

Weekly Weather & Crop Bulletin

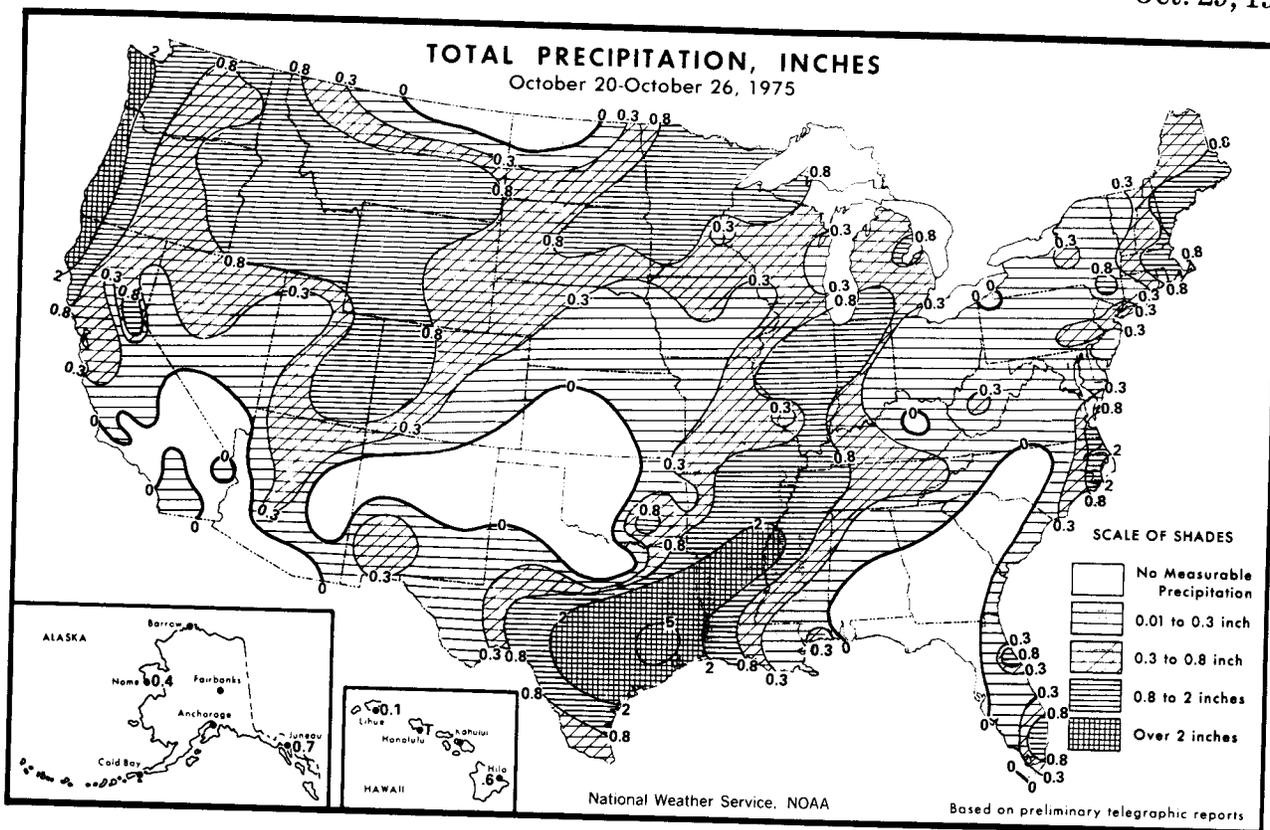
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NATIONAL WEATHER SUMMARY

For the Week of October 20-26

HIGHLIGHTS: While much of the northern and central Rockies was ankle-deep in snow, the eastern third of the Nation basked under summer-like temperatures that in some spots even pushed to record high levels. Unseasonably warm weather was common east of the Mississippi, especially around the upper Great Lakes. In central U.S. rains that the southern Plains wished for didn't arrive but instead turned up in the Midwest in the Mississippi and Ohio Valleys.

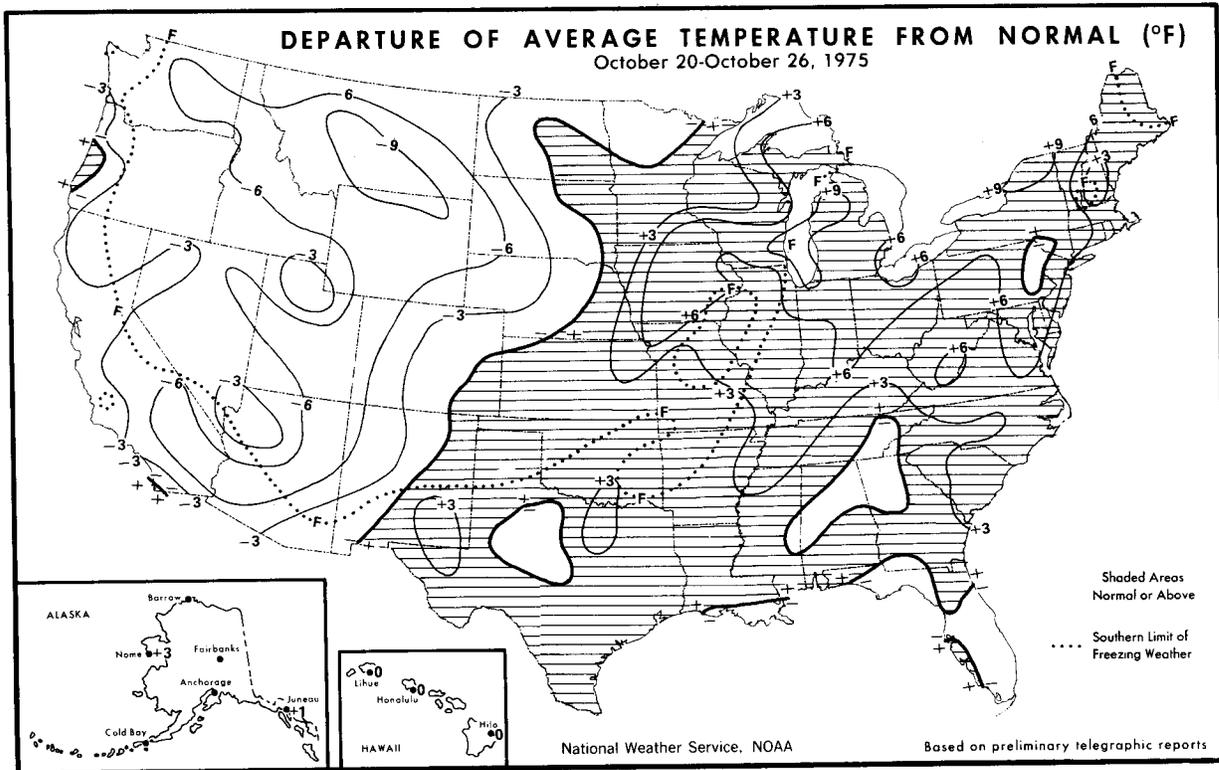
A rundown of Monday's weather showed rainshowers and cool temperatures across the Pacific Northwest and the Southwest. Fair, cool weather prevailed eastward to the Mississippi Valley and southeast portions of the Nation. Heavy morning rains in the Northeast caused landslides and washouts that closed roads in New Hampshire and Vermont. Flash flood watches posted earlier in the day for

New England were lifted when showers diminished in the evening. Elsewhere, California experienced an unusual outbreak of showers and thundershowers. Storms developed in Arizona and light rains dampened coastal sections of Washington State and Oregon.

Widespread fair weather favored much of the Nation throughout Monday, though considerable cloudiness persisted across the northern tier of States into the central Appalachians.

Rains in the Northeast moved into the Atlantic on Tuesday morning, but clouds lingered over the northern States from ocean to ocean. From the Pacific, widespread fog crept inland to the coastal valleys of central California reducing visibilities to near zero at times. In the northeast corner of the Nation, locally dense fog over most of Maine began to lift by sunrise.

While most of the Nation enjoyed a sunny mild



Tuesday, winter staked its claim in the northern Rockies. Snow already blanketed western and central Montana and forecasters warned southern Idaho of heavy snows to come.

At midweek the winter storm swept across the northern Rockies, dumping snow over most of Montana and the mountains of western and northern Wyoming. By 7 a.m. Wednesday Lewiston, Mont. had collected 7 inches and Cody, Wyo., 4 inches. Northwest of the storm, cold air shoved the mercury to below freezing from Washington and Oregon eastward into the western Dakotas.

Southeast of the storm a strong southerly flow of warm air pushed morning temperatures into the unseasonably warm 60's in the eastern Plains, central Mississippi Valley, and Northeast. Record highs were pinned on Pueblo, Colo.; Baltimore, Md.; and Portland, Maine. Daytime readings in the 70's and 80's were the rule for the eastern part of the Nation; 50's and 60's dominated the upper Great Lakes area; and 30's and 40's, the Northwest. Sharp temperature contrasts in Utah and Nevada ranged from the upper 60's in southern portions of the two States to lower 40's in the north.

Locally heavy snow, gusty winds, and below freezing temperatures accompanied the storm as it intensified and continued its eastern push on Thursday. Ahead of the storm moist air pulled northward from the Gulf carried showers and thundershowers to the lower Mississippi Valley region.

All morning long snow fell over most of Wyoming, where at the lower elevations Lander accumulated 5 inches and Sheridan and Laramie, 3 inches; mountain stations collected up to 8 inches.

A strong low pressure center out of the Rockies made the upper Great Lakes region the scene of windy, thundery conditions on Thursday. Elsewhere

cloudy skies in eastern Texas unloaded heavy rains that caused some damage; Galveston measured over 3 inches in 6 hours.

Meantime mild temperatures prevailed from the southern Plains and Gulf States northward to the Great Lakes and New England. Though more record highs came out of the East--Baltimore, Md., 78°--some spots in Wyoming froze in the 20's.

Friday marked the end to most of the heavy snow in the Plains and the Rockies as the weakening winter storm turned northward. By that time, though, Lander, Wyo. measured 9 inches of snow and it was even deeper in the mountains.

In parts of the middle Atlantic States late morning fog on Friday reduced visibility to well below a quarter mile. In the afternoon a band of thunderstorms from Wisconsin to eastern Texas and western Louisiana marked the leading edge of cold air that was moving into the Mississippi Valley.

East of the Mississippi River, unseasonably warm temperatures included daytime readings in the 80's as far north as West Virginia. For the second day in a row, Buffalo, N.Y. chalked up a record high of 79°.

As soon as the low center had moved into Canada another came in from the West Coast bringing rain and snow to the Northwest on Saturday. Except for this area, sunny skies brightened most of the Nation west of the Mississippi.

Over the weekend the cold air gained more ground in the East, kicking up showers and thundershowers from western Gulf areas into the Ohio Valley.

