

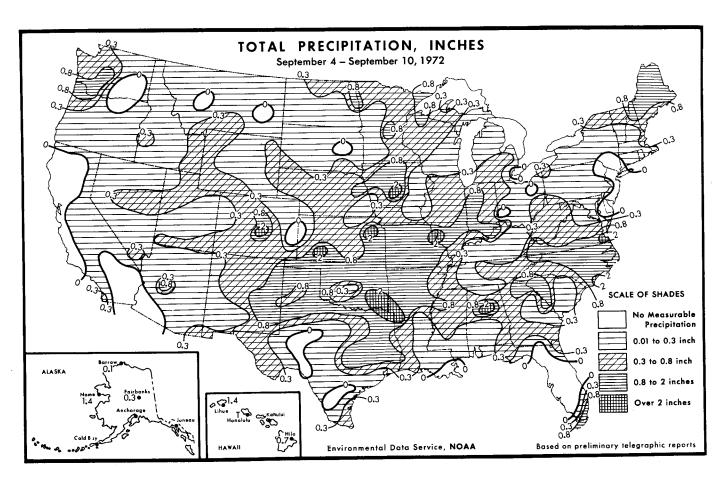
Weekly Weather Crop Bulletin

U. S. DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration Environmental Data Service

U. S. DEPARTMENT OF AGRICULTURE Statistical Reporting Service

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NATIONAL WEATHER SUMMARY

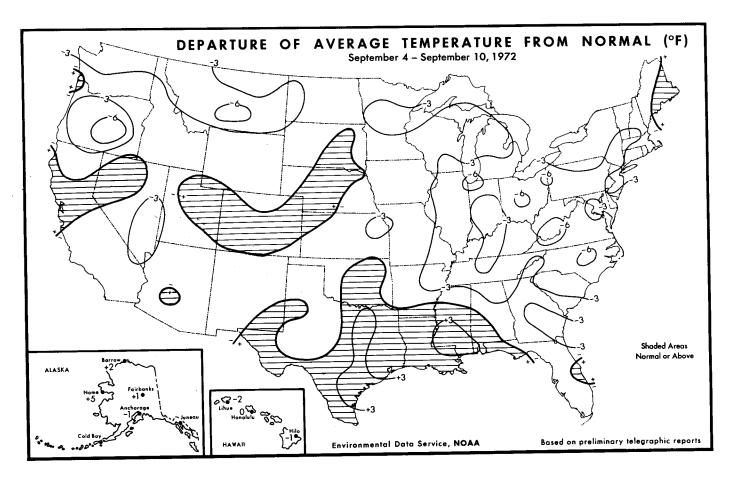
HIGHLIGHTS: Typical early autumn weather was general over most of the Nation, especially over the weekend. Light frost occurred in spots in North Dakota and northern Minnesota on 1 or 2 nights. Rainfall amounts ranged widely in short distances due to its showery character.

PRECIPITATION: Cold fronts pushing across the eastern two-thirds of the Nation accounted for most of the precipitation last week. Showers and thunderstorms, some heavy, occurred from the southern Great Plains to the middle and southern Atlantic Coast Monday afternoon, September 4. Lighter, more scattered showers fell west of the Rocky Mountains and from Minnesota to Upper Michigan. A storm centered over the Dakotas pro-

duced windy weather over the Dakotas and western Nebraska. Light to heavy showers fell in the Texas Panhandle, in northeastern Kansas, and nearby parts of Nebraska, Iowa, and Missouri. Heavy rains fell in Illinois and Indiana Thursday and early Friday.

Weekend rains were mostly associated with a cold front that stretched from Texas to New England. Some heavy thundershowers fell over the central Great Plains and the middle Mississippi River Valley.

Weekly totals ranged widely within short distances; in some places from none to 2.00 inches or more within 20 miles. Some of the heaviest rains fell in western Iowa east of Council Bluffs.



TEMPERATURE: Cold fronts moving southward from Canada into northern Great Plans, then continuing to Gulf of Mexico brought cool pleasant weather to the central and eastern portions of the Nation. Minimum temperatures in the 30's and 40's were common over the northern Great Plains. The mercury dropped to freezing or lower in the higher Rocky Mountains. Big Piney, Wyo., registered 25° Thursday morning. Moist tropical air pushed northward from the Gulf of Mexico. Early-morning temperatures along the Gulf Coast were generally in the 70's and afternoon readings reached the 90's.

The mercury at Catulla, Texas, climbed to 102° on Wednesday and Thursday afternoons. The Southwestern Deserts continued hot. Blythe,

Calif., recorded 109° Tuesday afternoon. The East cooled as the week progressed. Minimum temperatures dropped to the 40's in the northern and central Appalachians. Beckley, W. Va., registered 42° Wednesday morning.

The weekend brought early autumn temperatures to much of the eastern half of the Nation.

The weekend brought early autumn temperatures to much of the eastern half of the Nation A large High stretched from the Mississippi River Valley to the Atlantic Coast. Minimum temperatures east of the Mississippi River Sunday morning ranged from the 40's north of the Ohio River to the 70's along the Gulf Coast. Weekly mean temperatures over much of the East were 3° to 6° cooler than normal.

L. W. Dye

NATIONAL AGRICULTURAL SUMMARY

AGRICULTURAL HIGHLIGHTS: Small grain harvest nearing completion, fall seeding increasing. *
Corn picking becoming more widespread. * Soybean development behind a year ago.

SMALL GRAINS: Harvesting of this year's small grains moving toward completion. The barley, spring wheat and oat crop are 80 percent harvested in Montana. Less than 10 percent of oats and barley remain in North Dakota. In Minnesota over 90 percent of the spring wheat, oats, and barley are combined, flax harvest lagging slightly. In Tregon and Washington harvest is virtually finished. Farmers in the northern and eastern areas of Wisconsin were stymied in their oat harvest by wet fields. Some fields were abandoned. Flax harvest is still lagging in South Dakota.

Planting of the 1973 winter wheat crop made fair progress during the week, but is still behind last year's pace. In Kansas, wet fields delayed fieldwork in many areas with 2 percent of the wheat seeded. Ten percent of winter wheat is seeded in Montana. Seeding made good progress in many southern States. In Arkansas some early plantings are up to stand. In Oregon planting of small grains is just getting underway.

CORN: Picking of corn in few early-maturing fields have been reported in the Corn Belt. The crop continues in good to excellent condition in the major corn States. Cool weather has slowed maturing of the crop in many areas. In lowa 35 percent is mature compared with 53 percent last year. Crop conditions are 66 percent excellent and 34 percent good. In Illinois 48 percent of the crop was mature, normal for this time of year. Corn in Indiana was 10 percent mature compared to 25 percent last year. Eighteen percent of the crop is mature in Nebraska. Some light wind damage was reported in Minnesota. Silage harvesting is picking up momentum in all

Corn harvesting is continuing in the south with fair to good prospects. The Texas corn crop is well along at 50 percent harvested. Picking is underway in all southern and eastern areas, although like the Corn Belt maturity is lagging due to the cool temperatures in most

COTTON: Harvest continues to make good progress in Texas with 19 percent of the crop harvested compared to 12 percent a year ago. Dry weather remained over much of the South as cotton prospects continued fair to good. Dry weather prevailed over most of Alabama and the cotton opened much too prematurely. In Arkansas and Louisiana the crop is opening fast and light picking has begun. The cotton crop is in fair to good condition in Mississippi with 18 percent open. Picking is underway in Georgia. Cotton development continues on schedule with no unusual problems in California and Arizona. Harvest is underway in several Arizona counties.

SOYBEANS: Prospects continue good to excellent for soybeans in the North-Central States; although crop development is lagging behind last year's and average in most States. Cool, wet weather has slowed development in Illinois, Iowa, Missouri and Indiana. In Illinois one half of the crop is turning yellow. In Iowa 32 percent is turning compared to 68 percent

last year. In Indiana 30 percent is turning yellow compared to one half last year, while in Missouri 25 percent is turning compared to 40 percent a year ago. Harvest started in a few scattered fields of Illinois and Missouri.

Dry weather is continuing to slow progress of setting and filling Arkansas soybean pods. The showers during the week were very beneficial but more rain is still needed. Dry weather is severe in a few counties. In Tennessee virtually all soybeans have set pods and about 10 percent are beginning to turn yellow.

Relatively dry weather allowed OTHER CROPS: sorghum farmers across the Southern portion of the country to make good harvest progress. Texas 43 percent of the crop is harvested ahead of last year; although harvest was delayed by rain. Marketing of flue-cured tobacco continued active in North Carolina. Harvest is 90 percent completed. In Kentucky burley cuttings are 55 percent completed and dark types are 50 percent finished. In South Carolina marketings are declining as harvest is virtually over. Georgia peanuts are in fair to good condition with harvest very active -- 56 percent dug and 42 percent threshed. Potato harvest is getting started in eastern Idaho and is about 15 percent complete in southwest Idaho. Harvest for storage is starting in Aroostook County, Maine. Sweet potatoes digging is being slowed by dry weather in Louisiana, about 30 percent are dug. Rice harvest is virtually completed in Texas and Louisiana. Harvest is just getting started with less than 5 percent harvested in Arkansas.

Fruit and Nuts: Cool nights are giving good color to apples in Washington with some picking started. The New York and Michigan apple crops are sizing well and the quality is expected to be good. In Maryland and Delaware, apple picking continues as growers prepare to move into red and golden delicious varieties. The pecan crop is in poor condition in South Carolina, but in excellent condition in Texas. Citrus grove conditions are excellent in Florida. Grapefruit are now being picked in limited quantities. In Texas harvest of early oranges is underway and in Arizona lemon harvest continues.

