .	48	+ 1	T	-.6	Erie . . .	46	- 1	.5	-.3
Tucson . . .	65	+ 1	0	-.1	Flint . . .	49	+ 3	1.1	+ .5	Harrisburg . . .	51	+ 1	T	-.6
Winslow . . .	52	+ 1	T	-.1	Grand Rapids . . .	48	+ 2	1.0	+ .4	Philadelphia . . .	54	+ 2	.1	-.6
Yuma . . .	69	- 1	0	-.1	Houghton Lake . . .	44	+ 2	T	-.6	Pittsburgh . . .	48	0	.1	-.5
ARK. Fort Smith . . .	64	+ 7	.6	-.2	Lansing . . .	48	+ 2	.8	+ .3	Scranton . . .	49	+ 2	T	-.7
Little Rock . . .	61	+ 4	T	-.7	Marquette . . .	53	+10	.1	-.5	R.I. Providence . . .	42	- 1	.2	-.7
CALIF. Bakersfield . . .	59	- 3	.1	0	Muskegon . . .	50	+ 4	.8	+ .2	S.C. Charleston . . .	68	0	0	-.5
Eureka . . .	53	0	1.2	+ .1	S. Ste. Marie . . .	42	+ 1	T	-.7	Columbia . . .	59	0	0	-.7
Fresno . . .	55	- 4	.7	+ .5	MINN. Duluth . . .	40	+ 2	T	-.5	Greenville . . .	57	0	0	-.5
Los Angeles . . .	63	- 3	.1	-.1	Internat Falls . . .	38	+ 2	.1	-.2	S.D. Aberdeen . . .	46	+ 5	0	-.2
Red Bluff . . .	54	- 6	.6	+ .1	Minneapolis . . .	49	+ 6	0	-.4	Huron . . .	46	+ 4	0	-.3
San Diego . . .	63	- 1	T	-.2	Rochester . . .	48	+ 5	0	-.3	Rapid City . . .	48	+ 3	0	-.1
San Francisco . . .	55	- 4	.5	+ .2	St. Cloud . . .	43	3	T	-.3	Sioux Falls . . .	47	+ 4	0	-.2
Stockton . . .	54	- 5	.5	+ .2	MISS. Jackson . . .	67	+ 6	0	-.6	TENN. Chattanooga . . .	58	+ 1	T	-.7
COLO. Denver . . .	47	+ 1	T	-.2	Meridian . . .	62	+ 2	0	-.5	Knoxville . . .	55	0	.2	-.5
Grand Junction . . .	49	+ 1	T	-.2	MO. Columbia . . .	56	+ 4	.6	0	Memphis . . .	62	+ 5	0	-.7
Pueblo . . .	49	+ 1	.6	+ .4	Kansas City . . .	57	+ 5	.3	-.2	Nashville . . .	58	+ 3	.2	-.4
CONN. Bridgeport . . .	53	+ 1	T	-.8	St. Louis . . .	58	+ 5	.3	-.3	TEX. Abilene . . .	63	+ 2	2.4	+1.9
Hartford . . .	50	+ 2	T	-.8	Springfield . . .	59	+ 6	.4	-.2	Amarillo . . .	56	+ 3	.5	+ .2
D.C. Washington . . .	56	+ 1	.2	-.4	MONT. Billings . . .	45	+ 2	T	-.1	Austin . . .	69	+ 4	.1	-.4
FLA. Apalachicola . . .	69	+ 3	0	-.4	Glasgow . . .	43	+ 4	T	-.1	Beaumont . . .	71	+ 6	.8	0
Daytona Beach . . .	75	+ 6	.9	0	Great Falls . . .	45	+ 3	0	-.1	Brownsville . . .	67	- 5	T	-.5
Ft. Myers . . .	77	+ 4	1.2	+ .7	Havre . . .	43	+ 4	T	-.1	Corpus Christi . . .	75	+ 5	.6	+ .2
Jacksonville . . .	68	+ 2	.3	-.3	Helena . . .	42	+ 3	0	-.1	Del Rio . . .	67	+ 1	.1	-.2
Key West . . .	79	+ 2	1.6	+ .7	Kalispell . . .	41	+ 4	.2	-.1	El Paso . . .	60	+ 2	T	-.1
Lakeland . . .	73	+ 2	1.8	+1.4	Miles City . . .	43	+ 1	T	-.1	Fort Worth . . .	68	+ 6	.1	-.4
Miami . . .	78	+ 3	2.2	-1.1	Missoula . . .	41	+ 3	T	-.2	Galveston . . .	73	+ 4	1.4	+ .8
Orlando . . .	74	+ 3	2.7	+2.1	NEBR. Grand Island . . .	51	+ 4	T	-.2	Houston . . .	70	+ 4	.2	-.7
Tallahassee . . .	69	+ 5	0	-.5	Lincoln . . .	53	+ 5	T	-.2	Lubbock . . .	60	+ 5	.9	+ .6
Tampa . . .	75	+ 4	1.9	+1.5	Norfolk . . .	51	+ 5	0	-.2	Midland . . .	62	+ 2	2.2	+2.0
W. Palm Beach . . .	76	+ 2	2.1	+ .8	N. Platte . . .	46	+ 2	T	-.1	San Angelo . . .	64	+ 2	2.2	+1.9
GA. Atlanta . . .	60	+ 3	.1	-.5	Omaha . . .	54	+ 7	.1	-.2	San Antonio . . .	70	+ 5	T	-.5
Augusta . . .	60	+ 1	0	-.4	Valentine . . .	48	+ 5	0	-.1	Victoria . . .	73	+ 5	.5	-.2
Macon . . .	63	+ 2	0	-.4	NEV. Ely . . .	41	+ 1	T	-.1	Waco . . .	69	+ 5	.2	-.3
Savannah . . .	64	+ 2	T	-.4	Las Vegas . . .	62	+ 2	T	-.1	Wichita Falls . . .	64	+ 4	.8	+ .3
HAWAII. Hilo . . .	75	0	1.1	-1.7	Reno . . .	42	- 3	T	-.2	UTAH. Blanding . . .	47	+ 2	.1	-.2
Honolulu . . .	78	0	T	-.5	Winnemucca . . .	43	0	T	-.2	Salt Lake City . . .	47	+ 1	.3	-.0
Kahului . . .	74	- 3	T	-.4	N.H. Concord . . .	42	- 3	.2	-.5	VT. Burlington . . .	46	+ 2	T	-.6
Lihue . . .	78	+ 2	.3	-.8	N.J. Atlantic City . . .	49	- 3	.3	-.6	VA. Lynchburg . . .	53	0	T	-.6
IDAHO. Boise . . .	43	- 3	.1	-.2	Trenton . . .	52	0	T	-.6	Norfolk . . .	56	- 1	.7	+ .1
Lewiston . . .	47	+ 1	.1	-.2	N.MEX. Albuquerque . . .	53	+ 1	T	-.1	Richmond . . .	55	0	.2	-.5
Pocatello . . .	42	0	T	-.2	Roswell . . .	59	+ 5	0	-.2	Roanoke . . .	54	+ 1	.2	-.4
ILL. Cairo . . .	59	+ 3	.4	-.3	N.Y. Albany . . .	47	0	T	-.6	WASH. Colville . . .	41	+ 1	.4	0
Chicago . . .	53	+ 4	.1	-.5	Binghamton . . .	42	- 3	T	-.7	Omak . . .	45	+ 4	.7	+ .4
Moline . . .	54	+ 6	.1	-.4	Buffalo . . .	47	+ 1	.2	-.6	Quillayute . . .	47	0	8.5	+5.5
Peoria . . .	53	+ 5	.3	-.2	New York . . .	53	0	T	-.8	Seattle-Tacoma . . .	48	0	2.8	+1.6
Rockford . . .	49	+ 3	.5	-.1	Rochester . . .	47	0	.1	-.5	Spokane . . .	42	0	.4	0
Springfield . . .	55	+ 5	.1	-.5	Syracuse . . .	47	- 1	T	-.8	Walla Walla . . .	52	+ 4	.1	-.3
IND. Evansville . . .	55	+ 3	.2	-.4	N.C. Asheville . . .	53	+ 1	0	-.6	Yakima . . .	46	+ 2	T	-.2
Ft. Wayne . . .	49	+ 1	.2	-.5	Charlotte . . .	56	- 1	0	-.6	W. Va. Beckley . . .	51	+ 3	.2	-.4
Indianapolis . . .	51	+ 1	.3	-.3	Greensboro . . .	55	+ 1	0	-.6	Charleston . . .	55	+ 3	.2	-.4
South Bend . . .	52	+ 5	.2	-.5	Hatteras . . .	61	0	.2	-.8	Huntington . . .	53	+ 1	.2	-.3
IOWA. Burlington . . .	54	+ 5	.3	-.2	Raleigh . . .	55	0	T	-.6	Parkersburg . . .	52	0	.1	-.4
Des Moines . . .	54	+ 7	.6	+ .2	Wilmington . . .	61	0	T	-.6	WIS. Green Bay . . .	45	+ 2	0	-.4
Dubuque . . .	50	+ 5	.5	-.1	N.DAK. Bismarck . . .	42	+ 3	0	-.1	La Crosse . . .	47	+ 2	0	-.4
Sioux City . . .	51	+ 5	0	-.3	Fargo . . .	42	+ 3	T	-.2	Madison . . .	48	+ 4	.7	+ .3
KANS. Concordia . . .	57	+ 7	.9	+ .6	Williston . . .	40	+ 2	.1	0	Milwaukee . . .	48	+ 3	.6	+ .2
Dodge City . . .	56	+ 5	.8	+ .5	OHIO. Akron-Canton . . .	48	0	.1	-.5	WYO. Casper . . .	43	+ 2	.5	+ .3
Goodland . . .	51	+ 5	0	-.2	Cincinnati . . .	53	+ 2	.4	-.2	Cheyenne . . .	43	+ 1	T	-.2
Topeka . . .	57	+ 6	.4	0	Cleveland . . .	48	0	.3	-.3	Lander . . .	41	+ 1	0	-.3
Wichita . . .	58	+ 5	1.1	+ .7	Columbus . . .	50	+ 1	.3	-.2	Sheridan . . .	43	+ 2	T	-.2
KY. Lexington . . .	52	0	.4	-.2	Dayton . . .	52	+ 3	.3	-.2	P.R. San Juan . . .	82	+ 2	.8	-.5
Louisville . . .	55	+ 3	.2	-.4	Toledo . . .	48	+ 1	.3	-.2					

Based on 1941-70 Normals

The Weekly Weather and Crop Bulletin is published by the National Weather Service, NOAA, and Statistical Reporting Service, USDA. Standard copy for the Bulletin is prepared by Dr. Richard E. Felch, agricultural climatologist, Lyle M. Denny, Orus W. Byrd, meteorologists, DeLon Brown, agricultural statistician, and Susan E. Atkins, editor.

