

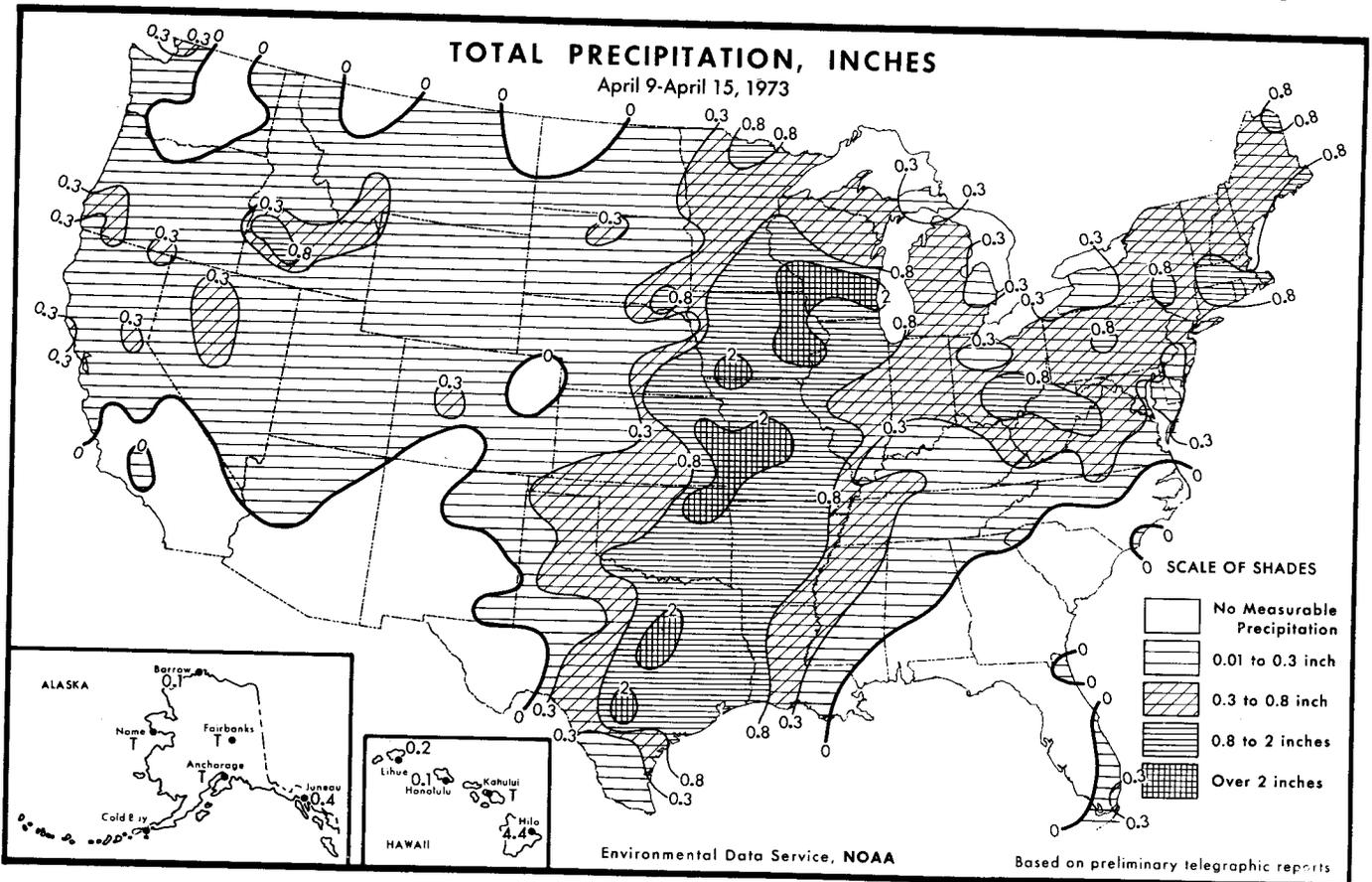
Weekly Weather & Crop Bulletin

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NATIONAL WEATHER SUMMARY

HIGHLIGHTS: Winter struck one last blow with a blizzard dumping 1 foot or more of snow on parts of the Corn Belt and an invasion of cold air from Canada that brought freezing temperatures to the Deep South.

PRECIPITATION: A late winter blizzard struck parts of the western Corn Belt Monday morning. By noon it buried northeast Iowa and southwest Wisconsin in a foot of snow. During the afternoon, falling snow was carved into mountainous drifts by 60 m.p.h. winds, holding visibilities to zero.

Dubuque, Iowa, recorded 18 inches of snow by the end of the day. Tuesday the storm drifted to the northeast, where it weakened over the Great Lakes, but not before it halted the baseball season at Milwaukee, Wisc. "The stadium looks like Disneyland," exclaimed a sports figure.

A Low that developed over New York carried

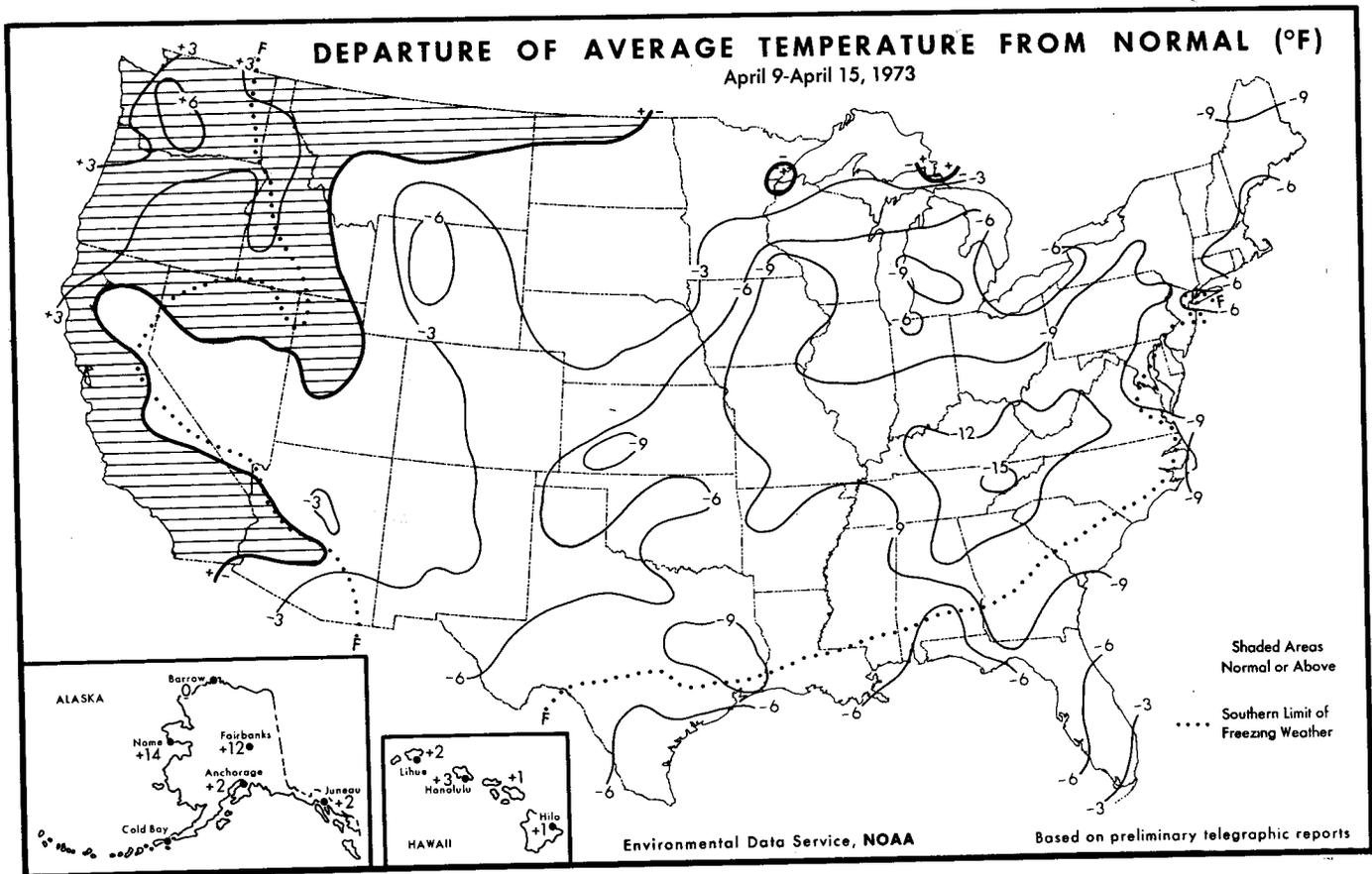
the heavy snow across New York into New England. By Tuesday afternoon, Burlington, Vt., had 3 inches of snow.

On the west coast a Pacific system pushed clouds over the northern Pacific and Northwest areas, bringing some showers to drought plagued areas in the Northwest.

On Wednesday a cold dry air mass centered over the lower Mississippi Valley cleared skies over much of the Nation. A Low over Maine did, however, cloud skies over much of the Northeast. Precipitation was scattered. One inch of snow accumulated at Buffalo and Rochester, N.Y., after rain changed to snow.

On Thursday several weak disturbances maintained pockets of rain or snow, but mostly fair weather prevailed. Up to 6 inches of snow fell on the central Appalachians.

On Friday a complex storm developed over the



Great Basin, while scattered showers again graced the drought areas in the Northwest. On Saturday the Great Basin storm moved snow into the Rockies and thunderstorms over the Plains. Shawnee, Kans., reported 1.60 inch of rain. Several tornadoes were sighted near Amarillo, Tex., accompanied by 2- and 3-inch hail. By Sunday thundershowers rumbled over the Plains and Palm Sunday tornadoes broke out over the Midwest.

TEMPERATURE: A wintry week gripped most of the Nation. Temperatures averaged from 6° to 9° below normal over the Corn Belt, the South, and much of Texas. In sections of the southern Appalachians they plummeted 12° and 13° below the norm. Only parts of the Northwest, most of California, and part of Arizona had temperatures above normal for the week.

The freeze line marched south. The western parts of the Carolinas, northern Georgia, Alabama, Mississippi and Louisiana, plus the northern two-thirds of Texas all experienced freezing temperatures.

On Monday, April 9, a frigid mass of air

surged across the Plains in the wake of the storm. Record cold temperatures were felt that morning from Wyoming to Louisiana. The freeze line embraced all of Iowa and most of Missouri. A 24° reading at El Paso, Tex., marked the coldest April morning low since readings began in 1879.

Tuesday morning the freeze line stretched from western Pennsylvania, across the Corn Belt, through Arkansas into Texas. Wednesday morning a Low, situated over Maine, and a High, centered near the Texas-Louisiana border, both sucked Arctic air from Canada. Temperatures fell below freezing in the Deep South, except in areas near the Atlantic and the Gulf. McComb, Miss., reported 30°, Birmingham, Ala., and Atlanta, Ga., 26°. Midday highs stayed in the 50's and 60's throughout the interior of the Deep South; closer to the coasts they ranged in the 60's and 70's.

The cold air mass hung over parts of the South and the Northeast, lowering average temperatures for the rest of the week. Greensboro, S.C., recorded a 32° temperature on Friday morning; however, a warming trend prevailed over the Nation during the weekend.

NATIONAL AGRICULTURAL SUMMARY

AGRICULTURAL HIGHLIGHTS: Unseasonably cold, freezing weather caused some damage to winter wheat in southern Great Plains. * Freezing temperatures hurt Eastern peach crop and caused some damage to apples. * Many tender spring vegetables in Texas killed by freeze.

