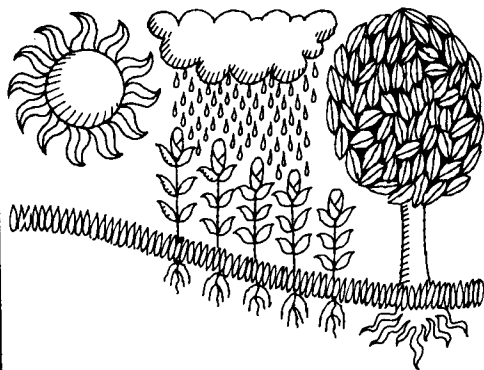




Weekly Weather & Crop Bulletin

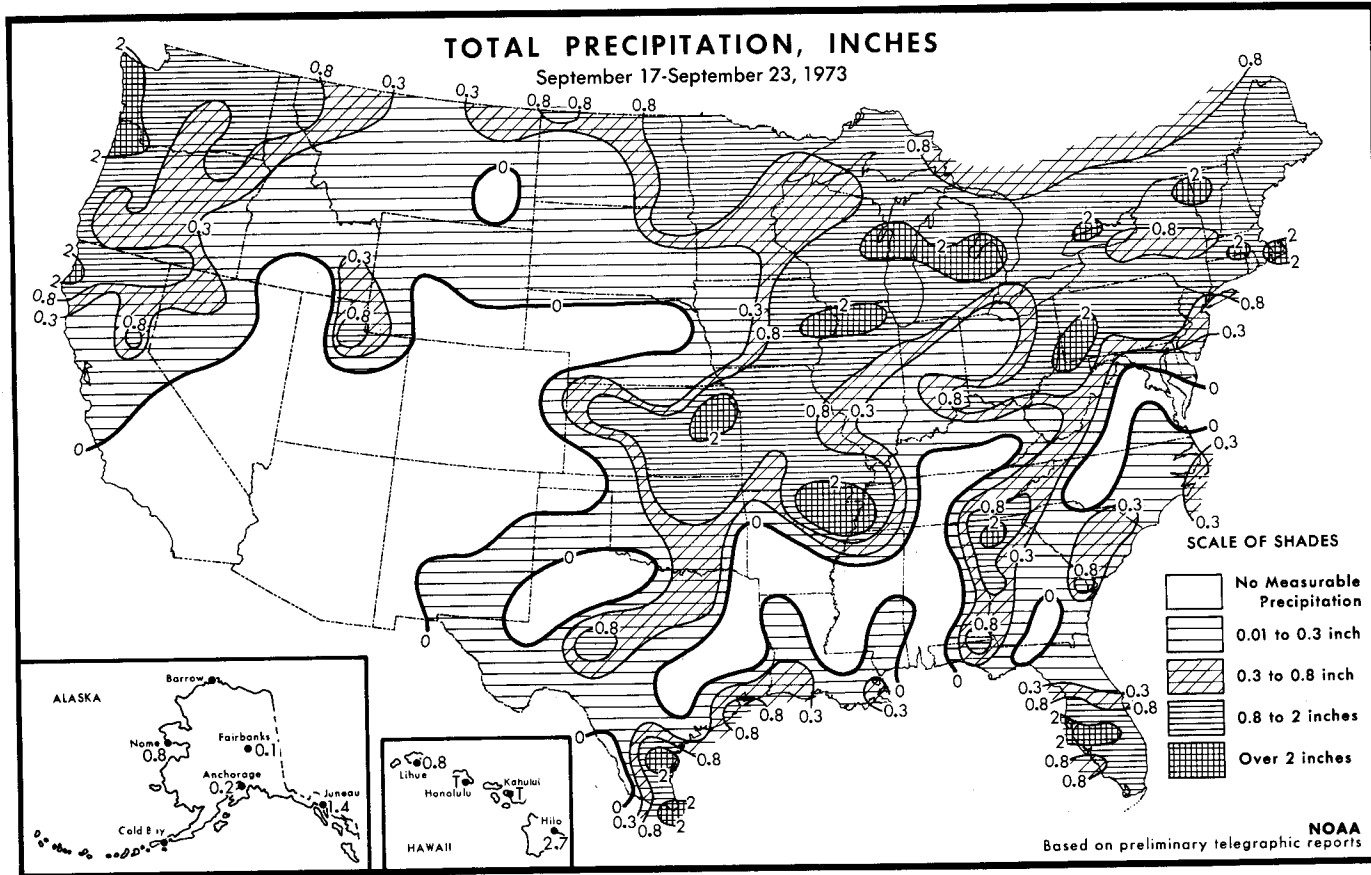
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NATIONAL WEATHER SUMMARY

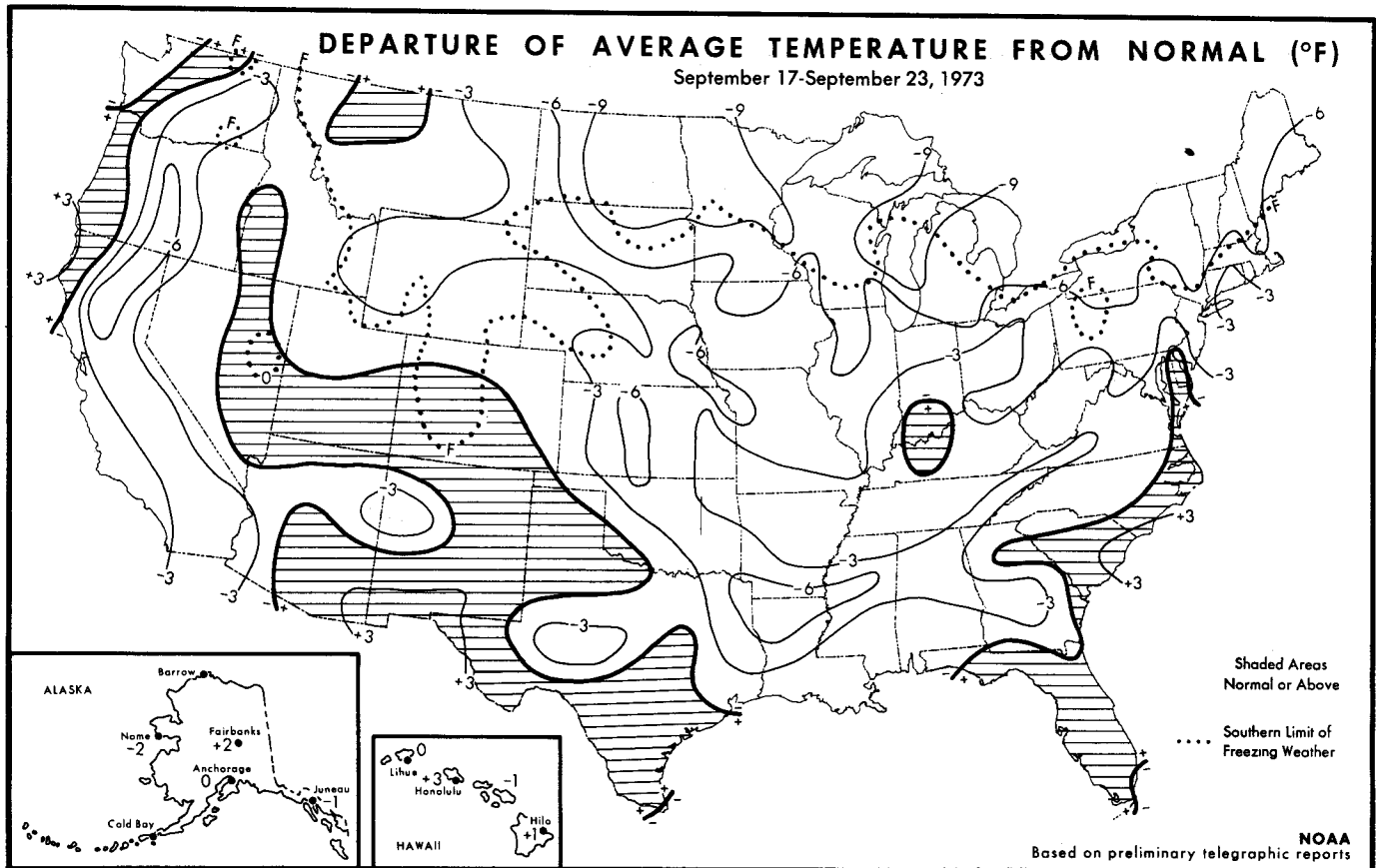
HIGHLIGHTS: Cold Canadian air brought autumnal temperatures to much of the Nation during the last week of summer. Only in the desert areas of the Southwest were temperatures about normal for this time of the year. The cold fronts also brought rain to many areas of the country's midsection and East Coast during the week and a storm front from Pacific Ocean generated much needed rain for the West Coast and northern Rockies.

PRECIPITATION: Monday and Tuesday saw a belt of cloudy wet weather moving from the Nation's midsection to the East Coast--while another front in the Pacific was beginning to generate much needed moisture in an area stretching from the Pacific Coast to the northern Rocky Mountains. By Wednesday rainfall covered much of the Pacific Northwest--though skies had cleared elsewhere.

On Thursday a developing storm in the Northwestern Plains dragged a considerable mass of showers from Washington and Oregon into the Great

Basin and across the northern Rockies. The heaviest and most numerous showers occurred in northern Nevada, Idaho, and western Montana. Meanwhile, northern California received its first rain of consequence thus far this season. San Francisco got its first sizable rainfall in 5 months. The precipitation was heaviest along the northern coast where 2 1/2 in. of rainfall were reported. Thunderstorms were also producing locally heavy rains in Florida and southern Texas. Alice, Tex. received nearly 2 1/2 in. of rain on Thursday afternoon.

