

WEEKLY WEATHER AND CROP BULLETIN

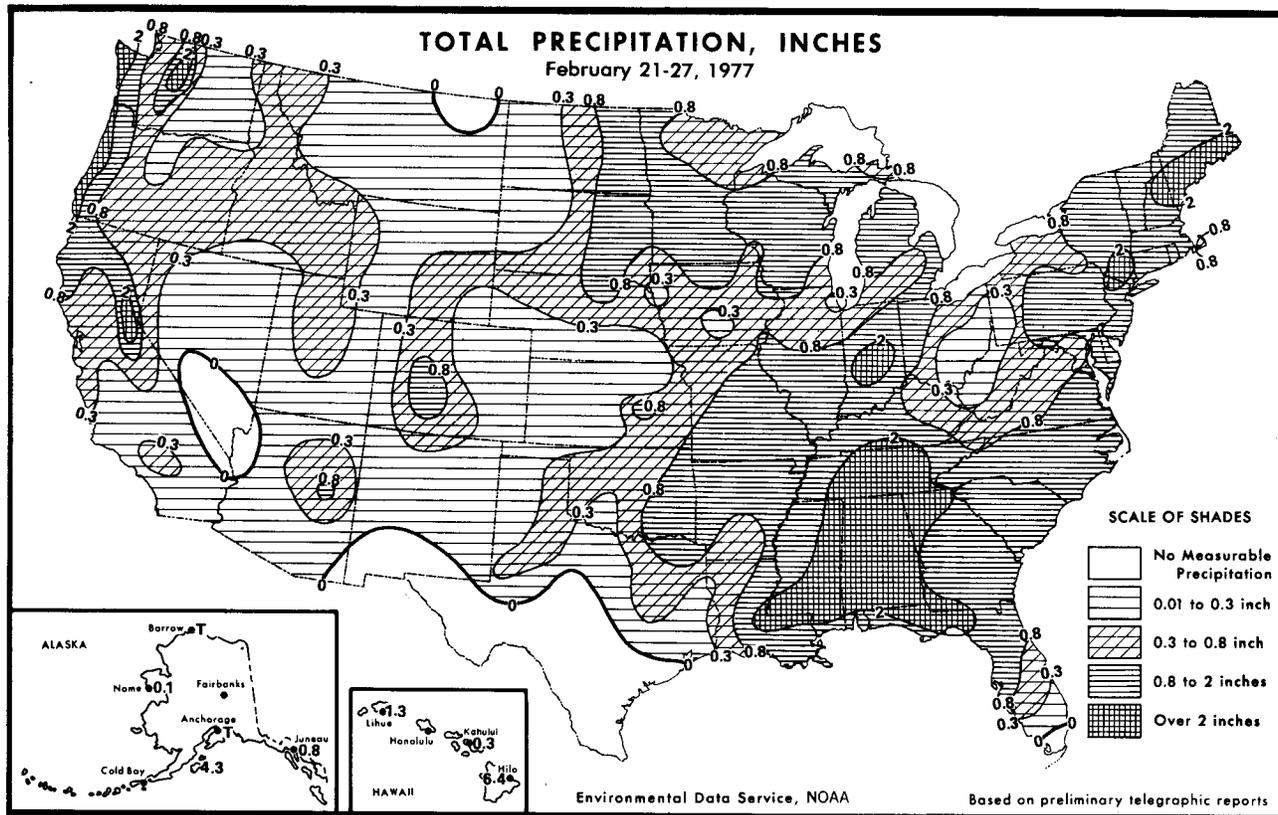
U.S. DEPARTMENT OF COMMERCE
Environmental Data Service, NOAA

U.S. DEPARTMENT OF AGRICULTURE
Statistical Reporting Service

Volume 64, No. 9

Washington, D.C.

Mar. 1, 1977



National Weather Summary

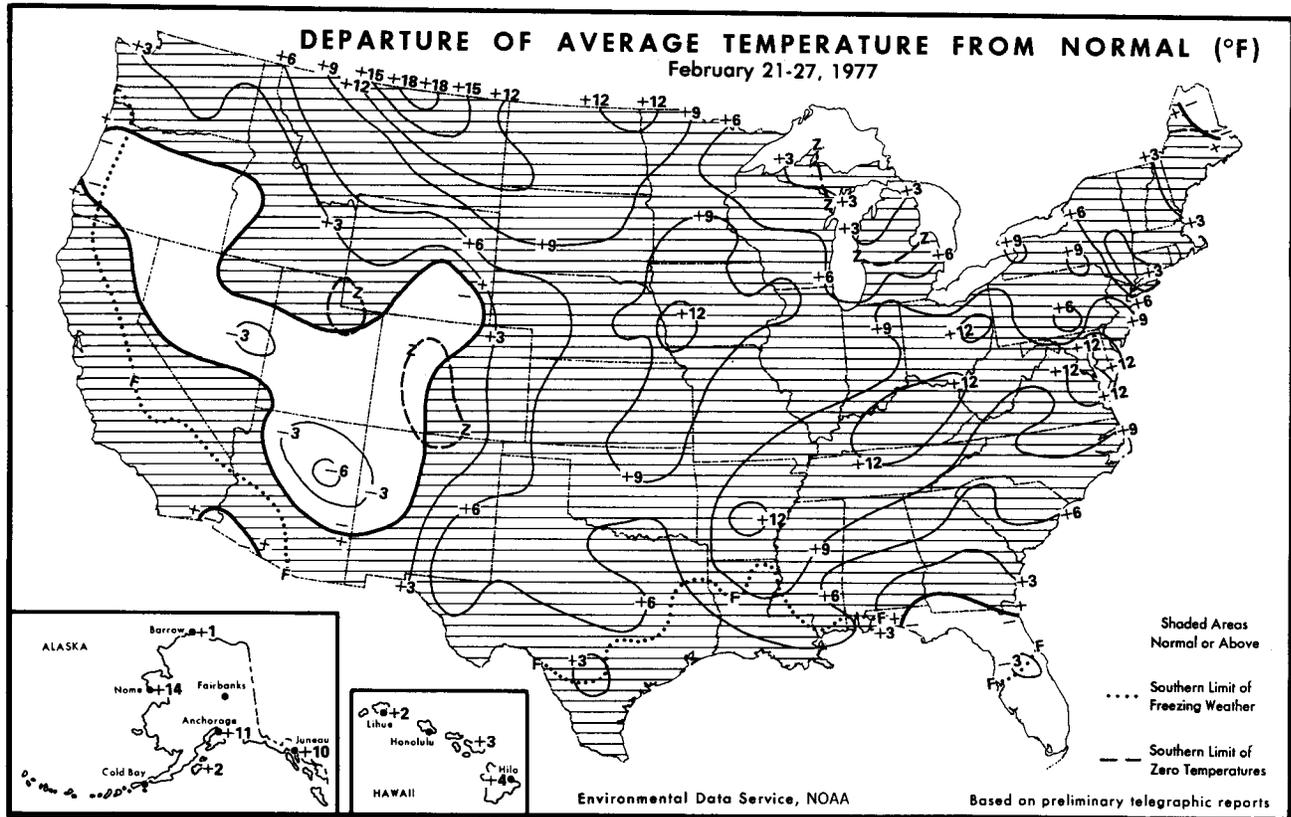
For the week of February 21-27

HIGHLIGHTS: Record-breaking warmth covered many parts of the Nation this past week. The entire Nation east of the Rockies was at least 6° above normal except in the upper Great Lakes, New England and Florida. North Central Montana was 18° warmer than normal. Much needed moisture moved into the Pacific Northwest with amounts of 2.00 to 4.00 in. along the coast and up to 1.00 in. further inland. Heavy rains fell across the Southeast with over three inches in parts of Alabama and Mississippi. Over 1.00 in. fell in the parched eastern Dakotas as a combination of rain, snow and ice. Severe dust storms occurred in the western Plains, with the dust clouds still persisting as they passed off the Atlantic Coast.

The cold air persisted in the eastern third of the Nation Monday. Below zero temperatures were recorded in northern Michigan and readings below freezing reached into northern Florida. Snow gradually diminished in the Northeast after leav-

ing heavy amounts in a band from West Virginia into New England. In the West the rain that started late Sunday continued into Monday and some heavy snow was reported in the mountains of northern California. Rainshowers and occasional thunderstorms were reported from central California and northern Nevada through western Oregon and Washington. High winds accompanied the storm gusts reached 60 mph in some places. Some snow reached into Idaho, Utah and parts of Colorado.

A succession of Pacific frontal systems moved rapidly eastward on Tuesday and continued to bring much needed precipitation to most of western U.S. Rain with snow at higher elevations spread from the West Coast into Colorado and Montana. A low pressure center was deepening in Kansas late in the day. Gusty wind and blowing dust was generated by the deepening low and, by the end of the day, moisture from the Gulf of Mexico was pulled into the system and showers and thunderstorms, some heavy, began from north Texas through eastern



Oklahoma and Kansas and into Nebraska. Rain or snow covered much of the upper Mississippi Valley. The hot weather in the West gave way to milder conditions and very warm weather was noted in central U.S. ahead of the storm. The cold weather in the East moderated to more pleasant conditions.

The intense low pressure system deepened and moved northeastward into Nebraska on Wednesday. A cold front extended southward into the Gulf of Mexico. Along and ahead of the front and east and northeast of the low, showers, thunderstorms and tornadoes broke out while behind the system high winds kicked up dust storms. The dust was carried high in the atmosphere and drifted eastward with the front. Much colder air was drawn into the northern Plains and rain changed to freezing rain and then to snow in the eastern Dakotas, Minnesota and Wisconsin. During the day showers, thunderstorms and tornadoes occurred all the way to Kentucky and Alabama. A frontal system moving onto the West Coast caused showers first in southern California and then in northern California, Oregon and Washington.

The powerful storm system moved from Nebraska to upper Michigan on Thursday. While southeastern U.S. was having problems with severe thunderstorms the north central portion of the Nation was plagued with severe winter weather. Snow, mixed with freezing rain in some areas, was widespread from the northern Plains through the Great Lakes region. Strong winds accompanied the snow and created near blizzard conditions in some areas. Later in the day rain extended south and east of the Great Lakes across the Ohio Valley and to the mid and north

Atlantic Coast States. A developing storm in the Southwest dumped locally heavy amounts of snow on the southern Rockies.