SMALL GRAINS: Unseasonably cold weather slowed winter wheat growth in the Great Plains and caused some damage to wheat in the southern Plains. Kansas wheat made fair to good growth but some frost damage occurred in scattered fields and some heaving damage was observed in north-central area. Problems continued with soil borne mosaic in many areas while some streak mosaic showed up in western Kansas. Oklahoma wheat condition was good despite an undetermined amount of freeze damage--83 percent of the crop is jointing. Frost caused some damage to developing wheat and oats in Texas--some of the acreage is in the boot and early milk stages. In Nebraska, winter wheat condition is good although some winterkill is evident. Lack of soil moisture continues in the Pacific Northwest and Montana. In Oregon, small grains developed rapidly under above normal temperatures with some fall seeded acreage jointing.

Spring small grain seeding progress was ahead of normal in the important producing States of the northern Great Plains, but continued to fall behind in other North Central States due to cold, wet weather. Spring wheat is 30 percent seeded in South Dakota compared to a normal average of 32 percent. Oats in Minnesota are 18 percent sown versus the usual 11 percent. Oat seeding in Iowa is 23 percent complete, but behind the average of 32 percent.

OTHER CROPS: Farm fieldwork remained almost at a standstill over much of the central United States due to cold, stormy, wet weather and muddy fields. Heavy snow driven by blizzard winds stopped farm activities in Iowa, and parts of Missouri, Minnesota, and Wisconsin. The snow and rain occurring over much of the Corn Belt fell on saturated soils, further delaying the start of the 6 to 10 days of drying conditions needed to permit extensive fieldwork. Plowing of corn and soybean acreage in the North Central Region is only about 25 percent completed. The worst flooding in 30 years continued along the Mississippi River and many of its tributaries with the Army Corps of Engineers estimating over 8 million acres under water as of April 15.

Improved weather in the northern Great Plains and Southeast allowed farmers to make fair to good progress on fieldwork. Fieldwork was active in the Pacific Coast States under favorable weather.

Cotton planting lags behind last year in Texas at 9 percent planted compared to 21 percent a year earlier. Other Southern States are also far behind schedule with only a few scattered fields planted due to cold, wet weather and flooding in the Delta. Open weather boosted cotton planting activity in California and Arizona.

Corn planting gained momentum in the South in areas where weather conditions and drier soils permitted. All Southern States are behind the usual schedule with planting running between 10 to 20 percent from Mississippi to South Carolina. Texas corn acreage is 49 percent planted. No corn has been planted in Kansas

compared to the average of 6 percent. Open weather is needed in the Corn Belt to dry fields enough to plow and plant.

Sorghum planting in Texas reached 33 percent complete, behind normal. Tobacco beds in Virginia and North Carolina need sunshine--most plants are in fair to good condition. Field setting is underway in southeastern North Carolina.

Potato planting is underway in Washington and on Long Island, New York. Sugar beet planting in Colorado is only 2 percent complete, but is nearing completion in Washington.

Fruits and Nuts: Freezing temperatures during the past week caused varying damage to the fruit crop along the Eastern Seaboard. Heavy apple bud damage was reported in Virginia on Red Delicious varieties in the Piedmont. Damage was light to none for other varieties, and prospects are still good for the apple crop in the northern Shenandoah Valley. Heavy bud loss occurred in some West Virginia apple orchards but crop development is too early for full evaluation. Red Delicious were hardest hit in Henderson County, North Carolina, but many buds are still green and showing good prospects. Other apple producing States report none to slight freeze damage at this time. Peaches in South Carolina were damaged in the Piedmont with the worst damage occurring in lower Greenville and Spartanburg counties, but it is too early to determine extent of damage. Some growers are reporting heavy losses while other report only slight losses. Other areas of South Carolina were unharmed. Georgia peach freeze damage varies widely by areas and stage of development. Damage is heavy in northern areas, moderate to heavy central and very light in the south. In New Jersey, Pennsylvania and New York, damage to peaches is spotty and varies by area and by variety. Cherries in the three Great Lake States reported some losses due to freezing. Michigan bud losses for Tart cherries appear heavy in west-central counties while farther north in the Grand Traverse area losses are light because of later fruit development. Favorable weather aided development of the fruit crop in California. Fruit trees are in full bloom in Washington with good bee activity.

Vegetables: Cabbage, celery and other LEAFY VEGETABLES IN Florida benefited from cooler temperatures but growth of other crops was slowed. In Texas, freezing killed many tender spring vegetables as far south as the San Antonio area and in East and Central Texas. Much watermelon and tomato acreage will have to be replanted. In California, lettuce cutting increased, the onion harvest at Imperial is increasing, and planting tomatoes for processing made normal progress. Harvest of mixed vegetables continued in Arizona. Vegetable planting was active in Washington and Oregon.

PASTURES AND LIVESTOCK: Cool season grasses are providing additional grazing across the Nation as pasture conditions remain above average. Cold, wet weather continues to cause stress to livestock especially in the central and southern Plains and southern Rocky Mountain States. Feedlots remain in poor shape with some improvement noted. Calving losses are more than normal in Kansas, Nebraska, and Colorado.

Temperature and Precipitation Data for the Week Ending Midnight, l.st., Apr. 15, 1973

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 . . .	50	-12	T	-1.2	La. Baton Rouge . . .	60	-8	T	-1.3	Youngstown . . .	37	-9	.4	-.5
Mobile . . .	61	-6	0	-1.6	Lake Charles . . .	60	-7	1.0	0	OKLA. Okla. City . . .	52	-1	.8	+1.1
Montgomery . . .	57	-6	T	-1.3	New Orleans . . .	59	-8	T	-1.1	Tulsa . . .	53	-5	2.5	+1.6
ALASKA. Anchorage . . .	36	+2	T	-.1	Shreveport . . .	57	-7	1.5	+ .4	OREG. Astoria . . .	51	+3	.3	-1.0
Barrow . . .	-3	0	.1	+ .1	MAINE. Caribou . . .	25	-10	.9	+ .3	Burns . . .	47	+2	T	-.2
Fairbanks . . .	39	+12	T	-.1	Portland . . .	36	-5	.8	-.1	Medford . . .	54	+4	.6	+ .3
Juneau . . .	39	+2	.4	-.3	MD. Baltimore . . .	51	-2	.3	-.5	Pendleton . . .	55	+5	T	-.3
Kodiak . . .	--	--	--	--	MASS. Boston . . .	42	-5	.6	-.3	Portland . . .	56	-1	.1	-.4
Nome . . .	34	+14	T	-.2	Chatham . . .	40	--	.2	--	Salem . . .	53	+3	.3	-.3
ARIZ. Flagstaff . . .	39	-3	T	-.3	MICH. Alpena . . .	32	-6	.9	+ .3	PA. Allentown . . .	41	-7	.7	-.2
Phoenix . . .	67	+1	0	-.1	Detroit . . .	39	-6	.5	-.2	Erie . . .	37	-6	.2	-.6
Tucson . . .	61	-4	0	-.1	Flint . . .	36	-6	.2	-.4	Harrisburg . . .	41	-10	.7	0
Winslow . . .	54	0	0	-.1	Grand Rapids . . .	36	-9	.3	-.4	Philadelphia . . .	44	-7	.1	-.7
Yuma . . .	68	-2	0	0	Houghton Lake . . .	34	-5	.6	+ .1	Pittsburgh . . .	38	-10	.3	-.4
ARK. Fort Smith . . .	52	-9	1.9	+1.0	Lansing . . .	35	-9	.5	-.1	Scranton . . .	37	-10	.7	-.1
Little Rock . . .	54	-7	1.2	0	Marquette . . .	35	-3	.5	-.1	R. I. Providence . . .	42	-4	.8	-.1
CALIF. Bakersfield . . .	64	+2	.2	0	Muskegon . . .	35	-9	.4	-.2	S. C. Charleston . . .	54	-10	0	-.7
Eureka . . .	54	+4	T	-.7	S. Ste. Marie . . .	39	+2	.1	-.4	Columbia . . .	52	-11	0	-.9
Fresno . . .	61	0	-.1	-.2	MINN. Duluth . . .	36	0	.6	+ .1	Greenville . . .	49	-12	.1	-.8
Los Angeles . . .	63	+1	0	-.3	Internatl Falls . . .	35	-1	.9	+ .5	S. D. Aberdeen . . .	43	0	.2	-.2
Red Bluff . . .	58	-2	.1	-.4	Minneapolis . . .	39	-4	.8	+ .4	Huron . . .	43	0	.2	-.3
San Diego . . .	62	+1	T	-.2	Rochester . . .	33	-9	1.8	+1.3	Rapid City . . .	41	-2	T	-.3
San Francisco . . .	57	+1	.1	-.3	St. Cloud . . .	38	-3	.6	+ .2	Sioux Falls . . .	43	-1	.6	+ .1
Stockton . . .	61	+2	.2	-.1	MISS. Jackson . . .	57	-7	.2	-.9	TENN. Chattanooga . . .	48	-12	T	-1.1
COLO. Denver . . .	41	-4	.1	-.4	Meridian . . .	56	-7	.1	-1.2	Knoxville . . .	47	-11	.1	-.8
Grand Junction . . .	50	-1	.1	-.1	MO. Columbia . . .	43	-11	1.8	+1.1	Memphis . . .	54	-6	.6	-.6
Pueblo . . .	46	-3	T	-.3	Kansas City . . .	44	-11	1.6	+ .8	Nashville . . .	47	-12	.2	-.7
CONN. Bridgeport . . .	41	-6	.7	-.2	St. Louis . . .	44	-10	1.3	+ .4	TEX. Abilene . . .	56	-7	.1	-.3
Hartford . . .	42	-5	1.7	+ .9	Springfield . . .	47	-8	.9	0	Amarillo . . .	50	-7	.1	-.2
D. C. Washington . . .	46	-8	.3	-.4	MONT. Billings . . .	40	-5	.2	-.1	Austin . . .	59	-8	.8	+ .1
FLA. Apalachicola . . .	62	-5	0	-1.1	Glasgow . . .	43	+1	.2	0	Beaumont . . .	58	-10	1.0	+ .1
Daytona Beach . . .	63	-5	0	----	Great Falls . . .	43	+1	.2	0	Brownsville . . .	69	-5	.1	-.2
Ft. Myers . . .	68	-5	0	-.6	Havre . . .	42	+1	.1	-.1	Corpus Christi . . .	66	-5	.3	-.2
Jacksonville . . .	61	-7	T	-.8	Helena . . .	40	-2	.2	0	Dallas . . .	64	-7	.5	+ .2
Key West . . .	74	-2	T	-.6	Kalispell . . .	43	0	.1	-.1	Del Rio . . .	58	-5	0	-.1
Lakeland . . .	64	-7	0	-.9	Miles City . . .	43	-1	T	-.2	El Paso . . .	58	-6	1.8	+1.1
Miami . . .	71	-3	.5	-.3	Missoula . . .	45	+2	T	-.2	Fort Worth . . .	62	-6	1.1	+ .4
Orlando . . .	66	-5	0	-.8	NEBR. Grand Island . . .	44	-7	1.0	+ .5	Galveston . . .	59	-8	1.1	+ .4
Tallahassee . . .	58	-9	0	-1.2	Lincoln . . .	44	-3	.2	-.3	Houston . . .	55	-4	.4	+ .2
Tampa . . .	64	-7	0	-.7	Norfolk . . .	44	-2	.1	-.3	Lubbock . . .	56	-8	0	-.2
W. Palm Beach . . .	69	-5	0	----	N. Platte . . .	44	-2	.1	-.3	Midland . . .	58	-8	.3	0
GA. Atlanta . . .	50	-9	T	-1.2	Omaha . . .	42	-6	1.4	+ .8	San Angelo . . .	62	-6	3.0	+2.4
Augusta . . .	54	-9	T	-.9	Valentine . . .	44	0	.1	-.3	San Antonio . . .	63	-6	.6	+ .1
Macon . . .	56	-9	0	-1.0	NEV. Ely . . .	41	-1	T	-.2	Victoria . . .	57	-9	2.1	+1.2
Savannah . . .	58	-7	0	-.9	Las Vegas . . .	63	0	T	-.1	Waco . . .	57	-6	.5	0
HAWAII. Hilo . . .	73	+1	4.4	+1.4	Reno . . .	45	-2	.1	-.1	Wichita Falls . . .	45	-2	.1	-.1
Honolulu . . .	77	+3	.1	-.3	Winneumucca . . .	47	+2	.6	+ .4	UTAH. Blanding . . .	56	+7	.1	-.3
Kahului . . .	74	+1	T	-.4	N. H. Concord . . .	35	-7	.7	-.1	Salt Lake City . . .	33	-7	.3	-.3
Lihue . . .	75	+2	.2	-.6	N. J. Atlantic City . . .	43	-7	.4	-.4	VT. Burlington . . .	43	-12	.7	-.1
IDAHO. Boise . . .	53	+4	1.1	+ .8	Trenton . . .	44	-7	.3	-.5	VA. Lynchburg . . .	47	-10	.1	-.6
Lewiston . . .	54	+4	.1	-.2	N. MEX. Albuquerque . . .	54	-1	T	-.1	Norfolk . . .	47	-10	.2	-.5
Pocatello . . .	45	0	.2	-.1	Roswell . . .	55	-3	0	-.1	Richmond . . .	43	-13	.1	-.7
ILL. Cairo . . .	49	-10	.3	-.7	N. Y. Albany . . .	37	-8	.6	0	Roanoke . . .	48	+2	.2	0
Chicago . . .	40	-8	1.2	+ .5	Binghamton . . .	35	-7	.5	-.2	WASH. Colville . . .	52	+3	T	-.2
Moline . . .	42	-7	2.2	+1.5	Buffalo . . .	37	-5	.2	-.5	Omak . . .	48	+1	.1	-1.9
Peoria . . .	42	-8	1.0	+ .1	New York . . .	45	-5	.6	-.3	Quillayute . . .	57	+9	.1	-.5
Rockford . . .	39	-8	1.0	+ .3	Rochester . . .	37	-7	.2	-.4	Seattle-Tacoma . . .	50	+4	T	-.2
Springfield . . .	43	-9	.7	-.1	Syracuse . . .	36	-9	.8	0	Spokane . . .	58	+5	T	-.3
IND. Evansville . . .	45	-12	.1	-.9	N. C. Asheville . . .	43	-12	T	-.8	Walla Walla . . .	56	+7	T	-.1
Ft. Wayne . . .	40	-8	.6	-.1	Charlotte . . .	49	-10	0	-.8	Yakima . . .	38	-12	.5	-.4
Indianapolis . . .	40	-10	.4	-.4	Greensboro . . .	46	-10	.2	-.6	W. Va. Beckley . . .	43	-11	.5	-.5
South Bend . . .	41	-5	.7	0	Hatteras . . .	52	-6	T	-.5	Charleston . . .	42	-13	.6	-.3
IOWA. Burlington . . .	43	-7	1.4	+ .6	Raleigh . . .	49	-10	T	-.8	Huntington . . .	41	-12	.9	+ .1
Des Moines . . .	38	-10	1.9	+1.3	Wilmington . . .	51	-11	T	-.7	Parkersburg . . .	36	-6	.7	+ .2
Dubuque . . .	36	-10	1.5	+ .8	N. DAK. Bismarck . . .	39	-3	T	-.2	WIS. Green Bay . . .	37	-9	3.0	+2.4
Sioux City . . .	44	-3	.2	-.3	Fargo . . .	38	-2	.3	0	La Crosse . . .	37	-6	1.3	+ .7
KANS. Concordia . . .	46	-6	1.3	+ .9	Williston . . .	41	0	T	-.2	Madison . . .	36	-7	2.2	+1.6
Dodge City . . .	44	-9	.4	0	OHIO. Akron-Canton . . .	40	-7	.7	0	Milwaukee . . .	38	-4	T	-.3
Goodland . . .	43	-4	T	-.4	Cincinnati . . .	41	-10	.4	-.4	WYO. Casper . . .	37	-4	.2	-.2
Topeka . . .	45	-8	2.2	+1.5	Cleveland . . .	40	-6	.5	-.3	Cheyenne . . .	37	-4	.1	-.5
Wichita . . .	48	-8	.6	0	Columbus . . .	41	-9	.8	0	Lander . . .	38	-4	.1	-.4
KY. Lexington . . .	44	-9	.2	-.8	Dayton . . .	40	-10	.5	-.3	Sheridan . . .	38	-4	T	-.7
Louisville . . .	43	-11	.2	-.7	Toledo . . .	38	-8	.7	0	P. R. San Juan . . .	80	+4	T	-.7