## 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:** Weather predominately fair and warm, temperatures averaging 5° warmer than normal. Except for Tennessee Valley, no measurable rain fell. Spotty light rain occurred over extreme north on 29th.

Farm activities: Mostly harvesting cotton, corn, soybeans. Corn harvest 66% complete, 78% 1974, average 68%. Soybeans good condition; harvest 34% done, 54% 1974, average 35%. Cotton slow in opening; 74% open, 21% harvested, 57% 1974, average 50%. Peanut harvest almost complete; 98% dug, 96% combined. Pecans poor to fair condition. Seeding small grains and winter grazing crops 61% complete. Pastures good, soil moisture adequate.

**ARIZONA:** Temperatures normal. Precipitation light.

Cotton satisfactory progress; harvest 40%; yields adequate, below normal. Sorghum harvest limited. Sugarbeets satisfactory. Renovation and replanting alfalfa limited, some grazing. Lettuce harvest continued Cochise County. Harvest nearing full volume north central and south central. Mixed vegetables seasonal progress. Melon harvest continues Salt River Valley. Red chili harvest continued Cochise County. Lemon harvest continued Yuma County, Salt River Valley. Picking navel oranges underway. Range conditions: Desert below average, mountain mostly average. Stock water adequate. Cattle, calves good condition.

**ARKANSAS:** Temperatures up to 6° above normal. Extremes: 88 and 30°. Precipitation light, none to less than 0.10 in.

Weekend rains beginning and end of period stalled field activity. Farming operations 15 days ahead of 1974. Soil moisture short, showers provided temporary relief. Fieldwork: 4.8 days. Most first cotton picking complete, second pickings in progress; harvest 59% complete, 36% 1974. Top bolls opening slowly. Rice harvest 99% combined, 95% 1974. Soybean harvest 50% complete, 28% 1974. Late beans slow to mature. Rains assured stands, continued growth of wheat and oats. Little corn or sorghum remains for harvest. Grasslands need rain to produce adequate forage. Cattlemen feeding some hay. Herds culled closely, marketings above normal.

**CALIFORNIA:** Storms early week and on 29th and 30th gave rain to all except low southeast deserts. Fair weather remainder. Rain ranged over 5.00 in., some north coast and northern mountain areas to 1.00 in. Sacramento Valley, northern San Joaquin Valley, and central coast. Light amounts south coast and southern San Joaquin Valley. Temperatures average 3 to 6° below normal most areas except 1 to 3° below southern area.

Rice, dry beans, cotton, corn, milo and sugarbeet harvesting continues. Small grain planting continues. Weather delaying harvests. Wine grape sugar levels continue low. Almond, walnut harvests active, but running late. New crop citrus progressing well; Navel harvest several weeks away; Desert grapefruit harvest underway. Broccoli, cauliflower, carrots, celery in moderate supply Salinas. Desert cantaloup slowing down; honeydews picking up Imperial Valley. Lettuce starting Palo Verde Valley. Potatoes, onions moving Tulalake, slowed by rains. Ranges improve aided by rain. Supplemental feeding increasing few areas. Calving, lambing continues. Water

supplies increased. Cattle, sheep utilizing stubble.

**COLORADO:** Temperatures near to slightly above normal eastern plains and slightly below normal mountains and west. Little or no precipitation eastern plains. Mountain areas 0.50 to 1.50 in. moisture. Southern east slope and southern mountains received locally heavy rains on 1st.

Sugarbeets 86% harvested, 87% 1974, 79% average. Corn 69% harvested, 66% 1974, 46% average. Grain sorghum 69% combined, 33% 1974, 42% average. Winter wheat stands remain spotty and in critical need of rain. Wheat condition fair to good except southeast poor. Range and pasture grasses frozen and dried. Livestock generally good condition; thinner than normal southeast.

**FLORIDA:** Temperatures averaging 3 to 5° above normal. Rainfall averaging 2.00 to 4.00 in. central and south mainly midweek. Little or no rainfall, extreme north and northwest.

Soil moisture adequate west, south, short north. Harvest of peanuts and corn nearly complete. Soybean harvest full swing. Haymaking and cotton picking continues. Pecans being gathered. Planting of small grains active, early plantings good condition. Sugarcane good condition. Pastures providing poor to good grazing. Cattle and calves fair to good condition. Citrus trees excellent, condition improved with rains. Fruit condition excellent, very little fruit splitting. Harvest progressing very well. Vegetable crop conditions good to very good; harvest increasing. Rains caused minor damage to snap beans, sweet corn, eggplant, tomatoes. Snap beans plantings active; harvest increasing. Cabbage transplantings and seeding delayed by rains. Celery transplanting active. Sweet corn plantings active, harvest steady, quality fair, reduced by rains. Cucumber plantings active; harvest increasing. Pickle harvest active. Eggplant harvest increasing, packout good. Escarole-Endive good growth, planting active. Lettuce, pepper, potato, radish plantings active. Squash fair to good, harvest active. Tomatoes mostly good condition, volume increasing, size good.

**GEORGIA:** Temperatures averaged 5 to 7° above normal, ranging upper 50's extreme northeast to lower 70's southeast. Rainfall mainly north and near coast. Amounts averaged near 0.10 in. No precipitation and little temperature change over weekend.

Soil moisture short to adequate. Harvest active with 6 days suitable. Cotton continued in mostly fair to good condition; harvest far behind normal at 35% complete, 1974 61% harvested. Soybeans fair to mostly good, 26% harvested, 1974 41%. Corn fair to mostly good, 71% harvested, 1974 74%. Peanuts good, harvest virtually complete. Pecans fair, 21% harvested, 1974 15%. Wheat 38% planted. Rye 64% planted. Pastures showing seasonal decline, fair to good condition. Cattle and hogs good.

**HAWAII:** Shower activities frequent Hawaii. Other Islands still in need of more moisture.

Weather favorable for crop growth. Head cabbage production getting light on Maui. Supplies most other vegetables adequate. Banana supplies heavy. Papaya production seasonal flush. Pineapple harvesting light. Sugar harvest slowing down. Pasture growth slow, but improving.

**IDAHO:** Mostly cool and wet week. Average temperatures 6 to 7° below normal, ranging from 7° Fairfield on 25th to 72° Emmett on 29th. Over 1.00 in. precipitation north. Snow in mountains southeast valleys.

Unfavorable weather continued hamper potato and sugarbeet harvest. Harvest continued most areas. Potato harvest nearly complete. Sugarbeet harvest moving ahead rapidly. Some seeding of winter grains and harvest of late small grains continue. Cattle are looking good and most are now on winter pastures.

**ILLINOIS:** Temperatures 2 to 4° above normal. Precipitation 0.10 to 0.50 in.

Corn harvest 85% complete, 47% 1974, average 46%; harvest active. Seeding winter wheat 97% complete, 94% 1974, average 93%; new seedings mostly good to excellent condition. Grain sorghum harvest 80% complete. Plowing 1976 corn and soybeans 40% complete, 28% 1974, average 26%. Pastures mostly fair to good, supplying 60% roughage requirements. Soil moisture 19% short, 79% adequate, 2% surplus. Fieldwork: 6.5 days suitable.

**INDIANA:** Near normal weather but drying rates and cloudiness little above normal. Rainfall 0.50 in. north to 0.75 in. south. Temperatures dropped to high 20's north, but extreme southwest hasn't had first fall freeze.

Five days suitable for fieldwork. Topsoil and subsoil moisture mostly adequate. Corn 75% harvested, 65% average, 55% 1974. Soybeans 85% harvested, 80% average, 75% 1974. Wheat 85% seeded, same as 1974. Wheat 75% emerged, stands mostly good. Apples 95% picked, same as 1974, average 90%. Pastures mostly fair to good.

**IOWA:** Temperatures 4 to 8° above normal. Precipitation below normal. Narrow band through central received around 0.50 in.

Dry windy week. Soil moisture mostly short. Rains 31st, through 2d should provide some relief. Another excellent week for harvest, though many fall storage facilities slowing harvest and limiting deliveries. Some corn and beans piled on ground. Corn harvest 87% complete, 50% 1974, and average. Highest harvest percent since 1955. Quality of corn good to excellent. Popcorn about 90% harvested. Grain sorghum harvest 95% complete, 68% 1974, 66% average. Soybean harvest completed. Fall plowing underway 36% complete, 20% 1974. Plowing being delayed due to dry ground conditions. Fall fertilizer application also underway. Fieldwork averaged 7 days suitable.

**KANSAS:** Rainfall over on 1st and 2d in all but northwest and extreme west. Beneficial to locally heavy rains most areas of central and eastern portions of southwest. Continued unseasonably warm, temperatures averaging 52° northwest to 61° southeast or 5 to 7° above normal.

Heavy rains greatly aided central areas. Wheat 95% planted, 100% 1974. Barley 95% planted, 95% 1974. Sorghum grain 80% harvested, 30% 1974, 60% average. Corn 90% harvested, 70% 1974, 60% average. Soybeans 75% harvested, 45% 1974, 70% average.

**KENTUCKY:** Temperatures averaged a few degrees above normal. Frost on 27th and 28th; hard freeze east on 30th. Precipitation averaged less than 0.25 in., most fell 29th.

Soil moisture 85% adequate. Fieldwork favorable 4.5 days. Activities included harvesting corn and soybeans, stripping tobacco, seeding small

grains. Corn 66% harvested, 70% 1974, 68% average. Soybeans 56% harvested, 56% 1974, 52% average. Tobacco 13% stripped, 11% 1974, 10% average. Wheat 72% seeded, 65% 1974, 72% average.

**LOUISIANA:** Temperatures slightly below normal. Rainfall light. Greatest weekly total 0.29 in. Temperature extremes: 87 and 37°.

Fieldwork possible 5.0 days. Soil moisture adequate. Main activities: Harvesting sugarcane, soybeans, cotton. Soybeans 66% harvested, 77% 1974, 54% average. Cotton 27% harvested, 62% 1974, 55% average. Sugarcane 26% harvested, 21% 1974, 23% average. Grain sorghum 80% harvested. Sweetpotatoes near 90% harvested. Pecan harvest active. Wheat 75% and oats 80% seeded. Pastures average. Cattle condition fair to good.

**MARYLAND & DELAWARE:** Temperatures averaged 2 to 5° above normal. Highs upper 70's, lows upper teens. Precipitation light, with amounts ranging from 0.08 to 1.33 in. Frost in most areas on 31st.

