

Weekly Weather & Crop Bulletin

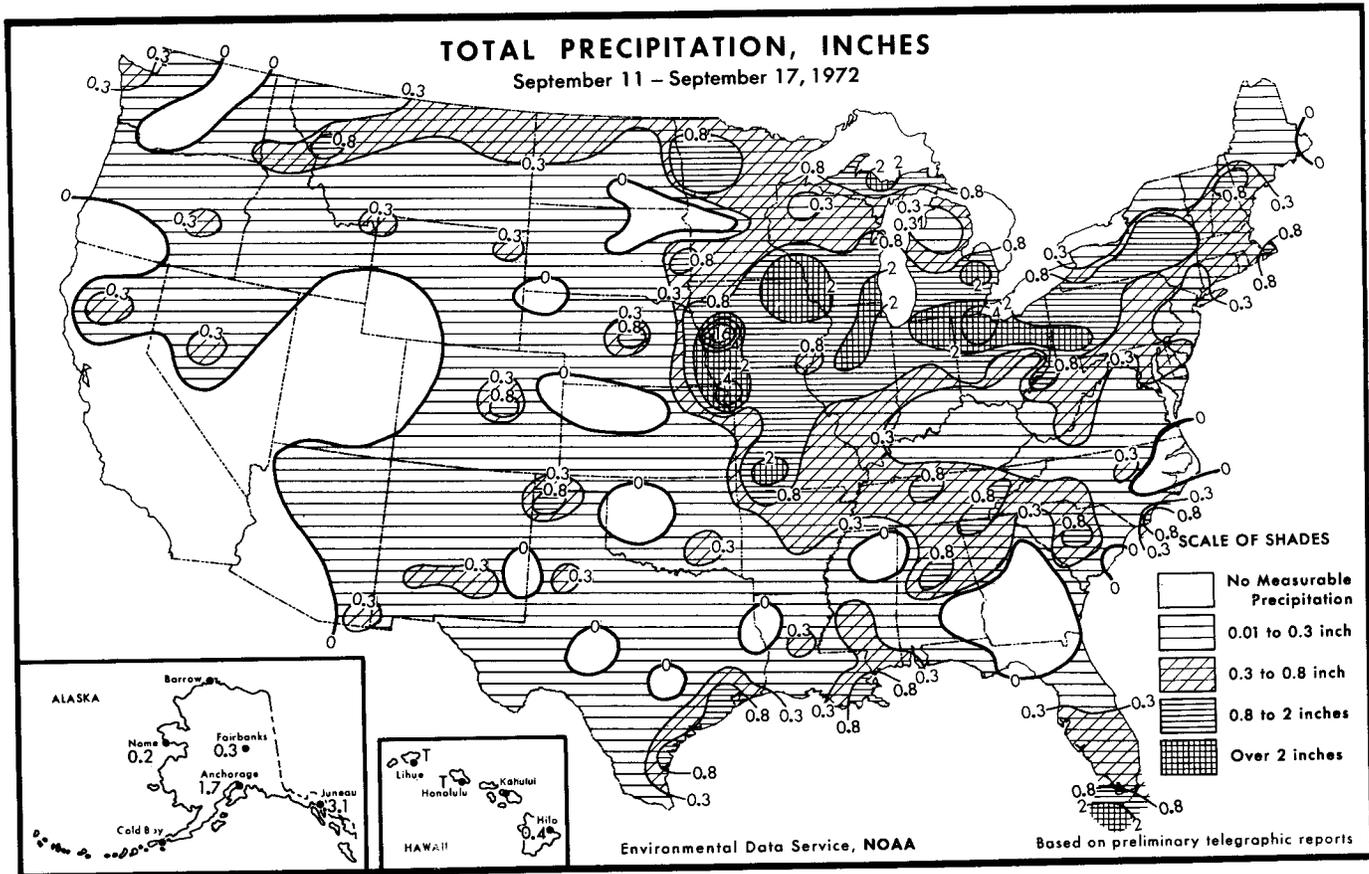
U. S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Environmental Data Service

U. S. DEPARTMENT OF AGRICULTURE
Statistical Reporting Service

1872-Centennial-1972

Volume 59 No. 38

Edited by Lucius W. Dye September 18, 1972 Washington, D. C.

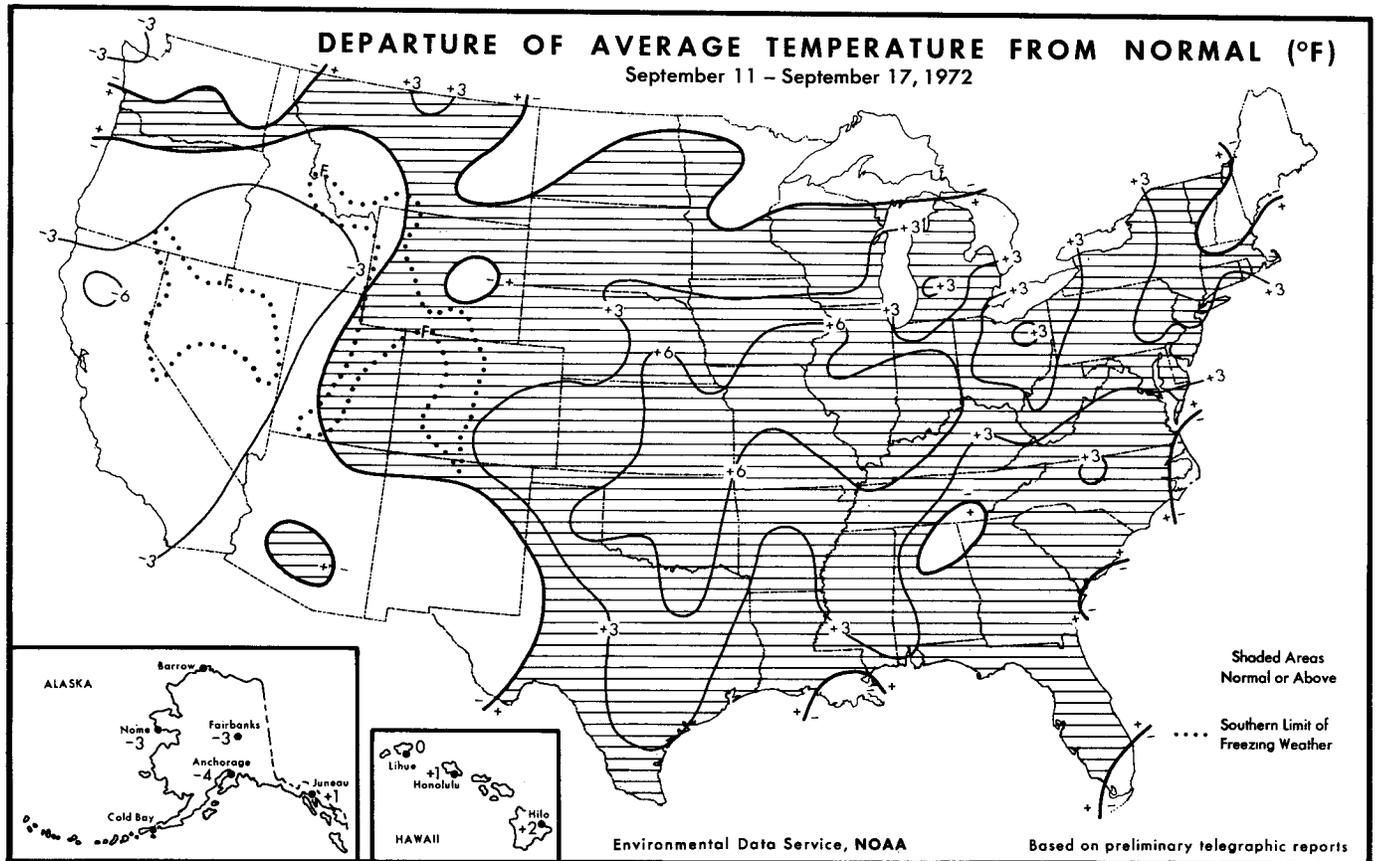


NATIONAL WEATHER SUMMARY

HIGHLIGHTS: Storm totals ranged from 10.00 to more than 20 inches in western Iowa, from 2.00 to 8.00 inches along the lower portion of the Platte River in Nebraska, and from 3.00 to more than 6.00 inches in northeastern Kansas early in the week.

PRECIPITATION: Highs were conspicuous on the weather map early in the week. One High was centered over the northern Great Plains; the other High covered the eastern third of the Nation. A slow-moving front stretched from a Low centered in the vicinity of Hudson Bay, across Lake Superior to the central Great Plains, and westward to another Low centered in northern Utah. Scattered showers and thunderstorms, some heavy, rumbled in the vicinity of the front. Especially heavy rains fell in eastern Nebraska and western Iowa. Storm totals exceeding 5.00 inches were common in that

area; some localities received more than 10.00 inches Sunday evening and early Monday. One of the largest totals that has come to our attention was 21.00 inches at Earling, Iowa, about 40 miles northeast of Omaha, Nebr. The continued heavy rains in Shelby County, Iowa, caused record river stages along the west and east forks of the Nishnabotna River. The heavy rains in Nebraska, Iowa, Kansas, and Missouri caused important rises on the main stem of the Missouri River. Although the heaviest thundershowers occurred in the Nebraska-Iowa vicinity, heavy showers occurred elsewhere along the front which, by midweek, stretched from the Texas Panhandle to New England. The heavy rains swelled the creeks and rivers in Iowa, southeastern Minnesota, and northern Illinois. Hail as large as baseballs fell in the Sidney, Iowa, vicinity early Wednesday evening. Much of the rain which occurred late in the week fell on sat-



urated soil where it was not needed.

As the weekend approached, the slow-moving front was approaching the Gulf and southern Atlantic Coast, rain was sparse, and sunny skies prevailed over most of the Nation. Generous rains fell over the weekend in the Deep South. Lighter showers occurred from Wisconsin to Pennsylvania.

TEMPERATURE: Early in the week, a High centered over the northern Great Plains dropped early-morning temperatures into the 40's from Montana to Upper Michigan and held afternoon temperatures in the 60's and 70's in the vicinity of the Great Lakes. Another High was spread over the eastern third of the Nation. It brought warm humid air to that area. Afternoon temperatures in the tropical air ranged mostly in the 80's and 90's. A slow-moving cold front marked the battle line of the cold and warm air masses. The cold air pushed the front southward and eastward and as the weekend approached, comfortable weather prevailed

over most of the Nation. Afternoon temperatures reached 100° on some days in the Desert Southwest. Buckeye, Calif., registered 105° Thursday afternoon. Temperatures dropped to 32° or lower at some mountain stations in the West on 1 or 2 mornings. Big Piney, Wyo., recorded 15° Thursday morning. Bondurant, Wyo., registered 12°.

Pleasant sunny weather continued over the weekend over most of the Nation. Maximums ranged from near 60° along the Canadian Border to the 90's along the Gulf of Mexico. Afternoon temperatures reached the 90's over the central Great Plains on Saturday and Sunday-- 97° at Omaha, Nebr., Sunday. The Deep South was equally as warm but the higher humidity made the air feel "sticky".

In general, weekly mean temperatures averaged cooler than normal west of the Rocky Mountains and warmer than normal east of the Rockies. Parts of the central Great Plains averaged 6° to 8° warmer than normal.

L. W. Dye

NATIONAL AGRICULTURAL SUMMARY

AGRICULTURAL HIGHLIGHTS: Small Grain fall seeding increasing. * Corn maturity near normal in Western Corn Belt, behind in eastern portion. * Hot dry weather advanced cotton maturity in South. * Soybean maturity slowed in North Central States.

SMALL GRAINS: Late summer harvesting operations of small grains made generally good progress in Montana and North Dakota although scattered showers and heavy early morning dews caused some delays. Ninety percent of Montana's small grain crop is harvested, while in North Dakota, 80 percent of the hard wheat and 75 percent of the durum wheat is combined. Oats harvest is nearing completion in the remaining States of South Dakota, Minnesota, Wisconsin, Michigan and New York.

Fall plowing and seeding of the 1973 winter wheat crop is picking up momentum across the Nation. In Kansas, the Nation's leading wheat State, seeding advanced rapidly this past week to 16 percent completion which is equal to average progress. Nearly 1/3 of Oklahoma's and 79 percent of South Dakota's winter wheat acreage is seeded with good stands up in early seeded fields. Recent rains in the High and Low Plains of Texas provided moisture for seeding winter wheat now 38 percent planted. Progress of winter wheat seeding is lagging in Washington and many eastern States due to dry soil conditions.

CORN: Hot rainy weather dominated the Corn Belt this past week with the outlook for good to excellent corn crop prospects continuing. Some flooding of lowland corn acreage occurred in Western Iowa, but it is too early for an assessment of damage. Corn advanced to maturity at about the normal pace in the Western Corn Belt, but continues to mature slowly in the Eastern Corn Belt. In Iowa and Illinois, 55 percent of the corn is mature and safe from frost while Minnesota corn is 45 percent mature and in South Dakota corn is 61 percent mature. Maturity of corn is behind the average progress in Indiana at 20 percent mature, while the crop is quite slow in maturing compared to last year in Missouri, Ohio and Michigan.

Corn picking is active in the Southern States and is underway on a limited scale across the southern portions of Kansas, Missouri, Illinois and Kentucky. Harvesting corn for silage is very active Nation-wide. Many Wisconsin and Michigan farmers are finding corn moisture too high for cutting silage.

COTTON: Hot dry weather during the week across the South caused cotton bolls to open rapidly and prospects to decline. Harvesting has been limited in most southern States. Good progress was made in Texas, the leading cotton producing State, with 23 percent of the crop harvested compared to 15 percent last year. Mississippi cotton bolls are 25 percent open and 3 percent of the crop is harvested. Cotton is being defoliated in Arkansas and Louisiana. Harvest is just beginning in Tennessee and South Carolina where some cotton is shedding due to dry conditions. Cotton prospects remain good from Texas to California where harvest activity is slowly increasing. The first bale was ginned in the San Joaquin Valley of California. Cotton continues to develop mature and open in good condition in Arizona with harvest accelerating in the southwestern part. Some cases of leaf spot and boll rot have been reported in southeastern Arizona and in New Mexico due to frequent showers and wet fields the past several weeks.