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 office of the Statistical Reporting Service, U.S.D.A. in cooperation with NOAA Climatologists.

ALABAMA: Light showers Monday, clearing and much colder Tuesday. Record low April temperatures over much of State Wednesday morning with damaging freeze northern half, frost and middle 30's south to Mobile area. Lows included 21° Valley Head, 22° Russellville, and 26° Birmingham. Fair and warmer beginning Thursday. Much warmer weekend; 70's and 80's Sunday. Open weather enabled farmers to make fair progress preparing land late week. A little cotton planted but wet ground and low soil temperatures held to minimum. A few fields corn planted, primarily in south and central. Small grains remained good to excellent, few fields beginning to head. Record low temperatures and frost Wednesday morning caused considerable fruit and vegetable damage. Many peach orchards were hard hit, while others suffered only moderate damage. Full extent of losses not fully determined now. Pastures showed good growth and provided seasonally short to adequate grazing.

ARIZONA: Cool temperatures gave way to warming trend by midweek but averaged slightly below normal for sixth consecutive week. Largest departures southeast. Several periods light showers brought insignificant amount north and north-central areas. Remainder State dry. Above freezing temperatures continued Yuma and Salt River Valley. Favorable weather allowed cotton operations full swing--planting just started Graham County. Small grains excellent progress. Early barley, wheat coloring, southwest. Aphids in barley, Yuma. Safflower satisfactory progress. Sorghum planting, stand establishment normal. Sugar beet development satisfactory--some planting Cochise County, harvest should start Yuma May 1. First cutting alfalfa hay later than last year but normal progress. Lettuce virtually complete Yuma. Harvest central, seasonal progress. Lettuce Cochise County good growth--harvest expected end-of-month. Harvest mixed vegetable central, west continued. Cantaloupes, Yuma good progress. Some chili pepper planting underway Graham, Cochise Counties. Harvest Valencia oranges full swing central, west. Grapefruit harvest active but limited. Ranges mostly good. Desert ranges excellent grazing. Lower elevation ranges greening, higher elevation ranges thawing. Stockwater good, runoff prospects excellent. Cattle, calves good to fair, calving underway.

ARKANSAS: Mean temperatures ranged from mid-60's along southern border to near 50° along northern border. Departures 5° to 10° below normal with largest departures south-central extending north and northeast to Missouri border. Lowest 19° at Calico Rock in north-central on 11th. Highest 81° Camden, El Dorado, and Hot Springs on 14th. Cool temperatures early in week followed by much warmer latter half week. Rainfall ranged from 2.00 to over 3.50 inches in south and portions east-central to near 0.50 inch to 1.00 inch extreme north and northeast. Hope had 3.58 inches, the largest total. Most rain on weekend. Limited progress with fieldwork. Land preparations far behind normal. Soil moisture surplus virtually all areas. Large acreage under flood. No cotton planted. Limited amount of rice acreage seeded. Wheat and oats fair to good condition. Strawberry crop severely damaged by

frost and freezing temperatures. Peaches severely hurt in northern areas, light damage elsewhere. Damage light to apples and grapes. Tomatoes hurt but replanting and suckering should replace losses. Pastures and hay crops growing well. Pasture feed plentiful. Cattle fair to good.

CALIFORNIA: Temperatures averaged 2° to 6° above normal all areas except low desert. Midweek measured warmest maximums for year with readings in mid to high 80's common in growing area. Light rain over northern half State on 13th with amounts generally less than 0.10 inch. Strong gusty winds several days along coast and in southern desert. Open weather prevailed, much fieldwork accomplished. Overwintered sugar beet digging and planting full swing. Small grains good, generally heading out, weeds problem. Cotton harvest finishing, planting progressing rapidly. First cutting alfalfa continues with weevil controls. Rice ground preparation increasing, planting over a week away. Planting safflower, corn, and milo made significant progress, safflower most active. Favorable weather aided development fruit crops. Spring weed cultivation, insect control measures picked up tempo. Irrigation of orchards, vineyards on lighter soils. Thinning apricots, plums, nectarines, to assist size development--harvest to start next month. Apple trees Watsonville past full bloom. Early variety walnut trees full leaf. Dusting pears for blight underway upper San Joaquin Valley. Peaches, prunes, cherries, good set; almond sets poor. Harvest navel oranges virtually complete. Valencia orange harvest increasing, cullage above normal for quality pack. Lemon harvest active along south coast. More lemon, avocado loss from high winds. Asparagus cutting fairly heavy Salinas. Fresh shipment Delta declining; processing increasing. Salinas broccoli moderate, Santa Maria heavy. Salinas cauliflower shipments light but increasing. Imperial, Coachella carrot movement steady. Celery shipments lighter. Palo Verde spring lettuce about complete; Oxnard cutting increasing; Santa Maria moderately active; Salinas underway. Onion harvest Imperial increasing. Strawberry picking peak south; light picking Salinas. San Diego fresh market tomato 3 weeks away. Planting processing tomatoes continues. Rangeland, permanent pastures good condition. Lambing and calving continues. Sheep shearing gaining central valley. Turkeys making good progress on ranges. Egg, milk production gradual seasonal increases. Bees San Joaquin Valley moving to citrus groves.

COLORADO: Average temperatures much below normal, record lows some areas early week. By Friday normal or above most areas. Values 24° Antero Reservoir 8th to 78° Lamar 13th. Precipitation general except extreme southwest where none reported. Amounts quite heavy South Platte Basin and some sections of Arkansas. Greatest reported amount 2.46 inches Longmont. New storm on 15th, mostly snow but with some rain. Heaviest precipitation eastern foothills and adjacent plains. Temperatures again plunged below normal but not to low levels of last weekend. Soil preparation and spring planting limited to last 2 days of week. Field activities considerably behind year earlier. Surface and subsoil moisture supplies

adequate to surplus statewide. Winter wheat and barley good to excellent condition. Winter wheat 5%, winter barley 4% jointing eastern plains. Growth limited by cold nighttime temperatures. Seeding oats and spring barley slow. Cool, wet soils slowing seed germination. Oats 4%, spring barley 5% acreage emerged. Sugar beet seeding 2% complete. Late summer potatoes 4% planted. Alfalfa generally good. Ranges and pastures poor to fair. Growth spring grass limited by cool, wet soil. Livestock condition poor to fair, supplemental feeding continues heavy. Loss newborn calves continues above normal.

