

Weekly Weather Crop Bulletin

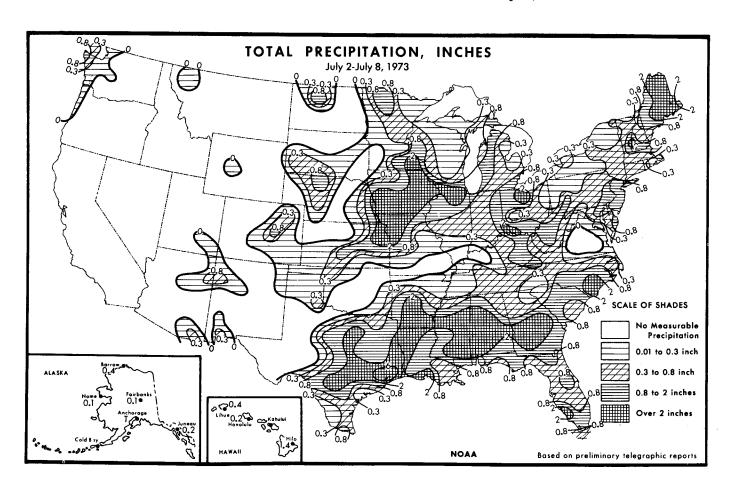
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NATIONAL WEATHER SUMMARY

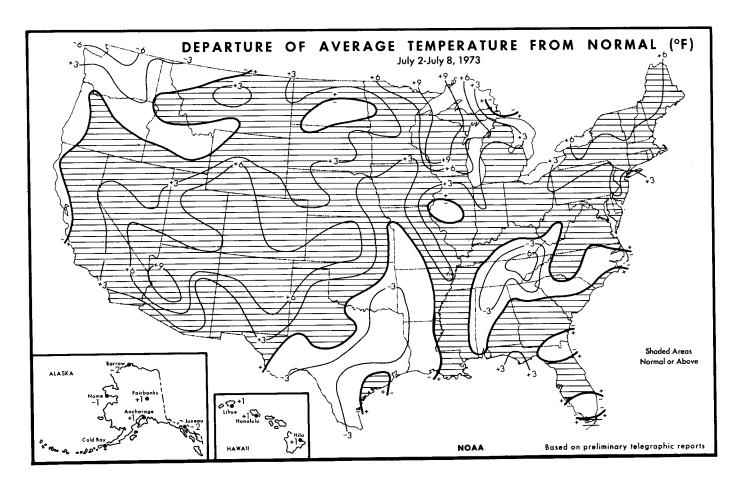
HIGHLIGHTS: Hurricane Alice, the season's first, was born off Bermuda Monday. Alice stayed a safe distance off our shores, finally breaking up over Newfoundland Friday. Parts of Texas, the South, and the Corn Belt received 2.00 in or more of rain, while the West stayed mostly dry. Large sections of the Nation averaged within 3° of normal, with only three scattered areas 3° subnormal for the week. Areas 3° above normal covered more ground. The largest was a long, irregularly shaped portion of the Midwest and West, stretching from the Great Lakes to the California deserts.

PRECIPITATION: The West remained mostly dry. The drought in the Northwest continued to intensify. (See p. 15.) The dry area stretched into Minnesota in the north and as far east as Indiana's southern tip. To the east, scattered areas received 2.00 in or more of rain. One east Texas area got 6.00

in, with an area stretching across Texas and the Deep South getting 2.00 in. An area embracing parts of five western Corn Belt States got 2.00 in, as did areas in Indiana, Maine, North Carolina, and Florida.

One Low drifted across Canada, from Saskatchewan across Hudson Bay and out over Davis Strait from Monday through Friday. As the cold front associated with the Low passed across the eastern two-thirds of the Nation, violent weather erupted. On Monday 16 tornadoes struck South Dakota, Minnesota, and Nebraska. Hailstones 1 in in diameter and winds up to 100 mph also struck Nebraska. Torrential rains deluged the eastern Kansas-Nebraska border area. Alexandria, Neb., had 3.00 in and Topeka, Kans., had 1.62 in fall in 20 minutes.

Also Monday, Tropical Storm Alice reached hurricane force,250 miles southwest of Bermuda. On Tuesday, her sustained winds were estimated at



Belt, bringing torrential rains to Iowa, with flash flooding occurring in many streams.

TEMPERATURES: Most of the Nation averaged close to normal last week, with areas warmer or cooler scattered across the land.

Warmer than normal areas covered a bit more ground. New England and New York were 3° to 6° above average, while a large area extending from the Great Lakes to the southwestern deserts averaged more than 3° above normal.

Cool air invaded the Nation's midsection Monday. A front, which extended from Lake Michigan through northern Kansas, had comfortable temperatures behind it. At midday, for example, Cook, Nebr., reported only 70°, while Russell, Nebr., 130 miles southeast and on the hot side of the front, reported 97°. Further southwest, temperatures were over 100°. Phoenix, Ariz., tied its record high, 115°.

Tuesday, Salt Lake City, Utah, tied its record, 101°, but farther west the central and north Coasts enjoyed afternoon highs in the 50's and 60's.

A traditionally warm 4th of July, with afternoon temperatures in the 80's and 90's was felt across the Nation; however, a surge of cold air held the mercury in the 50's and 60's in the Pacific Northwest.

Temperature records were broken Thursday at Salt Lake City, Utah, (104°); Pueblo, Colo., (103°) and Flagstaff, Ariz., (97°). Flagstaff, 7,000 ft above sea level, hit an all time high, breaking the previous record of 96°.

Friday and the weekend brought typical, hot summer weather to most of the Nation.

60 mph, with gusts up to 100 mph. But cool water temperatures tempered her activity. When she came ashore in Newfoundland and Nova Scotia on Friday, her force was greatly diminished.

Tuesday thunderstorms in the Nation's midsection dominated the weather. By afternoon 6.40 in of rain had fallen at Humboldt, Nebr., over 24 hours. Thunderstorms struck the Ohio and Lower Mississippi Valleys. Thunderstorms also hit Texas and the South: Fort Meyers, Fla., recorded 3.02 in afternoon rain, while Charlotte, N.C., had 1.42 in.

Independence Day was sunny throughout the Nation, except in thunderstorm areas, mainly in the Midwest and South, and in New England where clouds draped the sky. An early morning rain swamped Ottumwa, Iowa, with 2.00 of rain, and other heavy downpours produced sharp rises in many creeks throughout southwest Iowa.

Thursday was clear for most of the Nation also. A thunderstorm dumped 1.96 in of rain on Iola, Kans., and heavy rainfall struck Gulf areas, the Carolinas, and Maine. Goldsboro, N.C., received 1.98 in of rain in the late afternoon; Beaumont, Tex., received 3.30 in, and Caribou, Maine received 2.04 in.

On Thursday another Low formed in Saskatchewan and a front extended from the Low through the Dakotas into Wyoming; however, the front remained relatively stationary through Friday, because of a large High over the Ohio Valley and the Apppalachians. The High pressure system brought easterners a bright, but very hot, weekend. When the High finally moved out over the Atlantic, the trailing front was able to move across the western Corn

NATIONAL AGRICULTURAL SUMMARY

AGRICULTURAL HIGHLIGHTS: Winter wheat harvest rapid 44 percent of Georgia's cotton is setting bolls, in Kansas and going full swing in Nebraska. * well behind last year's 67 percent. So far, insect Warm, humid weather spurred row crops growth in * Soybean planting almost complete. * Pastures and livestock in Great Plains stressed by dry, hot weather.

SMALL GRAINS: Harvesting of winter wheat, rye, oats and barley is nearing completion in the South and is well underway in southern portions of the Corn The harvest moved rapidly ahead in Kansas, Belt. the Nation's leading wheat producing State, where 76 percent of the winter wheat acreage is harvested compared to 38 percent a week earlier and 84 percent a year earlier. Combining is in the wrap-up stage from central Kansas southward as the Oklahoma crop is virtually harvested and the Texas harvest is 93 percent complete. Continued hot, dry weather has pushed small grain maturity very rapidly from Colorado and Nebraska to North Dakota and Minnesota. Wheat is 2 percent harvested in Colorado and 20 percent harvested in Nebraska where combining is in full swing. About 30 percent of South Dakota's winter wheat and rye are ripening -- more than twice the normal acreage. Swathing has started in southern counties of North Dakota. Condition of small grains continues good to excellent in eastern Montana. In Washington and Oregon, small grains are ripening rapidly and harvesting is getting underway with some wheat cut in the Columbia Basin.

