

Weekly Weather & Crop Bulletin

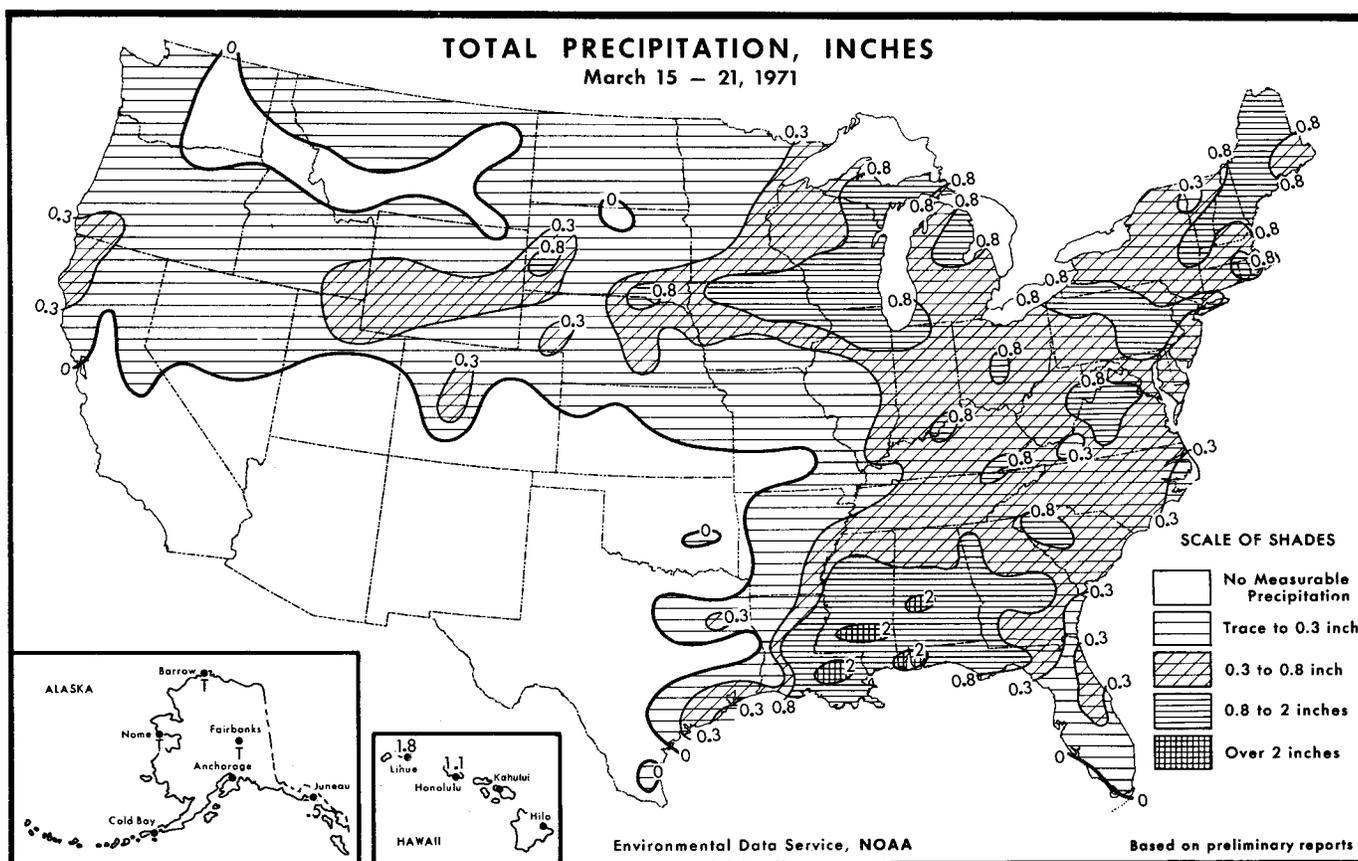
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Edited by Lucius W. Dye

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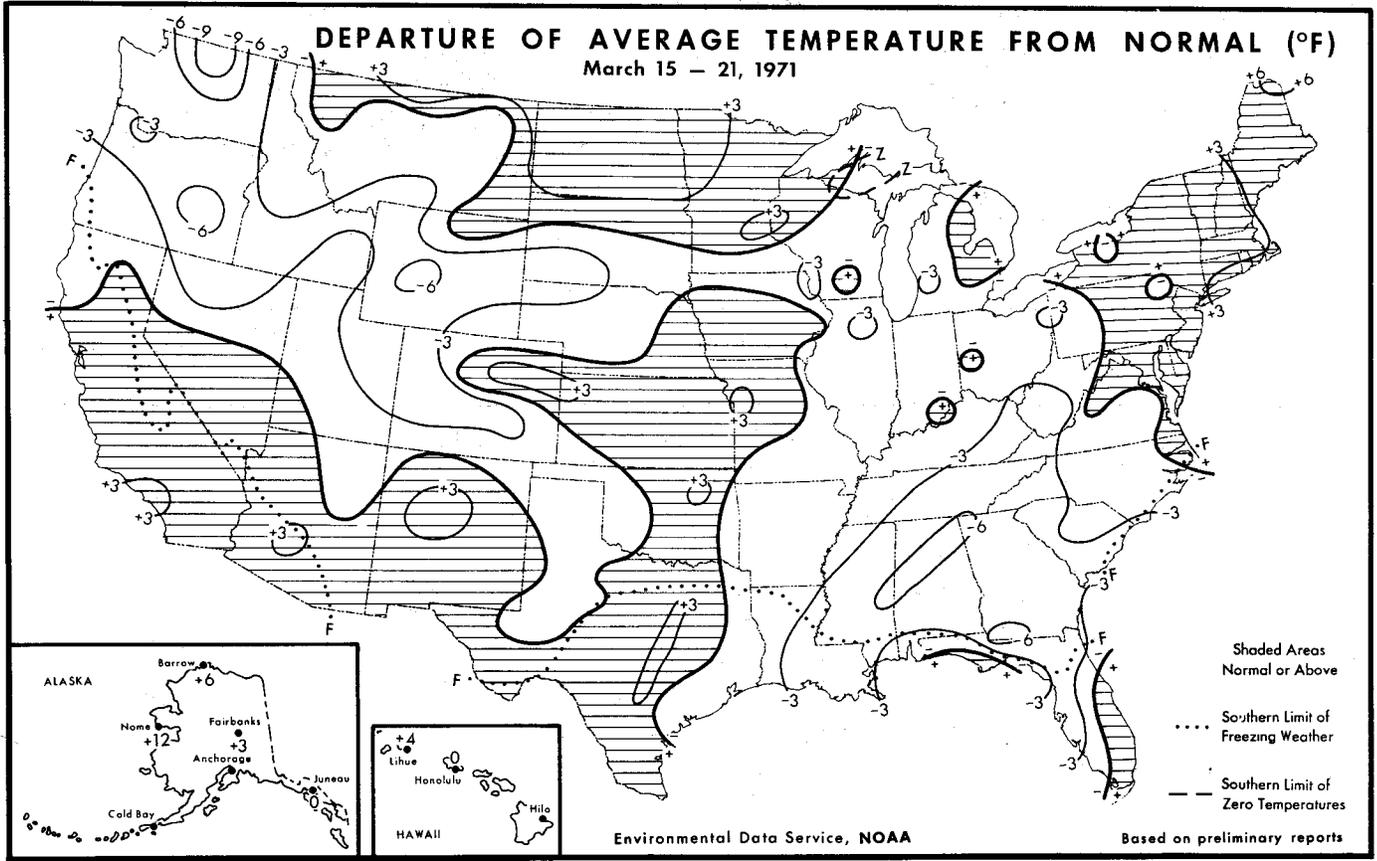
NATIONAL WEATHER SUMMARY

HIGHLIGHTS: A storm developed over the Great Basin, crossed the Rocky Mountains, intensified, and moved northeastward across the central Great Plains and Great Lakes region to New England. Blizzards and severe dust storms occurred along the storm path. Winds exceeded 60 m.p.h. and gusted to much higher speeds. Snowfalls of 10 inches or more were common from Iowa to New England.

PRECIPITATION: As the week began, an intense storm was centered over northern Michigan. Gusty winds and a few tornadoes occurred in the Ohio River Valley. Indiana and Ohio suffered widespread wind damage. House trailers were toppled, barns lost their roofs, and trees and power lines were blown down. Heavy snow fell in the northern Great Plains and Upper Mississippi River Valley.

A few showers and snow flurries continued into Tuesday which otherwise was mostly fair and dry. A Pacific storm brought light rains to the northern Pacific Coast and snow flurries to the mountains in the Northwest.

A new storm began developing in the Great Basin late Tuesday and early Wednesday. It spread snow over the central Rocky Mountains as it moved eastward. Lander, Wyo., received 5" of snow Tuesday afternoon. Three inches fell at Rapid City, S. Dak., accompanied by winds gusting to 50 m.p.h. Much stronger gusts occurred farther south. Grand Junction, Colo., registered gusts to 63 m.p.h. on Wednesday. Blowing dust reduced the visibility at Grand Junction to 1/2 mile. Widespread dust storms occurred over the Oklahoma and Texas Panhandles and west of the Pecos River in Texas.



