

WEEKLY WEATHER AND CROP BULLETIN

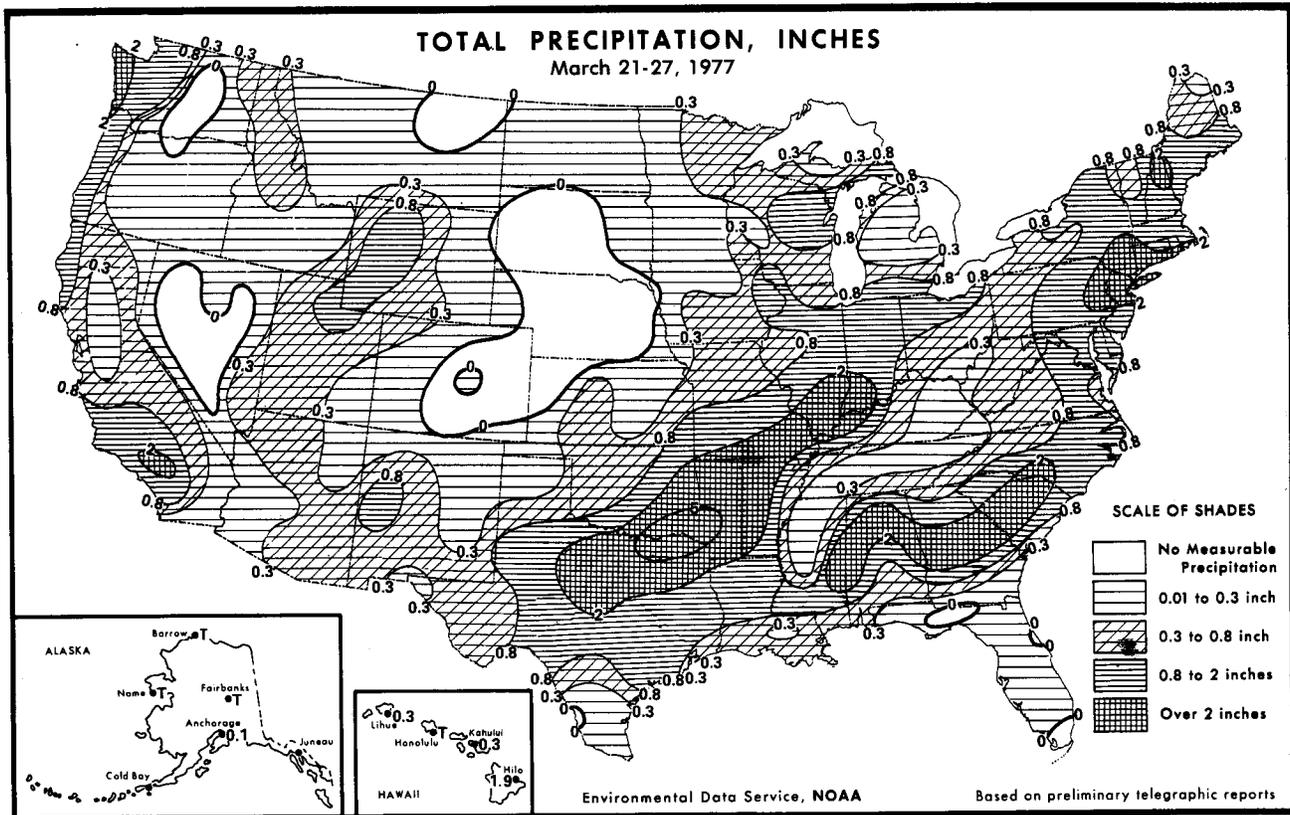
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National Weather Summary

For the Week of March 21 to 27

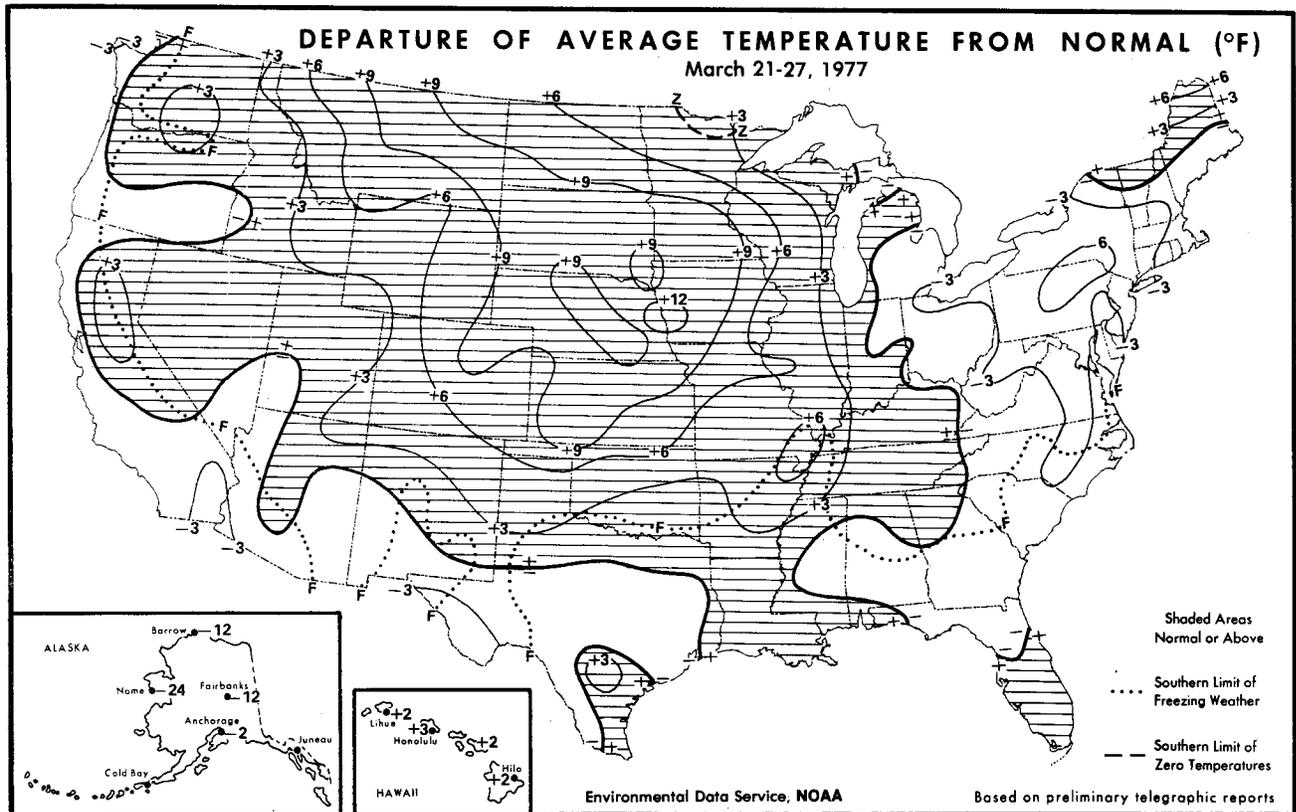
HIGHLIGHTS: As a result of several late winter storms moving from the Pacific Northwest to the lower Plains and then northeastward precipitation was prolific in most areas along this track. Rain-showers extended throughout California with the heaviest amounts falling in the Los Angeles area. Snow fell at higher elevation with most occurring along the crest of the Rockies. Welcome rain was falling in the important winter wheat area of Kansas, Oklahoma and Texas at the end of the period but more is needed. Some frost and freezing temperatures occurred in the East as far south as central South Carolina. The northern Plains was unseasonably warm through the first part of the week but then became more seasonable.

Monday was cold in the northern Plains States. Valentine, Nebr. dropped to a frigid -4° and International Falls, Minn. recorded 2° . Colder air was moving into the upper and middle Mississippi Valley and then eastward. A storm center was located in

Arkansas at mid-day. A mixture of rain and snow stretched from Wisconsin through Iowa into Missouri. The area was moving eastward as the storm tracked northeastward. Before the day was over the precipitation had spread to Ohio, the southern Appalachians and moderate rain was moving into southeastern U.S.

The rapidly moving storm center had moved off the New England Coast by late Tuesday and was deepening. Snow was falling early Tuesday from the eastern Great Lakes region into New England and rain wet the area from southern Pennsylvania across the upper Ohio Valley through the middle Atlantic Coast States, the Carolinas and eastern Georgia. Heavy snow fell from central Pennsylvania northward through New England and the deepening low center was causing high winds in the cool air behind the storm.

Elsewhere light snow fell from the eastern Dakotas to the western Great Lakes region. Rain and showers with snow at higher elevations fell



from Washington to the north coast of California.

On Wednesday the storm off New England was still pouring moderate to heavy snow, high winds and cold weather into the area from New York northward. The strong wind extended into the middle Atlantic States and Appalachians. The unseasonably cold air behind the storm extended far to the south where freezing temperatures were reported in northern Alabama and Georgia.

As one storm moved away in the Northeast another wet weather system was moving through the West. By late Wednesday showers reached from Washington into central California and extended eastward into Idaho, western Montana, northern Nevada and Utah. The storm continued to move south and east.

All that remained of the storm in the Northeast by noon on Thursday was the strong gusty wind and cool weather which extended southward to the middle Appalachians.

In the West, shower activity extended throughout the West Coast States and into the northern Rockies. Heavy snow fell in parts of Utah.

Elsewhere shower activity was increasing in the lower Mississippi Valley as moisture from the Gulf of Mexico began to move inland. Showers and thunderstorms formed in east Texas late Thursday.

The storm in the West intensified and became more complex on Friday. Early in the day showers of rain or snow extended from southern California to Montana and the storm was moving eastward from the central Plateau region. Even though the precipitation areas moved eastward it lingered in southern California where showers were heavy at times. Downtown Los Angeles reported over an inch of rain.

Shower activity became more scattered over east Texas but drizzle was widespread. Frost and freezing temperatures reached into West Virginia, the

middle Atlantic States and southward to the interior of South Carolina. Strong southerly winds across the Plains and Mississippi Valley brought warm weather to the Nation's midsection. Cooler temperatures were recorded in the West behind the storm system.

Some rainshowers lingered in southern California on Saturday morning. Snow was scattered over the mountains from Arizona to the western Dakotas. Showers and thunderstorms developed in parts of the eastern Dakotas in early morning hours and some hail was reported. Showers and occasional thunderstorms spread from Texas to Missouri and the lower Mississippi Valley by midday and became more numerous over all of Texas during the afternoon with the largest number in central Texas. The showers spread to east Kansas, Iowa, Minnesota and Wisconsin and by the end of the day covered most of the Mississippi Valley.