Vegetables: Harvest of New Jersey fall

vegetables: Harvest of New Jersey fall vegetable crops increasing. Orange County, New York onion harvest about 70 percent completed. Sweet corn harvest is active in Wisconsin. Cucumber and broccoli harvest are finished in Oregon. Planting of fall vegetables is active in Florida, Texas, Arizona and California. Lettuce thinning is active in Arizona. Limited pole beans, eggplant, peppers, and squash are being harvested in Florida.

PASTURES AND LIVESTOCK: Ranges and pastures are improving in Colorado. The prospects are now very good in the northeast and fair in other areas. In New Mexico the ranges are good but they remain dry in Arizona, Nevada, Utah, Oregon and California. In Oklahoma, native pastures are greening up but supplemental feeding continues. Livestock remain in good condition in most areas of the Nation. In Montana, 10 percent of cattle and sheep have moved from summer ranges.

John D. Witzig Agricultural Statistician Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., September 10, 1972

Temp	Tempera- ture 'F				Data for the W		Tempera- ture °F		pitation ches	, I.s.t., September 1	Tempera- ture °F		Precipitation Inches	
States and Stations	Average	Departure*	Total	Departure*	States and Stations	Average	Departure*	Total	Departure*	States and Stations	Average	Departure*	Total	Departure*
ALA.Birmingham. Mobile. Montgomery. ALASKA.Anchorage. Barrow. Fairbanks Juneau. Nome. ARIZ.Flagstaff. Phoenix Tucson. Winslow Yuma. ARK.Fort Smith. Little Rock CALIF.Bakersfield Eureka. Fresno. Los Angeles Red Bluff San Diego San Francisco Stockton. COLO.Denver Grand Junction. Pueblo. CONN.Bridgeport Hartford. D.C.Washington. FLA.Apalachicola. Ft. Myers Jacksonville. Key West. Lakeland. Miami. Orlando Tallahassee Tampa GA.Atlanta. Augusta Macon Savannah. HAWAII.Hlo Honolulu. Kahului Lihue. IDARO.Boise Lewiston. Pocatello ILL.Cairo Chicago Moline. Peoria. Rockford. Springfield IND.Evansville.	7.6 83 79 36 48 	-33-1-1-2-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	3.1 .22 .13 .14.1 .22.1 .00 1.07 TT T3 TT 0.44 0.1 .12.6 .88 .77 TT T5.5 .55 .55 .63 .77 TT 1.44 .5 T5.5 .55 .63 .77 .41	+2.3 -1.3 -8 -1.0 +.7 -3 0 -1.2 -1.1 +.2 +.3 0 -1.1 +.1 +1.0 -1.2 -1.0 -1.3 -1	Winnemucca. N.H.Concord N.J.Atlantic City Trenton N.MEX.Albuquerque Roswell N.Y.Albany. Binghamton Buffalo New York. Rochester Syracuse.	822 57 61 63 56 62 56 63 55 55 61 61 62 57 57 55 55 62 64 68 68 68 68 68 68 68 68 68 68 68 68 68	+ 1 1 0 0 4 2 2 3 3 1 - 3 3 3 1 - 5 2 3 3 4 3 - 3 1 - 3 3 2 - 4 4 2 2 3 3 2 - 4 4 2 2 3 3 2 - 4 4 2 2 3 2 4 4 2 3 3 4 4 2 2 3 2 4 4 2 3 3 4 4 2 2 2 4 4 3 3 3 4 4 2 2 2 4 4 3 3 4 4 2 4 4 2 4 4 2 4 3 4 4 2 4 4 2 4 4 2 4 3 4 4 2 4 4 2 4 4 2 4 3 4 4 2 4 4 2 4 4 2 4 3 4 4 2 4 4 4 2 4 4 4 2 4 4 4 2 4	TO 9 5 1.1 7T .1 0 5 4 1 4 4 3 2 2 5 5 6 5 5 1 4 1 1 8 2 5 9 5 1 0 1 T 1 T 1 6 3 7 4 4 3 2 6 3 T 2 1 T T 8 0 1 T 2 T 2 2 2	ded -1.44	OKLA.Okla. City Tulsa OREG.Astoria. Burns Medford Pendleton Portland Salem FA. Allentown Erie Harrisburg. Philadelphia. Pittsburgh Scranton. R.I.Providence. S.C.Charleston. Columbia. Greenville. S.DAK.Aberdeen. Huron Rapid City. Sioux Falls TENN.Chattanooga Knoxville Memphis. Nashville TEX.Abilene Amarillo. Austin. Beaumont. Brownsville Corpus Christi Dallas Del Rio El Paso Fort Worth Galveston Houston Lubbock Midland San Angelo. San Antonio Victoria. Waco. Wichita Falls UTAH.Blanding Salt Lake City VT.Burlington VA.Lynchburg. Norfolk Richmond. Roanoke WASH.Colville Omak. Quillayute. Seattle-Tacoma Spokane	798 605 54 66 63 59 64 66 63 62 64 67 70 74 4 66 64 67 70 74 4 85 2 83 68 85 76 68 81 67 68 68 68 68 68 68 68 68 68 68 68 68 68	2117311533224312540011453271320444203321213530022345644442	29912T041421TT333211TT333211555T55155547704431250TTTT889.7774463366TT774	5 + .3 + .1 7 + .1 4 5 6 7 6 7 5 2 2 2 3 6 + .1 5 6 7 7 6 + .1 3 6 + .1 1 1 1 1 1 1 1 -
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Lake Charles. . . 82 + 1 .8 - .2 Youngstown. . . . 59 - 6 T - .

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

CONDENSED STATE SUMMARIES

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

ALABAMA: Cold front set off general showers north half Monday night. As much as 4.00 inches north-central but very little south. Mostly fair and dry rest of week except scattered showers south weekend. Accumulated rainfall deficiency for year at Mobile 22.08 inches. Temperatures dropped to mid-50's north Wednesday morning but warmed to near or above normal rest of week. Extremes: 96° at Mobile Friday; 54° at Huntsville and Muscle Shoals Wednesday. Dry weather prevailed over most of State. Cotton opening rapidly. Limited harvest mostly central and south. Nearly 3/4 corn matured. Harvest slow as moisture content high. Peanut harvest has priority southeast. Good progress made in harvesting peanuts. Nearly all soybeans setting pods--rain needed during this critical stage. Earliest fields yellowing. Harvest of sweet potatoes made fair progress in Cullman County. Slow growth of hay crops curtailed cutting. Pastures supplied short grazing many counties.

ALASKA: Coudiness past week kept temperatures above the frost level most areas. Exceptions were isolated portions of Tanana Valley where lows in 20's from 2 locations. Average temperatures were near or above normal all areas. Precipitation fell early in week in most areas. The Lower Kenai Peninsula reported heaviest amounts. Only Homer FAA has cumulative amounts above normal. Many locations are over 3.00 inches below normal. Soil moisture is in short supply in Tanana and Matanuska Valleys, adequate Kenai Peninsula. Grain harvest 50% completed Tanana Valley, just beginning in Matanuska Valley. Silage and hay harvest nears completion. Potato digging underway. Vegetable harvest continues with demand greater than supply.

ARIZONA: Temperatures generally slightly below normal ranging from 3° above normal at Phoenix and Blythe to $\hat{6}^{\circ}$ below normal at Grand Canyon. Shower activity general throughout week with locally heavy amounts southeast and north-central. Extreme winds, 1.00-inch hail, and heavy precipitation, followed by an as yet unconfirmed tornado in Tempe-Mesa area about 7 p.m., m.s.t., Sunday September 10. Cotton crop looks good. Harvesting in Maricopa, Pima, Yuma Counties. Last week's rains encourage growth, delayed maturation Cochise, Greenlee Counties. Defoliation in Pima, Yuma Counties. Insect problems present Yuma, Graham Counties. Sorghum crop good progress and Counties. Sorghum crop good progress and harvesting in Maricopa, Pima, Yuma Counties. Alfalfa seed harvest limited scale. Sugar beet plantings underway Maricopa, Pinal Counties. falfa hay harvest slowed by rains. Planting, irrigating lettuce and cabbage in Yuma area. generally good. Preparations continued later plantings lettuce, other vegetables. Fall cantaloupes making good progress. Chili harvest continued Cochise County. Lettuce thinning active. Harvest chili, melons, other mixed vegetables continued Graham, Greenlee Counties. Thinning early-planted lettuce active Pima, Pinal Counties. Planting still underway. Lemon harvest increasing Yuma area, underway Salt River Valley next week. Range conditions good to poor. Eastern portions of State fair to mostly good condition. Late summer rains beneficial. Central and western deserts fair to poor. Rainfall below normal. Range feed supplies

limited, stock water diminishing. Northwestern areas, ranges poor condition. Precipitation considerably below average. Feed supplies limited. Cattle and calves good to fair. Sheep and lambs fair.