Seasonally warm, humid weather spurred corn growth and boosted its condition across The crop grew a the heart of the Corn Belt. foot taller last week with fields ranging from 28 inches high in Ohio to 38 inches high in Growth is about equal last year in Minnesota. Ohio and Indiana, but is behind normal in most North Central States except Minnesota. Corn condition is mostly good to excellent with more than the usual variation in height and development because of the extended planting season. Some corn is starting to tassel in Iowa. Most of the Corn Belt from Iowa and northern Missouri east got at least 0.80 inch of rain with about 2.00 inches falling over Iowa and portions of nearby States. Strong winds and heavy rains caused some localized damage to corn in Iowa. Soil moisture supplies from Iowa to Ohio are rated surplus to mostly adequate. Fields are drying out in Nebraska and Kansas and irrigation is increasing. More rain would be helpful in Minnesota and Wisconsin. The Southern corn crop is late but made good progress under hot, humid conditions and good rains. Conditions range from fair to excellent with most of the acreage rated good. About 5 percent of the Kentucky corn acreage is tasseling.

COTTON: Typical hot summer weather and scattered showers benefited cotton in the Deep South as the late crop made good growth and maintained fair to good condition. The first bale of cotton was harvested in southern Texas on July 3 after several weeks of harvesting delays from rains. Cotton in most southern States is squaring and starting to bloom much later than last year. About 58 percent of the Mississippi acreage is squaring compared to 80 percent last year. About

In the West, damage has been light in the South. hot weather accelerated cotton growth but caused some shedding of squares in Arizona where insect populations are increasing.

SOYBEANS: Soybean planting continues mostly in the eastern Corn Belt and the South. Soybeans are about 98 percent planted in the North Central States and around 95 percent planted in the South. Planting is virtually complete in Illinois; 95 percent complete in Indiana and about this stage in Ohio, Missouri, Mississippi, and Arkansas. Planting completion in the lagging Corn Belt States is running about 2 weeks later than last year. The crop grew rapidly under favorable weather and is in mostly good condition both in the North and South. Growth and development is generally less than last year and normal except in South Dakota and Minnesota where soybeans are ahead of normal at 13 inches high and 20 percent blooming. Only 5 percent of Iowa soybeans are blooming compared to nearly 20 percent a year ago. In the South, late soybean planting continues, especially on recently harvested small grain fields. Cyst nematode and seedling disease are causing some problems to soybeans in Arkansas.

OTHER CROPS: Having was in full swing on most of the Nation's farms except in flooded areas of New England where almost no hay was made. Sorghum planting was completed in north Texas last week while harvesting finally got underway in south Texas after several weeks delay from rain. Sorghum stands are becoming more even in Kansas. Tobacco in Kentucky and Tennessee is being hurt by diseases, insects and excessive

Fruits and Nuts: The peach harvest neared the halfway mark in North Carolina and is 70 percent complete in Georgia. Tart cherry picking is underway in Michigan while a good strawberry harvest continues in Wisconsin. Only a fair to light pecan set is reported in most major pecan producing counties of Texas. In California, fruit picking is increasing; prune, walnut and almond development is good. Thompson Seedless grape harvest is peaking in southern California.

<u>Vegetables</u>: <u>Lettuce</u> harvesting reached volume levels in Oswego County, N. Y. while sweet corn and tomato harvesting increased in New Jersey. Cabbage harvesting began on the Eastern Shore of Virginia. Cucumber picking started in Michigan. Vegetable crops are growing good in Wisconsin. light harvest of onions started on the Texas High Plains. In California, <u>lettuce</u> harvesting is peaking at Salinas while fresh market <u>tomatoes</u> continue in the southern San Joaquin Valley.

PASTURES AND LIVESTOCK: Hot, dry weather in the Great Plains pushed pastures to maturity and caused stress to livestock. Meanwhile, lower elevation ranges in many Western States reached a critically high fire danger level and stockwater grew short in the drought plagued Northwest. Most eastern pastures provided adequate feed.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., July 8, 1973

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States and Stations	Departure	Total	Departure	States and Stations	Average	Departure	Total	Departure	States and Stations	Average	Departure	Total	Departure
ALA.Birmingham. 75 Mobile. 85 Montgomery. 82 ALASKA Anchorage. 56 Barrow. 37 Fairbanks. 61 Juneau. 55 Kodiak. 55 Nome. 44 ARIZ.Flagstaff. 77 Phoenix. 99 Tucson. 99 Tucson. 99 Tucson. 99 Winslow 84 Yuma. 99 ARK.Fort Smith. 88 CALIF.Bakersfield 6 Eureka. 55 Fresno. 88 Los Angeles 77 Red Bluff 88 San Diego 68 San Francisco 68 Stockton 77 COLO.Denver 77 Grand Junction. 92 Buttle Rock 77 COLO.Denver 87 COLO.Denver 77 COLO.Denver 87 COLO.Denver 88 Los Angeles 77 Lattle Rock 88 CALIF.Bakersfield 88 San Diego 88 San Diego 88 San Diego 88 Los Angeles 77 Colo.Denver 87 Colo.Denver 88 Los Angeles 77 Lattle Rock 88 CALIF.Bakersfield 88 San Diego 88 San Diego 88 San Diego 88 San Diego 88 CONN.Bridgeport 77 Hartford 70 Lo. Washington 88 Ft. Myers 88 Lakeland 88 Miami 80 Crlando 88 Tallahassee 78 Augusta 88 Macon 88 ANAWAII.Hilo 87 Augusta 88 Macon 88 HAWAII.Hilo 77 HONOIULU 87 Lewiston 77 Colicago 77 Chicago 77 Ch	93228713228299004401666053390997441777004421424424442444444444444444444	2.0 1.6 2.7 7 4.4 1.2 2.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1	+ .92 +1.5331313123141414 + .114 + .114 + .114 + .114 + .114 + .114 + .114 + .114 + .114 + .114 + .114 + .114 + .114 + .114 + .114 + .114 + .114 + .1114 + .11111111 -	Las Vegas Reno	83 81 83 81 70 72 73 73 70 73 70 73 73 73 73 73 73 73 73 73 73 73 73 73	01236515 50213081158532213221013012114022214373224226654426402301110521111	.4 1.7 4.7 4.7 4.7 4.2 6.7 1.1 2.0 4.6 1.7 1.1 2.0 4.6 1.7 1.1 2.0 4.6 1.7 1.1 2.0 4.0 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1	4 46 0 + 3 .2 2 + .6 0 + 3 .2 2 + .7 2 .8 9 + .1 4 42 7 2 .8 9 + .1 .5 6 .2 2 + .1 .5 6 .2 2 + .1 .5 6 .2 24 4 .5 4 .4 1 .5 4 .5 4 .5 6 .5 6 .2 23 4 .5 6 .5 6 .5 6 .5 6 .5 6 .5 6 .5 6 .5	Houston Lubbock Midland San Angelo San Angelo San Angelo San Antonio Victoria Waco Wichita Falls UTAH,Blanding Salt Lake City VT.Burlington VA.Lynchburg Norfolk R'chmond Roanoke WASH.Colville Omak Quillayute Seattle-Tacoma Spokane Walla Walla Yakima Va.Beckley Charleston Huntington Parkersburg WIS.Green Bay La Crosse Madison Milwaukee WYO.Casper Cheyenne Lander	73 82 84 85 86 87 77 77 77 77 77 77 77 77 77 77 77 77	+ 00222001111331241244272311332220 44201031012305777011111643333230 4201031012305777011111643333230 + ++++++++++++++++++++++++++++++	1.1T10000001.268T62631TT3T6316631.77465 - 5.5T4.5.700T8.2.30TT2.TTTOTT0.10004.4.3.7T.7.17.TTT	8 7 2 1 3 1 2 3

CONDENSED STATE SUMMARIES

The Bulletin capsulizes nationally important weather and crop conditions. Every Monday SRS publishes more detailed data in State Weekly Weather and Crop Bulletins in cooperation with the National Weather Service, NOAA. Voluntary weather observers, crop reporters, and county extension agents contribute weekly observations for these reports.

ALABAMA: Continued hot and humid with the high of 98° Dothan. Scattered afternoon and evening thundershowers persisted throughout week, with several north and western areas reporting 2.00 to 3.00 in at midweek. Farmers busy side-dressing, cultivating and laying by crops. Cotton continued to make good progress with over 50% of acreage squaring. Insect damage remains light for cotton and corn. Corn remains good, southwestern counties need moisture. Soybean planting virtually completed statewide. Development of peanut crop generally satisfactory, and pegging freely. Leafspot control measures being applied. Weather permitted hay harvest statewide.

