

Weekly Weather & Crop Bulletin

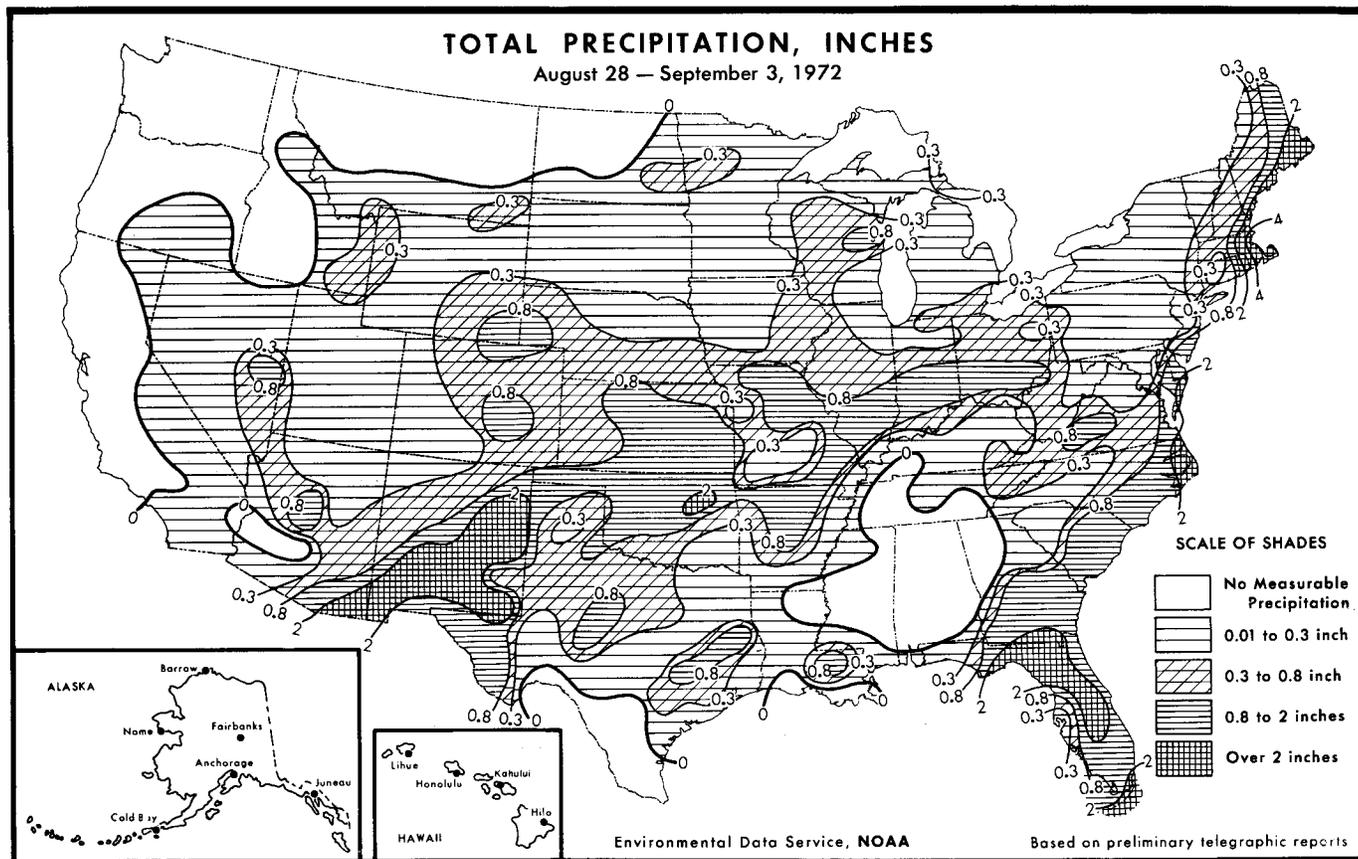
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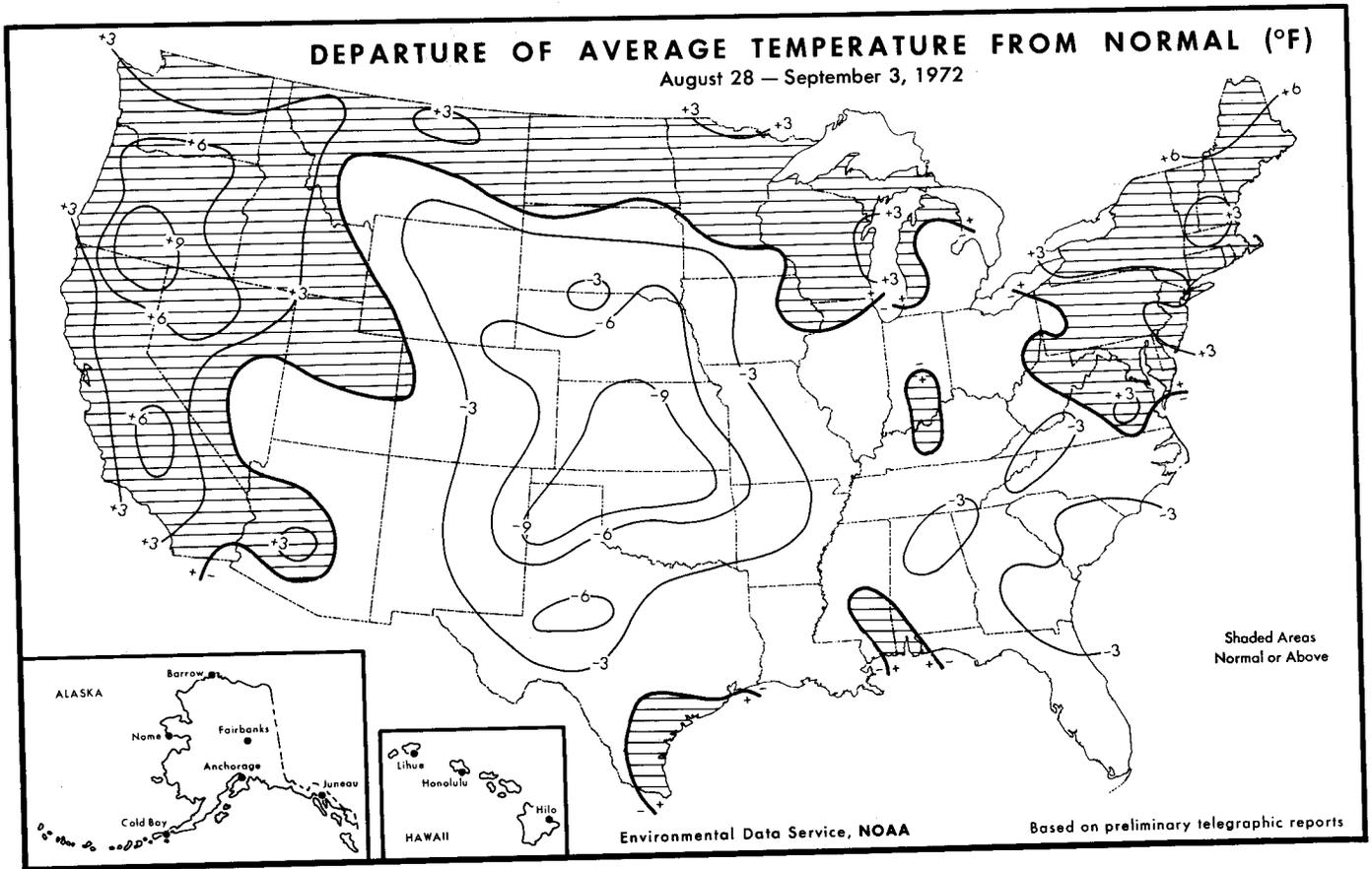
NATIONAL WEATHER SUMMARY

HIGHLIGHTS: Autumn temperatures arrived in the north central and northeastern States. Tropical Storm Carrie dumped up to 10.00 inches or more of rain in some localities in Massachusetts. Thundershowers caused local flooding in southern New Mexico and east central Kansas.

PRECIPITATION: Scattered thunderstorms occurred along the eastern slopes of the southern Rocky Mountains on Monday, August 28. Heavier showers fell along the Atlantic Coast from Virginia to Florida. Savannah Georgia received 4.14 inches in 6 hours early Tuesday. Tropical Storm Gwen, about 300 miles south southwest of San Diego with winds near the center gusting to 60 m.p.h. brought showers and thunderstorms to southern California. Heavier local showers fell in the mountains in the Southwest. Heavy showers continued in the East Wednesday. Orlando, Fla., re-

ceived 3.26 inches of rain Wednesday afternoon and early evening. A cold front moved into the northern Great Plains at midweek. It set off numerous showers and thunderstorms as it moved across the central Great Plains. As the weekend approached, thunderstorms were widespread from the upper Great Lakes to the southern Great Plains. Also, a tropical depression was shaping up off the Carolina Coast and a low was forming in the eastern part of the Gulf of Mexico.

A cold front pushed into the northern Great Plains as the weekend approached. The leading edge of the cold air set off showers and thunderstorms. Light rain fell in the cold air behind the front. Heavy rains, 2.00 to 4.00 inches in 24 hours, fell in east central Kansas Friday and Saturday causing substantial flooding along Gypsum Creek and Turkey Creek and the tributaries of the lower Smoky Hill River. Flooding also



occurred in south-central New Mexico due to the heavy showers in that area. Meanwhile, Tropical Storm Carrie was dumping heavy rainfall over eastern Massachusetts -- 8.00 inches southwest of Hyannis Port and over 5.00 inches at Chatham in 6 hours. Weekly totals at spots in Massachusetts exceeded 10.00 inches.

TEMPERATURE: High pressure extending from California to the Appalachians and from the Great Lakes to the Gulf of Mexico early in the week brought comfortable temperatures and lower relative humidity to much of the Nation. Onshore breezes cooled the Pacific Northwest. Lewiston, Idaho, registered 102° Monday but no higher than 84° Wednesday. Hot muggy air still covered the South and East.

At midweek, a cold front pushed from Canada across the Great Lakes region. It brought cooler drier air to the Northeast but oppressive summer heat continued in the South. Pleasant weather

followed the frontal passage as it moved southward and eastward.

Another front pushed into the northern Great Plains as the weekend approached. Temperatures fell into the 30's in northern Minnesota and below freezing in the central Rockies. Afternoon temperatures in the 60's were common Thursday and Friday over the northern Great Plains after the frontal passage. The cool air spread southward and eastward bringing a touch of autumn to much of the Nation. Elkins, W. Va., recorded 54° Sunday morning. This is 12° below normal for September 3.

Temperatures averaged above normal over the Far West, along the Canadian Border, from Pennsylvania to New England, and along the western Gulf Coast. The rest of the Nation averaged cooler than normal. Parts of the central Great Plains averaged 5° to 11° cooler than normal.

L. W. Dye

NATIONAL AGRICULTURAL SUMMARY

AGRICULTURAL HIGHLIGHTS: Small grain harvest moved ahead rapidly from Washington to Wisconsin.

* Corn and soybeans continue favorable development in the Corn-Belt. * Ranges becoming critically dry in California.

SMALL GRAINS: Harvesting of small grains moved ahead rapidly from the Pacific-Northwest eastward to the Northern Great Lakes States during the week. Farmers took advantage of the sunny, dry weather to get the combines rolling. The Washington and Oregon small grain harvest is in the mop-up phase. Small grains in Idaho are nearly all cut. In Montana winter wheat harvest advanced to 80 percent completion while spring wheat progressed to 50 percent combined. North Dakota's hard wheat is 50 percent harvested and 33 percent of the durum wheat is cut. Spring wheat in Minnesota is 82 percent harvested while oats combining in this leading oat producing State reached 83 percent finished. Most oat harvesting in Wisconsin is done, but much remains. The Michigan oat harvest is 75 percent done.

Across the Nation, farmers were busy plowing and readying seedbeds for fall sowing. Seeding is active in Idaho, Colorado, South Dakota and Minnesota. About 1 percent of the Kansas winter wheat acreage is seeded while full scale sowing activity is expected soon in Oklahoma where most fields are in fair to good condition.

CORN: A week of dry weather, warm days and cool nights across the northern half of the Corn Belt helped to advance the crop closer to maturity. The crop continues in good to excellent condition in the major Corn States. About 70 percent of the corn in the leading corn producing States of Iowa and Illinois has reached the dent stage. Corn is 20 percent mature in Illinois, only 5 percent mature in Indiana and 17 percent mature in Missouri. In the States of South Dakota, Wisconsin and Michigan, maturity is lagging with about 1/3 dented and a frost-free September would be helpful.