ARKANSAS: Rainfall of 0.50 inch or more most sections of State with locally heavy amounts in few areas. Texarkana reported weekly total 3.11 inches. Brinkley in east-central section, 2.94 inches, Stuttgart also in east-central section, 1.97 inches. Heaviest rains occurred early in week with light showers late in week and on weekend. North-central, extreme southeast, and southcentral border sections remained rather dry with amounts generally less than 0.25 inch. Near normal temperatures over most of State with departures in range -3° to +2°. Greatest negative departures through portions of central and northeast. Largest positive departures extreme southeastern corner. Highest of 100° at Morrilton on 8th and lowest of 48° at Calico Rock on 6th. Cool early in week, warming through latter part of week, and cooler on weekend. Dry weather presisted. Showers Labor Day and late in week brought temporary relief many areas but pastures and latematuring crops need general rain. Cotton opening rapidly. Possibly 25% bolls open and light picking begun. Combining of rice started-less than 5% cut. Harvest should gain momentum with many fields already drained. Dry weather slowing progress of setting and filling soybean pods. Showers very beneficial but more rain needed. Stress from dry weather severe few counties. Harvest of corn and sorghums underway. Hay harvest continues. Planting small grains for early grazing underway. Few fields up to stand. Apple and grape harvest well advanced. Pastures short most areas but herds mostly fair to good condition. Feeding and increased marketing continues in few of driest counties.

CALIFORNIA: Locally severe showers and thunderstorms in Sierra Nevada deposited up to 2.80 inches at 7,000 feet. Scattered showers on central and southern coast and in San Joaquin Valley. Light amounts but 0.42 inch at San Diego. Temperatures were near normal. Harvest continues field corn, alfalfa hay, dry bean, seed crops; underway milo, rice. Seedbed preparation small grains. Apple harvest increasing. Raisin grape harvest well advanced, some rain damage. Table wine grapes San Joaquin showing some bunch rot. Grapes winery accelerating; packout freestone peaches, nectarines continues; harvest other tree fruits virtually complete. Almonds active, walnut increasing. Light picking lemons, grapefruit, avocados. Valencia oranges slow. Artichoke harvest light. Broccoli, cauliflower light to moderate volume. Cantaloupe harvest continues Firebaugh District. Carrot digging continues central coast, southern California. Sweet corn active San Francisco Bay area, southern California. Honeydew harvest declining Sacramento, San Joaquin Valley. Salinas, Santa Maria lettuce moderate supply, onion harvest continues central coast, north areas. Movement mostly to dehydrators. Bell pepper harvest continues San Joaquin Valley. Moderate supplies, Salinas Valley. Chili pepper

harvest continues Santa Maria, winding up some San Joaquin Valley areas. Sweetpotato harvest picking up Merced-Modesto. Potato harvest slacking Delta area. Defoliation underway Tulelake. Green tomato increase King City-Gonzales next week. Processing tomato deliveries active Sacramento, northern San Joaquin Valley. Watermelons declining San Joaquin Valley, about complete Kern County. Scattered showers helped reduce fire danger. Movement livestock to sales yards active. Irrigated pastures holding well. Supplemental feeding and watering as necessary. Mature turkeys going to processing. Egg production normal.

COLORADO: Temperatures below normal most areas. Greatest departures eastern plains. Light to moderate showers over most of State including San Luis Valley and extreme southwest which have been very dry all year. Rain and wet fields delaying fall grain seeding and harvest operations most areas. Soil moisture supplies adequate most areas Eastern Plains, short to very short West and Southwest. Winter wheat 36% seeded, 17% emerged. Corn good to excellent, 95% in dough, 67% dented, 34% mature. Corn for silage 15% cut. Sorghum good condition, 70% turned color, 22% mature, 12% cut for forage. Dry beans 43% cut, 13% threshed. Rain damaging beans in windrows. Late summer potatoes 2/3 dug. Fall potatoes good condition, harvest underway. Sugar beet condition excellent. Cutting 3d alfalfa hay complete. Range and pastures improving, very good northeast, fair other areas. Livestock good condition.

FLORIDA: Temperatures near normal. Several minimum temperature records set early part of week. Rainfall averaged less than 0.20 inch northern sections increasing to 0.50 central sections and over 1.00 inch south with largest amounts along lower east coast. Moisture adequate most areas except west. Corn harvest progressing. Peanut harvest made good progress. Soybean setting beans. Pastures above normal most areas with favorable moisture. Cattle in good condition and continuing to make good weight gains on pasture. Citrus grove condition excellent. Moisture adequate, some color change beginning to show. Grapefruit now being picked in limited quantities. Planting of fall vegetables active with about normal progress to date for most crops. Limited pole beans, eggplant, peppers, squash harvesting North and West Florida. Major Penninsula Areas expects normal start of sweetcorn, cucumbers, radishes around October 1.

GEORGIA: Light to locally heavy rains in north and central early in week. Amounts varied from nearly 2.00 inches parts of northwest to less than 0.50 inch most places. Little or no rain in South. Many areas throughout State continue extremely dry. Warm at beginning of week and Saturday. Mild at midweek and at end of period. Highes in upper 80's and low 90's most areas on 2 or 3 days and lows in 50's or low 60's all areas 1 or 2 days. Averages ranged from 1° to 4° below normal. Soil moisture adequate for a few scattered counties—remainder short to very short. Condition of most crops declined. Rain needed badly. Cotton mostly fair to good, 2% picked. Corn fair to good, 6% picked. Peanuts fair to good with harvest very active, 56% dug and 42% threshed. Soybeans mostly fair to good with bloom and pod shedding. Pastures and hay crops declined sharply.

HAWAII: Weather improved over previous week. Showers light to moderate first half--clear and warm remainder of week. Growth cracks and spoilage

losses heavier than usual for some tender vegetable crops. Harvesting steady. Sugarcane harvesting normal but pineapples declining seasonally. Papaya supplies light but bananas increasing. Cattle and pastures fair to good condition.

IDAHO: Temperatures dropped sharply in midweek but averaged near normal except 1° to 5° below normal east. New Meadows recorded a low of 28° on 7th and Fairfield recorded 29° on 8th. Precipitation mostly as showers ranged from near zero north to locally heavy southwest and east. Montpelier reported greatest total, 1.22 inches. Other heavier totals included Ashton with 0.64 inch and Mountain Home and Emmett 0.51 inch. Harvesting slowed due to early morning dew and scattered rains. Grain harvest in windup. Potato harvest getting started in East, about 15% complete in Southwest. Dry beans about 50% harvested. Some acreage in Mountain Home area damaged by hail. Onion harvest proceeding rapidly with about 40% harvested. Third cutting alfalfa is slow, only 15% cut. Apple picking starting. Alfalfa seed combining nearly 10% complete. Seeding winter grains starting in north and east, about 10% complete in southern areas. Pastures and ranges still providing adequate forage.

ILLINOIS: Temperatures average 3° to 6° below normal in spite of some mid-and late week warming. Readings down into low 40's northern Illinois early in week. Nearly all of State received some rain with totals over 1.00 inch fairly common and a few reports over 2.00 inches. Corn 85% dent, 48% mature, about normal progress. Condition 88% good to excellent. Soybeans 1/2 turning yellow behind normal due to cool, wet weather. Condition good to excellent, 95%. Few early corn and beans harvested. Plowing for winter wheat 80% complete. Seeding should start soon. Alfalfa 3d cutting 60% finished, hampered by wet weather. Pastures continue to improve with rains. Soil moisture short 14%, adequate 73%, surplus 13%. 4.8 days suitable for fieldwork. Main activities cutting silage, preparing seedbeds for wheat, preparing machinery for fall harvest.

INDIANA: Cool pleasant week. Temperatures averaged 67°, 3° below normal. Temperatures ranged from 43° on 5th to 85° on 7th. Rainfall generally 1.00 to 1.50 inches on Thursday except 3/4 inch in northeast and southeast. In last 4 weeks, rainfall in southeast only 1.70 inches. Five days suitable. Topsoil and subsoil rated short to mostly adequate. Plowing for winter wheat 65% complete, same as last year. Wheat seeding underway. Corn 10% mature, 25% last year, 60% dented or later stage and 5% not yet in dough. Soybeans 30% turning yellow, last year half turned, 5% shedding leaves, 25% a year ago. Apples 25% picked. Tobacco 1/3 harvested. Picking tomatoes in full swing. Finishing harvest of cantaloupe and watermelons. Pastures mostly fair.

IOWA: Seasonal to cool temperatures with heavy weekend showers over west-central eastward into Marion County and also over northeast and some north-central counties. Heaviest rainfalls 10.00 to 15.00 inches over Shelby County and western Audubon County. Corn and soybean crop condition good to excellent. Major farm activities consisted of haying with some fall plowing and corn silage harvest. Over 5 days were suitable for fieldwork. Corn maturing slower than last year. Eighty-three percent corn in or past dent stage, last year 88%. Corn 35% mature compared with 53% last year. Corn crop condition 66% excellent and 34% good. Leaves

turning on 32% of soybeans, last year 68%. Twenty-five percent soybeans shedding leaves, well behind last year. Seventeen percent soybeans mature, last year 31%. Soybean crop condition 47% excellent and 53% good. Less than 5% winter wheat planted compared to 26% last year. Third cutting alfalfa hay 63% complete. Pasture condition reported 53% excellent and 47% good. Topsoil moisture reports indicate 90% adequate, 7% surplus, and 3% short.

KANSAS: Cool southern and eastern Kansas 3d consecutive week. Mean temperatures those areas averaged 2° to 4° below seasonal. Near normal temperatures northwest. Moderate to heavy northeastern quarter and eastern 1/3. Generally 0.75 to 2.00 inches those ares. Very heavy rains parts northeast. Over 7.00 inches locally in Riley and Pottawatomie Counties caused flash flooding. Mostly light to moderate rains south-central and west with generally 0.10 to 1.00 inch. Strong winds, large hail, and heavy rains locally Norton and Decatur Counties of northwest September 5. Wet fields delayed fieldwork many areas. Two percent of expected 1973 wheat acreage seeded compared 6% last year and 7% average. Corn crop 80% dented equal to year ago moderately ahead of average. Corn 38% matured, 39% last year and 47% Three percent corn harvested, 7% last average. year and 6% average. Twelve percent sorghum grain matured, 16% last year and average. Sorghum grain 2% harvested. Soybean prospects favorable. Alfalfa 3d cutting 94% completed 4th cutting 16% completed compared 28% last year and 22% average. Alfalfa seeding 57% completed compared 62% average. Rains further boosted grazing prospects most areas. Cattle marketings generally light.