FLORIDA: Flooding still persists in north after heavy rains last weeks. Considerably cooler after frontal passage of 8th with mid-30's north and mid-40's as far south as Everglades. Patchy frost Everglades Wednesday morning. Temperatures 4° to 8° below normal north and central and slightly below normal south. Rainfall averaged below 0.10 inch most sections. Fieldwork resumes in panhandle. Northeast continues excessive water. Shade tobacco in Gadsden set and being refertilized. Small grains headed out, some being used for haylage. Pastures and livestock mostly good. Heavy loss of fertilizers from leaching will require reapplication of fertilizers for continued good growth of grasses. Citrus trees excellent. Abundance new growth all areas, bloom completed also petal drop. Soil moisture adequate all areas. Cabbage, celery, other leafy vegetables benefited from cooler temperatures but growth other vegetable crops slowed. Some harvesting hampered by weather, especially pepper harvest, which declined sharply. Cabbage still full volume, but passed spring peak. Potato supplies continued to increase. Tomatoes steady. Harvesting watermelons Immokalee area to begin light this week with good prospects.

GEORGIA: No significant rainfall. Full week sunny weather welcome change from recent heavy rains. Temperatures mild early week but much cooler air spread over State Tuesday. Wednesday morning low 20's mountains and to freezing or below over north. High 30's coastal area. Frost observed many areas on two mornings. Averages: 6° to 9° cooler than normal. Gradual warming trend after midweek brought weekend temperatures back to about normal. Soil moisture adequate to surplus central and north. South mostly surplus. Record low temperatures and last week's heavy rains damaged tobacco, fruit, melons and vegetable crops. Wet soils continue to delay land preparation and planting. Some increased planting activity late week as soil dried. Tobacco 58% transplanted. Corn 13%, cotton less than 2%, a few soybeans and peanuts planted. Tobacco mostly fair to good. Small grains, pastures and livestock mostly good. Corn and truck crops mostly fair. Peach freeze damage varies widely by areas and stage of development. Damage heavy north, moderate to heavy central and very light south.

HAWAII: Cloudy, light to moderate showers. Soil moisture continued adequate. Crop progress fair to good, light insect and disease damages. Supplies of leafy greens heavy--other crops adequate. Sugar-cane harvesting active--pineapples increasing seasonally. Recent rain benefited pastures--cattle fair to good.

IDAHO: Warming trend. Temperatures averaged near normal except east where 7° below normal and low early week dropped to 10° higher valleys. Precipitation spotty, mostly less than normal. Locally heavy end week, north-central prairies,

south-central and east. Spring farming operations ahead schedule north and southwest, behind south-central and east. Small grain seeding nearly 25% done north and about 75% complete southwest, about 50% done south-central, and just barely started east. Emergence slow north due to dry soils. Crops emerging to good stands southwest, but growth slow due to cold nights and dry soils. Wet and cold conditions south-central hindering plant growth.

ILLINOIS: Temperatures: 6° to 11° below normal but warmer by weekend. Freezes Tuesday through Friday. Precipitation general, 0.50 to 1.50 inch, heaviest north. Fruit crops suffered freeze damage central, south. Estimate 80% to 90% peach crop and 50% or more apple crop destroyed. Oat seeding 33% complete. Plowing corn and soybean land 35% complete. Legumes, good. Winter wheat 16% excellent, 61% good, 22% fair, 1% poor. Pastures 22% excellent, 53% good, 22% fair, 3% poor. Pastures supplying 45% of roughage. Soil moisture 98% surplus, 2% adequate. Main activities machinery maintenance, livestock care. Fields nearly all areas too wet for tillage. Less than 1 day suitable for fieldwork.

INDIANA: Freezing temperatures on 11th, from 26° south to 23° north. Precipitation 0.50 to 1.00 inch early week, some fair drying weather last half. Temperatures averaged 8° degrees below normal. Soil temperatures and solar radiation lower than usual. Less than half a day suitable for fieldwork. Plowing at standstill, 15% done, as saturated soils hold equipment off fields. Oats 10% seeded, 35% average. Clover 50% seeded. Vegetative growth 7 days ahead. Wheat 6 inches tall, 5 inches average. Pastures gained slightly, still fair to good, providing 20% of feed for cattle. Peach crop hit by frost, damage extensive.

IOWA: Cold, wet week. Temperatures averaged 7° to 9° subnormal except 5° subnormal northwest. Strong winds and snow resulted in Iowa's most devastating snow storm in decades. Preliminary livestock and turkey losses totaled about \$16 million. Heavy rains and some light snow 15th caused additional stream rises and some flooding. Blizzard April 8 and 9 stopped fieldwork statewide except northwest. One day suitable for fieldwork with less than 2 days suitable previous week. Plowing about 32% complete, 26% last week, but behind the 62% for both 1972 and 1967-1971 average. Oats seeding advanced to 23% complete from 16% last week, behind 55% 1972 and 1967-1971 average 38%. Topsoil moisture 80% surplus and 20% adequate compared with 76% surplus and 24% adequate previous week.

KANSAS: Major storm late week brought moderate to heavy precipitation to eastern three-fourths. Precipitation generally under 0.25 inch western one-fourth and 0.40 to 2.00 inches elsewhere. Several rivers and streams at or near flood stage east. Temperatures averaged a few degrees below normal northwest and much below elsewhere. Daily highs extremely variable ranging from 30's or low 40's first day to 70's or low 80's west on 14th. Hard freezes west 9th and 10th but ground snow covered them. Oats and spring barley seeding slow progress. Oat seeding 38% complete, compared with 94% last year and average 87%. Spring barley seeding 42% complete, compared with 93% last year and average 83%. Virtually no corn planted so far, compared with 7% last year and average 6%. Wheat fair to good growth, most favorable development in west. Some frost damage scattered local wheat

fields and a little heaving north-central. Soil borne mosaic continued problem many areas and some streak mosaic west. More calving problems than usual wide areas across State due to inclement weather. Livestock losses from grass tetany in a number of areas. Higher than usual losses among old cows many areas due to weather stress.

KENTUCKY: Temperatures unseasonably cool to cold until rapid warming 15th with highs in 70's. Temperatures averaged 9° to 13° below normal, lows on the 11th, 21° to 33° degrees. Precipitation 0.08 inch to 0.72 inch. Flooding western border, but generally river levels lower than last week. Snow flurries 9th, snow and rain 10th; 1 inch at Williamstown in northern bluegrass. Sunny 11th and last 3 days. Wet weather limited fieldwork to 1 day. Soil moisture surplus. Plowing progress minimal, only 35% complete compared 45% year ago. Tobacco beds fair to good, but some local damage from freeze and snow. Over half beds sown have plants up. Pastures very green, high water content. Considerable freeze damage to fruit crops. Extent of freeze damage to wheat and barley difficult to assess--fields beginning to head probably greatest loss in yield potential.

LOUISIANA: First half of week very cool with record low temperatures. Last half of week warmer and rain began over weekend. Heaviest rainfall north and west. Temperatures ranged 6° to 9° below normal. Extremes 83° at Baton Rouge Saturday and 30° at DeRidder Tuesday. Weekly rain totals more than 1.00 inch north and west and mostly less than 0.10 inch south and east. Fieldwork active in light, well-drained soils latter part of week but again halted by moderate to heavy rainfall. Some rice and corn planted--perhaps 20% planted, about 50% a year ago. Only a few fields of cotton planted compared with about 10% a year earlier. Seepage along Mississippi River and backwater from Quachita, Black and Red Rivers have flooded extensive areas central and east. Evacuation of livestock continued--some forced sales from insufficient pasture and hay. Sugarcane cultivation and fertilization getting underway--poor stands some low areas. Wheat and oats heading--considerable rust damage showing. Most sweet potatoes bedded - some scattered transplanting in south-central. Strawberry harvest active--excessive moisture reducing yields. Pasture feed about average except where flooded. Topdressing pastures and hay meadows continued. Livestock fair to good.

MARYLAND AND DELAWARE: Wet again, turning sharply colder with frost and freezing. Temperatures much below normal with departures below normal ranging from 12° at Oakland, 8° to 10° in central and 4° to 8° in Delaware and Eastern Shore. Readings dropped sharply with wind and rain on 9th and frost, freeze problems rest of week. General rains of 8th, 10th, 12th, totaling 1.00 to 2.00 inches, with snow beginning extreme west on 10th and accumulating 6 inches by 13th. Weekend: Dry, fair with trend to normal temperatures. Fieldwork behind due to wet fields. Low temperatures several days damaged some peach blooms--extent varies, too early to assess full effect. Peach bloom ahead of normal, reaching full bloom most areas now. Tobacco beds 85% seeded, plants in early beds held back by low temperatures. Winter grains fair to good, more than usual low spot damage.

MICHIGAN: Cool warmer end week. Temperatures: 1° to 3° above normal along Lake Superior shores, 4° sub-normal rest of upper peninsula, 5° to 8° below normal lower peninsula. Storm passed southern low-

er peninsula first of period, deposited 2 to 8 inches snow central lower peninsula and 1 to 3 inches upper peninsula. Precipitation totaled about 0.10 inch to near 1.00 inch upper and 0.25 to 1.00 inch lower peninsula.

