

WEEKLY WEATHER AND CROP BULLETIN

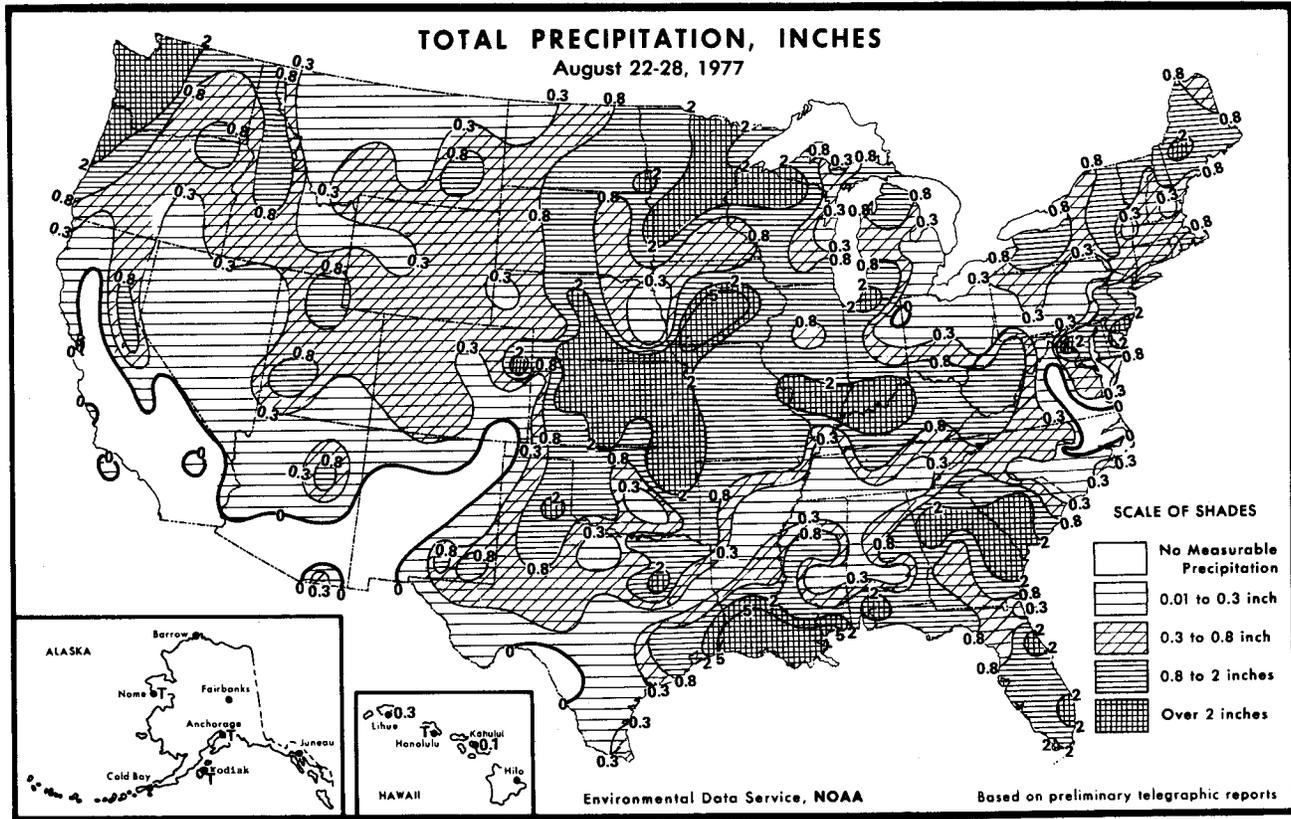
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National Weather Summary August 22-28

HIGHLIGHTS: Rains in the Pacific Northwest accompanied a winterlike cold front getting a jump on a rainy season that is usually expected around late September. Precipitation also fell in the Sierra Madre Mountains and as far south as central California. The southern half of Iowa was drenched by unusually heavy rains that swelled streams into local flooding. Spotty showers from Virginia southward did little to relieve drought conditions.