KENTUCKY: Rainfall spotty, none or light most sections but some totals 0.50 to 1.00 inch. Temperatures averaged 2° to 5° below normal. Cloudy with scattered showers or thundershowers on 4th and 8th, other days mostly sunny. Cooler and less humid early in week and at end of week; near or above-normal other days. Early-morning temperatures in 40's some sections on 6th. Cutting tobacco, filling silos dominated agricultural scene, as almost 6 days suitable for fieldwork. Soil moisture 85% short. Most crops not seriously affected by moisture shortage. Burley cutting 55% complete, 48% last year. Dark type 50% complete, 59% last year. Favorable drying weather. Corn maturity 20%, 28% last year. Picking early fields began. Soybeans 12% mature, 1/3 turning yellow, rest green. Late beans need rain. Cutting silage, hay, and plowing active. Pastures need rain.

LOUISIANA: Temperatures averaged 1° to 5° above normal. Weak cool fronts midweek did little to relieve late season heat. Scattered thundershowers all areas 1 or more days but weekly rain totals less than 1.00 inch most places. Temperature extremes: 98° at Oberlin Tuesday and Monroe Friday and 62° at Ashland and Winnfield Wednesday. Greatest 1-day rain total 1.30 inches measured Tuesday morning at Leesville. Fieldwork made good progress despite some interruption from scattered showers. Principal activities were insect control in cotton, soybeans and sugarcane; harvest of rice, sweet potatoes and hay and planting of sugarcane. Soil moisture short to adequate some detioration in cotton and soybean prospects. Condition of cotton fair to good. Crop opening fast, some scattered picking. Late soybeans need moisture. Early varieties maturing, few fields harvested. Rice about 90% harvested in major

southwestern parishes, milling quality excellent. Sugarcane prospects good stand excellent but growth a little behind normal. Corn about 60% harvested. Sweet potatoes about 30% dug; dry weather slowing digging. Pasture feed about average. Livestock in good condition.

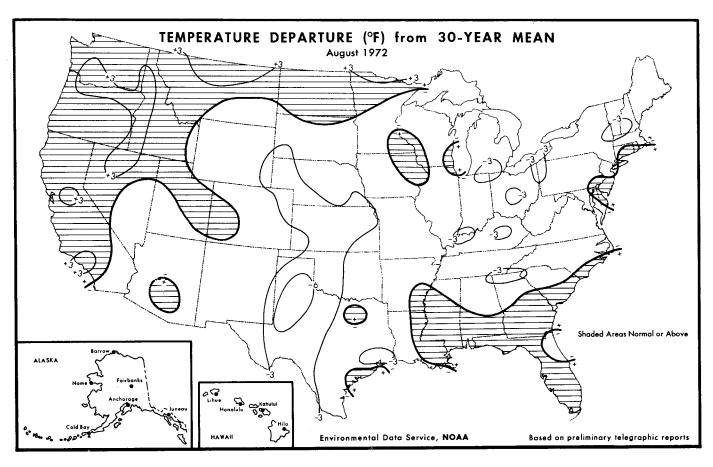
MARYLAND AND DELAWARD: Cool dry week. Temperatures averaged 2° to 4° below normal. Extremes mostly 80's, mid-40's to mid-50's. Rainfall light, most totals less than 0.15 inch. Tropical Storm Carrie of previous week gave many totals over 2.00 inches in south expecially southern Eastern Shore. Soil moisture adequate southern areas, dry elsewhere. Corn fields 1/4 mature, 1 week behind normal. Harvest starting. Soybean maturity about normal, few fields shedding leaves. Tobacco harvest 2/3 done, normal 80%. Peach harvest nearly complete. Apple picking continues as growers prepare to move into red and golden delicious varieties.

MICHIGAN: Cool showers mostly light ended by midweek. Temperature averages 1° to 5° below normal Upper Peninsula and 2° to 5° below normal Lower Peninsula with largest departures south. Precipitation totals: 0.25 to 0.65 inch Upper Peninsula; Lower Peninsula 0.30 to 0.65 inch except less than 0.10 inch southeast and along line from west-central to northeast to Alpena area. Fall crops advanced slowly toward maturity while wet fields slowed harvest of small grains and vegetables. Four days suitable for fieldwork. Soil moisture adequate to surplus. Oats 86% harvested. Corn and soybeans 10 days to 2 weeks late in maturity. Corn 48% dented or more, over 80% last year and average of 55%. Soybeans turning color or more mature, 25%—nearly 80% last year. Sugar beets and late potatoes continue to develop well. Fall potatoes more than 1/4 harvested. Over 75% 2d cutting and 15% 3d cutting hay harvested. Pasture feed supplies above average. Apples continue to size well.

MINNESOTA: Temperatures averaged 2° below normal. Extremes: 84°, 29°. Light frost northern districts on 5th. Precipitation: 3 northwestern counties received 1.00 to 2.00 inches during week. Greatest amount reported 2.34 inches at Warroad. West-central and southwest districts received generally less than 0.25 inch while rest of districts received generally more than 0.50 inch. Corn good to excellent in South with some light wind damage. Most corn denting in south. Soybeans developing slowly. Corn dented 75%, normal 61%. Safe from frost 26%, normal 22%. Soybeans turning yellow 58%, normal 82%. Soybeans shedding leaves 13%, normal 34%. Plowing completed 38%, normal 33%. Moisture short to adequate Northwest and West-Central Districts; adequate to surplus East Central and Central; mostly adequate elsewhere. Small grains combined: spring wheat 92%, oats 92%, barley 99%, flax 38%. Small grains seeded: winter wheat 37%, normal 50%; rye 42%, normal 45%.

MISSISSIPPI: Area of scattered showers or thunderstorms moved southward across State early in week followed by cooler weather. Then scattered thundershowers in some portion of State each day. Some stations received no rain but most reported rain on 1 or 2 days. Weekly totals up to 1.00 inch or more in northern portion of State and mostly under 0.50 inch in southern portion. At Sledge, 2.47 inches was measured Tuesday morning. Weekly temperature averages ranged from slightly below to slightly above normal. Extremes: 49° Wednesday at Holly Springs; 98° Thursday at Crystal Springs and Moorhead. Over weekend: scattered thunder-

(Continued on page 11)



WEATHER - AUGUST 1972

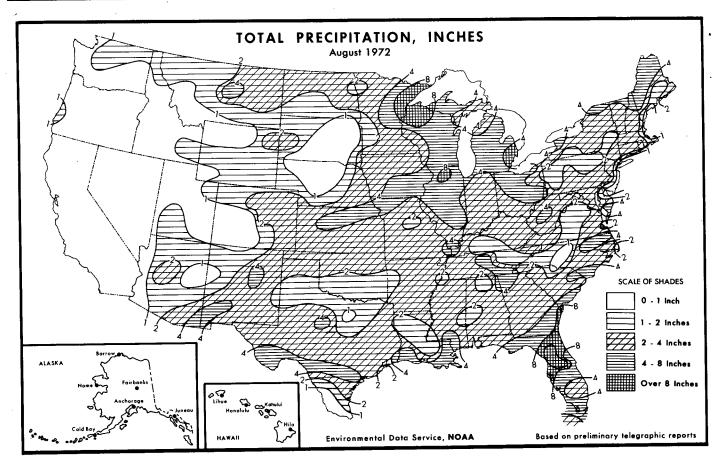
TEMPERATURE: August was a cool month over most of the Nation. The western portions of the central and southern Great Plains averaged 3° to 6° cooler than normal. The Northwest and the Deep South averaged slightly warmer than normal. The Far West averaged warmer than normal early and late in August and cooler than normal at midmonth. The opposite regime prevailed over midmerica. This area was cool early and late in August and warm in the third week.

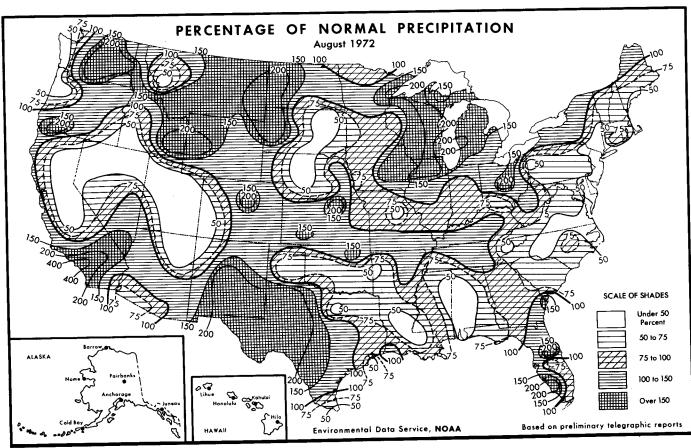
Storm systems sweeping across the eastern half of the Nation caused quick temperature changes and some large diurnal temperature ranges. The Southwestern Deserts continued hot. Furnace Creek, Death Valley, Calif., registered 121° on the afternoon of August 8. The soil temperature was 194°. In contrast, autumn temperatures were noted in the high Rocky Mountains. Big Piney, Wyo., registered 30° and Leadville, Colo. 31°, Tuesday morning, August 22.