Friday saw a number of violent thunderstorms spring to life as a dramatic input of warm moist southern air clashed with colder over the central United States. A tornado was reported at Union, Iowa; golf-ball-sized hail struck Cumberland, Wis.; and trees were downed by thunderstorm activity near Savannah, Ill. Other storms, scattered from Florida into South Carolina, deposited an inch of rain at Tampa, Fla.



Meanwhile an oceanic storm over the open Pacific sent surges of rain onto the northern coast that reached inland into the northern Rockies. The rains were driven onto land by strong gusty winds and gale warnings were posted along the Washington, Oregon, and northern California coasts.

The weekend brought no lessening of the storm activity. Gale warnings continued in effect along the Pacific Coast while a separate storm system whipped up gale-force winds over the Great Lakes. A severe thunderstorm delivered 3/4 in. hail and over 1 in. of rain at Du Bois, Pa. while another storm ripped off a hangar roof and damaged eight aircraft at East Liverpool, Ohio.

By Sunday, heavy thunderstorms had brought near-record flooding to northeastern Kansas as more than 6 in. of rain fell the preceding night on already saturated ground between Topeka and Manhattan. But the heavy rains weren't limited to the lower Missouri Valley: Ft. Lauderdale, Fla. received 3 in. of rain during the preceding 24 hour period; St. Petersburg, Fla. and Chatham, Mass. each received more than 2 in.; and Cincinnati, Ohio got almost 1 in.

TEMPERATURE: Weather more typical of late October than mid-September prevailed during much of the week as temperatures ranged from 3° to 10° below normal over much of the Nation's midsection and east. By the time summer officially ended on Saturday, frost had already been reported in a number of places.

From Monday through Thursday the Nation's weather picture was dominated by a succession of cold fronts which moved down from Canada onto the Central Plains and gradually extended their chilly

fingers eastward. Early Tuesday morning frost was reported as far south as southwest Iowa and northeast Kansas and the record for the coldest temperature this early in the season was broken at St. Joseph, Mo. with a reading of 37°. Wednesday and Thursday saw the continuation of cold nights in the East and North as the early-week cold front moved eastward out of the country--and was replaced by another mass of cold Canadian air moving into the upper Midwest. Portions of Pennsylvania reported frost on Wednesday morning and the following day the mercury dipped to 22° at Hibbing, Minn. In contrast, the temperature at Phoenix, Ariz. soared to 102° on Thursday, the 110th day this year the mercury topped 100° in that city.

The cold weather persisted in the Northeast on Friday. Early morning temperatures were at record lows in a number of reporting areas in New York: 34° at Rochester, 33° at Buffalo, and 29° at Albany. Boonville, N.Y. was the Nation's coldest spot on Friday with a reading of 21°.

Meanwhile in the Midwest a strong flow of southerly winds, exceeding 40 mph at times, drove a wedge of warm air into the Central Plains. Eastern Kansas reported readings in the 90°s non Friday, which represented nearly 20° of warming since the preceding day.

On Saturday, the last day of summer, morning freezes were noted in northern New England and pockets of cold air held afternoon readings to the 40°s in portions of northern New England and the upper Mississippi Valley. However, a warming trend was evident as the weekend wore on. Early Sunday morning the only report of a freeze came from International Falls, Minn. where the temperature dropped to 30°.

NATIONAL AGRICULTURAL SUMMARY

AGRICULTURAL HIGHLIGHTS: Rains finally fell on the parched Northwest. Rain and wet fields again slowed wheat seeding in the Great Plains. Widespread frost in northern portions of the North Central Region caught some immature corn in Wisconsin and Michigan. Corn and soybeans continued to mature rapidly.

SMALL GRAINS: Rains and wet fields slowed seeding of the 1974 winter wheat crop in Nebraska and Kansas for the second consecutive week. Rain also fell on the parched Northwest providing some badly needed moisture for seed germination.

Kansas winter wheat acreage is 20% planted compared to 35% in 1972 and a 10-year average of 30%. Nebraska seeding reached 55% versus a 70% average. South Dakota winter wheat is 85% seeded but more soil moisture is needed for germination. Ohio, Indiana and Illinois each have 15% seeded. Wheat seeding surged ahead in Oklahoma at 25% done and in Colorado at 60% done while Texas is 44% done versus 54% in 1972.

Rains which finally fell on the Northwest boosted seeding activity. Winter wheat is 55% seeded in Montana, recent rains helped germination statewide.

CORN: The Corn Belt corn crop continued to mature rapidly, ahead of last year and equal to average progress. The crop is 70% mature and safe from frost compared to 64% a year earlier. Less than 5% of the Corn Belt crop is harvested.

Frost hit parts of Michigan and Wisconsin hurting some immature corn. The Michigan crop is 52% mature, several more days of frost-free weather are needed. Over 90% of the corn in Minnesota and South Dakota is mature and safe. Harvesting corn for silage is in full swing in the Corn Belt and North Atlantic States.

Corn is maturing faster than last year's late crop in all Corn Belt States except Iowa, Missouri and Kansas. The Iowa crop is 72% mature versus 80% in 1972. Illinois corn is 85% mature, equal average progress. Ohio corn is 50% mature versus 60% average while Indiana corn is 55% mature, same as average.

Corn harvesting in the South gained momentum at about 24% complete. Harvesting is 40% done in North Carolina, 16% done in Georgia, and 5% done in Kentucky.

COTTON: Cotton in the South opened at an increasing rate but is still behind last year in the Delta. Mississippi cotton is 22% open versus 48% in 1972 while the Arkansas crop is 33% open versus 50% in 1972. Cool, damp weather in these States is causing boll rot which is of great concern to farmers.

Cotton harvesting in Texas made fair progress at 11% done but remained behind last year's progress of 26%. Picking in other Southern States is less than 3% done. First bales were ginned last week in Arkansas as defoliation began there and continued in the South Atlantic States. Less than 2% of cotton in Mississippi is harvested compared to about 10% in 1972.

Cotton harvesting was still very slow in California and most areas in Arizona except near Yuma. First bales were ginned in New Mexico.

SOYBEANS: Combining of early maturing soybeans has started in all Corn Belt States except Wisconsin; although overall less than 5% of the acreage is harvested. The crop continued to mature rapidly but behind the normal pace and a year earlier. Leaves are shedding on 58% of the Corn Belt acreage.

The Illinois crop has leaves shedding on 55% of the acreage versus 61% in 1972 and average shedding of 68%. About 8% of Illinois soybeans are harvested. Leaves are shedding on 59% of Iowa soybeans versus 70% in 1972 and an average of 68%.

In the South, a few soybean fields were harvested in Virginia, Georgia and from Florida to Louisiana and Arkansas. Recent rains and weather has helped late soybeans in Arkansas. Mississippi soybeans are 10% mature versus 20% a year earlier.

OTHER CROPS: Hay baling remained active in Texas, some areas were making the fifth cutting. Third cutting alfalfa hay in New York is 65% complete.

Sorghum grain harvesting in Texas slowed to 50% complete versus 45% in 1972. Oklahoma sorghum is 4% harvested. A few fields were harvested in Kansas.

Good harvesting conditions favored tobacco harvesting in Virginia, North Carolina and Kentucky.

Potato growers in Idaho are actively killing potato vines; the crop is 25% harvested in southwest Idaho. Potato harvesting is in full swing in Washington and Maine.

Sugar beet harvesting is underway in Washington and active in California. The Colorado crop is late.

Recovery of lodged rice in Louisiana is better than expected, 75% of the acreage is harvested.

FRUITS AND NUTS: The Virginia apple harvest is nearly 33% complete, the same as in 1972. Picking of early varieties continued in Northeast orchards and is in full swing in the Pacific States.

The harvest of peaches, plums and nectarines in California is nearly finished while early walnut harvesting started.

Citrus crops in major producing areas continued to show good growth.

VEGETABLES: The summer vegetable harvest neared completion in the Northeast. Supplies of peppers, eggplant and squash were moderate in New Jersey.

Planting and transplanting of fall crops were active in Florida, but rain continued to delay planting in the Texas Lower Rio Grande Valley.

Lettuce harvesting was active in California. Sweet corn picking continued active in Washington and Oregon.