The winter storm moved into New England early Friday as snow across northern New England and rain in south and central areas. Snow was also widespread across North Dakota, Minnesota and the Upper Great Lakes. Heavy snowfall occurred in portions of Colorado and New Mexico during the early morning and spread across the Great Plains during the day.

Unseasonably mild temperatures occurred along the Gulf and Atlantic Coasts during the day. Dust from the storms two days before on the Great Plains reduced visibility two to three miles in the Southeast.

The snow continued in the western Plains early Saturday. Snow also fell from the eastern Dakotas to the upper Great Lakes and reached into the Middle Mississippi Valley during the day. Widespread rain and snow fell across the western portions of Washington and Oregon.

The mild temperatures set many records in the East: Augusta, Ga. 76; Baltimore, Md. 68; Charleston, W.Va. 78, to name just a few.

A large area of rain and snow associated with a strong low pressure system moved northeastward during the day Sunday. Freezing rain fell from central Indiana into southern Michigan with snow to the north. Before the front moved through many record temperatures were set. The warm temperature and rain produced some flooding in New York, Pennsylvania and West Virginia. Welcome moisture again moved into the Pacific Northwest.

National Agricultural Summary

For the Week of February 21-27

HIGHLIGHTS: High winds stirred up dust in parts of the southern Great Plains at midweek but light precipitation helped settle the dust. Soils eroded and some winter wheat was damaged in Kansas, Colorado, Oklahoma and Texas. High temperatures greened wheat fields as far north as Montana. Rains in some areas of the west improved the immediate moisture problem for crops but farmers continued to haul stock water. Most of the United States reported shortages of soil moisture; the exceptions included the Atlantic and Gulf Coast areas and parts of the eastern North Central States. Land preparations began in the southern half of the Nation. Farmers spread fertilizer, disked crop residue, plowed and planted the first fields of cotton and corn. Orchard growers finished pruning deciduous trees in southern fruit producing areas.

SMALL GRAINS: Moderating temperatures throughout most of the Nation's winter wheat producing areas greened the 1977 winter wheat crop. Most areas need more precipitation with the crop coming out of dormancy. High winds whipped dust clouds across the southern Great Plains eroding topsoils and damaging winter wheat in Texas, Kansas, Oklahoma and Colorado. Precipitation in some areas of the Nation brought new snow cover to the crop and in the eastern half of the United States farmers fertilized the winter wheat.

In Kansas strong winds blew away soil and damaged some wheat but fields began greening. Soil moisture supplies were short. In Oklahoma winter wheat was in fair to good condition, growing rapidly in areas with adequate soil moisture. High winds and temperatures depleted topsoil moisture and most areas need precipitation. Heavy dust blanketed Oklahoma on the 23d. Texas wheat fields on the plains were plagued by blowing sand at midweek but weekend snow offered relief from moisture shortages and the dust. Greenbug populations increased and farmers began control measures on the northern Low Plains. In Colorado high winds on the 22d and 23d extensively eroded topsoils and damaged wheat. The crop condition declined. Montana winter wheat was in fair condition and started greening in the south central area. Snow cover gave little protection but wind damage at this time was light. Rains in California helped the small grains. In the eastern North Central States winter wheat began greening and farmers began fertilizing. The crop was in fair condition. In Arizona early fields began heading.

OTHER CROPS: Cotton producers planted some fields in Arizona and Texas. Less than 1% of the crop was planted in the Lower Rio Grande Valley, equalling last year and the average.

Farmers harvested sugarcane in Florida and Texas. Wet fields kept Texas growers from harvesting earlier this year. Arizona sugarbeets grew well.

Tobacco plant bed seeding extended into Virginia. Farmers in South Carolina treated seedbeds. Plants improved in Florida and Georgia. Indiana tobacco growers have some of the 1976 crop to strip. In Kentucky weather was more favorable for stripping tobacco but barley sales were light.

Farmers planted Irish potatoes in Texas, Alabama and Mississippi. Mississippi growers planted 30% of the crop compared with 24% last year. California and Florida growers harvested the winter crop.

Texas producers planted sorghum in the central and south areas, but less than 1% of the crop was planted compared with 6% last year and the average. Less than 1% of the Texas corn crop was planted lagging 3% in 1976 and the 4% average.

FRUITS AND NUTS: Fruit growers pruned trees in Virginia, pruned and set peach trees in South Carolina and pruned trees in Washington and Oregon. California fruit and nut trees in various stages of bloom included almonds, apricots, peaches, plums and nectarines. Citrus growers picked lemons, grapefruits, Navel oranges and tangerines. Arizona citrus growers picked Valencia oranges, grapefruit, tangelos and a few sweet oranges. The tempo of the Texas citrus harvest quickened as groves dried. Growers picked grapefruit and valencias. In Florida all citrus trees showed new growth. The groves need moisture and growers applied irrigation. Early and midseason orange harvest slowed because of limited supplies.

VEGETABLES: South Carolina vegetable growers harvested greens, planted cabbage and prepared land for spring crops. Florida vegetable shipments held steady. Cabbage, the volume leader, gained 29% over the previous week. Celery and potato volume also increased. Growers shipped steady supplies of carrots, escarole-endive but fewer supplies of lettuce, strawberries and tomatoes. Light volumes of cucumbers, eggplant, green peppers and squash moved to market. Cold wind and scattered frost damaged some plantings of snap beans, cucumbers and squash. Higher temperatures later in the week improved vegetable crops. Texas growers picked cabbage, carrots, lettuce, broccoli and spinach. Growers planted cantaloups, watermelons, potatoes, onions, sweet corn, cabbage, peas, turnips, beets and collards. Higher temperatures encouraged growth of onions, peppers, carrots and cabbage. Arizona lettuce producers harvested in the Yuma area and grew good stands in the central area. California growers harvested artichokes, asparagus, broccoli, cabbage, peas, onions, melons and tomatoes.

PASTURES AND LIVESTOCK: Cattle were generally in fair condition but improving. Higher temperatures took the stress off most herds and in some southern areas limited new grazing was available. Some livestock producers put cattle on small grain fields. The more favorable weather also reduced death losses during calving and lambing.

