

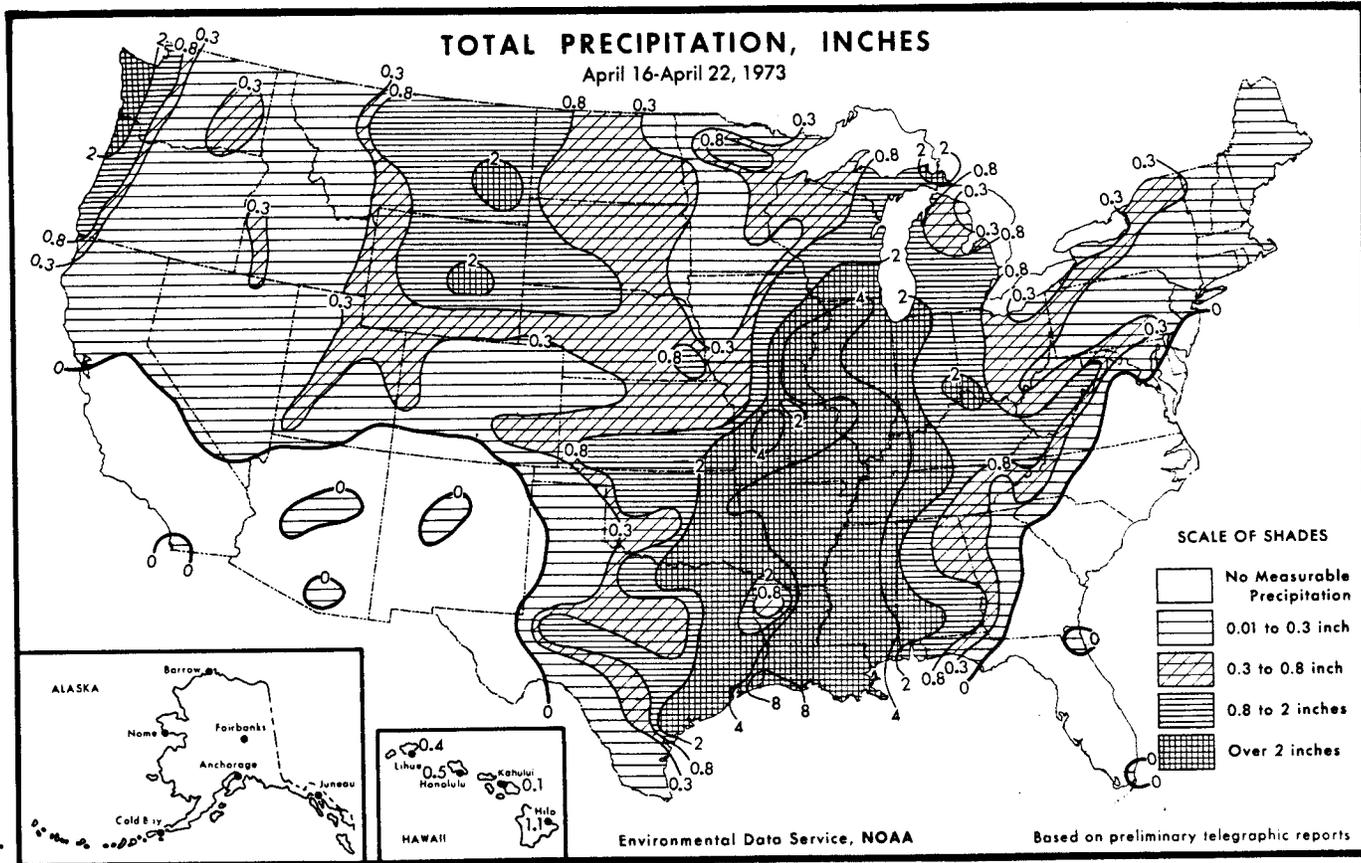
Weekly Weather & Crop Bulletin

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NATIONAL WEATHER SUMMARY

HIGHLIGHTS: Rains, thunderstorms, tornadoes, and hail ravaged the Nation's midsection last week, aggravating the threat of flooding in the Mississippi Valley. By midweek a spring snowstorm had developed in the Rockies, and temperatures throughout the West averaged colder than normal. The Nation's eastern third enjoyed mostly fair weather and unseasonably warm temperatures.

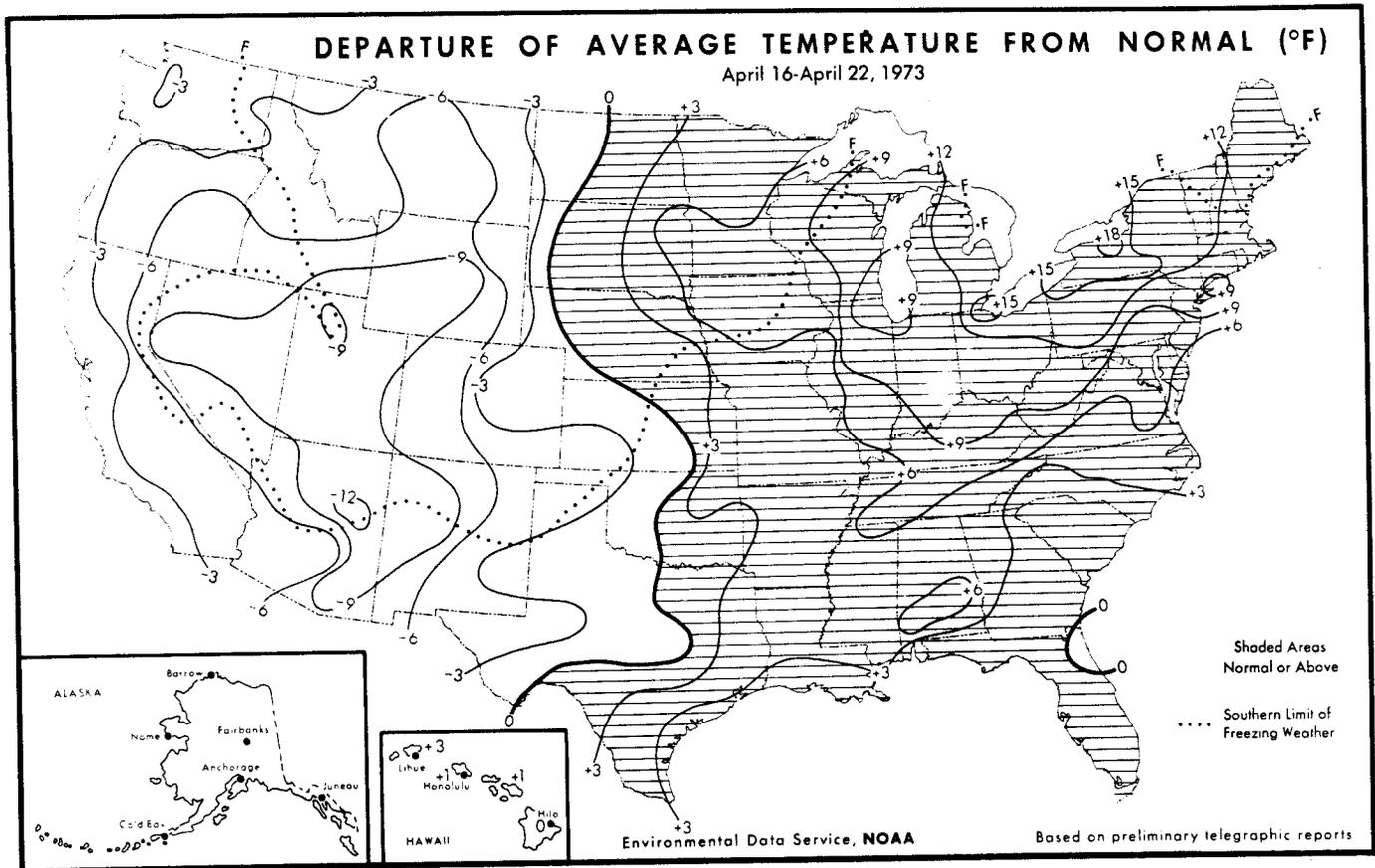
PRECIPITATION: On Monday a sprawling Low that extended from the Texas Gulf Coast to the Great Lakes drew moisture-laden tropical air into the Central States and dropped heavy rains on the Nation's already water-logged midsection. Jackson, Miss., was drenched with 5 inches of rain. Severe thunderstorms, accompanied by tornadoes and high winds, plagued the lower Great Lakes region.

The Nation's eastern third enjoyed mostly

fair skies, the result of a strong High centered on the Middle Atlantic Coast. On the Pacific Coast, there were showers in the north and clear skies in the south.

Tuesday and Wednesday saw the lingering low pressure system continuing to dump rains on the Nation's central portion. Rainfall totaled nearly 12 inches at Beaumont, Tex., and Morgan City, near the central Louisiana coast. This excessive and unusual rainfall further aggravated the threat of flooding along almost all rivers and streams from eastern Texas through the lower Mississippi Valley. Tides 3 to 5 feet above normal along the north central Gulf Coast produced some tidal flooding and slowed the flow of several rivers already in the flood stage.

Wednesday morning saw a spring snowstorm develop in the central Rockies. A Low centered over Utah supported a wide band of rain and snow



from Arizona to Wyoming. By the day's end, Lander, Wyo., had received 6 inches of snow, for a total of 12 inches on the ground.

