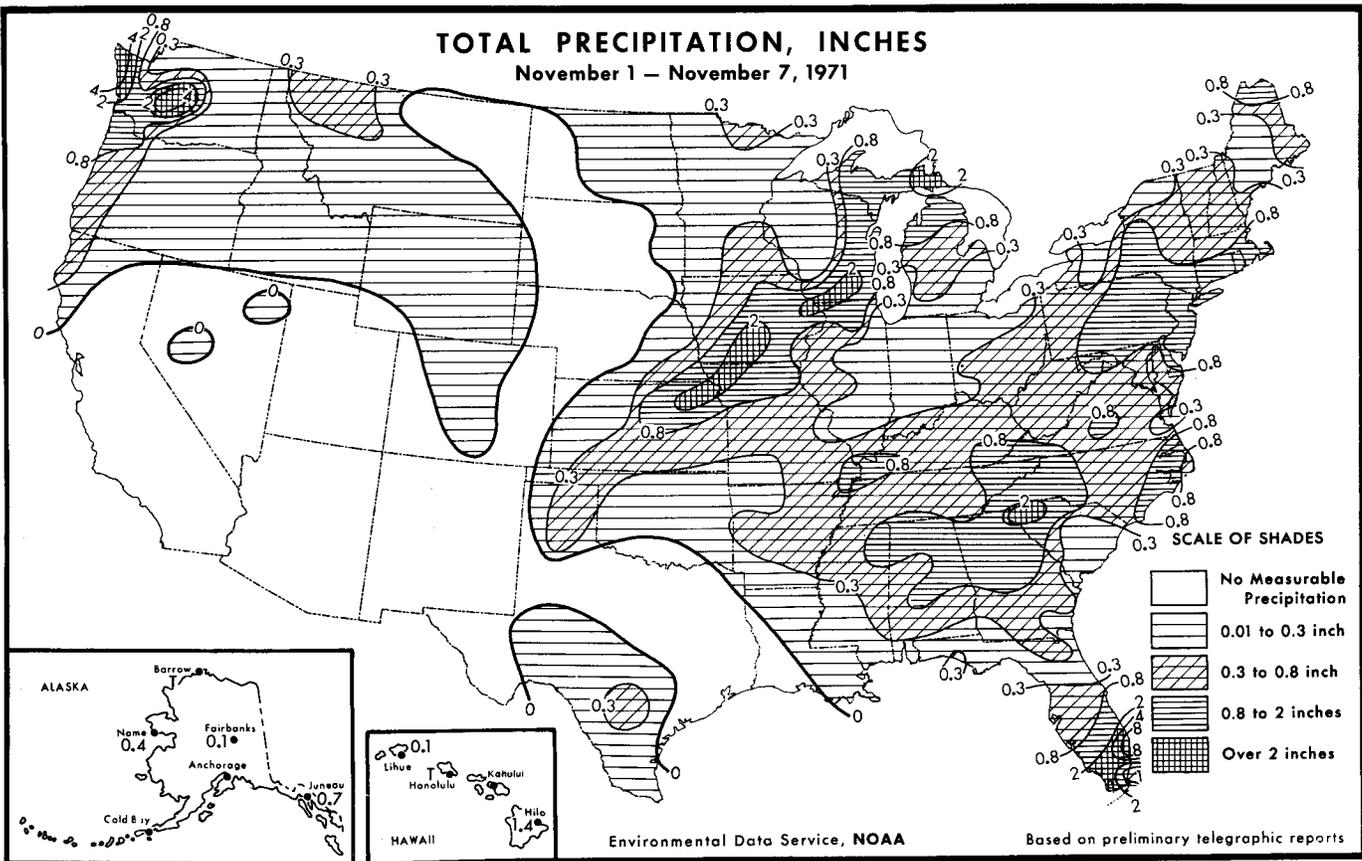


# Weekly Weather & Crop Bulletin

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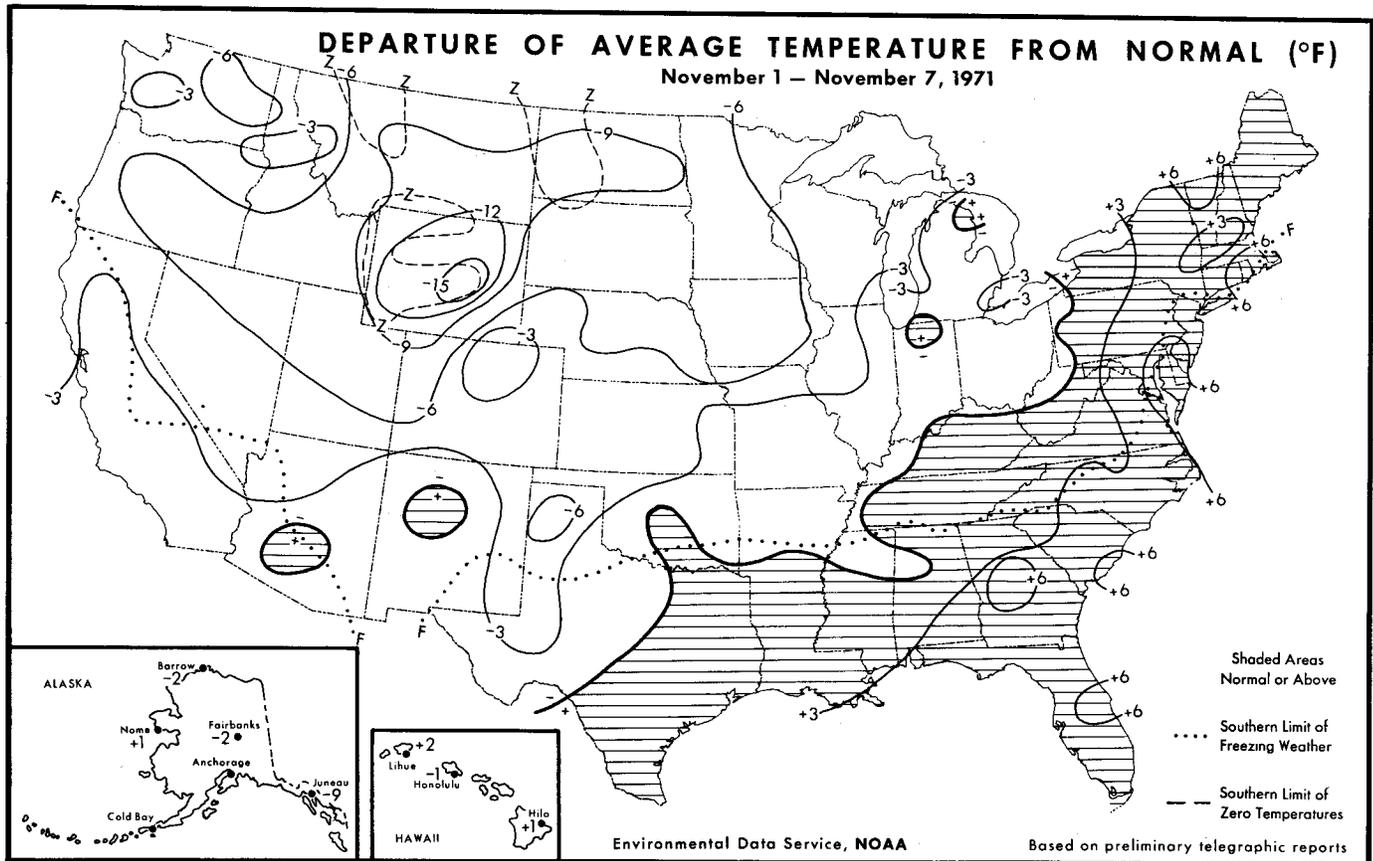
**HIGHLIGHTS:** Clear, cold winter weather was the general rule this week as waves of Arctic air moved across the Nation. Significant precipitation was generally limited to the eastern half of the Nation.

**PRECIPITATION:** Precipitation was generally confined to the area north and east of a line from Jacksonville, Fla., to Oklahoma City, northward to Devil's Lake, N.Dak., on Monday. Rains were fairly general with heavy amounts in some locations. Topeka, Kans., reported 48 m.p.h. winds with 0.88 inch of rain, Madison, Wisc., 1.47 inches, and Pellston, Mich., 1.20 inches. Tornadoes were reported in northwest Missouri. Portions of northern Georgia and western North Carolina received over an inch of rain. Almost 2.00 inches of rain fell at West Palm Beach in less than 6 hours.

As the storm causing heavy rains over the eastern half of the Nation moved northeastward on Tuesday, rain was generally confined to the eastern two tiers of States and the New England area. Areas just north of Birmingham, Ala., reported 1.95 inches with several locations between Mobile, Ala., and Lynchburg, Va., reported over 1.00 inch of precipitation.

Wednesday through Friday was clear and cold across the Nation, with only light precipitation in northwest Washington and the eastern coastal States on Wednesday. The only significant precipitation on Thursday occurred at Palm Beach where 5.05 inches fell in 6 hours. This gave them a monthly total of 9.11 inches. This is an all-time record for November, with rains continuing to fall.

A cold front moving across the eastern half of the United States triggered showers on Satur-



day and Sunday while the western half of the Nation remained clear and dry. Locally heavy snows were reported near the lower Great Lakes. Portions of the Cleveland area reported nearly a foot of snow on the ground. Up to 8 inches of snow covered the ground in portions of western New York Sunday morning.

**TEMPERATURE:** The word for the week was cold. A cold front moved through the Eastern States early in the week, bringing an end to the unusually balmy summer conditions. However, several record highs were set on the east coast before the front passed. A high of 87° at Jackson, Miss., was the highest there ever so late in the season. Washington, D.C. recorded 84° on Tuesday, a record for the date and for so late in the season. The cold front passed Tuesday, breaking the warm spell.