SOYBEANS: Good to excellent prospects continue for North-Central States soybeans. Hot humid weather with frequent thundershowers the past week slowed maturity of the crop to about 10 days behind normal development throughout the Corn Belt. Leaves had shed from only about 1/3 of the soybean plants in most Northern States compared to about 1/2 last year. The Iowa soybean crop is 30 percent mature compared to 65 percent last year while Ohio crop is 10 percent mature compared to the average of 20 percent. Harvest has started in northern soybean States with from 1 to 2 percent harvested in Illinois, Missouri, and Kansas. Weedy fields are causing harvesting problems in Iowa where harvest is just beginning.

Dry weather continues to hurt soybean prospects in the South. Late soybeans in Arkansas and Louisiana are suffering and need moisture. Much worm infestation is reported in the Arkansas crop. Tennessee soybeans continue to look good.

OTHER CROPS: Sorghum grain harvesting in Texas made fair progress with 43 percent of the crop harvested. The crop is maturing behind last year in Kansas and Missouri. Harvesting is getting underway in these States, but is behind last year also. Cutting and housing tobacco is very active in Kentucky under favorable weather conditions, burley is 74 percent cut while dark types are 76 percent cut.

Harvest of Georgia peanuts is very active and prospects continue fair to good. Prospects in North Carolina are mostly good in commercial areas with digging beginning. The Alabama peanut harvest is nearing completion. Potato vines were sprayed in East Idaho in lieu of a vine-killing frost and digging gained speed. Aroostook County, Maine potato digging is active with public schools closing to provide extra family help on the harvest. Rice is 98 percent harvested in Texas, 95 percent complete in southwest Louisiana and 15 percent complete in Arkansas. Dry beans ripening in Michigan was delayed by cloudy humid weather--white mold and other diseases are causing considerable damage.

Fruits and Nuts: Apple picking is underway in Washington while cool nights continued to bring color. Picking fall apples is also underway in Michigan and Pennsylvania. McIntosh apples are now available in New York and harvest of Wealthy apples just started. Florida citrus grove conditions are excellent and testing of fruit is active. Summer grapefruit harvest is complete in California while Valencia orange picking continues. The almond harvest is increasing in California and walnuts harvest is beginning. Filberts are dropping in Oregon.

Vegetables: Wet fields continued to slow vegetable harvesting in Michigan while rain is needed in New Jersey as the harvest of cabbage increases and light lettuce harvest continues. Peppers, eggplant, squash and snapbeans in New Jersey are in moderate supply. Onion and celery harvest continues in Orange County, N. Y.

PASTURES AND LIVESTOCK: Cooler than normal temperatures west of the Rocky Mountains slowed the deterioration of ranges. Supplemental feeding and watering continues in many areas, but livestock remain in good condition. Grazing became short in the Deep South and in States along the Atlantic Ocean. Pastures in North Central States continue in good to excellent condition.

Arlon M. Scott
Agricultural Statistician

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., September 17, 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 . . .	77	0	1.7	+ .9	New Orleans . . .	78	- 1	1.7	+ .5	OKLA. Okla. City . . .	82	+ 8	0	- .7
Mobile . . .	82	+ 3	.5	-1.0	Shreveport . . .	81	+1	T	- .5	Tulsa . . .	82	+ 8	T	-1.0
Montgomery . . .	80	+ 2	T	- .9	MAINE. Caribou . . .	54	- 1	.1	- .8	OREG. Astoria . . .	60	+ 2	.1	- .6
ALASKA. Anchorage . . .	45	- 4	1.7	+1.1	Portland . . .	60	0	.6	- .2	Burns . . .	54	- 5	.4	+ .3
Barrow . . .	42	- 3	---	---	MD. Baltimore . . .	74	+ 5	.4	- .3	Medford . . .	64	- 1	0	- .1
Fairbanks . . .	42	- 3	.3	0	MASS. Boston . . .	68	+ 2	.6	- .2	Pendleton . . .	65	0	0	- .1
Juneau . . .	51	+ 1	3.1	+1.5	Chatham . . .	65	---	1.0	---	Portland . . .	65	+ 2	T	- .4
Nome . . .	40	- 3	.2	- .4	MICH. Alpena . . .	58	+ 1	.3	- .6	Salem . . .	62	- 1	T	- .3
ARIZ. Flagstaff . . .	57	- 2	T	- .4	Detroit . . .	67	+ 3	1.2	+ .6	PA. Allentown . . .	67	+ 2	.3	- .5
Phoenix . . .	86	+ 2	T	- .2	Flint . . .	65	+ 3	2.1	+1.4	Erie . . .	64	+ 2	1.7	+ .8
Tucson . . .	81	0	T	- .2	Grand Rapids . . .	66	+ 3	1.9	+1.1	Harrisburg . . .	71	+ 3	.8	+ .1
Winslow . . .	70	- 2	T	- .2	Houghton Lake . . .	59	+ 1	.1	- .6	Philadelphia . . .	72	+ 4	.2	- .6
Yuma . . .	85	- 2	0	- 1	Lansing . . .	65	+ 2	1.0	+ .4	Pittsburgh . . .	69	+ 4	3.5	+2.9
ARK. Fort Smith . . .	80	+ 4	.2	- .7	Marquette . . .	57	- 1	2.1	+1.3	Scranton . . .	64	+ 1	.6	- .1
Little Rock . . .	77	+ 2	.5	- .3	Muskegon . . .	65	+ 1	1.3	+ .6	R. I. Providence . . .	67	+ 3	.7	- .1
CALIF. Bakersfield . . .	73	- 4	0	0	S. Ste. Marie . . .	55	- 1	1.0	+ .1	S. C. Charleston . . .	79	+ 3	T	-1.4
Eureka . . .	53	- 4	0	- .1	MINN. Duluth . . .	54	- 1	.8	+ .1	Columbia . . .	77	+ 1	1.0	0
Fresno . . .	70	- 5	0	0	Internatl Falls . . .	53	0	.5	- .2	Greenville . . .	74	0	.1	- .8
Los Angeles . . .	68	- 5	0	- .1	Minneapolis . . .	62	+ 1	.3	- .3	S. DAK. Aberdeen . . .	63	+ 2	T	- .3
Red Bluff . . .	71	- 6	.6	+ .5	Rochester . . .	62	0	2.3	+1.5	Huron . . .	63	0	.1	- .3
San Diego . . .	67	- 3	0	0	St. Cloud . . .	59	- 1	T	- .6	Rapid City . . .	64	+ 2	T	- .2
San Francisco . . .	60	- 4	0	- 1	MISS. Jackson . . .	83	+ 4	.6	0	Sioux Falls . . .	65	+ 2	.3	- .4
Stockton . . .	69	- 4	0	- 1	Meridian . . .	82	+ 5	.1	- .7	TENN. Chattanooga . . .	73	- 2	1.6	+ .9
COLO. Denver . . .	65	+ 2	.3	0	MO. Columbia . . .	76	+ 7	.9	- 1	Knoxville . . .	74	+ 1	.9	+ .3
Grand Junction . . .	71	+ 2	0	- 2	Kansas City . . .	78	+ 6	.6	- .2	Memphis . . .	80	+ 5	.2	- .5
Pueblo . . .	71	+ 4	.1	- 1	St. Louis . . .	77	+ 7	.7	+ .1	Nashville . . .	78	+ 4	1.0	+ .3
CONN. Bridgeport . . .	71	+ 5	.4	- .5	Springfield . . .	76	+ 5	2.4	+1.5	TEX. Abilene . . .	80	+ 3	.1	- .5
Hartford . . .	67	+ 3	.6	- .3	MONT. Billings . . .	61	0	.2	- .1	Amarillo . . .	79	+ 6	.1	- .4
D. C. Washington . . .	74	+ 3	.3	- .6	Glasgow . . .	59	+ 2	.4	+ .2	Austin . . .	85	+ 5	0	-1.0
FLA. Apalachicola . . .	81	+ 1	0	-2.2	Great Falls . . .	59	+ 1	.4	+ .1	Beaumont . . .	80	+ 1	.5	- .6
Ft. Myers . . .	83	+ 1	.3	-1.8	Have . . .	59	+ 3	.4	+ .1	Brownsville . . .	83	+ 1	.3	-1.6
Jacksonville . . .	81	+ 1	0	-1.8	Helena . . .	56	- 1	T	- .2	Corpus Christi . . .	84	+ 3	.9	- .4
Key West . . .	83	0	3.4	+1.8	Kalispell . . .	56	+ 1	.1	- .2	Dallas . . .	86	+ 8	.1	- .6
Lakeland . . .	81	0	T	-1.6	Miles City . . .	61	- 1	T	- .2	Del Rio . . .	82	+ 1	.1	- .5
Miami . . .	81	- 1	.7	-1.5	Missoula . . .	56	0	1.2	+ .9	El Paso . . .	74	- 1	.3	+ .1
Orlando . . .	83	+ 2	.1	-1.7	NEBR. Grand Island . . .	72	+ 6	.3	- .3	Fort Worth . . .	85	+ 6	T	- .5
Tallahassee . . .	79	0	0	-1.3	Lincoln . . .	73	+ 4	.5	- .2	Galveston . . .	83	+ 2	1.6	+ .2
Tampa . . .	82	+ 2	.6	-1.0	Norfolk . . .	70	+ 4	.3	- .3	Houston . . .	81	+ 2	1.3	+ .3
GA. Atlanta . . .	76	+ 2	.4	- .4	North Platte . . .	65	0	T	- .4	Lubbock . . .	75	+ 3	.7	+ .1
Augusta . . .	77	+ 1	.6	- .1	Omaha . . .	71	+ 5	3.6	+3.0	Midland . . .	76	0	.1	- .3
Macon . . .	78	+ 1	0	- .6	Valentine . . .	65	+ 3	T	- .3	San Angelo . . .	81	+ 2	0	- .6
Savannah . . .	80	+ 3	.1	-1.3	NEV. Ely . . .	53	- 5	T	- 1	San Antonio . . .	84	+ 5	.2	- .7
HAWAII. Hilo . . .	78	+ 2	.4	-1.6	Las Vegas . . .	78	- 3	0	- .1	Victoria . . .	84	+ 4	.4	- .6
Honolulu . . .	80	+ 1	T	- .3	Reno . . .	55	- 5	T	- 1	Waco . . .	85	+ 5	.1	- .6
Kahului . . .	---	---	---	---	Winnemucca . . .	56	- 3	T	- 1	Wichita Falls . . .	83	+ 5	T	- .6
Lihue . . .	78	0	T	- .5	N. H. Concord . . .	58	- 2	.8	- .2	UTAH. Blanding . . .	65	+ 2	0	- .3
IDAHO. Boise . . .	59	- 4	.3	+ .2	N. J. Atlantic City . . .	72	+ 4	.2	- .6	Salt Lake City . . .	65	0	0	- .1
Lewiston . . .	64	0	.6	+ .4	Trenton . . .	71	+ 3	.1	- .7	VT. Burlington . . .	60	+ 1	T	- .8
Pocatello . . .	57	- 4	T	- .1	N. MEX. Albuquerque . . .	70	- 1	.1	- .1	VA. Lynchburg . . .	72	+ 2	T	- .8
ILL. Cairo . . .	77	+ 4	.7	0	Roswell . . .	---	---	---	---	Norfolk . . .	74	0	T	-1.0
Chicago . . .	70	+ 3	1.1	+ .4	N. Y. Albany . . .	62	0	.9	0	Richmond . . .	73	+ 2	.1	- .8
Moline . . .	73	+ 7	.8	0	Binghamton . . .	63	+ 3	1.2	+ .5	Roanoke . . .	71	+ 1	.3	- .5
Peoria . . .	72	+ 5	3.1	+2.3	Buffalo . . .	65	+ 3	.2	- .5	WASH. Colville . . .	59	- 1	0	- .2
Rockford . . .	69	+ 4	3.1	+2.3	New York . . .	71	+ 1	.2	- .7	Omak . . .	60	0	0	- .1
Springfield . . .	75	+ 7	1.0	+ .2	Rochester . . .	67	+ 4	.2	- .4	Quillayute . . .	53	- 4	.4	- .7
IND. Evansville . . .	79	+ 8	.1	- .6	Syracuse . . .	67	+ 4	1.0	+ .3	Seattle-Tacoma . . .	59	- 2	T	- .5
Fort Wayne . . .	71	+ 6	3.6	+2.9	N. C. Asheville . . .	70	+ 1	.7	+ .1	Spokane . . .	60	- 2	.2	0
Indianapolis . . .	74	+ 7	.3	- .4	Charlotte . . .	75	+ 1	.7	- .1	Walla Walla . . .	65	- 2	T	- .2
South Bend . . .	67	+ 2	3.5	+2.7	Greensboro . . .	75	+ 4	.3	- .6	Yakima . . .	62	0	0	- .1
IOWA. Burlington . . .	73	+ 6	.6	- .3	Hatteras . . .	74	- 1	0	-1.5	W. VA. Beckley . . .	68	+ 3	.4	- .3
Des Moines . . .	72	+ 6	1.7	+1.1	Raleigh . . .	73	+ 1	.5	- .5	Charleston . . .	72	+ 3	.2	- .5
Dubuque . . .	67	+ 5	2.4	+1.4	Wilmington . . .	77	+ 1	1.0	- .5	Huntington . . .	73	+ 4	.1	- .6
Sioux City . . .	71	+ 5	1.4	+ .7	N. DAK. Bismarck . . .	61	+ 2	T	- .3	Parkersburg . . .	71	+ 2	1.5	+ .9
KANS. Concordia . . .	76	+ 6	T	- .6	Fargo . . .	60	+ 1	.9	+ .6	WIS. Green Bay . . .	64	+ 3	.9	+ .2
Dodge City . . .	75	+ 4	.1	- .3	Williston . . .	56	- 2	3	0	La Crosse . . .	65	+ 2	2.5	+1.7
Goodland . . .	70	+ 4	T	- .3	OHIO. Akron-Canton . . .	69	+ 4	3.3	+2.7	Madison . . .	64	+ 2	1.5	+ .7
Topeka . . .	76	+ 6	.3	- .4	Cincinnati . . .	74	+ 6	T	- .7	Milwaukee . . .	68	+ 7	3.0	+2.3
Wichita . . .	78	+ 6	.1	- .7	Cleveland . . .	67	+ 2	1.9	+1.1	WYO. Casper . . .	60	- 1	T	- .3
KY. Lexington . . .	73	+ 3	.1	- .5	Columbus . . .	69	+ 2	.7	+ .1	Cheyenne . . .	60	+ 1	T	- .3
Louisville . . .	76	+ 6	.3	- .3	Dayton . . .	71	+ 3	1.3	+ .6	Lander . . .	61	+ 1	T	- .3
LA. Baton Rouge . . .	82	+ 3	.2	- .9	Toledo . . .	67	+ 3	5.1	+4.6	Sheridan . . .	61	+ 1	.1	- .2
Lake Charles . . .	81	+ 1	T	- .9	Youngstown . . .	65	+ 2	1.5	+ .8	P. R. San Juan . . .	83	+ 3	.1	-1.4