The storm deepened as it moved eastward Thursday. It dumped 7 inches of snow at Ocheyedon, Iowa, Thursday morning. Blowing snow or blowing dust reduced the visibility to near zero in places. The gusts reached 70 m.p.h. at Imperial, Nebr., and 75 m.p.h. at Dodge City, Kans., Thursday forenoon and 100 m.p.h. at Hastings, Nebr., in the afternoon. Strong winds continued over Nebraska and Kansas Thursday night and early Friday. At Hays, Kans., the wind speed remained at 65 m.p.h. or higher for 3 consecutive hours and reached a peak gust of 115 m.p.h.

The storm continued northeastward over the weekend leaving 6 to 15 inches of new snow. Seasonal snowfall totals at a number of locations in New England have exceeded the previous record totals. By Sunday, the intensity of the snowfall had decreased but flurries continued from western Pennsylvania to northern Maine.

At large area from California to the eastern portions of Oklahoma and Texas received no rain or only light widely scattered sprinkles. Much of this area is becoming extremely dry.

TEMPERATURE: Subfreezing temperatures occurred in the West from Canada to Mexico on 1 or 2 days early in the week. Douglas, Ariz., registered 30° Monday morning. Southerly breezes warmed the Atlantic seaboard and temperatures reached the 70's as far north as New Jersey Monday afternoon.

The Florida Peninsula warmed to the 80's and Orlando registered 91° Monday. Weather continued mild Tuesday along the Atlantic coast. Palm Beach, Fla., recorded 90°. Southern Texas continued warm with the mercury reaching 92° Tuesday at San Antonio and 93° Thursday at Cotulla. At midweek a mound of high pressure lay over the East and early morning temperatures dropped to below freezing as far south as northern Florida Thursday morning reaching 28° at Tallahassee and 32° at Jacksonville. A few spots in the north registered subzero temperatures on 1 or 2 mornings. Among the coldest readings that came to our attention were -11° at Eagle River and Land O'Lakes, both in Wisconsin, Wednesday morning, and -12° at Marquette County Airport, Mich., Thursday morning.

Southerly winds brought warmer weather to mid-America Saturday. Some areas were 30° warmer Saturday afternoon than Friday. The maximums at Hill City, Kans., were 40° Friday and 70° Saturday. Willison, N. Dak., warmed to 45° Saturday but no higher than 23° Sunday after another cold blast pushed into the northern Great Plains. Northerly winds brought subfreezing weather to the Deep South Sunday morning when McBride, Miss., registered 30° and Tallahassee, Fla., 26°.

L. W. Dye

NATIONAL AGRICULTURAL SUMMARY

AGRICULTURAL HIGHLIGHTS: High winds damaged wheat fields in the Great Plains. *Spring fieldwork lagging behind last year in most regions. *Texas remains extremely dry. *Northern Great Plains blizzard hard on livestock.

SMALL GRAINS: High winds (gusts to 115 m.p.h. in central Kansas) caused blow damage to wheat fields in the Great Plains. Damage was most noticeable in fields with short plant growth. However, blizzard conditions from northern Kansas into the Dakota's and eastward brought precipitation that will help spring growth.

In the Southern Plains, many Oklahoma farmers worked the soil to prevent excessive blowing during the high winds. Winds also hit Texas where the fall-seeded grain crop is surviving under drought conditions.

Most fall-seeded grains are now growing in the Pacific Northwest, but rapid changes in temperature and strong winds are causing damage. Warm weather benefited grain growth in California and Arizona, with some early-planted Arizona fields nearing the soft dough stage. Small grains grew well in the South until slowed by cool weekend weather. Cold temperatures also limited growth in the North Central States.

Seeding of spring grains is essentially completed in Oklahoma, but far behind last year in Kansas. Wet fields and strong winds halted seeding in other areas of the Nation.

OTHER CROPS: Spring fieldwork continues to lag throughout the Country. Rain and snow are responsible for wet fields that have kept farmers waiting for drier weather. However, many Texas farmers are waiting for rain before seeding. Tobacco planting progress varies from transplanting in Georgia and the Carolinas to seedbed planting in Virginia and Maryland. Cotton growers are busy planting in Texas, Arizona, and California. Planting sugar beets was active in the Pacific Coast States of California and Washington. Nearly one-fourth of the Texas corn acreage is seeded, with Louisiana acreage about 5 percent in. Potato planting was active along the eastern shores of North Carolina and Virginia. Growers were also making headway in Alabama, Texas, and Washington. Some early-planted sorghum fields are emerging in Arizona, while seeding is active in Texas. In New England the maple sap flow is delayed due to the cold weather and deep snow. However, boiling is active in Ohio where little snow exists.

Fruits and Nuts: Warmer weather favored fruit and nut crop development in California and Arizona. Many crops have started to bloom. Picking of the California valencia orange crop increased, while grapefruit harvest is steady. Texas citrus is also blooming, with picking continuing in the Lower Valley. Oranges have reached peak bloom in Florida. Rainfall was beneficial to citrus trees. Peaches are blooming in the South, but low temperatures damaged some blooms in South Carolina and northern Texas.

Vegetables: Onion harvest increased in the Lower Valley of Texas. Quality is good, but size somewhat small. Only light supplies of Texas lettuce are available. Arizona cantaloupes developed well, but wind caused some problems. Lettuce made good growth. Artichoke and asparagus harvest increased in California. Vegetable shipments continue steady from Florida with only cucumbers and watermelons not available. The cold and wind damaged young sweet corn as far south as the Everglades. Sweet corn and watermelon planting occurred in Alabama and South Carolina. Drought conditions deteriorated the watermelon crop in South Texas. Maryland pea growers are well along in seeding their acreage, with planting increasing under fair weather in Washington. Cabbage growers in North Carolina have nearly finished transplanting.

PASTURES AND LIVESTOCK: Blizzard conditions were hard on livestock and caused extra work for farmers in the central part of the Nation. No abnormal death losses occurred as a result of the storm. Moderate temperatures and limited snow favored livestock in North Dakota. Small grains and winter pastures are furnishing little feed in drought ridden Texas.

New grass growth started in many areas of the Country, but provided little grazing. Heavy supplemental feeding was still necessary in most regions. Spring range prospects are very favorable in Nevada, however California pastures could use more rain. Death losses to newborn animals are generally below normal, but scours caused some deaths in Virginia.