On Wednesday a large sprawling high provided clear skies and cool weather to much of the Nation. A flow of Polar and Pacific air continued into the middle of the Nation. Freezing temperatures occurred in many areas.

While one cold spell gripped the east coast through Saturday, an even colder air mass was entering the Northern Great Plains. The first frost of the year occurred at many eastern locations Friday morning.

The colder air moved across the United States reaching the east coast Saturday night bringing brisk winds and colder temperatures. Chicago's Midway Airport recorded 18°, 2° below the previous record set in 1959. They reached a high of only 34° Sunday afternoon. In all, record lows occurred at 27 locations Sunday morning, ranging from 4° at Huron, S. Dak., to 23° at Muskegon, Mich. Freezing temperatures reached southward to the northern edge of Alabama and Mississippi. Temperatures reached into the 40's at several stations in northern Florida, with Tallahassee reaching 36° on Friday morning.

Meanwhile, the west coast States had generally fair and mild weather throughout most of the week with little or no precipitation.

R. E. FELCH

## NATIONAL AGRICULTURAL SUMMARY

**AGRICULTURAL HIGHLIGHTS:** Rains continue to plague Texas harvest. \* Freeze damaged some California fruit and vegetable crops. \* Storage space scarce in eastern Corn Belt. \* Peanut losses increasing North Carolina and Virginia.

**SMALL GRAINS:** Fall-sown grains are making good growth on the Great Plains. Moisture has been plentiful and the crop has responded well. Ground cover is good and bare spots scarce, thus limiting the threat of wind damage. Plant growth is large enough to allow ranchers to start grazing, and many herds were turned into wheat fields during the week. Texas growers are still planting wheat and oats; progress was slow but fields are drying and the crops will soon be seeded. Seeding equipment had good going in Arizona and California. It was cold and wet in the Pacific Northwest, but grains are in good shape. Oregon growers have some seeding and fertilizing to do, while Washington wheat farmers started spraying for green bugs.

The eastern half of the Nation registered good seeding progress, but the cold temperatures halted growth. More moisture is needed to improve growth from the Gulf of Mexico to Michigan. Completion of planting in the South must wait until after the soybean and cotton crops are harvested.

**CORN:** Cold windy weather did not slow up corn harvesting for long in the Corn Belt. Farmers dressed up warm and worked long days to get in this year's large crop. Rainfall was light except for a heavy band from Wisconsin to eastern Kansas. Wet fields resulting from this storm, plus last week's snow and rain made picking rather slow in some western Corn Belt areas. Muddy fields made picking in Minnesota and North Dakota extremely difficult, but the freezing weather allowed the ground to freeze and harvest operations to resume. Good headway was made from Illinois to Ohio as fields were dry and the crop ready to pick. However, these growers also have a problem as storage space is scarce due to the shipping strike. Illinois growers have 85 percent of their crop harvested, with picking over until 1972 in southern counties. Yields and quality of the crop are reported as "fantastic" in some areas. Strong winds in the central Corn Belt caused an increase in lodging, especially in fields already weakened by stalk rot and corn borer damage. Overall harvest progress continues ahead or close to last fall's fast pace.

Picking also made satisfactory progress from the Gulf of Mexico to Kentucky. Harvesting activity was slow along the Atlantic Coast, but was especially bogged down in North Carolina where fields remain saturated with water.

**SOYBEANS:** Combining the 1971 soybean crop is moving rapidly towards completion. Less than 5 percent of the fields remain to be combined in Illinois, Iowa, Nebraska, and South Dakota. For the 2nd straight week, very few beans were picked in Minnesota and Wisconsin--poor field conditions plagued harvest operations. Soybean combines moved across the fields steadily from Illinois to Ohio.

North Carolina's Coastal Plain was declared a disaster area; one reason is that soybeans are molding and sprouting in the fields. Dry fields aided harvest operations from Georgia to Louisiana. The freeze should be an aid to soybean harvesting in New Jersey as drying should be faster.

**COTTON:** Beautiful fall weather allowed farmers in States bordering the Mississippi River to keep their cotton pickers in high gear for the 3d straight week. Progress is well ahead of last year in all 5 States--Mississippi, Louisiana, Arkansas, Tennessee and Missouri. Picking did not fare so well to the east or west of this 5-State area. To the East, harvest was slowed by early week rains in Alabama--impassable fields are stopping progress in North Carolina. To the West, Texas growers continue to be stymied by wet fields and only 1 percent of the cotton crop was picked during the week. Cold temperatures did not slow picking in California and Arizona. Freezing conditions in Arizona damaged some immature cotton. Harvest in New Mexico is gaining momentum while Nevada growers started picking.

**OTHER CROPS:** The tempo of sorghum harvest slowed as wet fields held back harvest operations on the Great Plains. Lodging is becoming severe in several Kansas areas, while green sucker heads are delaying operations in Oklahoma. About 3/4 of the crop is cut in Texas and Kansas, the 2 leading sorghum producing States. North Carolina and Virginia peanut growers are having their problems as fields remain almost impassable--losses are becoming heavy and some fields were abandoned. Sugar beet digging was seriously hampered due to a combination of snow, frozen ground or muddy fields from Idaho to North Dakota. Digging conditions were much better in California and Ohio.

**Fruits and Nuts:** Freezing temperatures in California ended grape harvesting for fresh use. Some damage also occurred to the olive crop. The navel orange crop suffered only minor damage. Citrus picking increased in Florida, Texas and Arizona. Pecan harvest accelerated after the 1st frost of the season in the South. The 1971 apple crop is nearly all in storage. Some late apples were frosted, but picking resumed after they thawed and harvest is nearing the end.

**Vegetables:** Frost damaged vegetable crops in California. Some sweet corn and pepper acreage was lost, while substantial damage was done to the remaining tomato crop. Freezing temperatures also hit the Yuma, Arizona area. South Texas winter vegetable growers rushed to get their acreage planted after being held up by September rains. Shipments from Florida increased during the week. Fall supplies of cauliflower, cabbage and carrots are available from Michigan to New England.

**PASTURES AND LIVESTOCK:** Livestock producers had to start their winter feeding program in many States. Some farmers were able to let their herds forage in harvested corn, sorghum and beet fields. Pasturing of fall-seeded grains also increased--good gains were also made on Oklahoma wheat pastures. Power storages and ice caused extra chores for Nebraska farmers, but few losses were reported. Hay supplies seem adequate for a normal winter in most States. Marketing of livestock was heavy.

