

WEEKLY WEATHER AND CROP BULLETIN

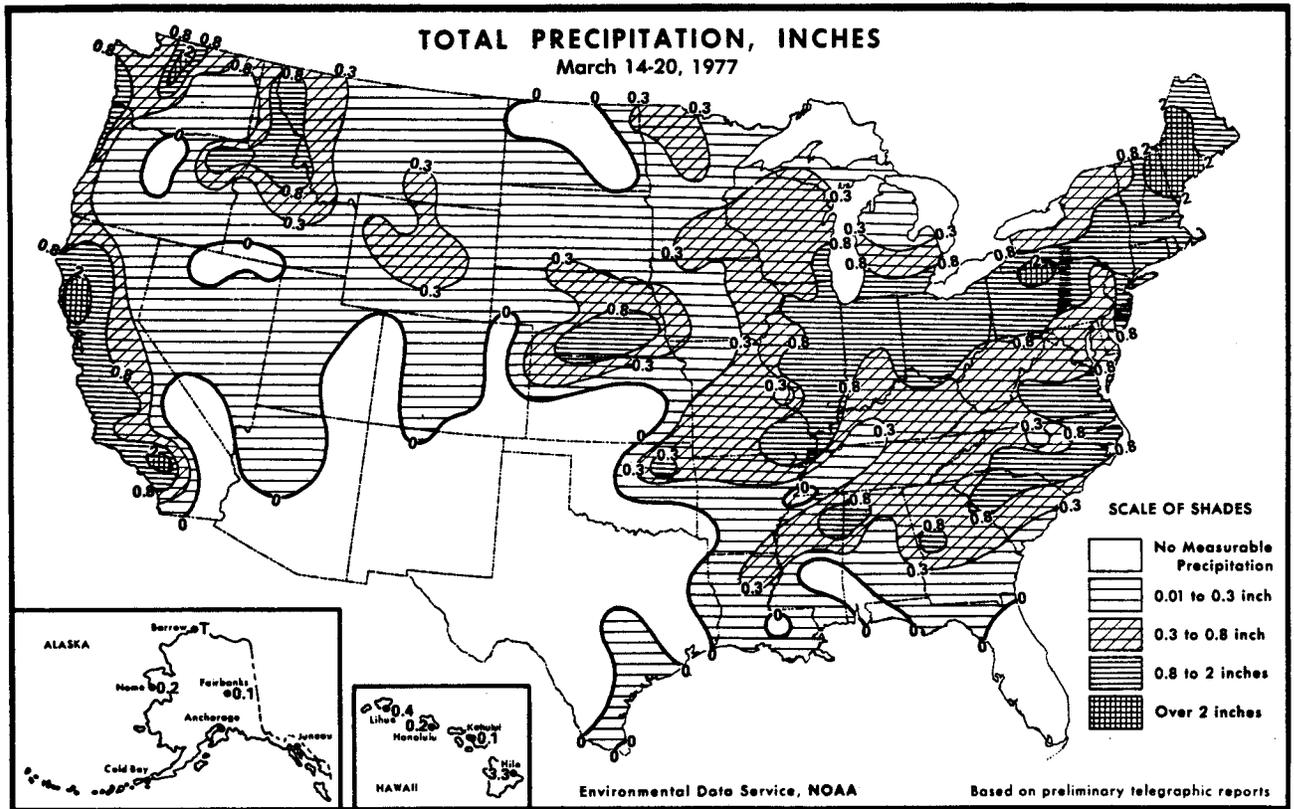
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National Weather Summary

For the Week of March 14 to 20

HIGHLIGHTS: The average temperatures for the week were above normal east of the Rockies and below normal in the West. In the East, the weather was much warmer than normal early in the week and many record high temperatures were recorded. Melting snow coupled with rainfall caused some local flooding in the Northwest. Cooler air moved slowly eastward and by the end of the week, temperatures were seasonable. Canadian air moved into the northern Rockies over the weekend and winter weather returned. Significant precipitation fell in most of California and lighter amounts in the Pacific Northwest. Most of Nebraska collected over 1/2 in. of rain or snow. From the eastern Plains to the Atlantic, precipitation was normal or better.

Unseasonably warm temperatures dominated the eastern portion of the central Plains, the middle Mississippi Valley and eastward on Monday. Wichita, Kan. had a high temperature of 82°. Record highs were recorded at Evansville, Ind. 77° and Alpena, Mich. 55°.

Rain continued in New England and eastern New York. The rain, combined with melting snow, brought many streams

to flood stage.

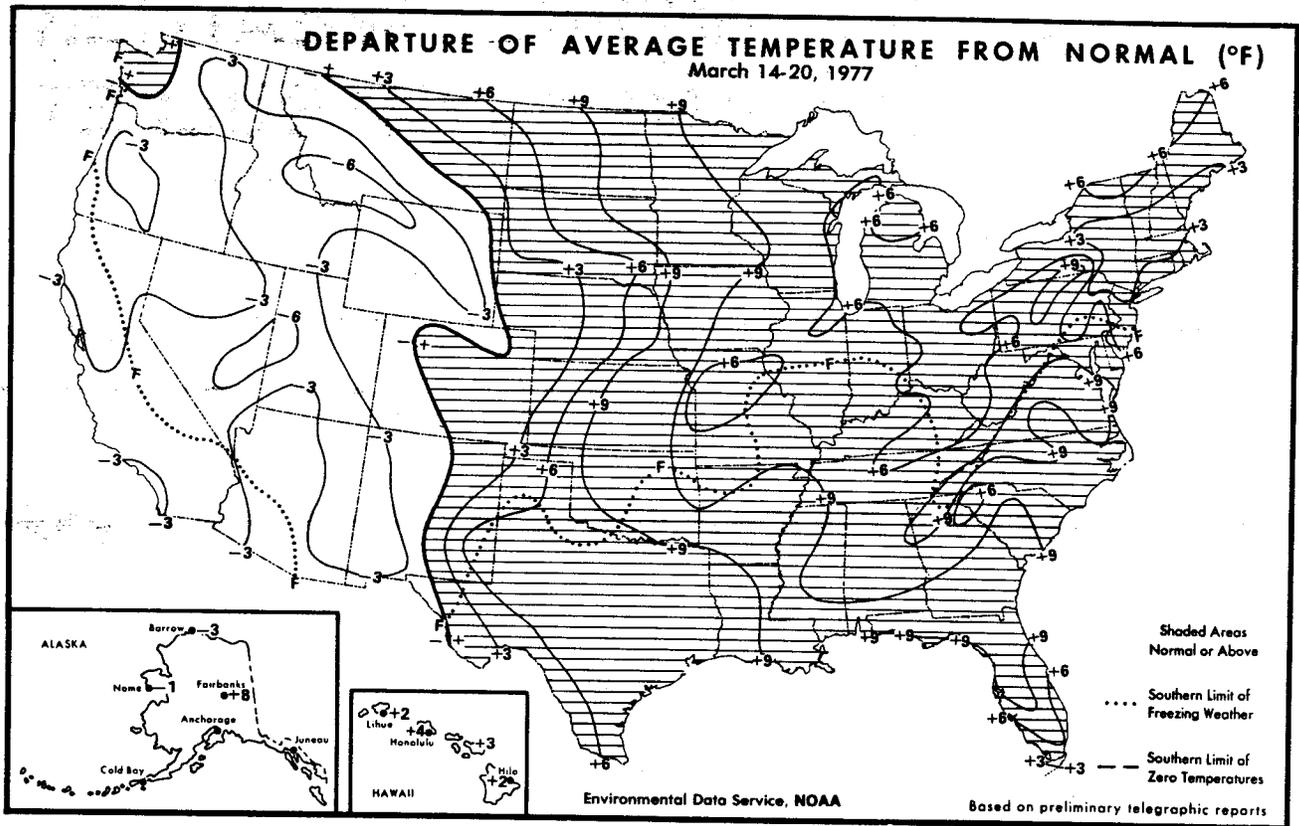
Further west a cold front pushing toward the Pacific Coast spread rainshowers, with snow in the mountains, across the northern Pacific Coast into Idaho, Montana and northern California.