Steve Pscodna
Agricultural Statistician

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., March 21, 1971

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 . . .	49	- 6	.9	- .5	New Orleans . . .	58	- 4	.7	- .6	OKLA, Okla. City . .	49	0	0	- .5
Mobile . . .	60	- 1	2.1	+ .4	Shreveport . . .	55	- 2	.1	- .9	Tulsa . . .	51	+ 3	T	- .6
Montgomery . . .	53	- 4	1.7	+ .2	MAINE, Caribou . . .	30	+ 6	.9	+ .3	OREG, Astoria . . .	41	- 4	T	-2.0
ALASKA, Anchorage . .	-	-	-	-	Portland . . .	36	+ 4	1.1	+ .1	Burns . . .	31	- 7	.2	0
Barrow . . .	- 9	+ 6	T	0	MD, Baltimore . . .	46	+ 2	.7	- .2	Medford . . .	45	0	.6	+ .2
Fairbanks . . .	13	+ 3	T	- .1	MA, Boston . . .	41	+ 2	.7	- .3	Pendleton . . .	39	- 5	0	- .3
Juneau . . .	31	0	.5	- .2	Chatham . . .	39	-	.8	-	Portland . . .	44	- 2	T	.8
Nome . . .	20	+12	T	- .2	MICH, Alpena . . .	28	+ 1	1.0	+ .5	Salem . . .	42	- 4	.1	- .9
ARIZ, Flagstaff . . .	37	+ 7	0	- .3	Detroit . . .	34	- 2	.5	0	PA, Allentown . . .	40	+ 1	1.3	+ .5
Phoenix . . .	64	+ 5	0	- .1	Flint . . .	33	+ 2	.6	+ .1	Erie . . .	34	0	.9	+ .2
Tucson . . .	60	+ 2	0	- .1	Grand Rapids . . .	31	- 3	.6	+ .1	Harrisburg . . .	42	+ 1	1.2	+ .4
Winslow . . .	43	- 3	0	- .1	Houghton Lake . . .	27	0	.9	+ .5	Philadelphia . . .	44	+ 2	.6	- .3
Yuma . . .	65	+ 1	0	- .1	Lansing . . .	33	0	.7	+ .1	Pittsburgh . . .	37	- 1	.5	- .2
ARK, Fort Smith . . .	50	- 2	T	- .8	Marquette . . .	27	- 1	1.1	+ .6	Scranton . . .	36	- 1	.7	0
Little Rock . . .	52	0	.1	-1.0	Muskegon . . .	32	- 2	.7	+ .2	R.I, Providence . . .	41	+ 3	1.0	0
CALIF, Bakersfield . .	60	+ 2	0	- .2	S. Ste. Marie . . .	23	- 2	1.5	+1.1	S.C, Charleston . . .	53	- 5	.6	- .3
Eureka . . .	48	- 1	.6	- .5	MINN, Duluth . . .	24	+ 2	.7	+ .3	Columbia . . .	53	- 2	.8	- .2
Fresno . . .	57	+ 2	0	- .4	Internatl Falls . . .	22	+ 2	.1	- .1	Greenville . . .	47	- 5	.9	- .2
Los Angeles . . .	64	+ 4	0	- .4	Minneapolis . . .	33	+ 4	.6	+ .1	S. DAK, Aberdeen . .	31	+ 2	T	- .3
Red Bluff . . .	55	0	T	- .6	Rochester . . .	28	- 1	.7	+ .3	Huron . . .	29	- 1	.2	- .1
San Diego . . .	60	+ 1	0	- .4	St. Cloud . . .	27	+ 1	.2	- .1	Rapid City . . .	29	- 3	.9	+ .6
San Francisco . . .	55	+ 1	T	- .6	MISS, Jackson . . .	52	- 5	1.1	- .2	Sioux Falls . . .	29	- 2	.7	+ .3
Stockton . . .	55	+ 1	T	- .5	Meridian . . .	51	- 6	1.6	+ .2	TENN, Chattanooga . .	46	- 6	.8	- .5
COLO, Denver . . .	40	+ 3	T	- .3	MO, Columbia . . .	43	+ 1	T	- .7	Knoxville . . .	46	- 5	.5	- .5
Grand Junction . . .	37	- 5	T	- .2	Kansas City . . .	47	+ 3	T	- .6	Memphis . . .	50	- 2	.3	- .9
Pueblo . . .	36	- 4	0	- .1	St. Louis . . .	42	- 1	T	- .8	Nashville . . .	47	- 3	.4	- .8
CONN, Bridgeport . . .	42	+ 4	1.2	+ .2	Springfield . . .	44	- 1	T	- .7	TEX, Abilene . . .	56	0	0	- .3
Hartford . . .	39	+ 2	.7	- .1	MONT, Billings . . .	31	- 3	T	- .3	Amarillo . . .	47	- 1	0	- .2
D.C, Washington . . .	47	+ 2	.8	+ .1	Glasgow . . .	26	- 2	T	- .1	Austin . . .	63	+ 3	0	- .4
FLA, Apalachicola . .	59	+ 2	.6	- .4	Great Falls . . .	30	- 1	.2	0	Beaumont . . .	60	- 2	.4	- .4
Ft. Myers . . .	66	- 3	0	- .6	Havre . . .	31	+ 4	T	- .1	Brownsville . . .	69	+ 1	T	- .2
Jacksonville . . .	58	- 5	.4	- .4	Helena . . .	30	- 2	T	- .2	Corpus Christi . . .	66	0	0	- .4
Key West . . .	73	0	T	- .4	Kalispell . . .	32	0	T	- .2	Dallas . . .	59	+ 3	T	- .6
Lakeland . . .	64	- 3	1.2	+ .1	Miles City . . .	32	0	.1	0	Del Rio . . .	65	+ 1	0	- .1
Miami . . .	71	0	.1	- .4	Missoula . . .	34	0	T	- .2	El Paso . . .	56	+ 1	0	- .1
Orlando . . .	66	0	.7	- .1	NEBR, Grand Island . .	37	0	.5	+ .2	Fort Worth . . .	57	0	.1	- .4
Tallahassee . . .	55	- 6	1.4	- .1	Lincoln . . .	38	- 1	.2	- .2	Galveston . . .	62	0	.3	- .4
Tampa . . .	62	- 4	T	- .9	Norfolk . . .	34	0	.2	- .2	Houston . . .	58	- 2	.5	- .1
GA, Atlanta . . .	49	- 3	.6	- .6	North Platte . . .	34	- 1	.1	- .1	Lubbock . . .	50	0	0	- .2
Augusta . . .	52	- 4	.5	- .5	Orma . . .	35	0	.2	- .1	Midland . . .	54	- 2	0	- .1
Macon . . .	54	- 3	1.0	- .1	Valentine . . .	29	- 3	.3	+ .1	San Angelo . . .	59	+ 1	0	- .2
Savannah . . .	56	- 3	.2	- .7	NEV, Ely . . .	34	0	.1	- .1	San Antonio . . .	65	+ 3	T	- .4
HAWAII, Hilo . . .	-	-	-	-	Las Vegas . . .	55	0	0	- .1	Victoria . . .	63	- 1	.1	- .5
Honolulu . . .	73	0	1.1	+ .5	Renov . . .	42	0	T	- .1	Waco . . .	62	+ 3	T	- .5
Kahului . . .	-	-	-	-	Winemucca . . .	34	- 4	T	- .2	Wichita Falls . . .	54	0	0	- .3
Lihue . . .	75	+ 4	1.8	+ .8	N.H, Concord . . .	35	+ 2	.7	0	UTAH, Blanding . . .	38	- 2	0	- .2
IDAHO, Boise . . .	39	- 3	.1	- .2	N.J, Atlantic City . . .	43	+ 1	.4	- .5	Salt Lake City . . .	38	- 3	.4	+ .1
Lewiston . . .	40	- 3	T	- .3	Trenton . . .	44	+ 2	.8	- .1	VT, Burlington . . .	29	+ 1	.3	- .2
Pocatello . . .	36	- 1	.4	+ .1	N.MEX, Albuquerque . .	51	+ 5	0	- .1	VA, Lynchburg . . .	45	- 1	.9	+ .1
ILL, Cairo . . .	47	- 2	.2	-1.0	Roswell . . .	51	+ 1	0	- .1	Norfolk . . .	51	+ 2	.7	- .1
Chicago . . .	36	- 1	1.6	+ .9	N.Y, Albany . . .	35	+ 1	1.0	+ .4	Richmond . . .	47	- 2	.4	- .4
Moline . . .	36	0	.5	- .1	Binghamton . . .	32	0	.5	- .2	Roanoke . . .	46	0	.2	- .6
Peoria . . .	36	- 2	.2	- .5	Buffalo . . .	34	+ 2	.6	- .1	WASH, Colville . . .	34	- 4	.2	0
Rockford . . .	32	- 3	1.0	+ .4	New York . . .	43	+ 1	.7	- .3	Omak . . .	31	-10	0	- .1
Springfield . . .	40	- 1	.3	- .4	Rochester . . .	32	- 1	.6	- .1	Quillayute . . .	38	- 5	T	-2.4
IND, Evansville . . .	44	- 2	.5	- .6	Syracuse . . .	36	+ 2	.5	- .3	Seattle-Tacoma . . .	40	- 4	.1	- .8
Fort Wayne . . .	36	- 1	.5	- .2	N.C, Asheville . . .	44	- 3	.6	- .3	Spokane . . .	36	- 3	T	- .3
Indianapolis . . .	39	- 1	.6	- .2	Charlotte . . .	47	- 3	.4	- .6	Walla Walla . . .	43	- 4	0	- .4
South Bend . . .	35	- 1	.9	+ .2	Greensboro . . .	46	- 2	.6	- .2	Yakima . . .	40	- 3	T	- .1
IOWA, Burlington . . .	36	- 2	.1	- .6	Hatteras . . .	51	0	.1	- .8	W.VA, Beckley . . .	36	- 5	.7	- .4
Des Moines . . .	36	+ 2	.1	- .4	Raleigh . . .	48	- 2	.4	- .4	Charleston . . .	41	- 4	.4	- .6
Dubuque . . .	30	- 3	.9	+ .2	Wilmington . . .	52	- 3	.3	- .6	Huntington . . .	43	- 3	.3	- .7
Sioux City . . .	35	+ 1	.4	+ .1	N.DAK, Bismarck . . .	31	+ 4	T	- .2	Parkersburg . . .	41	- 2	.3	- .5
KANS, Concordia . . .	41	+ 1	.1	- .2	Fargo . . .	30	+ 5	.1	0	WIS, Green Bay . . .	27	- 2	.9	+ .6
Dodge City . . .	43	+ 1	T	- .3	Williston . . .	30	+ 5	T	- .2	La Crosse . . .	28	- 3	1.1	+ .6
Goodland . . .	40	+ 3	.2	- .1	OHIO, Akron-Canton . .	36	- 2	.6	- .2	Madison . . .	30	0	1.0	+ .6
Topeka . . .	43	+ 1	T	- .5	Cincinnati . . .	42	- 2	.7	- .3	Milwaukee . . .	30	- 2	1.7	+1.1
Wichita . . .	45	0	T	- .4	Cleveland . . .	34	- 1	.5	- .2	WYO, Casper . . .	28	- 4	.3	0
KY, Lexington . . .	42	- 2	.4	- .7	Columbus . . .	38	- 2	.9	+ .1	Cheyenne . . .	31	- 2	.1	- .2
Louisville . . .	44	0	.8	- .3	Dayton . . .	39	0	.3	- .5	Lander . . .	27	- 6	.5	+ .3
LA, Baton Rouge . . .	56	- 5	2.3	+ .8	Toledo . . .	35	- 1	.4	- .2	Sheridan . . .	32	+ 1	.2	- .1
Lake Charles . . .	59	- 3	.1	- .8	Youngstown . . .	32	- 4	.7	- .1	P.R. San Juan . . .	79	+ 3	.7	+ .1

* Departures are from 30-year means (1931-60). Based on preliminary reports

CONDENSED STATE SUMMARIES

These summaries provide brief descriptions of condition and activities important on a national scale. Detailed reports of crop and weather conditions during the growing season are contained in State issues of Weekly Weather and Crop Bulletins published by field offices of the Statistical Reporting Service, U.S.D.A. in cooperation with NOAA State Climatologists.