ALASKA: Showers continued in Tanana Valley but amounts less than last week. Seasonal amounts were near or above normal. Temperatures near normal. In Matanuska Valley and Kenai Peninsula, temperatures near normal with no rain. Kodiak continued with above normal precipitation for week and for season. Soil moisture supply generally adequate, but short on upper Kenai Peninsula. Haying in progress in Tanana and Matanuska Valleys between rain showers. Quality of hay appears good with quantity expected about same as last year. Growth all crops continues excellent with some barley reported 3 feet tall snf headed in Tanana Valley. Small grains mostly 12 inches high or shorter. Dry conditions on much of Kenai Peninsula resulted in fair hay harvest.

ARIZONA: Light rainfall began edging into southern sections early in week. North, central dry; very hot. Substantial amounts rain recorded mountains and southeast. Cotton crop continues good progress, extremely warm temperatures caused some shedding of squares, insect populations increase. Small grain harvest in finishing stage central, southwestern valley areas. Cochise County harvest well underway. Yields statewide satisfactory. Sorghum maturity crops varies. Early plantings reaching maturity, some fields still to be planted following small grain har-Safflower approaching maturity, good condition, yield prospects favorable. Alfalfa hay various stages: Yuma, Salt River Valley areas making fourth cuttings; most other areas in or near third cutting. Cantaloupe harvest continued, Yuma area tapering off. Yields, quality, sizes generally satisfactory. Harvest continued central areas. Watermelon harvest continued central, just underway west. Mixed vegetable harvest continued seasonally. Potato harvest active, peaked Salt River Valley. Grape harvest continued active central, west; yields, quality generally good. Harvest grapefruit, Valencias continued Salt River Valley. Market demand improved Valencias, domestic demand good grapefruit. Groves good. New crop good Yuma area, variable Salt River Valley. Ranges good. Higher elevation ranges received rainfall, providing good grazing. Lower elevation ranges continue dry, fair to good. Desert ranges extremely dry, grazing limited. Stockwater adequate. Cattle, calves good. Sheep, lambs on summer pastures fair to good.

ARKANSAS: Mean temperatures in upper 70's and low 80's. Departures most localities 2° below to 2° above normal. Temperatures in narrow range through week with some cooling on weekend. Highest 100° Calico Rock. northcentral on 2nd Highest 100° Calico Rock, northcentral on 3rd. Lowest 60° Calico Rock and Gilbert northcentral on 6th. Rainfall heaviest portions central and southcentral, Little Rock 4.21 in, Camden 3.09 in, and El Dorado 3.05 in. Few localities southeast, northeast, and westcentral had 1.00 to 2.00 in, but large areas northern half of State had very little rain. Most rainfall midweek and on weekend. Hot humid weather. Excellent crop growth. Scattered showers beneficial. Cotton squaring, few blooms in older fields, condition fair to good. Rice making good growth. Soybeans 95% seeded, condition good with early plantings shading ground. Cyst nematode and seedling disease some problem, buildup of webworms reported. Sorghum planting continued. Corn silking and tasseling. Small grain harvest complete. Swathin fescue seed. Hay being cut. Peach harvest near peak. Tomato, cucumber, and squash harvest underway. Pastures adequate.

CALIFORNIA: Dry, mostly above normal temperatures. Many areas averaged 1° to 3° above normal, except along Colorado River Valley where up to 6° above normal. Hottest temperatures Tuesday through Wednesday: 90's in San Francisco Bay area, about 100° Los Angeles area, over 105° Central Valley; 115° along Colorado River. Hot, dry weather accelerated field crop growth, irrigation heavy. Harvest small grains, alfalfa active. Planting corn, milo, dry beans after barley continues. Perlette, Cardinal and Baurty seedless grape harvest continues. Thompson Seedless harvest at peak south and expected to start Bakersfield midmonth. Picking freestone peaches, plums, nectarines and apricots active. Harvest of earliest cling peaches, bartlett pears and Gravenstein apples underway. Prune, walnut and almond development good. Avocado harvest light. Sunburn fruit Santa Barbara canyons dropping from trees. Lemon harvest tapering as season ending. Valencia orange and other area grapefruit harvests continue active. June drop of 1973-74 citrus continues, reported heavy most areas. Broccoli and cauliflower moderate Salinas, plentiful Santa Maria. Cantaloupes nearly finished Palo Verde, starting southern San Joaquin Valley. Carrots, light Salinas. Celery increasing supplies Salinas. Sweet corn, conclude Coachella Valley, active Los Angeles, nearing completion Bakersfield. Lettuce peaking Salinas. Onions early harvest nearly over Stockton. Potatoes declining Kern County; continuing Hemet, good quality; starting Stockton. Fresh market tomatoes almost finished Imperial; continues southern San Joaquin. Watermelons started Bakersfield. Low range areas fire danger critically high, fires burned scattered acreages. Range cattle on high elevation ranges or permanent irrigated pastures. Water supplies adequate nearly all districts. San Joaquin Valley sheep moved onto grain stubble, harvest completed. Livestock good.

COLORADO: Hot and mostly dry; showers on weekend. Temperatures about 5° above normal. Extremes: Hottest 109° , Holyoke; 31° Fraser. Precipitation

confined mostly to mountains and eastern plains. Fleming in Kansas River Basin received 1.19 in. Most field crops good to excellent. Hot temperatures promoting plant growth. Wheat harvest underway. Some shriveling small grains. Surface soil moisture short to very short east slope. Light insect infestation alfalfa and small grains. Winter wheat 94% turning color, 21% ripe, and 2% harvested. Winter barley 96% turning color, 25% ripe and 6% harvested. Corn final cultivation 59% complete. Sorghum 97% emerged. Sugar beets 89% thinned or blocked. Dry beans 98% emerged. Potatoes good to excellent. Alfalfa excellent, first cutting 87% complete, second cutting 5% complete. Ranges and pastures good. Livestock making good gains summer ranges.

FLORIDA: Typical summer conditions, warm, humid days with scattered afternoon and evening showers. Rain heaviest central peninsula where many locations received amounts of 1.00 to 4.00 in. Elsewhere, amounts ranged from 1.00 to 3.00 in. Temperatures slightly above normal. Moisture generally adequate for crop growth, but short north. Corn good. Soybeans practically all planted, growing well. Peanut cultivation delayed by showers. Small grain harvest complete. Tobacco harvest continued active. Pastures and livestock improved. Haying underway to utilize surplus grass. Calf marketing for current and future shipments increasing. Citrus trees and new crop fruit excellent. Valencia harvest continues high, grapefruit practically finished. Vegetable season closing rapidly. Watermelon, sweet corn shipments down sharply. Limited eggplant supplies.

GEORGIA: Temperatures near seasonal normals with little daily change. Rainfall: Less than 1.00 in north, near 1.00 in central and about 0.50 in south. Showers in afternoon and evening. Soil moisture mostly short southwest, extremely varied elsewhere. Peanuts fair to mostly good. Corn fair to mostly good, evidence of shallow root system in dry areas. Cotton fair to good, continues late with 44% setting bolls. Tobacco maturing faster than normal, 36% harvested. Soybeans fair to mostly good, planting continues. Haying extremely active, quality varied. Peaches 70% harvested. Vegetables fair to good. Volume of melon and cantaloupe movement increased. Pastures and cattle good.

HAWAII: Showers windward and higher elevation gave good moisture to crops and pastures. Leeward areas dry and irrigation necessary to maintain crop growth. Sugarcane and pineapple harvesting active. Cattle fair to good.

IDAHO: Temperatures: Between 3° subnormal to 3° above. Extremes: 101°, Grandview; 27° to 30° higher valleys. Precipitation generally subnormal with most measurable amounts in east. Salmon reported 0.18 in and Tetonia experiment station 0.30 in. Nonirrigated crops and ranges showing stress from lack of moisture. Small grains ripening early in north; hurting yields. All dryland areas need rain. Grasshopper populations increasing most areas. Fire danger, ranges becoming critical. Irrigation water adequate, irrigated crops making good progress. Winter wheat 50% turning, 10% fields beginning to ripen. Statewide, 60% spring wheat fields headed. Early fields turning, southwest. Barley 40% turning with some ripening. Potatoes made good growth, middles closed, 80% fields southwest, 30% southcentral 10% east. Sugar beet blocking and thinning virtually complete first crop alfalfa 80% cut.