Elsewhere, rain with snow at higher elevations was falling from Washington across northern Idaho and western Montana and a mixture of rain and snow reached into western North Dakota.

The storm system moved into the Plains Sunday and by afternoon a cold front reached from the Great Lakes through Kansas and east Texas. Showers and thunderstorms wet the area from Texas through the central Plains, the lower and middle Mississippi Valley, the Ohio Valley and Great Lakes region. The heaviest rain and most violent weather occurred along a line from central Texas to southern Illinois.

Another major frontal system moved rapidly into and through the Pacific Northwest. Rainshowers with snow in the mountains spread throughout the Northwest and the Rockies. The showers in the Rockies extended from Montana through New Mexico.

National Agricultural Summary

For the Week of March 21 to 27

HIGHLIGHTS: Soil moisture remained relatively short throughout the Nation, except in the North and South Atlantic states. Above normal temperatures and warm winds again dried critical wheat acreage across the Southwest and western Plains. The open weather favored row-crop preparation and plowing was the predominant activity with fertilizing running a close second. Cotton planting made good gains while corn planting was 10 to 20% complete in some areas. Vegetable and fruit growers were especially active over a wider area. Grazing had not improved enough to offset a slight decline in the Nation's cattle condition although most livestock remained fair to good. Livestock producers were busy with the new born with light losses being the rule this spring.

SMALL GRAINS: Winter wheat continued greening, responding to above normal temperatures in winter wheat areas. Winter wheat was in fair to good condition with limited light wind damage occurring in dry, windy areas.

Wheat in Kansas remained in fair condition, responding to warmer temperatures but continuing very dry and suffering light to moderate wind damage in local areas. Oklahoma winter wheat declined slightly because of dry conditions but remained fair. However, greenbugs were becoming prevalent and spraying was common. Greenbugs also were becoming numerous in Texas with spraying active. Wheat was heading out over a large area in Texas. Nebraska wheat was holding its own with little improvement the past week. Wheat condition was poor in Colorado as moisture was short. Wheat showed much improvement in Ohio. Montana winter wheat was fair with some light wind damage. Winter kill in Montana has been light to moderate. Wheat in Washington looked good. In eastern States wheat was fair to good and improving, benefitting from recent wet weather. In Southwest United States wheat remained fair to poor and needed more moisture for good growth. Wheat pasture was limited in the major wheat producing areas and was discontinued in southern areas as wheat reached critical growth stages.

OTHER CROPS: Corn planting in the South continued with good progress reflecting dry, warm weather. In West North Central states planting was beginning. The North Atlantic areas showed some corn planting starting while other areas were near 20% completion. South Central states showed similar progress although Texas plantings were well behind average.

Cotton planting was active in California with some replanting caused by high winds in the desert areas. Cotton planting was active in central and south Texas and 4% complete. Fields in Lower Rio Grande Valley were up to good stands. Early cotton had good stands in Arizona although cool weather slowed late plantings' germination.

Sorghum planting gained in Texas with 38% of the acreage in compared to an average 35%. Stands were good with some greenbugs reported. Sorghum ground preparation was underway in Kansas and Oklahoma and was awaiting plowing completion in many other States.

Rice planting gained momentum in Texas as soils warmed. Planting continued in Louisiana.

Irish potato planting continued strong in most areas except acreage in northern locals which had not yet been plowed. Planting was 45% complete in North Carolina and 68% complete in Mississippi. Potatoes were also being planted in the Hermiston-Boardman area of Oregon.

Sugarcane harvest was being wrapped up in Texas with young cane in good to excellent condition.

Tobacco plant beds were in fair to good condition throughout the South Atlantic States. Plants looked small in South Carolina where transplanting was taking place. Transplanting was 6% complete in Georgia. Growers were preparing beds and stripping last year's crop in Maryland. Bed preparation was taking place in southern Indiana. Both Kentucky and Tennessee tobacco growers were busy with 80% planted in Tennessee.

VEGETABLES: Snap bean and squash harvest showed sharp gains in Florida. Cucumbers, green peppers, potatoes and radishes showed increases. Strawberry harvest was nearing the peak. Watermelon vines were running and blooming. Texas growers were continuing cucumber plantings. Harvest of cabbage, carrots, lettuce, spinach remained active. Tomatoes were blooming in Coastal Bend area and received slight frost damage in East Texas. Planting of cantaloup, honeydews, and melons continued in many areas.

In California artichoke, celery and strawberries were increasing while asparagus and cabbage were light. Planting of processing tomatoes continues. Market tomatoes were through the hot caps. Vegetable activity was on the increase throughout other South Atlantic and South Central States. Lettuce harvest was nearing full volume in central Arizona and looking good in New Mexico.

FRUITS AND NUTS: Orchard work was nearing completion in Maryland with some peach varieties budding. Fruit tree condition was fair to good in Virginia and Georgia with peaches in full bloom in northern Georgia. There was light frost damage to trees in Tennessee. Florida's citrus tree condition was very good with abundant new growth and full open bloom in most areas. The valencia harvest was increasing. Peaches were blooming in Arkansas while some freeze damage was evident to peach blooms in Oklahoma. Arizona grapes and deciduous fruit were making good progress. Arizona grapefruit and valencia harvest was active. California almonds and early area grapes were leafing out. Apples, cherries, peaches, pears, plums and prunes were blooming. Later area grapes and walnut buds swelled. Avocado, grapefruit, lemon and navel orange harvest continued. Orchard growers were busy with spring clean-up in Ohio, Michigan and Washington.

PASTURE AND LIVESTOCK: Pastures throughout the Nation remained generally fair, greening from the warm temperatures but lacking in moisture for good spring growth. Only the South Atlantic and South Central states showed significant pasture improvement. On the average the Nation's livestock was in fair condition. Stock water was very short in Arizona and California. Supplemental feeding was still common throughout much of the country. Lambing and calving were widespread and ahead of normal in many areas because of the open weather. Losses were generally light.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., March 27, 1977