Harvesting of corn and soybeans major activity. Small grain seeding nearing completion. Wet weather has slowed progress most areas. Tobacco farmers stripping, grading, packing tobacco. Some apples being harvested.

**MICHIGAN:** Temperatures slightly above normal up to 5° above. Precipitation generally light from trace to 1.09 in.

Soil moisture adequate. Excellent harvesting weather continued. Corn 65%, 31% 1974, 40% normal. Soybean combining 90%, 88% 1974, 65% normal. Sugarbeet harvest nearly complete. Winter wheat planting virtually complete. Apple harvest over most areas. Fall vegetable harvest virtually complete. Six days suitable for field and harvest work. Fall plowing active.

**MINNESOTA:** Warm week. Temperatures averaged 2 to 6° above normal. Extremes: 70 and 16°. Rainfall 0 south and west central to 0.07 in. east central and north.

Fall harvest resumed rapid pace after brief delay due recent rains. Six days fieldwork. Corn harvest 92% complete, 1974 86%, average 69%. Moisture content corn grain 20%, average 23%. Soybean harvest completed previous week, average 89%. Plowing harvested corn and soybean fields well ahead average. Farmers also applying fertilizer for next year's crops, chopping corn stalks for livestock bedding. Supplemental feeding cattle necessary but pastures and harvested grain fields furnishing some feed.

**MISSISSIPPI:** Temperatures 3 to 5° above normal. Extremes: 87 and 30°. Greatest 24-hour rainfall was 1.35 in. at Belzoni on 26th.

Soil moisture mostly adequate. Fieldwork: 4.6 days suitable. Cotton 92% open bolls, 90% average; 27% harvested, 51% 1974, 61% average. Soybeans 82% mature, 78% average; 45% harvested, 37% 1974, 44% average. Rice 84% harvested, 100% 1974. Corn 80% harvested, 83% 1974, 71% average. Sorghum 92% harvested, 88% 1974, 87% average. Sweetpotatoes 91%, hay crops 94% and pecans 28% harvested. Winter wheat 79% and oats about 85% planted. Cotton in poor to fair condition, corn in fair to good, other crops in good condition.

**MISSOURI:** Temperatures above normal, ranging 1° above in Bootheel to 7° above in west Ozarks. Precipitation ranged from 0.10 in. northwest to 1.00 in. east Ozarks and Bootheel.

Soil moisture short to adequate. Fieldwork:

6 days suitable. Corn 87% harvested, 62% 1974, 56% average. Soybeans 82% harvested, 58% 1974, 57% average. Grain sorghum 89% harvested, 56% 1974, 61% average. Cotton 83% harvested, 47% 1974, 53% average. Winter wheat 82% seeded. Plowing for spring planted crops 43% complete.

**MONTANA:** Unseasonably warm, dry week. Temperatures averaged normal southeast to 5° above normal west. Scattered light precipitation west. Little or none elsewhere. Gusty winds central.

Potatoes, dry beans, sugarbeets virtually all harvested. Winter wheat condition mostly good. Topsoil and subsoil moisture adequate. Cattle 80% and sheep 85% moved from summer ranges; 15% of cattle and 10% of sheep receiving supplemental feed. Cattle and sheep condition good to excellent.

**NEBRASKA:** Temperatures below normal 26th and 27th, above normal remaining. Showers on 1st, southeast 0.25 to 0.50 in.

Topsoil and subsoil moisture supplies short. Corn harvest 90% completed, 1974 70%, 60% normal. Minimum fuel required for grain drying. Sorghum harvest practically complete, 1974 85%, normal 75%. Soybean harvest near completion, 1974 95% and 90% normal. Sugarbeet harvest 90% completed. Wheat condition mostly fair. Pasture and range feed supplies 84% short. Cattle moved to stalk fields or winter pasture. Supplemental feeding on short pasture and range grasses.

**NEVADA:** Precipitation amounts greatest north, light south, not measureable south central. Temperatures averaged near normal most areas except uniformly below normal northwest. Extremes: 83° Logandale, 15° Reno and Mountain City.

Winter wheat seeding about completed. Potato harvest in windup. Movement cattle and sheep to winter ranges nearly finished.

**NEW ENGLAND:** Little precipitation, 0.25 to 0.50 in. New Hampshire and Maine on 28th and less than 0.50 in. Massachusetts on 30th. Elsewhere less 0.10 in. Above normal temperatures 27th through 1st, below normal other times. Highs 70's south, lows teens north.

Fall clean-up work continues. Crop season essentially ended.

**NEW JERSEY:** Temperatures up to 6° below normal. Extremes: 22 and 74°. Rainfall averaged 0.12 in. north, 0.09 in. central and 0.14 in. south. Heaviest 24-hour total 0.19 in. at Seabrook. Soil moisture in percent of field capacity, averaged 95 north, 84 central and 81 south.

Hardy vegetables continue in limited supply. Apple and cranberry harvest about complete. Harvest of field corn and soybeans active. Warm daytime temperatures have been beneficial for growth of fall sown grains and cover crops. Cover crop seeding continues as crops are harvested.

**NEW MEXICO:** Storm moved through on 31st dropping temperatures 10 to 20° north and 5 to 10° south. Generally light precipitation, amounts less than 0.10 in.

Soil moisture short all areas except southwest with adequate supplies. Good harvest weather prevailed. Cotton harvest 10% southwest, 10 to 30% southeast; no harvest north, crop fair. Alfalfa good, producers through north, working on 5th and 6th cut south. Grain sorghum good, 80 to 90% harvested east, 40% elsewhere. Corn good, 90%

harvested. Apples 75 to 100% harvested north. Ranges fair, livestock good.

**NEW YORK:** Temperatures averaged near normal. Extremes: 15 and 74°. Rainfall below normal. Northeast received 0.25 to 0.50 in., elsewhere amounts were less. Early week mild, much colder 30th and 31st. Flurries 30th north. Temperatures moderated during weekend. Rain fell on 1st and 2d.

Conditions improved for harvest. Many areas received first killing frost. Grain corn harvest about 50% complete. Farmers continue to harvest some corn silage and haylage. Last of vegetables being harvested. Cabbage, cauliflower and carrots in good supply. Most fruit harvested.

**NORTH CAROLINA:** First freeze of season in west and central on 31st. Temperatures averaged 4 to 6° above normal. Precipitation ranged from 0.50 to 1.00 in. east and generally 0.25 in. or less west and central.

Days suitable fieldwork 4.5. Soil moisture mostly adequate. Corn 83% combined, 1974 85%, average 63%. Peanuts 99% dug, 1974 100%. Peanuts 93% threshed, 1974 97%, average 76%. Soybeans 12% harvested, 1974 19%. Cotton 34% picked, 1974 42%, average 50%. Sweetpotatoes 85% dug, 1974 90%. Small grains 51% planted, 1974 55%, average 58%. Apple harvest virtually complete. Pasture fair to good.

**NORTH DAKOTA:** Temperatures above average, except north central. Extremes: 68 and 13°. Precipitation below normal. Greatest weekly rainfall 0.07 in. at Williston and Rugby. Weekend warm and dry.

Farmers busy winding up fall harvest, fall tillage and preparing for winter.

**OHIO:** Temperatures near to below normal. Extremes: 74 and 21°. Showers on 29th and 1st only. Greatest amount 0.39 in. southwest; least 0.03 in. northwest.

Harvest completed: Corn 55%, 50% 1974 and 60% normal; soybeans, over 90%, 95% 1974 and 80% normal; sugarbeets, 45%, 90% 1974 and 60% normal; popcorn, 65%, 60% 1974 and 65% normal. Long lines at elevators has slowed corn harvest some areas. Winter wheat seeding 95% completed, virtually done 1974, and 95% normal. Wheat 70% emerged. Soil moisture supplies 90% adequate, 10% surplus. Fieldwork: 6 days favorable.

**OKLAHOMA:** Temperatures averaged near normal, ranging 1° above normal to 1° below normal. Precipitation averaged 0 northwest to 0.63 in. east central. Weekend cool west, mild east with moderate to heavy rains most sections.

Wheat seeding progress slow. Topsoil 87% short. Wheat 81% seeded, 98% 1974, 97% average. Condition ranges poor to small area excellent. Other small grain seedings progress better, 90% complete. Harvest fall crops well ahead 1974 and average. Sorghums 73% harvested, 37% 1974, 49% average. Peanuts 81% dug and threshed, average for date 49%. Soybeans 45% combined. Cotton bolls 73% open, 88% average; no appreciable progress in harvest from 2 week ago, 2% 1974, 11% average. Pecan "pick-up" started east. Weekend rains should help "dusted-in" wheat northwest and boost dry pastures. Panhandle counties still need rain.

**OREGON:** Temperatures averaged slightly below normal. Extremes: 70's, 30's, west, 60's, 80's east. Precipitation in east ranged 0.50 to 2.00 in., 2.00 to 3.00 in. west valleys, 5.00 to 6.00 in. along coast.

Fall seeding 60% completed, delayed by rain, west; 90% completed east. Corn silage, grain harvest continuing. Sugarbeet harvest continuing. Apple harvest finished. Filbert, walnut harvests gaining; delayed by wet weather. Sweet corn picking nearly finished. Carrots, cabbage, broccoli, cauliflower, squash harvests continuing. Potato harvest 90% completed. Range, pastures above average. Cattle in good condition. Limited contracting. Winter feed supplies adequate.

PENNSYLVANIA: Lowest temperatures and coldest week since mid-April; 60's and 70's beginning and end of period, about 20° lower midweek. Extremes: 75 and 12°. Light showers and snow flurries north central mountains 29th with additional light showers 1st and 2d. Rainfall totaled less than 0.10 in: east, 0.10 to 0.50 in. west.

Wet soils hindering fieldwork. Some harvest of corn and apples plus sowing small grains.

PUERTO RICO: Island average rainfall 1.23 in. Highest weekly total 3.93 in. at Pico Del Este-Luquillo. Highest 24-hour total 2.40 in. at Arecibo. Temperatures averaged 79° on coasts and 73° interior. Extremes: 91 and 59°.

Favorable weather for cultivation and growth of sugarcane and ratoon. Rains hindered maturity of coffee and slowed harvest of grain in most interior producing areas. Excellent weather for planting tobacco. Pastures in good condition and weather favored development and cultivation. Food crop cultivation and planting progressing. Harvest limited to vegetables, bananas, plantains and citrus.

SOUTH CAROLINA: Temperatures above normal midweek, below normal late week. Scattered frost, freezing temperatures much of north and central on 29th. Scattered showers in mountains and north, but rainfall negligible.