ILLINOIS: Widely scattered precipitation early week, heaviest Tuesday northcentral. Warm, humid week. Temperatures 3° above normal. High's above 90° south, in 90's north late week. All corn fields 35 in tall, last year 49 in, average 49 in; advanced fields 60 in tall, last year 66 in; average 68 in. Condition 15%excellent; 63% good, 20%faur, 2% Soybean planting almost complete statewide, 90% complete extreme south. Planting virtually complete both last year and average end of June. Condition 11% excellent, 55% good, 31% fair, 3% poor. Whea about 80% harvested, 81% last year, average 86%. Oats about 75% turned yellow, 52% last year, average 74%. About 40% ripe, 20% last year, average 30%; combining starting with 5% harvested, 7% last year, average 9%. Condition 9% excellent, 55% good, 29% fair, 7% poor. Barley harvest 60% complete. thum 85% planted. Red clover hay 85% cut, 92% last year, average 93%. Second crop alfalfa hay 25% cut, 40% last year, average 38%. Condition good to excellent. Pastures good to excellent. Soil moisture 31% surplus, 63% adequate, 6% short. Average 5 days suitable fieldwork. Main activities cultivating, haying, combining wheat, some areas planting or replanting soybeans.

INDIANA: Hot, humid week. Rainfall averaged 0.70 in. Temperatures ranged from 51° to 96°, about 3° above normal. Evaporation and soil temperatures above normal. Fieldwork averaged 4 days. Topsoil and subsoil moisture mostly adequate to surplus. Soybeans 95% planted, 2 weeks behind 1972. Soybeans 9 in high, tying 1972. Corn 31 in high, same as 1972. Little corn silked. Wheat 65% ripe. Wheat 20% combined, same as 1972, 30% average. Oat harvest starting. Alfalfa hay 90% cut first time. Clover hay 70% cut. Pastures decline, fair to mostly good.

IOWA: Warm with moderate top heavy showers. Temperatures 3° to 5° above normal. Localized flooding from heavy rains over parts of Iowa July 3 to 4 and 8 to 9. Small grains approaching maturity, some early fields harvested. Weed control corn and soybeans mostly good. Some localized crop damage from strong winds and heavy rains. Four days suitable for fieldwork. Corn starting to tassel with some early fields 75% or more silked. Corn condition, 23% excellent, 65% good, 11% fair, and 1% poor. Over 5% soybean fields blooming, year ago nearly 20%. Soybean condition 14% excellent, 66% good, and 20% fair. Less than 5% oats harvested, crop growing conditions generally good. Winter wheat 10% harvested. Second cutting alfalfa hay 15% complete. First cutting clover hay 75% complete. Hay crops and pastures good to excellent. Topsoil moisture 27% surplus, 72% adequate, and 1% short.

KANSAS: Rain quite light. Temperatures over 100° daily, mostly west and central. Temperatures ranged 7° above normal southwest to 1° above normal northeast. Severe weather northeast on 2nd quite destructive. Wheat harvest moving rapidly with combining complete or active all areas by weekend. Wheat 76% harvested, 38% week earlier, 84% year ago, 83% average. Cutting south and central in wrap-up stage. Considerable stubble and summerfallow land worked. Row crops benefited from scattered rains. Sorghum stands evening up, greenbug infestations light. About 74% corn laid by, 80% year earlier, 73% average. Only 4% corn tasseled, 13% last year, 22% average. Row crops irrigated west, central. Some soybeans planted on recently harvested wheat land. Alfalfa second crop 61% cut, 64% average. Livestock good but bothered by extreme heat. Marketings light.

KENTUCKY: Parly cloudy, hot and humid with tempera- nearing completion southwest, started northwest. tures at or slightly above normal and scattered afternoon and evening thundershowers. Farmers averaged 4 days work. Soil moisture 50% adequate, 45% surplus, 5% short west. Soybean planting near end; average height 8 in, last year 12 in; condition 84%, 85% last year. Corn 5% tasseling, 15% last year. Tobacco late and affected by root rot, black shank, cutworms, bud worms, and excessive moisture; 55% under 12 in, 34% last year. About 89 over 24 in, 16% last year; condition 84%, 92% last year. Alfalfa second crop 50% cut, 61% last year. About 8% Pasture condition 101%, 91% last year.

Warm temperatures, scattered thunder-LOUISTANA: showers daily. Extremes 99°, Monroe; 68° New Iberia. Rain highly variable, ranging from less than 0.25 in to locally more than 3.00 in. Most frequent totals ranged 0.50 to 2.00 in. Greatest 24-hour Soil moisture mostly adequate north, generally short lower half. Fieldwork possible 5 days. Crop prospects fair to good but could use rain especially lower portion. Soybeans mostly in ground. Stands generally good, mostly good to fair. Few weed problems, rapid growth in areas with adequate soil moisture. Cotton good, making good growth; about 67% fruiting. Cultivation and layby continued. Rice good, making good growth; some disease and weed problems but not widespread. Some early varieties beginning to mature. Sugarcane good growing well, but many areas need rain. Many fields not as tall as 1972, but yield prospects good. Sorghum fair to good, planting continued where conditions suitable. Sweet potatoes good, growing well where moisture adequate. Peach, tomato, green pepper and okra harvest active. Most past peak and tapering off. Haying active, showers hampering progress many areas, yields good. Pastures providing average feed. Livestock good.

MARYLAND AND DELAWARE: Temperatures near normal. Daytime highs slightly subnormal with lows above normal. Extremes: Highs in low 90's and lows upper 50's except low 80's and upper 40's Garrett County. Precipitation heavy northcentral and northeast Maryland ranging from 1.75 to 3.00 in. Middle River had over 5.00 in. Precipitation extremely light extreme west, under 0.50 in. Other sections about normal precipitation. Fieldwork progress favorable. Some local damage from storm in northeast Maryland. Hay harvest and cultivation of row crops most frequent activity. Barley harvest slowed, 78% done, normal 83%. Wheat harvest 42% done, last year 16%, average 33%. Soybean planting 95% done, near normal but 2 weeks ahead of last year. Tobacco 97% set. Early peach and apple harvest underway.

MICHIGAN: Generally cool temperatures until warm and humid over weekend. Thunderstorms accompanying cold front resulted in rainfall around 1.50 in east upper and southwest lower, elsewhere, 0.10 in west upper and 0.25 to 1.00 in east lower. Temperatures ranged 3° to 5° above normal most areas. Rapid growth corn and soybeans on better drained soils, but considerable damage from water standing in low areas. Soil moisture varies from adequate to excessive. Averaged 4.6 days suitable for Winter wheat and early planted oats fieldwork. developing fast. About 80% wheat turned yellow, 4% Some early oats turning yellow. Navy beans hurt by standing water, some replanted. Average height of corn 22 in. Rains damaged cut hay and slowed harvest. About 63% first cutting hay made. Pasture feed supplies above average. Tart cherry picking underway southwest. Sweet cherry harvest

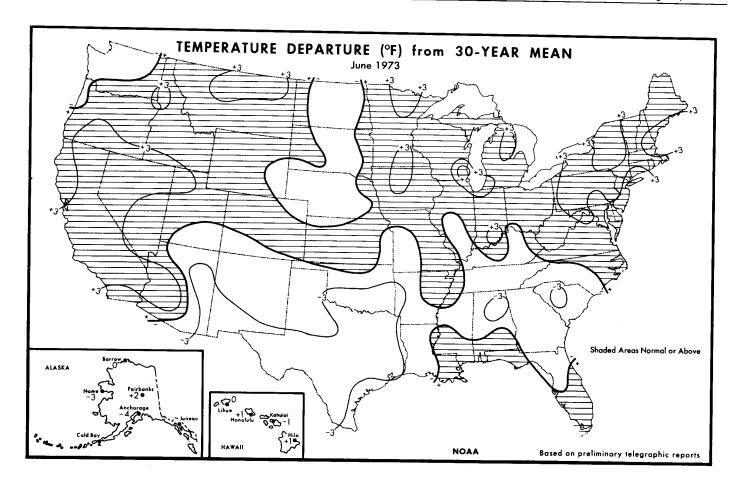
Cucumber harvest started southwest.

MINNESOTA: Warm, humid week in 90's. Temperatures 4° to 8° above normal. Precipitation central and south of 0.25 to 0.50 in above normal early week. North 0.75 in subnormal moisture; near normal elsewhere. Warm, dry, sunny: Crops advanced rapidly. Small grains over 80% headed and over 25% acreage approaching maturity. Development about 1 week to 10 days ahead of average. Rye all ripe, winter wheat about 93% mature. Corn 38 in tall, 5-year average 30 in. Soybeans 13 in tall, average 11 in. Soybeans 20% blooming, 5-year average 13%. Nearly 60% flax crop blooming, 5-year average 40%; 25% crop setting bolls. Soil moisture mostly short western one-third adequate elsewhere.

