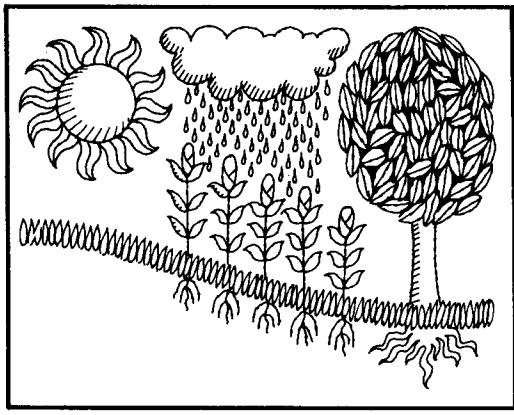

Weekly Weather & Crop Bulletin

U. S. DEPARTMENT OF COMMERCE
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U. S. DEPARTMENT OF AGRICULTURE
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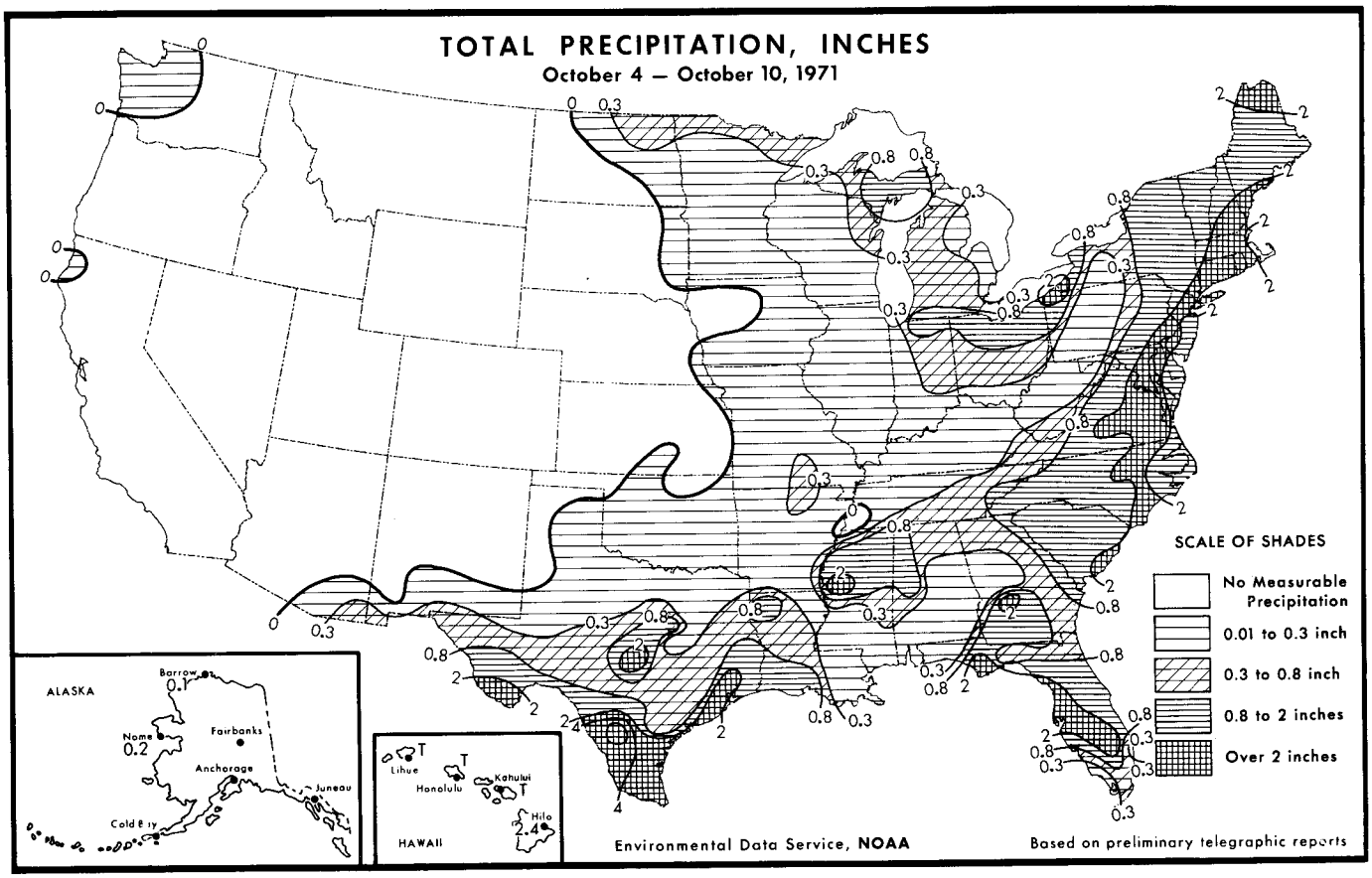
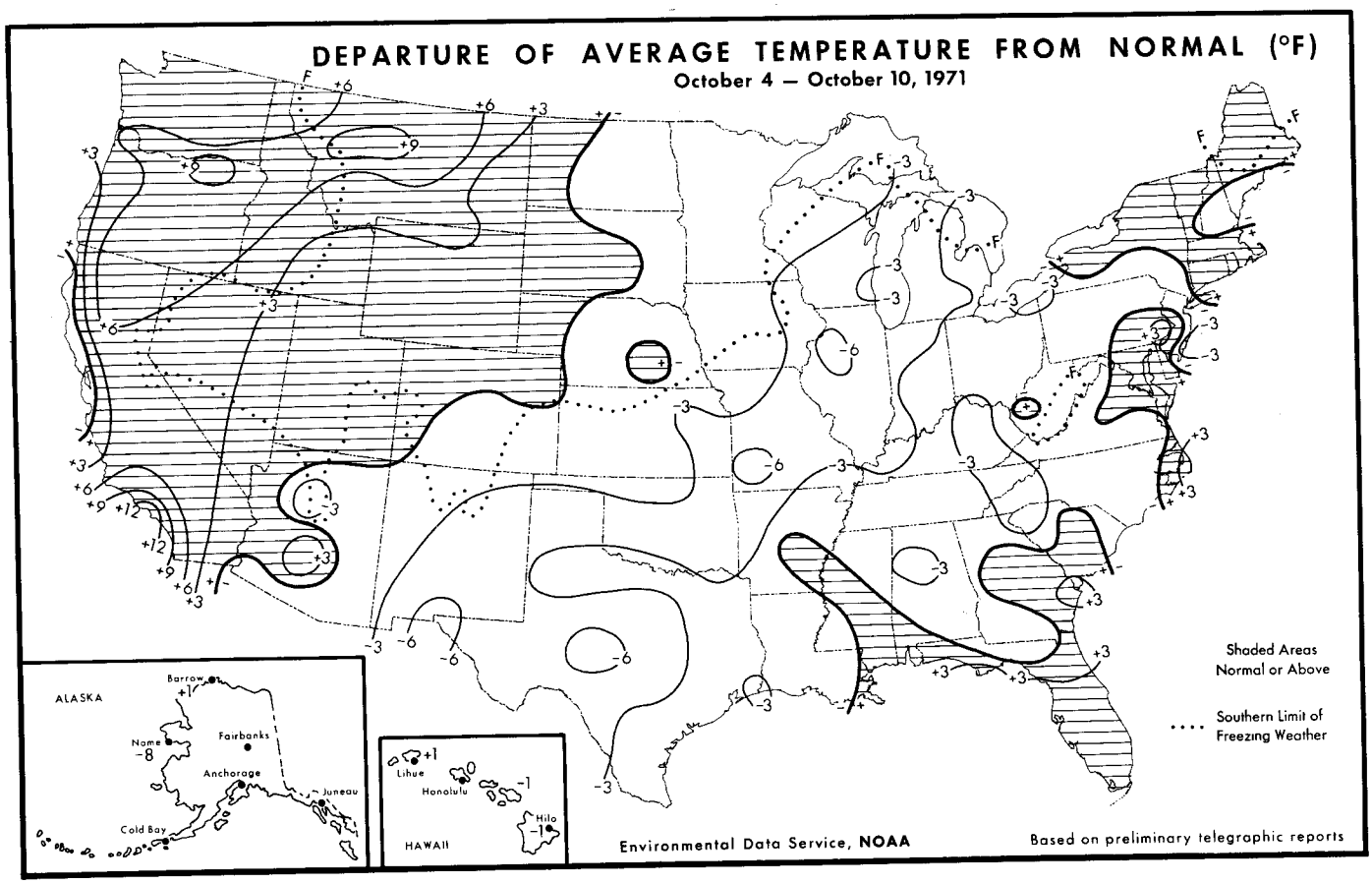


HIGHLIGHTS: Fine autumn weather prevailed over most of the Nation. Generous rains fell along the Atlantic seaboard late in the week. Only widely-scattered light showers fell over th West.

PRECIPITATION: Light rain fell early in the week over the Washington coast. Heavier showers fell from the Lower Rio Grande Valley northeastward to the middle Atlantic coast late Monday and Tuesday and from Pennsylvania to New England later in the week. In the 24 hours ending Tuesday morning, Cotulla, Tex., received 6.71 inches of rain. Rain fell over the eastern half of the Nation late in the week. This included light sprinkles from the Red River of the North Valley to New England Thursday, light to moderate showers from the Lower Rio Grande to western New York on Friday, and moderate rains in the Ohio River Valley and soil-soaking rains along the Atlantic seaboard Saturday and Sunday. Florida received light showers on several days late in the week.



TEMPERATURE: High pressure systems dominated the weather over most of the Nation last week. They brought typical autumn weather with mild sunny afternoons and cool invigorating nights. It was especially cool from the northern Great Plains to New England where afternoon temperatures by mid-week were in the 40's, 50's, and low 60's. Early morning temperatures dropped to the 30's over the higher Rocky Mountains and on Friday morning minimums in the 30's and 40's were common over the north from Washington and Oregon to the Atlantic Ocean and as far south as Virginia. Beckley, W. Va., registered 32° Friday morning. The exceptions to the fine cool autumn wather included southern California where desert winds pushed the temperatures to the 90's most afternoons and sunny Florida where the mercury reached the 90's on Wednesday afternoon. Los Angeles, California registered 102° Wednesday. Santa Ana winds caused unseasonal warmth over inland portions of California over the weekend. A large High centered over the Great Basin brought warm air northward to Montana and cool air to a large area from the Dakotas to the Great Lakes and southward to Oklahoma and Tennessee. On Saturday afternoon, maximum temperatures over this large area were mostly in the 60's. Temperatures averaged below normal over most of the Nation. Warmer-than-normal temperatures prevailed over much of the West.

L. W. Dye

NATIONAL AGRICULTURAL SUMMARY

AGRICULTURAL HIGHLIGHTS: : Dry weather allowed crop harvest to make excellent headway. * Rain continued to slow harvesting and planting operations in Texas. * Cotton picking well behind normal South.

SMALL GRAINS: Kansas and Oklahoma farmers were extremely busy seeding next year's wheat crop. The weather was sunny and dry and substantial progress was made in both States. One more week of nice weather will see the bulk of the acreage planted--over 80 percent is now seeded in the two States, Most early-planted fields are up. Army worms and grasshoppers are damaging newly-emerged fields in several areas. Progress was not so good in Texas as rains kept planting equipment idle a good portion of the week.

Fall-seeded grains in Nebraska, South Dakota, and Colorado are in good to excellent condition, depending on topsoil moisture. Only a few wheat fields remain to be seeded in Colorado. Montana wheat growers have 90 percent of their acreage in. Most grain acreage is seeded in Washington, but Oregon growers are still seeding. Some headway was made in seeding fall grains east of the Mississippi River, but most farmers concentrated on harvesting corn and soybeans. Seeding was held up in Georgia due to dry soils. Stands are mostly good throughout the East.

CORN: Seasonal temperatures and dry weather speeded corn harvesting in the Corn Belt. Farmers worked long hours as fields were dry and the moisture content of corn was decreasing to safe storage levels. The bulk of the crop is already made and safe from frost, but the moisture content is still fairly high in many fields and a hard freeze is needed to aid the drying process. Harvesting of the crop is well ahead of normal, but about equal to last year. Farmers in Nebraska and Wisconsin are having a hard time to get harvest rolling. The moisture content of grain is high, and less than 10 percent of the crop is picked. Missouri and Kansas growers are off to a fast start and have over 40 percent of their crop in. Picking is also off to a good start in Iowa and Illinois. Stalk breakage and ear droppage are causing increased concern in areas of Illinois, Iowa, and South Dakota.

Corn harvesting made good headway under clear skies in the South, but overall progress still lags behind last fall. The high moisture content of corn delayed picking in Kentucky and Alabama. Rains from North Carolina to New Jersey halted harvesting and dampened hopes for corn downed in North Carolina by Hurricane Ginger. Pennsylvania growers are having harvesting problems in blighted fields, as lodging and stalk breakage are causing difficulties.

SOYBEANS: A huge portion of the 1971 soybean crop was combined during the week. Sunshine and low humidity allowed farmers to cut a tremendous amount of acreage. Combining was extremely rapid in Illinois, Iowa and South Dakota where from 25 percent to 35 percent of the crop was combined. Illinois, the Number 1 soybean producing State, is also Number 1 in harvest completion, as 75 percent of their acreage is cut. Over half the Corn Belt crop is in storage, but harvest is just starting to gain momentum in the South. Prospects deteriorated in North Carolina where some fields are flooded; Arkansas growers wish they had some of this moisture for their late-planted fields which are drying out.

COTTON: Rains continued to delay cotton picking in Texas and North Carolina. Maturity of the Texas crop on the High Plains made some progress, but warm temperatures are needed. Harvest gained momentum in other cotton producing States as warm, dry weather prevailed. Bolls were opening much faster, thus growers have plenty of acreage ready to pick. Machine picking increased, but the amount of cotton picked still lags well behind last fall. Picking was active in the Desert area of California, with defoliation widespread in the San Joaquin Valley.

