

# WEEKLY WEATHER AND CROP BULLETIN

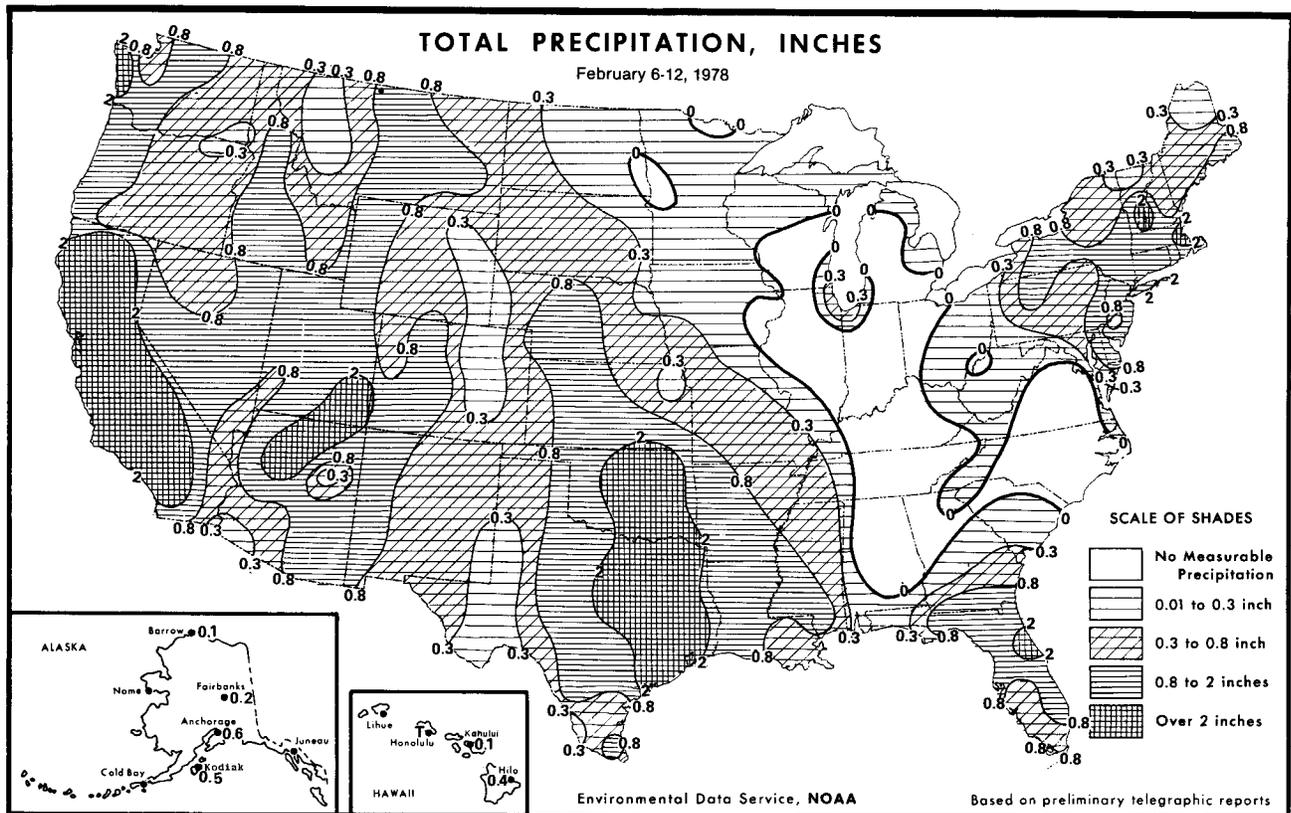
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## \* \* \* National Weather Summary \* \* \*

February 6 - 12

**HIGHLIGHTS:** Two powerful weather systems blitzed both coasts. The first storm brought high winds and heavy snow to the Northeast paralyzing many cities. The second system bombarded California with torrential rains and high winds; flooding and mud slides resulted. That storm moved eastward, picked up moisture from the Gulf of Mexico, and charged into the Plains at week's end.

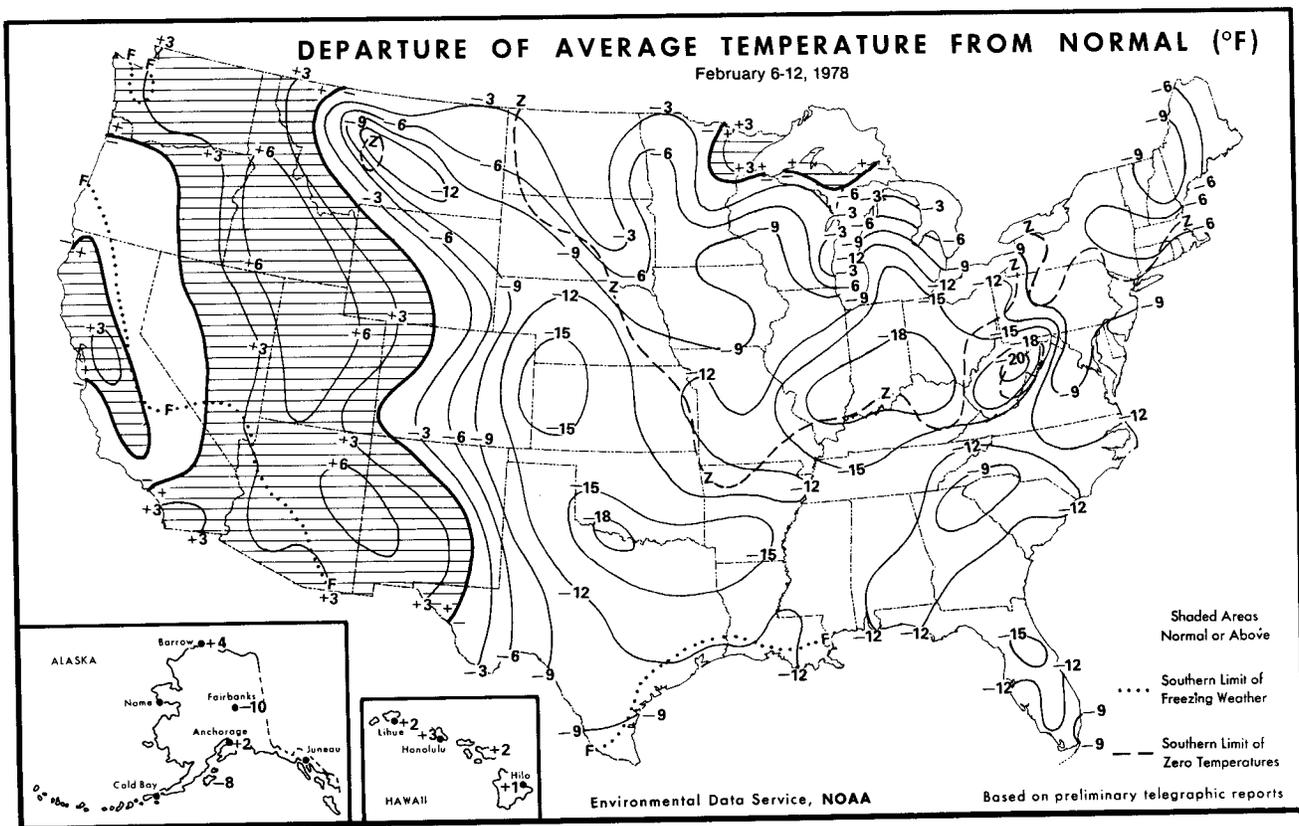
Temperatures remained colder than normal east of the Rockies---as much as 15 to 23° lower than expected for this time of year in the Ohio Valley. West of the Rockies, readings were at or above normal.

One of the worst winter storms on record pounded the Atlantic Coast States from Virginia through New England on Monday. A low pressure center off the coast carried heavy snows, high winds, and frigid temperatures to the area, nearly

shutting down most of the Northeast. Snow accumulated quickly; within one 6-hour period Providence collected 10 inches. By day's end, Hartford, Conn., had 19 inches, New York, 14, and Philadelphia, 13. Winds roared with gusts up to 90 mph on the Massachusetts coast. It also snowed in the northern Plains and Midwest. Thunder showers in California dropped three-quarters inch of rain on San Francisco and Long Beach.

Record low temperatures were notched at 14 stations in the Midwest and the South ranging from -17° at Waterloo, Iowa, to 28° at Pensacola, Fla. Minneapolis endured its 49th consecutive day of readings not rising above freezing. Charleston, W.Va., established a record seasonal snowfall of more than 55 inches.

The great blizzard in the Northeast trekked to the sea, but left behind many remembrances as Tuesday closed. Boston measured 22 inches of snow in a 24-hour span, breaking the previous record set 3 weeks before. Winds still gusted above 70 mph at some points and coastal flooding became serious.



Bad weather also assaulted the Great Plains and Midwest. Six to 8 inches of snow blanketed northeastern New Mexico and north central Oklahoma. Varied precipitation extended from Texas to Louisiana and Arkansas; Dallas got 3 inches of snow and ice and the Houston area gathered nearly an inch of rain. Meantime locally heavy rains drenched California causing local flooding.

And to add to the discomfort, 19 record lows opened the books from the South through the Ohio Valley. Miami Beach, at 42°, dipped 9 degrees below the previous record. Key West marked 48° for a new low, and reached only 57° for the day, its coldest February 10th. Not to be outdone by the mainland, Honolulu called in a double record; an all-time low for the day, a bone-chilling 60°, was offset by a record-tying high, 85°, later in the afternoon.