| States and Stations | Temperature °F | | Precipitation Inches | | States and Stations | Temperature °F | | Precipitation Inches | | States and Stations | Temperature °F | | Precipitation Inches | |
|----------------------------|----------------|-----------|----------------------|-----------|----------------------------|----------------|-----------|----------------------|-----------|--------------------------|----------------|-----------|----------------------|-----------|
| | Average | Departure | Total | Departure | | Average | Departure | Total | Departure | | Average | Departure | Total | Departure |
| ALA. Birmingham . . . | 66 | 0 | 1.6 | + .2 | La. Baton Rouge . . . | 63 | + 1 | .3 | - .9 | Youngstown | 35 | - 3 | .3 | - .5 |
| ALA. Mobile | 63 | + 2 | .4 | - 1.2 | LAKE CHARLES | 63 | + 1 | .5 | - .3 | OKLA. Okla. City . . . | 54 | + 3 | .7 | + .2 |
| ALA. Montgomery . . . | 57 | - 2 | .4 | - 1.0 | LAKE CHARLES | 65 | + 3 | .4 | - .8 | Tulsa | 57 | + 6 | 1.8 | + 1.1 |
| ALASKA Anchorage . . . | 24 | - 2 | .1 | 0 | LAKE CHARLES | 59 | + 0 | 1.9 | + .9 | OREG. Astoria | 45 | 0 | 2.2 | + .8 |
| BARROW | -25 | - 12 | T | - .1 | MAINE Caribou | 33 | + 6 | .2 | - .3 | Burns | 38 | 0 | .1 | - .1 |
| Fairbanks | 2 | - 12 | T | - .1 | MD. Baltimore | 34 | - 1 | 1.1 | - .4 | Medford | 45 | - 1 | .3 | 0 |
| Juneau | 2 | - 12 | T | - .1 | MASS. Boston | 40 | - 1 | 1.6 | + .7 | Pendleton | 48 | + 3 | .2 | 0 |
| Kodiak | 1 | - 12 | T | - .1 | CHATHAM | 39 | - 1 | 1.2 | - .2 | Portland | 48 | + 1 | .7 | - .1 |
| NOME | -15 | - 24 | T | - .1 | MICH. Alpena | 31 | + 2 | .3 | - .2 | Salem | 47 | + 1 | .6 | - .3 |
| ARIZ. Flagstaff | 38 | + 2 | .6 | + .2 | DETROIT | 36 | - 1 | .6 | 0 | PA. Allentown | 39 | - 2 | 2.5 | + 1.7 |
| PHOENIX | 63 | + 2 | .2 | + .1 | FLINT | 34 | - 2 | .2 | - .3 | Erie | 33 | - 3 | .4 | - .3 |
| TUCSON | 57 | - 2 | .7 | + .6 | GRAND RAPIDS | 36 | 0 | .2 | - .4 | Harrisburg | 40 | - 4 | 1.5 | + .8 |
| Winslow | 46 | - 1 | .2 | + .1 | Houghton Lake | 31 | + 1 | .1 | - .3 | Philadelphia | 43 | - 2 | 1.9 | + 1.0 |
| Yuma | 62 | - 3 | T | 0 | Lansing | 34 | - 2 | .3 | - .3 | Pittsburgh | 37 | - 4 | .4 | - .4 |
| ARK. Fort Smith | 54 | + 1 | 3.7 | + 2.8 | Marquette | 31 | + 1 | .1 | - .4 | Scranton | 32 | - 6 | 1.4 | + .8 |
| Little Rock | 57 | + 4 | 2.5 | + 1.4 | Muskegon | 38 | + 2 | .2 | - .4 | R.I. Providence | 40 | 0 | 1.7 | + .8 |
| CALIF. Bakersfield . . . | 57 | - 1 | .9 | + .7 | S. Ste. Marie | 26 | - 1 | .9 | + .5 | S.C. Charleston | 57 | - 2 | .5 | - .6 |
| Eureka | 47 | - 2 | 1.6 | + .6 | MINN. Duluth | 30 | + 3 | .6 | + .1 | Columbia | 55 | - 2 | 2.3 | + 1.3 |
| Fresno | 57 | + 2 | .4 | 0 | INTERNATL FALLS | 29 | + 4 | .4 | + .1 | Greenville | 52 | - 1 | 1.7 | + .5 |
| Los Angeles | 58 | - 1 | 1.1 | + .7 | MINNEAPOLIS | 42 | + 10 | .1 | - .3 | S.D. Aberdeen | 41 | + 10 | T | - .3 |
| Red Bluff | 57 | + 3 | .2 | - .3 | ROCHESTER | 42 | + 10 | .6 | + .2 | Huron | 42 | + 9 | T | - .3 |
| San Diego | 58 | - 1 | .3 | - .1 | St. Cloud | 39 | + 9 | .3 | - .1 | Rapid City | 43 | + 9 | 0 | - .3 |
| San Francisco | 52 | - 1 | .3 | - .2 | MISS. Jackson | 59 | + 1 | .3 | - 1.0 | Sioux Falls | 42 | + 8 | T | - .4 |
| Stockton | 57 | + 3 | .1 | - .3 | MO. Columbia | 50 | + 5 | .4 | - .3 | TENN. Chattanooga . . . | 53 | + 1 | .4 | - .8 |
| COLO. Denver | 49 | + 10 | T | - .3 | KANSAS CITY | 51 | + 7 | .5 | - .2 | Knoxville | 58 | + 6 | .2 | - .8 |
| Grand Junction | 47 | + 3 | .3 | + .1 | St. Louis | 50 | + 4 | 1.0 | + .2 | Memphis | 58 | + 4 | .2 | - 1.0 |
| Pueblo | 49 | + 7 | T | - .2 | Springfield | 52 | + 5 | 1.3 | + .6 | Nashville | 52 | + 1 | .1 | - 1.0 |
| CONN. Bridgeport | 37 | - 3 | 4.6 | + 3.8 | MONT. Billings | 43 | + 8 | .3 | 0 | TEX. Abilene | 56 | - 1 | 2.2 | + 1.9 |
| Hartford | 36 | - 3 | 1.5 | + .6 | Glasgow | 37 | + 8 | T | - .1 | Amarillo | 52 | + 4 | .2 | 0 |
| D.C. Washington | 45 | - 3 | .9 | + .1 | Great Falls | 40 | + 8 | .1 | - .1 | Austin | 60 | - 2 | 1.1 | + .7 |
| FLA. Apalachicola | 61 | - 1 | .1 | - 1.0 | Havre | 41 | + 11 | .1 | 0 | Beaumont | 63 | + 1 | .7 | 0 |
| Daytona Beach | 66 | + 1 | T | - .7 | Helena | 39 | + 6 | .1 | - .1 | Brownsville | 71 | + 2 | .1 | 0 |
| Ft. Myers | 70 | 0 | T | - .7 | Kalispell | 39 | + 6 | .1 | - .1 | Corpus Christi | 67 | 0 | .3 | + .1 |
| Jacksonville | 62 | - 1 | .1 | - .7 | Miles City | 43 | + 10 | .2 | + .1 | Dallas | 63 | - 2 | .9 | + .7 |
| Key West | 77 | + 1 | T | - .4 | Missoula | 38 | + 3 | .1 | - .1 | Del Rio | 63 | - 2 | .9 | + .7 |
| Lakeland | 68 | 0 | .2 | - .7 | NEBR. Grand Island . . . | 44 | + 6 | T | - .3 | El Paso | 54 | - 3 | .2 | + .1 |
| Miami | 74 | + 2 | 0 | - .5 | Lincoln | 48 | + 8 | T | - .4 | Fort Worth | 57 | 0 | 4.6 | + 4.0 |
| Orlando | 69 | + 2 | T | - .8 | Norfolk | 46 | + 10 | T | - .4 | Galveston | 62 | - 1 | .3 | - .3 |
| Tallahassee | 61 | - 1 | T | - 1.3 | N. Platte | 46 | + 9 | 0 | - .3 | Houston | 60 | - 3 | .9 | + .3 |
| Tampa | 69 | + 2 | .3 | - .6 | Omaha | 51 | + 13 | .1 | - .3 | Lubbock | 54 | + 3 | .8 | + .6 |
| W. Palm Beach | 73 | + 2 | .2 | - .6 | Valentine | 40 | + 6 | T | - .2 | Midland | 55 | - 2 | .6 | + .5 |
| GA. Atlanta | 54 | + 1 | 1.4 | + .1 | NEV. Ely | 35 | + 1 | .2 | 0 | San Angelo | 58 | - 1 | .9 | + .7 |
| Augusta | 55 | - 2 | 2.5 | + 1.5 | Las Vegas | 56 | - 1 | .3 | + .2 | San Antonio | 67 | + 4 | .6 | + .2 |
| Macon | 57 | - 2 | 2.9 | + 1.8 | RENO | 43 | + 2 | .1 | 0 | Victoria | 66 | + 2 | .8 | + .4 |
| Savannah | 57 | - 3 | .1 | - .9 | WINNEMUCCA | 41 | + 2 | T | - .1 | Waco | 58 | - 1 | 1.8 | + 1.2 |
| HAWAII. Hilo | 73 | + 2 | 1.9 | - 1.1 | N.H. Concord | 32 | - 3 | .9 | + .3 | Wichita Falls | 57 | + 2 | 1.8 | + 1.4 |
| Honolulu | 76 | + 3 | T | - .7 | N.J. Atlantic City | 40 | - 4 | 1.5 | + .5 | UTAH. Blanding | 44 | + 5 | T | - .2 |
| Kahului | 74 | + 2 | .3 | - .3 | Trenton | 41 | - 3 | 2.2 | + 1.3 | Salt Lake City | 45 | + 2 | .9 | + .5 |
| Lihue | 74 | + 2 | .3 | - .7 | N.MEX. Albuquerque . . . | 49 | + 1 | .8 | + .7 | VT. Burlington | 33 | 0 | .4 | - .1 |
| IDAHO. Boise | 42 | - 1 | .1 | - .1 | Roswell | 54 | + 2 | .2 | + .1 | VA. Lynchburg | 46 | - 2 | .7 | - .1 |
| Lewiston | 45 | + 1 | T | - .2 | N.Y. Albany | 33 | - 4 | .9 | + .3 | Norfolk | 48 | - 2 | .6 | - .1 |
| Pocatello | 41 | + 4 | .1 | - .1 | Binghamton | 28 | - 7 | 1.4 | + .7 | Richmond | 47 | - 3 | .8 | 0 |
| ILL. Cairo | 57 | + 6 | 3.8 | + 2.7 | Buffalo | 32 | - 3 | .4 | - .3 | Roanoke | 47 | - 1 | .4 | - .3 |
| Chicago | 42 | + 2 | .6 | - .1 | New York | 40 | - 3 | 3.2 | + 2.3 | WASH. Colville | 40 | + 1 | .3 | + .1 |
| Moline | 43 | + 4 | .8 | + .1 | Rochester | 32 | - 4 | .8 | + .2 | Omak | 42 | + 1 | T | - .2 |
| Peoria | 45 | + 4 | .5 | - .2 | Syracuse | 32 | - 4 | .7 | 0 | Quillayute | 39 | - 3 | 3.4 | + 1.1 |
| Rockford | 41 | + 4 | .6 | - .1 | N.C. Asheville | 48 | 0 | .7 | - .4 | Seattle-Tacoma | 47 | + 2 | .8 | 0 |
| Springfield | 49 | + 6 | .9 | + .2 | Charlotte | 51 | - 2 | 1.2 | + .2 | Spokane | 41 | + 2 | .3 | - .1 |
| IND. Evansville | 50 | + 3 | 2.3 | + 1.2 | Greensboro | 49 | - 1 | .5 | - .3 | Walla Walla | 49 | + 2 | .2 | - .1 |
| Ft. Wayne | 38 | - 2 | 1.0 | + .3 | Hatteras | 52 | 0 | .6 | - .2 | Yakima | 46 | + 3 | T | - .1 |
| Indianapolis | 43 | 0 | 1.4 | + .5 | Raleigh | 48 | - 4 | .8 | 0 | W. Va. Beckley | 41 | - 2 | .6 | - .3 |
| South Bend | 39 | + 1 | 1.9 | + 1.2 | Wilmington | 54 | - 2 | 1.6 | + .7 | Charleston | 44 | - 3 | .3 | - .6 |
| IOWA. Burlington | 45 | + 5 | .6 | - .1 | N. DAK. Bismarck | 37 | + 8 | T | - .2 | Huntington | 47 | 0 | .3 | - .6 |
| Des Moines | 47 | + 10 | .7 | + .1 | Fargo | 35 | + 6 | .1 | - .1 | Parkersburg | 44 | - 2 | .1 | - .8 |
| Dubuque | 42 | + 6 | .8 | 0 | Williston | 37 | + 8 | T | - .2 | WIS. Green Bay | 35 | + 3 | 1.0 | + .6 |
| Sioux City | 46 | + 9 | 0 | - .4 | OHIO. Akron-Canton | 38 | - 1 | .4 | - .4 | La Crosse | 42 | + 7 | .2 | - .3 |
| KANS. Concordia | 51 | + 9 | T | - .4 | Cincinnati | 44 | - 1 | .4 | - .6 | Madison | 39 | + 5 | .5 | 0 |
| Dodge City | 56 | + 12 | .3 | 0 | Cleveland | 35 | - 4 | .8 | + .1 | Milwaukee | 36 | + 1 | .4 | - .2 |
| Goodland | 47 | + 8 | 0 | - .2 | Columbus | 41 | - 1 | .3 | - .5 | WYO. Casper | 40 | + 7 | .1 | - .1 |
| Topeka | 53 | + 9 | T | - .6 | Dayton | 42 | 0 | .5 | - .3 | Cheyenne | 41 | + 8 | .2 | - .1 |
| Wichita | 54 | + 8 | .2 | - .3 | Toledo | 35 | - 4 | 1.1 | + .5 | Lander | 37 | + 3 | 1.3 | + 1.0 |
| N.Y. Lexington | 48 | + 2 | .3 | - .8 | | | | | | Sheridan | 38 | + 5 | .6 | + .3 |
| Louisville | 49 | + 2 | .5 | - .7 | | | | | | P.R. San Juan | 79 | + 2 | 1.1 | + .6 |

Based on 1941-70 normals

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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.

ALABAMA: Heavy rains on 21st. Dry and warm during week. Temperatures 1° above normal. Wet fields limit fieldwork to 3.4 days. Small grains fair to good. Livestock poor to fair. Some corn planted as conditions permitted. Planting Irish potatoes on Sand Mountain and bedding of sweetpotatoes nearing completion.