* 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: Sunny, hot, and dry most of week but thundershowers northern half during weekend dumped generally 1.00 to 2.00 inches of rain with locally up to 3.00 inches. Three-day total at Pinson, 5.85 inches. Only isolated thundershowers south. No measurable rain for week at Selma, Montgomery, and Dothan. Temperatures averaged several degrees above normal. Hottest Friday and Saturday. Selma reached 100° Friday. Drought continued to reduce prospective crop yields. Cotton opened rapidly, but only limited harvest to date. Corn harvest slow as moisture content high--will gain momentum South Alabama as peanut harvest is completed. Soybean plants yellowing many fields with beans maturing earliest fields. Few combined south and central counties. Late beans hit especially hard by drought. Federal-State inspection reported 105,000 tons peanuts inspected through September 15, compared with 79,000 tons year ago. Dry weather reduced amounts and quality of last cutting of hay. Production of late vegetables, including pimento peppers, cut short by dry weather. Pastures supplied short grazing most counties--several cattlemen having to feed. Heavy marketing cattle and calves reflects dry conditions and favorable prices.

ALASKA: Cloudy through most of week, keeping maximum temperatures below normal and minimum temperatures above normal. Result was averages mostly near normal. Temperatures dipped below freezing parts of Iana Valley when skies cleared briefly about midweek. Precipitation was frequent and totals well above average all areas except Kodiak. More rainfall is needed to saturate ground before freezing. General rains throughout the Bailbelt hampered harvesting of grain and potatoes. Crop harvesting is most advanced in the Tanana Valley with the majority of the harvest remaining in the Matanuska Valley. Topsoil moisture mostly adequate to surplus. However precipitation amounts received are still below seasonal normal in most areas.

ARIZONA: Temperatures ranged from 2° above normal southcentral, normal southeast and northwest, and 1° to 4° below normal elsewhere. Significant shower activity was confined to northern areas late in week with very light amounts elsewhere. Precipitation totals amounted to less than 0.05 inch most of State. Cotton continues to develop, mature, open in good condition. Opening in all areas. Harvesting accelerating in southwest. Cases of leaf spot, boll rot in southeast. Grain sorghum good, beginning to head out southeast, harvest picking up southwest. Alfalfa seed harvest continues, wind caused harvesting problems, yields fair to poor. Planting sugar beets continues. Alfalfa hay harvest continues, fair yields and quality. Lettuce and cabbage stands satisfactory Yuma area. Planting continues, early fields thinned. Fall cantaloupes making good growth. Chili pepper harvest active Cochise County, wilt reduced yields some fields. Harvest melons and chili peppers local market active Graham, Greenlee Counties. Weeding, thinning lettuce active Pima, Pinal Counties. Planting for later harvest active. Lemon harvest nearing volume proportions, Yuma area, beginning Salt River Valley. Market

conditions generally strong. Sizing other varieties good. Insect counts low. Tree conditions good. Range conditions vary from poor to good; northwest fair to mostly poor. Central desert fair to poor, central higher elevation and southeast ranges good. Cattle and calves good to fair. Screwworms major problem, southern areas. Sheep, lambs fair to good.

ARKANSAS: Very heavy rain portions of southwest over weekend with storm totals ranging up to 12.00 inches. The heaviest falls were in Bonnerdale-Glenwood area about 25 to 34 miles southwest of Hot Springs. Only very minor damage. Elsewhere weekly rainfall amounts ranged from near 1.00 inch in south-central and southeastern portions to less than 0.50 inch over northern half of State with many localities receiving little or no rain. Weekly mean temperatures in range +3° to +8° from normal with most unseasonable warmth in northwest and north-central sections. Most areas experienced gradual uptrend in temperature during week with pronounced cooling on weekend. Highest recorded, 100°, occurred at Morrilton in central section on 15th. Lowest, 60°, occurred at Calico Rock in north-central section on 16th and 18th. Dry weather continued to hurt crop growth. Weekend rains brought some relief, but mostly to central and southwest areas. Cotton fair to good. Defoliation underway, crop is opening rapidly with only limited picking to date. Rice harvest gaining momentum, 15% combined, excellent yields. Soybeans continue to suffer from drought, particularly late beans--harvest earliest varieties expected next week. Much worm infestation in soybeans. Corn and sorghum harvest progressing. Hay harvest active--supplies short on many farms. Small grains planting underway--some earlier plantings up to stand. Apple and grape harvest nearing completion northwest. Pastures short most areas, supplemental feeding required in driest areas. Cattle continue fair to good condition.

CALIFORNIA: Average temperatures 4° to 8° below normal valley locations; about 6° cooler than last week all areas. Freezing minimums northern and central mountain basins. Light showers Cascades and northern Sacramento Valley 12th. Heaviest amounts Red Bluff 0.62 inch, Susanville 0.35 inch. Cotton harvest slow increase. First bale ginned San Joaquin Valley. Rice harvest increasing Sacramento Valley. Small grain planting started. Harvest field corn, milo increasing. Raisin crops continue dry. Emperors, Ribiers, Thompsons packed fresh. Picking Calmeria, Almeria grapes underway. Juice grape large volume. Apple harvest continues. Almond increasing, walnut beginning. Nectarines complete, freestone peaches continue. Valencia orange continues. Light picking lemons, avocados. Summer grapefruit complete. Artichoke harvest light. Broccoli, cauliflower moving moderate volume. Westside cantaloupe harvest slow. Carrot digging continues central coast, southern California. Celery harvest increasing Salinas Valley. Honeydew harvest San Joaquin, Sacramento Valley declining rapidly. Salinas, Santa Maria lettuce moderate supply. Some damage corn earworm, cabbage looper, Santa Maria area. Onion digging active

San Joaquin Valley, northern areas. Bell pepper harvest continues San Joaquin Valley, increasing Salinas. Sweet potato harvest increasing Merced-Modesto area. Potato harvest underway in Tulelake area next 2 weeks. Fresh market tomato increasing King City, beginning San Joaquin Valley. Processing tomato deliveries declining Sacramento, San Joaquin Valleys. Range deterioration slowed by cooler temperatures, supplemental feeding and watering continues high. Livestock maintaining good condition utilizing available stubble and irrigated pasture.

COLORADO: Temperatures averaged slightly above normal eastern Plains, near normal elsewhere. Light showers all areas, somewhat heavier in central Arkansas Drainage Basin. Generally mild all week. Weather drying fields eastern plains by week's end, topsoil moisture adequate. Harvest active most areas. Corn silage 40% harvested. Corn maturing rapidly, 79% dented 54% safe from frost. Sorghum 73% turning color and 1/3 mature. Sorghum for forage 26% harvested. Third cutting alfalfa 64% harvested. Dry beans nearly 50% cut and 19% threshed. Late summer potato harvest 3/4 complete. Harvest fall potatoes San Luis Valley 5% complete. Seeding winter wheat and barley progressing rapidly, 63% and 53% complete respectively. About 35% winter wheat and 22% winter barley emerged. Sugar beet condition excellent most areas. Range and pasture condition excellent northeast and east, fair statewide. Livestock condition good.

FLORIDA: Sunny and warm. Temperatures slightly above normal with daily highs in low and mid-90's. Scattered showers early part of week with division averages less than 0.30 inch except 0.75 inch lower east coast and over 1.00 inch Keys. Corn and peanut harvest progressed rapidly. Early soybeans harvested, limited quantity. Land preparation for small grains underway. Inadequate soil moisture limiting grass growth many areas. Cattle and calves in good condition. Citrus grove condition excellent. Some irrigation underway. Testing of fruit active all areas; slight color change, not color break, no splitting, droppage not excessive. Favorable weather during week in major vegetable areas boosted plant growth and planting activity. In the peninsular areas, first pickings of cucumbers and eggplant started with sweet corn and radishes expected next week. Volume not expected until Mid-October. Earliest tomatoes are setting fruit.

GEORGIA. Continued extremely dry most areas. Rainfall confined to scattered light showers in southern sections until weekend when light to locally moderate amounts fell in north. Showers began extreme north Saturday and moved slowly southward on Sunday. Totals had reached, or slightly exceeded, 1.00 inch in parts of north by this Monday morning. Temperatures were mild at beginning of period but warmed to well above normal by midweek. Highs reached upper 90's south and central and low 90's north on 3 to 5 days. Hawkinsville had 104° on Saturday and several record highs for date were reported. Averages ranged from 2° to 5° above normal. Soil moisture short to mostly very short entire State. Crop conditions continues to decline. Cotton mostly fair to good, 6% picked. Corn fair to good, 11% picked. Peanuts fair to good with harvest very active, 82% dug and 66% threshed. Soybeans fair to good with pod shedding reported. Pastures mostly fair to good and hay crops fair to good. Planting of small grains and winter grazing pastures slowed, too hot and dry. Cattle mostly

good condition. Farmers continue to battle insects and diseases. Silage cutting remains active.

HAWAII: Weather generally dry and warm but favorable for crop growth. Soil moisture level maintained by heavy irrigation. Progress of crops continued fair to good despite prevalence of insects and diseases. Supplies adequate for vegetables. Banana harvesting increasing seasonally but papayas light. Sugarcane harvesting on schedule--pineapples down. Cattle and pastures fair to good.

IDAHO: Cooling trend established at end of last week continued with some recovery at end of this period. Temperatures average 2° to 5° below normal north and east and 5° to 11° below elsewhere. Low temperatures fell to freezing or lower most higher valleys during week. Precipitation general midperiod totaling above normal all areas except below normal east. Grandview on Middle Snake River recorded 0.93 inch on 11th for greatest total for week. Rains slowed harvest of crops early in the week. Potato vines being sprayed in east Idaho in lieu of a vine-killing frost. Potato digging gaining speed in east. Onion harvest now 1/2 done. Some frost damage to alfalfa higher elevations. Hay curing slow. Ensiling corn going ahead full throttle. Alfalfa seed harvest slow with about 20% done. Apple harvest nearly 10% complete. Seeding winter grains 10% done north and east, 15% south. Cattle movement from high ranges starting.

ILLINOIS: Temperatures averaged 2° to 7° above normal. Week began cool with readings in 40's and 50's, but by midweek maximum temperatures had climbed into 80's and 90's. Weekly precipitation totals ranged from over 4.00 inches parts of northern Illinois, where they needed the rain least, to generally less than 0.50 inch over the southern tip of State. Corn 90% dented, 60% mature and 2% harvested, about normal progress but behind 1971. Condition 86% good to excellent. Soybeans 80% turning yellow, 30% shedding leaves, and 2% harvested--behind normal progress. Condition 94% good to excellent. Third Cutting alfalfa 70% completed. Seeding winter wheat begun, nearly 5% completed. Pastures 78% good to excellent. Soil moisture short 14%, adequate 61%, and surplus 25%.

INDIANA: Very warm week and precipitation heavy in north. Temperatures averaged 7° above normal. Some 90's on 13th. Precipitation in north averaged 3.60 inches with some totals as high as 6.80 inches reported at Waterloo. Continued dry in south. Four days suitable for fieldwork. Topsoil and subsoil moisture adequate. Wheat land 70% plowed, 60% average. Wheat 5% seeded, 4 days behind average. Rye 15% seeded, barley 10% seeded, 30% average for both. Corn 20% mature, 35% average. Soybeans 45% turning yellow, 20% shedding leaves. Pastures mostly fair to good.

IOWA: Warm week with heavy showers early week over west-central, southern, and northeast divisions. Extensive flooding southwest and locally in northeast. Extremely heavy rain last week caused extensive flooding of lowlands in west-central and southwest counties. Appraisal of damage underway by county disaster committees. Acreages of corn and soybeans in lowlands, particularly soybeans, will be severely damaged in flooded areas. Corn crop 55% mature and safe from frost, about same as average, but behind 83% last year. Corn harvest underway in early fields, mostly silage and seed

corn. Soybeans 35% shedding leaves, 30% mature; last year 55% shedding leaves, 69% mature. Soybean harvest started in a few fields, last year 5% harvested. Weeds causing problems. Soybeans condition 53% good, 43% excellent, 3% fair, 1% poor. Winter wheat 25% planted compared to 36% last year. Third cutting alfalfa hay 70% complete. Pasture condition 57% excellent, 41% good, and 2% fair. Two-thirds of popcorn crop is mature with harvest starting. Only 2 days suitable for fieldwork. Topsoil moisture 55% adequate and 45% surplus.