Harvest continues active as open weather prevailed. Soil moisture generally short, some areas remain adequate. Corn harvest 93%, 84% 1974, 85% average. Cotton harvest 59%, 52% 1974, 58% average. Soybean harvest 15%, 22% 1974, 15% average. Oat seedings 47%, 47% 1974, 36% average. Wheat seedings 33%, 22% 1974, 23% average. Winter grazing seedings 79%, 68% 1974, 75% average.

SOUTH DAKOTA: Temperatures averaged from normal to 6° above normal. Extremes: 80 and 13°. Precipitation ranged from 0 to 0.23 in.

Row crop harvest continues at a fast pace. Corn 88% harvested, 1974 91%, normal 75%. Sunflower harvest virtually complete, yields generally lower than expected. Sorghum and soybean harvest are essentially complete. Cattle are generally on winter pasture or corn stubble. Some supplemental feeding being done. Farmers are busy repairing machinery, building and repairing fences, repairing barns and sheds, and moving feed to winter feeding areas.

TENNESSEE: Rainfall averaged less than 0.25 in., greatest amount 0.67 in. Temperatures near normal northeast and above normal elsewhere.

Soybeans 85% mature; 38% harvested, 1974 31%, average 34%. Corn 56% harvested, 1974 56%, average 60%. Moisture content high. Cotton 85% bolls open; 45% picked, 1974 32%, average 49%. Yields extremely poor. Tobacco stripping 44% completed, 1974 32%, average 44%. Wheat 64% seeded, 1974 67%, average 69%. Oats and barley 86% seeded. Fall sown hay, pasture, cover crops excellent condition and growing. Many farmers need more hay for winter.

TEXAS: Warm weather dominated except west and northwest. Rains with amounts in excess 1.00 in. common east of Pecos River. Heaviest rains Childress to Abilene where 2.00 in. plus fell.

Seeding wheat, oats, flax preceding rapid pace, generally ahead last year's schedule. Earlier stands responded well, showing good growth. Grazing expected improve. Harvest cotton, corn, sorghum, soybeans, peanuts generally well ahead schedule. Good rains East to Edwards Plateau southward provided moisture for seeding rest wheat crop; will give established stands good boost. High Plains irrigated wheat showing good progress but dry planted crop continues decline. Cotton harvest getting underway High Plains where some farmers defoliated. Most, however, waiting for freeze before starting harvest. Sorghum harvest making good progress High, Low Plains. South, Lower Rio Grande Valley, fall sorghum rapidly reaching maturity. Recent moisture east, Blacklands, Cross-Timbers make peanut digging easier. Digging fall crop underway south and south central. Major crops percent planted: Wheat 91, 1974 92, average 94; oats 90, 1974 91, average 91; flax 7, 1974 7, average 7. Major crops percent harvested: Cotton 29, 1974 28, average 29; corn 99, 1974 77, average 90; sorghum 96, 1974 62, average 76; peanuts 91, 1974 59, average 72; soybeans 75, 1974 37, average 56; sugarbeets 55, 1974 35, average 60.

High Plains: Cabbage, carrot, lettuce harvest continues. Trans-Pecos cabbage, lettuce harvest continues. Green pepper, tomato picking active. San Antonio-Winter Garden: Cabbage harvest continues. Carrots making good growth. Some newly planted carrot stands damaged by heavy rains. Spinach growing well. Cucumbers, eggplant, squash, bell peppers being harvested. Lower Rio Grande Valley: Seeding cabbage, carrots, onions continues. Pepper harvest remains active. Pecan harvest continues increase. Citrus movement continues relatively light due to poor price situation.

Good rains east to Edwards Plateau brought relief drought stressed pastures. Western areas, pasture conditions continue decline. Irrigated wheat stands furnishing limited grazing High Plains. Livestock continue hold up well in drier areas but feeding increasing. Heavy culling continues.

UTAH: Precipitation generally light with heaviest amounts occurring early week in north. Average temperatures ranged from 2 to 4° below normal except in north mountain areas.

Harvest of late summer crops continued. Good progress made in sugarbeet lifting after delay early in period. Potato digging nearly complete. Picking of corn for grain beginning. Apple picking continues. Movement of livestock to fall and winter ranges complete. Range feed prospects for the winter very good.

VIRGINIA: Temperatures averaged 4 to 5° above normal. Warm first, cold end. Extremes: 84 and 20°. Rainfall averaged 0.33 in.

Fieldwork: 4.7 days suitable. Topsoil moistures 84% adequate, 13% surplus, 3% short. Corn grain harvest 66% complete, 71% 1974, average 63%. Soybean harvest 17% complete, 1974 50%, average 32%. Excess moisture has caused serious lodging, prevented harvesting. Peanuts 86% combined, 1974 97%, average 78%. Stripping grading tobaccos continues. Pastures top condition. Wheat seeding 64% complete, 1974 64%, average 61%. Barley acreage 81%, oats 82% seeded. Sweetpotato harvest 90% complete. Cabbage harvest continues.

WASHINGTON: West: Temperatures averaged from 2 to 6° subnormal. Precipitation high in most areas, 4.00 to 6.00 in. above normal on coast to about 1.00 to 2.00 in. above normal elsewhere.

Harvesting: Sweet corn, celery, cabbage, carrots, table beets, beet seed. Silage corn fields nearing an end and fields being worked. Christmas tree cutting gaining momentum. Pruning and tying canberries. Fall pastures growing well, some cattle on winter feed. East: Readings averaged a little above normal to 5° below normal. Precipitation from slightly below normal south central to 1.00 in. above normal north.

Apple harvest virtually completed. Watercore evident in late fields. Cool temperatures and moisture strengthened fruit trees for winter. Orchardists controlling mice, but hampered by rains. Digging potatoes and sugarbeets. Grape picking almost completed. Drybean growers having difficulty combining remaining fields. Winter wheat stands looking very good. Spraying active on weeds and greenbugs.

WEST VIRGINIA: Temperatures above normal, warmest in north central. Precipitation below normal with less than 0.10 in. rainfall north half.

Soil moisture adequate. Corn picking continues with good yields. Unusually good weather allowed 4.9 days of suitable fieldwork. Cattle in good condition, marketing of cull cows and lower grade calves active.

WISCONSIN: Temperatures 3° above normal. Milo beginning, cooler midweek, mild again weekend. No measurable rainfall north; light showers southeast 31st, rain 2d mainly south. Moderate to locally heavy amounts south central and south-east.

Crop harvest nearing end. Corn for grain 80% harvested, 1974 40%, normal 50%. Storage space at grain elevators tight. Moisture content of corn well below 1974, saving considerably on fuel for drying. Many chopping and baling corn stalks. Soybeans 95% harvested, 1974 80%, normal 55%; moisture content very low. Fall plowing 45% done, 1974 43%, normal 46%. Soil moisture 75% short, 25% adequate. Fire danger high in woods, marshes. Cattle outside on fall pastures as weather remains mild. Most fruits and vegetables harvested except late cabbage, carrots, red beets. Weekend rain good for final curing of tobacco.

WYOMING: Temperatures averaged below to much below seasonal normals. Highest temperatures in 60's and low 70's. Precipitation generally below average.

Snowfall previous week reflected in improved soil moisture supplies, condition of ranges. Sugarbeet harvest 80% complete, potatoes 98%, corn for grain 40%. Winter wheat condition fair to good, some additional planting result of recent moisture. Livestock movement generally normal.

Heating Degree Days (Base 65° F.)