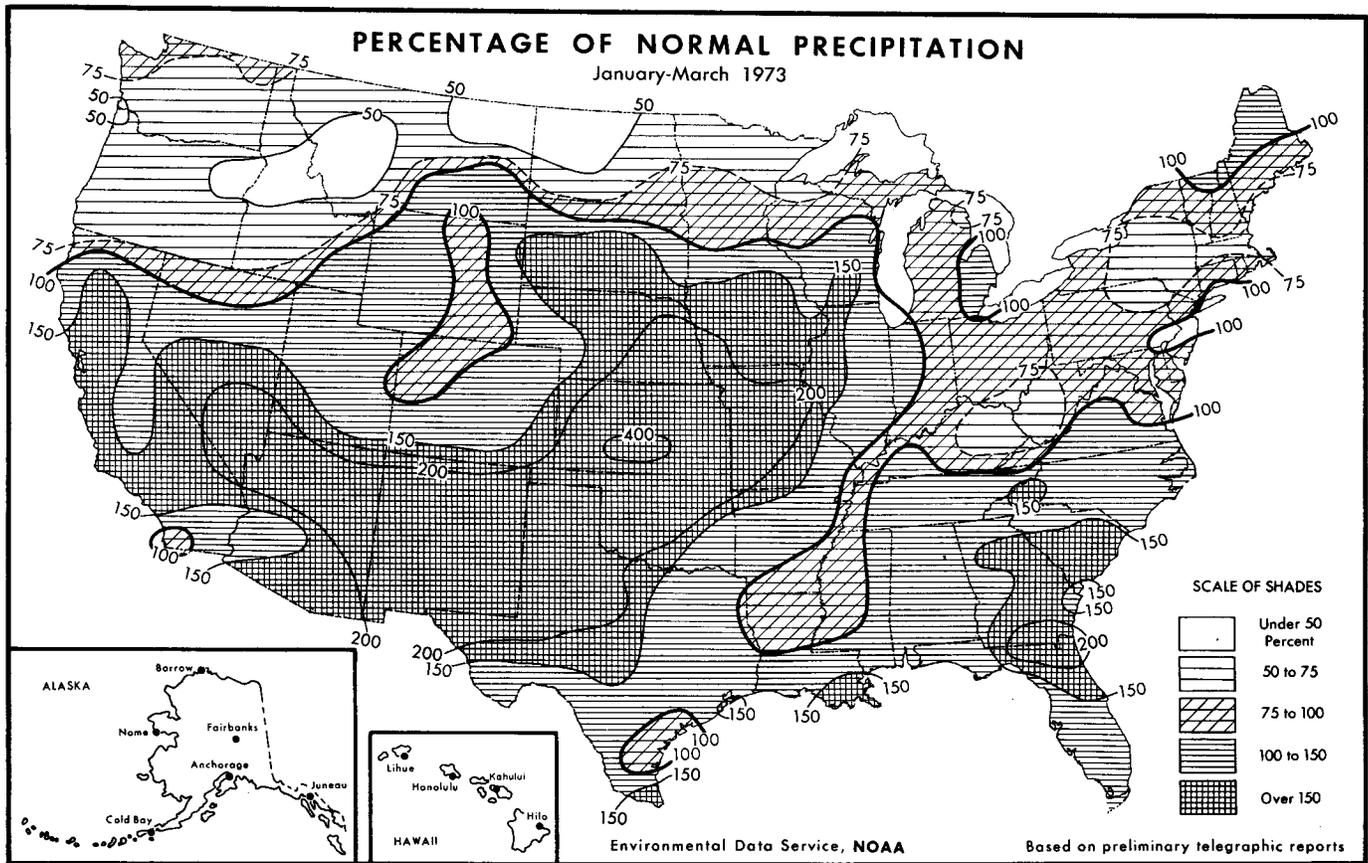
MINNESOTA: Temperatures: near normal north, 9° below normal southeast. Southeast snowcovered part of week. Heavy precipitation, amounts 1.00 to 3.00 inches southeast late week. Elsewhere from 0.50 to near 1.00 inch except west-central and north-west which received none to about 0.25 inch. Patchy snowcover heavier forested area northeast. No lake ice Duluth Harbor and along North Shore. Almost all lakes clear ice from Duluth south. Heavy snowfall south-central and southeast April 8 and 9. Spring fieldwork in snow area at standstill, rapid progress drier western areas. Oats 18% seeded, average 11%. Spring wheat 27% seeded, average 9%. Barley seeding 13% completed, average 5%. Land preparation for corn 3% and soybeans 1% completed. Fall-seeded crops, hay pastures mostly dormant but wintered generally fair to good.

MISSISSIPPI: Midweek cold snap caused temperatures 10° to 14° below normal, except near the coast. Wednesday morning coldest with freezing temperatures far south as McComb. Weekend temperatures generally mild. Rain all but southeast by Monday. Average 3.1 days suitable fieldwork. Plowing spring crops 32% complete. Seeding corn 18% complete compared with 28% year earlier. Oats 30%, 19% wheat acreage headed. Last year 52% oats, 40% of wheat acreage headed.

MISSOURI: Another cold, wet week. Temperatures 9th through 12th falling to near or below freezing statewide. Lows on 10th and 11th: teens into 20's statewide, breaking records. Lowest 12° Steppenville 10th. It finally warmed to above normal over weekend. Precipitation light extreme northwest but averaged from 0.75 inch to over 1.00 inch over remainder of State with up to 2.50 inches west-central. Snow fell on 10th and 11th, about 1 inch west, 12 to 15 inches extreme northeast. High winds produced drifts several feet high across central and northeast. Drifts still visible over weekend. Less than 1 day suitable fieldwork, no advance in the 11% plowing completion. Corn less than 1% planted compared to 6% a year ago. No cotton planted. Oats 4% sown, 87% year ago. Wheat only fair, pastures fair to good because of excess moisture. Soil moisture remains surplus.

MONTANA: Temperatures statewide averaged near normal. Highs generally in the 60's and 70's Monday through Friday, much cooler Saturday. Precipitation below normal. Little if any precipitation west and east, rest averaged 0.20 inch. Topsoil moisture short all areas but southern third. Subsoil moisture short all but northeast and south-central. Winter wheat fair to good northeast, good south-central and southeast, fair elsewhere. Field tillage well underway south-central and south-east, all other areas started. Oats and spring wheat 10% planted, barley 15% planted and sugar beets 25% planted. Range grasses started growth. Stockwater supply adequate northwest and southwest, short to adequate elsewhere. Supplemental feeding cattle 80% and sheep 75%. Losses of newborn calves and lambs generally lighter than normal. Calving 70% complete, lambing and shearing 60% complete.

NEBRASKA: Moisture plentiful with wet weekends and dry midweek. Precipitation averaged 0.25 inch over western two-thirds and 0.50 inch over



eastern third. Temperatures near normal. Most farmers able to get into fields beginning mid-week but weekend rain will again delay fieldwork. Farmers way behind in fieldwork and looking for warm dry weather. Fieldwork consisted of harvesting remaining crops, disking plowing, stalk shredding, fertilizer spreading, and limited seeding. Sugar beet planting 15% complete. Limited seeding of spring grains, grasses and legumes. Winter wheat condition generally good, but some winterkill east to be replanted to other crops. Grain sorghum harvest 96% complete and corn harvest 99%. Marketing livestock limited because of marketing uncertainties and fluctuating prices. Feedlots still in poor shape but improved considerably during week and beginning to dry out before weekend rains. Scours a problem with young calves. It has been a difficult spring for newborn stock.

NEVADA: Temperatures 1° to 5° above normal north, 3° above to 2° below south. High 85° Las Vegas low 19° Ely. Extensive precipitation Friday through Sunday. Lovelock 1.52 inch during 3 days. Warm early week, cooling later. Seed-bed preparation continues. Cotton planting underway Pahrump Valley. Vegetable harvest continues Moapa Valley. First cutting alfalfa hay well underway southern valleys. Livestock good. Calving and lambing satisfactory.

NEW ENGLAND: Cold, mostly 4° to 8° below normal. Many lows in teens north and a few on

10th and 14th in single numbers. Warming at end, with most highs in 60's on 15th. Week dry except major precipitation on 10th, ending on 11th. Totals mostly 0.50 to 1.50 inch. Rockland, Maine 1.68 inch in 6 hours. Nearly all fell as rain south but much wet snow north accumulating 3 to 10 inches central and northern Maine and northern portions of New Hampshire and Vermont. Snowcover of 1 foot or more common in northern Maine. Sap runs in higher elevations north all week.

NEW JERSEY: A dry, cool week, temperatures about 7° below normal, except 2° to 5° below normal along coast. Temperatures ranged from upper 60's on 15th to mid-20's on 13th and 14th. Precipitation averaged 0.4 inch north, 0.3 inch central and south, 0.4 inch along coast. Snow flurries Wednesday night and Thursday morning. Surplus soil moisture and below normal temperatures, limited plowing and preparation of land primarily to lighter, well drained soils. Potato planting lagged, became more active central late week. Harvest spring greens, green onions, leeks and spinach continued. Slight freeze damage peaches, varying by area and by orchard and variety, as temperatures near critical level. No damage reported apples and blueberries. Digging of nursery stock, spraying fruit, liming and top dressing crops active.

NEW MEXICO: Mostly fair but with light showers in extreme north and locally southeast after

Wednesday. Some snow in extreme northeast. Temperatures averaged 10° warmer than previous week but continued generally below normal with 5° to 10° below normal in central mountains and northeast. Low temperatures on Monday, slow warming to highs Friday and Saturday. Cooling on Sunday. Improved weather prevailed. Farming activities accelerated. Early cotton doing well south, 10% to 20% planted. Winter small grains good, grazing reaching final stages. Alfalfa greening well, mild aphid infestations encountered. Vegetables doing well both Mesilla Valley, Albuquerque Los Lunas areas. Apples looking promising north. Ranges poor to fair north, good elsewhere. Calving, lambing, shearing well along. Death losses significant north storm areas.

NEW YORK: A cool and relatively dry week. Temperatures averaged 5° to 10° below normal. Overnight lows fell to 20's almost all upstate points daily. Afternoon highs averaged 35° to 45° but a sharp warming trend developed Sunday when readings rose into 60's. Snow accumulated 3 to 5 inches north and 1 to 3 inches central. Water equivalent of the snow averaged 0.25 inch or less west third and from 0.50 to 0.75 inch over remainder. Rather windy with low humidity from 11th to 15th. Early season in progress due to mild winter. Precipitation delayed fieldwork. Light winter snowcover affected wheat and hay crops in a few areas, most remain in good condition. Maple producers had a poor season. Field preparation and planting of potatoes active Long Island. Cold, wet conditions prevented start potato fieldwork, upstate. Orange County onion planting and fieldwork active last week of March--early plantings emerging. First onions planted Elba area April 9. Fruit crops show little winter damage except on some peaches. Development well ahead of normal, making them more vulnerable to freezing temperatures. Bud damage to peaches, sweet and tart cherries from subfreezing temperatures this week.

NORTH CAROLINA: Temperatures much below normal. Highs mostly in 60's. Freezing weather began in mountains 10th and spread to nearly all areas one or more mornings thereafter. New record lows several stations. Only light precipitation after 8th, but snow flurries mountains with some accumulations 1 inch or more. Wet, cold weather troubled farmers. Fieldwork averaged 2.0 days. Corn planting gained momentum late week coastal plain farms. Flue-cured tobacco plant beds 45% good, 53% fair, 2% poor. Field setting underway southeast. Freezing temperatures on two mornings caused some damage apples, peaches and strawberries. Full extent damage will not be known for several weeks--damage varies by area and variety. Henderson County, Red Delicious apples hardest hit, but many buds still green and growers continuing spray programs.

NORTH DAKOTA: Temperatures variable becoming warm, then colder on weekend. Averages near normal except above normal northwest. Extremes 77° and 9°. Precipitation totals very light except .10 to .30 inch in southeast one-third of State. Most of past week favored seedbed preparation and small grain seeding. Weekend moisture did little to alleviate moisture shortage. Pastures greening and most need moisture. Calving and lambing progressed normally with mild temperatures most days. Livestock good, supplemental feeding still occurring.

OHIO: High temperatures ranged from upper 30's and lower 40's on Tuesday and Wednesday to lower 70's on Sunday. Lows ranged from 20's to around 40°. Lowest was 20° Toledo Saturday. Precipitation the first 4 days of period with thundershowers on Monday producing rainfall, amounts ranging from 0.25 to 0.50 inch, and locally heavier amounts in the northwest. Showers and snow flurries accounted for light amounts of precipitation Tuesday and Wednesday. Six inches or more snow fell on some central counties Thursday morning but most melted by that evening. The wait for dry weather continues as spring field activity remains behind 1972 and well behind 5-year average progress. Poor weather and muddy fields limited fieldwork to under 1 day. Soil moisture 98% surplus, 2% adequate. Plowing for corn and soybeans remains at 25% complete, normal 60%--little progress last week. Oat seeding over 10% done, well below 5-year average of 50%. Very little progress potato planting last week as farmers just started most areas. Under 5% sugar beets planted. Tobacco beds 45% sown. Winter wheat fair to good condition with spotty stands and drowned out areas in some fields. Frost damage to 1973 peach crop varies throughout State from very little damage to total loss.