As snowfall dwindled over New England, it picked up in the Plains on Wednesday. Rain, heavy at times, soaked much of California and Florida. Snow, with accompanying high winds, fell from the Dakotas to Texas leaving 2 inches at Oklahoma City and 5 inches at Dalhart, Tex. Rain and sleet glazed the Deep South. On the West Coast, a front moved inland drenching much of California's coastal sections with an inch or more. Like amounts of rain covered a large portion of Florida.

Muskegon, Mich., registered a record low reading of -11°.

Thursday began with rain from California to the Plateau Region; some waterways were above flood stage in the Golden State. Los Angeles received more than 2 inches of rain and Santa Barbara, 2.75 in. Parts of the Sierra Mountains swayed under 2 feet of additional snow. Snow continued in the Plains where Oklahoma City marked 7 inches. Heavy rains still drenched points in Florida; precipitation turned to snow over Georgia

where 3 to 5 inches whitened some areas, and it reached into the Carolinas.

The storm inundating southern California pushed eastward on Friday. In its wake, flooding, mud slides, and heavy snows in the mountains plagued the area. Los Angeles received another inch of rain while to the northeast Mount Wilson was awash in 12 inches; San Mateo Point clocked winds up to 92 mph. Mountainous sections of Utah were covered by 10 to 25 inches of snow and Flagstaff, Ariz., burrowed out of 12 inches. Heavy thunderstorms battered the region where California, Arizona, and Nevada converge.

Tracking the thermometer, Baltimore/Washington International Airport, between the two cities, set a record low of 11°.

The complex low pressure system in the southwestern quadrant of the Nation on Saturday spread precipitation through the Plateau Region to the Rockies and Plains. Flagstaff, Ariz., counted 17 inches of snow while the western mountains of Colorado and Wyoming and north central New Mexico notched 13 to 16 inches.

Sioux Falls, S. Dak., recorded its 51st consecutive day of failing to reach the balmy mark of 32°.

By mid-afternoon Sunday, the slow-moving storm stretched across the Plains to the Mississippi Valley. Snow and freezing rain fell in the northern reaches; rain and thunderstorms clipped Oklahoma and Texas extending eastward to the lower Mississippi Valley. A tornado dashed into extreme southwestern Louisiana. By evening, 3 to 12 inches of snow blanketed the central Plains and 6 inches fell just south of Kansas City. Dallas and Oklahoma City were soaked by more than an inch and one-quarter of rain.

The West Coast had little chance to dry out as a front quickly moved into California dropping more than an inch of rain along sections of the southern coast.



## National Agricultural Summary

February 6 - 12

**HIGHLIGHTS:** Storms ravaged the Far West, the Northeast coastal areas, and parts of the Great Plains. Rains entered the California coastal sections and spread through most of the Southwest slowing harvests and delaying land preparations for spring planting. Heavy snows in the frigid eastern part of the Nation created havoc for transportation systems and caused difficult feeding situations. In some areas, farmers were able to give only emergency care to livestock. Most of the 1978 winter wheat lay protected under a blanket of snow, including the southern Great Plains crop which received some moisture from the snow. Temperatures plunged as much as 19 degrees sub-normal east of the Rockies. Low readings slowed growth of small grains, pastures, and vegetables across the South. Texas rains and low temperatures delayed the onset on land preparation and planting because of wet soils and low soil temperatures. Grasslands east of the Rockies provided very little grazing, but mild temperatures and ample moisture in the West showed promise of an early growing season.

**SMALL GRAINS:** Winter wheat rated fair to good in most of the Nation, however, poor ratings continued in the drought-stressed dryland stands in the southern Great Plains and some cold-retarded stands across the South. Snow protected most of the Nation's wheat acreage from the low temperatures across the northern Great Plains and the Corn Belt. In the West, excess soil moisture yellowed plants in low-lying areas of California and Oregon.

Heavy snow covered Kansas winter wheat where only a light to moderate cover lay before. The lack of soil moisture remained critical in the west central portion, but the new snow should relieve the situation. Oklahoma winter wheat rated fair and mostly snow-covered. Topsoil moisture was adequate; subsoil moisture short. Texas Panhandle wheat fields received some much-needed moisture in the form of snow but much more was needed. Prolonged dry weather and low temperatures hurt dryland stands. From the Blacklands and East Texas southward, sufficient moisture was available though low temperatures and overcast skies limited growth. In Arizona, rains stopped small grain plantings. Irrigated winter wheat was in fair to good condition and providing moderate grazing in New Mexico. Dryland wheat rated poor to fair with light grazing available. Wyoming's snow-covered wheat was in fair to good condition. Montana winter wheat rated good with a good to excellent snow blanket in most areas. In Washington, snow melted in and wheat began growing with temperatures up to 6 degrees above normal. Oregon winter wheat scored generally good, but some low-lying grain fields yellowed from standing water. California rains generally helped wheat stands, but also yellowed plants in low areas.

In the South, Florida's crop grew only a little; Georgia's wheat rated fair to good; and North Carolina fair. Part of Virginia's wheat was covered with snow, but farmers fertilized some of the crop in open areas. North central States' wheat rated good although most of the crop was shielded by snow.

**OTHER CROPS:** Florida sugarcane harvest continued very active; young cane grew very slowly. Alabama growers harvested a few remaining soybeans. Arizona producers picked little cotton. Alabama growers began planting Irish potatoes. Florida

tobacco plants in beds were small but in good condition. South Carolina and Virginia tobacco growers prepared plant beds. Only four burley markets remained open in Kentucky to market the 1977 crop. Texas cotton and sorghum producers in the lower Rio Grande Valley waited for higher soil temperature as equipment stood poised to plant the first row crops for the 1978 season.

**FRUITS AND NUTS:** Severe weather curtailed orchard activity in many areas, although growers pruned deciduous trees in Virginia, South Carolina, Alabama, Oregon, and Washington. Unseasonably high temperatures rushed California's early deciduous fruit and nut trees into bloom.

Florida citrus groves rated excellent; defoliated trees showed new growth. Some trees had swelling bloom buds. A light frost nipped some fruit. Harvest was active but limited by weather conditions. Wet conditions slowed Texas and Arizona citrus movement. The California citrus harvest was also slowed by wet conditions.

**VEGETABLES:** Florida vegetable crops rated fair to good in spite of freezes in some areas with the southwest hardest hit. Low temperatures slowed plant maturity and kept fruit set light. Shipments advanced 1% from the previous week. Volume increased for snap beans, chinese cabbage, strawberries, lettuce, and potatoes. Celery, sweet corn, eggplants, radishes, and tomatoes held steady. Cabbage, carrots, cucumbers, escarole, okra, peppers, and squash declined in supply. Farmers were busy planting most crops. Watermelons rated poor to fair; frost forced replanting of many fields. New crop potatoes and strawberry supplies should gain rapidly in the next few weeks. In Texas, rains and low temperatures disrupted planting and harvest schedules. Growers harvested lettuce, carrots, cabbage, spinach, and cauliflower as weather permitted. Ice storms severely damaged winter vegetables in North Texas. Onions grew slowly and, in some areas, became blighted. Arizona rains interrupted lettuce and other vegetable harvests; some vegetables became over-mature and were lost. New Mexico growers planted lettuce and midseason onions. California growers also expect to lose cabbage and celery along the south coast because of over-maturity and disease. Imperial Valley lettuce harvest moved to market. Spring lettuce planting was delayed along the central and south coast. Harvests of broccoli, cabbage, and cauliflower were light.

**PASTURES AND LIVESTOCK:** Only southern and western pastures provided roughage to livestock. Low temperatures held the use of southern grasslands to a minimum; many rated only poor to fair. Mild temperatures and abundant rain improved western rangeland and stock water supplies. Livestock producers fed heavy rations to help animals combat unseasonably low eastern temperatures. Generally, animal condition rated fair to good. Newborn deaths were not unusually great except during bouts of severe, stormy weather. Florida's pastures rated poor to fair; permanent pastures supplied very little forage and small grain pastures grew slowly. Georgia pastures rated fair; cold delayed regrowth. Oklahoma native pastures and ranges rated fair; cattle required heavy supplemental feeding. Texas ranchers fed heavy rations when snow, freezing rain, and low temperatures caused weight losses. Grasses grew very slowly; most pastures and ranges were depleted. Arizona ranges showed a marked improvement. Soil moisture improved and stock tanks filled. Ranges grew well and prospects brightened for late winter and spring browse.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., Feb. 12, 1978