PASTURES AND LIVESTOCK: Rains brought some relief to the drought plagued Northwest and ranchers there are hopeful fall pastures will rebound. Pastures show improvement from the Dakotas southward. Grazing is generally abundant in Texas and Oklahoma as a result of recent rains.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., Sep. 23, 1973

States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches	
	Average	Departure	Total	Departure		Average	Departure	Total	Departure		Average	Departure	Total	Departure
ALA.Birmingham. . .	72	- 4	0	- .8	La.Baton Rouge. . .	76	- 1	0	-1.1	Youngstown. . .	57	- 4	.6	- .1
Mobile.	77	- 1	0	-1.5	Lake Charles. . .	76	- 2	.5	- .4	OKLA.Okla. City. . .	69	- 3	.8	+ .1
Montgomery. . .	75	- 2	0	- .9	New Orleans. . .	76	- 2	.3	- .9	Tulsa.	69	- 3	1.1	+2.2
ALASKA.Anchorage. .	47	0	.2	- .4	Shreveport. . .	72	- 6	T	- .5	OREG.Astoria. . .	58	0	3.3	+2.5
Barrow.	---	---	---	---	MAINE.Caribou. . .	45	- 8	1.4	+ .5	Burns.	54	- 3	.3	+ .1
Fairbanks. . . .	45	+ 2	.1	- .2	Portland.	52	- 6	1.2	+ .4	Medford.	64	+ 1	.5	+ .3
Juneau.	47	- 1	1.4	- .8	MD.Baltimore. . .	64	- 3	.2	- .5	Pendleton. . . .	61	- 2	1.0	+ .8
Kodiak.	---	---	---	---	MASS.Boston. . .	58	- 7	1.1	+ .3	Portland.	62	0	2.3	+1.8
Nome.	39	- 2	.8	+ .2	Chatham.	59	---	2.8	---	Salem.	62	0	1.9	+1.5
ARIZ.Flagstaff. . .	58	0	0	- .4	MICH.Alpena. . .	47	- 8	2.0	+1.1	PA.Allentown. . .	60	- 3	1.0	+ .2
Phoenix.	85	+ 2	0	- .2	Detroit.	57	- 5	.4	- .2	Erie.	55	- 5	1.3	+ .4
Tucson.	82	+ 2	0	- .2	Flint.	53	- 7	2.0	+1.3	Harrisburg. . . .	62	- 4	.9	+ .3
Winslow.	68	- 2	0	- .2	Grand Rapids. . .	53	- 8	1.9	+1.1	Philadelphia. . .	65	- 1	.7	- .1
Yuma.	82	- 4	0	- .1	Houghton Lake. . .	48	- 8	1.7	+1.0	Pittsburgh. . . .	60	- 3	2.5	+1.9
ARK.Fort Smith. . .	71	- 3	T	- .9	Lansing.	53	- 8	1.6	+1.0	Scranton.	57	- 5	1.7	+1.0
Little Rock. . . .	71	- 2	T	- .8	Marquette. . . .	50	- 7	1.0	+ .2	R.I.Providence. .	58	- 4	1.4	+ .6
CALIF.Bakersfield. .	74	- 2	0	0	Muskegon. . . .	52	- 10	1.1	+ .4	S.C.Charleston. .	78	+ 3	T	-1.4
Eureka.	60	+ 3	2.1	+2.0	S. Ste. Marie. . .	45	-10	.8	- .1	Columbia.	76	+ 1	.4	- .6
Fresno.	70	- 4	0	0	MINN.Duluth. . .	45	- 8	.4	- .3	Greenville. . . .	71	- 1	T	- .9
Los Angeles. . . .	68	- 1	0	- .1	Internatl Falls. .	44	- 8	1.5	+ .8	S.D.Aberdeen. . .	50	- 9	1.1	+ .8
Red Bluff.	68	- 8	.2	+ .1	Minneapolis. . .	52	- 7	.4	- .2	Huron.	53	- 7	.1	- .3
San Diego.	67	- 3	T	0	Rochester. . . .	52	- 8	.4	- .4	Rapid City. . . .	57	- 3	.2	0
San Francisco. . .	63	- 1	T	- .1	St. Cloud.	48	-10	.7	+ .1	Sioux Falls. . . .	56	- 4	.1	- .6
Stockton.	69	- 3	.1	0	MISS.Jackson. . .	73	- 3	0	- .6	TENN.Chattanooga.	70	- 3	1.0	+ .3
COLO.Denver. . . .	62	0	0	- .3	Meridian.	73	- 2	.1	- .7	Knoxville.	68	- 3	.4	- .2
Grand Junction. . .	68	+ 1	T	- .2	MO.Columbia. . .	63	- 4	.9	- .1	Memphis.	71	- 1	2.1	+1.4
Pueblo.	67	+ 1	T	- .2	Kansas City. . .	64	- 6	1.0	+ .2	Nashville.	71	- 1	T	- .7
CONN.Bridgeport. .	63	- 2	1.4	+ .5	St. Louis.	64	- 4	.3	- .3	TEX.Abilene. . . .	74	- 1	.3	- .3
Hartford.	59	- 3	1.6	+ .7	Springfield. . .	66	- 3	.7	- .2	Amarillo.	71	+ 1	T	- .5
D.C.Washington. . .	68	- 1	T	- .9	MONT.Billings. . .	57	- 2	.1	- .2	Austin.	80	+ 1	T	-1.0
FLA.Apalachicola. .	80	+ 1	T	-2.0	Glasgow.	52	- 3	.4	+ .2	Beaumont.	76	- 2	.3	- .8
Daytona Beach. . .	81	+ 2	T	---	Great Falls. . . .	57	+ 1	T	- .3	Brownsville. . . .	81	0	2.5	+ .6
Ft. Myers.	83	+ 2	.8	-1.3	Havre.	54	0	.2	- .1	Corpus Christi. .	82	+ 2	2.0	+ .7
Jacksonville. . . .	79	0	.1	-1.7	Helena.	53	- 2	.1	- .1	Dallas.	---	---	---	---
Key West.	83	+ 1	.9	- .7	Kalispell.	52	- 1	.6	+ .3	Del Rio.	80	+ 1	.1	- .5
Lakeland.	81	+ 1	1.6	0	Miles City. . . .	57	- 2	T	- .2	El Paso.	79	+ 5	T	- .2
Miami.	81	0	1.8	- .4	Missoula.	54	0	.1	- .2	Fort Worth. . . .	75	- 2	.3	- .3
Orlando.	82	+ 2	.4	-1.4	NEBR.Grand Island.	60	- 3	T	- .6	Galveston.	80	0	1.0	- .4
Tallahassee. . . .	80	+ 2	0	-1.3	Lincoln.	60	- 7	T	- .7	Houston.	76	- 1	.7	- .3
Tampa.	82	+ 2	2.0	+ .4	Norfolk.	58	- 5	T	- .6	Lubbock.	72	+ 2	T	- .6
W.Palm Beach. . . .	83	+ 1	1.4	---	N.Platte.	58	- 4	T	- .4	Midland.	71	- 3	T	- .4
GA.Atlanta.	72	0	.7	- .1	Omaha.	60	- 4	.2	- .4	San Angelo. . . .	74	- 3	.7	+ .1
Augusta.	75	0	.1	- .6	Valentine. . . .	58	- 2	.1	- .2	San Antonio. . .	79	+ 1	.1	- .8
Macon.	71	- 5	.1	- .5	NEV.Ely.	56	0	T	- .1	Victoria.	81	+ 2	T	-1.0
Savannah.	77	+ 1	.1	-1.3	Las Vegas.	79	0	0	- .1	Waco.	79	+ 1	.1	- .6
HAWAII.Hilo. . . .	77	+ 1	2.7	+ .7	Reno.	56	- 2	T	- .1	Wichita Falls. . .	78	+ 2	T	- .6
Honolulu.	81	+ 3	T	- .3	Winnemucca. . . .	57	- 1	.3	+ .2	UTAH.Blanding. . .	62	+ 1	0	- .3
Kahului.	77	- 1	T	- .1	N.H.Concord. . .	52	- 6	1.5	+ .5	Salt Lake City. . .	62	- 1	1.1	+1.0
Lihue.	79	0	.8	+ .3	N.J.Atlantic City. .	61	- 5	T	- .8	VT.Burlington. . .	49	- 8	2.4	+1.6
IDAHO.Boise. . . .	62	+ 1	.1	0	Trenton.	63	- 3	.5	- .3	VA.Lynchburg. . .	66	- 2	0	- .8
Lewiston.	61	- 1	.6	+ .4	N.MEX.Albuquerque.	68	- 1	T	- .2	Norfolk.	72	0	0	-1.0
Pocatello.	56	- 3	.3	+ .2	Roswell.	71	+ 2	T	- .5	Richmond.	68	- 1	.2	- .7
ILL.Cairo.	68	- 3	1.0	+ .3	N.Y.Albany. . . .	54	- 7	.6	- .3	Roanoke.	64	- 4	T	- .8
Chicago.	59	- 6	1.4	+ .7	Binghamton. . . .	53	- 5	1.3	+ .6	WASH.Colville. . .	55	- 3	1.3	+1.1
Moline.	59	- 5	1.8	+1.0	Buffalo.	53	- 7	.9	+ .2	Omak.	59	+ 1	1.4	+1.3
Peoria.	59	- 6	1.4	+ .6	New York.	64	- 4	.4	- .5	Quillayute. . . .	56	- 1	3.0	+1.9
Rockford.	56	- 7	3.8	+3.0	Rochester.	54	- 7	.7	+ .1	Seattle-Tacoma. .	59	0	1.4	+ .9
Springfield. . . .	62	- 4	.7	- .1	Syracuse.	54	- 7	.8	+ .1	Spokane.	56	- 4	1.4	+1.2
IND.Evansville. . .	69	0	T	- .7	N.C.Asheville. . .	66	- 1	.4	- .2	Walla Walla. . . .	62	- 3	.9	+ .7
Ft. Wayne.	60	- 4	.1	- .6	Charlotte.	71	- 1	0	- .8	Yakima.	58	- 3	.7	+ .6
Indianapolis. . . .	64	- 1	.7	0	Greensboro. . . .	68	- 1	T	- .9	W.Va.Beckley. . .	62	- 1	.6	- .1
South Bend.	58	- 5	.9	+ .1	Hatteras.	75	+ 1	.8	- .7	Charleston. . . .	66	- 1	.2	- .5
IOWA.Burlington. .	60	- 5	1.0	+ .1	Raleigh.	69	- 1	.1	- .9	Huntington. . . .	66	- 1	.3	- .4
Des Moines.	61	- 3	.3	- .3	Wilmington. . . .	74	0	.2	-1.3	Parkersburg. . . .	64	- 3	1.6	+1.0
Dubuque.	55	- 6	1.8	+ .8	N.DAK.Bismarck. .	46	-11	.2	- .1	WIS.Green Bay. . .	49	-10	2.1	+1.4
Sioux City.	59	- 5	T	- .7	Fargo.	47	-10	1.2	+ .9	La Crosse.	56	- 5	1.4	+ .6
KANS.Concordia. . .	63	- 5	.1	- .5	Williston.	50	- 5	.2	- .1	Madison.	53	- 7	1.0	+ .2
Dodge City.	64	- 5	T	- .4	OHIO.Akron-Canton.	59	- 4	1.0	+ .4	Milwaukee.	56	- 4	1.3	+ .6
Goodland.	62	- 2	.6	+ .3	Cincinnati. . . .	64	- 4	.9	+ .2	WYO.Casper. . . .	57	- 1	.2	- .1
Topeka.	65	- 3	4.1	+3.4	Cleveland.	60	- 3	.7	- .1	Cheyenne.	56	- 1	T	- .3
Wichita.	65	- 5	1.2	+ .4	Columbus.	64	- 1	.4	- .2	Lander.	54	- 4	T	- .3
KY.Lexington. . . .	67	- 2	.2	- .4	Dayton.	65	- 1	.1	- .6	Sheridan.	54	- 3	T	- .3
Louisville.	69	+ 1	.2	- .4	Toledo.	56	- 6	.1	- .4	P.R.San Juan. . .	83	+ 2	.4	-1.1