ARIZONA: Winter storm brought moisture most sections. Snow level 4,000 feet. Mild midweek much colder weekend. Temperatures ranged 3° above normal to 6° below.

Rain limited field activities. Earlier cotton fields good stands. Cool weather slowing germination later plantings. Small grains good progress, some heading. Strong winds, some lodging. Safflower good progress. Tap root development good, sugarbeets. Preparations for planting fall beets. Cutting, baling alfalfa hay increasing. Lettuce harvest nearing full volume central, seasonal volume Yuma. Few mixed vegetables remain. Watermelon, cantaloup planting nearing completion. Thinning active. Grapes, deciduous fruit good progress. Grapefruit, valencia harvest active Yuma, Salt River Valley. Few lemons, kinnow mandarins remain Salt River Valley. Drouthy conditions prevail most central, western areas. Ranges lower and mid-elevation deserts deteriorating. Stock water becoming critically short. Portions higher ranges sufficient moisture. Cattle, calves mostly fair to good condition.

ARKANSAS: Temperatures ranged 2° below normal Hot Springs and Pine Bluff to 4° above normal Batesville. Temperature extremes 78° El Dorado and 23° Gilbert. General precipitation late in week with amounts ranging from trace at Arkansas City to 2.29 in. at Fayetteville.

Wheat and oats for grain good growth. Land preparation all row crop areas. Good pasture growth. Pastures sustaining cattle in extreme south. Some supplemental feeding in central and northern areas of State. Tomato plantings in Monticello area. Peaches continue to bloom.

CALIFORNIA: High pressure off the California coast early in week brought dry weather and above normal temperatures while a cold front moving through the State latter part of week brought small amounts of precipitation and cooler temperatures to most stations. Greatest amounts of precipitation fell over mountain areas and along the northwest coast where amounts of over an inch were recorded. Average temperatures were mostly near normal with only two stations showing over a 3° variation.

Small grain helped by rains but dryland condition still critical. Irrigation continues where water available. Some green chopping oats. Some cut alfalfa damaged by rain. Planting cotton active. Some replanting cotton due winds in desert. Almonds and early area grapes leafing out. Apples, cherries, peaches, pears, plums, prunes blooming. Later area grapes and walnut buds swelling. Avocado, grapefruit, lemon, navel orange harvests continue. Royal mandarin harvest nearly complete. Valencia harvest expected to begin early April. Artichoke, celery, strawberry increasing. Asparagus, cabbage light. Market tomatoes through hot caps. Processing, planting continues. Snow in mountain regions, rain in lower elevations improve conditions. Grass supply improved, stock water supplies far below normal.

Supplemental feeding continues. Cattle condition fair to normal.

COLORADO: Dry mild conditions prevailed. Weak, cold front moved through Saturday. Precipitation scattered mainly confined to mountains. Windy conditions on Friday. Warmest Wednesday through Friday, highs in 60's and 70's. Few 80's reported southeast.

Winter wheat condition poor, soil moisture short, winter barley condition fair to poor. Spring seeding: oats 11% complete, spring barley 14% complete.

FLORIDA: Cold front, 22d, 23d brought a few showers, cooler weather with patchy frost northern portions mornings of 23d, 24th. Rainfall generally less than 0.25 in. for week. Temperatures averaged near to slightly above normal. Moisture adequate south, west, short central, north. Corn planting continues active. Early plantings up, excellent condition. Setting tobacco plants active. Peanut plantings active central areas. Soybean land being prepared for planting. Sugar-cane harvest about complete. Young cane good to excellent condition. Wheat and oats heading. Cool nights, scattered patches of frost slowed grass growth but gradual improvement of grazing conditions continues. Most pastures remain poor to fair. Additional moisture needed soon in many counties for good spring recovery. Cattle, calves continue poor condition.

Citrus tree condition very good. New growth abundant. Full open bloom most areas. Moisture short, irrigation underway. Valencia harvest increasing. Overall vegetable shipments increased. Snap beans, squash harvest showed sharp gains. Other crops showing increased movement included cucumbers, green peppers, potatoes, radishes, cabbage, carrot, escarole-endsive. Tomato shipments declined. Steady supplies celery, strawberries, lettuce. Strawberry harvest nearing peak. Bradford County underway. Good supplies sweet corn, cucumbers, green peppers about April 10. Watermelon vines running, blooming. Harvest expected late April.

GEORGIA: Temperatures near normal. Mild, except cold 23d and 24th with below freezing extreme north. Scattered frost southward into central area. Rainfall mainly on 21st. Amounts averaged 1.50 to 3.00 in. most sections, except less than 0.10 in. along south border and near coast. Warm and dry over weekend.

Soil moisture adequate to excessive except excessive east-central. Fieldwork: 3.0 days suitable. Wet fields delayed preparation and planting northern two-thirds. Pasture fertilization active statewide. Tobacco condition fair, transplanting 6% complete. Corn planting 12% complete, condition fair to good. Watermelons mostly fair to good, 28% planted. Peaches good, spraying active. South and central areas past bloom, north in full bloom. Apples good, spraying active. Wheat fair to mostly good, oats fair to good. Pastures improving, mostly fair to good. Cattle mostly fair to good. Hogs fair to mostly good.

IDAHO: Two significant storms moved across State moderating drought conditions in north Idaho, did little for south. Precipitation totals run 30 to 50% of normal for March. Temperatures averaged

1 to 5° cooler for week.

Planting spring grains southwest underway. Onion planting virtually complete in southwest. Livestock good condition. Lambing and calving progress satisfactory.

ILLINOIS: Temperatures: 2 to 7° above normal, warm period third straight week. Precipitation: near 0.75 in. northern two-thirds, near 3.00 in. south.

Soil moisture mostly short north, mostly short to adequate south prior to weekend rains. Winter wheat, other small grains and legumes mostly fair to good. Some greening. Livestock doing fairly well most areas. Main farmwork, weather permitting: caring for livestock, spreading fertilizer, preparing machinery for spring work.

INDIANA: Snowfall in north on 22d, melted by mid-week. Heavy rains in southwest on weekend of 2.00 to 4.00 in. caused flooding. Precipitation in southeast 1.00 in., central 1.00 to 1.50 in., north 1.00 to 2.00 in. Temperature averaged near normal. Extremes: 19 to 75°.

Fieldwork limited by wet topsoils. Some spreading fertilizer, sowing grass and clover seed. Few fields of oats sown and tobacco beds prepared in south. Farmers getting equipment ready and making other seasonal preparations. Subsoils still dry in some areas.

IOWA: Unseasonably mild with light precipitation over north and west central districts and moderate weekly amounts elsewhere.

Topsoil moisture 48% short, 50% adequate, 2% surplus; subsoil moisture still short. Plowing now 61% complete with 3.0 days suitable for fieldwork. Fertilizer supply mostly adequate. Still some nitrogen shortage. Seed corn adequate but shortage of soybean seed. Lambing, calving, and farrowing in full swing. Minimal loss. Pastures continue greening.

KANSAS: Week ended with beneficial rains eastern two-thirds, amounts ranging 1.00 to 1.50 in. south central to 0.50 and 0.75 in. east and north central. Dry weather continued extreme west, amounts limited to a few hundredths to little over 0.25 in. Temperatures averaged 49° northwest to 56° south central, 6° above normal southeast and 8 to 12° above normal elsewhere.

Wheat conditions unchanged, wind damage only light to moderate. Army cutworms, brown wheat mites, and soil-borne mosaic becoming more apparent in wheat fields. Spring oats and barley seeding almost completed, about 80% seeded, well ahead normal. Livestock generally good condition, some cattle grazing wheat pasture. Principal farm activities included seedbed preparation, fertilizer application, and land tillage to prevent wind erosion.

KENTUCKY: Temperatures averaged a few degrees above normal with readings averaging in low 50's west to mid and upper 40's east. Precipitation averaged around 0.75 in. west with only 0.20 in. east falling as rain first of week and again on Saturday.

Pastures greening but growth still short and livestock grazing heavy. Much spring plowing accomplished for corn and tobacco. Tobacco bed preparation and seeding active. All burley markets closed during week except Lexington.

LOUISIANA: Temperatures normal to 2° below. Extremes: 31 and 84°. Strong cold front accompanied by rain 27th.

Fieldwork: 4.8 days suitable. Main activities: Seedbed preparation, working cattle, planting rice and corn. Rice 15% planted, about same as last year, 10% average. Corn 26% planted, 23% last year. Strawberry harvest started. Sweetpotatoes being bedded. Small grains fair to good condition. Pastures improving slowly. Cattle in mostly fair condition.

MARYLAND & DELAWARE: Temperatures averaged 3 to 4° below normal. Highs in mid 80's, lows in mid and upper 30's. Precipitation averaged 1.00 to 2.00 in. Weekend sunny and warm.

Fieldwork progressing well with farmers preparing for spring planting. Orchard work about complete. Some peach varieties budding. Tobacco growers preparing plantbeds and stripping last year's crop.

MICHIGAN: Temperatures varied from 4° below normal to 2° above normal. Temperatures Upper 60's southern Lower and 50's northern Lower and Upper. Minimum temperatures teens southern Lower to 1° below zero Upper. Precipitation varied from 0.20 in. northwest Upper to 0.80 in. eastern Upper and from 0.10 in. east central Lower to 0.70 in. northwest and southwest Lower. Two in. snow remain portions northern Lower and 6.00 to 12.00 in. portions northern Upper.

Farm activities include making maple sirup, pruning fruit trees, caring for livestock, and early spring chores.

MINNESOTA: Temperatures near normal northeast and 5 to 10° above normal elsewhere. Average temperatures from around 30° in. north and low 40's south. Extremes: 70 and -4°. Precipitation near 0.10 in. extreme southwest and west central; from 0.10 to 0.25 in. south central through north central and 0.25 to 0.60 in. extreme north and east. Precipitation averaged 0.15 to 0.30 in. below normal southwest through north central and southeast and about normal elsewhere. Snow depth trace northeast elsewhere zero.

MISSISSIPPI: Temperatures 2-4° subnormal. Extremes: 24 and 84°. Greatest 24 - hour rainfall 2.21 in. at Meridian on the 22 d.

