

# WEEKLY WEATHER AND CROP BULLETIN

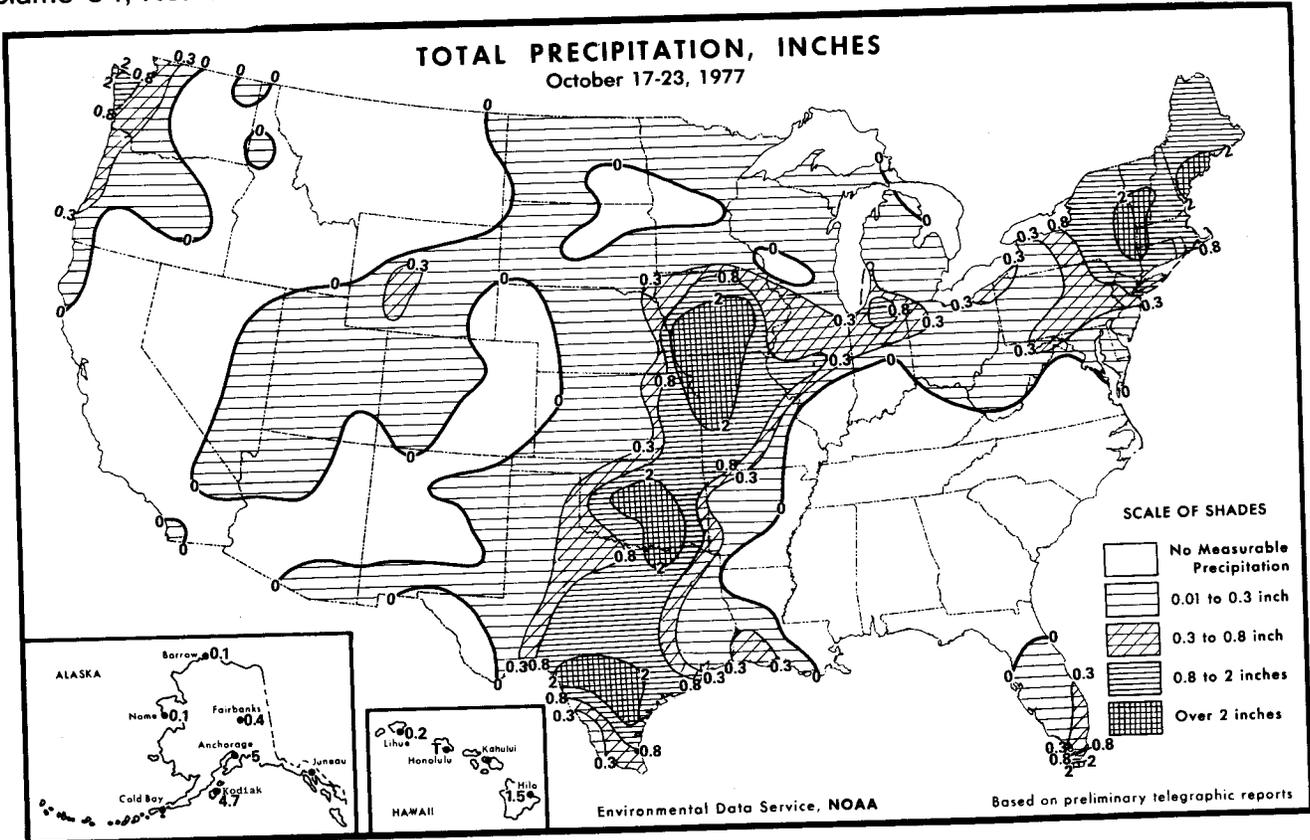
U.S. DEPARTMENT OF COMMERCE  
Environmental Data Service, NOAA

U.S. DEPARTMENT OF AGRICULTURE  
Statistical Reporting Service

Volume 64, No. 43

Washington, D.C.

Oct. 26, 1977



## National Weather Summary

October 17 - 23

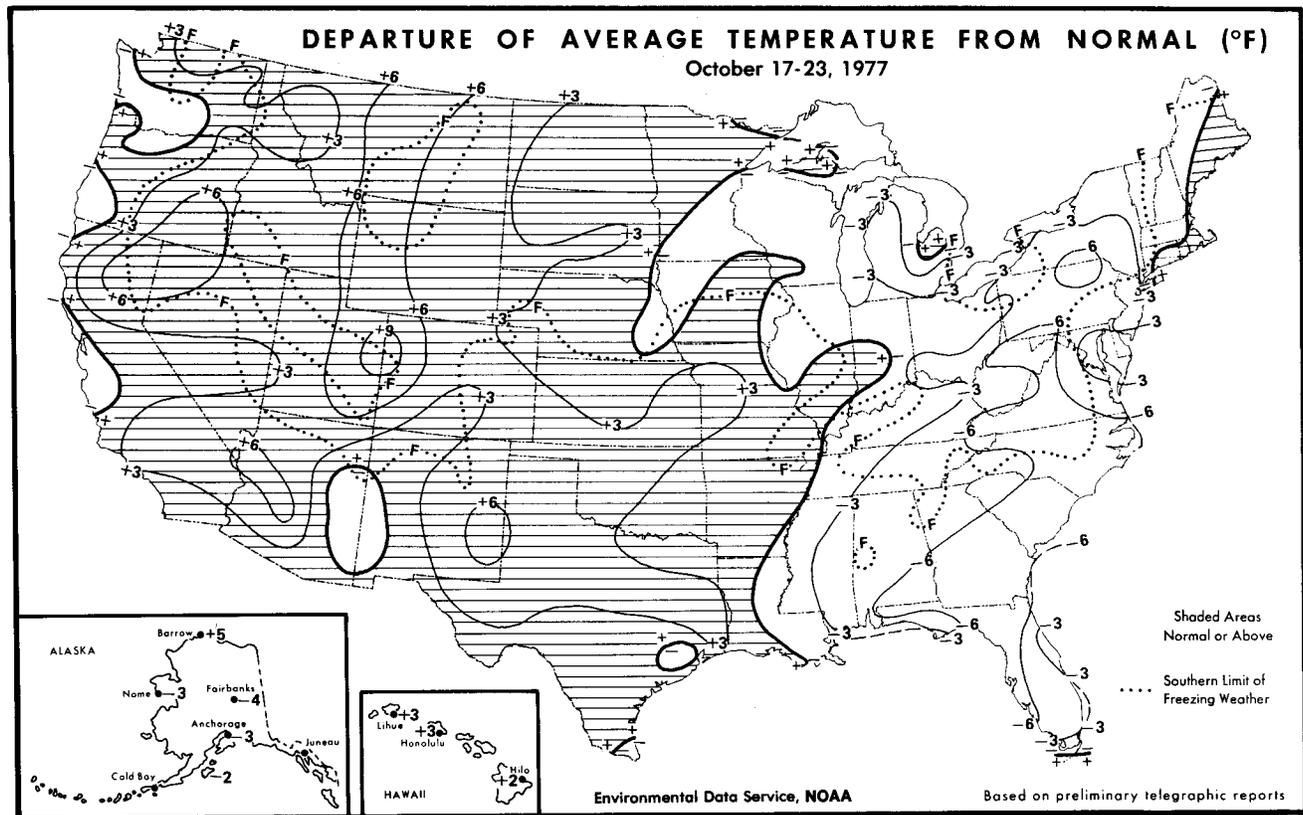
**HIGHLIGHTS:** Heavy rains in Missouri and Iowa brought streams to near bankful. Another area of heavy downpours covered Texas northward to Oklahoma; warm, moist air was pushed north by a low pressure center forming in the Gulf of Mexico and triggered the precipitation. The Northeast also received more rain on its already wet land. Light rain pushed into the Pacific Northwest and continued as the week ended. Little or no rain fell on most of the Rockies, Plateau Region, and the Southeast.

Most of the Nation west of the Mississippi River was near or above normal temperatures for this time of year; the northern half of the Rockies noted 6 to 9° warmer. On the other hand, a large portion of the country east of the Mississippi was below usual readings; it was 6 to 8° colder than normal from Florida to New York.

A coastal disturbance off southern New England carried rain, snow, and gale winds to the Northeast on Monday. Nearly 2 inches fell on parts of Maine and New Hampshire and 3 inches on sections of New York and Vermont. Further west 2 to 4 inches of snow blanketed portions of New York and Pennsylvania. The heavy precipitation triggered flash flooding on several rivers.

More than 20 stations reported record low temperatures; among them were 23° at Cincinnati, 40° at Houston, and Miami's 59°.

Tuesday dawned calm and stayed that way for most of the day. A few showers that didn't amount to much dotted the upper Great Lakes, New York, and New England. Near midnight a low pressure area dumped about one-half inch of rain on South Bend, Ind.



Temperatures were quite cold in the Southeast where records were broken from Virginia to Florida. Richmond was chilled by 28° and Tallahassee shivered through 32°. This marked the fifth day in six for record-breaking or tying low readings in Savannah and Miami.

High pressure dominated most of the Nation Wednesday morning. Some light showers reached from Ohio across Pennsylvania and from southern New England to Virginia. The afternoon brought some light rain to western Washington, the Arizona deserts, and southern California to Utah. Thunderstorms developed over South Texas by sunset.

Record low temperatures were registered in Tuscaloosa, Ala., 39°, and Tallahassee, 43°, while new high readings in Texas showed 88° at Beaumont-Port Arthur and 92° at Waco.