ALABAMA: Week began with temperatures above normal and ended with temperatures much below normal. Rainfall occurred in 3 periods, at the beginning, middle, and end of week. Heavy amounts fell over State during the middle period. The heaviest accumulations were in southern half of State during midweek. Wet fields and rain limited fieldwork to well drained upland soils. Limited corn and melon planting extreme south. Planting early summer potato crop began De Kalb and Jackson Counties. Side dressing late spring crops continued. Growers transplanted tomatoes Geneva-Houston County area. Small grains grew well until slowed by cold at weekend. Livestock fair to good. Most stockmen feeding. Pastures greening up.

ARIZONA: Temperatures slightly above normal over most of State. Strong winds and blowing dust most agricultural sections during week. Skies mostly clear and no precipitation reported. Cotton planting full swing southern Yuma County, getting underway central areas. Small grains making favorable growth. Early plantings Yuma area nearing soft dough stage. Planting and preparations for later plantings sorghum continue Yuma area. Early plantings emerging. Alfalfa growth favorable warmer desert valleys. Harvest active. Lettuce harvest nearing completion Yuma. Cabbage harvest continued. Temperatures favor development cantaloupes. Strong winds caused problems some fields. Spring lettuce harvest continued Salt River Valley. Thinning, weeding lettuce making good progress Pima, Pinal Counties. Lettuce making good growth Cochise County. Valencia orange, limited grapefruit harvest Yuma, Salt River Valley. Weather conditions favored new growth. Bloom making satisfactory progress. Ranges dry throughout State. Pumping, hauling of stockwater active. Supplemental feeding continues. Cattle, calves fair condition. Limited lambing northern Indian reservations.

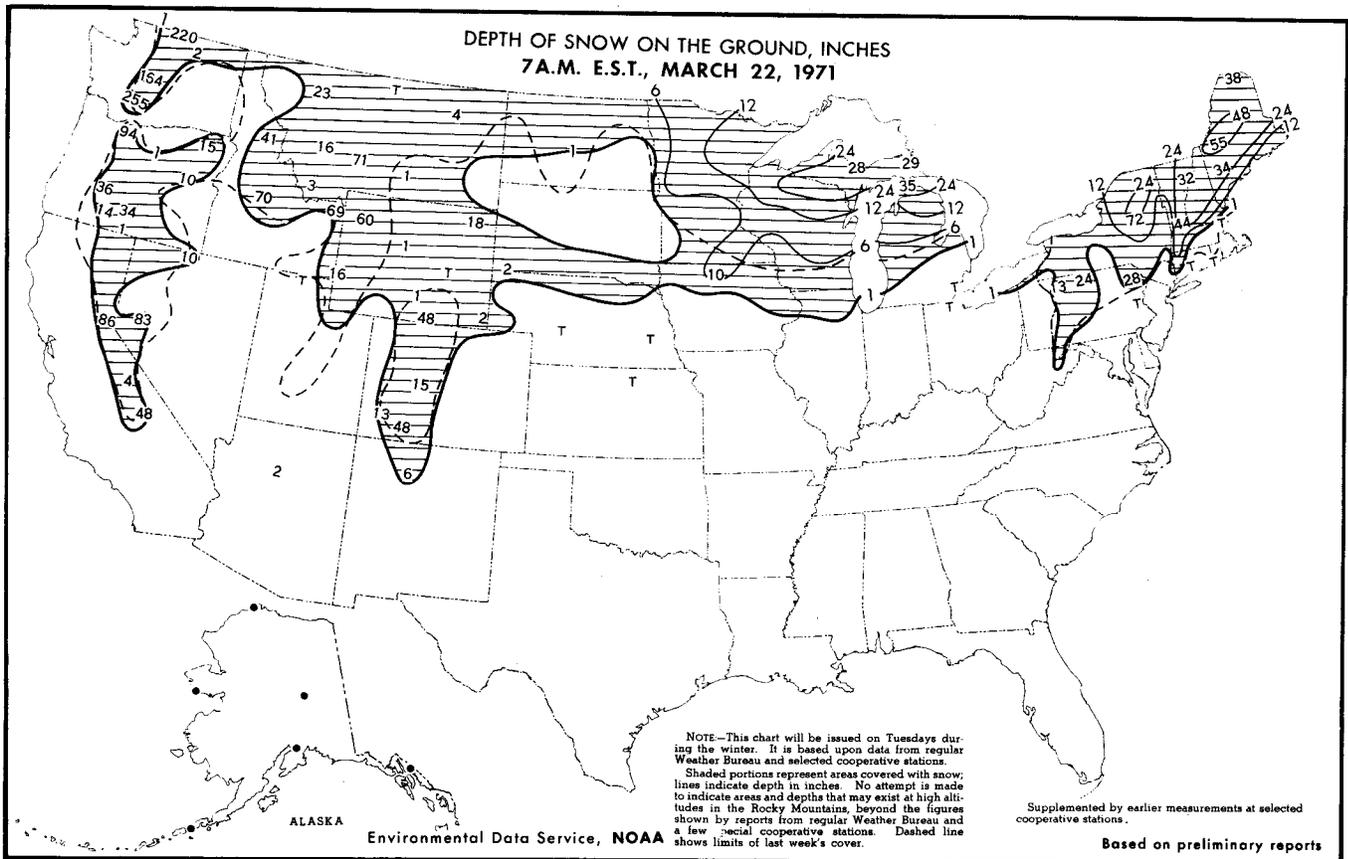
ARKANSAS: Temperatures averaged 3° below normal ranging from upper 40's north to low 50's south. Daily extremes: 22° to 79°. Light showers for weekly totals well below 0.50 inch except 0.50 to near 1.00 inch southeast. Pine Bluff wet spot with 0.73 inch. Land preparation made some progress until stopped by rain eastern part. West needs moisture. Small grains doing good, have been nitrated. Livestock mostly good. Feeding continues northern counties, declining south. Truck crops becoming more active. Peach trees blooming south.

CALIFORNIA: Average temperatures within a degree of normal all areas, except 2° above normal Los Angeles Basin, 4° to 8° below normal northeastern interior. Locally heavy rains 13th near southern coastal mountains, lighter rains other days in north. Total amounts 1.00 to 2.00 inches southern mountains and near 0.50 inch elsewhere. No precipitation in desert. Recent rains, warmer weather benefited small grains; dry land areas still need additional moisture. Most small grains fair to good. Alfalfa harvest for hay and cubes underway. Some cotton planting underway West Side district, San Joaquin Valley. Seeding sugar beets increasing; harvest over wintered beets continues.

Fieldwork late-planted crops full swing. Warmer weather enhanced development fruit, nut crops. Almonds past bloom and leafing out. Some frost damage showing Sacramento Valley. Peaches, plums, and nectarines near full bloom. Cherries, prunes, and pears starting bloom. Grape buds showing green many areas. Many new vineyards being planted. Harvest navel oranges continues; fruit quality and flavor good, but granulation problem some lots. Valencia harvest increasing gradually. Lemon harvest active. Picking central district nearly complete, 1/3 harvested southern district. Grapefruit harvest steady. Picking avocados active most areas; supplies new crop increasing. Rains improved range grass, but more moisture needed. Calving and lambing continue. Warmer weather helping milk and egg production. Artichokes Castroville increased. Asparagus-Stockton-Delta increasing; Imperial and Coachella Valleys near peak. Broccoli-Cauliflower Santa Maria and Salinas increased. Carrot digging continues Imperial and southern San Joaquin Valleys. Ventura and Orange Counties celery moderately active. Imperial lettuce nearing end, Palo Verde increasing and Oxnard underway. Southern San Joaquin harvest expected soon. Winter potato harvest continues San Joaquin Valley. Southern California strawberries increasing.

COLORADO: Varying temperatures averaged above normal east, below normal west. Precipitation light most areas, locally moderately heavy scattered areas. Light snow and wind delayed beginning fieldwork. Winter wheat and barley still good. Winds causing light damage to fall grains. Some local areas eastern plains received moderate wind damage. Surface soil moisture short to adequate some areas. Livestock generally good. Wind and cold hard on livestock. Calving and lambing progressing well with no abnormal death loss.

FLORIDA: Temperatures averaged 3° to 4° below normal northern sections and near normal southern sections. Two cold fronts pushed through Florida this week with many stations setting record-low temperatures for so late in season on morning of 21st. Palm Beach 41°, Tallahassee 26°, Tampa 35°, Jacksonville 32°. Rainfall averaged over 0.50 inch in north and central Florida, mainly in vicinity of fronts with over 2.00 inches in Panhandle. Southern Florida continues dry with amounts of only 0.10 to 0.20 inch. Corn and tobacco planting active. Small grains good progress and condition. Plant cane needs rainfall. Grinding complete. Pastures slowly improving. Slowed by cold north, rain needed south. Citrus tree conditions good to excellent. Rains beneficial. Blooms peaking on oranges. Grapefruit budding to open blooms. New growth abundant on most cold-damaged trees. Vegetable shipments continue mostly steady. All commodities available except cucumbers, watermelons. Some vegetables light supplies. Cabbage, celery, potatoes make up nearly half of volume shipped. Favorable weather early last week offset by low temperatures, scattered frost, March 18, 21. Strong winds March 20. Growth slowed. Some plant loss occurred. Damage extended into Everglades especially to young sweet corn.