Corn harvesting is underway in the South with fair to good prospects. The Texas corn crop is well along at 43 percent harvested. Picking is moving northward into Arkansas and Tennessee and eastward into South Carolina where 11 percent is harvested. Harvesting corn for silage is gaining momentum from the North Atlantic States to the middle Plains States.

COTTON: Pre-harvest and harvest activities made good progress in Texas with 16 percent of the crop harvested compared to 9 percent last year. Prospects across the South ranged from fair to good as another week of dry weather hastened cotton maturity and put the crop under stress from northeast Texas through northern Georgia. Ten percent of the bolls are open in Arkansas and Mississippi. Tennessee has 5 percent open bolls and 8 percent of South Carolina's cotton is open. Poisoning for insects continues. Scattered picking is underway in drier areas of Alabama and Georgia. Cotton is developing on schedule with no unusual problems in California and Arizona. New Mexico cotton is looking good and is fruiting heavily.

SOYBEANS: Prospects remained good to excellent for soybeans in the North-central States. The crop continued to develop nicely under favorable weather conditions this past week. The percentage of pods setting increased to 80 percent and over in most all major soybean States. Practically all the pods are set in the leading producing

States of Illinois and Iowa. Leaves are turning yellow on about 20 percent of the plants across the Corn Belt States with Iowa leading at 45 percent. Iowa's soybeans also are the most advanced in shedding leaves at 20 percent. In Arkansas and northeast Louisiana, soybeans are suffering from dry weather and rain is badly needed for setting and filling pods. The Mississippi crop remains fair to good condition with about 2 percent of the soybeans reaching maturity. Soybeans continue making good development in Tennessee with 90 percent setting pods.

OTHER CROPS: Sorghum harvested for grain in Texas is making good progress at 41 percent complete. Kansas and Oklahoma are just starting to harvest. Missouri sorghum at 27 percent mature is sharply behind last year's 42 percent. Tobacco harvest in South Carolina is complete, but in North Carolina harvesting burley and flue-cured are active. Burley and dark types are about 30 percent cut in Kentucky. The Virginia harvest is quite active. Georgia peanut prospects are fair to mostly good and digging is 26 percent complete while Texas peanuts are 17 percent harvested. Dry weather in Alabama prompted early digging. Digging of Idaho and Long Island, N. Y. potatoes are slow. Aroostook County, Maine potato farmers are busy killing top growth. The first cutting of rice in Texas is nearing completion, while combining a good crop has begun in Arkansas. Southwest Louisiana rice harvest is 85 percent complete. Pecan crop development is mostly fair in Georgia, fair to good in Mississippi, and excellent in Texas where harvest is expected 2 to 3 weeks earlier this year. Some cranberry bogs were flooded in Massachusetts from Tropical Storm Carrie.

Fruits and Nuts: Picking early apples was active in orchards from Arkansas to North Carolina and from Illinois to the New England States. Fall apples are coloring and sizing well in Virginia, Wisconsin, Michigan and New England. The California peach, plum and nectarine harvest is nearing completion. Harvest of almonds is increasing there with early walnuts just starting. Work is underway in Oregon orchards for an early filbert harvest. Citrus crops continue to size well and make good progress in Florida and Texas.

Vegetables: Summer vegetable harvest remains active in northern areas. The sweet corn harvest is going good again in Wisconsin, but most vegetable crops are running late. Snapbeans are being harvested in New York with good quality and yields, the pickle harvest is also at a peak. In California, Arizona, and Texas mixed vegetables continue to be harvested in seasonably light amounts.

PASTURES AND LIVESTOCK: Another week of hot, dry weather scorched ranges in California, Nevada, Utah and the Pacific-Northwest. Ranges in California are in critical to poor condition with supplemental feeding beginning to draw on hay supplies. Plentiful rains revived pastures from southern Arizona across the southern Great Plains eastward to Ohio and along the eastern seaboard from Florida to Maine. Pasture feed is good to excellent from the Northern Rocky Mountains to the Great Lakes. Southern pastures are becoming dry and need rain. Cattle and sheep in Montana are beginning movement from summer ranges.

Arlon M. Scott
Agricultural Statistician

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., September 3, 1972

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 . . .	76	- 4	T	- .9	New Orleans . . .	79	- 2	T	-1.2	OKLA. Okla. City . . .	74	- 6	1.1	+ .4
Mobile . . .	82	+ 1	T	-1.4	Shreveport . . .	82	- 1	.1	- .4	Tulsa . . .	70	- 9	2.0	+1.1
Montgomery . . .	79	- 1	0	-1.0	MAINE. Caribou . . .	65	+ 6	1.1	+ .3	OREG. Astoria . . .	64	+ 4	T	- .6
ALASKA. Anchorage . . .	---	---	---	---	Portland . . .	67	+ 4	3.0	+2.3	Burns . . .	70	+ 6	.1	0
Barrow . . .	---	---	---	---	MD. Baltimore . . .	74	+ 2	.2	- .8	Medford . . .	78	+ 9	T	- .1
Fairbanks . . .	---	---	---	---	MASS. Boston . . .	72	+ 4	4.2	+3.3	Pendleton . . .	75	+ 7	0	- .1
Juneau . . .	---	---	---	---	Chatham . . .	68	---	6.1	---	Portland . . .	73	+ 8	0	- .2
Nome . . .	---	---	---	---	MICH. Alpena . . .	63	+ 2	T	- .8	Salem . . .	71	+ 6	0	- .2
ARIZ. Flagstaff . . .	62	0	1.3	+ .8	Detroit . . .	68	- 1	.4	- .2	PA. Allentown . . .	72	+ 3	.1	- .9
Phoenix . . .	89	+ 3	T	- .3	Flint . . .	65	- 1	.3	- .4	Erie . . .	67	+ 2	.1	- .6
Tucson . . .	81	- 1	1.6	+1.2	Grand Rapids . . .	68	+ 1	.1	- .5	Harrisburg . . .	74	+ 2	T	- .7
Winslow . . .	72	- 3	T	- .3	Houghton Lake . . .	62	- 1	T	- .6	Philadelphia . . .	75	+ 4	.4	- .5
Yuma . . .	88	- 2	.3	+ .2	Lansing . . .	65	- 2	T	- .7	Pittsburgh . . .	69	0	.3	- .3
ARK. Fort Smith . . .	77	- 3	.3	- .5	Marquette . . .	64	+ 2	.1	- .5	Scranton . . .	69	+ 2	T	- .7
Little Rock . . .	77	- 3	1.6	+ .9	Muskegon . . .	67	0	0	- .7	R. I. Providence . . .	72	+ 5	3.1	+2.2
CALIF. Bakersfield . . .	86	+ 6	T	0	S. Ste. Marie . . .	61	+ 2	.2	- .5	S. C. Charleston . . .	75	- 4	1.7	+ .4
Eureka . . .	57	0	0	- .1	MINN. Duluth . . .	61	+ 2	.2	- .5	Columbia . . .	75	- 4	1.3	+ 1.0
Fresno . . .	83	+ 6	0	0	Internat'l Falls . . .	61	+ 3	.2	- .5	Greenville . . .	75	- 2	0	-1.0
Los Angeles . . .	78	+ 5	T	0	Minneapolis . . .	56	0	.1	- .5	S. DAK. Aberdeen . . .	66	- 1	.3	- .1
Red Bluff . . .	83	+ 4	0	- .1	Rochester . . .	65	- 1	.2	- .6	Huron . . .	67	- 2	.1	- .3
San Diego . . .	73	+ 1	T	0	St. Cloud . . .	64	0	.2	- .5	Rapid City . . .	64	- 4	.1	- .2
San Francisco . . .	64	+ 1	T	0	MISS. Jackson . . .	80	0	0	- .6	Sioux Falls . . .	63	- 5	.2	- .6
Stockton . . .	80	+ 5	0	0	Meridian . . .	80	0	0	- .8	TENN. Chattanooga . . .	72	- 5	T	- .8
COLO. Denver . . .	64	- 4	.7	+ .4	MO. Columbia . . .	73	- 1	.9	- .0	Knoxville . . .	73	- 2	.3	- .3
Grand Junction . . .	73	0	1.1	- .2	Kansas City . . .	71	- 5	.3	- .6	Memphis . . .	78	- 1	T	- .6
Pueblo . . .	67	- 4	1.3	+1.0	St. Louis . . .	73	- 1	.9	+ .1	Nashville . . .	77	- 1	.1	- .5
CONN. Bridgeport . . .	74	+ 5	.4	- .6	Springfield . . .	70	- 5	.4	- .5	TEX. Abilene . . .	75	- 6	1.4	+1.1
Hartford . . .	71	+ 3	.1	- .8	MONT. Billings . . .	64	- 3	.1	- .2	Amarillo . . .	68	-10	.2	- .3
D. C. Washington . . .	76	+ 2	.1	-1.0	Glasgow . . .	66	+ 3	0	- .3	Austin . . .	84	+ 1	T	- .5
FLA. Apalachicola . . .	80	- 1	.9	-1.3	Great Falls . . .	65	+ 2	0	- .3	Beaumont . . .	80	- 1	0	-1.4
Ft. Myers . . .	82	- 1	2.2	+ .3	Havre . . .	65	+ 3	0	- .2	Brownsville . . .	83	0	T	- .8
Jacksonville . . .	78	- 4	1.8	+ .1	Helena . . .	61	- 1	T	- .2	Corpus Christi . . .	84	0	T	- .6
Key West . . .	83	- 1	2.8	+1.4	Kalispell . . .	65	+ 5	0	- .3	Dallas . . .	82	- 1	.3	- .3
Lakeland . . .	80	- 2	.4	-1.2	Miles City . . .	68	0	T	- .3	Del Rio . . .	83	- 1	0	- .5
Miami . . .	81	- 1	3.0	+1.1	Missoula . . .	64	+ 3	T	- .2	El Paso . . .	76	- 2	.9	+ .6
Orlando . . .	81	- 1	4.5	+2.8	NEBR. Grand Island . . .	65	- 6	.5	0	Fort Worth . . .	82	- 1	.3	- .2
Tallahassee . . .	79	- 2	2.9	+1.3	Lincoln . . .	66	- 8	.8	- .0	Galveston . . .	84	+ 1	.1	-1.1
Tampa . . .	81	- 1	.2	-1.7	Norfolk . . .	64	- 8	.2	- .3	Houston . . .	79	- 2	.4	- .6
GA. Atlanta . . .	76	- 1	T	- .8	North Platte . . .	63	- 8	.4	0	Lubbock . . .	72	- 4	.3	- .1
Augusta . . .	77	- 2	.6	- .2	Omaha . . .	66	- 5	.6	- .1	Midland . . .	74	- 6	.2	- .3
Macon . . .	77	- 3	1.0	+ .1	Valentine . . .	66	- 2	.1	- .2	San Angelo . . .	80	- 4	1.5	+1.0
Savannah . . .	77	- 3	5.2	+3.8	NEV. Ely . . .	61	- 2	1.1	+1.0	San Antonio . . .	82	0	0	- .6
HAWAII. Hilo . . .	---	---	---	---	Las Vegas . . .	85	0	T	- .1	Victoria . . .	84	+ 2	.1	- .7
Honolulu . . .	---	---	---	---	Reno . . .	68	+ 5	.1	+ .1	Waco . . .	84	0	T	- .5
Kahului . . .	---	---	---	---	Winemucca . . .	71	+ 8	.2	+ .1	Wichita Falls . . .	78	- 5	.7	+ .3
Lihue . . .	---	---	---	---	N. H. Concord . . .	65	+ 2	.7	- .1	UTAH. Blanding . . .	67	- 1	T	- .3
IDAHO. Boise . . .	72	+ 4	T	- .1	N. J. Atlantic City . . .	75	+ 4	1.4	+ .5	Salt Lake City . . .	72	+ 2	.1	- .1
Lewiston . . .	73	+ 5	0	- .2	Trenton . . .	75	+ 4	.2	- .8	VT. Burlington . . .	68	+ 5	.1	- .6
Pocatello . . .	67	+ 1	.4	+ .2	N. MEX. Albuquerque . . .	71	- 3	.8	+ .5	VA. Lynchburg . . .	72	- 1	1.0	+ .1
ILL. Cairo . . .	75	- 3	0	- .7	Roswell . . .	---	---	---	---	Norfolk . . .	74	- 2	1.4	+ .3
Chicago . . .	71	- 1	.1	- .6	N. Y. Albany . . .	68	+ 2	0	- .8	Richmond . . .	74	0	.7	- .2
Moline . . .	71	0	.5	- .3	Binghamton . . .	67	+ 3	T	- .7	Roanoke . . .	69	- 5	1.1	+ .3
Peoria . . .	69	- 2	.4	- .3	Buffalo . . .	70	+ 4	.1	- .6	WASH. Colville . . .	66	+ 3	0	- .2
Rockford . . .	69	0	.1	- .8	New York . . .	73	0	.4	- .6	Omak . . .	67	+ 2	T	- .1
Springfield . . .	71	- 2	.7	+ .1	Rochester . . .	71	+ 4	.2	- .4	Quillayute . . .	62	+ 3	0	- .7
IND. Evansville . . .	72	- 3	T	- .6	Syracuse . . .	70	+ 3	.1	- .6	Seattle-Tacoma . . .	67	+ 5	0	- .2
Fort Wayne . . .	69	- 1	.3	- .3	N. C. Asheville . . .	69	- 3	T	- .7	Spokane . . .	69	+ 4	0	- .2
Indianapolis . . .	71	0	1.3	+ .5	Charlotte . . .	75	- 2	.1	- .8	Walla Walla . . .	74	+ 3	0	- .1
South Bend . . .	67	- 2	.5	- .2	Greensboro . . .	73	- 1	.3	- .6	Yakima . . .	70	+ 5	0	- .1
IOWA. Burlington . . .	70	- 2	.7	+ .1	Hatteras . . .	76	0	2.2	+ .8	W. VA. Beckley . . .	65	- 3	.3	- .6
Des Moines . . .	68	- 2	.2	- .8	Raleigh . . .	73	- 2	.2	- .8	Charleston . . .	70	- 2	.5	- .2
Dubuque . . .	69	+ 2	.4	- .5	Wilmington . . .	76	- 3	1.6	- .1	Huntington . . .	72	- 2	.2	- .5
Sioux City . . .	66	- 5	.4	- .2	N. DAK. Bismarck . . .	67	+ 2	0	- .3	Parkersburg . . .	70	0	1.2	+ .5
KANS. Concordia . . .	66	- 9	.8	+ .1	Fargo . . .	68	+ 2	.7	+ .2	WIS. Green Bay . . .	70	+ 4	1.6	+ .9
Dodge City . . .	65	-11	.3	- .2	Williston . . .	85	+ 1	0	- .3	La Crosse . . .	68	+ 1	T	- .9
Goodland . . .	63	- 7	.6	+ .2	OHIO. Akron-Canton . . .	69	0	T	- .6	Madison . . .	66	0	.2	- .4
Topeka . . .	69	- 6	1.4	+ .5	Cincinnati . . .	73	+ 1	.4	- .3	Milwaukee . . .	68	+ 3	.1	- .5
Wichita . . .	68	-11	1.2	+ .5	Cleveland . . .	68	- 1	.3	- .4	WYO. Casper . . .	61	- 5	.4	+ .2
KY. Lexington . . .	71	- 2	.1	- .6	Columbus . . .	69	- 2	.3	- .3	Cheyenne . . .	57	- 7	1.1	+ .8
Louisville . . .	75	+ 1	.4	- .2	Dayton . . .	70	- 2	.9	+ .3	Lander . . .	62	- 3	.2	+ .1
LA. Baton Rouge . . .	81	- 1	1.3	+ .1	Toledo . . .	66	- 2	.4	- .2	Sheridan . . .	62	- 3	.3	+ .1
Lake Charles . . .	80	- 1	T	-1.0	Youngstown . . .	66	- 2	.7	+ .1	P. R. San Juan . . .	83	+ 2	1.6	+ .2