It was a wet end-of-the-week for much of the East when the cold front spread rain from southern New England into the western Gulf States. Behind the front temperatures on Sunday fell a noticeable 10 to 20 degrees.

NATIONAL AGRICULTURAL SUMMARY

For the Week of October 20-26

HIGHLIGHTS: Row crop harvesting made excellent progress in all major producing areas during the past week. Nationwide, both corn and soybeans were 68% harvested by October 26, much ahead of 1974 and normal. Winter wheat seeding continues to make good progress at 82% finished but was limited in the western Great Plains by dry conditions.

SMALL GRAINS: Dry conditions in the western Great Plains continue to slow winter wheat seeding, while showers in most other areas will aid germination. By October 26, winter wheat seeding reached 82% complete, trailing last year and the usual 86%.

Dry conditions in southwest and south central Kansas delayed seeding further. Statewide, seeding was 90% finished, behind the normal 95%. Condition of emerged wheat was below average and stands were spotty. In Oklahoma, stands were spotty in the northwest, but good in the southwest where moisture is adequate. Seeding was only 78% complete versus the normal 95%. Farmers in the Texas High Plains continue to dry plant winter wheat and statewide, seeding advanced to 85% complete. Rain across the central and southern half of the State will help establish stands. Seeding is in the windup stage in several Northern and Western States.

CORN: Corn harvesting progressed well in most major corn States as good drying conditions continued over much of the Corn Belt and Southern States until late in the week. Nationally, the corn for grain harvest was 68% finished by October 26, versus only 49% in 1974 and the normal 46%.

In the North Central States, corn for grain was also 68% harvested, ranging from 80% complete in both Kansas and Missouri to 40% in both Michigan and Ohio. Harvest advanced to 72% complete in Illinois and Iowa, much ahead of last year's 35% in Illinois and 38% in Iowa. Quality of the 1975 crop is good to excellent in most areas. A shortage of commercial storage space slowed harvest in Iowa where elevators are becoming full.

Corn harvest in the South Atlantic region was over three-fourths complete and in the South Central States over two-thirds was finished.

COTTON: Cotton picking made good advancement in most major States during the week. By October 26, cotton harvesting in the 11 major Southern States reached 26% finished, behind last year's 30% and the normal 34%.

Cotton was 72% picked in Missouri, 47% in Arkansas, 41% in South Carolina, 33% in Tennessee and 28% in both Georgia and North Carolina. Harvest progress exceeded the 1974 and average levels in only Arkansas and Missouri. Texas cotton was 26% picked versus 28% in 1974 and normal 27%. Most of the crop on the High Plains was open and ready for harvest, but most farmers will wait for the first freeze before picking.

Cotton harvest was active in California and in Yuma County, Arizona. In New Mexico, harvest was increasing in the southern areas.

SOYBEANS: Nearly ideal autumn weather permitted

another week of excellent soybean harvesting progress in the major States. By October 26, about 68% of the Nation's soybean crop was harvested, ahead of last year's 59% and normal 57%.

In the North Central States soybean combining was 90% complete, much ahead the 77% in 1974 and usual 75%. Soybean harvesting was ahead of normal in all States in this region except Kansas. Harvest was virtually complete in Iowa, Minnesota, Nebraska, and South Dakota. In Illinois combining reached 97% finished versus only 80% in 1974 and the usual 82%. Harvest was 85% complete in both Indiana and Ohio.

In the South, combining was 30% done and ranged from only 7% finished in South Carolina to 60% in Texas.

OTHER CROPS: Harvest of sorghum grain continued to make excellent gains in most major producing States. By October 26, sorghum harvest in the seven major States was 84% finished, versus only 53% in 1974 and the usual 60%. Harvest reached 92% complete in Texas, 95% in Nebraska, and 65% in Kansas.

Tobacco stripping, at 8% complete, was on schedule in Kentucky. In Tennessee, stripping was 35% finished. Flue-cured tobacco marketing was active in Virginia.

Peanut harvesting made good advancement in most States during the week. Combining was 62% done in Oklahoma, 86% in Texas, 92% in Mississippi, and 97% in Alabama.

Potato digging reached 90% finished in Idaho and continues in Oregon and Washington. Harvest was virtually complete in most other fall potato States.

Sugarbeet lifting continued active in California, was 62% complete in Colorado, 95% in Minnesota, and nearing completion in North Dakota.

FRUITS AND NUTS: Apple harvest moved into the final stages in most States. Grape harvest continued active in California; table grapes were nearing completion. Citrus harvest was active in Texas and oranges are now being diverted into processing as well as fresh market. In Florida, citrus was in excellent condition with adequate soil moisture and cooler temperatures. Spot picking on Valencias began in California and is scheduled for Navelis in 2 to 3 weeks.

VEGETABLES: Harvest of hardy vegetables was nearing completion in most Northern States. Supplies of Florida and Texas vegetables were increasing and crops in most areas were in good condition. Harvest of broccoli, cauliflower, celery, and carrots was active in the California Salinas area. Vegetable planting continued active and on schedule in Florida and Texas.

PASTURES AND LIVESTOCK: Farmers and ranchers quickened their pace in gathering and working livestock in several Mountain and Plains States as the season's first major snowstorm hit. Livestock movement to winter ranges and stubble fields continued. Wheat pasture prospects were below normal in much of Kansas, Oklahoma, and Texas. Livestock continued in mostly good condition. Supplemental feeding is increasing in States where pastures are deteriorating.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., Oct. 26, 1975

Table with 12 columns: States and Stations, Average Temperature °F, Departure Temperature °F, Total Precipitation Inches, Departure Precipitation Inches, and four additional columns for the same metrics. Rows list various states and stations such as ALA, ARIZ, ARK, CALIF, COLO, CONN, FLA, GA, HAWAII, ILL, IND, IOWA, KANS, KY, LA, MAINE, MASS, MICH, MINN, MISS, MO, MONT, NEBR, NEV, N.H., N.J., N.MEX, N.Y., N.DAK., OHIO, OKLA, OREG, PA, R.I., S.C., S.D., TENN, TEX, UTAH, VT, VA, WASH, W.VA., WIS, WYO, and P.R.

Based on 1941-70 Normals

CORRECT VOL. 62 NO. 42 OCT 13-19, QUILLAYUTE, WASH. PRECIP. TO READ 10.1, DEPARTURE +7.4.

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STATE SUMMARIES OF WEATHER AND AGRICULTURE

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

ALABAMA: Dry week with temperatures averaging 3° warmer than normal. No measurable rain in south half with only light rainfall over north during weekend. Cool early week, then much warmer until turning cooler on weekend.

Open weather favored harvesting. Cotton slow in opening, 65% open, 85% 1974. Condition fair; 14% harvested, 40% 1974, 37% average. Corn condition mostly good; 56% harvested, 66% 1974, average 58%. Soybeans 70% matured; harvest 23% complete, 39% 1974, average 25%. Peanut harvest almost complete, 95% dug, 90% combined. Pecans poor to fair condition. Hay harvest 95% complete. Small grains and winter grazing crops 50% seeded. Pastures good, soil moisture adequate.

ARIZONA: Rain early week 0.50 in. higher elevations, elsewhere less than 0.25 in. Temperatures below normal, coldest midweek.

Cotton harvest, defoliation continues. Yuma County harvesting 20%, east harvest underway, central areas 5%. Harvest early grain sorghum complete, late plantings nearly ready. Sugarbeets satisfactory progress. Renovation, replanting alfalfa. Lettuce harvest continued Cochise, Maricopa Counties. Harvest cantaloups, honeydews continues. Lemon harvest continues Yuma, Salt River Valley. Cattle, calves mostly good condition. Fall calving underway. Range conditions fair mountains, poor desert. Sheep moved winter pastures, fall lambing in progress.

ARKANSAS: Temperatures averaged above normal with departures plus or minus 4°. Extremes: 88 and 27°. Much needed precipitation late week. Amounts varied from 2.65 to 0.05 in.

Soil moisture short. Fieldwork 6 days available. Good harvesting week. Small grains and pastures need rain. Cotton harvest 47% complete, 30% 1974, 41% average; 84% bolls open, 70% 1974. Soybeans maturing rapidly due to dry weather; harvest advanced to 36% complete, 22% 1974, average 27%. Rice levees being disked down with some land preparation for next crop; harvest 97% complete, 90% 1974. Small grain seeding delayed due to lack of moisture. Rain needed for germination of seeded fields. Pastures hurting, need rain. Corn and sorghum harvest near complete. Cattle marketing heavy. Some hay feeding already.

CALIFORNIA: Showers south on 20th, Sierra Nevada and northern mountains midweek, northwest on 24th, north and central areas into weekend. Amounts light except heavy some northern mountains over weekend. Inland temperatures cooled during week. Extremes: 80's to near freezing. Averages near or slightly below normal all areas.

Rice, dry bean, cotton, sugarbeets harvest active. Milo, field corn harvesting for grain and silage. Small grain planting active. Alfalfa seed, hay winding up. Pruning, fall irrigation, beginning as harvests end. Lower sugar content, north coast vineyards. Table grapes near completion. Raisin grapes boxed, sent to processing. Walnuts harvest active, almond harvest past peak. Spotty picking Valencias, granulation, low quality. Navels 2 to 3 weeks away. Oranges coloring, developing normally. Desert grapefruit harvest to begin soon. Broccoli, cauliflower,

celery, carrots active Salinas. Cantaloup, honeydews continue Imperial Valley. Bell peppers, lettuce underway San Joaquin Valley. Rain, snow, freezing weather delay potatoes and onions Tulalake. Range feed condition improved most areas. Recent moisture germinated, greened native pastures. Cattle conditions good, being maintained supplemental feeding. Calving, lambing continue. Stock water generally adequate.

COLORADO: Temperatures above normal east, below or near normal west. Extremes: 86 and -4°. Snow statewide 23d except for extreme southeast. Water equivalent averaged 0.50 in. north, 0.10 in. south.

Sugarbeets 62% harvested, 54% 1974, 60% average. Corn 55% harvested, 73% 1974, 34% average. Grain sorghum 62% harvested, 30% 1974, 32% average. Winter wheat 76% emerged, 82% 1974, 94% average. Fair to good condition except southeast poor. Ranges and pastures fair to good condition except southeast. Livestock generally good condition.

FLORIDA: Mostly fair and dry. Temperatures averaged near normal Peninsula, below normal Panhandle. Light to moderate rainfall of less than 0.10 in., many areas to near 4.00 in. along southeast coastal areas.