MISSISSIPPI: Hot, dry first half but showers gave totals ranged 0.50 to 2.00 in. Greatest 24 hour mississiff. Hot, dry first half but showers gave total 2.59 in Crowley. Farmers busy between showers some relief later. Temperatures 1° to 3° above season-planting soybeans, sorghums, cultivating other crops. al normals. Extremes: 99° to 59°. Scattered show-Soil moisture mostly adequate north, generally short ers some section daily, by Friday all sections had received rain. Precipitation averaged around 0.50 in north to nearly 2.00 in lower Delta and 2.50 in southcentral. Scattered weekend thundershowers with temperatures were a few degrees cooler but near seasonal normals. Another good week with 5.2 days suitable for fieldwork. Soil moisture mostly short to adequate, additional moisture needed. Cotton 58% squaring, 80% last year; 12% blooming, 43% last year. Soybean acreage 96% planted, complete last year; 85% up to a stand. Corn acreage 42% tasseled, 26% silked. Sorghums 94% planted 86% up to a stand. Sweet potatoes 92% planted. Condition of cotton, soybeans, corn, sorghums, sweet potatoes, peaches and pecans fair to good. Hay crops, rice, pastures, and livestock good.

> MISSOURI: Rainfall general north with weekly amounts averaging between 1.00 and 2.00 in. Scattered showers in Ozarks but significant rainfall spotty. Locally heavy amounts in excess of 3.00 in northwest and southwest. South of Springfield, 15 to 18 in recorded on "Bootheel" with Monday. Only isolated showers in the little or no rainfall, conditions becoming dry. Temperatures near or a little above normal with warmest days early in week. Five days suitable for fieldwork. Soybeans 94% planted, in fair to good condition, complete last year and in fair condition. Grain sorghum 94% planted, finished a year ago. 68% harvested, 90% in 1972. Cotton 29% squaring, in fair condition; 76% squaring last year, in fair condition. Second crop alfalfa 45% cut, 60% in 1972. Clover-timothy hay 69% harvested, 79% a year ago. Soil moisture supply 22% short, 70% adequate, 8% surplus. Motor fuel supply available for current farm work remains adequate.

MONTANA: Unseasonably warm and dry. No rain past week. Temperatures near or subnormal west and 4° above normal northcentral. Near normal temperatures first and latter portions of week, hot midweek, 100° readings southeast. Topsoil moisture mostly short except eastern third. Small grain condition poor to good northcentral, central and southwest, good to excellent eastern third, fair to good elsewhere. Winter wheat 20% turning, 70% headed, 10% in boot. Spring wheat and barley 45% headed, 35% in boot. Sugar beets fair to good, acreage virtually thinned. First crop alfalfa 50% cut, wild hay 25% complete. Alfalfa weevil damage mostly light, heavier portions southeast. Cattle and sheep mostly good, fair to good northwest and northcentral. Movement of livestock from summer ranges due to grass shortage substantial northwest and northcentral, light elsewhere. (Continued on page 11)



TEMPERATURE: Except for an area over the Dakotas and Nebraska, the northern two-thirds of the Nation was above normal. From Arizona westward, temperatures were below normal in the South except for southern portions of Mississippi, Alabama, and Florida. Most of Texas averaged 3° to 5° below normal.

Temperatures during the month were highly variable. The month began on the cool side, but quickly turned warm as a large high over the southeast brought unseasonally warm temperatures to much of the Nation. Only Texas and adjoining States remained below normal.

At midmonth temperatures continued above normal east of a line from Louisana to Montana, while temperatures were below normal over the western states.

A slow moving cold front during the week ending June 24 brought cooler temperatures to much of the Nation except for the western states and much of New England. As the month ended this cold air mass continued to keep the eastern half of the Nation cool, but temperatures were above normal from the Rockies westward.

PRECIPITATION: The distribution of precipitation during June was highly variable. West of a line from El Paso, Tex., to Sagenaw, Mich., precipitation was below normal except for a portion of northern Wisconsin, northern Montana, the coasts of Oregon and Washington and much of New Mexico, eastern Arizona, western Colorado, southern Utah,

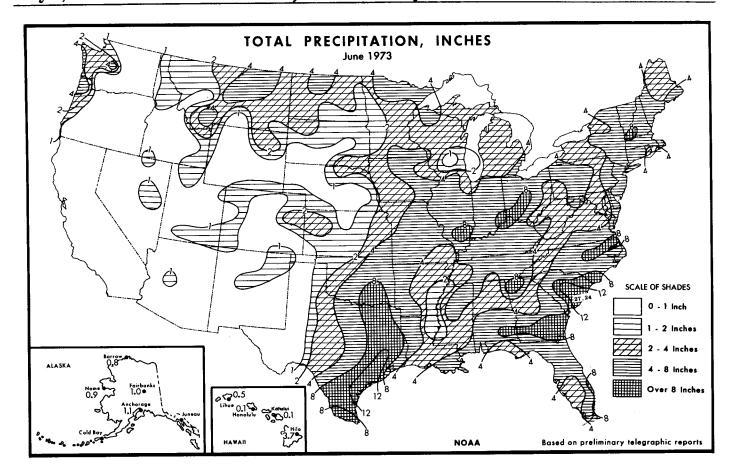
and eastern Nevada. Albuquerque, N.M., received 1.37 in rain, which 233 percent of normal. To the east, precipitation was above normal except along the Lower Mississippi River Valley and much of Mississippi and Alabama. Much of Florida also received below normal precipitation. The northern Appalachians and adjoining areas were also below normal.

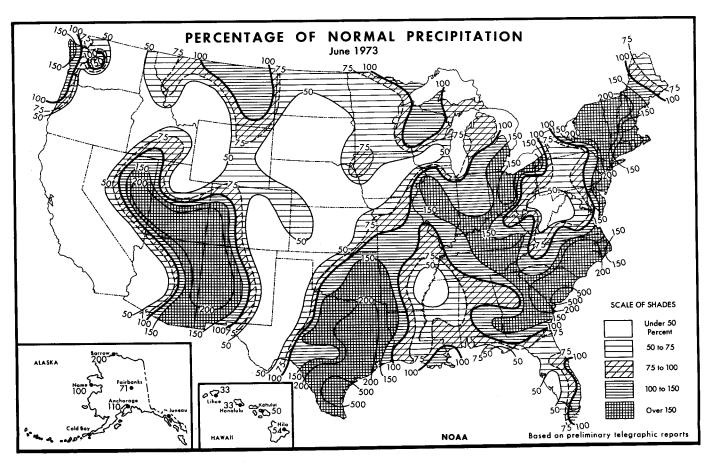
The month started clear and dry. During the just full week the western third of the Nation received virtually no precipitation. Thunderstorm activity brought 2.00 to 4.00 in of rain to parts of the Corn Belt, the Deep South, and eastern Texas. Much of this activity was associated with a slow moving cold front which took almost a week to move across the eastern half of the Nation.

Rainfall was more general at midmonth with excessive amounts in Texas, Georgia and South Carolina. Charleston, S.C., received 11.30 in of rain during the week ending the 17th, while Houston, Texas, received 9.95 in.

Heavy rains continued in many areas during the next week, associated mainly with thunderstorm activity. Virtually no rain fell in the west while south Texas and the Carolina's received 4.00 in or more. On Monday, June 18, Quincy, Illinois received 5.26 in of rain.

The month ended with dry conditions in the west and heavy rains in many portions of the eastern half of the Nation. The Mississippi River was bank-bound along its entire length for the first time since early March.





Temperature and Precipitation Data for June 1973

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(Continued from page 7) NEBRASKA: Highs well above 100° west and central. Scattered thunderstorms produced locally heavy rainfall of 1.00 to 5.00 in central, eastcentral and southeast, under 0.50 in elsewhere. Hot weather speeded development wheat crop. Practically entire crop turned; 55% ripe, 58% both 1972 and average. Harvesting 20% complete, 30% year earlier, 36% average. Wheat condition and yield mostly good. to excellent. Harvesting fullswing southeast and southcentral. Corn, sorghum, soybeans improved, mostly good to excellent. Some corn damaged from corn rootworms. Greenbugs damaging some sorghum fields. Second crop alfalfa hay 33% cut. Alfalfa and wild hay mostly good to excellent. Irrigated sugar beets excellent, weeding nearing completion. Topsoil moisture mostly short to adequate, subsoil mostly adequate. Main farm work cultivating and hilling row crops, irrigating, fertilizing, preparing for and harvesting wheat, spraying and mowing weeds, and haying. Ranges and pastures mostly average to below. Livestock suffered high temperatures and flies.