OTHER CROPS: Texas sorghum harvesting continued to make slow progress as rains halted combining. Percent of the crop cut in both Texas and Oklahoma lags behind last year. Combining made excellent headway in Kansas and other sorghum States. High winds caused lodging in some South Dakota fields. Dry weather was a relief to Kentucky tobacco farmers--they are hoping this will curb houseburn. Peanut growers in Georgia and Alabama are digging their last fields. Wet fields made combining impossible in Virginia and North Carolina. Potato digging resumed in Idaho as fields dried. Digging is generally complete in Maine, except for large operations. Much of the New York crop was going into storage. Lifting of the 1971 sugar beet crop made good headway as weather was ideal for digging. Dry bean harvest is nearing completion in Colorado, Nebraska and Montana. Over half the Louisiana sweetpotato crop is dug, however soggy fields have stymied digging in North Carolina.

Fruits and Nuts: Apple picking progressed at a fast pace from Washington to New England. Seasonal temperatures improved apple color. Most apples were going into storage. Cranberry harvest is well along and growers are working in their last bogs. Pear harvest is about over for this year. California grape picking continued with heavy deliveries to wineries; grapes are nearly all rolled. Florida citrus picking is increasing.

Vegetables: Rain and wet fields are dominating the Texas vegetable scene. Slow progress is being made harvesting on the High Plains, while excessive rainfall endangers the crop in the Lower Rio Grande Valley. Harvest of early sweet corn and cucumbers is underway in Florida. Dry soils are hurting snap bean and cucumber prospects in South Carolina. Harvesting of fall crops is rather light in New Jersey, with squash moving into storage in New England. Cabbages and onions are being stored in New York.

PASTURES AND LIVESTOCK: Pastures are providing excellent grazing for this late in the season. However, dry weather slowed growth in many States. Rains gave grass growth a boost in Florida. An increased number of herds started foraging in harvested corn fields. The movement of cattle and calves to market increased. Vaccinating horses for Venezuelan equine encephalitis is largely complete in Virginia.

Steve J. Pscodna
Agricultural Statistician

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t. October 10, 1971

States and Stations	Temperature °F Average	Temperature °F Departure*	Precipitation Inches Total	Precipitation Inches Departure*
ALA.Birmingham. . .	66	- 4	.2	- .4
Mobile.	74	+ 1	0	- .8
Montgomery. . . .	70	- 1	0	- .6
ALASKA.Anchorage. .	--	---	---	-----
Barrow.	--	---	---	-----
Fairbanks	34	+ 1	.1	- .1
Juneau.	--	---	---	-----
Nome.	26	- 8	.2	- .2
ARIZ.Flagstaff. . .	47	- 4	0	- .4
Phoenix	80	+ 5	T	- .1
Tucson.	72	- 2	T	- .2
Winslow	61	- 1	0	- .2
Yuma.	80	- 1	0	- .1
ARK.Fort Smith. . .	63	- 5	.1	- .7
Little Rock . . .	68	+ 1	.1	- .6
CALIF.Bakersfield .	77	+ 6	0	- .1
Eureka.	55	- 1	T	- .5
Fresno.	73	+ 5	0	- .1
Los Angeles . . .	82	+13	0	- .1
Red Bluff	76	+ 7	0	- .2
San Diego	76	+ 9	T	- .1
San Francisco . .	61	- 2	0	- .1
Stockton.	73	+ 5	0	- .1
COLO.Denver	56	0	0	- .2
Grand Junction. .	61	+ 1	0	- .2
Pueblo.	59	- 1	0	- .3
CONN.Bridgeport . .	60	+ 1	2.1	+1.3
Hartford.	58	+ 2	2.7	+2.0
D.C.Washington. . .	63	+ 1	2.7	+2.0
FLA.Apalachicola. .	77	+ 3	3.2	+2.6
Ft. Myers	82	+ 4	2.3	+1.1
Jacksonville. . .	74	0	.8	- .7
Key West.	84	+ 3	.1	-1.3
Lakeland.	79	+ 2	4.8	+3.9
Miami	83	+ 3	.6	-2.1
Orlando	81	+ 4	1.4	+ .2
Tallahassee . . .	72	- 1	.6	- .1
Tampa	80	+ 3	2.3	+1.4
GA.Atlanta.	66	0	T	- .5
Augusta	69	0	1.4	+ .9
Macon	71	+ 1	.2	- .3
Savannah.	74	+ 3	1.1	+ .4
HAWAII.Hilo	75	- 1	2.4	0
Honolulu.	79	0	T	- .4
Kahului	77	- 1	T	- .1
Lihue	79	+ 1	T	- .7
IDAHO.Boise	62	+ 6	0	- .1
Lewiston.	63	+ 7	0	- .3
Pocatello	54	+ 1	0	- .2
ILL.Cairo	63	- 3	.1	- .5
Chicago	55	- 5	.3	- .3
Moline.	53	- 6	T	- .6
Peoria.	53	- 7	.2	- .4
Rockford.	53	- 4	0	- .7
Springfield . . .	56	- 5	.2	- .5
IND.Evansville. . .	59	- 4	T	- .6
Fort Wayne. . . .	54	- 3	.5	- .2
Indianapolis. . .	57	- 2	.4	- .3
South Bend. . . .	54	- 3	1.2	+ .4
IOWA.Burlington . .	55	- 4	.3	- .4
Des Moines. . . .	58	- 1	.2	- .3
Dubuque	51	- 4	.1	- .5
Sioux City. . . .	57	- 2	T	- .4
KANS.Concordia. . .	59	- 3	0	- .4
Dodge City. . . .	61	- 2	0	- .3
Goodland.	58	0	T	- .2
Topeka.	60	- 3	0	- .6
Wichita	61	- 2	T	- .6
KY.Lexington. . . .	59	- 3	.2	- .3
Louisville. . . .	60	- 2	.3	- .2
LA.Baton Rouge. . .	70	- 2	.2	- .8
Lake Charles. . .	74	0	1.6	+ .9
New Orleans . . .	74	0	T	- .7
Shreveport. . . .	70	- 2	.9	+ .3
MAINE.Caribou . . .	49	+ 2	2.0	+1.2
Portland.	51	- 2	3.2	+2.4
MD.Baltimore. . . .	61	0	2.7	+2.0
MASS.Boston	60	+ 1	1.5	+ .9
Nantucket	59	---	1.7	-----
MICH.Alpena	48	- 2	.1	- .5
Detroit	55	- 3	.2	- .4
Flint	52	- 2	.4	- .1
Grand Rapids. . .	51	- 4	.5	- .1
Houghton Lake . .	48	- 3	.1	- .6
Lansing	52	- 3	.4	- .2
Marquette	50	- 2	1.6	+1.0
Muskegon.	51	- 5	.4	- .2
S.Ste.Marie . . .	45	- 5	.7	0
MINN.Duluth	48	- 2	.2	- .3
Internatl Falls .	45	- 2	.5	+ .1
Minneapolis . . .	51	- 2	.1	- .3
Rochester	52	- 3	T	- .4
St. Cloud	50	- 2	T	- .4
MISS.Jackson. . . .	70	0	T	- .4
Meridian.	70	0	.6	+ .1
MO.Columbia	58	- 5	.1	- .7
Kansas City . . .	62	- 3	T	- .7
St. Louis	59	- 4	.1	- .6
Springfield . . .	58	- 6	T	- .9
MONT.Billings . . .	57	+ 4	0	- .3
Glasgow	56	+ 6	0	- .2
Great Falls . . .	61	+10	0	- .2
Havre	56	+ 7	0	- .2
Helena.	55	+ 6	0	- .2
Kalispell	54	+ 6	0	- .3
Miles City. . . .	53	0	0	- .3
Missoula.	57	+ 9	0	- .3
NEBR.Grand Island .	59	+ 1	0	- .2
Lincoln	60	- 1	T	- .4
Norfolk	56	- 1	T	- .3
North Platte. . .	54	- 2	0	- .3
Omaha	57	- 2	.1	- .3
Valentine	54	0	T	- .2
NEV.Ely	52	+ 2	0	- .1
Las Vegas	73	+ 2	0	0
Reno.	57	+ 4	0	- .1
Winnemucca. . . .	57	+ 5	0	- .2
N.H.Concord	51	- 2	2.1	+1.5
N.J.Atlantic City .	58	- 3	1.8	+1.0
Trenton	61	+ 1	1.7	+1.0
N.MEX.Albuquerque .	60	- 3	0	- .2
Roswell	61	- 2	T	- .3
N.Y.Albany.	55	0	1.7	+1.1
Binghamton. . . .	53	- 1	1.3	+ .6
Buffalo	55	+ 1	1.0	+ .2
New York.	62	- 1	2.4	+1.6
Rochester	57	+ 2	.3	- .3
Syracuse.	56	0	.8	+ .1
N.C.Asheville . . .	56	- 5	1.0	+ .4
Charlotte	64	- 2	1.7	+1.0
Greensboro. . . .	61	- 2	1.1	+ .4
Hatteras.	71	+ 3	3.9	+2.9
Raleigh	63	- 1	2.3	+1.6
Wilmington. . . .	68	- 1	2.3	+1.6
N.DAK.Bismarck. . .	50	- 1	0	- .3
Fargo	50	- 1	.1	- .2
Williston	52	+ 2	0	- .2
OHIO.Akron-Canton .	54	- 3	.8	+ .2
Cincinnati. . . .	59	- 3	.2	- .4
Cleveland	54	- 3	1.4	+ .8
Columbus.	56	- 2	.5	0
Dayton.	57	- 2	.7	+ .1
Toledo.	54	- 2	.8	+ .2
Youngstown. . . .	53	- 2	1.2	+ .6
OKLA.Okla. City . .	63	- 4	T	- .6
Tulsa	64	- 3	.1	- .7
OREG.Astoria. . . .	61	+ 6	T	-1.4
Burns	59	+ 7	0	- .2
Medford	65	+ 8	0	- .4
Pendleton	66	+ 9	0	- .3
Portland.	64	+ 7	T	- .7
Salem	61	+ 4	T	- .7
PA.Allentown. . . .	58	0	1.9	+1.2
Erie	53	- 4	2.8	+2.0
Harrisburg. . . .	60	+ 1	.9	+ .2
Philadelphia. . .	62	+ 3	2.1	+1.4
Pittsburgh. . . .	56	- 1	.3	- .3
Scranton.	53	- 2	1.5	+ .7
R.I.Providence. . .	58	+ 1	2.2	+1.5
S.C.Charleston. . .	70	0	3.8	+3.0
Columbia.	69	+ 1	1.6	+1.0
Greenville. . . .	63	- 4	1.1	+ .3
S.DAK.Aberdeen. . .	52	- 1	T	- .3
Huron	53	0	T	- .3
Rapid City. . . .	55	+ 1	T	- .2
Sioux Falls . . .	53	- 1	T	- .3
TENN.Chattanooga. .	64	- 2	.6	- .1
Knoxville	62	- 3	1.0	+ .4
Memphis	66	- 1	0	- .5
Nashville	63	- 2	.2	- .3
TEX.Abilene	65	- 5	.3	- .5
Amarillo.	60	- 4	T	- .5
Austin.	70	- 4	.5	- .2
Beaumont.	71	- 3	1.1	+ .5
Brownsville . . .	77	- 1	2.5	+1.6
Corpus Christi. .	75	- 2	2.4	+1.7
Dallas	69	- 2	.3	- .3
Del Rio	70	- 5	1.1	+ .6
El Paso	63	- 6	.4	+ .2
Fort Worth. . . .	67	- 5	.4	- .2
Galveston	75	- 1	1.3	+ .5
Houston	71	- 2	2.5	+1.6
Lubbock	63	- 2	0	- .6
Midland	65	- 5	.1	- .4
San Angelo. . . .	65	- 7	.7	+ .2
San Antonio . . .	71	- 3	1.3	+ .7
Victoria.	73	- 2	.6	- .3
Waco.	69	- 4	.2	- .4
Wichita Falls . .	68	- 2	.1	- .6
UTAH.Blanding . . .	57	+ 1	0	- .4
Salt Lake City. .	56	0	0	- .2
VT.Burlington . . .	53	+ 1	1.6	+ .9
VA.Lynchburg. . . .	61	0	2.9	+2.3
Norfolk	65	- 1	3.0	+2.3
Richmond.	62	0	2.8	+2.1
Roanoke	60	- 1	1.2	+ .5
WASH.Colville . . .	56	+ 4	0	- .3
Omak.	56	+ 4	0	- .2
Quillayute. . . .	59	+ 5	.2	-2.1
Seattle-Tacoma. .	60	+ 5	T	- .8
Spokane	58	+ 5	0	- .3
Walla Walla . . .	66	+ 6	0	- .3
Yakima.	60	+ 5	0	- .1
W.VA.Beckley. . . .	55	- 2	.5	- .1
Charleston. . . .	61	0	T	- .6
Huntington. . . .	61	0	.1	- .4
Parkersburg . . .	60	- 1	.2	- .3
WIS.Green Bay . . .	50	- 4	.3	- .2
La Crosse	52	- 3	T	- .5
Madison	50	- 4	.2	- .4
Milwaukee	52	- 2	.1	- .4
WYO.Casper.	53	0	0	- .2
Cheyenne.	52	+ 1	0	- .2
Lander.	54	+ 2	0	- .3
Sheridan.	56	+ 4	T	- .3
P.R. San Juan . . .	--	---	---	-----

* 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: Very warm with a few showers mainly in north first of period. Fair and cooler midweek. Fair south, partly cloudy with some light rain north, Friday and Saturday. Clearing and much colder Sunday with minimums in upper 30's Sunday night. Temperatures averaged near normal. Rainfall light north, little or none south. Harvest gained momentum as open weather prevailed. Cotton opening much faster. Defoliation underway many fields, machine harvest prevalent many fields. About 60% open and 15% harvested, 78% and 51% year ago. Harvest corn making progress, but moisture content still high. Almost 1/4 harvested compared 1/2 year ago. Last fields peanuts being dug. Production much higher than preharvest expectations. Soybeans good condition, but maturing slowly. Few fields harvested. Pecans maturing rapidly with nuts beginning to drop. Hay harvest practically complete. Feed from pastures mostly adequate, but short few counties.