GEORGIA: Unusually cool most of week but showed large variations from day to day. Freezing occurred most of State on Thursday and Sunday with lows dropping to mid-20's in parts of the north and to below 20° in mountains. Averages ranged from 3° to 5° below normal. Rain occurred at beginning of week and Thursday night and Friday. Totals mostly between 0.50 and 1.00 but a few places in north and central received more than 1.00 inch, and less than 0.50 inch fell in the southeast. Fieldwork limited much of State, wet soils. Land preparation, topdressing pastures and small grains, and tobacco transplanting active where conditions permitted. Small grains mostly good. Low temperatures limited pasture growth.

HAWAII: Generally clear and dry all areas. Light showers mainly mountain areas. Crop progress fair to good. All sugar mills operating except one temporarily stopped for maintenance. Pineapple making good progress with light harvesting. Diseases affecting papaya production. Supplies down. Vegetable supplies adequate. Production bananas seasonal low. Pastures and cattle fair to good.

IDAHO: Temperatures averaged 5° to 10° below normal with largest departures east. Precipitation ranged light to heavy. Heaviest in lower valleys near Snake River, southwest, and in Upper Snake River plains. Totals statewide ranged to 0.75 inch. Fieldwork active most areas except higher elevations. Fruit trees holding dormancy well. Annual grasses providing some early grazing on ranges.

ILLINOIS: Precipitation generally less than 0.25 inch south and central, 0.50 to 1.00 inch northwest, and 1.00 to 1.50 inches northeast. Temperatures average 1° to 3° below normal. Winter-sown crops good condition. Livestock good. Fields wet and muddy most areas. Machinery maintenance, routine livestock chores, main activities. Oat seeding starting.

INDIANA: Cool week. Temperatures averaged 3° below normal and ranged from 22° on 17th in central to 65° in south on 21st. Precipitation totaled 0.40 inch in central and south and 0.60 inch in extreme northwest. Most occurred on 19th and 20th. High winds early on 19th caused scattered damage in north and central. Small tornado east of Lafayette. Soils wet and feedlots muddy. Caring for livestock main farm activity.

IOWA: Cold with midweek snowstorm driven by high winds. Highways blocked in northern Iowa. Snow-falls 5 to 10 inches north diminishing southward to less than 1 inch in southern divisions. Temperatures mostly 3° to 5° subnormal north, near normal south.

KANSAS: Very intense storm 18th caused blizzard parts northwest and north-central. Very strong winds entire State. Wind gust 50 to 70 m.p.h. eastern 1/3 and 70 to 90 m.p.h. elsewhere. Gusts to 115 m.p.h. locally central portion. Considerable blowing dust western 2/3. Worst area southwest. Weekly mean temperatures averaged above normal northwest. Near seasonal

elsewhere. Weekly precipitation totals 0.10 to 0.25 inch northwest and north-central, very light other areas. Wheat growing but high winds caused some blow damage to fields with inadequate top growth. Topsoil moisture depleted by winds; short some western counties. Some light infestations Hessian fly, cutworms, and soil-borne mosaic. Moderate progress oat and barley seeding. Oat acreage 19% seeded, compared 56% last year and average 37%. Spring barley 8% seeded; compared with 33% year earlier and 22% average. Storms and winds hard on newborn calves; caused some livestock to drift. Feed supplies mostly adequate, but will need conserving until grass starts. Pastures greening and grass leasing active. Cattle thefts local problem and many farmers repaired fence and building damage from winds.

KENTUCKY: Daily mean temperatures near or above seasonable about half of days. Sunny 21st, precipitation one or more sections other dates with thundershowers 15th and 18th, and snow flurries or rain other days. Precipitation generally light to moderate, totals 0.29 to 1.00 inch. Scattered wind damage eastern half and south-central 15th; tornado with no injuries and minor damage in Bluegrass near Lexington. Tobacco beds being prepared and seeded. Many fields still too wet to work, but some farmers beginning to apply fertilizer. Season late for crops normally seeded early spring. Fall-seeded grains showing growth.

LOUISIANA: Temperatures averaged 2° to 7° below normal. Mild to cool through Wednesday. Cloudy Thursday with moderate to heavy thundershowers. Fair and colder Friday and Saturday. Showers Sunday; warmer Sunday night. Low temperatures weekend in 30's or low 40's. Some frost. Temperature extremes 84° Natchitoches last Monday and 33° New Orleans airport Sunday. Weekly rain amounts locally less than 0.50 inch parts of north and west, more than 1.00 inch most areas to more than 3.00 inches locally south half. Greatest 1-day total 3.60 inches Mamou measured 5 p.m. Friday. Fieldwork active for several days, but again halted by showers. Land preparation continued, some fertilizer put down. Corn and rice planting active scattered areas, about 5% to 10% planted. Cultivation and fertilization sugarcane continued, growth slowed by cool weather. Peaches full bloom. Strawberries blooming and fruiting well, volume harvest still light, mostly from frost protected fields. Pasture feed average. Livestock good.

MARYLAND AND DELAWARE: Very warm first 2 days and normal to below normal last 5, averaged 1° to 2° above normal. Extremes: Mid-60's to mid-70's on 15th, 20's except teens in west on 18th. Precipitation mostly 0.50 to 1.00 inch. Heaviest totals on 19th during thunderstorms in eastern portion and 1 to 5 inches of snow in west. Strong gusty winds last 2 days. Rapid progress fieldwork until weekend storm. Fertilizer spreading very active as fields dried. Plowing underway southern counties. Pea planting well along. Seeding tobacco beds nearly done after slow start. Plants up in some fields.

MICHIGAN: Temperatures averaged from 2° below to 1° above normal. Temperatures turned cold early in period with only minor day-to-day temperature changes remainder of week. Precipitation averaged from 0.50 to slightly over 0.75 inch with heaviest amounts in Upper Peninsula and northeastern Lower Michigan. Although some rain was recorded in

southern areas of State, most precipitation occurred as snow Thursday and Friday as an intense low-pressure system moved through Great Lakes region. Portions of Upper Peninsula also received some significant precipitation early in period.

MINNESOTA: Temperatures averaged 2° below normal in south to 5° above normal in northwest. Precipitation generally 0.75 inch to 1.00 inch of water equivalent across south and east-central, and less than 0.25 inch throughout rest of State. Strong winds and heavy snows across southern part of State late on 18th caused blizzard conditions. This closed most of schools and blocked roads into 19th. Snowfalls of 6 to 14 inches and winds with gusts over 50 m.p.h. were common. Snow depths greater than 6 inches north and east and with more than 18 inches in Arrowhead region. Snow depths in the south generally vary from 2 to 6 inches.

MISSISSIPPI: Generally 2 or 3 days with rain. Rain early in week and on Thursday. Weekly precipitation totals ranged from 0.96 inch at Poplarville to 4.04 inches at Jackson. Temperature averages 2° to 4° above normal. Weekend mostly fair and cool except some scattered light showers Sunday chiefly in central and southern sections of State. The heaviest weekend amount was 0.08 inch at Yazoo City. Soil moisture adequate to surplus. Spring plowing made limited progress as soils began to dry out, 22% complete. Winter wheat, oats, Irish potatoes, peaches, pastures, and livestock fair to good. Truck crops mostly fair. Winter wheat 15%, oats 20% jointing. Average 2 1/2 days suitable fieldwork.

MISSOURI: Mild, dry, windy week. High winds with temperatures averaged 4° to 8° above normal, northwest, near normal southeast, helped dry fields. Some outdoor work started on better drained soils. Precipitation generally light with showers occurring Monday and Friday. Amounts averaged from trace southwest to 1/3 inch east.

MONTANA: Cool middle and end of week. Temperatures averaged near normal. Precipitation light and scattered. Calving 40% and lambing 25% complete, both ahead of normal. Death losses of newborn calves and lambs below normal. Shearing 35% complete, 95% range livestock receiving supplemental feed. Stockwater adequate. Livestock feed good supply. Winter wheat starting to green. Wind damage to winter wheat light.

NEBRASKA: Blizzard conditions with persistent very strong winds Thursday. Seasonal weather remainder of week. Precipitation beneficial to fall-sown crops and aiding subsoil moisture supplies. Little fieldwork accomplished. Calving and lambing operations making good progress, but winter storms caused more young stock care. Adverse weather caused some livestock losses.

NEVADA: Temperatures 1° to 7° below normal in north. 1° below normal at Ely to 7° below normal at Sheldon. Normal in south. Warming trend in north over weekend. Light to moderate precipitation in north. 0.02 inch at Battle Mountain to 0.28 inch at Owyhee. Local snowfall with 3 inches at Owyhee and Ely. Land preparation for spring planting underway most low elevation valleys. Vegetable harvest continues Moapa Valley, along with planting of tomatoes. Prospects for spring and summer ranges good. Calving and lambing progressing favorably with death losses about normal. Livestock remain good.

NEW ENGLAND: Seasonal temperatures except up to 3° to 6° above normal in Maine and some southern coastal areas. Considerable thawing early in week with many maxima in 50's and 60's. Major precipitation on March 19, nearly all as rain in extreme south but as heavy snow in north and at higher elevations of south. Considerable sleet in intermediate areas. Snowfall totals variable but up to 10 inches in northwestern Connecticut hills and more in many northern mountain areas. Precipitation totals variable but mostly 0.50 to 1.50 inches. Collecting maple sap delayed due snow depths. Only few good runs due cold weather.