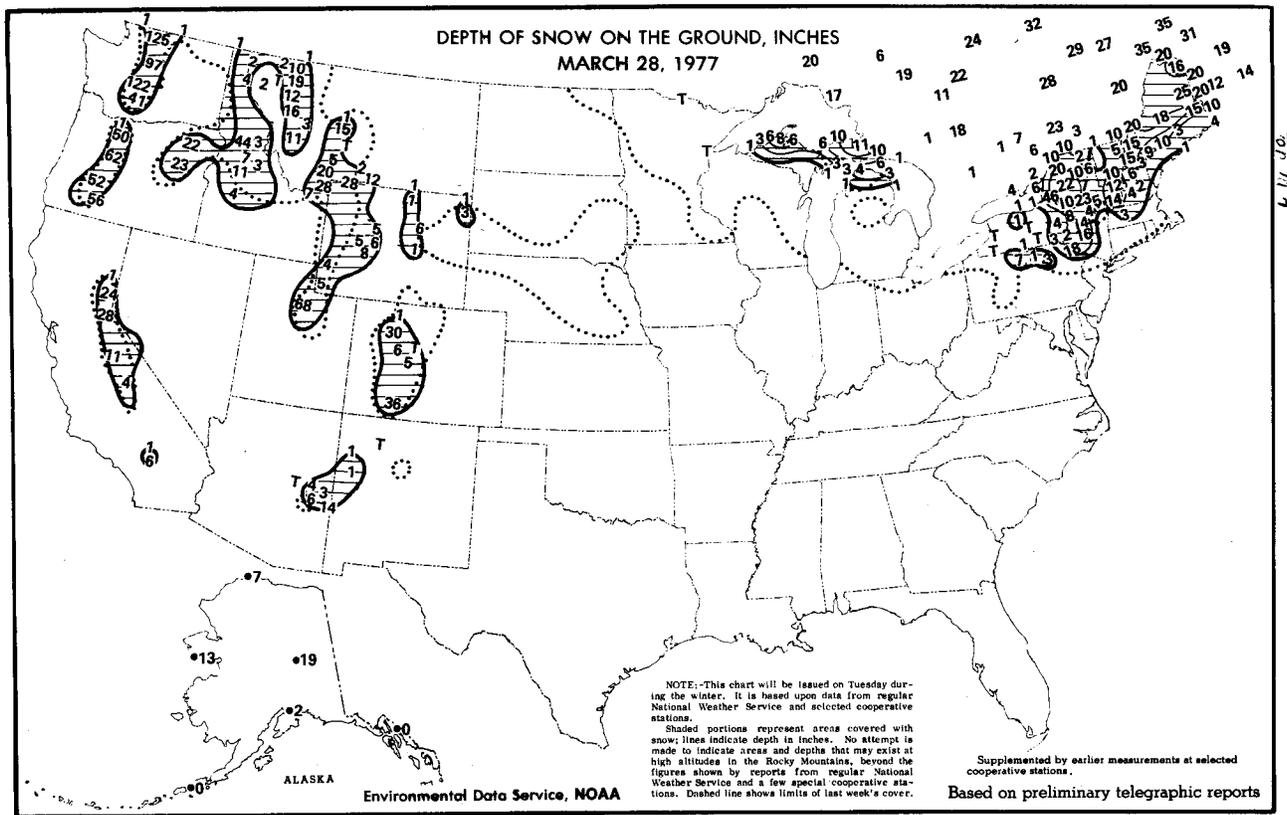
Soil moisture adequate. Fieldwork: 4.1 days suitable. Acreage plowed 55%, 47% 1976, 37% average. Corn 15% planted, 15% 1976. Irish potatoes 68% planted, 85% 1976. Winter wheat 25% jointing, 47% 1976. Oats 27% jointing, 48% 1976. Winter wheat and oats in fair to good condition. Livestock and pastures in fair condition.

MISSOURI: Temperature averages exceeded the normal by 2-4° during the week. Precipitation was light averaging about 0.10 in. over state.

Farming activities: 70% oats sown, plowing 67% complete. Scattered reports of corn planting. Wheat condition: 7% poor, 71% fair, 22% good. Pasture condition: 35% poor, 62% fair, 3% good. Soil moisture supply: 80% short, 20% adequate.

MONTANA: Dry week, temperatures average 5 to 10° above normal. All divisions received below normal precipitation except the southeast and southwest above normal. Frequent windy periods along eastern slopes of Rockies during week. Major Pacific storm crossed the State Sunday, dumping most of week's precipitation.

Winter wheat condition fair, winter kill light to moderate, wind damage mostly light to date. Crop green but not growing. Soil moisture



mostly short. Fieldwork just getting started, most advanced southern portions. Calving 50% done, lambing 40% complete, shearing, 55% done. Calf and lamb losses lighter than normal. Nearly all livestock receiving supplemental feed.

NEBRASKA: Temperatures about 10° above normal. Precipitation generally averaged from 0.30 to 0.50 in. across state except for less than 0.10 in. over Panhandle. South central portion received from 0.50 to 1.50 in. of precipitation.

NEVADA: Warm and dry early, with gusty winds end of week. Temperatures averaged near normal. Extremes: 83 to 10°. Precipitation light most areas. Ten to twenty in. snow higher elevations Sierra Nevadas.

Seedbed preparation curtailed by cold, windy weather. Range grasses mostly dormant. Calving, lambing continues.

NEW ENGLAND: Major winter storm dominated week's weather, arriving Tuesday with heavy rain, heavy snow and gale force winds. By Wednesday southwestern Connecticut had received over 4.00 in. of rain. 1.00 to 2.00 in. of rain was common all coastal areas with addition of 2 to 4 in. of snow. Inland, snow fall of over 6 in. was general. Mountain areas of western and central New England reported over 2 feet of new snow. Only northern boarder areas escaped heavy snow this storm. Gale force winds and snow flurries until Friday. Temperatures averaged near or above normal south and northwest and well above normal northeast.

NEW JERSEY: Temperatures averaged: 1 to 6° below normal. 14 at Newton on 26th and 68° at Seabrook 27th. Weekly rainfall averaged: 2.98

in. north, 1.98 in. central and 1.30 in. south. Heaviest total: 3.51 in. Long Valley 22d, when 2.00 to 3.00 in., rain fell over central and northern counties. Estimated soil moisture, in percent of field capacity, past week averaged: 99% north, 97% central and 96% south. Four inch soil temperature today averaged: 37° north, 44° central and 46° south.

Windy cold weather slowed field activity. Warmer temperatures needed for earlier plantings.

NEW MEXICO: Dry with recurring winds though most of week. Weekend storm brought substantial moisture southern two-thirds with totals to around three-quarters of an in.

Dryland wheat, poor. Irrigated wheat, alfalfa, fair. Irrigated winter barley, lettuce, onions, good. Ranges, poor. Cattle and sheep fair with calving and lambing active.

NEW YORK: Temperatures in mid-20's at higher elevations, upper 30's in Hudson Valley, mid-30's elsewhere. Averages near normal in north, 10° below normal south. Extremes: -7° at Old Forge, 64° at Buffalo. Precipitation ranged up to 1.50 in. except lower Hudson Valley, 2.00 to 3.00 in.

NORTH CAROLINA: Temperatures ranged from upper 20's to mid-70's. Frost low lying areas, no crop damage indicated. Heavy rains, some minor flooding—amounts excess of 1.50 in. 24 hr. period. Fieldwork: 3.0 days suitable. Soil moisture 60% adequate, 40% surplus. Pastures 10% poor, 55% fair, 35% good. Hay and roughage 60% short, 40% adequate. Feed grains 50% short, 50% adequate. Main farm activities: Land preparation: spreading lime and fertilizer; planting potatoes, gardens, and some corn in Coastal Plains counties. Irish potato planting 45% complete, 1976 65%. Small

grains and pastures responding favorably to warmer temperatures.

NORTH DAKOTA: Temperatures ranged from 1 to 4° above normal, except north central which was 1° below normal. Extremes: 3 and 72°. Precipitation below normal except southeast which was 0.02 in. above normal. Snow cover limited to sheltered areas. Cool and scattered showers Saturday with warm, dry weather Sunday.

Limited fieldwork, mostly fertilizer application. Few small fields of early grain seeded. Livestock fair to good condition.

OHIO: Temperatures averaged near or below normal. Mild on 21st, cool middle of week, cold again end of week. Snow north and rain over southern and central parts of State the 22d. Rain late again on 27th with amounts of 0.50 in. or more northwest.

Plowing and seed bed preparation slowed, stopped in many areas due to wet fields. Wheat shows much improvement. Preach trees not yet blooming. Apples bud development near "green tip" stage in some orchards in central Ohio. Setting of cabbage began 3-8th, nearing competition in S.E.

OKLAHOMA: Temperatures averaged from 1° below normal to 7° above normal. Precipitation averaged from 0.30 in. Panhandle to near 5.0 in. east central and southeast. Local flooding occurred south central from localized 7.00 and 8.00 in. rains.

Wheat crop rated fair after week above normal temperatures and drying winds, down slightly week earlier. Greenbug and brown spider mite populations increased and spray programs were active. Nearly one-fourth acreage now jointing, average for date but slightly later than year ago. Both top and subsoils reported dry in all major wheat areas. Showers of generally 0.50 in. or less on weekend will provide relief for short time. Approximately 85% spring oats and barley now up-to-stand, a few days ahead of average. Corn planting in east making slow progress. Plowing and preparing seedbeds for row crops continues but moisture needed. Freeze early in week caused some damage to peach blooms and early gardens, particularly in northeast. Range grasses are slow and in west supplemental feeding will continue two to three weeks. Most cattle off wheat intended for grain, except in northwest. Cattle condition up slightly from week earlier. Most areas report good calf crop.

OREGON: Rain fell intermittently over much of State during week. Coastal areas received from 1.00 to 2.00 in., while western valley averaged about 0.50 in. Rainfall was light in eastern Oregon, with generally 0.25 in. or less. Temperatures were near normal statewide. Range: Low 70's, low 30's west; low 70's, near 0° east.

Soil moisture supply continues to improve. Snowpack below normal. Farm activity light. Fertilizing grain fields continues, liming for red clover and alfalfa. Spring plowing and seeding underway in east. Grain and hay crops reported in good condition. Onions being shipped. Potatoes being planted in Hermiston-Boardman area. Feeding is reported light to heavy. Supplies appear adequate. Livestock in good condition.

PENNSYLVANIA: Coldest week since beginning of March with temperatures averaging 2 to 6° below normal and 5° below previous week. Northwest winds to 40 mph with higher gusts Wednesday through Friday kept temperatures in teens to 40's. Sunny and milder weekend. Temperatures extremes: 70 and

10°. Precipitation beginning of period as rain south and snow north measured from 0.50 in. north central to 2.00 in. southeast with 1.00 to 1.50 in. elsewhere. New snow to 13.00 in. northeast.