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 . . .	33	-13	T	-1.3	LA. Baton Rouge . . .	42	-11	.5	-.7	Youngstown . . .	12	-14	.1	-.5
Mobile . . .	41	-12	T	-1.1	Lake Charles . . .	42	-12	1.1	-.0	OKLA. Okla. City . . .	27	-13	2.8	+2.5
Montgomery . . .	40	-10	0	+1.0	New Orleans . . .	41	-14	.5	-.7	Tulsa . . .	28	-12	2.1	+1.7
ALASKA, Anchorage . . .	19	+2	.6	+ .4	Shreveport . . .	35	-15	.9	-.1	OREG. Astoria . . .	43	0	1.7	-.3
Barrow . . .	-15	+4	.1	0	MAINE, Caribou . . .	8	-3	.2	-.3	Burns . . .	30	0	.6	+ .3
Fairbanks . . .	-15	-10	.2	+ .1	Portland . . .	16	-6	.8	-.1	Medford . . .	41	0	.7	+ .1
Juneau . . .	-	-	-	-	MD. Baltimore . . .	25	-9	.3	-.4	Pendleton . . .	39	+1	.2	-.1
Kodiak . . .	23	-8	.5	-.8	MASS. Boston . . .	26	-3	2.9	+2.0	Portland . . .	42	0	1.3	+ .2
Nome . . .	-	-	-	-	Chatham . . .	27	-	1.5	-	Salem . . .	41	-1	.9	-.3
ARIZ. Flagstaff . . .	33	+3	2.4	+2.0	MICH. Alpena . . .	15	-2	T	-.3	PA. Allentown . . .	21	-7	1.1	+ .4
Phoenix . . .	58	+4	.4	+ .3	Detroit . . .	16	-9	T	-.4	Erie . . .	13	-11	.2	-.3
Tucson . . .	54	+1	1.0	+ .8	Flint . . .	12	-11	T	-.4	Harrisburg . . .	23	-8	.7	+ .1
Winslow . . .	44	+6	.2	+ .1	Grand Rapids . . .	11	-13	T	-.4	Philadelphia . . .	24	-9	.8	+ .2
Yuma . . .	60	+1	T	-.1	Houghton Lake . . .	8	-9	T	-.3	Pittsburgh . . .	18	-10	.1	-.5
ARK. Fort Smith . . .	31	-11	1.0	+ .2	Lansing . . .	7	-16	T	-.4	Scranton . . .	19	-7	.6	+ .1
Little Rock . . .	27	-15	.8	-.3	Marquette . . .	21	+2	.2	-.2	R.I. Providence . . .	20	-9	1.2	+ .4
EUREKA, Bakersfield . . .	55	+3	4.3	+4.0	Muskegon . . .	11	-13	0	-.5	S.C. Charleston . . .	38	-12	.1	-.6
Eureka . . .	48	0	2.9	+1.6	S. Ste. Marie . . .	13	-1	.1	-.3	Columbia . . .	35	-12	.1	-.8
Fresno . . .	50	+1	4.1	+3.6	MINN. Duluth . . .	14	+4	.1	-.1	Greenville . . .	34	-10	0	-1.1
Los Angeles . . .	56	-2	1.3	+ .6	Internatl Falls . . .	3	-2	T	-.1	S.D. Aberdeen . . .	10	-3	.1	0
Red Bluff . . .	50	+1	3.3	+2.5	Minneapolis . . .	11	-4	T	-.2	Huron . . .	14	-2	.4	+ .3
San Diego . . .	60	+4	1.3	+ .9	Rochester . . .	7	-8	T	-.1	Rapid City . . .	15	-10	.5	+ .4
San Francisco . . .	52	+1	4.1	+3.3	St. Cloud . . .	9	-3	T	-.2	Sioux Falls . . .	13	-5	.1	-.2
Stockton . . .	52	+4	1.0	+ .4	MISS. Jackson . . .	37	-12	1.1	0	TENN. Chattanooga . . .	29	-13	T	-1.3
COLO. Denver . . .	31	-1	.1	0	Meridian . . .	35	-14	.3	-.9	Knoxville . . .	30	-12	0	-1.2
Grand Junction . . .	35	+3	.5	+ .4	MO. Columbia . . .	21	-11	.4	0	Memphis . . .	32	-11	.5	-.7
Pueblo . . .	25	-9	.1	0	Kansas City . . .	19	-13	.4	+ .1	Nashville . . .	25	-15	T	-1.1
CONN. Bridgeport . . .	21	-9	1.3	+ .7	St. Louis . . .	17	-17	.2	-.3	TEX. Abilene . . .	34	-13	1.1	+ .8
Hartford . . .	21	-5	1.3	+ .5	Springfield . . .	23	-13	.8	+ .3	Amarillo . . .	25	-14	.4	+ .3
D.C. Washington . . .	29	-7	.1	-.5	MONT. Billings . . .	15	-12	.8	+ .7	Austin . . .	40	-12	1.3	+ .5
FLA. Apalachicola . . .	41	-14	.7	-.2	Glasgow . . .	11	-3	.3	+ .2	Beaumont . . .	43	-11	1.6	+ .5
Daytona Beach . . .	47	-12	2.9	+2.2	Great Falls . . .	12	-14	.7	+ .5	Brownsville . . .	56	-7	.5	+ .1
Ft. Myers . . .	53	-11	.6	+ .1	Havre . . .	16	0	1.4	+1.3	Corpus Christi . . .	50	-9	.5	0
Jacksonville . . .	43	-13	1.3	+ .4	Helena . . .	22	-2	.3	+ .2	Dallas . . .	-	-	-	-
Key West . . .	59	-12	1.2	+ .7	Kalispell . . .	26	+2	.2	-.1	Del Rio . . .	46	-9	.3	0
Lakeland . . .	51	-11	.7	+ .1	Miles City . . .	14	-6	.9	+ .8	El Paso . . .	51	-4	.3	+ .2
Miami . . .	59	-8	.5	0	Missoula . . .	26	0	.3	+ .1	Fort Worth . . .	32	-16	2.4	+1.8
Orlando . . .	44	-17	1.0	+ .3	NEBR. Grand Island . . .	16	-11	.7	+ .5	Galveston . . .	44	-11	.8	+ .1
Tallahassee . . .	41	-13	.8	-.3	Lincoln . . .	16	-11	.6	+ .4	Houston . . .	42	-12	2.4	+1.5
Tampa . . .	48	-13	1.4	+ .7	Norfolk . . .	15	-8	.3	+ .1	Lubbock . . .	31	-11	.3	+ .2
W. Palm Beach . . .	56	-10	1.2	+ .6	N. Platte . . .	13	-14	1.1	+1.0	Midland . . .	41	-6	.2	+ .1
GA. Atlanta . . .	36	-8	T	-1.1	Omaha . . .	16	-8	.3	+ .1	San Angelo . . .	40	-9	1.1	+ .9
Augusta . . .	36	-11	.1	-.8	Valentine . . .	13	-11	.8	+ .7	San Antonio . . .	42	-11	1.5	+ .9
Macon . . .	38	-12	T	-1.0	NEV. Ely . . .	29	+2	1.1	+1.0	Victoria . . .	46	-10	1.7	+1.1
Savannah . . .	39	-12	.4	-.2	Las Vegas . . .	51	+3	.4	+ .3	Waco . . .	38	-12	2.4	+1.8
HAWAII, Hilo . . .	72	+1	.4	-2.7	Reno . . .	34	-2	.9	+ .7	Wichita Falls . . .	26	-19	1.4	+1.1
Honolulu . . .	75	+3	T	-.6	Winnemucca . . .	34	+1	.4	+ .2	UTAH. Blanding . . .	32	0	2.3	+2.1
Kahului . . .	73	+2	.1	-.6	N.H. Concord . . .	11	-10	.6	0	Salt Lake City . . .	40	+8	1.0	+ .7
Lihue . . .	73	+2	0	-1.1	N.J. Atlantic City . . .	23	-10	.9	+ .1	VT. Burlington . . .	9	-8	.2	-.2
IDAHO, Boise . . .	39	+5	.8	+ .5	Trenton . . .	25	-7	.9	+ .3	VA. Lynchburg . . .	27	-10	0	-.7
Lewiston . . .	42	+5	.3	+ .1	N.MEX. Albuquerque . . .	42	+3	.4	+ .3	Norfolk . . .	31	-10	T	-.8
Pocatello . . .	36	+8	.4	+ .2	Roswell . . .	18	-4	.8	+ .3	Richmond . . .	28	-10	T	-.8
ILL. Cairo . . .	23	-16	.3	-.6	N.Y. Albany . . .	16	-6	.8	+ .2	Roanoke . . .	26	-11	0	-.8
Chicago . . .	17	-9	.4	0	Binghamton . . .	18	-6	.8	+ .2	WASH. Colville . . .	33	+4	.6	+ .2
Moline . . .	14	-10	T	-.3	Buffalo . . .	15	-9	.6	0	Omak . . .	32	+4	.9	+ .6
Peoria . . .	14	-12	0	-.4	New York . . .	26	6	.7	0	Quillayute . . .	42	+1	2.2	-.9
Rockford . . .	13	-10	T	-.3	Rochester . . .	17	-7	1.6	+1.0	Seattle-Tacoma . . .	45	+3	.5	-.6
Springfield . . .	14	-15	T	-.4	Syracuse . . .	18	-6	.5	-.2	Spokane . . .	34	+3	.7	+ .3
IND. Evansville . . .	16	-19	0	-.8	N.C. Asheville . . .	29	-10	T	-.9	Walla Walla . . .	43	+4	.3	-.1
Ft. Wayne . . .	9	-17	T	-.5	Charlotte . . .	34	-9	0	-.9	Yakima . . .	38	+4	.5	+ .3
Indianapolis . . .	12	-17	T	-.6	Greensboro . . .	28	-12	0	-.8	W.Va. Beckley . . .	14	-18	T	-.8
South Bend . . .	10	-15	T	-.5	Hatteras . . .	32	-13	T	-1.1	Charleston . . .	18	-18	.2	-.6
IOWA, Burlington . . .	17	-9	T	-.3	Raleigh . . .	30	-11	0	-.8	Huntington . . .	20	-15	T	-.7
Des Moines . . .	14	-9	.1	-.1	Wilmington . . .	35	-12	T	-.8	Parkersburg . . .	19	-15	T	-.6
Dubuque . . .	15	-10	T	-.3	N.DAK. Bismarck . . .	11	-1	.3	+ .2	WIS. Green Bay . . .	12	-5	T	-.2
Sioux City . . .	11	-7	.2	0	Fargo . . .	3	-6	T	-.1	La Crosse . . .	6	-12	T	-.2
KANS. Concordia . . .	18	-12	.5	+ .3	Williston . . .	10	-3	.4	+ .3	Madison . . .	12	-7	T	-.2
Dodge City . . .	19	-15	1.1	+1.0	OHIO. Akron-Canton . . .	13	-14	T	-.5	Milwaukee . . .	19	-2	.2	-.1
Goodland . . .	13	-18	.7	+ .6	Cincinnati . . .	13	-19	0	-.7	WYO. Casper . . .	25	-1	.4	+ .3
Topeka . . .	22	-10	.3	+ .1	Cleveland . . .	14	-13	.1	-.4	Cheyenne . . .	26	+3	.2	+ .1
Wichita . . .	23	-12	1.6	+1.4	Columbus . . .	13	-16	T	-.6	Lander . . .	26	+1	.4	+ .3
KY. Lexington . . .	14	-20	0	-.8	Dayton . . .	12	-17	T	-.6	Sheridan . . .	16	-9	.3	+ .1
Louisville . . .	19	-16	T	-.8	Toledo . . .	10	-16	T	-.4	P.R. San Juan . . .	80	+5	.2	-.5

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 ESCS State offices in cooperation with the National Weather Service.