Rain and showers continued in the West on Tuesday. Only light amounts fell in the northern portion of the West but the intensity was increasing in northern and central California and spreading into southern California.

A few rainshowers were scattered along the central Gulf of Mexico Coast and over southern Florida. There were a few showers over the middle Appalachians and drizzle lingered in New England. Light snow was reported in northern Minnesota.

It was somewhat cooler Tuesday west of a line from northern Michigan to southwest Texas but areas east of the line continued to have unseasonably warm weather. Record high temperatures for the date included Alpena, Mich. 59°, Chicago 72°, Evansville, Ind. 80° and Columbia, S.C. 88°.

The cold front in the West was moving across central



and southern California on Wednesday. Significant amounts of rain with snow in the mountains fell in nearly all of California. The rain was helpful but was not nearly enough to break the drought in those areas. The rain or snow area moved eastward into the mountains accompanied by high winds.

Elsewhere on Wednesday a few rainshowers were reported in southern New Mexico and southwest Texas. Rainshowers and snow flurries continued over the central and southern Great Lakes and into northern New England. The warm weather persisted in the East with record high temperatures reported in the Southeast.

A low pressure center associated with the cold front moving through the West was located in Nebraska and moving eastward on Thursday. Showers and thundershowers ended over California. In the meantime locally heavy snow and high wind developed in Utah and Colorado. The wind kicked up dust storms in eastern Colorado, western Kansas, Oklahoma and Texas and northern New Mexico.

Showers and thunderstorms began to develop east of the low and by the end of the day were reported from Arkansas to eastern North Dakota, Minnesota and Wisconsin. Most of the precipitation fell in southeastern Missouri and Illinois and gradually spread eastward toward Pennsylvania. Cooler weather moved eastward behind the storm.

The fast moving storm moved from Missouri north-eastward off New England on Friday. Snow fell from Minnesota through the Great Lakes region and New England. Heavy amounts were measured in Michigan and New England. Showers and thunderstorms occurred from central Tennessee and North Carolina northward to the snowline

in Pennsylvania and southern New York. Local flooding occurred in parts of Ohio and western Pennsylvania.

A low pressure center in Colorado caused some thunderstorms and snow showers which reached into Wyoming and Nebraska. Light showers dampened western Washington and Oregon and snow reached across northern Idaho into western Montana.

The snow and rain ended in the Northeast early Saturday. The disturbance in Colorado moved eastward and developed into a significant storm as it moved from Missouri to Illinois by late Saturday. Rain and some snow to the north covered the area from the Mississippi River Valley to the Appalachians. The Gulf Coast and Florida had little or no precipitation but moderate to heavy amounts fell further north. Snow returned to the northern Rockies and the northern Plains.

The winter storm continued to move northeastward up the Ohio Valley on Sunday. This low pressure center began to fill and another formed further south. Moderate to heavy snow fell in northern Indiana and moved into New England. Rainshowers fell from Ohio through Pennsylvania and southward into the Carolinas where the second low center moved into the Atlantic.

Further west, another winter storm was brewing over Wyoming and spread a wintry hand into the northern Plains. Snow fell in Wyoming, Colorado, Nebraska, South Dakota, Iowa and into the southern Lakes region.

It was cold over parts of the upper Plains and northern Rockies where a surge of Canadian air reminded residents of the winter just past. Seasonable temperatures prevailed over most other areas of the Nation.

National Agricultural Summary

For the Week of March 14 to 20

HIGHLIGHTS: Unseasonably mild temperatures in the east-erns two-thirds of the United States helped green grass-lands and small grains. Some of the driest sections of the Nation received some precipitation but soil moisture reserves in those areas, notably the West Coast and the Western North Central States, remained low. Most of the Nation east of the Mississippi had adequate soil moisture; elsewhere soil moisture was short. Farmers prepared fields for row crop planting throughout the United States, about on schedule. Rains limited fieldwork in some areas of the South. Corn planting advanced into South Carolina. Cattle began grazing some northern pastures on a limited scale. Cattle were in good condition nation-wide but producers in Kansas and Colorado found a mid-March blizzard took a heavy toll of cattle and calves.

SMALL GRAINS: Winter wheat producers topped the crop in the northern part of the Nation. High temperatures helped green the crop. The winter wheat improved in most areas although blowing winds dried soils and stirred dust clouds in parts of the southern Great Plains.

Texas wheat responded to high temperatures but blowing sand damaged some High Plains fields. Dryland fields in western Texas need moisture. Greenbugs were sighted in all areas but beneficial insect populations increased too. Some fields began to head. In Oklahoma winter wheat rated fair to good but overall declined slightly from a week earlier. High winds interfered with spraying to control greenbugs and also dried topsoils. Some Panhandle dryland acreage was lost to high winds. Producers moved cattle off acreage to be harvested for grain. Kansas wheat was unchanged and in fair condition. Wheat was green but soil moisture supplies were short. Winds caused slight to moderate damage in most areas of Kansas but the southwest was hardest hit. Farmer tilled to reduce wind erosion. The Montana winter wheat condition was fair but soil moisture was short in all major production areas. Wind damage was light.

In Mississippi 9% of the winter wheat crop was jointing compared with 42% last year. The Alabama crop was fair and improving. In California rains brought some relief to dryland grains. Oregon small grains were growing and in above average condition in some areas. In Washington winter wheat grew well but later plantings were behind usual development. Farmers reseeded some fields.

OTHER CROPS: Corn planting advanced northward under the influence of higher temperatures. Some of the earliest corn was already up to stands in Texas and Florida. Louisiana farmers planted 13% of the crop compared with 15% last year. Mississippi farmers planted 9%, 2 points less than 1976. In Texas 12% of the corn was in the ground, lagging 18% in 1976 and the 29% average.

Cotton planting was underway in Texas, Arizona and California. Arizona planting was more active. California growers planted cotton in the desert areas. Texas cotton planting advanced rapidly in the south although low soil temperatures delayed planting locally. Planting reached 2% complete compared with 7% both last year and the average.

Texas sorghum planting advanced to 23% complete lagging both 1976's 35% and the 30% average. Early plantings emerged in south and central areas. Greenbugs were sighted in some fields.

Farmers planted rice in Texas and Louisiana. About 8% of the Louisiana crop was sown compared with 9% last year. Texas growers planted 6% of their crop behind both last year's 15% and 22% average.

Irish potato planting continued throughout all but the most northern producing areas of the Nation. North Carolina farmers planted 35% of the crop, far behind 1976's 60%. Mississippi growers planted 45% also short of last year's 75%.

In Florida several sugar mills closed for the season with cane harvest nearing completion. Young cane was in good condition. Louisiana sugarcane grew slowly. California sugarbeets emerged and Arizona sugarbeets progressed well.