NEVADA: Temperatures well above normal extreme south. No precipitation. Humidity ranged to as low as 1% central and east. Temperature extremes 116°, Las Vegas; 30°, Mountain City. First cutting alfalfa 75% comdlete northwest, nearing 25% northeast. Control measures underway. Third cutting alfalfa almost complete southern valleys. Small grains good, harvest underway south. Winter grains soon ready for harvest remainder State. Livestock good. Cattle deaths about normal but coyotes inflicted high kills some sheep flocks.

NEW ENGLAND: Week warm, muggy beginning, cooling, then heat wave end. Near 90° Saturday, in 90's Sunday. Showers, thunderstorms general Wednesday, Thursday. Flash flooding central Vermont, New Hampshire, and flooding of rivers and stream valleys west Massachusetts and west Connecticut. Many acres crops destroyed along rivers, streams in flooded areas. Fences, roads washed out. Little haying done till sunny weather over weekend. Many strawberries rotted. Sweet corn harvest began south. Almost no hay made, much rotting. Washouts, erosion, standing water in north Aroostook Co., Me., potato fields.

NEW JERSEY: Warm week. Temperatures 2° to 4° above normal. Range from upper 50's to mid-90's. Precipitation varied from 0.25 to 1.50 in from scattered thundershowers. Hot weather past several days dried up most excess surface moisture. Sweet corn and tomato harvest increasing. Dry onion and pepper harvest started. Few potatoes dug south. Summer cooking apples available. Peach harvest increasing. Blueberry supply good, quality improved. Hay making and grain combing very active. Soybean planting continues. Some field corn did not get planted because of too much rain earlier.

NEW MEXICO: Shower activity became a little more general with all sections except southeastern plains and extreme northwest receiving at least a little rain. Greatest total 1.35 in, Raton. Southern desert sections had 0.40 to 0.50 early week and western mountains near 0.33 in late in week. Continued very warm temperatures with most divisions averaging 3° to 6° above normal. All 7 days above 100° Alamogordo and 6 of the 7 were 100° or higher Socorro, Deming, and Tucumcari. Soil moisture short; hot, dry weather prevailed. Crops growing well. Cotton rapid growth, squaring south.

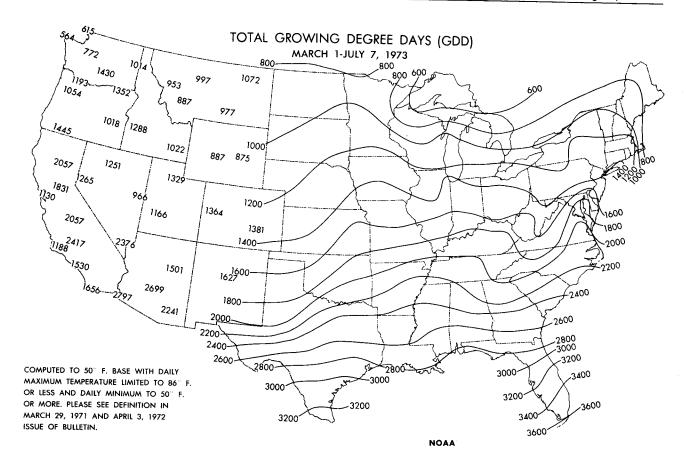
Wheat and barley harvest active, past 75% done. Alfalfa second cut near complete, third starting. Apple crop good. Livestock good. Some screwworm in cattle. Range moisture condition declining; grasshoppers problem southeast.

NEW YORK: Unseasonably warm. Temperatures southeast coastal sections 2° to 3° above normal while readings elsewhere ranged from 4° to 8° above normal. High: 97°, Albany. Many overnight lows in 50's. Precipitation somewhat above normal again over coastal southeast but elsewhere generally averaged up 0.75 in subnormal. Good week for field activity and crop development. Some crop damage reported from heavy rains June 28-July 5 eastern edge. Soil moisture mostly adequate to surplus. Corn planting virtually complete, warm weather promoting good growth. First cutting hay continues with about 65% alfalfa and 55% clover-timothy harvested. Grass silage over 70% complete. Second cutting alfalfa begun in a few areas. Dry bean planting complete, crop good. In Orange County 7.00 in rain fell June 28-July 5, some onions flooded, some loss of acreage expected near major streams. Good celery growth with no significant rain damage. Ulster County sweet corn excellent. Lettuce harvest reached volume levels Oswego County. Tree fruit Sweet cherry harvest continues. vineyards making good progress.

NORTH CAROLINA: Near normal temperatures. Precipitation subnormal in Piedmont and mountain areas but above normal coastal areas. Soil moisture generally adequate, surplus some localized areas. About 3.7 days suitable for fieldwork. Flue-cured tobacco harvest 3% complete and gaining momentum. Corn improved, 28% excellent, 66% good, 6% fair. Most soybean acreage seeded, growing crop good shape. Small grain harvest nears completion, wheat and rye about 80% complete, oats and barley 90%. Cotton, peanuts and sweet potatoes good shape. Apples fair to good. Irish potatoes 64% dug. Peach harvest nears half-way mark.

NORTH DAKOTA: Temperatures near normal. Cooler early week with few highs late week. Scattered thundershowers produced precipitation from 0.01 to 0.04 in subnormal north, 0.01 to 0.05 in subnormal south. Continued hot, dry weather has pushed small grain maturity very rapidly. Swathing has started in southern counties, some being cut for hay in driest areas. Moisture conditions more favorable in west and north. All crops need rain. First cutting alfalfa hay winding up.

OHIO: Showers thunderstorms, Funnel clouds severe weather warnings issued for many sections early and midweek. Fair, dry weather late week with increasing heat and humidity weekend. Extremes: 93°, Chesapeake 56°, Youngstown. Rain totals from 2.72 in Cincinnati to 0.10 inch Youngstown. Midweek rains spoiled otherwise good week for farmers. Over 4 days suitable for fieldwork. Hot weather, when not raining, helped row crops grow. During June 17 days favorable for fieldwork, 19 days in 1972, 25 days in 1971. Soil moisture 52% surplus, 47% adequate, 1% short. Corn fair, 28 inches high, same as 1972, normal 34 inches. Soybean planting continues some areas, will be mostly complete this comming week. Soybeans average 10 in tall, normal 11 in . Alfalfa 80% cut. All wheat turned, 50% ripe, 10% harvested, normal 20%. Oats 10% ripe, normal 20%. Harvest just starting some areas. Barley 30% harvested.



OKLAHOMA: Temperatures from 1° subnormal southeast and eastcentral to 5° above normal panhandle. Precipitation light except up to 1.50 in eastern third. Weekend hot with scattered rains up to 1.00 in. Wheat harvest virtually complete except western panhandle and isolated northeast areas. Nearly half stubble worked but soils drying rapidly. Late fields rye and oats combined. Rains needed west to complete sorghum planting. Cotton 95% up to stand with squaring started southwest. Few peanuts blooming but later than normal. Most soybeans planted with 75% acreage up to stand. Haying progressed well under favorable conditions. Half topsoils dry and ranges and pastures drying particularly shallow soils. Cattle making very good gains.

OREGON: Temperatures near normal early week, warming during midweek brought highs into 80's, 90's all locations except coast. Early week, lows at some eastern stations dropped into low 30's with scattered reports of frost. Rainfall almost nonexistent. Scattered showers resulted in a few hundredths on north coast end week. Harvest activities increasing. Barley harvest well underway Columbia Basin, starting Willamette Valley. Some wheat cut Columbia Basin. Grains ripening rapidly. First, second cutting hay being made. Grass swathing continues. Some combining being done. Seed cleaners starting operation. Strawberry harvest completed. Raspberries past peak, other caneberries starting. Sweet cherry harvest complete north Willamette Valley, starting Union County, nearing completion other areas. Green pea harvest continues late areas, yields still subnormal. Fruit thinning continues, third cover spray applied. Filbert crop looks good. Walnuts poor good size. Nonirrigated pastures gone. Low ranges gone. Stockwater supplies short. High ranges fair. Cattle good; sale, contract activity slow.

PENNSYLVANIA: Warm, humid early week, drier and somewhat cooler midweek becoming hot weekend. Daytime highs upper 70's to mid-90's, overnight lows mostly upper 50's to low 70's except 40's to low 50's northern areas Friday. Temperatures 1° to 4° above normal, extremes 94°, 39°. Precipitation first half of week as showers and thunderstorms, dry latter half. Weekly totals under 0.25 in central and extreme west, 1.00 to 2.00 in southeast, 0.25 to 1.00 in elsewhere. Fieldwork resumed at rapid pace. Crops making good growth on well drained soils. Barley combining gaining momentum. Winter wheat nearing maturity. Hay quality mostly good. Tart cherry harvest underway. Limited snapbeans harvested, green peas winding up. Sweet corn tasseling.

