

# Weekly Weather & Crop Bulletin

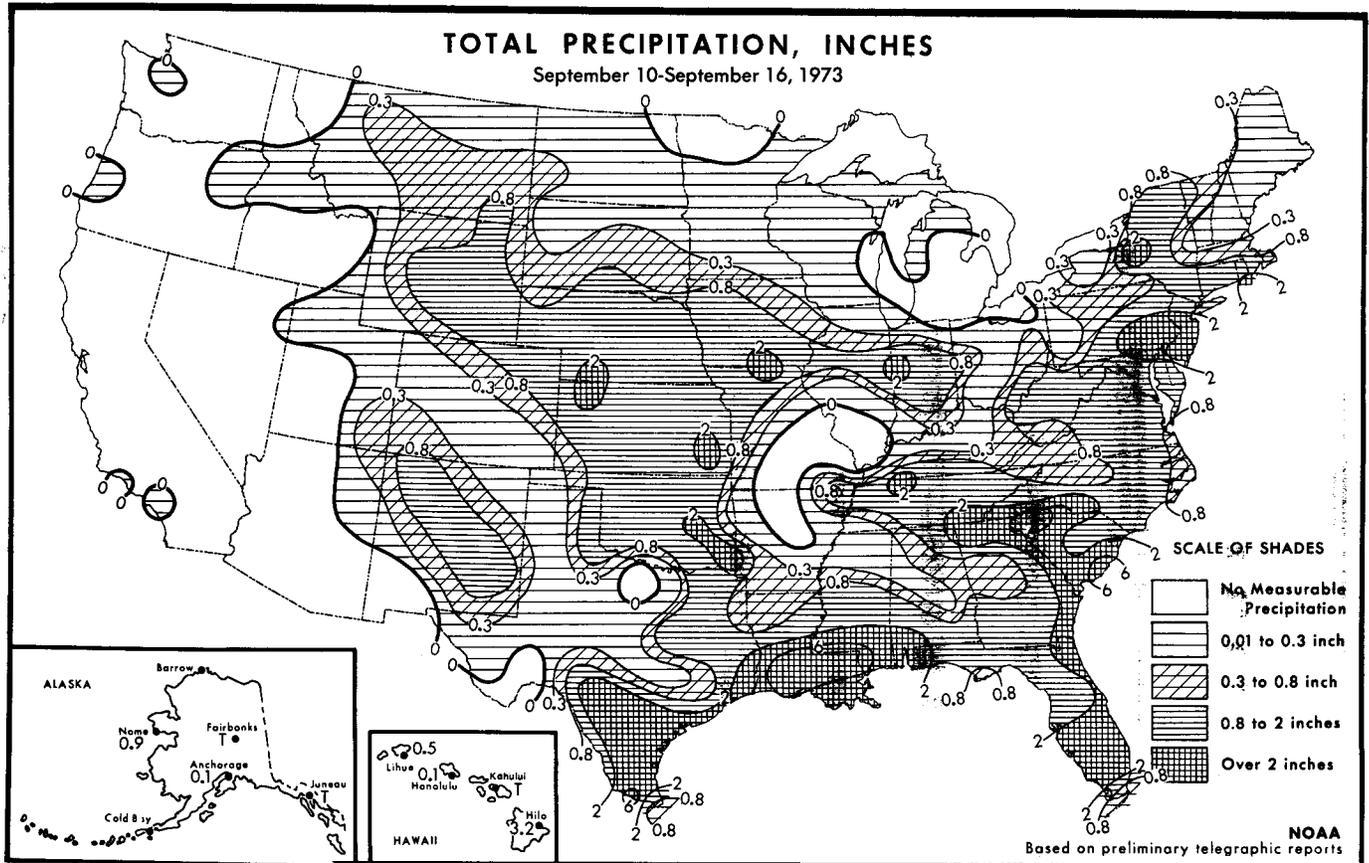
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## NATIONAL WEATHER SUMMARY

**HIGHLIGHTS:** Cool Canadian air brought fall temperatures to most of the East, and Midwest, while winter gripped parts of the northern Plains. Sunday, Lewistown, Mont., stood 5.00 in. deep in snow; Alliance, Nebr., reported light snow accumulations. On the Gulf Coast, Baton Rouge, La., reported 6.99 in. rain for the week, with the surrounding area receiving 6.00 in. or better. Much of the Gulf Coast and Atlantic Seaboard received at least 2.00 in.

**PRECIPITATION:** Pacific Coast States stayed mainly dry. The Gulf Coast was deluged. An area roughly centered on Baton Rouge, La., had 6.00 in. rain. Baton Rouge itself got 6.99 in., while Mobile, Ala., got 4.20 in., Victoria, Tex., 4.72 in. and Ft. Myers, Fla., 5.60 in. On the Atlantic Coast, an area centered on Charleston, S.C., got 6.00 in., while scattered Eastern areas got 2.00 in. or better.

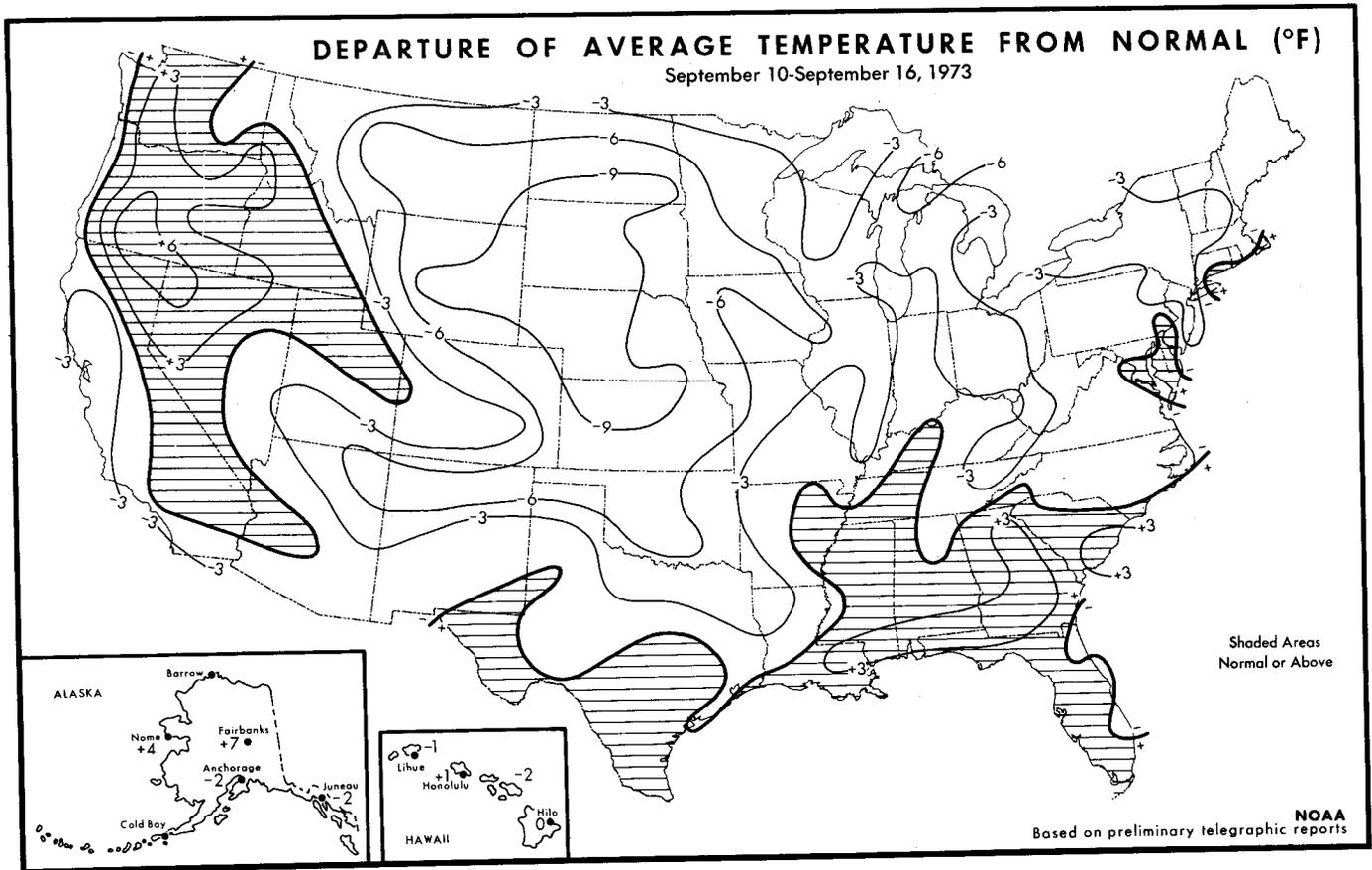
The northern Plains tasted winter before summer

ended. Weekend snow fell over Montana, Wyoming, and the Dakotas. Lewistown, Mont., had 5 in., while Great Falls got 3 in. snow.

Monday rain poured in east Texas: Morning thunderstorms deposited 2.59 in. rain at Palacios, while Cotulla got 1.12 in. afternoon rain.

Clouds shrouded most of the East and Texas on Tuesday; 2.68 in. rain fell on Ft. Myers, Fla., Palacios, Tex., and Laramie, Wyo., got nearly 1.00 in. morning rain. Rainstorms lingered over the Gulf Coast the rest of the day and into Wednesday, when Baton Rouge, La., got 1.40 in. during 6 hours. At 9 a.m. Wednesday, Ft. Myers, Fla., had received 4.50 in. in the previous 24 hours. Rain fell over the Plains as well; Hill City, Kans., received 1.22 in.

Wednesday afternoon, two distinct storm systems brought rain: the first, centered in southwest Mississippi, to the Gulf Coast, the second, centered in Kansas, to the Plains. Torrential rains struck Baton Rouge, La., which had 4.52 in. that



evening. Elsewhere, sunny skies ruled.

Thursday, a High brought clear weather to the Northeast, while dense fog obscured the Carolinas and Georgia. McComb, Miss., had 1.78 in. morning rain. Charleston, S.C., got 1.10 in. evening rain; Charlotte, N.C., had 1.39 in. the same evening.

Friday morning, Anderson, S.C., was soaked with 4.73 in. rain, bringing the 24-hour total at 9 a.m. to 6.41 in. In the Rockies, snow began to fall. Friday, snow mostly melted as it touched earth, because ground temperatures remained warm.

Friday night and Saturday morning, 4.00 in. snow accumulated at Lewistown, Mont. While some melted Saturday, Lewistown still had 2.00 in. on the ground Sunday. Late Saturday thunderstorms struck the Gulf. Florida's east coast also had heavy rain: Cape Kennedy recorded 2.00 in.

Sunday, drizzle and cloudiness persisted over most of the Plains, while Alliance in Nebraska's Panhandle reported light snow accumulations.

**TEMPERATURES:** Only the Deep South and parts of Texas averaged above normal. Fall gripped most other parts of the Nation. A large section of the western Plains had temperatures 9° subnormal, and by Sunday record lows showed in the Dakotas and snow fell as far east as the Nebraska Panhandle. Large areas in the northern Great Plains and western Corn Belt averaged 6° subnormal, as did an upper Great Lakes area, and parts of Nevada, Oregon, and California.

Autumn temperatures ruled the North and West Monday morning. While the mercury dipped into the

30's in Nevada and Michigan, Watertown, N.Y., felt the coldest reading: 34°. Daytime temperatures were in the mild 70's across the northern tier of States. It was warmer in the South: Miami Beach, Fla., hit a record breaking 96°.