Farmers began fertilizing pastures. Hay supplies were short but pastures started greening. Florida pastures rated poor but scattered showers helped make a noticeable improvement in some areas. Texas ranges responded to higher temperatures but hay supplies were almost depleted and supplemental feeding was necessary. California rains improved range conditions in the northern half of the State but the precipitation was not enough to replenish stock water supplies. Cattlemen thinned herds and gave supplemental feeds to maintain their cattle.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., February 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 . . . | 56 | + 8 | 3.4 | +2.0 | La. Baton Rouge . . . | 61 | + 6 | 1.0 | - .2 | Youngstown . . . | 38 | +10 | .2 | - .4 |
| Mobile . . . | 61 | + 6 | 1.1 | - .2 | Lake Charles . . . | 61 | + 5 | .4 | - .7 | OKLA. Okla. City . . . | 51 | + 8 | .3 | - .1 |
| Montgomery . . . | 55 | + 3 | 2.8 | +1.6 | New Orleans . . . | 62 | + 5 | 1.4 | + .1 | Tulsa . . . | 52 | + 9 | .3 | - .2 |
| ALASKA. Anchorage . . . | 31 | +11 | T | - .2 | Shreveport . . . | 60 | + 8 | .3 | - .6 | OREG. Astoria . . . | 46 | + 2 | 2.0 | + .2 |
| Barrow . . . | -18 | + 1 | T | 0 | MAINE. Caribou . . . | 12 | - 3 | 1.2 | + .7 | Burns . . . | 32 | - 1 | .3 | 0 |
| Fairbanks . . . | 39 | + 10 | -.8 | 0 | Portland . . . | 27 | + 2 | 2.2 | +1.3 | Medford . . . | 43 | 0 | .6 | + .1 |
| Juneau . . . | 33 | + 2 | 4.3 | +3.1 | MD. Baltimore . . . | 49 | +13 | .6 | - .2 | Pendleton . . . | 43 | + 2 | .3 | + .1 |
| Kodiak . . . | 19 | +14 | .1 | - .1 | MASS. Boston . . . | 35 | + 3 | 1.4 | + .5 | Portland . . . | 44 | - 0 | 1.7 | + .8 |
| Nome . . . | 28 | - 3 | .7 | + .3 | Chatham . . . | 36 | -.8 | .6 | -.1 | Salem . . . | 42 | - 2 | 1.9 | + .8 |
| ARIZ. Flagstaff . . . | 59 | + 3 | .1 | - .1 | MICH. Alpena . . . | 24 | + 4 | 1.5 | +1.1 | PA. Allentown . . . | 40 | + 9 | 1.7 | +1.0 |
| Phoenix . . . | 55 | + 0 | T | - .2 | Detroit . . . | 35 | + 7 | 1.3 | + .8 | Erie . . . | 34 | + 7 | .6 | 0 |
| Tucson . . . | 33 | - 8 | .7 | + .6 | Flint . . . | 31 | + 5 | .4 | 0 | Harrisburg . . . | 39 | + 5 | 1.2 | + .5 |
| Winslow . . . | 60 | - 1 | T | - .1 | Grand Rapids . . . | 30 | + 4 | 1.0 | + .6 | Philadelphia . . . | 45 | + 9 | 1.1 | + .4 |
| Yuma . . . | 52 | + 7 | .8 | 0 | Houghton Lake . . . | 24 | + 4 | 1.1 | + .7 | Pittsburgh . . . | 40 | + 9 | .2 | - .4 |
| ARK. Fort Smith . . . | 57 | +12 | .8 | - .3 | Lansing . . . | 32 | + 6 | .4 | 0 | Scranton . . . | 36 | + 7 | 1.2 | + .7 |
| CALIF. Bakersfield . . . | 54 | 0 | .1 | - .1 | Marquette . . . | 23 | + 2 | .8 | + .4 | R.I. Providence . . . | 36 | + 5 | 1.4 | + .5 |
| Eureka . . . | 49 | 0 | .9 | - .3 | Muskegon . . . | 29 | + 3 | .6 | + .2 | S.C. Charleston . . . | 55 | + 3 | 1.1 | + .2 |
| Fresno . . . | 52 | + 1 | .1 | - .3 | S. Ste. Marie . . . | 19 | + 2 | .7 | + .3 | Columbia . . . | 56 | + 7 | 1.2 | + .2 |
| Los Angeles . . . | 59 | 0 | .2 | - .4 | MINN. Duluth . . . | 20 | + 5 | .4 | + .2 | Greenville . . . | 50 | + 4 | 1.6 | + .4 |
| Red Bluff . . . | 51 | 0 | .6 | - .1 | Internat'l Falls . . . | 17 | + 7 | .7 | + .5 | S.D. Aberdeen . . . | 28 | +10 | .9 | + .7 |
| San Diego . . . | 59 | + 2 | .1 | - .3 | Minneapolis . . . | 29 | +10 | .8 | + .5 | Huron . . . | 29 | + 8 | 1.7 | +1.5 |
| San Francisco . . . | 52 | 0 | .6 | - .1 | Rochester . . . | 29 | +10 | .9 | + .7 | Rapid City . . . | 36 | + 9 | .2 | + .1 |
| Stockton . . . | 53 | + 3 | .4 | - .1 | St. Cloud . . . | 24 | + 8 | .9 | + .7 | Sioux Falls . . . | 31 | + 9 | .7 | + .4 |
| COLO. Denver . . . | 36 | + 2 | .1 | - .1 | MISS. Jackson . . . | 60 | + 9 | 1.0 | - .2 | TENN. Chattanooga . . . | 52 | + 8 | 2.6 | +1.3 |
| Grand Junction . . . | 35 | - 1 | .1 | - .1 | Meridian . . . | 56 | + 5 | 3.4 | +2.1 | Knoxville . . . | 55 | +11 | 1.2 | 0 |
| Pueblo . . . | 38 | + 2 | .3 | + .2 | MO. Columbia . . . | 43 | + 7 | 1.1 | + .6 | Memphis . . . | 55 | +10 | 1.2 | 0 |
| CONN. Bridgeport . . . | 34 | + 2 | 1.1 | + .4 | Kansas City . . . | 44 | + 9 | .5 | + .1 | Nashville . . . | 55 | +12 | 2.7 | +1.6 |
| Hartford . . . | 33 | + 4 | 1.9 | +1.1 | St. Louis . . . | 45 | + 8 | 1.8 | +1.2 | TEX. Abilene . . . | 57 | + 7 | T | - .2 |
| D.C. Washington . . . | 51 | +12 | .6 | - .1 | Springfield . . . | 46 | + 7 | .9 | + .3 | Amarillo . . . | 47 | + 6 | .2 | + .1 |
| FLA. Apalachicola . . . | 54 | - 3 | 1.8 | + .8 | MONT. Billings . . . | 36 | + 7 | .1 | - .1 | Austin . . . | 61 | + 6 | T | - .7 |
| Daytona Beach . . . | 59 | - 1 | T | - .6 | Glasgow . . . | 33 | +15 | T | - .1 | Beaumont . . . | 61 | + 5 | T | -1.0 |
| Ft. Myers . . . | 64 | - 2 | T | - .6 | Great Falls . . . | 36 | + 8 | .1 | - .1 | Brownsville . . . | 68 | + 3 | T | - .3 |
| Jacksonville . . . | 57 | 0 | 1.0 | + .1 | Havre . . . | 38 | +18 | .1 | 0 | Corpus Christi . . . | 65 | + 4 | 0 | - .4 |
| Key West . . . | 70 | - 2 | 0 | - .4 | Helena . . . | 33 | + 6 | T | - .1 | Dallas . . . | 53 | + 5 | .1 | - .2 |
| Lakeland . . . | 63 | 0 | 1.9 | +1.2 | Kalispell . . . | 34 | + 7 | .4 | + .2 | Del Rio . . . | 61 | + 3 | 0 | - .2 |
| Miami . . . | 68 | - 1 | 0 | - .5 | Miles City . . . | 36 | +12 | .1 | 0 | El Paso . . . | 50 | 0 | T | - .1 |
| Orlando . . . | 58 | + 4 | .7 | - .1 | Missoula . . . | 33 | + 4 | .1 | 0 | Fort Worth . . . | 56 | + 6 | T | - .6 |
| Tallahassee . . . | 54 | - 2 | 2.1 | + .8 | NEBR. Grand Island . . . | 39 | + 9 | .2 | 0 | Galveston . . . | 61 | + 4 | 0 | - .6 |
| Tampa . . . | 61 | - 2 | 1.5 | + .7 | Lincoln . . . | 38 | + 8 | .1 | - .2 | Houston . . . | 60 | + 3 | T | - .8 |
| W. Palm Beach . . . | 65 | - 2 | T | - .7 | Norfolk . . . | 36 | +10 | .6 | + .4 | Lubbock . . . | 50 | + 6 | .2 | - .2 |
| GA. Atlanta . . . | 51 | + 5 | 1.8 | + .6 | N. Platte . . . | 35 | + 5 | .2 | + .1 | Midland . . . | 55 | + 5 | .1 | - .1 |
| Augusta . . . | 53 | + 3 | 1.8 | + .8 | Omaha . . . | 41 | +13 | .3 | 0 | San Angelo . . . | 57 | + 5 | 0 | - .2 |
| Macon . . . | 55 | + 3 | 1.7 | + .5 | Valentine . . . | 32 | + 6 | .7 | + .6 | San Antonio . . . | 58 | + 2 | T | - .5 |
| Savannah . . . | 57 | + 4 | 1.1 | + .3 | NEV. Ely . . . | 26 | - 3 | .1 | - .1 | Victoria . . . | 62 | + 4 | T | - .6 |
| HAWAII. Hilo . . . | 75 | + 4 | 6.4 | +2.9 | Las Vegas . . . | 52 | + 1 | 0 | - .1 | Waco . . . | 60 | + 7 | T | - .6 |
| Honolulu . . . | 75 | + 3 | .3 | - .3 | Reno . . . | 37 | - 1 | .7 | + .5 | Wichita Falls . . . | 53 | + 5 | .1 | - .2 |
| Kahului . . . | 74 | + 2 | 1.3 | + .3 | Winnemucca . . . | 35 | - 1 | .1 | - .1 | UTAH. Blanding . . . | 33 | - 2 | T | - .2 |
| Lihue . . . | 37 | - 1 | .4 | + .1 | N.H. Concord . . . | 28 | + 3 | 1.3 | + .7 | Salt Lake City . . . | 36 | + 1 | .5 | + .2 |
| IDAHO. Boise . . . | 41 | + 1 | .2 | 0 | N.J. Atlantic City . . . | 44 | + 9 | 1.2 | + .3 | VT. Burlington . . . | 26 | + 5 | 1.1 | + .7 |
| Lewiston . . . | 32 | + 1 | .4 | + .2 | Trenton . . . | 45 | +10 | 1.9 | +1.2 | VA. Lynchburg . . . | 48 | + 8 | .5 | - .3 |
| Pocatello . . . | 49 | + 7 | 1.2 | + .2 | N.MEX. Albuquerque . . . | 41 | - 1 | .1 | 0 | Norfolk . . . | 54 | +11 | 1.4 | + .6 |
| ILL. Cairo . . . | 36 | + 6 | .3 | - .1 | Roswell . . . | 52 | + 7 | .1 | 0 | Richmond . . . | 53 | +12 | 1.2 | + .4 |
| Chicago . . . | 38 | +10 | .4 | 0 | N.Y. Albany . . . | 28 | + 2 | 1.1 | +1.1 | Roanoke . . . | 48 | + 8 | .6 | - .2 |
| Moline . . . | 38 | + 8 | .7 | + .3 | Binghamton . . . | 36 | +12 | .7 | + .1 | WASH. Colville . . . | 36 | + 3 | .1 | - .2 |
| Peoria . . . | 34 | + 8 | .3 | - .1 | Buffalo . . . | 36 | +10 | .3 | - .3 | Omak . . . | 37 | + 4 | T | - .3 |
| Rockford . . . | 40 | + 7 | .8 | + .3 | New York . . . | 40 | + 5 | 1.5 | + .7 | Quillayute . . . | 42 | 0 | 4.1 | +1.3 |
| Springfield . . . | 47 | + 9 | 1.0 | + .1 | Rochester . . . | 32 | + 6 | .3 | - .3 | Seattle-Tacoma . . . | 46 | + 3 | .3 | - .7 |
| IND. Evansville . . . | 38 | + 9 | 1.7 | +1.2 | Syracuse . . . | 32 | + 6 | .9 | + .2 | Spokane . . . | 35 | + 1 | .2 | - .2 |
| Ft. Wayne . . . | 40 | + 7 | 3.0 | +2.4 | N.C. Asheville . . . | 48 | + 7 | .9 | - .1 | Walla Walla . . . | 46 | + 3 | .2 | - .1 |
| Indianapolis . . . | 37 | + 9 | .5 | 0 | Charlotte . . . | 53 | + 8 | 1.2 | + .2 | Yakima . . . | 38 | 0 | .3 | + .2 |
| South Bend . . . | 38 | + 8 | .6 | + .2 | Greensboro . . . | 51 | + 9 | 1.2 | + .3 | W.Va. Beckley . . . | 43 | + 9 | .7 | - .2 |
| IOWA. Burlington . . . | 38 | +11 | .3 | 0 | Hatteras . . . | 55 | + 8 | 1.4 | + .4 | Charleston . . . | 48 | +10 | .1 | - .7 |
| Des Moines . . . | 31 | + 7 | 1.0 | + .6 | Raleigh . . . | 53 | + 9 | 1.8 | +1.0 | Huntington . . . | 50 | +12 | .1 | - .7 |
| Dubuque . . . | 35 | + 9 | .1 | - .2 | Wilmington . . . | 55 | + 6 | 1.7 | + .8 | Parkersburg . . . | 47 | +11 | .2 | - .5 |
| Sioux City . . . | 42 | + 8 | T | - .3 | N.DAK. Bismarck . . . | 27 | +11 | .3 | + .2 | WIS. Green Bay . . . | 26 | + 6 | 1.3 | +1.0 |
| KANS. Concordia . . . | 45 | + 8 | .1 | - .1 | Fargo . . . | 23 | + 9 | 1.2 | +1.1 | La Crosse . . . | 29 | + 6 | .7 | + .4 |
| Dodge City . . . | 38 | + 5 | .1 | 0 | Williston . . . | 28 | +11 | T | - .1 | Madison . . . | 32 | + 9 | 1.3 | +1.0 |
| Goodland . . . | 46 | +10 | .3 | 0 | OHIO. Akron-Canton . . . | 41 | +12 | .3 | - .3 | Milwaukee . . . | 31 | + 6 | .4 | + .1 |
| Topeka . . . | 47 | + 9 | T | - .3 | Cincinnati . . . | 44 | + 9 | .8 | 0 | WYO. Casper . . . | 26 | - 2 | .4 | + .3 |
| Wichita . . . | 50 | +13 | .3 | - .6 | Cleveland . . . | 37 | + 8 | .4 | - .2 | Cheyenne . . . | 29 | - 1 | .7 | + .6 |
| Lexington . . . | 52 | +14 | 1.2 | + .2 | Columbus . . . | 41 | + 9 | .1 | - .5 | Lander . . . | 30 | + 3 | .1 | - .1 |
| Louisville . . . | 52 | +14 | 1.2 | + .2 | Dayton . . . | 40 | + 8 | .9 | + .3 | Sheridan . . . | 33 | + 6 | .1 | - .1 |
| | | | | | Toledo . . . | 35 | + 6 | 1.3 | + .8 | P.R. San Juan . . . | 78 | + 2 | .2 | - .3 |