**ALABAMA:** Cold and dry with warming trend. Temperatures averaged 10° below normal. Light rain in south on 9th.

Fieldwork limited by cold temperatures and wet fields. Care and feeding of livestock and poultry major activity. Few soybean fields harvested. Small grains made limited growth and in poor to fair condition. Planting of Irish potatoes underway. Pruning fruit nearing completion. Livestock fair condition.

**ARIZONA:** Temperatures normal some areas, 3 to 6° above normal other areas. Precipitation statewide; heaviest amounts, higher elevations, snow above 5,500 ft.

Thundershowers halted field activities 10th. Some ground cotton remains, rain damage varied. Small grain planting at standstill, some late plantings may be eliminated. Sugarbeets excellent growth. Alfalfa haying seasonally slow, new and renovated fields good progress. Harvests of lettuce, other mixed vegetables interrupted, some vegetables lost, over-mature. Later fields responding well. Preparations, planting spring crops at standstill. Citrus harvest active but interrupted by rain, muddy fields. Ranges marked improvement, soil moisture greatly improved, stock tanks mostly full. Range grasses growing well, good prospects late winter, spring browse. Cattle, calves, sheep, lambs generally good condition.

**ARKANSAS:** Highest normal 48°, lowest 39°. Highest mean 36°, lowest 22°. Highest temperature 59°, lowest 4°. Temperatures 10 to 17° below normal. Most precipitation 0.30 in.

Fieldwork again limited to cattle feeding. Herds remain on full feed. Small grain growth nil.

**CALIFORNIA:** Violent weather and large amounts of precipitation to nearly entire state. Temperatures near normal in deserts and mountains and slightly above normal elsewhere. Only a few locations in deserts received less than 1.00 in. Amounts in excess of 7.00 in. reported at many mountain locations and south.

Rain beneficial. Yellowing reported low areas. Planting continues, soil permitting. Most field activities stopped. Rains delaying most cultural activities. Early fruit and nut varieties blooming. Bees moved into almonds. Citrus harvest slow. Some losses expected cabbage and celery south coast due over-maturity and disease from wet weather. Lettuce harvest active Imperial Valley. Planting spring lettuce delayed central and south coast. Harvest broccoli, cabbage, cauliflower light. Lambing, calving continues.

**COLORADO:** Dry beginning of week. Snow across mountains and western valleys 6th through 10th. Considerable low cloudiness and fog with freezing drizzle over eastern plains entire week. Precipitation ranged from 0.03 to 1.27 in. in west; traces to 0.37 in. east. Temperatures mild beginning of week. East turned colder on 5th and remained cold. Mountains and western valleys turned cooler on 6th. Temperatures ranged up to 9° above normal over mountains and west. Eastern plains varied from 2° below to 9° above normal.

**FLORIDA:** Midweek rains averaging 0.50 to 2.00 in. soaked the state. Cold temperatures dominated early week with scattered frost and freezing temperatures into south. Weekend readings were not as cold with sunny skies.

Soil moisture adequate south, central, excessive north, west. Fieldwork limited due to wet fields. Tobacco plants small but in good condition. Supply adequate. Small grains making very little growth because of cold. Sugarcane harvest continues; growth very slow on young cane. Pasture conditions poor to very poor north. Southern pastures poor to fair. Small grain pasture growth slow. Permanent pastures supplying very little forage. Supplemental feeding heavy. Cattle condition poor to good. Citrus groves continue excellent, defoliated trees showing new growth. Some trees swelling bloom buds. Light frost last week. Harvest very active; limited by weather. Vegetable crops mostly fair to good condition. Freezing temperatures, frost early week, some areas. Southwest area hardest hit. Cold weather continues to slow plant maturity. Shipments up 1% from previous week. Fruit set continues light. Volume increased for several crops including snap beans, chinese cabbage, strawberries, lettuce, potatoes, celery, sweet corn, eggplant, radishes, tomatoes held steady. Cabbage, carrots, cucumbers, escarole, okra, peppers, squash declined in supply. Plantings continue active most crops. Watermelon crop poor to fair. Heavy replanting due to frost and freezing temperatures. New crop winter potatoes, strawberries should gain rapidly next several weeks.

**GEORGIA:** Temperatures 12 to 18° below normal. Average readings varied from 28° north to 40° extreme southwest. Snow fell in east central night of 8th. Rain fell in southern third on 8th. Precipitation ranged from none in north to 0.10 in. central to nearly 1.00 in. extreme southeast.

Soil moisture excessive. Farm activities limited by wet conditions. Spring land preparation moving slowly in south and central, not yet begun in north. Small grains fair to good condition. Cattle fair condition. Pastures fair condition, recovery delayed by cold.

**HAWAII:** Weather favorable crop growth.

Most sections dry. Heavy irrigation all areas. Water levels decreasing both for domestic and agriculture uses. Pastures on Kau, Kona, Hawaii poor. Cabbage supplies ample, others light to moderate. Banana supplies decreasing. Papaya and pineapple harvesting light. Sugar getting active. Pastures poor to fair; heavy supplemental feed of cattle. Ranchers applying for federal assistance.

**IDAHO:** Temperatures most areas 10° above normal. Extremes: 56 and 0°. Substantial precipitation except Panhandle region. Some southern stations 1.00 in. above normal.

Wet weather limited activities to tending cattle, marketing. Calving and lambing continuing. Livestock holding areas muddy. Livestock generally good condition. Feed supplies adequate.

**ILLINOIS:** Temperatures 9° below normal north, 12 to 19° below normal south. Precipitation 0.50 in. northeast and south, trace elsewhere. Snowfall

1 to 10 in. northern two-thirds, heaviest extreme north.

Winter wheat mostly good. Some pig and lamb losses due to cold; feed consumption up. Soil moisture adequate to surplus.

INDIANA: Sunny but cold. Temperatures 18°; 12° below normal and ranged from -12 to 37°. Precipitation slight but snow cover from 4 in. extreme south to 18 in. extreme north.

Major activities: Caring for livestock--death loss light, snow removal, chores.

IOWA: Temperatures much below normal. Departures varied from 6° subnormal northwest to near 10° subnormal south and east. Lows -17 to -22°. Temperatures moderated with latter week highs in 20's. Precipitation began falling as heavy snow over southwest Iowa late on 12th. Snow depths 7 to 12 in. north and west and 2 to 4 in. southeast by 13th.

KANSAS: Unusual cold with frequent snows west. Major winter snow storm end of period. Moisture equivalents range from 0.50 to 1.00 in. west and 1.00 to over 1.50 in. east. Snow depths 3 to 6 in. southeast to 8 to 12 in. west and north. Temperatures from 15 to 17° in west to 19 to 22° central and northeast to 25° southeast or 15 to 17° below normal west to 10 to 13° below normal elsewhere. Heavy snow weekend. Light to moderate snow cover before. Heavy supplemental feeding of cattle. Calving underway with few losses reported. Hog farrowings mostly normal with few losses reported. Moisture situation still critical west central but snow cover should help. Farm activities centered around snow removal, caring for livestock, and machinery repairs.

KENTUCKY: Temperatures 20° below normal beginning of week moderating to 10° below normal by week's end. Little or no precipitation with only trace amounts of snowfall 13th.

Only four burley markets open. Unofficial reports of heavy baby pig losses from TGE, scours and cold weather.

LOUISIANA: Temperatures 12 to 15° below normal. Extremes: 21 and 69°. Light snow, sleet and freezing rain midweek, heavy thunderstorms on 12th statewide.

Farm activities: Care and feeding of livestock.

MARYLAND & DELAWARE: Temperatures much below normal. Highs in upper 20's and low 30's except in mountains where highs averaged about 20°. Lows in teens except about 5° in mountains. Precipitation light except moderate to isolated heavy amounts over northeastern Maryland and Eastern Shore of Maryland and Delaware. Snow storm beginning of week dumped light amounts over west with moderate to heavy falls over remainder of area. Weekend sunny and cold.

Farmers limited to winter chores and maintenance work.

MICHIGAN: Temperatures below normal over Lower Peninsula and slightly above normal over Upper Peninsula. Maximum temperatures warmed to mid 20's and low 30's by 8th. Minimums were -5 to -19°. Precipitation light to non-existent with 0.02 in. or less in most areas. Snow depths over southern half of Lower Michigan ranged from 6 to 19 in. Amounts over northern half of Lower and Upper Michigan ranged from 10 to 26 in.

Main farm activities feeding livestock and farm chores.

MINNESOTA: Temperatures 2 to 4° above normal in extreme northeast and normal to 6° below normal elsewhere except 8 to 13° below normal extreme southeast. Extremes: 33 and -21°. Precipitation from 0.10 to 0.20 in. below normal. Totals a trace to 0.07 in. north and trace to 0.14 in. south. New snowfall averaged from trace to 1 in. north but locally around 3 in. extreme northeast near Lake Superior. Over south amounts were about 1 in.

