

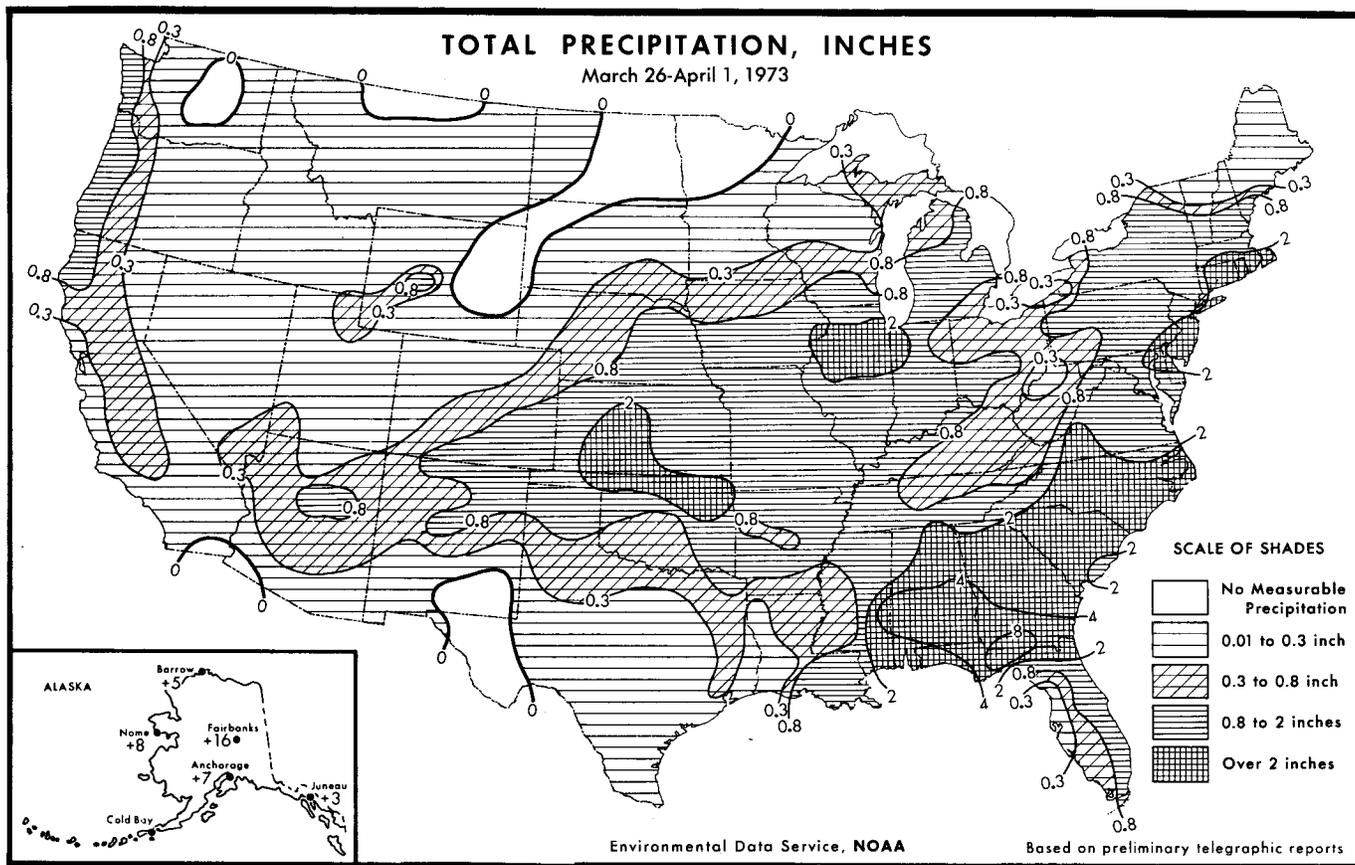
Weekly Weather & Crop Bulletin

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NATIONAL WEATHER SUMMARY

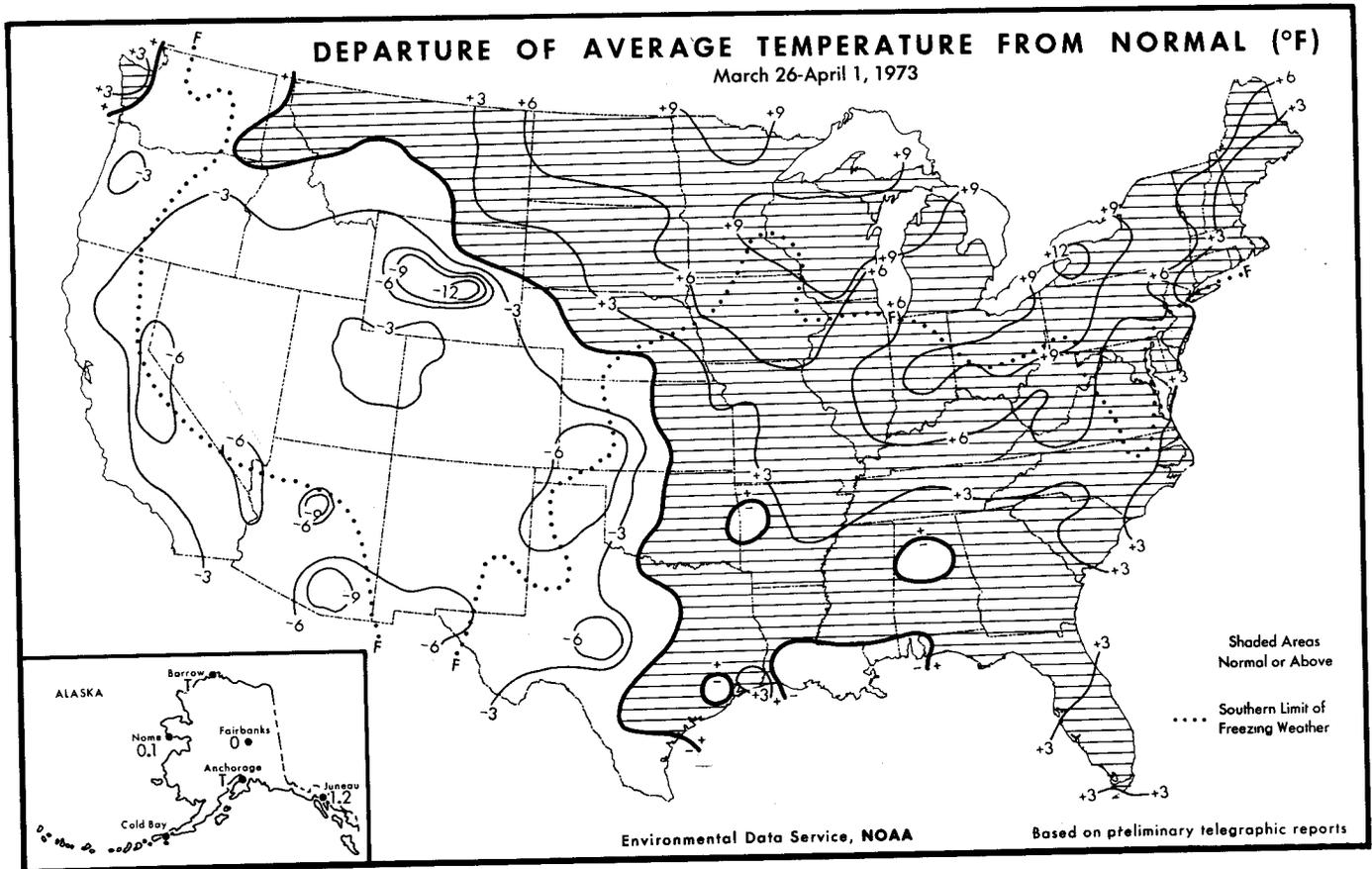
HIGHLIGHTS: March ended violently over much of the South, Midwest, and Atlantic Seaboard. Rain drenched and flooded the Deep South. Tornadoes struck from Oklahoma to Washington, D.C. destroying property, leaving several dead in northern Georgia. Large hailstones pelted scattered areas, and violent thunderstorms generated high winds. Winter held on in the Rockies, but much of the Corn Belt remained above freezing all week.

PRECIPITATION: Rain drenched the Deep South, the western half of the Corn Belt and the Kansas wheat belt this week. From 2.00 to 4.00 inches of rain soaked soils and flooded rivers from northern Florida to Virginia and west to Mississippi. Torrents of rain turned fields to mud in Kansas, western Missouri, and Oklahoma. There, the week brought from almost 2.00 to over 2.50 inches of rain.

A pleasant spring-like day graced most of the Nation's interior on Monday, March 25, while the coastal areas received scattered showers. Tuesday began with generally fair weather--cloudy and dry. But rain returned to the Plains during the afternoon. A Low pushed showers into west and central Texas and showers later spread into the Mississippi Valley. Snow fell in Colorado and northern New Mexico.

Wednesday, a poorly organized Low, extending from the upper Great Lakes to the Southern Plains generated showers and thundershowers over the mid-Mississippi Valley. Warm moist air flowing toward the emerging storm caused thundershowers over southern Texas and the Louisiana coast.

On Thursday, Lows centered over Illinois and the Rockies and one south of New Mexico stirred up the weather over much of the Nation. Heavy rains swelled and flooded rivers from the Gulf Coast to



the mid-Mississippi Valley. Flagstaff, Ariz., added 13 inches of snow to its already record snowfall for the year.

Friday, snow fell in the central Rockies, east into Colorado. Goodland, Kans., recorded 1.00 inch of new snow. Severe weather extended eastward: Baseball-sized hail fell near Texarkana, Ark., Montgomery, Ala., had 1.83 inch of rain, tornadoes hit near Durant, Okla., Friday night the storm dumped 4.00 to 6.00 inches of rain on southern Alabama and 1.50 inches over parts of Georgia and South Carolina.

Saturday, nine tornadoes touched down in central Missouri, five in northern Georgia, and three in Illinois. In northern Georgia several people were killed and a large number injured.

Sunday rains caused flooding in the Carolinas. Tornadoes touched down in central Florida, lower Michigan, and the Washington, D.C. suburbs. The tornado in Washington destroyed a shopping center and tore roofs off a school and an apartment house.