Farm activities included stalk chopping, disking, plowing, spreading manure, liming and top dressing plus fence repair.

PUERTO RICO: Dry week. Island average rainfall 0.22 in. or 0.27 in. below normal. Highest weekly total 1.63 in. at San Juan City followed by 1.40 in. at Lares. Highest 24-hour total 1.20 in. at Lares. Temperatures averaged about 77° on coasts and 71° interior divisions with mean station temperatures ranging from 78.5° at San Juan WSFO to 63.6° at Luquillo Mountains. Extremes: 93 and 48°.

Dry weather favored maturity of sugarcane. Drought affecting seriously sugar cane plantings, pastures crops and other vegetables mostly southern and western interior sections. Low yield noted. Coffee trees blooming but rains needed for bean formation. Good weather tobacco harvest and drying in the shed.

SOUTH CAROLINA: Temperatures averaged mostly 1 to 3° below normal. Rainfall above normal, occurred mainly 21st. Light frost many areas 22d.

Tobacco plant beds, moisture in beds fair to good condition. Plants smaller than normal. Tobacco transplanting underway most areas. Corn planting started; watermelon planting slightly ahead last year. About 65% of land prepared for spring planting. Other activities were: Planting snap beans, cucumbers and squash; setting tomatoes; harvesting greens. Watermelons planted: 53%, 1977, 46% 1976. Corn planted: 12%, 1977.

SOUTH DAKOTA: Temperatures above normal third straight week. Extremes: -1 and 79°. Scattered points in north and east received more than 0.10 in. precipitation. Northeast enjoying moisture excess of 2.00 to 4.00 in. since Jan. 1st. Other areas mostly near normal.

Fieldwork picking up in favorable weather. Fertilizing, spring plowing and some seeding main activities. Calving and lambing continuing. Recent moisture has aided stock dam and dugout water levels.

TENNESSEE: Precipitation 0.20 to 0.70 in. Temperatures 4° above normal, extremes: 27° at Bristol and 80° at Jackson.

Fieldwork: 4.3 days. Soil moisture 12% short, 83% adequate, 5% surplus. Pastures, oats, and wheat condition fair. Spring plowing 55% complete. Tobacco seedbeds 80% planted. Cattle fair condition. Light frost damage to fruit trees.

TEXAS: Heavy rains north on 26-27th causing considerable flooding. Normal amounts range from 0.25 in. Panhandle and far west Texas to 1.00 in. east 1/2. Rainfall ranged from 0.10 in. south Texas to 0.50 in. far west, south central and Panhandle to 3.50 in. east and north. Temperatures near normal. Only Trans-Pecos 6° below normal. Normals range from low 50's in Panhandle to upper 60's in south. Soil temperatures still cool for planting cotton except south of San Antonio. Temperatures along upper coast near minimum suggested for rice.

Weekend rains welcome; flooding in north and east. Small grains across State should improve after drink, but more rain would be welcomed on Plains. Wheat on Plains, Edwards Plateau dry at end of week, but rain should offer some relief. Greenbugs continue to buildup on Low Plains and Cross-Timbers: spraying common. Fields central

and east heading out; those in Blacklands entered boot stage. Cotton planting active central and south. Currently 4% complete, behind both average and 1976 rate of 8%. Many fields in Lower Rio Grande Valley up to good stands. Some worms reported in early fields in south Texas and Coastal Bend. Sorghum planting jumped ahead again, now 38% surpassing 35% average. Early stands in eastern 1/2 good, although greenbugs in central and north. Corn planting active, but at 16% progress well 33% average. Fields up to stands as far north as southern Low Plains. Most stands in eastern 1/2. Oats in central, north and east good. Heading widespread. Fields not for harvest providing good grazing. Flax blooming south central. Most fields good. Rice planting gains momentum as the soil along upper Gulf Coast warmed. Progress well behind average. Alfalfa in most areas making excellent growth. Top-dressing active on Plains and Trans-Pecos.

Lower Rio Grande Valley, planting cantaloupe, honeydews continues. Okra planting nearly complete. Cucumber planting near complete. Tomatoes blooming. Laredo, harvest 2d cabbage began. Eagle Pass, cucumber planting began; spinach harvest remains active. San Antonio-Winter Garden area, cucumber planting continues. Watermelon put out runners; replanted fields emerge. Carrot, cabbage harvest going well. Along upper gulf coast, majority of vegetables planted. East Texas, tomatoes received slight frost damage. Sweet-potatoes put in field beds. Central Texas, land preparation, tomato and melon planting remain active. High Plains, potatoes, onions planted. Ranges near normal, although pastures on northern High Plains poor. Weekend rains should improve conditions. Cattle continue to improve; lice building up. Noxious weeds a concern in Trans-Pecos. Lambing active, shearing nearing completion.

UTAH: Recurring periods of light to moderate snow during latter half of period. Accumulated amounts heavy in few localities. Average temperatures for period generally near normal except much above some northern mountain stations. Averages ranged from 3° below normal to 10° above.

VIRGINIA: Temperatures little below normal. Extremes: 77 and 21°. Rainfall moderate to heavy ranging from 0.56 in. to 1.82 in.

Fieldwork: 3.2 days suitable. Topsoil moisture: 6% short, 78% adequate, 16% surplus. Pasture and wheat, fair condition. Barley and oats poor condition. Tobacco plantbeds mostly fair condition. Freeze damage to peaches reported, most severe in southwest. Fruit condition remains fair to good in most areas. Alfalfa condition fair. Feed still short but more forage provided by grazing. Corn planting just beginning. Plowing, liming and fertilizing very active. Seeding clover, grass and oats. Some early vegetables planted. Spraying and pruning fruit trees.

WASHINGTON: West: Temperatures averaged above normal except 1° below normal East Cascade foothills. Precipitation averaged 0.20 in. subnormal except 0.70 in. below coastal area.

Pastures greening but no livestock out yet.

Christmas trees fertilized. No freeze damage showing. Seed fields look good. Caneberries, blueberries starting leaf development. Dormant spray being applied. Strawberry plants being dug. Early radishes emerging. Cabbage fields fertilized. Vegetable growers working fields. Daffodil harvest continues. Logging on upswing.

East: Temperatures averaged near normal except 2° below normal Palouse/Blue Mountains and 1° above Central Basin. Precipitation was 0.10 in. below normal except 0.20 in. subnormal Palouse/Blue Mountains and near normal northeastern area.

Water turned on in some irrigation systems. Pre-irrigation preceding planting. Fields worked, seeded to potatoes, beets, small grains, peas, alfalfa. Orchardists pruning, irrigating, removing brush. Bud development keeping pace with weather. Fall seeded grains look good. Fertilizing and spraying active. Grasses beginning to grow. Livestock on winter feed. Hay carryover above average. Shipments continue. Cattle sales, movement normal.

WEST VIRGINIA: Temperatures averaged little below normal throughout State. Highest reported 69°, lowest 15°. Precipitation averaged below normal except northeast was above normal. Hay supplies: 12% critically short, 63% short, 25% adequate.

Soil moisture 88% adequate, 12% surplus. Fieldwork: 4.6 days suitable with plowing well underway many areas. Field preparation and general farmwork main activities.

WISCONSIN: Cool temperatures in 30's and 40's until 25th. Warming to 50's and 60's 26th-27th, reaching 70° south 27th. Snow extreme south and southeast 21st, with 3.00 in. near Illinois border. Light rain and snow north 22d-23d. More extensive rain system developed late 26th and continued into 28th. Weekly precipitation totals ranged from 0.40 in. to 1.00 in. Temperatures little cooler 27th.

Little snow or frost left in State. Frost depths averaged 3.00 in. as of 25th, decline of 13.00 in. from two weeks earlier. Snow depths averaged less than 0.50 in. comparable to light snow cover late March 1968 and 1973.