MISSISSIPPI: Temperatures 15 to 20° below normal. Extremes: 11 to 60°. Rainfall less than 0.10 in.

Soil moisture surplus to adequate. Fieldwork: 1.1 days suitable. Winter wheat and oats mostly in poor condition. Livestock in fair to poor condition. Hay and roughage supplies short to adequate. Feed grain supplies mostly short.

MISSOURI: Heavy snows, up to 12 in. many areas covered most of State. Most activities at standstill except for emergency care of livestock.

MONTANA: Week began with brief warming spell, ending with another major storm east of Divide. Precipitation well above normal except northwest and extreme southwest. Precipitation amounted to several inches new snow, blizzard conditions in east. Between 12 and 24 in. snow over plains, 6 to 12 in. western valleys. Temperatures averaged 2 to 14° below normal over mountains and plains to a little above west. Moisture up to an inch common.

Winter wheat condition good, snow cover good to excellent. Livestock condition fair to good. Death losses about normal with higher losses in northeast. Full damage assessment due to blizzards not available. Moderate to severe difficulty getting feed to livestock, particularly in east and northeast. Calving 5% complete, lambing 10%.

NEBRASKA: Past week fair. Blizzard 12th; 7 in. new snow in Lincoln by 13th. Storm continued through Monday, winds gusting to near 40 mph. Schools, offices and most businesses closed 13th.

NEVADA: Precipitation throughout week. Snowfall depths Lake Tahoe basin increased up to 4 feet. Temperatures 4 to 8° above normal. Extremes: 15 and 67°.

Livestock wintering well. Feed supplies adequate. Caring for livestock main winter activity.

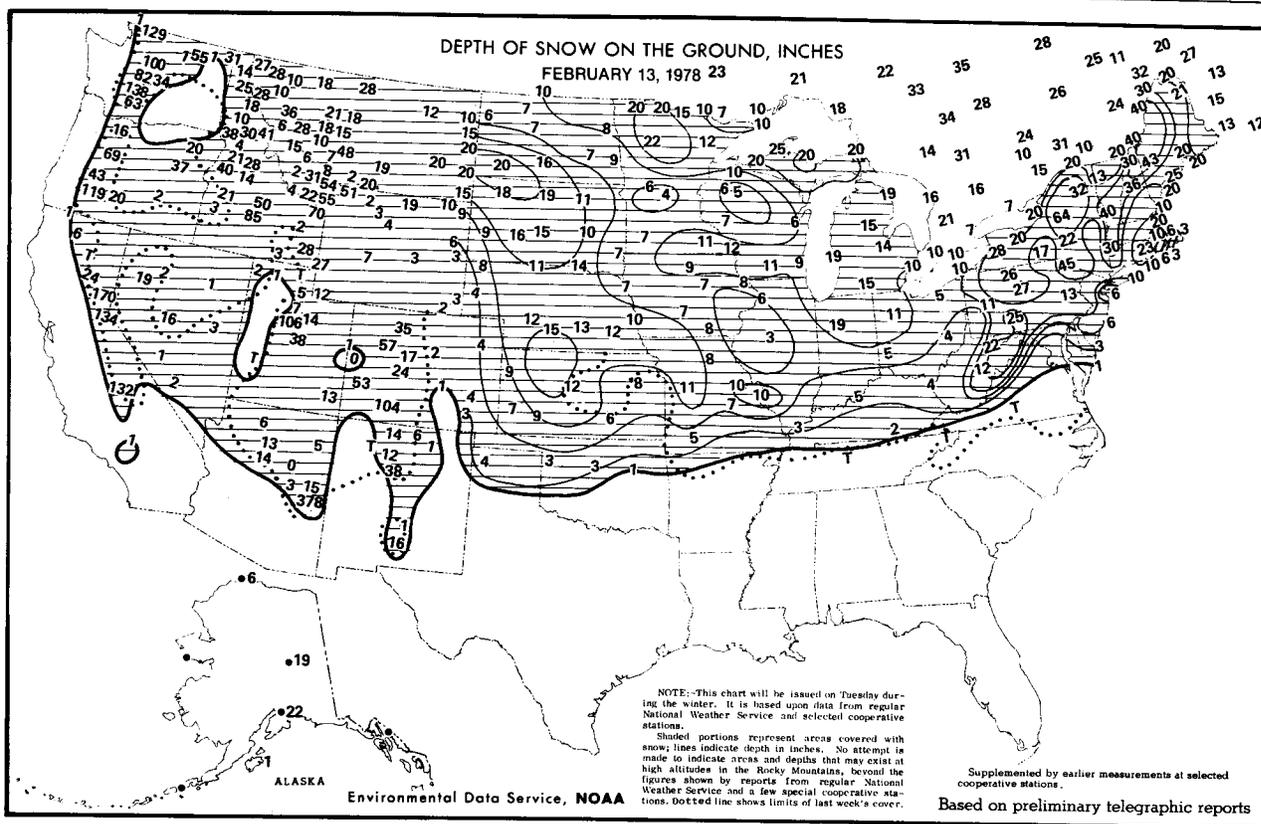
NEW ENGLAND: Paralyzing snow storm early week. Snow spread into southern New England 6th. Boston collected 27 in., an all time record for a single storm. Amounts dropped off markedly toward Quebec border area with 2 to 4 in. reported. Peaceful weather followed storm with nighttime radiational cooling producing some chilly early morning temperatures.

NEW JERSEY: Temperatures 11° below normal; averaging 17° north, 22° south and 25° coastal areas. Extremes: -12 and 39°. A snow storm on 6th and 7th brought heavy precipitation along coast and north. Heavy snow varied from 9 to 22 in.

Outdoor activity continues to be limited due to snow cover.

NEW MEXICO: Persistent cloudiness with rain and snow first half of week and again 10th and 11th. Moisture totals 0.25 to 0.50 in. generally.

Planting of spring lettuce, mid season onions, and durum wheat continued. Irrigated winter wheat and barley, fair to good condition with moderate grazing. Dryland winter wheat, poor to fair with



light grazing. Ranges, fair condition with light to moderate supplemental feeding. Livestock, good with calving and lambing continuing.

**NEW YORK:** Major snow storm; 18 in. over New York City and Long Island, around 24 in. in Catskills, 20 in. in Rochester area, and 8 to 12 in. elsewhere. Water content of snow pack 2 to 4 times normal. Temperatures several degrees below normal, coldest 9th and 10th. Temperatures in Adirondacks reached  $-20^{\circ}$ .

**NORTH CAROLINA:** Temperatures  $10^{\circ}$  below normal. Precipitation less than 0.05 in.

Fieldwork: 1.3 days suitable. Soil moisture adequate to surplus. Condition small grain fair; pastures poor to fair. Hay, roughage and feed grain supplies short to mostly adequate.

**NORTH DAKOTA:** Blizzard struck bringing strong winds and heavy snow to west central, southwest and south central. Most areas received over 12 in. new snow, bringing activity in that area to a halt. Precipitation data scarce from these areas, but apparently many stations received near normal monthly moisture during storm. Temperatures warmest so far this year; many stations reported maximum temperatures above  $20^{\circ}$ . Extremes:  $-27$  and  $23^{\circ}$ .

Blizzard brought particular problems to livestockmen who found feeding of livestock near impossible. Some reports indicate livestock losses due to winter storm. Farmers and ranchers preparing for upcoming calving and lambing season as weather allows.

**OHIO:** Snow flurries, mainly east, 6th and 7th. Temperatures and precipitation averaged below normal. Snow depth ranged 4 in. south to 12 in. northwest.

Farm activities mostly limited to essential chores. Continue to market storage stocks of potatoes and dry onions. Livestock in fair to good condition.

**OKLAHOMA:** Temperatures much below normal, ranging from  $11^{\circ}$  below normal southeast to  $17^{\circ}$  below normal southwest. Precipitation ranged from 0.85 in. Panhandle to 2.39 in. central.

Topsoil moisture adequate, subsoil moisture short. Significant snow statewide. Heavy rains at weekend. Winter wheat fair condition, most snowcovered. Native pastures and ranged fair condition. Livestock fair condition. Heavy supplemental feeding required but adequate supplies of hay available.

**OREGON:** Precipitation in all areas. Rainfall along coast ranged from 1.93 in. to 4.79 in. Interior valleys of west received 1.00 to 2.00 in. Rainfall in east ranged generally from 0.25 to 0.50 in. Temperatures 3 to  $8^{\circ}$  above seasonal norms. Extremes: mid 60's, high 20's west; high 50's, high teens east.

Farm activity picking up but many areas still too wet. Spraying underway where conditions permit. Field crops in good shape. Some low lying grain fields yellowing due to standing water. Fruit and berry activity minimal. Calving and lambing continue. Feeding heavy. Hay and roughage supplies adequate.

**PENNSYLVANIA:** Paralyzing snow storm beginning of week left up to 12 in. snow eastern half and up to 30 in. in Pocono Mountains. Western half only 2 to 4 in. Fair but cold remainder of period. Below normal temperatures with departures this week 9 to  $12^{\circ}$ . Extremes: 38 and  $-20^{\circ}$ . Precipitation from less than 0.50 in. western two-thirds increasing to 1.25 in. extreme eastern areas.

Normal winter chores continue to be hampered by below normal temperatures and unusually heavy snow accumulation.

**PUERTO RICO:** Island rainfall 0.47 in. or 0.22 in. below normal. Temperatures about 77° on coasts and 71° interior. Extremes: 91 and 60°.

**SOUTH CAROLINA:** Much colder than usual with mid-week temperatures lowest. Nighttime temperatures below freezing throughout week except south coast. Light precipitation with snow up to 2 in. 8th and 9th in southern half.