TEMPERATURE: Temperatures warmer than average covered the East, the Midwest, and the North Central United States last week. The area around Buffalo, N.Y., averaged 10° or more above normal, while large sections of the Atlantic Coast, the Deep South, the Corn Belt, and the Northwest ran from normal to 6° above normal.

Much of the central and western Corn Belt remained frost-free all week. The West Coast remained cooler than normal for the second week in a row, Some Mountain State areas were as much as 9° to 12° below normal.

The week began on the mild side. Midday temperatures shot up into the high 40's, the 50's and 60's all along the Canadian Border. Tuesday was cooler due to a cold front moving across the North-Central States and northerly winds blowing into New England.

On Wednesday morning the freeze line moved into the western Plains and as far south as North Carolina in the East.

Thursday's frost line embraced only the Rockies and Northern Plains. However, midday highs along the Canadian Border ranged in the 30's and 40's in the Nation's midsection and in the 40's and 50's closer to the coasts.

Friday's temperature story was almost the same. The day's high was at St. Petersburg, Fla., 86°, and the low at Lander, Wyo., 9°.

Late in the week a Pacific cold front pushed into Washington, Oregon, and northern California. By late Sunday it embraced the whole of the western third of the Nation. Sunday afternoon, temperatures ranged from 77° at Key West, Fla., to 20° at Laramie, Wyo.

John C. Ryan

NATIONAL AGRICULTURAL SUMMARY

AGRICULTURAL HIGHLIGHTS: Winter wheat made excellent growth in the Great Plains, condition lowered due to cool wet weather. * Spring sowing of small grains began in North Central Region.

* Land preparation and planting in South delayed by wet conditions. * Livestock plagued by floods in South and by snowstorms in Colorado and New Mexico.

SMALL GRAINS: Winter wheat in the southern Great Plains made good to excellent growth during the past week but cool, wet weather lowered condition slightly. Generally, wheat throughout this area is in good to excellent condition with adequate to surplus soil moisture. Kansas wheat made good to excellent growth in western parts of the State but soilborne mosaic, floods and standing water caused some problems in central and eastern sections. The condition of Nebraska wheat is above average but cool wet weather slowed growth. Dead spots in wheat were reported to be caused by standing water and winter-kill although the damage is expected to be minor. In Oklahoma, wheat made rapid growth but lost some condition due to cool temperatures and excessive rains--half of the wheat acreage is jointing. Texas wheat and oats condition and growth were excellent. Colorado winter wheat and barley condition remains good to excellent with very little wind or freeze damage.

Fall sown grains in South Dakota are in good condition but stands are highly variable with greenbug damage showing up on untreated fields in some areas. Overwintering small grains are greening up across the North Central Region in generally good condition. In Montana winter wheat is greening in mostly fair condition and soil moisture remains mostly short. Farmers in the Pacific Northwest were actively planting small grains and hoping for additional moisture. Reseeding winterkilled wheat was quite extensive in Washington. Small grains in California are showing good growth with early plantings heading in the Sacramento Valley. Small grain crops in the South are growing well in mostly good condition except for flooded lowland acreage. More sunshine would be helpful.

Rain, snow, and soggy fields continued to halt spring seeding of oats and barley in Kansas and Colorado. In Kansas, oats seeding is only 14 percent complete compared with the average 61 percent. Spring tillage is underway on a small scale in Montana, the Dakotas, Minnesota and Wisconsin with seeding of small grains just beginning. Oats seeding in Iowa at 7 percent complete is behind the average of 12 percent.

OTHER CROPS: More rains and wet fields continued to delay land preparation for spring planting in the South and southern half of the North Central States. Many fields in Louisiana, Mississippi and Alabama are under water. Most farmers in the Southeastern quarter of the Nation from the Plains of Texas and Oklahoma to the Atlantic Coast are behind schedule with plowing and applying herbicides and fertilizers. Fieldwork was limited to well drained, higher elevation fields. Some plowing got underway in the northern States from Wisconsin to Montana. Cool, wet weather also delayed field preparation and planting in California and Arizona.

South Texas cotton farmers made some progress during the week with cotton now 6 per-

cent planted compared to 13 percent last year. Some cotton land in Mississippi probably will not dry out in time to plant. Georgia farmers have less than 2 percent of their intended cotton acreage planted. Rain delayed cotton planting in Arizona while early plantings in California are emerging nicely.

Planting of corn in Texas is 33 percent complete compared to 53 percent last year. Corn planting in Georgia is near normal at 7 percent planted but very little progress has occurred in other Southern States because of wet conditions.

Sorghum planting in Texas reached 24 percent complete compared to 34 percent last year while rain delayed sorghum planting in Arizona. Some tobacco plant beds in North Carolina have sustained water damage but conditions are generally fair to good. Tobacco transplanting is behind normal in Georgia at 29 percent complete. Alfalfa is growing well in Kansas, but weevils are active there and in California. Vermont producers had the best run of maple sap of the season last week.

Fruits and Nuts: Florida orange trees are in peak bloom in excellent condition. Many citrus groves in Arizona are nearing full bloom while Valencia orange and grapefruit, picking was limited. Limited frost damage to peach blooms occurred in a minor producing area of Georgia. Peach trees are beginning to bloom in Western Virginia and a few apple blossoms are beginning to show pink in southern Virginia. Wet orchards in California are causing weed control problems; ground applications of herbicides have not been effective and growers are relying more on airplane spraying. Apricot and cherry trees in Washington are blooming. Most fruit tree pruning is completed in the Pacific Northwest.

Vegetables: Florida vegetable supplies are expected to increase throughout April. Cabbage harvesting is at full volume, pepper supplies heavy, and tomatoes are increasing.

Vegetable transplanting gained momentum in areas of North and South Carolina. Vegetable harvesting in the Texas Lower Rio Grande Valley accelerated while harvest activity declined in other winter producing areas. The spring lettuce harvest at Riverside, California is in full swing while south coast supplies are increasing and cutting is beginning in the San Joaquin Valley. Carrot digging is active in several areas of California.

PASTURES AND LIVESTOCK: Pastures greened as far north as Wisconsin. Although most pastures are providing forage, wet conditions are limiting grazing in the southern Plains States and in the South. Many livestock producers in Alabama, Mississippi and Louisiana were busy last week moving livestock to high grounds for protection from rising flood waters. Feedlots in the Great Plains continue in very muddy conditions slowing weight gains. Snowstorms in Colorado and New Mexico caused severe stress to livestock and hampered livestock care and feeding.