Tuesday started in the 30's and 40's throughout the Great Basin, New England, and the Mid Atlantic States. Cool air, plus a few thundershowers, kept central Plains temperatures in the 50's, but hot, humid conditions persisted further South. A few Gulf State locations hit 90°.

Wednesday morning, the Gulf Coast stayed in the 70's, while a deepening Low over Canada pulled cool air into the Pacific Northwest. Thursday cool air settled over the north central and northeastern sections. Morning temperatures dipped into the 30's from Minnesota to New England. Strong winds brought cold air and cloudy skies to Montana. Cut Bank, Mont., had a high of 46°. By midnight, 50's were recorded as far south as the Oklahoma Panhandle.

Cold overcast skies hung over Montana and the Dakotas Friday: 30's were common. Temperatures just above freezing kept snow from accumulating in lower Montana elevations. That night the temperature hovered around 32° at Great Falls and 2.00 in. of snow decorated the ground.

Saturday the cold air pushed into the Plains. Plains temperatures rose into the 40's, melting some snow, but fell below freezing, and even into the 20's some places. Fargo and Bismarck, N.D., both set records: 27°. Sunday, Grand Island, Nebr., had a high of 44°, while North Platte reached only 41°.

## NATIONAL AGRICULTURAL SUMMARY

**AGRICULTURAL HIGHLIGHTS:** Rains slowed winter wheat seeding in the Great Plains and cotton harvesting in Texas. Heavy rains and high winds in Texas and Louisiana damaged much unharvested rice. Farmers in several Corn Belt States started harvesting corn and soybeans. The corn crop is now more mature than last year and is only slightly behind average.

**SMALL GRAINS:** Rains from Nebraska to Texas slowed seeding of the 1974 winter wheat crop but replenished topsoil moisture to aid germination. Seeding is 30% complete in Nebraska, compared to 40% normally done while Kansas wheat acreage is 10% seeded versus 15% normal progress.

Texas wheat is 36% planted versus 37% in 1972, but Oklahoma farmers made only limited headway. Colorado wheat is 40% seeded versus 63% in 1972. Seeding is about 5% done in Illinois, Indiana, and Ohio.

Drought conditions persisting over much of the Dakotas and Montana, northern Idaho and eastern portions of Washington and Oregon held up usual winter wheat seeding progress. Winter wheat seeding is 75% done in South Dakota and 35% done in Montana.

**CORN:** Farmers in several Corn Belt States started harvesting corn, which continued to mature faster than in 1972. Maturity was only slightly behind average. On September 16, the Corn Belt crop was 51% mature and safe from frost compared with about 43% mature a year earlier and average progress of 54%. About 90% of the crop is in or beyond the dent stage. Harvest began in Ohio, Illinois, Minnesota, Missouri and Kansas.

Missouri corn at 38% mature lags well behind the 48% pace of last year. Maturity of the Iowa crop at 51% lags both the 55% of 1972 and the average of 63%. Kansas corn is maturing slightly more slowly than in 1972. Corn matured ahead of 1972 in all remaining North Central States.

Corn harvesting gained momentum in the South. Picking is 30% complete in North Carolina, 37% in South Carolina, 43% in Texas, and 12% in Georgia.

**COTTON:** Rain held the Texas cotton harvest far behind schedule at 8% picked versus 23% in 1972. The first Texas bales were ginned last week in the southern high plains and northern low plains. Elsewhere in the South, farmers harvested very little cotton. Less than 1% was harvested in Georgia and in Mississippi, where 13% of the bolls had opened, compared to about 25% in 1972.

Soil moisture is now mostly adequate in Arkansas and Mississippi, and cotton in these States is in good condition. However, heavy rains have lowered the condition of Louisiana cotton which is fair to good. Bolls are rotting on lower branches in many fields.

In California and Arizona, cotton looks good. Defoliation is active. Harvest started in Imperial Valley, Calif. and near Yuma, Ariz.

**SOYBEANS:** Combining of early maturing soybeans started in several Corn Belt States. Harvesting began in Minnesota, Missouri, Kansas and in Ohio where 10% of the crop is mature.

About 35% of the Corn Belt soybean acreage is shedding leaves compared to about 32% a year earlier. Iowa, Missouri and Kansas are the only North Central States that lag behind 1972 in this category. About 28% of Iowa soybeans have shed leaves versus 35% in 1972 and an average of 45%. Illinois soybeans are 35% in this stage, the same as 1972.

Dry weather has hurt late planted soybeans in Michigan and Kentucky. About 10% of the soybean acreage in Mississippi has shed leaves versus 20% in 1972.

**OTHER CROPS:** Harvesting of second and third hay crops continued in Wisconsin. Third crop alfalfa hay cutting is about completed in Nebraska and the fourth crop is 45% cut. Hay baling in Texas is active despite wire and twine shortages.

Sorghum harvesting in Texas continued making good progress at 47% complete. Nebraska and Kansas sorghum is 20% mature versus an average of 25%.

Flue-cured tobacco harvesting is 74% complete in Virginia, is nearly complete in North Carolina where 50% of the burley crop is banded. Dryness in Kentucky forced early burley cutting.

Peanut harvesting is very active in Georgia at 43% dug and also in Texas at 26% dug.

Rice harvesting is far behind in Texas at 79% versus 98% in 1972 and in Louisiana at 55%. Heavy rains, high winds have damaged much of the remaining crop.

**FRUITS AND NUTS:** Apple harvesting in Washington and California is in full swing. The McIntosh apple harvest began in New England and in Western New York.

Peach harvesting is nearly over in the Northeast and in California.

The cranberry harvest is in full swing in New England. Lack of water to flood Oregon bogs will slow cranberry harvesting there.

**VEGETABLES:** Sweet corn harvesting is nearly complete in the Northeast, and is well along in the Great Lakes area while harvesting began in Washington.

Harvest continued in Washington and California of broccoli, cauliflower and carrots.

Lettuce harvesting was steady in California. Cochise County, Arizona lettuce made good growth and is nearly ready for cutting.