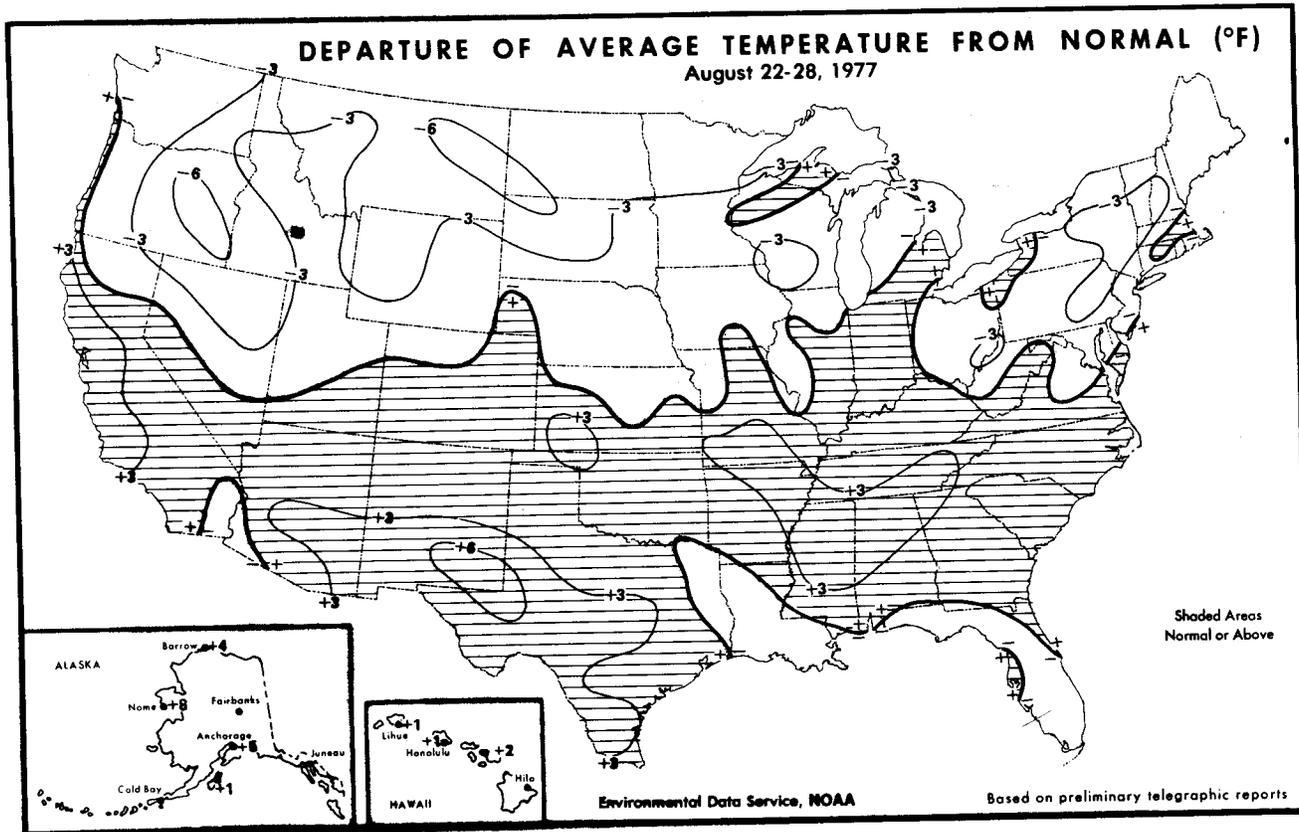
Temperatures were somewhat below normal in the northern half of the States and the southern segment was generally above normal.

As the week began, thunderstorms were active along the northern Atlantic Coast, eastern sections of the Great Lakes and Ohio Valley, upper half of the Appalachians, Gulf Coast, central Plains, northern Rockies, and Plateau Region. New Orleans received nearly 3 more inches of rain, giving a

2-day total of 5.59 in. By late Monday afternoon, heavy thunderstorms rumbled over southeastern Texas while several others formed above the central Plains. Three tornadoes were sighted, one in Texas and two in Kansas including some hail. Concordia, in north central Kansas, already measured its rainiest August ever, 8.60 in. An evening storm produced flooding and loss of power in Jonesboro, Ark.