Arlon M. Scott
Agricultural Statistician

Temperature and Precipitation Data for the Week Ending Midnight, l.st., Apr. 1, 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 . . .	56	- 2	2.6	+1.3	La. Baton Rouge . . .	63	- 1	.9	-.6	Youngstown . . .	50	+10	1.2	+.4
Mobile . . .	62	- 1	3.2	+1.5	Lake Charles . . .	62	- 2	1.1	-.8	OKLA. Okla. City . . .	52	0	.6	+.1
Montgomery . . .	61	+ 1	4.2	+2.8	New Orleans . . .	64	0	1.1	-.2	Tulsa . . .	54	+ 2	2.7	+2.0
ALASKA. Anchorage . . .	34	+ 7	T	-.1	Shreveport . . .	61	+ 1	T	-1.0	OREG. Astoria . . .	45	- 1	.9	-.9
Barrow . . .	6	+ 5	T	0	MAINE. Caribou . . .	34	+ 6	1	-.5	Burns . . .	35	- 5	.2	0
Fairbanks . . .	32	+16	0	-.1	Portland . . .	37	+ 1	1.0	-.1	Medford . . .	44	- 2	.6	+.3
Juneau . . .	36	+ 3	1.2	+.5	MD. Baltimore . . .	51	+ 4	2.4	+1.5	Pendleton . . .	45	- 1	.2	-.1
Kodiak . . .	---	---	---	---	MASS. Boston . . .	41	0	1.8	+.8	Portland . . .	47	- 1	.6	-.2
Nome . . .	20	+ 8	.1	-.1	Chatham . . .	40	---	2.7	---	Salem . . .	43	- 4	.9	0
ARIZ. Flagstaff . . .	28	-11	1.3	+1.0	MICH. Alpena . . .	37	+ 6	1.1	+.6	PA. Allentown . . .	48	+ 6	1.8	+.9
Phoenix . . .	58	- 4	.6	+.5	Detroit . . .	47	+ 7	.8	+.2	Erie . . .	48	+11	.3	-.4
Tucson . . .	52	- 9	.3	+.2	Flint . . .	44	+ 8	1.2	+.7	Harrisburg . . .	48	+ 3	1.2	+.4
Winslow . . .	46	- 3	.9	+.8	Grand Rapids . . .	45	+ 8	1.6	+1.1	Philadelphia . . .	49	+ 4	2.3	+1.4
Yuma . . .	61	- 5	T	0	Houghton Lake . . .	42	+ 9	.6	+.2	Pittsburgh . . .	53	+11	.7	-.1
ARK. Fort Smith . . .	55	- 1	.3	-.5	Lansing . . .	44	+ 6	1.0	+.4	Scranton . . .	45	+ 4	.6	-.1
Little Rock . . .	59	+ 3	.6	-.5	Marquette . . .	38	+ 6	.7	+.2	R.I. Providence . . .	42	+ 1	2.4	+1.0
CALIF. Bakersfield . . .	55	- 4	.8	+.6	Muskegon . . .	45	+ 7	1.2	+.7	S.C. Charleston . . .	61	+ 3	1.9	+1.0
Eureka . . .	48	- 1	1.1	+.1	S. Ste. Marie . . .	41	+12	.5	+.1	Columbia . . .	60	+ 4	3.3	+2.0
Fresno . . .	51	- 6	.3	-.1	MINN. Duluth . . .	35	+ 7	.1	-.3	Greenville . . .	56	0	2.4	+1.3
Los Angeles . . .	58	- 2	.1	-.2	Internatl Falls . . .	37	+11	0	-.3	S.D. Aberdeen . . .	40	+ 5	T	-.3
Red Bluff . . .	51	- 5	.6	+.1	Minneapolis . . .	45	+10	.2	-.2	Huron . . .	41	+ 6	.3	0
San Diego . . .	58	- 2	.2	-.1	Rochester . . .	43	+ 9	.4	0	Rapid City . . .	38	+ 2	T	-.3
San Francisco . . .	52	- 2	.1	-.4	St. Cloud . . .	41	+ 9	T	-.3	Sioux Falls . . .	42	+ 6	.3	-.1
Stockton . . .	54	- 2	.6	+.1	MISS. Jackson . . .	61	+ 1	.6	-.6	TENN. Chattanooga . . .	57	+ 2	1.1	-.2
COLO. Denver . . .	37	- 3	.3	-.1	Meridian . . .	61	+ 1	4.4	+3.0	Knoxville . . .	58	+ 4	.9	-.1
Grand Junction . . .	43	- 2	.1	-.1	MO. Columbia . . .	50	+ 4	2.0	+1.3	Memphis . . .	59	+ 3	1.1	-.1
Pueblo . . .	39	- 5	.7	+.5	Kansas City . . .	50	+ 2	1.9	+1.2	Nashville . . .	56	+ 3	.4	-.8
CONN. Bridgeport . . .	43	+ 1	4.2	+3.2	St. Louis . . .	53	+ 6	.9	+.1	TEX. Abilene . . .	56	- 3	.2	-.1
Hartford . . .	44	+ 2	2.3	+1.5	Springfield . . .	51	+ 3	1.9	+1.1	Amarillo . . .	44	- 7	.9	+.7
D.C. Washington . . .	54	+ 5	1.5	+.8	MONT. Billings . . .	37	- 1	.2	-.1	Austin . . .	64	+ 1	.1	-.4
FLA. Apalachicola . . .	65	+ 2	5.4	+4.4	Glasgow . . .	38	+ 5	T	-.1	Beaumont . . .	69	+ 5	.1	-.7
Daytona Beach . . .	71	+ 5	.2	---	Great Falls . . .	35	0	.1	-.1	Brownsville . . .	69	- 1	T	-.3
Ft. Myers . . .	73	+ 3	.4	-.2	Havre . . .	35	+ 2	0	-.2	Corpus Christi . . .	67	- 1	T	-.3
Jacksonville . . .	67	+ 2	4.9	+4.1	Helena . . .	34	- 2	T	-.2	Dallas . . .	66	- 1	.1	-.2
Key West . . .	76	+ 2	.6	+.2	Kalspell . . .	37	+ 1	.1	+.1	Del Rio . . .	52	- 6	T	-.1
Lakeland . . .	69	+ 1	.2	-.8	Miles City . . .	40	+ 4	T	-.2	El Paso . . .	59	- 1	.2	-.4
Miami . . .	75	+ 3	.9	+.4	Missoula . . .	38	+ 1	T	-.2	Fort Worth . . .	65	+ 1	T	-.7
Orlando . . .	71	+ 3	1.1	+.3	NEBR. Grand Island . . .	41	0	1.4	+1.0	Galveston . . .	62	- 1	.7	+.1
Tallahassee . . .	65	+ 2	8.8	+7.6	Lincoln . . .	44	+ 1	2.0	+1.6	Houston . . .	50	- 4	.6	+.4
Tampa . . .	71	+ 3	.2	-.6	Norfolk . . .	43	+ 4	1.2	+.8	Lubbock . . .	50	- 4	.6	+.4
W. Palm Beach . . .	75	+ 3	1.3	---	N. Platte . . .	39	0	.7	+.4	Midland . . .	54	- 5	T	-.1
GA. Atlanta . . .	56	+ 1	2.6	+1.4	Omaha . . .	45	+ 5	1.6	+1.2	San Angelo . . .	54	- 7	T	-.2
Augusta . . .	60	+ 2	2.3	+1.4	Valentine . . .	39	+ 3	.4	+.1	San Antonio . . .	65	+ 1	.2	-.2
Macon . . .	61	0	2.6	+1.5	NEV. Ely . . .	39	+ 2	.2	0	San Antonio . . .	67	+ 1	T	-.6
Savannah . . .	64	+ 2	2.7	+1.7	Las Vegas . . .	50	- 8	.6	+.5	Victoria . . .	61	0	.1	-.5
HAWAII. Hilo . . .	---	---	---	---	Reno . . .	38	- 6	.1	0	Waco . . .	58	0	.6	+.2
Honolulu . . .	---	---	---	---	Winnemucca . . .	36	- 4	.1	-.1	Wichita Falls . . .	39	- 4	.2	0
Kahului . . .	---	---	---	---	N.H. Concord . . .	48	+ 1	1.3	+.5	UTAH. Blanding . . .	42	- 2	.4	0
Lihue . . .	---	---	---	---	N.J. Atlantic City . . .	48	+ 3	2.5	+1.6	Salt Lake City . . .	39	+ 6	.1	-.4
IDAHO. Boise . . .	42	- 3	.1	-.2	Trenton . . .	49	+ 4	2.4	+1.5	VT. Burlington . . .	53	+ 3	1.3	+.3
Lewiston . . .	45	0	.2	-.1	N. MEX. Albuquerque . . .	44	- 5	1.2	+1.1	Norfolk . . .	55	+ 3	1.8	+1.1
Pocatello . . .	36	- 4	.3	0	Roswell . . .	51	- 3	0	-.1	Richmond . . .	56	+ 4	1.5	+.7
ILL. Cairo . . .	57	+ 4	1.1	-.1	N.Y. Albany . . .	45	+ 7	1.8	+1.1	Roanoke . . .	56	+ 6	2.3	+1.5
Chicago . . .	45	+ 3	2.2	+1.5	Binghamton . . .	43	+ 7	1.1	+.4	WASH. Colville . . .	41	- 1	.1	-.1
Moline . . .	47	+ 6	2.3	+1.7	Buffalo . . .	49	+13	.7	0	Omak . . .	43	- 2	0	-.2
Peoria . . .	48	+ 5	2.4	+1.7	New York . . .	46	+ 1	1.5	+.5	Quillayute . . .	49	+ 4	1.6	-.8
Rockford . . .	44	+ 4	1.3	+.6	Rochester . . .	46	+ 9	1.5	+.8	Seattle-Tacoma . . .	44	- 1	.2	-.6
Springfield . . .	51	+ 6	1.6	+.8	Syracuse . . .	47	+ 9	1.8	+.9	Spokane . . .	41	- 1	T	-.3
IND. Evansville . . .	57	+ 7	1.2	+.1	N.C. Asheville . . .	54	+ 4	.8	-.1	Walla Walla . . .	48	0	.3	-.1
Ft. Wayne . . .	48	+ 7	.5	-.2	Charlotte . . .	56	+ 2	2.8	+1.8	Yakima . . .	44	- 1	T	-.1
Indianapolis . . .	53	+ 9	1.3	+.4	Greensboro . . .	54	+ 3	2.4	+1.6	W. Va. Beckley . . .	51	+ 7	.7	-.4
South Bend . . .	48	+ 8	1.5	+.8	Hatteras . . .	56	+ 2	3.3	+2.5	Charleston . . .	54	+ 5	.3	-.7
IOWA. Burlington . . .	49	+ 7	2.0	+1.3	Raleigh . . .	57	+ 4	2.2	+1.4	Huntington . . .	57	+ 7	.4	-.6
Des Moines . . .	48	+ 8	1.6	+1.1	Wilmington . . .	59	+ 1	2.8	+1.9	Parkersburg . . .	56	+ 8	.1	-.8
Dubuque . . .	46	+ 8	1.2	+.5	N.DAK. Bismarck . . .	39	+ 6	T	-.2	WIS. Green Bay . . .	43	+ 9	.2	-.1
Sioux City . . .	45	+ 6	.4	0	Fargo . . .	37	+ 6	0	-.2	La Crosse . . .	47	+10	.5	0
KANS. Concordia . . .	45	+ 1	1.5	+1.1	Williston . . .	38	+ 7	.1	-.1	Madison . . .	44	+ 9	1.2	+.7
Dodge City . . .	40	- 6	2.7	+2.4	OHIO. Akron-Canton . . .	52	+10	.6	-.2	Milwaukee . . .	39	+ 3	.8	+.3
Goodland . . .	37	- 3	1.3	+1.0	Cincinnati . . .	53	+ 7	1.0	-.1	WYO. Casper . . .	24	-12	T	-.3
Topeka . . .	49	+ 3	1.7	+1.2	Cleveland . . .	44	+ 4	.4	-.4	Cheyenne . . .	31	- 4	.1	-.2
Wichita . . .	49	0	1.6	+1.1	Columbus . . .	54	+11	1.1	+.3	Lander . . .	27	- 9	1.3	+1.0
KY. Lexington . . .	55	+ 7	.6	-.5	Dayton . . .	50	+ 6	.8	0	Sheridan . . .	36	+ 1	T	-.4
Louisville . . .	57	+ 9	.8	-.2	Toledo . . .	47	+ 7	.3	-.3	P.R. San Juan . . .	79	+ 3	T	-.6

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: Temperatures averaged near normal for week with no major changes. Widespread heavy rain Friday night averaging 2.00 inches north and about 3.50 inches south. Over 5.00 inches at Selma, Greenville, Claiborne, and Union Springs and 6.25 inches at Highland Home in south-central. Clearing weather weekend. Many lowland fields and pastures along rivers and creeks in south and central Alabama flooded by heavy rains over State Friday and Saturday. Preparation of lands limited to driest highland fields early in week. Many farmers behind schedule plowing and applying herbicides and fertilizers. Stockmen along Alabama and Tombigbee Rivers were busy moving livestock to high grounds for protection from rising flood waters. Prospects for small grains excellent except in flooded lowlands. Growers made very limited progress cultivating potatoes in Baldwin, Mobile and Escambia counties. Watermelon and vegetable planting slowed by rain. Few tomatoes set in Geneva and Houston Counties. Pastures showing good growth; application of fertilizer delayed by wet weather many areas. Livestock fair to good condition.