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

CONDENSED STATE SUMMARIES

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

ALABAMA: A sunny dry week with temperatures near normal. Very little shower activity north and central. Showers extreme south mainly Wednesday when locally up to 2.00 inches fell at Headland in southeast. Temperatures varied from 95° at Selma Sunday to 57° Tuesday morning at Huntsville and Decatur. Prospects for Alabama's crops continue to deteriorate as dry weather prevailed most counties. Cotton opened prematurely many fields over State. "First" bales ginned Tennessee Valley with scattered ginnings in several south and central counties. Three-fifths corn crop matured, only 2/5 year ago. Light harvest continued primarily south and central -- yields fair to good. Soybeans made fair development with 9/10 setting pods. Earliest fields beginning to yellow. Late fields need moisture badly. Dry weather prompted early digging of peanuts. About 22,000 tons inspected through September 4, compared with nearly 19,000 year ago. Large quantity hay saved. Pastures short many counties. Grazing adequate several counties, but all pastures need rain.

ALASKA: Freezing temperatures from two locations in Tanana Valley. In Clearwater area, the low was below 32° for 5 consecutive nights. Lows in 30's all areas. Still a few high temperatures in low 70's. Precipitation well below normal all areas except immediate vicinity of Fairbanks. Cumulative precipitation better than 2.00 inches below normal at most stations. Soil moisture generally adequate. Some grain harvested with average yield. Second crop hay harvest and silage chopping continue. Potato harvest for storage progressing in Matanuska and Tanana Valleys. Yields expected to be average. Livestock in good condition.

ARIZONA: Moist air most of State bringing scattered showers all sections. Heaviest totals in White Mountains and southeast where some totals between 2.00 and 3.00 inches. Precipitation was light and widely scattered in irrigated valleys in south. Strong winds and blowing dust this section early in week. Cotton crop remains generally good. Limited defoliation underway Yuma. Insect damage normal. Recent rains Cochise County slowed maturity. Sorghum crop in all stages. Limited harvesting Yuma and Pima Counties. Limited harvest alfalfa seed continues Yuma and Graham Counties. Alfalfa hay harvest progressing normally. Yields about normal. Land preparations late summer and early fall vegetables advanced. Fall cantaloupes making good progress. Lettuce good stand Cochise County. Chili pepper harvest underway. Melons, chili peppers and mixed vegetables harvested Graham and Greenlee Counties. Cucumber harvest continued Navajo County. Lettuce making good progress Pima and Pinal Counties. Early lemon harvest underway Yuma County. Market conditions good. Insects causing problems new growth. Other citrus varieties making satisfactory development. Ranges generally poor to fair. Central, western desert areas grass supplies generally poor. Stockwater supplies adequate except northwestern areas. Cattle and calves fair to good except Mohave County where cattle and calves are poor due to drought. Sheep and lambs fair to good.

ARKANSAS: Fair dry weather and below-normal temperatures common early portion of week. Scattered afternoon showers and thundershowers developed by midweek. Precipitation midweek less than 0.25 inch. Showers and thundershowers more numerous in late week and weekend. Total precipitation ranged from zero at Ozark in northwest Arkansas and only traces along southern border to 1.83 inches at Clarendon in east-central Arkansas and 1.64 inches at Little Rock. Temperatures warmed to near normal at midweek but cooled to below normal over weekend. Departure from normal temperature ranged from +1° at Jonesboro in northeast and Eudora in extreme southeast to -5° at Fayetteville in northwest. The highest temperature was 97° at Morrilton 29th. The coolest temperature was 51° at Calico Rock. Dry weather hurting crops especially soybeans. Labor Day showers very beneficial central and southwest, but general rain needed. Cotton maturity hastened by dry weather. About 10% of bolls open, but very limited picking to date. Moisture needed for normal sizing of bolls. Poisoning for insects continued. Combining good rice crop begun, but harvest not general yet. Additional draining of fields underway. Most of soybean crop under stress from dry weather. Moisture badly needed for setting and filling pods. Grain harvest of corn and sorghums begun. Mostly fair to good yields. Baling short hay crop continued. Much land prepared for early seeding small grains; few fields wheat and oats already planted. Apple and grape harvest continued. Melon harvest about over. Marketing okra active, but volume declining. Pastures short most areas, critically short few driest counties. Most livestock fair to good despite short pastures.

CALIFORNIA: Dust storm in Bakersfield area with winds gusting to 50 m.p.h. Locally severe thunderstorms in Sierra Nevada. Temperatures above normal except in low desert. Harvest near complete safflower, field corn. Milo harvest starting. Seedbed preparation small grains. Harvest apples slow, lack color. Grape harvest continues. Thompson table raisin final stages. Recent rainfall may cause damage. Wine crushing increasing. Harvest late variety plums, freestone peaches, nectarines nearing completion. Cling peach, prune, pear complete 1 week. Almonds increasing good yield. Early walnuts harvest. Valencia oranges moving slowly. Light lemons, grapefruit, avocado, artichoke being harvested San Francisco Bay. Broccoli, cauliflower light. Cantaloupe harvest continues Firebaugh. Carrot digging continues central coast, southern California. Sweet corn picking active San Francisco Bay area, southern California. Honey dew harvest declining Sacramento, San Joaquin. Salinas, Santa Maria lettuce moderate to good supply. Onion harvest continues central coast, beginning northern area. Dehydrators bell pepper harvest continues San Joaquin Valley, moderate supplies Salinas Valley. Santa Maria chili pepper harvest underway. Sweet potato harvest continues Merced, Modesto. Potato harvest continues Delta, Santa Maria. Market tomato harvest continues southern California. Processing tomato harvest continues Sacramento, northern San Joaquin Valley. Watermelon picking

declining San Joaquin Valley. Range conditions remain critical to poor. Stubble fields and irrigated pastures being grazed off. Supplemental feeding drawing on hay supplies. Water supplies dropping. Dairying and egg production normal.

COLORADO: Rainy and cool east of Continental Divide last part of week. Temperatures averaged 2° to 6° below normal except in northwest. Significant rainfall all areas except extreme west. Some new snow on high peaks. Soil moisture supplies improved east of mountains. Surface soil moisture generally adequate eastern Plains, short to very short other areas. Wet fields delaying harvest. Winter wheat seeding also delayed, only 15% seeded, 5% emerged. Spring barley harvest virtually complete except local areas west slope. Few scattered fields oats to be cut. Corn good to excellent, maturing rapidly with 76% in dough, 35% dented. Corn for silage 9% harvested. Sorghum good -- 47% turned color, 12% ripe and 11% cut for forage. Dry beans 27% cut, 7% threshed. Sugar beets excellent. Nearly 2/3 late summer potatoes harvested. Fall potatoes good. Third crop alfalfa 36% cut. Range and pastures improved most areas, averaged fair. Livestock good.

FLORIDA: Considerable cloudiness and rain early part of week left temperatures 1° to 3° below normal. Several record-low minimum temperatures set Sunday morning in drier air, including Daytona Beach with 64°. Rainfall averaged 2.00 to 3.00 inches most of State except 1.00 inch in central sections. Corn harvest progressing. Moisture needed for soybeans in western areas. Harvest of peanuts just starting. Pastures and cattle good. Ample grass available, but frequent rains hampering hay harvest. Citrus tree condition excellent. General rainfall all areas. Heavy flushes new growth. Fruit growth good. Moderate to heavy rains throughout all vegetable areas slowed field activity. Planting of fall vegetables including snap beans, cabbage, celery, sweet corn, cucumbers, eggplant, green peppers, squash, and tomatoes continues active.

GEORGIA: Rainfall light and very spotting except in coastal area and extreme south where some heavy rains occurred. Savannah Airport had over 5.00 inches during week and more than 2.00 inches fell several other places. Most of north and central received no rain or only light sprinkles. Much of these sections continued extremely dry. Temperatures near seasonal until Friday when cooler air moved into State. Saturday morning lows coolest since spring most areas. Rapid weekend warming brought temperatures back to summer levels by Sunday. Averages were normal to slightly below normal with largest negative departures in southeast. Soil moisture reserves continued short to very short many areas. General rains badly needed. Cotton mostly fair to good. Picking underway some drier areas. Corn fair to mostly good. Light harvest underway. Peanuts fair to mostly good. Digging 26% complete. Soybeans fair to mostly good, but need moisture. Haying active. Sweet potatoes and pecans mostly fair. Pastures fair to good but need rain. Cattle good condition.

HAWAII: Shower activity heavy most parts of State. Increase in spoilage losses expected for leafy vegetables. High winds caused bruising damage to exposed crops. Farm operations however continued normal. Sugarcane and pineapple harvesting on schedule. Supplies of papayas light, but bannas increasing seasonally. Vegetables adequate. Rain beneficial to pastures. Cattle fair to good condition.

IDAHO: Temperatures averaged from 5° to 10° above normal north and southwest to 0° to 5° above elsewhere. High temperatures early in week lowered by as much as 15° by end. A few higher valley stations reported temperatures below freezing late in week. Precipitation mostly none but a few light showers north, southwest, and south-central. Scattered areas of heavy showers east. Heaviest amounts included 0.65 inch Ashton, 0.48 inch Tetonia, and 0.35 inch Pocatello. Rapid progress made in harvesting. Small grains nearly all cut except in north and east where about 75% of spring grains uncut. Potato digging slow. Dry beans about 1/3 dug. Second cutting alfalfa in windup and starting on 3d. Fruit picking going strong with over 3/4 of prunes and peaches and 1/2 of pears picked. Good start on early apples. About 15% winter wheat seeded. Pea aphids still troublesome in alfalfa in south-central. Cooler nights and maturity of crops cut demands for irrigation water.