Tobacco plants were in fair to good condition along the Atlantic Coast States. Growers seeded beds in Maryland, Kentucky, Tennessee and North Carolina. South Carolina growers transplanted some tobacco. Plants were smaller than normal for this time of the year. Kentucky growers have some burley and fire-cured tobacco to strip and sell. Some burley markets remained open and some remaining fired crop was sold at the farm. Adverse handling and stripping weather in January pushed the burley selling season past its usual closing date.

VEGETABLES: Florida vegetable crop conditions improved. Higher temperatures speeded plant growth; bloom and fruit set increased. Vegetable shipments increased 5%. Among those advancing in volume were strawberries, esarole-entive, lettuce, snap beans and squash. Carrot, green pepper and tomato shipments declined. Supplies of cabbage, celery, potatoes and radishes were steady.

Texas vegetable growers planted melons, cucumbers, onions. Vegetable harvests included carrots, cabbage and and spinach. Arizona growers harvested lettuce and other assorted vegetables. California vegetable crops grew well. Some early planted processing tomatoes emerged. Growers harvested broccoli, spinach, artichokes, asparagus, cauliflower, lettuce and strawberries.

FRUITS AND NUTS: Fruit growers in Pennsylvania, Michigan and Virginia pruned deciduous trees. Peach trees bloomed in Virginia, South Carolina, Arkansas and Texas. Some Texas peach trees reached the shuck split stage with good to excellent fruit set. Florida citrus trees were in open bloom with an abundance of new growth. Growers irrigated groves in southern and coastal areas. Texas growers picked citrus fruit. Arizona growers harvested grapefruits, oranges, lemons and a few mandarins. California growers picked grapefruits, lemons and oranges. Deciduous fruit and nut trees were in various stages of early development. Frost damaged some of the early fruits and nuts but the extent was unknown.

PASTURE AND LIVESTOCK: Higher temperatures greened more northern pastures but cattle got only limited forage from the early growth. Hay supplies were short and cattle producers looked forward to fresh supplies of forage. Many western grasslands got some relief from rains but most areas need much more rainfall to sustain adequate growth. Cattle were in fair to good condition. A blizzard earlier in March caused higher than expected death losses in Colorado and Kansas.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., March 20, 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 . . .	61	+8	.1	-1.3	La. Baton Rouge . . .	70	+10	T	-1.1	Youngstown . . .	43	+7	2.0	+1.2
Mobile . . .	70	+11	T	-1.7	Lake Charles . . .	67	+7	T	-.8	OKLA. Okla. City . . .	58	+10	T	+.5
Montgomery . . .	64	+7	.3	-1.1	New Orleans . . .	71	+10	T	-1.3	Tulsa . . .	58	+10	1.4	+.5
ALASKA. Anchorage . . .	--	--	--	--	Shreveport . . .	63	+6	T	-.9	OREG. Astoria . . .	44	0	1.4	-.1
Barrow . . .	18	-3	T	0	MAINE. Caribou . . .	30	+6	.9	+4	Burns . . .	34	-2	T	-.2
Fairbanks . . .	18	+8	.1	0	Portland . . .	33	+1	2.2	+1.4	Medford . . .	43	-2	.1	-.3
Juneau . . .	--	--	--	--	MASS. Baltimore . . .	51	+8	.8	0	Pendleton . . .	42	-2	.1	-.1
Kodiak . . .	--	--	--	--	MASS. Boston . . .	41	+3	1.2	+3	Portland . . .	45	-1	.2	-.6
Nome . . .	6	-1	.2	0	Chatham . . .	38	--	1.3	--	Salem . . .	40	-5	T	-1.0
ARIZ. Flagstaff . . .	32	-2	.2	-.2	MICH. Alpena . . .	36	+10	.2	-.2	PA. Allentown . . .	44	+6	.6	-.2
Phoenix . . .	59	-1	0	-.2	Detroit . . .	39	+4	1.1	+5	Erie . . .	38	+5	1.2	+6
Tucson . . .	55	-3	T	-.1	Flint . . .	36	+3	.4	-.1	Harrisburg . . .	46	+5	.7	-.1
Winslow . . .	42	-3	T	-.1	Grand Rapids . . .	37	+4	.4	-.2	Philadelphia . . .	48	+6	.8	0
Yuma . . .	59	-5	0	-.1	Houghton Lake . . .	34	+7	.1	-.3	Pittsburgh . . .	43	+5	1.4	+6
ARK. Fort Smith . . .	57	+7	.1	-.7	Lansing . . .	36	+3	.7	+1	Scranton . . .	37	+1	.8	+2
Little Rock . . .	60	+10	T	-1.1	Marquette . . .	34	+7	.1	-.3	R.I. Providence . . .	40	+3	1.2	+3
CALIF. Bakersfield . . .	52	-5	.3	+2	Muskegon . . .	36	+3	.8	+3	S.C. Charleston . . .	66	+9	1.1	-1.0
Eureka . . .	46	-2	.7	-.4	S. Ste. Marie . . .	30	+6	.1	-.3	Columbia . . .	64	+10	.6	-.5
Fresno . . .	50	-4	.5	+1	MINN. Duluth . . .	30	+6	.2	-.2	Greenville . . .	55	+4	.7	-.5
Los Angeles . . .	56	-3	.9	+4	Internat Falls . . .	29	+8	.2	-.1	S.D. Aberdeen . . .	37	+10	T	-.2
Red Bluff . . .	51	-2	1.0	+4	Minneapolis . . .	39	+11	.3	-.1	Huron . . .	37	+8	.2	0
San Diego . . .	55	-3	.3	-.1	Rochester . . .	38	+11	.3	-.1	Rapid City . . .	35	+4	.2	0
San Francisco . . .	49	-4	1.4	+8	St. Cloud . . .	36	+10	.2	-.1	Sioux Falls . . .	36	+6	.1	-.2
Stockton . . .	52	-1	.6	+2	MISS. Jackson . . .	65	+9	0	-1.3	TENN. Chattanooga . . .	57	+7	.4	-.9
COLO. Denver . . .	38	+1	T	-.3	Meridian . . .	63	+7	T	-1.4	Knoxville . . .	57	+7	.5	-.6
Grand Junction . . .	39	-2	T	-.2	MO. Columbia . . .	47	+5	.4	-.2	Memphis . . .	62	+11	T	-1.1
Pueblo . . .	41	+1	.1	0	Kansas City . . .	49	+5	.1	-.5	Nashville . . .	55	+6	.1	-1.0
CONN. Bridgeport . . .	42	+4	1.0	+2	St. Louis . . .	50	+7	.2	-.5	TEX. Abilene . . .	60	+6	0	-.2
Hartford . . .	39	+3	1.5	+7	Springfield . . .	51	+7	.6	-.1	Amarillo . . .	51	+5	0	-.2
D.C. Washington . . .	54	+9	.3	-.5	MONT. Billings . . .	30	-2	.4	+2	Austin . . .	68	+8	.1	-.3
FLA. Apalachicola . . .	69	+8	T	-1.1	Glasgow . . .	29	+4	T	-.1	Beaumont . . .	69	+9	0	-.6
Daytona Beach . . .	73	+9	0	-.8	Great Falls . . .	28	-2	.1	-.1	Brownsville . . .	75	+7	T	-.1
Ft. Myers . . .	74	+5	0	-.7	Havre . . .	30	+4	.1	0	Corpus Christi . . .	72	+7	T	-.2
Jacksonville . . .	71	+10	T	-.8	Helena . . .	26	-4	.2	+1	Dallas . . .	--	--	--	--
Key West . . .	77	+2	0	-.3	Kalispell . . .	28	-2	.5	+4	Del Rio . . .	69	+6	T	-.1
Lakeland . . .	76	+10	0	-1.0	Miles City . . .	32	+2	T	-.1	El Paso . . .	52	-3	T	-.1
Miami . . .	77	+6	0	-.5	Missoula . . .	29	-4	.5	+4	Fort Worth . . .	62	+7	0	-.6
Orlando . . .	74	+8	0	-.8	NEBR. Grand Island . . .	40	+5	1.3	+1.0	Galveston . . .	66	+5	0	-.6
Tallahassee . . .	71	+11	T	-1.4	Lincoln . . .	43	+7	1.0	+6	Houston . . .	67	+6	T	-.6
Tampa . . .	75	+9	0	-.9	Norfolk . . .	41	+8	.5	+2	Lubbock . . .	56	+7	0	-.2
W. Palm Beach . . .	75	+5	0	-.8	N. Platte . . .	36	+2	.1	-.1	Midland . . .	60	+6	0	-.1
GA. Atlanta . . .	60	+9	.5	-.8	Omaha . . .	46	+11	.3	-.1	San Angelo . . .	63	+6	0	-.2
Augusta . . .	64	+9	.6	-.5	Valentine . . .	32	+1	.6	+5	San Antonio . . .	69	+8	T	-.3
Macon . . .	65	+8	.3	-.9	NEV. Ely . . .	27	-6	T	-.2	Victoria . . .	70	+8	T	-.4
Savannah . . .	68	+10	.1	-1.0	Las Vegas . . .	52	-3	0	-.1	Waco . . .	65	+8	T	-.5
HAWAII. Hilo . . .	73	+2	3.3	+3	Reno . . .	37	-3	T	-.1	Wichita Falls . . .	58	+6	0	-.4
Honolulu . . .	77	+4	.2	-.6	Winnemucca . . .	34	-2	0	-.1	UTAH. Blanding . . .	35	-3	T	-.2
Kahului . . .	75	+3	.1	-.6	N.H. Concord . . .	34	+1	.9	+3	Salt Lake City . . .	37	-3	.2	-.2
Lihue . . .	74	+2	.4	-.7	N.J. Atlantic City . . .	46	+5	1.5	+5	VT. Burlington . . .	35	+6	.7	+3
IDAHO. Boise . . .	37	-4	.1	-.1	Trenton . . .	46	+5	.8	-.1	VA. Lynchburg . . .	53	+7	.9	+1
Lewiston . . .	39	-4	.3	+1	N.MEX. Albuquerque . . .	44	-2	0	-.1	Norfolk . . .	57	+9	1.2	+4
Pocatello . . .	32	-3	.2	0	Roswell . . .	55	+6	0	-.1	Richmond . . .	56	+9	.8	0
ILL. Cairo . . .	56	+8	1.2	+1	N.Y. Albany . . .	35	+1	1.8	+1.2	Roanoke . . .	56	+11	.5	-.3
Chicago . . .	43	+6	.9	+3	Binghamton . . .	40	+9	1.0	+4	WASH. Colville . . .	34	-3	.1	-.2
Moline . . .	42	+6	.6	0	Buffalo . . .	36	+4	.5	-.1	Omak . . .	36	-3	.4	+2
Peoria . . .	43	+6	.6	0	New York . . .	44	+3	.6	-.3	Quillayute . . .	44	+2	.6	-1.8
Rockford . . .	41	+7	.4	-.2	Rochester . . .	36	+3	.4	-.2	Seattle-Tacoma . . .	45	+1	.3	-.5
Springfield . . .	47	+8	1.2	+6	Syracuse . . .	36	+3	.5	-.1	Spokane . . .	35	-2	.2	-.2
IND. Evansville . . .	52	+8	.7	-.4	N.C. Asheville . . .	55	+9	.5	-.6	Walla Walla . . .	43	-3	.2	-.1
Ft. Wayne . . .	47	+7	.4	+.9	Charlotte . . .	59	+8	.9	-.2	Yakima . . .	40	-2	.1	0
Indianapolis . . .	43	+7	.4	+.9	Greensboro . . .	57	+9	.3	-.5	W. Va. Beckley . . .	48	+8	.8	-.2
South Bend . . .	44	+8	1.2	+6	Hatteras . . .	59	+8	.7	-.1	Charleston . . .	50	+5	.6	-.3
IOWA. Burlington . . .	44	+7	.5	-.1	Raleigh . . .	58	+9	.4	-.4	Huntington . . .	49	+4	.4	-.6
Les Moines . . .	43	+9	.2	-.4	Wilmington . . .	62	+8	.6	-.3	Parkersburg . . .	49	+6	.7	-.2
Dubuque . . .	40	+8	.8	+1	N.DAK. Bismarck . . .	32	+7	T	-.1	WIS. Green Bay . . .	35	+6	.4	0
Sioux City . . .	41	+8	.3	-.1	Fargo . . .	34	+10	T	-.1	La Crosse . . .	41	+10	.4	-.1
KANS. Concordia . . .	49	+10	.1	-.3	Williston . . .	31	+6	T	-.2	Madison . . .	37	+7	.5	+1
Dodge City . . .	49	+8	0	-.3	OHIO. Akron-Canton . . .	43	+7	1.3	+6	Milwaukee . . .	37	+6	1.3	+8
Goodland . . .	37	+1	.3	+1	Cincinnati . . .	46	+4	.9	-.1	WYO. Casper . . .	27	-4	.3	+1
Topeka . . .	51	+10	T	-.5	Cleveland . . .	40	+4	1.8	+1.1	Cheyenne . . .	28	-3	.2	0
Wichita . . .	54	+10	0	-.4	Columbus . . .	44	+5	1.2	+4	Lander . . .	29	-2	.4	+1
KY. Lexington . . .	51	+7	.7	-.4	Dayton . . .	45	+6	.9	+1	Sheridan . . .	29	-3	.2	-.1
Louisville . . .	52	+8	.5	-.7	Toledo . . .	39	+3	1.2	+6	P.R. San Juan . . .	78	+2	.4	0