OKLAHOMA: Temperatures averaged much below normal, ranging from 6° below normal north-east to 13° north-central. Precipitation ranged from about 0.75 inch panhandle to about 1.00 inch west-central. Rain on weekend all areas, light in panhandle to over 2.00 inches eastern third. Small grain development remains behind with wheat 83% jointing compared with 93% a year ago. Condition remains good despite undetermined amount of freeze damage from previous weekend. Barley 67% jointing, 94% last year. Oats 41% jointing, 66% last year. Wet fields delayed further spring planting nearly all counties. Alfalfa weevil infestations heaviest southwest and central--spraying increasing all alfalfa growing areas. Small amount freeze damage on alfalfa western half. Fruit damaged by cold weather most areas but extent generally light. Cool season range grasses eastern one-half making good growth. Cattle condition remains fair to good.

OREGON: Average temperatures all above normal: 3° to 6° above west, 4° to 6° above Cascades, 2° to 5° above central, 1° to 3° above east. Freezing temperatures continued east and central early with lows of 19° to 28° typical. Precipitation continued below normal most sections. Generally dry until thundershower outbreak last 2 days. Traces up to 0.23 inch typical but 0.58 inch at usually dry Medford. Grains, hay and pastures developed rapidly. Fall seeded grains jointing Jackson, Wasco, and Umatilla Counties. Good growth all areas but great concern over lack of moisture. Planting peppermint roots continues, flaming peppermint getting underway. Early potatoes 80% planted Columbia Basin counties. Fertilization, fumigation underway for potato planting central and south. Pears full bloom lower Hood River Valleys and Medford. Sweet cherries full bloom at the Dalles and Willamette Valley. Apples in bloom Milton-Free-water and just starting at Medford. Weather has been excellent for pollination. Spraying for brown rot, blossom blight, scab, and mildew. Light freezes east, little damage. Asparagus and rhubarb harvest getting underway. Live-

stock beginning move onto early ranges. Soil moisture and stream flow extremely low.

PENNSYLVANIA: Week began cold and wet, ended mild and dry. Mostly cloudy, cold through Thursday. Rain Monday night changed to snow flurries and squalls Tuesday. Occasional flurries continued into Thursday some sections with daytime temperatures in 30's and 40's. Up to 4 to 8 inches snow higher elevations. Sunny with warming trend latter part week. Afternoon temperatures reaching 60's Sunday. Precipitation 0.50 to 0.85 inch southwest, central into northeast; 0.25 to 0.50 inch northwest and southeast corners. Temperatures 6° to 10° below normal. Extremes: 72°, 7°. Return of winter weather halted most field activities and threatened fruit crops. Topsoil moisture 85% surplus, 15% adequate. Plowing 20% complete, spring oats 10% seeded. Winter grains greening, spotty damage from winterkill. Damage to fruit crop varies with variety and location. Peach crop severely damaged some sections. Other fruits have spotty damage.

PUERTO RICO: Dry weather continued islandwide. No rain reported 49 out of 50 stations. One station eastern mountains reported 0.07 inch for week. Drought now severe to extreme all divisions. Urban water supplies running low and rationing started several towns. Crop moisture conditions too dry all divisions except parts of interior. Some zones north and south in extreme agricultural drought. Cattle losses reported. Local emergency aid to farmers extended to additional zones. Temperatures averaged 79° on coasts and 74° interior with most departures ranging from 1° to 4° above normal. High 98°, low 50°. No official crop report received due local holiday; however, information on hand indicates agricultural drought delaying most planting schedules and has damaged or reduced yields of pastures and most minor food crops.

SOUTH CAROLINA: Heavy rain beginning week measured over 2.00 inches Piedmont and mountains and less than 1.00 inch coast. Average temperatures ranged from 51° to 56°, 8° below normal. Freezing temperatures many locations 11th and 12th. Sunny, windy weather enhanced drying conditions enabling farmers to get in fields. Tobacco plants--fair to good condition-- 14% transplanted compared with 54% last year. Cotton--about 1% planted compared with 5% last year. Corn -- 15% planted, 34% last year. Small grains--fair to good condition, powdery mildew reported. Pastures good condition. Subfreezing temperatures mornings of 11th and 12th caused damage to peaches in Piedmont, with worst damage in lower Greenville and Spartanburg Counties--extent cannot be determined at this time. Some growers reporting 100% damage while others only slight. Other areas unhurt. Peanuts--3% planted compared with 6% last year. Vegetables fair condition. Tomatoes set--Charleston area. Planting cucumbers and snapbeans underway.

SOUTH DAKOTA: Temperatures averaged from near normal to 6° below normal. Extremes ranged from 6° near Marcus 10th to 79° at Vivian and Pierre 13th, Aberdeen 14th. Precipitation fell mostly as rain mixed with some snow end of week. Totals ranged from a trace parts of west to over 1.00 inch portions southeast. All areas have adequate topsoil moisture. Fieldwork rapid progress statewide as cool, dry weather pre-

vailed. Growth of fall sown grains slowed considerably by freezing nighttime temperatures. Spring fieldwork near normal. Plowing 19% complete, 11% last year and 18% for normal. Spring wheat seeding 30% complete, last year 7% normal 32%. Oats seeding 29% complete, last year 23%, normal 29%. Barley seeding 22% complete, last year 13%, normal 22%. Livestock remain in good condition. Pasture growth slow due to cool nights.

TENNESSEE: Springlike weather returned to winter levels early in week with record low temperatures for date and so late in season on Wednesday. Warming on weekend; highs climbing into low 80's. Extremes 81°, 23°. Precipitation as mixture of rain and snow flurries through Tuesday totaled traces to 0.75 inch. Farmers made good progress with plowing and planting over weekend. Plowing nearly 50% complete, about 2 weeks behind normal. Planting just getting underway, also behind schedule. Pastures and small grains remain in good condition. Small grains beginning to head.

TEXAS: Week started dry and cold but ended wet and mild. Frost or freezing temperatures were common west early week but warm temperatures late in week brought averages back near normal. Little or no rain observed Trans-Pecos. Rain light to moderate high and low plains, Edwards Plateau and south. Heavy rain on upper coast, south-central, north-central and east. Most rainfall over weekend. Gilmer in northeast had heavy rainfall with 7.00 inches Sunday. Frost and freeze damaged seeded crops as record low temperatures covered much of State. Some corn and sorghum to be replanted as result of frost damage. Some wheat and oats in boot stage and early milk stage also damaged by frost and freezing weather. Planting of cotton, corn, sorghum and rice lag behind schedule because of cold, wet soils. Major crops percent planted: cotton 9, last year 21; corn 49, last year 65; sorghum 33, last year 41; peanuts 14, last year 9; rice 40, last year 88. Lower Rio Grande Valley onion harvest continued despite showers. Cabbage harvest remains active. Carrot digging continues. No damage to peppers, cantaloupes or watermelons. Laredo light onion harvest underway. Carrot digging remains active. Honeydew melon planting underway. Coastal Bend onion harvest continues. Melon growth stymied by cold. Cabbage making good growth. In San Antonio--Winter Garden many tender spring vegetables lost to freeze. In East and Central Texas many watermelon and tomatoes lost to freeze and will have to be replanted. North Texas tomatoes lost to freeze. On High Plains some onions may be damaged by snow and freezing. Knox-Haskell potato tops burned by freeze and will delay crop by about 10 days. Peach crop in over one-half northern sections lost, some damage noted other areas because of freezing. Citrus harvest loss behind schedule with picking to continue into June.

UTAH: Few widely scattered showers rain or snow. Accumulated amounts generally light. Average temperatures continued below normal ranging generally between 1° and 6° below. Soil temperatures 4-inch depth ranged from low 40's Cache Valley to mid-40's Salt Lake City and Richfield and mid-60's St. George. Rarely, if ever has contrast between two spring seasons been so marked in Utah. Mid-April 1973 finds planting barely started for spring wheat, oats, barley, green peas, sugar beets, and other crops. Fruit

trees just starting to bloom. Very little feed growth in pastures and on range lands. All this due to long severe winter that lasted well into spring, continuous storms that have kept fields wet, and below normal temperatures that have stymied new growth. In contrast, last year by mid-April planting 75% completed spring wheat, 60% oats, 80% barley, 65% sugar beets, virtually complete dry onions, and 40% green peas. Fruit trees last year bloomed in March and fruit mostly destroyed by heavy freezes. This year apricots beginning to bloom, other fruits have not bloomed. Prospects for fruit production good most areas.

VIRGINIA: Very cold nighttime low readings in upper teens and low 20's. End week, temperatures averaged 9° below normal. Highs mostly in upper 60's at beginning. Precipitation midweek; some snow mountains and north with rain elsewhere. Totals averaged near 1.25 inch. Rain, snow, wet soils and cold limited fieldwork with 1.5 day suitable. Most time suitable east and south. Soil moisture 75% surplus. Corn planting began Tidewater, 1% planted. Most fields still being prepared. Tobacco beds needed sunshine. Topdressed pastures and hay. Snow reduced utilization west of mountains but pastures excellent. Sheep shearing gained momentum. Irish potatoes 90% planted in Northampton, 65% in Accomack. Subfreezing temperatures damaged peaches severely especially in lower elevations of orchards. Worst damage lower Piedmont but significant loss in counties running northeast from Carroll to Madison. Shenandoah Valley peaches in full bloom and 5 consecutive nights of freezing temperatures caused considerable loss. Red Delicious apples suffered heavy kill in Piedmont and some buds dead in north. Damage light to none for other varieties. Prospects still good for apple crop northern Shenandoah Valley.

WASHINGTON: Western Washington: Dry with above normal temperatures. Planting peas, preparing soils for other vegetables. Harvest field rhubarb full swing. Picking tulips active. All crops growing well. Green chopping grass and rye continues. Most stock now on pastures. Eastern Washington: Temperatures 2° above normal, only few scattered showers northeast. Fruit in full bloom with good bee activity. Orchard heating couple cold nights, no damage. String-

ing hops, trellising grapes continues. Planting spring grains, sugar beets near completion; late potatoes, corn underway. Asparagus harvest active. Summer fallow being worked. Soils very dry east of Cascades, early irrigating necessary. Water supply looks short some areas. Ranges, pastures slowed by lack moisture.