ALASKA: Above normal rain about 1.00 inch total occurred in Matanuska Valley early in week. Maximum temperatures were slightly below normal while minimums were about normal. Kenai Peninsula received light rain, below normal through the week. Temperatures were near normal. Tanana Valley received light rain early in week. Maximum temperatures were 7° to 10° below normal. Minimums were near normal. Topsoil and subsoil moisture supplies adequate throughout Railbelt. Harvest barley continues both Tanana and Matanuska Valleys. Frequent precipitation and high moisture content hampered harvest. Potato harvest interrupted Matanuska Valley as wet ground main harvest problem. Livestock in generally good condition. Supply local hay and straw short throughout Railbelt.

ARIZONA: Temperatures were slightly below normal in most sections. Precipitation was light and limited mostly to mountains in eastern and southeastern parts of State. Locally gusty winds in agricultural sections in southern part of State. Cotton harvest active Yuma. Harvesting very limited central, southeastern areas. Harvest early grain sorghum active Yuma. Early yields fair. Harvest spring-planted sugar beets active Willcox. Salt River Valley, Pima and Pinal Counties, fall lettuce good condition. Harvest underway, Cochise County. Chili, melons, and other vegetables being harvested, Graham and Greenlee County. Yuma area activities delayed by rain. Harvesting cantaloupes, honeydews getting underway. Planting winter vegetables continued. Some lemon picking Salt River Valley. Fruit sizing rapidly. Yuma area, lemon harvest limited scale, sizes small. Grapefruit sizing well. Ranges remained fair to good condition. Winds removing soil moisture. Lower elevation and desert supplying adequate feed. Higher elevation ranges received moisture to fill stock tanks and allow greening before winter freezes. Cattle and calves fair to good. Sheep and lambs fair.

ARKANSAS: Mild to warm temperatures through middle of week; pronounced cooling over weekend. Near freezing temperatures Sunday and Monday several locations in north. Weekly means in range zero to 6° below normal. Precipitation generally light except for Arkansas City with 1.12 inches. Extreme north-central and extreme southeast had amounts near 0.50 inch. Good progress with fall harvest. Rice over 90% cut. Cotton harvest gained momentum, 20% harvested. Harvest at peak northeast, but much slower progress elsewhere. Fair to good yields indicated. About 10% soybeans harvested. Poor to good yields expected with dry weather hurting many late fields. Grain sorghum harvest well advanced, and corn picking 1/2 finished. Further seeding small grains underway soil conditions and progress harvest other crops permits. General rain needed for land preparation and seeding. Pastures short north, mostly adequate elsewhere.

CALIFORNIA: Much warmer after Sunday so this week was 10° to 16° warmer than last week most areas. Average temperatures 2° to 5° above normal north of Tehachapis. South Coast maximum reached 100° Tuesday, Wednesday, Thursday; average temperatures 8° to 10° above normal with low humidity. All areas preparing for planting fall grain. Alfalfa cutting final stages Imperial Valley. Sugar beets underway San Joaquin; picking up Sacramento Valley. Dry bean harvest slowed south coastal. Harvesting early varieties rice nearly complete, late varieties underway. Corn active all areas San Joaquin, Sacramento Valleys. Milo being harvested Central Valley. Picking cotton Desert; defoliation widespread San Joaquin Valley, picking limited. Harvest fruit and nut crops active. Apple harvest active Watsonville area. Grape harvest continues, winery deliveries active. Raisins approximately 90% to 95% rolled or boxed. Table grape harvest continues. Light picking peaches continues. Prune harvest virtually complete. Walnut harvest picking up, but sun burn damage. Date harvest increasing. Pears continue to be packed. Light harvest lemons Desert area. Harvest Hass Avocados continues. Ranges very dry. Supplemental feeding increasing. Calving, lambing in progress. Turkeys moving to processors. Broccoli-cauliflower, Salinas-Santa Maria normal. Westside cantaloupes nearing end, Imperial Valley increasing. Celery Santa Maria, Salinas continues seasonally normal. Southern California sweet corn moderately active. Lettuce Salinas declining, San Joaquin Valley increasing. Onions Central Coast, San Joaquin slight decline. Potatoes slow Stockton Delta, Salinas District-northern California going to storage. Merced sweetpotatoes continues active. Market tomatoes Oxnard, Chula Vista, King City, Stockton moderate.

COLORADO: Clear and dry fall weather all areas. Warm days and cool nights. Lower elevations maximums 70° to 80°, minimums high 30's and 40's. No measurable precipitation. Some windy periods. Fieldwork progressed rapidly. Seeding winter wheat 97%, winter barley 94% complete. Winter wheat and barley 84% and 80% emerged. Condition emerged winter wheat good most areas. Excellent northeast and east-central. Harvest corn for grain 5% complete. Corn silage 89% harvested. Sorghum grain acreage 70% mature, 13% harvested. Cutting dry beans nearly complete,

85% threshed. Sugar beet harvest 7% complete. Fall potato harvest San Luis Valley 60% completed. Range and pastures slightly improved. Livestock excellent.

FLORIDA: Temperatures averaged 3° to 4° above normal as sunny skies in the early part of the week brought daytime high temperatures into the low 90's. A cold front pushing down from the northwest brought overcast skies and rain to most of Florida on weekend. Heaviest amounts of rain were in central Florida and along the Gulf coast, where the front combined with a low pressure area. Northern, central, and southwestern divisions of State averaged over 2.00 inches of rain with only 0.50 inch along the lower east coast and scattered showers in the Keys. Weekly rainfall amounts totaled 3.63 inches at Lake Alfred, 3.51 inches at Kissimmee, and 3.37 inches at Canal Point. The 24-hour rainfall ending at 8 a.m., October 10 totaled 3.10 inches at Apalachicola. Rainfall totaled 3.91 inches at Homosassa Springs by 8 a.m., October 11. Weekend rains ended drought field crop areas except extreme west Panhandle. Peanut digging about complete. Cotton and soybean harvest becoming active, corn continues. Drought interrupted planting small grain. Rains very beneficial to parched pasture grasses. Most pastures fair compared to good week ago. Cattle and calves good. Citrus tree condition excellent. Drier than normal, but light rains late week. New crop harvest increasing. Rains midweek and over weekend relieved dry conditions major vegetable areas. Earliest plantings sweet corn, cucumbers, eggplant, radishes, and squash being harvested. Limited, but increased supplies these commodities in first shipments escarole, lettuce, peppers, and tomatoes expected during last half October. Planting potatoes and strawberries stated South. Planting most other crops continues active.

GEORGIA: Unseasonably warm beginning of week, turning much cooler at midweek and continued cool remainder of period. Highs dropped from 80's and low 90's early in week to 60's and 70's by Friday and lows dropped 18° to 22° during same period. First freeze of fall occurred on 8th with 31° at Blairsville, about 5 days earlier than average. Averages ranged from near normal in north to 3° above normal at Savannah. Rain north Tuesday night and over much of State Saturday. Blakely had 4.12 inches Saturday and several places in south had more than 1.00 inch. Amounts generally small in north. Weekend rains relieved soil moisture shortates most areas. Conditions before weekend favorable for harvest, but had become too dry for small grain planting many counties. Small grains 32% planted. Peanut harvest nearly complete. Cotton picking 30% complete, about 1/2 normal progress. Corn 1/3 gathered, also late. Soybean harvest still light with only 2% combined. Haying declined. Mountain apple harvest continued brisk. Pastures declining rapidly, but cattle remain mostly good.

HAWAII: Light to moderate rain in watershed areas. Sugar production up slightly from year ago. Pineapple planting full swing. Papaya production increasing. Banana supplies steady. Vegetable supplies adequate. Pastures fair condition. Livestock in fair to good.

IDAHO: Temperatures averaged near normal and only precipitation was scattered and light south-central and east coming first 2 days. Rising temperatures averaged slightly above normal north and slightly below normal east. Harvesting resumed following rains and snow. Potatoes 30% dug. Fall feed supply diminishing some areas, necessitating supplemental feeding. Fall seeding about 80% complete north and 90% east. Emerged stands look good. Fall plowing major activity.

ILLINOIS: Precipitation in many localities as cold air fronts passed through State. Amounts were light to moderate on 8th and 9th. Severe storm activities minor. Temperatures averaged several degrees below normal. Daily high temperatures often in 70's. Considerable sunshine and low humidity. Soil moisture short 34%, adequate 66%. Rains improved moisture situation. Some streams, ponds, wells still low. 1971 becoming good crop year. Corn 30% harvested, same as last year, over 1 week ahead normal. Yields good to excellent. Moisture 12% to 30%. Grain quality good to excellent. Stalk rot still problem many areas. Soybeans 75% harvested, 60% year ago--well ahead normal. Yields and quality good to excellent most areas; north and central Illinois better than southern Illinois. Winter wheat seeding 70% complete, 55% last year. Wheat sprouting east-southeast. Sorghum grain yields good to excellent southwest. 1972 acreage intended for corn and soybeans 20% plowed. Pastures excellent 11%, good 41%, fair 37%, poor 11%. Main activities include corn and soybean harvest, sowing wheat, plowing.

INDIANA: Cool week. Showers on 9th of 0.10 to 0.50 inch. Temperatures aveaged 52° to 59° and 3° below normal. Partly cloudy days with daily highs in 60's or 70's. Scattered frost in central and quite general in northern Indiana on 12th as minimums dropped to high 20's. Six days suitable for fieldwork. Topsoil and subsoil moisture rated adequate. Corn harvest 20% complete, ahead 10% average, 30% last year. Soybean harvest 40% complete, same as average. Winter wheat 65% seeded. Wheat 30% emerged with stands mostly good. Rye 75% and barley 80% seeded. Silos 90% filled. Apples 55% picked. Tobacco 80% harvested. Grain sorghum 20% cut. Pastures fair to good.

IOWA: Cold dry week. Precipitation mostly around 0.10 inch. Temperatures averaged 1° to 5° subnormal. Corn and soybean harvest full swing. Ear droppage corn some concern local areas. Fall plowing slowed due dry soil conditions. Over 6 days suitable fieldwork. Corn harvest 25% complete, 20% year ago. Soybean harvest 50% complete, last year 45%. Grain sorghum 45% harvested, slightly ahead last year. About 85% winter wheat planted. Topsoil moisture 68% short and 32% adequate.

KANSAS: Sunny and dry. Weekly mean temperatures near normal northwest, below seasonal elsewhere. Cold front October 7, 8 caused marked cooling but no significant rain. Portions northern Kansas and western 2/3 had first freeze of fall on 10th. Lowest 30° at several localities. Row crops maturing and harvest progress well ahead usual. Sorghum grain 84% mature and safe from frost, 1960-69 average 72%. Combining grain sorghum 34% complete, average 20%. Corn 43% harvested, average 25%. Soybean combining 33% complete, average 31%. Sugar beet harvest progressed and final alfalfa cuttings made. Wheat 86% planted, 86% average. Most early plantings up to good stands. Additional moisture needed to sprout late-planted fields. Grasshoppers damaged newly-emerged wheat some areas. Barley 63% seeded,

average 74%. Some cattle grazed harvested crop fields, but only limited volunteer wheat available. Marketings picked up seasonally.

KENTUCKY: Temperatures above normal early in week, below normal balance, averaging 1° to 3° below seasonable. 31° at Sandy Hook in northeast on morning of 8th. Rain generally light ranging 0.04 inch to 0.85 inch occurring one or more sections first 2 days and last 2 days of week. All days favorable fieldwork. Soil moisture mostly adequate. Corn 26% harvested, last year 52% and 39% in 1969. High moisture content grain delaying harvest. Burley tobacco 10% cured and ready for stripping. Drier weather welcome, hopefully will curb houseburn. Soybeans 14% harvested, last year 19% and 26% 1969. Leaves entirely green 11% acreage. Many soybean fields very weedy. Fall wheat 38% seeded. Pastures excellent.

LOUISIANA: Temperatures averaged near normal. Warm through Thursday. First real fall weather as cool dry air overran State weekend. Temperature extremes: 91° Oak Grove and Bogalusa October 4 and 39° Winnsboro and Monroe October 11. Precipitation light to moderate in scattered showers mostly early in week. Totals zero to trace to locally more than 1.00 inch. Greatest 1-day total, 1.18 inches measured at New Iberia October 5. Good to excellent progress made fieldwork, some delay due scattered showers. Soil moisture mostly adequate, some spots north dry. Land preparations and seeding small grains and rye grass for winter pasture active. Late crops maturing rapidly. Machine picking cotton getting underway, 60% crop open. Combining soybeans active, about 20% completed. Rice harvest virtually completed. Corn 80% harvested, sweetpotatoes 60% completed, hay 90%, sugarcane planting 60%. Harvest for sugar to get underway next week. Pecans falling and being gathered central and south. Pasture feed average or better.

MARYLAND AND DELAWARE: Mostly cloudy and humid. Rain on 5 days totaled 1.75 to 3.00 inches in east, 0.25 inch or less in Garrett County. Rainfall heavy in east on 10th, 1.50 to 2.50 inches. Temperatures averaged normal to 2° above normal. Some scattered light frost 8th. Extremes: 70's, mid-30's to mid-40's except 30° to 35° in Garrett County. Weather and wet fields slow harvest. Corn 48% picked, last year 70%. Soybean harvest just started, about 1/4 done year ago. Small grain seeding lagging because slow harvest. About 75% red Delicious and 60% golden picked, about week late.

MICHIGAN: Seasonal weather early, colder after midweek with intermittent light rain or showers throughout period. Minimum temperatures mostly low to mid-30's. Temperatures average 1° to 2° below normal Upper Peninsula, 1° to 5° below normal Lower Peninsula with largest departures south-central and southwest. Precipitation 0.50 to 1.50 inches Upper Peninsula, 0.10 inch northeast to 0.50 inch except near 1.00 inch extreme southwest Lower Peninsula.