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State Summaries of Weather and Agriculture

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

ALABAMA: Warm with rain. Temperatures 9° above normal. Rains on 19th and 20th.

Wet fields and rain limited fieldwork. Some corn planted. Small grains fair, improving. Livestock poor to fair. Pastures supplying some grazing.

ARIZONA: Cool, dry. Widely scattered showers mountains. Temperatures below normal.

Cotton planting increasing. Small grains good progress. Lettuce harvest continued seasonal volume Yuma, accelerating central areas. Mixed vegetable harvest active. Potatoes, dry onions good progress. Cantaloup thinning underway west. Grapes, deciduous fruits leafing. Grapefruit, Valencia orange harvest continued. Substantial moisture needed lower ranges. Higher elevations mostly fair to good. Cattle, calves mostly fair to good.

ARKANSAS: Temperatures ranged from 4 to 11° above normal. Extremes: 87 and 27°. Little or no rain. Amounts ranged from none at several stations to 0.19 in.

Good progress on land preparation in Delta. Too wet in low areas of Arkansas River Valley. Tomatoes being planted. Peaches in midbloom. Excellent strawberry prospects. Grapes budding with prospects currently good. Early Irish potatoes planted as well as cabbage and greens. Pastures furnishing some grazing. Hay and supplemental feed primarily in west.

CALIFORNIA: An inch or more of precipitation was recorded in many parts with only the southeast interior receiving little or none. Below normal temperatures averaging from 2 to 9° below normal.