PUERTO RICO: Very dry and hot islandwide. Rainfall averaged 0.06 in or 1.12 in subnormal. Greatest weekly total 0.47 in north coast. Temperatures averaged 82° on coasts and 76° interior. Extremes: 94°, 57°. Dry weather retarded ratoon development some sections. Dry and hot weather hurt coffee beans interior sections. Soil preparation tobacco plantations carried out some areas. Dry weather hurt pasture zones. Soil preparation discontinued many areas. Lack of rain retarded minor crops' development most zones.

SOUTH CAROLINA: Temperatures near normal with normal summer shower activity. Rainfall below normal. Weather conditions improved. Tobacco fair to good condition, 61% topped; 12% harvested,

18% last year. Cotton fair, blooming and squaring started. Corn good to excellent. Soybeans 88% planted, 93% last year; stands good, still grassy. Sorghum 83% planted, 90% last year. Small grains fair. Wheat 76% harvested, 94% last year. Oats 83% harvested, 97% last year. Rye 86% harvested. Barley 87% harvested, 99% last year. Pastures good. Sweet potatoes 93% transplanted, 100% last year. Peaches good, 25% harvested, same last year. Grapes fair to good. Watermelons fair, many fields drowned out.

SOUTH DAKOTA: Temperatures 3° to 6° above normal. Near record highs end of week, 110° or higher southwest, lows from 40's to low 60's. Drought conditions continue as some areas have not received moisture for more than 3 weeks. Weekend showers gave some relief but precipitation still 2.00 to 4.00 in below seasonal normal. Crop conditions rapidly deteriorating north-central and northeast. Over 95% winter wheat and rye turning color; about 30% ripening, more than twice normal. Spring grains virtually all headed. Some oats and barley beginning to ripen, ahead of normal and last year. Second cultivation of corn 85% complete, normal 76%, last year 60%. Soybeans 30% in bloom, normal 18%. Over 80% flax in bloom or past bloom stage, normal 68%, last year 42%. Second crop alfalfa 10% cut with light yields. Wild hay 33% harvested. Pastures curing prematurely in dry areas. Livestock in good shape but bothered by pinkeye and flies. Stockwater drying up some areas west and north.

TENNESSEE: Scattered showers throughout week. High temperatures ranged from mid-80's to low 90 s while lows ranged from near 60° in extreme east to mid-70's extreme west. Temperatures 5° subnormal east to near normal west. Most of State received showers of variable amounts. State wettest area with amount near 4.00 in. About 90% wheat, barley and 80% oats harvested, comparable with most years. Corn late but making rapid growth, 10% silked, normal 33%. Cotton 50% squared, 67% normal. Very few plants have set bolls, weevil population about same as last year. Only 5% soybeans started blooming. Some scattered planting still being done, poor stands common, particularly west where rain needed. Tobacco generally poor. Number of fields yellowing and diseases, particularly root rot, prevalent. Blooms generally smaller than usual.

TEXAS: Hot across western half early week. During last half, thunderstorm activity increased in intensity and spread. Temperatures in excess of 100° prevailed from near Mineral Wells westward to El Paso and northwestward to Panhandle on Monday, and Wednesday through Saturday. El Paso had 8 straight days of 100° plus readings before reaching only 99° on Wednesday. Thunderstorm activity across south early week, increased and spread northward during last half, 2.00 to 4.00 in rain fell in Beaumont-Port Arthur-Orange, Houston, and Dallas-Fort Worth, and from Del Rio to San Antonio. Some flash flooding reported. Marble size hail fell at Kountze, while 1/2 in hail fell at Fort Worth. Wheat, oat harvest excellent progress and nearing completion. First bale of cotton harvested July 3, wet weather delayed harvest several weeks. Harvest sorghum underway, several weeks of rains delaying progress. Sprouting of sorghum in head noticed. Corn, peanuts, and soybeans making good progress. Major crops percent planted: sorghum 100, last year 100; soybeans 94, last year 100; peanuts 95, last year

Major crops percent harvested: wheat 93, last year 97, oats 98, last year 100; barley 99, last year 100. <u>High Plains</u>: Light harvest of onions and potatoes started. <u>Trans-Pecos</u>: Cantaloupe harvest should start next week. Haskell: Potato harvest complete, watermelon harvest should begin next week. North Texas: Cantaloupe and watermelons need rain. Central and East Texas: Tomato harvest continues active. Watermelons continue to show good growth but will be later than normal. Sweet potatoes late but making excellent growth. Winter Garden-San Antonio area: Watermelon, cantaloupe harvest continues.

<u>Laredo</u>: Harvest of watermelons continues. <u>Lower</u> Rio Grande Valley: Cantaloupe harvest ending. Honeydew melon and watermelon harvest was slowed due to rain. Most citrus trees have set a good crop for the 1973-74 season, in excellent condition having benefited from recent rains. Peach harvest continues active. Only a fair to light pecan set reported in most large pecan producing counties.

UTAH: A few scattered thundershowers weekend, mainly south half. Moisture locally moderate in a few localities. Largest amounts about 0.33 in. Soil temperatures at 4-inch depth ranged from upper 70's in Cache Valley to low 80's Salt Lake City and Richfield and mid-90's St. George. Effects freezing temperatures many farming areas around June 18 now manifest for corn, small grains, sugar beets, vegetable crops nipped by light frosts. Damage light in most areas and good recovery being made, but yield will be cut on some crops, particularly corn, in some areas. Less than 10% winter wheat acreage ripe, combining will get underway this week most early areas. Production prospects only fair for winter wheat; good for corn, potatoes, sugar beets. About 15% sweet cherries now picked, production prospects fair to good. Soil moisture short most areas. Feed on ranges now in use good. Cattle and sheep thriving.

VIRGINIA: Warm, humid with widely scattered showers and thunderstorms. Temperatures near normal ranging from 3° below normal to 3° above Highs mostly in 90's. Lows ranged from 45° to 70°. Extremes 95° and 45°. Precipitation a averaged 0.60 in, heaviest near 3.00 in north. Crops grew rapidly where soil moisture sufficient. Upper Tidewater driest, southeast wettest. Topsoil moisture 65% adequate, 27% short, 8% surplus. About 4.8 days suitable for fieldwork. Small grain harvest well advanced for this date: Barley 85%, wheat 65% oats 75%. Much of acreage remaining to be combined is west of mountains and in north. Planted soybeans in harvested small grain fields in Tidewater and Piedmont. Corn improved except in drier areas, 50% silked in Tidewater and 10% in Piedmont. Silking more advanced than 1972. Flue-cured tobacco growth rapid, topped and suckered. Applied insecticides, fungicides, hebicides and landplaster to peanuts. Plants grew rapidly and bloomed profusely. Haying major activity. Clipped pastures, high grass becoming dry and unpalatable. Cabbage harvested started in Carroll County and Eastern Shore. Irish potato digging near peak.

WASHINGTON: West: Temperatures 1° to 7° subnormal. Sileage, sweet corn growth poor, damp cool weather. Weed problem most corn fields. Harvest vegetable crops continued. Potatoes blooming, early areas. Strawberry harvest nearly complete. Raspberry harvest underway, fruit rot fungus causing losses. Damp weather hampering haying, hay over-ripe. Pastures good. Christmas tree shearing continued. East: Temperatures 4° subnormal, dry condition. Apricot harvest underway. Cherry harvest full swing.late areas. Early fresh market produce harvested. Wheat harvested early areas. Haying continued, yields discouraging. Dry pea harvest underway. Early potatoes defoliated, harvest soon. Sugar beets, late potatoes ahead normal growth. Farmers continued to sell cattle, anticipate feed shortage. Grass seed swathing completed, combining underway.