MINNESOTA: Temperatures averaged 2° below normal. Extremes 76°, 22°. Precipitation: Little to none except northeast which averaged 0.50 to 1.00 inch. North cloudy and damp entire period. South cloudy and damp 7th to 9th. Harvesting slowed by weather north. Corn picked 11%, normal 6%; percent moisture 28. Soybeans combined 38%, normal 45%; percent moisture 14. Flax combined 92%, normal 86%. Potatoes 73% harvested, normal 65%. Sugar beets 36% harvested, normal 26%. Grain and hay stubble 72% plowed. Topsoil moisture adequate, except surplus northwest.

MISSISSIPPI: Second week with temperature averages above normal. Weekly averages were 3° to 5° above normal and daily extremes were 93° at Merrill on 4th, and 42° at D'Lo on 8th. Weekly rainfall totals were mostly under 0.50 inch; nearly all rain on Tuesday and Wednesday; Carrollton had a 1-day amount of 2.74 inches Tuesday. Over weekend: Temperatures turned cooler and Holly Springs had a 35° minimum Saturday. Mostly sunny and clear except for rain on Saturday in central Mississippi, amounts under 0.10 inch. Soil moisture surplus northeast, adequate to surplus east-central, other areas mostly adequate. Average 5 days suitable fieldwork. Corn 65% mature, 35% harvested. Cotton 48% opened and 8% harvested. Rice 84% Harvested. Soybeans 24% mature, 15% combined. Sorghum 36% mature, but no harvested, 64% harvested. Cotton and corn fair to good. Hay, soybeans, livestock, and pastures mostly good. Pecans fair to good.

MISSOURI: Cool dry week. Two surges of cool Canadian air dropped temperatures 2° to 5° below normal. Frost or freezing temperatures many locations north of Missouri River by end of week. Rainfall limited to few showers Saturday, October 9, with amounts generally less than 0.25 inch. Corn 41% harvested, 33% last year. Soybeans 73% mature, 36% harvested, nearly 2 weeks ahead last year. Grain sorghum 48% harvested, over 2 weeks ahead last year. Cotton good condition, bolls 67% open, 26% harvested, 27% last year. Pasture mostly fair, fall plowing 25% done.

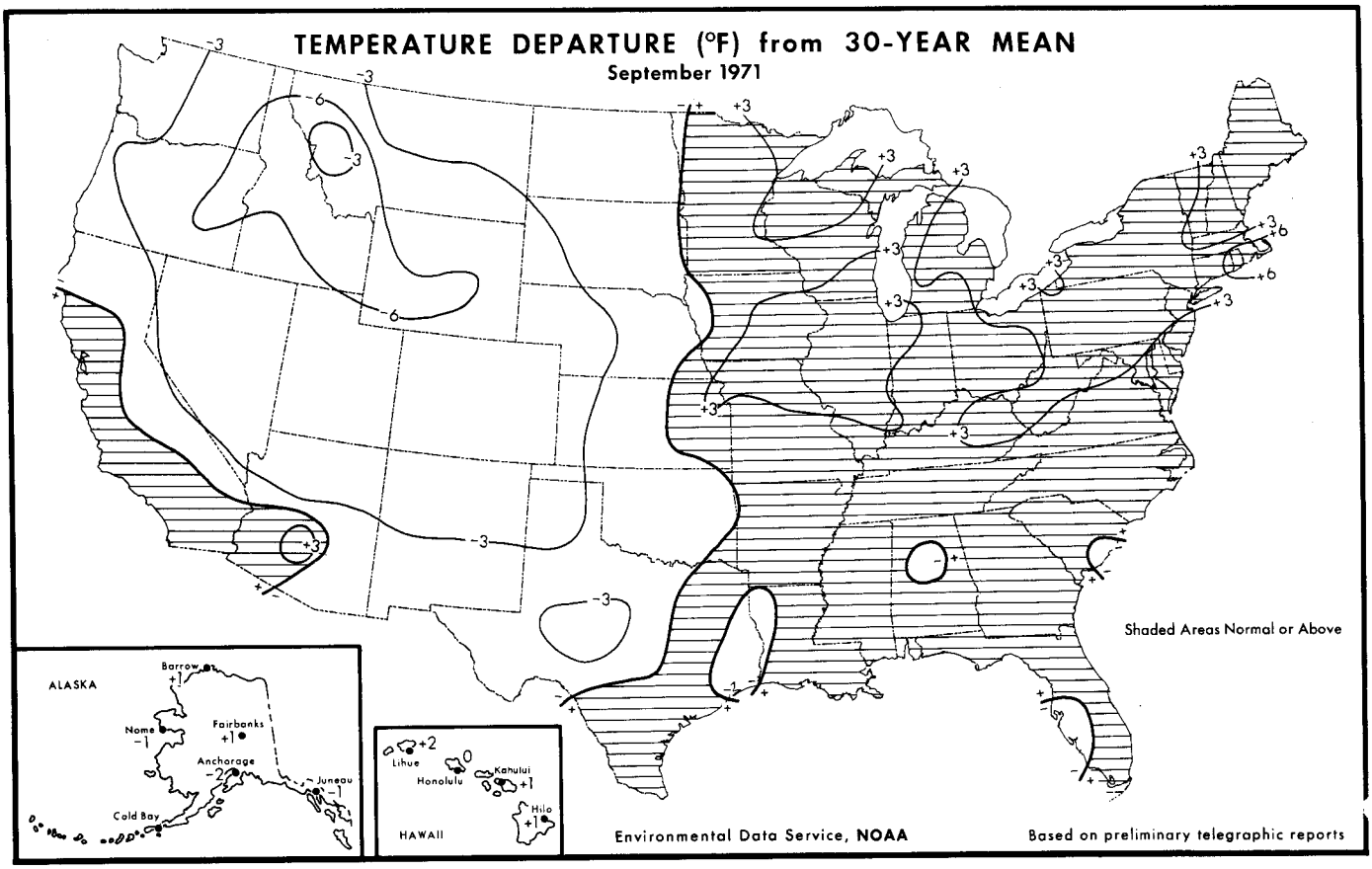
MONTANA: Quite warm all week, with no precipitation except scattered traces. Topsoil moisture generally adequate, but short northwestern and north-central districts. Winter wheat 90% planted. Sugar beet harvest 15% complete; yields very good. Potatoes 45% dug, yields below last year, but quality good. Corn silage harvest 95% complete. Dry beans 90% harvested. Sixty five percent range cattle and sheep moved from summer ranges.

NEBRASKA: Seasonal temperatures and dry weather. Weather generally favorable harvesting operations. About 10% corn harvested for grain with moisture content averaging 22%. Sorghum harvest 40% complete, 18% normal, and moisture content averaging 15%. Soybean combining 45% complete, 12% moisture. Sugar beet harvest just getting underway west, while dry bean harvest nearing completion. Winter wheat conditions good to excellent western areas and fair to poor eastern areas. Topsoils remain dry most areas, except northwest and southwest. Livestock conditions good with some stalk field grazing.

NEVADA: Warm dry week. All divisions averaged 1° to 6° above normal. No precipitation. Alfalfa hay harvest virtually complete. Alfalfa seed harvest nearing completion. Planting winter grains continues. Cattle and sheep generally good condition with weights above average as result good range year. Movement livestock from summer to fall and winter ranges continues. Contracting for fall delivery increased.

NEW ENGLAND: Week averaged near normal although October 7 to 9 was moderately cool. No general freeze, but some scattered reports on October 7

(Continued on page 10)



WEATHER - SEPTEMBER 1971

TEMPERATURE: In general, September temperatures averaged below normal over the western half of the Nation and above normal over the eastern half. Monthly temperature departures were usually small. Few stations averaged more than 4° cooler or 4° warmer than normal.

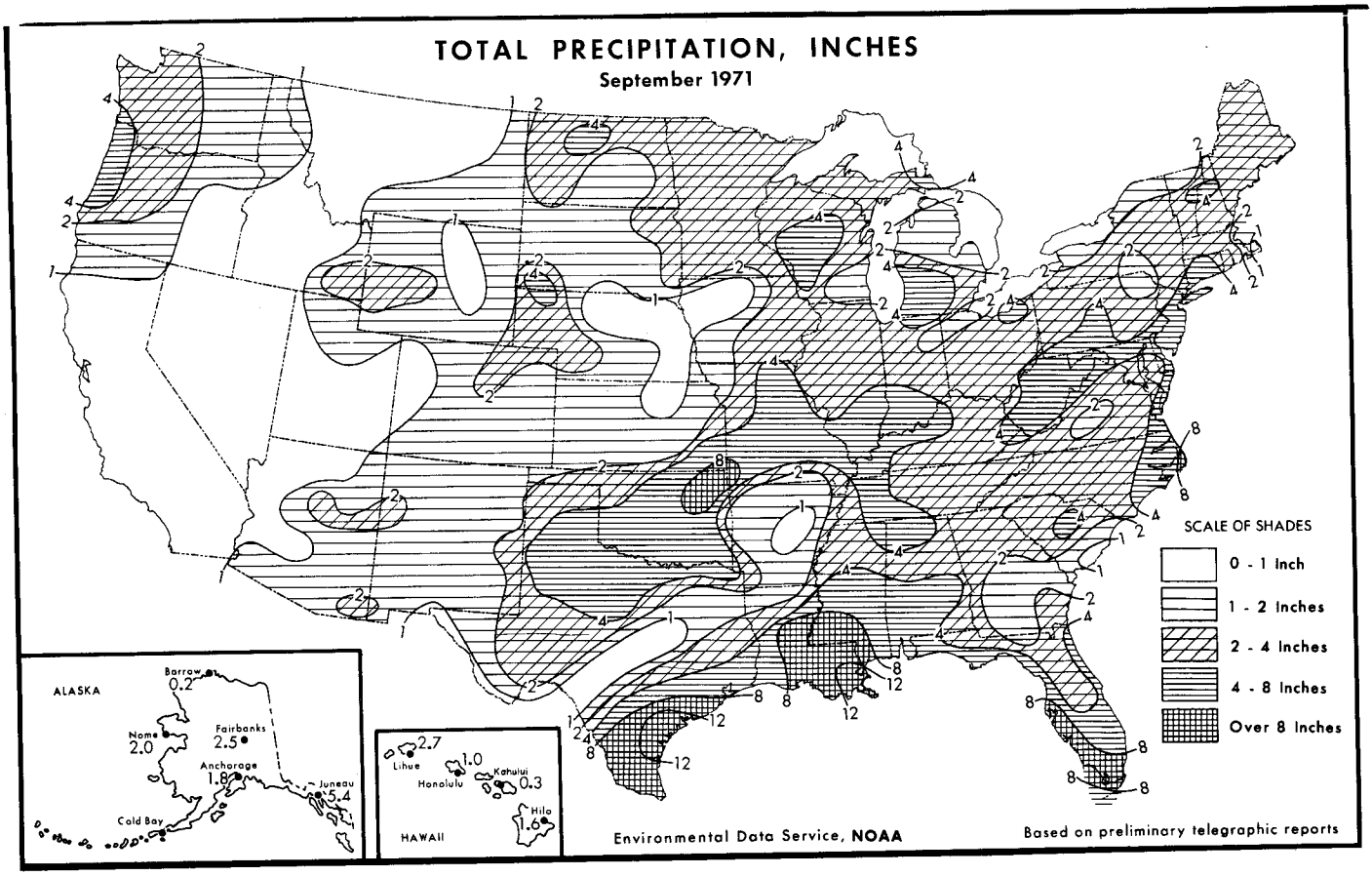
The Far Northwest was cool and comfortable in the first few days of September. Southerly winds on the back side of a HIGH which lay over the East warmed the Great Plains. On the afternoon of September 2, much of the Dakotas and parts of Nebraska had warmed to 100° or higher, 105° at Pierre, S. Dak. The high 80's and 90's were common elsewhere over the Great Plains on the 2d. With the warming trend came increased humidity which added to the discomfort of the citizens over the eastern half of the Nation. The Southwest was hotter but less humid. Temperatures in the desert regions of the Southwest approached or exceeded 100° on most afternoons in the 1st half of September. Palm Springs, Calif., registered 120° on the afternoon of September 12.