Rains provide some relief dryland grains. Seedbed preparation corn, rice, cotton. Cotton planting in desert. Sugarbeets emerging, being cultivated. Spraying alfalfa for weevil, aphid. Harvest of avocados, grapefruit, lemons, and oranges continues. Tree fruits and nuts in various stages of early development. Some frost damage to early fruit and nuts, extent unknown. Harvesting broccoli, spinach, artichokes, some asparagus, cauliflower, lettuce, and strawberries. Early planted processing tomatoes emerging. Rains brought relief many areas, much more rain needed to overcome drought. Rangeland grass improved, stock water supplies increased. Supplemental feeding necessary. Ranchers continue to thin herds.

COLORADO: Precipitation light; heaviest amounts over northern portion. Snowfall in mountains very spotty; snowpack increased 4 to 8 in. Warmest early in week. Near or slightly below normal from Continental Divide westward; eastern plains 3 to 5° above normal.

Crop and livestock losses from March 11th, 12th storm still undetermined as farmers across eastern plains dig out of up to 25 foot drifts. Little precipitation and snowpack continues much below normal. Spring fieldwork well underway. Hay supplies below average.

FLORIDA: Less than 0.25 in. rainfall from scattered showers north 20th, otherwise no rain. Warm with temperatures well above normal.

Soil moisture adequate but getting dry in south. Corn planting active. Early corn up to good stands. Land readied for peanut planting. Tobacco plant beds good condition. Wheat and oats good condition, early plantings beginning to head. Sugarcane harvest nearing completion. Several mills closed. Young cane good condition. Peach prospects good. Pastures continue seasonal improvement but remain poor to fair. Cattle adding some flesh but overall condition poor. Calving well along. Citrus grove condition very good, moisture adequate north, central, irrigating south and coastal. Open bloom all areas, abundance of new growth. Vegetable crop conditions improving. Warm weather hastening

plant growth. Bloom, fruit set increasing. Light snap bean, squash harvest underway. Strawberry harvest increasing. Overall vegetable shipments up 5%. Escarole-endive, lettuce supplies increased. Carrot, green pepper, tomato shipments declined. Steady supplies cabbage, celery, potatoes, radishes. Sweet corn harvest to begin late March. Eggplant harvest expected early April. Watermelons making good growth.

GEORGIA: Temperature 6° above normal north, elsewhere 10° above normal. Extremes: 32 and 87°. Rain early in period, 1.00 in. and more, heaviest 4.65 in.

Soil moisture mostly adequate. Land preparation 70% complete central, 75% southwest and 80% north. About 20% corn planted southwest and central. Small grain mostly good condition; topdressing almost complete. Pasture, cattle and tobacco plants fair condition.

HAWAII: Cool windy weather continues. Rains most sections beneficial.

Crops damaged from strong winds making good recovery. Low temperatures higher elevations slowing crop progress. Vegetable supplies adequate. Banana, papaya supplies light. Pineapple harvesting light. Parched pastures turning green from recent rains at all elevations.

IDAHO: Storms moderated drought condition in north but drought continues. Temperatures 5 to 10° below normal. Extremes: 63 and 4°.

Fieldwork in southeast and south central underway. Livestock good condition. Calving and lambing progressing with lighter than normal losses.

ILLINOIS: Temperatures 6 to 8° above normal. Precipitation near 0.33 in. some northwest areas, more than 1.00 in. localized areas elsewhere.

Winter wheat and alfalfa fair. Oats seeding begun many areas. Corn and soybean acreage 75% plowed, 73% 1976, 64% average. Pastures supplying some livestock roughage requirements. Soil moisture short. Livestock water supplies short to adequate. Fieldwork: 3.0 days suitable.

INDIANA: Warm but turned cold on weekend and few inches snow in extreme north. Temperatures averaged in 40's but declined from 81 in southeast on 15th to 23 in northwest on 19th. Precipitation 0.50 to 1.00 in. south, 1.00 to 1.50 in north. Soil temperatures mostly 35 to 50°.

Soils thawed but generally too wet for much fieldwork except where well drained. Dry subsoils prevented much runoff from recent rains. Wheat greening nicely. Limited plowing, stalk discing, sowing clover and oats, topdressing wheat, spreading lime and fertilizer, preparing tobacco beds, and doing chores.

IOWA: Record warmth 14th declined by midweek to near seasonable temperatures with moderate precipitation thereafter. South broke temperature records with highs to 77°.

Precipitation improved soil moisture. Topsoil rated short to adequate. Subsoil mostly short. Plowing 56% completed. Fieldwork: 3 days suitable. Fertilizer supply adequate. Some reports of nitrogen shortage. TGE and pseudorabies in hogs but on decline. Lambing, calving and farrowing losses down. Pastures greening.

KANSAS: Snows northwest, with from 0.25 to 0.75 in. water equivalents. Thunderstorms producing 1.00 in. or more east central, otherwise, little or no moisture. Temperatures averaged 41° northwest, 50 to 55° southeast half or 4° above normal northwest and 7 to 11° above normal elsewhere.

Wheat conditions unchanged, fair condition. Moisture supplies short. Wheat green. Wind damage slight to moder-

ate most areas, southwest hit hardest. Digging out from March 12th blizzard in northwest revealed above normal cow and calf losses. Livestock good shape elsewhere. Adequate supplies of feed on hand. Farm activities centering around land tillage to prevent wind erosion and cultivation in preparation row crop planting.

KENTUCKY: Temperatures averaged low to mid-50's, about 8° above normal. Readings above normal first but below normal end of week. Precipitation averaged 0.50 to 1.00 in. Falling as rain.

Warmer weather and spring rains caused pastures to green but vegetative growth slowed by cool nights. Pasture grass needed to alleviate hay shortages. Livestock on pastures but need supplemental feeding. Few seeding tobacco beds. Spring plowing common. Some burley and fire-cured tobacco to strip and sell. Burley sales limited to four markets. Much fire-crop going as barndoor sales. Burley selling season lingering on well past usual closing date due mainly adverse handling and stripping weather in January.

LOUISIANA: Temperatures 4 to 7° above normal. Extremes: 32 and 87°. Rainfall spotty.

Fieldwork: 4.2 days suitable. Main activities: seedbed preparation and application of fertilizer and herbicides. Rice 8% planted, 9% last year. Corn 13% planted, 15% last year. Sugarcane growth slow. Small grains and pastures continue improvement. Cattle condition improving slowly.

MARYLAND & DELAWARE: Temperatures well above normal. Highs in mid-60's, lows in 40's. Moderate to heavy precipitation fell in western and northern areas, lighter amounts in southern areas.

Small grains poor to fair condition. Farmers spreading fertilizer, manure, and lime. Some topdressing wheat and barley. Tobacco stripping and seeding tobacco beds behind schedule. Livestock good condition. Hay supplies running short.

MICHIGAN: Temperatures 3 to 8° above normal. Unseasonably warm temperatures reaching into 70's southern Lower and 60's northern Lower. Cool midweek with night time temperatures into teens. Precipitation over northern Lower and Upper averaged 0.10 in.; southern Lower averaged 0.61 in.

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

MINNESOTA: Temperatures 5 to 10° above normal. Extremes: 58 and 13°. Precipitation from 0.20 to 0.35 in. central and east with about 0.50 in. some north central sections. Elsewhere precipitation less than 0.20 in.

MISSISSIPPI: Temperatures 5 to 9° above normal. Extremes: 34 and 85°.

Soil moisture adequate to surplus. Fieldwork: 3.2 days suitable. Acreage plowed 45%, 44% 1976, 32% average. Corn 9% planted, 11% 1976. Irish potatoes 45% planted, 75% 1976. Winter wheat 9% jointing, 42% 1976. Oats 7% jointing, 40% 1976. Winter wheat, oats, and pastures in mostly fair condition. Livestock in fair to poor condition.