Nearly every portion of the country was dampened by some precipitation on Tuesday.

A cold front started to march across the Pacific Northwest pushing ahead welcome rain and cooler temperatures. By afternoon, heavy rains dumped 1 to 3 inches on southern Illinois and eastern Missouri. Thunderstorms spawned tornadoes in North Carolina and Missouri and large hail in Kentucky and Indiana where more than 3 inches of rain fell on Evansville. Three feet of water clogged the



downtown streets of Greenville, S.C., after a heavy downpour. Heavy rain triggered minor flooding in northern Arizona and the southern areas of Nevada and Utah.

Midland, Tex., got honors for the day's high temperature--a record-breaking 106°. Thorhult, Minn., tipped the other end of the scales by noting 24°.

Rain continued to fall over the Pacific Northwest and moved eastward and southward on Wednesday. Seattle collected 1.49 in., the highest single-day total since December 1975. Buffalo, N.Y., got another half inch, running its August precipitation to 10.65 in., the wettest month since 1871 when records began. Thunderstorms dumped locally heavy rain along the Atlantic and Gulf Coasts and the Appalachians. Other storms brought heavy rain to parts of the Southwest and Plains. Street flooding plagued Las Cruces, N. Mex., while one inch of rain soaked points in northern Oklahoma and more than 3 inches fell on Castell in southwestern Texas. Rain also made its mark in Utah and western Colorado.

Thursday thunderstorms dotted the upper Mississippi Valley, parts of the central Plains, eastern New Mexico and western Texas, Gulf Coast, and from the southern Atlantic Coast into Tennessee. Some heavy amounts for the day included more than an inch at Milton, Fla., Augusta, Ga., Baton Rouge, La., and Russell, Kans.

Temperature records tumbled from the Great Lakes to the central Appalachians when a mass of cool air chilled several States.

Friday brought extremely heavy rains to several sections of Iowa triggering flooding there and in parts of the central Plains; Des Moines measured

more than 4 inches and Indianola which is just south of the State Capital was inundated by nearly 9 inches. Four tornadoes whirled through west central Minnesota while hail damaged some crops in Campbell, Minn., and pelted towns in North Dakota. Rainstorms also hit the Southeast, the Gulf Coast into the Ohio Valley, most of the Plains, and the upper Great Lakes. Atlanta got nearly 1.50 in. of rain.

Saturday precipitation included showers and thunderstorms in many areas of the Plains, Great Lakes, Mississippi Valley, Gulf Coast, and southern Atlantic Coast States. Hibbing, Minn., notched 2.60 in., and a town near Duluth weathered a tornado. By evening, more rain fell on hard-hit Iowa bringing increased flooding. Red Oak and Cumberland in southwestern Iowa were awash after about 5 inches while Des Moines noted another 2.24 in. Baton Rouge, La., set an August record for rain, 12.69 in., knocking off the 1940 measurement.

Wet weather began a dreary Sunday for States lying along a cold front from Wisconsin to Texas. The heaviest rain fell over Kansas and from southern Illinois through southeastern Missouri to central Arkansas. Showers and thunderstorms occurred over western Virginia, along the East Coast from the Carolinas southward, along the Gulf Coast and from the Pacific Northwest to northern Idaho. Behind the cold front temperatures were cool, but from the middle Mississippi and Ohio Valleys to the middle Atlantic Coast States readings soared to the 90's. New England and parts of the South also sweltered; Boston and Fort Worth chalked up 95°.

Another record bit the dust; this time Des Moines set an August rainfall mark of 10.81 in.