On Thursday cold air behind the front associated with the spring snowstorm in the Northern Plains began colliding with the warm moist front located over the Central States. The result: Even more rain for the Mississippi and Ohio Valleys, plus tornadoes in areas where the two fronts met. In the Northern Plains, the snowstorm intensified into a full scale blizzard by nightfall. Snow up to 1 foot deep closed some roads in southwestern Montana. More than 1 foot of snow covered the ground at Laramie, Casper, and Lander, Wyo.

On Friday the midwestern rains continued, with severe thunderstorms stretching from Arkansas northward over Missouri to eastern Iowa and the western Great Lakes. A tornado ripped through northeast Arkansas near Harrison, resulting in 1 death and 22 injuries.

Snow extended southwards over the central and southern Rockies and portions of the adjacent plateau regions. The snowstorm brought more than 5 feet of snow during the week at Alta, Utah, located in the ski area west of Salt Lake City.

Saturday the thunderstorms and tornadoes continued to ravage the Midwest, with the added wrinkle of hail. Large pellets struck eastern Kansas, northern and western Missouri, and eastern Iowa. Three-inch hail struck Liberty in west central Missouri.

The persistent weather front, seemingly anchored to the Central States, touched off another episode of violent thunderstorms in the Midwest Easter Sunday. The lower Mississippi and Middle

Mississippi Rivers were on the rise again as a result of the persistent rains. A crest of 42.5 feet at St. Louis expected on Thursday would establish a new record flood stage--surpassing the all-time high of 42.0 feet of April 1785.

TEMPERATURE: Warmer temperatures than average prevailed over the eastern half of the Nation last week, while in the western half thermometer readings were as much as 12° colder than normal.

A strong high pressure system centered on the Middle Atlantic Coast made for unseasonably mild temperatures from New England to Florida on Monday, April 16. Temperatures in the eastern third of the Nation held in the 60's as far north as Michigan. Record high readings for the date were recorded in many parts of the North Atlantic States, including 79° at Buffalo, N.Y., Boston, Mass., and Hartford, Conn. In the West, a cold front extended from northern Idaho to northwestern California while another cold front dipped from the western end of Lake Erie to extreme southern Texas.

Tuesday saw the continuation of the unseasonably mild temperatures from the Eastern Gulf to New England. Portland, Maine recorded a record high temperature for the second consecutive day. In the West, the mercury continued to drop below freezing in the Rockies and stayed cooler than average in most other spots.

Wednesday cold air flowing into the Northwest behind a snowstorm resulted in below-freezing temperatures from Oregon and Nevada to Montana. About the coldest spot in the Nation Wednesday morning was Reno, Nev. where the temper-

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NATIONAL AGRICULTURAL SUMMARY

AGRICULTURAL HIGHLIGHTS: Winter wheat growth made good to excellent progress in southern Great Plains. * Spring wheat seeding continues ahead of normal. * Land preparation and planting in South still slow. * Nation's pastures greening.

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 growth last week, and was 41 percent jointed, as compared with 62 percent a year ago. Cold weather caused some frost burn of foliage but apparently little head damage. Yellowing less evident in fields. The condition of Nebraska wheat continues generally good to fair.

Only a few southern wheat fields in Oklahoma have headed compared with an average of 15 percent for this date and nearly 50 percent a year earlier. Excessive rains have caused some lodging. Condition remains good. Texas wheat and oats making good to excellent progress across the State. Colorado condition of winter wheat and barley good to excellent. Growth continues to be limited by cool wet soils. Six percent winter wheat and 5 percent winter barley jointing eastern plains.

Spring small grain seeding continues 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. North Dakota spring wheat seeding 53 percent complete, normal 53 percent, last year 23 percent. Oats seeding 53 percent complete, normal 50 percent, last year 42 percent. Minnesota spring seeding was considerably ahead of normal with spring wheat at 62 percent, normal 18 percent; oats at 47 percent, normal 23 percent; barley at 43 percent, 12 percent normal. Spring wheat and oats each 3 percent emerged compared with normal of 1 and 2 percent respectively. Oat planting was slowed by rain in the eastern Corn Belt and northeastern sections of the Nation. Seedlings remain behind normal but generally ahead of last year. Ohio was less than 15 percent finished, compared to the average progress for this date of 60 percent in the ground. In Washington and Oregon, cold weather continues to slow growth.

OTHER CROPS: More rains and wet fields continued to delay land preparation for spring plantings in the South and southern half of the North Central States. Flooding continues along the Mississippi River and many of its tributaries with the Army Corps of Engineers estimating over 10 million acres under water at this time.

Cotton planting in Georgia lags behind normal with only 12 percent seeded as compared with 35 to 45 percent normal for this time of year. Other Southern States are also far behind schedule with only a few scattered fields planted due to wet weather and flooding in the Delta. Cotton planting nearing completion in Arizona

with 75 percent planted, but other operations still behind schedule. In California planting continues with some occasional replanting needed.

Corn planting continues to gain momentum in areas where weather conditions and drier soils permitted. All Southern States are generally behind schedule. In Texas cold wet soils have reduced germination and slowed growth of early planted stands. Some replanting in southern half of State necessary due to rootworm damage and poor stands.

Sorghum planting continues in Arizona. In Virginia flue-cured tobacco growers preparing fields, plant bed care continued with a few beds watered. In North Carolina plant beds 47 percent good some transplanting underway, primarily in southeast part of State. Seeding sugar beets continues in Idaho with stands good and no frost damage to date. Southwest Idaho potato growers have about half of their acreage planted. Long Island potatoes about 60 percent planted and progressing rapidly in muckland areas.

Fruits and Nuts: Total extent of damage from recent freeze still undetermined but damage does not appear to be widespread along Eastern Coast. Peaches in South Carolina in fair condition. Damage in Georgia lighter than expected earlier, mostly fair to good condition. Many blocks Red Delicious apples in full bloom in Winchester area of Virginia and other varieties opening rapidly in other areas. Most fruit in New York has advanced to 1/2 inch green to pink stage except Lake Champlain area where most is green to pink. Frost damage to date in New York limited to some sweet and tart cherries. Growers were pruning, removing brush, planting trees, and fertilizing. In California thinning is underway on apricots, peaches, plums, and nectarines. Harvesting navel oranges nearly complete and picking Valencias increasing.

Vegetables: In north and west Florida vegetable areas, high winds were helpful in drying fields still wet from earlier rains, some melon, cucumber, and squash vines rolled about but damage was not severe. Cabbage in full volume, lettuce other leafy vegetables declining to moderate spring levels. Tomatoes are about steady with May increase expected. Strawberry volume good Southern California due to dry warm weather. Picking increasing Salinas, Oxnard. First sweet corn in New York planted last week in Hudson Valley. Other vegetable planting progressing rapidly under warm dry weather conditions.

PASTURES AND LIVESTOCK: Cool season grasses continue to provide some additional grazing across the Nation as pastures are drying from previous rains. Wet conditions are still limiting grazing in the southern Plains States and in the South. Spring pasture conditions showing high potential for good crop and grazing year as warmer weather appears in most areas. Nebraska calving operations completed some ranches. Montana 75 percent complete with some losses from storms. Calving losses continue higher than normal in Kansas.

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: General showers Tuesday and Wednesday and north on Thursday. Mostly fair rest of week. Temperatures averaged 5° above normal, 12° warmer than last week. High in 80's last 4 days most sections. Very limited progress made planting cotton and corn early in period, but midweek rains further delayed these operations. Many low-land fields not prepared for planting due to excessive rains, and farmers took every opportunity to plow, apply fertilizer and herbicides. As period ended, cotton planting lagged far behind a year ago when about 33% of acreage was planted. Planting has been limited to driest fields in Tennessee Valley, south and central. Corn planting also far behind a year ago when about 33% was in the ground. Scattered fields of peanuts planted. About 50% small grains have headed. Rust damage observed in few wheat fields but not excessive. Pastures continued to develop nicely and furnished seasonally short to adequate grazing.

ARIZONA: Cold, blustery weather midweek and again weekend brought drying conditions lower elevations, mostly light showers northern and eastern mountains. Below normal temperatures continued for seventh consecutive week with largest departures north. Temperature remained above freezing Yuma and Salt River Valley agricultural areas. Cotton planting near completion southwest. Central 75% planted. Cotton operation behind schedule. Small grains excellent progress. Coloring in Yuma area. Some aphid activity in barley. Safflower good progress. Sorghum planting continues. Sugar beet harvest to begin next week, Yuma. Yield prospects favorable. First cutting alfalfa hay virtually complete Yuma, Pima. First cutting Maricopa, Graham still in progress. Vegetable harvest continued. Cantaloupes now progressing normally. Harvest may be delayed until early June. Valencia orange picking in Salt River area back to normal. Picking in Yuma area limited. Grapefruit picking limited, current harvest for export. General citrus grove condition very good. Blooming is reaching full stage. Higher elevation ranges continued unseasonably cool with some snow cover. Supplemental feeding still required these areas. Desert areas providing good grazing. Cattle and calves fair to mostly good. Sheep and lambs fair, those on desert pastures good.

ARKANSAS: Very heavy rain and flood affected many sections. Rainfall much above normal all sections except along southern border. Largest totals in southwest, central, east central, north central, and northeast sections with amounts ranging from about 4.00 to 11.00 inches. Elsewhere totals 0.90 inch to 4.00 inches. Largest weekly total at Batesville in northeast with 11.00 inches, smallest at El Dorado with 0.90 inch. Most rain occurred late week and weekend. Mean temperatures 1° to 7° above normal ranging from near 70° along southern border to mid 60's in north. Cooling early in week followed by mild temperatures continued through weekend. Highest 82° at Eudora in southeast on 20th and 21st.