MISSOURI: Temperatures 7° above normal. Precipitation averaged from 0.56 in. northwest prairie to 1.30 in. east Ozarks.

MONTANA: Week began and ended cool and wet; warm midweek. Temperatures averaged 1 to 7° below normal except north central and east. Lows dropped below 0° by end of week, with new snow all except east. Precipitation well above normal west and south central, dry in east.

Winter wheat condition fair. Soil moisture improved west and south. Still short major winter wheat areas. Wind damage light. Livestock condition good; calving progressing well.

NEBRASKA: Temperatures 2 to 9° above normal. Blizzard conditions over west with heaviest precipitation over west central. Precipitation general with amounts mostly near 0.33 in.

NEVADA: Light precipitation north. South and central mostly dry. Temperatures averaged 4 to 7° below normal. Extremes: 73 and -3°.

Fall planted grains greening slowly. Calving and lambing gaining momentum.

NEW ENGLAND: Abnormally heavy rains over all but northern Maine 14th coupled with above normal temperatures and snow melt sent many streams and some rivers to flood stage. Return to normally cold weather 16th. Snowstorm in parts of southern and central New England 18th with up to 12 in. snow. Heaviest snows occurred in a band from northwestern Conn. across western and northern Mass. southeastern New Hampshire to southwestern Maine with amounts upwards to 12.0 in. of snow.

NEW JERSEY: Temperature 3° warmer than normal. Extremes: 18 and 66°. Rainfall 0.77 in. north, 0.85 in. central and 1.07 in. south. Soil temperatures 35° north, 43° central and 45° south.

Cold weather over weekend slowed farm activities. Soil moisture excessive many areas. Soil preparation and planting will resume as fields dry.

NEW MEXICO: Dry and windy. Scattered light snows northern mountains at midweek with insignificant amounts.

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

NEW YORK: Temperatures from mid-20's to upper 30's, 1 to 7° above normal. Extremes: -7 and 68°. Precipitation up to 3.50 in. east, about 0.50 in. west. Storm left 8 to 12 in. snow Hudson Valley; 3 to 5 in. elsewhere on 19th.

NORTH CAROLINA: Temperatures 9 to 11° above normal. Heavy showers early week totaled 0.50 to 1.00 in. with up to 5.00 in. mountains.

Fieldwork: 3.7 days suitable. Soil moisture adequate. Pastures fair. Hay, roughage and feed supplies short to adequate. Main farm activities land preparation, planting potatoes, topdressing small grains and pastures and seeding burley tobacco plant beds. Irish potatoes planting about 39% complete, 1976 60%. Small grains responding well to warmer weather; wheat and rye mostly fair to good, oats and barley poor to mostly fair.

NORTH DAKOTA: Temperatures 7 to 18° above normal southwest to northeast. Extremes: 12 to 65°. Precipitation ranged from 0.01 in. to 0.18 in. below normal in all but east where range was 0.01 in. to 0.50 in. above normal. Snow cover minimal to non-existent except sheltered areas.

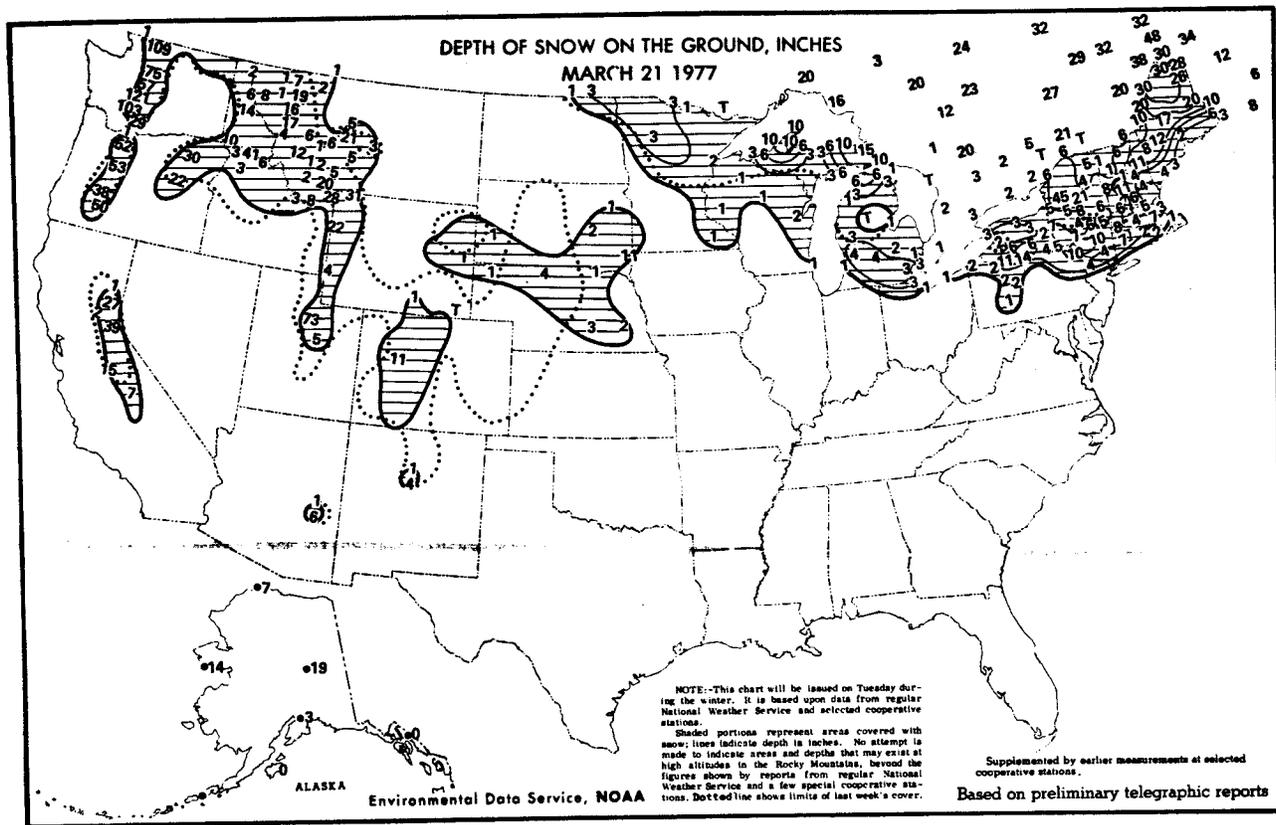
Topsoil moisture improved with recent precipitation much more needed to replenish subsoil. Livestock fair to good condition. Calving and lambing making normal progress.

OHIO: Scattered showers north 13th and 14th. Rain 17th, 18th, and 20th. Heavy snow northwest 17th and 20th. Temperatures near or slightly above normal.

Good progress seedbed preparation. Sirup producers welcomed weekend cool spell. Fall sown grain condition continue to improve. Top dressing wheat active.

OKLAHOMA: Temperatures ranged from 4 to 11° above normal. Precipitation little or none except averaged 0.80 in. northeast.

Wheat condition good to fair but down slightly from week earlier. Greenbug populations on increase. High winds hampered spraying. Topsoils dry all wheat areas. Panhandle lost some dryland acres to high winds. Cattle coming off acreage for grain, onto acres for grazeout. Spring oats and barley seedings approaching completion, with 70% up to



stand. Ground preparation for row crops continues. Peach trees nearing full bloom. New growth in ranges slow but southern pastures and ranged improved. Cattle conditions made little change with supplemental feeding still widespread.