Precipitation was generally light as Thursday began. Most of it was confined to the Northeast where New York City collected .78 inch and Rumford, Maine, .81 inch. A few showers were scattered over northwestern North Dakota and the Desert Southwest; Needles, Calif., notched nearly a quarter-inch. By day's end New York City had one inch of rain and Lander, Wyo., almost one-half inch. Portland, Maine, measured another .87 inch to add to its third wettest October in the books.

Oklahoma City tied its 1899 record high temperature for the day of 88°.

Precipitation over New England finally ended on Friday, however, scattered showers cropped up over Florida, the northern Plains, central Rockies, coastal and western Texas, northwestern Arizona, Montana Rockies, and western Washington. By afternoon, a cold front extending from the upper

Great Lakes to New Mexico triggered rainfall in West Texas across Kansas to South Dakota. At nightfall San Antonio had received the largest amount of rain, .81 inch. Most of the rain was associated with the front. As midnight approached, an occasional thunderstorm rumbled over the lower half of the Plains, middle Mississippi Valley, and the northern and western sections of Texas.

On Saturday the front extended from Canada through Indiana and Missouri to a low over Oklahoma. And precipitation became heavy when thunderstorms reached from Texas through the central Plains to the middle Mississippi Valley. Two to 3 inches soaked northwestern Missouri while 9 inches drenched Vanderpool and 6 inches fell on Utopia in south central Texas; meanwhile 4 inches covered Blanco County in central Texas. Rain also hit the southern parts of Texas and Florida, areas of the Dakotas and New Mexico, and the Washington/Oregon coastline. Nighttime showers diminished over the Plains, but dampened locales from Oklahoma through the Great Lakes.

Showers continued on Sunday from South Texas across the eastern portions of the upper Great Plains into the middle Mississippi and Ohio Valleys and central Great Lakes. Rain also persisted over Florida and the Pacific Northwest coast. Much of the precipitation over the center of the Nation was the result of a low pressure area over eastern Kansas which was on a front reaching from Texas to Missouri and eastward to the Carolinas. Rainfall included about one and one-half inches at Kansas City and nearly an inch at Houston. As the new week began, a cold front was moving over the Northwest to the northern Rockies.

## National Agricultural Summary

October 17-23

**HIGHLIGHTS:** Clear, relatively cool weather improved harvesting conditions throughout most of the Nation until a weekend storm system spilled rain from Texas through Iowa and began moving eastward. Fields dried enough to support harvest equipment, and frosts reached farther south helping defoliate plants. Corn harvest advanced to 57%, shy of the 61% in 1976 but ahead of the 47% average. Soybean harvest also surged forward to 57%, far short of last year's unusually quick pace but almost equalling the 59% average. Cotton picking, at 51% was about double both last year and the average. Dry soils delayed small grain seeding in the Southeast, the southern Great Plains, and some of the Northwest. Soil moisture rated short in parts of the South and from the Rocky Mountains westward. Surplus conditions existed in parts of the eastern Corn Belt, but elsewhere was adequate.

**SMALL GRAINS:** Winter wheat seeding for the 1978 crop reached 87% complete, short of the 90% in 1976 and the 95% average. Dry soils checked progress in parts of the South and the West. Farmers finished planting in the Mountain States and the northern Great Plains. Oklahoma and Kansas farmers almost finished. Rains in eastern Kansas at the weekend slowed seeding. Kansas wheat rated good to excellent; little was being pastured. Oklahoma wheat rated fair to good with 70% up to stand--also very little grazed at present. Texas seeding made very little progress, many growers were waiting for additional moisture. Many dry-land stands germinated poorly and appeared moisture-stressed. Weekend rains should give emerged stands a boost and allow resumption of planting. Among the north central States wet field conditions delayed progress because many farmers must harvest crops from fields earmarked for seeding. Small grain producers in the West Coast States almost finished seeding, but low soil moisture caused spotty stands.

**CORN:** Harvest was ahead of normal in most of the Nation. Compared with last year the southern harvest was early, the eastern Corn Belt about equal, and the western Corn Belt later. Nationally, harvest reached 57% lagging 1976 by 4 points but ahead of normal by 10 points.

In the eastern north central States, harvest reached 49% compared with 48% last year and the 40% average. Some farmers let corn fields dry to avoid the expense of drying after harvest.

In the western north central States harvest advanced to 59%, short of 1976's 72% but surpassing the 47% average. Fields dried and farmers were able to make good progress throughout the region.

In the South harvest was almost finished in Florida and South Carolina, 90% in North Carolina, 88% in Alabama, and 99% in Texas.

**SOYBEANS:** The Nation's soybean harvest also reached 57%, the same as corn. Last year farmers had harvested 70% of the soybeans and on the average usually harvested 59%. Growers harvested 24% of the 1977 crop this week. Clear weather dried the crop in the north central States. In the eastern north central States harvest reached 71% less than 1976's 89% and the 79% average. In the western north central States combining reached 66% lagging 1976's 88% and the 70% average. At this time last year, Iowa and Minnesota growers almost finished harvesting; this year progress stood at 74 and 85% respectively.

In the south central States combining reached 41%, equalling 1976's rate and surpassing the average by 6 points. Frosts aided leaf drop and fields dried.

**COTTON:** Picking stood at 51% complete in the eleven southern States, more than twice the 24% a year ago and almost double the 28% average. The crop rated fair to good with some poor areas in the Southeast. Picking was well advanced in all States except Oklahoma. Texas harvest advanced more quickly in the Panhandle with strippers active in defoliated fields. Arkansas growers reached 72% complete and were chopping stalks in harvested fields. Arizona harvest advanced faster than last year, New Mexico's harvest reached 20% complete. California picking gathered momentum as gins operated around the clock.

**OTHER CROPS:** Grain sorghum harvest in the seven major States advanced to 70% complete, 3 points less than last year but ahead of the 59% average. Harvest lagged significantly in South Dakota, Nebraska, and Oklahoma. Among the other States harvest was well advanced compared with 1976 except in Kansas which lagged only 5 points.

Rice harvest was almost complete; Louisiana was 100%, Arkansas 95%, Mississippi 90%. Texas growers harvested the second cutting at a fast pace. California growers passed the peak and combining activity declined. Arkansas growers disked harvested fields.

Peanut combining ranged from 54% in Virginia, 77% in North Carolina, 84% in Georgia to 78% in Alabama. Irish potato harvest was almost complete; wet fields hampered digging the last 10% in Maine. The Red River Valley harvest in Minnesota advanced to 95% and almost 100% in North Dakota. The Idaho harvest reached 95%.

**VEGETABLES:** Frost killed most tender vegetable crops in northern areas; wet fields delayed harvests in the Northeast. Low temperatures slowed maturity and reduced volume from some southern areas. Florida's sweet corn harvest was slow, tomato volume was light; radish, eggplant, squash, cucumbers, pepper, and snap bean harvest increased. Texas growers picked cucumbers, peppers, and squash; dry soils delayed fall vegetables in some areas. Arizona growers harvested lettuce. California's processing tomato harvest nearly ended; growers picked fresh market supplies of lettuce, broccoli, cauliflower, celery, peppers, and tomatoes.

**FRUITS AND NUTS:** Apple harvest was almost complete reaching 90 to 95% in northern areas. Pecans rated fair to good; picking ranging from 13% in Georgia to 20% in Mississippi. Florida's citrus groves rated excellent; fruit had good color with harvest increasing in all areas. Texas producers harvested grapefruit and early oranges. Arizona growers harvested a limited amount of grapefruit and some lemons. California Navels developed some color; Valencia harvest was light.

**PASTURES AND LIVESTOCK:** Pastures rated fair to good in the northern half of the Nation from the Great Plains eastward. In the South pastures were fair. Texas, California and the Mountain States generally had poor to fair ranges; grasses needed moisture. High elevation pastures rated good.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., Oct. 23, 1977

Table with 12 columns: States and Stations, Temperature °F (Average, Departure), Precipitation Inches (Total, Departure). Rows list various states and cities with their respective weather data for the week ending Oct 23, 1977.

Based on 1941-70 normals

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

Standard copy for the Bulletin is prepared by Lyle Denny and O.W. Byrd, Environmental Data Service, National Oceanic & Atmospheric Admini-

stration; Harry DeLong and Jim Carlin, Statistical Reporting Service, U.S. Department of Agriculture.

Yearly subscription rate: \$5.00 domestic and \$11.25 foreign airmail. Order from the Agricultural Weather Support Service, South Building Mail Unit, Room 1248, USDA, Washington, D.C. 20250. Make checks payable to Department of Commerce, NOAA.

## State Summaries of Weather and Agriculture

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

**ALABAMA:** Cool, dry week. Temperatures 2° below normal. No rainfall.

Fieldwork: 6 days suitable. Soil moisture short to adequate. Major activities included harvesting cotton, peanuts, soybeans and corn. Cotton 48% harvested, 18% 1976, 32% average. Corn 88% harvested, 71% 1976, 63% average. Soybeans 27% harvested, 28% 1976, 33% average. Peanuts 78% combined, 89% 1976. Pastures, pecans fair condition. Small grains 57% sown, 52% 1976, 58% average.

**ARIZONA:** Warm, clear; temperatures 1 to 5° above normal. Widely scattered light showers, mostly under 0.25 in.

Field activities full swing, ideal weather conditions. Cotton harvest increasing, ahead of last year. Sorghum harvest continued. Sugarbeet harvest underway Cochise County, spring beets good growth. Limited swathing alfalfa hay underway, growth virtually halted colder areas. Field preparations continued wheat, barley. Lettuce harvest active Cochise County. Lettuce, mixed vegetables good progress Yuma, Salt River Valley. Cantaloup harvest active Salt River Valley, near harvest Yuma. Lemon harvest nearing full volume Yuma, increasing Salt River Valley. Grapefruit harvest limited. Range conditions mostly good higher elevations, poor to fair lower deserts. Stock water, soil moisture supplies short deserts, adequate mountains. Cattle, calves good condition. Ranchers "rounding up" cattle for market. Sheep moved winter pasture, fall lambing underway.