ARIZONA: Temperatures continued much below normal over State dipping to near or below 0° highest elevations north portion by weekend. Well above average rainfall occurred most areas, majority falling in early part of week. Low temperature remained above freezing for the week both Salt River Valley and Yuma. Cotton planting delayed by rain, some planting continuing, Yuma. Small grains continue satisfactory with head emergence. Safflower excellent southwest with flower buds developing. Sorghum planting, stand establishment delayed adverse weather. Sugarbeet planting delayed by rain. Very little alfalfa hay harvest, Salt River Valley. About 60% first cutting, Yuma County. Harvest lettuce, mixed vegetables continued central, western areas, conditions permitting. Cantaloupes, western areas slow progress, cool weather. Salt River Valley: Valencia orange picking slowed by rain; picking Kinnows limited; limited grapefruit harvest. Harvest grapefruit, valencias limited, Yuma area. Many groves Yuma, Salt River Valley nearing full bloom. Ranges received moisture from storms; higher elevation ranges snow-covered, wet. Temperatures too cold to promote growth of feed. Desert ranges green, providing grazing. Problems with poisonous weeds. Cattle, calves fair to mostly good with calving active. Sheep, lambs fair.

ARKANSAS: Mean temperatures ranged from low 50's in the northwest and north-central section to near 60° in extreme south. Weekly departures ranged 2° to 3° with negative departures mainly in western half of State. Highest 75° at number of locations mainly in southern half 29th. Lowest 31° at Gilbert in north-central section on 2d. Cool early in week followed by warming trend through week and cooler again on weekend. Weekly precipitation totals less than 0.50 inch along western border and in portions of east-central section. Elsewhere amounts generally ranged 0.50 to 1.00 inch except in scattered locations in northern half where amounts of 1.50 to 2.15 inches were recorded. Largest weekly total of 2.15 inches at Batesville. Showers occurred at midweek and again late in week.

Wet fields continued to delay land preparation and progress to date is far behind normal. Farmers have been busy getting equipment and supplies ready in order to proceed as rapidly as possible when fields dry out. Small grains and cool season grasses are growing well and providing good grazing. Native grasses are greening up. Strawberries are blooming and should peak this week. Cattle are in fair to good condition.

CALIFORNIA: Average temperatures 2° to 6° below normal; greatest negative departures San Joaquin Valley, desert. Precipitation occurred several days; totals for week were generally less than 0.50 inch in north and 0.10 inch south coast. Strong northerly winds Sacramento Valley on Wednesday. Cool wet weather delayed field preparation and sugar beet harvest. Small grains showing good growth, early plantings heading Sacramento Valley. Alfalfa weevil problem, spraying active. Cutting of alfalfa and small grain hay delayed. Early cotton emerging nicely. Adverse winter, spring weather has had contrasting effects on fruit, nut crops. Weed control problems from wet orchards. Ground application insect control slowed, more reliance on air application. Poor to good sets of fruit reported. Bee pollination slowed due wet weather. Strong north winds, clear skies increased frost hazard. Freeze prevention devices used Madera area. Beneficial effect of wet weather showing: fruit sizes above average, irrigation needs reduced for later in season. Most crops in bloom or leafing out. Spring orchard production practices picking up tempo with warm drier weather. Artichoke harvest increasing. Asparagus cutting slow San Joaquin Valley, movement to freezers beginning. Broccoli, cauliflower shipments light Salinas, Santa Maria. Carrot digging active Imperial, Coachella, San Joaquin Valleys. Spring lettuce deal Riverside County full swing, south coast supplies increasing. Lettuce cutting San Joaquin Valley beginning, Salinas to start in 10 days. Strawberry harvest increased, Monterey County to start in 10 days. Processing tomato planting continues behind schedule. Rangeland continues to show improvement, range conditions and water supplies best in years. Supplemental feeding nominal. Lambing-calving continues. Sheep shearing in central valley. Cattle feedlots and dairy lots muddy. Egg and milk production increasing.

COLORADO: Heavy snowfalls in southeast late in the week with drifts up to 10 feet deep severely crippled most activity. This snow was in addition to moderate to heavy rain and snow which had fallen over much of the eastern plains earlier. Weekly precipitation totals extreme east and southeast generally 200% to 300% of monthly normal--one of the wettest Marches of record on the plains. Only moderate precipitation fell along the foothills with light snow in central and northern mountains and western slope. Heavy snow continues to fall in San Juan Mountains of the southwest. Snowpack in this area in excess of 200% of normal. Precipitation totals for past 6 months in southwest may be new alltime record. Temperatures below normal over entire State after cloudy and damp weather prevail-

ed; temperatures greatest east. Limited fieldwork past week. Rain and snow further delayed soil preparation for spring planting. Surface and subsoil moisture supplies adequate to surplus. Condition winter wheat and barley good to excellent. Wind damage none to light. Little evidence of additional freeze damage. Winter wheat and barley made limited growth eastern plains. Muddy fields curtailing livestock grazing of winter wheat, winter wheat on western slope still under snow. Spring barley and oats 6% seeded... compared with 35% and 43% seeding a year ago. Condition range and pastures poor to fair. Growth of spring grass limited because of extremely wet soil and cool nights. Snowstorm southeast caused severe stress to livestock. Supplemental feeding continued heavy statewide. Livestock condition poor to fair. Death loss to cows and newborn calves above normal for the week.

FLORIDA: Frontal passages on Monday and weekend brought heavy rain, damaging winds, thunderstorms, and hail. Rainfall averaged over 4.00 inches in Panhandle and north Florida, and 0.50 to 1.00 inch elsewhere. Tallahassee reported a weekly total of 8.84 inches. Record March rainfall totals were set at many stations in Panhandle and north Florida. Temperatures averaged slightly above normal. Pastures and cattle improving seasonally while level of supplemental feeding decreases. Seeding of spring field crops slowed by rain. Soil moisture now adequate to surplus. Sugarcane harvest continues; two mills completed their grinding season last week. Citrus tree condition remains excellent; oranges in peak bloom, others close behind. Soil moisture excellent, new growth covering all trees. Vegetable supplies should be increasing throughout April as early spring acreage begins harvesting. Cabbage harvesting at full volume. Pepper supplies heavy, tomatoes increasing to spring volume. Other vegetables in seasonal supply. Watermelons available from southwest around mid-April.

GEORGIA: Heavy to excessive rains all areas. Weekly totals ranged from just under 1.00 inch to over 4.00 inches. Excessive rains, severe thunderstorms, and a very destructive tornado occurred late Saturday. The tornado moved over a 75-mile path from near Jonesboro to just northeast of Athens. The storm caused 2 deaths, over 100 injuries and estimated property damage of \$100 million. Temperatures were mild during most of week after a cool beginning. Averages were slightly above normal most areas. Soil moisture surplus statewide. Fieldwork limited to southern areas early in the period. Cleanup operations underway in affected areas following tornado. Tobacco transplanting behind normal at 29% complete--condition fair to good. Corn 7% planted--near normal. Less than 2% cotton planted. Some varieties peaches frost damaged in northern counties--major producing area only lightly damaged. Small grains fair to mostly good--some mildew problems. Melon planting well advanced but growth slow. Pastures and livestock good condition.

HAWAII: Weather cloudy with frequent, light showers. Winds stronger than usual but damage to crops light. With the advent of warmer weather, crops making good progress. Supplies of vegetables and fruits ample. Harvesting of sugarcane increasing--pineapples light. Pastures and cattle fair to good condition.

IDAHO: Temperatures for the week averaged 3° to 7° below normal east and south-central and near normal elsewhere. Precipitation was very spotty and light.

A few upland areas, central and south-central mountains, recorded 0.10 to 0.20 inch. Field preparation and seeding small grains gained headway in spite of raw weather. Barley and spring wheat emerging in the southwest. Range grasses greening at lower elevations and livestock being turned out to graze. Cleaning field irrigation ditches continues.

ILLINOIS: It was another mild wet week for Illinois. Temperatures averaged 4° to 6° above normal for the week, with the daily maximum temperatures in the 50's and 60's. Weekly rainfall totals through the 30th were frequently in the 1.00 to 2.00 inch range across the State. More heavy rains occurred this past weekend. Livestock in good condition. Feedlots remained quite muddy. Heavy rains continued to delay fieldwork. Main activities included machinery repair, routine farm chores.

INDIANA: Wet warm week; scattered severe thunderstorms March 31. Temperatures averaged 8° above normal, ranging from 32° on the 28th at Ft. Wayne to 75° at Evansville on 31st. Precipitation ranged from 0.50 inch to 1.00 inch central and south to 1.50 inch in extreme northwest. Most fell last 5 days. Many streams bank full. Wet fields limited outside activity but greening up continues on an advanced spring growing season. Overwintering grains and pastures generally look good. Some frost damage to early budding fruit trees. Seeding of tobacco beds getting underway to half complete.

IOWA: Temperatures averaged 4° to 8°. Above normal with moderate to heavy precipitation falling at the week's end except only near normal amounts fell across northern sections. Some lesser amounts fell in most section earlier in the week. Wet weather has impeded fieldwork, less than 2 days suitable for fieldwork during week. Plowing about 25% complete, behind 47% for both 1972 and 1967 - 1971 average. Oats seeding at 7% is ahead of 1972 but behind 1967 - 1971 average of 12%. Seeding most advanced in eastern third of State. Major farm activities consisted of manure hauling, livestock care, some fertilizing, and preparing machinery for the 1973 crop season. Topsoil moisture 77% surplus and 23% adequate. Subsoil moisture 71% surplus and 29% adequate.

KANSAS: Cloudy, wet weather continued. Precipitation totals generally 1.00 to 3.00 inches. Considerable agricultural flooding east, central, and southwest late in week. One of wettest first 3 months of record for Kansas. Numerous localities had record rainfall for March; totals generally 2 to 4 inches northwest and 6 to 12 inches elsewhere. Weekly mean temperatures averaged below normal western third, near seasonal central, and above normal elsewhere. Hard freeze parts western third April 1 with minima that area mostly in 20's. Seeding of oats, barley, sugar beets at virtual standstill due to soggy fields. By March 31 oat seeding 14% complete, 82% year ago and average 61%. Spring barley 17% seeded compared 69% year earlier and average 45%. Sugar beet planting western Kansas also delayed by wet fields. Alfalfa growing well but alfalfa weevils locally active. Wheat made good to excellent growth western areas but soil-borne mosaic, floods, and standing water caused some problems in central and eastern sections. Livestock farmers continued to fight mud. Acreage of wheat grazed by cattle limited by wet fields. Pastures supplying a little green feed but supplemental feeding continued under handicap of sloppy lots, muddy roads. Some cattle turned on native pastures early to get them out of muddy lots.