KANSAS: Significant precipitation most of eastern 1/3 generally 0.25 to 1.00 inch. Torrential rains locally extreme northeast with few spots over 6.00 inches. Hiawatha, Brown County, had 6.70 inches with unofficial totals of over 9.00 inches that area. Precipitation spotty and generally light western 2/3 of State. Weekly mean temperatures averaged near seasonal parts north-central. Considerably above normal elsewhere. Cool near mid-week, warming trends late in period pushed maxima to 90's on 17th. Wheat seeding accelerating--16% completed, 12% year ago, 16% average. Sorghum crops 64% colored, 70% last year and 66% average. Sorghum 19% matured compared 27% year earlier, 23% average. Harvest 3% completed, moderately behind last year and average. Corn 89% dented, 90% last year and 83% average; 49% matured, 61% last year and 58% average. Corn harvesting slow due to wet fields some areas--5% harvested, 12% year ago and 10% average. Soybeans 1% harvested, 5% year ago and 2% average. Corn and sorghum silage cutting active. Alfalfa 4th cutting 25% completed, 37% last year and 33% average. New alfalfa seeding 74% completed, 70% year ago, 75% average. Pastures and cattle good to excellent condition.

KENTUCKY: Rainfall spotty, weekly totals at most points less than 0.25 inch, but totals some locations 0.50 inch to 1.00 inch. As of 17th, at a number of locations, at least 3 weeks since last 24-hour rain of 0.25 inch or more. Warm to very warm and humid most days, temperatures averaging 2° to 6° above normal. Most days sunny. Showers 1 or more sections last 4 days, most numerous last day. Dry weather continued and soil moisture mostly short. Lack of rain hurting late corn and soybeans, hay crops and pastures. Cutting and housing tobacco very active under favorable weather conditions. Burley 74% cut, 68% last year. Very little houseburn to date. Dark types 76% cut. Corn harvest just beginning, about 40% acreage mature. About 85% acreage safe from freeze damage. Soybeans 17% shedding leaves, another 40% leaves turning yellow. Late beans need rain. Fall wheat 12% seeded, soils mostly too dry for germination. Pastures dry, need rain or fall and winter feed will be sharply reduced.

LOUISIANA: Temperatures well above seasonal early and late in week. Averages 1° to 4° above normal. Precipitation confined to scattered showers mainly in south early in week and over weekend. Weekly totals none to less than 0.25 inch north; none to locally more than 1.00 inch central and south. Temperature extremes: 98° Winnsboro Wednesday and Thursday and 60° Ashland Wednesday. Greatest 1-day precipitation 1.25 inches measured at Alexandria Sunday morning. Fieldwork active in all areas with minimum of interruption from scattered showers. Main activities were insect control in cotton, soybeans, and sugarcane, harvest of sweetpotatoes and hay, planting sugarcane and preparing land for fall pastures. Soil moisture generally short except in southernmost parishes, continued deterioration in

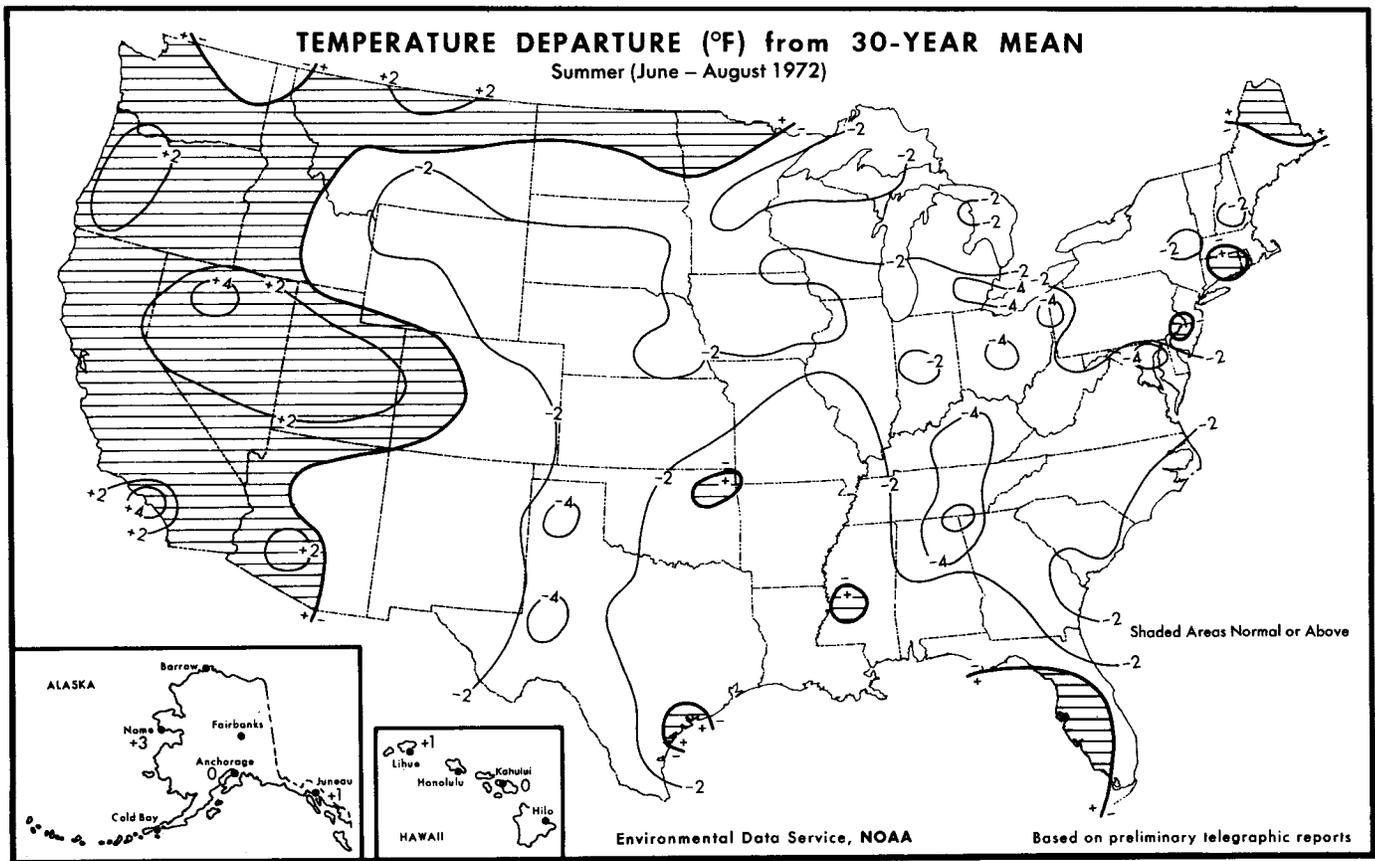
cotton and soybeans prospects. Cotton condition fair to good, maturing rapidly and harvest underway. Late soybeans need moisture, harvest of Hill variety active in northeast. Rice harvest about 95% complete in southwest. Sugarcane prospects good, planting 73% complete. Corn about 65% harvested. Sweetpotatoes 35% dug. Pastures below normal, but livestock in good condition.

MARYLAND AND DELAWARE: Temperatures averaged 2° to 5° above normal. Extremes mostly mid-80's to low 90's, mid-40's to mid-50's. Rainfall on 12th and 14th mostly 0.50 inch or less. Only a few totals over 1.00 inch. Rainfall at some stations in north-central Maryland less than 0.50 inch in 3 weeks. Limited relief to dry soils in central and northern areas. Fall seeding of hay and grain crops delayed. Silo filling chief activity. Corn for grain 50% mature, average 70%. Hay becoming active in south. Soybean maturity about normal. Tobacco harvest 80% done, normal 88%. Watermelon and cantaloupe harvest nearing end. Peppers, tomatoes, lima beans and snap beans also harvested. Need rain to size apples. Delicious varieties coloring well and harvest expected to peak about September 25.

MICHIGAN: Seasonal weather except rapid warming south as period ended. Scattered showers and thundershowers early and late in period, heavy south. Temperature averages: Normal to 3° above normal Upper Peninsula; 1° below normal north interior to 3° above south Lower Peninsula. Precipitation totals: 0.20 to 0.65 inch except locally over 2.00 inches Upper Peninsula; Lower Peninsula, 0.70 to 1.00 inch north increasing to 1.25 to 4.00 inches south. Fall crops moved slowly toward maturity. Fieldwork slowed or halted by wet fields--averaged 3.8 days suitable for fieldwork. Soil moisture surplus to adequate. Corn 75% dented compared 90% last year and average of 75%. Much corn for silage too high in moisture to harvest. About 60% soybeans turning color or more mature, 95% last year. Dry bean ripening delayed by cloudy humid weather--white mold and other diseases causing considerable damage. Sugar beets sizing well. Wet weather slowed potato harvest, less than 30% fall crop harvested. Much hay lost or damaged. Pasture feed supplies above average. Wheat seeding started, but slowed by wet fields. Fall apple harvest started. Picking of pear and plums nearing completion southwest. Pears and peach harvest well along northwest. Wet fields continue to slow vegetable harvest.

MINNESOTA: Temperatures near normal across State. Extremes: 89°, 30°. Precipitation: Heaviest was 1.00 to 1.50 inches on a 150-mile wide line from Tyler-Mankato-Rochester then 2.00 inches to 2.50 inches through La Crosse into Wisconsin. This occurred late on 12th. Rest of State received 0.50 to 1.00 inch except west-central and central districts which received less than 0.25 inch. Crops made good progress, but additional frost-free weather needed to mature late-planted corn and soybeans. Topsoil moisture short to adequate west-central and southwest districts, adequate to surplus elsewhere. Corn dented 89%, normal 82%; corn safe from frost 45%, normal 44%. Silage corn cut 20%, normal 41%. Soybeans about 1 week late; shedding leaves 31%, normal 64%; mature 7%, normal 17%. Flax combined 53%, normal 66%. Hay and grain stubble plowed 49%, normal 40%. Small grains seeded: winter wheat 78%, normal 65%; rye 72%, normal 63%.

(Continued on page 12)



SUMMER WEATHER (June to August 1972)

TEMPERATURE: Summer temperatures averaged above normal over most of the area west of the Rocky Mountains and cooler than normal from the Rocky Mountains to the Atlantic Ocean. The Far West averaged warmer than normal in each of the 3 months, June to August. June was warmer than normal over mid-America but July and August were relatively cool. The East averaged cooler than normal in each of the 3 months with two minor exceptions. New York and New England averaged warmer than normal in the early part of the summer and the eastern Gulf Coast and the southern Atlantic Coast were slightly warmer than normal in August.

Shortly after mid-July, the Bermuda High moved westward from a position about 600 miles northeast of Bermuda. By July 21, it became stationary over the western Carolinas. The very light but generally southerly winds on the west side of the High spread warm, humid, hazy weather over the eastern half of the Nation. The light thunderstorms in the moist air brought little relief from the heat, humidity, and atmospheric pollution. Patches of early-morning fog dotted the eastern half of the Nation on most mornings and the rising sun was reddish orange due to the pollutants in the air.

PRECIPITATION: In general, summer rainfall totals were less than 4.00 inches west of the Rocky Mountains, between 4.00 and 8.00 inches over the western Great Plains, and more than 8.00 inches over the eastern half of the Nation. Numerous spots over the East received more than 16.00