Based on 1941-70 normals

Publication of the Weekly Weather and Crop Bulletin began in 1892 as the Weekly Weather Chronicle. It is now issued under general authority of the Act of January 12, 1895 (44USC 213), 53 Cong., 3d Session. Contents of the Bulletin may be reprinted freely, with proper credit. Standard copy for the Bulletin is prepared by R.E. Felch, L.M. Denny, and O.W. Byrd, National Weather Service, NOAA; H.J. Delong, Statistical Reporting Service, USDA. Yearly subscription rate: \$5.00 domestic and \$11.25 foreign airmail. Order from the Agricultural Weather Support Service, South Building Mail Unit, Room 1248, USDA, Washington, D.C. 20250. Make checks payable to Department of Commerce, NOAA.

State Summaries of Weather and Agriculture

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

ALABAMA: Preview of spring then return to winter. Welcome rains and warm but temperatures dropped sharply on 27th. Temperatures averaged 6° above normal. Moderate to heavy rains on 23d and 26th.

Fieldwork possible 21st through 23d. Plowing, fertilizing, and feeding major activities. Small grains made limited growth. Irish potato planting continues. Livestock remain poor to fair condition. Hay supplies short.

ARIZONA: Cooler, scattered precipitation early, more general precipitation later in week. Amounts averaged 0.50 to 0.70 in. in central mountains. Trace in northwest, southern deserts. Temperatures near normal.

Land preparations cotton final stages. Limited planting underway. Early planted small grains heading. Sugarbeets excellent growth. First cutting alfalfa hay underway. Lettuce harvest steady progress. Melon preparation, planting well advanced. Valencia orange harvest underway, Yuma. Harvest grapefruit, valencias, tangelos, few sweet oranges active Salt River Valley. Soil moisture, stock water very short, desert ranges. Supplemental feeding required some areas.

ARKANSAS: Mild with warm days and cold nights. Temperatures 5 to 11° above normal. Extremes: 88 and 15°. Generally light rainfall with greatest amount of 2.47 in.

Rain limited fieldwork. Some stalk destruction and disking. Very little plowing accomplished to date. Cattle on full feed. Livestock producers buying hay. Nitrogen topdress on fescue and rye grass pastures. Some growth on fescue and rye grass pastures.

CALIFORNIA: Some precipitation in all parts. Over 1.00 in. along the north coast and over 3.00 in. at some mountain locations in the north. Temperatures averaged from near normal in the north to 7° above in the south-east interior.

Small grains generally benefited from recent rains. More rain needed. Alfalfa being irrigated. Cotton and sugarbeet ground being prepared. Almond, apricot, avocado, peaches, plums, and nectarines are in various stages of bloom. Avocado, lemon, grapefruit, navel orange, and tangerine harvest continues. Planting of asparagus, peas, onions, melons, tomatoes continues. Harvesting of artichokes, asparagus, broccoli, cabbage, lettuce, winter potatoes, strawberries, and other miscellaneous vegetables active. Recent rains improved range conditions northern half. Rains not enough to improve stock water supplies. Herd thinning, supplemental feeding continues. Lambing, calving continue.

COLORADO: Heavy snow mountains 22d, 24th and 25th, 24 to 48 in., 4 to 15 in. 24th and 25th in San Luis Valley and into southeast. Northeast, little or no precipitation. Northwesterly winds, gusting 50 to 100 mph caused dust storms. Temperatures well above normal beginning of week, with strong cooling east portion end of week.

Crop conditions continue decline. Precipitation below normal, putting stress on dryland crops and reducing irrigation water prospects. High winds on 22d and 23d caused extensive erosion of topsoil and some damage to wheat. Spring fieldwork underway. Livestock good condition, calving and lambing underway. Hay supplies below average. Early spring and summer grazing prospects poor.

FLORIDA: Frost in most agricultural areas, 22d, with fair and warm weather, until a cold front again reduced readings on 27th. Rains averaged 1.00 to 2.00 in. across most of central, north less than 0.10 in. south. Temperatures near to slightly above normal.

Soil moisture adequate central, most of Panhandle, excessive northeast, becoming short south central, southern areas. Land preparation continues, early corn being planted. Sugarcane harvest active, more than 75% complete. Small grains improving, applying top-dressing. Tobacco plant beds improving. Scattered showers beneficial pastures but overall condition very poor. Pastures made noticeable improvements central, south while small grains, other forage crops Panhandle, north recovering slowly. Heavy supplemental feeding of livestock. Overall, cattle, calves poor condition. All citrus trees showing new growth. Rain needed, irrigation being applied. Early and midseason orange harvest slowing due to limited supplies. Vegetable shipments held steady. Volume leader, cabbage, showed 29% increase. Celery, potatoes also showed volume increase. Steady supplies carrots, escarole-ende. Shipments lettuce, strawberries, tomatoes decreased. Light volume cucumbers, eggplant, green peppers, squash continues. Cold winds, scattered frost during early week caused some damage, plant loss to snap beans, cucumbers, squash. Warmer weather latter part of week beneficial.

GEORGIA: Temperature 1 to 3° above normal except 1 to 2° below normal extreme south. Precipitation 1.25 in.

Soil moisture adequate. Land preparation for spring planting well underway. Some corn planted southwest. Small grain, pasture, and cattle fair condition. Tobacco plants fair condition.

HAWAII: Weather variable and windy. Water-shed Maui and Waimea, Hawaii received sufficient rains to replenish reservoirs. Good rains eased drought Kau area Hawaii. Reservoir water level to irrigate sugarcane low on west Kauai and Oahu.

Vegetable and banana supplies adequate. Sugar and pineapple harvesting light. Pasture improving on all Islands, however heavy supplemental feeding Kau and Kona continues.

IDAHO: Temperatures ranged from 70 to 2°. Temperature departure 4° above normal. Precipitation ranged from 0.10 to 0.30 in. north and 0.15 in. to near normal southwest, with amounts from near normal to 0.20 in. above, south central and southeast.

Main farm activities: feeding and machinery repairs. Some moisture but still very dry. Cattle and sheep good condition. Calving and lambing active.

ILLINOIS: Temperatures 7 to 10° above normal. Precipitation 0.33 in. northern areas, 1.33 in. some extreme southern areas.

Soil moisture mostly short. Winter wheat and other small grains mostly fair. Legumes and livestock mostly fair to good condition. Main farmwork: Caring for livestock, machinery repair, fertilizing wheat, some clover sowing.

INDIANA: Warm with weekend precipitation. Temperatures ranged from 20 to 75°, and averaged 8° above normal. Snow and ice storm in west central weekend. Ice 0.25 to 0.50 in. Precipitation 0.50 to 1.00 in. south, 1.50 to 2.50 in. central, 0.30 to 0.50 in. north. Snow cover few

inches central and north. Soils frozen central and north.

Thawing soils permitted some moisture penetration. Fields mostly too soft to support equipment limiting the spreading of fertilizer, lime and manure. Wheat showing first signs of greening up. Preparations for 1977 crop season underway. Still some tobacco to be stripped. Major activity: Caring for livestock and chores.

IOWA: Warm with midweek rainfalls. Above normal precipitation north and east and near normal elsewhere. Warmer than normal temperatures varied from 6 to 8° above northeast to around 12° above southwest. Temperature to 70° on the 21st and 22d.

Precipitation eased topsoil moisture shortage slightly. Farm activity increased with above normal temperatures. Hay and roughage supplies mostly adequate.

KANSAS: Temperatures 7 to 11° above normal with 40° northwest and 44 to 46° east and south. Precipitation spotty and mostly light except for 0.25 to over 0.50 in. south and east central. High winds 23d reached from 45 to over 70 mph west and produced serious blowing dust storm southwest and extreme west.

Strong winds caused soil erosion and some damage to wheat. Fields greening. Moisture supplies short. Livestock not greatly affected by winds and dust storms. Pasture and range forage generally short with cattle on lower quality roughage and milo stubble fields.

KENTUCKY: Temperatures near normal averaging in upper 40's to low 50's. Precipitation ranged from 0.50 in. to over 2.00 in. with major precipitation falling 23d.

Farm activities: Care and feeding of livestock. Heavy feeding necessary but some light grazing resumed since snow melt and ground thawing. Some plowing in preparation of spring seeded crops. Weather more favorable for tobacco stripping. Burley sales light.

LOUISIANA: Temperatures 3 to 7° above normal. Extremes: 88 and 28°. Thundershowers with cold fronts on 22d, 23d and 25th, heaviest east.

Land preparation good progress most areas. Other farm activity routine chores and equipment repair. Native pastures starting to green, supplemental feeding general.

MARYLAND & DELAWARE: Temperatures 4 to 6° above normal. Highs 50's, lows in 30's. Precipitation less than 1.00 in. except on Eastern Shore where totals were slightly over 1.00 in.

Warm, sunny weather enabled farmers to start outside work. Some field preparation started.

MICHIGAN: Temperatures 2° above normal Upper Peninsula and northwest Lower Peninsula to 9° above normal over southeast Lower Peninsula. Precipitation 1.00 to 1.50 in. eastern Upper Peninsula and northeast and extreme southeast Lower Peninsula. Elsewhere amounts ranged from 0.40 to 1.00 in.

Necessary farm chores and feeding livestock main farm activities.

MINNESOTA: Temperatures 7 to 10° above normal except 5° above northeast. Extremes: 64 and -2°. Precipitation averaged over 1.00 in. above normal northwest and west central to 0.40 to 0.60 in. above extreme south and 0.20 to 0.50 in. above northeast and north central, 0.75 to 1.20 in. west and south to 0.35 to 0.60 in. northeast and north central. Snow on ground 6 to 12 in. north half to none or traces extreme south.