Corn harvest nearing completion. Soybean harvest making progress. Peanut harvest progressing well, nearing completion some areas. Cotton harvest gaining momentum. Pecan harvest underway all areas. Haymaking nearing end. Seeding small grains continues. Early plantings good condition. Sugarcane making good growth. Pastures, cattle and calves fair to good condition. Citrus excellent condition, soil moisture adequate, cooler temperatures beneficial. Vegetable crop conditions mostly good. Plantings active and on schedule most crops. Snap beans, pompano September plantings mostly lost. Later plantings good condition. Cabbage transplanting active. Sweet corn harvest active. Cucumber conditions fair to good, harvest active. Eggplant conditions good to excellent. Harvest active. Light harvest escarole and endive. Peppers fruit set and sizing very good. Potato plantings active. Radish harvest increasing, moderate volume. Squash volume steady to increasing. Tomato harvest increasing.

GEORGIA: Temperatures averaged 2 to 6° sub-normal, except near normal on coast. Cool early week, frost extreme north 19th and 21st. Warmer end of week. Dry week. Warm over weekend with isolated showers on 26th.

Soil moisture adequate. Harvest active with 5 days suitable. Cotton condition declined, harvest very late at 28% complete, 1974 50%, average 62%; defoliation more active. Soybeans fair to mostly good, 15% gathered, 1974 21%, average 25%. Corn 64% harvested, 1974 65%, average 70%; harvesting problems west and north from lodging. Peanuts good, 99% dug and 97% threshed, 1974 100% and 99%. Pecans declined, condition fair, 14% gathered, 1974 8%. Wheat 30% planted. Rye 53% planted. Armyworms a severe problem on small grains some areas. Pastures declining seasonally, still fair to mostly good. Cattle and hogs good.

HAWAII: Shower activities increasing all Islands. Frequent showers certain areas of Hawaii and Oahu interrupted farm operations. Some reservoirs on Kauai and Oahu partially replenished by rains.

Vegetable supplies adequate. Banana supplies heavy. Papaya production increasing. Pineapple harvesting light. Some sugar mills on Kauai and Hawaii closed for season. Rains improving pasture growth all Islands.

IDAHO: Weather cool and moist. Mild dry weather, cooling trend early week, temperatures averaged 5 to 7° below normal. Precipitation throughout, heaviest north and southeast.

Intermittent rain and snow hampered harvest activities. Despite adverse weather, harvest continued towards completion. Potato harvest 90% complete, 100% 1974. Sugarbeet harvest 40% complete, 55% 1974. Winter wheat crop 95% planted, 75% emerged, 90% planted, 40% emerged 1974. Winter barley crop 95% planted, 80% emerged; 85%, 35%, respectively 1974. Cattle and sheep continue move winter ranges and stubble fields. Cattle good to excellent condition.

ILLINOIS: Temperatures 3 to 6° above normal. Precipitation 0.10 to 1.33 in., heaviest north and central.

Corn harvest 72% complete, 35% 1974 and average; harvest active. Soybean harvest 97% complete, 80% 1974, average 82%. Seeding winter wheat 93% complete, 84% 1974, average 87%. Grain sorghum harvest 75% complete. Plowing 1976 corn and soybeans 35% complete, 21% 1974, average 22%. Pastures mostly fair to good condition. Soil moisture 25% short, 74% adequate, 1% surplus. Fieldwork: 6.5 days suitable.

INDIANA: Sunny and warm, showers, then cool. Temperatures dipped to high 20's north and central on 26th. Extreme southwest still frost free. Rainfall 0.50 in. north to 1.30 in. southeast. Temperatures averaged 5° above normal.

Good drying conditions. Fieldwork averaged 5 days. Topsoil and subsoil moisture adequate. Corn 45% harvested, 1974 25%, average 35%. Soybeans 85% combined, 65% 1974 and average. Wheat 85% seeded, 1974 75%. Wheat 65% emerged, stands mostly good to excellent. Barley and rye 95% seeded. Apples 85% picked, 1974 90%. Pastures fair.

IOWA: Temperatures 3 to 7° above normal, precipitation below normal.

Dry week with light showers 23d and 24th. Weather excellent for harvest. Corn drying naturally, resulting in low moisture high quality. Corn 72% harvested, 38% 1974, 41% average. Harvest being slowed by a shortage in commercial storage space; Elevator capacity becoming full. Soybean harvest virtually complete, 87% 1974, 83% average. Grain sorghum harvest 76%, 55% 1974, 57% average. Fall plowing 28% complete, 22% 1974. Popcorn harvest well underway. Pasture condition poor to fair. Condition of fall seeded crops mostly fair, but need rain. Topsoil moisture short. Fieldwork averaged 6.6 days suitable.

KANSAS: Dry with unseasonably warm temperatures early week, unseasonably cool weekend. Temperatures ranged from 1 to 2° above normal west and north central to 5° above normal east and south central. First general killing frost and hard freezes most of State morning of 25th.

Wheat condition below average; stands spotty. Topsoil and subsoil moisture very short except southeast. Seeding still delayed southwest and south central. Wheat 90% planted, 95% 1974 and average. Corn 80% harvested, 60% 1974, 50% average. Sorghum grain 65% harvested, 25% 1974, 45% average. Soybeans 50% harvested, 30% 1974, 60% average.

KENTUCKY: Pleasant weather prevailed. Temperatures near normal, averaging in upper 50's to low 60's. Rainfall less than average.

Soil moisture adequate to excessive. Fieldwork favorable over 4 days. Activities included harvesting corn and soybeans, stripping tobacco, seeding small grains. Corn 57% harvested, 1974 57%, average 58%. Soybeans 45% harvested, 1974 41%, average 41%. Tobacco stripping 8% complete, 1974 8%, average 8%. About 40% cured and ready for stripping. Wheat seeding made good progress, 62% complete, 1974 55%, average 58%.

LOUISIANA: Temperatures slightly above normal. Rain statewide except southeast 24th and 25th October up to 7.00 in. Greatest 1-day rainfall, 5.28 in. Temperature extremes: 88 and 36°.

Fieldwork possible 5.5 days. Soil moisture adequate. Soybeans 57% harvested, 65% 1974, 47% average. Cotton 20% harvested, 47% 1974, 43% average. Sugarcane 15% harvested, 14% 1974 and average. Grain sorghum 70% harvested. Sweetpotatoes to be 85% harvested. Pecan harvest gained momentum. Wheat 70% and oats 75% planted. Pastures average. Cattle condition declined.

MARYLAND AND DELAWARE: Temperatures averaged 4 to 9° above normal. Highs low 80's, lows upper 30's. Precipitation ranged from 0.01 to 2.90 in.

Corn for grain 85% harvested, 70% 1974. Soybeans 40% harvested. Seeding of small grains nearing completion.

MICHIGAN: Temperatures well above normal from 4 to 10°. Precipitation start and end of week 0.35 to 1.00 in.

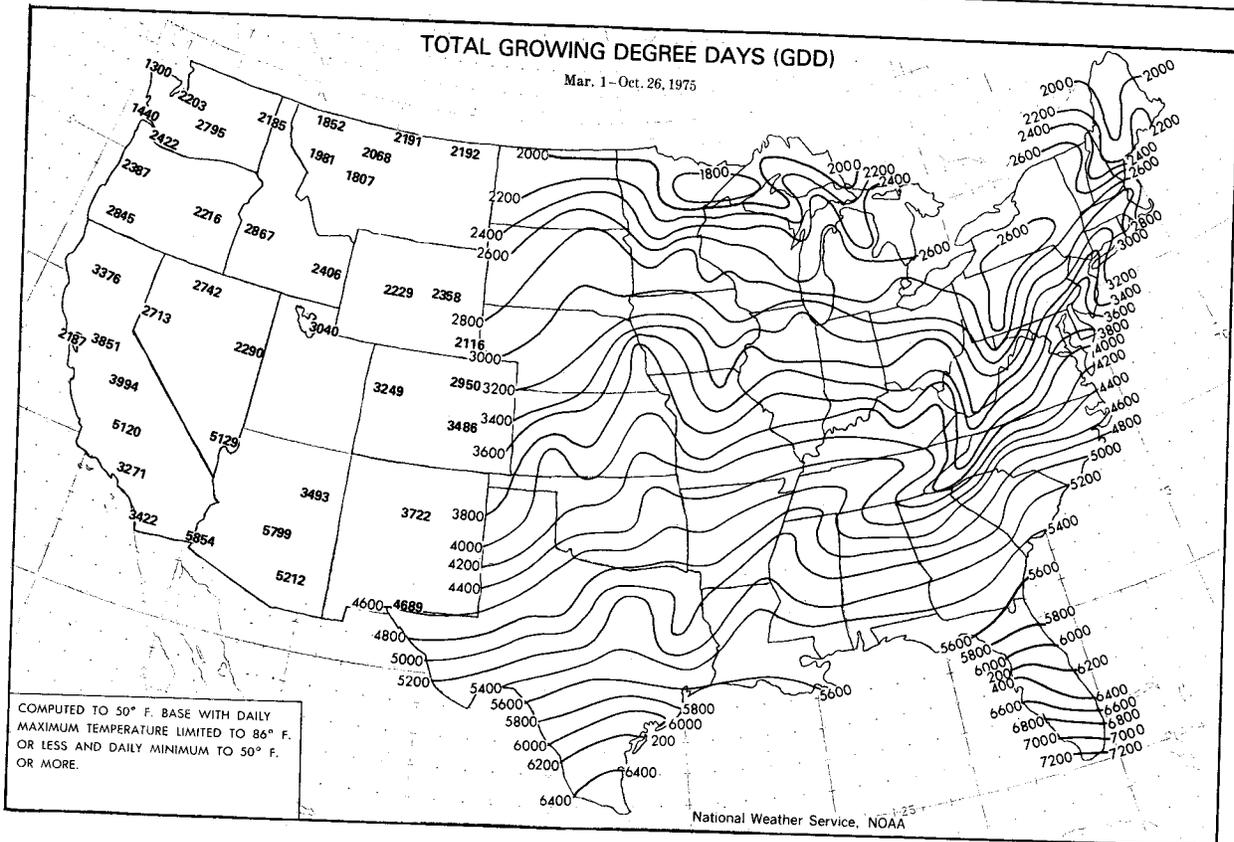
Soil moisture adequate. Excellent weather for harvesting and fieldwork. Corn 40% harvested, 17% 1974, 27% normal. Corn silage virtually complete. Soybean combining 75%; 73% 1974, 52% normal. Potato digging virtually complete. Sugarbeet harvest slowed, warm temperatures preventing stockpiling; harvest 55% complete, 67% 1974, 45% normal. Winter wheat planting 95% complete. Jonathan and Red Delicious apples 95% complete. Fall vegetable harvest nearing completion. Five plus days field and harvesting work.

MINNESOTA: Temperatures 2° below normal northwest, 2 to 4° above normal southeast. Extremes: 76 and 22°. Precipitation 0.50 to 1.00 in. above normal central through northwest and near normal southeast.

Fall harvest made moderate headway. Corn harvest 77% completed, 1974 75%, average 55%. Soybean combining virtually complete, 1974 99%, average 85%. Sugarbeets 95% dug, 1974 99%, average 90%. Sunflowers 72% combined, 1974 80%.