Steve J. Pscodna  
Agricultural Statistician

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., November 7, 1971

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. . .	55	- 3	.6	-.1	New Orleans	66	+ 3	.1	-.6	OKLA.Okla. City	55	+ 1	.3	-.1
Mobile. . . . .	65	+ 3	T	-.6	Shreveport. . . .	61	+ 2	T	-.9	Tulsa . . . . .	52	- 1	.1	-.5
Montgomery. . . .	61	+ 3	.6	+.2	MAINE.Caribou . . .	40	+ 5	.9	+ .1	OREG.Astoria. . . .	45	- 4	1.8	-.6
ALASKA.Anchorage. .	4	---	---	---	Portland. . . . .	46	+ 4	.6	-.3	Burns . . . . .	32	- 9	T	-.5
Barrow. . . . .	-	- 2	T	-.1	MD.Baltimore. . . .	56	+ 6	.4	-.3	Medford . . . . .	41	- 5	T	-.3
Fairbanks . . . . .	9	- 2	.1	-.1	MASS.Boston . . . .	55	+ 6	1.0	+ .1	Pendleton . . . . .	41	- 4	T	-.3
Juneau. . . . .	28	- 9	.7	-1.0	Nantucket . . . . .	53	---	1.8	---	Portland. . . . .	44	- 4	.9	-.1
None. . . . .	23	+ 1	.4	+ .1	MICH.Alpena . . . .	40	+ 1	.9	+ .3	Salem . . . . .	42	- 6	.4	-.8
ARIZ.Flagstaff. . .	37	- 3	0	-.2	Detroit . . . . .	42	- 4	.2	-.3	PA.Allentown. . . .	51	+ 5	2.8	+2.1
Phoenix . . . . .	64	+ 2	0	-.1	Flint . . . . .	42	- 1	.1	-.4	Erie . . . . .	44	- 1	1.9	+1.1
Tucson . . . . .	61	- 1	0	-.1	Grand Rapids. . . .	40	- 3	.6	0	Harrisburg. . . . .	53	+ 5	1.1	+ .4
Winslow . . . . .	45	- 2	0	-.1	Houghton Lake . . . .	39	- 1	.8	+ .2	Philadelphia. . . .	56	+ 7	1.2	+ .5
Yuma. . . . .	64	- 2	0	-.1	Lansing . . . . .	42	- 1	.3	-.2	Pittsburgh. . . . .	46	0	.3	-.2
ARK.Fort Smith. . .	54	- 1	.3	-.5	Marquette . . . . .	36	- 3	1.2	+ .6	Scranton. . . . .	50	+ 6	1.1	+ .4
Little Rock . . . .	55	0	.5	-.4	Muskegon. . . . .	42	- 3	.1	-.6	R.I.Providence. . . .	53	+ 6	.8	0
CALIF.Bakersfield .	59	- 1	0	-.1	S.Ste.Marie . . . . .	35	- 4	2.1	+1.4	S.C.Charleston. . . .	67	+ 7	.1	-.4
Eureka. . . . .	47	- 5	.3	-.7	MINN.Duluth . . . .	29	- 4	.1	-.4	Columbia. . . . .	63	+ 5	.2	-.2
Fresno. . . . .	55	- 2	0	-.2	Internatl Falls . . .	26	- 5	.4	0	Greenville. . . . .	57	+ 1	2.3	+1.7
Los Angeles . . . .	65	0	0	-.1	Minneapolis . . . . .	31	- 8	.3	0	S.DAK.Aberdeen. . . .	31	- 5	T	-.2
Red Bluff . . . . .	56	- 2	0	-.4	Rochester . . . . .	32	- 6	.4	0	Huron . . . . .	31	- 7	T	-.2
San Diego . . . . .	62	- 2	0	-.2	St. Cloud . . . . .	29	- 7	.1	-.2	Rapid City. . . . .	32	- 8	T	-.2
San Francisco . . . .	54	- 3	0	-.3	MISS.Jackson. . . .	60	+ 1	T	-.7	Sioux Falls . . . . .	31	- 8	T	-.3
Stockton. . . . .	55	- 2	0	-.2	Meridian . . . . .	59	+ 1	.7	+ .1	TENN.Chattanooga. . .	55	+ 2	.7	-.1
COLO.Denver . . . .	40	- 2	T	-.2	MO.Columbia . . . . .	47	- 2	.4	-.2	Knoxville . . . . .	54	+ 1	.9	+ .2
Grand Junction. . . .	38	- 7	0	-.2	Kansas City . . . . .	47	- 3	.8	+ .3	Memphis . . . . .	55	0	.6	-.4
Pueblo. . . . .	40	- 4	0	-.2	St. Louis . . . . .	49	- 1	.1	-.5	Nashville . . . . .	54	+ 1	.3	-.4
CONN.Bridgeport . .	54	+ 5	2.3	+1.5	Springfield . . . . .	48	- 2	.3	-.4	TEX.Abilene . . . . .	57	- 1	0	-.4
Hartford . . . . .	53	+ 6	1.3	+ .6	MONT.Billings . . . .	30	-10	T	-.2	Amarillo. . . . .	45	- 6	.5	+ .3
D.C.Washington. . .	58	+ 6	.4	-.3	Glasgow . . . . .	27	- 8	T	-.1	Austin. . . . .	64	+ 1	T	-.5
FLA.Apalachicola. .	68	+ 4	.3	-.3	Great Falls . . . . .	25	-14	.3	+ .1	Beaumont. . . . .	64	+ 1	0	-.7
Ft. Myers . . . . .	76	+ 4	.1	-.2	Havre . . . . .	28	- 8	T	-.1	Brownsville . . . . .	71	0	.3	-.1
Jacksonville. . . .	69	+ 4	.1	-.4	Helena. . . . .	29	- 8	.2	+ .1	Corpus Christi. . . .	70	+ 2	0	-.4
Key West. . . . .	80	+ 4	1.1	+ .3	Kalispell . . . . .	30	- 5	.5	+ .2	Dallas . . . . .	61	+ 1	0	-.6
Lakeland. . . . .	76	+ 7	.8	+ .3	Miles City. . . . .	29	-10	0	-.1	Del Rio . . . . .	64	0	.1	-.1
Miami . . . . .	78	+ 3	.7	-.1	MISSoula . . . . .	33	- 2	.1	-.1	El Paso . . . . .	54	- 2	0	-.1
Orlando . . . . .	76	+ 7	.5	+ .1	NEBR.Grand Island . .	38	- 5	0	-.2	Fort Worth. . . . .	60	0	0	-.6
Tallahassee . . . .	66	+ 3	T	-.4	Lincoln . . . . .	40	- 6	.2	-.1	Galveston . . . . .	70	+ 3	T	-.9
Tampa . . . . .	74	+ 5	.3	-.1	Norfolk . . . . .	36	- 7	T	-.3	Houston . . . . .	64	+ 1	0	-.9
GA.Atlanta. . . . .	58	+ 3	1.4	+ .8	North Platte. . . . .	35	- 6	0	-.1	Lubbock . . . . .	50	- 3	0	-.2
Augusta . . . . .	63	+ 5	.4	-.1	Omaha . . . . .	36	- 8	.5	+ .1	Midland . . . . .	54	- 4	.1	-.1
Macon . . . . .	65	+ 6	1.0	+ .5	Valentine . . . . .	33	- 6	0	-.2	San Angelo. . . . .	58	- 2	.1	-.2
Savannah. . . . .	66	+ 5	.2	-.3	NEV.Ely . . . . .	33	- 5	0	-.1	San Antonio . . . . .	65	+ 2	.4	+ .1
HAWAII.Hilo . . . .	75	+ 1	1.4	-1.5	Las Vegas . . . . .	53	- 5	0	-.1	Victoria. . . . .	67	+ 1	T	-.6
Honolulu. . . . .	76	- 1	T	-.5	Reno. . . . .	31	-11	0	-.1	Waco. . . . .	62	+ 1	T	-.5
Kahului . . . . .	---	---	---	---	Winnemucca. . . . .	34	- 6	T	-.2	Wichita Falls . . . . .	56	- 2	0	-.4
Lihue . . . . .	78	+ 2	.1	-1.0	N.H.Concord . . . . .	43	0	.6	-.2	UTAH.Blanding . . . .	39	- 4	0	-.2
IDAHO.Boise . . . .	36	- 7	.1	-.2	N.J.Atlantic City . . .	54	+ 3	1.3	+ .4	Salt Lake City. . . . .	31	-11	T	-.3
Lewiston. . . . .	41	- 2	.1	-.2	Trenton . . . . .	55	+ 5	.9	+ .1	VT.Burlington . . . .	46	+ 6	.7	+ .1
Pocatello . . . . .	32	- 8	T	-.2	N.MEX.Albuquerque . .	50	+ 2	T	-.1	VA.Lynchburg. . . . .	54	+ 2	1.2	+ .6
ILL.Cairo . . . . .	---	---	---	---	Roswell . . . . .	---	---	---	---	Norfolk . . . . .	62	+ 6	.2	-.5
Chicago . . . . .	43	- 3	T	-.5	N.Y.Albany . . . . .	47	+ 3	.6	0	Richmond . . . . .	58	+ 5	.4	-.3
Moline. . . . .	40	- 6	.5	+ .1	Binghamton. . . . .	47	+ 4	.9	+ .3	Roanoke . . . . .	53	+ 2	.5	-.2
Peoria. . . . .	41	- 5	.2	-.3	Buffalo . . . . .	46	+ 2	.4	-.3	WASH.Colville . . . .	32	- 5	.2	-.3
Rockford. . . . .	40	- 3	.8	+ .2	New York . . . . .	55	+ 3	1.5	+ .7	Omak. . . . .	32	- 7	T	-.3
Springfield . . . .	45	- 3	.3	-.3	Rochester . . . . .	47	+ 2	.1	-.5	Quillayute. . . . .	41	- 6	5.3	+2.4
IND.Evansville. . . .	49	- 2	.6	-.1	Syracuse. . . . .	48	+ 3	1.0	+ .3	Seattle-Tacoma. . . .	45	- 2	2.0	+ .8
Fort Wayne . . . . .	43	- 1	.1	-.5	N.C.Asheville . . . . .	52	+ 2	1.2	+ .7	Spokane . . . . .	33	- 7	.1	-.4
Indianapolis. . . . .	45	- 2	.2	-.4	Charlotte . . . . .	58	+ 4	.9	+ .4	Walla Walla . . . . .	43	- 3	.2	-.2
South Bend. . . . .	46	+ 1	.2	-.4	Greensboro. . . . .	56	+ 4	.4	-.2	Yakima. . . . .	37	- 5	T	-.2
IOWA.Burlington . .	41	- 5	.4	-.1	Hatteras . . . . .	66	+ 6	.5	-.5	W.VA.Beckley. . . . .	49	+ 3	.7	0
Des Moines. . . . .	37	- 7	2.1	+1.7	Raleigh . . . . .	57	+ 3	.4	-.2	Charleston . . . . .	53	+ 3	1.6	+ .9
Dubuque . . . . .	36	- 5	2.7	+2.1	Wilmington. . . . .	64	+ 5	1.2	+ .6	Huntington. . . . .	50	0	.8	+ .3
Sioux City. . . . .	36	- 6	T	-.3	N.DAK.Bismarck. . . .	27	- 9	.1	-.1	Parkersburg . . . . .	49	- 1	.8	+ .4
KANS.Concordia. . . .	42	- 5	.8	+ .5	Fargo . . . . .	27	- 9	T	-.2	WIS.Green Bay . . . .	35	- 5	1.1	+ .7
Dodge City. . . . .	43	- 5	.8	+ .6	Williston . . . . .	25	- 9	T	-.1	La Crosse . . . . .	35	- 6	.1	-.4
Goodland. . . . .	39	- 4	0	-.1	OHIO.Akron-Canton . .	43	- 2	.4	-.1	Madison . . . . .	36	- 4	2.3	+1.8
Topeka . . . . .	46	- 2	1.9	+1.5	Cincinnati. . . . .	47	- 3	.3	-.2	Milwaukee . . . . .	39	- 2	.9	+ .4
Wichita . . . . .	45	- 5	.4	0	Cleveland . . . . .	45	- 2	.2	-.4	WYO.Casper. . . . .	24	-15	T	-.2
KY.Lexington. . . . .	51	+ 1	.3	-.4	Columbus. . . . .	44	- 2	.5	0	Cheyenne. . . . .	37	- 1	T	-.2
Louisville. . . . .	50	+ 1	.6	-.1	Dayton. . . . .	46	- 2	.4	-.1	Lander. . . . .	25	-12	.1	-.2
LA.Baton Rouge. . . .	63	+ 1	T	-1.2	Toledo. . . . .	43	- 1	.1	-.3	Sheridan. . . . .	26	-13	.1	-.1
Lake Charles. . . . .	65	+ 2	0	-.8	Youngstown. . . . .	44	0	.4	-.2	P.R. San Juan . . . .	81	+ 2	.8	-.5

\* Departures are from 30-year means (1931-60). Based on preliminary reports

## CONDENSED STATE SUMMARIES

These summaries provide brief descriptions of condition and activities important on a national scale. Detailed reports of crop and weather conditions during the growing season are contained in State issues of Weekly Weather and Crop Bulletins published by field offices of the Statistical Reporting Service, U.S.D.A. in cooperation with NOAA Climatologists.