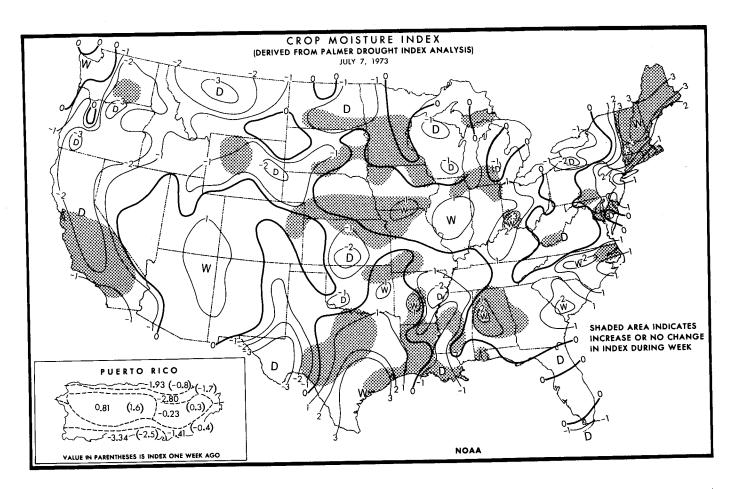
WEST VIRGINIA: Temperatures slightly subnormal. Highs generally 80's with many areas into 90's midweek. Highest 99° at Clarksburg. Lows mostly 50's and 60's with Canaan Valley recording lowest at 37°. Scattered showers and thundershowers Tuesday and Wednesday. Air stagnation advisory issued Friday, continued weekend. Good growing conditions brought rapid development of crops. All growing crops mostly good. Favorable weather allowed farmers about 4.5 days fieldwork, mostly hay and gardening. Small grains ripening fast with nearly 50% barley combined. First reported wheat combined. Livestock good despite prevalent face flies and scattered pinkeye.

WISCONSIN: Very warm week. Temperatures 6° to 9° above normal, reaching mid-90's weekend. Rain-

fall light, generally less than 0.25 in except for a few locally heave showers southwest Tuesday. Crops developing well in warm temperatures but could use more moisture. A good week for haying, first crop 80% harvested, last year 95%, normal 75%. Corn growing rapidly, average 24 in tall, last year 26 in, normal 22 in. Early oats good but late oats spotty, 55% headed, last year 80%, normal 75%. Soybeans progressing fine. Early potatoes look very good. Early pea pack poor. Sweet corn and other vegetable crops growing well. Most tobacco planted. A good strawberry harvest continuing. Soil moisture 30% short, 65% adequate, 5% surplus. Rain would be welcomed for topsoil most areas.

WYOMING: Hot, dry weather. Most stations below 5,000 ft 100° plus on 5th and 6th. Extremes 106° Worland airport and Colony; 27°, Jackson. Showers north provided local relief from dry spell. Alfalfa 65% harvested, other 45% harvested, about week behind 1972. Spring wheat 80% headed, 75% year ago. Barley 80% headed, virtually all headed out year ago. Oats about 65% headed, 75% 1972. Winter wheat 40% milk stage, 40% soft dough and 20% hard dough. Surface soil moisture supplies short.

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



SHADED AREAS: Index increased or did not change last week

Index

3.0 Excessively wet, some fields flooded Above 3.0 Too wet, some standing water 2.0 to 2.0 Prospects good, some fields too wet 1.0 to 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 extremely dry

UNSHADED AREAS: Index decreased last week

Index

Below

3.0 Some drying, but still excessively wet 3.0 More drying weather needed, work delayed Above 2.0 to 0 to 2.0 Favorable, except still too wet in spots 0 to 1.0 Normal growth and fieldwork 1.0 to 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 -4.0 Extremely dry, most crops near ruin

The map gives a general picture of how wet or dry the Nation was last week. It shows areas where abnormal wetness or dryness have hindered crops and areas where moisture conditions have favored them.

The lines show the crop-moisture situation according to an index computed from values of temperature and precipitation by areas...350 climatological divisions, which correspond roughly to SRS's crop reporting districts. Previous weekly computations of soil moisture account for the effects of prior weather.

Shaded areas are those where precipitation increased the index last week or where soils did not dry. Unshaded areas dried last week.

The centers of wet or dry areas are marked: W=wet; D=dry. The map lines mark off crop situations. Use the legend to interinterpret.

Local variations caused by isolated rain or by soil differences are not shown. While shallow rooted crops in poor soils may suffer more than the map shows, conditions may be better where soils are good. Also, legends apply to growing rather than mature plants. Any map interpretation must consider both the growth stage and moisture status and trend. In irrigated regions, the index values reflect only departures from ordinary irrigation requirements.

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Heating Degree Days (Base 65° F.)

June 1973

ALA.Birmingham	000	MAINE, Caribou	122	OKLA.Okla. City	000
Mobile	000	Portland	99	Tulsa	000
Montgomery	000	MD. Baltimore	1	OREG.Astoria	246
ALASKA, Anchorage . Barrow.	405 950	MASS.Boston.	000	Burns U	189
Fairbanks	150	Chatham	1	Medford Pendleton	48
Juneau	130	MICH.Alpena Detroit	86	Pendleton	73
NOME	655	Plint	17	Portland	89
ARIZ.Flagstaff	164	Grand Rapids	4	Salem	141
Phoenix	000	Houghton Lake	54	Erie	6 40
IUCSON	000	Lansing	20	Erie	7
Winslow Yuma	31	Marquette U	159	Philadelphia	l i
ARK. Fort Smith	000	S. Ste. Marie MINN. Duluth	192	Pittsburgh	2
Little Rock	000	Internat1 Falls	171	Scranton	4
CALIF. Bakersfield.	000	Minneapolis	155	R.I.Providence S.C.Charleston	16
Eureka U	293	Rochester	20	Columbia	000
Fresno	2	St. Cloud	48	Greenville	000
Los Angeles U	2	MISS.Jackson	000	S.DAK.Aberdeen	27
Red Bluff	000	Meridian	000	Huron	31
0 Di	_	Vicksburg U		Rapid City	83
San Francisco	103	MO.Columbia	000	Sioux Falls	19
COLO.Denver	56	St. Louis	000	TENN. Chattanooga.	000
Grand Junction	49	Springfield	1	Knoxville Memphis	000
Pueblo	25	MONT. Billings	99	Nashville	000 000
CONN.Bridgeport	8	Glasgow	68	TEX.Abilene	000
Hartford	130	Great Falls	125	Amarillo	000
D.C. Washington	000	Havre	99	Austin	000
FLA. Apalachicola . Ft. Myers	000	Helena	155	Beaumont	000
Jacksonville	000	Kalispell	205 74	Brownsville	000
Key West	000	Missoula	186	Corpus Christi Dallas	000
Lakeland U	000	NEBR. Grand Island.	11	Del Rio	000
Miami	000	Lincoln	1	El Paso	000
Orlando	000	Norfolk	12	Fort Worth	000
Pensacola U Tallahassee	000	North Platte	34	Galveston U	000
Tampa	000	Omaha	3	Houston	000
GA. Atlanta	000	Valentine NEV.Ely	28 202	Lubbock	000
Augusta	000	Las Vegas	000	Midland	000 000
Macon	000	Reno	87	San Antonio	000
Savannah	000	Winnemucca	97	Victoria	000
IDAHO, Boise Lewiston	91	N.H.Concord.	78	Waco	000
Pocatello	59 135	N.J.Atlantic City. Trenton U	3	Wichita Falls	000
ILL, Cairo U	000	N.MEX.Albuquerque.	3	UTAH, Blanding R Salt Lake City	
Chicago	000	Roswell	000	VT.Burlington	67 86
Moline	1	N.Y.Albany	47	VA.Lynchburg	000
Peoria	000	Binghamton	470	Norfolk	000
ROCKIOTA	2	Buffalo	24	Richmond	000
Springfield IND.Evansville	000	New York	4	Roanoke	1
Fort Wayne	000	Rochester Syracuse	17	WASH.Colville	164
Indianapolis	000	N.C.Asheville	000	Omak	
South Bend	000	Charlotte	000	Quillayute Seattle-Tacoma	299 183
IOWA, Burlington	000	Greensboro	000	Spokane	152
Des Moines	000	Hatteras R	000	Walla Walla U	61
Dubuque	7	Raleigh	000	Yakima	95
Sioux City	4	Wilmington	000	W.VA.Beckley	11
KANS.Concordia Dodge City	000	N.DAK.Bismarck	93 79	Charleston	4
Goodland	28	Fargo	79 78	Huntington	10
Topeka	000	OHIO. Akron-Canton.	î	Parkersburg U WIS.Green Bay	000 9
Wichita	000	Cincinnati U	3	Madison	15
KY, Lexington	000	Cleveland	3	Milwaukee	6
Louisville	000	Columbus	000	WYO.Casper	117
LA.Baton Rouge Lake Charles	000	Dayton	000	Cheyenne	122
New Orleans	000	Toledo Youngstown	3 6	Lander	122
Shreveport	000	Todings town	١	Sheridan	130
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Preliminary reports from airport locations, except those marked U for urban and R for rural. **Bstimated.