MISSISSIPPI: Temperatures 3 to 5° subnormal. Extremes: 88 and 32°. Greatest 24-hour rainfall was 0.20 in. at Wiggins on 18th.

Soil moisture mostly adequate. Fieldwork 4.8 days suitable. Cotton 91% open bolls, 84%



average; 15% harvested, 34% 1974, 49% average. Soybeans 66% mature, 65% average; 32% harvested, 26% 1974, 32% average. Rice 97% mature; 75% harvested, 97% 1974. Corn 67% harvested, 75% 1974, 61% average. Sorghum 77% harvested, 86% 1974, 81% average. Sweetpotatoes 82%, peanuts 92%. Hay crops 93% and pecans 18% harvested. Winter wheat 78% and oats 85% planted. Cotton in poor to fair condition. Corn in fair to good condition.

MISSOURI: Temperatures 4° above normal Boot-heel to 8° above northwest prairie. Precipitation averaged 0.25 in., except Ozarks 1.00 in. Soil moisture short to adequate. Fieldwork: 6 days suitable. Corn 78% harvested, 53% 1974, 48% average. Soybeans 70% harvested, 45% 1974, 50% average. Grain sorghum 81% harvested, 46% 1974, 53% average. Cotton 72% harvested, 43% 1974, 48% average. Winter wheat 74% seeded. Plowing for spring planted crops 31% complete. Fertilizer and fuel in adequate supply.

MONTANA: Temperatures ranged 3° below normal west and north central to 11° below normal south central. Fall storm left well above normal precipitation all but northeast early week. Sugarbeet harvest about 75% done, potatoes 80%, dry beans 90%. Fall snows slowing harvest progress. Winter wheat good to excellent condition. Grasshopper activity stopped by snows. Livestock good to excellent. About 75% cattle and 80% sheep now moved from summer ranges.

NEBRASKA: Temperatures 10 to 20° above normal first half; up to 30° below normal latter half. Snow in Panhandle and north central, up to 12 in. Rains averaged less than 0.10 in. Topsoil and subsoil moisture supplies mostly

short. Corn 80% harvested, 1974 65%, normal 35%. Grain moisture content 12 to 18%. Sorghum harvest 95% completed, 1974 75%, 55% normal. Soybean harvest nearing completion, 1974 90% and normal 80%. Wheat condition poor to fair few areas good. Pasture and range feed supplies 91% short. Cattle moving to stalk fields. Supplemental feeding necessary areas of short grass.

NEVADA: Cold fronts dominated weather. Gusty winds, showers, and marked cooling prevailed. Precipitation heaviest northwest. Temperatures averaged 3 to 4° below normal. Extremes: 91° Logandale, 6° Mountain City. Potato digging about completed main producing areas. Planting winter grains continued. Livestock movement on schedule.

NEW ENGLAND: Rain southern New England on 19th and northern on 20th. Rains 25th dropped from 0.30 to 1.00 in. south and 0.10 in. north. Temperatures near normal until 22d, 10 to 15° above normal thereafter.

Aroostook, Maine harvests of potatoes, sugarbeet test plots and buckwheat complete. Cranberry harvest nearing completion. Howes entering storage excellent condition. Apple harvest complete.

NEW JERSEY: Temperatures averaged 4 to 10° above normal. Extremes: 35 and 84°. Rainfall averaged 0.39 in. north, 0.39 in. central, and 0.35 in. south. Heaviest 24-hour total 0.56 in. at Cape May Court House on 24th.

Soil moisture, in percent of field capacity averaged 97 north, 93 central and 88 south. Weekend rains halted harvest of corn for grain and soybeans. Fall vegetable harvest continues. Potato harvest complete. Sweetpotato harvest

well advanced. Late variety apples being picked. Cranberry harvest well advanced. Cover crops and small grains making good growth. Planting continues as crops are harvested.

NEW MEXICO: Very mild early week with scattered showers south on 21st. Freezing temperatures all of State except southern third. Temperatures averaged near normal southern third and 10 to 18° colder than normal northern two-thirds.

Localized light freezes nipped some immature cotton and sorghum. Cotton bolls mostly open south central, less than half elsewhere, picking increasing south, not yet started north. Harvest grain sorghum 60%. Lettuce active Mesilla Valley, other crops about through. Ranges, live-stock fair to good condition.

NEW YORK: Temperatures 5 to 10° above normal. Lows upper 30's to mid 40's, highs in 70's and low 80's. No frost. Rains generally below normal.

Warmer, drier conditions aided harvest activities, some fields remain too wet for heavy equipment. Grain corn harvest 30% complete. Corn silage and hay harvest virtually finished. Hay regrowth good, continue cutting for haylage. Fall seeded wheat good condition. Dry bean harvest continues, wet conditions making harvest difficult and lowering quality. Potato harvest nearly complete. Upstate lost some acreage due to surplus moisture during most of harvest. Cabbage harvest continues. Beet crop all maturing at once making handling by processors difficult. Apple harvest nearly complete, Romes being picked. Grapes nearly done, finishing with Catawbas.

NORTH CAROLINA: Temperatures above normal. Extremes: 70's and 30's. Rainfall confined to showers along coast on 24th.

Days suitable fieldwork 4.40. Soil moisture mostly adequate. Corn 80% combined, 1974 81%, average 56%. Peanuts 93% dug, 1974 94%. Peanuts 83% threshed, 1974 81%, average 61%. Soybeans 9% harvested, 1974 11%. Cotton 28% picked, 1974 30%, average 41%. Sweetpotatoes 73% dug, 1974 77%. Small grains 41% planted, 1974 44%, average 46%. Apples 92% picked, 1974 92%, average 86%. Pastures fair to mostly good.

NORTH DAKOTA: Temperatures above normal, except southwest. Extremes: 76 and 23°. Precipitation above normal, except northeast, central and north central. Greatest weekly precipitation 1.52 in. at Wahpeton. Weekend near normal temperatures with scattered precipitation.

Sugarbeet lifting nearing completion. Dry bean and soybean combining virtually completed. Corn picking and sunflower combining full swing. Condition fall sown winter wheat and rye mostly fair to good. Soil supplies short to adequate. Winter ranges fair, stockwater supply adequate.

OHIO: Above normal temperatures much of week. High 85° southeast, low 30° northwest. Rainfall light, ranging 0.01 in. northeast to 0.27 in. southwest.

Harvest completed: Corn for grain 40%, 40% 1974, and 50% normal; soybeans 85%, 85% 1974 and 75% normal; sugarbeets 30%, slowed by warm weather, 60% 1974 and 40% normal; popcorn 40%, 45% 1974 and 60% normal. Winter wheat 90% seeded, 95% 1974 and 85% normal. Quality corn and soybean grain mostly good. Soil moisture supplies 79% adequate and 21% surplus. Fieldwork: Nearly 5 days favorable.

OKLAHOMA: Temperatures ranged from 1° above normal to 8° below normal. Precipitation averaged from none in several areas to 0.32 in. east central. Weekend cool and dry.

Dry weather permitted good progress harvesting fall crops, but fall seedings slow as topsoil moisture short 75% State. Wheat 78% seeded, 95% 1974 and average. Stands northwest spotty, good southwest where moisture adequate. Oats and barley expected seedings near 45% up, 70% year earlier. Corn harvest 85% complete, 60% 1974, 70% average. Sorghum harvest 59% combined, 30% 1974, 43% average. Peanuts 62% combined, well ahead of 38% average and 1974 late crop. Soybeans 26% combined, double 1974 percent this date, but slightly behind average. Cotton harvest very slow; 55% fields show open bolls, 75% year ago, 81% average. Cotton picking 2% complete, 2% 1974, 8% average. Pecan hulls now opening some areas. Ranges fair to good, supplemental feeding increases.

OREGON: Temperatures near normal. Extremes: 80's and 10°. Precipitation along coast over 2.00 in., western valleys over 1.50 in., east 0.01 to 0.90 in.

Fall seeding, land preparation continuing. Cutting corn for silage. Harvesting sugarbeets. Apple harvest nearly finished. Harvesting filberts, walnuts, cranberries. Sweet corn, carrot, broccoli, cauliflower, squash, potato harvests continuing. Beet harvest completed. Ranges and pastures look good. Western ranges regrowth good. Eastern ranges regrowth slow. Cattle, sheep in good shape.

PENNSYLVANIA: Warm, sunny and dry until 25th when east cloudy and cool with light rain. Fair west entire week. Temperatures 8 to 12° above normal. Extremes: 80 and 23°. Rainfall 0 west to 0.40 in. middle Susquehanna and 0.25 in. southeast.

Soil moisture adequate. Potato harvest essentially complete. Harvest of apples, ensilage corn and grain corn active. Ensilage corn harvest nearing end.

PUERTO RICO: Island average rainfall 1.69 in. Highest weekly total 4.58 in. at Pico Del Este Luquillo. Highest 24-hour total 3.65 in. at Corral Viejo. Temperatures averaged about 80° on coasts and 74° interior. Extremes: 95 and 57°.

Dry weather with light rains favorable for sugarcane cultivation, low lying area plantings still suffering from past floods. Rains slowed down coffee harvest and transporation. Good weather for planting tobacco. Pastures in generally good condition. Farmers planting and fertilizing. Food crop planting and cultivation operations progressing. Good harvest of sweet corn, peppers and tomatoes in Cabo Rojo.

SOUTH CAROLINA: Temperatures averaged above normal in all but mountain areas. A few scattered showers occurred in mountains and along immediate coast.

Harvest continues active as open weather prevailed. Soil moisture mostly adequate except for few dry spots. Corn harvest 90%, 88% 1974, 81% average. Cotton harvest 41%, 44% 1974, 51% average. Soybean harvest 7%, 9% 1974, 6% average. Wheat seedings 24%, 15% 1974, 19% average. Oat seedings 33%, 27% 1974, 24% average.

SOUTH DAKOTA: Temperatures averaged from 8° below to 3° above normal. Extremes: 76 and 13°. First snowstorm deposited up to 10 in. of snow in west. Total precipitation ranged from 1.59 to 0.25 in.

Row crop harvest continues at a good pace. Corn 77% harvested, 1974 84%, normal 68%. Soybeans 99% harvested, 1974 99%, normal 89%. Sorghum 96% harvested, 1974 96%, normal 75%. Alfalfa seed and sunflower harvest are nearing completion. Cattle are being moved to winter pastures and into corn stubble. Some supplemental feeding being done. Cull cows and calf sales are increasing.

TENNESSEE: Fair weather most of week, rains week-end. Amounts ranged from 0.50 in. to 1.50 in. west and central and 0.10 in. to 0.60 in. east. Temperatures averaged 2 to 4° above normal.