MISSISSIPPI: Temperatures near normal. Extremes: 14 and 85°.

Soil moisture adequate. Fieldwork: 3.3 days suitable. Acreage plowed 34%, 24% 1976, 19% average. Irish potatoes 30% planted, 24% 1976. Winter wheat and oats in mostly poor condition. Livestock in poor to fair condition.

MISSOURI: Temperatures 6° above normal in the east Ozarks and Bootheel and 8 to 9° above normal elsewhere. Precipitation ranged from 0.50 in. northwest prairie to 1.15 in. east Ozarks.

Farming activities general livestock care.

MONTANA: Warm temperatures 2 to 18° above normal. Cooler trend began about midweek. Frequent light snow showers south, central and west. Precipitation generally below normal except for spotty, above normal amounts in the southeast, central and west.

Winter wheat condition fair. Starting to green south central. Wind damage to date light, snow cover protection poor. Calving and lambing continues with losses mostly lighter than average. Shearing about 10% done, winter ranges fair condition, grazing generally open.

NEBRASKA: Precipitation general over north central averaging near 0.33 in. Precipitation fell off to trace amounts southeast and southwest. Strong winds midweek caused wind erosion over central and west.

NEVADA: Rain and snow all areas except extreme south early week. Weaker front later brought only light precipitation. Fair weather end of period. Temperatures 1 to 2° below normal. Extremes: 83 and -9°.

Winter grains fair. Calving and lambing gaining momentum.

NEW ENGLAND: Temperatures near to 10° above normal. Storm brought 2 to 8 in. snow, followed by another bringing over 1.00 in. rain to south and coastal sections. Elsewhere mixture of snow, freezing rain, sleet and rain fell with a liquid content of 0.50 to 1.00 in. Snow flurries following storm brought up to 6 in. snow to much of north.

NEW JERSEY: Temperatures 4 to 7° above normal averaging 37° north, 43° south and 44° coastal areas. Extremes: -1 and 69°. Precipitation above normal, averaging 2.17 in. north, 1.62 in. south and 1.47 in. coastal sections.

Farmers caring for livestock, repairing machinery and making spring plans.

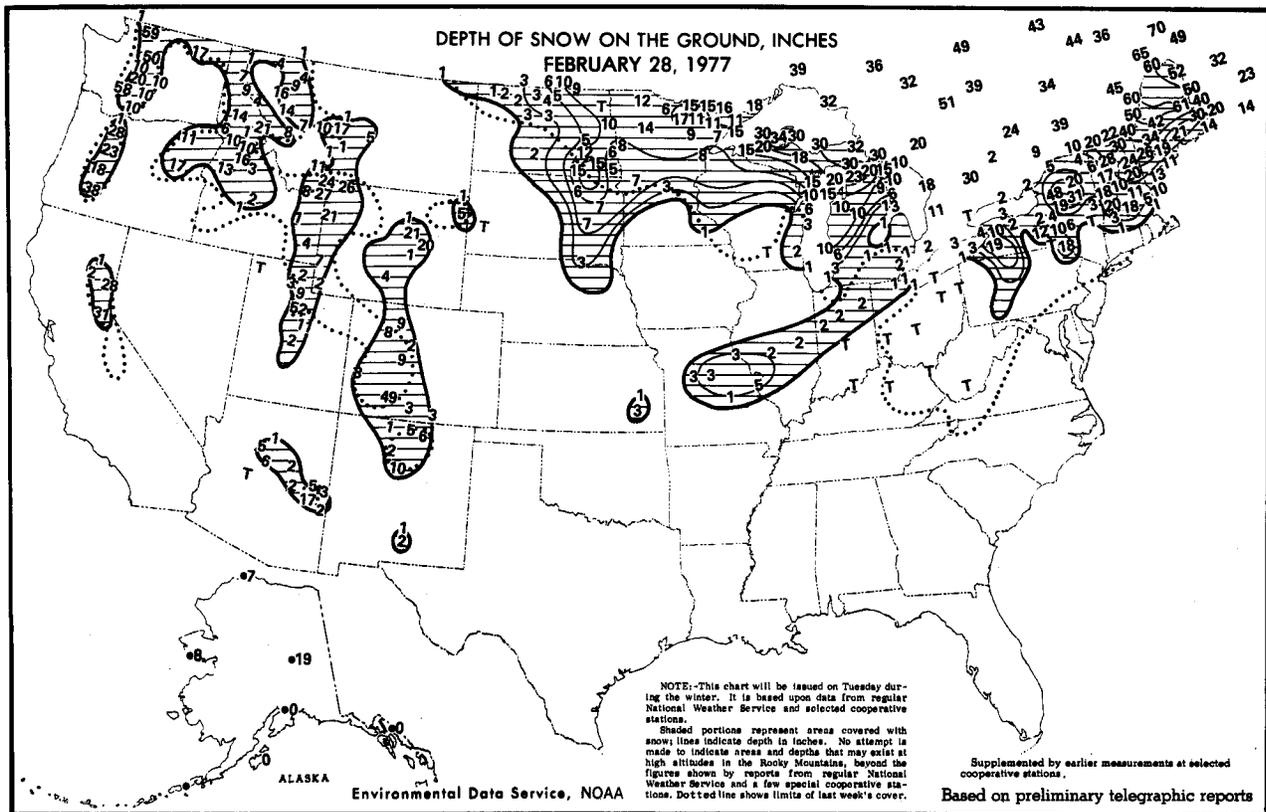
NEW MEXICO: Violent damaging winds 22d except northwest. Considerable soil erosion probably took place eastern plains.

Soil moisture very short northeast, short elsewhere. Ranges poor north, fair south. Livestock fair. Calving, lambing, shearing continued. Land preparation, small grain irrigation continued but hampered by high winds. Dryland wheat poor, irrigated wheat and barley fair. Durum wheat fair.

NEW YORK: Low 20's in Adirondacks, 20's and 30's elsewhere. Moderating temperatures 2 to 9° above normal. Extremes: -10 and 57°. Precipitation up to 2.50 in. Hudson Valley, light elsewhere.

NORTH CAROLINA: Cold temperatures but moderating 22d with warming trend through week. Temperatures 4 to 8° above normal. Rainfall 24th averaged between 0.50 to 1.00 in.

NORTH DAKOTA: Temperatures 5 to 15° above normal.



Extremes: -5 and 57° . Precipitation ranged from 0.12 in. below normal to 1.33 in. above normal. Heaviest snowfall in east. Snowfall ranged from none to 11 in.

Farm activities: Caring for livestock.

OHIO: Temperatures above normal. Cooling on 21st then warming 22d. Windy and mild with frequent periods of showers 23d through 25th. Precipitation 1.00 in. northwest. Colder with a few snow flurries 27th.

Fall sown grains and grass beginning to turn green.

OKLAHOMA: Temperatures 4 to 9° above normal. Precipitation few hundredths inch in Panhandle to 1.50 in. southeast. Severe dust storm 23d; snow up to 2 in. 25th and 26th.

Wheat mostly fair to good condition, making rapid growth where soil moisture is present. Additional moisture needed, as high winds and warm days pulled topsoil moisture. Heavy dust on 23d, but dust origin principally from other areas. Some blow damage in western Panhandle. Wheat grazing increased. Near half spring oats and barley seeded, average for date. Emergence slow. Topdressing small grains active where moisture is present. Ground being worked for row crops. Other activity was fencing, repair work and feeding livestock. Ranged greening some but providing little grazing. Many thin cattle but feeding needs down. Feed shortages reported.

OREGON: Frequent storms left measureable rainfall at all reporting stations. Coastal regions generally reported 2.50 in., precipitation in western valley ranged from 0.53 to 2.80 in. East of the Cascades rainfall varied between 0.10 and 0.33 in. with maximum of 0.61 in. Temperatures mild and

ranged from normal to about 4° above normal.

Soil moisture short. Snowpack poor but higher elevations received up to 36 in. snow during week. General farm activity slackened due to rains. Land preparation and fertilization on schedule. Orchard pruning virtually complete. Apple market continues strong. Potato planting in Boardman area. Calving and lambing continue. Sheep in ryegrass fields in Willamette Valley. Feeding heavy, supplies remain adequate. Pastures and ranges need more moisture.

PENNSYLVANIA: Cold beginning, warming trend through most of week. Temperatures 6 to 12° above normal. Extremes: -4 and 69° . Storms produced 0.25 in. rainfall southwest to 1.50 in. east central. Snow cover melted.

Farmers doing normal winter chores.

PUERTO RICO: Island rainfall 0.28 in. or 0.36 in. below normal. Temperatures about 77° coasts and 71° interior. Extremes: 91 and 54° .

Sugarcane harvest underway. Coffee trees blooming some areas but dry weather affecting development and poor harvest forecast. Tobacco harvesting and drying active. Rains needed for normal development of plantings. Pastures drying and scarce mostly south coastal and western interior. Rains badly needed. Farmers preparing soil for planting. Dry weather limited field operations such as cultivating and fertilizing.

SOUTH CAROLINA: Temperatures below normal at first and above normal for rest of week. Extremes: 18 and 84° . Rainfall near normal.

Activities include: Harvesting greens; planting late cabbage; preparing land for spring vegetables and spring crops; treating tobacco beds; pruning and setting peach trees. Warmer

weather, rainfall beneficial to pastures and small grains.

SOUTH DAKOTA: Heaviest precipitation in months. East and south benefitted most, with snow depths ranging from 2 to 10 in. with moisture equivalents of 0.50 in. to 2.33 in. Warm weather replaced by colder air latter week. Extremes: 6 and 70°.

Operators planning spring activities considering extremely dry conditions. Livestock doing well in favorable winter weather.

TENNESSEE: Warm and windy with scattered showers and thunderstorms. Precipitation slightly above 1.00 in. Temperatures 10° above normal.

Major activities: Caring of livestock, fencing, plowing, fertilizing small grains, liming pastures, sowing tobacco beds. Rains stopped most activities. Most activities behind schedule. Small grains in fair condition, pastures late, cattle fair to good condition.

TEXAS: Dry, mild dominated. Scattered light rain east. Snow on High Plains. Snow brought near normal precipitation of 0.25 in. to northwest, remainder drier than normal. Temperatures several degrees above normal. Readings generally 2 to 5° above normal; up to 10° above normal in extreme northeast.