**ALABAMA:** Unseasonably warm with showers early in period. Clearing and much cooler Wednesday and Thursday with scattered frost north and central sections. Warmer Friday and Saturday. A few showers northern sections Saturday night, then clearing and much colder Sunday night with temperatures ranging from mid-20's north to mid-30's extreme south. Rainfall moderate north and central and light south. Average temperatures for week warmer than usual. Showers slowed harvest early week. Good progress made latter part. First frost, which extended into central counties, November 4. Frost will aid opening remaining cotton bolls and knocking leaves off plants. Corn harvest made good progress. Almost 2/3 harvested, 3/4 year ago. Harvest slow north and central Alabama. Harvest soybeans continues moderate rate. Still delayed by strike Port of Mobile even though large vessel loaded over weekend. Timely showers provided needed moisture for small grains--more rain needed, especially south. Pecan harvest increased following showers and wind. Pastures providing adequate grazing, but cattle getting supplemental feed.

**ARIZONA:** Temperatures were slightly below normal over most of State. No precipitation. Cotton harvest continues statewide. Freezing temperatures, many areas, hastened picking and damaged immature cotton. Harvest active Yuma and central areas. Sorghum harvest active Yuma, central areas and reaching full intensity southeast. Cooler temperatures terminated some growth. Spring-planted sugar beet harvest complete; high yields. Planting small grains active. Planting and renovating alfalfa hay well advanced. Fall lettuce harvest underway Salt River Valley, Pima and Pinal County areas. Lettuce harvest complete Cochise County. Red chili harvest active. Fall melons growth terminated. Freezing temperatures Yuma area. Lettuce other winter vegetables making good progress. Navel oranges, grapefruit, Algerian tangerines and lemons harvest underway Salt River Valley. Ranges fair to good. Soil moisture short supply. Recent rains improving conditions. Range areas have adequate supplies stockwater and forage.

**ARKANSAS:** Near normal temperatures most of State, weekly means in range 2° to -6° from normal, with greatest negative departures in extreme northwest. Daily extremes: 19° to 84°. Precipitation generally light with heaviest 0.92 inch at Evening Shade in northwest. Sharp cooling trend at weekend. Harvest good to excellent progress until late week when general showers interrupted activities. Picking cotton 75% to 80% completed, many growers northeast completed. Soybeans 65% to 70% combined. Destroying cotton stalks and disking cotton and soybeans. Movement pecans and walnuts to market increasing. Seeding winter grains continued Delta, more moisture needed. Growth on older seedings slow, because shortage moisture, particularly western and north-central areas. Pastures mostly short, very short north-central upland areas. Stockwater short some localities. Livestock mostly good, but gains virtually stopped. Feeding hay continued driest areas. Marketing cattle increasing.

**CALIFORNIA:** Cold week. Temperatures 5° to 10° below normal. Widespread freezing. Light precipitation northern 1/3 of State. Field preparations small grains active. Harvesting field corn, rice, and sorghum nearing completion. Cotton harvest full swing. Sugar beet digging continues. Moisture supplies low, moisture needs increasing. Freeze losses minimal except table grapes. Table grape harvest for fresh market finished. Harvest wine grapes continues. Almond harvest completed. Walnut harvest remains active. Picking olives continues; some damage unharvested fruit. Navel orange crop continues to develop. Little damage due frost. Lemon and grapefruit harvest continues desert. Ranges very dry. Lambing increasing Sacramento Valley. Turkey movement to market normal. Apiaries good condition for over wintering. Effects cold weather being seen major producing areas. Broccoli, cauliflower harvest light Salinas, Santa Maria. Central coast carrots moderate. Celery good volume from Salinas, Guadalupe-Oceano. New planting San Diego County, slightly damaged. Honeydew harvest complete. Sweet corn harvest slow. Acreages lost due cold weather several areas. Brentwood lettuce declining; moderate Fresno; increasing Bakersfield. Potato digging delayed Tule Lake. Damage undetermined. Potatoes, Hemet area, severely damaged, may reduce yields 40% to 50%. Merced sweetpotatoes moderate. Market tomato damage substantial.

**COLORADO:** Week cold and dry except mostly light snows scattered mountain areas. Some periods high winds east of mountains and other scattered areas. Substantial field activity entire week. Topsoil moisture supply adequate all areas except southeast. Condition winter wheat good to excellent statewide, 8% fall-seeded acreage adequate growth for grazing. Winter barley condition good. Harvest sugar beets 89%, corn for grain 59% complete. Sorghum grain 61% harvested. Range and pasture condition mostly good. Beet tops and corn stubble fields providing excellent supplemental feed. Livestock condition good to excellent.

**FLORIDA:** Temperatures continued well above normal despite a cold frontal passage during midweek. Second cold front moving into central portions of State late Sunday evening sharply dropped temperatures in northern sections of State. Temperatures averaged 3° to 6° above normal for week with daytime temperatures in high 80's. Nighttime temperatures reflected the frontal passages with minimum temperatures near 40° northern sections and low 60's in central portions of State. Rainfall averaged 0.50 to 1.00 inch north and 1.00 to 2.00 inches elsewhere. A notable exception was West Palm Beach which had a total of 9.72 inches mainly in the 24-hour period with passage of cold front. Other high rainfall totals for week were 4.71 inches at Belle Glade, 4.89 inches at Tavernier, and 2.80 inches at Plant City. Drought western Panhandle delayed seeding small grains. Other areas fair to good. Harvest late soybeans full swing. One sugarmill began grinding November 8, others last half November. Pastures and livestock above normal. Most good. Progress

small grain pastures behind normal. Citrus trees excellent condition, recent showers provided adequate moisture. Most fruits except valencias showing good color break. Harvesting increasing. Harvest sweet corn, cucumbers, radishes, and squash active. Volume tomatoes and celery increasing to commercial volume. Supplies snap beans, eggplant, escarole, and peppers are light and increasing. First cutting cabbage have started. Planting winter potatoes active. Transplanting strawberries essentially complete.

GEORGIA: Rainfall, moderate to heavy northwestern 1/3 of State, mostly light southeast 2/3. Totals exceeded 1.00 inch over much of previously dry northwest and west-central sections. Few areas in south had no rain during week. Unusually warm first part of week. Cool air moved in late Wednesday but warming brought above normal temperatures by early weekend. Second cold front Sunday brought lowest temperatures of fall season by Monday morning. Blairsville had 17° and freezing line extended south of Athens and Atlanta area. Averages for week ranged from 3° to 6° warmer than normal. Harvest cotton, corn, soybeans, and pecans remain active. Harvesting progress later than usual. Yields generally good. Seeding small grains and winter pastures continued. Livestock good.

HAWAII: Cool weather with light to moderate showers. Growth tender crops slowed. Ample soil moisture. Operations sugarcane plantations on schedule. Plantings pineapples active, picking fruits light. Supplies local vegetables and fruits adequate. Pasture receiving ample showers; growth range grasses improving. Cattle fair to good.

IDAHO: Temperatures continued to average 5° to 10° below normal for the 3d consecutive week. Departures were slightly greater east portion. Precipitation varied from light to moderate falling as snow above 3,500 to 5,000 feet. Largest amounts were recorded southwest ranging 0.25 to 0.50 inch. Sugar beet harvest operations seriously hampered due snow and cold. Some potatoes left unharvested. Fall tillage operations slowed. Livestock grazing lower elevation meadows and hay fields. Winter grains good condition.

ILLINOIS: Temperatures sharply colder with first fall freeze in central and south on Thursday. Some daily highs below freezing on weekend. Precipitation ranged from 0.10 inch south and east to over 1.00 inch in extreme west and northwest, mostly falling Monday. Snow flurries most of State over weekend but mostly north and east. Corn 85% harvested, last year 80%. Harvest 1 week ahead normal. Corn harvest virtually complete most southern Illinois. Yields, quality reported "fantastic." Wind, stalk rot, corn borer caused increasing lodging most remaining fields. Livestock grazing lodged fields some areas. Storage space shortages, grain marketing problems prevalent most areas. Virtually all winter wheat sown. Stands had good growth most areas before frost. Intended 1972 corn, soybean acreage 40% plowed, last year 30%. Progress 1 week ahead normal. Pastures provided 55% livestock roughage. Pasture conditions 7% excellent, 50% good, 33% fair, 10% poor. Soil moisture short 44%, adequate 56%. Days suitable for fieldwork 6 1/2. Activities include harvesting corn, spreading fertilizer, plowing.

INDIANA: Temperatures sharply lower. First freeze central and south this fall on 4th. Temperatures below 20° by Monday. Precipitation only 0.10 to 0.20 inch. Some snow flurries in north and snow up to 2 inches central and south on weekend. Low relative humidity. Most days partly cloudy. Soil temperatures at 4-inch depth dropped from 63° to 48°. Days suitable for fieldwork 7. Fall seeding and harvesting making good progress. Corn harvest 65% complete, ahead of 40% average, behind 70% last year. Soybeans 85% combined, compared 70% last year and 90% average. Sorghum grain 60% harvested. Seeding winter wheat mostly complete. About 90% seeded wheat emerged; stands mostly good to excellent. Topsoil and subsoil moisture mostly adequate. Pastures fair to good.