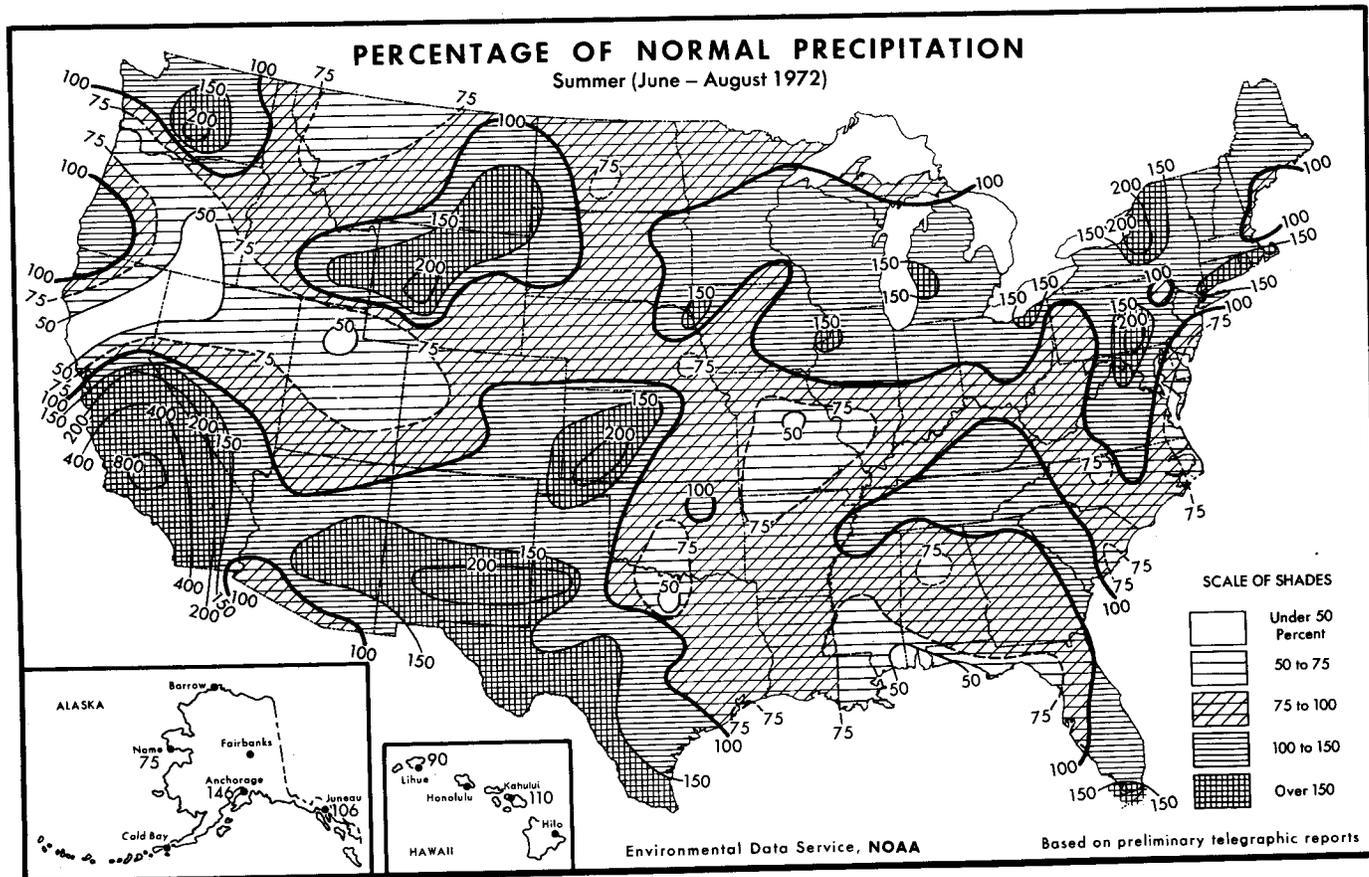
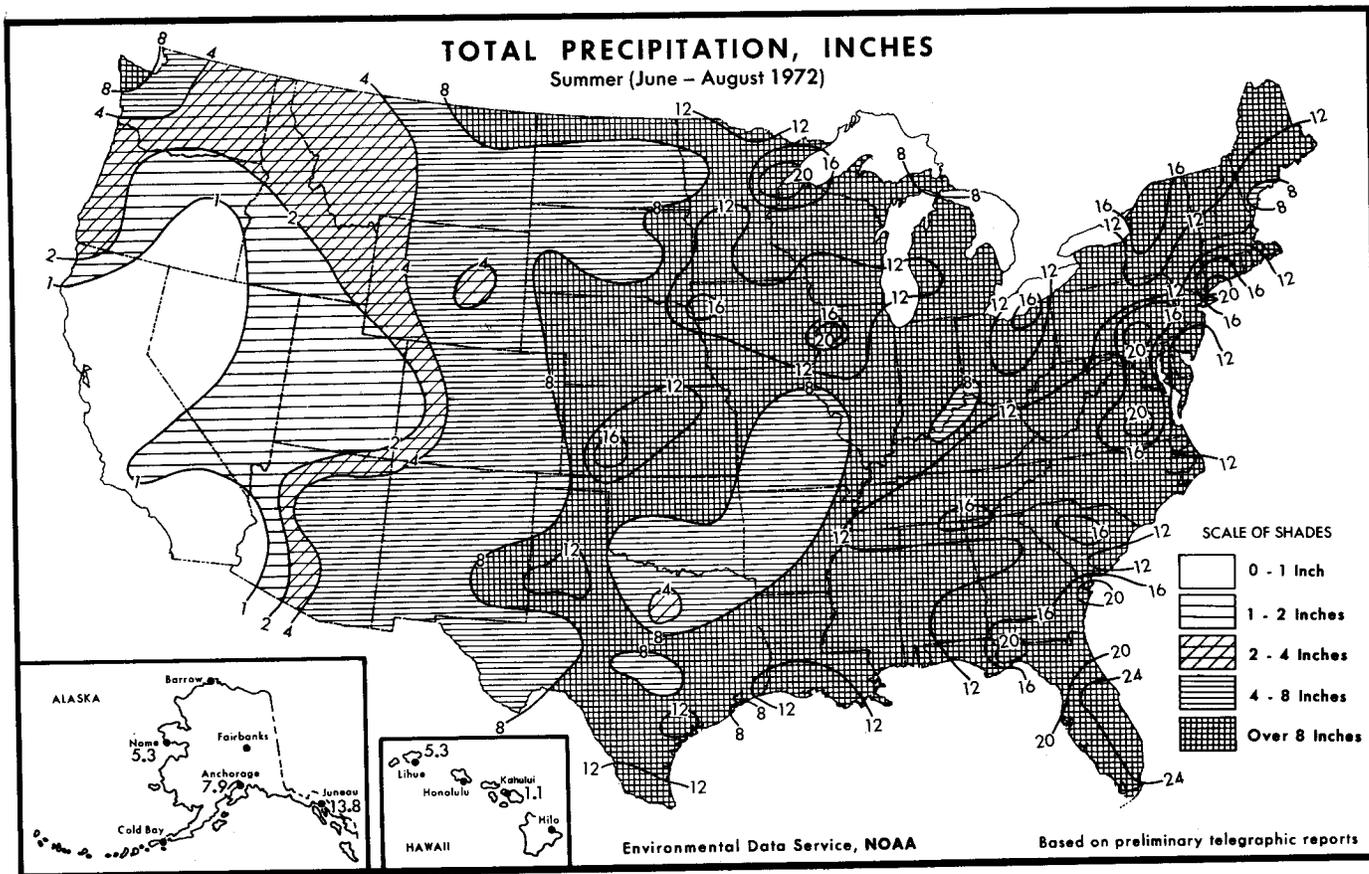
inches of summer rain. Over the Florida Peninsula, the 3-month totals ranged from 16.00 to more than 26.00 inches. Totals were mostly between 50% and 150% of normal. An important exception was parts of southern California where the normals are small. This area has a "Mediterranean" climate; most of the rain falls in winter with almost none occurring in summer. The light rains which did fall were several times the summer normals.

Torrential rains in northern and eastern Black Hills on the evening of June 9, caused the worst natural disaster in South Dakota history. The 3.00- to 5.00-inch rains flooded portions of the Keystone, Sturgis, and Rapid City areas. About 200 persons were drowned. Hundreds were left homeless. Many bridges and many miles of roads and railroad tracks were destroyed. Property damage was in the neighborhood of \$100 million.

Hurricane Agnes played the star roll in the weather news in the 4th week of June. She caused some of the most devastating floods in the Nation's history across the eastern United States. Hardest hit were Virginia, Maryland, District of Columbia, West Virginia, Delaware, New Jersey, New York, Pennsylvania, and Ohio.

Vigorous thunderstorms broke out in July and August over the Great Plains in connection with the fronts which moved across the area. One of the August storms dumped 1.30 inches of rain at St. Cloud, Minn., in 18 minutes. Such a downpour is called a "cloudburst."

L. W. Dye



AGRICULTURAL WEATHER CENTENNIAL

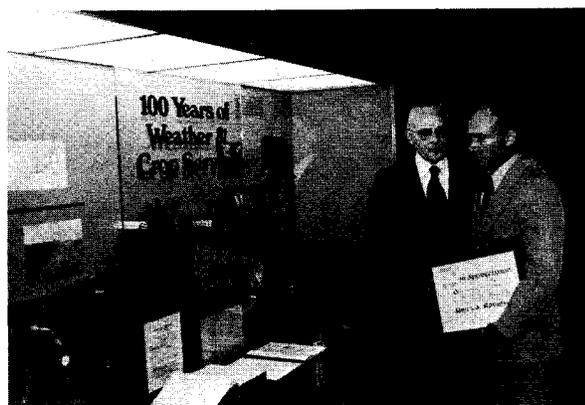
OBSERVANCE HELD



Floyd and Boyd Bishop receive a Certificate of Appreciation from Secretary of Agriculture Earl Butz for their outstanding record as crop observers.



Howard Pollack, Deputy Administrator of NOAA presents a Certificate of Appreciation to Mr. Frank T. Street for his fine work as a cooperative weather observer.



Secretary of Agriculture Earl Butz and County Agent James A. Robinson admire the exhibit in the Smithsonian Institution honoring the 100 years of the Weather and Crop Service.

The Weather and Crop Service Centennial observance and reception was attended by over 200 persons at the Smithsonian Institution on Thursday, September 7. A highlight of the evening was the presentation of certificates of appreciation to volunteer crop observers Floyd and Boyd Bishop of Meade County, South Dakota, a volunteer weather observer, Mr. Frank Street of Henderson, Kentucky and county extension agent James Robinson from Aroostock County, Maine. Mr. Lucius W. Dye, Editor of the Weekly Weather and Crop Bulletin, received the Bronze Medal for 33 years of meritorious government service.

The Honorable Earl Butz, Secretary of Agriculture presented the awards to the Bishop Brothers and Mr. Robinson. Mr. Howard Pollock, Deputy Administrator of NOAA, represented Secretary of Commerce Peter Peterson in presenting awards to Mr. Street and Mr. Dye.

An eye-catching display case, which will be viewed by the public through the end of the year, was presented. The display depicts 100 years of progress in recording weather and crop conditions.

The Centennial edition of the Weekly Weather and Crop Bulletin was also presented at the ceremonies. Including a number of stories which present the history of the crop and weather service and examples of how the information is used, the Bulletin was well received.

The key to the entire crop weather service is the volunteer crop and weather observer. Although only single representatives of each type of observer were honored, the honor was intended to represent the dedicated efforts of thousands of observers across the country. Each week some 13,000 cooperative weather observers record daily temperature and rainfall. Several thousand crop observers send in weekly reports on crop conditions while some 3000 county agents assist in the compilation of this information.

The Bishop Brothers of Meade County, South Dakota have been extremely reliable over the years. Floyd and Boyd started sending in monthly crop reports in 1932 and have not missed more than 10 times in all those years. They haven't missed a single report since 1953. That's 236 in a row. They also provide crop weather information and are credited with a 99 per cent return in the past 13 years. Additionally, they maintain an official weather station on their ranch for the National Weather Service. In their spare time, Floyd and Boyd run their own 920 acre cattle and hay ranch.

James A. Robinson, Area Potato Specialist, Aroostock County Maine, has earned a reputation for careful, unbiased, professional evaluation of crop and weather conditions. His weekly reports of the highly sensitive potato situation in Aroostock County reflect a fund of knowledge learned from a boyhood on a potato farm and an education at the University of Maine. His appraisal of crop prospects are eagerly sought and respected though the potato industry.

Frank T. Street operates the cooperative weather station for Henderson, Kentucky. He has been preparing accurate, daily weather reports at the station since September 1, 1936, first as assistant observer to his sons Frank, Jr., and George and later as chief observer. In 1966, he received the John Campanius Holm award and has been selected for the Jefferson award for outstanding accomplishment in the field of weather observations. A native Kentuckian and an alumnus of the University of Kentucky, Mr. Street has engaged in research concerning the effects of weather on peach and crop production with the University and nationally recognized authorities. He has co-authored peach variety performance reports, which are published by the University and highly regarded in national peach growing circles. Mr. Street was selected by the National Peach Council as the outstanding peach grower in the United States in 1968, the first year such an award was given.

The editor of the Weekly Weather and Crop Bulletin, Lucius W. Dye, first came into the Weather Bureau in 1939 when it was still a part of the Department of Agriculture. This respected employee of the Department of Commerce has over 33 years of government service. He has two college degrees and can most aptly be termed a "gentleman and a scholar". Although the Bulletin involves all of the deadlines and headaches of any printed material, Mr. Dye's willing and helpful manner has seen to it that everything is done properly and on time.

After the ceremonies, a reception was held in the display area. The reception was provided by 24 agri-business companies and representatives. All of these groups make regular use of the information provided by the crop and weather service at both the State and National level.

It was fitting that the events were carried out at the Smithsonian, since it was Joseph Henry, former Secretary of the Smithsonian who conceived the basic idea and laid the groundwork for the crop and weather reporting service we have today.

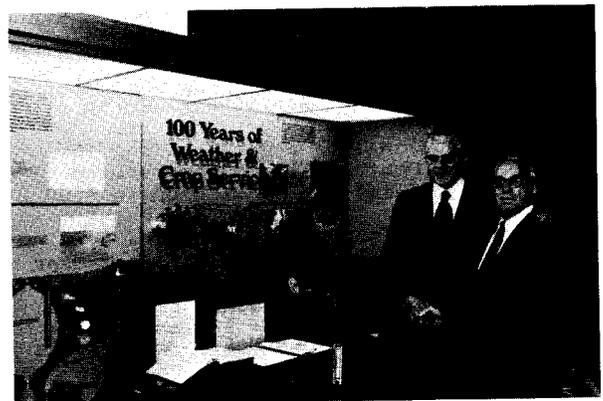
R.E. Felch



Floyd and Boyd Bishop admire the exhibit at the Smithsonian Institution.



Dr. C. G. Abbot of the Smithsonian Institution is surrounded by Frank Street, Floyd and Boyd Bishop, and Lucius W. Dye. Dr. Abbot was born the year the Weekly Weather and Crop Bulletin was established--1872.



Secretary of Agriculture Earl Butz congratulates Lucius W. Dye, editor of the Weekly Weather and Crop Bulletin, on his receiving the Bronze Medal for his 33 years of Government service.

(Continued from page 7)

MISSISSIPPI: Widely scattered light showers early in week, otherwise mostly sunny and hot. There was 1 or no days with rain at most stations and amounts generally under 0.50 inch. At Belzoni, 1.00 inch was measured morning of 9th. Weekly temperatures averaged normal or a few degrees above normal. Extremes: 100° Meridian on 8th; 58° Wednesday and Thursday at Waynesboro and Wiggins. Over weekend: Showers developed Saturday and Sunday. They were most numerous and heavy in northern quadrant of State. Some flash flooding accompanied the heavier thunderstorms. At New Albany 5.20 inches was measured this morning. Soil moisture very short to adequate northern half, very short to short in southern counties. Corn 64% mature, but not harvested, 15% harvested. Cotton fair to good, 25% open, 3% harvested. Soybeans poor to good, 20% shedding, 70% mature, but not harvested. Rice fair to good. Livestock fair to good. Pecans very poor to mostly fair. Sweet potatoes 50%, hay crop 80%, and peanuts 15% harvested. Average of 6 days suitable for fieldwork.