OREGON: Rainfall light to moderate. Coastal areas received from 2.00 to 3.00 in. while Willamette Valley averaged about 0.66 in. Generally 0.20 in. or less east of Cascades. Temperatures averaged 1 to 3° below normal in west and 2 to 6° below normal east. Ranges mid-60's, high 20's west, low 60's, low teens east.

Soil moisture supply improving. Snowpack below normal, rate of snowfall declined. Farm activity light. Fertilizing continues in grain fields. Fall and early spring seeded grains coming. Grain condition above average in some areas. Potatoes being planted. Feeding continues, supplies adequate. Stock in good condition.

PENNSYLVANIA: Warm first half, cool remainder with temperatures averaging 2 to 5° above normal. Extremes: 72 and 50°. Mixture of rain, snow, sleet 17th, 18th and 20th provided 0.75 in. extreme northeast and north central mountains, 1.00 to 1.50 in. elsewhere. Snowfall traces to 12 in. upper Susquehanna Valley.

Weather conditions favoring increased farm activity. Activities included tree pruning, grape trimming, plus limited stalk chopping and plowing in southeast.

PUERTO RICO: Thunderstorm activity over north central 18th produced locally heavy rainfall. Island average rainfall 0.64 in. or 0.13 in. above normal. Temperatures averaged about 77° on coasts and 71° interior. Extremes: 93 and 50°.

Development of plantings affected severely by prolonged drought except over north central where showers relieved crop stress. Dry weather favored tobacco drying and curing. Farmers requesting aid from government for cattle feed as pastures dried up.

SOUTH CAROLINA: Temperatures above normal. Extremes: 36 and 88°. Rainfall below normal.

Moisture condition in tobacco plant beds fair to good condition; plants smaller than normal. Insects, disease problems some areas. Some tobacco transplanting.

Other activities: Planting corn, cucumbers, squash, tomatoes; harvesting greens; setting late cabbage; cultivating beets, lettuce; spraying insects peach groves. Peach trees full bloom. Farmers disking, subsoiling land.

SOUTH DAKOTA: Light snow, greatest amounts in central and east. Moisture equivalents mostly less than 0.25 in. Temperatures 1 to 10° above normal. Extremes: 7 and 69°.

Operators caring for stock and preparing for spring work. Livestock fair to good condition. Most cows coming home for calving.

TENNESSEE: Temperatures 7 to 9° above normal. Precipitation 0.10 to 0.20 in., maximum 0.79 in.

Soil moisture adequate. Fieldwork: 3.2 days. Pastures, oats and wheat condition good. Plowing 36% complete. Tobacco beds 60% planted. Livestock condition fair.

TEXAS: No precipitation. Temperatures 2 to 10° above normal. Soil temperatures ranged from mid-50's in northeast to lower 80's in Lower Rio Grande Valley.

Clear weather allowed farmers south, central, east to plant at rapid pace. Farmers in west, on plains continued seedbed preparation, but high winds continued to deplete soil moisture. Wheat responded to warm, but blowing sand damaged fields on High Plains. Dryland fields on plains, Edwards Plateau and Trans-Pecos need moisture badly. Greenbugs reported most areas. Beneficial insects also increasing. Fields south, east beginning to head. Cotton planting progressed rapidly in south. Low soil temperatures delayed planting some areas. Planting, 2% complete, compares with 7% for 1976 and average. Fields emerging in south. Sorghum planting now 23% complete, 35% in 1976 and 30% average. Early fields up in south and central. Corn planting

advanced to 12% complete, compared with 18% in 1976 and 29% average. Early fields up to stands as far north as Blacklands. Rice planting began in earnest, currently 6% complete, 15% last year and average rate 22%. Oats generally good, warm stimulated growth; many fields again being grazed. Fields in east, central, south began to head. Sugarcane harvesting active.

Harvests of carrots, spinach, cabbage, citrus remains active. Cucumber, cantaloup, watermelon, potato planting continues. Peaches central in petal fall to shuck split stage. Fruit set good to excellent. East trees full bloom with petal fall beginning on some varieties. Trees in north, west full bloom. Pecan buds swelling, breaking most areas with exception west where trees remain dormant. Warm stimulated ranges, but high winds further depleted soil moisture on plains, Edwards Plateau, Trans-Pecos. Blowing sand damaged ranges, bothered cattle in Trans-Pecos. Cattle other areas gained weight due to improving pastures.

UTAH: Recurring widely scattered snow showers; accumulated amounts moisture light to none. Temperatures ranged from near normal to 7° below. Moisture deficit extremely critical.

Spring plowing, ditch cleaning, other fieldwork continues south. Range calving continues. Few range sheep operations started shearing.

VIRGINIA: Temperatures 10° above normal. Extremes: 28 and 80°. Scattered rainfall ranged from trace to 1.55 in.

Fieldwork: 4.4 days suitable. Topsoil moisture adequate. Pasture and wheat fair condition. Barley poor condition. Peach trees blooming early east, central and south. Very good condition except some localized freeze damaged buds in southwest. Alfalfa fair condition. Grazing beginning to provide forage for livestock. Feed short. Cattle thin but good condition. Tobacco plant beds fair condition. Plowing, liming, fertilizing very active. Preparing land for corn. Potato planting underway. Clover, grass, oats being seeded. Pruning fruit trees and top-dressing small grains.

WASHINGTON: West: Temperatures near normal to 3° subnormal. Precipitation averaged 0.10 to 1.30 in. below normal.

Rains replenished soil moisture. Pastures showing growth but cannot support cattle yet. Hay supplies sufficient.

East: Temperatures 4 to 5° below normal. Precipitation averaged from 0.20 in. below normal to 0.20 in. above normal. Blossom degree accumulation 10 days ahead. Cherry buds at 2d stage; apples approaching silver tip. Potatoes, spring wheat, barley being planted. Mint roots transplanted. Irrigation remains critical, crop acreage will be affected. Wells are being dug. Winter wheat making normal growth. Later plantings are behind. Some fields reseeded. Fieldwork hampered by freezing nights. Pastures, livestock holding up well.