Dust all of Texas. Winds brought welcome drying weather to eastern half, but pulled needed moisture from topsoil in west. Farmers on High Plains received snow. Wheat fields on plains plagued by blowing sand at midweek, but weekend snow offered dryland fields on High Plains some relief from short moisture. Greenbugs increase in central third. Control measures underway on northern Low Plains. Oats improved noticeably. Nitrogen applied in north and east. Cotton planting continued on limited scale in south. Less than 1% planted in Lower Rio Grande Valley. Sorghum planting began central, south. Less than 1% planted, compared with 6% average. Corn less than 1% in, lags behind 4% average. Sugarcane harvesting resumed after lengthy delay due to wet fields. Movement of cabbage, carrots, lettuce, broccoli, spinach continued. Cantaloup planting active. Bell peppers progressing well. Harvest of grapefruit, valencias increasing as groves dry. Watermelon planting continues as moisture conditions allow. Sweet corn, potatoes, onions, cabbage, turnips planted in some areas. Ranges responded to warm, however, supplemental feeding still necessary. Hay supplies nearly depleted. Cattle improved. Lice a problem north and east.

UTAH: Rain and snow; accumulated moisture generally light but locally moderate in higher mountains. Temperatures 3 to 10° above normal.

Moisture helpful to upper levels of range and dryland wheat but insufficient to change intermediate zone moisture. Early land preparation

temporarily halted. Marketing of potatoes and apples from storage nearing completion. Farm flock lambing continues. Spring calving in progress. Most ranches hauling water to livestock on winter ranges.

VIRGINIA: Temperatures several degrees above normal. Extremes: 9 and 83°. Precipitation 0.75 in.

Fieldwork: 2.1 days suitable. Topsoil moisture adequate. Spreading lime, fertilizer, manure. Feeding, caring for livestock. Most cattle generally good condition but thin. Fruit tree pruning active. Farmers topdressing small grain, seeding pastures, plowing, when conditions permit. Some spring oats planted. Winter grain and grazing crops generally poor condition. Hay and roughage supplies very low. Tobacco plant bed preparation and seeding underway.

WASHINGTON: West: Temperatures 3° above normal. Precipitation 0.50 in. above normal coastal area to 0.30 in. Subnormal elsewhere. Reservoirs and snow pack increasing.

Lettuce transplanted to cold frames. Pasture ground prepared for seeding. Livestock on winter rations.

East: Temperatures 6° above normal Palouse/Blue Mountain area, 3° above normal elsewhere. Precipitation 0.10 in. below normal Okanogan area to 0.30 in. subnormal Palouse/Blue Mountain area.

Orchardists cleaning and pruning. Pear development retarded due to rains. Wheat and bluegrass fields making some growth. Soil dry. Crop prospects dependent on future rain. Pastures showing some growth. Hay adequate. Calving continues.

WEST VIRGINIA: Temperatures above normal. Extremes: 79 and 2°. Precipitation below normal. Minor flooding due to ice jams and snow melt.

Fieldwork: 2.3 days suitable. Soil moisture mostly adequate. Hay supply short. Livestock in mostly poor condition. Above normal death losses in calving continues. Farm activities limited to feeding and care of livestock.

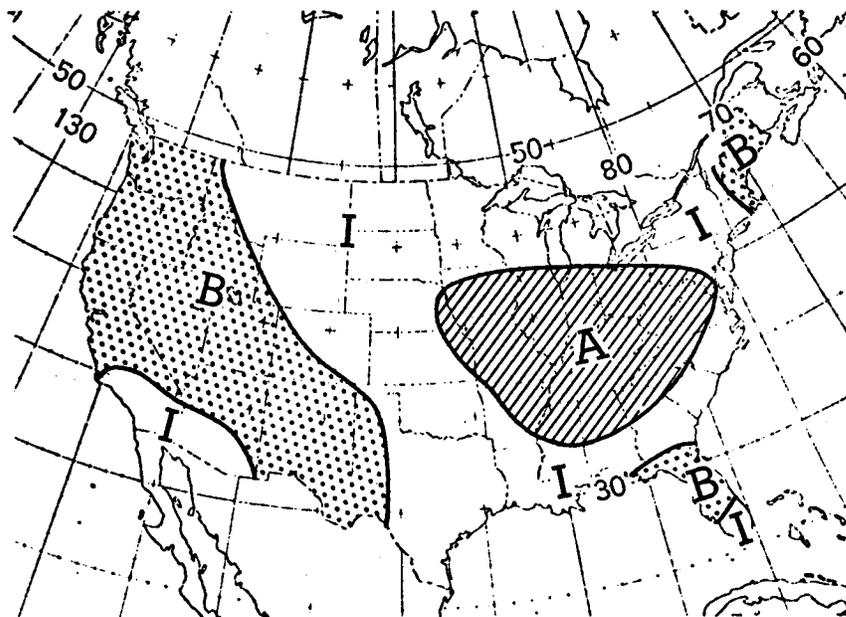
WISCONSIN: Partly cloudy with temperatures in 30's. High temperatures in 40's and 50's 23d. Precipitation ranged from 0.50 to 1.50 in. many areas, the most precipitation of the winter. Frost depths averaged 30 in., decline of 4 in. from two weeks earlier. Snow cover averaged 3 in., decline of 5 in. from two weeks earlier and equal to previous low for late February in 1966.

WYOMING: Temperatures above normal. Precipitation mostly below normal.

Moisture conditions dry. Chief activities: Calving, feeding and some fieldwork. Livestock in good condition. Feed supplies short to adequate.

OUTLOOK FOR SPRING AVERAGE TEMPERATURES

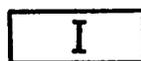
March through May 1977



Above Normal, 60% chance of occurrence



Below Normal, 60% chance of occurrence

Indeterminate, 50% chance of Above Normal
50% chance of Below Normal

The two categories Above and Below are to be compared to the long-term average or "normal" temperatures of the years 1941-70. Each category has a natural climatic frequency or probability of 50%. Each carries a 60% probability of occurring where forecast (shaded area), based on the verification scores of eighteen years of experimental seasonal predictions.

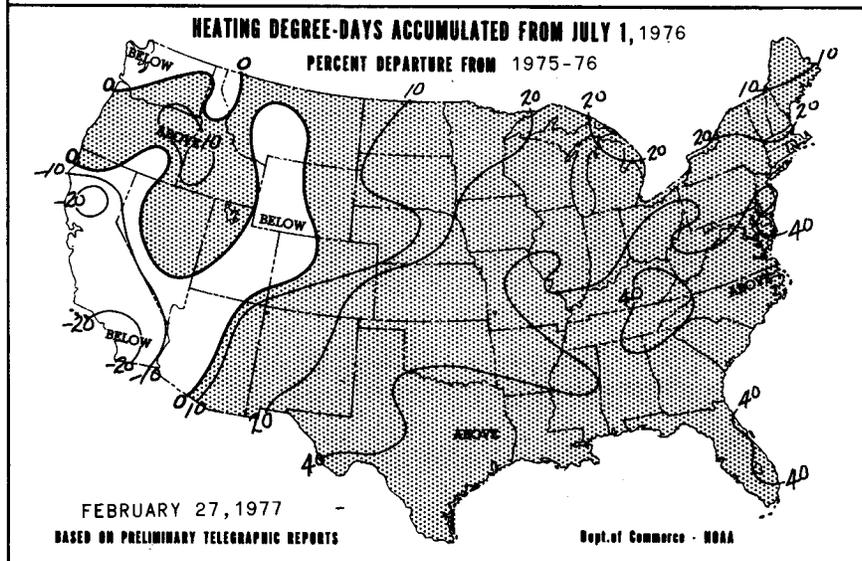
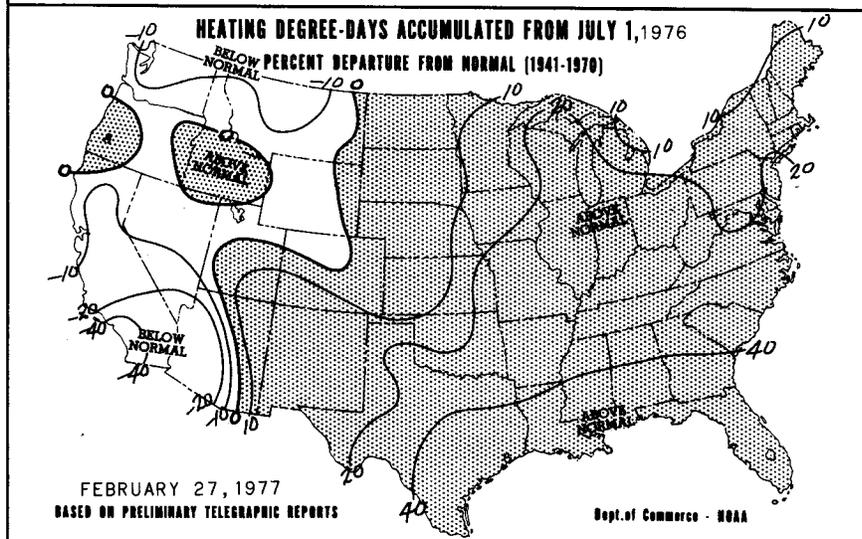
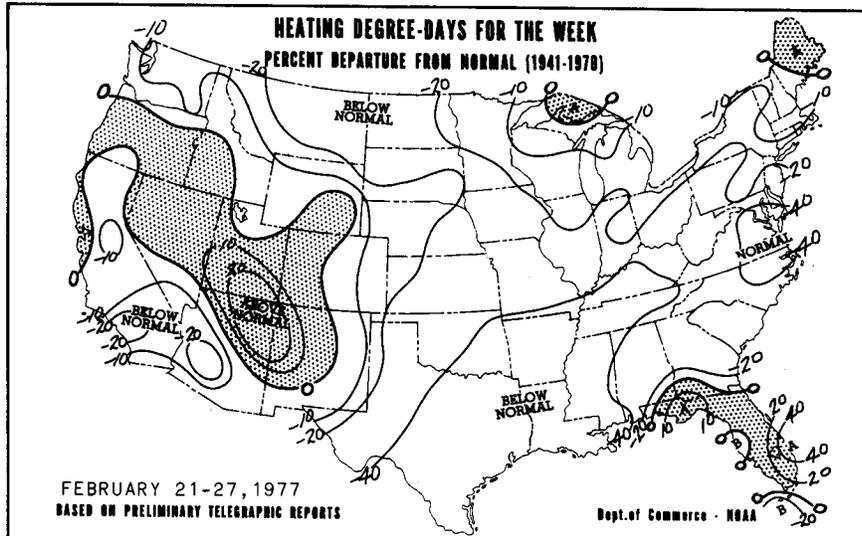
NOAA National Weather Service
Long Range Prediction Group