**ARKANSAS:** Few showers northwest 23d, otherwise no rainfall. Temperatures ranged from 3° below to 4° above normal. Extremes: 28 and 86°.

Soil moisture adequate. Fieldwork: 6.5 days suitable. Soybean harvest 29% complete, 30% 1976, average 28%. Light frosts aided leaf drop some areas, others need good killing frost to hasten maturity. Unharvested portion of crop fair to mostly good condition. Cotton harvest 72% complete, 41% last year, average 45%; open bolls 97% of acreage, 83% year ago. Stalk destruction common. Rice harvest 95% complete, 91% year ago, average 93%. Fields disked as harvest completed. Corn harvest 99% complete, 98% 1976. Sorghum harvest 98% complete, 95% last year, average 89%. Wheat seeding 45% complete, 42% last year; growth good but moisture needed some areas. Oat planting 45% complete, 53% 1976. Hay harvest virtually complete. Pastures average.

**CALIFORNIA:** Very light precipitation north. Throughout interior valley and mountains temperature averaged from near normal to 11° above normal.

Alfalfa progressed to final cutting. Corn, sorghum harvesting as crops dry. Cotton picking intensifying. Gins operating round-the-clock. Dry bean, rice harvests declining. Small grain planting continues with poor soil moisture. Citrus colored. Some splitting and small fruit. Valencia harvest very light. Apple harvesting continued. Avocados moved light volume. Some lose to soft dates expected due to rains Riverside County. Almond, walnut harvests continue to wind down. Brussels sprouts, bell pepper, market tomatoes, fall potatoes past peak. Honeydew, cantaloup increasing desert. Lettuce increasing San Joaquin. Broccoli, cauliflower, celery heavy volume. Processing tomato harvest near end. New grass showing

stress, lack of water. Ground water levels critical. Supplemental feeding, hauling water continued. Calving begun most areas.

**COLORADO:** Dry and mild. Light precipitation 20th and 21st. Scattered rains lower elevations, snow in high country. Snowfall heaviest in central mountains; 3 to 6 in. Temperatures mild; minor cooling on 21st and 22d.

Corn grain harvest 72% 1977, 28% 1976, 30% average. Alfalfa 4th cutting 82%. Sorghum harvested for grain 52% 1977, 23% 1976, 32% average. Sorghum cut for forage 93% 1977, 87% 1976, 85% average. Apple harvest nearing completion. Soil moisture short to very short. Range and pasture poor west slope, fair elsewhere. Livestock good condition.

**FLORIDA:** Fair, cool and dry becoming increasingly cloudy with a few showers weekend. Temperatures 5 to 10° below normal beginning of week, moderating to near normal weekend. Rainfall weekend generally light, averaging less than 0.25 in. except a few locations having 0.50 to 0.75 in.

Soil moisture mostly short. Corn, peanut harvest nearing completion. Soybean harvest increasing; crop matured rapidly. Cotton harvest beginning. Hay harvest active south, nearly complete north. Pecans good condition, harvest increasing. Cutting cane for planting continues. Several mills should start grinding last of October and early November. Planting small grains active. Pasture condition mostly good, although some seasonal decline noted. Very little overgrazing. Movement of cattle to market heavy. Cattle condition good. Citrus grove conditions excellent. Some irrigation due to cool, dry weather. Good fruit color. Harvest increasing all areas. Most vegetable crop conditions very good. Cool temperatures beneficial; fruit set, growth plantings most crops continue active pace. Sweet corn harvest slowed, should increase this week. Tomato harvest light. Crown set light; second pickings should improve. Radish, eggplant, squash, cucumber, pepper harvest increasing. Snap bean harvest gaining rapidly. First harvest lettuce expected this week. Strawberry transplanting active.

**GEORGIA:** Fair weather; temperatures ranging from mid-40's mountains to near 60° south. Temperatures mostly 8 to 10° below normal. Rainfall light averaging 0.10 in. or less, mainly north and central.

Fieldwork: 6 days suitable. Soil moisture adequate northern third, mostly short to very short elsewhere. Late haying unusually active. Land preparation, fall seeding, and harvesting major chores. Peanuts fair; 93% dug, 84% threshed; last year 98% dug, 94% threshed; average 99% dug, 97% threshed. Corn poor, insect and mold damage; 88% combined, last year 79%, average 63%. Cotton mostly poor to fair; 33% picked, last year 24%, average 36%. Soybeans mostly fair to good; 12% harvested, last year 10%, average 13%. Pastures fair, declined seasonally after frost. Cattle mostly fair to good. Hogs fair to mostly good. Pecans mostly fair to good; 13% gathered, last year 8%. Small grain seeding delayed south by dry soils. Wheat 36% planted, last year 29%. Rye 50% seeded, equal to last year. Other small grains 48% planted, last year 45%.

**HAWAII:** Weather favorable, showers generally light confined mainly windward and higher elevations.

Heavy irrigation most sections. Spraying for insect continue frequent. Watermelon, snap bean fields heavily infested. Some fields abandoned or harvest length shortened. Vegetable supplies: Leafy crops increasing. Others light or adequate. Banana and papaya supplies heavy. Pineapple harvest light. Sugar harvest steady. Pastures fair to good.

**IDAHO:** Unseasonably warm dry weather. Temperatures ranged from 3 to 9° above normal with slight cooling by weekend. Extremes: 82 and 19°. Only precipitation reported 0.02 in.

Harvest of all major field crops, except sugarbeets, in wind-up stage. Planting of fall grains nearly complete. Harvest of potatoes 95% complete compared to 90% last year. Sugarbeets 35% harvested, 45% last year. Winter wheat planting virtually complete, 90% last year. Emergence of winter wheat 80%, 60% in 1976.

**ILLINOIS:** Temperatures 1 to 2° below normal. Precipitation very light; scattered showers central.

Corn 58% harvested, 49% 1976, 48% average. Soybeans 78% combined, 97% 1976, 89% average. Grain sorghum 65% harvested. 1978 winter wheat 65% seeded, 88% last year, 86% average. 1978 corn and soybeans acreage 15% plowed, 28% last year, 25% average. Pastures mostly good. Soil moisture adequate. Fieldwork: 6.5 days suitable.

**INDIANA:** Showers north and central 0.70 in.; none south. Temperatures near normal and ranged from 28 to 79°. Sunshine 75% of possible.

Fieldwork: 6 days. Topsoil and subsoil moisture mostly adequate. Pastures fair to good. Corn 50% harvested, 1976 40%, average 35%. Soybeans 60% combined, 1976 85%, average 65%. Wheat 55% seeded, 1976 85%, average 80%. Wheat 75% emerged, 1976 45%. Wheat stands fair to mostly good. Barley 80% seeded. Rye 75% seeded. Apples 95% picked, 1976 95%, average 80%.

**IOWA:** Temperatures near or slightly above normal. Rainfalls moderate over north and west central but heavy elsewhere where soils are again saturated and streamflows increased.

Mild weather provided excellent harvesting conditions. Fields drying, harvest proceeding rapidly. Topsoil and subsoil moisture adequate. Fieldwork: 7 days suitable. Harvest moving well for corn; 61% complete, 72% last year, 38% average. Soybean harvest 74% complete, virtually all harvested a year ago. Winter wheat seeding 73% complete. Fall plowing 15% complete. Livestock in good condition; activity in feeder cattle increasing.

**KANSAS:** Significant precipitation confined east and north central during latter part period. Local heavy amounts ranging 2.00 in. to over 4.00 in. northeast and east central. Temperatures averaged 57° northwest and north central and 59 to 62° elsewhere or 2° above normal north central, 3 to 6° above normal elsewhere.

Rainfall limited to eastern one-third locally heavy, should slow fieldwork next week. Wheat seeding 95% complete, last year, average 90%. Wheat condition good to excellent. Insects moderately heavy. Leaf rust western two-thirds. No significant pasturing of wheat. Barley seedings 95% complete, last year 90%, average 85%. Corn harvested 80%, last year 60%, average 45%. Sorghum grain 95% fully mature, equal last year, average 85%. Harvesting sorghum 55%, last year 60%, average 35%. Combining soybeans 40%, last year

55%, average 50%. Pastures excellent. Livestock grazing sudan, volunteer wheat, corn, milo stubble fields. Substantial quantities supplementary feeds.

**KENTUCKY:** Temperatures 1 or 2° below normal with precipitation less than 0.10 in.

Most days favorable for field activities, mainly corn harvest, soybean combining, stripping tobacco and cutting late hay. Soil moisture generally adequate, excessive west central. Corn harvest 63% completed, 52% last year and 59% average. Soybean combining speeding up, now 36% finished, but still behind 43% last year and normal 46%. About 16% burley stripped compares with 10% average progress. Another 55% of crop cured and ready for stripping, assuring plenty of tobacco ready for opening of markets. Houseburn a bit less than expected. Some plant bed preparation for 1978 crop underway, about 40% fall treated mainly with methyl bromide. Fall wheat seeding nearing 60% completion.