**PASTURES AND LIVESTOCK:** Pastures in Michigan deteriorated rapidly from dryness but rain benefited pastures in southern areas of the North Central Region. Rain was abundant over the South Central and Atlantic Regions, also. The West remained mostly dry. Supplemental feeding of livestock is common in Oregon and California.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., Sep. 16, 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 . . .	78	0	.3	-.5	La. Baton Rouge . . .	82	+3	7.0	+5.8	Youngstown . . .	61	-2	T	-.7
Mobile . . .	82	+3	4.2	+2.7	Lake Charles . . .	80	0	5.6	+4.6	OKLA. Okla. City . . .	69	-6	1.7	+1.0
Montgomery . . .	81	+2	.3	-.7	New Orleans . . .	81	+2	3.8	+2.6	Tulsa . . .	70	-5	1.1	+1
ALASKA. Anchorage . . .	48	-2	.1	-.5	Shreveport . . .	76	-4	.6	+ .2	OREG. Astoria . . .	58	-1	T	-.7
Barrow . . .	---	---	---	---	MAINE. Caribou . . .	53	-2	.2	-.6	Burns . . .	62	+2	0	-.1
Fairbanks . . .	53	+7	T	-.3	Portland . . .	59	-1	T	-.8	Medford . . .	71	+6	0	-.1
Juneau . . .	48	-2	T	-1.4	MD. Baltimore . . .	67	-2	1.6	+ .8	Pendleton . . .	66	+1	T	-.1
Kodiak . . .	---	---	---	---	MASS. Boston . . .	64	-2	.3	-.6	Portland . . .	66	+3	0	-.4
Nome . . .	47	+4	.9	+ .2	Chatham . . .	64	---	1.1	---	Salem . . .	64	+1	0	-.3
ARIZ. Flagstaff . . .	59	-1	.4	---	MICH. Alpena . . .	53	-4	.1	-.8	PA. Allentown . . .	63	-3	3.3	+2.5
Phoenix . . .	86	+2	0	-.2	Detroit . . .	62	-2	T	-.6	Erie . . .	61	-1	.4	-.4
Tucson . . .	80	-1	T	-.3	Flint . . .	60	-2	T	-.7	Harrisburg . . .	67	-1	4.3	+3.6
Winslow . . .	87	-5	.1	-.2	Grand Rapids . . .	61	-2	T	-.7	Philadelphia . . .	69	+1	2.5	+1.7
Yuma . . .	86	-1	0	-.1	Houghton Lake . . .	54	-4	T	-.6	Pittsburgh . . .	64	-1	.2	-.4
ARK. Fort Smith . . .	74	-3	T	-.8	Lansing . . .	59	-4	T	-.6	Scranton . . .	58	-5	1.2	+ .6
Little Rock . . .	76	0	0	-.8	Marquette . . .	55	-3	.1	-.6	R.I. Providence . . .	62	-2	1.0	+ .1
CALIF. Bakersfield . . .	78	0	0	0	Muskegon . . .	59	-5	T	-.8	S.C. Charleston . . .	81	+5	6.6	+5.2
Eureka . . .	55	-2	0	-.1	S. Ste. Marie . . .	51	-6	.1	-.7	Columbia . . .	78	+1	1.3	+ .2
Fresno . . .	73	-2	0	0	MINN. Duluth . . .	51	-4	.1	-.6	Greenville . . .	74	0	6.2	+5.3
Los Angeles . . .	69	0	0	0	Internat'l Falls . . .	52	-2	T	-.7	S.D. Aberdeen . . .	54	-8	.2	-.1
Red Bluff . . .	73	-4	0	-.1	Minneapolis . . .	59	-2	.1	-.6	Huron . . .	54	-9	.6	+ .2
San Diego . . .	68	-3	T	0	Rochester . . .	56	-6	.2	-.7	Rapid City . . .	52	-11	.3	+ .1
San Francisco . . .	60	-4	T	-.1	St. Cloud . . .	55	-5	.1	-.5	Sioux Falls . . .	56	-7	.5	-.2
Stockton . . .	69	-5	0	0	MISS. Jackson . . .	78	0	1.0	+ .4	TENN. Chattanooga . . .	75	0	3.6	+2.8
COLO. Denver . . .	59	-5	.8	+ .5	Meridian . . .	79	+2	1.3	+ .5	Knoxville . . .	70	-4	1.2	+ .6
Grand Junction . . .	69	0	.2	-.1	MO. Columbia . . .	66	-3	.1	-.9	Memphis . . .	76	+1	.2	-.5
Pueblo . . .	67	-1	.1	-.1	Kansas City . . .	65	-7	1.6	+ .8	Nashville . . .	74	0	.2	-.5
CONN. Bridgeport . . .	66	0	.9	-.1	St. Louis . . .	68	-2	T	-.7	TEX. Abilene . . .	75	-2	.1	-.3
Hartford . . .	63	-1	1.2	+ .3	Springfield . . .	70	-1	T	-.9	Amarillo . . .	70	-3	.1	-.4
D.C. Washington . . .	73	+2	1.0	0	MONT. Billings . . .	54	-7	.4	+ .1	Austin . . .	82	+2	.1	-.7
FLA. Apalachicola . . .	82	+2	3.0	---	Glasgow . . .	54	-4	.1	-.1	Beaumont . . .	80	+1	3.7	+2.5
Daytona Beach . . .	82	+2	5.6	+3.5	Great Falls . . .	51	-7	.6	+ .3	Brownsville . . .	84	+2	1	-1.2
Ft. Myers . . .	83	+1	2.9	-1.1	Havre . . .	53	-3	.1	-.2	Corpus Christi . . .	82	+1	3.8	+2.8
Jacksonville . . .	80	0	.5	-1.0	Helena . . .	51	-6	.2	0	Dallas . . .	82	+1	.5	-.1
Key West . . .	83	0	.5	-1.0	Kalispell . . .	54	-2	T	-.2	Del Rio . . .	82	+1	.5	-.1
Lakeland . . .	82	+1	2.1	+ .4	Miles City . . .	54	-8	.8	+ .6	El Paso . . .	75	0	T	-.3
Miami . . .	83	+1	5.1	-1.6	Missoula . . .	56	-1	T	-.2	Fort Worth . . .	76	-3	.1	-.5
Orlando . . .	83	+2	1.6	-.1	NEBR. Grand Island . . .	58	-8	1.8	+1.2	Galveston . . .	81	0	2.5	+1.1
Tallahassee . . .	82	+3	1.4	0	Lincoln . . .	60	-9	.8	+ .1	Houston . . .	80	+1	.7	-.3
Tampa . . .	83	+2	1.8	0	Norfolk . . .	58	-8	1.5	+1.0	Lubbock . . .	72	0	T	-.5
W. Palm Beach . . .	83	0	3.8	---	N. Platte . . .	55	-10	1.3	+ .9	Midland . . .	77	-2	.1	-.3
GA. Atlanta . . .	77	+3	.8	0	Omaha . . .	59	-7	1.1	+ .4	San Angelo . . .	74	-2	.1	-.5
Augusta . . .	78	+2	2.1	+1.4	Valentine . . .	53	-10	1.8	+1.5	San Antonio . . .	80	+1	3.1	+2.3
Macon . . .	80	+3	.7	0	NEV. Ely . . .	57	-2	T	-.1	Victoria . . .	82	+2	4.7	+3.7
Savannah . . .	80	+2	2.2	+ .8	Las Vegas . . .	81	0	T	-.1	Waco . . .	80	0	1.0	+ .3
HAWAII. Hilo . . .	76	0	3.2	+1.2	Reno . . .	63	+3	0	-.1	Wichita Falls . . .	74	-5	0	-.5
Honolulu . . .	80	+1	.1	-.1	Winnemucca . . .	63	+4	0	0	UTAH. Blanding . . .	61	-3	.7	+ .4
Kahului . . .	76	-2	T	0	N. H. Concord . . .	57	-3	.1	-.8	Salt Lake City . . .	66	+1	1.1	0
Lihue . . .	78	-1	.5	0	N. J. Atlantic City . . .	64	-4	3.9	+3.1	VT. Burlington . . .	57	-2	1.1	+ .3
IDAHO. Boise . . .	66	+2	T	-.1	Trenton . . .	67	-1	2.5	+1.6	VA. Lynchburg . . .	69	-1	1.6	+ .8
Lewiston . . .	68	+4	T	-.2	N. MEX. Albuquerque . . .	68	-3	1.3	+1.1	Norfolk . . .	73	-1	1.5	-.6
Pocatello . . .	61	-1	T	-.1	Roswell . . .	70	-1	2.0	+1.5	Richmond . . .	70	-2	1.2	+ .3
ILL. Cairo . . .	71	-3	T	-.7	N. Y. Albany . . .	58	-5	.1	-.7	Roanoke . . .	68	-2	.8	0
Chicago . . .	63	-4	.1	-.6	Binghamton . . .	57	-3	.8	+ .1	WASH. Colville . . .	59	-1	T	-.2
Moline . . .	61	-6	.7	-.2	Buffalo . . .	58	-4	T	-.8	Omak . . .	61	+1	0	-.1
Peoria . . .	64	-4	.8	0	New York . . .	67	-3	1.2	+ .2	Quillayute . . .	57	-1	T	-.8
Rockford . . .	61	-4	.1	-.7	Rochester . . .	59	-5	T	-.6	Seattle-Tacoma . . .	64	+3	T	-.4
Springfield . . .	67	-2	.1	-.5	Syracuse . . .	59	-4	2.1	+1.4	Spokane . . .	61	-1	0	-.2
IND. Evansville . . .	69	-2	T	-.7	N. C. Asheville . . .	69	0	.8	+ .2	Walla Walla . . .	67	0	T	-.2
Ft. Wayne . . .	63	-3	.1	-.5	Charlotte . . .	73	-1	2.5	+1.7	Yakima . . .	64	+1	0	-.1
Indianapolis . . .	66	-2	1.4	+ .6	Greensboro . . .	70	-1	.4	-.5	W. Va. Beckley . . .	62	-3	.8	-.2
South Bend . . .	64	-1	T	-.8	Hatteras . . .	75	0	.4	-1.2	Charleston . . .	66	-3	.8	+ .1
IOWA. Burlington . . .	62	-5	1.0	+ .2	Raleigh . . .	71	-2	1.0	+ .1	Huntington . . .	68	-1	1.0	+ .3
Des Moines . . .	61	-5	1.3	+ .4	Wilmington . . .	76	0	.9	-.8	Parkersburg . . .	66	-3	1.0	+ .3
Dubuque . . .	59	-4	.2	-.8	N. DAK. Bismarck . . .	51	-9	.2	-.1	WIS. Green Bay . . .	56	-5	T	-.7
Sioux City . . .	60	-7	.9	+ .2	Fargo . . .	51	-9	T	-.4	La Crosse . . .	60	-3	.1	-.7
KANS. Concordia . . .	61	-10	1.2	+ .5	Williston . . .	52	-6	T	-.3	Madison . . .	57	-5	T	-.6
Dodge City . . .	64	-8	1.2	+ .8	O. Akron-Canton . . .	62	-3	.4	-.3	Milwaukee . . .	61	-1	T	-.7
Goodland . . .	58	-9	1.8	+1.5	Cincinnati . . .	66	-4	.2	-.5	WYO. Casper . . .	52	-9	.9	+ .7
Topeka . . .	64	-7	1.2	+ .5	Cleveland . . .	63	-2	T	-.7	Cheyenne . . .	53	-7	1.2	+ .9
Wichita . . .	66	-7	T	-.1	Columbus . . .	64	-3	T	-.6	Lander . . .	51	-9	1.1	+ .9
KY. Lexington . . .	69	-2	.8	+ .2	Dayton . . .	64	-4	T	-.6	Sheridan . . .	53	-7	.5	+ .3
Louisville . . .	71	0	.8	+ .2	Toledo . . .	60	-4	0	-.5	P.R. San Juan . . .	84	+2	.5	-.9

## 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, cooler air north Tuesday. Scattered showers increased south Wednesday, spreading Thursday. North Alabama received only slight relief from dryness. Fair, cooler weather returned weekend; temperatures dipped into upper 60's. Scattered showers gave crops needed moisture for development, but more rain needed to push cotton and soybeans to maturity. Moisture short upper two-thirds, adequate to surplus lower third.

Cotton opening additional fields north, few fields premature due to dryness. Harvest limited to scattered fields lower half.

Corn harvest made only fair progress south and central as moisture content remained high many fields, 10% harvested Statewide. Combining soybeans underway scattered fields south and central. Digging of peanuts slow with 13,248 tons inspected through September 14, compared with 94,193 tons year earlier.

**ALASKA:** Temperatures in Tanana Valley during daytime were much above normal whereas those at night were near seasonal normals with some nighttime frost reported. Precipitation remained near or slightly subnormal. Throughout southcentral Alaska little or no precipitation. Seasonal totals fell even farther below normal. Temperatures slightly subnormal. On Kodiak Island over 2.00 in. rain reported for week with nearly 1.00 in. on the 13th. Barley in Tanana Valley about 50% combined. Freezing temperatures helping dry grain before harvest. Silage and hay harvest continued in Matanuska Valley. Soil moisture supply adequate.

**ARIZONA:** Dry except for afternoon, evening thunderstorms northeast portion early week and southeast Saturday, Sunday. All of State from 0.10 to 0.30 in. subnormal precipitation. Temperatures 1° to 3° subnormal except central which remained normal, and northwest 2° above normal.

Cotton good progress statewide. Limited picking early fields underway, Yuma. Defoliation widespread as crop matures. Other areas bolls maturing rapidly, recent weather favorable. Harvesting sorghum continued Yuma. Early fields combined Willcox area. Sugar beets planting continued Yuma, Maricopa Counties. Sugar beets in southeast made satisfactory progress. Alfalfa seed harvest normal progress Yuma. Alfalfa hay cutting continued mostly limited basis. Lettuce satisfactory growth Maricopa, Pima, Pinal Counties. Planting full swing Yuma. Emergence early fields generally good. Lettuce grew well Cochise County, neared harvest. Melons, mixed vegetables good progress central, west. Lemon harvest neared volume proportions Yuma, overall quality good. New crop fruit sizing rapidly Salt River Valley. Groves Yuma, Salt River Valley good. Ranges generally fair, drying fast. Northern counties better than normal with more rainfall. Southeast ranges drying rapidly. Central valley desert very dry, fair to poor. Stockwater supplies adequate. Cattle, calves generally good. Sheep, lambs fair to good. Movement to winter pastures will begin soon.

**ARKANSAS:** Very little rain statewide except isolated light showers. Temperatures averaged near 70° northwest to mid and upper 70's southern border. Departures to 3° subnormal largest de-

parture westcentral. Cooling late week, warming on weekend. Soil moisture mostly adequate to surplus. Weather conditions increased good crop prospects.

Cotton stopped fruiting, condition fair to good. Boll rot and worm infestation prevalent. Rice good, considerable lodging many fields, harvest begun early varieties. Soybeans good to excellent, potential increased. Sorghum harvest active, yields good, heads sprouted some fields. Corn harvest underway. Some small grain up to stand. Land preparation and small grain seeding continued. Late hay prospects much improved. Grape, apple, and watermelon harvest continued. Okra showing regrowth and heavy fruiting. Pastures good to excellent, army worms pose a threat. Livestock good, gaining weight. Controls for flies and ticks still needed.

**CALIFORNIA:** Precipitation mainly limited to very light amounts along south coast on Thursday and Friday. Temperatures 3° subnormal along south coast, 3° above normal over Sierras and extreme northeast and mostly near normal other areas. Afternoon temperatures continued near 100° over southern deserts.

Small grain planting continued. Rice harvest full swing with some lodging. Sugar beet harvest continued, some treatment for army worms. Milo harvest started early fields. Cotton looks good, defoliation active, harvest started Imperial Valley, boll worm damage minimal.

Dry beans harvested. Alfalfa harvested. Field corn harvest continued. Clover and alfalfa seed harvest continued. Record wine grape harvest active, excellent quality. Table grape packing progressed. Some raisins boxed, delivered. Sugar levels subnormal, drying slow, cool weather. Almond, fig harvest continued. Early walnuts harvested. Harvest prunes, clingstone peaches, freestone peaches, plums, nectarines nearly complete. Picking apples active, small fruit sizes. Navel oranges, grapefruit, tangerines developing well. Broccoli and cauliflower moderate Salinas. Cantaloupe light Westside. Carrots steady Salinas. Celery slight increase Salinas and Santa Maria. Sweet corn steady southern California, San Francisco Bay. Honeydew active central San Joaquin, Sacramento. Lettuce steady Salinas, Santa Maria. Bell pepper increased Gilroy, King City. Potatoes steady this week Santa Maria, slight increase south. Sweet potatoes active Livingston. Fresh market tomato harvest active central coast, south. Processing tomato harvest active San Joaquin, Sacramento; minor deliveries central coast. Movement livestock from high to low ranges increasing. Supplemental feeding common, natural feed scarce. Some ranchers grazed grain stubble, sugar beet or alfalfa fields. Bee movement into rangelands, other nectar and pollen areas. Mature turkeys moved to processors.