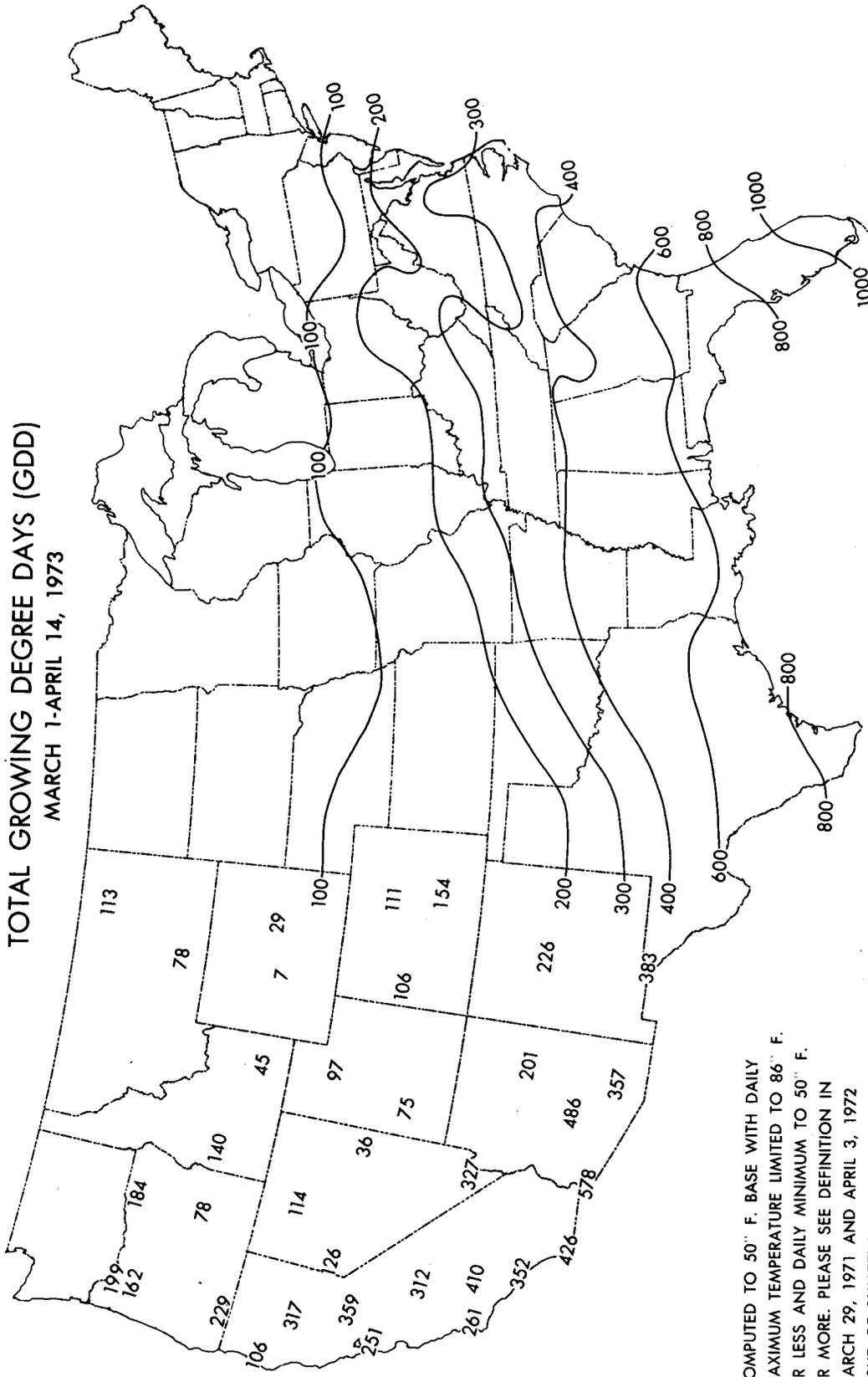
WEST VIRGINIA: Temperatures continued to fall with lows approaching record 20's. Daily highs cool. Rain fell through period changing to snow during 10th to 12th with significant accumulations reported in the north. Five consecutive nights of freezing with lows in mid-20's caused variable damage to apples and peaches. Estimates of peach buds lost: 25% to 75%. Damage to apples not as severe, bud loss up to 50% in some orchards. Too soon for full damage evaluation and crops still susceptible to further damage. Cherries and strawberries hard hit. Grass growing rapidly due to adequate moisture.

WISCONSIN: Major snowstorm across State early in period with 12 to 18 inches of badly drifted snow most sections. Several deaths attributed to storm. Roads closed for more than 24 hours and some milk had to be dumped. Strong northeast winds caused lakeshore flooding along Green Bay from Marinette southward. Shoreline erosion likewise severe elsewhere along Lake Michigan. Snowcover gone again by weekend. Heavy thunderstorm rains from southwest diagonally across State, added to snow melt waters, caused rivers to overflow their banks again some areas. Fields waterlogged and work at standstill. About 6% oats planted and spring plowing 10% completed. Both unchanged from last week. Soil moisture surplus everywhere except adequate in northwest.

WYOMING: Light to moderate snows over much of State. Sundance reported most moisture with 0.75 inch. Temperatures averaged 3° to 14° below normal first half-week. Highs mostly 50's west of Divide and Upper Platte drainage, high 50's to low 70's elsewhere. Lows mostly -5° to 10° west of Divide, Wind River and Upper Platte drainages, 0° to 15° elsewhere. Extremes 73° at Colony and -7° at Riverton. Main farm and ranch activities are calving and lambing ranch areas and preparing seed beds irrigated areas. Feed becoming short in areas where feeding livestock continues.

Standard copy for the Weekly Weather and Crop Bulletin is prepared by: Dr. Richard E. Feich, Agricultural Climatologist; Arlon M. Scott, Agricultural Statistician; John C. Ryan, Editor.

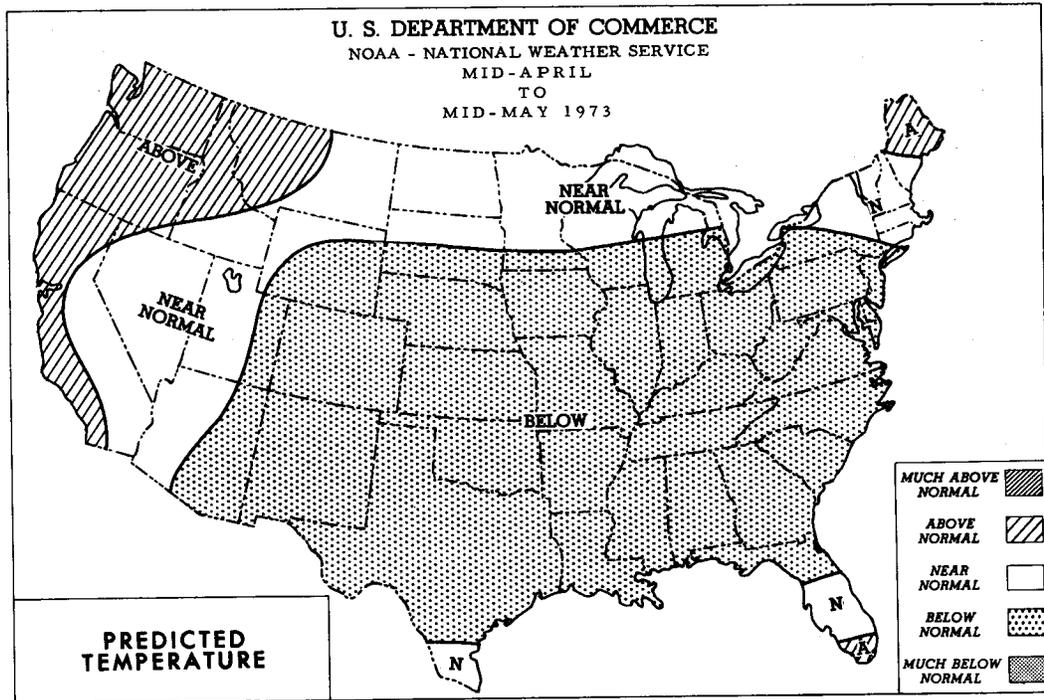
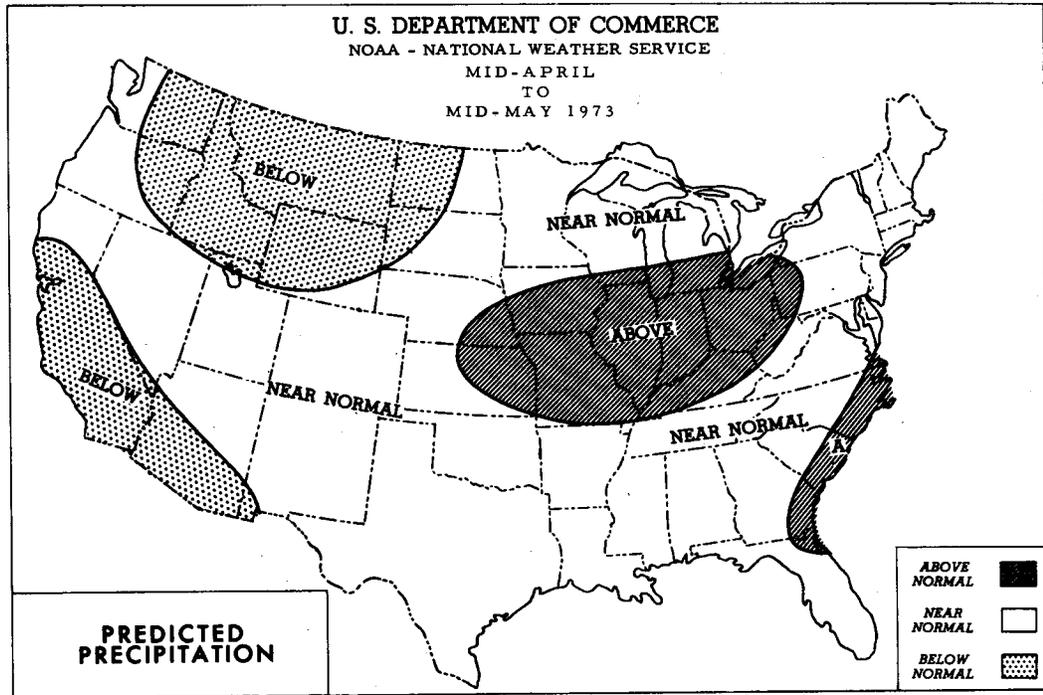
TOTAL GROWING DEGREE DAYS (GDD)
MARCH 1-APRIL 14, 1973



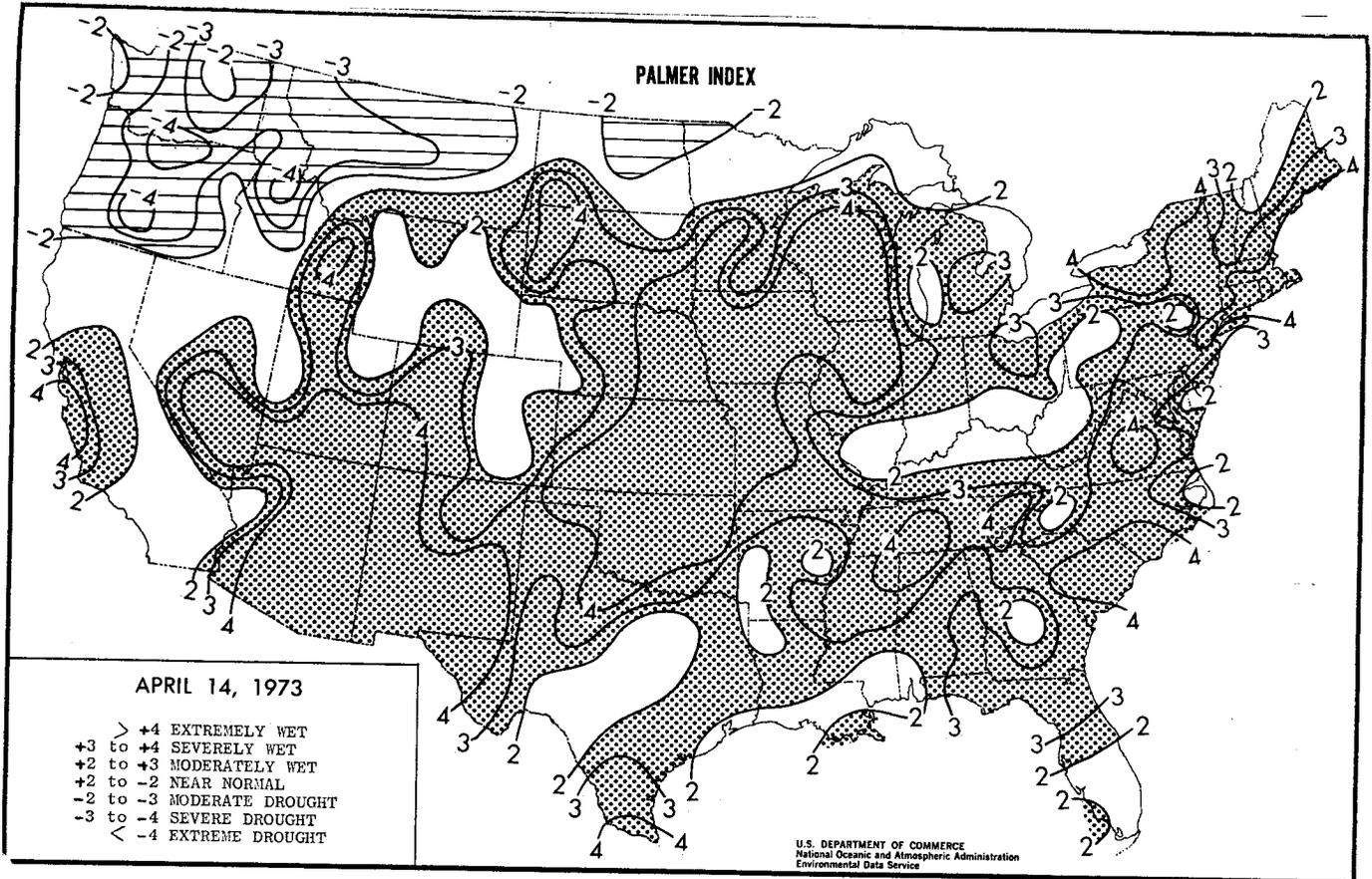
COMPUTED TO 50° F. BASE WITH DAILY
MAXIMUM TEMPERATURE LIMITED TO 86° F.
OR LESS AND DAILY MINIMUM TO 50° F.
OR MORE. PLEASE SEE DEFINITION IN
MARCH 29, 1971 AND APRIL 3, 1972
ISSUE OF BULLETIN.