CONDENSED STATE SUMMARIES

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

ALABAMA: Dry, cool air over State Tuesday. Temperatures in 40's north and 50's south. Wednesday morning low of 39° at Valley Head. No rain most of week. Warm, dry weather over weekend. Harvest of corn, peanuts gained momentum. Harvest of soybeans, cotton limited to few early fields. Cotton opening rapidly statewide, some prematurely north due to dry weather. Harvest on limited scale south and central.

Corn 90% mature, but less than 20% harvested. Harvest made good progress even though moisture content remained high many fields and digging peanuts took priority southeast. Soybeans yellowing many fields, beans maturing earliest fields. Late soybeans need rain, especially northern counties. Growers made good progress digging peanuts; 27,970 tons inspected through September 22. Dry weather reduced quality, amount last hay cuttings.

ALASKA: Temperatures above normal in Tanana Valley with little or no precipitation. Matanuska Valley temperatures and precipitation totals subnormal. Kodiak Island reported near normal temperatures and precipitation. Barley in Tanana Valley about 75% combined. Grain maturity slow in Matanuska Valley. A sharp breeze would be helpful in reducing moisture content. Potato harvest neared completion. Soil moisture supply adequate.

ARIZONA: Scattered afternoon, evening showers extreme southeast Tuesday, Thursday, otherwise fair, dry weather through week. Temperatures 4° to 7° subnormal eastcentral, southwest; otherwise near or slightly subnormal.

Cotton harvest, defoliation continued Yuma. Few fields defoliated and picked Salt River Valley. Few fields Yuma, Maricopa, Graham Counties treated for pink bollworm. Leaf perforators active Yuma. Sorghum satisfactory progress. Limited harvesting Yuma. Sugar beets good progress Yuma; planting underway, Maricopa. Alfalfa seed harvest Yuma with fair yields. Alfalfa hay harvest on limited scale. Renovation, new plantings Yuma, Salt River Valley. Lettuce harvest expected to start next week Cochise County. Early planted lettuce good progress central, western areas. Cooler nights beneficial. Planting, land preparation for later lettuce, mixed vegetables active central, western areas. Cantaloupes fall harvest, good progress.

Harvest lemons Yuma area nearing volume. Citrus groves generally good condition--some fruit injury from strong winds--other new crop fruit sizing well. Ranges deteriorated statewide due to dryness. Cattle, calves good. Sheep, lambs fair to good.

ARKANSAS: Dry much of State. Rainfall 0.25 in. or greater recorded latter part week and on weekend extreme north. Black Rock got 2.94 in., Harrison 1.24 in., and Keiser 0.54 in. Temperatures averaged in upper 60's north to mid-70's south; 3° to 5° subnormal eastern third, near normal elsewhere.

Soil moisture mostly adequate. Cool, damp weather slowing maturity and causing boll rot in cotton. Defoliation began. First bales ginned. Crop 33% open. Rice 10% harvested, open weather needed for large scale harvesting operations. Soybeans mostly good; weather aided potential yields of late beans, combining began south. Sorghum yields good, wet weather causing damage

by sprouting in the heads. Corn maturing well, harvest active. Armyworms in small grains and pastures. Small grain planting continued. Fall cutting of hay continued. Apple and grape harvest almost complete. Okra harvest slowed by cool nights. Pastures average to above average. Livestock going to market in good condition. Weight gains average from pasture grazing. Flies still need control in livestock.

CALIFORNIA: Fall storms brought precipitation to north. Light amounts fell along extreme north coast Sunday through Tuesday and again Friday. Precipitation quite general over State from San Francisco and Sacramento northward on Wednesday and Thursday with over 1.00 in. along north coast and northern mountains. Temperatures generally subnormal all areas.

Small grain planting increased. Cotton harvest still very slow. Sugar beet harvest active. Harvest dry beans, field corn, milo increased. Harvest wine grape crop active; excellent yield some varieties, low sugar. Table grape packing Ribiers, Emperors, Thompson seedless progressing normally. Harvest Tokays fresh continued, increasing tonnage wineries. Many raisins rolled, boxed, delivered. Sugar levels lower normal, cool weather slowed drying. Almond, fig harvest near completion. Harvest early varieties walnuts underway. Harvest prunes, clingstone, freestone peaches, plums, nectarines nearly finished. Picking Jonathan, Red, Golden Delicious, Newtown Pippin apples. Major producing areas active. Early citrus crops including navel oranges, desert valleys grapefruit, tangerines developing well.

Broccoli, cauliflower active Salinas. More broccoli Santa Maria-Oceano. Cantaloupe slow westside. Carrots steady Salinas. Celery heavy Salinas. Sweet corn light southern California. Honeydews light San Joaquin, Sacramento. Lettuce active Salinas, Santa Maria; Brentwood, Westside just starting. Bell pepper active San Joaquin and Salinas. Potatoes less active Stockton and Santa Maria; Tulelake just starting. Sweet potatoes active Livingston. Fresh market tomatoes light central coast, southern California. Processing tomato active Sacramento, San Joaquin; more active central coast. Weekend showers caused some concern, no serious problems at this time.

Movement livestock from high elevation ranges continued active with anticipation of deer season and spurred by cool weather, early storms. Cattle coming off high ranges good to excellent condition. Fall calving started lower valleys.

COLORADO: Mostly fair and dry. Scattered showers several days but totals generally insignificant. Late week widespread light precipitation to central and northern mountains. Snow depths up to 2 in. reported that area with heaviest moisture amounts about 0.25 in. Temperatures 3° to 6° subnormal east and 1° to 2° above seasonal west. Extremes: 90's over parts of southeast on 19th and 20th, 18° at Walden on 17th and at Fraser 18th.

Planting winter wheat progressing rapidly, 60% seeded, 24% emerged. Condition good except southeast fair due dry soil. Corn maturing rapidly; 77% dented, 50% safe from frost, 78% 1972. Corn silage 47% harvested. Grain sorghum 85% turning color,

7% ripe, 68% ripe year ago. Fall potato harvest active San Luis Valley. Dry beans 54% cut, 16% threshed. Some quality loss northeast from recent rain. Sugar beets good to excellent but late. Apple harvest in volume. Third cutting alfalfa 51% harvested. Pastures and ranges very good, slight improvement most areas. Livestock good to excellent.

FLORIDA: Temperatures near to slightly above normal most of week. Daily showers and thundershowers numerous and widespread. Weekly totals moderate but heavier over weekend, some stations got little rain, others much. Rainfall moderate except heavier on Atlantic and Gulf Coasts.

Crop conditions good. Soil moisture generally adequate. Corn harvest continued, yields variable. Harvest of peanuts well underway and moving in large quantities to mills and buying stations. Small acreage soybeans harvested, regular harvest 2 weeks away. Sugarcane good. Hay making continued. Land preparation for small grains active. Some oats seeded. Cattle, calves good. Pastures mostly good to excellent. Northern and southern pastures poor to fair.

Citrus trees excellent--fewer rains last week--fruit sizing well--fruit droppage not abnormal--harvesting very slow starting due to low maturity. Planting, transplanting continued for fall vegetable crops. First loadings sweet corn, radishes in late September. Some early squash available to local markets. Planting active. Snap beans, cucumbers, peppers, winter potatoes, cabbage transplanting continued. Lettuce, romaine, other leaf crop planting in full swing. Land preparation underway for strawberries.

GEORGIA: Temperatures averaged 2° subnormal. Rainfall light to moderate except for locally heavy amounts central coastal section. Most rain north and south with less center of State.

Soil moisture mostly adequate north and south, short central. Peanut harvest very active; 64% dug, 49% picked. Corn fair to mostly good; 16% gathered. Cotton fair to good; 2% picked. Defoliation continued south, insect control active central and north. Soybeans fair to good; harvest started. Rains improved condition some plantings. Pecans fair to mostly good, yield prospects good. Hay and pasture mostly good, haying active. Cattle good. Small grains 8% seeded, land preparation very active, some seed shortages. Fire ants problem in lower State.