Weather permitting, peach and apple trees pruned; tobacco beds and lands prepared for spring planting. General farm maintenance.

**SOUTH DAKOTA:** Temperatures seasonably cold, ranging from 1° above normal to 13° below normal. Average temperatures 8 to 17°. Extremes: -17 and 31°. Precipitation statewide. Central sections received 0.50 to 0.75 in. Snow depths greatest in north and central.

**TENNESSEE:** Cold dry weather. Rain developed 12th night with amounts less than 0.50 in. Snow remained from previous week as temperatures averaged 11 to 17° below normal. Temperatures warmed to upper 40's in the east to low 60's in west at week's end.

Farm activities consisted of general chores, repairing equipment, and care of livestock.

**TEXAS:** Pacific fronts moved through midland late week causing freezing rain, drizzle; snow north, rain, scattered thunderstorms south. Skies clearing behind front. Temperatures below normal by 12 to 14° northern third, coastal section; by 4 to 7° remainder. Soil temperatures south range from near 50° southern Blacklands and rice belt to lower 60's lower Rio Grande Valley.

Snow, freezing rain, cold temperatures prevented most fieldwork northern areas; rains, wet fields slowing final pre-plant preparations southern areas. Wheat fields Panhandle received much needed moisture from varying amounts snow; much more needed. Dryland stands hurt by prolonged dry weather, cold temperatures. Blacklands, east Texas southward have sufficient moisture for growth but cold temperatures, cloudy skies limited progress. Oat stands making very limited growth due cold, cloudy weather. Recent moisture benefit fields Cross-Timbers, Edwards Plateau. Some fields east, along coast too wet to graze. Many sorghum producers lower Valley ready to plant when soil temperatures rise. Cotton farmers lower Valley, along coast getting planting equipment ready; waiting for warmer soil temperatures. Few gins still operating on southern High Plains. Flax growth slowed by cold temperatures, cloudy weather. Stands south still need rain; other areas have sufficient moisture.

Lower Rio Grande Valley citrus movement slowed by wet conditions. Cool, damp weather delayed lettuce development as harvest continues on earlier fields. Melon planting active as weather conditions allowed. Early bell pepper fields emerging. Onion blight a problem, spraying continues on frequent basis. San Antonio-Winter Garden area carrot harvest slowed as cool, wet weather hampered growth development. Cabbage, spinach, cauliflower harvest continues as weather permits. Onion progress slowed by cold temperatures. Upper Gulf Coast winter vegetable growth very slow due cool, wet weather. East Texas, field activities limited by adverse weather. Central Texas land preparation for spring planting active as weather permitted. Planting fruit and pecan trees. North Texas ice storms severely damaged winter vegetables in some locations.

Trans-Pecos January seeded onions up and doing well.

Ranchers continue heavy feeding as snow, freezing rain, cold temperatures causing weight losses. Sunshine, warmer weather needed for winter grass, small grain growth. Grass most pastures, ranges depleted; cold weather hindered regrowth. Recent moisture should boost growth in pastures, ranges when weather warms.

**UTAH:** Snow in mountains and rain or rain changing to snow in valleys. Accumulated moisture moderate to heavy. Temperatures well above normal; averages ranged from 2° below normal to 13° above.

Most farm activities feeding and caring for livestock. Cattle and sheep on winter range in good condition. Some early farm flock lambs beginning to drop. Marketing of dry onions, apples and potatoes continued.

**VIRGINIA:** Average temperatures mid to upper 20's; about 15° below normal. Extremes: mid 40's and -5°. Precipitation in form of snow; generally light with snow ranging from trace to several inches. Heaviest in southwest and on Eastern Shore. Snow cover ranged from patches to 12 in. and even greater depths in southwest.

Topsoil moisture adequate to surplus. Snow cover protecting small grains in most areas. Less than a half day suitable for fieldwork. Snow removal from roads, feeding aprons big task some localities. Feed supply short north and west, mostly adequate elsewhere. Prolonged winter cold causing higher feeding rates. Ice a problem with livestock especially southwest. Livestock condition mostly good. Severe cold causing deaths of newborn, some pneumonia, scours reported. Top-dressing small grains east; limited tobacco plant bed preparation south central areas. Limited pruning of orchards.

**WASHINGTON:** West: Temperatures 5° above normal coastal and northeast Olympic-San Juan regions and 7° above normal in Puget Sound area. Precipitation normal except 0.70 in. below normal on coast and 1.90 below normal in the west Cascades.

Fertilization of fields continues; pruning, tying of caneberrries neared completion.

East: Temperatures 7° above normal on Cascade eastern slope to 9° above normal in the Palouse-Blue mountains. Precipitation 0.20 to 0.30 in. above normal except 0.60 above normal in Okanogan-Big Bend; 0.30 in. below on Cascade eastern slope.

Snow cover melting; wheat breaking dormancy. Grape and orchard pruning. Lambing and calving continue. Some health problems resulting from wet and muddy conditions reported.

**WEST VIRGINIA:** Temperatures 10 to 20° below normal with 0° or below last 5 days in central. Precipitation much below normal, 0.25 in. or less. Snow depths up to 32 in. in northern mountains, 4 to 6 in. elsewhere.

Hay supply becoming short. Grain and other feed supplies mostly adequate. Some cattle loss through ice on ponds. Calf losses above normal due to cold damp conditions.

**WISCONSIN:** Week began cold but temperatures moderated to more seasonal levels in the the mid-20's on 8th and reached lower 30's 12th. Extremes: 32 and -17°. Precipitation light except heavy snow 6th along Lake Michigan and Lake Superior totaling 8 to 12 in. Snow cover exceeds 12 in. except northwest corner. Frost depths average 12 in., with deepest frost northwest where less snow cover.

WYOMING: Temperatures above normal reaching 50's many stations. Precipitation generally light, though spread out; many stations reported only trace.

Winter wheat fair to good condition, most has

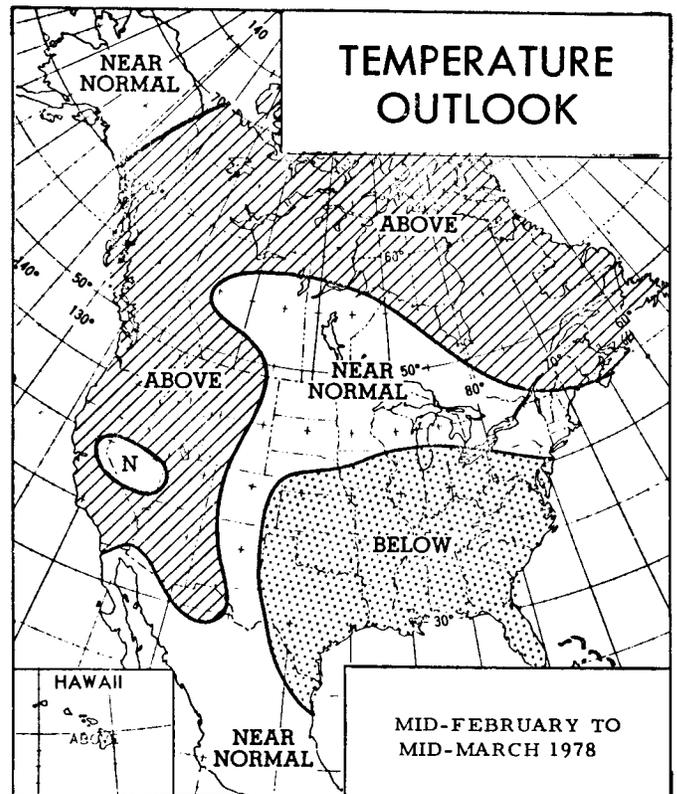
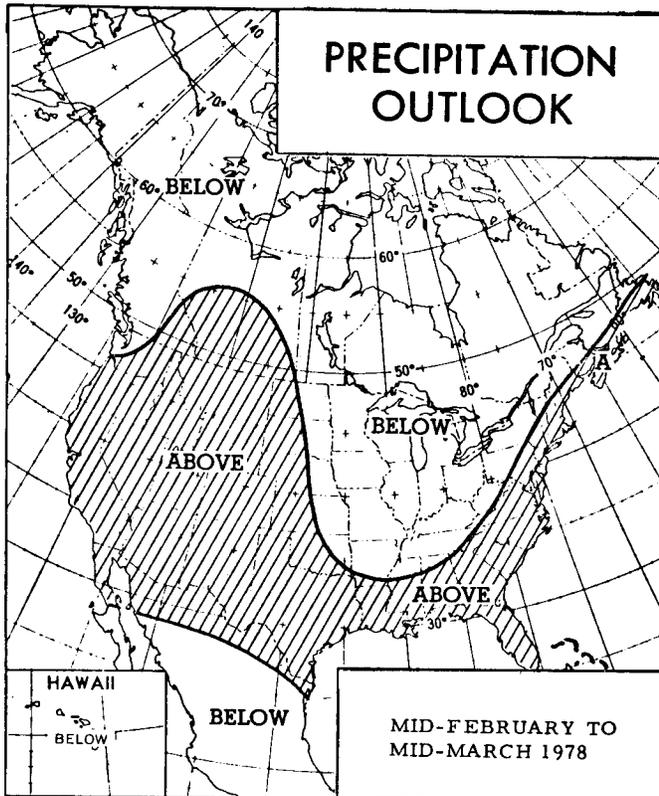
snow cover. Recent snows have been helpful. Livestock mostly good condition; increased supplemental feeding because of weather conditions. Some shearing of sheep and lambing where shelter available.