October 1975

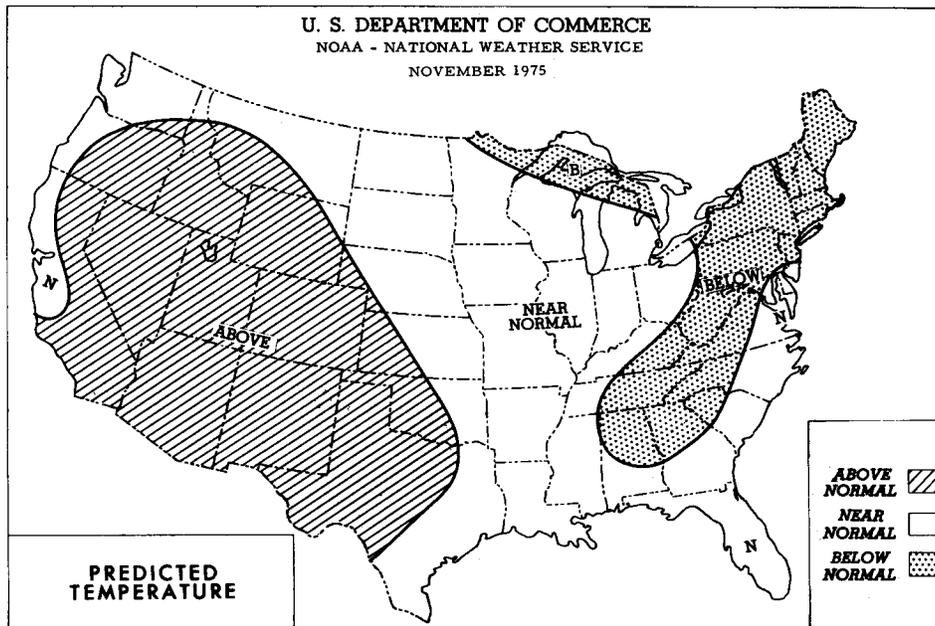
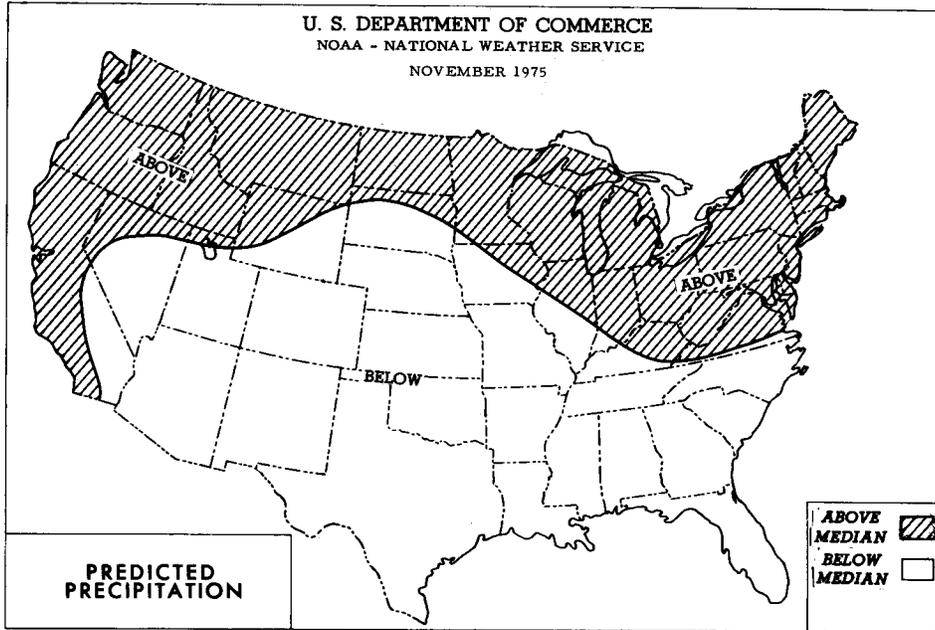
ALA. Birmingham . . . . .	105	MAINE, Caribou . . . . .	699	OKLA, Okla. City . . . . .	126
Mobile . . . . .	11	Portland . . . . .	480	Tulsa . . . . .	146
Montgomery . . . . .	31	MD, Baltimore . . . . .	156	ORIG, Astoria . . . . .	429
ALASKA, Anchorage . . . . .	937	MASS, Boston . . . . .	239	Barnes U . . . . .	599
Barrow . . . . .	---	Chatham . . . . .	778	Medford . . . . .	416
Fairbanks . . . . .	---	MICH, Alpena . . . . .	488	Pendleton . . . . .	332
Juneau . . . . .	711	Detroit . . . . .	375	Portland . . . . .	354
Nome . . . . .	1222	Flint . . . . .	355	Salon . . . . .	409
ARIZ, Flagstaff . . . . .	566	Grand Rapids . . . . .	382	PA, Allentown . . . . .	257
Phoenix . . . . .	15	Houghton Lake . . . . .	472	Erie . . . . .	382
Tucson . . . . .	38	Lansing . . . . .	402	Harrisburg . . . . .	232
Winslow . . . . .	310	Marquette U . . . . .	455	Philadelphia . . . . .	152
Yuma . . . . .	7	S. Ste. Marie . . . . .	537	Pittsburgh . . . . .	362
ARK, Fort Smith . . . . .	141	MN, Duluth . . . . .	561	Scranton . . . . .	291
Little Rock . . . . .	130	Internat'l Falls . . . . .	622	R.I. Providence . . . . .	297
CALIF, Bakersfield . . . . .	139	Minneapolis . . . . .	387	S.C, Charleston . . . . .	40
Eureka U . . . . .	328	Rochester . . . . .	380	Columbia . . . . .	56
Fresno . . . . .	154	St. Cloud . . . . .	524	Greenville . . . . .	118
Los Angeles U . . . . .	31	MISS, Jackson . . . . .	59	S. Dak, Aberdeen . . . . .	411
Red Bluff . . . . .	198	Meridian . . . . .	108	Huron . . . . .	382
Stockton . . . . .	140	Vicksburg U . . . . .	---	Rapid City . . . . .	493
San Diego . . . . .	19	MO, Columbia . . . . .	254	Sioux Falls . . . . .	407
San Francisco . . . . .	188	Kansas City . . . . .	226	TEX, Chattanooga . . . . .	152
COLO, Denver . . . . .	363	St. Louis . . . . .	228	Knoxville . . . . .	172
Grand Junction . . . . .	358	Springfield . . . . .	245	Memphis . . . . .	90
Pueblo . . . . .	320	MONT, Billings . . . . .	536	Nashville . . . . .	138
CONN, Bridgeport . . . . .	190	Glasgow . . . . .	613	TEX, Abilene . . . . .	97
Hartford . . . . .	292	Great Falls . . . . .	592	Amarillo . . . . .	158
D.C, Washington . . . . .	102	Havre . . . . .	597	Austin . . . . .	27
FLA, Apalachicola . . . . .	7	Helena . . . . .	666	Beaumont . . . . .	16
Ft. Myers . . . . .	0	Kalispell . . . . .	656	Brownsville . . . . .	5
Jacksonville . . . . .	11	Miles City . . . . .	543	Corpus Christi . . . . .	4
Key West . . . . .	0	Missoula . . . . .	662	Dallas . . . . .	---
Lakeland U . . . . .	0	NEBR, Grand Island . . . . .	298	Del Rio . . . . .	16
Miami . . . . .	0	Lincoln . . . . .	269	El Paso . . . . .	66
Orlando . . . . .	0	Norfolk . . . . .	326	Fort Worth . . . . .	33
Daytona Beach . . . . .	0	North Platte . . . . .	437	Galveston U . . . . .	4
Tallahassee . . . . .	22	Omaha . . . . .	251	Houston . . . . .	26
Tampa . . . . .	0	Valentine . . . . .	437	Lubbock . . . . .	122
GA, Atlanta . . . . .	113	NEV, Ely . . . . .	617	Midland . . . . .	82
Augusta . . . . .	62	Las Vegas . . . . .	73	San Angelo . . . . .	75
Macon . . . . .	57	Reno . . . . .	471	San Antonio . . . . .	31
Savannah . . . . .	25	Winnsboro . . . . .	474	Victoria . . . . .	6
IDAHO, Boise . . . . .	399	N.H, Concord . . . . .	532	Waco . . . . .	27
Lewiston . . . . .	417	N.J, Atlantic City . . . . .	249	Wichita Falls . . . . .	87
Pocatello . . . . .	527	Trenton U . . . . .	194	UTAH, Blanding B . . . . .	---
ILL, Cairo U . . . . .	147	N. MEX, Albuquerque . . . . .	256	Salt Lake City . . . . .	355
Chicago . . . . .	279	Roswell . . . . .	162	VT, Burlington . . . . .	448
Moline . . . . .	297	N.Y, Albany . . . . .	358	VA, Lynchburg . . . . .	185
Peoria . . . . .	306	Binghamton . . . . .	415	Norfolk . . . . .	98
Rockford . . . . .	376	Buffalo . . . . .	368	Richmond . . . . .	121
Springfield . . . . .	253	New York . . . . .	188	Roanoke . . . . .	172
IND, Evansville . . . . .	223	Rochester . . . . .	365	WASH, Colville . . . . .	593
Fort Wayne . . . . .	346	Syracuse . . . . .	357	Omak . . . . .	---
Indianapolis . . . . .	288	N.C, Asheville . . . . .	232	Quillayute . . . . .	486
South Bend . . . . .	300	Charlotte . . . . .	103	Seattle-Tacoma . . . . .	413
IOWA, Burlington . . . . .	289	Greensboro . . . . .	121	Spokane . . . . .	554
Des Moines . . . . .	266	Hatteras R . . . . .	32	Wallula Falls U . . . . .	321
Dubuque . . . . .	393	Raleigh . . . . .	117	Yakima . . . . .	477
Sioux City . . . . .	328	Wilmington . . . . .	40	W.VA, Beckley . . . . .	289
KANS, Concordia . . . . .	208	N. DAK, Bismarck . . . . .	550	Charleston . . . . .	227
Dodge City . . . . .	190	Fargo . . . . .	492	Huntington . . . . .	228
Goodland . . . . .	290	Williston U . . . . .	632	Parkersburg U . . . . .	---
Topeka . . . . .	230	OHIO, Akron-Canton . . . . .	344	WIS, Green Bay . . . . .	465
Wichita . . . . .	201	Cincinnati U . . . . .	244	Madison . . . . .	412
KY, Lexington . . . . .	244	Cleveland . . . . .	345	Milwaukee . . . . .	353
Louisville . . . . .	205	Columbus . . . . .	321	WYO, Casper . . . . .	532
LA, Baton Rouge . . . . .	24	Dayton . . . . .	292	Cheyenne . . . . .	575
Lake Charles . . . . .	19	Toledo . . . . .	406	Lander . . . . .	561
New Orleans . . . . .	16	Youngstown . . . . .	389	Sheridan . . . . .	575
Shreveport . . . . .	39				

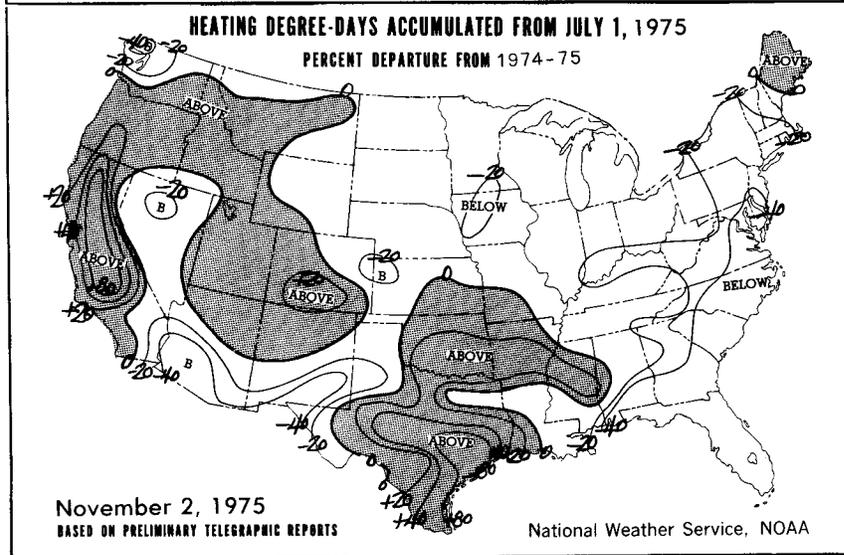
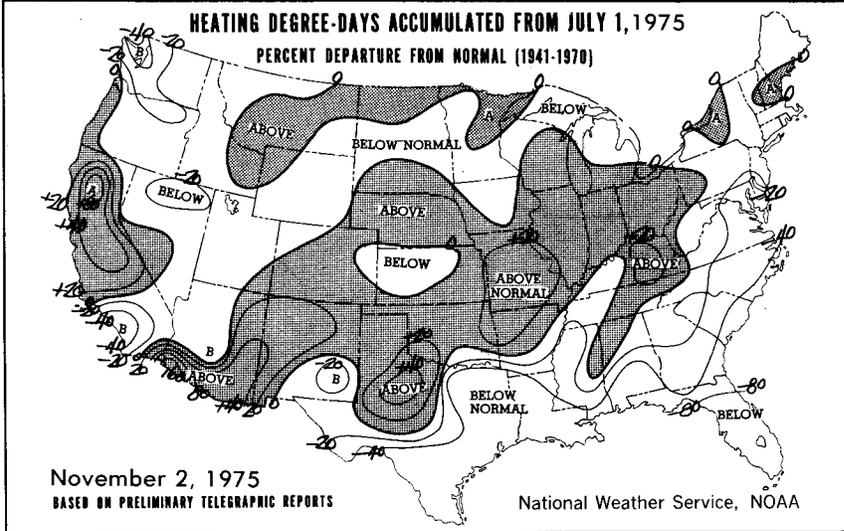
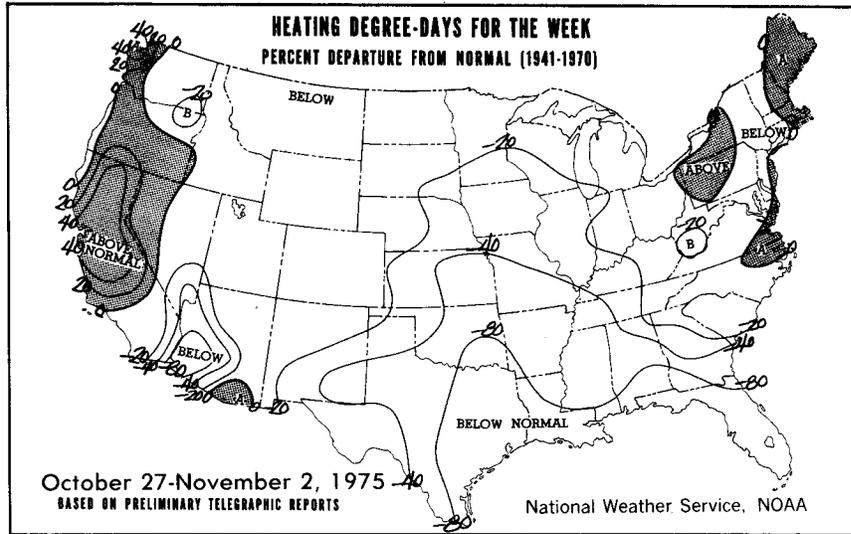
Preliminary reports from airport locations, except those marked U for urban and R for rural. \*Estimated.