NEW JERSEY: Temperatures averaged from 1° to 4° above normal. Mild Monday and Tuesday, cooler rest of week. Afternoon readings reached into low or mid-70's Monday afternoon. Precipitation averaged 1.20 inches over north, 0.70 inch over central and southern interior and 0.50 inch along coast. Most of precipitation fell as rain Friday night but up to 3 inches of snow fell extreme north. One inch or less of snow remained on the ground on the morning of 22d.

NEW MEXICO: Dry spell continues. Temperatures averaged a little above normal. Generally cool nights with minimum on Friday. Mild days Wednesday and on weekend. Moisture short to very short. Irrigated wheat and barley fair to good. Dry-land wheat critical and in need of moisture. Spring lettuce and onions up to stand in good condition. Limited thinning lettuce. Ranges fair. Livestock fair to good. Lambing and calving active. Shearing activity picking up. Supplement feeding continuing.

NEW YORK: Temperatures averaged in low 40's coastal and low to mid-30's Upstate for warmest week of season. Maximums in 50's to low 60's early week but lowering to below normal after 16th. Coolest on 18th and 19th with minimums teens to low 20's. Widespread precipitation on 19th and 20th. Totals 0.60 to 0.90 inch Long Island and Hudson Valley decreasing to 0.20 to 0.50 inch elsewhere. Weekend storm included 6 to 12 inches of snow in northern and east-central sections with 2 to 5 inches remainder Upstate. Snow cover of 2 to 4 feet or more continues in northern half with bare ground extensive in lower elevations of southern Upstate.

NORTH CAROLINA: Warm at first with highs near 70° and lows near 50° turning colder after 16th. Below freezing nearly all areas morning of 18th. Temperatures averaged a little below normal. Precipitation several days but daily amounts mostly light. Totals mostly 0.50 to 1.00 inch mountains and southern Piedmont and 0.50 inch or less elsewhere. Snow flurries mountains 3 days but accumulations small. Often rather windy. Soil moisture increased, mostly adequate, wet in mountains. Small grains good. Pastures improving, mostly good. Tobacco beds progressing well. Some plants in border belt about ready for setting. Irish potatoes good, planting near completion east. Sweet potatoes bedding coastal areas. Cabbage transplanting nearly complete. Other commercial vegetable planting along coast. Some labor shortages. Pruning and shrubbing near completion. Hay and feed grains short, few areas.

NORTH DAKOTA: Temperatures averaged 1° to 6° above normal. Precipitation mostly traces southwest, 0.10 to 0.30 inch elsewhere. Snow depths 5 to 10 inches northeast and north-central, mostly less than 1 inch elsewhere. Moderate temperatures and limited snow favorable for livestock. Feed

and hay supplies adequate. Farmers preparing machinery and readying supplies for fieldwork. Lambing and calving getting underway.

OHIO: Cold and windy week. Daily mean temperatures were 10° or more above normal on 15th, but below normal remainder of week. Showers especially widespread 15th and 19th. Several areas reported hail on 19th. Snow common evening of 19th and morning of 20th. Precipitation amounts for week mostly in 0.20 to 0.60-inch range. Soft fields and cold temperatures still delaying fieldwork. Maple syrup harvest still active in many areas. Many farmers concerned about supplies of good corn and soybean seed.

OKLAHOMA: Temperatures averaged from 2° below normal to 4° above normal. Extremes: 83° and 12°. Variable rainfall amounts eastern tier counties Thursday. Best rains southeast. Greatest rainfall total 0.42 inch at Idabel. No rain elsewhere. Very strong winds Thursday caused severe duststorm over State. Dust reduced visibility to 1/2 mile or less in some western areas. Wheat condition held about steady, but high winds and continued short moisture damaged some fields. Growth generally good, moisture critically needed for continued development western 1/3. Wheat condition rated 26% poor, 32% fair, 42% good; compared with 23% fair, 76% good, 1% excellent year earlier. Crop mostly poor to fair western 1/3, fair to good elsewhere. Surface moisture mostly short western 2/3. Many farmers working soil to prevent blowing during recent strong winds. Spraying for greenbug control very active southwestern Oklahoma. Seeding spring oats and barley essentially completed. Oats about 60% and barley 75% up to stand. Fruit trees beginning to bloom, gardening active. Livestock condition held steady, mostly fair to good. Native range grass dormant, but clover and annual grasses furnishing some grazing. Supplemental feeding still necessary. Many cattle being moved off small grain pastures.

OREGON: Cool wet days first half of week followed by clearing and sharp warming at close. Temperatures northwest half of State averaged 1° to 5° below normal, southeast 6° to 11° below normal. Minima east side 5° to 25°, western valleys 24° to 30°, coast 27° to 36°. Maxima 39° to 72°. Two to 5 days of rain and snow totaled 0.20 to 0.40 inch northeast, 0.60 to 0.90 inch southeast, 0.90 to 1.40 inches western valleys and north coast, 1.70 to 2.10 inches south coast. Fieldwork lagging because of wet fields, lambing and calving progressing well. Hay supplies short. New grass just starting. Pruning of fruit and nut trees being rushed.

PENNSYLVANIA: Cool wet week. Quite mild at start of week, but cool remainder. Temperatures averaged about 2° below normal. High 73° at Confluence on 15th and low 14° at Carroltown on 18th. Low pressure system Tuesday gave only light precipitation. Deep midwest flow on Friday brought bulk of week's precipitation with water equivalent total in the 0.50- to 1.00-inch range. Snowfall about 5 to 7 inches across northern tier of counties, 2 to 4 over remainder except in southeast where precipitation fell as rain. Another weak low Sunday with negligible precipitation. Over an inch occurred along the western slope of Allegheny and in the Lower Susquehanna and east-central mountains climatic division. Routine spring preparation.

PUERTO RICO: Good stable weather with only light showers islandwide early in week. Highest weekly total 1.77 inches western interior. Generally less than 0.50 inch other divisions. Crop moisture near normal all divisions except southern where topsoil moisture depleted and normal development retarded. Temperatures averaged 76° on coast and 71° interior. Highest maximum 92°, lowest minimum 49°. No crop report due local holiday.

SOUTH CAROLINA: Rain early in week and at end of week most location. Totals ranged from 0.40 inch central to 0.90 inch northwest and over 1.00 inch in mountains. Cold midweek with freezing and subfreezing temperatures at most locations on 18th. Weekly average temperatures were 3° below normal in northwest and 1° below normal along coast. Soil moisture adequate to wet all areas. Tobacco plant beds mostly fair. Small percent transplanting underway. Watermelon, corn, cucumber planting beginning coastal area. Tomato transplanting slowed by cold weather. Maintenance fruit orchards continued. Cold weather caused damage to some peach varieties, extent damage unknown.

SOUTH DAKOTA: Weekly temperatures averaged from near normal to 5° below normal. Extremes ranged from 7° at Lemmon on 22d to 55° at Philip and Rapid City on 20th. Rain changing to snow end of week with amounts up to 1.84 inch in south-central and 1.25 inches in southeast. Lead reported 1.25 inch and 17 inches of snow on 17th through 19th. Snow on ground end of week ranged from 6 inches in southeast to 15 inches in northern Black Hills. Other parts of State had little or no snow on ground end of week. Topsoil moisture enhanced by widespread snowfall blanketing most of State. Moisture content and depth varied from area to area. Additional moisture will help put winter wheat and rye in good condition for spring. Also made feeding more difficult due muddy feedlots and stock corrals. No abnormal losses of livestock due to storm.

TENNESSEE: Temperatures at all stations below normal from 2° in central and northeast to 5° in extreme southeast. Light showers and thunderstorms Monday and Friday. Precipitation amounts ranged from less than 0.50 inch in northwest to more than 0.75 inch in southeast. Farm activity delayed by wet, soggy fields. Most fields too wet to support machinery. Pastures show improvement. Small grains in fair condition. Pastures somewhat below last year. Tobacco bed preparation slightly behind last year's pace, only 40% seeded, compared 70% year ago. Plowing 40% complete same as year ago. Livestock good. Supplemental feeding continues. There were 2.3 days suitable for fieldwork. Soil moisture 43% adequate and 57% surplus.

TEXAS: Light to moderate showers Thursday in north-central and East Texas. Locally heavy amounts of 1.00 inch or more fell in small area near Louisiana border. Drought conditions continued elsewhere. Cool front brought strong winds and blowing dust to West Texas first of week. Dry planting conditions continue to dominate State. Planting South Texas, Lower Valley, Coastal Bend has fallen behind last year's schedule as farmers wait for adequate moisture before planting. Small grains and winter pastures furnishing limited grazing as drought conditions prevail. Main activities were preplant irrigation, planting spring crops, and feeding livestock. Percent crop seeded to date: cotton 6, 6 year ago:

sorghum 14, 10 year ago; corn 22, 7 year ago; rice 28, 3 year ago. Lower Valley spring onion harvest gaining momentum, shipments still light. Onion quality very good, but size small. Onion harvest starts Laredo, Coastal Bend early April. Cabbage, carrot harvest continues active Lower Valley, declining Winter Garden. Lettuce harvest nearly complete Lower Valley with light supplies available Winter Garden. Spinach harvest nearing completion. Mild temperatures stimulated growth irrigated spring vegetables Lower Valley, other South Texas areas. Dryland watermelons deteriorating South Texas because of drought. East Texas beginning to plant watermelon, transplant tomatoes. High Plains planting potatoes, onions. Grapefruit, Valencia orange harvest continues Lower Valley. Citrus blooming. Peaches blooming with some possible damage from freezing temperatures northern areas.