Environmental Data Service, NOAA

WMO 1084



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.

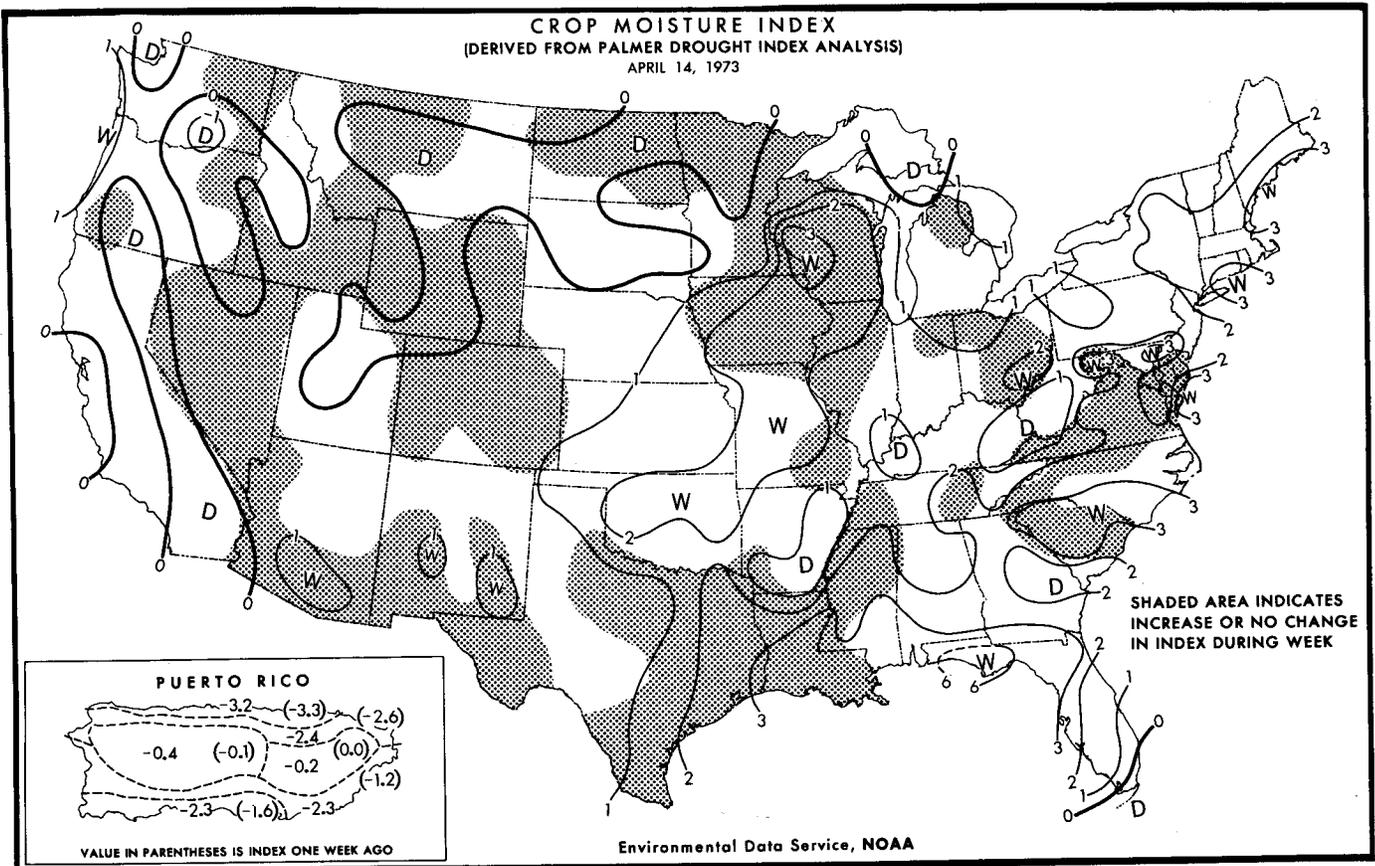


**WEEKEND RAINS IN MIDWEST HASTEN
 SNOW MELT -- INCREASE CONCERN
 OVER FIELDWORK**

Heavy rains fell Sunday and Monday over much of the western Corn Belt. While the rain hastened the snow melt in the areas which were buried earlier in the week, it combined with the melt to increase flooding in many areas and generally delay the beginning of spring fieldwork. From 1.00 to 3.00 inches of rain fell from southern Minnesota to the Gulf, with the heaviest amounts in southeastern Kansas, eastern Oklahoma and Texas, Arkansas and Missouri.

Fieldwork during the past week was generally held at a standstill, although some plowing was done late in the week in Nebraska, the Dakota's, Minnesota and the northwest corner of Iowa. Sunday's rain again halted these efforts. Most of the heavy rain fell before the storm system moved eastward so much of Indiana and Ohio received only 0.10 to 0.25 inch of moisture. However, 98% of the soils in Ohio already have surplus moisture. Skies have now cleared across the Corn Belt, but temperatures are cool. It will be 6 to 10 days before full-scale fieldwork can begin provided the precipitation subsides. Farmers are already several weeks behind in their fieldwork in many areas.

On the dry side of the picture, the Palmer Index maps show that the Northwest corner of the U.S. is extremely dry. Reservoirs are rapidly reaching very low levels, and the hydroelectric plants in some areas may have to be shut down. Rainfall over much of the area has been less than 75% of normal for several months.



INDEX DECREASED DURING WEEK
(Unshaded Areas)

INDEX INCREASED OR DID NOT CHANGE DURING WEEK
(Shaded areas)

INDEX

- ABOVE 3.0 SOME DRYING, BUT STILL EXCESSIVELY WET.
- 2.0 to 3.0 MORE DRY WEATHER NEEDED, WORK DELAYED.
- 1.0 to 2.0 FAVORABLE, EXCEPT STILL TOO WET IN SPOTS.
- 0 to 1.0 FAVORABLE FOR NORMAL GROWTH AND FIELDWORK.
- 0 to -1.0 TOPSOIL MOISTURE SHORT; GERMINATION SLOW.
- 1.0 to -2.0 ABNORMALLY DRY, PROSPECTS DETERIORATING.
- 2.0 to -3.0 TOO DRY, YIELD PROSPECTS REDUCED.
- 3.0 to -4.0 POTENTIAL YIELDS SEVERELY CUT BY DROUGHT.
- BELOW -4.0 EXCEPTIONALLY DRY, MOST CROPS ABOUT RUINED

INDEX

- ABOVE 3.0 EXCESSIVELY WET, SOME FIELDS FLOODED.
- 2.0 to 3.0 TOO WET, SOME STANDING WATER.
- 1.0 to 2.0 PROSPECTS ABOVE NORMAL, SOME FIELDS TOO WET.
- 0 to 1.0 MOISTURE ADEQUATE FOR PRESENT NORMAL NEEDS.
- 0 to -1.0 PROSPECTS IMPROVED, BUT RAIN STILL NEEDED.
- 1.0 to -2.0 SOME IMPROVEMENT, BUT STILL TOO DRY.
- 2.0 to -3.0 DROUGHT EASED, BUT STILL SERIOUS.
- 3.0 to -4.0 DROUGHT CONTINUES, RAIN URGENTLY NEEDED.
- BELOW -4.0 NOT ENOUGH RAIN, STILL EXCEPTIONALLY DRY.

The map above is based on weekly areal mean values of temperature and precipitation for 350 climatological divisions. Weather during previous weeks has been taken into account through successive weekly computations of both topsoil and subsoil moisture. The map shows recent crop moisture conditions; i.e., areas in which crops have been hindered by abnormal dryness or wetness, and areas where moisture conditions have been favorable.

This is a generalized picture; local variations caused by the occurrence or absence of heavy rain or by soil differences are not shown. Shallow rooted crops and crops in areas with poor soils are likely, on occasion, to suffer more than indicated. Conditions may be better than shown in areas having exceptionally good soils.

The legend applies primarily to growing rather than matured vegetation. Interpretation of the

effects on crops and native vegetation must, therefore, take account of the stage of growth as well as the status and trend of moisture conditions. The trend is indicated by the shading which denotes areas where the index did not decrease below its value of a week previous; i.e., conditions did not become noticeably drier during the week. A trend toward drier occurred in the unshaded regions. The lines show the crop moisture situation according to the computed index values which may be interpreted using the legends above. One legend applies to the unshaded areas, the other to the shaded. Centers of relative maximum and minimum index values are marked for easier recognition - W for wet and D for dry. In irrigated regions the index values merely reflect departures from ordinary irrigation requirements.



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NATIONAL FLOOD SUMMARY April 16, 1973

National Weather Service

Heavy rainfall during the last 24 to 48 hours has renewed flooding over a large area in the Plains and Mississippi Valley states. Most streams are either still in flood from previous rises or have only recently returned to within banks. Although the heaviest rain fell in the southern portion of the flood area it was sufficiently heavy in the Missouri and Middle Mississippi basins to reverse falling trends on the main stem Missouri and Mississippi. Some severe flash flooding was reported in Mississippi. The Mississippi River is above flood level at all but one or two stations from Quincy, Ill., to the mouth, as well as in one or two places above Quincy. A new flood crest of 35.0 feet is forecast for St. Louis, Mo., at the end of this week. The stage at St. Louis this morning was 33.8 feet and flood stage is 30 feet. The Lower Mississippi has crested at all points although crest or near crest conditions still prevail from about Vicksburg, Miss., to Baton Rouge, La., where stages 6 to 8 feet above flood level are reported. Little change to slight fall is forecast for this portion of the river on down to New Orleans, La. The stage at New Orleans this morning was 17.2 feet and flood stage is 17 feet. Some streams in the east Gulf and south Atlantic drainage continue in flood but stages are generally falling, except in Mississippi where new rises are in progress.