HAWAII: Showers windward areas benefited crop progress. More rain needed to relieve dry conditions--especially on Maui and Hawaii. Crops under irrigation fair to good condition. Pineapple harvest declining; other activities picking up. Sugar harvest normal. Lowland pastures dry--supplemental feeding necessary. Upland pastures fair. Vegetables adequate; bananas plentiful, papayas light.

IDAHO: Temperatures slightly subnormal, some higher elevation stations reported a few subfreezing readings. Storms end of week brought moderate to heavy precipitation to southwest and north and light amounts to southcentral area but southeast had little or none. Except for 0.05 in. in August Coeur D'Alene north reported first rainfall since end of June.

Rains beneficial dryland forage and ground preparation for fall seeding. Showers delayed harvesting operations. Culling and marketing cattle active north. Main activities: Harvesting potatoes, hay, onions, sweet corn, dry beans, spring grains, seed crops; also preparing ground and fall plant-

ing. Potato digging active southwest, 25% harvested. Good start southcentral, beginning east. No general killing frost, spraying and mechanical killing of vines active. Spring grain harvest active east, complete elsewhere. Rain delayed third cutting alfalfa but crop 50% complete. Combining alfalfa, red clover seed 50% complete. Dry bean harvest 80% cut, 40% combined. Apple harvest active, prune and plum near completion. Seeding fall grains active except north where soil moisture short, condition improved by soaking rains. Fall grains emerged east and southcentral.

ILLINOIS: Moderate to heavy rains north Monday and Friday, light amounts elsewhere. Temperatures subnormal. Quite cool first half week, mild later. Corn 15% excellent, 70% good, 14% fair, 1% poor. Corn 85% mature, 80% 1972, 1970-72 average 85%; 3% harvested, same as 1972, average 7%. Soybeans 9% excellent, 69% good, 22% fair. Soybeans 85% turned yellow, 55% shedding leaves, 1972 61% shedding, average 68%; 8% combined, same as 1972, average 15%.

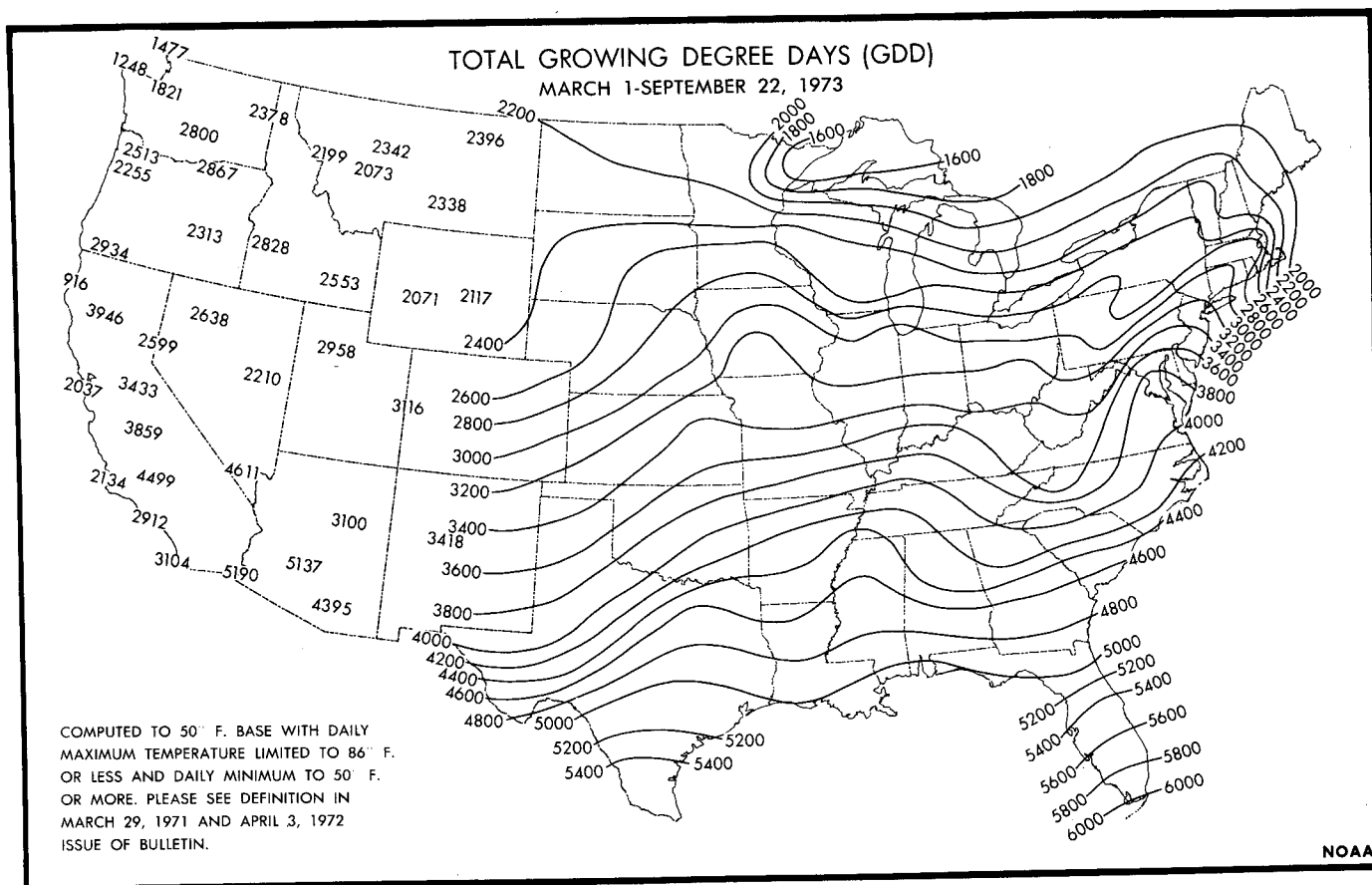
Third crop alfalfa hay about 85% cut, 74% 1972, average 84%. Condition mostly fair to good. Winter wheat seeding nearly 15% complete, 11% 1972, average 12%. Pastures 17% excellent, 53% good, 27% fair, 3% poor. Soil moisture 14% short, 79% adequate, 7% surplus. Fieldwork: 5 days. Main activities: Fall plowing, winter wheat seeding, corn silage harvesting, soybean combining.

INDIANA: Cool north, near average south. Temperatures ranged from 37° at Bluffton to 89° at Dubois. Precipitation 0.10 to 0.60 in.; least central and east. Rainfall 1.00 to 2.00 in. subnormal last 4 weeks. Fieldwork averaged 6 days. Topsoil moisture mostly short to adequate. Subsoil moisture short to adequate. Corn 95% dented, 55% mature, about same as average, ahead of 40% mature 1972. Soybean harvest 5% complete, same as normal, ahead of 1972 pace. Soybeans 45% shedding leaves, same as average. Wheat land plowed same as average. Wheat 15% seeded, 10% 1972. Rye 20% seeded. Barley 15% seeded. Apple harvest same as average. Pastures poor to mostly fair.

IOWA: Cool week with showers mostly over east half State falling the 21st. Four days suitable for fieldwork. Corn 72% mature, 5-year average 82%. Corn most advanced in northwest, northcentral and westcentral and least advanced central and southeast. Soybeans 84% leaves turning; leaves shedding 59%, 5-year average 68%. Soybeans mature 51%, average 59%. Crop most advanced in northwest, northcentral and least advanced central and southeast. Soybean harvest started northwest. Third crop alfalfa 85% harvested. Winter wheat 28% planted. Topsoil moisture 3% short, 73% adequate, and 24% surplus.

KANSAS: Temperatures far below normal first of week, above normal by weekend, averaged 2° to 5° subnormal statewide. Scattered light frosts some areas east. Precipitation confined mostly to east. As much as 6.70 in. fell in a few hours in Wabaunsee County. All significant rain fell over weekend, some flooding along small streams north-east.

Wet fields delayed seedbed preparation, especially east. Wheat seeding 20% complete, 35% 1972, 10-year average 30%. Corn harvesting little progress, 5% complete. A few fields grain sorghum and soybeans harvested. Ranges and pastures continued to provide good grazing. Surface and soil moisture supplies adequate to surplus.



KENTUCKY: Daily highs averaged in 80's and over-night lows in 50's and 60's except record low temperatures in upper 30's Wednesday morning and afternoon highs in low 90's Sunday. Rainfall light and scattered.

Nearly all days suitable fieldwork. Soil moisture 66% short, 34% adequate. Corn 5% harvested. Dry conditions advancing harvest some areas. Soybeans 3% harvested, 24% shedding leaves, 36% leaves turning yellow and 37% leaves entirely green. Late beans suffering from lack of moisture. Tobacco cutting 81% completed, behind recent years. Most reporters expect burley yields well below 1972. Curing conditions good. Wheat seeding 13% completed. Rain needed for fall seeded small grains.

LOUISIANA: Temperatures normal to 4° subnormal. Extremes: 90° Baton Rouge and New Orleans Saturday and Sunday, 52° Winnsboro on Wednesday. Dry with zero weekly totals most areas. Greatest 1-day rain 1.40 in. at Lake Charles 24th. Fieldwork possible 5.2 days. Soil moisture adequate to surplus. Haying, seeding winter pasture, and rice harvest active where conditions permitted. Cotton opened rapidly, about 20% open, less than 1% picked. Recovery of downed rice better than expected, nearly 75% harvested. Combining of soybeans underway, fair to good yields, insects and grass in few late fields. Sugarcane planting resumed, crop growing well. Digging sweet potatoes continued. Some souring and rotting in low fields. Pastures above average. Livestock good.