IOWA: A cold week with heavy precipitation ending early in week. Cold and windy at weekend. Record daily minima on 7th some localities. Corn harvest moving ahead despite several days wet weather. Corn harvest 75% complete, last year 70% and 5-year average less than 50%. Soybean harvest slowly nearing completion, almost 95% acreage harvested, compared less than 80% last year. Grain sorghum 85% harvested, 70% last year. Topsoil moisture supply 5% short, 84% adequate and 11% surplus. Almost 4 days suitable fieldwork.

KANSAS: Widespread precipitation eastern 2/3 early in period. Weekly totals 1.25 to 2.00 inches northeast, generally 0.10 to 0.75 inch central and southeast. Little or no moisture western 1/3. Weekly mean temperatures averaged 2° to 6° below seasonal. Coldest weather of season and first statewide freeze 7th. Minima that day teens to mid-20's. Maxima 60's and 70's 4th, generally 40's and 50's after 5th. Wet fields delayed harvest many areas. Grain sorghum harvest 78% complete, up 8 points from last year and the 1960-69 average. Lodging grain sorghum fields severe enough to affect yield few localities. Corn harvest 82% completed, 81% last year, average 65%. Sugar beet digging well along. Few alfalfa fields cut. Conditions favorable for new alfalfa. Wheat and rye grew well with more fields large enough to be pastured. Cool season grasses, stubble, and stalk fields also provided grazing. Cattle movement active.

KENTUCKY: Temperatures averaged about seasonable. Precipitation on 3 days; totals less than 0.10 inch to 1.16 inches. Changeable weather. Temperatures above normal 1st and 2d, maximum in 70's and low 80's. First general freeze on 4th. Rain and snow showers on 6th. Snow accumulations 1 to 3 inches over grass at a number of locations. Temperatures much below normal on 7th, afternoon temperatures in 30's. Over 5 1/2 days favorable fieldwork. About 80% corn acreage harvested, yield and quality good. Storage space short corn and soybeans. Soybean harvest 62% completed, slightly behind normal. Tobacco stripping active, 1/5 burley complete, ahead normal, but behind last year. Houseburn prevalent, causing some weight loss in barn. Winter seeding 80% done--all fall seedings making good growth. Local hay supplies generally adequate for winter feeding.

LOUISIANA: Fourth week with above normal temperature. Averages 1° to 4° above normal. Large variations as two cold fronts during week dropped lows to freezing scattered interior sections. Maximums near record level early in week. Ex-

tremes 90° Monroe Tuesday, Oberlin Thursday, 29° Monroe 8th, Winnfield Friday, Ashland Thursday. Precipitation again confined to scattered very light showers. Two to 6 weeks since significant rainfall. Totals less than 0.25 inch, except 0.27 inch at Bogalusa Wednesday morning. Weather excellent for maturing and harvesting crops. Soil moisture very short southeast. Fall sown grains and pastures need rain. Harvesting soybeans, cotton, and sugarcane full swing. Soybeans 75%, cotton 65%, sugarcane 25%, sorghum grain 90%, sweetpotatoes 90% harvested. Pecan harvest active. Supply of pasture feed about average. Livestock good condition.

MARYLAND AND DELAWARE: Temperatures averaged 6° above normal as exceptionally warm weather continued through 3d. Rest of week below normal except near normal on 6th. Season's first killing frost on 5th. Rainfall on 2d, 3d, and 7th totaled mostly 0.50 to 0.75 inch, except up to 1.75 inches in Eastern Shore and Delaware. Limited progress corn and soybean harvest; first freeze 5th caused little damage as most susceptible crops harvested. Freeze should favor soybean harvest by halting growth, killing weeds, and hastening drying. Some late apples frosted, but picking resumed after thawing and harvest now practically complete.

MICHIGAN: Near seasonal weather prevailed until record-setting cold pushed over Michigan as period ended. New daily minimums for November 8 were widespread, mostly in teens. Snow flurries all areas, favored locations for lake snow received 5 to 8 inches. Temperature averages were 1° to 3° below normal in Upper Peninsula, normal northeast to 4° below normal southern Lower Peninsula. Precipitation totals, 1.00 to 2.00 inches Upper Peninsula; 0.50 to 2.50 inches northwest Lower Peninsula diminishing rapidly to less than 0.25 inch southeastern half Lower Peninsula.

MINNESOTA: Temperatures: Very cold with temperatures averaging 8° below normal in west to 4° below normal in east and northeast. Mean temperatures below freezing across State except southeast. Extremes: 52°, 1°. Precipitation: Little to none in western half of State and 0.30 inch in eastern part. Harvesting very slow northwest and central districts, progressing well south. Fieldwork 2 days northwest and central and 4 days south. Corn picked 61%, normal 62%; moisture content 25%. Soybeans combined 73%, normal 91%; moisture 16%. Ground plowed: Corn land 26%, soybean land 48%.

MISSISSIPPI: Temperatures turning colder later part week with freezing temperatures extending to northern coastal divisions over weekend. 90° at Merrill on 1st, 28° Thursday at Holly Springs and University and 23° at Tupelo on 8th. A few stations had no rain, totals generally under 0.50 inch. At Tupelo 1.24 inches, measured Tuesday morning. Over weekend: Scattered light rains northern and central Mississippi. Tupelo reported 0.27 inch Sunday morning. Soil moisture mostly short south, north-central, northwest, and central areas, elsewhere mostly adequate. Average 5 1/2 days suitable fieldwork. Favorable harvest weather. Corn 79%, cotton 70%, soybeans 70%, sorghums 89% harvested. Wheat 78%, oats 87% seeded. Some grain acreage needs moisture. Wheat, oats, pecans, and pastures mostly fair condition. Livestock mostly good.

MISSOURI: A recordbreaking surge of cold air ended a week of near normal temperatures. Week averaged 2° below normal north to near normal south. Temperatures dipped into teens Sunday morning November 7. Rainfall early and late in week with amounts ranging from over 2.00 inches in northwest to less than 0.50 inch in southeast. Rain northwest slowed harvest. Harvest corn 78%, soybeans 82%, grain sorghum 80%, and cotton 79% completed. Fall seeding 3/4 completed and 1/2 fall plowing accomplished. Soil moisture adequate northern half, remainder short. Pastures fair to good.

MONTANA: Cool temperatures except very cold late in week followed by strong warming Sunday. Generally light precipitation northwest and along the east slopes of Rockies, very little precipitation elsewhere. Topsoil moisture short to adequate. Winter wheat good condition. Sugar beet lifting slowed by muddy and frozen fields. Range cattle and sheep mostly moved from summer ranges. Marketing calves ahead average. Range feed short to adequate.

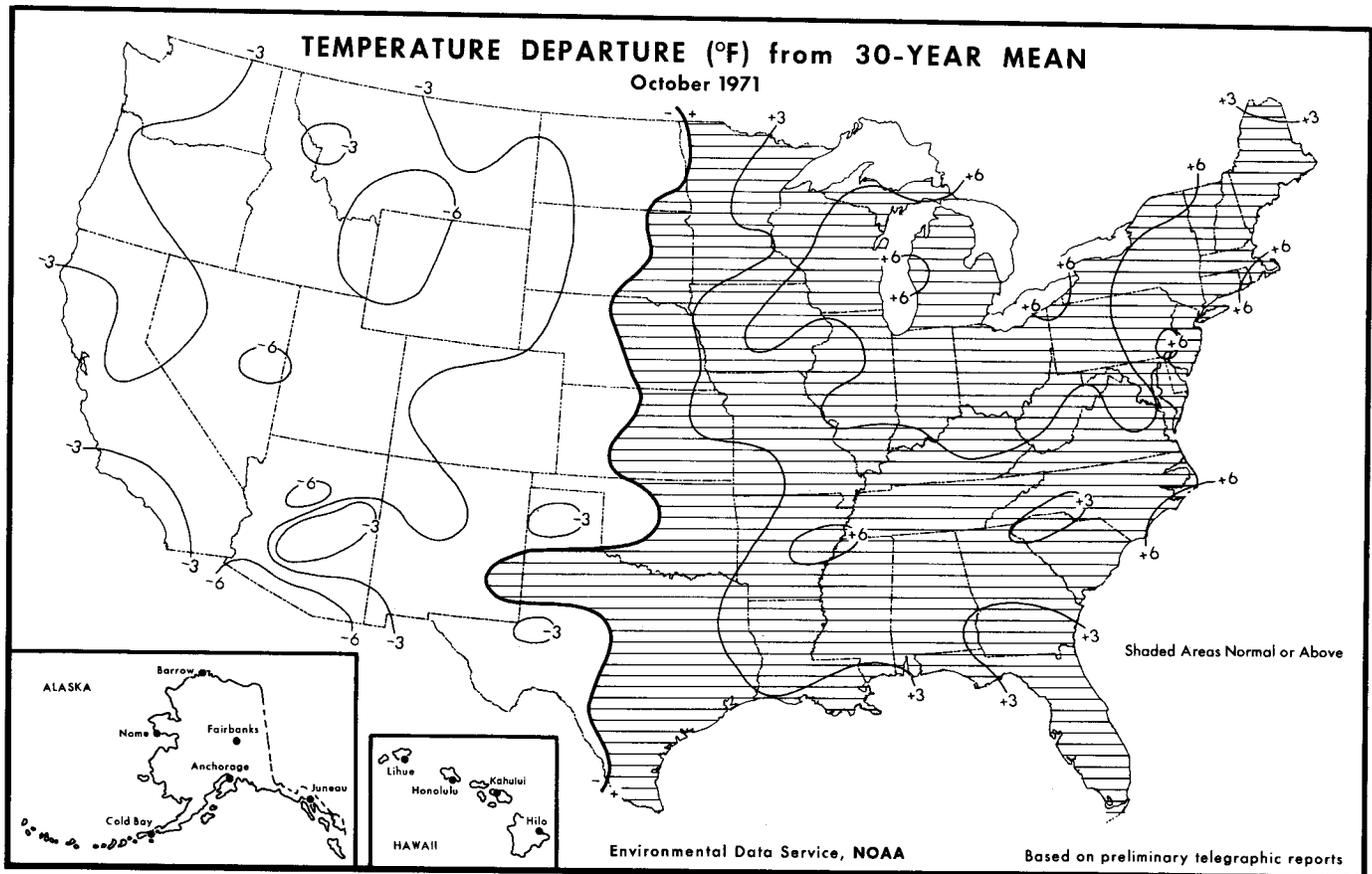
NEBRASKA: Cold and dry. Harvest slowed by wet ground. Corn harvest 78% compared to 58% normal. Sorghum 93% compared to 73% normal for this date. Soybeans 96% harvested. Farmers cleaning up ice, storm damage, fencing stalk fields, and moving hay into winter feeding areas. Winter wheat benefitted from recent moisture and in good to excellent condition, all but eastern Nebraska. Sugar beet harvest nearing completion. Power outages and ice storm caused problems for livestock producers, but few reports of losses. Cattle grazing stalk fields.