KENTUCKY: Temperatures above normal and cloudy with rain one or more areas most days. For the week temperatures averaged 5° to 9° above normal, and rainfall totals ranged from about 0.50 inch to 1.50 inches. Maxima generally in the 50's to 60's but in the 70's on the 31st. The Ohio and Mississippi Rivers remained above flood stage along the western border. Surplus soil moisture statewide. Less than 2 days suitable fieldwork, only 30% of land plowed. Three-fourths of tobacco beds seeded, 20% have plants up. Pastures excellent condition, already furnishing 45% of cattle roughage, but two-thirds of livestock still on some winter feed. Winter hay supply more than adequate, 16% still on hand. Freeze damage small grains and legumes generally light. Some fruit damaged in northeastern counties.

LOUISIANA: Cloudy and cool to mild during the week. Locally moderate to heavy rains fell in the south half mostly on Friday. Weekly mean temperatures averaged normal to 3° below normal. Weekly rain totals were less than 1.00 inch in most sections, but ranged upward from 1.00 to near 4.00 inches in the southeast. The greatest 1-day rain total reported was 2.43 inches measured at Boothville 31st. Very little field work possible because of excessive moisture--some activity in northern half of State late in week. Land preparation far behind schedule -- very little spring planting done. Backwater and flooding worst in years -- extensive lowland areas along major rivers cannot be worked for at least a month. Movement of cattle to high ground continued. Grazing of winter pastures limited by excessive moisture. Native grasses growing rapidly and furnishing average grazing. Most livestock in fair to good condition. Harvest of strawberries underway--some damage to mature berries from last week's torrential rainfall. Recent transplantings of green peppers damaged also, causing some replanting. Peach prospects good.

MARYLAND AND DELAWARE: Temperatures averaged near normal central and southeastern sections to slightly above normal western Maryland. Extreme highs near 70° lower Eastern Shore on 26th and mid-60's central and western on 24th. Lows in teens in western on 24th and mostly near 30° central and east on the 24th and 28th. Precipitation amounts generally 0.75 to 2.25 inches, occurring as general showers 26th, 27th and 30th. Over the weekend, high temperatures near 60° on March 31 and in 60's on April 1, Thunderstorms and thunderstorms moved across State afternoon and evening of the 1st with numerous reports of hail 1/4- to 3/4-inch diameter. Minor damage from wind and minor flooding. Plowing ahead of normal in well drained areas, especially southern Maryland and Eastern Shore. Fields too wet in most areas. Some early peas seeded. Tobacco plants starting in many beds. Pasture, hay and grain fields getting good start but need more sunny days. Weekend storms flooded some low areas but reported hail caused little damage as few crops vulnerable.

MICHIGAN: Fair, mild weather early. Showers late in week over south caused minor flooding in low-lying areas. Temperatures averaged 6° to 12° above normal Upper Peninsula, 5° to 11° above normal Lower Peninsula. Precipitation: 0.10 to 1.00 inch Upper Peninsula; 0.75 inch north to 1.67 inch southern Lower Peninsula.

MINNESOTA: Temperatures varied during week with 10° above normal in the southeast and along the northern border and about 7° above normal for rest of State. Extremes 62°, 14°. Precipitation: Little to none in northern half of State; from 0.25

inch to 0.50 inch in the southern half of State. No snow cover except for about 6 inches in the heavier forests in the northeast districts. All lakes clear of ice from Twin Cities south. Farm work very limited except for some spring plowing on well drained soils.

MISSISSIPPI: Rain on March 24 and 25 caused flash flooding mostly in southern portions of State; most amounts were 1.50 inch to over 4.00 inches. Mid-week mostly fair; a high of 83° on 28th at Lexington. Weekly average temperatures ranged 3° below normal to 1° above. By end of week, more rain--most stations had 2 to 5 days for period. Over weekend severe thunderstorms Friday afternoon and Saturday produced damaging winds, up to golfball-size hail and heavy rain with some flash flooding. Evacuation was necessary at Meridian where 4.13 inches of rain was reported on March 31 causing already swollen rivers to rise. Soil moisture conditions surplus or flooded most areas. Flood waters continue to be major problem with some farms entirely under water. Days suitable for fieldwork averaged 0.6 day, down from 1.8 days previous week. Less than 1% of 1972 cotton and soybean acreage is still not harvested. Plowing for 1973, 24% complete compared with 45% a year ago. Some cotton land probably will not dry out in time for planting due to flooding and backwaters. Small grains, Irish potatoes, peaches, truck crops, pastures and livestock in fair to good condition. Livestock continue to be moved to higher grounds in several areas. Some livestock still cut off from higher grounds.

MISSOURI: A very wet week. Rain fell 6 days during week at many locations adding to an already too-wet situation. Totals for week ranged from under 1.00 inch southeast to about 2.00 inches in the west and north. Many rivers are out of bank and considerable farmland is under water. Rainfall for March exceeded all previous records at most locations except for the southeast, which nevertheless, reported above normal totals. Temperatures were near normal with little daily variation due to heavy cloud cover. Outdoor work at a virtual standstill with no days suitable for fieldwork. Plowing remains 11% complete, compared to 63% last year. Oats 2% seeded, 63% a year ago. Wheat and pastures fair to good condition. Soil moisture surplus to flooding in all areas.

MONTANA: Slightly cooler temperatures the past week. Temperatures a few degrees above normal over the western, northern and eastern divisions and a few degrees below normal elsewhere. Precipitation first of week and again over weekend confined mostly to southwest, central and south-central areas. Precipitation totals mostly less than 0.25 inch. Topsoil moisture mostly short north-central, north-east and central, short to adequate northwest and southeast, adequate elsewhere. Subsoil moisture mostly short north-central and central, short to adequate northwest, adequate remainder. Winter wheat condition good northwest, fair to good north-central and northeast, fair elsewhere. Winter wheat greening most areas. Winterkill light, stalling poor to good western third, north-central and northeast, fair central, fair to good south-central. Field tillage just beginning most areas, well underway portions central, south-central and southeast. Prospective supplies irrigation water mostly below average. Stockwater supplies adequate western third and south-central, short to adequate elsewhere. Calving and lambing 45% complete, shearing 60% complete.

NEBRASKA: Much precipitation received, especially in the southeast. Totals in excess of 3.00 inches were reported from Plattsmouth to Table Rock. Heavy wet snow fell in southern Panhandle on 28th and 29th. Considerable cloudiness and recurring precipitation kept daytime temperatures below normal. Average weekly temperatures ranged from a few degrees subnormal in southern Panhandle to 7° above normal in the extreme southeast. Maxima in the 50's or higher occurred statewide on 27th and east on 28th. Wet and muddy conditions plague farmers and ranchers. All fieldwork at standstill last week. Main farm activities were fighting muddy weather and care of livestock. Condition of wheat above average, growth slowed because of cool weather. Dead spots in wheat reported; most caused by standing water, winterkill, and undetermined causes. Extent of damage expected to be minor. Harvest of grain sorghum remains at 94% complete. Harvest of corn remains at 97% complete. Feedlots in very bad condition. Livestock losses continue above normal, gains are slow. In range areas, calf scours reported but do not appear as severe as previous years.

NEVADA: Temperatures all divisions below normal -- 4° below normal in north; 6° below normal in south-central and 10° below normal in extreme south. Precipitation all stations; light in north, moderate in southcentral and extreme south. Light snowfall north and southcentral midweek. Cool temperatures and high winds delayed fieldwork in northern part of State. Fall-planted grains appear in good condition. In Moapa Valley, harvest of vegetables is underway on limited acreage. Livestock in good condition with calving and range lambing in full swing. Spring and summer ranges fair to good condition. Water supplies adequate.

NEW ENGLAND: Another mild week with means mostly 2° to 4° above normal in south and 5° to 10° above normal in north. Briefly cold early in week with some minima near 0° in north on 28th. Precipitation ranged from very light, near 0.10 inch in much of Maine to very heavy in southern and western sections including Southwestern Maine, where totals were mostly 1 to 3 inches. Some locally heavier in eastern Massachusetts. Most of week dry, with precipitation all at beginning and end of week. Some new snow at higher elevations in north April 1-2 but general snowcover limited to northern Maine, with many areas there reporting 7 to 14 inches. Pastures greening in all States and fruit tree bud development well advanced. Vermont maple producers had best run of season last weekend through Thursday. In southern areas many producers finishing. In north producers hoping for more good runs. Season advanced all areas. Maple sap not quite up to top quality.

NEW JERSEY: Temperatures generally averaged from 1° to 4° above normal for the week. Readings varied from the mid-20's to the mid-60's. Showers off and on during week were followed by heavy thunderstorms throughout the State Sunday evening. North Jersey averaged 1.80 inches of rain for the week while other divisions averaged 1.50 inches. Weekly station totals varied from 0.93 inch at Glassboro to 2.11 inches at Hightstown. Heavy weekend rains have halted all fieldwork. Water standing in many fields. Some lettuce, cabbage and potatoes have been planted. Peach bloom will be about 2 weeks ahead of normal. A few fields of corn that growers were not able to get in last fall have been harvested. Pastures greening. Fall sown grains making good growth.

NEW MEXICO: More than 1.00 inch of precipitation in most of north, very little precipitation in south. Precipitation most widespread on Thursday and Friday with milder temperatures. Several inches of snow disrupted travel mostly in the northeast. Temperature averages ranged from 5° to 10° below normal with greatest departures in the northeast. Warmest days on Monday and again on weekend with low 70's in some southern localities. Coldest night also at beginning and end of week with near 0° minimum in some northern localities. Weather conditions mostly good south. Snow hindering progress field activities northern half. Small grains good, limited grazing continued. Alfalfa good, 1st cutting in approximately 3 weeks. Vegetables good progress. Ranges fair to good. Calving, supplemental feeding hampered by snow and wet conditions.