**COLORADO:** Showers, thunderstorms, warm temperatures dominated early week with heaviest 24-hour amounts 0.50 to 1.30 in. Some hail northeast with 3/8-in. size at Denver. Midweek warm, dry and over west on weekend. Highs in 70's and 80's west with around 90° readings. Cool, moist Cana-

dian air east weekend. High readings dipped into 40's northeast 11th with low 37° at Akron. Drizzle and rain in cool air mass resulted in only light precipitation.

Rains across eastern plains increased soil moisture supplies but delayed harvest dry beans and corn silage. Planting winter wheat good progress, 40% seeded, 63% 1972; 12% emerged, 35% 1972. Harvest oats and spring barley nearing completion. Corn good to excellent, 84% in dough, 50% dented. Corn for silage 27% harvested, 40% 1972. Grain sorghum good to excellent; 60% turning color, none ripe, 1972 73% turning and 28% ripe. Summer potatoes 60% dug. Dry beans 27% cut, 6% threshed; some spoilage and discoloration cut dry beans northeast from recent heavy rains. Harvest peaches, pears continued in volume. Second cutting alfalfa nearly complete, third cutting 36%. Rain improved pastures slightly. Livestock good to excellent, a few beginning move from high ranges.

**FLORIDA:** Temperatures a little above normal. Daily showers and thundershowers widespread statewide. Rainfall totals moderate except heavy central to lower Atlantic and Gulf coasts. Soil moisture adequate many areas to surplus western and southern counties. Most field crops good but drier weather would help.

Corn harvest continued. Peanut digging underway. Spraying for insects and disease in soybeans active. Sugarcane good. Land preparation for small grains started. Cattle and calves good to excellent. Pastures good to excellent. Planting, transplanting, tomatoes, snap beans, cabbage, celery increasing. Radish, carrot, leaf crop seeding continued. Pepper, squash planting finished some areas. Red potatoes in Everglades for early winter harvest. Sweet corn making good progress. Citrus tree condition excellent, new growth abundant, new crop fruit making excellent progress but many rains have caused some water problems.

**GEORGIA:** Temperatures 4° to 5° above normal. Hot early week, moderating at midweek. Rainfall light to moderate, generally widely scattered till Thursday, then extremely heavy northern quarter, moderate to locally heavy over rest except continued rather light and sparse near Chattahoochee River westcentral and southwest. Over weekend, a cooling trend north and continued warm south.

Soil moisture very short to excessive, no clear pattern--mostly adequate. Peanut harvest very active, 43% dug, 32% picked, white mold a problem. Corn fair to mostly good, 12% gathered. Cotton fair to good, 1% picked, defoliation beginning south. Soybeans fair to good, rains central and north helped early beans, came too late for some late plantings. Pecans fair to good, spraying continues. Pastures improved. Cattle good. Haying continued active. Small grains 6% seeded, land preparation increased where moisture improved. Some seed shortages. Southern pine beetle attack on pines at epidemic levels many north counties. Fire ants spreading rapidly south and central.

**HAWAII:** Vegetable crop progressed fair to well except poor to fair on Maui, where drought continued. Heavy rain on Hawaii relieved dry conditions southeastern sections. Hamakua district remained dry and premature harvest of sugarcane necessary. Harvest of pineapple declined. Sugar harvest normal. Supplies of most vegetables adequate. Bananas plentiful. Papayas light.

**IDAHO:** Temperatures near normal east to 7° above normal north after a storm front moved east early

week. No precipitation panhandle; northcentral prairie, southwest and southcentral got light amounts.

Generally frost-free weather brought additional growth to late crops. Potato harvest active southwest with 20% acreage dug. Digging limited elsewhere, expected to be active around September 20. Onion harvest at peak. Dry beans 25% combined. Wet weather stopped grain harvest southeast. Dry weather held fall grain seeding north, made headway other areas. Good development week for sugar beet crop. Rains slowed third cutting alfalfa hay.

**ILLINOIS:** Cool, subnormal temperatures. Precipitation statewide, traces south, southwest districts; above normal rainfall westcentral, central, portions of southeast. Corn 15% excellent, 69% good, 15% fair, 1% poor; 1972 86% good or excellent. About 75% mature, 60% 1972, 1970-72 average 70%. Harvest just starting, same as 1972. Soybeans 10% excellent, 73% good, 17% fair; 1972 94% good or excellent. About 80% turning yellow, 77% 1972, average 86%. Nearly 35% shedding leaves, same as 1972. Harvest underway--early maturing soybean fields, about 3% combined, same as 1972.

Third crop alfalfa hay nearly 80% cut, 66% 1972, average 79%; mostly fair to good. Winter wheat about 5% seeded, same as 1972. Pastures 11% excellent, 52% good, 32% fair, 5% poor. Soil moisture 26% short, 69% adequate, 5% surplus. Averaged 5.5 days fieldwork. Farmers cut and baled hay, prepared ground for wheat seeding, harvested corn for silage.

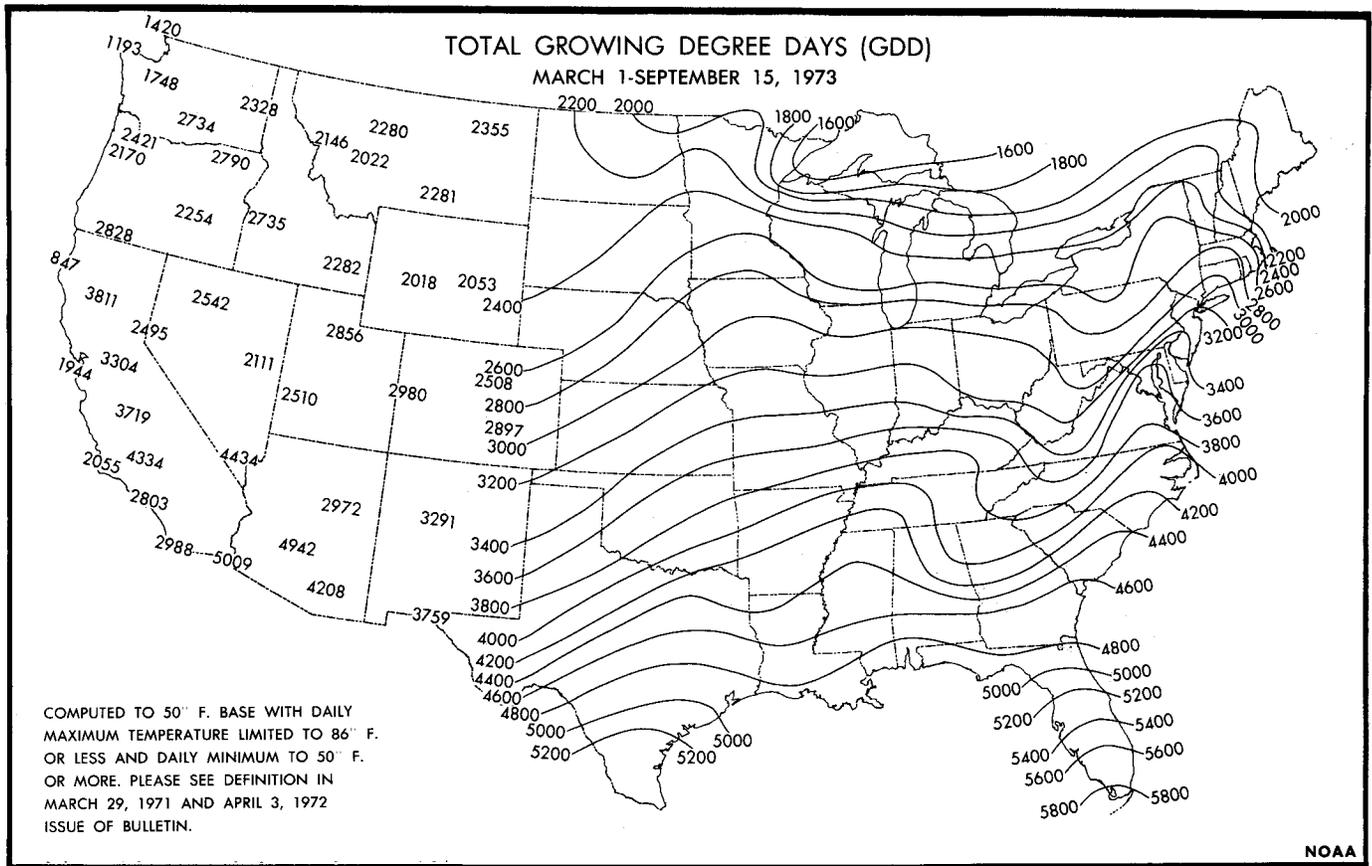
**INDIANA:** Warm. Growing degree days for season now above normal. Precipitation Friday to 1.00 in. but subnormal for month. Humidity low. Fieldwork averaged 6 days. Topsoil moisture mostly short to adequate. Subsoil moisture short to adequate. Corn 85% dented, 25% mature, average 35% mature, 20% in 1972. Soybean harvest just underway. Soybeans 45% turning yellow, 35% average; 20% shedding leaves, 15% average. Wheat land plowing same as average. Wheat 5% seeded, same as 1972. Rye 15%, barley 10% seeded. Apples 30% picked, 35% average. Pastures poor to mostly fair.

**IOWA:** Temperatures 6° to 8° subnormal. Rainfall above normal statewide and much above in southcentral and southeast sections. Row crops fair to excellent with over 90% either good or excellent. Fieldwork: 4 days suitable. Corn 88% dented, 51% mature, 5-year average 63%. Corn crop least advanced in central, southcentral and southeast.

Soybeans 60% leaves turning, leaves shedding 28%, 5-year average 45%. Soybeans mature 18%, average 35%. Soybean crop most advanced northwest and westcentral. Third cutting alfalfa 75% harvested, average 77%. Second crop clover 89% harvested. Winter wheat 16% planted. Pastures improved: 1% poor, 14% fair, 53% good, 32% excellent. Topsoil moisture 7% short, 77% adequate, 16% surplus.

**KANSAS:** Temperatures near normal early week to much subnormal week's end. Averaged about 7° subnormal central and northeast to near 3° subnormal southeast. Precipitation most of State, 24-hour amounts of as much as 4.00 in. + in Meade County and 3.62 in. in Allen County. Rains fell early week and again weekend.

Rains delayed wheat seeding but some progress west. State 10% seeded, 15% 1972 and average. Winter barley 5% seeded, little progress. Fall grain crops later than normal. Corn 40% mature, 45% 1972, 60% average. Corn grain harvest 5% completed, 10% average. Sorghum acreage 20%



mature, equal to 1972 but behind average of 25%. Very little grain sorghum harvested. Soybean harvest barely underway. Corn and sorghum silage cutting active when weather permitted. Third cutting alfalfa essentially completed. Fourth cutting 25%, equal to 1972. New alfalfa seeding 65% completed, 70% 1972, 75% average. Cattle good. Ranges furnishing favorable fall grazing.

**KENTUCKY:** Showers Thursday and Friday gave widely variable rainfall amounts from none to over 1.00 in., otherwise fair. Temperatures near normal. Fieldwork averaged 5.2 days as generally dry weather continued. Soil moisture 70% short, 30% adequate.