NEVADA: A dry cold week Nevada with Ely and Austin the only stations reporting ground cover of snow and light precipitation. Temperatures all divisions averaged about 5° below normal. Cotton harvest begun Pahrump Valley. Limited acreage green onions and radishes harvested Moapa Valley. Livestock good condition and coming off ranges at above average weights. Movement to winter ranges nearly complete. Water and feed supplies adequate and livestock should winter good.

NEW ENGLAND: Unseasonable warmth of past 2 weeks continued first half of this week. Many maxima in 70's early in week. Means averaged mostly 4° to 8° above normal. Much cooler at close, with many minima near 20° on 8th, bringing the most widespread freeze of season. Showers frequent, with some snow in north. Heaviest precipitation on Tuesday and Sunday. Totals mostly 0.50 to 1.50 inches. Thunderstorms Sunday, with high winds causing some utility outages. Cranberry harvest complete with large crop reported. Apples and fall vegetables moving from storage heavy volume. Livestock starting on winter feeding program.

NEW JERSEY: Abnormally warm weather early in the week gave way to very cold weather on Sunday. Temperatures were as much as 20° above normal on 1st and 10° below normal on 7th. Freezing temperatures over most of State on morning of 8th. Rainfall averaged 2.10 inches over North Jersey, mostly on 1st and 2d. The remainder of State averaged 1.10 inches. Weekly rainfall totals ranged from 0.80 inch at several stations to 3.70 inches at Long Valley. Frost occurred several nights during period. Surface moisture continues delay harvest potatoes, grain corn, and soybeans. Fall-sown grain and cover crops growing nicely. Some fields being sown as late crops harvested.

(Continued on page 10)



## WEATHER - OCTOBER 1971

**TEMPERATURE:** For the second consecutive month, temperatures averaged below normal over the western half of the Nation and above normal over the eastern portion. Temperature departures over the western half were generally 3° below normal, with a few high elevation stations reporting departures of -6°. The eastern half of the Nation was generally 4° above normal, with temperatures across the Corn Belt averaging 6° to 7° above normal.

After starting the month on a cool note, the western 1/3 of the Nation enjoyed warm days and cool nights, with temperatures averaging 3° to 6° above normal during the first 10 days of the month. The remainder of the Nation, except for the New England area and parts of the Southeast, experienced below normal temperatures.

By mid-month, the pattern which was to persist the remainder of the month was firmly established, with the western portion of the Nation below normal in temperature, and the eastern half above normal. The line separating the two temperature regions moved slowly southeastward until by the last week of October the dividing line ran from the North Dakota-Minnesota border southward into southwestern Texas. At mid-month, temperature departures were generally small, averaging 2° to 3° above normal over the eastern 2/3 of the Nation.

With the cool air to the Northwest, several surges of cold air worked their way southward. McComb, Mississippi, reported 39° on the 11th, and Tallahassee also reported 39° on the 12th.

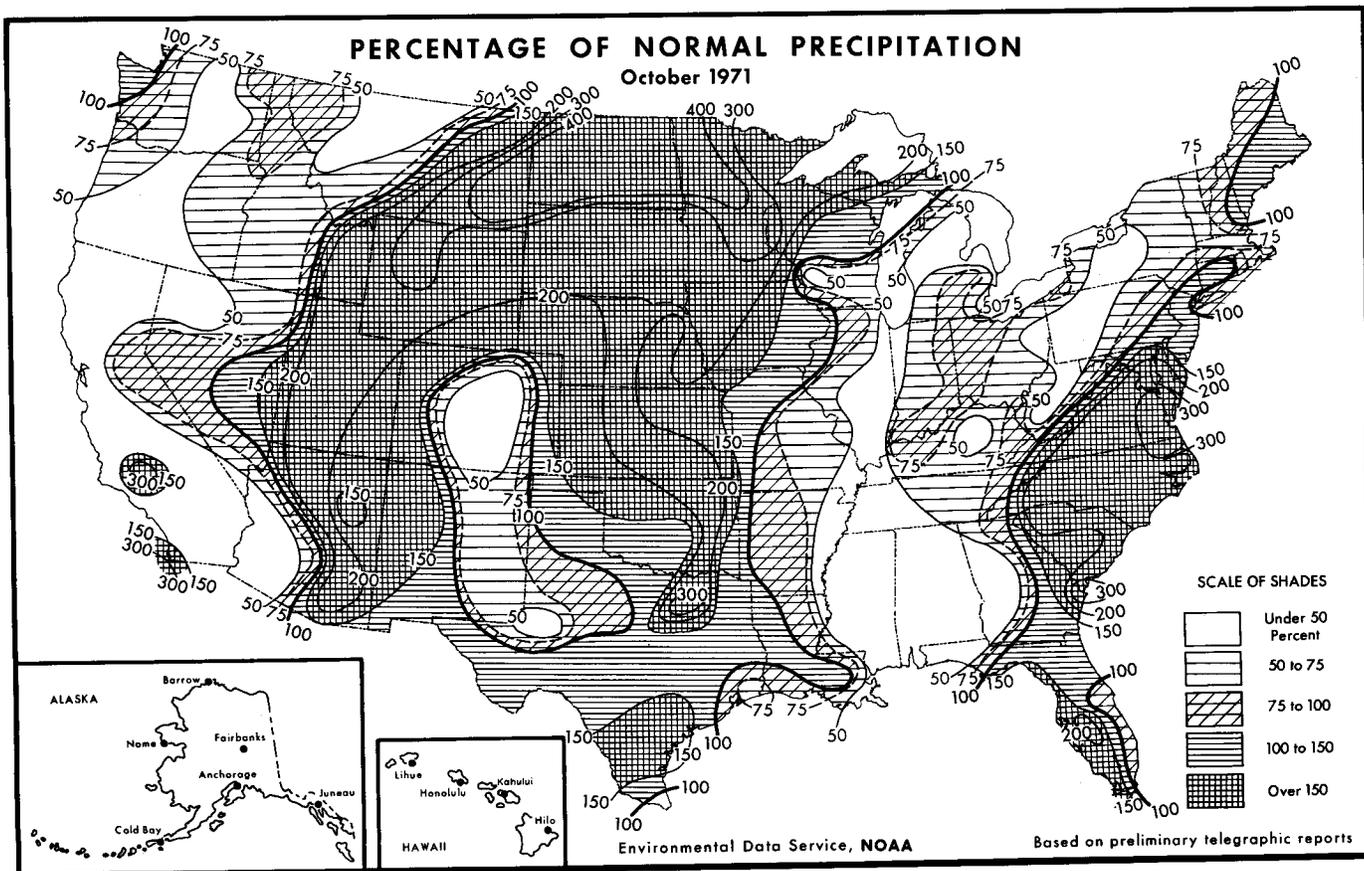
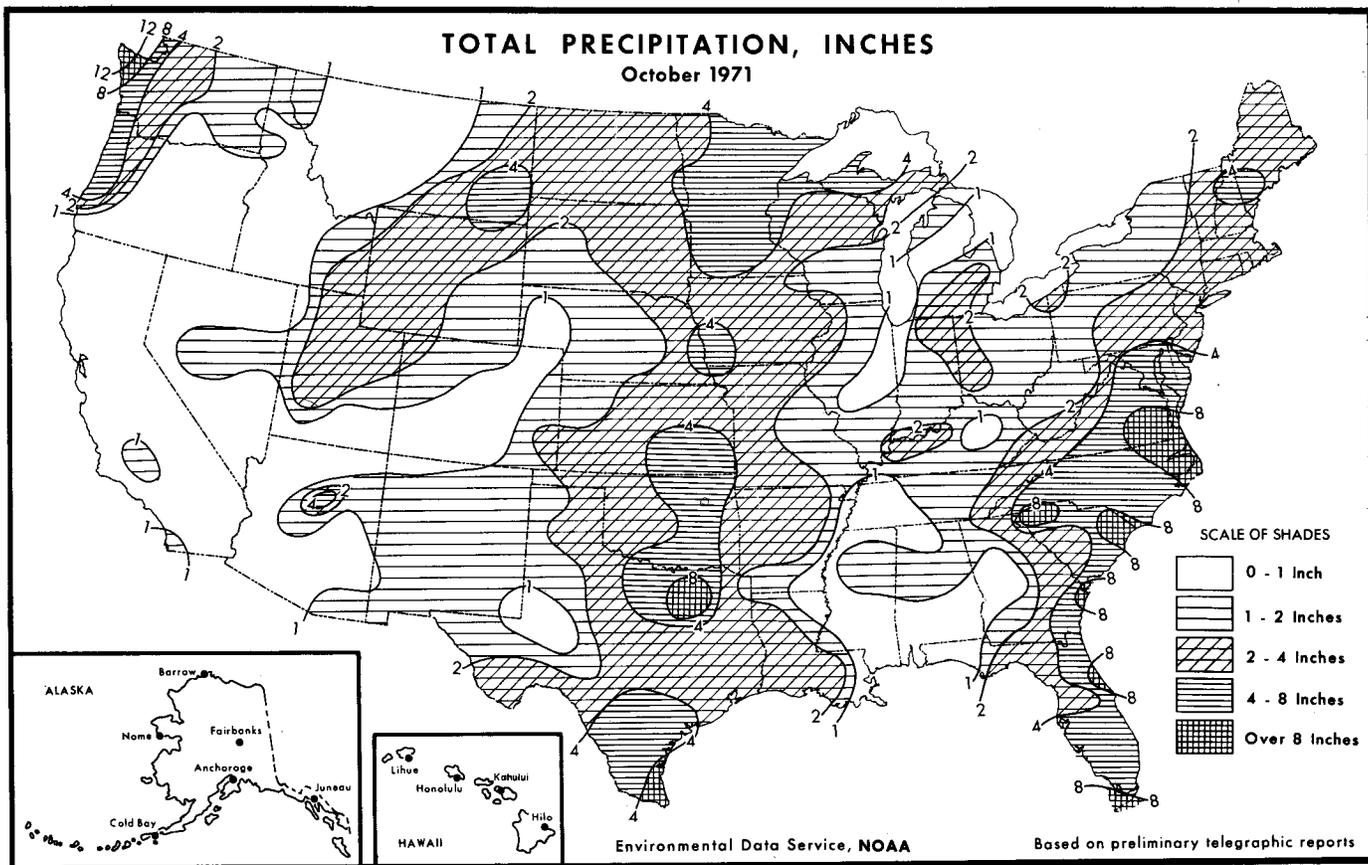
Around October 20, a large low pressure system moved from northeastern Colorado to Mani-