**LOUISIANA:** Temperatures 3° below to normal. Extremes: 33 and 89°. No precipitation.

Soil moisture short north, adequate elsewhere. Main activities: Harvesting cotton, soybeans and sugarcane, and fall plowing. Cotton fair to good; 58% harvested, 51% last year, 35% average. Soybeans fair to good; 48% harvested, 67% last year, 48% average. Sugarcane good; 11% harvested, 7% last year, 9% average; planting 79% complete. Sweetpotatoes fair to good; 78% harvested, 85% last year. Wheat 42% seeded, 60% last year. Oats 38% seeded, 70% last year. Haying near complete. Pecans fair to good. Pastures and livestock fair to good.

**MARYLAND & DELAWARE:** Temperatures 5° below normal. Highs in 60's; lows in 40's. Western areas cooler. Precipitation moderate, 1.00 to 2.00 in. Weekend fair, mild.

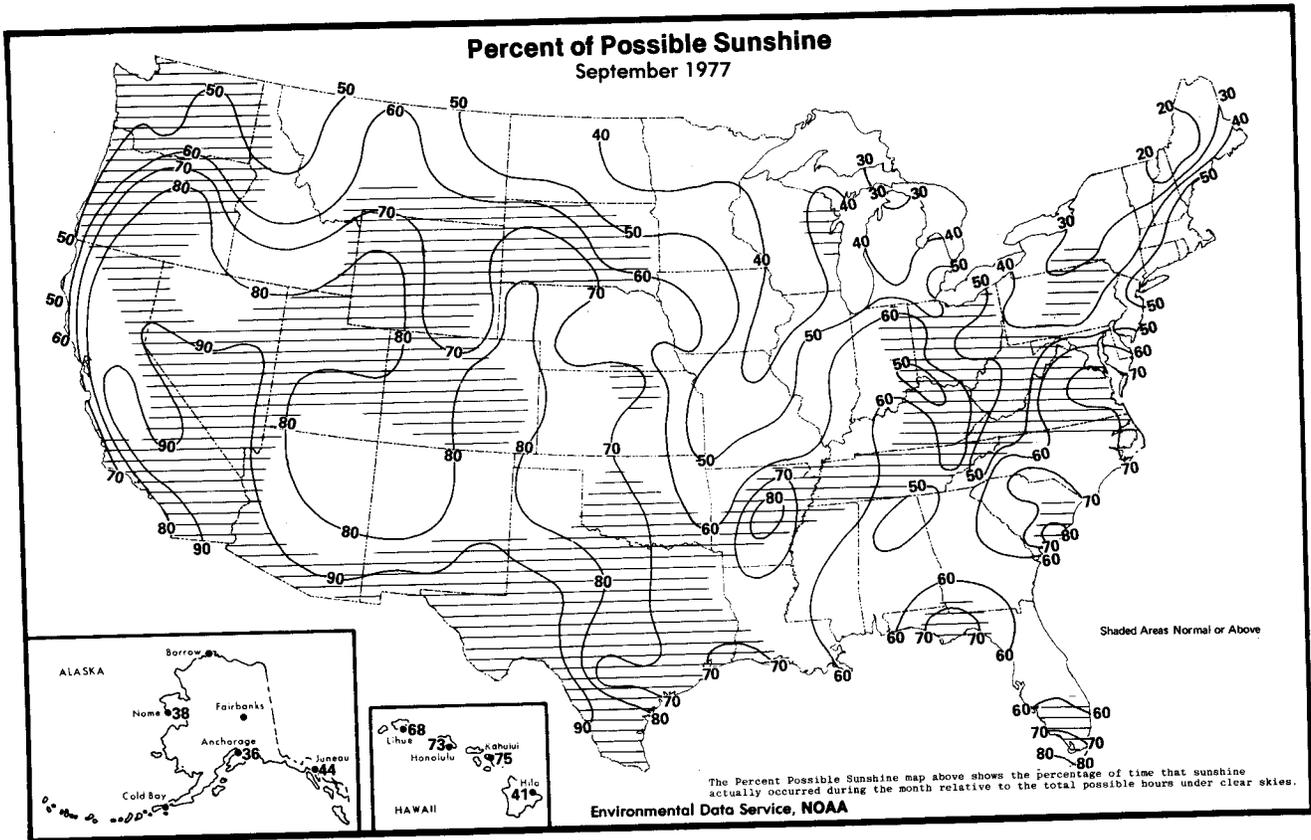
Corn for grain 90% harvested, 65% 1976, 70% average. Corn for silage nearly completed. Soybeans 35% harvested, 20% 1976, 29% average. Tobacco growers stripping crop and preparing plant beds. Fall apple harvest about completed. Small grain seeding continues. Pastures supplying average amounts of feed. Topsoil moisture adequate, subsoil short to adequate.

**MICHIGAN:** Temperatures below to near normal, ranging 2 to 5° below except near normal northwest. Extremes: 18 and 71°. Precipitation light to non-existent. Only significant moisture of 0.25 to 0.55 in. over southeastern Upper and western and southeastern Lower.

Fieldwork: 5 days suitable. Activities: Harvest corn, soybeans, dry beans, sugarbeets, potatoes, and wheat seeding. Soil moisture adequate to surplus. Pastures average or above. Corn harvested for grain 25%, 40% 1976, 25% normal; 80% silage chopped. Dry beans: 50% harvested, complete in 1976 and normal. Soybeans 35% combined, 65% 1976, 55% normal. Third cut hay 75%. Wheat planting 65%. Sugarbeets 20% dug, 60% 1976, 45% normal. Potato digging 85%, 90% 1976 equal to normal. Apple picking virtually complete. Fall vegetable harvest winding down.

**MINNESOTA:** Temperatures near normal. Extremes: 78 and 21°. Precipitation averaged 0.20 in. to 0.40 in. below normal except normal to 0.20 in. below normal northwest and north central. Totals ranged from 0.44 in. north central to none most of southwest half.

Harvests advanced very rapidly. Surplus soil moisture slowed progress in east central. Corn, soybean harvest completed in many localities. Percent harvested: Corn 70%, 1976 88%, normal 61%;



soybeans 85%, 1976 99%, normal 89%; flax 95%, 1976 99%, normal 99%; sugarbeets 97%, 1976 94%, normal 95%; potatoes 95%, 1976 99%, normal 97%; sunflowers 84%, 1976 99%, normal 81%.

**MISSISSIPPI:** Temperatures 6° subnormal. Extremes: 28 and 89°.

Soil moisture adequate. Fieldwork: 6.0 days suitable. Soybeans 96% shedding, 96% 1976; 73% mature, 76% 1976, 55% average; 41% harvested, 40% 1976, 28% average. Cotton 70% harvested, 44% 1976, 36% average. Rice 90% harvested, 91% 1976, 83% average. Corn 82% harvested, 74% 1976, 61% average. Sorghum 84% harvested, 89% 1976. Peanuts 94% harvested, 90% 1976, 87% average. Pecans 20% harvested, 11% 1976. Hay crops 93% harvested, 95% 1976, 94% average. Sweetpotatoes 74% harvested, 80% 1976, 74% average. Winter wheat 64% planted, 67% 1976. Oats 70% planted, 74% 1976. Pecans in fair condition. Other crops in fair to good condition.

**MISSOURI:** Temperatures near normal except Bootheel, which averaged 4° below normal. Frost and freezing temperatures early week. Rain generally light; 0.98 in. northwest prairie. East Ozarks and Bootheel missed most rain, 0.15 in. average elsewhere.

Fieldwork: 5.8 days suitable. Soybeans 90% mature, normal 80%. Soybeans 44% harvested, last year 69%, normal 48%. Corn 65% harvested, last year 73%, normal 51%. Grain sorghum 73% harvested, last year 73%, normal 55%. Cotton 68% harvested, last year 37%, normal 49%. Winter wheat seeding 36% completed, last year 63%. Fall plowing 18% completed, last year 33%. Pasture condition good to excellent. Soil moisture supply adequate to surplus.

**MONTANA:** Warm, very dry. Temperatures 2 to 90° above normal. Frequent windy periods along east slopes of Continental Divide.

Winter wheat in good condition. Topsoil moisture mostly adequate. Subsoil moisture short to adequate. Sugarbeets 65% dug, normal 70%. Potatoes 85% harvested, normal 85%. Livestock condition good; about 80% moved off summer ranges, normal 70%. Stockwater short north and east; 10% livestock on supplemental feed, more than normal.

**NEBRASKA:** Temperatures above normal. Rainfall mostly southeast late week.

Topsoil moisture adequate. Corn harvest 55% complete, same as year ago, 10% ahead normal. Grain sorghum 65% harvested, 85% year ago, normal 70%. Soybeans 70% harvested, year ago 90% and normal 75%. Sugarbeet harvest 50% completed. Winter wheat in good condition. Range and pasture feed adequate. Cattle moving to stalk fields.

**NEVADA:** Cooling trend but temperatures several degrees above average. Thundershowers south and east; most precipitation 0.19 in.

Potato harvest continues under ideal condition. Moving livestock to winter ranges.

**NEW ENGLAND:** Cool wet weather first half of week. Precipitation averaged close to 0.50 in. 17th with total of 0.50 in. to slightly over 1.00 in. 19th and 20th. Temperatures near to slightly below normal.

Some progress in harvesting Maine potatoes but wet soil and cold weather continue to hamper operations. Less than 10% of acreage remaining for harvest. Much corn for silage still not harvested because of wet fields.

**NEW JERSEY:** Cold averaging 5° below normal. Extremes: 21 and 74°. Rainfall averaged 0.84 in. north, 0.76 in. central and 0.23 in. south. Soil moisture in percent of field capacity: 97% north, 95% central and 91% south. Soil temperature 48° north to 55° south. Widespread killing frost central and north 24th.