Corn 2% harvested, 37% mature but not harvested, 61% dented or earlier. Late corn not filling well, too dry. Soybeans 15% shedding leaves, 35% leaves turning yellow and 50% leaves entirely green. Late bean pods filling poorly. Tobacco cutting 67% complete. Dry conditions forcing early cutting burley, some leaves dropping off. Houseburn minimal to date. Wheat seeding 7% completed, rain needed. Pastures declining, hay feeding increasing especially in western half.

**LOUISIANA:** Heavy rains continued south due to weak tropical depression. Weekly totals 2.00 to 7.00 in. south. North received none to 1.00 in. Greatest 1-day rain 5.76 in. at Amite Thursday morning. Temperature 1° to 3° subnormal north and normal to 3° above central and south. Extremes: 94° Amite Thursday, 63° Shreveport Sunday.

Fieldwork limited second week, especially south. Haying, pasture planting, fall plowing, and insect control active north as weather permitted. Field-

work possible 1 day. Soil moisture surplus. Cotton declined, fair to good. Bolls rotting lower branches many fields. First bale ginned 2 parishes.

Rice fair, much of remaining crop south on ground, some still underwater. Rice harvest 55% complete, 3 weeks behind 1972. Yield and quality lowered considerably in downed fields. Soybeans fair to good, some rotting lower branches. Sugar-cane good, no progress planting, some lodging. Sweet potatoes good, some souring and rotting in low fields. Pastures average, some flooded forcing cattle to higher ground. Livestock good.

**MARYLAND-DELAWARE:** Cool, 2° subnormal. Extremes: Mid-80's to mid-40's except low 70's and low 40's Garrett County. Precipitation above normal. Amounts 1.00 to 1.50 in. except northcentral and northeastern Maryland and Northern Delaware where amounts averaged 2.00 to 2.50 in. with isolated showers totaling up to 4.00 in. in extreme north-central Maryland. Soil moisture mostly short across both States. Corn 13% harvested; 60% mature, 50% 1972. Soybeans 25% fields yellowing, 4% leaves shedding. Tobacco 85% harvested, ahead 1972, normal 90%. Harvested Jonathan and Grimes apples, Red Delicious starting.

**MICHIGAN:** Over southeast lower only trace of precipitation, over northwest lower and upper State mostly less than 0.10 in. with few areas around 0.20 in. Temperatures 1° to 3° subnormal over southern lower and 3° to 6° subnormal northern lower and upper State. Southern lower had highs mostly in 70's falling into lower 60's Sunday. Northern lower and upper State had highs in 70's Monday and 60's most of week then falling to 50's

over weekend. Lows in upper 30's and lower 40's over much of State Thursday morning and over northern lower and upper State Sunday morning.

Dry soils limited development of late planted corn and soybeans. Early planted fall crops matured rapidly. Soil moisture critically short lower peninsula, adequate upper peninsula. Averaged 6.1 days fieldwork. Corn 84% dented or more advanced; 25% mature, 10% 1972. Corn silage 25% harvested. Dry weather hurt vegetables and late planted soybeans. Early planted maturing rapidly, about 20% shedding leaves. Dry beans 76% harvested. Fall potatoes 37% harvested. Sugar beet harvest started. Wheat planting underway but many waiting for rain. Pastures deteriorated rapidly, supplied less than average feed. Cool weather improved apple color.

MINNESOTA: Temperatures 2° to 5° subnormal until weekend, then 6° to 10° subnormal. Overnight lows on 16th and 17th in mid-20's and 30's northwest, northcentral and northeast districts, elsewhere mostly low 40's. Precipitation continues 0.50 in. below weekly averages with little or no rain northern two-thirds. Southern third recorded 0.33 to 0.67 in. over last 3 days.

Fall crop development continued about 1 week ahead normal. Corn for grain 71% mature, 2% picked. Soybeans 67% leaves shed, 3% combined. Corn silage cutting 40% complete. Flaxseed 80% combined. Fall sowing winter wheat and rye nearing completion. Potatoes 20% dug. Sugar beet harvest underway. Soil moisture generally adequate except continued dry southwest.

MISSISSIPPI: Showers and thunderstorms in State daily. Temperatures slightly above normal. Dry and cooler during weekend. Soil moisture mostly adequate. Averaged 3.7 days suitable fieldwork. Cotton 13% open, less than 1% harvested. Soybeans 2% mature, 10% shedding. Harvest of sweet potatoes 25%, hay 85%, corn 8%, rice 2% and sorghums 18% complete. Field crops generally good.

MISSOURI: Precipitation ample averaging 1.00 to 1.50 in. except for southwest. Local amounts varied from less than 0.25 in. portions of southwest, 2.00 to over 4.00 in. elsewhere. Temperatures cool across north half, about 2° subnormal, but near to 3° above normal across south.

Fieldwork: 3 days suitable. Corn fair to good, 38% mature, 48% 1972, 2% harvested. Corn silage cutting underway as conditions permit. Soybeans fair to good, 35% turning color, 13% mature, 1% harvested. Cotton bolls 6% open, 3% last week, condition fair to good. Sorghum 32% mature, 40% 1972. Soil moisture supplies 13% short, 71% adequate, 16% surplus.

MONTANA: Warm, dry early week. Wet snow or rain Friday with strong cooling giving afternoon temperatures in 30's. From 4 to 10 in. of snow some areas. Clearing over weekend brought freezing temperatures mostly west.

Grain and hay harvest mostly complete. Winter wheat seeding active, nearly 35% done. Dry bean harvest 50% complete. Corn silage 30% cut. Soil moisture still short northwest, northcentral and central. Wheat germination ranges poor to good, mostly fair even in dry areas. Range feed and stockwater still short northwest, northcentral, central and parts of southwest and southcentral. Nearly 33% cattle and calves, sheep and lambs moved from summer ranges. Grasshopper damage mostly light to moderate. Rain and snowfall improved topsoil moisture most of State.

NEBRASKA: Subnormal temperature. General rains fell ranging 0.50 in. northeast to 4.00 in. west. Soil moisture supplies increased. Topsoil 16% surplus, 78% adequate, 6% short. Subsoil 6% surplus, 78% adequate, 16% short. Farmers put up silage, seeded wheat, hayed, prepared machinery and storage for fall harvest. Fieldwork 3 days.

Range and pasture 14% above average, 73% average, 13% below average. Corn 19% excellent, 74% good, 7% fair; 90% in or beyond dent stage, 85% 1972; 40% mature, 30% 1972, 45% normal. Sorghum 29% excellent, 66% good, 5% fair; 90% heads turned, 80% 1972, 85% average; 20% mature, 30% 1972, 25% normal. Soybeans 19% excellent, 65% good, 16% fair; leaves in or beyond turning stage 85%, shedding 45%, 10% mature, same as 1972 and average. Winter wheat seeding 30% completed, 55% 1972, 40% normal. Some wheat needs replanting where flooded and washed. Third cutting alfalfa about completed, 45% fourth crop; 16% excellent, 74% good, 10% fair. Wild hay 18% excellent, 70% good, 12% fair. Generous rains benefited sugar beets but delayed dry bean harvest.

NEVADA: Near normal weather. Temperatures mostly normal. Extremes: 103°, Las Vegas, 22°, Mountain City. Precipitation confined to light showers northeast. Alfalfa seed harvest continued active all major producing areas. Hay and small grain harvest nearly complete all areas. Alfalfa hay harvest ranges from third cutting west to sixth cutting southern valleys. Ranges dry. Livestock good to excellent.

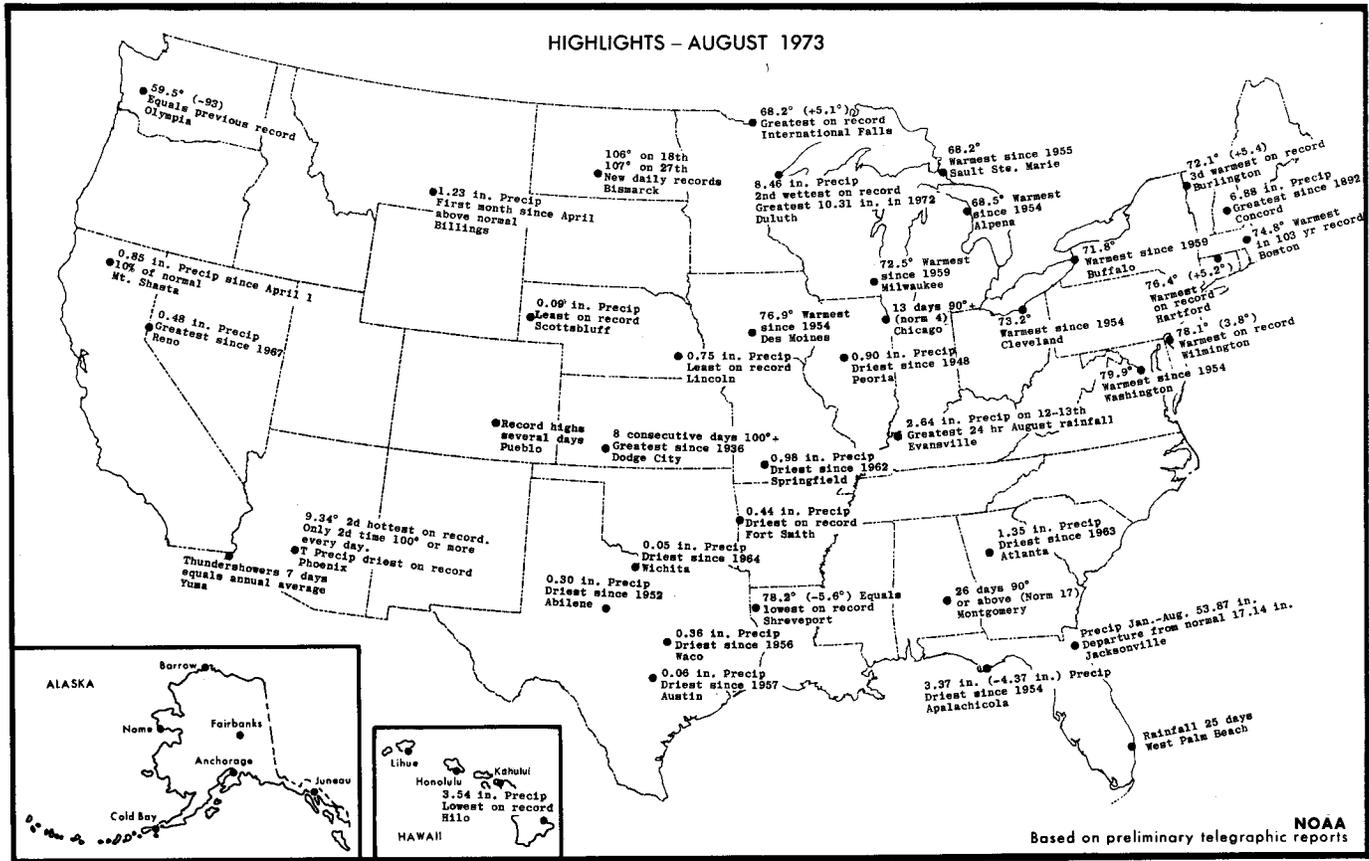
NEW ENGLAND: Mostly cool, highs 60's, low 70's south, 60's north, overnight lows 40's except 50's coastal, few mid-30's north. Precipitation light except 1.00 in. plus south Friday. Aroostook County, Maine, school recess begins 19th, active potato harvest end of week. Soil dry, tubers lack size. McIntosh harvest began; color, size, quality good. Cranberry harvest full swing 16th, some loss from scald. Late sweet corn very wormy. Silage harvest very active; yields, quality good.