**AVERAGE MONTHLY WEATHER OUTLOOK**

**AGRICULTURAL IMPLICATIONS:** The November outlook indicates that above normal precipitation will be limited to the northern third of the Nation. Continued above normal moisture would delay row crop harvest and fall field preparations in the Northeast and eastern Corn Belt, where even now wet weather is causing problems. However, the additional moisture needed to boost fall grains and replenish soil moisture in the western Corn

Belt and central Great Plains is not expected. Dryness is prevalent in eastern Colorado, western Kansas, and Nebraska. It's likely the current drought in Arizona and southern California will intensify. Below normal precipitation and above normal temperatures would benefit the Southeast and Deep South, where crops are late and harvesting has been slow.





Heating Degree Days (Base 65°) For Week Ending Nov. 2, 1975

States* and Stations	Weekly		Seasonal † Accumulation			States and Stations	Weekly		Seasonal † Accumulation			States and Stations	Weekly		Seasonal † Accumulation		
	TOTAL	Departure*	TOTAL	Departure*	Departure From 1974-75		TOTAL	Departure*	TOTAL	Departure*	Departure From 1974-75		TOTAL	Departure*	TOTAL	Departure*	Departure From 1974-75
ALA. Birmingham	28	-28	163	-2	-15	Portland	143	-1	823	6	-61	Tulsa	21	-42	206	-33	33
Mobile	1	-23	20	-27	-38	MD. Baltimore	79	-10	231	-73	-121	OREG. Astoria	109	1	923	-2	86
Montgomery	7	-34	52	-54	-68	MASS. Boston	85	-12	337	-77	-238	Burns	172	10	906	-15	105
ARIZ. Flagstaff	149	-14	911	-71	77	MICH. Alpena	155	-5	976	-71	-146	Medford	140	24	501	-15	91
Phoenix	3	13	16	7	14	Detroit	121	-3	572	34	-122	Pendleton	95	-32	410	-128	17
Tucson	21	1	52	19	19	Flint	115	-21	608	-63	-149	Portland	112	4	491	-111	77
Winslow	89	-11	371	69	25	Grand Rapids	115	-18	664	66	-207	Salem	115	3	624	8	96
Yuma	0	2	7	5	-7	Houghton Lake	145	-16	945	-43	-132	PA. Allentown	108	-4	418	-51	-181
ARK. Fort Smith	13	-46	203	49	34	Lansing	121	-14	712	78	-130	Erie	131	-2	620	-42	-147
Little Rock	35	-26	180	13	46	Marquette	130	-27	892	-35	-171	Harrisburg	96	-6	342	-33	-167
CALIF. Bakersfield	38	7	82	17	40	Muskegon	105	-28	653	3	-117	Philadelphia	75	-14	217	-97	-142
Eureka	80	-4	1172	49	61	S. St. Marie	160	-11	1088	-58	-247	Pittsburgh	120	1	576	40	68
Fresno	71	28	171	67	89	MINN. Duluth	176	-11	1196	39	-258	Scranton	113	-10	485	-90	-185
Los Angeles	23	-2	41	-99	4	Internatl Falls	189	-14	1253	-17	-106	R. I. Providence	137	27	497	11	-140
Red Bluff	74	32	188	92	99	Minneapolis	114	-49	668	-113	-172	S. C. Charleston	29	-5	50	-35	-91
San Diego	15	-2	25	-46	3	Rochester	118	-41	707	-68	-163	Columbia	42	-4	76	-50	-105
San Francisco	70	25	510	116	136	St. Cloud	148	-25	916	41	-156	Greenville	59	1	168	-4	-76
Stockton	69	24	160	57	76	MISS. Jackson	13	-28	85	-19	0	S. DAK. Aberdeen	134	-39	658	-160	-149
COLO. Denver	124	-10	597	28	-39	Meridian	22	-25	135	9	24	Huron	134	-27	722	0	1
Grand Junction	111	-8	425	4	60	MO. Columbia	59	-34	410	92	-23	Rapid City	130	22	747	6	0
Pueblo	109	-12	474	47	85	Kansas City	53	-40	370	64	-22	Sioux Falls	98	57	691	-14	-54
CONN. Bridgeport	81	-8	271	-59	-171	St. Louis	56	-32	343	57	-26	TENN. Chattanooga	62	-10	206	-7	72
Hartford	100	-21	450	-88	-227	Springfield	38	-49	398	100	35	Knoxville	69	-1	238	31	0
DEL. Wilmington	85	-6	258	-56	-169	MONT. Billings	138	-14	783	4	-77	Memphis	28	-30	130	-37	-19
D. C. Washington	64	9	144	-83	-132	Glasgow	147	-36	970	29	52	Nashville	48	-24	212	0	-32
FLA. Apalachicola	1	15	7	-21	-1	Great Falls	136	-25	924	31	15	TEX. Abilene	23	-19	144	41	16
Daytona Beach	0	2	0	-2	0	Havre	155	-32	940	-85	-37	Amarillo	63	-20	288	36	-45
Ft. Myers	0	1	0	0	0	Helena	162	-20	1191	131	62	Austin	5	-18	31	-16	15
Jacksonville	5	-11	13	-12	-25	Kalispell	162	-36	1142	-173	-67	Brownsville	0	-3	5	2	2
Key West	0	0	0	0	0	Miles City	150	-15	795	-6	-15	Corpus Christi	0	-7	15	6	11
Lakeland	0	2	0	-2	0	Missoula	170	-17	1084	-31	147	Del Rio	8	-11	17	-23	0
Miami	0	0	0	0	0	NEBR. Grand Island	97	-30	499	-10	-49	El Paso	31	-19	95	-13	-73
Orlando	0	2	0	-2	0	Lincoln	81	-39	458	9	-19	Fort Worth	2	-31	35	-36	-1
Tallahassee	0	-22	27	-12	-29	Norfolk	95	-42	560	-13	-25	Galveston	0	-9	3	-13	1
Tampa	0	2	0	-2	0	North Platte	134	-11	711	72	-8	Houston	0	-16	35	5	20
W. Palm Beach	0	0	0	0	0	Omaha	79	-34	413	0	-117	Lubbock	35	-34	204	12	-78
GA. Atlanta	39	-17	158	-5	-16	Valentine	118	-36	707	18	-21	Midland	27	-16	129	34	15
Augusta	40	-6	81	-37	-82	NEV. Ely	166	-7	983	-8	2	Beaumont	1	-20	17	-25	-3
Macon	25	-13	70	-24	-39	Las Vegas	19	-23	78	-10	-1	San Angelo	13	-24	106	21	36
Savannah	15	-16	29	-41	-52	Reno	157	20	656	-76	-85	San Antonio	1	-18	22	-16	1
IDAHO. Boise	122	-9	531	-54	26	Winnemucca	154	0	624	-187	-172	Victoria	0	-11	12	-7	5
Lewiston	121	-12	512	-78	52	N. H. Concord	163	20	923	151	-70	Waco	2	-26	33	-27	6
Pocatello	162	3	793	18	21	N. J. Atlantic City	111	20	391	66	-70	Wichita Falls	12	-34	129	-22	38
ILL. Cairo	40	-28	215	-25	-21	Trenton	88	0	290	-27	-123	UTAH. Salt Lake C	117	-15	459	-93	52
Chicago	84	-30	448	32	-72	N. MEX. Albuquerque	82	-11	337	-83	22	VT. Burlington	129	-18	729	-77	-205
Moline	74	-47	477	6	-69	Roswell	44	-35	162	-75	-155	VA. Lynchburg	82	-2	274	-19	-104
Peoria	83	-34	504	63	-14	N. Y. Albany	122	-8	579	-54	-333	Norfolk	64	8	126	-42	-103
Rockford	108	-24	635	76	41	Binghamton	143	4	738	-7	-161	Richmond	70	-2	174	-72	-198
Springfield	65	-40	394	23	-42	Buffalo	127	-3	604	-34	-84	Roanoke	74	-12	255	-38	-137
IND. Evansville	70	-20	307	9	-97	New York	83	-1	269	-10	-136	WASH. Quillayute	214	91	618	-496	-408
Fort Wayne	118	-3	544	42	-53	Rochester	123	-1	599	2	-167	Seattle-Tacoma	115	-1	447	-316	-171
Indianapolis	101	8	446	42	-102	Syracuse	125	4	648	75	-159	Spokane	159	-4	832	-14	65
South Bend	86	-38	499	-37	-28	N. C. Asheville	80	-12	349	2	-36	Walla Walla	87	-29	407	-47	2
IOWA. Burlington	74	-42	454	21	-74	Hatteras	31	-3	43	-44	-101	Yakima	129	-16	648	-62	26
Des Moines	77	-49	429	-67	-80	Charlotte	60	-1	142	-39	-124	W. VA. Beckley	94	-25	459	-103	-193
Dubuque	105	-37	682	45	-44	Greensboro	72	-5	182	-75	-115	Charleston	72	-22	348	6	-150
Sioux City	98	-35	555	13	21	Raleigh	69	1	162	-57	-150	Huntington	80	-13	333	-6	-117
KANS. Concordia	56	-49	357	-24	-20	Wilmington	36	0	52	-40	-102	Parkersburg	92	-2	421	78	-47
Dodge City	73	-26	316	-3	-17	N. Dak. Bismarck	160	-20	928	4	-203	WIS. Green Bay	138	-17	863	59	-123
Goodland	99	-32	455	-80	-142	Fargo	163	-17	852	-41	-185	LaCrosse	126	-16	680	65	-78
Topeka	55	-42	370	26	-4	Williston	174	-14	1028	42	-50	Madison	118	-34	699	-47	-53
Wichita	46	-40	303	33	36	OHIO. Akron-Canton	114	-6	551	23	-57	Milwaukee	117	-25	600	-74	-132
KY. Lexington	96	3	400	85	-63	Cleveland	115	-1	560	44	-47	WYO. Casper	153	-13	832	-13	-113
Louisville	67	-24	284	-20	-152	Columbus	104	-11	443	-18	-63	Cheyenne	151	-9	852	-4	-75
LA. Baton Rouge	3	-23	24	-38	-3	Cincinnati	83	-16	401	56	-120	Lander	167	-11	860	-6	-50
Lake Charles	3	-17	19	-23	3	Dayton	92	-18	433	22	-116	Sheridan	150	-17	868	-20	-111
New Orleans	3	-19	22	-25	-2	Toledo	126	1	665	131	-12						
Shreveport	7	-28	44	-38	-2	Youngstown	130	5	617	43	-100						
MAINE. Caribou	191	8	1181	-63	-129	OKLA. Okla City	17	-47	193	13	46						