MARYLAND AND DELAWARE: Cool, 3° subnormal. Extremes: Mid-80's to low 40's except upper 70's and mid-30's western Maryland. Precipitation mostly light except in west and northcentral

where totals reached 2.00 to 2.50 in. Good week for harvest. Corn harvest about at normal pace, 25%, 1972 15%. Silo filling 73% done, about normal. Soybean progress about usual, 50% yellowing and 17% shedding leaves. Tobacco harvest passed 90%, excellent curing weather. Good progress fall seeding grain and cover crops. Apple harvest delayed, red varieties slow to color and pickers scarce.

MICHIGAN: First significant precipitation of month lower peninsula. Rainfall generally 0.50 to 1.00 in. over upper and less than 0.50 in. over extreme southeast lower. Remainder of lower got 1.50 to 2.00 in., a few stations in excess of 2.00 in. in heavier showers. Temperatures 6° to 10° subnormal. Highs in upper 70's over southern lower Saturday. Lows in upper 20's or lower 30's Monday, Thursday and Friday over northern areas. Remainder of lower State had lows in 30's with some scattered light frost many locations early week.

Light to heavy frost damaged late maturing crops much of State. Rains relieved dry soil conditions many areas and spurred wheat planting. Averaged 4.7 days fieldwork. Some immature corn hurt by frost. Grain corn 95% dented or more advanced, 52% mature. Corn silage 48% harvested. Grain corn harvest started. Dry weather limited filling of soybean pods. About 44% soybean acreage shedding leaves or more advanced, 12% mature, harvest started. Dry beans 82%, fall potatoes 42%, sugar beets 5% harvested. Rapid planting of wheat after rains, 38% planted. Pasture feed supplies below average. Fall apple picking in full swing. Grape harvest underway. Summer vegetable harvest nearing completion.

MINNESOTA: Temperatures 5° to 10° subnormal. Coldest morning on 20th with lows in 20's north and central to 30's south. Precipitation above normal except southern district where totals averaged near 0.50 in. below. Rainfall general over State on 21st with 1.00 to 1.50 in. totals northwest and northcentral.

Corn and soybeans nearing maturity, development about 1 week ahead of average. These crops mostly safe from frost. Harvest started some dry west-central and southwest counties. Corn for grain 91% mature, 4% harvested. Soybeans shed leaves 80%, 47% mature, 5% combined. Winter wheat and rye seeding nearly completed. Dry bean crop 75% combined. Potato crop 40% dug. Sugar beets 9% harvested. Soil moisture generally adequate but wet weather late week interrupted field operations, especially northwest.

MISSISSIPPI: Temperatures subnormal statewide, 9° subnormal northcentral to 2° subnormal along coast. Extremes: 40°, 92°. Little or no precipitation in State, except near coast. Weekend temperatures above seasonal normals with isolated showers.

Soil moisture mostly short to adequate. Fieldwork: 5.9 days. Cotton 22% open, 48% 1972. Less than 2% harvested. Boll rot and worm infestation causing concern. Soybean acreage 1% harvested, 4% 1972, other acreage 10% mature, 19% shedding and 35% turning. Rice 15% combined, 40% 1972. Corn 11% picked, 28% 1972. Harvest of sorghums 32% complete, hay crops 90%, sweet potatoes 30% and peanuts 20%. Condition of cotton, corn, sweet potatoes, and pastures fair to good. Soybeans, sorghums, hay crops, and livestock mostly good. Pecans poor to good.

MISSOURI: Very cool week. Temperatures about 5° subnormal. First light frost of fall reported in extreme northwest on 18th, but little or no damage to crops or plants. Precipitation generally very light south with near or above normal amounts north. Weekend temperatures back to near or above normal with some locally heavy rains Sunday west.

Three days suitable for fieldwork. Corn 48% mature, 4% harvested, 1972 53% and 8% respectively. Soybeans 43% turning color, 16% mature, 2% harvested, condition fair to good. Cotton bolls 16% open, mostly fair. Sorghum 49% mature, 49% 1972. Soil moisture supplies 13% short, 61% adequate and 26% surplus. Motor fuel supply mostly adequate.

MONTANA: Mild temperatures throughout week, highs mostly upper 60's and 70's. Temperatures near normal. Lows generally in 30's. Most stations received some precipitation but above normal amounts confined to west, southwest and northeast.

Wheat seeding progress good, nearly 55% planted. Recent rains helped germination all areas. Topsoil moisture still short northwest, northcentral districts; mostly adequate elsewhere. Subsoil moisture short all areas except east. Potato harvest nearly 10% complete. Dry beans and corn silage about 60% done. Range feed supplies still short northwest, northcentral, central districts and parts of southcentral, southwest districts. About 50% cattle, sheep moved from summer ranges.

NEBRASKA: First freeze September 17 in Panhandle. Light frost Tuesday central and east. Temperatures subnormal till late week, then above normal. Rain general, 0.50 in. up to 1.50 in. Topsoil moisture supplies 24% surplus, 68% adequate, 8% short. Subsoil supplies 6% surplus, 68% adequate, 26% short. Farmers put up silage, seeded wheat, hayed, prepared machinery and storage for fall harvest. Fieldwork: 4 days. Wet soils delayed seeding

wheat. Cool weather slowed maturity fall crops. Warm, dry weather needed. Corn 65% mature, near normal, 55% 1972. Some freeze damage, stalk rot and rootworm damage reported, some early corn picked.

Almost all sorghum heads turned, 90% 1972, 95% average; 35% mature, 30% 1972, 45% average. Soybean leaves 70% shed, 55% 1972, 80% average; 20% mature, 15% 1972, 35% average. First soybeans harvesting reported. Winter wheat seeding 55% completed, 80% 1972, 70% average; rains delayed planting. Alfalfa 12% excellent, 72% good, 16% fair. Wild hay 13% excellent, 79% good, 8% fair. Rains and cooler weather benefited sugar beets, some hail damage. Dry beans suffered from hail, frost and rain. Range and pasture 20% above average, 66% average, 14% below average.

NEVADA: Temperatures varied from normal northeast and southcentral to 5° subnormal extreme south. Extremes: 97° Las Vegas and Logandale, 23° Mountain City. Precipitation varied 0.50 in. at McDermitt to none south. Winds strong and gusty. Alfalfa seed harvest continues full swing, neared completion some areas. Third cutting alfalfa hay continued west and central. Sixth cutting in progress southern valleys. Fall plowing and winter wheat seeding underway. Feed prospects on fall and winter range very good. Cattle, sheep thriving.

NEW ENGLAND: Sunny with periods of showers. Cool, below freezing many areas Thursday, Friday nights. Warmed over weekend south. Locally heavy showers September 18, 22, 23. Some totals 2.00 in. plus. Potato, apple, silage, cranberry harvest very active. Aroostook Co., Me. potato yields disappointing, also true in other areas. Apples good color, size, but below average crop. Cranberries good size, color, yield; harvest near peak. Corn silage yields, quality good.

NEW JERSEY: Cool week. Temperatures near to 3° subnormal. Extremes: 84° at Newark Sunday afternoon, 35° at Newton with light frost at Blairstown Friday morning. Light showers Tuesday and Sunday morning, heaviest weekly total 0.93 in. at Newton. Soil moisture adequate. Fall vegetable harvest light, increase expected next week. Local movement of sweet corn and tomatoes continued. Moderate supplies peppers, eggplant, and squash. White potato digging well advanced. Sweet potato harvest continued light. Apple movement good. Cranberry harvest general, recent cool weather beneficial for color. Silage making active north, near completion south. Combining of soybeans and corn for grain increased. Sowed cover crops and small grain.

NEW MEXICO: Cloudy and cool eastern plains early week with clearing and warming through midweek. Western areas generally fair and mild all week. Scattered showers east and south early, late in week with rainfall amounts generally 0.10 in. or less. Scattered rainfall, moisture still short. All crops fair to good. First cotton ginned. Some rain damage to hay. Grain sorghum combining underway, corn harvest continued. Sugar beet pulling started. Winter wheat seeding complete except scattered areas, good stand. Ranges fair, need moisture. Livestock good.

NEW YORK: Temperatures well below normal most areas. Averages 2° subnormal at New York City to 9° subnormal at Watertown. High 82° at Poughkeepsie on Sunday. First frost of season many areas Friday morning. General frost north of Mohawk Valley with local frost through remaining interior

valleys. Saranac Lake had week's low 23°. Many other stations reported subfreezing temperatures Friday morning. Precipitation frequent and plentiful most sections; exception somewhat subnormal over coastal southeast and around Albany. Heaviest amounts north: Watertown 2.54 in., Massena 2.56 in., Ellenburg Depot 2.06 in., and Burlington 2.35 in.

Silage corn harvest gearing up statewide, 25% harvested. Early grain corn harvest beginning. Third cutting alfalfa 65% complete. Winter wheat planting underway. Vegetable crop harvest nearing completion; snap beans, sweet corn, cucumbers, and tomatoes nearly finished. Iceberg lettuce harvest completed in Oswego County. Long Island and Upstate potato harvests proceeding well. McIntosh and Twenty-Ounce harvests continued. Concord grape harvest beginning Finger Lakes area.