MISSOURI: Week began and ended cool, but was well above normal middle of week. Temperatures average 5° to 8° above normal. Heavy rains Wednesday and Thursday soaked all but southeast. Amounts ranged from over 3.00 inches north-central to over 1.00 inch in Ozarks, to less than 0.10 inch most areas of Bootheel. Four days suitable for fieldwork. Corn remains good, 48% matured, 71% a year ago. Corn 6% harvested compared to 13% last year. Soybeans mostly good 28% matured; 1% harvested, 8% last year. Grain sorghum 40% matured, 63% last year; 5% harvested, 15% last year. Cotton condition mostly good with harvest starting. Soil moisture 30% short, 56% adequate and 14% surplus.

MONTANA: Cool and wet most of State first of week. Warmer and dryer over weekend all sections except northern Plains. Temperatures averaged near normal most of State to 4° above normal southwest. Barley, spring wheat, oats each 90% harvested. Winter wheat acreage 1/4 seeded. Corn silage harvest 50% complete; flaxseed, dry beans each 30% harvested. Second cutting alfalfa 85% complete. Cattle and sheep good to excellent condition eastern 1/3, good elsewhere. Cattle and sheep each 15% moved from summer ranges. Range feed supply sufficient except short portions western 1/3, north-central and central. Grasshopper damage to late summer ranges light. Winter ranges and pastures fair to good condition, except eastern 1/3 good to excellent.

NEBRASKA: Warm week most sections. Stormy at times portions of east. Thunderstorms dumped heavy rains on 10th and 11th along the Platte River from Central City downstream to Plattsmouth where 2-day totals of 2.00 to 8.00 inches were measured. Thunderstorms again lashed portions of east-central Nebraska evening of 13th causing isolated property damage. Over western 2/3 of Nebraska, dry with most stations measuring less than 0.25 inch of precipitation. Temperatures averaged from 4° to 5° above normal in east to near normal in west. Hot dry weather was the rule over weekend. Cool weather first of the week slowed maturing of crops. Rains replenished soil moisture in eastern areas, but slowed or stopped fieldwork. Corn 94% dented, 28% mature, slightly later than normal. Root and stalk rot reports earlier than normal, and are more widespread. Sorghum reached 80% turning color, 12% ripe. Soybeans 70% turning color, compared with 78% normal. Dry

bean harvest picking up momentum. Fall wheat 40% planted.

NEVADA: Temperatures all divisions 2° to 5° below normal. Extremes: Reno high 86°, low 26°, Winnemucca, high 88°, low 26°. Precipitation light in northwest. Moderate in northeast. Trace in southwest, and none in extreme south. Alfalfa seed harvest continues active all major producing areas. Hay and small grain harvest nearing completion most areas. Alfalfa hay harvest ranges from 3d cutting in northern areas to 6th cutting in southern valleys. Livestock remain in good condition.

NEW ENGLAND: Week mostly mild and dry. Mean temperatures averaged 1° to 5° above normal. Quite warm and humid Sunday with many maxima in 80's and a few 90's in south. Freezing limited to a few colder locations in north on 13th. Scattered showers and some thunderstorms on 13-14th accounted for nearly all the rain. Totals mostly from near none to 0.60 inch but ranged to over 1.00 inch in heavier storms locally in Massachusetts. New Bedford reported a small tornado-waterspout on 14th with minor damage on land. Local wind damage also on University of Connecticut campus at Storrs same date. General fall harvest in full swing. Potato digging active in Aroostook County, Maine, with closing of public schools. Apple picking active with crop still taking on size and coloring well. Late variety summer vegetables harvested in moderate volume. Fall squash moving to storage. Silage corn growing well with cutting becoming more active. Good quality 2d and 3d cutting hay going into barns.

NEW JERSEY: A warm week with temperatures as much as 6° above normal some southern counties. Extremes: 93° on 18th at Newark and East Millstone and 42° at Charlotteburg on 12th. Rainfall continues subnormal but amounts were heavier than last week's. Rainfall heaviest in South Jersey with Cape May Courthouse reporting 0.70 inch this week. Irrigation applied as soil moisture continues very short. Cabbage harvest increasing. Light lettuce harvest continues. Iceberg harvest should increase this week. Limited amounts of sweet corn and tomatoes are available. Peppers, eggplant, squash and snapbeans are in moderate supply. White potato digging remains steady. Fall apple supplies are increasing. Cranberry harvest is underway. Rain is needed for grain and cover crop germination.

NEW MEXICO: Showers most frequent early in week, almost none on weekend. Showers generally light but locally were more than 1.00 inch. Greatest totals were in northeastern plains and southwestern mountains. Temperatures averaged above normal with seasonally warm nights. Minimum temperatures late in week and warmest days on weekend. Moisture adequate to surplus except northwest corner poor. Periodic rain and wet fields hampered farm activity, local flooding southeast. Clear weather needed. Cotton boll rot, rust developing, opening bolls slowed. Most farm activity at standstill. Wheat 3/4 planted. Sorghum grain dough stage, some ready for harvest. Range, livestock good to excellent except northwest corner ranges poor.

NEW YORK: Warm with beneficial rains occurring midperiod. Maximums mostly upper 60's to upper 70's but warming to mid-80's on 17th. New York City 92°. Minimums 38° to 45° interior on

11th and 15th ranging up to 65° to 70° morning of 14th. Precipitation widespread 13th and 14th. Totals 0.50 to 0.90 inch in dry areas of south-central and east-central. Elsewhere Upstate 1.30 to 2.50 inches in southwest down to 0.10 to 0.20 inch near Lake Ontario and northern valleys. Dry week on Long Island. Corn silage harvest underway, about 10% completed. Grain corn will need few more weeks frost-free weather to mature. Early dry beans harvested, crop in fair condition, weather good for development. Second and 3d cutting alfalfa continues although growth has slowed. Pastures poor to fair. Orange County onion and celery harvest continues. In central and western sections topping of onions active. Lettuce harvest about to finish Oswego County. Wayne County celery deal moving rapidly with good size and quality. Supplies of fresh market snap beans increased while harvest of processing beans passed 3/4 mark. Grape harvest underway Finger Lakes with Aurora, Concord coloring well. Cold press harvest to begin September 18. McIntosh apples now available. Harvest of wealthy apples just begun with general harvest of processing apples expected next week. Bartlett pear harvest about completed.

NORTH CAROLINA: Temperatures rising slowly, and averaging a little above normal. Highs reaching 90° warmer areas 13th through 17th. Mostly fair during work week; showers over week-end averaging 0.50 inch, but some local amounts to 3.00 inches. Soil moisture very short southern Piedmont, mostly adequate central, southern coastal plains, mostly short remaining areas. Flue-cured tobacco harvest almost complete -- selling active with record high prices. Burley harvest continues. Cotton mostly fair -- insect control, leaf defoliation. Limited picking. Soybeans mostly good -- spraying insect-infested fields. Peanuts mostly good commercial areas -- spraying leaf spot, insects, digging beginning. Corn, commercial apples, sweet potatoes, mostly good -- harvest active. Remaining hay crop mostly good. Pastures mostly fair.

NORTH DAKOTA: Temperatures averaged near normal except 2° above normal in south. Highs varied from 60's to 80's and lows mostly in 40's and 50's. Scattered showers mostly on 12th and 13th. Rainfall amounts varied from a trace to 1.54 inches, heaviest in northeast and little or none in southwest. Harvesting operations made generally good progress past week although scattered showers and heavy early morning dews caused some delays. About 80% hard wheat and 3/4 durum combining completed. Oats and barley harvest nearing completion. Flax about 1/2 combined.

OHIO: A wet week particularly in northern sections. Rainfall amounts evening of 13th and morning of 14th were generally 4.00 to 5.00 inches. Paulding reported 6.39 inches. On evening of 17th 4.00 to 5.00 inches again fell in northern Ohio. Maximum temperatures ranged from upper 60's to lower 90's. Minimum temperatures were mostly in 60's and 70's except mornings of 15th and 16th when readings were in upper 40's to upper 50's. Rainfall in northern 1/3 of State caused local flooding. However, continued dry in southwest and south-central. 5-days suitable for fieldwork. Soil moisture supplies improved, 18% short, 43% adequate, 39% surplus. Corn for grain 65% dented, but not hard compared to 95% last year; 1/4 mature compared to 55% last year. Corn silage is 30% harvested.

Soybeans 10% mature compared to 25% last year and average 20%; leaves shedding 30% against 50% average. Third cutting alfalfa 65% harvested, 5 percentage points behind last year. Potato harvest made little progress. Tobacco crop 65% harvested. Less than 1/2 red clover seed harvested. Winter wheat seeding normal and barley seeding behind average. Tomato harvest slowed by wet fields.

OKLAHOMA: Precipitation ranged from none in west-central to 0.30 inch in east-central. Temperatures averaged above normal and ranged from 1° above normal southeast to 8° above normal central and northeast. Few 100° readings southwest Sunday. Late maturing row crops and fall grazing prospects continue to improve. Mostly good to fair. Crop development moderately ahead of year earlier. Surface soil moisture decline now rated 1/3 adequate, balance short. Subsoil moisture 1/5 adequate. Seeding 1973 wheat around 4/5 completed Panhandle, gaining momentum other areas, nearly 1/3 completed for entire State. Good stands early-seeded fields. Harvesting corn for grain 1/10 completed. Sorghum grain wide range development, nearing maturity Panhandle, elsewhere harvest active. Nearly 1/4 cotton bolls open, about 10 days earlier than last year. Insects causing some problems southwest and other scattered areas. Scattered picking southwest and east-central. Peanut crop 1/4 mature, scattered digging and threshing continued. Slightly over 1/10 soybean crop mature, recent rains beneficial, but more moisture needed. Range and pasture greening up; however, supplementary feeding necessary. Livestock still good to fair.

OREGON: Cloudy wet days early in week with cooler days mid-period. Weekly temperatures averaged 2° to 4° below normal, 6° to 8° below normal northeast. Minima 26° to 30° scattered east, 33° to 46° elsewhere. Maxima 74° to 84°. Precipitation limited northern 3/4 of State. Totals mostly 0.10 to 0.40 inch except 0.70 to 1.10 inches northwest and northeast. Soil moisture short throughout State, limiting land preparation and seeding of fall grains. Harvest red clover seed continues. Sweet corn and bush bean harvest continues. Picking winter pears full swing. Apple harvest underway with limited picking at Hood River. Filberts are dropping. Hop harvest continues at Ontario, completed at Salem and Grants Pass. Potato digging continues Ontario, Hermiston and Klamath Falls. Potato vines nipped by frost southern and central areas. Yearlings moved in from ranges.

PENNSYLVANIA: Heavy showers west, light rainfall southeast. Precipitation totals 2.00 to over 4.00 inches west, 0.50 to over 2.00 inches central and northeast, under 0.50 inch southeast. Most rain fell first half of week and late Sunday. Flash flooding parts of west, continued dry southeast. Weekly temperatures 2° to 4° above normal north, 4° to 6° above normal south. Extremes: 93°, 38°. Rains provided some relief from dry spell. Topsoil moisture supply 2/3 short. Corn mostly in dough and dent stages. Late fall potato digging underway most sections. Tobacco cutting 3/4 finished. Barley and wheat seeding lags. Pastures remain below average. Hay baled good quality, tonnage down. Fall apples being picked; small size, good quality and color. Tomatoes short supply, 2 weeks late. Late sweet corn mostly poor.

PUERTO RICO: Rainfall averaged 0.71 inch or 1.27 inches below normal. Moderate rainshowers centered in eastern and western sections. Highest weekly total 4.32 inches northwest section. Rainfall generally less than 0.50 inch through central portion and less than 0.10 inch along south coast. Small areas of no rain in south-central section where agricultural drought greatly eased but more rain still needed to normalize crop moisture conditions. Temperatures averaged 81° to 82° coast and 76° to 77° interior sections with mean departure of about 1.0° below normal. Sugarcane plantations report some cultivating and fertilizing operations in progress. New plantings continued good development except some nonirrigated zones where more rain needed. Coffee harvesting operations well underway with good harvest in view. Rains caused minor delays in some zones, but young trees benefitted. Work continued in tobacco zones on seedbed preparation under favorable weather conditions. Minor crop zones planting and harvesting. Avocados declining, but plantains and bananas continued abundant.

SOUTH CAROLINA: Sunshine abundant and rain very scarce. Beaufort and Jasper Counties had from 0.50 to 1.00 inch of rain. Rest of State had less than 0.10 inch. Daily temperature ranges were large. Lows were in 40's in some locations for the first time this fall, highs were in the 80's and 90's. Weekly average temperatures were about normal. Dry conditions causing poor growth and development all crops. Some premature shedding cotton and soybeans. Several tobacco markets still open selling at full allotment. Cotton 37% open bolls compared with 49% last year. Some harvest underway. Corn good to excellent condition, 96% mature, 25% harvested. Soybeans fair to good condition, 90% bloomed, 87% set pods, 17% leaves turning, 10% leaves shedding. Last year all bloomed, 94% set pods. Peanuts 65% harvested compared with 47% last year. Lespedeza good condition. Pastures fair condition. Grain, sorghum, hay crops fair to good condition. Grapes 95% harvested compared with 100% last year. Apple harvest 60% complete compared with 66% last year. Pecans poor condition.

SOUTH DAKOTA: Weekly temperatures averaged from 2° below normal to 3° above normal. Extremes ranged from 32° near Marcus and Porcupine on 14th to 94° near Porcupine on 12th. Precipitation light most of State with amounts generally less than 0.50 inch, although there were a few locally heavy thundershowers. Brookings received 1.33 inches in a thundershower on 12th.