ILLINOIS: Although maximum temperatures during midweek reached into upper 80's and low 90's, nighttime readings remained cool, resulting in weekly averages near normal in northern part of State and 3° below normal over southern Illinois. Largest weekly precipitation totals over northern 1/3 of State early in week and frequently exceeded 2.00 inches. Almost all corn reached dough stage. Nearly 70% dented, 20% mature. Condition good to excellent 88%, year ago about same. Soybeans, pods all set, about 20% turning yellow. Condition good to excellent 94%, year ago 84%. Alfalfa hay 3d cutting 45% cut. Condition mostly good to excellent. Pastures continue to improve. Apple harvest underway in South. Sunflower harvest underway many areas. Plowing for wheat 2/3 complete. Soil moisture short 19% adequate 67%, surplus 14%. Days suitable for fieldwork averaged 5.7.

INDIANA: Warm then cool. Daily highs declined from 80's most of week to high 60's weekend. Precipitation ranged from 0.20 inch in north to 1.00 inch in central and few hundredths inch in south as cold front passed through. In last 4 weeks, rainfall from 1.00 inch southeast to 5.00 inches northwest. Normal is 3.00 inches. Growing degree days since April 1, near normal central, but 200 to 300 below normal elsewhere. Seven days suitable for fieldwork. Topsoil moisture short to adequate. Subsoil short to mostly adequate. Wheatland 55% plowed, 45% average. Corn 5% mature, 45% dented or later stages, 15% not yet in dough. Ten percent mature is average. Soybeans 20% turning yellow, 30% usual. Silos 15% filled. Apples 20% picked. Tobacco 15% harvested. Pastures mostly fair.

IOWA: Cool and dry. Warm at early week, cool late week. Precipitation mostly light. Montezuma measured 4.40 inches on September 1. Corn and soybean crops mostly excellent. Major farm activities were haying with fall plowing and corn silage harvest starting. Over 5 1/2 days suitable for fieldwork. Corn maturing slower than last year. Ninety percent corn in or past dough stage, 70% in or past dent stage compared last year 80% dent. Corn 71% excellent, 26% good, and 3% fair. Ninety-five percent soybeans setting pods; 5-year average 96%. Twenty percent soybeans shedding leaves; last year 45%. Soybean 51% excellent, 46% good, and 3% fair. Third cutting alfalfa hay 55% complete, and clover hay 2d cutting nearing completion. Hay crop mostly good to excellent. Pasture 50% excellent, 45% good, and 5% fair; still above average. Topsoil moisture 88% adequate, 7% surplus, and 5% short. Subsoil moisture 90% adequate, 5% surplus,

and 5% short.

KANSAS: Second consecutive wet and unseasonably week cool. Precipitation generally 0.50 to 1.50 inches west and 0.75 to 2.00 inches east. Locally heavy rains eastern 2/3 of State; several spots had over 3.00 inches. Local agricultural flooding lower Smoky Hill River Basin, Central Kansas. Weekly mean temperatures averaged 6° to 11° below seasonal. Daytime maxima ranged from 90's southwest August 31 to 50's northwest September 1. Daily minima mostly 50's and 60's. Additional rains further improved row crop prospects. Wheat seeding underway, 1% of acreage seeded compared to average of 2%. Corn acreage 27% matured compared 33% last year and 38% average. Sixty-nine percent corn dented equal to year ago, slightly above average. Grain sorghum combining underway very limited scale southeast area. Acreage coloring is 34% compared 39% last year and 23% to 57% range past 10 years. Heading 90% complete compared 86% average. Soybeans continued favorable development. Alfalfa 3d cutting 85% completed. Fourth cutting 9%, year ago 17%, average 12%. New alfalfa seedings 37% completed compared 33% year ago, 45% average. Cattle doing well on pastures and ranges--marketings slow.

KENTUCKY: Little or no rain over much of State but totals at a few locations of 0.30 to 1.00 inch. As of 3d, over most of state from 7 to 19 days since last date with rain of at least 0.25 inch. Temperatures about seasonable until cooler last day. Maximum temperatures last day low 60's north to low 80's in southeast. Most days sunny until cloudy last day; a few showers 1st and 2d, and in some sections intermittent light rain and a few thundershowers last day. Practically all days favorable fieldwork. Soil moisture 60% short, 40% adequate. Corn maturing rapidly, 14% mature, with another 59% dented, but not mature, 27% dough or earlier. Soybeans good condition, 5% shedding leaves, 22% leaves turning yellow, 73% leaves entirely green. Burley tobacco 30% cut, dark types 31% cut. Haying continues, lespedeza 45% harvested. Pastures good condition, but general rain needed for late-season growth.

LOUISIANA: Temperatures averaged near to 3° below normal. Skies mostly clear until late in week. Showers less frequent than last week and weekly rain totals none to less than 0.25 inch most stations. Temperature extremes: 97° at Winnsboro and 59° at Ashland, both on Thursday. Greatest 1-day rain total 1.27 inches measured at Baton Rouge Saturday morning. Fieldwork active all areas. Insect control, haying, land preparation for fall pastures, rice combining, sweetpotato digging, and sugarcane planting active. Rice harvest 85% complete in southwest. Sweetpotato digging continued in central and northeast. Cotton in northeast hurt by continued dry weather. Soybeans in northeast need rain, prospects generally good in southwest. Sugarcane made good growth and planting progressed rapidly. Cabbage transplanting continued in New Orleans area. Pasture feed about average statewide. Livestock continued in good condition.

MARYLAND AND DELAWARE: Temperatures averaged normal to 3° above normal. Extremes: 80's, 50's and low 60's. Rainfall mostly light except in southern areas especially southern half eastern shore where Tropical Storm Carrie on 2d gave some locally heavy rainfall. Crisfield reported 4.50 inches. August 1972 temperatures averaged near normal, rainfall below normal to much below normal. Soils dry most areas. Corn 14% mature, last year 27% and average 20%. Silo filling underway, but

behind usual pace. Soybean progress near normal 80% podding. Late soybeans need rain. Tobacco harvest lagging, about 1/2 cut, usual 3/4 cut. Preparation for fall seeding active. Some alfalfa seeded, but many waiting for moisture. Vegetable and fruit harvest continues. Important delicious varieties of apples will peak after Mid-September.

MICHIGAN: Mild until scattered showers and colder temperatures moved over Michigan on weekend. Temperature averages: normal to 1° above normal Upper Peninsula; Lower Peninsula, 3° above normal north to 2° below normal central interior sections. Precipitation totals: 0.10 inch west to 0.50 inch east Upper Peninsula; generally less than 0.10 inch north and 0.25 to 0.65 inch south. Harvest of small grains, hay, and potatoes speeded up. Fall crops developed well. Average 4.5 days suitable for fieldwork. Soil moisture adequate to surplus. Oats over 75% harvested, but wet fields still delaying harvest local areas. Corn and soybeans developed well, but maturity still lagging. Corn about 32% dented or more mature compared with 60% last year and average of 35%. About 12% soybeans turning color or shedding leaves compared with nearly 50% last year. Sugar beets and late potatoes developing well. Nearly 1/4 of potatoes harvested. Over 70% 2d cutting and 10% 3d cutting hay made. Pasture feed above average. Fall and winter apples sizing and coloring well. Fall vegetable harvest active.

MINNESOTA: Temperatures 2° below normal south; 3° above normal in north. Extremes: 98°, 29°. Precipitation generally less than 0.25 inch except in 100-mile strip from Grand Forks-Fargo eastward where 0.50 inch on 30th. Small grain harvest good progress most areas. Corn good to excellent south. Topsoil moisture short to adequate southern half; adequate to surplus elsewhere except very short northern part of northwest district. Corn dented 40%, normal 35%. Corn safe from frost 7%, normal 6%. Soybeans turning 22%, normal 51%, shedding leaves 2%, normal 12%. Small grains combined: spring wheat 82%, normal 84%; oats 83%, normal 96%; barley 91%, normal 93%; flax 24%, normal 51%. Small grains seeded. Winter wheat 7%, normal 28%; rye 16%, normal 22%.

MISSISSIPPI: Scattered thundershowers early in week followed by sunny, warm, and dry weather except for a few scattered light showers in south or coastal Mississippi late in week. No rain at some stations but most reported 1 day with amounts generally under 0.30 inch. At McComb, 1.63 inches of rain was measured morning of August 26. At Greene County Fire Tower, 3.41 inches of rain was reported after noon of September 1. Weekly temperature averages generally a few degrees below normal. Extremes: 98° at Merrill Saturday and Monday; 56° at Holly Springs Monday and Tuesday. Over weekend, increasing cloudiness followed by showers mostly the northern part of State. Generally soil moisture very short to mostly short. Crop condition slipped some areas and improved others, but remained fair to good. Soybeans fair to good, 80% podding, 5% shedding and 2% mature. Cotton very poor to mostly good with 10% open. Corn fair to good, 47% mature, 9% harvested. Rice, hay crops, pasture, livestock and pecans fair to good. Days suitable for fieldwork averaged 6.

MISSOURI: Warm most of week, turning sharply cooler at end of week. Temperatures 3° below normal and 2° above normal south. Rainfall at end of period very spotty. Heaviest amounts north half of State with some stations receiving almost 1.00 inch. Much of southern half of State

received no precipitation. Six days suitable for fieldwork. Corn mostly good, 83% dented, 17% mature. Last year 86% dented, 36% mature. Soybeans mostly good, 88% setting pods, 16% turning color; year earlier 87% setting pods with 20% turning color. Grain sorghum 27% mature, sharply behind 42% year ago. Cotton bolls 10% opening, ahead of last year. Third cutting of alfalfa 85% complete. Pastures good northwest and Bootheel, poor central, fair elsewhere. Soil moisture 54% short, 45% adequate, 1% surplus.

MONTANA: Temperatures averaged 4° above normal western divisions to 2° below normal south-central Plains. Hot first of the week turning cooler midweek. Little or no precipitation northern sections, mostly light spotty showers south. Small grain harvest made good progress. Winter wheat 80% harvested. Barley 60% harvested, 35% ripe, 5% turning. Spring wheat 50% harvested, 35% ripe, 15% turning. Average date to begin seeding winter wheat September 9. Range feed supply adequate eastern 1/3 and south-central, short to adequate elsewhere. Livestock shrinkage less than normal to normal eastern 1/3, north central and central, normal elsewhere. Five percent cattle and 5% sheep moved from summer range. Haying active 2d cutting 65% complete, wild hay harvest 90% complete. Dry bean harvest started. Corn silage harvest starting.

NEBRASKA: Temperatures averaged 2° to 7° below normal with rainfall averaging about 0.50 inch statewide. Warm weather, with maximums in the 80's and low 90's first of week with cool showery weather August 30 through September 3. Topsoil and subsoil moisture supplies adequate most areas. A few irrigators have completed operations for this year. Both irrigated and non-irrigated corn good to excellent. About 60% has reached dent stage with 10% matured, near normal. Harvesting corn for silage getting underway. Sorghum heads turning color on 50% of acreage compared to 50% normal. Leaves are turning color on 35% of soybeans; normally 30%. Weather conditions and wet soils limited tillage of seedbeds. Some legumes and rye planted and little wheat seeding in western areas. Livestock generally good.

NEVADA: Temperatures averaged 4° above normal in northwest, near normal elsewhere. Light to heavy precipitation all divisions from trace at Yucca to 1.11 inches at Ely. A man was struck and killed by lightning in Las Vegas on August 27. Second cutting alfalfa hay mostly complete and 3d cutting underway in some western and central areas. This cutting in southern areas about 1/3 complete. Harvest of other hays nearing completion. Harvest of small grains remains active, nearly 80% complete. Alfalfa seed good condition with harvest about 1/5 complete. Livestock good. Ranges quite dry and need moisture.

NEW ENGLAND: Warm and dry until Tropical Storm Carrie September 3. Temperature averaged 2° to 6° above normal. A few showers in west and north at beginning of week. Carrie brought general rain and scattered thunderstorms Sunday to east and washing and flooding rains to extreme southeast. Falmouth, Mass., had 8.33 inches and Martha's Vineyard up to 10.00 inches. Totals varied from none to 0.25 inch in west to mostly 1.00 to 3.00 inches in east except up to 10.00 inches in extreme southeast. Considerable damage from falling trees and limbs along the Massachusetts coast and in Rhode Island. Many boats lost or damaged.