Harvest of tender vegetables continues to decline mostly from south; elsewhere vegetables killed by widespread frost 24th. Supplies of most hardy vegetables including cabbage and lettuce available in moderate but declining volume. White potato and apple harvest nearly 90% complete. Cranberry and sweetpotato harvest over 75% complete. Soil moisture adequate. Harvest of field corn and soybeans expected to resume as soils dry out. Wheat planting well advanced. Early planted cover crops continue to make good growth.

**NEW MEXICO:** Few light showers south weekend; otherwise fair and dry with mostly mild temperatures.

Cotton harvest 20% completed. Cleanup operations on alfalfa continue in extreme north after freeze week ago. Fifth cutting 90% complete south. Grain sorghum harvest 50% completed. Corn for silage and grain harvest 90% completed. Winter wheat seeding 95% completed with irrigated crop making acceptable stands but dryland fields hindered by short soil moisture. Fall lettuce harvest continues in Mesilla Valley. Peanut harvest in main producing area 60% completed. Ranges fair to good. Livestock good. Fall cattle shipments in full swing.

**NEW YORK:** East had 1.00 to 3.00 in. rain 17th and 18th. Temperatures near normal northeast; below normal elsewhere. Extremes: 18 and 70°.

Slow harvesting progress. Many fields unworkable. Corn silage 50% done, 80% 1976. Grain corn 12% done. Dry bean losses already significant. Onion harvest moving slowly. Cabbage mostly limited to hand harvesting. Apple harvest nearing completion. Grape harvest complete.

**NORTH CAROLINA:** Temperature 6 to 8° below normal. Precipitation 0 to 0.20 in.

Fieldwork: 5 days suitable. Soil moisture adequate. Conditions: Soybeans, cotton and pastures fair; peanuts fair to good. Harvested: Tobacco virtually complete; corn for grain 90%, 1976 82%, average 80%; peanuts dug 86%, 1976 78%, average 85%; peanuts threshed 77%; 1976 71%, average 74%; apples 87%, 1976 90%, average 86%; sweetpotatoes 82%, 1976 66%, average 72%; sorghum grain 76%, 1976 69%, average 63%; cotton 36%, 1976 18%, average 25%; soybeans 7%, 1976 7%, average 9%. Planted: Wheat 35%, 1976 28%, average 38%.

**NORTH DAKOTA:** Small amounts moisture fell across north with most amounts 0.10 in. Temperatures 4 to 7° above normal. Extremes: 80 and 20°.

Dry, warm weather allowed farmers to get back into fields. Small grain harvest virtually complete. Major activities: Harvesting sugarbeets, sunflowers, flax and soybeans. Sugarbeet lifting 98% complete, soybeans 90%, potato digging and dry edible bean harvest virtually complete.

**OHIO:** Record low 17th, above normal 20th to 23d; showers north 22d. Low precipitation 0.08 in. south; 0.75 in. northeast.

Excellent harvesting weather. Fieldwork: 6 days favorable. Main activities centered around corn, soybean and sugarbeet harvest. Considerable late fall plowing. Normal high moisture in corn and soybeans, quality mostly good. Some house

burn in tobacco. Armywork damage in corn fields. Harvest completed: Corn for grain 40%, 35% 1976 and average. Soybeans 75%, 75% normal, 80% 1976. Sugarbeets 35%, 35% normal, 30% 1976. Apples and grapes on schedule, nearing completion. Popcorn 50%, 60% 1976, 45% average. Winter wheat 75% seeded, 90% last year, 80% average; condition good. Pasture condition good. Livestock condition good, limited use of crop residue. Soil moisture supplies mostly adequate.

**OKLAHOMA:** Temperatures ranged from 3 to 7° above normal south to 1 to 3° above normal north. Precipitation fell at weekend ranging from 1.63 in. south central to 0.0 Panhandle.

Topsoil moisture supplies short, subsoil moisture supplies generally short. Wheat rated fair to good, 70% up to stand, 75% 1976 and 62% normal. Very little wheat pastured at present. Oats rated fair; 50% up to stand, 44% 1976 and 49% normal. Barley fair condition, 35% up to stand, 43% 1976 and 52% normal. Corn harvest 92% complete, 86% 1976 and 65% normal. Sorghum good condition with 85% mature, 89% 1976 and 94% normal. Sorghum harvest 39% complete, 52% 1976 and 40% normal. Cotton rated good; 89% has open bolls, 83% 1976 and 71% normal. Cotton harvest 8% complete. Peanut harvest in full swing; 50% complete, 48% 1976 and 37% normal. Soybean harvest 31% complete, 16% 1976 and 22% normal. Native pastures and ranges rated fair. Livestock good condition.

**OREGON:** Good weather prevailed. Only measurable rain along coast. Temperatures near to slightly above seasonal normal in west and 4 to 8° above normal east. Extremes: mid-70's, mid-30's west; low 80's, low 20's east.

Warm, dry weather good for fall farm activity. Land preparation and seeding continued. Wheat and barley emerging. Some reseeding necessary. Some hay and silage yet to be harvested, some late cereals also to be harvested. Vegetable harvests continue. Potato harvest nearing completion. Onion harvest in last stages. Apple and pear harvests nearing completion. Filbert and walnut harvests in full swing. Cattle generally in good shape. Pastures and ranges greening, feed and forage situation adequate at present.

**PENNSYLVANIA:** Fair, breezy and cool. Temperatures 3 to 6° below normal. Extremes: 20 and 71°. Cloudy with scattered showers early in period and in west weekend. Rainfall 0.25 to 0.50 in. all except extreme northeast where 0.75 to 1.40 in.

Fairly good week for fieldwork. Farmers harvesting corn for grain and silage, picking apples, and doing additional plowing.

**PUERTO RICO:** Island average rainfall 0.83 in. or 0.96 in. below normal. Temperatures 80° on coasts and 76° interior. Extremes: 93 and 57°.

**SOUTH CAROLINA:** Rainless with temperatures below normal. Scattered frost across north central, west. Extremes: 30 and 75°.

Soil moisture short midlands, adequate elsewhere. Tobacco marketing practically completed. Bed preparation beginning. Cotton harvesting ahead of last year. Later boll sets opening slowly. Some farmers waiting for frost. Corn harvest about over. Soybeans fair condition. Harvest of early varieties full swing some areas. Scattered frosts turning leaves earlier than usual. 91% of leaves turned, 29% plants mature. Pastures fair condition. Lack of moisture limiting some reseeding. Hay harvest 90% complete. Winter grazing 78% planted. Waiting for moisture before planting small grain. Most fall vegetables fair condition.

Cool weather reduced cucumber volume, delayed development. Apple harvest about over. Pecan harvest underway most areas. Corn harvested 97% 1977, 94% 1976, 85% average. Cotton harvested 51% 1977, 30% 1976, 40% average. Soybeans harvested 7% 1977, 3% 1976, 6% average.

**SOUTH DAKOTA:** Temperatures mostly 1 to 7° above normal. Extremes: 24 and 85°. Precipitation less than 0.33 in.

Topsoil moisture adequate. Full scale harvest underway after being held up by wet fields and high moisture content of grains. Corn harvested 43%, 1976 89%, normal 62%. Grain sorghum harvested 55%, 1976 96%, normal 71%. Soybeans harvested 76%, 1976 99%, normal 84%. Sunflowers 54% harvested.

**TENNESSEE:** Temperatures normal west, 5° below normal east. Precipitation less than 0.50 in.

Soil moisture adequate. Fieldwork: 5.4 days suitable. Cattle condition good. Soybeans mature 90%, 70% 1976, 67% normal. Soybeans harvested 50%, 25% 1976, 23% normal. Cotton harvested 70%, 23% 1976, 37% normal. Corn harvested 60%, 50% 1976, 52% normal. Burley tobacco stripped 45%, 41% 1976, 35% normal. Fall plowing completed 78%, 75% 1976, 80% normal. Wheat seeded 63%, 64% 1976, 64% normal. Oats seeded 90%, 83% 1976, 85% normal. Barley seeded 85%, 82% 1976, 87% normal.

**TEXAS:** Early week little precipitation. Fair skies, mild temperatures midweek. Thundershowers late, with another cold front. Temperatures near normal coastal plains; elsewhere, above normal. Rainfall near normal north central, coastal plains; slightly below normal northwest and above normal elsewhere.

Harvest most field crops very active Panhandle; progress well ahead of schedule. Weekend rains beneficial to fall seeded grains. Cotton harvest continues to gain momentum on Panhandle; strippers active in defoliated fields. Pima cotton harvest active Trans-Pecos. Sorghum harvest proceeding rapidly. Corn harvest nearing completion. Scattered fields remain on High Plains; weather permitting, most will be harvested in a few days. Peanut harvest continues. Soybean harvest good progress. Second cutting rice continuing at fast pace. Sunflower harvest progressing rapidly. Some late fields not yet ready for harvest. Wheat seeding little progress; many growers halted plantings until rain. Weekend rains should speed plantings; give boost to emerged stands. Many dryland stands spotty, moisture stressed. Oat seeding moderate progress; stands spotty. Weekend rains may germinate some dry planted seed. Sorghum harvested 91%, 84% 1976, 79% average. Corn harvested 99%, 82% 1976, 84% average. Cotton harvested 45%, 16% 1976, 22% average. Peanuts harvested 65%, 62% 1976, 61% average. Soybeans harvested 40%, 38% 1976, 22% average. Pecans harvested 7%, 7% 1976, 3% average. Sugarbeets harvested 27%, 55% average. Sunflowers harvested 79%, 48% 1976, 39% average. Wheat planted 74%, 80% 1976, 85% average. Oats planted 68%, 67% 1976, 81% average.