Lowest 37° at Fayetteville on 17th. Fieldwork at standstill. Favorable weather needed to resume field activity. Large acreage flooded. No cotton planted. Little rice seeded, wheat and oats fair to good condition. Strawberry and peach crop in fair condition. Tomato set delayed by weather. Pastures in good condition providing adequate feed. Early harvest of hay will begin as weather permits. Cattle condition improving.

CALIFORNIA: Temperatures averaged 2° to 6° below normal throughout. Scattered showers occurred interior, north coast. Drizzle dampened some coastal. Thundershowers Sacramento Valley midweek. Strong winds prevailed coast, southern interior, mountain area most of week. Below freezing low's occurred some localities end of week, followed by general daytime warming trend Friday. Weather permitted rapid progress fieldwork; strong winds caused drying, some lodging, advanced small grains. Small grains heading out statewide; cutting for hay increasing. Sugar beet digging progressing well, planting active. Cotton planting continues; occasional replanting needed. Rice planting underway. First cutting alfalfa continues northward, more control measures than normal required weeds and weevils. Planting corn and milo gaining momentum, active most areas. Fruit, nut development normal. Grapes good progress. Thinning underway apricots, peaches, plums, nectarines. Prospects normal deciduous. Light set almonds. Harvest navel oranges nearly complete; heavy bloom. Picking Valencias increasing. Lemons very active, excellent quality. Most asparagus continuing processors; light volume fresh. Broccoli steady Desert. Cauliflower harvest nearly completed Santa Maria; steady Salinas. Celery slight decrease, some abandonment. Lettuce peak southern San Joaquin; central coast beginning. Strawberry volume good south due to dry warm weather. Picking increasing Salinas, Oxnard. Tomato plants good growth. Central Valley sheep shearing continues. Lambing, calving throughout State. Rangeland providing plentiful feed; grass starting dry out shallow soil. Bee colonies doing well range areas where clovers starting bloom and abundance windflower. Egg, milk production increasing seasonally.

COLORADO: A snow storm in western part of State on Tuesday moved across mountains and northern plains on Wednesday. Average temperatures were below normal for week. These cold temperatures were associated with passage of snow storms. Since storms missed the southeast, temperatures in this area were only slightly below normal. Lowest temperature was -8° at Yampa; highest was 82° at Lamar and Holly. Precipitation was general in west and northeast with lower elevations receiving about 0.50 inch and mountains receiving 1.00 inch or more. Most of the southeast received only trace amounts except for a few stations along the Arkansas River. Heaviest amounts included 1.71 inch at Steamboat Springs, 1.59 inch at Aspen, 1.17 inch at Cheesman and 1.08 inch at Fraser. Weekend was relatively quiet weather-

wise with only scattered rain or snow showers mostly in mountain areas. Snow and wet soil continued to prevent extensive soil preparation and spring planting. Most field activities limited to last 2 days of week. Surface soil moisture adequate to surplus. Condition winter wheat and barley good to excellent. Growth continues to be limited by cool wet soils, 6% winter wheat, 5% winter barley jointing eastern plains. Seeding oats and spring barley 2% and 20% complete, 4% oats, 6% spring barley emerged. Condition emerged acreage fair to good. Only 2% sugar beets seeded. Very small acreage emerged. Seeding late summer potatoes 5% complete, 1% emerged. Alfalfa condition generally good, growth very slow. Range and pastures generally poor, but improving. Livestock condition poor to fair. Calving progressing. Supplemental feeding continued heavy.

FLORIDA: Fair and warm with temperatures averaging slightly above normal. Little or no rain. Most stations have not reported precipitation in 2 weeks. Fieldwork active. Planting or re-planting of corn, grain sorghum and soybeans was prevalent. Pastures and livestock improving seasonally. Southern two-thirds of State will need rain soon to sustain adequate grass growth. Citrus trees excellent growth. Moisture adequate interior, short on east coast. Warm, windy days increased irrigation use. Normal bloom period almost over. Caretaking active. Harvest seasonal in north and west vegetable areas, high winds were helpful in drying fields still wet from earlier rains. Some melon, cucumber and squash vines rolled about, but damage was not severe. Cabbage is in full volume but in gradual decline. Lettuce, other leafy vegetables declining to moderate spring levels. Potato and sweet corn supplies are increasing. Tomatoes are about steady with May increase expected. Watermelons are increasing to good supply by mid-May. All other spring vegetables available in seasonal supply.

GEORGIA: Light to moderate rainfall in extreme northern counties and along the western border, but little or none was reported elsewhere. Most areas have had no significant rainfall in over 2 weeks. Temperatures mild early in week, but warming trend brought readings to well above normal before weekend. Averages for week ranged from 2° to 6° above normal. Soil moisture surplus northern areas, mostly adequate elsewhere. Land preparation and planting very active central and southern areas, particularly latter part of period. Planting progress far behind normal, tobacco transplanting 87% complete. Corn 30% planted, less than half normal rate. Cotton 12% seeded, 35-45% normal. Peanuts 5% planted, 40% normal. Soybean plantings still light. Small grains, pastures and cattle mostly good. Peach damage lighter than feared earlier, mostly fair to good condition. Vegetables and melons mostly fair, considerable replanting.

HAWAII: Weather favorable for crop growth and maturity. Showers light to moderate. Crop progress fair to good. Vegetables and fruits adequate. Sugarcane harvesting normal and on schedule. Pineapples increasing, pastures continued to benefit from showers. Cattle fair to good condition.

IDAHO: Temperatures: 4° to 10° below normal with all areas reporting temperatures below freezing. Locally heavy precipitation on 14th. Reynolds,

Owyhee County, recorded 2.38 inches for greatest. Generally, heaviest amounts were recorded southwest where totals ranged from 0.55 to 2.38 inches. Lightest amounts east and between Salmon and Clearwater Rivers to north. Farm work getting behind in southcentral and eastern. Dryness prevails north. Southwest mainly on schedule. Wheat and barley seeding about two-thirds complete north, three-fourths done in southwest, about half done in southcentral Valleys and about one-fourth complete east. Sugar beets about 90% seeded in southwest, about 25% in southcentral. Stands of beets are good and no frost damage. Potato planting about half done in southwest, barely started elsewhere. Onions mostly all seeded except for Washington County.

ILLINOIS: Temperatures: 5° to 10° above normal. A gradual warming trend developed early week. Temperatures climbed from 50's and 60's to 70's by weekend. Weekly precipitation ranged from 2.00 to 7.00 inches occurring mostly Monday and at end week. Winter wheat reported 19% excellent, 60% good, 20% fair, 1% poor. Red clover, alfalfa reported good condition. Oat seeding 40% complete. Plowing corn and soybean ground remains 35% complete. Pastures 28% excellent, 57% good, 14% fair, 1% poor. Pastures supply nearly 60% of roughage requirements. Soil moisture 97% surplus, 3% adequate. Main activities machinery repair, livestock care. Less than 1 day suitable fieldwork.

INDIANA: Very wet week, rain every day, totals exceeded 400 inches south, 300 inches west and 200 inches elsewhere. Temperatures averaged in 60's and were 9° above normal. Some frost Tuesday. Temperatures to 83° southeast on Saturday. Soil temperatures 50's and above normal. Solar radiation 50% of usual. Fieldwork limited to 1 day early week. Topsoil and subsoil moisture surplus remainder of period. Fieldwork 16 days behind normal. Plowing still only 15% done, 50% in 1972. Only few fields corn seeded. Oats 15% seeded, 35% last year. Wheat 8 inches high, 6 average. Oats 1 inch. Pastures much improved last week, fair to mostly good.

IOWA: Warm with precipitation heavy southeast and east central, diminishing to subnormal western and north central. Floods southeast, stream flow diminishing northwest. Fieldwork still slowed by wet weather, slightly more than 1 day suitable for fieldwork. Oats seeding 35% complete, behind 1972 76% and 1967-1971 average 78%. Plowing 35% complete, behind 1972 74% and 1967-1971 average 71%. Feed supplied by pastures average to below average. Topsoil moisture reports indicate 84% surplus and 16% adequate.

KANSAS: Late winter storm caused a variety of weather. Intense low pressure system passed through northwest at midweek causing high winds with high of 72 m.p.h. at Hutchinson. Associated with storm was some tornado activity, thunderstorms with large hail, and locally heavy rains in southeast and east central. Temperatures from 3° below normal southwest to normal northwest and about 3° above normal east. In northwest Goodland low of 24° on 16th, Emporia and Coffeyville highs of 82° on 21st. Wheat made good growth with ample moisture. April 21 wheat was 41% jointed, compared with 62% year ago and range of 31% to 68% last decade. Recent cold weather caused some frost burn but apparently little head damage. Yellowing less evident in wheat fields. Oat seeding 54% complete, 97% year ago, average 93%. Spring barley seeding

59% complete, 98% year ago, average 90%. Corn planting 1% complete, 16% last year, average 13%. Alfalfa growing well but nipped by recent freezes and some weevil damage. Some peach freeze damage. Cattle moving to native pastures. Some losses from grass tetany on wheat. Spring calving making normal progress but losses above normal.

KENTUCKY: Flooding continued along the western border. Strong southerly winds prevailed giving above normal temperatures statewide and excessive rainfall west. Temperatures warmed during period, reaching 10° to 15° above normal late week. Heavy rainfall over western half totaled as much as 6.00 inches near western border. Severe thunderstorms with tornado damage occurred west on 19th. Rain, flooded fields, and water logged soil continued to keep most farmers out of fields. Corn planting 25% complete, 33% last year but 35% in 1971. River bottomland will take several weeks to dry out. Tobacco beds fair to good. Wet conditions causing yellowing, and flea beetles and liverwort troublesome. Barley 27% headed. Freeze damage intensive on early barley. Wheat moving into boot stage and needs sunshine. Pastures lush, grass tetany continues to be a problem.