toba, bringing cold air whistling southward west of the system. Temperatures were in the 70's and 80's to the east of that same system over the central Great Plains. The remainder of the Nation east of the Low pressure system averaged 3° to 6° above normal.

During the last week of the month, the eastern half of the Nation averaged 6° to 15° above normal in a final flurry at Indian Summer. Meanwhile, the western half of the U.S. averaged 6° to 18° below normal, accompanied by high winds and snow over the Rockies. A sharp temperature contrast existed across a cold front which was present along the Nebraska-Kansas border on the 28th. That afternoon, Lincoln, Nebraska, in the cold air, reported 43° while Topeka, Kansas, recorded 80°. Temperatures plunged to -15° at Big Piney, Wyoming, on the 26th, while the lowest temperature recorded at Washington, D.C., was 67°.

The extended Indian Summer over the eastern half of the Nation resulted in many new records being set at a number of locations. On October 30, record highs were reported at Rochester, New York (80°), Buffalo, N.Y. (73°), Lexington, Ky. (83°), Bristol, Tenn. (79°), Madison, Wisc. (78°), and Lansing, Mich. (tied 77°) to name a few. In Philadelphia, this was the second warmest October in 101 years of record, surpassed only by 1947. This was the warmest October ever at the Nation's Capital with an average temperature of 64.7°.

Flagstaff, Ariz., set fourteen records during October. It was the coldest October in 73 years of record with an average of 38.6°. A -2° reading on October 30 was the coldest ever in October.



**PRECIPITATION:** Most of the Nation received above normal precipitation during the month, except for the area west of the Rockies, and an area extending from Michigan to the Gulf between the Mississippi and the eastern mountains.

The month began with rains from meandering Hurricane Ginger soaking portions of the Eastern Seaboard, and a system over the northern Great Plains blanketing portions of the Rockies with wet snow. The western snows were followed by a week of no precipitation over the western 1/3 of the Nation. However, generous rains fell over most of the Eastern Seaboard. Heavy showers fell from the Lower Rio Grande Valley and moved northeastward to the Middle Atlantic coast on the 4th and 5th. In the 24 hours ending on the morning of the 5th, Cortulla, Tex., received 6.71 inches of rain.

At midmonth heavy snows again belted parts of the West, while torrential tropical rains fell in the Florida Keys. A low pressure system southwest of the Florida coast drenched southern Florida. Over 8.50 inches of rain fell at International Airport, Key West, in the 48-hour period ending the morning of the 13th. On the 15th and 16th snow fell in western Montana and spread over a wide area. The storm, centered over the Great Basin, dumped 18 inches of snow at Austin, Nevada, and on the 16th, 11 inches fell at Flagstaff, Ariz. This was the heaviest October snowstorm in more than half a century at Flagstaff.

Heavy snows were again a topic of conversation as the month came to a close. By the 28th, 16 inches of snow had accumulated at Lander, Wyo., with 10 to 12 inch accumulations at several reporting stations. Rawlins, Wyo., reported an accumulation of 21 inches. On the 31st, a record 24-hour snow of 8.50 inches set a new record at Salt Lake. This also gave Salt Lake its snowiest October on record, with almost 17 inches (16.6) for the month.

Meanwhile, over the eastern half of the Nation, early morning fog was a common occurrence. Soaking rains fell over the Atlantic Coastal States from southern New England to Georgia, in a continuing pattern of weekend rains, on the afternoon of the 25th.

The central portion of the Corn Belt, and on over through the Rockies, received above normal rainfall, helping to replenish depleted soil moisture in some areas. The area between the Mississippi River and the western mountains received below normal rainfall, with most of southern Alabama and Mississippi receiving less than 0.75 inches of rain during the entire month. Jackson, Miss., received a total of 0.09 inches of rain, or about 1/20 of the normal.

Portions of the Eastern Seaboard received large amounts of rainfall. Most of Virginia and the Carolinas received over twice the normal rainfall for October. Rainfall amounts exceeding 10 inches were reported at several locations.

R. E. FELCH

**NEW MEXICO:** Partly cloudy with only traces of precipitation. Cooler average temperatures especially in eastern plains but still a little above normal in southeast. Cold air on Tuesday brought general below-freezing minima. Warmest Thursday and Friday with 80° at Carlsbad. Cooling Sunday; 12° at Raton. Topsoil and subsoil moisture short to adequate. Isolated areas very short soil moisture. Sorghum grain harvest active. Cotton harvest gaining momentum. Most other harvest wrapup stages. Ranges fair to good. Livestock holding up well. Fall shipping active.

**NEW YORK:** Above-normal warmth of last several weeks terminated early period with much colder temperatures latter half of week. Maximums in 70's, on 2d. Cooling to 40's on 4th and 35° to 40° Upstate afternoon of 7th. Minimums mid-20's to low 30's Upstate and mid-30's on Long Island on 5th brought 1st fall freeze to Great Lakes Plain and Lower Hudson Valley. Latest such date at Ithaca in 90 years of record. Precipitation early half of week totaled 1.00 to 1.50 inches from southeast with mostly 0.20 to 0.60 inches elsewhere. Heavy lake effect snowfall on 3d, 4th southeast of Lake Erie totaled 4 to 9 inches. Widespread light rain 7th changing to snow all but southeast quarter with additional 3 to 8 inches Lake Erie snowbelt. Mostly good week for continuing harvest of grain, corn now about 3/4 complete. Other field crops harvested. Vegetable harvest nearly all complete. Few late hardy vegetables continue to be harvested. Apple harvest virtually complete. Grape picking finished November 5.

**NORTH CAROLINA:** Temperatures much above normal dropping below normal over weekend. First freeze much of interior 5th reaching near coast 8th. Rain daily through 3d, then mostly fair. Total amounts variable 0.25 inch to 4.00 inches mostly 1.00 to 2.00 inches mountains and 0.50 to 1.00 inch elsewhere. Soil moisture remains mostly surplus. General rains across State about mid-week. Forty-five counties eastern North Carolina declared disaster area. Some damage to crops Statewide, but most serious peanuts, soybeans, corn, cotton central and northern Coastal Plain. Harvest lag continues, little progress during week. Small grain seeding 40% complete, condition mostly good. Pastures mostly good. Apple harvest virtually complete. Labor demand light.

**NORTH DAKOTA:** Temperatures averaged 4° to 9° below normal over State. Precipitation ranged from a trace to 0.10 inch over State. Wet muddy fields continue delay harvesting sunflowers, corn, and sugar beets. However, cold weather last half week caused ground to freeze and allowed harvesting operations to proceed. Livestock good. Feed supplies adequate for normal winter.

**OHIO:** Warm spell ended on 3d. Strong winds, rain, and snow accompanied cold front which moved through Ohio on 6th. Early morning temperatures on 7th broke existing record low temperatures for date at many locations. Rain common 2d, 3d. Days favorable fieldwork, 6. Soil moisture 15% short, 85% adequate. Corn to harvested for grain 80% picked, last year 85% usual 50%. Soybeans 90% harvested, equal to last year and normal. Sugar beets 60% dug, last year 70%, 1965 to 69 average 65%. Popcorn 85% picked, last year same, normal, 65%.