PRECIPITATION: Early in August an active cold front stretched from the Great Lakes to the central Great Plains. Numerous thunderstorms occurred along the front as it moved southeastward to the Gulf and Atlantic Coasts. Some of the thunderstorms produced heavy rain; some were accompanied by hail and strong winds. One thunderstorm uprooted trees near Lost Nation, Iowa. Others drenched spots in southern Illinois and in eastern Kentucky. More fronts swept eastward from the western Great Plains to the Atlantic Ocean in the second week of August. Thunderstorms occurred

along the fronts and from the southern Great Plains to the Atlantic Seaboard in the warm humid air that covered the Southland. Heavy thunderstorms spotted parts of the central and eastern portions of the Nation in the third week of August. The central Great Plains received no rain or only light scattered sprinkles. Heavier showers fell from the northern Great Plains to the Great Lakes and in the warm humid areas in the South. Severe thunderstorms hit Wisconsin and Michigan on the 18th, 19th, and 20th. Frontal thunderstorms continued in the fourth week of August. One of these dumped 1.30 inches of rain at St. Cloud, Minn., in 18 minutes. When rain falls at such intensity, it falls as streams rather than drops. These downpours are called "cloudbursts." The last few days of the month some more thunderstorms, some moderate to heavy Tropical Storm Gwen, about 300 miles south southwest of San Diego, Calif., brought some heavy showers to the mountains in the Southwest. Heavy rains also fell in the Southeast. Savannah, Ga., received 4.14 inches in 6 hours early August 29 and 3.26 inches fell at Orlando, Fla., on the afternoon of the 30th. Practically no rain fel in the entire month in the Far West. Spots in Practically no rain fell California received no rain. Monthly totals elsewhere in the Far West were generally less than 1.00 inch. The greatest monthly totals were in northern Florida where some localities received more than 16.00 inches.

L. W. Dye





Temperature and Precipitation Data for AUGUST 1972

		npera- e °F	- Precipitation Inches			Tempera- ture °F		Precipitation Inches			Tempera- ture °F		Precipitation Inches	
States and Stations	Average	Departure*	Total	Departure*	States and Stations	Average	Departure*	Total	Departure*	States and Stations	Average	Departure*	Total	Departure*
ALA.Birmingham. Mobile. Montgomery. ALASKA.Anchorage. Barrow. Fairbanks. Juneau. Nome. ARIZ.Flagstaff. Phoenix Tucson. Winslow Yuma. ARK.Fort Smith. Little Rock CALIF.Bakersfield Eureka. Fresno. Los Angeles Red Bluff. San Diego. San Francisco Stockton. COLO.Denver. Grand Junction. Pueblo. CONN.Bridgeport Hartford. D.C.Washington. FLA.Apalachicola. Ft. Myers. Jacksonville. Key West. Lakeland. Miami. Orlando Tallahassee Tampa. GA.Atlanta. Augusta Macon. Savannah. HAWAII.Hilo Honolulu. Kahului Lihue. IDAHO.Boise Lewiston. Pocatello IIL.Cairo Chicago Moline. Peoria. Rockford. Springfield IND.Evansville. Fort Wayne. Indianapolis. South Bend. IOWA.Burlington.	79 83 817 41 -55 53 63 63 63 80 80 80 80 80 80 80 80 80 80 80 80 80		2.5 0 1.4 1 - 6.4 8.2 1.2 9.7 3.1 5.5 T.1 0 4 T.2 T.0 7.3 0.8 5.8 0.3 8.5 8.0 3.2 2.3 5.6 8.8 8.3 1.4 5.5 3.9 9.4 6.5 1.2 8.6 8.4 9.5 5.3 9.9 7.0 1.4 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	-2.99 -1.12 -3.64 -7.2 -1.87 -0.0 -1.12 -1.2 -1.3.4 -7.2 -1.87 -7.3 -1.87 -7.3 -1.18 -1.7 -1.88 -1.7 -1.88 -1.7 -1.88 -1.7 -1.88 -1.7 -1.88 -1.7 -1.88 -1.7 -1.88 -1.7 -1.88 -1.7 -1.88 -1.7 -1.88 -1.7 -1.88 -1.7 -1.88 -1.7 -1.88 -1.7 -1.88 -1.7 -1.88 -1	New Orleans Shreveport. MAINE.Caribou Portland. MD.Baltimore. MASS.Boston Chatham MICH.Alpena Detroit Flint. Grand Rapids. Houghton Lake Lansing. Marquette Muskegon. S.Ste.Marie MINN.Duluth Internatl Falls Minneapolis Rochester St. Cloud MISS.Jackson. Meridian. MO.Columbia Kansas City St. Louis Springfield MONT.Billings Glasgow Great Falls Havre Helena. Kalispell Miles City Missoula. NEBR.Grand Island Lincoln Norfolk North Platte Omaha Valentine NEV.Ely Las Vegas Reno. Winnemucca N.H.Concord N.J.Atlantic City Trenton N.MEX.Albuquerque Roswell N.Y.Albany. Binghamton Buffalo New York Rochester Syracuse N.C.Asheville Charlotte Greensboro. Hatteras.	823615571663666666666666666666666666666666	0 1 2 2 0 1 1 2 4 0 2 1 3 3 2 2 2 2 3 0 2 2 2 1 1 0 3 1 1 1 3 3 3 4 4 2 2 2 2 1 2 1 3 1 0 1 0 1 1 1 2 0 0 0 0 0 0 0 0 0 0 0 0	4.93.1.5.8.2.8.4.9.1.5.8.2.8.4.9.1.6.0.6.1.1.6.0.6.1.1.6.0.6.1.1.6.0.6.1.1.6.0.6.1.1.6.0.6.1.1.6.0.6.1.1.6.0.6.1.1.6.0.6.1.1.1.6.0.6.1.1.1.6.0.6.1.1.1.6.0.6.1.1.1.6.0.6.1.1.1.6.0.3.2.4.8.7.0.8.0.5.8.1.7.1.4.2.9.4.5.8.2.9.1.8.9.6.7.8.1.6.0.6.1.1.1.1.3.2.1.3.2.1.6.0.5.8.1.7.1.4.2.9.4.5.8.2.9.1.8.9.6.7.8.1.6.0.6.1.1.1.3.2.1.6.0.3.2.4.8.7.0.8.0.5.8.1.7.1.4.2.9.4.5.8.2.9.1.8.9.6.7.8.1.7.1.6.0.3.2.4.8.7.0.8.0.5.8.1.7.1.4.2.9.4.5.8.2.9.1.8.9.6.7.8.1.7.1.2.2.3.4.3.3.3.1.6.0.6.1.1.1.3.2.1.3.2.1.3.3.3.1.6.0.6.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1	-1.34 -1.4-1.6 -3.9 -1.2 +1.4.3 +1.6.5 -9.7 -1.7.2 -1.8.6 +1.2.9 +1.2.9 +1.2.9 +1.2.9 +1.2.9 -1.2.9 +1.2.9 -1.2.9 +1.3.8.6 -1.7.9 -1.2.9 +1.2.9 -1.2.9 +1.2.9 -1.2.9 +1.3.8.6 -1.2.9 -1.2.9 +1.3.8.6 -1.3.0 -1.2.9 +1.3.8.6	OKLA.Okla. City Tulsa OREG.Astoria. Burns Medford Pendleton Portland. Salem. PA.Allentown. Erie Harrisburg. Philadelphia Pittsburgh. Scranton. R.I.Providence. S.C.Charleston. Columbia. Greenville. S.DAK.Aberdeen. Huron Rapid City. Sioux Falls TENN.Chattanooga. Knoxville Memphis. Nashville TEX.Abilene Amarillo. Austin. Beaumont. Brownsville Corpus Christi Dallas Del Rio El Paso Fort Worth. Galveston Hubbock Midland San Antonio Victoria. Waco. Wichita Falls UTAH.Blanding Salt Lake City VT.Burlington VA.Lynchburg. Norfolk Richmond. Roanoke WASH.Colville Omak. Quillayute. Seattle-Tacoma Spokane. Walla Walla VAkima. W.VA.Beckley.	80 82 63 63 76 66 74 77 70 80 77 69 71 75 76 80 77 77 77 77 80 80 77 80 80 77 80 80 77 80 80 80 80 80 80 80 80 80 80 80 80 80	A 3 0 2 1 1 1 2 4 4 + 5 2 1 1 2 1 2 1 3 1 3 3 0 2 1 1 4 4 5 5 2 1 1 2 1 2 1 2 1 3 1 3 3 2 3 0 1 4 4 5 5 6 5 2 1 1 2 1 2 1 2 1 3 1 3 3 2 3 0 1 4 5 6 5 2 1 1 2 1 2 1 2 1 3 1 3 3 0 1 4 5 6 5 2 1 1 2 1 2 1 2 1 3 1 3 3 0 1 4 5 6 5 2 1 1 2 1 2 1 2 1 3 1 3 3 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1.8.2.4.3.4.4.4.7.1.3.0.5.8.8.6.0.5.9.2.5.7.3.6.9.3.7.4.7.6.8.4.9.5.8.7.2.4.2.6.8.6.1.0.5.1.9.3.7.6.8.4.9.5.8.7.2.4.4.8.8.2.4.2.6.8.6.1.0.5.1.9.3.7.6.8.4.9.5.8.7.2.4.4.8.8.2.4.2.6.8.6.1.0.5.1.9.3.7.6.8.4.9.5.8.7.2.4.4.8.8.2.4.2.6.8.6.1.0.5.1.9.3.7.6.8.4.9.5.8.7.2.4.8.8.2.4.2.3.2.1.1.3.2.1.1.3.2.1.1.3.2.1.1.3.2.1.1.3.2.1.1.3.2.1.1.3.2.1.3.3.4.4.3.3.4.4.8.8.2.4.4.8.8.2.4.3.4.4.8.8.2.4.4.8.8.2.4.3.4.4.8.8.2.4.3.3.4.4.8.3.3.4.4.8.3.3.4.4.8.3.3.4.4.8.3.3.4.4.8.3.3.4.4.8.3.3.4.4.8.3.3.4.4.8.3.3.4.4.8.3.3.4.4.8.3.3.4.4.8.3.3.4.4.8.3.3.4.4.8.3.3.4.4.8.3.3.4.4.4.8.3.4.4.3.4.4.3.4.3	7
Des Moines. Dubuque	78 73	- 2 + 1 - 2 - 3 - 3 - 3 - 3 - 3 + 1	6.7 6.0 2.1 6.7 4.0 2.5 3.3 3.3 4.0 2.5 2.0	+3.0 +2.3 6 +3.5 +1.6 + .2 -1.0 + .4 + .8 5 -3.3	Raleigh Wilmington N.DAK.Bismarck Fargo Williston OHIO.Akron-Canton Cincinnati Cleveland Columbus Dayton Toledo	76 79 71 71 69 70 74 69 70 72 68	- 1 0 + 2 + 1 + 1 - 2 - 1 - 3 - 2 - 3	4.2 4.9 1.7 3.5 3.2 2.2 6.4 8.0 3.1	-1.0 -2.0 0 +.5 +1.7 +.1 -1.1 +3.1 +5.1 +.2 +1.2	Charleston. Huntington. Parkersburg. WIS Green Bay La Crosse. Madison. Milwaukee WYO.Casper. Cheyenne. Lander. Sheridan.	73 72 73 68 71 69 69 66 65 67 69	- 1 - 2 - 1 - 1 - 1 - 1 + 1 - 3 - 2 - 1	4.1 2.1 4.2 5.9 6.0 7.5 4.8 1.0 1.8	+ .1 7 + .4 +3.1 +2.4 +4.1 +1.7 + .3 + .4 + .5