National Agricultural Summary

August 22 - 28

HIGHLIGHTS: Rains improved soil moisture in most of the central and northern Plains, most of the Corn Belt, parts of the South, and the coastal Pacific Northwest. Pastures responded with renewed growth and late row crops improved too. Small grain combining kept pace with recent years although rains slowed activity in some areas of the north central States. Fall plowing advanced rapidly while producers seeded some small grains in the South and extreme North. Corn developed quickly; most of the crop dented or matured. Corn harvest advanced into Missouri. Most of the soybean acreage set pods and northern plants yellowed; some shed leaves. Cotton bolls were opening, but picking was confined mostly to Texas. Growers defoliated some cotton. Most of the sorghum headed and a significant acreage turned color; harvest centered in Texas. Rice harvest became widespread extending into Arkansas. Low temperatures slowed northern vegetable development and harvest. Growers planted vegetables in southern areas. Pastures doused with recent rain improved, however, most of the West, parts of the South, and north central States need precipitation for late pastures.

SMALL GRAINS: Rains delayed combining for the 1977 small grain crops, but progress was so far advanced because of earlier good weather that farmers were ahead of normal in most States. Minnesota oats harvest stood at 98% compared with 99% in 1976 and 85% average. North Dakota spring wheat harvest was 75% complete, oats 85%, barley 95%, and durum 60%. Montana spring wheat growers combined 60%, 5 points ahead of 1976 and 20 points ahead of average. Wisconsin oats harvest was almost complete except in rain-soaked northern areas.

Preparations for 1978 small grain plantings advanced quickly with plowing and seedbed preparation running ahead of both last year and normal in most States. Illinois farmers plowed 80% of the winter wheat acreage compared with 63% in 1976 and 65% average. Indiana was an exception with 25% of the wheat land plowed, short of 1976's 45% and 50% average. But in South Dakota farmers plowed 46% surpassing 36% in 1976 and 31% normal.

Winter wheat planting advanced in Texas with 2% of the acreage seeded. Oklahoma growers seeded some Panhandle fields. South Dakota growers planted 5% ahead of last year's 2% and 1% average. Minnesota producers delayed planting because of dry soils, but had 10% seeded compared with 9% in 1976 and 13% average. Dry soils also slowed planting in the Pacific Northwest.

CORN: The Nation's corn crop continued developing rapidly with more rain and near normal temperatures particularly in the Corn Belt providing good growing conditions. Harvest extended throughout the South and reached into Missouri and across to Tidewater Virginia. Harvest ranged from 26 to 28% in Alabama and Louisiana, 17% in Texas, 10% in Mississippi, and 5% in Tennessee.

In the eastern Corn Belt most of the crop was dented ranging from Ohio's near normal 60% to Illinois 95%, Michigan 40% and Wisconsin 65%; generally 30 points ahead of normal. Maturity ranged from a low of 15% in Indiana to a high of 65% in Illinois.

In the western Corn Belt Minnesota corn will be safe from frost in one or two weeks; Missouri growers already harvested 6% of the crop. Most corn was dented ranging from 65 to 93%; from 14 to 35% of the corn was mature.

SOYBEANS: Soybeans rated fair to good, and in Kansas excellent. In the eastern north central States pod set reached 75 to 96% and plants began yellowing. About 10 to 20% of the crop started turning color.

In the western north central States pod set was almost complete at about 85%. Yellowing ranged from 29 to 51% and some Minnesota and South Dakota soybeans began shedding leaves. In three weeks the Minnesota crop will be safe from frost. Rains helped late beans fill better.

In the southern production area pod set ranged from 75 to 87% and yellowing reached up to 20%. Farmers sprayed to control insects and diseases, but rains reduced the effectiveness.

COTTON: Cotton rated fair to good in most areas, but only poor to fair in several States along the Atlantic Coast. Farmers sprayed to control large insect populations in the Southeast. Bolls opened earlier than last year and the norm. In Georgia 32% of the bolls opened, Alabama 14%, Mississippi 32%, Arkansas 15% and Louisiana 13%--10 to 25 points ahead of many recent years. Texas harvest advanced rapidly from the Lower Rio Grande Valley into the Blacklands. Picking reached 10%, ahead of 5% in 1976 and the 8% average. Plains cotton matured rapidly and many bolls opened. California growers irrigated cotton the last time.