NEW YORK: Near record warm March terminated with another week of above normal temperatures. Maximums warming from 40's on 27th to mid-50's and low 60's daily later half of week. Highest near 65° Great Lakes counties on 28th and 29th. Minimums mostly 35° to 45° but ranging down to 15° to 20° northern half and low to mid-20's elsewhere upstate on 28th. Precipitation generally very light through 31st. Major storm beginning April 1 yielded mostly 1.00 to 1.50 inches northern quarter, Hudson Valley and Long Island with 2.50 inches in Poughkeepsie area. Amounts decreasing to 0.60 to 0.90 inch central and western sections. March very unusual for near record light snowfall.

NORTH CAROLINA: Light freeze scattered areas 28th, otherwise generally above freezing. Temperatures averaged near normal. Showers 4 to 6 days, heavy rains over weekend, 1.00 to 5.00 inches averaging 2.00 inches. Some flash floods on small streams and some flooding of main rivers. Some homes evacuated, at least 1 drowning. Soil moisture surplus mountains and Piedmont -- adequate to surplus coastal plains. Farm activities limited -- land preparation primarily on higher, well drained soils. Some tobacco plant beds have sustained water damage -- condition generally fair to good. Small grains and pastures good -- topdressing when field conditions permit. Irish potato planting and cabbage transplanting full swing eastern part of State.

NORTH DAKOTA: Mostly fair weather except near 0.10 inch precipitation in west. Slightly cooler but temperatures averaged 5° to 10° above normal. Mild weather past week permitted farmers to begin fieldwork on small scale. Moisture generally adequate. Few farmers began small grain seeding in drier fields southern counties. Livestock good condition. Calving well underway most areas and lambing past halfway point.

OHIO: A mild wet week. Maximum temperatures were mostly in the 50's and 60's except along the lake shore where readings in the 40's were recorded on several days. On March 31 and April 1, temperatures in southern Ohio reached into the 70's. Minimum temperatures were generally in the 30's and 40's. Rain occurred frequently; however the amounts were generally light. On morning of 31st, heavy fog restricted operations at Cleveland-Hopkins Airport and at the Burke Lakefront Airport. Plentiful-surplus soil moisture limited farm activities during the past week. Wheat greening up and condition varies considerably from field to field. Major

activities include care of young livestock, repair of farm buildings and fences and preparation of machinery for spring fieldwork.

OKLAHOMA: Average temperatures ranged from 5° below normal Panhandle to 3° above normal north-east. Precipitation ranged from near 2.00 inches south-central to 3.00 inches northeast. Heavy snow western Panhandle, rain in other areas over weekend. Some streams out of banks. Wheat made rapid growth past week but lost some condition because of cool temperatures and excessive rains. Half of acreage now jointing. Barley mostly good condition with one-fourth acreage now jointing. Oat crop progress about normal. Seedbed preparation for all row crops very slow as top-soil moisture excessive in two-thirds of State. Alfalfa making good growth; weevil infestation varies from light to moderate with some spraying for control. Native grasses starting to grow with ranges and pastures providing more grazing from winter annuals and cool weather plants. Cattle need dry weather.

OREGON: Maximum temperatures higher than previous week, but weekly average temperatures near normal except 3° to 5° below normal scattered locations eastern Oregon. Weekly minimums 13° to 34° east, and 27° to 38° west. Maxima 56° to 69°. Precipitation decreased to below normal. Amounts mostly traces to 0.34 inch east of Cascades, 0.13 to 0.50 inch western interior, 0.23 to 1.21 inch coast and coast range. Planting and reseeding grain crops continue. Mint being planted in Willamette Valley. Spraying, fertilizing and stubble plowing continue. Bud development at Hood River is near normal. Second application of spray has been applied and pruning is in the windup stages. Asparagus in Umatilla County has not started yet due to cold weather. Livestock in fair to good condition. Early pastures and volunteer grain in stubble providing good feed. Water supply outlook looks bleak.

PENNSYLVANIA: Gradual warming trend during week. Maxima mostly 40's and 50's early in week, 50's and 60's weekend. Minima 20's and 30's beginning of week, mostly 40's weekend. Weekly means 4° to 6° above normal east, 6° to 12° above west. Extremes: 72°, 20°. Generally dry first half week, increasing shower activity over weekend. Some heavy thunderstorms with hail parts west and southeast Sunday. Weekly totals 0.25 to 1.00 inch west and north, 1.00 to 2.25 inches Susquehanna Valley and southeast. Spring plowing underway as soils permit.

PUERTO RICO: Dry warm weather continued with prevailing southerly winds. Rainfall averaged 0.35 inch or 0.22 inch below normal, a slight increase over last week. No significant rains northern and southwestern coasts. Only light showers south-central coast. Light to moderate showers central-interior where highest weekly total 2.85 inches reported. Crop moisture conditions too dry all divisions except most of interior where near normal. Agricultural drought continued to intensify in northern and southern divisions. Temperatures averaged 78° on coast and 73° interior with continued high station departures of 2° to 4° above normal especially in north. Highest maximum temperature 96°, lowest minimum 52°. Sugarcane harvesting operations made good progress in dry weather but young crop needs more rain in non-irrigated zones. Coffee flowering degraded by agricultural drought. Tobacco harvesting and drying operations made good progress

except for delays due heavy local rainshowers interior. Pastures destroyed in central-southern divisions, and emergency aid given to farmers by commonwealth as result of agricultural drought. Northwestern and southwestern coasts also in bad condition due drought. Minor crop planting and yields reduced due drought in most zones.

SOUTH CAROLINA: Rainfall amount varied from 2.00 inches in Charleston County to less than 0.50 inch in the extreme northeast. Rain continued as week ended. Temperatures averaged about normal, ranging from the low 40's to the low 70's with weekly averages from 54° to 60°. Land preparation, fertilizing active all areas as weather permits. Began setting out tobacco plants in Pee Dee on limited basis -- plant condition fair to good. Corn planting continues on limited basis in Southern Counties. Fertilizing and spraying peaches active as weather permits. Coastal area -- setting tomato plants, planting cucumbers, snapbeans, watermelons, cantaloupes. Harvesting mixed greens continues.

SOUTH DAKOTA: Temperatures averaged from 2° to 5° above normal. This is the 6th week in a row that temperatures averaged above normal. Extremes ranged from 15° on the 28th, 29th and 30th to 64° on the 27th. Precipitation fell mostly as rain scattered through the week, with amounts ranging from zero in portions of the northwest to over 1.00 inch in parts of the southeast. Yankton reported 1.22 inch. Surplus soil moisture reported over a large portion of the southeast and adequate in rest of State. Some fieldwork underway in northern areas but most will start in about a week. Spring plowing, spring wheat planting and barley seeding 1% complete. Oats less than 1% seeded. This is about average progress for these operations. Fall sown grains generally in good condition, but stands are highly variable. Not much soil blowing but greenbug damage was extensive on some untreated fields in the central and south-central areas. Feed supplies ample, livestock in good condition, but some problem with scours in calves. No movement to pasture except to escape muddy lots. Lambing nearing completion and calving well underway with good success. Some fertilizing and plowing of alfalfa ground but most farm activities repairing fences and farm machinery and caring for livestock.

TENNESSEE: Temperatures averaged 2° to 4° above normal; extremes 41°, 77°. Scattered showers throughout week most general on Friday and Saturday. Total ranged from 0.50 inch east and central to over 1.00 inch parts of west. Continuing rains and excessive soil moisture is causing a serious delay in farm field preparation--planting of spring crops will be considerably delayed. In the western part of State, some 1972 crops have not been harvested and wheat fields on lowlands are under water. Pastures in good condition, 2 to 3 weeks ahead of past years in some areas.

TEXAS: Temperatures averaged near normal around the State last week. Extremes ranged from 25° at Marfa and 28° at Dalhart to 90° at several cities in south Texas. Scattered showers in west Texas produced 0.25 to 0.50 inch of rain early last week. Locally heavy rains 0.50 to 1.00 inch moved into central Texas at mid-week. Pea-size to marble-size hail was observed around Kerrville, Austin and San Antonio Wednesday. Toward end of week, rain and snow moved into the northern Panhandle. Dalhart measured 2

inches of snow while the Southern High Plains averaged 1 inch of rain. Snow ended Saturday morning at Dalhart and generally clear skies prevailed around the State over weekend. Planting of cotton, corn, sorghum, peanuts, rice made progress during week. Cold wet soils made conditions less than ideal. Early planted fields of cotton, corn, sorghum up to good stands. Moderate to heavy cutworm damage will force some to replant. Seedbed preparation delayed on High and Low Plains by wet weather. Wheat, oats made excellent growth. Grazing abundant and grain crop prospects excellent. Major crops percent planted: Cotton 6%, last year 13%; Corn 33%, last year 53%; Sorghum 24%, last year 34%; Peanuts 9%, last year 6%; Rice 15%, last year 55%. In the Lower Rio Grande Valley harvest activities accelerated during week of mild, open weather. Carrots and cabbage continue in good supply. Seed stems are becoming more apparent as onion crop approaches maturity. Blading and harvest picked up although crop development about 2 weeks later than normal. Onion shipment volume will continue light for the next week or longer. In the Winter Garden-San Antonio supplies of carrots, cabbage, spinach are declining. Potatoes showing good growth. Melons beginning to emerge. In the Coastal Bend melons in the running and blooming stages, crop later than normal. Spinach harvest nearing completion. Onions making good growth. On the High Plains potato and onion planting well underway. In the Trans-Pecos transplanting of onions continues. Early cantaloupes being seeded at Pecos. Peach trees reaching full bloom stage in Trans-Pecos and on High Plains. Other areas report a good fruit crop set.

UTAH: Recurring periods of rain and snow past week. Locally moderate to heavy accumulation few localities south portion. Most ranges and farmlands lower valleys now free of snow. Average temperatures continued 2° to 10° below normal most sections. Soil temperatures at 4 inches germinating depth ranged from upper 30's Cache Valley to low 40's Salt Lake City and Richfield and mid-50's St. George. Some sheep shearing started. Farm flock lambing completed. Range lambing in progress. Calving well along. Care and feeding of beef cattle and sheep on winter rangelands and valley farms plus dairy herds and poultry flocks continue major activities. Irrigation water supplies good to excellent all areas from reservoir storage and stream flow. Soil moisture plentiful nearly all farming areas. Some plowing and planting started in northern and central Utah valleys but snow and rain storms have been coming too frequently for fields to dry out sufficiently to permit already overdue spring fieldwork in full force. Marketing of potatoes and apples from storage nearly completed. No fruit trees in bloom yet except in Washington County in southwest.