NEW JERSEY: Mild week, temperatures near normal. Extremes: 85° at Newark Tuesday afternoon, 39° at Newton Thursday morning. A strong front accompanied by heavy showers moved across State Friday evening. Rainfall ranged from 1.00 in. at Lakehurst to 3.86 in. at Pomona, most of State averaging over 2.00 in. Rain beneficial. Soil moisture adequate.

Fall iceberg lettuce harvest about to begin. Limited amounts sweet corn and tomatoes available. Peppers, eggplant and squash in good supply. Apple picking active. Peach harvest will be over this week. Cranberry harvest underway, coloring slow. Harvest of soybeans and corn for grain light. Small grain seeding active.

NEW MEXICO: Very substantial rains north half and eastern plains early week with some totals north mountains over 2.00 in. Slight renewed shower activity south late week with light amounts. Cool beginning of week, warming last half. Temperatures near normal south, 1° to 4° subnormal north. Some large hail reported with thunderstorms northwest of Roswell Tuesday.

Ranges fair, livestock and crops generally good. Grain sorghum harvest started scattered fields. Corn harvest continued. Dryland winter wheat seeding continued. Cotton fair to good



but 10 days to 2 weeks late, some boll opening most areas. Moisture and humidity hampered alfalfa cutting. Apple harvest increasing. Early fall lettuce cutting started. Peanuts good progress.

**NEW YORK:** Temperatures 1° subnormal at Poughkeepsie to 5° subnormal at Albany and Buffalo. High New York City 81° Tuesday. Lows: 30's many interior stations. Saranac Lake had 30° Monday morning. Precipitation generally subnormal west and extreme north, less than 0.10 in. Elsewhere amounts generally above normal with over 2.00 in. at Syracuse. Heaviest amounts fell late week.

Favorable weather permitted considerable progress in corn silage and hay harvest. Third cutting alfalfa 55% harvested. Corn silage 10% harvested. Early dry bean harvest well underway. Plowing and fitting for winter wheat in progress. Soil moisture levels very short to adequate, generally below normal.

Vegetable harvest progressed satisfactorily. Onion harvest nearly over Orange County while topping well along in central and western onion fields. Potato digging full swing in Steuben area. Ulster County sweet corn harvest nearly complete. McIntosh and Twenty-Ounce apple harvest underway for processing western New York. Hudson Valley apple harvest continues. Peach and pear harvest nearly complete.

**NORTH CAROLINA:** Showers early week mixed with cooler temperatures, dry weather near end week. Rain in mountains Thursday and over most of State Friday relieved dry conditions prevail-

ing over 3 weeks.

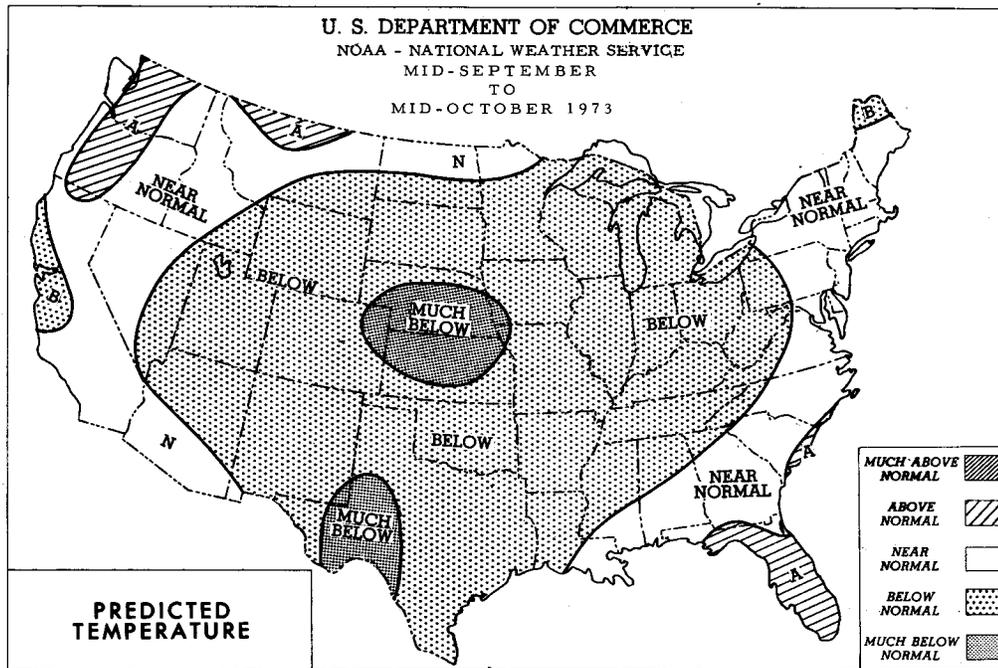
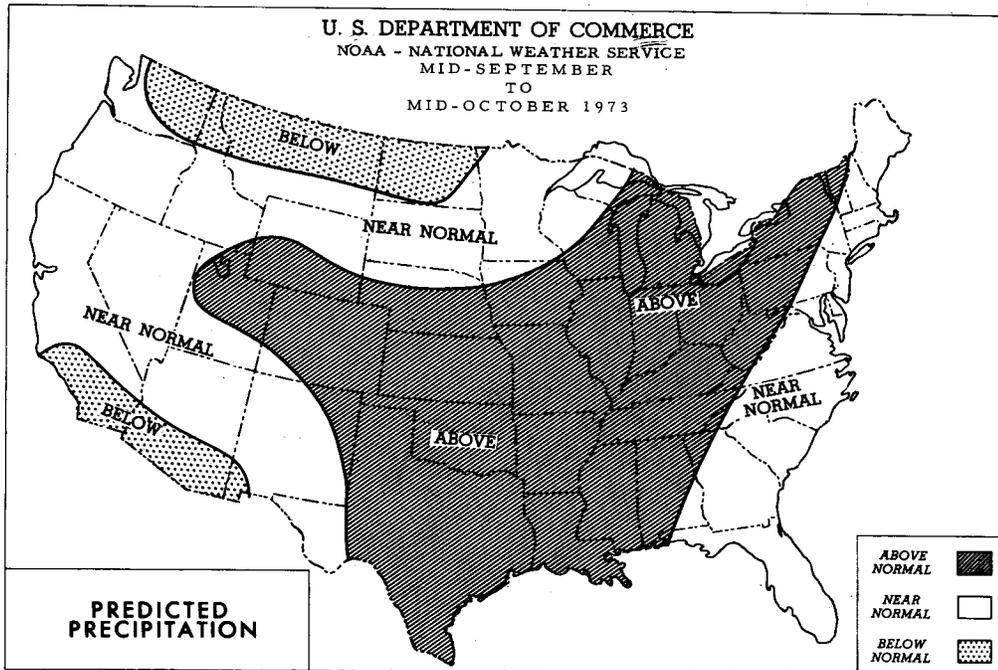
Corn 30% harvested, yields high, moisture content relatively low. Flue-cured tobacco harvest nearly complete. Border, Eastern Belt market open. Old, Middle Belt sales heavy, average price higher than normal. Burley crop 50% banded, ahead 1972. Soybean dusting, spraying heavy; rain was welcome. Cotton looks good, bolls opening, maximum yield potential. Peanuts 5% dug, crop looks good. Pastures back to par after showers. Land prepared for small grains, some planting started.

**NORTH DAKOTA:** Temperatures statewide 6° to 9° subnormal. Extremes: 83°, Bismarck, Williston and Dickinson; 28°, Watford City. Highs ranged from low 80's to low 40's while lows ranged from mid 50's to high 30's. Southwest division precipitation 0.01 in. above normal while all other divisions subnormal. Snow southwest Friday. Weekend temperatures dropped from mid 30's to mid-20's statewide. Some light snow and rain showers fell.

Limited precipitation allowed good progress; small grain harvest winding up in north. Light frost nipped garden vegetables and started to close growing season for row crops. Flax combining full swing. Silage making, dry bean harvest, potato digging well underway. Pastures good growth most areas.

**OHIO:** Fair weather from 10th through 12th. Some rain over southern two-thirds of State on 13th and 14th. Fair, cool again on 15th and 16th although considerable cloudiness prevailed over north on 16th. Temperatures subnormal. Sporadic

### AVERAGE MONTHLY WEATHER OUTLOOK



These prognostic charts show the expected categories of average temperature and total precipitation for the period indicated. They are taken from the Weather Service's publication Average Monthly Weather Outlook which contains additional information necessary for complete interpretation.

rains did little to alleviate extremely dry conditions that have prevailed since late August.

Soil moisture 79% short, 21% adequate; shortest since April 30, 1971. Corn 85% dented, 35% mature; averages 85%, 45%. Harvesting just starting. Soybeans 35% shedding leaves, 10% mature; averages 50% shedding leaves, 15% mature. Combining also just starting. Lower than normal yields reported due to dry weather. Winter wheat 5% planted, 10% normal. Barley 20% seeded, same as 1972, normal 30%.

**OKLAHOMA:** Temperatures normal northeast and eastcentral to 4° subnormal northcentral. Precipitation ranged from 0.50 in. westcentral to 1.90 in. central. Weekend mild to cool with rains most areas. Wet fields limited fieldwork, while row crops neared maturity. Some wheat seeding accomplished but most activity confined to seedbed preparation.

Harvest corn and sorghums limited. Over 33% sorghums now mature. Cotton retaining top set after rains, condition good all areas. Some early peanuts dug, 12% acreage mature. Soybeans filling well, crop good to excellent. Fourth cutting alfalfa 67% taken, some fifth cuttings central areas. Range grasses making new growth. Cattle remained good. Topsoil moisture ample all but parts of some northwestern counties.

**OREGON:** Temperatures above normal, coast a few degrees above, western valley and east 3° to 6° above. Rapid warming early week. Brookings hit 103°, Medford 100°. Most inland areas reached 90's, cooling later. Showers first and last days of week, very light and spotty west of Cascades, amounts less than 0.10 in. Showers east of Cascades more widespread. Southeast less than 0.10 in., northeast from 0.20 to 0.70 in.

Farmers prepared and fertilized the land, seeded pastures, clovers, seed crops. Seeding of fall grains limited by soil moisture east. Last cutting hay underway or completed. Prune harvest started, dryer space becoming limited. Winter pear harvest continued. Apple harvest continued Milton-Freewater, starting Hood River. Filbert drop started, size good. Lack of water to flood bogs will slow cranberry harvest. Vegetable, potato and onion harvest continued. Hop and sugar beet harvest also continued. Range and stockwater supplies remain poor. Many cattle on stubble with supplemental feed.

**PENNSYLVANIA:** Mostly sunny but cool. Temperatures 2° to 4° subnormal and 7° to 10° below previous week. Daily highs mostly 70's and low 40's and 50's. Extremes 85° lower Susquehanna River Valley; 32°, northcentral. First major storm of season lashed central and east with heavy rain and strong winds Friday. Rainfall over lower Susquehanna Valley 4.00 in. to nearly 6.00 in. for greatest daily amounts since Tropical Storm Agnes June 1972. Harrisburg with 4.34 in. set new daily September record. Amounts 2.00 in. or more over southeastern quarter. West generally less than 0.25 in.

Heavy rains relieved dry conditions. Corn 10% mature stage, 50% dent, remainder mostly dough. Silage corn 33% harvested, limited high moisture grain harvested. Winter barley 25% seeded; winter wheat, 20%. Fall plowing 67% completed. Fall potato harvest gaining momentum. Tobacco harvest 75% completed with good curing condi-

tions. Peach harvest completed. Apple harvest progressing, mostly McIntosh. Tomatoes in full swing.