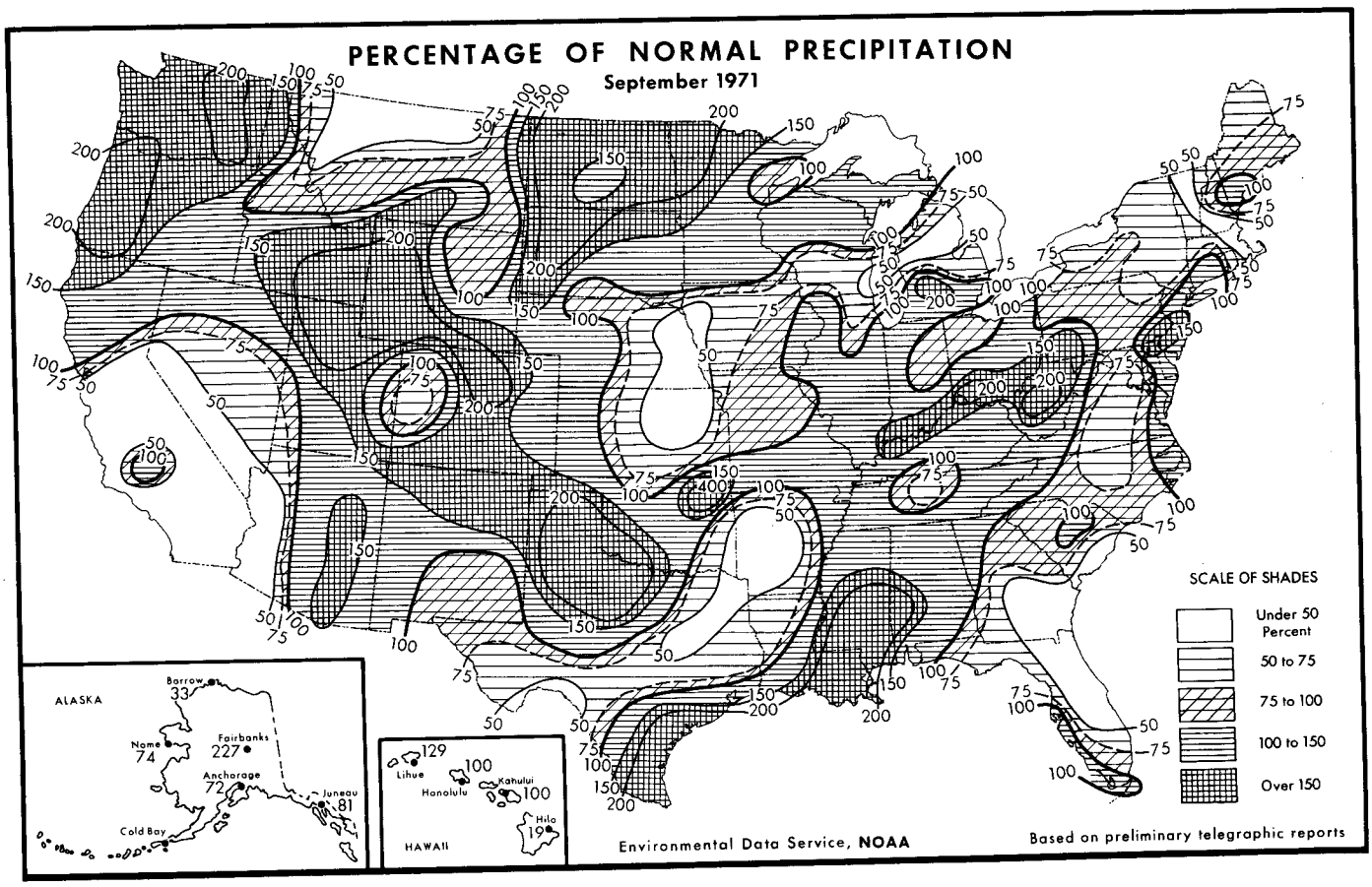
Cool air poured southward over the Rocky Mountains and Great Plains early in the 2d week of September. Denver, Colo., was 20° cooler on the 8th than on September 7. Pickstown, S. Dak., registered 99° on the 7th but no higher than 62° on the 8th. A warming trend occurred over mid-America about midmonth followed by sharp cooling. Maximum temperatures at Valentine, Nebr., on the 13th and 14th were 95° and 65°, respectively. Subfreezing weather covered the high Rocky Mountains on the morning of September 16 when Alamosa, Colo., registered 28°. The Deep South continued hot and humid until a cold blast lowered maximum temperatures sharply on the 16th. Jackson, Miss., warmed to only 72° on the 16th in contrast to 89° the previous afternoon. A large HIGH centered over the northern Great Plains brought the coldest weather of the season to much of the Great Plains and the central Rocky Mountains. The warmest temperature at Fraser, Colo., on the 17th was 29° and on the morning of the 19th the mercury at Leadville tumbled to 9°.

A High centered over the southern Great Plains brought the coolest weather of record for so early in the season to spots in Arizona, New Mexico, Oklahoma, and western Texas near the end of the 3d week of September. The Pacific Coast States were cool and comfortable in the 4th week of September. The Far Southwest continued hot. Cool weather prevailed from the northern Great Plains to New England. Clouds held maximums in the 80's across the Deep South except in Florida where there was lots of warm sunshine. In general, the last few days of September were seasonally cool over the West and warm over the East. Autumn chill penetrated far southward into Arizona and New Mexico on the 26th.

In contrast, a large LOW brought sultry summer weather to the Great Plains in the closing days of September. Madison and Milwaukee, Wis., registered 88° on the last day of the month.

PRECIPITATION: Thinly scattered light thundershowers occurred over much of the eastern half of the United States on September 1. An afternoon shower dropped 2.28 inches of rain at Vandalia,


TOTAL PRECIPITATION, INCHES
September 1971
SCALE OF SHADES
0 - 1 Inch
1 - 2 Inches
2 - 4 Inches
4 - 8 Inches
Over 8 Inches
ALASKA
Barrow 0.2
Nome 2.0
Fairbanks 2.5
Anchorage 1.8
Juneau 5.4
Cold Bay
HAWAII
Lihue 2.7
Honolulu 1.0
Kahului 0.3
Hilo 1.6
Environmental Data Service, NOAA
Based on preliminary telegraphic reports


PERCENTAGE OF NORMAL PRECIPITATION
September 1971
SCALE OF SHADES
Under 50 Percent
50 to 75
75 to 100
100 to 150
Over 150
ALASKA
Barrow 33
Nome 74
Fairbanks 227
Anchorage 72
Juneau 81
Cold Bay
HAWAII
Lihue 129
Honolulu 100
Kahului 100
Hilo 19
Environmental Data Service, NOAA
Based on preliminary telegraphic reports

Ill. About the middle of the first week of September, light rain showers fell along a slow-moving cold front that stretched from the northern Great Plains southwestward across the central Rocky Mountains. A few snow flurries occurred in the mountains. As the front moved further south, it set off thunderstorms some of which were accompanied by hail and strong winds. Hobart, Okla., received 4.75 inches of rain on the afternoon of September 4. A depression off the Louisiana coast spread showers from Texas to Florida with some totals exceeding 5.00 inches. A few storm totals in the Dakotas also exceeded 5.00 inches. California and western Texas continued dry. Five tropical cyclones entered the weather picture in the 2d week of September. Hurricane Edith swept across the Caribbean Sea and lashed Nicaragua and Honduras before slamming into the Louisiana coast accompanied by heavy rains and a few tornadoes. Hurricane Fern drifted inland near Port O'Connor, Tex. She produced heavy rains and widespread flooding. Hurricane Ginger dallied over the Atlantic Ocean for almost 3 weeks before moving inland across the North Carolina coast on the 23d producing generous rains in parts of Virginia and North Carolina. Tropical Storm Heidi threatened the Atlantic seaboard on September 12. Hurricane Irene crossed Central America to the Pacific Ocean and was renamed Olivia. Tropical Storm Olivia off the coast of Baja California moved northeastward bringing generous showers to the arid Southwest, especially Arizona and New Mexico.

Light snow fell in the Great Basin and the northern and central Rocky Mountains and cold rain accompanied by blustery winds fell over the northern and central Great Plains in the latter half of the month.

Monthly totals ranged from 2.00 to more than 5.00 inches in western Washington and northwestern Oregon. Most other areas west of the Rocky Mountains received less than 1.00 inch of rain in September. September totals ranged widely east of the Rocky Mountains, from less than 1.00 inch to more than 16.00 inches. Most monthly amounts were between 2.00 and 8.00 inches.

For the Nation as a whole, most areas received between 50% and 150% of normal.

L. W. Dye

(New England continued from page 7)

and 8. Very light rain several days but heavier scattered showers and some thunderstorms October 6 and general heavy rain on 9th. Traffic hampered on 10th by flooded low spots and slippery wet leaves. Weekly totals mostly 1.50 to 3.00 inches. Portland, Me., had 3.25 inches. General fall harvest winding down. Potato growers harvesting excellent quality crop Aroostook, Me. Harvest generally complete, except for larger operations. McIntosh apple harvest about finished southern orchards, tapering off north. Apple growers picking Cortland and Delicious; which show good color and size. Cranberry harvest about 3/4 complete. Cutting corn for silage near completion. Some late vegetables being harvested. Winter squash going into storage.

NEW JERSEY: Temperatures averaged near seasonal. Readings ranged from mid-30's to upper 70's. Rainfall heavy throughout State, particularly over weekend. Northern and coastal divisions averaged 2.20 inches while central and southern interior averaged 1.80 inches. Station totals varied from 1.50 inches at Millville to 2.9 inches at Newton. Fall vegetable harvest light to moderate. Potatoes moving into storage. Apple and cranberry harvests making good progress. Most field corn still too moist to harvest for grain, except where dryers available. Some growers still trying to make hay. Soybean harvest underway. Grain crops being seeded. Early seedlings growing nicely.

NEW MEXICO: Light showers south. Otherwise dry. Cooler south. Temperatures averaged near normal most of State with daytime temperatures mostly below normal and nighttime temperatures mostly above normal. Highest temperatures Sunday. Moisture adequate except southwest. Cotton harvest increasing. Sorghum grain, peanuts harvest underway. Alfalfa continues active. Broomcorn pulling nearing completion, threshing beginning. Lettuce, apples, vegetables, and chili harvest active. Ranges good most areas. Livestock good.

NEW YORK: Warm early week with maximum 65° to 75° on 4th and 5th. Seasonably cold after 6th. Maximums upper 40's to mid-50's Upstate on 7th. Minimums mid-30's to low 40's Upstate to near 45° Long Island on 8th as season continues without widespread killing freeze. General precipitation on weekend with heaviest 1.30 to 2.10 inches eastern 1/3. Showers widespread on 6th and 7th, totals mostly 0.30 to 0.70 inch. Corn silage harvest nearing completion. Corn for grain harvest picking up, about 15% harvested. Dry bean harvest continues, still some problems with sprouting in fields. Growers continue harvest 3d cutting alfalfa. Potato movement to storage active Long Island and Upstate. Onion harvest nearly complete, movement to storage active. Celery harvest continues. Storage cabbage harvest getting underway. Long Island cabbage and cauliflower harvest active. Cooler weather providing better apple color. McIntosh harvest progressing satisfactorily. Western New York harvest about 30% complete. Cortland and Delicious varieties increasing. Concord grape harvest continues peak volume.

NORTH CAROLINA: Temperatures above normal, dropping to below normal over weekend. First frost and freezing temperatures several mountains stations October 8. Rain most areas with cool turn, totals 0.50 inch to 3.00 inches, mostly 1.00 to 2.00 inches. Soil moisture adequate to excessive. Unharvested Coastal Plain crop damage by Hurricane Ginger moderate; final outcome depends on weather. Rain, cloudy weather dampens hopes for downed corn, flooded soybeans. Damage hard to assess remainder crops. Peanut harvest 1/3 complete. Cotton harvest delayed, condition declined. Corn, peanut, soybean condition declined slightly; hay, pasture, sweetpotatoes unchanged. Crop harvest percent completion as follows: Tobacco 99, cotton 20, hays 80, apples 66, corn 45. Small gains 25% planted.

NORTH DAKOTA: Temperatures averaged near normal. Precipitation light entire State with 0.10 to 0.15 inch east. Harvesting remaining small grain crop made good progress over weekend with no precipitation and sunny skies. Flax and dry edible bean harvest windup stages. Potato harvest nearing completion. Over 3/4 soybeans combined. Corn picking reaching half way point.

OHIO: Fair and mild through 6th; partly cloudy and cool remainder of week. Rain widespread over weekend. First frost of season north and central areas on 8th. Six days favorable fieldwork. Soil moisture 15% short, 80% adequate, 5% surplus. Corn virtually all mature and safe from frost, nearly

1/4 harvested; last year 40% harvested. Soybeans 95% mature, nearly 50% harvested. Last year 55% harvested, normally 40%. Corn silage harvest nearly complete. Potatoes 85% dug, last year and usual 80%. Apples 35% picked. Popcorn 35% harvested, equal to last year. Sugar beets 20% dug. Grapes over half picked. Winter wheat 65% seeded. Rye nearly 3/4 planted.

OKLAHOMA: Rainfall averaged less than 0.10 inch. Temperatures averaged 2° to 5° below normal. Seeding small grains advanced substantially. Wheat 4/5 seeded, 2/5 up. Oats and barley around 3/5 seeded, 1/4 up. Fall armyworm problem several localities. Prospects winter pasture good. Wet fields delayed seeding and harvest activities several localities. Corn 1/2 picked, 3/5 year earlier. Sorghum grain 9/10 mature, harvest progress slow, 1/4 complete, 1/3 year ago. Cotton maturing slowly, only 1/2 bolls open, 3/4 year ago. Only few fields harvested. Peanuts maturing rapidly, but wet fields delaying harvest, causing some damage. Soybeans 3/4 mature, about 1/5 harvested. Surface soil moisture adequate 4/5 State. Livestock making good gains as pastures furnishing adequate grazing.

OREGON: Mild dry with warming trend followed by slight cooling last 2 days. Temperatures averaged normal to 4° above normal with 5° to 7° above normal northcentral. Some morning fog western valleys and coast last 2 days. Minima 22° to 32° east of Cascades, 36° to 47° north-central and western 1/3 of State. Maxima 75° to 90°. Land preparation and fall seeding active. Apple harvest active. Pears about complete. Late vegetable, onion and potato harvest continue. Putting up silage. Filbert harvest increasing. Sugar beet harvest beginning. Fall pastures making good growth. Fall livestock movement active. Normal marketing.

PENNSYLVANIA: Persistent cooling during week with heavy rains over weekend. Three frontal passages brought steady drops in temperatures, as daily maxima fell from 70's early in week to 50's and low 60's latter half. Weekly temperatures 1° to 2° below normal north and west, near to 1° above normal central and southeast. Scattered showers early and midweek, heavy rains northwest and east over weekend. Weekly totals 1.00 to 2.00 inches northwest and east, 0.25 to 0.50 inch central and northwest. Moisture supplies 75% adequate, ramainder surplus. No general killing frost to date. Corn remains high in moisture. Lodging and stalk breakage problem blighted fields. Wet fields delaying progress potato harvest. Winter grains good stands. Grape harvest full swing, apples coloring nicely. Hay and pasture lush growth.

PUERTO RICO: Rainfall averaged 1.60 inches or near normal. Heavy showers totaling over 4.00 inches western Cordilleras and local areas northcentral coast totaling nearly 7.00 inches, with over 3.00 inches in 1 day. South coast received moderate showers averaging 0.70 inch. More rain needed to relieve mild to moderate agricultural drought in parts of south and north coasts. Temperatures averaged 80° to 81° on coast and 75° interior, with average departure of 0.5° below normal. Highest maximum 95°, lowest minimum 58°. Sugarcane plantations active seeding and cultivating except non-irrigated zones where too dry. Coffee zones good progress harvesting, except some delays local showers. Pastures generally good to excellent islandwide, except some areas north and south coasts and interior too dry for normal development. Minor crops active seeding and cultivating all zones except parts north coast and interior too dry.