VIRGINIA: Violent weather in the form of tornadoes, severe thunderstorms, and hail occurred at the end of the week. Rainfall totals averaged near 1.00 inch falling at several periods. Temperatures averaged near normal ranging from 3° above to 5° below normal. Highest temperatures

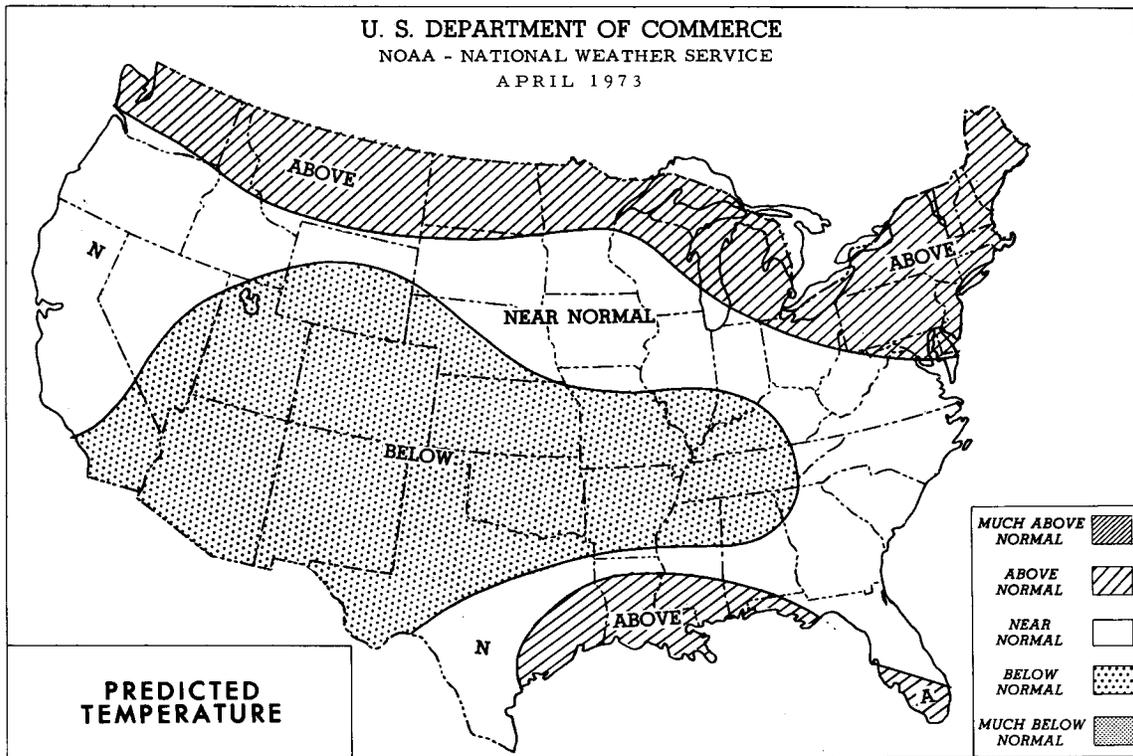
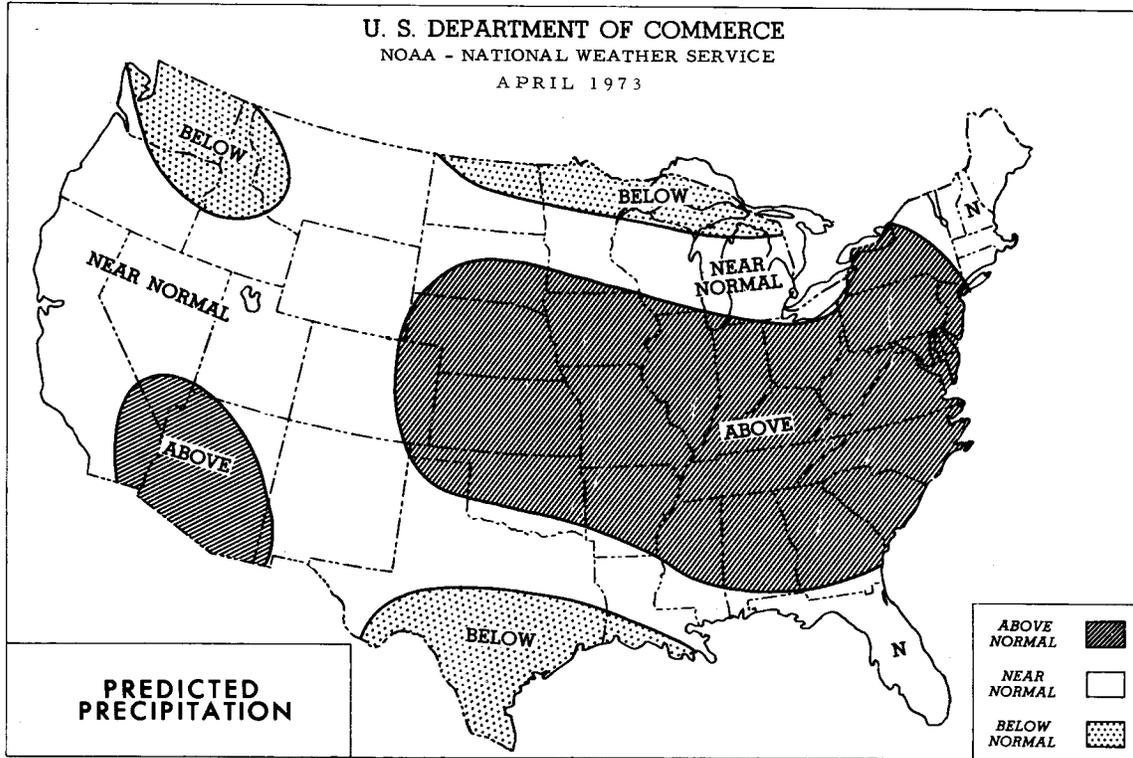
were mostly in the 60's and 70's. Less than 2 days suitable for fieldwork. Surplus moisture two-thirds of topsoil. Plowing, discing, liming and fertilizing progress limited. Some oats, grass and legumes seeded. Pasture growth excellent. Irish potatoes over one-half planted on Eastern Shore. Orchard spray programs started. Peaches beginning to bloom west of mountains. A few apples beginning to show pink blossoms in southern areas.

WASHINGTON: Western Washington: Temperatures warm, near normal, with light occasional showers. Soil preparation and planting active. Crop growth good. Pruning caneberries, last of forced rhubarb harvest, spraying, shearing Christmas trees were other activities. Green chopping rye and grasses. Livestock turned onto pastures. Eastern Washington: Mild days, cold nights, little precipitation. Active soil preparation and planting grains, potatoes, sugar beets, hay, vegetables. Fertilizing, weed spraying underway. Soil moisture short in dryland. Much reseeding on winterkilled wheat. Summerfallow worked up. Most fruit pruning done. Apricots, cherries blooming, fruit generally 2 weeks early. Hand thinning peaches. Hop twining and grape pruning, trellising continues. Livestock good. Calving nearing completion.

WEST VIRGINIA: Light rain showers many days with weekly totals near 1.00 inch. Heavy thunderstorms April 1. Above-normal temperatures every day with highs mostly in 60's entire week. Pastures and meadows making good growth. Some gardens being plowed but too wet for most field activity. Livestock in good condition but supplemental feeding still required in most areas. Small grains in fair condition.

WISCONSIN: Fine spring weather prevailed most of week except cloudy and wet over the weekend. Temperatures continued well above normal averaging 6° to 12° warmer than normal most areas. March was one of the warmest of record in most sections as temperatures averaged 9° to 14° above normal. At many stations every single day during March was warmer than usual. The good spring weather has helped dry and warm the soils. Fieldwork was active on lighter soils and higher ground. Spring plowing in full swing before weekend rains. Some oats seeded and a few potatoes planted. Pastures turning green. Livestock mostly good although feed often of poor quality.

WYOMING: Light to heavy snows occurred statewide. Lander reported the most moisture with 1.25 inch. Temperatures averaged 4° to 10° below normal southwest half, near to a little below normal northeast half. Maxima were mostly upper 30's and 40's southwest half, high 40's to 60's northeast half. Minima mostly -5° to 15° southwest half, 10° to 25° northeast half. Temperature extremes were 61° at Dever and Redbird and -5° at Bondurant and Big Piney. Main farm and ranch activities are calving and lambing. Most ranchers still feeding hay and supplemental feeds. Ranges and pastures most areas below normal condition.



MR. LUCIUS W. DYE RETIRES

Mr. Lucius W. Dye, Editor of the Weekly Weather and Crop Bulletin since July, 1970, retired last week after 34 years of government service. Mr. Dye has been associated with the Weekly Weather and Crop Bulletin since March, 1963.

Born and reared on a Nebraska farm, Mr. Dye joined the Weather Bureau in 1939 when it was a part of the Department of Agriculture. Mr. Dye was honored for his many years of dedicated service at the Weather and Crop Service Centennial last September when he was awarded the Department of Commerce Bronze Medal. At a retirement banquet last week, he received a Certificate of Merit citing his 34 years of service. In a prepared statement read on his behalf, Dr. Harry Trelogan, Administrator of the Statistical Reporting Service, stated, "Generally, we have found other departments easy to work with; this is especially true of men from the Department of Commerce. Lucius Dye has been one of the most cooperative men with whom we have worked."

All of us who have been associated with Lucius over the years have enjoyed working with him. Mr. Dye had the additional honor of celebrating his 70th birthday last week. We wish him well in his future endeavors.