NORTH CAROLINA: Shower activity Sunday and Monday east and mountain section. High temperatures in upper 70's and low 80's. Cold front Tuesday dropped showers over Piedmont area followed by a cooler air mass. Low 36° at Laurel Springs. Slow warming later week. Corn harvest 40% complete, high yields reported. Defoliant applied to cotton, some picking started. Soybeans look good; hot, dry weather plus insects causing irregular growth, development. Peanuts 18% dug, 8% threshed, promising high yield. Tobacco, Old, Middle Belt harvest nearly complete. Eastern, Border Belt complete. Active selling, all markets open. Burley 75% cut, stripping beginning. Apples 45% picked Henderson County, over 50% elsewhere. Small grains 8% planted. Active week haying. Pastures need rain. Grape harvest peaking.

NORTH DAKOTA: Temperatures 8° to 10° subnormal. A heavy frost pretty much covered whole State as temperatures dipped into mid-20's generally during early week. Scattered precipitation statewide about normal except for eastcentral where 0.04 in. above normal. Precipitation interrupted harvest of flax and row crops. Heavy downpours will delay potato digging, dry bean combining, and sugar beet lifting eastern areas several days. Soybean and sunflower harvest started. Pasture growth good.

OHIO: Considerable cloudiness, scattered showers north on 17th. Cooler on 18th and 19th. Weak cold front caused some light showers as it moved across State. Few reports light frost from north morning of 21st. Considerable cloudiness, windy on 22nd. Showers and thunderstorms over much of State late on 22nd. Heavy fog over much of State during early morning hours of 23rd.

Another week of dry weather speeded crop maturity but affected late season crop and vegetable prospects. Subnormal temperatures for week reduced effect of dryness. Soil moisture supplies short 82%, adequate 18%. Nearly entire week favorable for fieldwork. Corn crop 50% mature and safe from frost, 35% 1972, normal 60%. Corn 5% picked, same as average. Soybean crop 35% mature and safe from frost, 1972 only 20%, normal almost 40% mature. Combining 5% complete, slightly behind normal. Corn silage about 50% chopped. Tobacco cutting almost 75% finished, normal 80%. Winter wheat seeding 15% done, average 20%. Barley seeding ahead of 1972 at 45% complete.

OKLAHOMA: Temperatures 5° subnormal northeast to 9° subnormal westcentral. Precipitation ranged from 0.01 in. southeast to 0.73 in. westcentral. Weekend warm with few scattered showers. Clear weather allowed fieldwork progress many areas.

Wheat seeding surged ahead, 25% acreage sown. Corn harvest advanced rapidly, 20% harvested, 90% mature. Sorghum grain 4% harvested, 45% mature. Cotton mostly good, 13% open bolls. Peanuts good to excellent; 24% mature, 4% dug. Soybean crop 14% mature, some fields harvested. Fifth cutting alfalfa 14% taken, mostly central, southcentral. Most pastures good, recent rains provided new growth. Cattle remain good. Topsoil moisture mostly adequate.

OREGON: Long dry period ended, good rains reported. Amounts ranged from high of 3.04 in. north coast to 0.71 to 1.11 in. Willamette Valley. Spotty amounts east of Cascades ranged from 0.15 in. at Burns to 1.11 in. at Lakeview. Baker, Lakeview and Condon received more than normal September rainfall this week with 0.75 in. Temperatures near to slightly subnormal. Highs mostly in 70's except low 80's in southwest interior and Willamette Valley. Local frost in high valleys east of Cascades.

Rain slowed red clover seed harvest, western onions storage, bentgrass field burning, filbert drop but provided moisture for fall seeding, seed bed preparation. Third and fourth cuttings hay dampened. Corn silage harvest continued, yields reduced by forced early harvest. Pear and prune harvest neared end. Apples starting Hood River, The Dalles. Bush bean harvest neared end. Sweet corn continued. Broccoli, brussels sprouts, cabbage, and cauliflower underway. Ranchers hopeful rain will re-green fall pastures, stubble, and recharge springs. Calf weight expected light this fall.

PENNSYLVANIA: Weekly precipitation totals 0.50 to 1.00 in. southeast and parts of northwest and northcentral, 2.00 to 2.75 in. southwest and extreme northeast, 1.00 to 2.00 in. elsewhere. Generally cool through Friday, highs mostly 60's and 70's, lows 30's and 40's with subfreezing in mountains. Weekend highs in 70's and low 80's. Temperatures 2° to 4° subnormal south, 4° to 8° subnormal north. Extremes: 83°, 26°.

Topsoil moisture 5% short, 75% adequate, 20% surplus. Corn 60% dented, 20% dough, 20% mature, some harvested. Corn chopping 50% completed. Pastures fair but improving. Hay quality fair. Wheat 25% planted. Fall plowing 67% completed. Potatoes 50% harvested. Peaches all harvested. Apple harvest in progress.

PUERTO RICO: Rainfall averaged 1.13 in. or 0.89 in. subnormal. Highest weekly total 4.68 in. western interior. Temperatures averaged 80° on coasts and 76° interior. High 95°, low 58°. Sugar-cane plantations report young cane and ratoons developing well, good progress fertilizing, cultivating and irrigating.

Coffee bean development good most areas, harvesting progressing well except few zones where minor delays due locally heavy rains. Pastures generally good to excellent except too wet in a few western zones and too dry few southern and northcentral zones where chinch bugs attacking. Recent rains improved minor crops, seeding making good progress. Excessive rains west caused fungus in yam crop. Good harvest of bananas, plantains, and squash.

SOUTH CAROLINA: Temperatures above normal statewide, greatest departures south where daily temperatures remained above normal. Cooler weather penetrated north and central portions around mid-week. Rainfall widely scattered, averaging much below normal. Small area in Aiken, Saluda, Lex-

ington Counties got 1.00 to 2.00 in.

Soil preparation for fall plantings continued. Soil moisture adequate statewide. Cotton defoliation continued. Cotton 45% open bolls, 3% harvested; same as 1972. Corn 55% harvested; 1972 43% harvested. Soybeans fair to good; 94% set pods, 30% leaves turning, 8% leaves shedding, 2% matured; 1972 97%, 29%, 13%, 9% respectively. Peanuts 60% harvested, 1972 65%. Pastures fair to good. Winter grazing 18% planted. Fall hays 56% harvested, 1972 59%. Apples 68% harvested, 1972 72%. Pecans fair to good. Fall vegetables fair.

SOUTH DAKOTA: Temperatures continued subnormal for second consecutive week; 5° to 8° subnormal northeast, 3° to 8° subnormal elsewhere. Highs generally in 70's. Subfreezing temperatures quite general, except eastcentral and southeast. Light precipitation widespread, mostly totaling less than 0.50 in. Precipitation 4.00 to almost 7.00 in. below seasonal average.

Corn for grain 94% safe from frost, normal 82%, 1972 81%. More corn than normal cut for silage due to August drought and also to offset hay shortage. Soybeans shedding leaves 82%, 1972 70%. Fall plowing 72% complete. Fall seeding of winter wheat 85% complete, 1972 93%. Rye seeding 78% complete, 1972 86%. More moisture needed most areas for germination of fall grains. Pastures generally short, but many have greened up. Supplemental feeding still general. Livestock marketings slowed some areas due to drop in prices.

TENNESSEE: General showers east half of State early week. Showers spotty and light remainder of week. Temperatures 3° to 6° subnormal, coolest midweek. Corn, cotton, soybeans generally good but additional rainfall and late frost needed for soybeans, late corn to mature. About 33% of State short on soil moisture. Only few soybean fields mature, leaves turning yellow 25%. Normally 10% soybeans now mature. Cutting corn for silage active. Considerable late corn cut for silage.

Corn for grain 60% mature, 5% harvested, normally 15% harvested. Corn worms have damaged many late planted fields. Cotton picking will be 1 to 2 weeks later than usual, 25% of bolls opened with few scattered fields picked. Insect controls generally successful. About 90% burley and 75% other tobacco harvested, same as normal but 1 week behind 1972.

TEXAS: Cool much of northern half early week. Afternoon highs in 50's much of panhandle Monday. At midweek, warm, moist air moved into State, highs in lower 90's. Weak cold front stopped in panhandle Saturday, temperatures somewhat cooler through upper plains. Rest of Texas continued warm. Rainfall generally light, above normal amounts confined to south. About 5.00 in. rain fell in 2-1/2 hours near Harlingen Monday. Weekly totals were excess of 2.00 in. in Lower Rio Grande Valley, Raymondville got 3.95 in.

Seeding of wheat, oats gained momentum. Fields irrigated high plains, many southern fields too wet. Harvest cotton, corn, sorghum and peanuts fair progress. Soybeans reaching maturity. Rice harvest lagging behind schedule, heavy lodging delayed harvest, some heads beginning to sprout. Major crops percent harvested: Cotton 11, 1972 26; corn 53, 1972 61; sorghum 50, 1972 45; peanuts 31, 1972 31; rice 73, 1972 100. Major crops percent planted: Wheat 44, 1972 54; oats 56, 1972 31.

High Plains: Potato supplies continued seasonal

decline. Carrot digging gained momentum. East Texas: Sweet potato digging continued with above average yields reported most areas. San Antonio-Winter Garden: Cucumber picking continued active. Carrots and cabbage made good growth. Lower Rio Grande Valley. Planting delayed again by continuing showers. Disease problems beginning to appear in tomato and pepper fields. Citrus continued to show good growth. Light picking of early oranges started mid-September.