Weather favorable for maturing row crops. Two weeks frost-free weather still needed for late-planted crops. Corn 61% safe from frost, equal to normal, but 23 points below last year. Sorghum grain showing head color 65% normal 83% last year nearly 99%. Soybeans shedding leaves 47% normal 65%, last year 80%. Most row crops look good above normal yields expected. Flax harvest nearing completion, considerably behind normal. Early fall-seeded grains up with stands good most areas, but spotted where moisture short. Seeding progress rapid in spite of dry fields with 70% rye and 79% wheat seeded, ahead of normal and last year. Greenbugs in early-emerged wheat fields could cause problem until frost. Livestock good. Pastures dry but seasonably good. Stubble fields and sudan grazed. Stock water mostly adequate. Hay harvest about complete -- some stacks moved to winter feeding areas.

TENNESSEE: Temperatures 4° above normal in west to near normal in east. Extremes: 93°, 53°. Precipitation mostly light to moderate in scattered showers over weekend. Totals from less than 0.25 to 1.50 inches in southeast. Isolated areas reported as much as 2.00 inches on Cumberland Plateau. With 5.7 days suitable for field-work, Tennessee farmers continued harvest of crops. Burley tobacco harvest 95% complete, dark air-cured 90% and dark-fired 80% complete. About 10% corn for grain harvested with cotton harvest just beginning. Soybeans continue to look good. Fall seeding and plowing made good progress last week. Pasture conditions declined, but should improve with recent rain.

TEXAS: A few locally heavy thundershowers dotted north-central Texas, the Southern High Plains and Trans-Pecos mountain region the latter half of week. However, for most of the State showers were light, isolated, and insignificant. Temperatures continued above seasonal normal. Harvest of cotton, corn, sorghum, peanuts, rice made fair to good progress. Rain on High and Low Plains provided adequate moisture for planting wheat and oats. Cool weather delayed maturity of cotton crops. Sorghum harvest near completion southern half and just getting started northern part of State. Planting wheat and oats making fair progress on High and Low Plains. Dry weather and inadequate moisture delayed planting of wheat and oats from Blacklands southward. Major crops percent harvested: cotton 23, 15 last year; corn 55, 63 last year; sorghum 43, 47 last year; peanuts 23, 18 last year; rice 98, 98 last year. Major crops percent planted: wheat 38, 42 last year; oats 15, 19 last year. On High Plains, bell pepper harvest in full swing. A few tomatoes damaged by heavy rains. In Trans-Pecos, bell pepper harvest getting underway. In North Texas, light supplies of watermelons and cantaloupes are still available. In East Texas, digging of dryland sweetpotatoes remains active. In Winter Garden-San Antonio area, cabbage and carrots are still being planted. Early cucumber fields ready for harvest. At Laredo, tomatoes and green peppers making good growth. In lower Rio Grande Valley, planting of fall vegetables continues. Tomatoes and green peppers making good growth. Pecan harvest underway in some South Texas counties with shucks beginning to split most other areas. The 1972-73 citrus crop continues to make good growth with harvest of early oranges underway and grapefruit to start in early October.

UTAH: Few isolated light showers early in period, but accumulated amounts of moisture small. Less than 0.10 inch in most localities. The continued moisture deficit has maintained the severity of the drought which ranges from severe to extreme over south and west-central sections of Utah. Average temperatures ranged from near normal to 4° below normal. Soil temperatures at 4-inch depth now range from mid-60's in Cache Valley to upper 60's in Salt Lake City and Richfield and low 80's in St. George. Weather excellent for harvest. No killing frost of consequence in late crop areas yet. Winter wheat acreage for 1973 crop 60% planted. Third crop alfalfa hay 60% cut. Alfalfa seed harvest will be mostly completed by September 25. Potato harvest about 10% completed south to 60% completed north. Apple picking just started, about 5% along in Utah County. Tomato picking 65% completed. Fall-winter range feed rated only 1/2 normal.

VIRGINIA: Temperatures above normal except below normal at beginning and end of week. Light scattered showers Thursday and Friday. Topsoil moisture 73% short, Best in Tidewater and southwest. Cutting corn silage near peak in Piedmont and north. Harvest for grain 1/3 done southeast, gained momentum in Tidewater and began in Piedmont. Oats 10% planted and barley 5%. Flue-cured tobacco 85% pulled, 70% last year. Fire-cured 75% cut, 65% last year. Sun-cured 80% cut, 55% last year; burley 60% cut, 45% last year. Sprayed soybeans for Mexican bean beetles. Haying active. Pastures deteriorated especially in Upper-Piedmont and Northern Virginia.

WASHINGTON: Western Washington: Temperatures near normal with locally heavy dew and recurring fog. Some precipitation but less than normal. Harvest of silage corn underway southern counties while maturing to north. Picking of good sweet corn crop also underway. Blueberry picking tapering off, blackberries half gone. Harvest of carrots, cauliflower, lettuce, and cabbage underway. Cabbage seed plants planted. Not enough rain to help dryland pastures. Livestock in good shape with calf weaning underway. Eastern Washington: Cool first half of week warming latter half. Temperatures averaged 1° to 3° below normal. Normal precipitation Palouse Blue Mountain area otherwise little or no rainfall. Apple picking underway while cool nights continued to bring color. Harvesting of grapes for processing started while silage corn, sweet corn, potatoes, hops, alfalfa, and clover seed, other crops in harvest stage. Some swathing of 4th cuttings of hay and alfalfa. Moving some early-weaned calves to market. Seeding and preparation for seeding fall crops major activities. A few areas not yet received sufficient moisture to begin planting winter wheat.

WEST VIRGINIA: Heavy thundershowers with cold front September 14. Lighter showers September 11 and 12. Lowest temperatures September 10; highest September 13. Warm sunny weekend. Fieldwork suitable 4.4 days. Main activities cutting hay, fillingsilos, and general maintenance. Soil moisture conditions varied. Most areas east and south need rain. Corn mostly fair to good.

About 15% corn mature, 35% last year. Pastures generally good. Second cutting hay 82% complete and 3d cutting 30% complete. Potatoes 65% harvested. Tobacco 68% harvested, 55% last year. Seeding winter wheat and barley underway.

WISCONSIN: Cloudy and wet early part of week with heavy showers south half late Tuesday and early Wednesday. Mostly sunny and windy with good drying conditions after Wednesday except showery again on Sunday afternoon. Also a few isolated thunderstorms in north Saturday afternoon with a tornado in the forests across extreme southern Forest County and central Marinette County. Rains on Sunday very heavy southeast with 3.00 to 5.00 inch totals in counties west and south of Milwaukee. Most of the remaining oats harvested. A little second crop haying and baling of straw done. Most third crop hay being green chopped. Silo filling of corn begun. Fields still mostly too wet. Corn for grain about 50% safe from frost. Soybeans look good, but fields are weedy. Soybeans and corn could use another 2 weeks with no frost. Most tobacco crop harvested--good crop. Apples excellent in yield, size and quality. Pastures continue very productive, but mosquitoes have hurt milk production. Soil moisture 30% adequate and 70% surplus.

WYOMING: Scattered light to moderate showers occurred over most of Wyoming. Moran reported most moisture with 1.03 inches. Temperatures averaged near normal. Maxima mostly 70's west of Divide and Upper Platte Drainage, 80's elsewhere. Minima were mostly high teens to low 30's west of Divide, high 20's to low 40's east. Temperature extremes: 90° at Sheridan Field Station and 12° at Bondurant. Some areas reported their first light frost. Farm and ranch activities included harvesting small grain, corn for silage. Some hay, beans and potatoes and drilling winter wheat. One-third of corn for silage cut. Corn for grain moving ahead rapidly with over 1/2 denting and 15% mature. Windrowing dry beans 65% completed and about 10% harvested. Winter wheat 60% planted, few reports of some emerged. Potato harvest in full swing, 50% harvested. Expect sugar beet harvest to begin about September 27.

MATURITY NEAR NORMAL IN THE CORN BELT

Despite late planting this spring and below normal growing degree day (GDD) accumulations this summer, corn maturity in the Corn Belt is still about normal or only slightly behind normal for this time of the year. Because of a cold wet spring, planting was 2 to 3 weeks later than usual in most areas of the Corn Belt and 4 to 5 weeks behind last year. For example, although the corn is normally about 50% planted by May 15 in Iowa, Nebraska, and Illinois, Table 1 shows that on May 15, 1972 only 25%, 10%, and 35% were planted in the three States, respectively. Well over half of the total corn acreage in Iowa (70%), Illinois (60%), Indiana (55%), and Nebraska (70%) was finally planted during the 2-week period from May 16 to May 29. The total corn acreage in these four States represents slightly more than half (52%) of the total corn acreage for grain in the United States in 1972.

The combination of late planting and a cooler than normal summer (see Summer Temperature Departure Map - p. 8) has produced some concern over the potential damage in the event of an early frost. The average date of first fall frost over the United States is shown in Figure 3. Using May 22 as an average corn planting date for 1972, the number of growing degree days accumulated from May 22 through September 9 at several locations in the Corn Belt were determined. These values are shown in Figure 1. The departures from normal are presented in Figure 2. Most of the Corn Belt ranges from 200 to 300 GDD's below normal. In spite of this, however, crop reports received to date indicate that the crops are maturing normally or only slightly later. Table 1 shows that as of September 9, 48% of the corn in Illinois was safe from frost which is normal for this time of the

year. Minnesota was 26% safe from frost compared to a normal of 22%. Iowa is 35% safe from frost which is also about normal for this time of the year.

Table 1. Corn planting percentages and the amount of corn mature in the various Corn Belt States in 1972.

State	% Corn planted		% Corn dented		% Corn mature		Total acres in 1000s
	May 15	May 29	Sept 9	Sept 9	Sept 16		
Iowa	25	95	83	35	55	10,450	
Ill.	35	95	85	48	60	9,250	
Ind.	20	75	60	10	20	4,880	
Minn.	28	73	75	26	45	4,850	
Nebr.	10	80	70	18	28	5,100	
Mo.	49	88	--	39	48	2,500	
Ohio	35	85	60	15	25	3,103	

Since the average frost date is October 1 or later over most of the Corn Belt, it appears that the 1972 corn crop is almost normal and the chances of severe damage from an early frost are minimal. By quoting an average frost date, however, we are admitting a 50/50 chance of freezing temperature before that date as well as after. A freeze can occur between now and that date but there appears to be no big potential for decreased dry weight accumulation in the grain except possibly on some late planted bottomlands. Any delay in fall freeze will benefit yield in these fields.

R. E. Felch

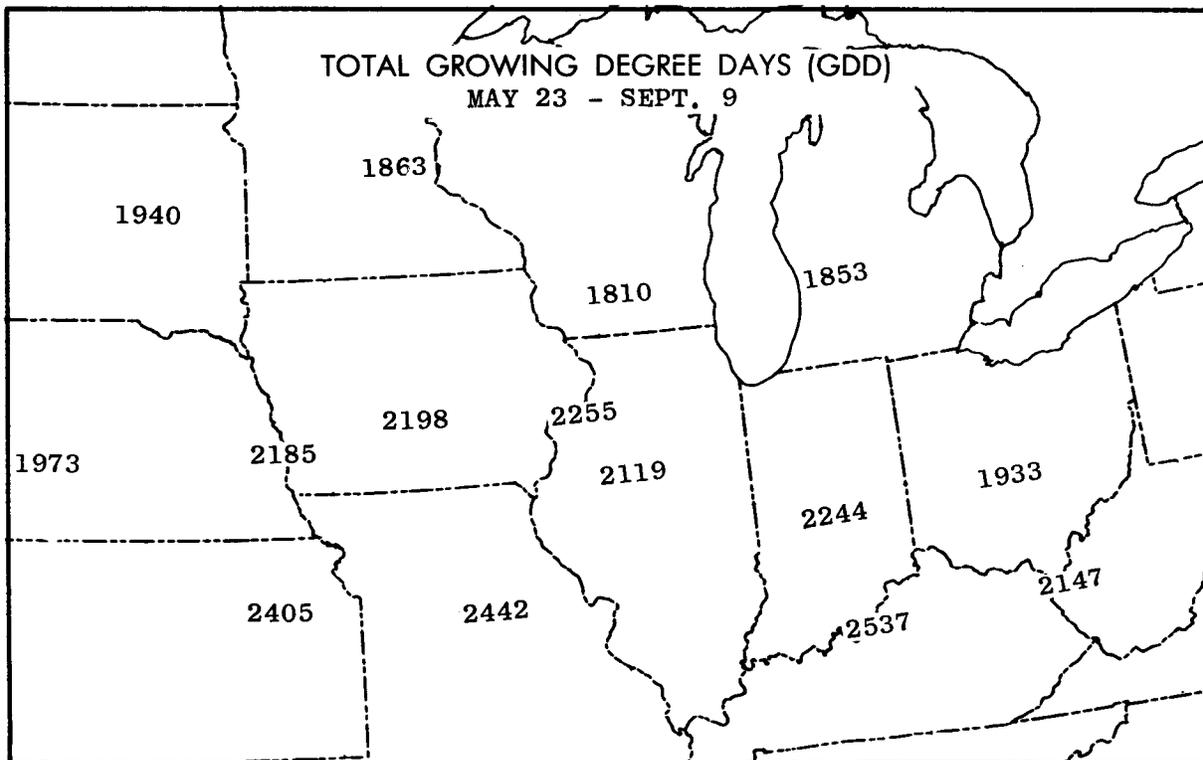


Figure 1. Total growing degree day accumulation for the period May 23 to September 9, 1972 over the Corn Belt.