OTHER CROPS: Grain sorghum rated good to excellent with most sorghum headed and over half turning color in the major producing States. In Missouri 36% was mature. The Texas harvest advanced to 60% complete compared with 52% in 1976 and 53% normal. Showers slowed harvest on the southern Low Plains.

Rice harvest moved into Arkansas where 5% of the crop was combined surpassing the 1% in 1976. Lodging caused some difficulty in both Arkansas and Louisiana. Some of Louisiana's downed grain sprouted. The Louisiana harvest reached 57%, ahead of 1976's 55% and the 48% average. Texas rice combining advanced to 93% edging out 1976's 92% and the 81% average.

Maine potatoes grew well; a few potatoes were dug and shipped to processors. North Dakota growers began harvest on a limited scale. Idaho potato vines stayed green longer with only 13% dying compared with 25% in 1976. Early harvest continued in the Pacific Northwest.

FRUITS AND NUTS: The peach harvest ended in southern areas, but continued in northern areas into Maine and the Pacific Northwest. Apple harvest extended throughout the U. S. Concord grapes turned color in New York. California harvested a wide variety of fruits and nuts. Florida citrus groves and fruit were in excellent condition; trees grew rapidly and had some late blooms.

VEGETABLES: Low temperatures slowed vegetable growth in northern areas and harvesting declined moderately. The Michigan pickle harvest was 75% complete. In southern areas growers prepared seedbeds and planted fall season crops. Heavy rains delayed Arizona field preparation. Florida farmers planted tomatoes, cucumbers, eggplant, peppers, squash, and okra. Texas producers harvested some crops from northern areas and planted fall crops in the South. California growers picked a wide variety of fresh market vegetables and processing tomatoes.

(continued on last page)

Temperature and Precipitation Data for the Week Ending Midnight, Lst., August 28, 1977