SOUTH CAROLINA: Rainfall less than 0.50 inch except 1.00 to 3.00 inches in northeast and north-central as the remains of Hurricane Ginger took a turn to west. Temperatures averaged near normal with cold air arriving at end of week. Soil moisture short several areas, adequate elsewhere. Cotton fair to good, bolls opening 83%, harvest 25% complete. Condition soybeans good to excellent. Harvest just begun. Sorghum harvest 37% complete. Peanuts 84% harvested. Corn harvest 57% complete. Pecans fair to good. Apple harvest 86% complete. Pastures good condition. Winter grazing 49% planted, 32% emerged. About 82% hay crops harvested. Winter wheat 3% and winter oats 8% planted. Fall vegetables fair to good. Cucumbers, snap bean prospects hurt by dry weather.

SOUTH DAKOTA: Weekly temperatures averaged from 2° below normal to 3° above normal. Extremes ranged from 25° at Summit on 7th to 83° at Pickstown on 10th. Little or no precipitation over most of State. Precipitation reported fell last half of week and generally totaled 0.10 inch or less. Topsoil moisture supplies generally adequate, except few areas central and south-central. Hard freeze needed some areas to dry out corn and sorghum. Several areas reported ear droppage and stock breakage severe from corn borer damage. Some frost damage to corn and sorghum later areas. High winds caused some lodging sorghum. Harvest row crops progressed rapidly. Harvest well ahead normal with 38% corn picked, 62% grain sorghum harvested, and 63% soybeans combined. Fall-seeded grain ranges from good to excellent depending upon fall moisture. Most yearlings and lambs marketed. Spring calves moving to market in larger numbers. Pastures and ranges greened up and fall feed supplies generally good.

TENNESSEE: Week began warm and humid, with a sharp change to cooler at midweek, and again late in period. Scattered showers early in week and over weekend. Temperatures averaged near normal. Rainfall totals generally less than 0.25 inch to 1.00 inch, heaviest in mountains. Crop prospects continued good with harvest increasing. Mostly good cotton crop, 20% picked and 60% bolls open. Soybean outlook favorable, 5% harvested. Maturity declined by abundant summer and fall rainfall. Corn picking 30% complete with practically all crop mature. Tobacco 20% stripped. Lespedeza 95% harvested. Pastures good condition for season. Calf marketing increasing. Oats, barley 75% seeded. Wheat 50% planted. Days favorable fieldwork averaged 4.8. Soil moisture supply 78% adequate 16% short and 6% surplus.

TEXAS: Except for East Texas, rains were general over most sections Tuesday through Friday. Weekend rains were light and spotted. Impressive weekly totals included Cotulla 6.63 inches, Laredo 4.70 inches, and Panther Junction 3.34 inches. McCook caught 6.78 inches within 24 hours. Extensive flooding is occurring on Middle Nueces from Tilden to Lake Corpus Christi and below Lake Corpus Christi to Nueces bay. Temperatures cool throughout State. Harvesting and seeding activities slow progress as light to heavy rain fell. Maturity cotton on the Plains made progress, but warm open weather still very much needed. Harvesting cotton, corn, sorghum, peanuts increased latter part week and should continue to do so if open weather prevails. Small grains making good growth. Percent harvested; cotton 20, 28 year ago; sorghum 48, 73 year ago; corn 81, 94 year ago; peanuts 31, 34 year ago. Percent planted; wheat 69, 75 year ago; oats 51, 62 year ago. Rain and wet fields continue domi-

nate Texas commercial vegetable scene. Slow progress being made with High Plains carrot, lettuce, bell pepper harvest. Seeding and harvesting Trans-Pecos area slowed by surplus moisture. Early-planted vegetables Winter Garden-San Antonio suffering from insect and disease damage. Lower Rio Grande Valley vegetable crop continues to be endangered by excessive rainfall.

UTAH: Gorgeous Indian summer weather ideal for harvesting late crops, fall plowing, and moving livestock down from high country persisted throughout past week. Temperatures much below normal at beginning of week rose to well above normal by weekend. Averages near normal. Crops harvested, picked, or threshed now 55% potatoes, dry beans, dry onions, apples, and 90% corn. Sugar beet harvest started most areas. Movement livestock down from high country to fall and winter range land and valley farms; 55% completed for cattle, 65% sheep. Range feed prospects fair to good north, poor south and east. Planting winter wheat for 1972 harvest 85% completed, 55% acreage planted to date emerged.

VIRGINIA: Temperatures much above normal at beginning, becoming much cooler with some freezing temperatures on 8th. Scattered showers and thundershowers Tuesday and Wednesday and over weekend. Fieldwork proceeded slowly due rain and wet soils. Rain-saturated peanut fields making digging and combining impossible. Less than 15% dug, 2/3 last year. Barley and oats 1/2 planted, wheat 1/5. Corn 1/3 harvested. Soybenas 2% harvested. Many hay fields to be cut, curing difficult. Pastures outstanding. Vegetable harvest included snap beans, cucumbers, sweetpotatoes, and peppers. Apple picking full swing. Vacination horses Venezuelan equine encephalitis largely completed. Feeder cattle marketing seasonally active.

WESTERN WASHINGTON: Warm and dry fall weather with considerable night and morning valley fog. Pastures continue good with emphasis on grazing. Harvest vegetables continues. Berry harvest over, except cranberries just beginning. Christmas tree growers preparing for November harvest. Eastern Washington: Warm days, cool nights and little or no precipitation. Early apple harvest nearing completion, Winesap harvest beginning. Harvest sugar beets, potatoes and silage corn continues. Hay supply adequate with 4th cutting alfalfa underway. Most grain seeding completed with major operations concerned with fall tillage and fertilization. Grape harvest going well under near ideal weather.

WEST VIRGINIA: Sharp contrast in temperatures during week. Warm and humid until midweek with cooling balance of period. Lows in 30's October 8. Rainfall light except 0.50 inch totals from Hurricane Ginger October 2 and 3 in south and east. More rain from cold front October 9 and 10. Relatively good week weatherwise allowed 4.1 days fieldwork. Main farm activities harvesting corn, picking apples, and marketing livestock. First frost several locations October 8. Corn 30% harvested. Winter wheat 25% seeded. Soil moisture 2% short, 76% adequate and 22% surplus.

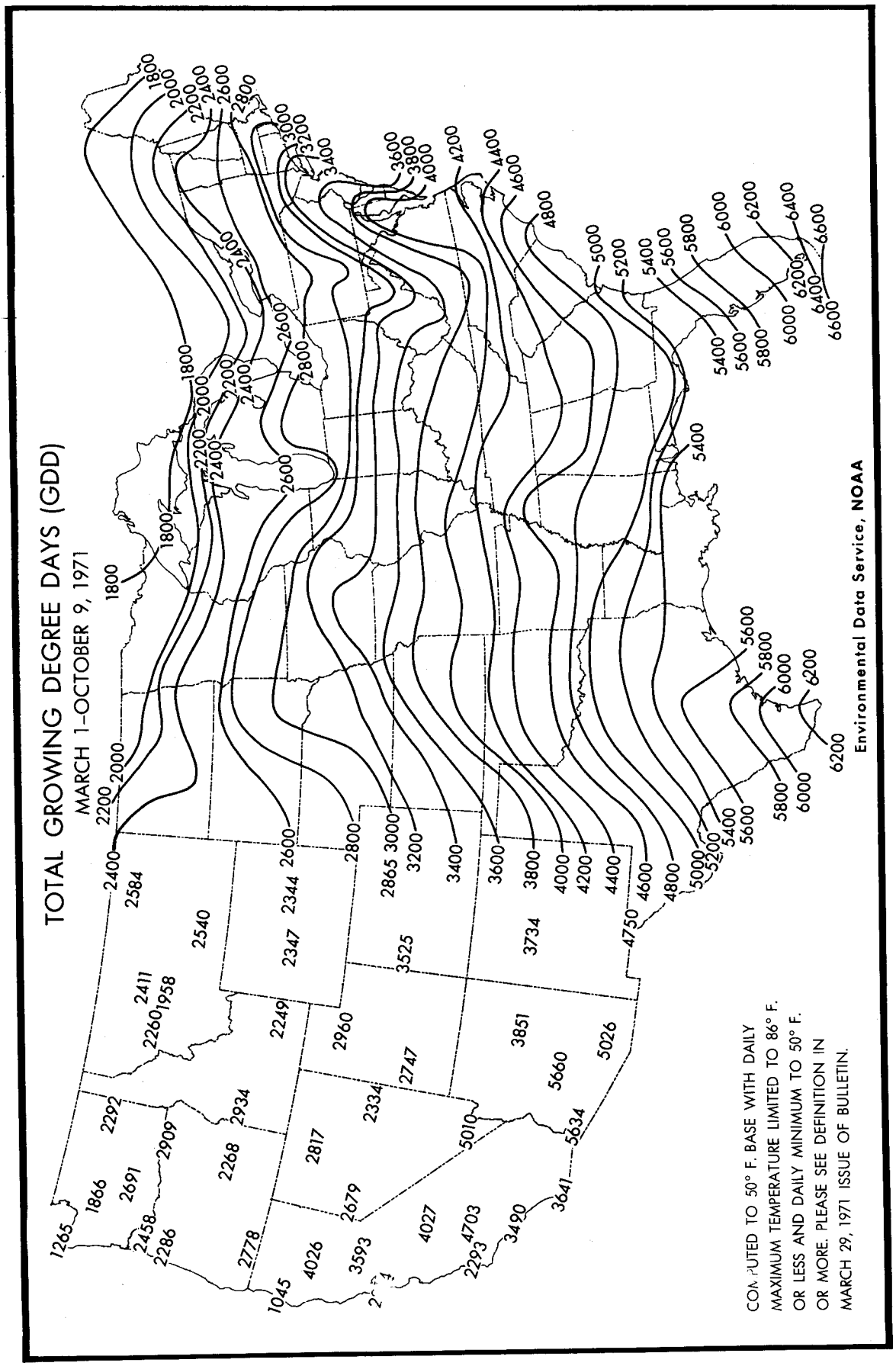
WISCONSIN: Slightly cooler than normal with frequent light showers. Corn harvest getting underway, about 5% picked against 15% last year. Moisture content still fairly high and hard freeze wanted. Yields very good except light some southwestern and southeastern counties where rainfall was very light this summer. Silo filling about done. Soybean harvest starting. Good crop, except in dry areas. Potato harvest slowed by rain. Harvest cabbage, carrots, and beets continuing. Good cranberry harvest nearing end. Crop not as large as last year due partly hail damage this summer many Jackson and Monroe County marshes. Pasture conditions excellent northwest half and fair to poor southeast. Soil moisture 20% short, 60% adequate and 20% surplus.

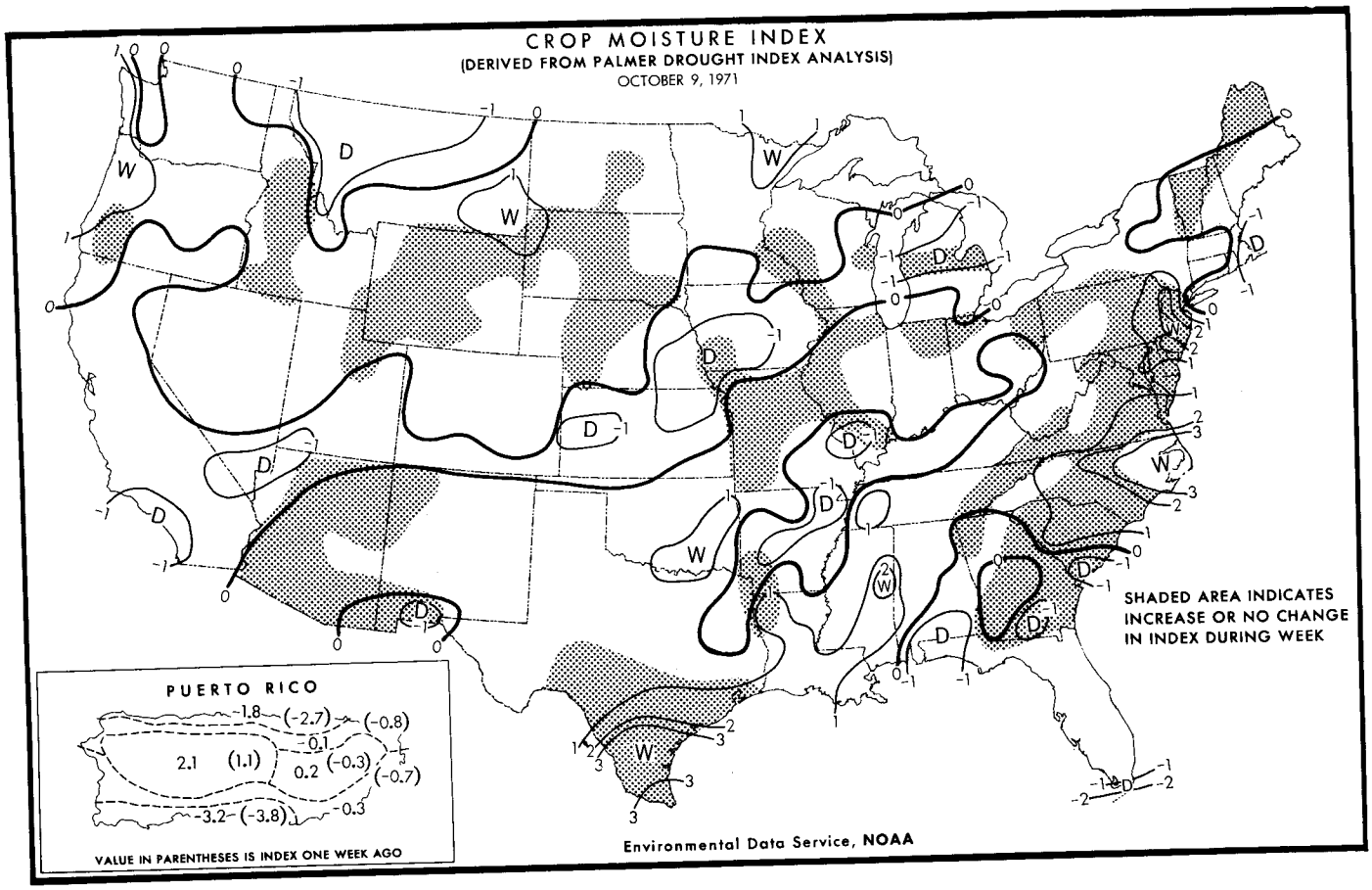
WYOMING: Week started cold with scattered light to moderate precipitation most of State, heavy over northeast. Alva 5SE reported most moisture with 2.41 inches. Skies quickly cleared and pleasant weather stayed through week. However, temperatures averaged 1° to 8° below normal. Maxima were mostly around 70° over southwest half of State, mid-70's to low 80's northeast half. Minima were mostly 15° to 25° west of Divide, 20's to low 30's east. Temperature extremes: 82° at Kaycee and 12° at Bondurant. Main agricultural activities harvesting sugar beets and moving livestock. Sugar beet harvest slowed by recent precipitation, only 5% harvested. Winter wheat prospects continue good with adequate surface soil moisture.