The WWCB Staff

NATIONAL FLOOD SUMMARY
April 2, 1973

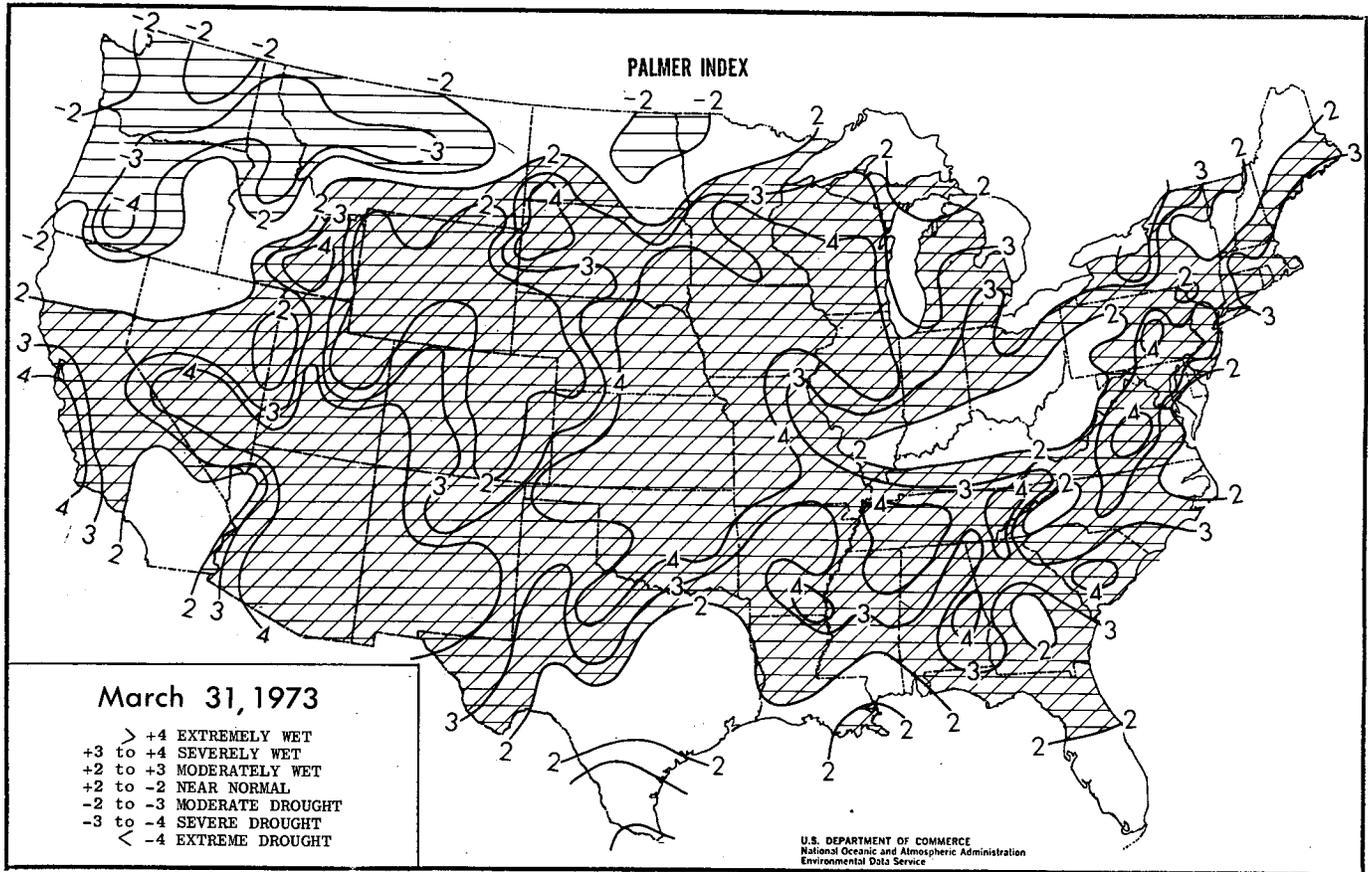
ing, Mo., at 5.5 feet over flood stage. Mississippi River tributaries in northeast Missouri are experiencing major flooding, especially the Cuivre River at Old Monroe, Mo.

Major flooding and the highest in years is in progress in the Yadkin-Pee Dee Basin of North and South Carolina. Major flooding occurred yesterday on the Rocky River at Norwood, N.C. Major flooding is in progress on the Lumber River in North Carolina where 4.5 foot overflow was reported this morning. This will necessitate the evacuation of about 150 families who have already been forced from their homes by high water two times since the first of this year.

A number of streams in the Arkansas drainage in Oklahoma and in Kansas went above flood level during the weekend as did a number of Georgia and Alabama streams. Many other rivers that have been above flood level for the past several days continue in flood today.

National Weather Service

Portions of the large flood area in the central Plains, middle Mississippi Valley, and the east Gulf and south Atlantic drainages were again visited by heavy rains since Friday morning. Flash flooding was reported in some of the heavier rainfall areas and new crests have formed on some of the principal rivers, some of which were already in a major flood condition. Newer and higher crests than those observed last week are forming on the Lower Missouri river. Flooding occurred from Rulo, Nebraska to the mouth, and the river was near crest this morning at Lexington, Missouri. A number of tributaries in the Missouri Basin in Missouri and Kansas, and southwest Iowa and southeast Nebraska were above flood stage during the weekend and remained so today. Much lowland and agricultural flooding was reported. A new crest has also formed on the Upper Mississippi River which is above flood level today at all reporting stations from LeClaire, Iowa to Reserve, Louisiana. It is cresting today at Gregory Land-



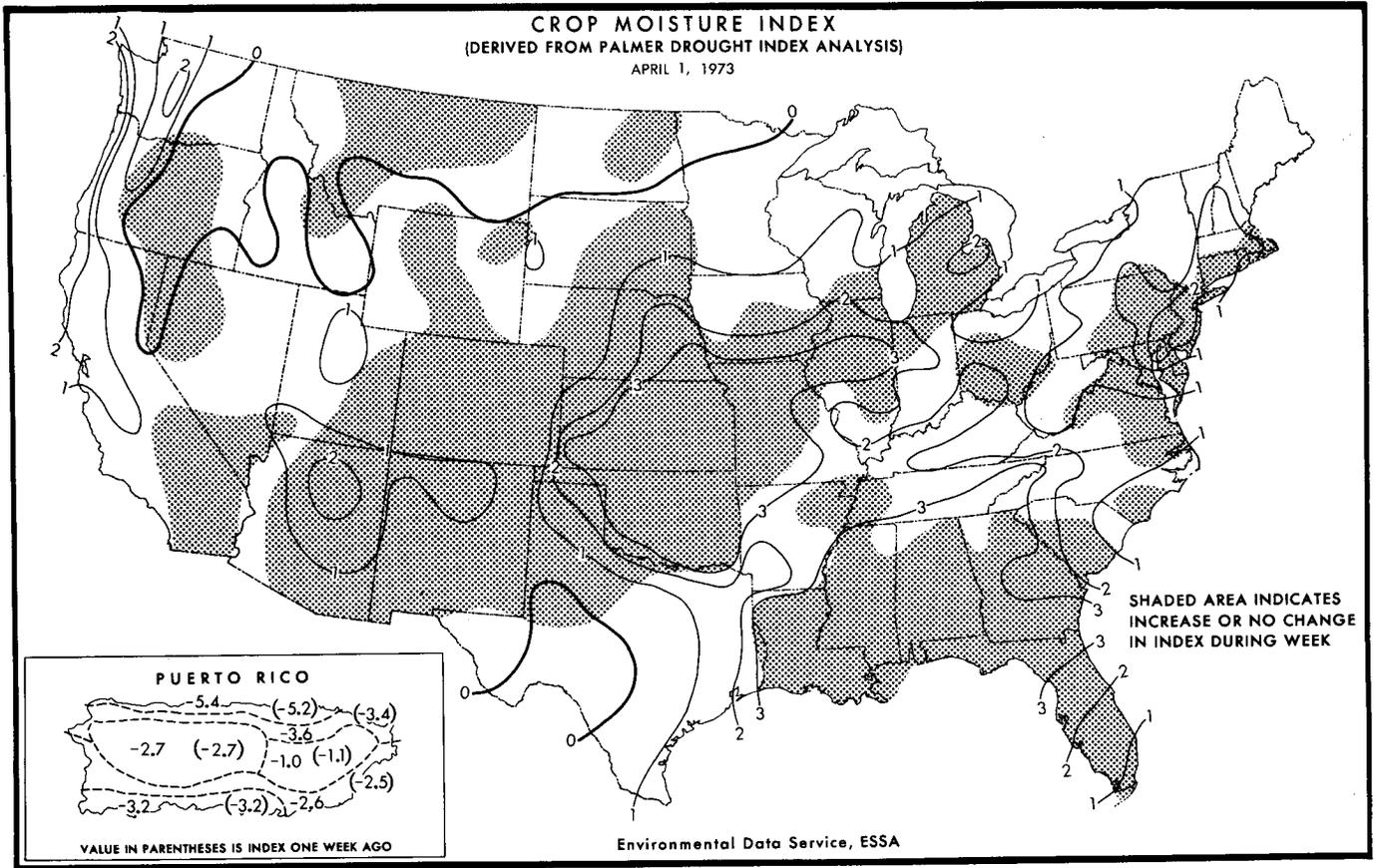
SOAKED SOILS STALL FIELDWORK

The Palmer Index, seen for the past several years as a measure of drought severity, also pictures the extent of abnormally wet weather. The above map shows areas where the weather has been persistently wetter or drier than normal for the past several months. The positive signs indicate wetter than normal moisture conditions while the negative signs indicate drier than normal conditions. The United States is essentially wet all over except for the northwest where some drought is occurring. The abnormal wetness over much of the Country has persisted since last fall.

The Palmer Index should not be confused with the Crop Moisture Map which appears on the opposite page. The latter depicts the week to week changes in the moisture used by vegetation in relation to the amount needed for normal growth. The Palmer Index shows the accumulated deviation of the moisture situation from normal over an extended period of time.

The Palmer Index values look familiar over the southwest except that the signs are the reverse of what is usually expected at this time of year. Instead of being extremely dry, they are extremely wet. The Corn Belt is extremely wet and farmers are several days or even weeks behind in their spring field work. The concern is great over whether or not conditions will dry sufficiently to permit Corn Belt farmers to plow and plant their corn and soybean crops by early May.

L.M. Denny



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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