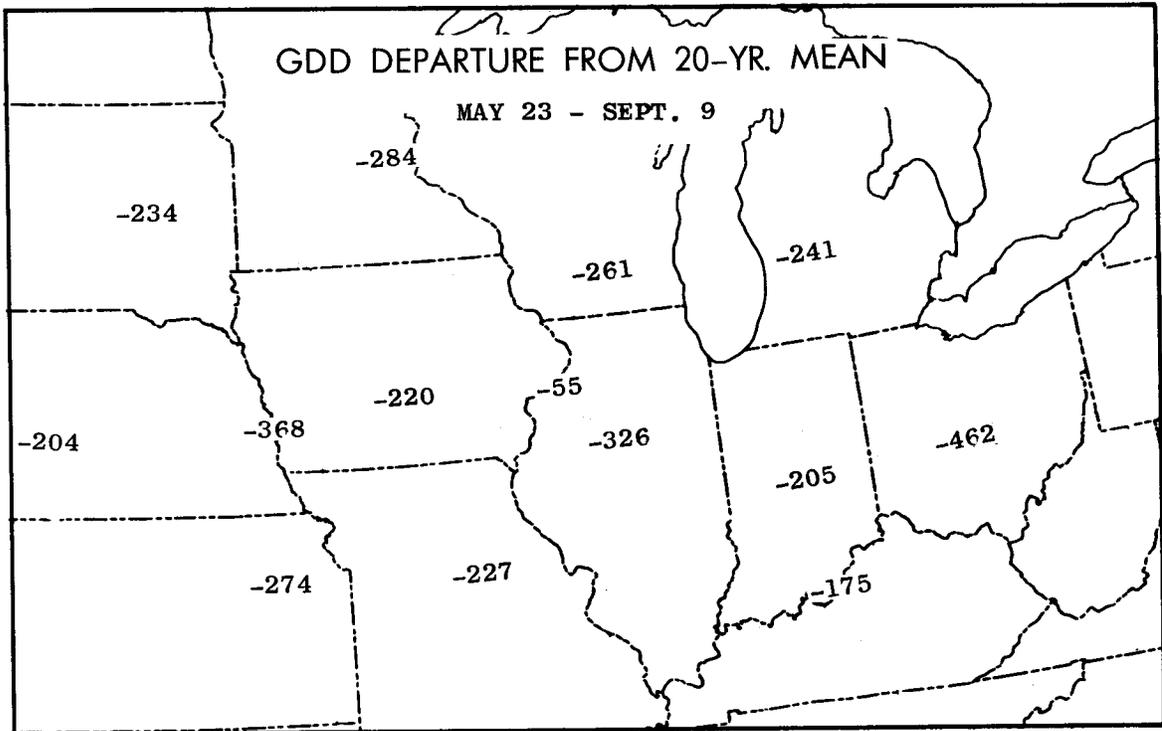


Figure 2. The departure of GDD accumulation during the period May 23 to September 9, 1972 from the 20-year normal.

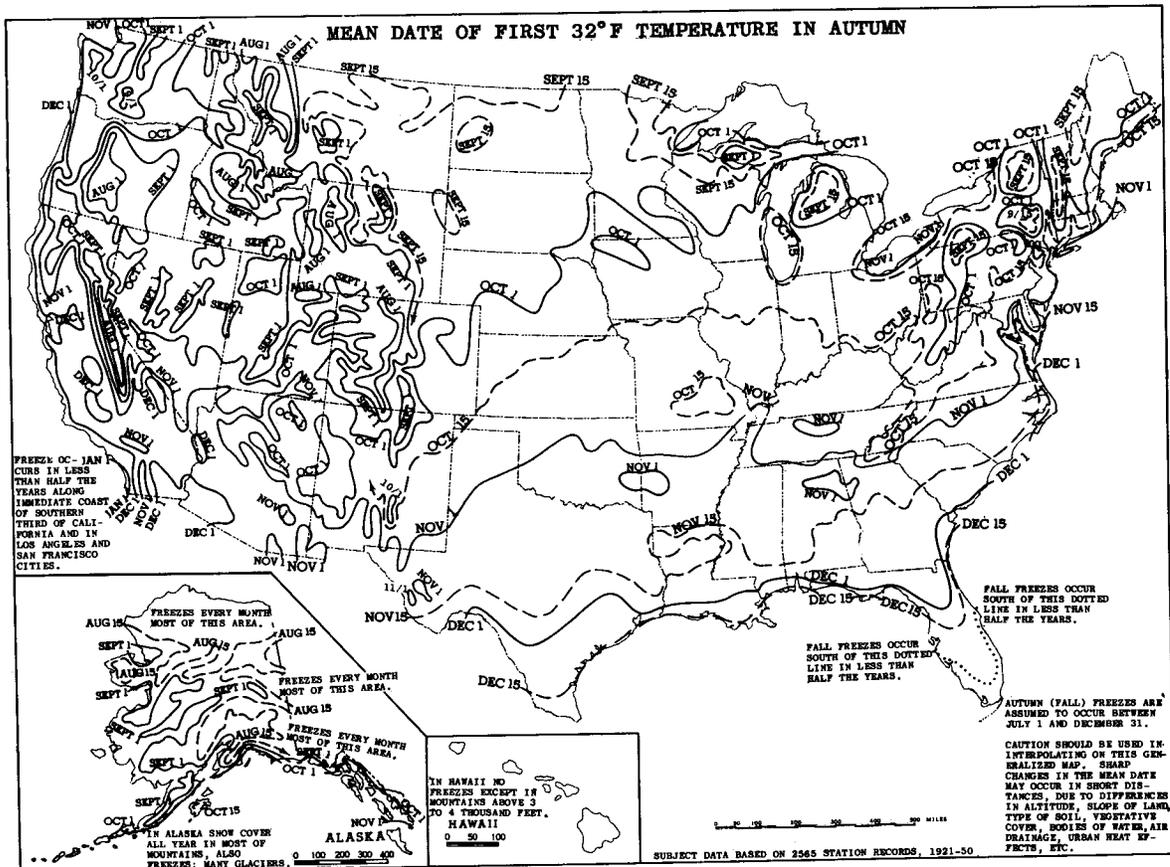
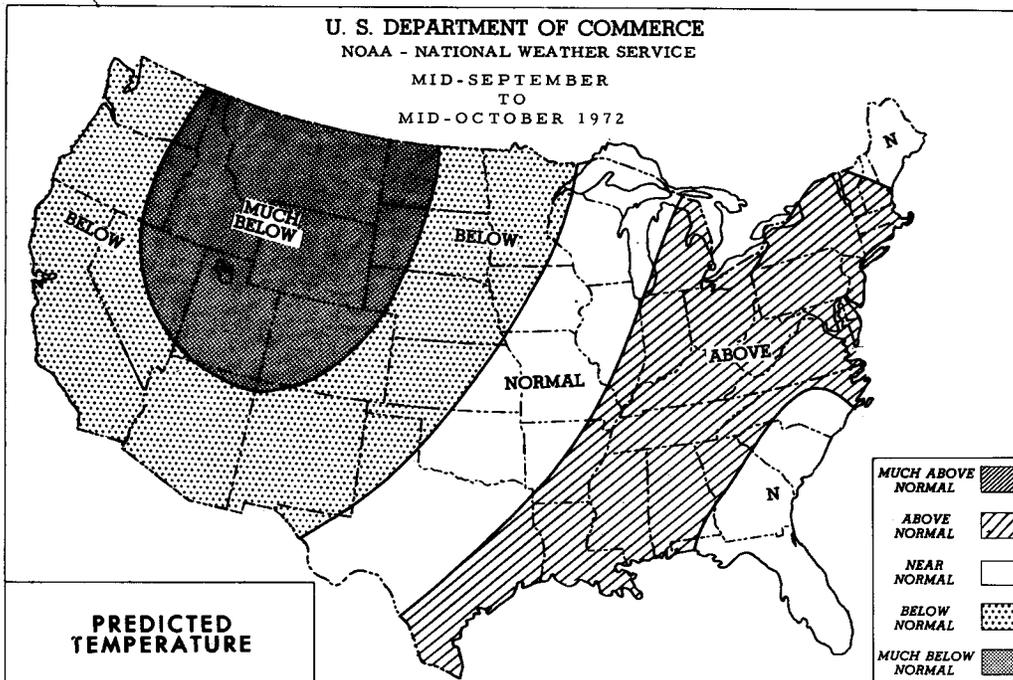
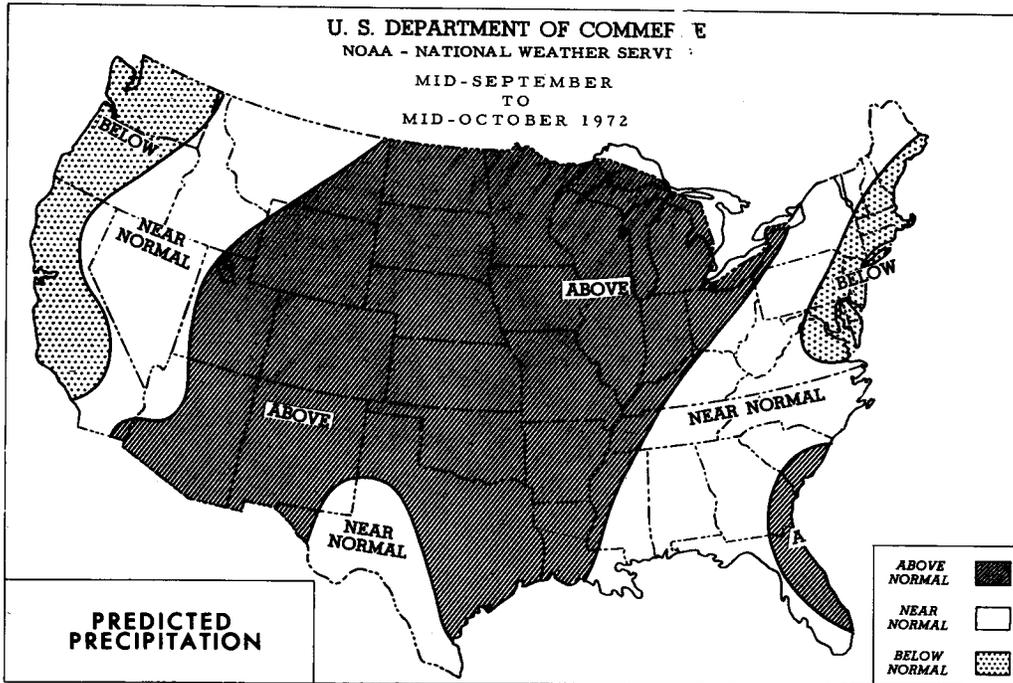
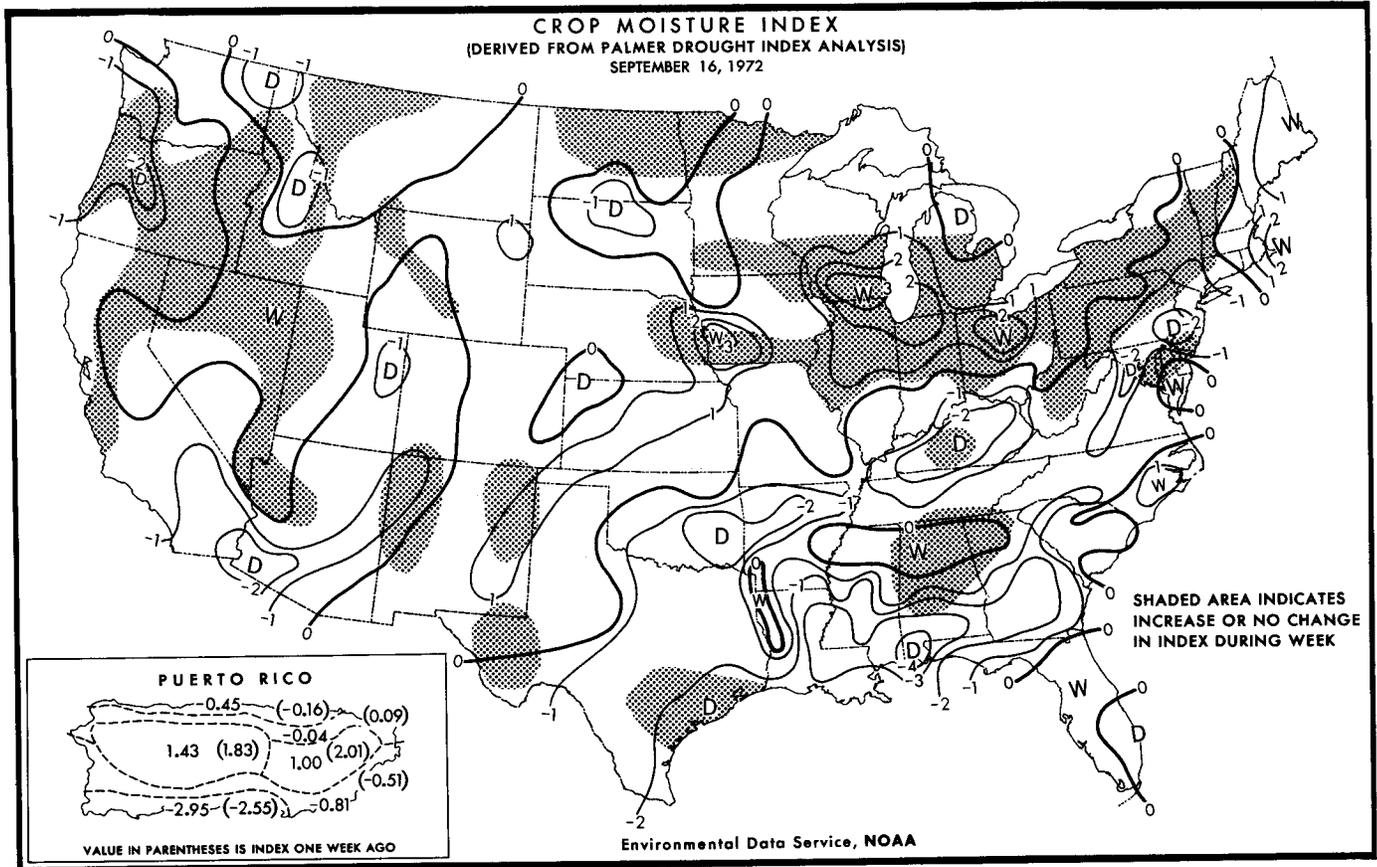


Figure 3. The 50% frost date over the United States.

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

210

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.

Please send subscriptions and any questions or comments to the Editor at above address.