Days suitable for fieldwork averaged 4.3. Soybeans 25% harvested, 1974 19%, average 23%. Corn harvested 48%, 1974 42%, average 53%. Cotton 33% harvested, 1974 20%, average 40%. Tobacco striped 35%, 1974 27%. Wheat acreage seeded 59%, 1974 61%, average 62%. Oats and barley 80% sown, behind 1974 and average. Pastures fair.

TEXAS: Warm temperatures, little rainfall early week. Late week heavy rains cooler temperatures. Southeast 2.00 to 3.00 in. above normal, elsewhere 0.25 in. or less. Temperatures near normal southwest, 3 to 5° above normal elsewhere.

Seeding wheat and oats continues, much of crop dry planted. Rains will help establish stands and improve grazing prospects. Row crop harvest making satisfactory progress. Many farmers continue to dry plant wheat on High Plains where moisture extremely short. Rains across central and southern half will help establish stands and produce adequate grazing later in fall. Most cotton on High Plains open and ready for harvest, but farmers will wait until first freeze. Blacklands completion of harvest delayed by rain and cold weather. Corn harvest rapidly nearing completion on High Plains, high moisture and storage facilities caused temporary delays. Major crops percent harvested: Cotton 26, 1974 28, average 27; corn 96, 1974 75, average 89; sorghum 92, 1974 62, average 72; peanuts 86, 1974 57, average 68; soybeans 60, 1974 23, average 46; sugarbeets 42, 1974 26, average 57. Major crops percent planted: Wheat 85, 1974 90, average 93; oats 85, 1974 89, average 88.

High Plains: Lettuce and carrot harvest remains active. Tran-Pecos: Cabbage, lettuce, green peppers, harvest continues. East: Digging of sweetpotato nearing completion. San Antonio-Winter Garden: Supplies of cucumbers declining. Beets, carrots, cabbage and spinach showing good development. Light cabbage cutting underway. Onion planting remains active. Green peppers being picked. Laredo: Onion planting complete. Tomatoes continue to make fair progress. Coastal Bend: Cucumber harvest continues. Spinach fields continue to emerge. Lower Rio Grande Valley: Cucumber and pepper harvest continues. Planting of cabbage and carrots active. Onions being planted. Pecan harvest in various stages. Citrus harvest continues active. Oranges now being diverted into processing channels as well as fresh market. Grapefruit movement slow due to dull market.

Scattered rain brought relief to pastures. Livestock continue hold up well with short grazing and declining pasture conditions. Feeding already started eastern areas.

UTAH: First major killing freeze occurred on 24th. Temperatures averaged near to slightly below normal. Light to moderate precipitation midweek, mainly south central and southeast.

Winter wheat 87% planted. Rain boosted prospects for next year. Potatoes 80% harvested, sugarbeets about 50%. Apple crop about 75% picked. Livestock going into the winter in good condition.

VIRGINIA: Temperatures averaged 3° above normal, except 1° above normal southwest mountains. Extremes: 85 and 29°. Scattered rain each day. Greatest amount 2.43 in.

Fieldwork: 4.8 days suitable. Topsoil moisture 90% adequate, 10% surplus. Corn grain harvest 58%, 1974 64%, average 59%, some lodging. Soybean harvest 12% complete, 1974 22%, average 20%. Peanuts 91% dug, 74% combined; 1974 95%, 83%; average 80%, 64%. Flue-cured tobacco marketing active. Other types preparing for market. Some hay saved, including peanut vines. Pastures excellent. Small grain seeding; Wheat 47%, 1974 56%, average 53%; barley 70%, 1974 79%, average 74%; oats 71%, 1974 83%, average 77%.

WASHINGTON: West: Temperatures averaged 2 to 4° subnormal. Precipitation near normal.

Harvesting: Celery, carrots, cabbage, squash, potatoes, seedbeets. Wet conditions and lowland flooding hampered sweet and field corn cutting. Thinning raspberries, cutting and marketing Christmas trees. Dairy cows on late pasture or green chop. East: Reading 2 to 6° subnormal. Precipitation about normal in north and above normal south.

Harvesting: Dry beans, field corn, Winesaps, Romes. Digging sugarbeets and potatoes. Fourth cutting of alfalfa also continued. Cool temperatures ideal for fruit tree hardening and color. Plowing, fertilizing, seeding. Wheat seeded earlier emerging well with additional moisture. Greenbugs widespread, spraying underway. Livestock moved out of mountains and grazing hay fields and pastures.

WEST VIRGINIA: Temperatures averaged 4 to 6° above normal. Precipitation light, amounts less than 0.25 in., occurring early week.

Soil moisture 78% adequate, 22% surplus. Pastures remain in good condition. Some small grains emerged. Fieldwork suitable 4.3 days. Weather excellent for picking corn.

WISCONSIN: Temperatures 6° above normal. Highs in 70's until 25th. Much cooler weekend with lows below freezing 26th. Rainfall light south, heavier central and north. Heaviest in excess 2.00 in.

Crop harvest continued good progress. Corn for grain 55% harvested, 1974 25%, normal 33%. Moisture content lower than usual, test weights higher, quality excellent. Much chopping and baling of corn stalks. Soybeans 80% harvested, 1974 55%, normal 40%. Moisture content very low, some shattering and cracking. Haying season mostly completed. Fall plowing 35% done, 1974 35%, normal 58%. Very dry many areas for plowing. Soil moisture 75% short, 25% adequate. Mild weather allows cattle to remain on fall pastures. Harvesting of fruits and vegetables nearly finished.

WYOMING: Temperatures mostly below normal. Precipitation above normal all drainages except Green and Bear.

General snowfall breaks long dry spell, toughens range grasses, improves grazing. Moisture delayed row crop harvest late week. Sugarbeets 65%, potatoes 90% dug, grain corn 30% picked and dry bean combining virtually complete. Winter wheat 85% emerged, condition fair to good, moisture will help. Ranchers busy gathering, working and shipping livestock. Livestock generally good condition.

The Heating Degree Day Statistic: A Measure of Fuel Needs

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

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

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

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

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

The fuel industry can monitor fuel consumption by keeping up-to-date on the heating degree-day

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

For the rest of the heating season the Bulletin will feature three maps. The first will show heating degree-days for the week as the percent departure from normal (1941-70); the second, the number of heating degree-days accumulated from July 1, 1975 as the percent departure from normal; and the third, the number of heating degree-days accumulated since July 1, 1975 as the percent departure from last year.

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

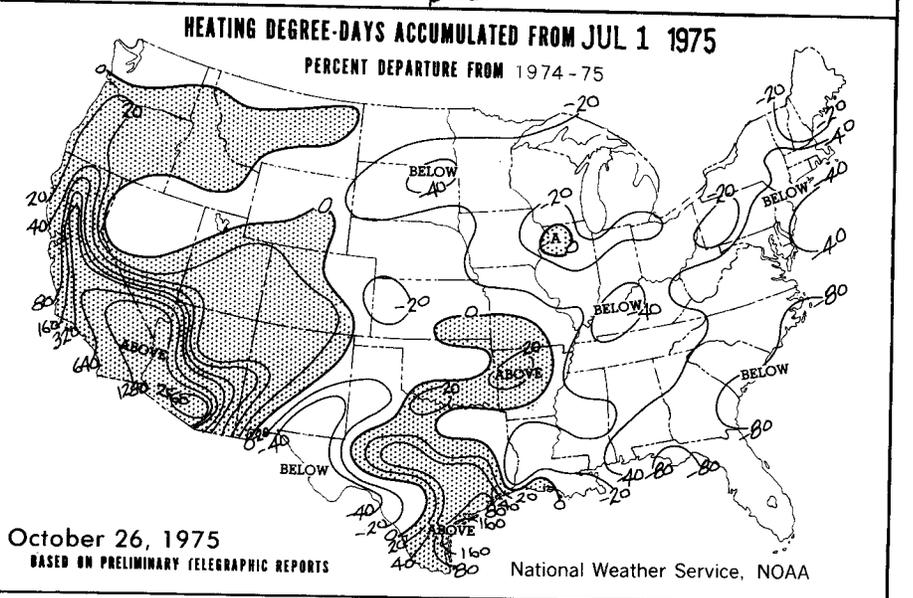
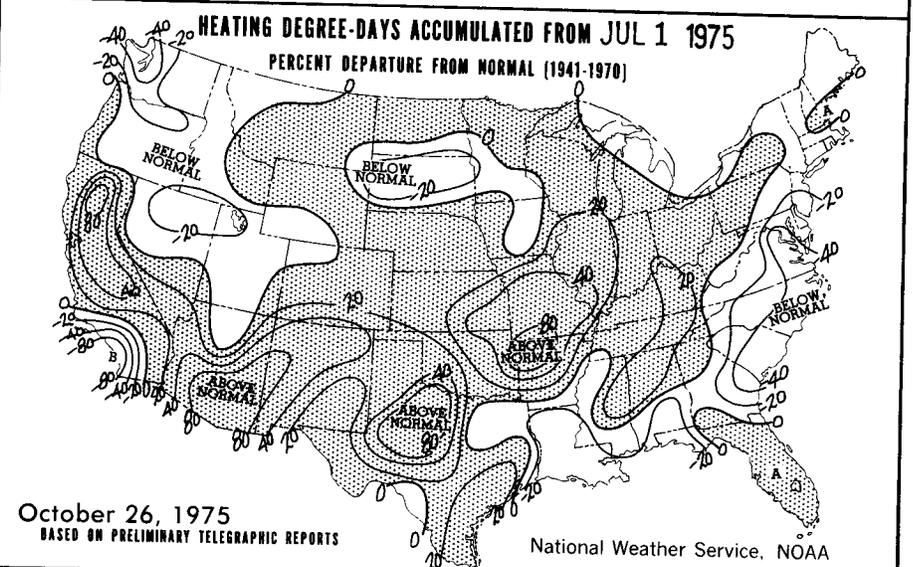
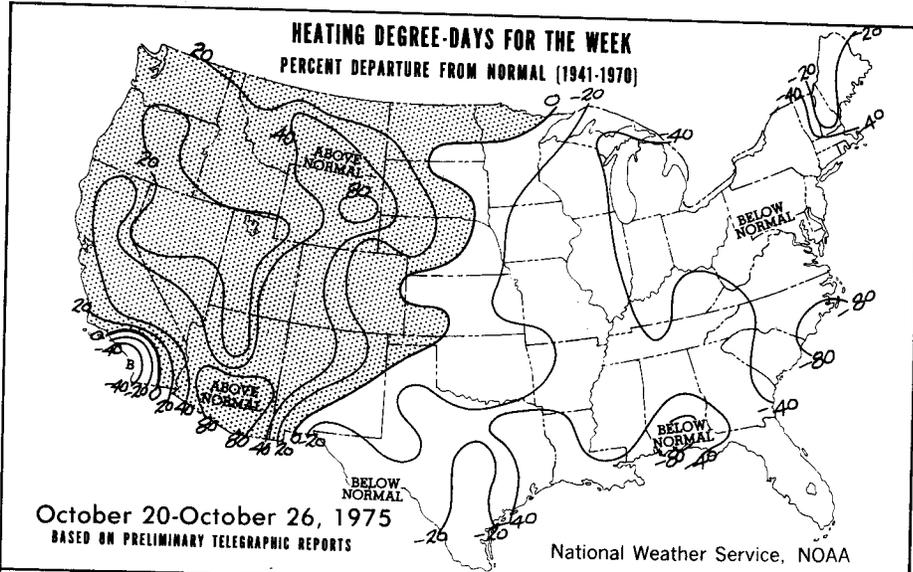
Starting July 1 of this year the heating degree day accumulation up to now has been above normal over a widespread area--from Texas to the Great Lakes region, through New England east to the Appalachians, and in southern Georgia and Florida. This means that these areas have been cooler than normal and so have required additional energy to keep homes at a comfortable temperature. Compared to last year, however, these areas have been warmer.