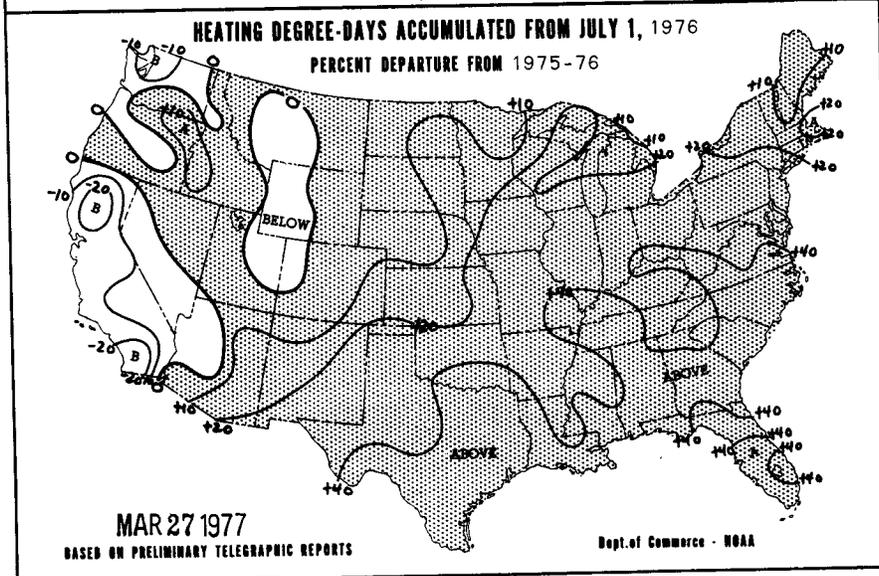
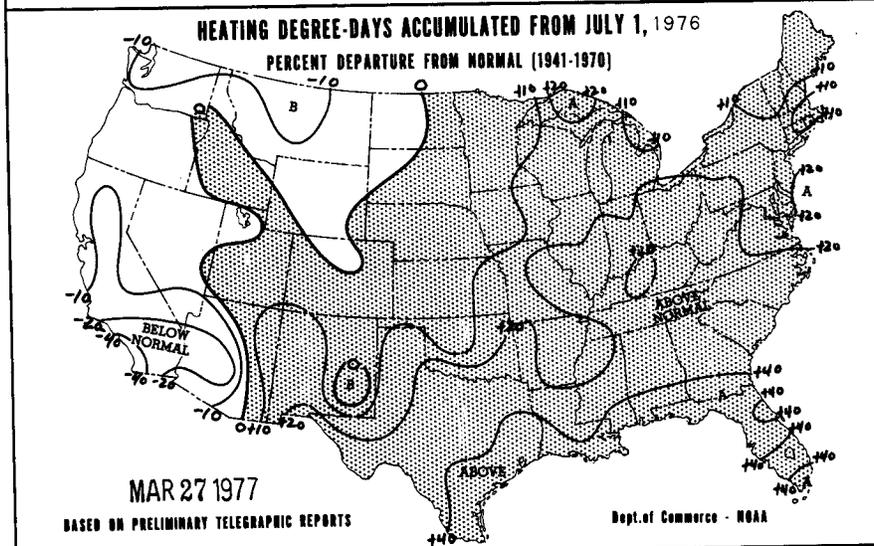
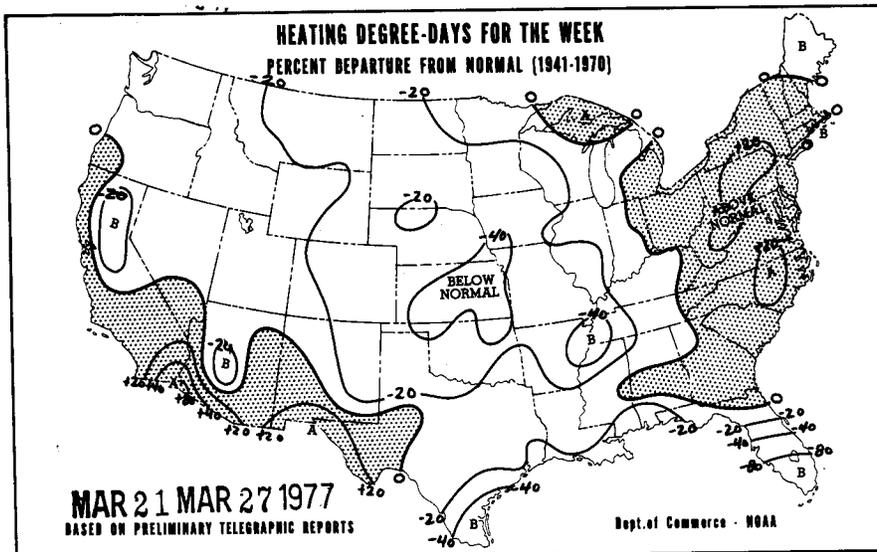
WYOMING: Temperatures above normal. Lower Platte, Upper Platte, Cheyenne and Niobrara drainages all below normal in precipitation while Snake, Big Horn, Belle Fourche, and Wind River drainages mostly above normal. Snow storm of 25th brought up to 18 in. at Buffalo in Little Missouri and Tongue drainage and 4-12 in. from southwest, into north central Wyoming.

Soil moisture short. Topsoil: very short 22%; short 57%; adequate 21%.

Major activities: plowing, fertilizing, seedbed preparations, calving and lambing. Planting progressing: spring wheat 3%; oats 4%; barley 12%. Winter wheat breaking dormancy. Prospects fair. Some isolated wind damage reported, light to moderate. Calving, lambing, and shearing ahead of last year: spring calves born 36%; range ewes lambed 16%; farm flock ewes lambed 60%; range sheep shorn 21%; farm flock sheep shorn 51%.

HEATING DEGREE DAYS (BASE 65°) FOR WEEK ENDING MAR. 27, 1977.

| STATES AND STATIONS | WEEKLY | | | SEASONAL ACCUMULATION + | | | STATES AND STATIONS | WEEKLY | | | SEASONAL ACCUMULATION + | | | STATES AND STATIONS | WEEKLY | | | SEASONAL ACCUMULATION + | | |
|-------------------------|--------|------------|------------------------|-------------------------|------------|------------------------|------------------------|--------|------------|------------------------|-------------------------|--------------------------|---------------------------|---------------------|--------|------------|------------------------|-------------------------|--|--|
| | TOTAL | DEPARTURE* | DEPARTURE FROM 1975-76 | TOTAL | DEPARTURE* | DEPARTURE FROM 1975-76 | | TOTAL | DEPARTURE* | DEPARTURE FROM 1975-76 | TOTAL | DEPARTURE* | DEPARTURE FROM 1975-76 | | TOTAL | DEPARTURE* | DEPARTURE FROM 1975-76 | | | |
| ALA. BIRMINGHAM..... | 1082 | 15 | 34 | 3439 | 76 | 101 | MAINE CARIBOU..... | 219 | 47 | 84 | 69 | YOUNGSTOWN..... | 218 | 32 | 6715 | 1201 | 1629 | | | |
| MOBILE..... | 1082 | 15 | 34 | 3439 | 76 | 101 | PORTLAND..... | 219 | 47 | 84 | 69 | OKLA. OKLAHOMA CITY..... | 77 | 25 | 3737 | 408 | 861 | | | |
| MONTGOMERY..... | 1082 | 15 | 34 | 3439 | 76 | 101 | MD. BALTIMORE..... | 155 | 19 | 4729 | 519 | 1158 | TULSA..... | 425 | 45 | 5848 | 421 | 858 | | |
| ARIZ. FLAGSTAFF..... | 182 | 24 | 5498 | 345 | 23 | 943 | MASS. BOSTON..... | 173 | 3 | 5180 | 385 | 887 | OREG. ASTORIA..... | 37 | 1 | 3716 | 333 | 199 | | |
| PHOENIX..... | 182 | 24 | 5498 | 345 | 23 | 943 | MICH. ALPENA..... | 236 | 2 | 7325 | 291 | 660 | BURNS..... | 37 | 1 | 3716 | 333 | 199 | | |
| TUCSON..... | 182 | 24 | 5498 | 345 | 23 | 943 | DETROIT..... | 209 | 2 | 6459 | 925 | 1261 | MEDFORD..... | 37 | 1 | 3716 | 333 | 199 | | |
| WINSLON..... | 182 | 24 | 5498 | 345 | 23 | 943 | FLINT..... | 209 | 2 | 6459 | 925 | 1261 | PENDLETON..... | 37 | 1 | 3716 | 333 | 199 | | |
| YUMA..... | 182 | 24 | 5498 | 345 | 23 | 943 | GRAND RAPIDS..... | 209 | 2 | 6459 | 925 | 1261 | PORTLAND..... | 37 | 1 | 3716 | 333 | 199 | | |
| ARK. FORT SMITH..... | 74 | 15 | 4018 | 873 | 106 | 4 | HOUGHTON LAKE..... | 209 | 2 | 6459 | 925 | 1261 | SALEM..... | 37 | 1 | 3716 | 333 | 199 | | |
| LITTLE ROCK..... | 74 | 15 | 4018 | 873 | 106 | 4 | HARDETTTE..... | 209 | 2 | 6459 | 925 | 1261 | PA. ALLENTOWN..... | 182 | 14 | 5595 | 519 | 1025 | | |
| CALIF. BAKERSFIELD..... | 156 | 28 | 1711 | 284 | 141 | 141 | MUSKOGEE..... | 209 | 2 | 6459 | 925 | 1261 | ERIE..... | 182 | 14 | 5595 | 519 | 1025 | | |
| EUREKA..... | 156 | 28 | 1711 | 284 | 141 | 141 | S. STE. MARIE..... | 209 | 2 | 6459 | 925 | 1261 | HARRISBURG..... | 182 | 14 | 5595 | 519 | 1025 | | |
| FRESNO..... | 156 | 28 | 1711 | 284 | 141 | 141 | MINN. DULUTH..... | 245 | 1 | 8758 | 611 | 659 | HARRISBURG..... | 182 | 14 | 5595 | 519 | 1025 | | |
| LOS ANGELES..... | 156 | 28 | 1711 | 284 | 141 | 141 | INTERNAT. FALLS..... | 245 | 1 | 8758 | 611 | 659 | HARRISBURG..... | 182 | 14 | 5595 | 519 | 1025 | | |
| RED BLUFF..... | 156 | 28 | 1711 | 284 | 141 | 141 | MINNEAPOLIS..... | 245 | 1 | 8758 | 611 | 659 | HARRISBURG..... | 182 | 14 | 5595 | 519 | 1025 | | |
| SAN DIEGO..... | 156 | 28 | 1711 | 284 | 141 | 141 | ROCHESTER..... | 245 | 1 | 8758 | 611 | 659 | HARRISBURG..... | 182 | 14 | 5595 | 519 | 1025 | | |
| SAN FRANCISCO..... | 156 | 28 | 1711 | 284 | 141 | 141 | ST. CLOUD..... | 245 | 1 | 8758 | 611 | 659 | HARRISBURG..... | 182 | 14 | 5595 | 519 | 1025 | | |
| STOCKTON..... | 156 | 28 | 1711 | 284 | 141 | 141 | MISS. JACKSON..... | 52 | 2 | 2924 | 730 | 927 | R. I. PROVIDENCE..... | 177 | 1 | 5730 | 678 | 932 | | |
| COLO. DENVER..... | 114 | 68 | 4872 | 189 | 162 | 108 | MERIDIAN..... | 52 | 2 | 2924 | 730 | 927 | S. C. CHARLESTON..... | 61 | 7 | 2651 | 604 | 894 | | |
| GRAND JUNCTION..... | 114 | 68 | 4872 | 189 | 162 | 108 | MO. COLUMBIA..... | 106 | 1 | 4594 | 1030 | 1478 | COLUMBIA..... | 72 | 6 | 3083 | 610 | 1040 | | |
| PUEBLO..... | 114 | 68 | 4872 | 189 | 162 | 108 | KANSAS CITY..... | 106 | 1 | 4594 | 1030 | 1478 | GREENVILLE..... | 91 | 6 | 3771 | 822 | 1036 | | |
| CONN. BRIDGEPORT..... | 196 | 24 | 5140 | 516 | 886 | 839 | SPRINGFIELD..... | 106 | 1 | 4594 | 1030 | 1478 | S. DAK. ABERDEEN..... | 166 | 69 | 7559 | 83 | 879 | | |
| HARTFORD..... | 196 | 24 | 5140 | 516 | 886 | 839 | DEL. WILMINGTON..... | 163 | 18 | 4940 | 584 | 1070 | MURON..... | 166 | 69 | 7559 | 83 | 879 | | |
| DEL. WILMINGTON..... | 163 | 18 | 4940 | 584 | 1070 | 839 | D. C. WASHINGTON..... | 137 | 17 | 4255 | 441 | 1200 | RAPID CITY..... | 166 | 69 | 7559 | 83 | 879 | | |
| D. C. WASHINGTON..... | 137 | 17 | 4255 | 441 | 1200 | 839 | FLA. APALACHICOLA..... | 27 | 1 | 1984 | 666 | 655 | SIoux FALLS..... | 166 | 69 | 7559 | 83 | 879 | | |
| FLA. APALACHICOLA..... | 27 | 1 | 1984 | 666 | 655 | 839 | DAYTONA BEACH..... | 27 | 1 | 1984 | 666 | 655 | TENN. CHATTANOOGA..... | 84 | 7 | 4034 | 789 | 859 | | |
| DAYTONA BEACH..... | 27 | 1 | 1984 | 666 | 655 | 839 | FORT MYERS..... | 27 | 1 | 1984 | 666 | 655 | KNOXVILLE..... | 84 | 7 | 4034 | 789 | 859 | | |
| FORT MYERS..... | 27 | 1 | 1984 | 666 | 655 | 839 | JACKSONVILLE..... | 27 | 1 | 1984 | 666 | 655 | MEMPHIS..... | 84 | 7 | 4034 | 789 | 859 | | |
| JACKSONVILLE..... | 27 | 1 | 1984 | 666 | 655 | 839 | KEY WEST..... | 27 | 1 | 1984 | 666 | 655 | NASHVILLE..... | 84 | 7 | 4034 | 789 | 859 | | |
| KEY WEST..... | 27 | 1 | 1984 | 666 | 655 | 839 | LAKELAND..... | 27 | 1 | 1984 | 666 | 655 | TEXAS. ABILENE..... | 64 | 1 | 3119 | 853 | 829 | | |
| LAKELAND..... | 27 | 1 | 1984 | 666 | 655 | 839 | MIAMI..... | 27 | 1 | 1984 | 666 | 655 | AMARILLO..... | 64 | 1 | 3119 | 853 | 829 | | |
| MIAMI..... | 27 | 1 | 1984 | 666 | 655 | 839 | MALDEN..... | 27 | 1 | 1984 | 666 | 655 | AUSTIN..... | 64 | 1 | 3119 | 853 | 829 | | |
| MALDEN..... | 27 | 1 | 1984 | 666 | 655 | 839 | MARLBOROUGH..... | 27 | 1 | 1984 | 666 | 655 | BEAUMONT..... | 64 | 1 | 3119 | 853 | 829 | | |
| MARLBOROUGH..... | 27 | 1 | 1984 | 666 | 655 | 839 | MARTIN..... | 27 | 1 | 1984 | 666 | 655 | BROWNSVILLE..... | 64 | 1 | 3119 | 853 | 829 | | |
| MARTIN..... | 27 | 1 | 1984 | 666 | 655 | 839 | MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | CORPUS CHRISTI..... | 64 | 1 | 3119 | 853 | 829 | | |
| MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | 839 | MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | DEL. RIO..... | 64 | 1 | 3119 | 853 | 829 | | |
| MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | 839 | MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | FORT PASKO..... | 64 | 1 | 3119 | 853 | 829 | | |
| MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | 839 | MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | FORT WORTH..... | 64 | 1 | 3119 | 853 | 829 | | |
| MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | 839 | MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | GALVESTON..... | 64 | 1 | 3119 | 853 | 829 | | |
| MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | 839 | MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | HOUSTON..... | 64 | 1 | 3119 | 853 | 829 | | |
| MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | 839 | MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | LUBBOCK..... | 64 | 1 | 3119 | 853 | 829 | | |
| MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | 839 | MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | MIDLAND..... | 64 | 1 | 3119 | 853 | 829 | | |
| MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | 839 | MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | SAN ANGELO..... | 64 | 1 | 3119 | 853 | 829 | | |
| MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | 839 | MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | SAN ANTONIO..... | 64 | 1 | 3119 | 853 | 829 | | |
| MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | 839 | MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | VICTORIA..... | 64 | 1 | 3119 | 853 | 829 | | |
| MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | 839 | MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | WACO..... | 64 | 1 | 3119 | 853 | 829 | | |
| MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | 839 | MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | WICHITA FALLS..... | 64 | 1 | 3119 | 853 | 829 | | |
| MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | 839 | MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | UTAH. SALT LAKE CITY..... | 142 | 21 | 4985 | 113 | 2 | | |
| MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | 839 | MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | VT. BURLINGTON..... | 228 | 2 | 7253 | 549 | 795 | | |
| MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | 839 | MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | VA. LYNCHBURG..... | 130 | 12 | 4571 | 741 | 1112 | | |
| MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | 839 | MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | NORFOLK..... | 130 | 12 | 4571 | 741 | 1112 | | |
| MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | 839 | MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | RICHMOND..... | 130 | 12 | 4571 | 741 | 1112 | | |
| MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | 839 | MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | ROANOKE..... | 130 | 12 | 4571 | 741 | 1112 | | |
| MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | 839 | MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | WASH. WILLYAVUTE..... | 55 | 11 | 4245 | 313 | 316 | | |
| MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | 839 | MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | SEATTLE-TACOMA..... | 55 | 11 | 4245 | 313 | 316 | | |
| MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | 839 | MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | SPOKANE..... | 55 | 11 | 4245 | 313 | 316 | | |
| MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | 839 | MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | SALLA HALLA..... | 55 | 11 | 4245 | 313 | 316 | | |
| MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | 839 | MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | YAKIMA..... | 55 | 11 | 4245 | 313 | 316 | | |
| MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | 839 | MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | W. VA. BECKLEY..... | 172 | 48 | 5013 | 1047 | 1745 | | |
| MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | 839 | MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | CHARLESTON..... | 172 | 48 | 5013 | 1047 | 1745 | | |
| MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | 839 | MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | HUNTINGTON..... | 172 | 48 | 5013 | 1047 | 1745 | | |
| MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | 839 | MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | PARKERSBURG..... | 172 | 48 | 5013 | 1047 | 1745 | | |
| MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | 839 | MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | WIS. GREEN BAY..... | 209 | 20 | 7881 | 966 | 1265 | | |
| MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | 839 | MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | LACROSSE..... | 209 | 20 | 7881 | 966 | 1265 | | |
| MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | 839 | MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | MADISON..... | 209 | 20 | 7881 | 966 | 1265 | | |
| MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | 839 | MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | OMAHA..... | 209 | 20 | 7881 | 966 | 1265 | | |
| MAYFIELD..... | 27 | 1 | 1984 | 666 | 655 | 839 | MAYFIELD..... | 27 | 1 | 1984 | 66 | | | | | | | | | |