February 25, 1977

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

| STATES AND STATIONS | WEEKLY | | SEASONAL ACCUMULATION + | | | STATES AND STATIONS | WEEKLY | | SEASONAL ACCUMULATION + | | | STATES AND STATIONS | WEEKLY | | SEASONAL ACCUMULATION + | | |
|-------------------------|--------|------------|-------------------------|------------|------------------------|--------------------------|--------|------------|-------------------------|------------|------------------------|---------------------------|--------|------------|-------------------------|------------|------------------------|
| | TOTAL | DEPARTURE* | TOTAL | DEPARTURE* | DEPARTURE FROM 1975-76 | | TOTAL | DEPARTURE* | TOTAL | DEPARTURE* | DEPARTURE FROM 1975-76 | | TOTAL | DEPARTURE* | TOTAL | DEPARTURE* | DEPARTURE FROM 1975-76 |
| ALA. BIRMINGHAM..... | 73 | 47 | 3165 | 862 | 938 | MAINE CARIBOU..... | 379 | 31 | 7518 | 810 | 529 | OKLA. YOUNGSTOWN..... | 192 | 64 | 5986 | 1333 | 1536 |
| MOBILE..... | 76 | 47 | 2214 | 801 | 895 | PORTLAND..... | 273 | 8 | 6284 | 710 | 882 | OKLA. OKLAHOMA CITY..... | 97 | 8 | 340 | 474 | 902 |
| MONTGOMERY..... | 70 | 25 | 2757 | 884 | | MD. BALTIMORE..... | 125 | 75 | 4248 | 685 | 1155 | TULSA..... | 97 | 8 | 3553 | 626 | 902 |
| ARIZ. FLAGSTAFF..... | 247 | 112 | 4625 | 341 | 33 | MASS. BOSTON..... | 217 | 14 | 4543 | 525 | 931 | OREG. ASTORIA..... | 11 | 11 | 315 | 315 | 157 |
| PHOENIX..... | 48 | 14 | 824 | 19 | 33 | MICH. ALPENA..... | 284 | 24 | 6645 | 535 | 788 | BURNS..... | 11 | 11 | 315 | 315 | 157 |
| TUCSON..... | 71 | 14 | 1276 | 46 | 127 | DETROIT..... | 284 | 24 | 6645 | 535 | 788 | WEDFORD..... | 11 | 11 | 315 | 315 | 157 |
| WINSLON..... | 27 | 6 | 4130 | 53 | 47 | FLINT..... | 284 | 24 | 6645 | 535 | 788 | WINDLETON..... | 11 | 11 | 315 | 315 | 157 |
| YUMA..... | 37 | 6 | 715 | 10 | 47 | GRAND RAPIDS..... | 284 | 24 | 6645 | 535 | 788 | PORTLAND..... | 11 | 11 | 315 | 315 | 157 |
| ARK. FORT SMITH..... | 90 | 50 | 3662 | 96 | 1021 | HOUGHTON LAKE..... | 284 | 24 | 6645 | 535 | 788 | SALEM..... | 11 | 11 | 315 | 315 | 157 |
| LITTLE ROCK..... | 64 | 50 | 3247 | 54 | 850 | LANSING..... | 284 | 24 | 6645 | 535 | 788 | PA. ALLENTOWN..... | 77 | 77 | 4908 | 689 | 1072 |
| CALIF. BAKERSFIELD..... | 77 | 79 | 1422 | 32 | 19 | MARQUETTE..... | 284 | 24 | 6645 | 535 | 788 | BRIDGEVILLE..... | 77 | 77 | 4908 | 689 | 1072 |
| EUREKA..... | 11 | 1 | 1026 | 9 | 9 | MUSKOGEE..... | 284 | 24 | 6645 | 535 | 788 | HARRISBURG..... | 77 | 77 | 4908 | 689 | 1072 |
| FRESNO..... | 50 | 1 | 1026 | 9 | 9 | ST. STE. MARIE..... | 284 | 24 | 6645 | 535 | 788 | PITTSBURGH..... | 77 | 77 | 4908 | 689 | 1072 |
| LOS ANGELES..... | 50 | 1 | 1026 | 9 | 9 | MINN. DULUTH..... | 317 | 77 | 7792 | 842 | 947 | SCRANTON..... | 77 | 77 | 4908 | 689 | 1072 |
| RED BLUFF..... | 50 | 1 | 1026 | 9 | 9 | INTERNATL FALLS..... | 333 | 54 | 8460 | 778 | 1007 | S. I. PROVIDENCE..... | 28 | 31 | 5074 | 832 | 1018 |
| SAN DIEGO..... | 52 | 1 | 1026 | 9 | 9 | MINNEAPOLIS..... | 333 | 54 | 8460 | 778 | 1007 | S. C. CHARLESTON..... | 28 | 28 | 244 | 683 | 839 |
| SAN FRANCISCO..... | 53 | 1 | 1026 | 9 | 9 | ROCHESTER..... | 333 | 54 | 8460 | 778 | 1007 | COLUMBIA..... | 28 | 28 | 244 | 683 | 839 |
| STOCKTON..... | 53 | 1 | 1026 | 9 | 9 | ST. CLOUD..... | 333 | 54 | 8460 | 778 | 1007 | GREENVILLE..... | 28 | 28 | 244 | 683 | 839 |
| COLO. DENVER..... | 202 | 15 | 4175 | 184 | 234 | MISS. JACKSON..... | 50 | 51 | 2707 | 84 | 89 | S. DAK. ABERDEEN..... | 25 | 25 | 664 | 26 | 973 |
| GRAND JUNCTION..... | 211 | 15 | 4455 | 50 | 50 | MERIDIAN..... | 69 | 51 | 2882 | 906 | 815 | HURON..... | 25 | 25 | 664 | 26 | 973 |
| PUEBLO..... | 188 | 14 | 4346 | 336 | 521 | MO. COLUMBIA..... | 153 | 53 | 5054 | 1187 | 1461 | RAPID CITY..... | 25 | 25 | 664 | 26 | 973 |
| CONN. BRIDGEPORT..... | 193 | 3 | 3460 | 618 | 907 | KANSAS CITY..... | 149 | 53 | 4499 | 922 | 1209 | ST. LOUIS..... | 25 | 25 | 664 | 26 | 973 |
| HARTFORD..... | 232 | 28 | 5149 | 866 | 866 | ST. LOUIS..... | 149 | 53 | 4499 | 922 | 1209 | SIoux FALLS..... | 25 | 25 | 664 | 26 | 973 |
| DEL. WILMINGTON..... | 149 | 58 | 4375 | 628 | 1028 | SPRINGFIELD..... | 128 | 53 | 4413 | 905 | 1163 | TENN. CHATTANOOGA..... | 101 | 44 | 3649 | 863 | 803 |
| D.C. WASHINGTON..... | 99 | 84 | 3853 | 691 | 1182 | MONT. BILLINGS..... | 201 | 51 | 4837 | 312 | 512 | KNOXVILLE..... | 101 | 50 | 3711 | 927 | 1109 |
| FLA. PALM BEACH..... | 73 | 3 | 1856 | 709 | 619 | GLASGOW..... | 226 | 104 | 4837 | 312 | 512 | MEMPHIS..... | 101 | 50 | 3711 | 927 | 1109 |
| DAYTONA BEACH..... | 73 | 3 | 1856 | 709 | 619 | GREAT FALLS..... | 226 | 104 | 4837 | 312 | 512 | NASHVILLE..... | 101 | 50 | 3711 | 927 | 1109 |
| FORT MYERS..... | 73 | 3 | 1856 | 709 | 619 | HAYNE..... | 226 | 104 | 4837 | 312 | 512 | TEXAS. ABILENE..... | 101 | 50 | 3711 | 927 | 1109 |
| JACKSONVILLE..... | 73 | 3 | 1856 | 709 | 619 | HELENA..... | 226 | 104 | 4837 | 312 | 512 | AMARILLO..... | 101 | 50 | 3711 | 927 | 1109 |
| KEY WEST..... | 73 | 3 | 1856 | 709 | 619 | KALISPELL..... | 226 | 104 | 4837 | 312 | 512 | AUSTIN..... | 101 | 50 | 3711 | 927 | 1109 |
| LAKELAND..... | 73 | 3 | 1856 | 709 | 619 | MILES CITY..... | 226 | 104 | 4837 | 312 | 512 | BEAUMONT..... | 101 | 50 | 3711 | 927 | 1109 |
| MIAMI..... | 73 | 3 | 1856 | 709 | 619 | MISSOULA..... | 226 | 104 | 4837 | 312 | 512 | BROWNSVILLE..... | 101 | 50 | 3711 | 927 | 1109 |
| ORLANDO..... | 73 | 3 | 1856 | 709 | 619 | NEBR. GRAND ISLAND..... | 179 | 68 | 5054 | 268 | 554 | CORPUS CHRISTI..... | 111 | 111 | 1300 | 498 | 723 |
| TALLAHASSEE..... | 73 | 3 | 1856 | 709 | 619 | LINCOLN..... | 189 | 68 | 5054 | 268 | 554 | DEL RIO..... | 111 | 111 | 1300 | 498 | 723 |
| TAMPA..... | 73 | 3 | 1856 | 709 | 619 | NORFOLK..... | 202 | 70 | 5788 | 747 | 1040 | EL PASO..... | 111 | 111 | 1300 | 498 | 723 |
| NEXT PALM BEACH..... | 30 | 1 | 364 | 92 | 62 | NORTH PLATTE..... | 202 | 70 | 5788 | 747 | 1040 | FORT WORTH..... | 111 | 111 | 1300 | 498 | 723 |
| GA. ATLANTA..... | 103 | 63 | 3431 | 968 | 1093 | OHIO. OHAMA..... | 172 | 74 | 5291 | 751 | 1192 | GALVESTON..... | 111 | 111 | 1300 | 498 | 723 |
| AUGUSTA..... | 103 | 63 | 3431 | 968 | 1093 | VALENTINE..... | 221 | 48 | 5530 | 238 | 441 | HOUSTON..... | 111 | 111 | 1300 | 498 | 723 |
| MACON..... | 103 | 63 | 3431 | 968 | 1093 | NEV. ELV..... | 268 | 19 | 5320 | 39 | 144 | LUBBOCK..... | 111 | 111 | 1300 | 498 | 723 |
| SAVANNAH..... | 61 | 21 | 2317 | 696 | 787 | LAS VEGAS..... | 199 | 12 | 4088 | 419 | 118 | MIDLAND..... | 111 | 111 | 1300 | 498 | 723 |
| IDAHO. BOISE..... | 196 | 4 | 4667 | 431 | 531 | RENO..... | 199 | 12 | 4088 | 419 | 118 | SAN ANGELO..... | 111 | 111 | 1300 | 498 | 723 |
| LEWISTON..... | 166 | 8 | 3674 | 324 | 15 | WINNEHUCCA..... | 310 | 5 | 4295 | 351 | 250 | SAN ANTONIO..... | 111 | 111 | 1300 | 498 | 723 |
| POCATELLO..... | 229 | 8 | 5196 | 149 | 369 | N. H. CONCORD..... | 260 | 22 | 6410 | 1100 | 690 | VICTORIA..... | 111 | 111 | 1300 | 498 | 723 |
| ILL. CAIRO..... | 112 | 53 | 4220 | 1173 | 1486 | N. J. ATLANTIC CITY..... | 165 | 43 | 4684 | 1047 | 1075 | WASH. SEATTLE-TACOMA..... | 157 | 4 | 3603 | 311 | 257 |
| CHICAGO..... | 209 | 57 | 5733 | 1201 | 1545 | TRENTON..... | 149 | 62 | 4589 | 928 | 1301 | SEATTLE-TACOMA..... | 157 | 4 | 3603 | 311 | 257 |
| HOLINE..... | 193 | 46 | 5967 | 1156 | 1605 | N. MEX. ALBUQUERQUE..... | 169 | 65 | 3863 | 529 | 634 | SPOKANE..... | 157 | 4 | 3603 | 311 | 257 |
| PEORIA..... | 199 | 46 | 5828 | 1236 | 1436 | ROSWELL..... | 77 | 65 | 2991 | 66 | 634 | HALLA WALLA..... | 157 | 4 | 3603 | 311 | 257 |
| ROCKFORD..... | 225 | 46 | 6305 | 1221 | 1408 | N. Y. ALBANY..... | 250 | 16 | 5788 | 747 | 1040 | YAKIMA..... | 157 | 4 | 3603 | 311 | 257 |
| SPRINGFIELD..... | 178 | 50 | 5439 | 1213 | 1564 | BINGHAMTON..... | 250 | 16 | 5788 | 747 | 1040 | W. VA. BECKLEY..... | 150 | 69 | 5319 | 1174 | 1650 |
| IND. EVANSVILLE..... | 134 | 57 | 4657 | 1070 | 1298 | BUFFALO..... | 250 | 16 | 5788 | 747 | 1040 | CHARLESTON..... | 131 | 57 | 4807 | 1295 | 1661 |
| FORT WAYNE..... | 202 | 47 | 5801 | 1220 | 1523 | NEA YORK..... | 311 | 31 | 4314 | 734 | 1050 | HUNTINGTON..... | 131 | 57 | 4807 | 1295 | 1661 |
| INDIANAPOLIS..... | 182 | 47 | 5477 | 1272 | 1505 | ROCHESTER..... | 311 | 31 | 4314 | 734 | 1050 | PARKERSBURG..... | 124 | 76 | 4767 | 1111 | 1316 |
| SOUTH BEND..... | 198 | 49 | 5650 | 1213 | 1511 | SYRACUSE..... | 311 | 31 | 4314 | 734 | 1050 | WIS. GREEN BAY..... | 274 | 39 | 7054 | 1192 | 1430 |
| IOWA. BURLINGTON..... | 183 | 63 | 5788 | 1148 | 1553 | N. C. ASHEVILLE..... | 129 | 43 | 4155 | 926 | 1032 | LACROSSE..... | 274 | 39 | 7054 | 1192 | 1430 |
| DES MOINES..... | 193 | 79 | 5588 | 1311 | 1588 | CHARLOTTE..... | 91 | 48 | 3481 | 922 | 1127 | MADISON..... | 274 | 39 | 7054 | 1192 | 1430 |
| DUBUQUE..... | 243 | 41 | 6607 | 1207 | 1566 | GREENSBORO..... | 100 | 61 | 4882 | 882 | 1237 | MILWAUKEE..... | 274 | 39 | 7054 | 1192 | 1430 |
| SIoux CITY..... | 210 | 64 | 5976 | 743 | 1168 | HATTERAS..... | 88 | 45 | 3677 | 966 | 919 | WYO. CASPER..... | 270 | 11 | 5186 | 74 | 49 |
| KANS. CONCORDIA..... | 159 | 61 | 4646 | 410 | 902 | RALEIGH..... | 99 | 60 | 3779 | 966 | 919 | CHEYENNE..... | 244 | 19 | 5096 | 130 | 303 |
| DODGE CITY..... | 140 | 40 | 4085 | 285 | 732 | WILMINGTON..... | 76 | 36 | 2541 | 581 | 923 | LANDER..... | 244 | 19 | 5096 | 130 | 303 |
| GOODLAND..... | 190 | 40 | 4448 | 211 | 822 | N. DAK. BISMARCK..... | 76 | 68 | 3219 | 193 | 896 | SHERIDAN..... | 244 | 19 | 5096 | 130 | 303 |
| GOPELL..... | 130 | 40 | 4838 | 229 | 1184 | FARGO..... | 61 | 61 | 3505 | 659 | 1213 | | | | | | |
| TOPEKA..... | 130 | 40 | 4838 | 229 | 1184 | HILLSTON..... | 61 | 61 | 3505 | 659 | 1213 | | | | | | |
| WICHITA..... | 124 | 71 | 4119 | 501 | 773 | OHIO. AKRON-CANTON..... | 171 | 78 | 5796 | 1261 | 1702 | | | | | | |
| KY. LEXINGTON..... | 120 | 75 | 4770 | 1157 | 1288 | CINCINNATI..... | 156 | 74 | 5248 | 1452 | 1753 | | | | | | |
| LOUISVILLE..... | 99 | 93 | 4427 | 845 | 1326 | CLEVELAND..... | 156 | 74 | 5248 | 1452 | 1753 | | | | | | |
| LA. BATON ROUGE..... | 39 | 3 | 1966 | 547 | 552 | COLUMBUS..... | 156 | 74 | 5248 | 1452 | 1753 | | | | | | |
| LAKE CHARLES..... | 39 | 3 | 1966 | 547 | 552 | DAYTON..... | 156 | 74 | 5248 | 1452 | 1753 | | | | | | |
| MONROE..... | 40 | 3 | 2029 | 557 | 603 | TOLEDO..... | 156 | 74 | 5248 | 1452 | 1753 | | | | | | |
| NEW ORLEANS..... | 40 | 3 | 2029 | 557 | 603 | | | | | | | | | | | | |
| SHREVEPORT..... | 44 | 3 | 2508 | 579 | 946 | | | | | | | | | | | | |