LOUISIANA: Torrential rainfall, especially in south with 2-day totals of 5.00 inches to more than 10.00 inches in some areas. North rainfall ranged mostly from 0.50 to 4.00 inches. Greatest 1-day total was 5.89 inches at Houma Tuesday morning, with an additional 4.10 inches Wednesday morning. Weather was humid and cloudy rest of week. Temperatures: 1° to 4° above normal. Extremes: 84° at Baton Rouge Sunday, and 53° at Dequincy Wednesday. Very little fieldwork possible because of excessive moisture. Limited activity on light, well-drained soils in north late week. Land preparation and planting fell further behind. Planting corn 1% to 20% complete, 80% last year. Rice seeding 30% to 35% complete in southwest, 65% to 70% last year. Only a few fields of cotton planted compared with 30% a year earlier. Flood waters extended into additional areas as major rivers reached higher levels. Movement of cattle from affected areas continued. Sugarcane cultivation and fertilization at standstill. No progress in transplanting sweet potatoes. Strawberry harvest continued, rains reducing yield and quality. Pasture feed about average where not flooded. Livestock fair to good.

MARYLAND AND DELAWARE: Much warmer and dry. Scattered frost morning of 14th and 15th, then marked warming trend to well above normal on 18th. Temperatures: 2° to 4° above normal central and east and 3° to 5° above west. Extreme lows near 20° for west, elsewhere near 30° on 14th, highs mid 70's to mid 80's on 18th. Precipitation mostly 0.25 to 0.50 inch in four western counties 17th thru 19th and near 0.10 inch north central on 18th. Dry south central and Eastern Shore. Good week for fieldwork except in Western Maryland. Plowing progress rapid. Corn planting started, small grains show improvement, barley and rye starting to head. Tobacco plant beds responding to warmer weather. Potato planting 85% done in central Delaware, vegetable planting active. Peach prospects remain uncertain. Apples to be in full bloom this week.

MICHIGAN: Rainfall totaled 0.50 to 2.00 inches upper peninsula and generally up to 1.95 inch in lower, except under 0.50 inch northeast and 2.50 to 3.00 inches southwest mainly over the weekend.

Temperatures: 5° to 10° above normal upper peninsula and 10° to 15° above normal lower. Wet fields delayed spring fieldwork. Soil moisture mostly surplus. Average 2.6 days suitable for fieldwork about midweek. Only 17% of acreage intended for spring planting plowed. Oats 9% planted. Sugar beet planting started. Warm temperatures stimulated growth of winter wheat hay and pasture. Wheat conditions near average. About 12% of 1972 corn crop not harvested. Warm temperatures pushed fruit development.

MINNESOTA: Temperatures: about 6° above normal except southwest near 10° above normal. Precipitation about 0.50 inch across north and generally less than 0.25 inch in south. Severe weather Thursday evening. Thunderstorm winds heavily damaged elevator at Clarkfield and many farm barns and out buildings in Redwood, Yellow Medicine and Chippewa Counties. Topsoil and subsoil moisture mostly adequate except in southeast where surplus and in northwest where short. Seeding considerably ahead of normal with spring wheat at 62%, normal 18%. Oats at 49%, normal 23%. Barley at 43%, normal 12%. Flax at 11%, normal 6% and processing peas at 9%. Spring wheat and oats were each 3% emerged compared with a normal of 1% and 2% respectively. Land preparation for corn 19% and soybeans 8% complete. Fieldwork consisted of fertilizer spreading, herbicide spraying, plowing, disking and planting. Winter wheat, rye, and hay fields were in good condition. Pastures mostly fair to good.

MISSISSIPPI: Temperatures near or slightly above seasonal normals. Highest was 85° at Yazoo City and Wiggins on Thursday. The lowest was 38° at Tupelo Saturday. Precipitation heavy causing flash flooding. Heaviest reports were 7.34 inches at Columbia, 7.32 inches at Yunica and 5.92 inches at Jackson and Philadelphia. Greatest 24 hour amounts were 6.22 inches at Yunica on Friday, 4.40 inches at Columbia on Wednesday and 3.94 inches at Jackson on Tuesday. Over weekend temperatures were above normal with highs in 60's and lows in 60's. Rainfall locally heavy and confined to northwest causing flash flooding. Rain continued to severely hamper all farming activities. Days suitable for fieldwork averaged 0.3 day compared with 3.1 days previous week and 5.5 days a year ago. Backwater continues to cover more and more cropland and pastures. Doubtful whether some will be able to plant anything this spring. Plowing completed advanced 1 point to 33%, corn planted steady at 18% compared with 36% last year, and less than 0.5% of cotton acreage planted compared with 23% a year ago. Wheat 45% and oats 55% headed with conditions fair to good on acreage not flooded. Fruit and vegetable crops in north damaged by recent frost. Fresh potatoes and truck crops generally fair to good condition. Pastures and livestock good. Some livestock being moved to higher ground.

MISSOURI: Heavy rains over most of the State produced general flooding on many streams and low land areas. Average temperatures: mostly in 60's and 70's, and lows in 40's and 50's, except for Monday and Tuesday some in the 30's. On Saturday morning, rainfall amounts of 3.00 to 10.00 inches from north of Lake Of The Ozarks into northeastern Missouri, and on Sunday morning, amounts from 1.00 to 2.00 inches. Mississippi and Missouri Rivers headed for record or near record floods by Monday many tributary streams in flood or at very high levels. Fieldwork remains at a virtual standstill. Less than 1 day suitable for field-

work, no advance in the 11% plowed. Corn less than 1% planted compared with 12% last year. No cotton planted. Oats 5% sown, essentially complete at this time a year ago. Wheat generally fair condition, pastures fair to good. Soil moisture surplus all areas.

MONTANA: Cool wet week. Temperatures: from 3° to 9° below normal. South central and east received from 1.50 to nearly 4.00 inches of precipitation. Snowfall in some areas up to 3 feet. Blizzard conditions were widespread over south central Thursday and Friday. Soil moisture improved most areas. Winter wheat condition generally fair to good. Spring wheat and barley seeding 25% complete, sugar beets 50%. Potato planting just beginning. 80% of cattle and sheep receiving supplemental feed. Newborn calf and lamb condition generally good. Some losses from storm. Calving 75% complete, lambing 70% complete, shearing 65% complete.

NEBRASKA: Major storm during middle of week brought very variable precipitation and damaging winds. Heaviest precipitation occurred eastern third; amounts near 1.00 inch to as much as 1.50 inch. Central and western portions 0.50 to nearly 1.00 inch. Snow in panhandle during storm. Temperatures averaged a little above normal. Farmers in fields early last week but rain Thursday stopped field work for couple days. Fieldwork consisted of disking, plowing, shredding stalks, spreading fertilizer, harvesting remaining crops and some seeding. About 3.0 days suitable for fieldwork. Farmers especially anxious to get land prepared for planting row crops since more land in production this year. Winter wheat condition continues generally good to fair. Surface and subsoil moisture conditions favorable. Grain sorghum harvest 97% completed. Corn harvest nearly complete. Sugar beet planting 55% complete. Seeding small grains, grasses and legumes progressing. Corn planting just begun. Feedlot condition improved but some remain very muddy. Cattle being moved to pastures although grazing limited. Frequent storms, wet weather difficult for young livestock. Calving operations completed some ranches.

NEVADA: Temperatures averaged 4° to 6° below normal in north and 5° to 8° below normal in south. High temperature Logandale 80° and coldest was 19° Reno. During week Caliente received heaviest rainfall 0.82 inch on Wednesday. High winds accompanied by cold temperatures and snow flurries delayed field work in the north. First cutting alfalfa hay continues in southern valleys. Movement of cattle to ranges progressing normally as ranges continue to turn green. Livestock good condition with no unusual death losses.

NEW ENGLAND: Week dry, with sudden return to unseasonal warmth. Means mostly 8° to 16° above normal. Some highs at 90° Easter Sunday in south and many near 80° in north. Some low's in 20's north and 30's south at midweek. Precipitation principally from scattered showers and some thunderstorms at end of week. Totals mostly none to 0.25 inch except some heavier in north. General snowcover nearly gone in open areas even in north but Ft. Kent, Maine, still had 6 inches as of Friday. Many apple orchards reached 1/4-inch green during week, with some bloom expected early varieties this week. Orchardists quite concerned about possibility of late frost. Maple sugaring generally complete. Dry, warm weather perfect for early season plowing. Pastures in south beginning to green.

NEW JERSEY: Very warm and dry week. Temperatures averaged 8° to 10° above normal with readings ranging from mid 80's on Thursday to upper 30's on morning of Wednesday. Precipitation averaged less than 0.10 inch with most areas only trace. Very warm weather over weekend has advanced rate of crop development. Field work has been very active, light topsoils have dried rapidly and some growers are applying irrigation to new plantings. Asparagus harvest is increasing. Spinach and "greens" are moving to market. Tomato planting has begun. Sweet corn planting has made good progress. Apples and blueberries are beginning to bloom in some areas. Fall-sown grains are growing nicely. Field corn drilling about to begin. Prospects for most crops good.