FIRST CLASS MAIL

World Weather and Crop Update

NORTH AMERICA: Heavy precipitation throughout most of the Corn Belt in the United States should help replenish subsoil moisture reserves in this important farming region. Significant precipitation also has fallen in Kansas, Oklahoma and Texas, the heart of U. S. hard winter wheat production that had been adversely affected by a severe drought. Light rains also fell in California, mainly in the south, and along the coasts of Washington and Oregon. Scattered showers fell in the wheat growing region of Washington with Spokane recording 0.34inch for the reporting period.

SOUTH AMERICA: Heavy thunderstorms struck the rich agricultural areas in southern Brazil, Uruguay, and Argentina. Three to four inches of precipitation were recorded in parts of the Brazilian provinces of Sao Paulo, Parana, and all of Rio Grande do Sul. Some damage probably occurred to maturing crops in these areas. Precipitation was less heavy in adjacent areas in Uruguay and Argentina, and the central maize region in Argentina, luckily received only scattered light showers, the heavier amounts--up to an inch--falling to the north and south of it. Heavy showers also fell along the east coast of Brazil relieving the dry spell which had developed in parts of the eastern states.

ASIA: In the People's Republic of China, significant precipitation during the reporting period was confined mainly to an area stretching across mid-section of that country from the Szechwan Basin and southern Shensi province in the west to the east coast. This included the extreme southern portion of the North China Plain, the PRC's main winter wheat belt, but most of that important region was dry during the reporting period. Light, scattered showers fell in Kwangtung province, the PRC's most important rice producing province, but much more water is needed for transplanting the early rice crop. If the dry spell should continue, delayed transplanting of the early crop could impact adversely on the multiple cropping regime in this area. India continued seasonally hot and dry with light showers in Assam in the extreme northeast the only precipitation recorded during the week. Unirrigated crops are under stress over much of that country. In Australia, seasonal tropical activity resulted in heavy rainfall in the northwestern coastal regions. Showers, locally heavy especially along the coast, also fell in southeast Australia in Victoria and in the south-

eastern portion of New South Wales. But Western and South Australia were without significant precipitation. Rainfall was light in Northeastern Australia, a welcome relief from the heavy down-pours of recent weeks in some areas.

AFRICA: Incomplete data for South Africa indicate only light scattered shower activity in general with little precipitation in the principal agricultural areas. In the North Africa, winter grain crops and pastures are suffering from lack of moisture in Algeria and Tunisia where precipitation during the past winter was well below normal.

USSR: Mild temperatures and only light precipitation throughout European USSR continue to favor field work as spring sowing is now well underway in many southern regions. Snow cover has disappeared over most of the important agricultural regions as temperatures have been consistently above normal for the past six weeks. Blossoming of fruit trees is 2-4 weeks earlier than normal in some southern areas. Light precipitation-- 1 to 7 mm --was reported for many areas, but top soil is beginning to dry out in Moldavia and parts of the Ukraine. Significant precipitation, however, was recorded in the eastern Ukraine--8mm at Donetsk--and in the North Caucasus with Rostov and Krasnodar reporting 10 mm and 19 mm, respectively. Above normal temperatures also have been prevailing with daytime readings above freezing throughout the main agricultural regions in Asiatic USSR. Precipitation continues to be very light in Siberia and Kazakhstan.

EUROPE: In Western Europe it was generally wet with light to moderate rainfall in the United Kingdom and the northern portion of the continent. Temperatures, however, dropped to below normal during the past week with light snow reported in some areas of France and Germany. Mediterranean France received some much needed precipitation, and Italy reported variable showers of 1 to 5 mm, heavier in the Po Valley, for the reporting period. It was dry, however, in Spain. Precipitation in Eastern Europe was confined to the northern countries with heavier amounts--up to 11 mm--deposited in East Germany. No significant precipitation was recorded elsewhere in East Europe; Greece and Turkey also were without rain for the period.