**PUERTO RICO:** Rainfall averaged 0.64 in. which is 1.34 in. subnormal. Only significant rainfall westcentral, max, 3.44 in. Lares. The Eastern half and whole north coastal section received generally less than 1.00 in. Greatest 24-hour amount 2.80 in. at Lares. Temperatures averaged 82° in north coastal sector, 81° all other lowland areas, and 76° interior divisions. Extremes: 94° at San Juan, 59° at Adjuntas.

Weather helped most agricultural activities including sugarcane ratoon development, coffee ripening and harvesting. Tobacco soil prepared for planting. Weather favored planting and fertilizing of pastures most areas except in Hatillo, Toa Baja and Barranquitas where pastures need more rain. Hatillo pastures are also being attacked by worms and bugs. Weather favored planting and cultivation of food crops.

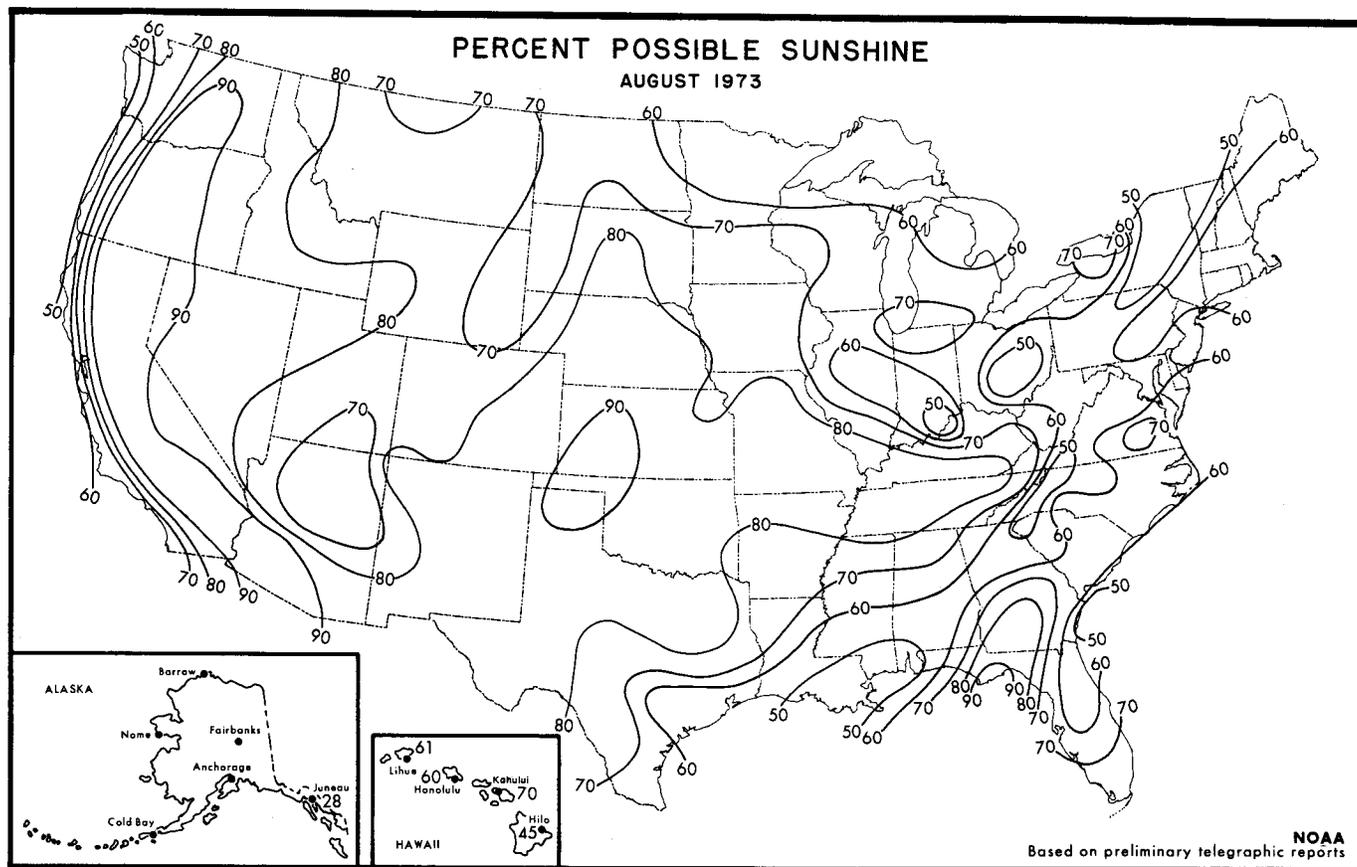
**SOUTH CAROLINA:** Temperatures above normal early week; normal at end. Rainfall heavier than usual most areas. Excessive rainfall and flash flooding in Piedmont Thursday night and Friday.

Farmers applied insecticides to cotton, soybeans and prepared soil for fall plantings. Soil moisture generally adequate most of State; Piedmont moisture short to excessive. Cotton fair to good, 31% open bolls, 37% 1972. Corn fair to good, 90% mature, 37% harvested; 1972 96%, 25% respectively. Soybeans fair to good, 98% bloomed, 91% set pods, 18% leaves turning, 3% leaves shedding; 1972 90%, 87%, 17%, 10%, respectively. Peanuts 55% harvested, 59% 1972. Lespedeza, pastures, grain sorghum, hay crops fair to good. Grapes 95% harvested, same 1972. Apples 66% harvested, 60% 1972. Pecans fair to good.

**SOUTH DAKOTA:** Cool through weekend. Temperatures from 5° to 12° subnormal. High 92° last Monday at Academy occurred before cooling. Low 30° at Lemmon Sunday first freezing temperature other than in Black Hills so far this season. Widely scattered showers and light rains fell late week. Some light snows fell northwest in addition to Black Hills. Precipitation deficiencies as much as 6.50 in. subnormal for growing season some areas.

Row crop maturity well ahead of normal and 1972. Corn 86% mature and safe from frost, normal 55%, 1972 53%. Sorghum grain showing head color 97%, normal 81%, 1972 62%. Soybeans shedding leaves 74%, normal 61%, 1972 43%. Harvest all row crops expected underway by October 1. Moisture helped fall plowing, seeding of fall grains and greened up pastures some areas. Winter wheat seeding 75% complete, somewhat ahead of normal. Rye 49% seeded slightly behind normal. Early seedings particularly on summer fallow sprouting. More rain would be welcomed. Topsoil moisture nearly same as last week. Pastures short, stockwater supplies mostly low. Marketings of yearlings increasing. Range lamb marketings heavy some areas.

**TENNESSEE:** General rains midweek and scattered showers at other times. Temperatures 3° to 5° above normal. General rainfall improved crop conditions statewide but additional rainfall needed for development of late crops. Soil moisture still short eastern half. Rains hampered tobacco cutting but by weekend slightly over 75%



harvested, about normal.

Corn fields 50% mature but few cut for grain. Normally 10% harvested. Cutting corn for silage quite active. Dry weather damaged late fields some areas; corn worm damage prevalent. Cotton bolls 10% open, picking not started. Normally 25% open bolls and 5% picked. Recent rains improved soybean prospects, but additional rainfall needed for full development late fields. Soybean crop considerably later than usual with 75% not yet yellowing and practically no fields mature. Wheat 10% seeded. Oats and barley 20% seeded. Normally about 25% these crops planted.

**TEXAS:** Rainfall averaged 2.00 and 3.00 in. above normal south Texas and coastal plains. Temperatures 3° to 4° subnormal northwest. Moderate to heavy rains along middle and upper-coastal plains. Skidmore and Sabine Pass measured better than 3.00 in. Tuesday. Severe weather erupted west Texas. One-inch size hail fell at Childress, and small hail pelted Big Spring and Garden City. Over weekend, showers, thunderstorms continued south and light rain, cloudiness northwest and upper Red River Valley.

Cotton harvest lags far behind schedule, first bales ginned southern high plains, northern low plains. Corn and sorghum harvest good progress, recent rains caused delays. Peanut harvest normal progress and ahead of schedule. Rice harvest far behind schedule, heavy rains, high wind damaged much of remaining crop. Soybeans excellent progress except upper Gulf Coast where rains, standing water hurt crop. Major crops, percent harvested: Cotton 8, 1972 23; corn 43, 1972 55; sorghum 47, 1972 43; peanuts 26, 1972 23; rice 79, 1972 98. Major crops percent planted: Wheat 36, 1972 37;

oats 11, 1972 15.

**High Plains:** Potato supplies continue seasonal decline. Peppers, cucumbers available. Tomato, green bean harvest active. Carrots making good progress, some harvest underway. **North Texas:** Watermelon, cantaloupe harvest almost complete. **East Texas:** Sweet potato harvest resumed. **San Antonio-Winter Garden:** Lettuce planting continues. Cabbage making good growth. Cucumber picking continued. **Lower Rio Grande Valley:** Rains delayed vegetable seeding. Tomatoes, peppers, cabbage, citrus continued good progress.

Range, livestock improved across State. Parts Edwards Plateau, low plains short stockwater, rain produced little run-off. Forage abundant most areas. Hay baling active despite short wire, twine supplies. Screwworm cases increased south Texas, Coastal Bend. Sheep shearing past 50% done Edwards Plateau.

**UTAH:** Scattered showers and thunderstorms early week, locally moderate to heavy accumulations. Temperatures near normal to 6° below. Few areas light frost colder valleys over weekend. Harvest of crops made excellent progress. Most days bright, dry, clear with cool nights. Very little frost damage during week.

Harvest completion: Silage corn 15%, potatoes north 35% but major potato acreage south only 5%, dry onions 10%, sweet corn 85%, tomatoes 30%, third crop alfalfa hay 35%, alfalfa seed 70%, peaches 55%, pears 70%, apples less than 10%. Fall planting winter wheat about 40% completed, 1972 55%. Feed prospects on fall, winter range lands very good, perhaps best ever. Cattle, sheep thriving.

VIRGINIA: Shower activity early week. Widespread rain on Friday, greatest amount 2.34 in. Dulles Airport. Considerable daily temperature variation; extremes: 88° and 43°. Topsoil moisture improved. Good harvesting weather.

Corn silage harvest continued active. Grain harvest picked up momentum, 16% complete, 9% 1972. Peanut harvest began. Soybean insect control applications continued heavy. Late week rain beneficial to late crop. Flue-cured tobacco harvesting and marketing active, harvest 74% complete. Excellent progress burley harvest, 60% complete, about same as 1972. Fire-cured 64% harvested; sun-cured 55% harvested. Late haying active. Limited progress small grain seeding. Cotton harvest began limited scale. Irish potato harvest in wrap-up stage. Sweet potato harvest picking up. Apple harvest ahead of 1972.

WASHINGTON: West: Temperatures averaged 1° to 4° above normal. Few scattered showers, light frost higher elevations. Harvested broccoli, cauliflower, carrots, berries, potatoes. Sweet corn harvest began. Bush bean, cucumber harvest neared completion. Farmers busy preparing fields, planting pastures, alfalfa. Silage corn harvest to begin soon. Some third cutting hay made, demand good. Pastures short to adequate, irrigated fields excellent. Bulb planting active. Tree fruit crops generally plentiful.