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

Table 1. The normal heating degree-day accumulations by months during the primary heating season for fifteen cities across the United States and the 1974-75 accumulations.

City	November		December		January		February		March		Annual Norm	Total 1974/75
	Norm*1974	1974	Norm 1974	1974	Norm 1975	1975	Norm 1975	1975	Norm 1975	1975		
Washington, D.C.	510	446	856	674	911	740	776	677	617	608	4211	3790
Philadelphia, Pa.	564	500	924	786	1014	852	871	812	716	737	4865	4599
Trenton, N.J.	561	524	933	785	1020	858	885	817	738	775	4947	4781
New York, N.Y.	528	512	915	783	1017	858	885	819	741	778	4848	4802
Boston, Mass.	594	587	992	836	1110	925	969	918	834	866	5621	5505
Buffalo, N.Y.	756	738	1150	1024	1280	1077	1137	1001	1020	1053	6927	6536
Cleveland, Ohio	702	660	1076	1026	1181	1021	1039	962	896	934	6154	6091
Detroit, Mich.	747	726	1132	1123	1252	1129	1075	1044	921	996	6419	6601
Chicago, Ill.	774	715	1175	1041	1305	1144	1089	1059	908	947	6497	6227
St. Louis, Mo.	600	625	942	954	1045	979	837	919	682	803	4750	5051
Omaha, Nebr.	813	726	1218	1115	1389	1311	1106	1189	942	1024	6601	6423
Minneapolis, Minn.	993	933	1451	1254	1649	1561	1366	1379	1147	1324	8310	8257
Denver, Colo.	768	803	1004	1043	1088	1024	902	975	868	852	6016	6322
Salt Lake City, Utah	777	638	1076	1025	1147	1157	885	819	787	734	5978	5787
Seattle-Tacoma, Wash.	612	591	760	690	831	804	636	671	648	678	5185	5045

*Normals based on 1941-70.