UTAH: Recurring periods light precipitation first half of period. Fair and mild over weekend. Accumulated amounts of moisture generally less than 0.50 inch over and near mountains; only a few hundredths elsewhere. Temperatures continued near to a little below normal but with marked rising trend latter part of period. Milder weather permitted resumption of spring land preparation and planting although fields many farming areas still too wet for working. Fruit prospects continue good. No setbacks from severe weather to date. Farm flock lambing well along and calving in progress. Irrigation water supply outlook from storage reservoirs and streamflow continues good to excellent. Care and feeding of dairy cattle, poultry flocks, beef cattle, and sheep on winter rangelands, valley farms, and in feedlots continue major activities.

VIRGINIA: Two days at beginning above normal temperatures. Remainder normal to below. Showers at beginning and Friday and Saturday. Totals from 0.25 to 1.00 inch. Nearly 4 days suitable for fieldwork. Plowing, discing, and spreading of lime and fertilizer progressed well, but some fields too wet. Irish potato planting well along on Eastern Shore. Earlier tobacco beds up, in good condition. Others being seeded. Planting, including oats, hays, pastures and gardens. Some calf losses from scours. Minor hay shortages.

WASHINGTON: West of Cascades: Temperatures below normal. Maximums 45° to 55°; minimums 25° to 35°. Showers beginning of week, sunny latter half. Precipitation totals 0.25 to 0.75 inch. Digging certified strawberry plants, picking daffodils and harvesting forced rhubarb continue. Fieldwork starting. East of Cascades: Average temperatures 3° to 6° below normal. Maximums in 40's; minimums 20° to 30° most nights. Showers first of week. Precipitation totals 0.10 to 0.25 inch. Heavier amounts extreme east and southern counties. Planting peas, sugar beets, and potatoes increasing. Pruning and preparation for orchard heating continues. Asparagus lands being prepared for cutting. Most fall-seeded grains growing. Some localities rapid changes temperature and strong cold winds causing some damage to cereals. Sheep shearing starting. Livestock good.

WEST VIRGINIA: Sudden drop in temperatures with light snow flurries as cold front moved across State March 16. Stronger cold front March 19 gave rain and scattered thunderstorms which turned to snow showers with temperatures in teens March 20. Snow totaled 2 inches in mountains March 17 and up to 5 inches March 20. Soil moisture adequate to surplus. Progress seedbed preparation minimal. Pastures greening up, but are not providing grazing. Livestock remain good condition.

WISCONSIN: Temperatures near normal. Precipitation heavy southeast half as deep low pressure system brought 12 to 16 inches of snow to many southern areas on Thursday closing schools and blocking highways. Also light snow northeast half on Sunday at end of period. Snowfall during week generally light over the source regions of potential flood, but reductions snow depths and water equivalent these areas minimal. Farm activities mainly care and feeding livestock.

WYOMING: Light snow most of Wyoming, some heavy amounts in mountains. Moran reported 1.38 inch moisture. Temperatures averaged near normal over most of State, some colder because of snow cover. Maxima mostly 35° to 45° west of Divide and Upper Platte Drainage, 50° to 65° elsewhere. Minima were mostly 5° to -25° west of Divide, -5° to 20° east. Temperature extremes: 68° at Deaver and -27° at Big Piney. Feeding livestock, farm flock lambing and shearing continue dominate Wyoming agriculture. Some fieldwork begun irrigated areas. No unusual death losses reported.

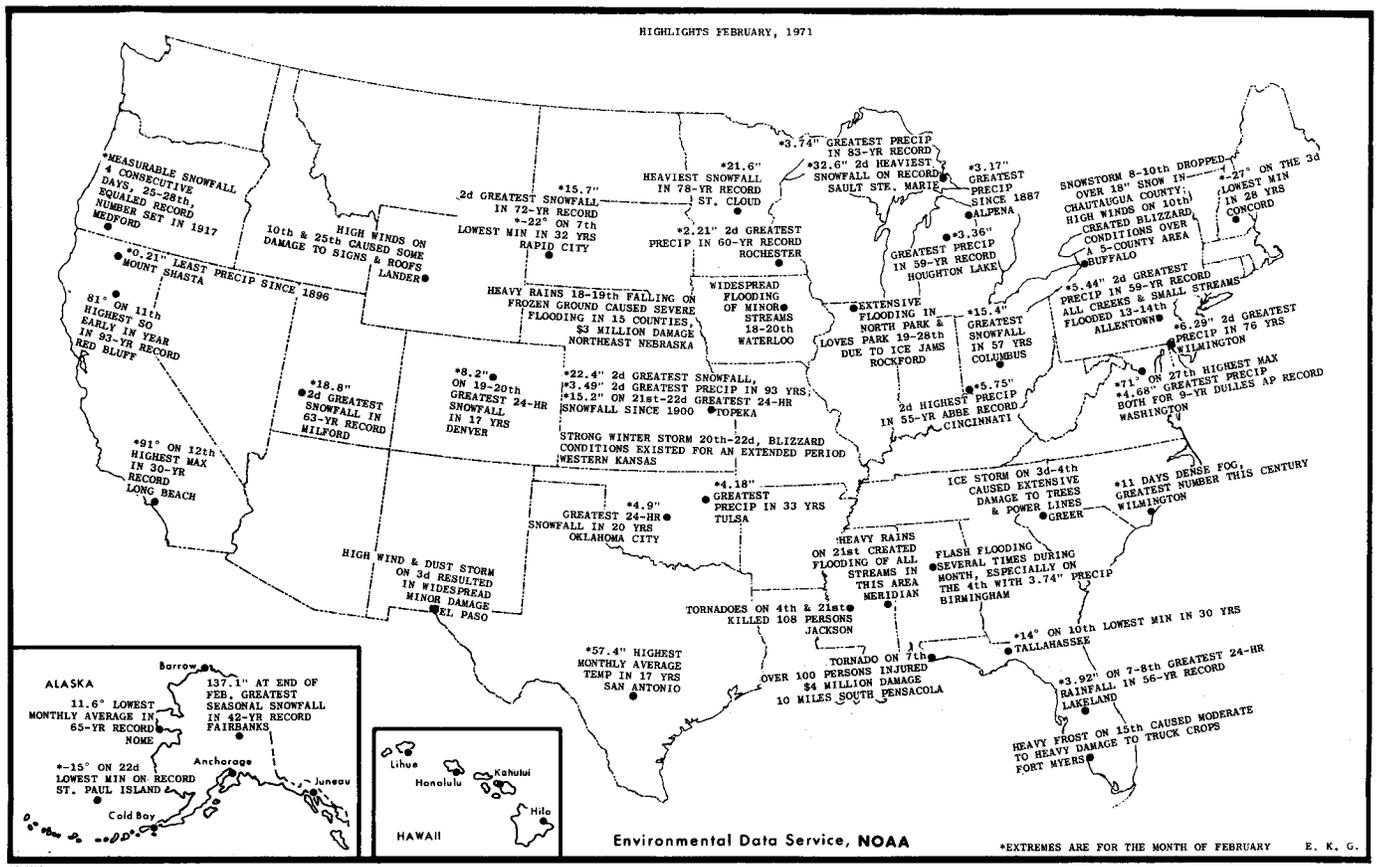
WATER SUPPLY OUTLOOK FOR THE WESTERN UNITED STATES
Issued as of March 1, 1971

The table below shows the most probable forecasts for the residual period (March 1 to September 30, 1971) at selected points in the West. Water Supply Outlook for the Western United States issued as of March 1, 1971, contains supplementary information and forecasts for these and many other points in the West.