East: Fair, warm. Temperatures 1° to 3° subnormal. Trace precipitation. Severe drought conditions continued. Harvest continued for sweet and silage corn, potatoes, hops, mint, miscellaneous vegetables. Yakima Concord grape harvest began. Fall seeding onions, alfalfa hay pastures. Third cutting alfalfa hay virtually complete, fourth cutting underway. Farmers busy irrigating, preparing land. Apple harvest full swing. Peach, pear harvest continued.

WEST VIRGINIA: Fair weather until Friday. Temperatures 3° to 5° subnormal except north-east panhandle near normal. Rain 1.00 in. over most of State on Friday. Soil moisture up; 54% short, 45% adequate. Averaged 5.1 days suitable fieldwork. Farmers harvested hay, corn silage and clipped pastures. Second cutting hay 86% com-

plete, third cutting 42%. Pastures mostly fair. Tobacco 46% harvested. Corn 65% dented, 23% mature. Potatoes 70% dug. Fall seeding of wheat and barley started.

WISCONSIN: Temperatures nearly 5° subnormal. Cool, crisp autumn air prevailed most days, with scattered light frost in low northern areas. Rainfall light and spotty, averaging 0.20 in. or less all areas. Good rains southeast half September 17.

Corn and soybeans continued to mature. Early corn safe from frost, late corn needs rest of September to make grain. Corn 70% in dent, 1972 70%, normal 60%. Silo filling 10% done, 1972 3%, normal 10%. Picking seed corn started. Soybeans should be safe from frost in 2 weeks. Soybeans 40% leaves turning, 1972 25%, normal 30%. Harvesting of second and third crop hay continued. New seedings remain good. Pastures excellent west, poorer east. Some oats combined. Tobacco harvest moving fast, a good crop going to curing sheds. Potato harvest has good start. Sweet corn harvest well along with yields below 1972 but harvesting conditions better. Extreme heat last week of August moved maturity of vegetable crops ahead of schedule. Harvest continued for vegetable crops, apples, cranberries. Apple crop below 1972 but cranberries look promising. Soil moisture 35% short, 62% adequate, 3% surplus. Rain on 17th will help dry southeast. Fall plowing off to earlier start than 1972.

WYOMING: Wet, stormy. Heavy thunderstorms struck portions of east and south on 8th and 9th. Hail and torrential rains caused property damage at Cheyenne, Lander, and Shirley Basin afternoon of 8th. Tornado dipped down west of Rock Springs on 9th. Heavy thunderstorms south-east on 11th. Temperature extremes: 90°, Glenrock, 26°, Big Piney.

Heavy rains slowed activity. Corn for silage 20% harvested. Less than 10% of corn for grain mature. Dry beans 45% windrowed, less than 10% combined. Potatoes 15% dug, about 2 weeks behind 1972. Winter wheat 75% planted, 45% emerged. Second cutting alfalfa 90% completed, third cutting 20% harvested. Soil moisture mostly adequate, some surplus.

## WORLD WEATHER AND AGRICULTURE

## INDIAN MONSOON ACTIVITY CONTINUES ACTIVE

Monsoon activity in India has continued active up through August 22. The cumulative rainfall from June 1 through August 22 was normal in 24 weather zones, above normal in 8, and deficient in 3. The 32 weather zones which were normal or above account for approximately 91 percent of the total kharif cereal grain production. See following table for details.

Weather Subdivision	Cumulative Rainfall	
	Actual	Percent Deviation
Tamil Nadu	174	+15
Gangetic West Bengal	717	-11
Orissa	781	-7
East Uttar Pradesh	621	-9
Bihar Plains	638	-12
East Madhya Pradesh	743	-17
Coastal Andhra Pradesh	282	-21
South Interior Mysore Plains West Uttar Pradesh	347	+28
	565	+1
East Rajasthan	440	+5
West Madhya Pradesh	810	+16
Gujarat Region	522	-17
Telangana	621	+19
North Interior Mysore	467	+23
Assam and Meghalaya	1087	-6
Bihar Plateau	626	-21
West Rajasthan	289	+60
Punjab	532	+53
Madhya Maharashtra	409	+19
Haryana, incl. Delhi	562	+37
Kerala	1235	-7
Royalaseema	248	+15
Vidarbha	638	-11
Sub-Himalayan West Bengal	1371	-13
Jammu and Kashmir	338	+77
Saurashtra & Kutch	327	-21
Konkan	2037	+1
Marathwada	538	+27
Himachal Pradesh	834	-18
Hills of West Uttar Pradesh	991	-4
Nagaland, Manipur, Mizoram & Tripura	771	-13
Coastal Mysore	2648	+5
Arunachal Pradesh	2443	-1
Bay Islands	983	-10
Arabian Sea Islands	961	+23

LATE SUMMER RAINS BENEFIT  
LATE CROPS IN USSR

Abundant rainfall over much of the European USSR during late July and August has significantly enhanced yield prospects for late crops, including sugar beets, sunflowers, potatoes and corn. In conjunction with a slight increase in the area planted, except corn, yield levels are expected to rebound from last year. Recent reports from the sugar beet areas indicate good growth during August, primarily due to abundant precipitation. In the Central Chernozem Zone and Middle Volga, the beets are twice as large as last year's drought-drawn roots. A larger area was planted to sunflower this year and the favorable conditions will reverse the falling production trend of past years. Corn has also benefited from the excellent soil moisture conditions during July and August and yields are expected to be good.

In the Ukraine, where ears are reportedly filling to full weight, a good harvest is expected.

## CROP WEATHER IN FRANCE

Grain crops in France, excluding corn, sorghum, and rice are expected to be down slightly in production from last year. Although winter and spring planting conditions were good, wheat may have suffered from the extreme heat in June and early July. In April, cold weather did delay planting of spring cereals, but conditions were favorable for seedbed preparation which minimized delays. After a satisfactory May, June was dry and the wheat did suffer from the effects of the hot weather. Dry weather in July, however, provided good conditions for harvesting winter barley. About midmonth extensive rains brought needed moisture for corn during the tasseling stage. Given good fall weather yields are expected to be good.

WEATHER REDUCES RICE YIELDS  
IN INDONESIA

Weather has been the primary factor in lowering rice production in Indonesia. Drought in 1972 was regarded as the worst in the last decade and affected most of Indonesia. The greatest impact was felt in Java and Sulawesi which account for much of the country's production of rice and corn. Early planting of dry season crops (May-July) suffered dryness during late growth stages, whereas late crops (August-Sept.) mostly failed. The following wet season was also less ideal due to the rains coming late for the early planting (October-December), followed by severe rains during the flowering period for the later planting. The outlook is slightly better as the dry season improved through occasional rains in most areas.

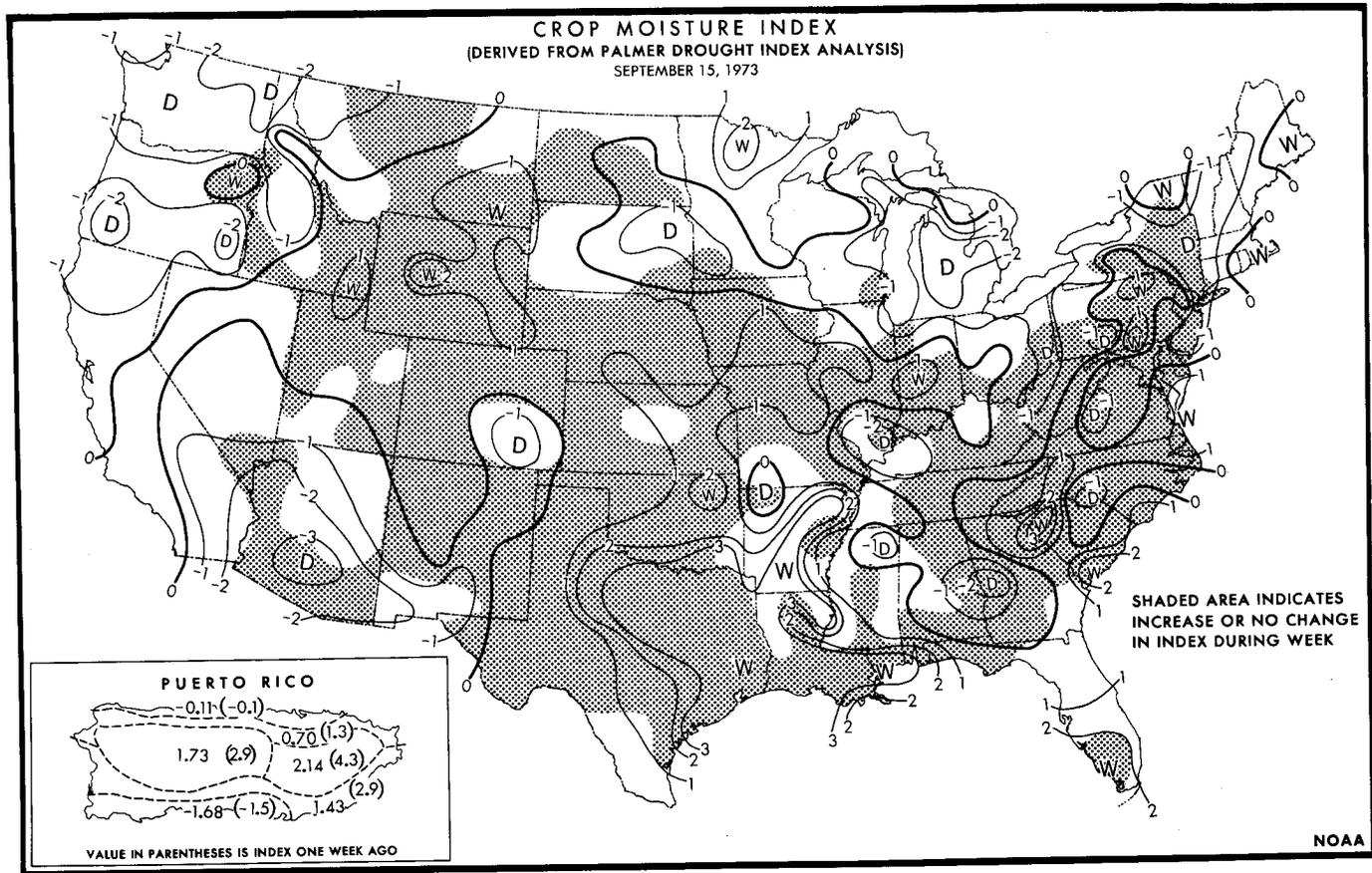
## CHILEAN RAINFALL BELOW NORMAL

Rainfall throughout Chile during the period January-August 1973 has been less than normal.

	Jan. 1 - Aug. 10, 1973	
	Actual mm	Percent Normal

Arica	0.2	40.0
Antofagasta	0.8	24.2
Copiapó	7.5	44.4
La Serena	62.8	74.7
Ovalle	50.3	49.0
Valparaíso	167.6	56.0
Santiago	130.7	53.2
Rancagua	242.1	55.5
Curicó	438.2	79.1
Linares	764.4	112.7
Chillán	547.7	74.0
Concepción	601.0	63.3
Los Angeles	546.1	59.8
Victoria	877.0	81.3
Temuco	679.8	74.9
Valdivia	1,028.8	65.0
Puerto Montt	1,111.7	91.0
Ancud	1,838.2	113.1
Coihaique	554.7	45.8
Punta Arenas	209.0	68.5

Only two provinces, Linares and Ancud, have received above normal rainfall. Winter plantings in general were delayed due to the low rainfall and shortage of supplies of inputs.



**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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U. S. Department of Agriculture  
Washington, D.C. 20250

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