* BASED ON 1941-70 NORMALS.





FIRST CLASS MAIL

World Weather and Crop Update

(February 22-28, 1977)

NORTH AMERICA. The past week has seen some slight improvement in the agricultural scene in the United States. Significant precipitation fell in the moisture deficit areas in the Plains States, the Corn Belt and in the Pacific Coastal States. Western parts of Nebraska, Kansas, and Oklahoma where winds have been moving top soil, did not receive any moisture during this period while only token amounts fell on Southern California. Subsoil moisture continues to be well below normal throughout the Corn Belt and the Great Plains. The snow pack in the Western Mountains also is well below normal and the lack of irrigation water, especially in California, is already requiring a drastic cutback in crop plantings.

SOUTH AMERICA. Moderate to heavy shower activity occurred over northern and central Argentina, Uruguay and Rio Grande do Sul, Brazil's southernmost state. Heavy precipitation was recorded over the major part of Argentina's corn belt with the likelihood of some damage to crops from the heavy downpours and some local flooding. Localized crop damage also may have occurred in neighboring Uruguay and Brazil. Elsewhere in Brazil, the northern portion of the southern states and all of the southeastern states were moderately warm and dry. Some shower activity occurred in the lower Parana Valley. Precipitation in the northeast was about normal for this time of the year.

EUROPE. Temperatures, although somewhat cooler than during the previous week, were still on the mild side in Western Europe. The mild, wet winter has been beneficial to winter grains, but it has been a special blessing to livestock operations in view of the fodder deficit created by last summer's drought. Precipitation has been about normal in the Mediterranean countries except in Greece, which is well below normal for February, and the islands of Sicily and Sardinia. In Eastern Europe, light precipitation fell in East Germany, Poland, Czechoslovakia, Hungary, and northern Yugoslavia, but other areas were dry. Temperatures have turned to a more seasonal mode, but pose no threat to winter grains although practically all of Eastern Europe is devoid of snow cover.

USSR. More seasonal temperatures have returned to European USSR. The previous spell of mild weather coupled with rain has melted the snow in some winter grain areas that normally would still be under snow cover. Only areas adjacent to the Black Sea would normally be without snow at this time, but the snow boundary has retreated well to the north of its customary position. The colder temperatures are probably welcome to delay the coming of spring which is getting under way in the more southerly areas with winter grains and even fruit trees in some areas coming out of dormancy. Field work has begun in some areas--southern Ukraine and North Caucasus--mainly top dressing of winter grains by airplanes. Asiatic USSR remains locked in winter with snow retention measures the only field activity at this time of year.

ASIA. Generous rains, very heavy in some places, fell over the northeastern (northwest to southeast) half of Australia. But elsewhere, precipitation was generally sparse with unirrigated crops and pastures parched by mid-summer temperatures. Precipitation also was light in the People's Republic of China, but temperatures throughout the country have begun to moderate to more seasonal norms in contrast to the below normal temperatures that have prevailed most of the winter. Dust storms have been reported in some winter wheat areas of North China, but this is not unusual for this time of year. Light to moderate showers fell over part of the northern wheat growing regions in Indian, but the remainder of that country was rainless during the reporting periods.

AFRICA. Data are incomplete for South Africa. Available data, however, indicate only light activity over the principal agricultural areas with some scattered showers reported over the central and southeastern portions of the maize triangle. In North Africa, Morocco continued to receive excellent rainfall. The rainfall pattern that has generously doused Morocco all winter, however, did not extend into the neighboring Algeria and Tunisia which were rainless during the reporting period.