One man presumed lost from a boat capsized off Plymouth, Mass. Some coastal homes undermined by high waves and erosion from heavy rain. Many cellars flooded. Second consecutive good week for haying. Quality of 2d and 3d cuttings better than 1st. Silage corn making good progress with some cutting southern areas. Rains over weekend from Tropical Storm Carrie revived pastures. Potato farmers Aroostook County, Maine, busy top killing. Crop looks good. Apples taking on size and coloring well with cool nights. Picking early apples, peaches, and pears active. Some cranberry bogs flooded from tropical storm. Too early to assess loss. Seasonal vegetables at peak harvest.

NEW JERSEY: Temperatures variable during week ranging from low 50's on 1st to near 90° on 29th and 31st. Most stations averaged near seasonal normals with a few as much as 3° to 5° above normal. Precipitation chiefly from Tropical Storm Carrie which passed northward some distance off New Jersey coast. Coastal division averaged 1.00 inch of rainfall, central and southern interior 0.80 inch, and northern counties 0.30 inch. The greatest total was 2.03 inches at Millville. No reports of storm damage. Rain over weekend but some areas could use additional amounts. Fall vegetable crops are growing nicely. White potato harvest advancing. Scattered sweet potato harvest begun. Harvest of Red Delicious apples will begin this week. Cranberries are sizing nicely. Rain beneficial to field corn and soybeans. Early soybeans setting pods. Silage making continues.

NEW MEXICO: Scattered showers through week more frequent and heavier in September. Local showers of 1.00 to 2.00 inches caused flash flooding in south. Totals generally more than 1.00 inch except in northwest. Temperatures averaged near normal in west and below normal in central and east. Warm to midweek, then cooler. Moisture generally adequate. Planting winter wheat very active. Sorghum grain excellent. Cotton good condition and fruiting heavily. Alfalfa hay harvest delayed due to rain. Harvest of other crops very active. Ranges good to excellent. Livestock good to excellent.

NEW YORK: Dry sunny week as warm temperatures continued through 2d. Maximums mostly upper 70's to mid-80's except cooling to near 70° west and north on 3d. Coolest minimums upper 40's to low 50's Upstate and near 60° coastal on 31st. Precipitation very light all sections except coastal where storm off shore averaged 0.50 inch on weekend. Excellent week for fieldwork; good progress made in combining oat crop. Corn mostly in milk stage. Harvest of 2d and 3d cutting alfalfa still very active. Pastures generally fair. Favorable weather permitted steady harvest progress of late seed onions in Orange County. Pulling of onions started in most central and western sections. Long Island potato digging slowed as dry conditions continued. Some digging of early potato varieties started in Steuben County. Harvesting snap beans planted after the storm with good quality and yields. Pickle harvest at peak. Harvest of early apple varieties continues in the Hudson Valley. Picking of Bartlett pears started.

NORTH CAROLINA: Temperatures averaged near normal with a slight cooling trend. Showers daily east portion with totals 1.00 to 4.00 inches averaging 1.50 inches. Tapering off westward to mostly 0.50 inch or less mountains. Soil moisture short to very short except mostly adequate central and

southern coastal plains. Crop conditions holding--corn, peanuts, soybeans, sweet potatoes, commercial apples mostly good. Pastures, hays, cotton--fair to good. Marketing flue-cured tobacco active. Harvested corn, sweet potatoes, burley tobacco, commercial apples, fall vegetables.

NORTH DAKOTA: Warm and humid through Wednesday followed by cooler weather remainder of week. Very cool Labor Day with maxima in 50's and 60's. Frost in a few local areas 1st and 5th. Mostly fair except scattered thunderstorms eastern half of State late Wednesday with rainfall amounts variable from trace to 1.00 inch. Harvesting operations made good progress. About 1/2 hard wheat and over 1/3 durum acreage harvested. Oats and barley combining about 3/4 completed. Flax and dry edible bean harvest underway. Over 1/3 rye planted.

OHIO: Low temperatures generally ranged from 50° to 70°. The lowest was 46° at Oberlin on 30th. Normal lows are 56° to 63°. High temperatures ranged from lower 60's to lower 90's. On the 3d, Columbus recorded a high of 63°. Cincinnati 92° on 31st was highest temperature for week. Normal highs are 78° to 84°. Little or no rain fell until 1st. Only significant amounts occurred on 3d. During the week ending September 1, six days favorable for fieldwork. Soil moisture supplies 26% short, 69% adequate and 5% surplus. Corn crop is 55% dented, but not hard compared to 70% average. About 10% corn crop is mature and safe from frost, usually 20% is matured by September 5. About 15% corn silage harvested compared to 30% last year. 80% soybean crop has pods set with leaves green, less than 10% with leaves yellow. Second cutting clover-timothy 85% complete and 3d cutting alfalfa 40% harvested. Potato crop 35% dug equal to average progress. Tobacco acreage 90% topped and 20% harvested. Average harvesting progress is 35%. Land intended for winter wheat planting about 1/2 plowed.

OKLAHOMA: Temperatures ranged from 3° below normal south-central and southeast to 10° below normal north-central. Precipitation averaged 0.30 inch southeast to 1.40 inches north-central. Row crop condition remains fair to good, but soil moisture supplies improved. Surface soil moisture is 1/3 adequate with the balance short. Subsoil moisture is 16% adequate. Additional rainfall still needed all areas. Crop development about same as year earlier except cotton somewhat ahead. Wheat seeding slightly over 10% completed in Panhandle, full scale activity expected shortly. Only limited seeding other areas, but seedbed preparation and fertilizer application active. Most fields fair to good for seeding. Around 1/2 corn crop mature, harvesting in eastern 2/3 becoming widespread. 3/4 of sorghum grain crop in dough stage, 1/4 mature, 1% harvested. Around 97% cotton crop setting bolls, but only few open. Soybean crop is 2/3 setting pods, 2% mature. Slightly over 9/10 of peanut crop spiking, 5% mature. Few scattered fields dug east-central Oklahoma. Recent rains expected to improve growth of alfalfa 4th cutting 1/3 completed. Pastures greening up in several areas, but most are still poor to fair. Supplemental feeding continues. Livestock holding up well.

OREGON: Warming trend continued through mid-period, cooler at close. Temperatures averaged 1° to 4° above normal south coast, 6° to 12° above normal elsewhere. Minima 31° northeast, 37° to 57° elsewhere. Maxima 74° to 75° south coast, 86° to 106° elsewhere. Precipitation

limited to isolated thundershowers south-central on Tuesday totaled up to 0.05 inch. Grain harvest nearly over except the late-seeded spring grains and late areas at higher elevations. Pole bean picking nearly completed. Sweet corn and beets are coming in volume. Potato digging continues in Columbia Basin and Willamette Valley, is starting at Klamath Falls. Vines are going down in central Oregon. Bartlett pear harvest is nearly over, Anjous just getting underway. Orchard work underway for an early filbert harvest. Cranberries coloring on schedule, but sizing slow in some bogs. Soil moisture is short, ranges dry. Livestock are fair to good.

PENNSYLVANIA: Quite dry week. Much of central and east had no measurable rainfall. Northern counties and western 1/3 of State reported mostly under 0.10 inch, with 0.25 to 0.50 inch few locations southwest. Southeast corner received up to 0.40 inch from Tropical Storm Carrie. Temperatures 2° to 4° above normal south-east. 1° to 2° above normal elsewhere, except 1° to 2° below normal Upper Susquehanna. Extremes: 88°, 41°. Dry weather continues to slow crop growth and hinders fall field work. Fall potato harvest just beginning. Corn starting to dent, mostly dough stage. Fall plowing over 1/4 finished behind schedule. Hay quality good, quantity low. Pasture 3/4 below average. Tomatoes and sweet corn for processing late.

PUERTO RICO: Rainfall averaged 1.05 inch or 0.81 inch below normal. Heaviest rains in western section with 4.09 inches highest weekly total. Light hail in small area with no crop damage reported. Light to moderate rains in northern, eastern, and central interior zones. Little or no rain south-central coast. Crop moisture conditions near normal all zones except south coastal where moderate to severe agricultural drought continues centered in small areas along central portion southern coast. Temperatures averaged 80° to 82° on coast and 75° to 76° interior divisions with mean departure of about 1.0° below normal. Highest maximum 95°, lowest minimum 59°. Young sugar cane development improved by recent rains in non-irrigated zones. Coffee harvesting progressing well. Tobacco zones continue seedbeds preparation and some planting started. Pastures good to excellent all zones except fair in northwest and poor in south-central. Minor crop planting continued with good abundance of avocados and plantains on market.

SOUTH CAROLINA: Little to no rain in Piedmont, about 1.00 inch in the Sand Hills and from 2.00 to 4.00 inches in Coastal Plain. Hilton Head had 6.30 inches. Temperatures averaged 2° to 3° above normal in Piedmont. Clouds and rain kept the Coastal Plain temperatures down to normal. Preparing land for fall planting. Soil moisture very short western Piedmont, too wet lower coastal plain. Tobacco harvest complete. Cotton fair to good condition, 98% set bolls, 8% open bolls. Last year 20% open bolls. Corn good to excellent condition--98% in or past dough, 82% mature, 11% harvested. Last year 78% mature, 8% harvested. Soybeans good to excellent, 76% bloomed, 58% set pods, 4% leaves turning. Some premature shedding result of dry condition. Last year 94% blooming, 70% set pods. Peanuts 51% harvested compared with 40% last year. Lespedeza and pastures good condition. Peaches, watermelon harvest complete. Apple harvest 30% complete, compared with 42% last year. Grain sorghum, pastures, hay crops good condition. Pecans prospects indicate short crop.

SOUTH DAKOTA: Weekly temperatures averaged from near normal to 6° below normal. Extremes ranged from 35° at Shadehill Dam on 1st to 101° at Salem on 28th. Precipitation fell as showers and thunder-showers middle and end of week. Amounts ranged from none to about 1.00 inch, with most areas receiving 0.30 inch or less. Topsoil moisture generally short except for eastern edge of State and southwest corner. Fall plowing delayed by late harvest and dry conditions. Fall seeding slightly slower than normal; 6% winter wheat seeded compared with 7% last year; rye 9% seeded compared to 20% last year. Row crop development continues to lag with 35% of corn denting compared to 100% last year and 69% 5-year average. Sorghum 30% heads turning compared with 74% last year and 45% average. Southern corn leaf blight identified in 10 southeastern counties. Flax harvest continuing with 47% harvested--yield generally below previous year. Grasshoppers numerous over State and causing some severe damage particularly in new alfalfa. Livestock remain good to excellent. Flies and pinkeye still problem. Yearling steers and lambs moving to market.

TENNESSEE: Warm and dry. Temperatures averaged 2° to 4° below normal, the largest departures in southeast. Rainfall very spotty with totals generally less than 0.25 inch. Tobacco and hay silage harvesting major farm activity. Some fall seeding being done. Soybean development good. About 90% setting pods and early fields are turning yellow. Corn prospects continue good--over 85% dented, 30% mature. Silage harvest continues and harvest for grain getting underway. Cotton crop mostly good--over 5% open bolls. Tobacco harvest progressed rapidly aided by dry weather. Burley and dark-fired harvest each 60% complete. Fall seeding of wheat and barley is over 5% complete. Nearly 10% of oats are seeded. Fall plowing 55% complete. Lespedeza hay harvest 65% complete. 5.2 days favorable for fieldwork. Soil moisture 61% short, 36% adequate and 3% surplus.

TEXAS: Cotton pre-harvest and harvest activities are making good progress through most of State. Sorghum harvest complete in southern portion of State and making good progress elsewhere. First cutting of rice nearing completion with second cutting to start in about 2 weeks. Corn harvest is well along and has reached the Cross Timbers. Peanut harvest making good progress. Major crops percent harvested: Cotton 16, a year ago 9; sorghum 41, a year ago 44; corn 43, a year ago 42; peanuts 17, a year ago 12; rice 1st cutting 94, a year ago 91. A slow moving cold front produced contrasting weather in Texas latter half of week. Northwest Texas experienced cool, cloudy weather while southern half of State remained warm and humid. Amarillo's high temperature of 57° Saturday contrasted with 100° at McAllen. Showers frequent and heavy on Low Plains. High Plains, light supplies of potatoes remain available. Cucumber supplies decreasing. Green pepper picking continues. Carrot digging active. Trans-Pecos, picking of tomatoes and green peppers continues. Cabbage showing good growth. Central and East Texas, digging of dryland sweetpotatoes continues. Irrigated crop outlook remains good. Only light supplies of melons available. North Texas, decreasing supplies of cantaloupes and watermelons remain available. San Antonio-Winter Garden area, land preparation and planting of fall vegetables are still active. Laredo, tomatoes and green peppers continue to show good growth. Lower Rio

Grande Valley, ample water supplies are encouraging additional vegetable plantings. Pecan crop development continues excellent. Harvest should be two to three weeks earlier this year than last. The 1972-1973 citrus crop continues to size well and make good progress.