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 . . .	82	+ 4	.6	-.3	La. Baton Rouge . . .	79	- 2	6.3	+5.4	Youngstown . . .	68	0	T	-.7
ALA. Mobile . . .	83	+ 2	1.3	-.2	LA. Lake Charles . . .	81	- 1	7.6	+6.6	OKLA. Okla. City . . .	81	+ 1	.1	-.6
ALA. Montgomery . . .	82	+ 2	.1	-.7	LA. New Orleans . . .	81	- 1	7.0	+5.8	OKLA. Tulsa . . .	82	+ 2	2.9	+2.2
ALASKA. Anchorage . . .	59	+ 5	T	-.6	LA. Shreveport . . .	81	- 1	7.2	-.4	OREG. Astoria . . .	61	+ 1	2.8	+2.4
ALASKA. Barrow . . .	40	+ 4	T	-.2	MAINE. Caribou . . .	61	0	.7	-.1	OREG. Burns . . .	58	- 6	.3	+ .2
ALASKA. Fairbanks . . .	---	---	---	---	MAINE. Portland . . .	63	- 2	.4	-.2	OREG. Medford . . .	68	- 1	.2	+ .1
ALASKA. Juneau . . .	---	---	---	---	MD. Baltimore . . .	73	- 1	.9	0	OREG. Pendleton . . .	65	- 5	1.1	+1.0
ALASKA. Kodiak . . .	55	+ 1	T	-1.1	MASS. Boston . . .	71	+ 1	.7	-.1	OREG. Portland . . .	64	- 2	3.1	+2.9
ALASKA. Nome . . .	56	+ 8	T	-.8	MASS. Chatham . . .	65	---	1.2	---	OREG. Salem . . .	64	- 1	1.7	+1.5
ARIZ. Flagstaff . . .	64	+ 2	.1	-.5	MICH. Alpena . . .	60	- 3	.7	0	PA. Allentown . . .	70	0	1.3	+ .4
ARIZ. Phoenix . . .	93	+ 5	0	-.3	MICH. Detroit . . .	70	0	.3	-.4	PA. Erie . . .	66	0	.7	-.1
ARIZ. Tucson . . .	85	+ 2	0	-.5	MICH. Flint . . .	69	+ 2	.2	-.5	PA. Harrisburg . . .	70	- 3	.2	-.5
ARIZ. Winslow . . .	75	0	1.0	+ .7	MICH. Grand Rapids . . .	68	- 1	1.4	+ .8	PA. Philadelphia . . .	72	- 1	1.5	+ .6
ARIZ. Yuma . . .	89	- 3	T	-.1	MICH. Houghton Lake . . .	62	- 1	1.1	+ .5	PA. Pittsburgh . . .	67	- 2	1.1	-.6
ARK. Fort Smith . . .	82	+ 2	1.3	+ .6	MICH. Lansing . . .	69	+ 1	.5	-.1	PA. Scranton . . .	66	- 3	1.1	-.6
ARK. Little Rock . . .	81	+ 2	.2	-.5	MICH. Marquette . . .	64	0	.3	-.4	R.I. Providence . . .	68	- 1	.9	0
CALIF. Bakersfield . . .	84	+ 4	.2	0	MICH. Muskegon . . .	66	- 2	.5	-.1	S.C. Charleston . . .	80	+ 1	2.0	+ .6
CALIF. Eureka . . .	61	+ 4	.2	+ .1	MICH. S. Ste. Marie . . .	59	- 3	1.5	+ .7	S.C. Columbia . . .	79	0	.8	+ .8
CALIF. Fresno . . .	79	+ 2	.0	0	MICH. S. Ste. Marie . . .	59	- 3	1.5	+ .7	S.C. Greenville . . .	77	0	.8	-.1
CALIF. Los Angeles . . .	75	+ 1	0	0	MINN. Duluth . . .	57	- 5	1.9	+1.1	S.D. Aberdeen . . .	66	- 2	.6	+ .1
CALIF. Red Bluff . . .	79	0	T	-.1	MINN. Internatl Falls . . .	56	- 5	2.0	+1.2	S.D. Huron . . .	67	- 3	.7	+ .2
CALIF. San Diego . . .	72	+ 1	T	0	MINN. Minneapolis . . .	68	0	.8	+ .2	S.D. Rapid City . . .	66	- 3	.5	+ .2
CALIF. San Francisco . . .	67	+ 4	T	0	MINN. Rochester . . .	65	- 2	.7	-.1	S.D. Sioux Falls . . .	68	- 2	1.0	+ .3
CALIF. Stockton . . .	79	+ 4	0	0	MISS. St. Cloud . . .	64	- 2	3.4	+2.5	TENN. Chattanooga . . .	82	+ 5	1.1	-.6
COLO. Denver . . .	70	0	.3	0	MISS. Jackson . . .	83	+ 3	.1	-.7	TENN. Knoxville . . .	79	+ 3	.6	0
COLO. Grand Junction . . .	74	+ 1	.4	+ .1	MISS. Meridian . . .	77	+ 2	1.6	+ .8	TENN. Memphis . . .	84	+ 5	T	-.7