NEW MEXICO: Light precipitation mostly Wednesday and Friday in northwest quarter of State, with more than 0.50 inch total at Chama. Precipitation fell partially as snow including Albuquerque. Temperatures averaged slightly below normal in the extreme southeast to 10° below normal in northwest. Southern part of State escaped freezing temperatures on weekend. Warmest daytime on Tuesday and Wednesday except for Sunday in south. Weather mostly favorable. Snow flurries north, high winds midweek all areas. Soil moisture adequate to surplus. Farm activities active. Cotton planting south still limited. Light alfalfa hay cutting starting south. Winter grains good, three-fourths wheat jointing. Ranges greening. Spring calving, lambing about through, death losses north higher than normal.

NEW YORK: Temperatures averaging nearly 15° above normal. Temperatures ranged from 29° at Glens Falls to 87° at Rochester and Poughkeepsie. Spotty and light rain on 6 of the 7 days averaged about 0.50 inch below the normal rainfall for this time of year. A few areas such as Massena had near normal rainfall due to an isolated heavy shower. Weather was favorable for fieldwork over most of State. Plowing and fitting fields well along. Oat planting about 20% completed. Favorable weather spurred growth of wheat and hay. Pastures are greening up in most areas. Corn planting just started in a few areas. Vegetable planting progressing rapidly under warm dry weather conditions. Long Island potatoes 60% planted. Planting progressing rapidly in Muckland areas. Orange County onions approximately 70% planted, Elba about 30% complete. First sweet corn in Hudson Valley planted last week. Celery transplanting started Tuesday, Orange County. Fruit growers were pruning, removing brush, planting trees and fertilizing. Most fruit has advanced to 1/2 inch green to pink stage except Lake Champlain area, where most is in green tip. Frost damage to date limited to some sweet and tart cherries. Vineyard development ahead of normal and grape tying continues.

NORTH CAROLINA: Longest period fair weather since February most areas. No rain except showers mountains averaging 0.50 inch. Rising temperatures averaging above normal. Above freezing all areas since 15th. Highs in 80's over weekend. Soil moisture surplus mountain areas, adequate elsewhere. Field work averaged 4.2 days. Corn planting at 15% complete gained momentum in coastal areas, progress still behind normal. Flue-cured plant beds 47% good, 48% fair, 1% excellent, 4% poor. Transplanting under way, primarily in southeast. Cotton planting 3% complete, well behind normal. Peanut planting just starting. Small grains and pasture good shape. Truck crops fair.

NORTH DAKOTA: Temperatures much above normal, ranging from 9° above in west to 15° above in east. General rain and thunder showers latter part of week with heaviest amounts in southwest, lightest in north central. Precipitation amounts ranged from 2.18 inches at Bowman to 0.17 inch at Rugby. Tillage and seeding continued to move ahead until midweek when rain held up operations temporarily. Rains beneficial for pastures, hay meadows and initial small grain growth.

OHIO: Southerly winds produced mild and moist conditions throughout most of week. High wind warning was issued 16th as southerly winds reached 50-55 m.p.h., especially over north. Steady moderating trend in temperatures. Highs in 60's and lower 70's early week warmed to upper 70's and lower 80's on 20th, 21st, and 22d. Highest 82° Cleveland on 21st; lowest: 31° Toledo on 17th. Measurable amount of rain occurred somewhere daily except 21st. Rather general rains on 16th, 17th, and 18th with greatest 3-day amount 1.73 inch at Cincinnati. Showers and thunderstorms over north on 22nd produced 0.93 inch at Findlay. Weekly total over southeast averaged less than 0.50 inch. Rain and wet fields continued to delay progress of fieldwork. Nearly 2.0 days were favorable for fieldwork but was limited in most areas to lighter soils and higher ground. Soil moisture supplies surplus by 91% and adequate by 9%. As of Monday, April 23, 1973, plowing for corn and soybeans is now over 25% complete. Most progress was made in the northeast. Last year 60% was complete and the 1968-72 average progress is 65% complete. Oat seeding as of today was less than 15% finished, compared to the average progress for the date of 60% in the ground. Sugar beet planting is 5% done. Tobacco beds are 55% seeded. Potato planting is 5% completed. Sunshine and continued warm temperatures are needed to dry out wet, soggy fields and to aid growth of existing crops.

OKLAHOMA: Temperatures from 2° below normal in southwest and southcentral to 3° above normal in northeast and panhandle. Precipitation ranged from about 0.50 inch panhandle to slightly over 3.50 inches southeast. Precipitation over week-end generally light except moderate to heavy in eastern third. Tornadoes occurred in south-central part on night of April 19-20. Small grains making rapid growth with little evidence of freeze damage to crops. Only a few southern wheat fields have headed compared with an average of 15% for this date and nearly half crop a year earlier. Excessive rains have caused some lodging. Condition crop remains mostly good. Oat and barley crops somewhat later than wheat. Fair progress made preparing row crop seedbeds west. Rains eastern half makes reworking most acreage necessary. Alfalfa growth good but weevils building up. Pecan trees breaking dormancy. Gardens fair to poor because excessive rain. Ranges and cattle condition showing slow improvement.

OREGON: Weekly temperatures below normal in all areas except near normal coastal area. Greatest departures 4° to 6° below normal in south central, northeast, and southeast. Dry spell broken in most areas except only 0.01 to 0.03 inch in central just east of Cascades 0.99 to 2.20 inch in coastal area, 0.80 to 3.45 inch in Cascades, and 0.45 to 0.98 inch in Willamette Valley. Southwestern valleys and most of east ranged generally 0.06 to 0.25 inch except locally near 0.50 inch. Grain crops in good condition in west but still need additional moisture in the east. Growth all field

crops slowed by cool, wet weather. Potato planting nearly complete Columbia Basin and continues at Ontario. Asparagus growth slowed by cool weather, harvest continues. Onions and green peas mostly planted. Seedbed preparation for other vegetable crops continues as weather permits. Pollination of tree fruits slowed by wet, cool weather. Livestock continue moving to ranges. Early fat lambs moving to market.

PENNSYLVANIA: Warm and generally dry week. Day-time temperatures in 50's and 60's Tuesday gradually increased during week and reached 70's and 80's Sunday. Some cooling occurred Friday and Saturday. Overnight temperatures mostly in 40's and 50's until Sunday when early morning readings in 50's to low 60's. Temperatures averaged 10° to 15° above normal. Rainfall was light occurring mostly as scattered showers and totaled less than 0.25 to 0.75 inch. Spring fieldwork running ahead of last year. Topsoil moisture 60% adequate, remainder surplus. Spring plowing 30% completed, oats seeding finished. Seeding tobacco beds 75% completed. Pastures early. Fruit growers concerned with early season. Apples coming into pink stage. Peaches, plums and sweet cherries in full bloom.

PUERTO RICO: Average island rainfall 0.90 inch or 0.15 inch below normal. First significant rainfall in weeks reported in north-central and western interior sections. Highest weekly total 3.40 inches in western Cordilleras. Light to moderate showers reported along south coast. Crop moisture conditions slightly improved but much more rain needed to end drought especially in northern and southern divisions. Water rationing extended to additional towns as water storage levels continued to drop. Divisional temperatures averaged 79° to 80° on coast and 73° to 74° interior with some northern station departures ranging from 1° to 3° above normal. Highest temperature 95°, lowest temperature 52°. Sugarcane harvesting operations retarded in some zones towards end of week due heavy rain showers. Ratoon development improved in nonirrigated zones. Coffee plantations reported rains helped flowering of new crop and bean development. Tobacco zones reported rain arrived too late to save new crop. Additional plantings rescheduled. Rains helped pasture recovery from drought effects in some zones. Danger of damage due cattle trampling. In southwest sections rains not sufficient to relieve drought conditions. Minor crop zones making preparations to resume planting in areas where crop moisture conditions have improved.

SOUTH CAROLINA: Temperatures below normal, although by close of period daily values were near seasonal averages. Lows in 30's and highs in 60's early week with a minimum of 28° and scattered frost mountains. Temperatures climbed to lows in 50's and highs in 70's. Only precipitation recorded: Drizzle or light rain mountains and foothills near midweek. Excellent week for farm activities. Tobacco 32% transplanted compared with 82% last year. Plants, in short supply, are in fair to good condition. Cotton 14% planted, 39% last year. Corn stands fair condition 39% planted compared with 70% last year. Small grains fair to good condition. Powdery mildew in many fields. Pastures, hay crops good condition. Peaches fair condition. Total extent of damage from recent freeze still undetermined but damage not widespread. Vegetables fair to good condition. Watermelons 75% planted about same as last year. Peanuts 6% planted compared with 19% last year.

SOUTH DAKOTA: Temperatures: Near normal to 9° above normal. Many mid-teen temperatures the 16th. Precipitation fell late week and was quite general. West and southeast averaged well over 1.00 inch while central and northeast received between 0.50 inch and 1.00 inch. Total of 2.87 inches fell at Fort Meade. Adequate topsoil moisture in most regions, with small area of surplus in west-central part. Field work made good progress until halted by precipitation past midweek. Spring field work near normal to slightly ahead. Spring plowing 32% complete, normal 30%, last year 24%. Spring wheat seedings 53% complete, normal 53%, last year 23%. Oats seedings 53% complete, normal 50%, last year, 42%. Barley seeding 51% complete, normal 42%, last year 30%. Normally flax seeding is just getting started, but 7% has been completed so far this year.

TENNESSEE: Another very soggy week. Rainfall: 2.00 to 5.00 inches in parts of west to 0.25 to 1.00 inch mountains, from showers and thunderstorms during week. Some lowland flooding in west. Temperatures averaged 6° to 8° above normal. Continuing rains, flooding, and wet fields are becoming a quite serious problem to farmers, particularly in the west. Only 3% expected corn acreage and less than 1% cotton acreage has been planted. Normally, about 20% of the corn and 7% of the cotton has been planted at this time. It is now becoming apparent that the April frosts severely damaged early strawberries, apples, and peaches. The cold weather also resulted in some damage to tobacco plants and to barley that was headed.