UTAH: Recurring periods of precipitation various sections of State. Accumulated amounts range from little or none to well over 1.00 inch at a few stations in south-central Utah. Average temperatures ranged from near normal to 7° below normal except 2° above normal Uinta Basin. Soil temperatures at 4-inch depth ranged from upper 60's in Cache Valley to near 70° Salt Lake Airport and Richfield, and mid-80's St. George. Good harvest weather most sections. Grain crops all harvested except small acreages at high elevation. Third crop alfalfa hay harvest 20% completed. Dry onions being lifted. Sweet corn and snap bean harvest about 90% completed. About 1/3 of tomato crop now picked. Potatoes and sugar beets making good to excellent growth. Early potato harvest in Davis County about completed. Corn for silage and grain rated fair to good. Few peaches and pears surviving this year's serious freeze now being picked. First crop alfalfa seed harvest in full progress. Second crop harvest will start next week. Cattle and sheep thinner than usual as summer ends, because of prolonged extreme drought. Feed on ranges now in use, poor most areas. Feed prospects on fall and winter range lands rated poor to very poor all areas except Cache County rated fair.

VIRGINIA: Temperatures below normal. Precipitation mostly light and scattered showers at beginning and over weekend. Days suitable for fieldwork averaged 5.7, highest this year. Top soil moisture short. Limited harvest of high moisture corn in Tidewater. Silage harvest becoming general east of the mountains. Soybeans blooming, pods setting well. Spraying with insecticides was active. Peanuts sprayed with fungicides to control leaf spot. Burley tobacco 15% harvested, flue-cured 60%, fire-cured 45% done and sun-cured 40%. Haying active, yields and quality good. Pastures contain plenty of feed, but becoming dry. Plowed and prepared seed beds. Tomatoes, cabbages and watermelons harvested. Fall apples sizing well.

WASHINGTON: Western Washington: Dry and warm with temperatures 2° to 4° above normal brought some moisture stress. Sweet and silage corn continued in good shape. Harvesting of truck crops continued. Blackberry harvest active with huckleberries scarcer than normal. Pears being picked along Columbia. Bulb growers started planting. Eastern Washington: Sunny with no rain. Hot first of week. Bartlett pear harvest ending as peaches, prunes being harvested. Harvest of bean and silage corn crops continued. Potatoes being dug. Sweet corn picked in Yakima Valley while hops, tomatoes, and fresh vegetables harvested. Winter wheat crop nearly completed. Livestock in good condition. Land preparation for fall seeding active. Small grain harvest finishing.

WEST VIRGINIA: Generally dry week with temperatures highest at beginning, lowest at end. Light showers September 3 to 4 as cold front slowly crossed State from northwest. Soil moisture varied but mostly adequate. Some areas needing rain. Excellent week for making hay with average of 5.3 days suitable for fieldwork.

About 55% 2d growth hay cut. Corn fair to good with 48% in dough or dent stage. Potato harvest active. Most tobacco topped and in fair to good condition. Pastures and hay remain in good condition.

WISCONSIN: Temperatures averaged near normal. Warm first half of week. Cool second half. Rain-fall light most areas except locally heavy in some east-central counties Thursday evening. Considerable amount of fieldwork done in spite of wet ground. Oat combining mostly completed south and west. Much still to be done east and north. Second crop haying also active again. A few farmers have started on their 3d cutting. Corn crop looking very good, but is a little behind schedule. Only about 1/3 dented. A frost-free September needed. Growth of corn very tall. Some blight scattered areas after wet, cloudy weather of August. Tobacco harvest underway. Heavy crop of high moisture content. Soybeans doing good, but need more warm weather. Sweet corn harvest going good again most areas. Most other vegetable crops running late. Apple crop looks heavy. Pastures excellent. Soil moisture 70% adequate and 30% surplus.

WYOMING: Showers were general, light except moderate to heavy southeast quarter. Horse Creek reported most moisture with 1.33 inches. Temperatures averaged near normal western half, a little below normal eastern half. Maxima mostly 75° to 80° west of Divide and Upper Platte Drainage, 80's to low 90's elsewhere. Minima mostly high 20's and 30's west of Divide, 35° to 45° east. Temperature extremes: 91° at Basin and Sheridan Field Station and 24° at Bondurant. Major agriculture included harvesting dry beans, small grains, hays, and corn silage, irrigation, summer fallowing, drilling of winter wheat, and some movement of livestock to fall pasture. Winter wheat sowing is about 1/3 completed. Potato harvest just beginning. About 20% of dry beans windrowed. Corn for grain 25% milk stage, 65% in dough stage, and about 10% denting. Surface soil moisture supply adequate.

Heating Degree Days (Base 65° F.)

AUGUST 1972

ALA. Birmingham	0	MAINE, Caribou	145	OKLA. Okla. City	0
Mobile	0	Portland	53	Tulsa	0
Montgomery	0	MD. Baltimore	0	ORIG. Astoria	65
ALASKA, Anchorage	252	MAS. Boston	4	Burns U.	41
Barrow	750	Nantucket	20	Medford	11
Fairbanks	---	MICH. Alpena	108	Pendleton	4
Juneau	293	Detroit	28	Portland	6
Nome	365	Flint	40	Salem	42
ARIZ. Flagstaff	78	Grand Rapids	41	PA. Allentown	11
Phoenix	0	Houghton Lake	92	Erie	47
Tucson	0	Lansing	56	Harrisburg	1
Winslow	0	Marquette U.	126	Philadelphia	20
Yuma	0	S. Ste. Marie	122	Pittsburgh	11
ARK. Fort Smith	0	MINN. Duluth	146	Scranton	0
Little Rock	0	Internatl Falls	74	R.I. Providence	10
CALIF. Bakersfield	0	Minneapolis	52	S.C. Charleston	0
Eureka U.	204	Rochester	71	Columbia	0
Fresno	0	St. Cloud	76	Greenville	0
Los Angeles U.	0	MISS. Jackson	0	S. DAK. Aberdeen	35
Red Bluff	0	Meridian	0	Huron	38
Sacramento	0	Vicksburg U.	---	Rapid City	43
San Diego	0	MO. Columbia	0	Sioux Falls	43
San Francisco	42	Kansas City	0	TENN. Chattanooga	0
COLO. Denver	15	St. Louis	0	Knoxville	0
Grand Junction	0	Springfield	9	Memphis	0
Pueblo	0	MONT. Billings	26	Nashville	0
CONN. Bridgeport	2	Glasgow	11	TEX. Abilene	0
Hartford	9	Great Falls	23	Amarillo	0
D.C. Washington	0	Havre	9	Austin	0
FLA. Apalachicola	0	Helena	49	Beaumont	0
Ft. Myers	0	Kalispell	26	Brownsville	0
Jacksonville	0	Miles City	10	Corpus Christi	0
Key West	0	Missoula	39	Dallas	0
Lakeland U.	0	NEBR. Grand Island	9	Del Rio	0
Miami	0	Lincoln	6	El Paso	0
Orlando	0	Norfolk	20	Fort Worth	0
Pensacola U.	0	North Platte	16	Galveston U.	0
Tallahassee	0	Omaha	12	Houston	0
Tampa	0	Valentine	38	Lubbock	0
GA. Atlanta	0	NEV. Ely	86	Midland	0
Augusta	0	Las Vegas	26	San Angelo	0
Macon	0	Reno	6	San Antonio	0
Savannah	0	Winnemucca	26	Victoria	0
IDHO, Boise	0	N. H. Concord	82	Waco	0
Lewiston	1	N. J. Atlantic City	9	Wichita Falls	0
Pocatello	9	Tranton U.	0	UTAH, Blanding R	---
ILL. Cairo U.	0	N. MEX. Albuquerque	3	Salt Lake City	0
Chicago	12	Roswell	0	VT. Burlington	69
Moline	7	N. Y. Albany	38	VA. Lynchburg	0
Peoria	19	Binghamton	56	Norfolk	0
Rockford	26	Buffalo	33	Richmond	0
Springfield	11	New York	0	Roanoke	1
IND. Evansville	3	Rochester	24	WASH. Colville	31
Fort Wayne	0	Syracuse	23	Omak	---
Indianapolis	4	N. C. Asheville	0	Quillayute	131
South Bend	35	Charlotte	0	Seattle-Tacoma	32
IOWA, Burlington	6	Greensboro	0	Spokane	0
Des Moines	16	Hatteras R.	0	Walla Walla U.	3
Dubuque	20	Raleigh	0	Yakima	11
Sioux City	5	Wilmington	0	W. VA. Beckley	45
KANS. Concordia	2	N. DAK. Bismarck	39	Charleston	2
Dodge City	0	Fargo	41	Huntington	3
Goodland	24	Williston U.	25	Parkersburg U.	54
Topeka	0	OHIO, Akron-Canton	16	WIS. Green Bay	42
Wichita	0	Cincinnati U.	1	Madison	32
KY. Lexington	1	Cleveland	27	Milwaukee	67
Louisville	0	Columbus	18	WYO. Casper	75
LA. Baton Rouge	0	Dayton	6	Cheyenne	46
Lake Charles	0	Toledo	36	Lander	28
New Orleans	0	Youngstown	39	Sheridan	28
Shreveport	0				

Preliminary reports from airport locations, except those marked U for urban and R for rural.
*Estimated.

WORLD WEATHER AND AGRICULTURE

Introductory Note: Weather plays an important role in determining world food supplies. These food supplies have a definite effect on the supply and demand for U.S. imports and exports. Therefore, in our continuing effort to make the Bulletin more useful and informative, we begin a new feature this week which gives pertinent information regarding the influence of weather on agricultural production around the world. Using information from various sources, reviews of important events and conditions will be presented. When justified, specific problems will be discussed in detail. The series will be published in the first issue of each month, or more often when significant events or developments occur.

CANADIAN TOBACCO CROP HURT BY BAD WEATHER

The Ontario Flue-Cured Tobacco Marketing board recently estimated this year's tobacco crop could be 180 million pounds or less. The target production earlier estimated was for a crop of 200 million pounds, about the same as the 201.8 million pounds for the 1971 crop. Due to unfavorable weather, including serious damage by frost, much of the crop had to be replanted and quality may be affected.

About 40% of the Canadian crop is exported, mostly to the United Kingdom. The Imperial Tobacco Company, a major purchaser of the Canadian leaf for the British market, also purchases heavily from the U.S. crop, which is currently selling for record high prices.

Foreign Agriculture
August 21, 1972

RAIN DAMPENS MEXICO'S
SORGHUM OUTTURN PROSPECTS

Wet weather in the State of Tamaulipas, which produces about half of Mexico's sorghum, has reduced the crop sharply. As a result, Mexico may harvest only 1.4 million tons, the same as last year, and possibly will need to either import sorghum or divert corn for feed purposes as was necessary in the past season. The Tamaulipas harvest was expected to be 1.1-1.2 million tons but now may be only 500,000 tons.

Foreign Agriculture
July 10, 1972

USSR: WEATHER AND CROPS

In several southern and central areas of the Ukraine, in Krasnodar Kray, southwestern Stavropol Kray, and in southern Moldavia, corn sown in mid-April is tasseling two weeks earlier than usual, and in Belgorod and Voronezh about 20 days early. The earlier than usual development of corn could also help insure the ripening of corn for grain along the northern fringe of the corn belt. Often large areas of corn are harvested for silage when it appears that it will not mature for grain.

Soil moisture conditions are excellent in the Virgin Lands. While the crop in western Siberia and northern Kazakhstan is by no means assured, the situation is brighter than earlier this spring. Problems that could still affect spring grains include "sukhovey" (hot, dry winds) that often plague this area, and whether the growing season will be long enough to insure total development and timely harvesting of the spring grain crop. Lodging could also be a major problem in parts of European USSR.

COOL SUMMER DELAYS CROPS
IN ENGLAND AND WALES

July continued the pattern of June in that most of the time the weather was cold and wet except for a brief warm, dry spell in the middle of the month. Crops everywhere were late.

Crops were in surprisingly good condition despite the weather. Potatoes were generally sound and healthy with very little blight and sugarbeets were doing well. Haymaking was late and poor drying conditions and over-maturity in late cuts are expected to reduce the feeding quality. Pastures have been adequate and live-stock have continued to make good progress with few disease problems. There was generally insufficient rain for the optimum growth of crops and grass, but enough to make haymaking difficult. Cereal crops look satisfactory but prospective wheat yields have been reduced by heavy attacks of yellow rust. Corn harvesting is expected to be a fortnight (two weeks) later than usual. Digging of early potatoes proceeded well and growth of the main crop improved after a slow start. There is generally no shortage of grazing.