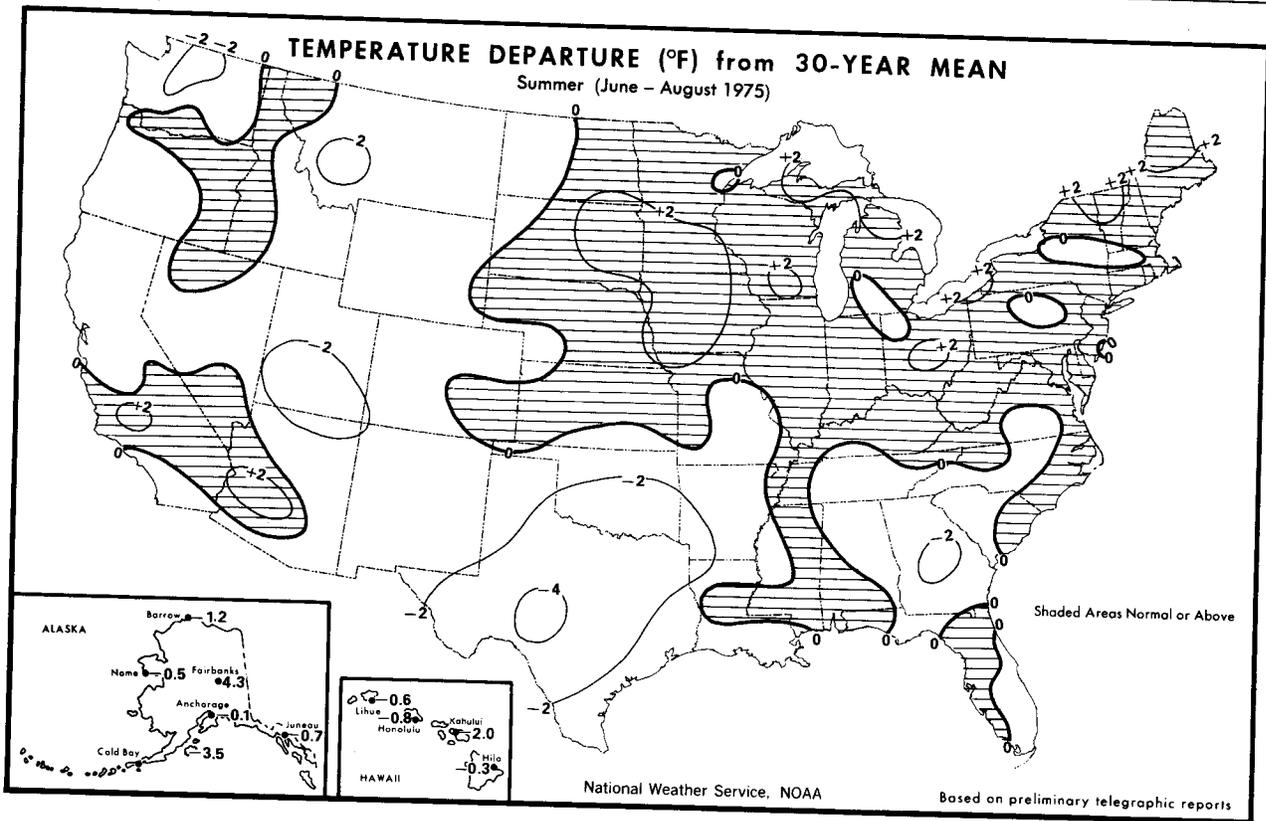


Heating Degree Days (Base 65°) For Week Ending October 26, 1975

States and Stations	Weekly		Seasonal + Accumulation			States and Stations	Weekly		Seasonal + Accumulation			States and Stations	Weekly		Seasonal + Accumulation		
	TOTAL	Departure*	TOTAL	Departure*	Departure From 1974-75		TOTAL	Departure*	TOTAL	Departure*	Departure From 1974-75		TOTAL	Departure*	TOTAL	Departure*	Departure From 1974-75
ALA. Birmingham	33	8	135	30	-43	Portland.	97	30	680	5	-79	Tulsa.	46	2	143	33	-23
Mobile	3	12	19	4	-39	MD. Baltimore.	24	48	152	-63	-174	OREG. Astoria.	119	24	814	-3	99
Montgomery	9	21	45	20	-74	MASS. Boston.	46	36	206	-111	-296	Burns.	173	30	734	-25	88
ARIZ. Flagstaff	168	23	762	-57	143	MICH. Alpena.	81	60	821	-66	-212	Medford.	129	29	361	-39	74
Phoenix.	13	6	13	6	13	Detroit.	61	43	451	37	-193	Pendleton.	126	20	315	-96	22
Tucson.	21	11	31	18	30	Flint.	57	58	493	-42	-216	Portland.	110	17	379	-115	69
Winslow.	118	43	282	80	71	Grand Rapids.	66	45	549	-84	-274	Salem.	125	27	509	5	97
Yuma.	7	7	7	7	7	Houghton Lake.	72	67	800	-27	-197	PA. Allentown.	36	-59	310	-47	-233
ARK. Fort Smith	35	7	190	95	33	Lansing.	63	51	591	92	-199	Erie.	61	49	489	-44	-224
Little Rock.	29	15	146	40	18	Marquette.	79	53	762	-8	-221	Harrisburg.	33	-51	246	-27	-215
CALIF. Bakersfield.	30	11	44	10	40	Muskegon.	62	50	548	31	-173	Philadelphia.	20	-50	142	-83	-193
Eureka.	98	21	1092	53	75	S. Ste. Marie.	94	55	927	-48	-286	Pittsburgh.	59	-42	456	39	-25
Fresno.	49	20	100	39	83	MINN. Duluth.	145	12	1020	50	-300	Scranton.	39	-66	372	-80	-244
Los Angeles.	8	13	18	-97	14	Internatl Falls.	181	10	1064	-3	-164	R. I. Providence.	55	40	305	-71	-251
Red Bluff.	50	23	114	60	87	Minneapolis.	109	24	554	-64	-217	S. C. Charleston.	14	-10	21	-30	-120
San Diego.	5	8	10	-44	9	Rochester.	81	-50	589	-27	-211	Columbia.	34	0	201	121	20
San Francisco.	50	13	440	91	132	St. Cloud.	142	1	768	66	-214	Greenville.	32	-12	111	-3	-132
Stockton.	44	15	91	33	73	MISS. Jackson.	19	-10	72	9	-13	S. DAK. Aberdeen.	127	-15	397	-248	-299
COLO. Denver.	124	13	473	38	-22	Meridian.	31	3	111	32	0	Huron.	138	7	450	-111	-181
Grand Junction.	141	48	314	12	81	MO. Columbia.	57	-15	351	126	-66	Rapid City.	175	49	442	-147	-173
Pueblo.	106	10	364	58	83	Kansas City.	49	-20	317	104	-41	Sioux Falls.	123	-3	593	43	-74
CONN. Bridgeport.	27	46	190	-51	-198	St. Louis.	47	-19	287	89	-75	TENN. Chattanooga.	46	8	168	27	-59
Hartford.	56	47	350	-67	-250	Springfield.	53	-13	360	149	17	Knoxville.	56	4	169	32	-59
DEL. Wilmington.	22	51	173	50	-227	MONT. Billings.	205	77	645	18	-50	Memphis.	20	-23	102	-7	-47
D. C. Washington.	16	40	79	-75	-180	Glasgow.	180	27	823	65	60	Nashville.	32	-22	164	24	-78
FLA. Apalachicola.	6	3	0	-12	-8	Great Falls.	202	67	788	56	50	TEX. Abilene.	22	-7	121	60	1
Daytona Beach.	0	0	0	0	0	Havre.	175	17	786	-52	-30	Amarillo.	52	-10	225	56	-43
Ft. Myers.	0	0	0	0	0	Helena.	206	50	1029	151	65	Austin.	17	2	26	2	10
Jacksonville.	6	2	8	-1	-30	Kalispell.	193	17	980	-137	-70	Brownsville.	5	5	5	5	2
Key West.	0	0	0	0	0	Miles City.	182	47	645	9	-22	Corpus Christi.	4	2	15	13	11
Lakeland.	0	0	0	0	0	Missoula.	208	43	914	-14	120	Del Rio.	7	-5	9	-12	-6
Miami.	0	0	0	0	0	NEBR. Grand Island.	98	-2	402	20	-53	El Paso.	11	-15	64	6	-48
Orlando.	0	0	0	0	0	Lincoln.	82	-11	377	48	-36	Fort Worth.	16	-10	33	-5	-3
Tallahassee.	17	5	27	10	-27	Norfolk.	108	-2	465	29	-43	Galveston.	3	4	3	-4	1
Tampa.	0	0	0	0	0	North Platte.	140	21	577	83	-21	Houston.	9	0	35	21	20
W. Palm Beach.	0	0	0	0	0	Omaha.	70	-16	334	34	-150	Lubbock.	34	-15	169	46	-65
GA. Atlanta.	31	11	119	12	-55	Valentine.	154	26	591	56	-16	Midland.	26	2	102	50	6
Augusta.	19	13	41	-31	-122	NEV. Ely.	183	31	817	-1	30	Beaumont.	6	7	16	-5	-4
Macon.	21	5	45	-11	-64	Las Vegas.	42	16	59	13	56	San Angelo.	19	-5	93	45	27
Savannah.	9	10	14	-25	-67	Reno.	135	16	499	-96	-95	San Antonio.	10	-2	21	2	0
IDAHO. Boise.	140	30	409	-45	17	Winemucca.	146	11	470	-187	-171	Victoria.	5	-2	12	4	5
Lewiston.	167	56	412	-45	56	N. H. Concord.	117	-9	754	125	-108	Waco.	13	-4	31	-1	4
Pocatello.	169	34	631	15	-7	N. J. Atlantic City.	39	-36	280	46	-144	Wichita Falls.	27	-3	117	56	30
ILL. Cairo.	38	11	201	79	-35	Trenton.	31	41	206	-23	-178	UTAH. Salt Lake C.	122	12	342	-78	46
Chicago.	52	-38	364	62	-139	N. MEX. Albuquerque.	98	28	255	94	59	VT. Burlington.	68	-63	602	-57	-215
Moline.	49	-47	552	202	24	Roswell.	52	7	135	-23	-112	VA. Lynchburg.	40	-28	192	-17	-167
Peoria.	63	-30	421	97	-80	N. Y. Albany.	64	-48	457	-46	-345	Norfolk.	16	-26	62	-50	-155
Rockford.	76	-32	527	100	-30	Binghamton.	67	52	595	3	-223	Richmond.	15	-44	104	-70	-246
Springfield.	52	-30	329	63	-102	Buffalo.	56	56	477	-31	-151	Roanoke.	34	-34	181	-26	-182
IND. Evansville.	41	-28	237	29	-157	New York.	32	-33	186	-11	-178	WASH. Quillayute.	139	28	404	-587	-492
Fort Wayne.	46	-54	437	56	-125	Rochester.	53	-54	476	3	-214	Seattle-Tacoma.	130	27	331	-316	-169
Indianapolis.	45	-41	345	50	-178	Syracuse.	50	-55	523	71	-193	Spokane.	184	42	675	-8	55
South Bend.	43	-59	413	1	-91	N. C. Asheville.	67	8	269	14	-86	Walla Walla.	123	29	320	-18	18
IOWA. Burlington.	55	36	380	63	-122	Hatteras.	7	-17	12	-41	-125	W. VA. Beckley.	57	-46	365	-78	-253
Des Moines.	55	44	352	-18	-112	Charlotte.	25	-20	82	-38	-181	Charleston.	42	-33	276	28	-188
Dubuque.	81	34	577	82	-103	Greensboro.	29	-32	110	-70	-175	Huntington.	40	-35	253	7	-172
Sioux City.	97	8	457	48	-16	Raleigh.	28	-26	93	-58	-210	Parkersburg.	48	-28	331	82	-108
KANS. Concordia.	73	6	301	25	-16	Wilmington.	3	-22	16	-40	-138	WIS. Green Bay.	102	-28	725	76	-189
Dodge City.	75	2	243	23	-27	N. Dak. Bismarck.	151	2	768	24	-198	LaCrosse.	86	-29	554	81	-147
Goodland.	100	7	356	-48	-119	Fargo.	148	0	689	-24	-227	Madison.	80	-48	581	-13	-135
Topeka.	50	25	315	68	-24	Williston.	172	15	854	56	-59	Milwaukee.	67	-53	483	-49	-210
Wichita.	59	4	257	73	22	OHIO. Akron-Canton.	58	-43	442	34	-135	WYO. Casper.	307	165	807	128	36
KY. Lexington.	49	22	304	82	-138	Cleveland.	58	-39	445	45	-129	Cheyenne.	164	26	701	5	-55
Louisville.	34	-36	217	4	-203	Columbus.	54	-41	339	-7	-136	Lander.	186	37	691	3	-50
LA. Baton Rouge.	11	-6	21	-15	-6	Cincinnati.	33	-44	318	72	-179	Sheridan.	205	67	718	-3	-105
Lake Charles.	6	-7	16	-6	0	Dayton.	43	-44	341	40	-179						
New Orleans.	7	-7	19	-6	4	Toledo.	61	-43	539	130	-91						
Shreveport.	12	-11	37	-10	-9	Youngstown.	62	-43	487	38	-190						
MAINE. Caribou.	140	-26	990	-71	-143	OKLA. Okla. City.	39	-7	137	21	-4						

* Based on 1941-70 Normals.

+ Accumulation July 1, 1975



Summer Weather Review

HIGHLIGHTS: Summer temperatures were cooler than normal in most of the States. Exceptions to this trend were the Great Lakes area, the Midwest, and the northern Plains. Some parts of Iowa, Minnesota, and South Dakota averaged 2 to 3 degrees above normal. Precipitation totals for the summer were near or above normal over most of the country; however, variations from the mean produced serious dry and wet spells in some areas.

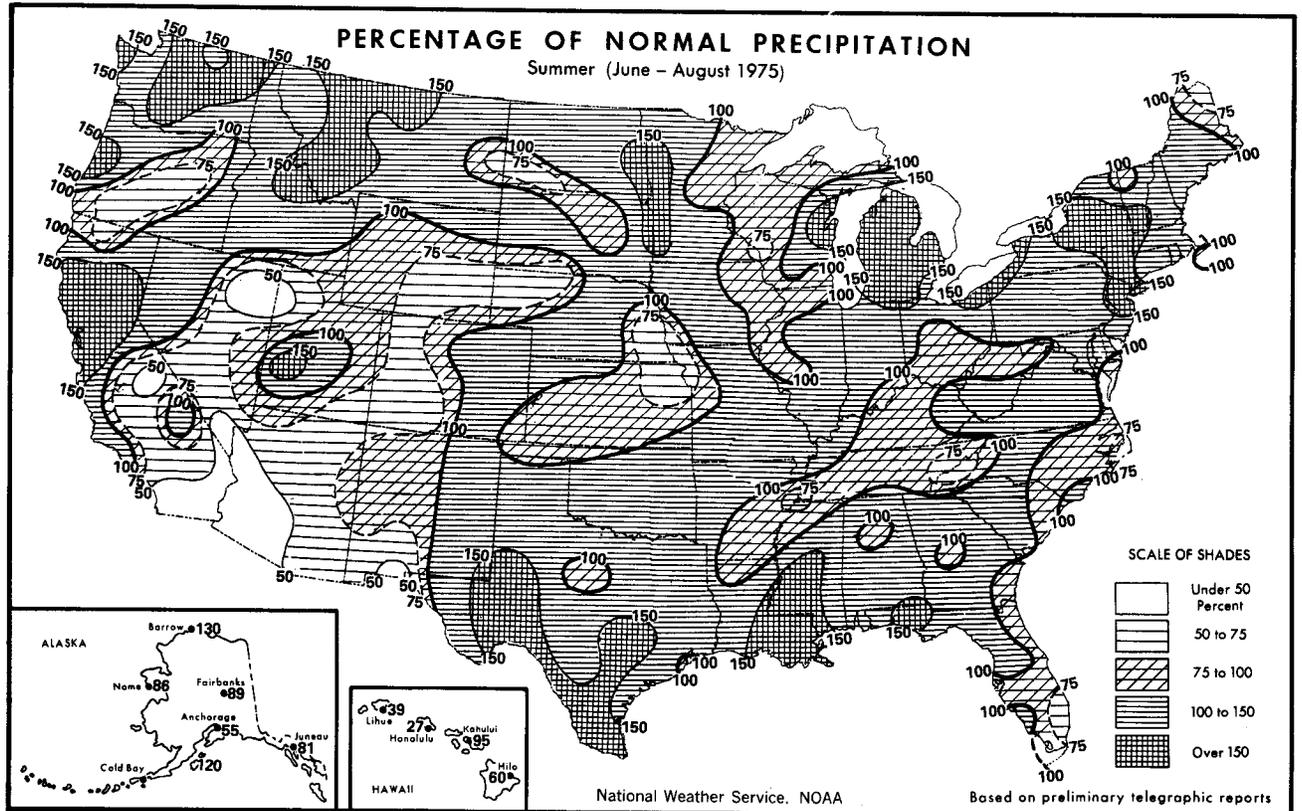
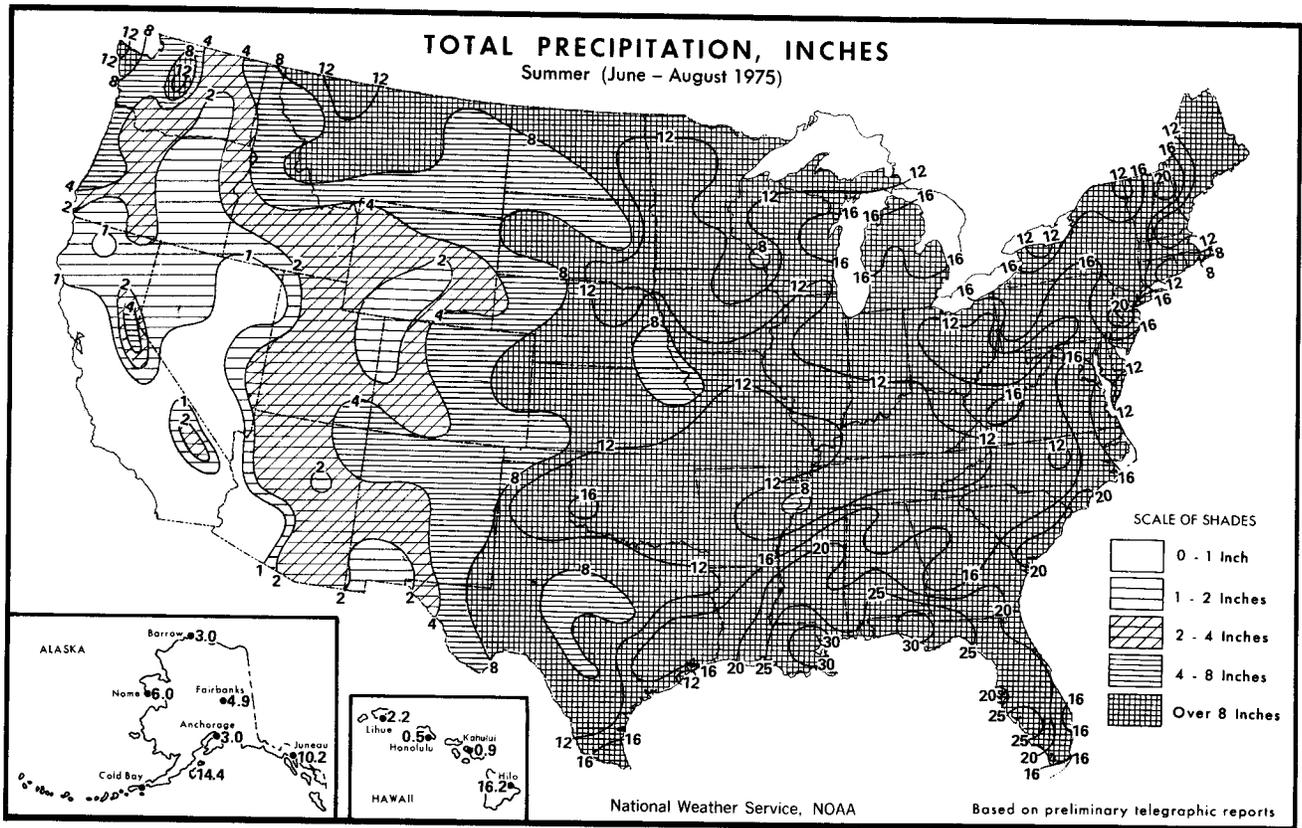
After near normal spring rainfall, severe weather in June produced some heavy precipitation totals. Many areas of the Great Plains recorded 50% more than the normal amount of rainfall. This was largely due to thunderstorm activity accompanied by high winds and some hail. Heavy crop damage was reported from the severe weather in many areas and from flooding from the foothills of the Rockies through the Missouri Valley and south to Kansas. At the end of the month severe flooding began in the Red River Valley of the North. During the same period parts of Iowa, Missouri, and Ohio and all of Kentucky and Tennessee were short of rainfall. Throughout the Southwest and areas west of the Rockies little precipitation occurred during the month. Temperatures averaged near normal in most areas with few sustained extremes. Average temperatures ran slightly below normal in the Rockies, the southern Plains, and in the Appalachians.