**OKLAHOMA:** Rainfall averaged 0.10 inch northeast with lesser amounts elsewhere. Temperatures averaged from near to 4° below normal with freeze all sections of State. Extremes: 83° and 20°. Peanut harvest advanced rapidly, 2/3 completed--about 1 week ahead year ago. Sorghum grain harvest made little headway due wet fields, morning dew delayed progress. Harvest about 3/5 completed, 7/10 year earlier. Green sucker heads still delaying harvest many fields. Heavy lodging, bird damage few localities. Cotton continues mature slowly, 4/5 bolls open, nearly all year earlier, only few fields harvested. Pecan harvest under-way most areas, about 10% complete. Growth small grains good, grazing becoming widespread. Good demand for stocker cattle. Livestock making favorable gains on small grain pastures. Native

pastures and ranges still furnishing fair to good grazing. Surface moisture adequate, except parts. Panhandle.

**OREGON:** Cool wet week with milder days and coolest nights at close. Temperatures averaged 3° to 5° below normal west, 5° to 9° below east. Minima 0° to 26° east, 24° to 31° west side. Maxima 48° to 62°. Rains daily on coast, 1 to 3 days east. Rains totaled 0.20 to 0.30 inch east side, 0.70 to 0.80 inch western valleys and locally north-central, 1.00 to 1.80 inches northern Cascades and coast. Snow in high mountains 2 days. Filbert and walnut harvest continues. Potato harvest nearly complete. Sugar beet harvest continues. Some fall seeding and fertilizing to be done.

**PENNSYLVANIA:** Arctic outbreaks Wednesday night and Saturday night brought first statewide freezing temperatures of season and first snow flurries to northwest. Temperatures in near-record low 80's ahead of front Tuesday. Maxima Sunday upper 20's to low 40's. Lowest 15° Monday morning. Coldest week since late April. Temperatures near normal west, 3° to 6° above normal east. Precipitation 1.00 to 3.00 inches east, 1.00 to 2.00 inches northwest, mostly 0.50 to 1.00 inch elsewhere. One to 5 inches snow northwest Saturday night and Sunday. General frost end of week, killed most tender vegetation. Corn harvest continuing, picking apples final stages. Potato digging nearly finished, grapes completed.

**PUERTO RICO:** Rainfall averaged 1.76 inches or about normal for week. Heavier rains of 5.00 to 7.00 inches in western sections. Good distribution along north and south coasts continued to improve crop moisture conditions following September drought. Other zones near normal for week except few zones too wet in extreme west. Temperatures averaged 79° on coast and 74° interior with average departure of 0.4° below normal. Highest maximum 92°, minimum 57°. Sugarcane developing well all zones. Coffee plantations good progress with fieldwork all zones, except some delay extreme west due heavy rain showers. Pastures good to excellent, some fertilizing activity. Minor crops developing well, with good abundance on market.

**SOUTH CAROLINA:** Rain last part of week heavy in northwest with amounts of 2.00 to 5.00 inches. Remainder of State had less than 1.00 inch. The season's first freezing temperature came on the 5th but weekly average temperatures were 5° to 7° above normal, except portions lower Coastal Plains, Ridge, all areas experiencing excessive soil moisture. Cotton 57% harvested, soybeans 76% mature, 5% harvested. Sorghums 60% harvested. Corn 79% harvested. Pecans fair to good. Pastures good to excellent. 84% winter grazing seeded, 80% emerged. Wheat 20% planted, 15% emerged. Oats 32% planted 30% emerged. Fall vegetables fair to good. Charleston-Beaufort area snapbean harvest continuing, cucumber harvest practically complete.

**SOUTH DAKOTA:** Cold dry week. Weekly temperatures averaged up to 14° below normal. Extremes ranged from 5° below zero at Lemmon on 6th to 69° at Rapid City on 4th. No measurable precipitation in lower elevations of State. Very light snow northern Black Hills midweek. Generally good progress made harvesting remaining acreage corn, but harvest not yet completed. Many calves going to market. Topsoil moisture supplies generally adequate or above. Fall-seeded grains good to excellent. Winter feed supplies adequate. Livestock

good, some movement to winter pastures. Upper layer soil frozen. Various farm activities prior to coming of winter include preparations for feeding and repairing livestock sheds and fences.

**TENNESSEE:** First cold weather of season arrived Thursday behind one of two cold fronts that crossed State. The second surge of cold air on Sunday sent temperatures into the low 20's Monday morning. Rainfall primarily on Wednesday and Saturday totaled 0.50 inch to 1.00 inch; heaviest in mountains. Crop harvest advancing rapidly. Most crops yielding well. Soybeans 40% harvested 30% year earlier. Cotton 70% picked, 50% last year. Corn 70% picked, on schedule with last year. Tobacco 60% stripped, slightly behind year earlier. Heavy frost late week with first occurring November 5, helping mature late soybean and cotton fields and aiding tobacco curing. Pastures above average condition. Days favorable fieldwork averaged 4.7. Reported soil moisture 72% adequate, 22% short, and 6% surplus. Oats, barley seeding practically complete. Wheat 80% planted.

**TEXAS:** A cold front brought sharply lower temperatures to most sections of State over weekend, and a little light rain to Edwards Plateau and extreme South Texas. Light freezes almost nightly on southern High Plains. Hard freezes in Panhandle over weekend. Both Amarillo and Dalhart reported minima of 26°. Considerable cloudiness accompanied the cold air mass downstate. Wet weather delaying planting wheat, oats, flax, as well as harvest cotton, corn, sorghum, peanuts. Abundant moisture boosted range and livestock conditions. Pastures recovered from summer drought. Grazing good to excellent and continues to improve. Percent planted major crops; wheat 91, 95 last year; oats 82, 94 last year. Percent harvested; cotton 26, 46 last year; corn 95, 100 last year; sorghum 74, 98 last year; peanuts 60, 74 last year; soybeans 44, 77 last year. High Plains carrot digging active with shipments at peak. Lettuce harvest nearly complete. Cucumber harvest active Winter Garden, Coastal Bend, increasing Lower Valley. Light supplies bell peppers from Winter Garden, Lower Valley with harvest increasing Lower Valley. Fall tomatoes later than normal, Laredo, Lower Valley with harvest scheduled to start late November. Winter Garden cabbage harvest underway with early carrots approaching maturity. Seeding winter vegetables, spring onions active south Texas as growers rush to catch up after heavy rains September. Citrus harvest moderately active. Pecan harvest 32% complete, 26% last year.

**UTAH:** Little or no precipitation past week, but temperatures continued very cold averaging 8° to 23° below normal. Very cold temperatures prevented drying fields and continues to slow sugar beet harvest. About 25% still unharvested, compared 12% last year. Sorting, grading, and marketing potatoes, dry onions, and apples from storage in progress. Range ewes being bred. Irrigation water carryover this fall largest ever.

**VIRGINIA:** Temperatures much above normal first half and below normal second half with freezing temperatures most stations. Rain showers and thunder-showers first half and scattered showers over weekend. Mud limited fieldwork especially Tidewater. Killing frost Thursday and Sunday nights. Wheat west of Blue Ridge 80% sown, remainder 1/2 planted.



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Corn 2/3 picked. Substantial soybean damage from lodging, sprouting, and molding. Peanut combining 1/2 done. Losses heavy, some abandoned. Stripping burley tobacco. Marketing flue-cured, curing dark-fired.

**WASHINGTON:** Western Washington: Cool and wet with some lowland flooding. All vegetable harvests completed except for few carrots and potatoes. Caneberry pruning continuing. Wet weather limited most farm activity to equipment maintenance.  
Eastern Washington: Partly cloudy and cool with rain, snow, and local strong gusty winds at times. Walla Walla established a new October snowfall record the first 2 days of the period. Major orchard activities are cleanup and rodent control. Spraying for greenbugs underway wheat areas. Sugar beets and potatoes still being dug and grape harvest completed. Carrot harvest begun. Cattle doing well on supplemental feed.

**WEST VIRGINIA:** Temperatures in 80's many locations October 30 and in 70's with light rain October 31 through November 2. Rainfall totaled about 0.50 inch. Rapid drop in temperatures from midweek on, with first statewide killing frost November 5. Light rain evening of November 6 as cold front pushed across State and dropped temperatures again. Cooler weather slowed pasture growth. Supplemental winter feeding livestock increasing. Apple harvest final stages. Tobacco growers stripping crop. Pace corn harvest increasing due drier conditions.

**WISCONSIN:** First winter weather this season with hard freezes and snow flurries throughout State. Week began with heavy rains over much of State on Monday. This rain helped restore soil moisture to many previously dry areas though amounts were light in much of Kenosha, Racine, and Walworth counties. Heaviest amounts of near 3.00 inches fell locally along line from Dubuque to Madison and beyond. Rains briefly delayed corn harvest which is at halfway mark. This pace behind last year, but near normal. Cold, dry weather should speed harvest from now on. Fall plowing also very active after rains and at 1/2 way mark. Soil moisture 80% adequate, 5% short, and 15% surplus.

**WYOMING:** A cold week with light snow over most of State. Border 3N reported the most moisture with 0.57 inch. Temperatures averaged 4° to 17° below normal, greatest departure in Wind River Drainage. Maxima were mostly high 30's to low 50's west of Divide, high 40's through 60's east. Minima were mostly -7° to 12° Statewide. Temperature extremes: 70° at Carpenter and -15° at Big Piney. Weather was favorable for fieldwork. Livestock in very good condition. Feed supplies good. Soil moisture supplies adequate to surplus.