Monthly Agricultural Report
Ministry of Agriculture
August 10, 1972

PROSPECTS POOR FOR ITALIAN ALMOND CROP

Adverse weather following an unusually early blossoming has caused extensive damage (in the form of early fruit dropping and poor pollination) to Italy's 1972 almond crop. Current forecasts call for a harvest of 22,000 short tons (in-shell basis), slightly above last year's 19,000 ton crop but well below the normal range of 40,000-42,000 tons. Exports during the 1971-72 (September-August) are expected to total 15,500 tons, compared with 19,500 tons the preceeding season.

Foreign Agriculture
July 10, 1972

POLISH GRAIN SITUATION

Except for relatively small areas of Poland, weather conditions this spring and summer have been better than average for cereal production. This spring soil moisture conditions across the country were substantially below normal, and concern over the receipt of timely and adequate rainfall during the growing season was great. However, ideal weather conditions have alleviated this concern. Losses from winterkill and other causes have also been unusually low. If harvest conditions are satisfactory, it is anticipated that total production will set new records.

INDEX OF SPECIAL ARTICLES IN WEEKLY WEATHER AND CROP BULLETIN

January to September 4, 1972

Bulletin Number	Subject Title	Author
1	Index of Special Articles in Weekly Weather and Crop Bulletin in 1971	L. W. Dye
4	A Report of the Phenological Survey in the Western Region of the United States, 1971	Joseph M. Caprio
9	Items Published Regularly in Weekly Weather and Crop Bulletin	L. W. Dye
14	Growing Degree Days and the 1972 Growing Season	R. E. Felch
15	Spring Freeze Probability and the Length of the Growing Season	R. E. Felch and J. J. Rahn
15	Growing Degree Day Accumulations Ahead of Normal	R. E. Felch
15	Serious Outbreak of Screwworm Occurring in Texas and Mexico	R. E. Felch
15	Crop Moisture Index	W. C. Palmer
19	Drought in the Southwest Again	W. C. Palmer
21	Corn Belt Warm and Sunny	R. E. Felch
22	Weekly Weather and Crop Bulletin Centennial	L. W. Dye
24	Black Hills Disaster	Charles A. Hudson
24	Growing Degree Days for Hybrid Corn Production	Warren M. Wisner
25	Late Freeze Hits Michigan	Norton D. Strommen
28	Hurricane Agnes	Richard M. DeAngelis
30	Screwworm Epidemic Continues to Worsen	R. E. Felch
30	100 Years of the Weekly Weather and Crop Bulletin	L. W. Dye
34	Black Hills Disaster - June 9 and 10, 1972	Walter Spuhler
36	World Weather and Agriculture	R. E. Felch
36	Index of Special Articles in Weekly Weather and Crop Bulletin, January to September 4, 1972	L. W. Dye
36	100 Years of the Weekly Weather and Crop Bulletin	L. W. Dye
36	Agricultural Weather Centennial	L. W. Dye

CENTENNIAL EDITION

Page	Title	Author
2	A Century of Cooperation	Patrick E. Hughes
5	View from a Civil-War Cornfield	William Hodge
7	Weather and Crops	Richard Felch
10	Weather, Agriculture and Sugar Production	Karl Han
11	Drought: A Cancer on the Land	Patrick E. Hughes
16	Weather and Corn Blight	Richard Allen and Marvin Bauer
18	Weather and Agriculture: A Look Ahead	Gerald L. Barger

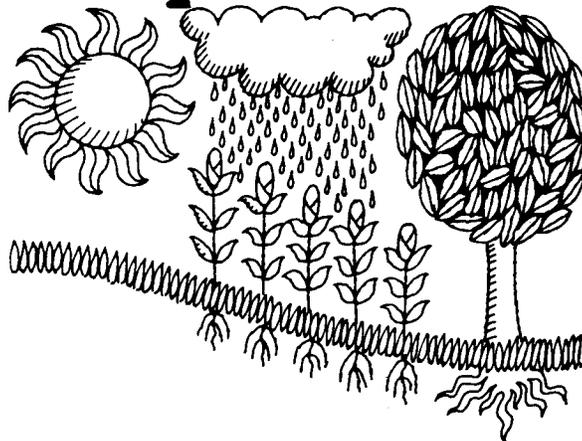
1872

100 YEARS OF THE WEEKLY WEATHER AND CROP BULLETIN

1972

Title	Period	Bureau or Office	Department	Remarks
Weekly Weather Chronicle	Nov. 16, 1872- Apr. 4, 1881	Signal Corps	War	This was a 2-page printed release that contained a general summary of weather for each week ending on Wednesday. A paragraph on rivers was included, beginning in 1873. Publication discontinued in 1881.
Special Bulletin	June 1884- Apr. 1887	"	"	Issued as a special bulletin for the month; a one-page leaflet.
Weather Crop Bulletin	May 1887- June 26, 1891	"	"	Issued weekly during growing season May to September and monthly during other months. Consisted of one page of text under headings of "Temperature," "Precipitation," and "General Remarks." Crop information was given.
Weather Crop Bulletin	July 1891- Jan. 1896	Weather Bureau	Agriculture	The Weather Service of the Signal Corps was transferred from the War Department to the Department of Agriculture, effective July 1, 1891, thus creating the Weather Bureau. The Bulletin was issued weekly from April through September and monthly October to March. One large page (19"x24") containing charts of temperature and precipitation, tabulations of temperature and precipitation, and text under headings "Temperature," "Precipitation," "General Summary," and "State Summaries." The general plan (format) of the publication continued with little change to the end of 1921, except for adding the Snow and Ice Bulletin at end of 1919 as mentioned below.
Climate and Crop Bulletin	Feb. 1896- Aug. 22, 1904	"	"	Title of publication changed.
Weather Crop Bulletin	Aug. 29, 1904 Jan. 1906	"	"	Title of publication changed.
National Weather Bulletin	Feb. 1906- June 1914	"	"	Title of publication changed.
National Weather and Crop Bulletin	July 6, 1914 Dec. 1921	"	"	Title of publication changed. The Snow and Ice Bulletin that had been issued as a separate publication since 1894 was combined with the National Weather and Crop Bulletin during the winter from December 1919 to December 1921.
Weather, Crops, and Markets	Jan. 1922- Dec. 1923	"	"	For economy the bulletin was reduced in content and consolidated with the Crops and Markets under the title Weather, Crops, and Markets and published weekly at the Government Printing Office. The tabulation of temperature and precipitation was dropped, but the charts of temperature and precipitation, discussion of weather and its effects on crops, and State telegraphic summaries were generally carried in the consolidated publication.
Weekly Weather and Crop Bulletin	Jan. 1924- June 1940	"	"	Due to public demand for more detailed and earlier release of information on the weather and its effects on crops, a separate publication was again issued and printed weekly at the Weather Bureau. This bulletin consisted of 4 pages (9 1/2"x12") and contained a general discussion of conditions during the week with special emphasis on small grains, corn, cotton, miscellaneous crops, and pastures; charts and tabulation of temperature and precipitation; and State telegraphic summaries. The Snow and Ice Bulletin that was resumed as a separate publication from January 1922 to November 1932 was again added to the Weekly Weather and Crop Bulletin for the December to March period from December 1932 to present.
Weekly Weather and Crop Bulletin	July 1940- July 12, 1965	"	Commerce	The Weather Bureau was transferred from the Department of Agriculture to the Department of Commerce, effective July 1, 1940. There was little change in the format of the Bulletin until October 18, 1954, when revised to an 8-page publication.
Weekly Weather and Crop Bulletin	July 13, 1965 May 4, 1969	Environmental Data Service	"	On July 13, 1965, the Environmental Science Services Administration was created as an agency within the Department of Commerce. The Environmental Data Service was established in ESSA.
Weekly Weather and Crop Bulletin	May 5, 1969- Oct. 2, 1970	"	"	Format changed. The Bulletin was expanded to 12 or 16 pages to accommodate additional maps and articles.
Weekly Weather and Crop Bulletin	Oct. 3, 1970- (continuing)	"	"	On October 3, 1970, the National Oceanic and Atmospheric Administration was created as an agency within the Department of Commerce. ESSA went out of existence but all functions of ESSA, including Environmental Data Service, were combined with other Governmental organizations into NOAA.

Weather & Crop Service



1872·Centennial·1972

U.S. Department of Commerce
U.S. Department of Agriculture

AGRICULTURAL WEATHER CENTENNIAL

1972 marks the 100th year of publication of the Weekly Weather and Crop Bulletin. This, then, is the appropriate time to recognize all the inter-workings of weather with the production and distribution of food and fiber. Some of the objectives of the Weather and Crop Service Centennial are:

1. Increase the awareness of the public that Weather and Crop Bulletins, both State and National, provide a unique service in summarizing the effects of weather on the agricultural industry.
2. Honor the thousands of weather and crop reporters who voluntarily submit local information, usually without pay.
3. Emphasize the mutual cooperation of two government agencies, the U.S. Department of Agriculture and the U.S. Department of Commerce, in providing a service to agriculture and the economy generally that neither could provide alone.
4. Call attention to the progress that Agricultural Meteorology has made in the past century both as a science and as a service to the Nation and to the world.
5. Stress the potential contribution of Agricultural Meteorology in providing the optimum of food with a minimum of environmental degradation.

A highlight of the Centennial effort is the assembling of a volunteer weather observer, a

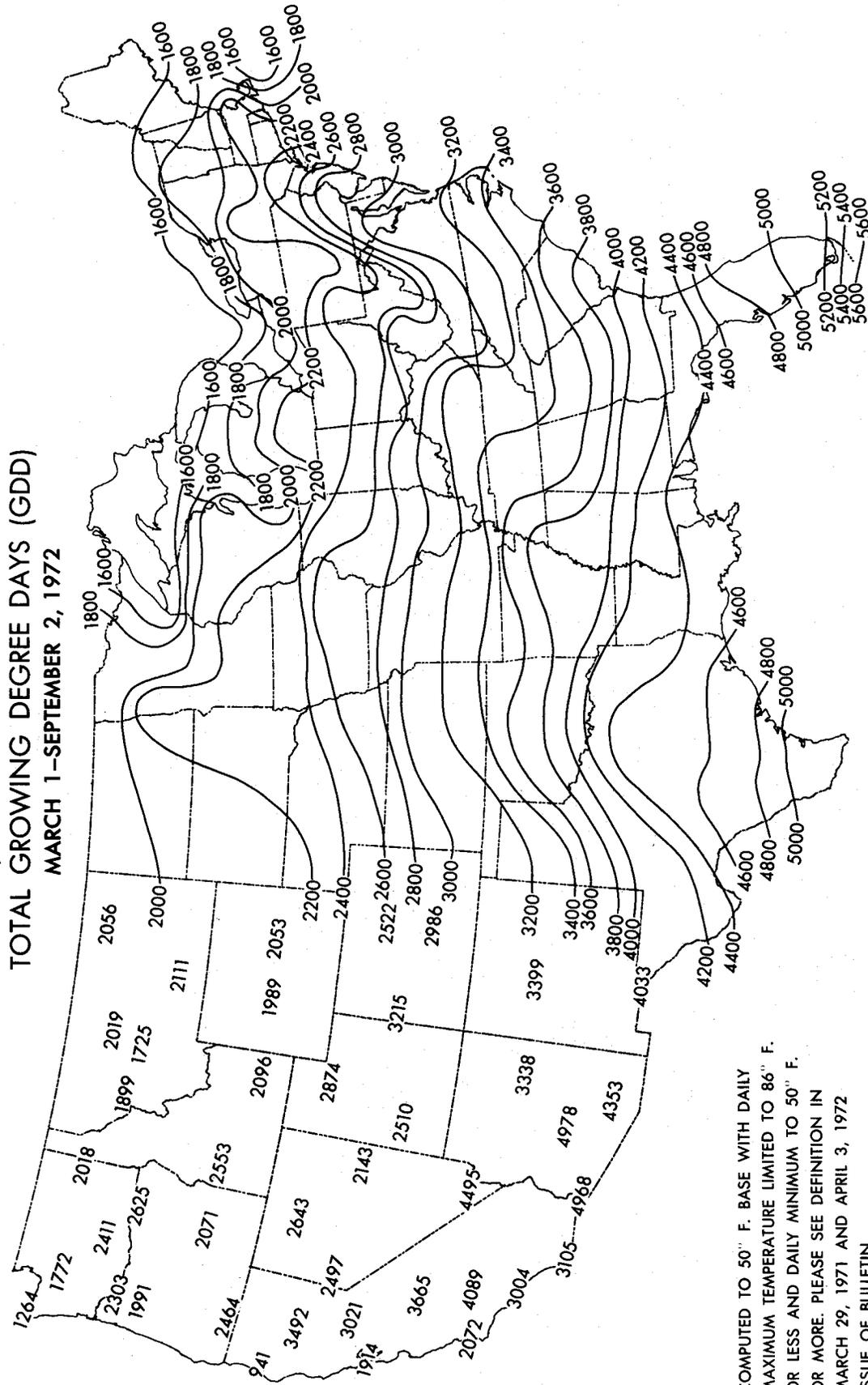
volunteer crop reporter, and a county extension agent in Washington, D.C., on September 7, 1972, to receive appropriate awards emphasizing the importance of cooperators throughout the Country in providing basic information for the Weekly Weather and Crop Bulletins. These awards will be made by the Department of Commerce and the Department of Agriculture at the Smithsonian Institution with Members of Congress and other invited officials present. An eye-catching exhibit depicting 100 years of weather-crop reporting will be opened during the September 7 awards ceremony and shown in the Smithsonian through December 1972. The placement of the exhibit is such that thousands of persons will see it each day.