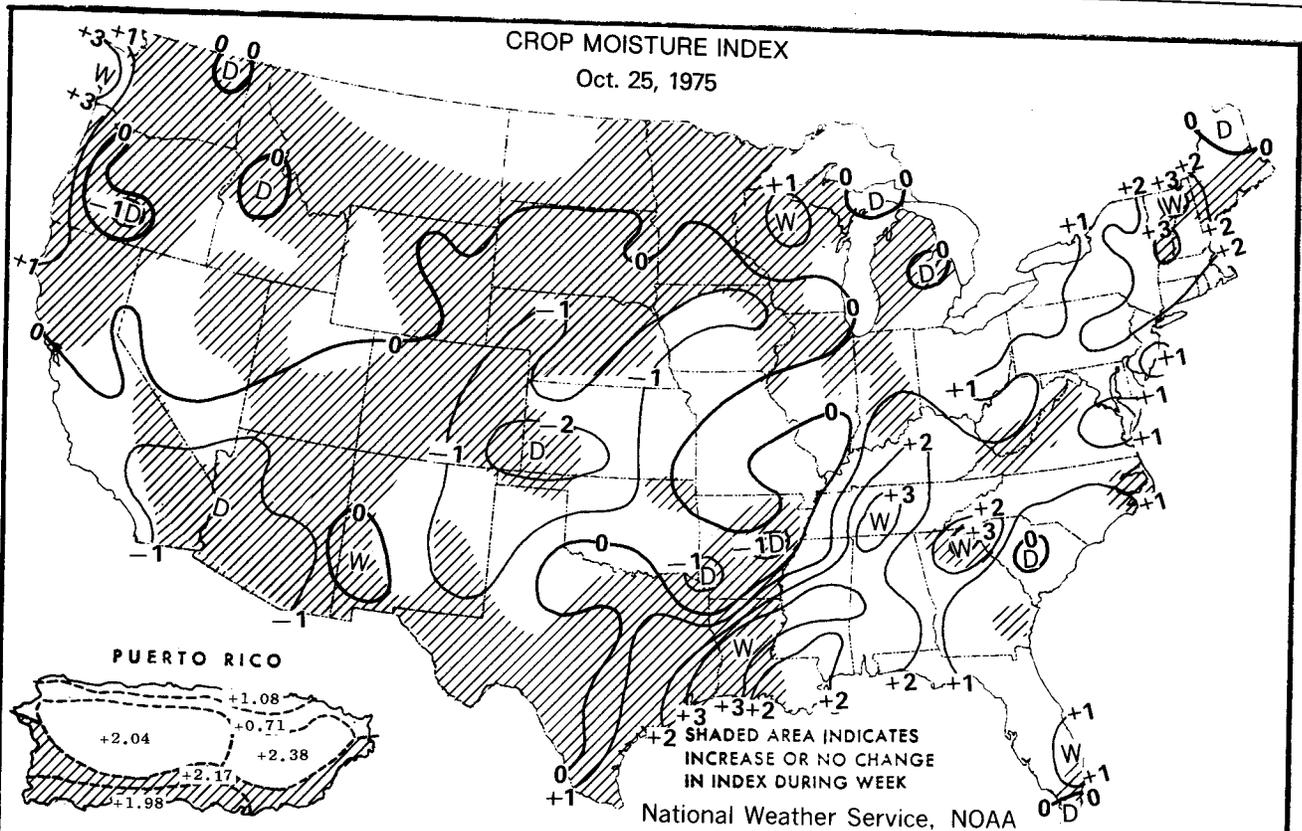
July was a month of extreme dryness or wetness. The central and northern Great Plains and the western Corn Belt were unusually dry and warm. The southern Great Plains, the South, and Atlantic Coast States had well above normal precipitation and below normal temperatures.

Flooding from previous rains continued in the Red River Valley of the North into early July. Damage to sugarbeets and other crops was severe. In contrast, from southern Minnesota southward through Missouri, some records for dryness of 30 to 40 years standing were broken. Des Moines, Iowa recorded only 0.44 inches of rain for the entire month. Wichita, Kans. measured less than a tenth of an inch. Unseasonably warm temperatures in the northern part of this area averaged up to 6 degrees above normal for the month. Dryness and heat caused severe stress to crops in these areas. However, in other areas enough rain at the right time favored crops. Heavy rain with near normal temperatures occurred in the South, East, and west of the Rockies.

Rains in early August broke the dry spell in the Plains but considerable damage had already been done. The dry area shifted to the central and southern Rockies where August precipitation was scarce. The East Coast also experienced a dry spell from Florida to eastern Pennsylvania. The driest portion of this area was in North Carolina where less than 50% of the normal rain fell. Excessive rains continued in Mississippi and southern Alabama and spread to western Tennessee and Kentucky. Temperatures were above normal from the central Plains to the entire eastern United States. The West had below normal temperatures as did the southern and northern plains.

At the end of summer, moisture stress returned to South Dakota, Nebraska, western Kansas, and southwestern Colorado. Despite good rains in early August the Texas panhandle was also beginning to dry out.





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

World Weather and Crop Update

In Australia, abundant rains the last 10 days of October continued to benefit winter cereals and lay the groundwork for a good start on summer crops, but at the same time further lowered sugar content in cane and harassed harvest. Argentina benefitted from some rain in the winter wheat region. Central Brazil received a little rain, although not enough to end the prolonged drought.

General rains on October 23 were needed for fall plantings in northeast China while typhoon Flossie pestered the southeast coast without much apparent effect. A tropical storm brought unseasonably heavy rain to India's Gujarat State and adjacent Pakistan late in the month.

Considerable rain early last week further improved soil moisture in Western Europe although it slowed field activity. Soil moisture greatly improved in the North Caucasus region in October, and much of the USSR's winter wheat area received beneficial late October rainfall.

North America experienced its coldest weather of the season and first widespread snowfall in the Rocky Mountain and western Great Plains regions. Much of the western winter wheat area remained dry, however. Many dry days in the southern United States favored harvests delayed earlier by wet weather. Hurricane Eloise brought rain, death, and destruction to west-central Mexico.



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CROP PROGRESS

SEEDING

Percent of Acreage Seeded
 As of October 26

winter wheat

	AVG.	1975	1976
Colo.	100	3/	3/
Idaho	1/	90	95
Ill.	87	84	93
Ind.	1/	75	85
Kans.	95	95	90
Ky.	58	55	62
Mich.	3/	3/	95
Mont.	100	100	100
Nebr.	100	100	100
Ohio	85	95	90
Okla.	95	95	78
S. Dak.	100	100	100
Tenn.	62	61	59
Texas	93	90	85
U. S.	86	86	82

HARVESTING

Percent of Acreage Harvested
 As of October 26

corn

	AVG.	1974	1975
Ga.	70	65	64
Ill.	35	35	72
Ind.	35	25	45
Iowa	41	38	72
Kans.	50	60	80
Ky.	58	57	57
Mich.	27	17	40
Minn.	55	75	77
Mo.	48	53	78
Nebr.	35	65	80
N. C.	56	81	80
Ohio	50	40	40
S. Dak.	68	84	77
Wis.	33	25	55
U. S.	46	49	68

soybeans

	AVG.	1974	1975
Ala.	25	39	23
Ark.	27	22	36
Ga.	25	21	15
Ill.	82	80	97
Ind.	65	65	85
Iowa	83	87	3/
Ky.	41	41	45
La.	47	65	57
Minn.	85	99	3/
Miss.	32	26	32
Mo.	50	45	70
Nebr.	80	90	3/
N. C.	1/	11	9
Ohio	75	85	85
S. C.	6	9	7
Tenn.	23	19	25
U. S.	57	59	68

cotton

	AVG.	1974	1975
Ala.	37	40	14
Ark.	41	30	47
Ga.	62	50	28
La.	43	47	20
Miss.	49	34	15
Mo.	48	43	72
N. C.	41	30	28
Okla.	8	2	2
S. C.	51	44	41
Tenn.	40	20	33
Texas	27	28	26
11-State	34	30	26

sorghum

	AVG.	1974	1975
Colo.	32	30	62
Kans.	45	25	65
Mo.	53	46	81
Nebr.	55	75	95
Okla.	43	30	59
S. Dak.	75	96	96
Texas	72	62	92
7-State	60	53	84



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