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

(Continued from page 7) showers and warm. 1.00 inch of rain fell at Belzoni. 100° at Meridian. Soil moisture short to adequate northern half, southern half short to very short. Rain early in week was beneficial but most all areas need rain. Soybeans fair to good condition, 10% shedding, 4% mature. Cotton fair to good with 18% open. Corn fair to good 12% harvested. Rice, hay crop, livestock fair to good condition. Days suitable for fieldwork averaged 6.

MISSOURI: Week began cool, moderated to near normal temperatures by end of period. Temperatures averaged 3° below normal. Rainfall on Thursday and Friday plentiful all but northeast which averaged only about 0.50 inch. Heavy rain again in southeast Ozarks added to an allready too wet situation. Average 5 days suitable for fieldwork. Corn mostly good condition, 39% mature, 60% last year; 2% harvested, 5% last year. Silage cutting in full swing. Soybeans good condition, 25% turning color, 40% year ago. Less than 1% harvested, 2% previous year. Grain sorghum 34% mature, behind last year's 57%. Cotton mostly good condition, 12% opening bolls behind last year's 22%. Soil moisture 43% short, 54% adequate, 3% surplus.

MONTANA: Temperatures averaged from near normal southwest to 6° below normal south-central plains. Precipitation generally light and spotty. Most showers over the southwest and southcentral with isolated areas receiving 1.00 inch or more. Winter wheat harvest virtually complete. Barley, spring wheat and oats entering windup stage, all 80% harvested. Flaxseed harvest underway, 30% complete. Dry beans 45% complete. Corn silage 15% complete, 2d cutting alfalfa 75% complete. Ten percent winter wheat acreage planted. Grazing prospects, late summer ranges good to excellent eastern 1/3, fair to good central 1/3, poor to good western 1/3. Prospective hay and forage supplies for coming winter adequate or better except northwest, central and southwest short to adequate. Livestock doing well 10% cattle and 10% sheep moved from summer ranges.

NEBRASKA: Temperatures averaged near normal. Most of precipitation resulting from erratic shower and thundershower activity. Precipitation highly variable over short distances, especially over central 1/3 of State. Weekly rainfall totals in portions of central Nebraska varied from no rain at all to about 2.00 inches in a space of 20 miles. Most of the heavy rains last week fell during the evening of 5th in a strip extending from near North Platte to Norfolk. Weekend of 9th saw torrential rains in a narrow band extending from 30 miles northeast of Grand Island to Omaha during the evening of 10th and early 11th. Incomplete rainfall reports indicate that rains in excess of 4.00 inches fell in Platte River Valley northwest of Lincoln, 4.39 inches at Schuyler. Development of crops retarded by cool weather. Soil moisture adequate for State. Corn development reached 70% dented, and 18% Silage harvest picking up momentum. mature. Sorghum 61% turning color, rated good to excellent. Soybean acreage has 48% turning color. Wet conditions slowed dry bean harvest. Potatoes and sugar beets in good condition. Alfalfa 3d crop 90% completed, 4th crop 10% completed. Fall wheat planting 16% completed. Livestock in good condition.

NEVADA: Temperatures near normal all divisions except 4° below normal extreme south. Highest,

100° at Logandale; lowest 31° at McDermitt. General light to moderate precipitation all stations from trace at Caliente and Hawthorne to 0.63 inch at Fallon. Hay harvest nearing completion and small grain harvest continues in high elevation valleys. Third cutting alfalfa hay in progress in northern areas and 5th cutting nearing completion in southern valleys. Alfalfa seed harvest active in all major producing areas. Cotton crop in Pahrump Valley progressing favorably with bolls starting to open. Livestock in good condition.

NEW ENGLAND: Week sunny and dry. Temperatures averaged near normal in Maine and mostly 1° below normal elsewhere. Wide temperature range on 7th, with some scattered freezing in morning to highs near 80°. Tender vegetation killed at Grafton, N. H. Local freezing again on 11th. No rain most areas until scattered showers and some thunderstorms 9th. Totals mostly under 0.10 inch in Connecticut, much of Massachusetts, and the southern portions of New Hampshire and Vermont. Totals generally less than 0.50 inch elsewhere except some near 1.00 inch in heavier thunderstorms in coastal Massachusetts. Good week for all crops. Apples coloring fast with cool nights. Picking increasing in volume. Cranberries showing good color with some general harvesting. Potato harvest for storage general harvesting. starting in Aroostook County, Maine. Good quality 2d cutting hay going into barn. Beginning to cut silage corn in all areas. All seasonal vegetables at peak.

Temperatures generally averaged NEW JERSEY: from 3° to 7° below normal. Extremes ranged from mid-80's on 7th and 8th to upper 30's on 11th. No frost. Rainfall sparse. Only station reporting more than 0.10 inch of rain was Long Branch with 0.33 inch. Soil moisture is becoming depleted in all areas. Most areas received a light rain on 9th but a good soaking would be beneficial. Harvest of fall vegetable crops increasing. Light supplies of corn, tomatoes, peppers, squash, and eggplant continue to move. White potato harvest is about 2/3 complete. Sweet potato harvest remains light. Fall apple supplies increasing. Cranberry harvest will begin next week. Soybeans beginning to color. Fall grains being seeded.

NEW MEXICO: Showers throughout week, generally light in west. Heavier local showers in mountains and in eastern plains later in week with totals of from 1.00 to 3.00 inches. Temperatures averaged near normal with minor changes. Warmest days early in week and coolest night mid-week. Soil moisture adequate to surplus, occasional local dry spots. Periodic rains interrupting farm activities. Some local flooding, damage limited. Planting fall wheat as permitted, over half planted, excellent stand. Cotton opening increasing. Hay cutting interrupted wet fields. Sorghum grain turning color. Ranges, livestock good. Fall contracting underway.

NEW YORK: Cool through 6th and end of week.
Minimums low 50's eastern Long Island and mostly
40° to 45° interior Upstate on 2 or 3 nights.
Seasonably warm midweek with maximums upper
70's to low 80's on 7th. Considerable sunshine
as precipitation limited to showers of generally
0.30 inch or less on 8th. Dry weather extended
for 3d week especially in south-central and
southeast. Oat harvest near completion. Corn
is in milk to dent stage of maturity. Additional

moisture needed southeastern sections. Third cutting alfalfa underway. Early dry beans reaching maturity. Pastures in poor to fair condition. Harvest of early variety potatoes continues active Long Island. Major Upstate areas getting underway. Sizes small in most areas. Orange County onion harvest approximately 70% completed. Sizes small in most areas. Lettuce and celery harvest continues. Sweet corn quality good. Bartlett pear harvest nearly complete in Hudson Valley and well underway in western New York. Apple crop sizing well and expect good quality. Concords coloring well, wineries to take first French Hybrids September 11.

NORTH CAROLINA: Temperatures falling slightly, and averaging below normal. Rain all areas September 5, and scattered showers other days. Total amounts mostly 1.00 to 2.00 inches, but a few amounts 3.00 to 7.00 inches coastal counties. Rains early week increased soil moisture to mostly adequate, except very short to short southern Piedmont and short to adequate southern mountains. Crop conditions little change--corn, peanuts, soybeans, sweet potatoes, hay, commercial apples mostly good. Pastures, cotton fair to good. Marketing flue-cured tobacco active. Harvest 90% complete. Harvesting corn, sweet potatoes, burley tobacco, commercial apples, fall vegetables.