TEXAS: Early part of the week, thunderstorms dumped heavy rains over central and east with amounts exceeding 6.00 inches at Galveston and 10.00 inches at Port Arthur. Midweek, high winds exceeding 80 mph at times swept large portions of west and scattered thunderstorm activity shifted to that section. During the weekend, 3-inch hailstones at Roby. Smaller hail at numerous points in north central Sunday. Temperatures: 6° to 8° above normal in south and 3° above normal in northeast. Otherwise, considerable cloudiness held temperatures near normal. In Lower Rio Grande Valley, showers slowed onion harvest. Cabbage, carrot harvest continues. At Laredo, onion harvest continues. Carrot digging underway. In Coastal Bend, warmer weather needed to stimulate growth on watermelons and cucumbers. Onion harvest remains active. In San-Antonio-Winter Garden, some watermelons damaged by hail. Rain. Potato growth slowed by wet, cold weather. Light onion harvest underway. Some lettuce damaged by hail. In east, tomato crop hampered by cold temperatures and excessive rains. Watermelon replanting will get underway as soon as fields dry. In central, large portion of watermelon crop will be replanted. In Knox-Haskell areas, potatoes making good recovery from setback suffered from recent freeze. In Trans-Pecos, onions making good growth. Early planted cantaloups beginning to emerge. On High Plains, onion planting active. Some cabbage has been planted. Early carrots are emerging. The peach crop will be produced mostly in central and east, as late freeze either damaged or destroyed the crop in north and on High Plains. Citrus harvest remains active with a large portion of crop going to processing plants. Moderate to heavy rain, high wind and hail stopped planting activities on crops. Cold, wet soils reduced germination, slowed growth early planted stands. Replanting corn and sorghum in southern half necessary

rootworm damage and poor stands. Wheat, oats making good to excellent progress. Grazing abundant except east and upper Gulf Coast. Planting of major crops this year: cotton 9%, last year 26%; corn 61%, last year 73%; sorghum 35%, last year 44%; soybeans -, -, rice 43%, last year 94%; peanuts 14%, last year 12%.

UTAH: Recurring rain and snow. Moderate to heavy accumulations many localities. Temperatures: below normal ranging from 3° to 8° below most stations. Accumulated growing degree days since March 1 continue below normal. Soil temperature at 4 inch depth ranges from upper 30's Cache Valley to mid-40's Salt Lake City, upper 40's Richfield, and mid-60's St. George. Continued cool weather and wet fields has limited progress. Water is plentiful, freeze damage to date is minimal, but everything is late. Planting crops lagging behind normal. Bloom of fruit trees has occurred only for apricots, just starting for other fruits, behind usual development. Alfalfa and winter wheat have made very little growth compared with usual. Pasture and range feed on spring range lands is behind normal growth, forcing feeding expensive hay. The potential is there for a very good crop and grazing year when warm weather comes.

VIRGINIA: Temperatures below normal at beginning, warming gradually through week with daytime highs in the 80's by weekend. Weekly departures averaged near normal ranging from 4° above normal to 4° below normal. Light rain early week with totals generally less than 0.50 inch. Fields dried out east of mountains, about 5 days were suitable for field work and only one-tenth of topsoil contained surplus moisture. West of mountains, 1.5 day suitable for field work and surplus topsoil moisture prevailed. Corn 25% planted in Tidewater. In Piedmont, 10%. Soybean planting very limited. Flue-cured tobacco growers prepared fields. Plant bed care continued. A few beds watered. Limited acreage of oats, clover, alfalfa and grasses sown for hay and pasture. Pastures excellent. Top dressing and spraying common. Cotton planting started. Barley began heading. Tomatoes transplanted. Watermelons planted. Snap beans and Irish potatoes planted on Eastern Shore. Sheared sheep, marketed lambs and feeder cattle. Many blocks Red Delicious in full bloom in Winchester. Other varieties opening rapidly.

WASHINGTON: Western Washington: Temperatures cool, below normal, with showers. Planting of early vegetables, green peas and silage corn active by week's end. Strawberries starting to bloom, spraying of raspberries to retard cane growth. Harvest of field rhubarb and tulips continues. Eastern Washington: Cooler than normal, some rains over eastern areas. Active planting of potatoes, sugar beets and field preparation for corn, cherries, and pears blooming in late areas and early apple orchards blooming. Prospects for fruit crop excellent. Soil moisture still short. Seedings of spring crops emerging. Calving nearly complete and shearing well underway.

WEST VIRGINIA: Cold with minimum temperatures near 0° in higher elevations of central part of State, 20's and 30's elsewhere. Relief came as warm air pushed in from south. Light showery activity Tuesday and Wednesday maximum readings rose into 80's in eastern panhandle and 70's elsewhere. Minimum readings remained mostly in 50's. Tree

foliage developing rapidly. Wet soils restricted field activity over most of State to fencing, hauling manure, repair of equipment and other such chores. Only 1.50 day favorable field work mostly plowing, seeding oats and gardening. Peaches, pears, cherries and early strawberries some damage. Apples and late strawberries safe thus far. Cattle wintered well. Many now on full pasture some grass tetany reported.

WISCONSIN: Excessive rainfalls continued to plague the southeast. Weekly rainfall totals in excess of 600 inches locally from Beloit north-eastward toward Milwaukee. Widespread flooding along Turtle Creek at Beloit and Fox River in Waukesha, Racine, Walworth, and Kenosha Counties. Also many streets and basements under water in Milwaukee area. Damage expected to exceed several million dollars. Week otherwise cloudy, humid and warm except mostly sunny and dry on Tuesday and Sunday. Dry weather as period ended very beneficial in limiting flood losses and remov-

ing excess soil moisture. Little field work done during week and mostly in northwest where rainfall has been light. About 10% of oats planted and 15% of spring plowing done. Both ahead of last year pace when things were exceedingly slow. Winter survival of seedings and grain generally favorable. Farm activity routine chores. Soil moisture 25% adequate and 75% surplus.

WYOMING: Light to very heavy snow fell midweek with strong winds which blocked most roads. Kaycee most moisture with 2.55 inches, and over 3 feet of snowfall. Temperatures: 3° to 9° below normal. High's mostly 45° to 55° west of Divide, mid 50's to low 70's east. Lows mostly 5° to 20° west of Divide, 15° to 25° east. Temperature range: 78° at Torrington and 2° at Moran. Major farm and ranch activities were calving, lambing and feeding of livestock. Not much seed bed preparation due to heavy snow storm. Northwestern corner was able to do some planting of spring crops.

Summary: Continued from p.2.

ature dropped to 19°. Mild to warm weather prevailed from the Mississippi Valley to the Atlantic Coast. The high of 70° at International Falls, Minn., was 22° above normal. Seventy-degree temperatures were reported as far north as northern New England.

By Thursday, the freezing temperatures extended through most of the Northern Plains region, with the mercury dipping into the teens in parts of Colorado. Warm air, however, had spread from Mexico into the Southern Plains. The temperature reached 101° at Laredo, Tex. and hot blowing dust reduced visibility from the Texas Panhandle across Oklahoma to eastern Kansas.

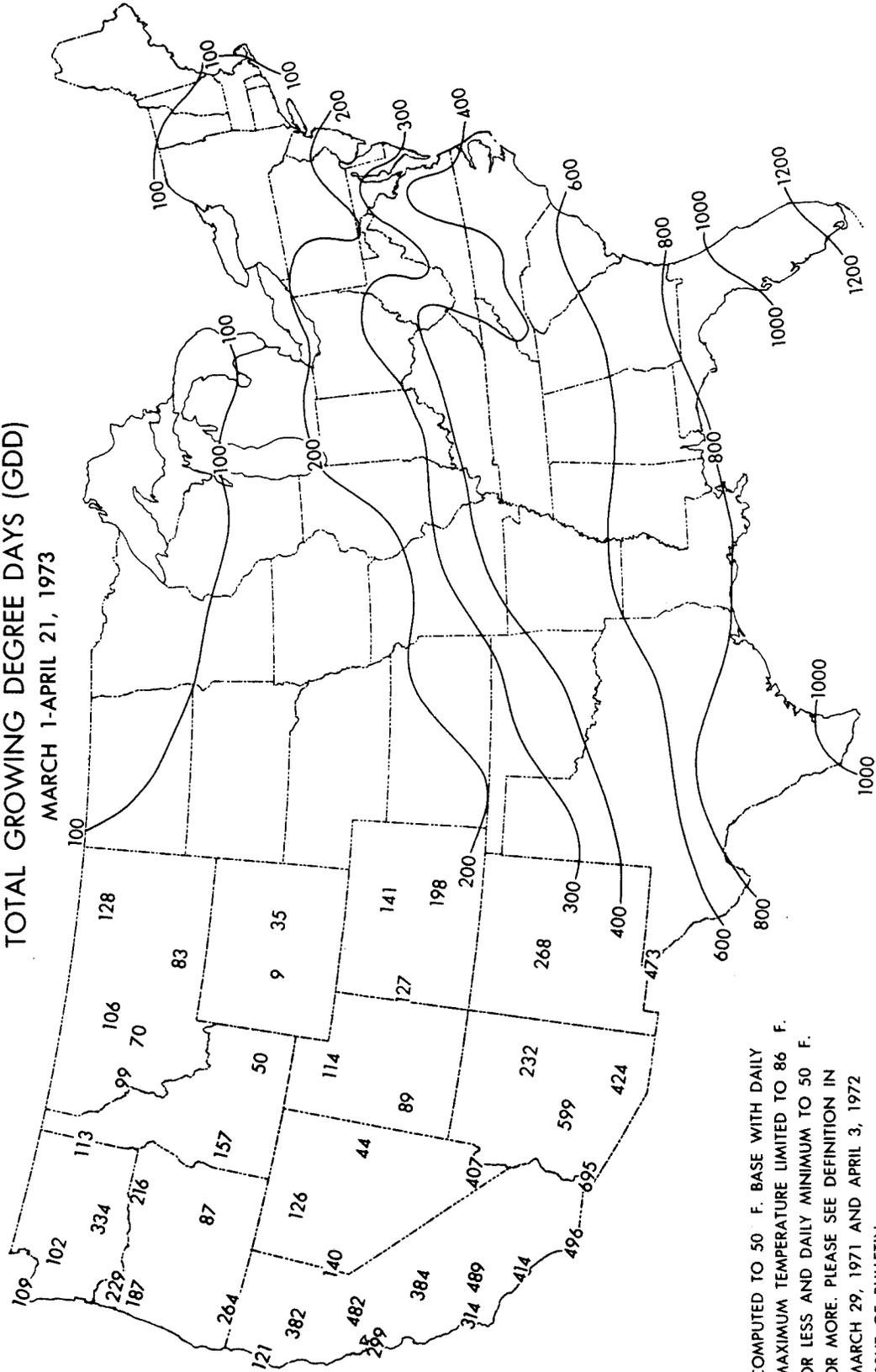
Friday and Saturday saw the continuation of the cold spell in the western portion of the Nation, and the extension of the heat wave in the East. On Saturday unseasonably warm readings of 80° were recorded at scattered locations in the eastern half of the country. The 87° reading at Rochester, N.Y., set a new record high for the day.