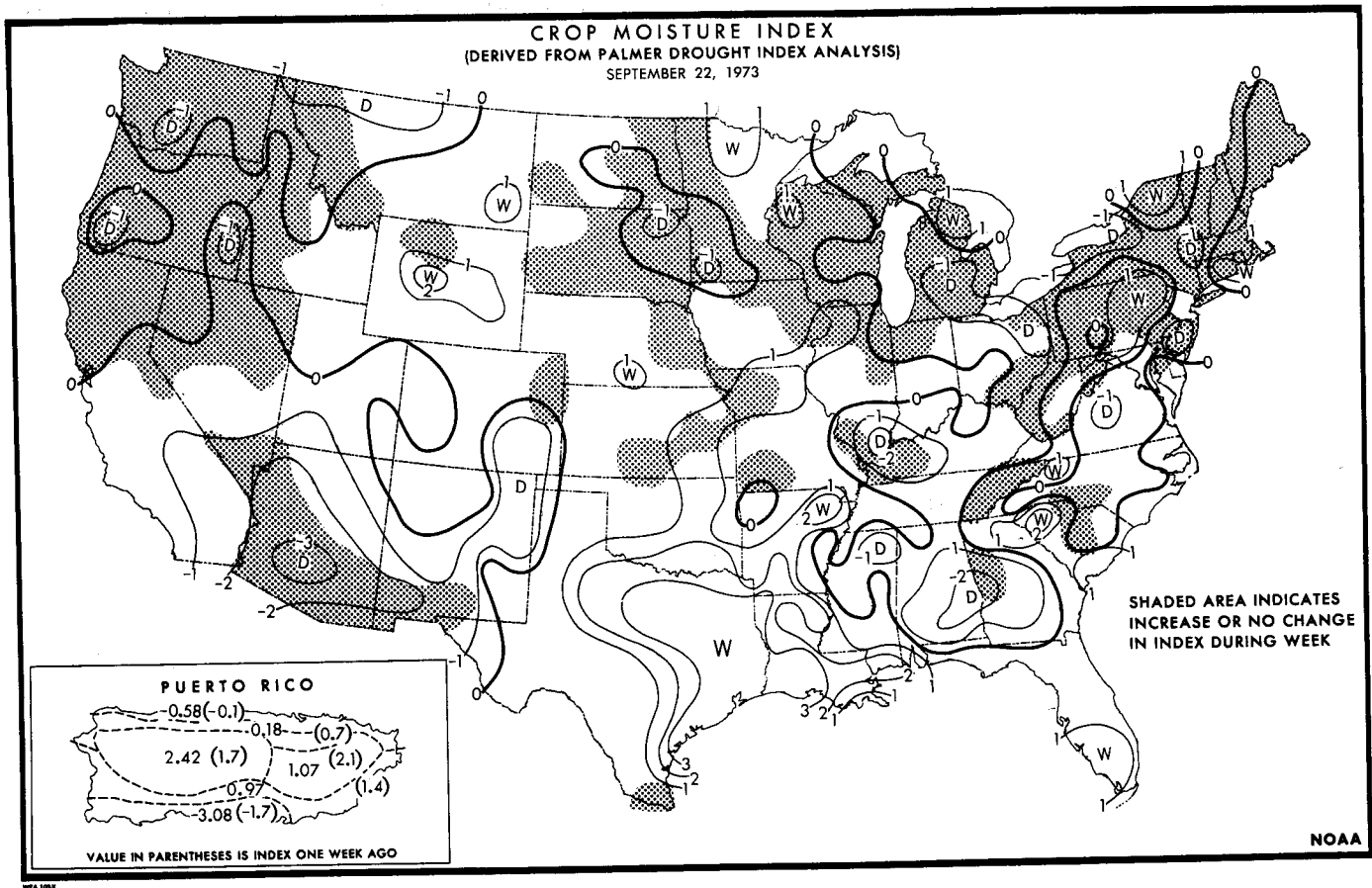
Range, livestock conditions above average. Grazing abundant. Hay baling still active, some areas baling fifth cutting. Sheep, goat shearing near completion Edwards Plateau, Trans-Pecos areas. More screwworm cases south half of State.

UTAH: Weekend storm swept across northwest. Accumulated moisture locally heavy along northern Wasatch Front. Temperatures near normal most sections. Most of week clear and dry. Acreage harvested: 60% third crop alfalfa, 40% silage corn, 60% potatoes north and 10% south, 10% dry onions, 10% dry beans, 50% tomatoes. A year ago this date harvest 75% completed third crop alfalfa hay, 50% silage corn, about same for potatoes, 20% dry onions, 85% tomatoes. Fruit harvest in leading Utah County completed for peaches and pears, about 10% completed apples. Statewide 85% peaches, 80% pears, 10% apples harvested. Frost damage late crops negligible north but hurt corn and alfalfa hay some areas central and south. Fall and winter range feed 100% of normal. Winter wheat crop 70% seeded, 80% 1972.

VIRGINIA: Cool with two areas 4° subnormal. Highest 90° and lowest 35°. Showers Monday, isolated thunderstorms Tuesday, otherwise fair. Good harvesting weather. Fieldwork averaged 5.5 days. Topsoil moisture 61% adequate, 39% short. Good progress corn for grain harvest, nearly 25% complete, 12% 1972. Tidewater area over halfway mark. Silage harvest concentrated mainly north and mountains. Soybeans good, a few early fields combined. Flue-cured tobacco marketing active, all markets opened. Harvest of all types continued active. Good progress small grain seeding but still lagging 1972. Cotton harvest continued, 6% complete. Preparation and marketing cattle active. Good progress sweet potato harvest. Cabbage and cucumber harvest continued. Apple harvest nearly 33% complete, same as 1972.

WASHINGTON: West: Rain early in the week, ranging 0.20 to 2.5 in. Temperatures 2° above normal. Rain eased dry conditions, reduced fire danger, benefited pastures, late maturing crops. Harvest broccoli, cucumbers, bush beans almost complete. D'Anjou pear, prune harvest underway. Seed crop harvest neared completion. Potato harvest in full swing. Cauliflower nearing midpoint. Sweet corn harvest continued. Sweet silage corn hit by early frost going into silo. Carrot harvest continued. Blackberry, blueberry neared end. Limited third cutting alfalfa. Fall seeded grains up. Pasture short to adequate. Grass and corn cut to supplement shortage of feed.

East: Rain 0.10 to 1.00 in. Temperatures 2° to 4° subnormal. Rain brought some relief to drought. Harvest slowed some areas. Fire danger diminishing. Land preparation, fertilizing continued. Seeding winter grain crops, grape, sugar beet harvest underway. Harvest sweet corn, corn for silage, alfalfa seed, dry beans continued. Apple, potato harvest full swing. Hop harvest neared end. D'Anjou pear harvest continued. Fourth cutting alfalfa taken. Supplemental livestock feeding continued.



SHADED AREAS: Index increased or did not change last week

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 good, 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 |
| Below -4.0 | Not enough rain, still extremely dry |

UNSHADED AREAS: Index decreased last week

Index

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

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

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

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

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

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



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WEST VIRGINIA: Temperatures subnormal. High 85° at Martinsburg and Point Pleasant, low 32° at Bartow. Showers beginning of week. Fieldwork suitable 5 days. Major activities: Harvesting hay, filling silos, and harvesting potatoes. Soil moisture 31% short, 62% adequate, 7% surplus. Hay mostly good, 90% second cutting and 56% third cutting harvested. Tobacco 67% harvested. Corn mostly good, 5% dough, 50% dent, 45% mature. Wheat 24% and barley 33% sown. Potatoes 79% dug.

WISCONSIN: Cool week. Temperatures 6° subnormal. Overnight temperatures remained below 50° except on Saturday. Frost north and central areas Tuesday and Thursday mornings. Lowest 23° at Eagle River and Phelps Thursday. Rain on Monday and Friday. Heaviest south Monday and eastcentral Friday. Rainfall averaged from 0.60 in. central to 2.00 in. eastcentral.

Frost north and central ended hopes for grain corn there. Silo filling now very active, 30% done, 1972 13%, normal 30%. Silage quality good but quantity less due to late plantings and dry weather. Most corn for grain west and south safe from frost, east needs a few more days. Soybeans maturing fast; 65% leaves turning, 1972 40%, nor-

mal 50%. Early soybeans shedding leaves, crop looks good. A little harvesting of second and third crop hay. Some combining of late oats, yield poor. Pastures good west, poorer east. Tobacco harvest well along, good crop in curing sheds. Potato harvest active, good yields. Sweet corn, snap bean harvest nearing end, yields below 1972. Harvest continued for lima beans, carrots, beets, apples, cranberries. Good garden and wild berry crop year. Plowed where moisture adequate. Winter wheat being seeded. Soil moisture 40% short, 60% adequate.

WYOMING: Light to moderate precipitation statewide. Black Hills got nearly 0.75 in. moisture. Temperatures near normal west of Divide, 5° to 12° subnormal east. Highs mostly upper 60's and 70's west half, 75° to 85° east half. Lows mostly 20's to mid-30's. Extremes: 85° at Chugwater, 18° at Big Piney. Light to moderate showers over State limited harvest activities. Fall harvest potatoes, dry beans, and grains underway. Winter wheat 90% seeded, 75% emerged, showing good stands. Local flooding caused some replanting. Livestock fair to good, some movement to winter ranges. Little feeding to date.