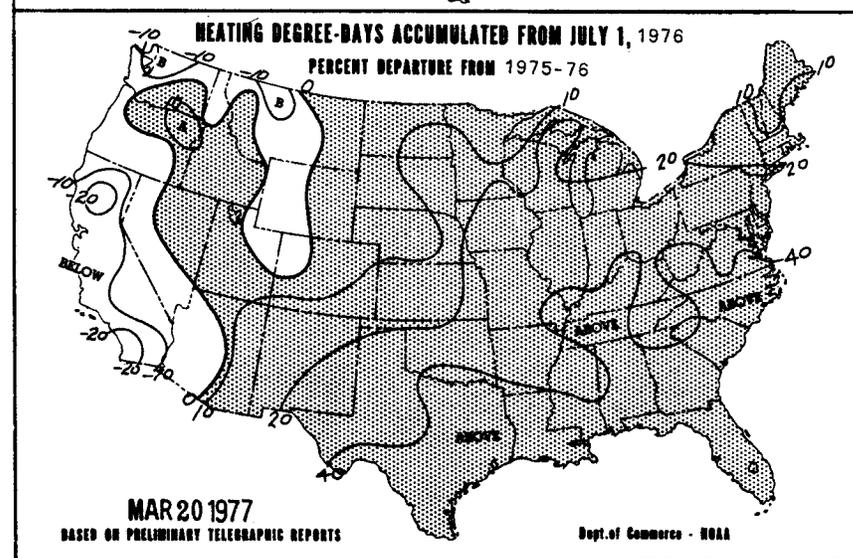
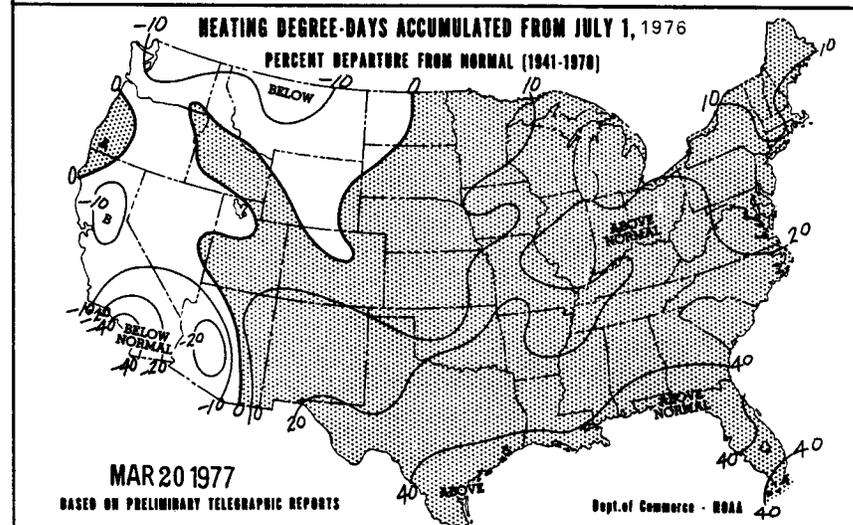
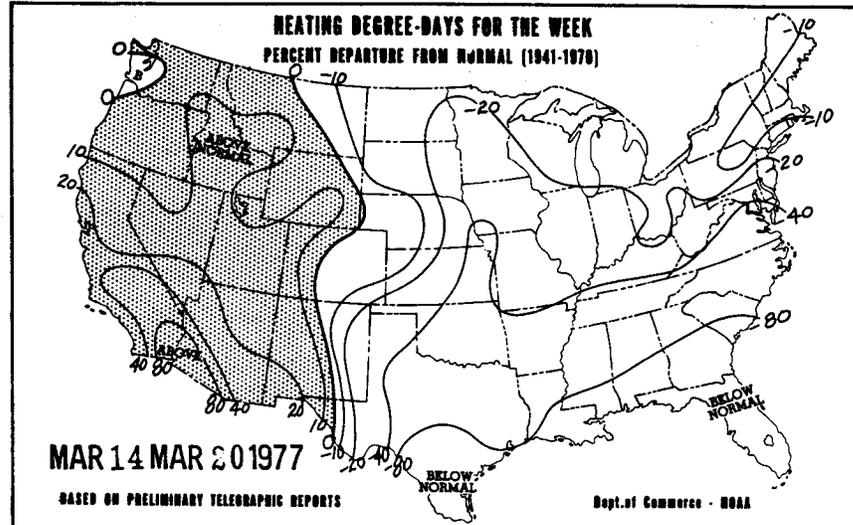
WEST VIRGINIA: Temperatures above normal. Extremes: 23 and 80°. Precipitation above normal.

Hay supplies short. Soil moisture adequate. Fieldwork: 4.7 days suitable. Manure spreading, plowing, fence fixing and general chores main activities.

WISCONSIN: Mild with high temperatures in 40's extreme north and 60° south. Cooled to more normal readings of 30's and 40's midweek and remained in that range through weekend. Precipitation ranged from 0.34 in. northwest to 1.10 in. southeast. Light rain north 15th. Snow 17th with 8 in. Milwaukee and 2 to 6 in. elsewhere. Snow 18th and again late 19th, with up to 3 in. accumulation.

WYOMING: Precipitation fell over most areas, no above normal amounts recorded.

Soil moisture short. Winter wheat prospects fair. Major activities: Preparation of land for planting, calving, lambing and shearing. Some spring wheat, oats and barley planted. Calves born 30%; farm flocks and range ewes, 42% and 13% lambed respectively. Farm flocks 49% shorn. Range and pastures in fair condition.



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World Weather and Crop Update

For the Week of March 14 to 20

NORTH AMERICA. There has been some improvement in the United States during the past week. Moderate to heavy rains fell over much of the corn belt although subsoil moisture reserves are still well below normal over most of the grain and soybean area. Drought stricken northern California received a good soaking rain--as much as 2 inches in some places--and some rain fell in other areas of California. Much more is needed, however, to alleviate the severe drought situation in that state. Light showers fell over the winter wheat areas of Washington and northern Idaho. But critically dry areas in the main winter wheat belt in Oklahoma and western Kansas did not receive any significant precipitation during the reporting period.

ASIA. Scattered light showers over northern China have deposited some much needed moisture over China's most important winter wheat belt which has been suffering from a moisture deficiency. Peking at the northern edge of the wheat belt recorded only 4 mm of precipitation during the reporting period, but up to 10 mm were reported for some areas to the south. Precipitation was light elsewhere in the PRC except in the extreme south which was without significant rainfall. Reports of drought are beginning to surface in Kwangtung, China's most important rice producing province, and if the current dry spell should continue, transplanting of the early rice crop could be sufficiently delayed to interfere with the delicate timing of multiple cropping in this region. Field work is general as mild temperatures prevail throughout the PRC. India was hot and dry except for scattered showers in Assam in the northeast and Kerala in the extreme south. Unirrigated winter crops are under stress over much of that country. Seasonal tropical activity continued to generate extremely heavy precipitation over the coastal regions of northwest Australia. Moderate to heavy showers also fell in Queensland, most of New South Wales and coastal areas of Victoria. But it continued seasonally dry in the southwest and all but the eastern portion of South Australia. Unirrigated crops and rangelands in these latter regions are under heavy stress.

AFRICA. Data for South Africa are incomplete, but seasonal shower activity was recorded at the start of the reporting period across the maize belt where crop prospects in general continue to be favorable.

SOUTH AMERICA. Shower activity has been relatively light during the reporting period in the main corn belt of Argentina, Uruguay and the lower half of Rio Grande do Sul, Brazil's southern most state. Elsewhere in Brazil, shower activity has increased in the southeastern states where a moisture deficit had developed in some of the corn and soybean regions. Precipitation was normal along the north coast but generally light along the east coast and in the northeastern states.

USSR. Precipitation was light throughout most of the USSR during the past week. Moderate to heavy showers, however, occurred along the Black Sea coast and in the North Caucasus with Rostov and Krasnodar reporting rainfalls of 12 mm and 16 mm, respectively. Continuation of mild temperatures in European USSR is permitting the northward extension of field work which started somewhat earlier than normal this year. Precipitation has been very light throughout the main agricultural areas in Siberia and Kazakhstan.

EUROPE. The past week also has been relatively dry with mild temperatures throughout most of Europe. In Western Europe, precipitation was confined mainly to light rainfall in the United Kingdom, Denmark, Benelux, the west coast of France and in the north of West Germany. Scattered light to moderate showers also fell in northern Italy. The Mediterranean areas, including North Africa, were dry as the wet season is apparently over. In Eastern Europe, moderate to locally heavy showers fell in Bulgaria and light to moderate showers were reported for East Germany and Czechoslovakia. But the remaining East European countries were without significant precipitation. Greece also received some scattered light showers, but this is insufficient to dent the accumulated moisture deficit--about 50 percent of normal--over the past three months. Scattered moderate to heavy showers fell in Turkey, and moderate general rains were reported for Israel.