Harvest grapefruit, early oranges at steady pace. Bell peppers, cabbage, cucumbers, carrots, onions making good progress. Cucumber, peppers, squash harvest active. Fall vegetables delayed by dry conditions some areas. Pecans harvested in south and along upper Gulf Coast. Dry conditions in central, east slowed crop development, sporadic harvest underway.

Ranchers continue to cull heavily; range, pasture conditions declining. Weekend rains may improve

small grain pasture prospects. Livestock condition holding up well; supplemental feeding increasing. Low stock water problem some areas.

**UTAH:** Fair and mild conditions prevailed. Temperatures quite warm, up to 10° above season normals. Rainfall widespread over most of the west and north. Rain generally light.

Winter wheat planting virtually completed. Corn for silage completed with potatoes nearly finished. Sugarbeet harvest continued. Soil moisture very short. Most livestock moved from high summer ranges to lower valleys.

**VIRGINIA:** Rainfall average 0.75 in. Temperatures 7° below normal. Extremes: 73 and 24°.

Topsoil moisture short to adequate. Livestock watering supplies adequate to short. Corn combining 76%, 55% 1976, 52% average. Soybean combining little advanced due to wet fields and delayed maturity. Peanuts: Digging 78%, 66% 1976, 74% usual; combining 54%, 39% 1976, 54% average. Sorghum grain 16% harvested, 7% 1976. Seeding: Wheat 39%, 41% 1976, 43% usual; barley 76%, 63% 1976, 66% usual; winter oats 86%, 64% 1976, 70% average. Pastures fair. Fieldwork: 4.9 days suitable.

**WASHINGTON:** West: Temperatures 2° below to 2° above normal. Precipitation 0.25 in. below normal coastal areas, 1.00 in. below normal inland.

Cauliflower, sweet corn, carrots, pumpkins, potatoes, cole crops and corn silage harvested. Winter cover crops planted, pastures seeded, some fertilizing and liming. Pasture conditions quite good.

East: Temperatures 3 to 5° above normal. Precipitation 0.20 to 0.40 in. below normal.

Apple harvest over except for some late varieties. Potato digging continues; sugarbeet harvest now underway. Some grain corn harvested where moisture conditions permit. Fourth cutting alfalfa mostly finished. Some carrots harvested. Most fall grain planted. Some spotty stands. Some fall calving reported.

**WEST VIRGINIA:** Temperatures below normal northeast, much below normal elsewhere. Precipitation below normal north and southwest, near normal elsewhere. First measurable snowfall 16th higher elevations.

Soil moisture adequate to surplus. Fieldwork: 3.3 days suitable. Main activities: Harvesting corn, sowing small grains. Wet conditions hampering haying, potato digging. Corn harvest 60%, 52% 1976, 54% average. Hay 3d cutting 85%, 97% 1976, 95% average. Small grains planting progress: Wheat 55%, 62% 1976, 65% average; Barley 61%, 70% 1976, 86% average. Feed supplies short. Pasture conditions fair to good, quality below normal, frost damage slight.

**WISCONSIN:** Temperatures 1° above normal. Highs reached 70 south and west, lows mostly 30's and 40's except upper 20's north. Rainfall light averaging 0.20 in. or less.

Good progress on corn and soybeans harvest. Corn for grain 45% harvested, 1976 55%, normal 35%. Some farmers allowing corn to dry more in fields to save drying costs. Soybeans 35% combined, 1976 67%, normal 40%. Fall plowing 20% done, 1976 20%, normal 35%. Farmers plowing as corn and soybean fields harvested. More third and fourth crop hay made during favorable October weather. Fall pasture conditions remain above normal. Potato and cran-

berry harvests near end. Topsoil moisture adequate. Some fields too wet to work.

WYOMING: Temperatures 2 to 8° above normal. Maximums 60's to low 80's. Minimums mostly 20's and low 30's. Precipitation spotty, mostly in band

from southwest corner through west central to central and northeast.

Soil moisture short. Potatoes 95% harvested. Sugarbeet harvest 70% dug, average 80%. Average sugar content 17.2%. Corn for grain 44% picked. Winter wheat good.

## World Weather and Crop Update

October 17 - 23

**USSR.** Favorable conditions for harvesting row crops prevailed over most of the western part of European USSR. By October 17, only small areas of corn, sugarbeets, vegetables, and sunflowers were unharvested. The central Asia cotton harvest continued to progress rapidly under almost ideal conditions; state procurements of seed cotton in mid-October totalled 7.6 million metric tons or 93 percent of plan. Sowing of winter crops was completed on 39.3 million hectares or more than 90 percent of the planned area. The pace of winter sowing is behind that of 1976, and suggests at this time that the planned area in winter grains may not be achieved and the area sown may be less than last year. Soil moisture is generally adequate at this time of year in the main winter grain areas.

**ASIA.** In the People's Republic of China, precipitation was generally very light throughout the country. Harvesting was nearly complete in the north, but moisture deficiencies affected the sowing and development of winter grains in some parts of the principal wheat belt in the North China Plain. Post-monsoonal activity continued to bring heavy rainfall to the lower third of peninsular India, but the seasonal dry period has set in over most of the northern agricultural areas. However, adequate irrigation is available in most areas from earlier, copious monsoon rains. Light to moderate showers fell along coastal regions of South Australia, New South Wales, and Victoria, but there was little significant rainfall over the main Australian grain areas, most of which are experiencing serious or severe shortages of moisture. Soil moisture was low in most areas, and was urgently needed to prevent further crop deterioration.

**AFRICA.** In the north, sowing of winter grains and pastures benefitted from moderate to heavy rains

throughout Morocco. But rainfall was generally light in Algeria, and Tunisia was without significant rain. Spring sowing and pastures received a boost as light to moderate showers moistened the main agricultural areas in South Africa. However, the drought continued in the western Sahel, including Mauritania, Senegal and parts of Mali and Gambia; and, as the current wet season draws to an end, there is little chance of significant rain before the spring of 1978.

**AMERICAS.** Moderate to heavy rains throughout the principal grain areas in Argentina have improved winter grains and conditions for spring sowing. Warm, dry weather favored wheat harvesting in Rio Grande do Sul, Brazil's most important wheat state. Heavy rains and high winds earlier in October resulted in severe lodging and some sprout damage in some areas. Mild and generally sunny weather in the Prairie Provinces of Canada favored harvesting which had been delayed in some areas by inclement weather during August and September.

**EUROPE.** Harvesting and sowing of winter crops moved rapidly ahead under favorable conditions in western Europe as mild, sunny weather prevailed until showers bathed the weekend. Daily light rain, however, plagued field operations in the United Kingdom. Moderate to heavy showers fell over much of Spain with substantial recordings in the extreme south where soil moisture remains low. A generally dry, sunny week in Italy was punctuated by a few isolated, moderate showers over the peninsula. Harvesting activities in eastern Europe spurted under the influence of generally mild, dry weather. Estimated soil moisture, however, is low in some countries, especially Czechoslovakia and Hungary, although this poses no special problems at this time of year. Moderate to heavy showers fell over the agricultural areas of Turkey, Israel, and Lebanon.

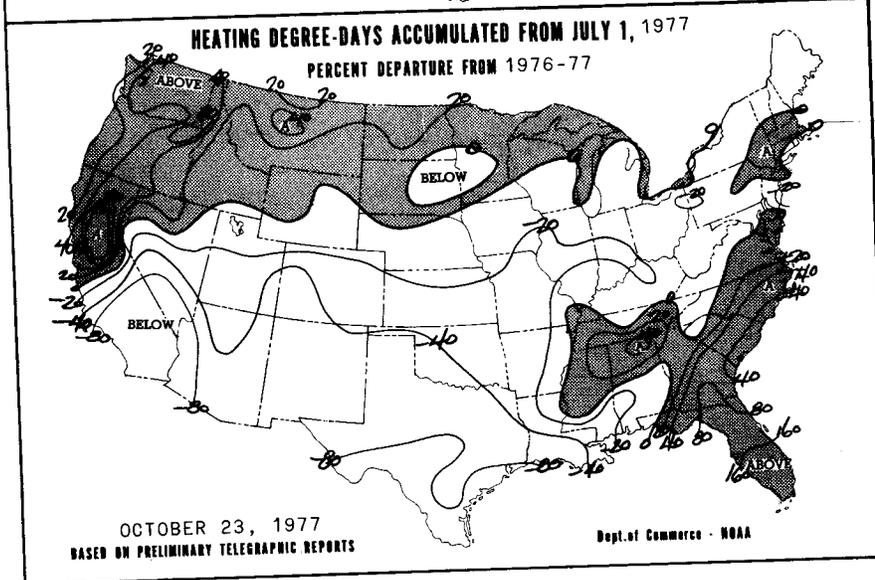
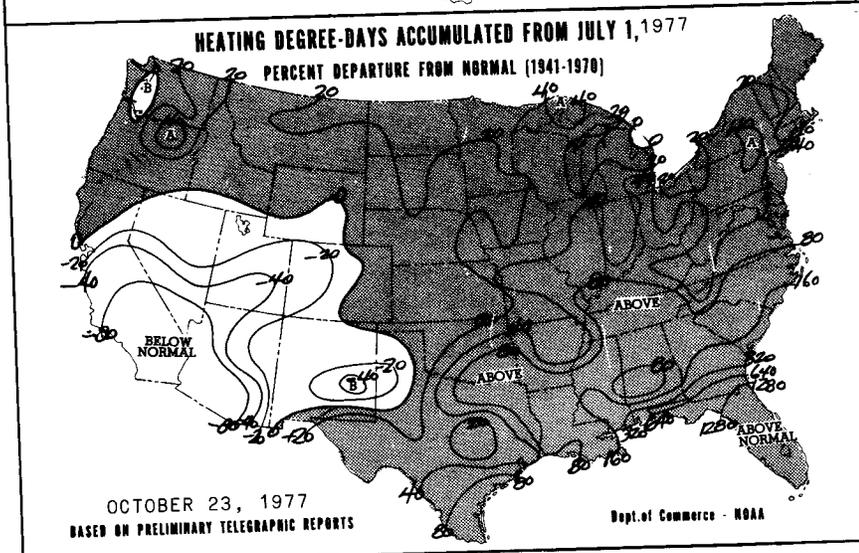
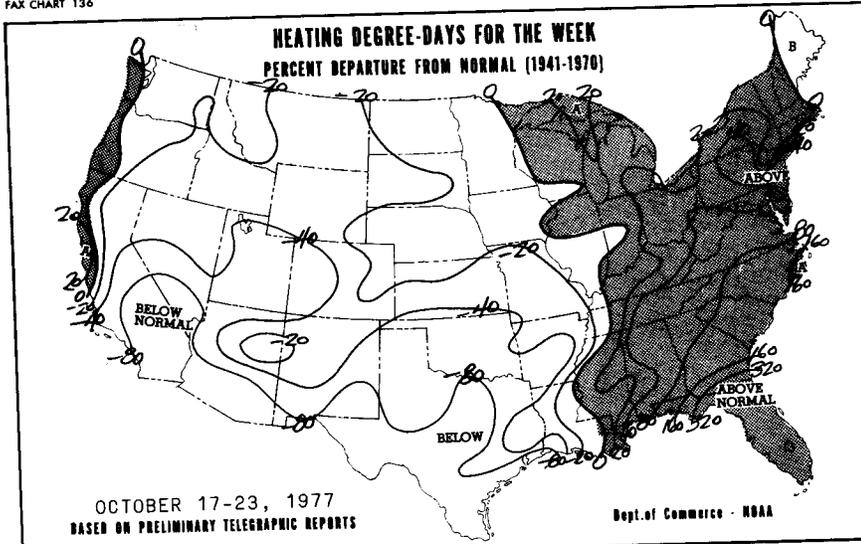
HEATING DEGREE DAYS (BASE 65°) FOR WEEK ENDING OCT. 23, 1977.