\* Based on 1941-70 Normals.

† Accumulation July 1, 1975



## Weather and Agriculture: A Century of Cooperation

This month marks the beginning of the second hundred years of research and service at the State Agricultural Experiment Stations across the Nation. The value of the many, new agricultural techniques developed by the Experiment Stations can scarcely be estimated.

In 1872 the National Weather Service initiated a cooperative weather and crop program. The importance and degree of the cooperation between the Weather Service offices and the agricultural industry have steadily increased since that time. While other factors that restrict agricultural production have been researched and efficient techniques have been developed for soil maintenance, crop cultivation, planting, harvest, and insect and disease control, weather continues to be the principal limiting factor on productivity.

National Weather Service facilities that provide agricultural weather forecasts or act as advisories to agriculture serve all 11 States of the National Weather Service's Southern Region and a few in other major U.S. agricultural centers.

The modern day National Weather Service Agricultural Weather program began in 1959 as a pilot project authorized and funded by Congress. Its purpose: to supply the latest crop-weather information to Mississippi Delta farmers. Success was immediate. Surveys following the 1959 crop season estimated \$40 were returned to Delta farmers for every Federal dollar spent. Later, an enthusiastic Congress voted to expand the Agricultural Weather Program to include several other weather sensitive areas in the United States.

Little else was done to further expand agricultural services until 1973 when the first Environmental Studies Service Center (ESSC) was established at Auburn to serve the Tri-State area of Alabama, Georgia, and Florida. Two other centers have been established, one at Stoneville, Miss. in the fall of 1974 and another at College Station, Tex. this past summer.

The ESSC has as its basic mission the real time formulation of interpretive statements relating meteorological events and climatological data to the diversified agriculture of the Southeast. The ESSC interpreter role goes beyond the real-time formulation of advisories and delves deeply into research programs. Interpretive research became a part of the ESSC program when it was realized that one of the greatest contributions the Center could make was the simultaneous transfer of agricultural and meteorological technology for use in the operational decisions confronting the man-on-the-farm.

The objectives of the ESSC includes the "fostering avenues of cooperation with the land grant universities, especially the Cooperative Extension

Service, and the Agricultural Experiment Station, other government and state agricultural agencies, and grower organizations in the area served, for the purpose of maximizing usefulness of agricultural weather information."

The goals and programs of the ESSC are summed up in its motto:

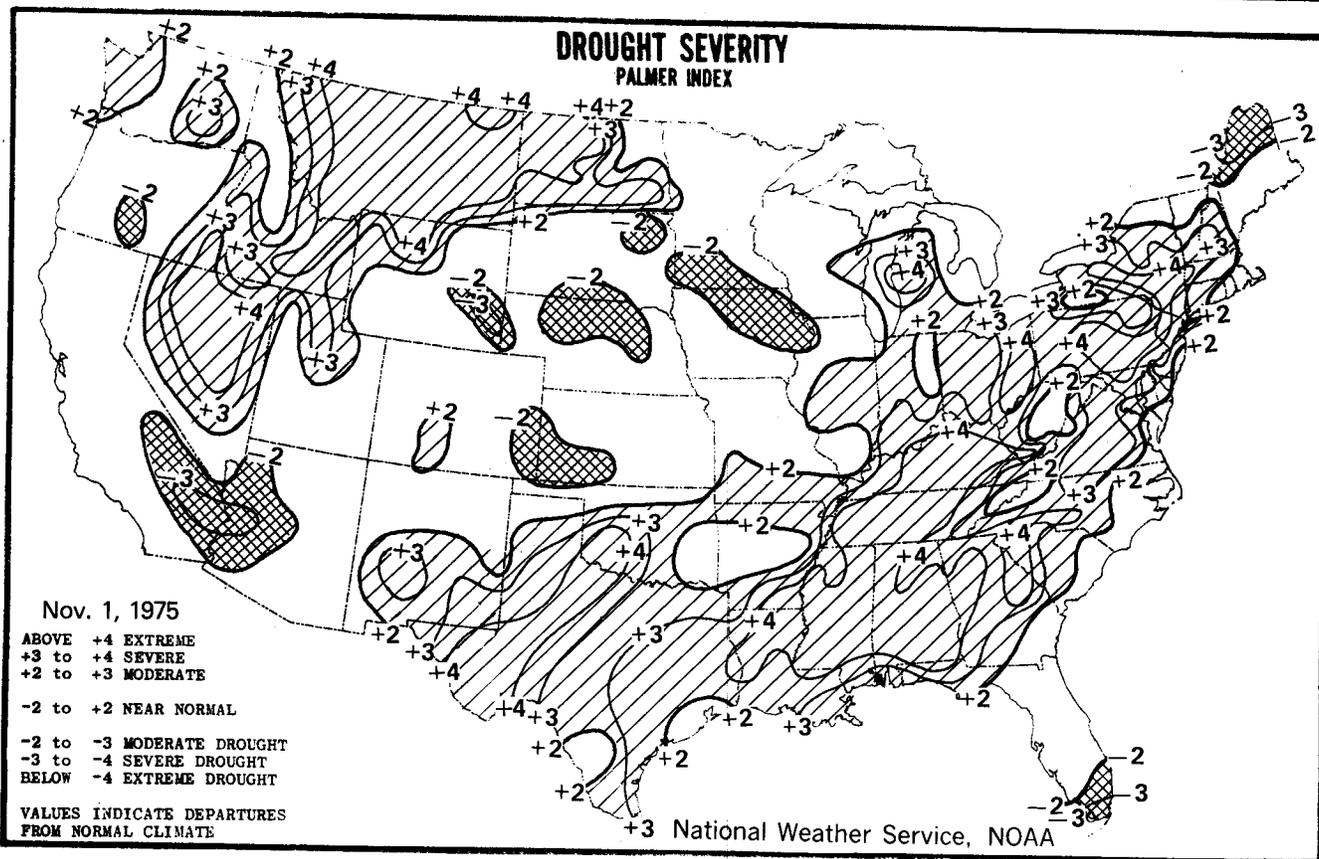
"Get the right weather information in the right form to the right farm at the right time."

The States of Southern Regions are served by three Environmental Studies Service Centers: Auburn, Ala. serves Alabama, Georgia, and Florida; Stoneville, Miss. takes care of Arkansas, Louisiana, Mississippi, and Tennessee; and College Station, Tex. serves Texas, Oklahoma, and New Mexico.

The increased recognition of the value of weather in the production of food and fiber has strengthened the tie between the State Agricultural Experiment Station and the National Weather Service. The improved availability of weather service data and expertise of experiment station research personnel has greatly enhanced recent research efforts. At the same time the interaction of experiment station personnel with weather service employees has further improved the agriculturally-significant weather advisories. These services are available to the public through the news media, which gets its information from the NOAA Weather Wire, a teletypewriter circuit linking National Weather Service offices to radio and television stations and daily newspapers.

Together the ESSC at Auburn and Experiment Stations in the Tri-State area are looking for ways to improve advisory services. In Florida a program under study will use satellite information to improve crop freeze forecasts. ESSC personnel are cooperating with the Experiment Station and the National Aeronautics and Space Administration (NASA) scientists in this effort. In Georgia researchers are making headway on an irrigation scheduling program. The advisory takes in an estimate of crop moisture needs for the next 5 days and a summary of recent evaporation and rainfall information for the three States. Studies in Alabama are investigating the use of solar heating in poultry house operations during the winter. A peanut harvest advisory also is being developed in conjunction with the Cooperative Extension Service.

Over the past century weather and agricultural scientists have moved ahead as a team. Together they have overcome problems that once stood in the way of food and fiber production in our country. But there are still problems that remain unsolved. These emphasize the need for increased cooperation between weather and agriculture in the years ahead.



**Seasonal Drought Wrap-up**

This is the final map for the year of Drought Severity according to the Palmer Index. The next map will appear in the first issue of April, 1976.

The Palmer Index shows the degree of departure of moisture in an area from normal or expected conditions. In this respect it's important to realize that the current moisture climate reflects weather of the past several weeks and even months.

During the 1975 growing season, drought was a persistent problem in the Southwest, especially in south central California and western Arizona. In addition, a small area of northeastern South Dakota has experienced moderate to severe drought since August, 1973, and several other areas reported short periods of droughts of moderate to severe intensity.