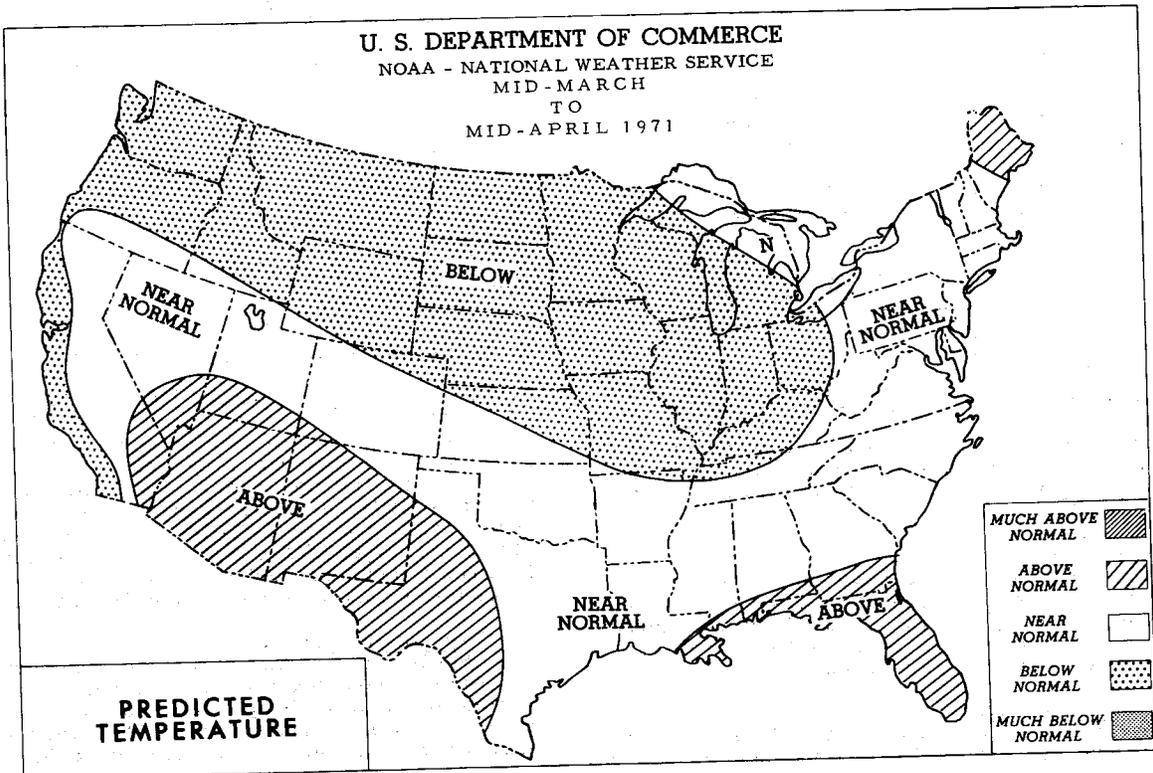
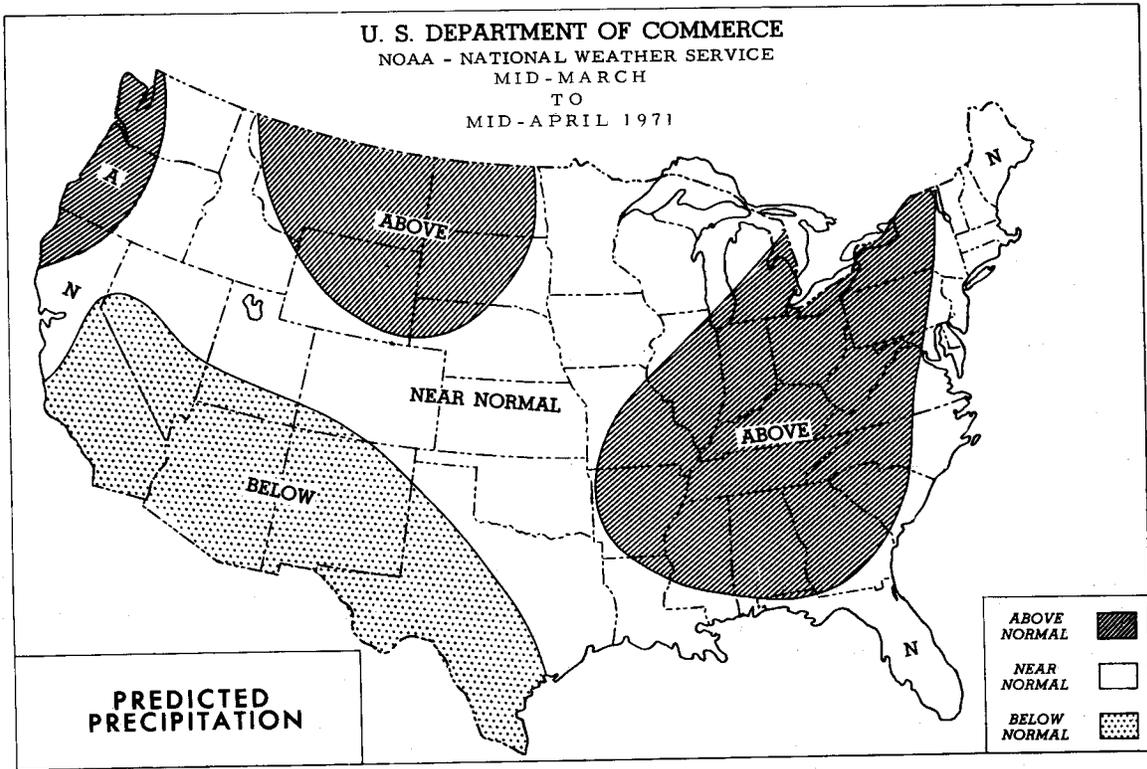
River	Station	Forecast in 1,000 % of 15-acre-ft. yr. Avg.†	
Columbia	Grand Coulee, Wash.	75,400	104
Columbia	The Dalles, Oreg.	125,000	112
Snake	Clarkston, Wash.	36,000	130
Sacramento*	Red Bluff, Calif.*	10,500	115
San Joaquin*	Big Creek, Calif.*	1,310	96
Weber	Gateway, Utah	465	164
Jordan	Utah Lake, Utah	430	141
Truckee	Tahoe, Calif	260	81
Colorado	Lake Powell inflow	10,480	131
Green	Green River, Utah	4,660	149
San Juan	Bluff, Utah	960	85
Little Colo.**	Woodruff, Ariz.	2.6	34
Gila#	Solomon, Ariz.#	20.0	24
Rio Grande	San Marcial, N. Mex.	320	84
Arkansas	Pueblo, Colo.	305	85
Missouri#	Ft. Peck, Mont.#	6,390	144
Yellowstone##	Sidney, Mont.##	8,700	137
North Platte	Glendo, Wyo.	1,181	157

- † Period, 1953-67
- * Period, Oct. 1, 1970 to Sept. 30, 1971
- ** Period, Nov. 1, 1970 to June 30, 1971
- # Period, Mar. 1, 1971 to June 30, 1971
- ## Period, Apr. 1, 1971 to Sept. 30, 1971

Hydrologic Services
National Weather Service

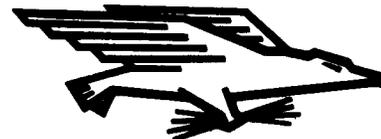


AVERAGE MONTHLY WEATHER OUTLOOK



The above prognostic charts show the expected categories of average temperature and total precipitation for the period indicated. They were extracted from the Extended Forecast Division's publication "Average Monthly Weather Outlook" which contains additional information necessary for complete interpretation.

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Questions, comments, and suggestions concerning the content are desired; please send to the Editor at the above address.

TIPS FOR DEALING WITH CORN BLIGHT IN 1971

As the 1971 growing season approaches, a large question mark remains concerning the southern corn leaf blight. Weather-blight studies reported in the Dec. 28, 1970, issue of the Bulletin suggest that where weather conditions are favorable for corn growth, conditions will also be favorable for blight development. While actual weather patterns during the upcoming season are unpredictable at this time, "normal" weather over most corn growing regions apparently produces sufficient moisture for the spread and development of the blight fungus.

In view of the strong potential for blight in 1971 the U.S. Department of Agriculture's Extension Service has published a collection of working materials on the blight in a booklet titled Corn Blight 1971????. The following is excerpted from the booklet article (pages 14-16) "Potential for Southern Corn Leaf Blight (Race T) in 1971", by Harlan E. Smith, Extension Service Plant Pathologist.

Factors for a grower to consider when attempting to predict probable occurrence of disease (Race T) in 1971 in any given field.

1. Hybrid To Be Grown

Degree of resistance or susceptibility should be determined from grower observation, from seed company, or local Extension sources. Other conditions being the same, more blight is apt to occur with susceptible hybrids. This is the most important factor in determining potential for blight.

2. Site of Field

River bottoms tend to have more frequent dews, heavier dews and dews that last longer in the morning, thus providing conditions for more infections. In general, fields with better air drainage tend to have less blight.

3. Occurrence in 1970

Where disease was severe in 1970 it is apt to be serious again in 1971 (given same conditions

such as hybrid grown, weather, etc.). However, disease can be serious in those areas where the disease did not occur in 1970 if favorable weather occurs, susceptible hybrids are grown, etc.

4. Date of Planting

In many areas early planted corn tended to escape severe damage in 1970, but there were exceptions. Check with local Extension sources.

5. Rate of Planting

High rates of planting may result in thicker stands of corn that tend to dry out more slowly following dews or rain. Thus, somewhat more blight may occur with heavier seeding rates.

6. Weed and Grass Control

Uncontrolled weeds and grass may tend to prevent most rapid drying following rain or dew. Thus, there may be somewhat more chance for occurrence of blight.

7. Air Pollution, Stagnant Air Masses and Cloudiness

Presence of these will tend to prevent drying out of corn plants following rain and dew, thus bringing about more possibility of infections.

8. Presence of Protectant Fungicides on Corn Plants

Sweet corn producers, seed corn producers and corn fields where research is being conducted may have protectant fungicides applied and thus escape serious damage. Costs of spraying may be prohibitive for most field corn producers unless (1) there is an effective warning system, and (2) if only a limited number of applications will be needed (in cases of very late infections).

9. Type of Irrigation

Sprinkler overhead will be more conducive for blight development than furrow irrigation. Irrigation should be planned so that foliage dries off well before nightfall. This practice will tend to reduce infections somewhat.