NORMAL TOTAL HEATING DEGREE DAYS, MONTHLY AND ANNUAL

(Base 65°)

STATE AND STATION	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	ANNUAL
ALA. BIRMINGHAM	0	0	6	93	363	555	592	462	363	108	9	0	2551
HUNTSVILLE	0	0	12	127	426	663	694	557	434	138	19	0	3070
MOBILE	0	0	0	22	213	357	415	300	211	42	0	0	1560
MONTGOMERY	0	0	0	68	330	527	543	417	316	90	0	0	2291
ALASKA ANCHORAGE	245	291	516	930	1284	1572	1631	1316	1293	879	592	315	10864
ANNETTE	242	208	327	567	738	899	949	837	843	648	490	321	7069
BARROW	803	840	1035	1500	1971	2362	2517	2332	2468	1944	1445	957	20174
BARTER IS.	735	775	987	1482	1944	2337	2536	2369	2477	1923	1373	924	19862
BETHEL	319	394	612	1042	1434	1866	1903	1590	1655	1173	806	402	13196
COLD BAY	474	425	525	772	918	1122	1153	1036	1122	951	791	591	9880
CORDOVA	366	391	522	781	1017	1221	1299	1086	1113	864	660	444	9764
FAIRBANKS	171	332	642	1203	1833	2254	2359	1901	1739	1068	555	222	14279
JUNEAU	301	338	483	725	921	1135	1237	1070	1073	810	601	381	9075
KING SALMON	313	322	513	908	1290	1606	1600	1333	1411	966	673	408	11343
KOTZEBUE	381	446	723	1249	1728	2127	2192	1932	2080	1554	1057	636	16105
MCGRATH	208	338	633	1184	1791	2232	2294	1817	1758	1122	648	258	14283
NOME	481	496	693	1094	1455	1820	1879	1666	1770	1314	930	573	14171
SAINT PAUL	605	539	612	862	963	1197	1228	1168	1265	1098	936	726	11199
SHEMYA	577	475	501	784	876	1042	1045	958	1011	885	837	696	9687
YAKUTAT	338	347	474	716	936	1144	1169	1019	1042	840	632	435	9092
ARIZ. FLAGSTAFF	46	68	201	558	867	1073	1169	991	911	651	437	180	7152
PHOENIX	0	0	0	22	234	415	474	328	217	75	0	0	1765
PRESCOTT	0	0	27	245	579	797	865	711	605	360	158	15	4362
TUCSON	0	0	0	25	231	406	471	344	242	75	6	0	1800
WINSLOW	0	0	6	245	711	1008	1054	770	601	291	96	0	4782
YUMA	0	0	0	0	148	319	363	228	130	29	0	0	1217
ARK. FORT SMITH	0	0	12	127	450	704	781	596	456	144	22	0	3292
LITTLE ROCK	0	0	9	127	465	716	756	577	434	126	9	0	3219
TEXARKANA	0	0	0	78	345	561	626	468	350	105	0	0	2533
CALIF. BAKERSFIELD	0	0	0	37	282	502	546	364	267	105	19	0	2122
BISHOP	0	0	42	248	576	797	874	666	539	306	143	36	4227
BLUE CANYON	34	50	120	347	579	766	865	781	791	582	397	195	5507
BURBANK	0	0	6	43	177	301	366	277	239	138	81	18	1646
EUREKA	270	257	258	329	414	499	546	470	505	438	372	285	4643
FRESNO	0	0	0	78	339	558	586	406	319	150	56	0	2492
LONG BEACH	0	0	12	40	156	288	375	297	267	168	90	18	1711
LOS ANGELES	28	22	42	78	180	291	372	302	288	219	158	81	2061
MT. SHASTA	25	34	123	406	696	902	983	784	738	525	347	159	5722
OAKLAND	53	50	45	127	309	481	527	400	353	255	180	90	2870
POINT ARGUELLO	202	186	162	205	291	400	474	392	403	339	298	243	3595
RED BLUFF	0	0	0	53	318	555	605	428	341	168	47	0	2515
SACRAMENTO	0	0	12	81	363	577	614	442	360	216	102	6	2773
SANDBERG	0	0	30	202	480	691	778	661	620	426	264	57	4209
SAN DIEGO	6	0	15	37	123	251	313	249	202	123	84	36	1439
SAN FRANCISCO	81	78	60	143	306	462	508	395	363	279	214	126	3015
SANTA CATALINA	16	0	9	50	165	279	353	308	326	249	192	105	2052
SANTA MARIA	99	93	96	146	270	391	459	370	363	282	233	165	2967
COLO. ALAMOSA	65	99	279	639	1065	1420	1476	1162	1020	696	440	168	8529
COLORADO SPRINGS	9	25	132	456	825	1032	1128	938	893	582	319	84	6423
DENVER	6	9	117	428	819	1035	1132	938	887	558	288	66	6283
GRAND JUNCTION	0	0	30	313	786	1113	1209	907	729	387	146	21	5641
PUEBLO	0	0	54	326	750	986	1085	871	772	429	174	15	5462
CONN. BRIDGEPORT	0	0	66	307	615	986	1079	966	853	510	208	27	5617
HARTFORD	0	6	99	372	711	1119	1209	1061	899	495	177	24	6172
NEW HAVEN	0	12	87	347	648	1011	1097	991	871	543	245	45	5897
DEL. WILMINGTON	0	0	51	270	588	927	980	874	735	387	112	6	4930
FLA. APALACHICOLA	0	0	0	16	153	319	347	260	180	33	0	0	1308
DAYTONA BEACH	0	0	0	0	75	211	248	190	140	15	0	0	879
FORT MYERS	0	0	0	0	24	109	146	101	62	0	0	0	442
JACKSONVILLE	0	0	0	12	144	310	332	246	174	21	0	0	1239
KEY WEST	0	0	0	0	0	28	40	31	9	0	0	0	108
LAKELAND	0	0	0	0	57	164	195	146	99	0	0	0	661
MIAMI BEACH	0	0	0	0	0	40	56	36	9	0	0	0	141
ORLANDO	0	0	0	0	72	198	220	165	105	6	0	0	766
PENSACOLA	0	0	0	19	195	353	400	277	183	36	0	0	1463
TALLAHASSEE	0	0	0	28	198	360	375	286	202	36	0	0	1485
TAMPA	0	0	0	0	60	171	202	148	102	0	0	0	683
WEST PALM BEACH	0	0	0	0	6	65	87	64	31	0	0	0	253
GA. ATHENS	0	0	12	115	405	632	642	529	431	141	22	0	2929
ATLANTA	0	0	18	127	414	626	639	529	437	168	25	0	2983
AUGUSTA	0	0	0	78	333	552	549	445	350	90	0	0	2397
COLUMBUS	0	0	0	87	333	543	552	434	338	96	0	0	2383
MACON	0	0	0	71	297	502	505	403	295	63	0	0	2136
ROME	0	0	24	161	474	701	710	577	468	177	34	0	3326
SAVANNAH	0	0	0	47	246	437	437	353	254	45	0	0	1819
THOMASVILLE	0	0	0	25	198	366	394	305	208	33	0	0	1529
IDAHO BOISE	0	0	132	415	792	1017	1113	854	722	438	245	81	5809
IDAHO FALLS 46W	16	34	270	623	1056	1370	1538	1249	1085	651	391	192	8475
IDAHO FALLS 42NW	16	40	282	648	1107	1432	1600	1291	1107	657	388	192	8760
LEWISTON	0	0	123	403	756	933	1063	815	694	426	239	90	5542
POCATELLO	0	0	172	493	900	1166	1324	1058	905	555	319	141	7033
ILL. CAIRO	0	0	36	164	513	791	856	680	539	195	47	0	3821
CHICAGO	0	0	81	326	753	1113	1209	1044	890	480	211	48	6155
MOLINE	0	9	99	335	774	1181	1314	1100	918	450	189	39	6408
PEORIA	0	6	87	326	759	1113	1218	1025	849	426	183	33	6025
ROCKFORD	6	9	114	400	837	1221	1333	1137	961	516	236	60	6830
SPRINGFIELD	0	0	72	291	696	1023	1135	935	769	354	136	18	5429
IND. EVANSVILLE	0	0	66	220	606	896	955	767	620	237	68	0	4435
FORT WAYNE	0	9	105	378	783	1135	1178	1028	890	471	189	39	6205
INDIANAPOLIS	0	0	90	316	723	1051	1113	949	809	432	177	39	5699
SOUTH BEND	0	6	111	372	777	1125	1221	1070	933	525	239	60	6439
IOWA Burlington	0	0	93	322	768	1135	1259	1042	859	426	177	33	6114
DES MOINES	0	9	99	363	837	1231	1398	1165	967	489	211	39	6808
DUBUQUE	12	31	156	450	906	1287	1420	1204	1026	546	260	78	7376
SIOUX CITY	0	9	108	369	867	1240	1435	1198	989	483	214	39	6951
WATERLOO	12	19	138	428	909	1296	1460	1221	1023	531	229	54	7320
KANS. CONCORDIA	0	0	57	276	705	1023	1163	935	781	372	149	18	5479
DODGE CITY	0	0	33	251	666	939	1051	840	719	354	124	9	4986
GOODLAND	0	6	81	381	810	1073	1166	955	884	507	236	42	6141
TOPEKA	0	0	57	270	672	980	1122	893	722	330	124	12	5182
WICHITA	0	0	33	229	618	905	1023	804	645	270	87	6	4620
KY. COVINGTON	0	0	75	291	669	983	1035	893	756	390	149	24	5265
LEXINGTON	0	0	54	239	609	902	946	818	685	325	105	0	4683
LOUISVILLE	0	0	54	248	609	890	930	818	682	315	105	9	4660
LA. ALEXANDRIA	0	0	0	56	273	431	471	361	260	69	0	0	1921
BATON ROUGE	0	0	0	31	216	369	409	294	208	33	0	0	1560
BURRWOOD	0	0	0	0	96	214	298	218	171	27	0	0	1024
LAKE CHARLES	0	0	0	19	210	341	381	274	195	39	0	0	1459
NEW ORLEANS	0	0	0	19	192	322	363	258	192	39	0	0	1385
SHREVEPORT	0	0	0	47	297	477	552	426	304	81	0	0	2184
MAINE CARIBOU	78	115	336	682	1044	1535	1690	1470	1308	858	468	183	9767
PORTLAND	12	53	195	508	807	1215	1339	1182	1042	675	372	111	7511
MD. BALTIMORE	0	0	48	264	585	905	936	820	679	327	90	0	4654
FREDERICK	0	0	66	307	624	955	995	876	741	384	127	12	5087
MASS. BLUE HILL OBSY	0	22	108	381	690	1085	1178	1053	936	579	267	69	6368
BOSTON	0	9	60	316	603	983	1088	972	846	513	208	36	5634
NANTUCKET	12	22	93	332	573	896	992	941	896	621	384	129	5891
PITTSFIELD	25	59	219	524	831	1231	1339	1196	1063	660	326	105	7578
WORCESTER	6	34	147	450	774	1172	1271	1123	998	612	304	78	6969
MICH. ALPENA	68	105	273	580	912	1268	1404	1299	1218	777	446	156	8506
DETROIT (CITY)	0	0	87	360	738	1088	1181	1058	936	522	220	42	6232
ESCANABA	59	87	243	539	924	1293	1445	1296	1203	777	456	159	8481
FLINT	16	40	159	465	843	1212	1330	1198	1066	639	319	90	7377
GRAND RAPIDS	9	28	135	434	804	1147	1259	1134	1011	579	279	75	6894
LANSING	6	22	138	431	813	1163	1262	1142	1011	579	273	69	6909
MARQUETTE	59	81	240	527	936	1268	1411	1268	1187	771	468	177	8393
MUSKEGON	12	28	120	400	762	1088	1209	1100	995	594	310	78	6696
SAULT STE. MARIE	96	105	279	580	951	1367	1525	1380	1277	810	477	201	9048
MINN. DULUTH	71	109	330	632	1131	1581	1745	1518	1355	840	490	198	10000
INTERNATIONAL FALLS	71	112	363	701	1236	1724	1919	1621	1414	828	443	174	10606
MINNEAPOLIS	22	31	189	505	1014	1454	1631	1380	1166	621	288	81	8382
ROCHESTER	25	34	186	474	1005	1438	1593	1366	1150	630	301	93	8295
SAINT CLOUD	28	47	225	549	1065	1500	1702	1445	1221	666	326	105	8879
MISS. JACKSON	0	0	0	65	315	502	546	414	310	87	0	0	2239
MERIDIAN	0	0	0	81	339	518	543	417	310	81	0	0	2289
VICKSBURG	0	0	0	53	279	462	512	384	282	69	0	0	2041
MO. COLUMBIA	0	0	54	251	651	967	1076	874	716	324	121	12	5046
KANSAS	0	0	39	220	612	905	1032	818	682	294	109	0	4711
ST. JOSEPH	0	6	60	285	708	1039	1172	949	769	348	133	15	5484
ST. LOUIS	0	0	60	251	627	936	1026	848	704	312	121	15	4900
SPRINGFIELD	0	0	45	223	600	877	973	781	660	291	105	6	4561
MONT. BILLINGS	6	15	186	487	897	1135	1296	1100	970	570	285	102	7049
GLASGOW	31	47	270	608	1104	1466	1711	1439	1187	648	335	150	8996
GREAT FALLS	28	53	258	543	921	1169	1349	1154	1063	642	384	186	7750
HAVRE	28	53	306	595	1065	1367	1584	1364	1181	657	338	162	8700
HELENA	31	59	294	601	1002	1265	1438	1170	1042	651	381	195	8129
KALISPELL	50	99	321	654	1020	1240	1401	1134	1029	639	397	207	8191
MILES CITY	6	6	174	502	972	1296	1504	1252	1057	579	276	99	7723
MISSOULA	34	74	303	651	1035	1287	1420	1120	970	621	391	219	8125