STATES AND STATIONS	WEEKLY		SEASONAL ACCUMULATION +			STATES AND STATIONS	WEEKLY		SEASONAL ACCUMULATION +			STATES AND STATIONS	WEEKLY		SEASONAL ACCUMULATION +		
	TOTAL	DEPARTURE*	TOTAL	DEPARTURE*	DEPARTURE FROM 1976-77		TOTAL	DEPARTURE*	TOTAL	DEPARTURE*	DEPARTURE FROM 1976-77		TOTAL	DEPARTURE*	TOTAL	DEPARTURE*	DEPARTURE FROM 1976-77
ALA. BIRMINGHAM.....	57	21	173	87	29	MAINE. CARIBOU.....	156	1039	51	101	YOUNGSTOWN.....	113	16	464	64	167	
MONTGOMERY.....	55	108	60	40	15	PORTLAND.....	116	723	104	52	OKLA. OKLAHOMA CITY	14	225	111	22	75	
ARIZ. FLAGSTAFF.....	109	28	47	282	205	MASS. BOSTON.....	85	21	236	54	TULSA.....	13	225	111	90	73	
PHOENIX.....	6	0	0	0	0	MICH. ALPENA.....	44	11	11	5	OREG. ASTORIA.....	92	3	80	34	215	
TUCSON.....	6	0	0	0	0	DETROIT.....	229	220	1	324	BURNS.....	92	1	119	129	158	
MINSLON.....	6	0	0	0	0	FLINT.....	229	220	1	324	MEDFORD.....	92	1	119	129	158	
YUMA.....	6	0	0	0	0	GRAND RAPIDS.....	15	15	0	44	PENDLETON.....	92	1	119	129	158	
ARK. FORT SMITH.....	23	23	136	91	57	HOUGHTON LAKE.....	151	151	0	140	PORTLAND.....	88	1	119	129	158	
LITTLE ROCK.....	23	23	112	67	45	LANSING.....	141	141	0	140	SALEM.....	88	1	119	129	158	
CALIF. BAKERSFIELD	16	16	10	8	8	MARQUETTE.....	149	149	0	140	PA. ALLENTOWN.....	101	16	464	64	167	
EUREKA.....	10	10	0	0	0	MUSKOGEE.....	149	149	0	140	ERIE.....	101	16	464	64	167	
FRESNO.....	10	10	0	0	0	S. STE. MARIE.....	149	149	0	140	HARRISBURG.....	101	16	464	64	167	
LOS ANGELES.....	10	10	0	0	0	MINN. DULUTH.....	45	1124	225	80	PHILADELPHIA.....	101	16	464	64	167	
RED BLUFF.....	10	10	0	0	0	INTERNATL FALLS.....	45	1124	225	80	PITTSBURGH.....	101	16	464	64	167	
SAN DIEGO.....	10	10	0	0	0	MINNEAPOLIS.....	45	1124	225	80	SCRANTON.....	101	16	464	64	167	
SAN FRANCISCO.....	4	4	32	1	1	ROCHESTER.....	45	1124	225	80	S. C. CHARLESTON.....	93	5	399	66	67	
STOCKTON.....	4	4	1	28	15	ST. CLOUD.....	45	1124	225	80	COLUMBIA.....	93	5	399	66	67	
COLO. DENVER.....	39	34	332	53	135	MISS. JACKSON.....	39	129	80	GREENVILLE.....	77	28	28	85	10		
FRANK JUNCTION.....	39	34	125	97	28	MO. COLUMBIA.....	25	129	80	HURON.....	77	28	28	85	10		
PUEBLO.....	39	34	301	39	123	ST. LOUIS.....	25	129	80	ST. JOHNS FALLS.....	77	28	28	85	10		
CONN. BRIDGEPORT.....	70	26	4	5	18	SPRINGFIELD.....	25	129	80	TENN. CHATTANOOGA.....	77	28	28	85	10		
HARTFORD.....	100	430	5	5	6	MONT. BILLINGS.....	76	42	643	KNOXVILLE.....	77	28	28	85	10		
DEL. WILMINGTON.....	100	35	296	107	14	GLASGOW.....	76	42	643	MEMPHIS.....	77	28	28	85	10		
D.C. WASHINGTON.....	63	14	164	38	17	GREAT FALLS.....	76	42	643	NASHVILLE.....	77	28	28	85	10		
FLA. APALACHICOLA.....	37	30	26	60	26	HAVRE.....	76	42	643	TEXAS. ABILENE.....	2	6	15	15	93		
DAYTONA BEACH.....	12	12	0	0	0	HELENA.....	76	42	643	AMARILLO.....	2	6	15	15	93		
FORT MYERS.....	12	12	0	0	0	KALISPELL.....	76	42	643	AUSTIN.....	2	6	15	15	93		
JACKSONVILLE.....	3	7	7	30	30	MILES CITY.....	76	42	643	BEAUMONT.....	2	6	15	15	93		
KEY WEST.....	3	7	7	30	30	MISSOULA.....	76	42	643	BROWNSVILLE.....	2	6	15	15	93		
LAKELAND.....	2	2	2	17	17	NEBR. GRAND ISLAND.....	85	85	37	CORPUS CHRISTI.....	2	6	15	15	93		
MIAMI.....	10	10	0	0	0	LINCOLN.....	85	85	37	DEL RIO.....	2	6	15	15	93		
ORLANDO.....	10	10	0	0	0	NORFOLK.....	85	85	37	EL PASO.....	2	6	15	15	93		
TALLAHASSEE.....	4	31	10	8	9	NORTH PLATTE.....	85	85	37	FORT WORTH.....	2	6	15	15	93		
TAMPA.....	4	31	21	21	11	VALENTINE.....	85	85	37	GALVESTON.....	2	6	15	15	93		
WEST PALM BEACH.....	4	31	21	21	11	NEV. ELY.....	121	121	66	HOUSTON.....	2	6	15	15	93		
GA. ATLANTA.....	5	20	166	79	43	LAS VEGAS.....	121	121	66	LUBBOCK.....	2	6	15	15	93		
AUGUSTA.....	5	20	148	91	42	RENO.....	121	121	66	MIAMI.....	2	6	15	15	93		
Macon.....	5	20	125	69	19	MINNEAPOLIS.....	121	121	66	SAN ANTONIO.....	2	6	15	15	93		
SAVANNAH.....	39	23	99	61	19	N.H. CONCORD.....	129	10	765	VICTORIA.....	2	6	15	15	93		
IDAHO. BOISE.....	68	33	450	46	53	J. ATLANTIC CITY.....	92	24	283	WICHITA FALLS.....	2	6	15	15	93		
LEWISTON.....	91	35	483	76	239	TRENTON.....	92	24	283	UTAH. SALT LAKE CITY	58	43	60	66	16		
POCATELLO.....	91	35	559	76	4	N. MEX. ALBUQUERQUE	44	17	121	VT. BURLINGTON.....	138	14	732	131	33		
ILL. CAIRO.....	37	5	202	103	10	ROSWELL.....	8	43	54	VA. LYNCHBURG.....	99	38	282	104	25		
CHICAGO.....	9	11	482	48	48	N. Y. ALBANY.....	42	23	61	NORFOLK.....	99	38	282	104	25		
MOLINE.....	9	11	403	97	7	BINGHAMTON.....	42	23	61	RICHMOND.....	99	38	282	104	25		
PEORIA.....	9	11	395	114	7	BUFFALO.....	42	23	61	ROANOKE.....	99	38	282	104	25		
ROCKFORD.....	104	104	106	110	110	NEW YORK.....	42	23	61	WASH. GUILLAYUTE.....	109	109	1027	85	114		
SPRINGFIELD.....	69	31	86	82	82	N. C. ASHEVILLE.....	105	37	304	SPokane.....	109	109	1027	85	114		
IND. EVANSVILLE.....	64	248	72	15	15	C. CHARLOTTE.....	105	37	304	ST. PATTIE-TACONA.....	94	94	1027	85	114		
FORT WAYNE.....	106	106	59	59	59	GREENSBORO.....	105	37	304	SPOKANE.....	109	109	1027	85	114		
INDIANAPOLIS.....	73	314	59	31	31	HATTERAS.....	105	37	304	HALLA HALLA.....	109	109	1027	85	114		
SOUTH BEND.....	108	157	91	34	34	WILMINGTON.....	105	37	304	YAKIMA.....	109	109	1027	85	114		
IOWA. BURLINGTON.....	87	364	88	103	88	N. DAK. BISMARCK.....	129	85	50	W. VA. BECKLEY.....	121	26	497	100	95		
DES MOINES.....	114	114	117	117	117	FARGO.....	129	85	50	CHARLESTON.....	97	97	325	114	55		
DUBUQUE.....	114	114	117	117	117	HILLISTON.....	129	85	50	HUNTINGTON.....	97	97	325	114	55		
SIoux CITY.....	91	74	74	74	74	OHIO. AKRON-CANTON.....	115	23	497	PARKERSBURG.....	101	101	325	114	55		
KANS. CONCORDIA.....	60	280	41	50	50	CINCINNATI.....	115	23	497	WIS. GREEN BAY.....	124	3	671	80	89		
DODGE CITY.....	40	102	6	115	115	CLEVELAND.....	115	23	497	LACROSSE.....	104	104	529	109	65		
GOODLAND.....	78	367	12	26	26	COLUMBUS.....	115	23	497	MADISON.....	116	116	529	109	65		
GOODLAND.....	78	367	12	26	26	DAYTON.....	115	23	497	MILWAUKEE.....	110	110	529	109	65		
TOPEKA.....	36	148	20	94	94	TOLEDO.....	121	26	26	WYO. CASPER.....	98	33	594	21	82		
WICHITA.....	36	148	20	94	94	LA. BATON ROUGE.....	12	49	22	CHEYENNE.....	98	33	594	21	82		
LA. BATON ROUGE.....	12	49	22	37	37	LAKE CHARLES.....	12	49	22	LANDER.....	98	33	594	21	82		
LAKE CHARLES.....	12	49	22	37	37	NEW ORLEANS.....	12	49	22	SHERIDAN.....	98	33	594	21	82		
NEW ORLEANS.....	12	49	22	37	37	SARASOTA.....	12	49	22								
SARASOTA.....	12	49	22	37	37												