NORTH DAKOTA: Cool weather continued most of week with scattered light frost in low places 1 or 2 nights. Warm and humid Saturday and in east Sunday. Scattered showers Wednesday and in few areas Saturday. Rainfall amounts varied from light to about 1.00 inch in north-central and northeast; mostly light other areas. Scattered showers and cool temperatures continued to delay harvesting operations. About 3/4 hard wheat and 2/3 durum combining completed. Less than 10% oats and barley acreage remain to be harvested. About 1/4 flax combined. Potato digging underway.

Low temperatures across Ohio ranged from low 40's to low 60's on 5th. Toledo and Youngs-town both recorded a low of 42° which set a new record for that date. On 10th, Youngstown reported a low of 38°, Cincinnati a low of 50°. These were both new records for that date. High temperatures ranged from upper 60's to upper 80's. mal highs and lows for this time of year are about 77° to 83° and 55° to 61°, respectively. In general, precipitation amounts were low. Cooler nighttime temperatures slowed rowcrop maturity over state, but warm sunshine during day enabled harvesting fresh vegetables, fruits, fall plowing, and haying. Six days were suitable for fieldwork during past week. Soil moisture supplies lowest in 1972 -- 39% short, 58% adequate and 3% surplus. 60% of corn crop dented but not hard, 90% last year and 80% normal. About 15% corn mature and safe from frost, last year 40%. Soybeans continue to lag behind last year and normal with 85% having leaves turning yellow or ear-lier. 15% has leaves shedding or beyond compared with 35% year ago and 25% for normal. Potato crop 40% harvested. Tobacco 45% cut, only 35% last year.

OKLAHOMA: Temperatures averaged near normal most areas to 2° below normal north-central. Precipitation averaged 0.20 inch southwest to 1.50 inches northeast. Recent rains benefitted row crops and native pastures but conditions still

mostly fair to good. Crop development and harvest progress moderately ahead of year ago. bale cotton ginned southwest September 6. Few fields of peanuts have been dug. Seeding 1973 winter wheat crop made good progress in Panhandle. Seedbed preparation active other areas with few fields seeded for early pasture. Most fields fair to good condition. Some improvement surface soil moisture remains 84% short. About 7% corn crop harvested. Sorghum mostly dough important Panhandle and north-central, elsewhere mostly mature with harvest tempo increasing 5% for State. Cotton bolls beginning to open 7% Nearly 1/5 peanut crop mature. Most for State. soybean crop setting pods. Alfalfa hay starting to make recovery several areas, 4th cutting 2/5 completed. Native pastures greening up but supplemental feeding continues. Livestock remain fair to good condition.

OREGON: Warm sunny days turned to showers midperiod with cooler days at close. Temperatures averaged mostly 2° to 6° above normal except near normal northeast. Minima mostly 36° to 55°. Maxima 75° to 100°. I to 3 days of light showers and rain totaled 0.05 to 0.32 inch except for dry conditions south coast and north-central counties. Farmers in Willamette Valley now preparing seedbeds for fall planting. Some seeding of fall grains just getting underway in eastern Oregon. Later areas finishing grain harvest. Harvest activity tapering off on snap beans and sweet corn. Potatoes remain active with sheds at Klamath Falls now shipping Norgolds. Fruit harvest remains active. Red and Golden Delicious apples being picked at Medford and Milton-Freewater. Prune harvest is getting underway in northern Willamette Valley. Ranges remain dry.

PENNSYLVANIA: Continued quite dry. Driest 2-week period, statewide, in 2 1/2 years. Scattered showers deposited mostly under 0.10 inch with 0.10 to 0.40 inch few localities. No measurable amounts many areas. Temperatures 2° to 4° below normal. Scattered light frost colder mountain valleys. Extremes: 87°, 33°. Topsoil moisture supply 90% short. Corn drying fast. Potato size small, some digging of fall varieties. Pastures 80% below average. Apples coloring nicely, size hurt by dry weather. Sweet corn finishing.

PUERTO RICO: Rainfall averaged 2.10 inches or about 0.20 inch above normal. Heavy rainshowers and thundershowers early in week along eastern and central portions with moderate showers southern divisions. Highest weekly total, 6.38 inches in eastern mountains. South coast agricultural drought greatly eased and some fields in Central Interior zones too wet for operations due minor flooding. Temperatures averaged 80° to 81° on coast and 75° to 76° interior divisions with mean departure of about 2.0° below normal. Highest maximum 95°, lowest minimum 56°. The increased rainfall has improved development of young sugarcane especially Ratoons. Planting cultivating and fertilizing operations also made good progress.
Coffee harvesting has begun almost all plantations while planting and transplanting also continued. Tobacco zone activity generally slow with some seedbed preparation underway. Pastures improving especially in south where agricultural drought greatly eased by recent rains. Minor crops progressing well with good abundance of all products on market. Planting operations progressed well in most zones under favorable weather.

SOUTH CAROLINA: Cool air at beginning of week brought in by the circulation of Tropical Storm Carrie. Minimums were in the mid-50's for first time this fall. Cold front midweek brought some rain and 50° minimums again on last 2 days. Week-ly temperature averages were 2° to 3° below normal. Rainfall amounted to 0.25 inch northwest, 0.50 inch central and 1.00 inch or more near coast. Farmers continued control practices for insects. Tobacco marketing declining. Cotton fair to good condition. Some defoliation underway. All set bolls, 18% open bolls, last year 30% open bolls. Corn good to excellent condition, 85% mature, 16% harvested -- last year 84% mature, 13% harvested. Soybeans good to excellent condition, 83% bloomed, 80% set pods, 12% leaves turning, 1% leaves shedding--last year 96% bloomed, 85% set pods. 59% peanut crop harvested, 45% last year. Lespedeza, grain, sorghum, pastures, hay year. Lespedeza, grain, sorghum, pastures, hay crops good condition. Grapes 93% harvested, 98% last year. Apple harvest 40% complete compared with 60% last year. Pecan crop poor condi-

SOUTH DAKOTA: Temperatures averaged from 4° below normal to 2° above normal. Extremes ranged from 29° at Lemmon on 8th to 97° at Philip on 9th. Precipitation generally light and scattered through week with amounts mostly from a trace to about 0.50 inch. Two to 4 weeks of frost-free weather still needed to mature many late fields of row crops. Nearly all corn is in or past dough stage with about 25% safe from frost. Normal for this date 29%, last year 49% safe. Sorghum grain showing head color 49%, normal 66% and last year 88%. Soybeans shedding leaves 26%, normal 38%, year earlier 54%. Harvesting corn silage just starting in some areas, other areas in full swing. Southern corn leaf blight identified in 12 southeastern counties but of little significance except on few isolated fields. Flax harvest still lagging at 65% harvested. Normally flax harvest is nearly complete by this date. Seeding of small grains made rapid progress, with wheat approaching halfway point and rye over 1/3 seeded. Livestock in good to excellent condition. Pastures becoming dry. Yearlings and lambs mowing to market.

TENNESSEE: Temperatures below normal first half and near to above normal second half. A few showers early in period and less general precipitation over weekend. Accumulated amounts ranged from a trace to about 0.75 inch. Heaviest amounts parts of northeast with lightest in north-central north of Nashville. With 5.3 days suitable for fieldwork, farmers made good progress in tobacco, hay and silage harvest. Crop and livestock prospects continue to look good. Virtually all soybeans have set pods and about 10% are beginning to turn yellow. Corn is 35% mature with grain harvest just beginning. Approximately 15% of cotton has open bolls. Crop continues to look good. Burley and Dark Fired harvest 75% complete. Dark Air-cured harvest 85% complete. Fall plowing slowed by recent dry weather, 55% complete.

TEXAS: Widely scattered showers most sections of State. Most numerous on southern High Plains. Warmer northwest and north-central Texas with little change elsewhere. Harvest of cotton, corn, sorghum, and peanuts continues northward as good harvest conditions prevailed. However, sorghum and corn harvest was delayed on southern High Plains and on Low Plains. The first cutting of rice nearing completion with 2d cutting to start in 1 to 2 weeks. Major crops percent harvested:

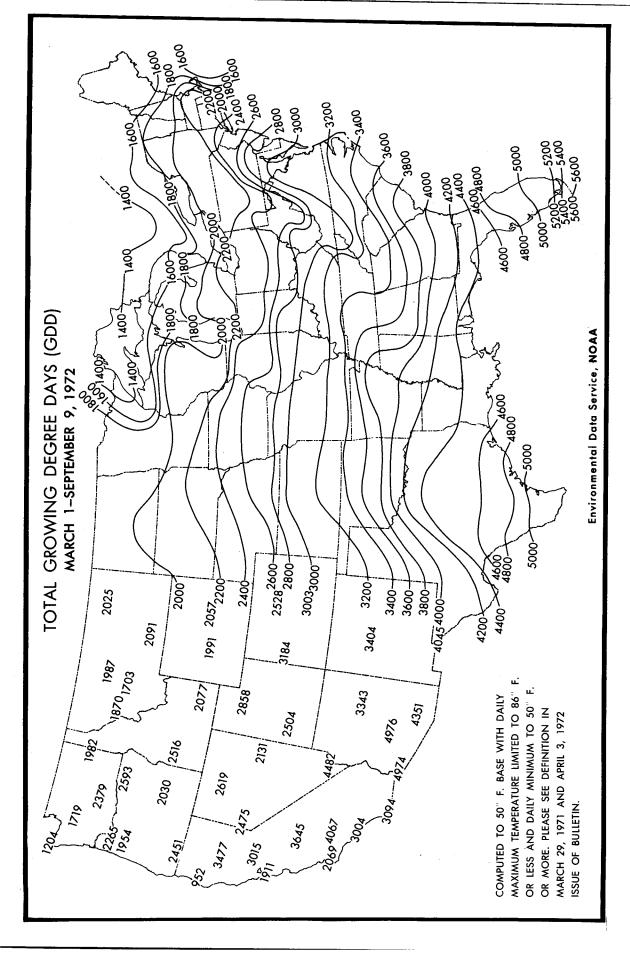
cotton 19, a year ago 12; sorghum 43, a year ago 40; corn 50, a year ago 12; sorgnum 43, a year ago 40; corn 50, a year ago 51; reanuts 20, a year ago 14; rice 96. a year ago 96. On the High Plains, vegetable harvest delayed because of wet libits. Cucumbers, peppers and melons available in moderate supplies. Light supplies of potatoes still Carrots and cabbage being processed. available. In North Texas, light supplies of cantaloupe and watermelons remain available. In East Texas, digging of dryland sweetpotatoes continues. Irrigated crop continues to look good. In San Antonio-Winter Garden area, planting of spinach is underway. Tomatoes, cucumbers, peppers making good progress. Planting of cabbage continues. In the Coastal Bend, cucumbers need rain. Some melons are blooming. Land preparation for spring melons underway. At Laredo, tomatoes and green peppers are requiring irrigation. In Lower Rio Grande Valley, fall vegetables continue to show good growth. Land preparation underway for spring onion planting. Peach harvest over. Pecan crop prospects remain excellent. Citrus crop continues to make good growth while requiring irrigation. Harvest of early oranges underway.

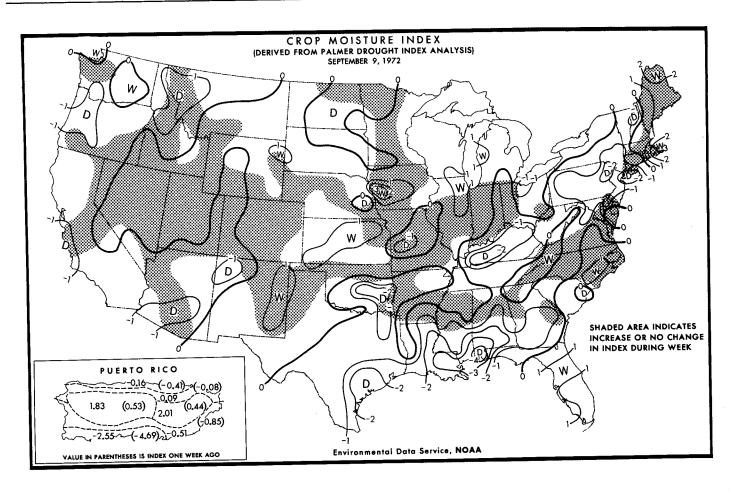
UTAH: Recurring periods of precipitation most sections. Accumulated amounts quite heavy some localities. Accumulations in drought plagued southern Utah heaviest since first of year many localities but additional precipitation needed to relieve moisture deficit. Temperatures averaged near to a little below normal. Soil temperatures, at 4-inch depth, ranged from low 60's Cache Valley, to mid-60's Richfield, upper 60's Salt Lake City and mid-80's St. George. Minimum temperatures in late crop areas have held well above freezing assuring full growing season for potatoes, dry onions, tomatoes, sugarbeets, field corn, alfalfa hay, alfalfa seed, and other late crops. crop alfalfa hay 25% cut. Alfalfa seed harvest from 1st crop hay about completed, starting for 2d crop hay. Silage and grain corn harvest about 10% completed, but will really get underway this week. Dry onion harvest in progress. Utah potato harvest starts this week. Southern Tomato harvest about 1/2 completed. Sugar beets adding tonnage daily. Harvest of near failure peach and pear crops nearly completed. Picking of main crop apples not started.

VIRGINIA: Temperatures below to much below normal. Rain and showers mostly near beginning. Good week for fieldwork. Rain restored topsoil moisture in east and partially in Piedmont, north, west, and southwest. Cut corn silage except in west and southwest. Flue-cured tobacco 3/4 pulled. Fire-cured over 60% cut. Sun-cured crop nearly 60%, burley 45%. Rain beneficial to soybeans and peanuts. Haying west of mountains and upper Piedmont. Pastures deteriorated in north but improved in southeast and southern Piedmont. Apple picking more general. Cool weather helped coloring. Cattlemen prepared for feeder calf sales.

WASHINGTON: Western Washington: Temperatures and precipitation near normal as some light rains fell. Cattle still on pastures as some feed supplies becoming short. Corn harvest into early stages. Harvest of small grains and seed crops continued. Cucumber and broccoli harvest finishing while other truck crops continued. Local demand for lettuce and cabbage improved. Blackberry picking progressed while a week and a half of blueberry harvest remains. Eastern Washington: Continued quite dry with near normal to 3° above normal southern portions. Many irrigated field

(Continued on back page)





INDEX DECREASED DURING WEEK (Unshaded Areas)

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

INDEX

3.0 SOME DRYING, BUT STILL EXCESSIVELY WET. ABO VE 2.0 to 3.0 MORE DRY WEATHER NEEDED, WORK DELAYED.

0 to 2.0 FAVORABLE, EXCEPT STILL TOO WET IN SPOTS. 0 to 1.0 FAVORABLE FOR 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.

BELOW -4.0 EXCEPTIONALLY DRY, MOST CROPS ABOUT RUINED

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

INDEX

3.0 EXCESSIVELY WET, SOME FIELDS FLOODED. ABOVE

3.0 TOO WET, SOME STANDING WATER. 2.0 to

2.0 PROSPECTS ABOVE NORMAL, SOME FIELDS TOO WET. 1.0 to 1.0 MOISTURE ADEQUATE FOR PRESENT NORMAL NEEDS.

0 to -1.0 PROSPECTS IMPROVED, BUT RAIN STILL NEEDED. 0 to

-2.0 SOME IMPROVEMENT, BUT STILL TOO DRY. -1.0 to

-2.0 to

-3.0 DROUGHT EASED, BUT STILL SERIOUS.
-4.0 DROUGHT CONTINUES, RAIN URGENTLY NEEDED.
-4.0 NOT ENOUGH RAIN, STILL EXCEPTIONALLY DRY. -3.0 to BELOW

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; 1.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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(Washington continued from page 13) crops harvested along with potatoes, sweet and silage corn and dry beans. Fall planting of alfalfa and pastures underway. Cattle condition good. Only traces of grain crop unharvested. Last of peach and D'Anjou pear crops harvested. Cool nights giving good color to apples with some picking started.

WEST VIRGINIA: Coolest week since end of June. Below normal temperatures with considerable sunshine. Showers September 3, 4, and 8. Hay making continued main activity. About 75% 2d cutting and 20% 3d cutting completed. Oats crop combined except few scattered fields. Over 1/2 potatoes dug. About 45% tobacco harvested. Growing crops mostly good condition. Corn 8% silked, 51% dough, 29% dented, and 12% mature. Soil moisture 73% adequate and 27% short. Eastern panhandle needing rain. Fieldwork average 5 days.

WISCONSIN: Cool late summer week. Light rain showers several days. Weather favorable for fieldwork on 3 to 5 days. Much of remaining oat acreage combined. Still many fields not harvested in the North and East. Some fields abandoned where too wet. Little second crop hay harvested, 3d crop ready to cut. Pastures

in very good condition and should provide excellent fall grazing. Corn slow in maturing due to cloudy, cool, wet weather—about 55% in dent or beyond, 70% last year. Soybeans looking good though fields often very weedy. Tobacco harvest moving along. Sweet corn harvest active. Harvests of potatoes and other vegetable crops slowed by cool and damp weather. Soil moisture 40% adequate and 60% surplus.

WYOMING: Moderate showers statewide: Border 3N reporting most moisture with 1.22 inches. Temperatures averaged slightly below normal. Maxima were mostly mid-70's to mid-80's; minima mostly 30's to low 40's. Temperature extremes: 85° at Basin, Deaver and Sheridan Field Station and 22° at Bondurant. Farm activities included harvest small grains, silage corn, haying, and windrowing dry beans. Barley, oats, and spring wheat harvest moved to completion in most areas. Harvest of corn for silage began and harvest of potatoes underway. About 40% of dry beans had been windrowed and 5% were combined. Winter wheat seeding underway with about 1/2 acreage planted and 10% emerged. Second cutting alfalfa virtually completed. Thirty-five percent of corn for grain in dough stage, 60% denting and 5% mature.

NATIONAL FLOOD SUMMARY September 11, 1972

Precipitation...excessive rainfall occurred locally in west central Iowa in the last 24 hours...particularly in Shelby...Crawford...and Audubon counties. Unoficial reports of 11 to 13 inches of rain were received from the Harlan Area in Shelby county...and up to 15 inches was reported just north of Harlan. Audubon Iowa in Audubon county reported between 8 and 9 inches. And Denison Iowa in Crawford county received more than 7 inches. A number of other local areas received heavy rain since Friday morning September 8... in the southeast Rockies...central and southern plains...Mississippi Valley...and in a few other widely scattered localities.

Hydrologic Services Division National Weather Service