NEBR. GRAND ISLAND	0	6	108	381	834	1172	1314	1089	908	462	211	45	6530
LINCOLN	0	6	75	301	726	1066	1237	1016	834	402	171	30	5864
NORFOLK	9	0	111	397	873	1234	1414	1179	983	498	233	48	6979
NORTH PLATTE	0	6	123	440	885	1166	1271	1039	930	519	248	57	6684
OMAHA	0	12	105	357	828	1175	1355	1128	939	465	208	42	6612
SCOTTSBLUFF	0	0	138	459	876	1128	1231	1008	921	552	285	75	6673
VALENTINE	9	12	165	493	942	1237	1395	1176	1045	579	288	84	7425
NEV. ELKO	9	34	225	561	924	1197	1314	1036	911	621	409	192	7433
ELY	28	43	234	592	939	1184	1308	1075	977	672	456	225	7733
LAS VEGAS	0	0	0	78	387	617	688	487	335	111	6	0	2709
RENO	43	87	204	490	801	1026	1073	823	729	510	357	189	6332
WINNEMUCCA	0	34	210	536	876	1091	1172	916	837	573	363	153	6761
N. H. CONCORD	6	50	177	505	822	1240	1358	1184	1032	636	298	75	7383
MT. WASH. OBSY.	493	536	720	1057	1341	1742	1820	1663	1652	1260	930	603	13817
N. J. ATLANTIC CITY	0	0	39	251	549	880	936	848	741	420	133	15	4812
NEWARK	0	0	30	248	573	921	983	876	729	381	118	0	4859
TRENTON	0	0	57	264	576	924	989	885	753	399	121	12	4980
N. MEX. ALBUQUERQUE	0	0	12	229	642	868	930	703	595	288	81	0	4348
CLAYTON	0	6	66	310	699	899	986	812	747	429	183	21	5158
RATON	9	28	126	431	825	1048	1116	904	834	543	301	63	6228
ROSWELL	0	0	18	202	573	806	840	641	481	201	31	0	3793
SILVER CITY	0	0	6	183	525	729	791	605	518	261	87	0	3705
N. Y. ALBANY	0	19	138	440	777	1194	1311	1156	992	564	239	45	6875
BINGHAMTON (AP)	22	65	201	471	810	1184	1277	1154	1045	645	313	99	7286
BINGHAMTON (PO)	0	28	141	406	732	1107	1190	1081	949	543	229	45	6451
BUFFALO	19	37	141	440	777	1156	1256	1145	1039	645	329	78	7062
CENTRAL PARK	0	0	30	233	540	902	986	885	760	408	118	9	4871
J. F. KENNEDY INTL	0	0	36	248	564	933	1029	935	815	480	167	12	5219
LAGUARDIA	0	0	27	223	528	887	973	879	750	414	124	6	4811
ROCHESTER	9	31	126	415	747	1125	1234	1123	1014	597	279	48	6748
SCHENECTADY	0	22	123	422	756	1159	1283	1131	970	543	211	30	6650
SYRACUSE	6	28	132	415	744	1153	1271	1140	1004	570	248	45	6756
N.C. ASHEVILLE	0	0	48	245	555	775	784	683	592	273	87	0	4042
CAPE HATTERAS	0	0	0	78	273	521	580	518	440	177	25	0	2612
CHARLOTTE	0	0	6	124	438	691	691	582	481	156	22	0	3191
GREENSBORO	0	0	33	192	513	778	784	672	552	234	47	0	3805
RALEIGH	0	0	21	164	450	716	725	616	487	180	34	0	3393
WILMINGTON	0	0	0	74	291	521	546	462	357	96	0	0	2347
WINSTON SALEM	0	0	21	171	483	747	753	652	524	207	37	0	3595
N. DAK. BISMARCK	34	28	222	577	1083	1463	1708	1442	1203	645	329	117	8851
DEVILS LAKE	40	53	273	642	1191	1634	1872	1579	1345	753	381	138	9901
FARGO	28	37	219	574	1107	1569	1789	1520	1262	690	332	99	9226
WILLISTON	31	43	261	601	1122	1513	1758	1473	1262	681	357	141	9243
OHIO AKRON	0	9	96	381	726	1070	1138	1016	871	489	202	39	6037
CINCINNATI	0	0	54	248	612	921	970	837	701	336	118	9	4806
CLEVELAND	9	25	105	384	738	1088	1159	1047	918	552	260	66	6351
COLUMBUS	0	6	84	347	714	1039	1088	949	809	426	171	27	5660
DAYTON	0	6	78	310	696	1045	1097	955	809	429	167	30	5622
MANSFIELD	9	22	114	397	768	1110	1169	1042	924	543	245	60	6403
SANDUSKY	0	6	66	313	684	1032	1107	991	868	495	198	36	5796
TOLEDO	0	16	117	406	792	1138	1200	1056	924	543	242	60	6494
YOUNGSTOWN	6	19	120	412	771	1104	1169	1047	921	540	248	60	6417
OKLA. OKLAHOMA CITY	0	0	15	164	498	766	868	664	527	189	34	0	3725
TULSA	0	0	18	158	522	787	893	683	539	213	47	0	3860
OREG. ASTORIA	146	130	210	375	561	679	753	622	636	480	363	231	5186
BURNS	12	37	210	515	867	1113	1246	988	856	570	366	177	6957
EUGENE	34	34	129	366	585	719	803	627	589	426	279	135	4726
MEACHAM	84	124	288	580	918	1091	1209	1005	983	726	527	339	7874
MEDFORD	0	0	78	372	678	871	918	697	642	432	242	78	5008
PENDLETON	0	0	111	350	711	884	1017	773	617	396	205	63	5127
PORTLAND	25	28	114	335	597	735	825	644	586	396	245	105	4635
ROSEBURG	22	16	105	329	567	713	766	608	570	405	267	123	4491
SALEM	37	31	111	338	594	729	822	647	611	417	273	144	4754
SEXTON SUMMIT	81	81	171	443	666	874	958	809	818	609	465	279	6254
PA. ALLENTOWN	0	0	90	353	693	1045	1116	1002	849	471	167	24	5810
ERIE	0	25	102	391	714	1063	1169	1081	973	585	288	60	6451
HARRISBURG	0	0	63	298	648	992	1045	907	766	396	124	12	5251
PHILADELPHIA	0	0	60	291	621	964	1014	890	744	390	115	12	5101
PITTSBURGH	0	9	105	375	726	1063	1119	1002	874	480	195	39	5987
READING	0	0	54	257	597	939	1001	885	735	372	105	0	4945
SCRANTON	0	19	132	434	762	1104	1156	1028	893	498	195	33	6254
WILLIAMSPORT	0	9	111	375	717	1073	1122	1002	856	468	177	24	5934
R. I. BLOCK IS.	0	16	78	307	594	902	1020	955	877	612	344	99	5804
PROVIDENCE	0	16	96	372	660	1023	1110	988	868	534	236	51	5954
S. C. CHARLESTON	0	0	0	59	282	471	487	389	291	54	0	0	2033
COLUMBIA	0	0	0	84	345	577	570	470	357	81	0	0	2484
FLORENCE	0	0	0	78	315	552	552	459	347	84	0	0	2387
GREENVILLE	0	0	0	112	387	636	648	535	434	120	12	0	2884
SPARTANBURG	0	0	15	130	417	667	663	560	453	144	25	0	3074
S. DAK. HURON	9	12	165	508	1014	1432	1628	1355	1125	600	288	87	8223
RAPID CITY	22	12	165	481	897	1172	1333	1145	1051	615	326	126	7345
SIOUX FALLS	19	25	168	462	972	1361	1544	1285	1082	573	270	78	7839
TENN. BRISTOL	0	0	51	236	573	828	828	700	598	261	68	0	4143
CHATTANOOGA	0	0	18	143	468	698	722	577	453	150	25	0	3254
KNOXVILLE	0	0	30	171	489	725	732	613	493	198	43	0	3494
MEMPHIS	0	0	18	130	447	698	729	585	456	147	22	0	3232
NASHVILLE	0	0	30	158	495	732	778	644	512	189	40	0	3578
OAK RIDGE (CO)	0	0	39	192	531	772	778	669	552	228	56	0	3817
TEX. ABILENE	0	0	0	99	366	586	642	470	347	114	0	0	2624
AMARILLO	0	0	18	205	570	797	877	664	546	252	56	0	3985
AUSTIN	0	0	0	31	225	388	468	325	223	51	0	0	1711
BROWNSVILLE	0	0	0	0	66	149	205	106	74	0	0	0	600
CORPUS CHRISTI	0	0	0	0	120	220	291	174	109	0	0	0	914
DALLAS	0	0	0	62	321	524	601	440	319	90	6	0	2363
EL PASO	0	0	0	84	414	648	685	445	319	105	0	0	2700
FORT WORTH	0	0	0	65	324	536	614	448	319	99	0	0	2405
GALVESTON	0	0	0	0	138	270	350	258	189	30	0	0	1235
HOUSTON	0	0	0	6	183	307	384	288	192	36	0	0	1396
LAREDO	0	0	0	0	105	217	267	134	74	0	0	0	797
LUBBOCK	0	0	18	174	513	744	800	613	484	201	31	0	3578
MIDLAND	0	0	0	87	381	592	651	468	322	90	0	0	2591
PORT ARTHUR	0	0	0	22	207	329	384	274	192	39	0	0	1447
SAN ANGELO	0	0	0	68	318	536	567	412	288	66	0	0	2255
SAN ANTONIO	0	0	0	31	207	363	428	286	195	39	0	0	1549
VICTORIA	0	0	0	6	150	270	344	230	152	21	0	0	1173
WACO	0	0	0	43	270	456	536	389	270	66	0	0	2030
WICHITA FALLS	0	0	0	99	381	632	698	518	378	120	6	0	2832
UTAH MILFORD	0	0	99	443	867	1141	1252	988	822	519	279	87	6497
SALT LAKE CITY	0	0	81	419	849	1082	1172	910	763	459	233	84	6052
WENDOVER	0	0	48	372	822	1091	1178	902	729	408	177	51	5778
VT. BURLINGTON	28	65	207	539	891	1349	1513	1333	1187	714	353	90	8269
VA. CAPE HENRY	0	0	0	112	360	645	694	633	536	246	53	0	3279
LYNCHBURG	0	0	51	223	540	822	849	731	605	267	78	0	4166
NORFOLK	0	0	0	136	408	698	738	655	533	216	37	0	3421
RICHMOND	0	0	36	214	495	784	815	703	546	219	53	0	3865
ROANOKE	0	0	51	229	549	825	834	722	614	261	65	0	4150
WASH. NAT'L. AP.	0	0	33	217	519	834	871	762	626	288	74	0	4224
WASH. OLYMPIA	68	71	198	422	636	753	834	675	645	450	307	177	5236
SEATTLE	50	47	129	329	543	657	738	599	577	396	242	117	4424
SEATTLE BOEING	34	40	147	384	624	763	831	655	608	411	242	99	4838
SEATTLE TACOMA	56	62	162	391	633	750	828	678	657	474	295	159	5145
SPOKANE	9	25	168	493	879	1082	1231	980	834	531	288	135	6655
STAMPEDE PASS	273	291	393	701	1008	1178	1287	1075	1085	855	654	483	9283
TATOOSH IS.	295	279	306	406	534	639	713	613	645	525	431	333	5719
WALLA WALLA	0	0	87	310	681	843	986	745	589	342	177	45	4805
YAKIMA	0	12	144	450	828	1039	1163	868	713	435	220	69	5941
W. VA. CHARLESTON	0	0	63	254	591	865	880	770	648	300	96	9	4476
ELKINS	9	25	135	400	729	992	1008	896	791	444	198	48	5675
HUNTINGTON	0	0	63	257	585	856	880	764	636	294	99	12	4446
PARKERSBURG	0	0	60	264	606	905	942	826	691	339	115	6	4754
WIS. GREEN BAY	28	50	174	484	924	1333	1494	1313	1141	654	335	99	8029
LA CROSSE	12	19	153	437	924	1339	1504	1277	1070	540	245	69	7589
MADISON	25	40	174	474	930	1330	1473	1274	1113	618	310	102	7863
MILWAUKEE	43	47	174	471	876	1252	1376	1193	1054	642	372	135	7635
WYO. CASPER	6	16	192	524	942	1169	1290	1084	1020	657	381	129	7410
CHEYENNE	19	31	210	543	924	1101	1228	1056	1011	672	381	102	7278
LANDER	6	19	204	555	1020	1299	1417	1145	1017	654	381	153	7870
SHERIAN	25	31	219	539	948	1200	1355	1154	1054	642	366	150	7683


TOTAL GROWING DEGREE DAYS (GDD)
MARCH 1-OCTOBER 9, 1971
Environmental Data Service, NOAA
COMPUTED TO 50° F. BASE WITH DAILY MAXIMUM TEMPERATURE LIMITED TO 86° F. OR LESS AND DAILY MINIMUM TO 50° F. OR MORE. PLEASE SEE DEFINITION IN MARCH 29, 1971 ISSUE OF BULLETIN.



INDEX DECREASED DURING WEEK
(Unshaded Areas)

INDEX

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

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

INDEX

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

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

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

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

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South Building Mail Unit
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Washington, D.C. 20250

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