Easter Sunday was almost too hot for a spring bonnet in the East, while ear muffs were necessary in parts of the West. New record high readings were recorded on April 22 at Albany, N.Y. (86°); Boston, Mass. (84°); and Providence, R.I. (83°). Meanwhile temperatures dropped below freezing in much of the Northern Plains and Rocky Mountain area.

Standard copy for the Weekly Weather and Crop Bulletin is prepared by: Dr. Richard E. Felch, Agricultural Climatologist; Albert D. Frank, Agricultural Statistician; John C. Ryan, Editor.

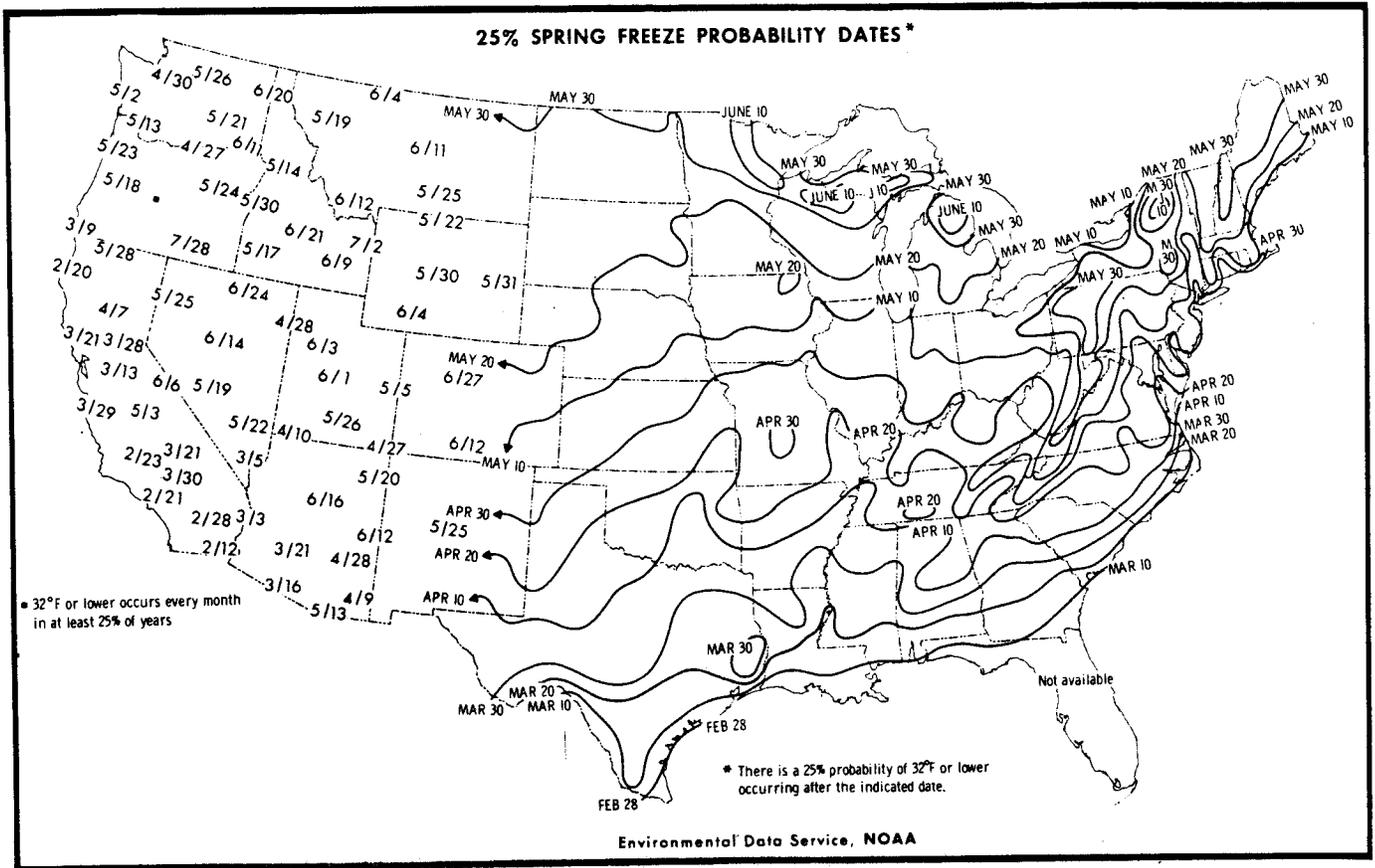
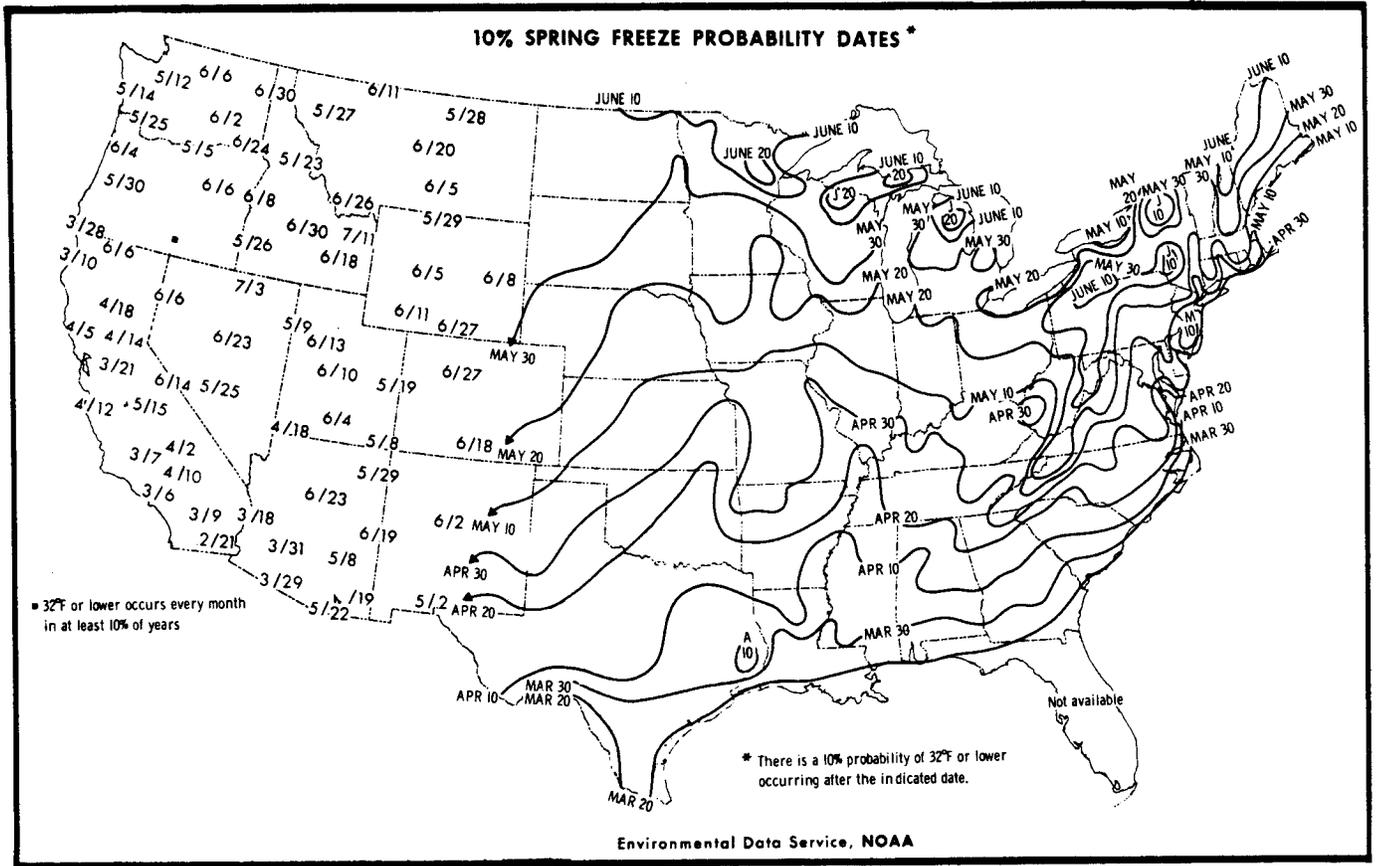
TOTAL GROWING DEGREE DAYS (GDD)