\* BASED ON 1941-70 NORMALS.

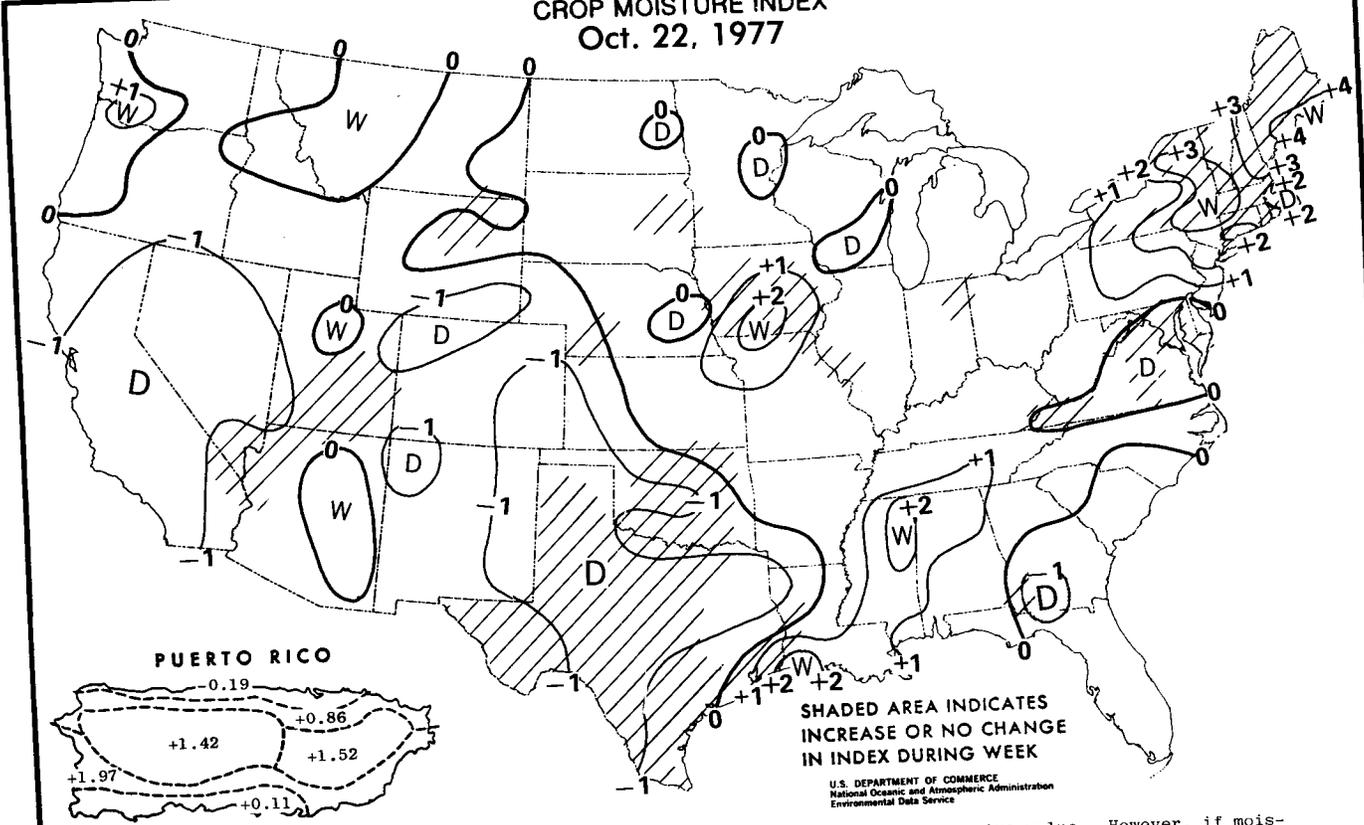
+ ACCUMULATION FROM JULY 1, 1977.

FAX CHART 136





CROP MOISTURE INDEX  
Oct. 22, 1977



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
0 to 1.0	FAVORABLE FOR NORMAL GROWTH AND FIELDWORK
0 to -1.0	TOPSOIL MOISTURE SHORT GERMINATION SLOW
-1.0 to -2.0	ABNORMALLY DRY, PROSPECTS DETERIORATING
-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
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**



**HARVESTING PROGRESS**

Percent of acres harvested as of October 23

CORN			SORGHUM				
	1977	1976	Avg.		1977	1976	Avg.
Ga	88	79	63	Colo	52	23	32
Ill	58	49	48	Kans	55	60	35
Ind	50	40	35	Mo	73	73	55
Iowa	61	72	38	Nebr	65	85	70
Kans	80	60	45	Okla	39	52	40
Ky	63	52	59	S Dak	55	96	71
Mich	25	40	25	Tex	91	84	79
Minn	70	88	61				
Mo	65	73	51	7 States	70	73	59
Nebr	55	55	45				
N C	90	82	80				
Ohio	40	35	35				
Pa	NA	NA	NA				
S Dak	43	89	62				
Tex	99	82	84				
Wisc	45	55	35				
U. S.	57	61	47				

These 16 States produced 92% of the 1976 U. S. corn crop.

COTTON			
	1977	1976	Avg.
Ala	48	18	32
Ark	72	41	45
Ga	33	24	36
La	58	51	35
Miss	70	44	36
Mo	68	37	49
N C	36	18	25
Okla	8	1/	1/
S C	51	30	40
Tenn	70	23	37
Tex	45	16	22
11 Southern States	51	24	28

These 11 States produced 67% of the 1976 U. S. cotton crop.

SOYBEANS			
	1977	1976	Avg.
Ala	27	28	33
Ark	29	30	28
Ga	12	10	13
Ill	78	97	89
Ind	60	85	65
Iowa	74	100	77
Kans	40	55	50
Ky	36	43	46
La	48	67	48
Mich	35	65	55
Minn	85	99	89
Miss	41	40	28
Mo	44	69	48
Nebr	70	90	75
N C	7	7	9
Ohio	75	80	75
S C	7	3	6
Tenn	50	25	23
U. S.	57	70	59

These 18 States produced 96% of the 1976 U. S. soybean crop.

**SEEDING PROGRESS**

Percent of acres planted as of October 23

WINTER WHEAT			
	1977	1976	Avg.
Colo	100	100	100
Ill	65	88	86
Ind	55	85	80
Kans	95	90	90
Mo	36	63	NA
Mont	100	100	100
Nebr	100	100	100
Ohio	75	90	80
Okla	90	93	90
Tex	74	80	85
U. S.	87	90	95

These 10 States produced 74% of the 1977 U. S. winter wheat crop.

1/ Less than 5%.

NA Not Available.