Weather and crop scientists have contributed to a Centennial Edition of the Weekly Weather and Crop Bulletin which is to be distributed concurrently. It stresses not only history but what Agricultural Meteorology can do today to reduce contamination from herbicides, minimize nitrate leaching into ground water and streams, increase the quality of fruits and vegetables, and improve control of plant and animal pests. More articles were received than could be included in the special issue. Some of these will be published subsequently in the Weekly Weather and Crop Bulletin. At the end of the year, we hope to publish a more complete Centennial Edition which will repeat some of the articles published this fall and also include those not published in the weekly issues. We really do appreciate the effort put forth by all contributors.

L. W. Dye

TOTAL GROWING DEGREE DAYS (GDD)

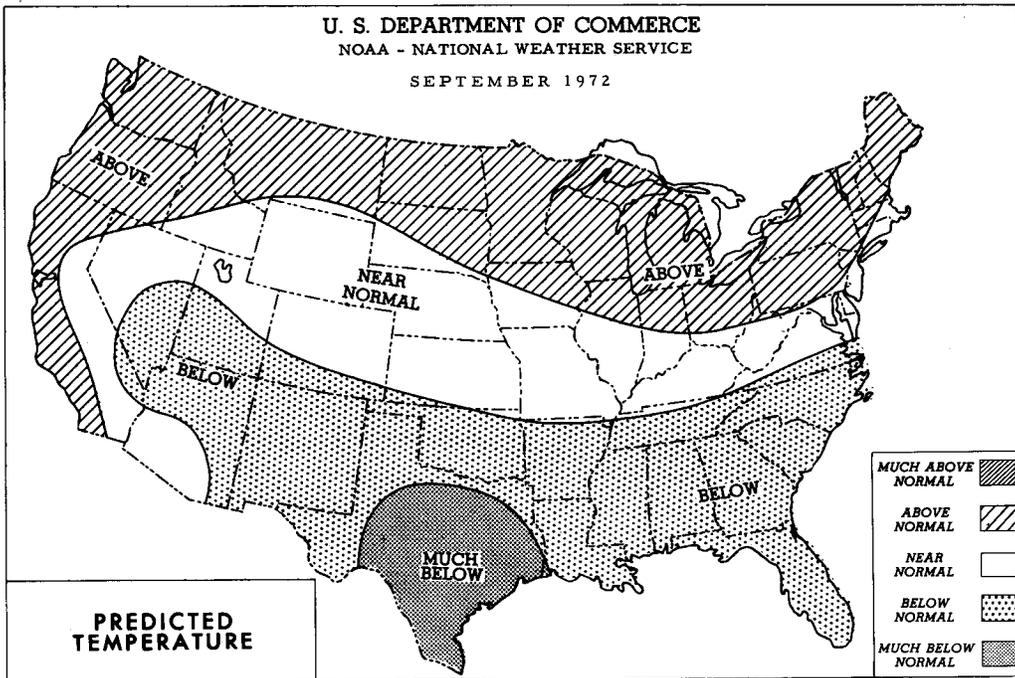
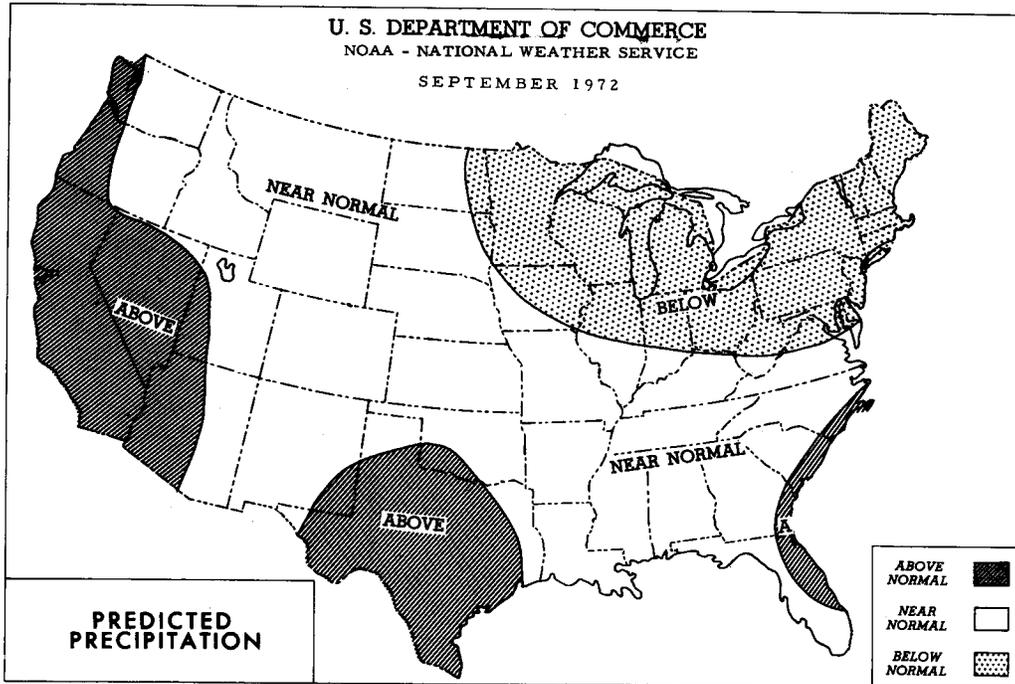
MARCH 1-SEPTEMBER 2, 1972



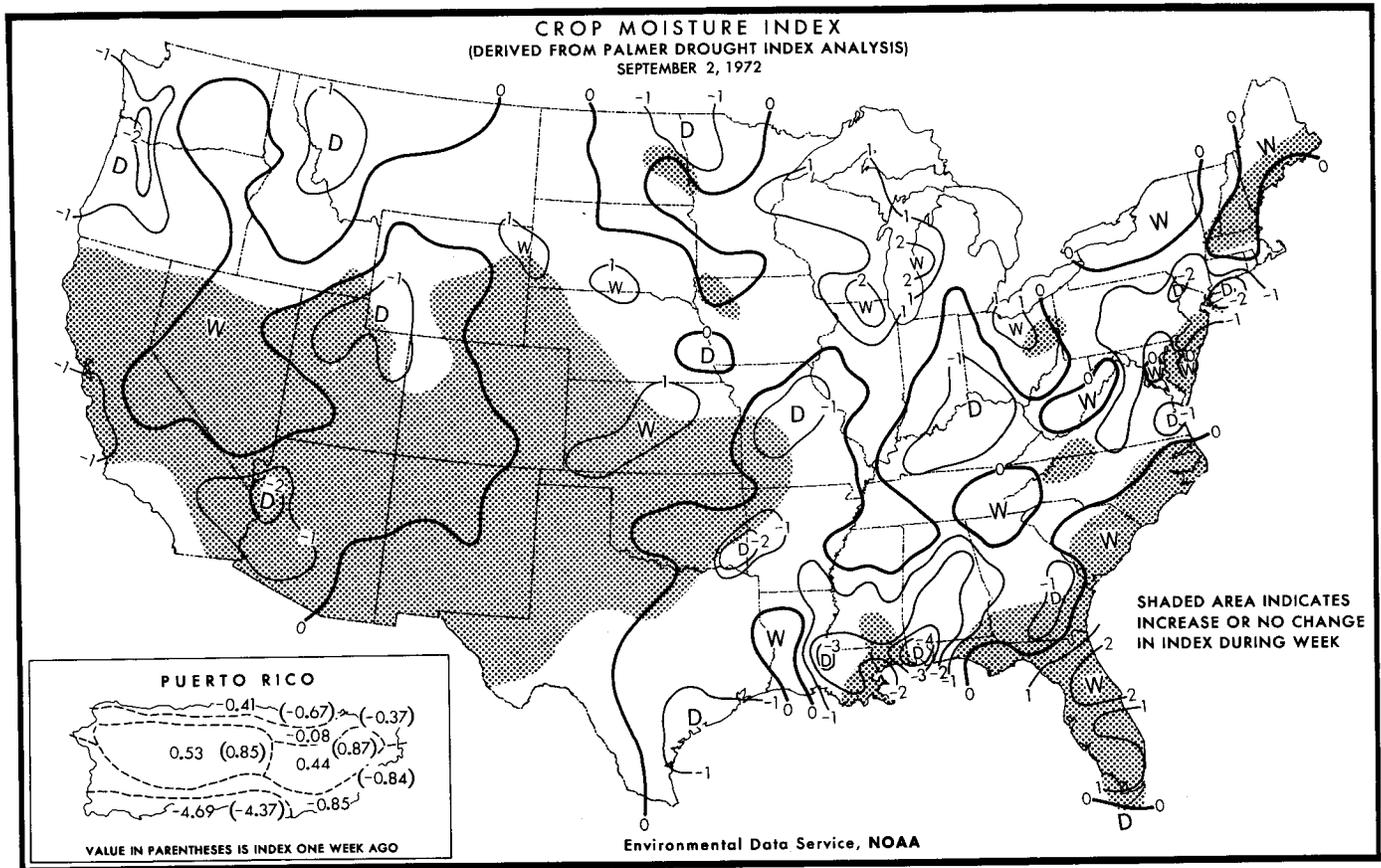
COMPUTED TO 50° F. BASE WITH DAILY
 MAXIMUM TEMPERATURE LIMITED TO 86° F.
 OR LESS AND DAILY MINIMUM TO 50° F.
 OR MORE. PLEASE SEE DEFINITION IN
 MARCH 29, 1971 AND APRIL 3, 1972
 ISSUE OF BULLETIN.

Environmental Data Service, NOAA

AVERAGE MONTHLY WEATHER OUTLOOK



The above prognostic charts show the expected categories of average temperature and total precipitation for the period indicated. They were extracted from the Extended Forecast Division's publication "Average Monthly Weather Outlook" which contains additional information necessary for complete interpretation.



INDEX DECREASED DURING WEEK
(Unshaded Areas)

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

INDEX

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

INDEX

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

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

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

The legend applies primarily to growing rather than matured vegetation. Interpretation of the

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



FIRST CLASS MAIL

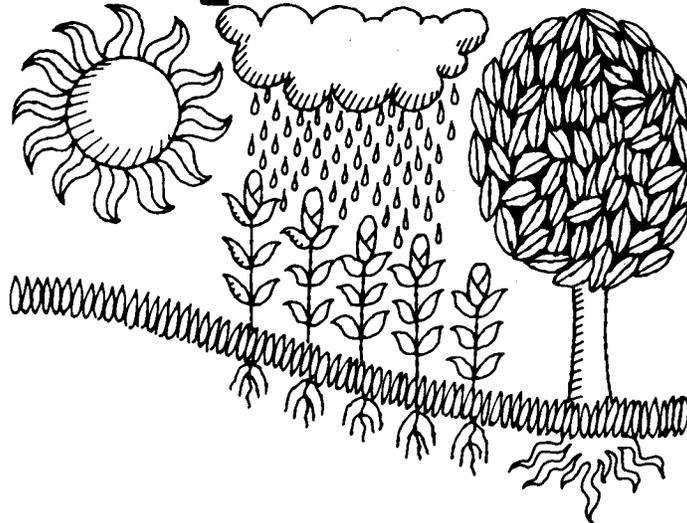
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Total Annual Subscriptions: \$5.00 in U.S. and possessions, \$6.50 including domestic airmail, \$11.25 including foreign airmail. For December through March issues only, \$1.50, \$2.00 with domestic airmail, \$3.50 with foreign airmail. Make checks payable to Department of Commerce, NOAA.

Publication of this bulletin began in 1872 as the Weekly Weather Chronicle. It is now issued under general authority contained in the Act of January 12, 1895 (44 USC 213), 53d Cong., III. Sess. Quotation or reproduction of this material is encouraged. Please give credit to this publication and, in case of special articles, to authors.

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