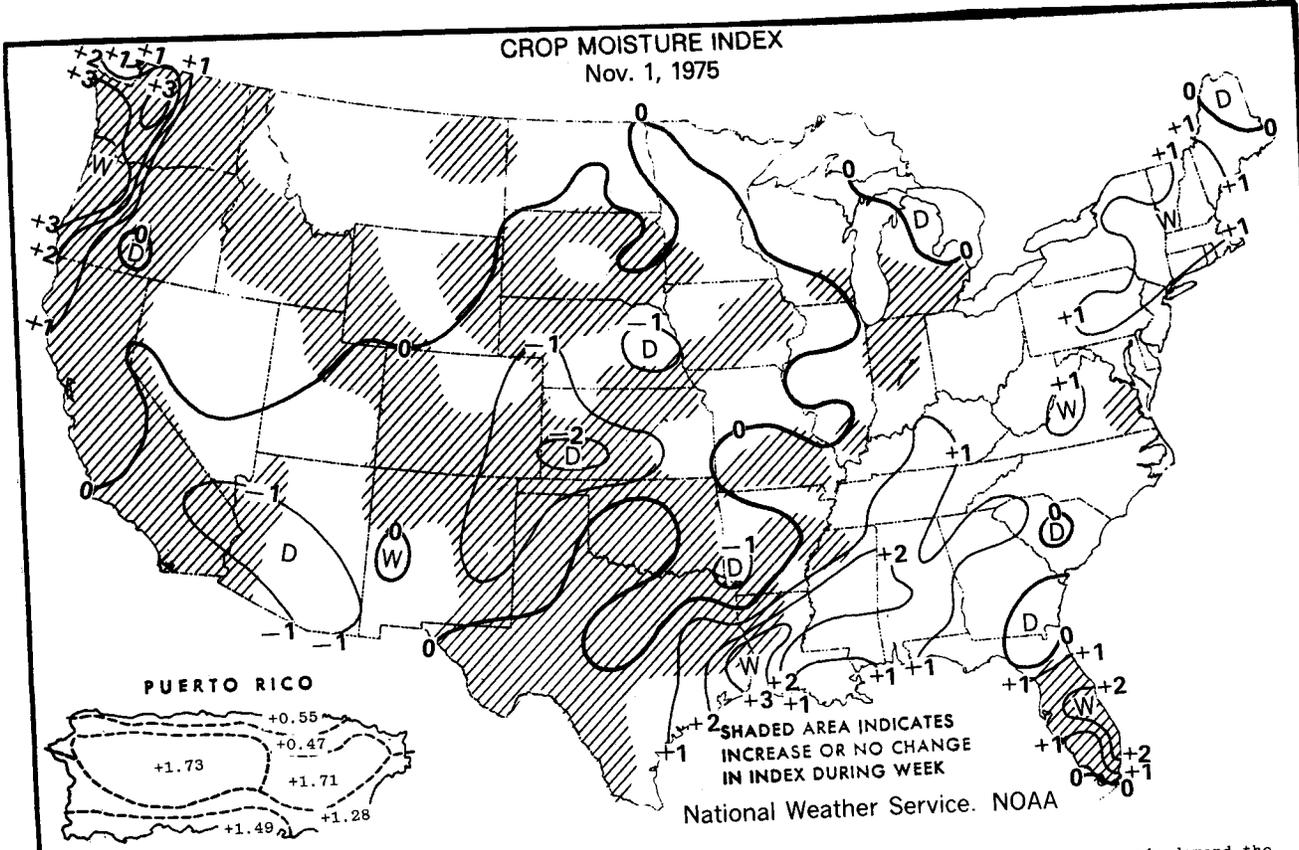
At this time last year drought was extensive in the West and in the central and northern Plains. Severe drought existed in south central North Dakota and in north central and northeastern South Dakota. Parts of Utah and Nevada also registered severe to extreme drought. Moderate drought covered most areas west of a line from central New Mexico to central Lake Michigan. The area from Central Texas to Kentucky showed a positive anomaly, which means rainfall there continued above normal.

Drought areas were broken by little precipitation until February, 1975 when increased precipitation began to relieve the dryness. Rains came to

most drought areas by May, but some dryness persisted. Moderate drought continued in western Kansas, eastern Colorado, much of Nebraska, and southeastern and northeastern South Dakota until late May, when rains eased the dryness. By the end of June drought areas were scarce although mild drought was beginning to show on the West Coast and in parts of New York and New England. An almost chronic drought situation occurred in southern Florida, where the Florida Keys were in an extreme drought category.

In July, rain was scarce over the western Corn Belt and drought began to develop in Iowa, northern Missouri, Nebraska, southern and eastern South Dakota, and in parts of Minnesota and Wisconsin. Drought in New England intensified and spread into central Ohio. Areas of northern New England experienced severe drought. Rains brought relief to most areas by the end of August, but mild drought persisted.

As shown on the current map drought has been relieved in New England, except for extreme northern Maine, but drought in the central Plains is intensifying. Meantime, a moderate drought situation has returned to western Kansas, southeast Colorado, most of Nebraska, and southern South Dakota, and the area encompassing southern Minnesota and the northeastern half of Iowa. Mild drought surrounds these areas.



The Crop Moisture Index measures the degree to which moisture requirements of growing crops were met during the previous week. The index is computed from average weekly values of temperature and precipitation. These values are used to calculate the potential moisture demand. Taking into account the previous soil moisture condition and current rainfall, the actual moisture loss is determined.

If the potential moisture demand, or potential evapotranspiration, exceeds available moisture supplies, actual evapotranspiration is reduced and the CMI gives a negative

value. However, if moisture meets or exceeds demand the index is positive.

Shaded areas indicate the index was unchanged or increased from the previous week's value; soils dried in the unshaded areas. Centers of positive and negative areas are identified by W for wet and D for dry.

Local moisture conditions may vary because of differences in rainfall distribution or soil types. The type of agriculture and stage of crop development must be considered when assessing the impact of moisture conditions based on the Crop Moisture Index. Some general guidelines follow.

- UNSHADED AREAS: INDEX DECREASED**
- ABOVE 3.0 SOME DRYING BUT STILL EXCESSIVELY WET
  - 2.0 to 3.0 MORE DRY WEATHER NEEDED, WORK DELAYED
  - 1.0 to 2.0 FAVORABLE, EXCEPT STILL TOO WET IN SPOTS
  - 1.0 to 1.0 FAVORABLE FOR NORMAL GROWTH AND FIELDWORK
  - 0 to 1.0 TOPSOIL MOISTURE SHORT, GERMINATION SLOW
  - 0 to -1.0 TOPSOIL MOISTURE SHORT, PROSPECTS DETERIORATING
  - 1.0 to -2.0 ABNORMALLY DRY, PROSPECTS REDUCED
  - 2.0 to -3.0 TOO DRY, YIELD PROSPECTS REDUCED
  - 3.0 to -4.0 POTENTIAL YIELDS SEVERELY CUT BY DROUGHT
  - BELOW -4.0 EXTREMELY DRY, MOST CROPS RUINED

- SHADED AREA: INDEX INCREASED OR DID NOT CHANGE**
- ABOVE 3.0 EXCESSIVELY WET, SOME FIELDS FLOODED
  - 2.0 to 3.0 TOO WET, SOME STANDING WATER
  - 1.0 to 2.0 PROSPECTS ABOVE NORMAL, SOME FIELDS TOO WET
  - 1.0 to 2.0 PROSPECTS ABOVE NORMAL, SOME FIELDS TOO WET
  - 0 to 1.0 MOISTURE ADEQUATE FOR PRESENT NEEDS
  - 0 to -1.0 PROSPECTS IMPROVED BUT RAIN STILL NEEDED
  - 1.0 to -2.0 SOME IMPROVEMENT BUT STILL TOO DRY
  - 2.0 to -3.0 DROUGHT EASED BUT STILL SERIOUS
  - 3.0 to -4.0 DROUGHT CONTINUES, RAIN URGENTLY NEEDED
  - BELOW -4.0 NOT ENOUGH RAIN, STILL EXTREMELY DRY



# FIRST CLASS MAIL

210

Total Annual Subscriptions: \$5.00 in U.S. and possessions, \$6.50 including domestic airmail, \$11.25 including foreign airmail. For December through March issues only, \$1.50, \$2.00 with domestic airmail, \$3.50 with foreign airmail. Make checks payable to Department of Commerce, NOAA.

Publication of this bulletin began in 1872 as the Weekly Weather Chronicle. It is now issued under general authority contained in the Act of January 12, 1895 (44 USC 213), 53d Cong., III. Sess. Quotation or reproduction of this material is encouraged. Please give credit to this publication and, in case of special articles, to authors.

Please send subscriptions and any questions or comments to the Editor at above address.

## CROP PROGRESS

### SEEDING

Percent of Acreage Seeded  
 As of November 2

	winter wheat		
	AVG	1974	1975
Colo.	100	100	100
Idaho	3/	3/	3/
Ill.	93	94	97
Ind.	1/	75	85
Kans.	3/	100	95
Ky.	72	65	72
Mich.	3/	3/	3/
Mont.	100	100	100
Nebr.	100	100	100
Ohio	95	100	95
Okla.	97	98	81
S. Dak.	100	100	100
Tenn.	69	67	64
Texas	94	92	91
U. S.	89	89	86

### HARVESTING

Percent of Acreage Harvested  
 As of November 2

	corn		
	AVG	1974	1975
Ga.	1/	74	71
Ill.	48	47	85
Ind.	55	65	75
Iowa	50	50	87
Kans.	60	70	90
Ky.	68	70	66
Mich.	40	31	65
Minn.	69	86	92
Mo.	56	62	87
Nebr.	60	70	90
N. C.	63	85	83
Ohio	60	50	55
S. Dak.	75	91	88
Wis.	50	40	80
U. S.	58	62	82

	soybeans		
	AVG	1974	1975
Ala.	35	54	34
Ark.	1/	28	50
Ga.	1/	41	26
Ill.	87	89	3/
Ind.	75	80	85
Iowa	87	93	100
Ky.	52	56	56
La.	54	77	66
Minn.	89	100	100
Miss.	44	37	45
Mo.	57	58	82
Nebr.	90	95	3/
N. C.	1/	19	12
Ohio	80	95	90
S. C.	15	22	15
Tenn.	34	31	38
U. S.	65	68	75

### cotton

	AVG	1974	1975
Ala.	50	57	21
Ark.	1/	36	59
Ga.	1/	61	35
La.	55	62	27
Miss.	61	51	27
Mo.	53	47	83
N. C.	50	42	34
Okla.	1/	2	2
S. C.	58	52	59
Tenn.	49	32	45
Texas	29	28	29
11-State	40	36	33

### sorghum

	AVG	1974	1975
Colo.	42	33	69
Kans.	60	30	80
Mo.	61	56	89
Nebr.	95	85	3/
Okla.	49	37	73
S. Dak.	1/	3/	3/
Texas	78	62	98
7-State	73	56	91



1/Data not available  
 2/Less than 5%  
 3/Virtually complete