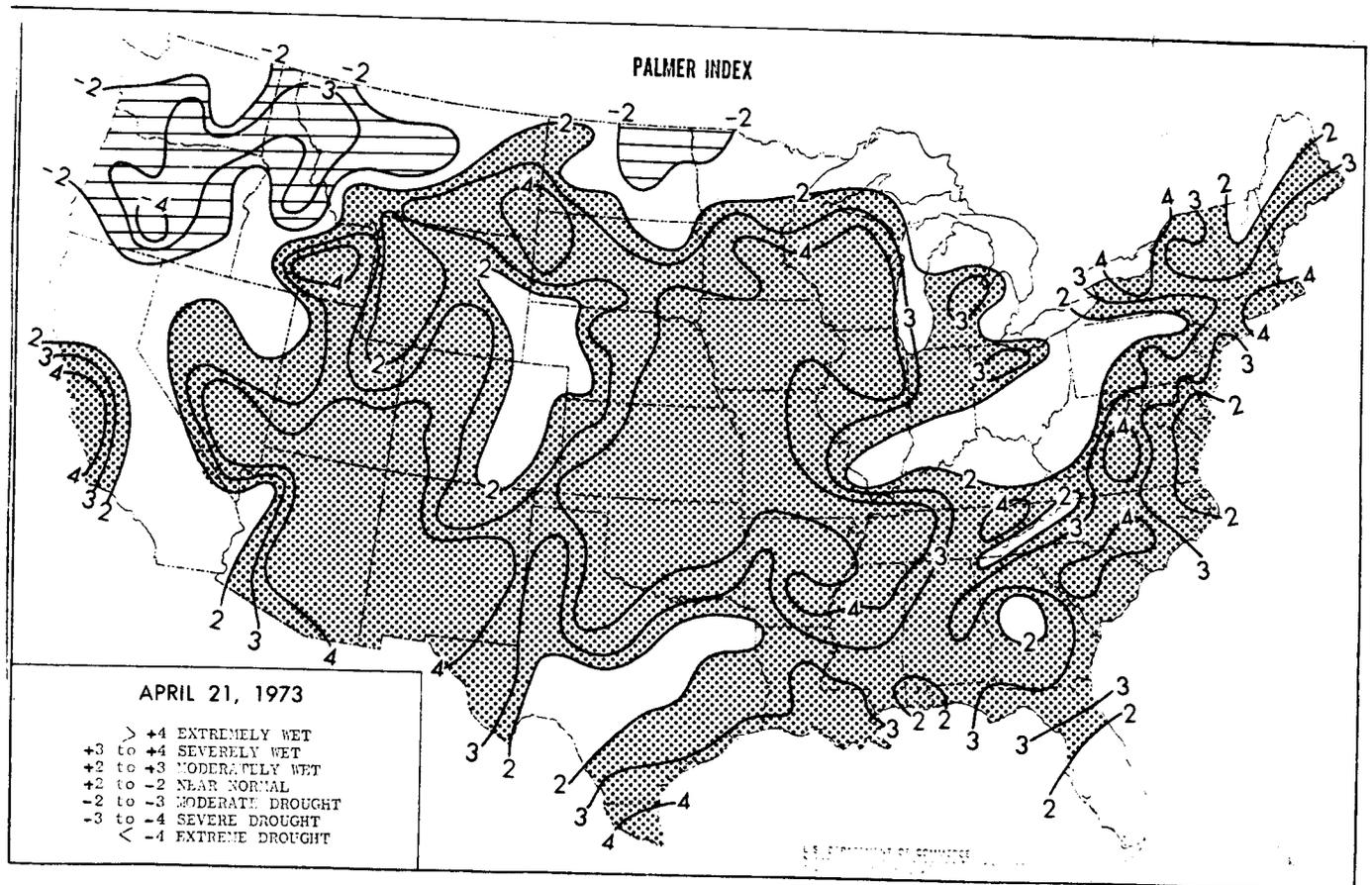
MARCH 1-APRIL 21, 1973



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 OR LESS AND DAILY MINIMUM TO 50 F.
 OR MORE. PLEASE SEE DEFINITION IN
 MARCH 29, 1971 AND APRIL 3, 1972
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Environmental Data Service, NOAA

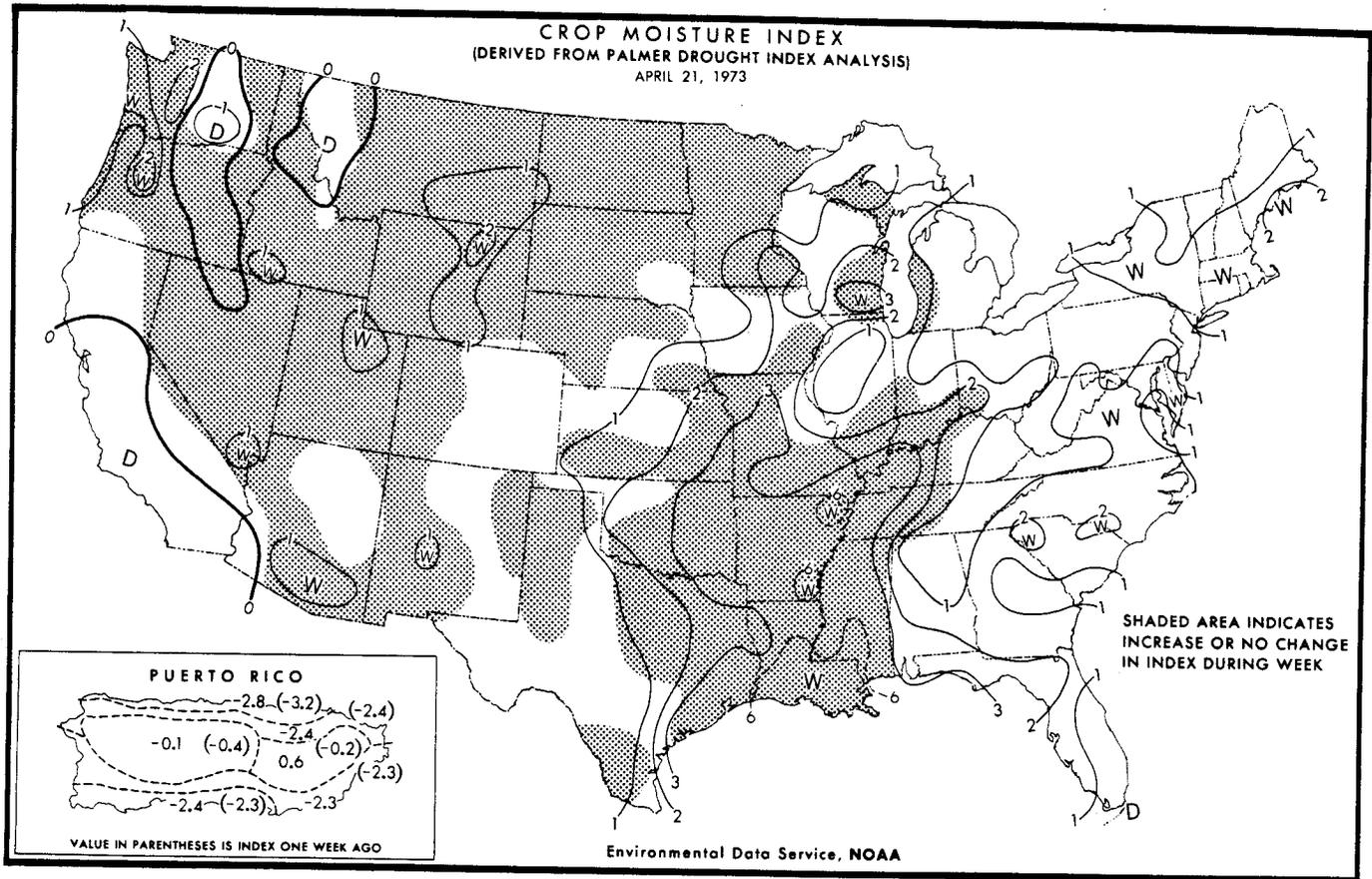




RAINS CONTINUE TO SOAK NATION'S MIDSECTION

The indexes in the above chart are a result of abnormal precipitation and temperature for the particular area. The positive areas are abnormally wet and the negative areas abnormally dry. This chart differs from the Crop Moisture Index, shown on the opposite page, in that it shows the results of long term abnormalities. When the weather is wet for a long period the index will increase as the soil fills with moisture and continues to increase as reservoirs and ponds fill and run off into rivers and lakes.

This week shows the drought in the northwest continuing but abated somewhat. Most of the rest of the Nation is abnormally wet. The unshaded areas are near normal. Pastures in the wetter areas are in poor condition due to excessive moisture in the root zone of grasses. Fieldwork has been halted by excessive moisture and some crops that were planted will have to be replanted. Record floods are occurring on many rivers and streams.



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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