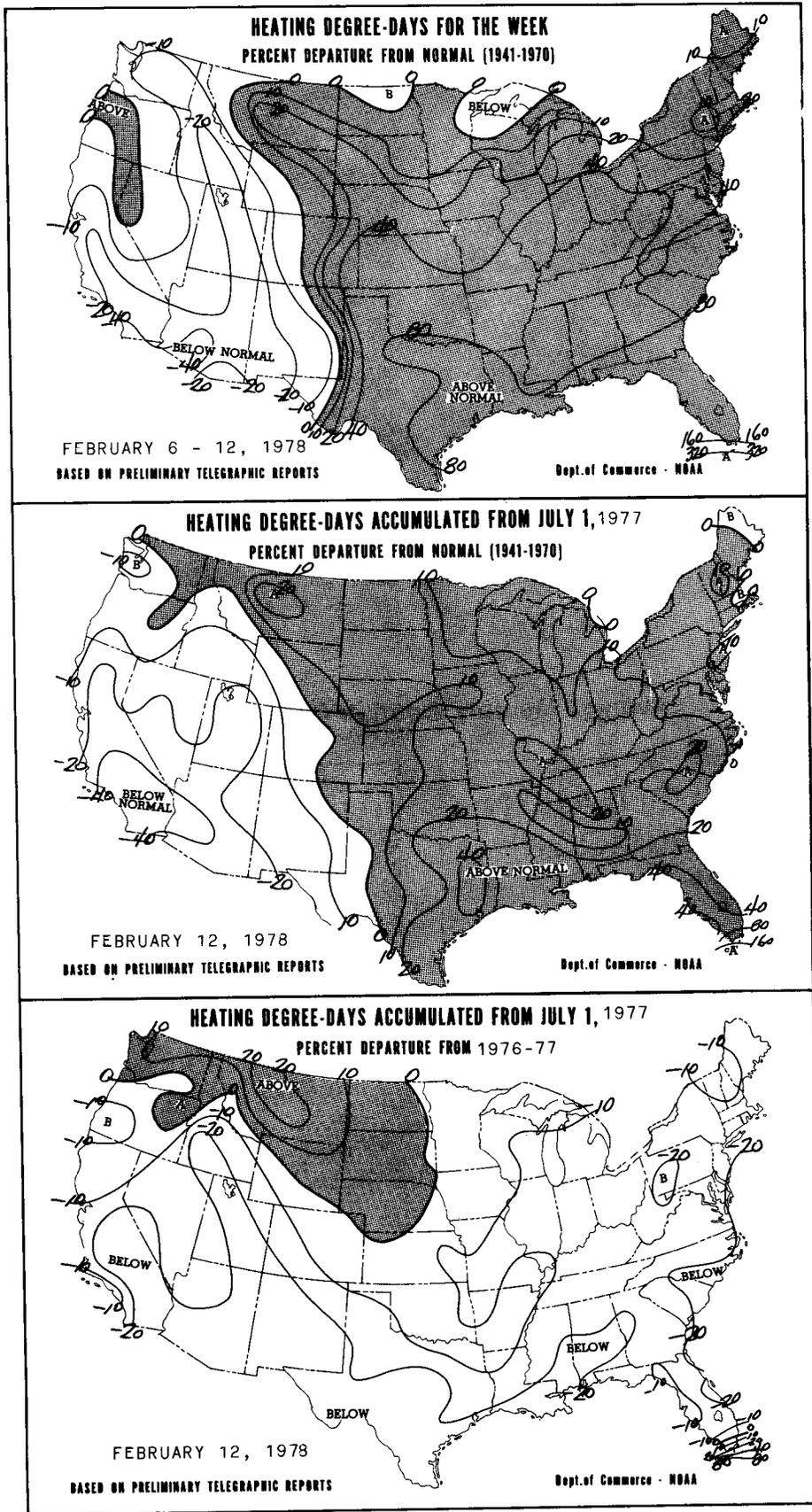
**WATER SUPPLY OUTLOOK FOR THE WESTERN UNITED STATES**  
 Issued as of February 1, 1978

The table below shows the runoff forecast in percent of the 15-year (1958-72) average. The forecasts are for the remainder of the water year (October thru September), except for the full water year for the Sacramento and San Joaquin Basins; April 1 to September 30, 1978, for the Missouri, Yellowstone, and North Platte Basins; November 1, 1977 to June 30, 1978 for the Little Colorado Basins; and January 1 to June 30, 1978, for the Gila Basin. The publication "Water Supply Outlook for the Western United States," issued as of February 1, 1978, contains the complete water supply forecasts for about 375 stations in the Western United States.

River	Station	Forecast 1,000 Acre-feet	Percent 15-year average
Columbia	Grand Culee, WA	67200	97
Columbia	The Dalles, OR	108000	103
Snake	Lower Granite, WA	25000	112
Sacramento	Red Bluff, CA	10500	118
San Joaquin	Big Creek, CA	1800	138
Weber	Gateway, UT	383	107
Jordan	Utah Lake, UT	411	109
Truckee	L. Tahoe-Farad	400	115
Colorado	L. Powell infl.	10700	122
Green	Green River, UT	4515	128
San Juan	Bluff, UT	1268	108
Little Colo.	Woodruff, AZ	6.5	76
Gila	Solomon, AZ	89	64
Rio Grande	San Marcial, NM	230	69
Arkansas	Pueblo, CO	315	117
Missouri	Ft. Peck, MT	5400	114
Yellowstone	Sidney, MT	7750	111
North Platte	Glendo, WY	1040	126

**Average Monthly Weather Outlook**





HEATING DEGREE DAYS (BASE 65°) FOR WEEK ENDING FEB. 12, 1978.

STATES AND STATIONS	WEEKLY			SEASONAL ACCUMULATION +			STATES AND STATIONS	WEEKLY			SEASONAL ACCUMULATION +			STATES AND STATIONS	WEEKLY			SEASONAL ACCUMULATION +		
	TOTAL	DEPARTURE*	DEPARTURE*	TOTAL	DEPARTURE*	DEPARTURE*		TOTAL	DEPARTURE*	DEPARTURE*	TOTAL	DEPARTURE*	DEPARTURE*		TOTAL	DEPARTURE*	DEPARTURE*	TOTAL	DEPARTURE*	DEPARTURE*
ALA. BIRMINGHAM...	224	89	2438	401	451	451	MAINE. CARIBOU...	393	17	6005	138	827	YOUNGSTOWN.....	558	85	4387	297	976		
MOBILE...	171	66	1659	415	438	438	PORTLAND.....	344	42	4820	164	561	OKLA. OKLAHOMA CITY	264	91	2926	340	198		
MONTGOMERY...	177	66	1766	105	735	735	MD. BALTIMORE...	282	65	3253	132	569	TULSA.....	81	2987	401	272			
ARIZ. FLAGSTAFF...	220	25	3552	90	671	671	MASS. BOSTON.....	269	20	3487	23	493	OREG. ASTORIA.....	150	1	3047	108	177		
PHOENIX.....	45	14	861	861	861	MICH. ALPENA.....	445	12	5209	19	639	BURNS.....	1	4452	109	11				
TUCSON.....	17	20	2650	507	1051	1051	DETROIT.....	458	47	4581	473	523	MEDFORD.....	136	377	389	531			
YUVA.....	33	42	480	307	179	179	FLINT.....	670	60	4650	740	719	PENDLETON.....	136	160	27	224			
ARK. FORT SMITH...	230	80	2823	437	518	518	GRAND RAPIDS...	874	87	4556	235	636	PORTLAND.....	136	2893	209	141			
LITTLE ROCK...	264	102	2752	345	95	95	HOUGHTON LAKE...	997	99	4561	70	70	SALEM.....	164	2893	120	179			
CALIF. BAKERSFIELD	70	24	834	731	46	46	LANSING.....	997	99	4561	70	70	PA. ALLENTOWN.....	51	3899	125	554			
EUREKA.....	112	1	2499	269	133	133	MARQUETTE.....	997	99	4561	70	70	ERIE.....	79	4407	197	171			
FRESNO.....	161	1	749	489	45	45	MUSKOGEE.....	997	99	4561	70	70	HARRISBURG.....	54	3360	50	131			
LOS ANGELES.....	36	14	1485	595	45	45	S. STE. MARIE...	8	8	597	332	516	PHILADELPHIA...	63	4076	7	11			
RED BLUFF.....	30	13	1414	505	5	5	MINN. DULUTH.....	356	65	5508	380	23	R. I. PROVIDENCE...	314	61	3865	147	636		
SAN DIEGO.....	30	13	1414	505	5	5	INTERNATL FALLS...	356	65	5508	380	23	S. C. CHARLESTON...	185	75	1727	184	451		
SAN FRANCISCO...	88	21	1560	277	180	180	MINNEAPOLIS...	997	99	4561	70	70	COLUMBIA.....	81	2333	141	236			
STOCKTON.....	95	21	1388	501	300	300	ROCHESTER.....	997	99	4561	70	70	GREENVILLE...	25	2479	257	574			
COLO. DENVER.....	239	9	3658	128	101	101	MISS. JACKSON...	998	89	2121	454	377	S. DAK. ABERDEEN...	38	25	638	720	354		
GRAND JUNCTION...	207	23	3433	401	273	273	MERIDIAN.....	206	206	1967	217	667	HURON.....	33	5886	594	11			
FUEBLO.....	280	62	3661	91	292	292	MO. COLUMBIA.....	304	76	3824	400	323	RAPID CITY.....	16	2666	667	353			
CONN. BRIDGEPORT...	287	42	3431	92	446	446	KANSAS CITY.....	307	80	4096	605	341	SIOUX FALLS.....	34	5818	659	79			
HARTFORD.....	304	28	4100	24	446	446	ST. LOUIS.....	1200	76	3906	483	473	TENN. CHATTANOOGA...	364	86	2833	470	438		
DEL. WILMINGTON...	308	81	3493	274	527	527	SPRINGFIELD...	289	86	3538	454	473	KNOXVILLE.....	80	2800	448	482			
D. C. WASHINGTON...	253	51	2873	45	595	595	MONT. BILLINGS...	345	76	4756	756	934	MEMPHIS.....	33	4451	157	409			
FLA. APALACHICOLA...	166	89	1340	342	295	295	GLASGOW.....	380	221	6785	979	855	NASHVILLE.....	78	3087	504	488			
DAYTONA BEACH...	120	68	778	181	94	94	GREAT FALLS...	380	221	6785	979	855	TEXAS. ABILENE...	216	89	2161	276	506		
FORT MYERS.....	153	77	1325	349	331	331	HAVRE.....	342	99	5610	1038	161	AMARILLO.....	95	2987	259	538			
JACKSONVILLE...	153	77	1325	349	331	331	HELENA.....	342	99	5610	1038	161	AUSTIN.....	174	1535	349	437			
KEY WEST.....	111	65	752	255	94	94	KANSAS CITY.....	307	80	4096	605	341	BEAUMONT.....	155	1365	110	374			
LAKELAND.....	38	18	232	80	237	237	SALES CITY.....	342	99	5610	1038	161	BRONNSVILLE...	69	5966	110	245			
MIAMI.....	103	43	800	80	237	237	SISSOULA.....	342	99	5610	1038	161	CORPUS CHRISTI...	106	1200	194	287			
ORLANDO.....	166	89	1340	342	295	295	NEBR. GRAND ISLAND...	42	73	4627	381	38	DEL RIO.....	130	903	202	483			
TALLAHASSEE...	166	89	1340	342	295	295	LINCOLN.....	42	73	4627	381	38	DEL PASO.....	130	903	202	483			
TAMPA.....	111	65	752	255	94	94	NORTH PLATTE...	42	73	4627	381	38	FORT WORTH.....	130	903	202	483			
NORTH PALM BEACH...	51	25	278	52	96	96	OKLA. OKLAHOMA CITY	264	91	2926	340	198	HOUSTON.....	156	1561	161	352			
GA. ATLANTA.....	201	55	2499	325	607	607	OKLA. TULSA.....	81	2987	401	272	LUBBOCK.....	33	2333	141	236				
AUGUSTA.....	198	53	2086	281	446	446	NEV. ELY.....	42	24	4207	610	607	HIGHLAND.....	168	1919	127	460			
Macon.....	198	53	2086	281	446	446	LAS VEGAS.....	29	21	1500	602	260	SAN ANGELO.....	169	1787	127	506			
SAVANNAH.....	182	83	1669	241	396	396	RENO.....	11	11	3259	546	459	SAN ANTONIO...	156	1440	357	381			
IDAHO. BOISE.....	184	31	3330	484	921	921	WINNEMUCCA.....	211	10	3421	774	474	VICTORIA.....	64	1751	284	271			
LENISSON.....	161	35	3467	148	126	126	N. H. CONCORD...	376	70	5140	452	592	HACO.....	103	2552	470	267			
POCATELLO.....	197	60	3878	655	811	811	N. J. ATLANTIC CITY...	295	71	3298	119	898	UTAH. SALT LAKE CITY	173	55	3044	867	800		
ILL. CAIRO.....	304	120	3373	690	231	231	TRENTON.....	291	63	3574	376	408	VT. BURLINGTON...	393	59	5154	168	548		
CHICAGO.....	334	62	4531	634	634	634	N. MEX. ALBUQUERQUE...	60	22	2653	322	858	VA. LYNCHBURG...	24	69	3195	330	563		
MOBILE.....	334	62	4531	634	634	634	ROSMELL.....	41	21	2080	590	722	NORFOLK.....	26	70	2409	87	578		
SPRINGFIELD...	357	167	4328	605	605	605	N. Y. ALBANY.....	330	30	4506	72	584	ROANOKE.....	26	70	2409	87	578		
IND. EVANSVILLE...	343	131	3684	519	545	545	BINGHAMTON...	42	43	4819	247	536	WASH. QUILLAYUTE...	4	4	3546	22	274		
FORT WAYNE.....	397	127	4587	622	622	622	BUFFALO.....	45	46	4386	104	757	SEATTLE-TACOMA...	37	4	4204	183	280		
INDIANAPOLIS...	367	118	4087	381	860	860	NEW YORK.....	71	50	3386	274	431	SPOKANE.....	24	3265	4	189			
SOUTH BEND.....	380	101	4484	329	585	585	ROCHESTER.....	35	48	4286	88	653	HALLA HALLA...	152	3265	4	189			
IOWA. BURLINGTON...	346	72	4676	582	509	509	SYRACUSE.....	30	41	4350	167	649	YAKIMA.....	187	28	3918	134	144		
DES MOINES.....	357	61	4779	338	281	281	N. C. ASHEVILLE...	251	67	3221	367	498	W. VA. BECKLEY...	34	129	4041	377	731		
DUBUQUE.....	372	61	5421	646	510	510	CHARLOTTE.....	216	63	2505	259	330	CHARLESTON.....	121	3492	496	726			
SIOUX CITY.....	351	49	5108	477	285	285	GREENSBORO...	232	84	3096	455	389	HUNTINGTON...	37	3452	405	619			
KANS. CONCORDIA...	325	83	4195	443	23	23	HATTERAS.....	33	76	2814	383	579	PARKERSBURG...	31	113	3642	428	771		
BODGE CITY.....	322	108	3599	232	140	140	RALEIGH.....	11	76	2814	383	579	WIS. GREEN BAY...	170	31	5507	333	846		
GOODLAND.....	365	125	4240	293	4	4	WILMINGTON...	2	76	1890	177	500	LACROSSE.....	14	49	5472	476	633		
TOPEKA.....	398	87	3550	346	223	223	N. DAK. BISMARCK...	378	5	6578	687	360	MADISON.....	14	24	4003	118	533		
WICHITA.....	295	87	3550	346	223	223	FARGO.....	430	36	6727	808	510	WYOM. CASPER...	81	9	4828	130	134		
WYOM. CASPER.....	353	137	3666	484	650	650	HILLISTON.....	388	22	6778	177	829	CHEYENNE.....	14	14	4003	118	533		
LOUISVILLE...	329	117	3559	422	448	448	OHIO. AKRON-CANTON...	360	93	4371	384	829	SHERIDAN.....	52	5501	641	536			
LA. BATON ROUGE...	158	68	1476	224	431	431	CINCINNATI.....	135	89	4178	811	578								
LAKE CHARLES...	159	77	1473	363	298	298	CLEVELAND.....	99	415	557	260									
NEW ORLEANS...	168	88	1376	287	388	388	COLUMBUS.....	113	415	557	260									
SHREVEPORT...	210	100	2156	574	174	174	DAYTON.....	66	119	4209	503	712								
							TOLEDO.....	87	114	4688	564	728								

BASED ON 1941-70 NORMALS.

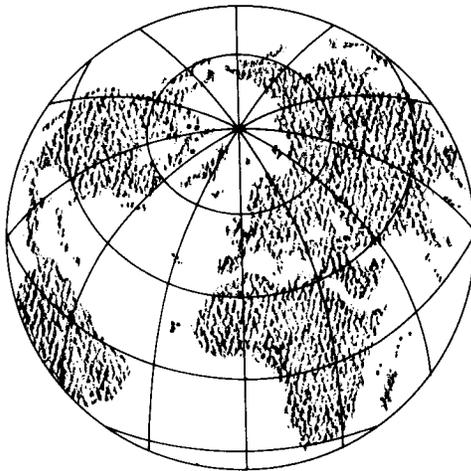
+ ACCUMULATION FROM JULY 1, 1977.



# FIRST CLASS MAIL

## World Weather and Crop Update

February 6 - 12



USSR. Severe frosts posed no particular problems in the main winter grain areas. Ample snow cover protected dormant wheat plants in areas where air temperatures approached the critical range. Temperatures were well above the critical range in the southern Ukraine and North Caucasus where there was little or no snow cover.

ASIA. Snow and rain fell in the People's Republic of China's main northern winter wheat belt. Ample rains also occurred in most of the provinces south of Yangtze with heaviest amounts along the east coast. However, precipitation was light in Kwangtung Province. India was seasonally dry except for light showers in the Bihar Plateau region.

AUSTRALIA. Little significant rain fell in Australia's main agricultural regions. Although January rains somewhat relieved the drought in several sections, especially New South Wales and Queensland, soil moisture remained low in many areas.

AFRICA. In North Africa, heavy rains dotted Morocco and Algeria; Tunisia received light to moderate showers. Substantial rains fell throughout the maize triangle in South Africa.

SOUTH AMERICA. Moderate to locally heavy showers fell over much of the Argentine provinces of Buenos Aires and Cordoba, but precipitation was generally light over the other principal agricultural areas. In the important corn and soybean areas of southern Brazil, Rio Grande do Sul received moderate to heavy showers over the weekend, but Santa Catorina was dry. Showers fell over the central Parana and Sao Paulo, but missed the western soybean areas where crops remained dry. Heavy rains, locally excessive, drenched the northeastern states.

EUROPE. Cold weather dominated western Europe with widespread snow in the northern half. Heavy rains, however, pelted southern France and northern Italy. The northern countries in eastern Europe---East Germany, Czechoslovakia, and Poland---also experienced a cold week with generally light snow. Light to moderate precipitation, mainly rain, was recorded in the southern half of this region. Moderate to heavy rains were scattered throughout Greece. The eastern half of Turkey's central wheat belt received moderate precipitation.