COLO. Pueblo . . .	74	+ 1	.3	-.1	MO. Columbia . . .	73	- 3	1.7	+ .8	TENN. Nashville . . .	79	+ 2	1.0	+ .3
CONN. Bridgeport . . .	70	- 2	1.3	+ .5	MO. Kansas City . . .	73	- 3	2.0	+1.4	TEX. Abilene . . .	83	+ 1	.4	-.1
CONN. Hartford . . .	70	+ 1	.4	-.5	MO. St. Louis . . .	73	- 3	2.0	+1.4	TEX. Amarillo . . .	77	+ 1	.8	+ .2
D.C. Washington . . .	75	- 1	1.2	+ .2	MO. Springfield . . .	80	+ 4	1.4	+ .7	TEX. Austin . . .	87	+ 3	T	-.6
FLA. Apalachicola . . .	80	- 1	1.6	-.3	MONT. Billings . . .	64	- 4	.2	-.2	TEX. Beaumont . . .	85	+ 3	2.1	+ .8
FLA. Daytona Beach . . .	81	0	3.4	+1.8	MONT. Glasgow . . .	60	- 6	.2	-.1	TEX. Brownsville . . .	86	+ 2	.8	0
FLA. Ft. Myers . . .	81	- 2	1.6	-.2	MONT. Great Falls . . .	63	- 2	.2	-.1	TEX. Corpus Christi . . .	87	+ 3	.2	-.7
FLA. Jacksonville . . .	81	0	T	-1.8	MONT. Havre . . .	61	- 5	.2	-.1	TEX. Dallas . . .	89	+ 4	T	-.4
FLA. Key West . . .	83	- 1	2.1	+ .9	MONT. Helena . . .	61	- 3	.2	-.1	TEX. Del Rio . . .	83	+ 4	T	-.2
FLA. Lakeland . . .	81	- 1	2.0	+ .4	MONT. Kalispell . . .	57	- 4	.2	-.1	TEX. El Paso . . .	85	+ 1	.5	-.1
FLA. Miami . . .	83	0	1.7	+ .1	MONT. Miles City . . .	64	- 6	1.1	+ .8	TEX. Fort Worth . . .	84	+ 1	.6	-.5
FLA. Orlando . . .	81	- 1	1.6	+ .1	MONT. Missoula . . .	60	- 3	.1	-.1	TEX. Galveston . . .	83	0	1.4	+ .4
FLA. Tallahassee . . .	80	- 1	1.8	+ .3	NEBR. Grand Island . . .	71	- 2	1.6	+1.0	TEX. Houston . . .	80	+ 3	1.7	+1.3
FLA. Tampa . . .	83	+ 1	1.4	-.4	NEBR. Lincoln . . .	72	- 2	.1	-.7	TEX. Lubbock . . .	87	+ 6	.3	0
FLA. W. Palm Beach . . .	82	- 1	2.2	+ .4	NEBR. Norfolk . . .	70	- 2	.3	-.3	TEX. Midland . . .	87	+ 4	.4	0
GA. Atlanta . . .	78	+ 1	2.6	+1.9	NEBR. Omaha . . .	70	- 1	.6	+ .1	TEX. San Angelo . . .	87	+ 4	T	-.7
GA. Augusta . . .	80	+ 1	2.2	+1.3	NEBR. Valentine . . .	68	- 2	1.6	+1.1	TEX. San Antonio . . .	85	+ 1	.2	-.6
GA. Macon . . .	82	+ 2	.4	-.4	NEV. Ely . . .	81	- 3	.1	0	TEX. Victoria . . .	89	+ 4	.2	-.3
GA. Savannah . . .	80	0	3.4	+2.0	NEV. Las Vegas . . .	87	+ 1	T	0	TEX. Wichita Falls . . .	84	0	.3	-.2
HAWAII. Hilo . . .	---	---	---	---	NEV. Reno . . .	66	+ 1	T	0	UTAH. Blanding . . .	69	0	.2	-.2
HAWAII. Honolulu . . .	82	+ 1	T	-.1	NEV. Winnemucca . . .	64	- 2	.2	+ .1	UTAH. Salt Lake City . . .	71	- 1	1.1	-.1
HAWAII. Kahului . . .	81	+ 2	.1	0	N.H. Concord . . .	63	- 3	.3	-.4	VT. Burlington . . .	64	- 2	1.0	+ .2
HAWAII. Lihue . . .	81	+ 1	.3	-.2	N.J. Atlantic City . . .	72	0	2.2	+1.2	VA. Lynchburg . . .	73	0	.2	-.7
IDAHO. Boise . . .	65	- 5	.7	+ .6	N.J. Trenton . . .	71	+ 2	1.4	+ .5	VA. Norfolk . . .	76	0	T	-1.3
IDAHO. Lewiston . . .	68	- 2	.5	+ .3	N.MEX. Albuquerque . . .	77	+ 2	0	-.3	VA. Richmond . . .	75	0	.6	-.5
IDAHO. Pocatello . . .	64	- 3	.3	+ .2	N.MEX. Roswell . . .	83	+ 6	T	-.3	VA. Roanoke . . .	73	0	.4	-.5
ILL. Cairo . . .	78	0	.1	-.7	N.Y. Albany . . .	64	- 4	.2	-.5	WASH. Colville . . .	---	---	---	---
ILL. Chicago . . .	72	0	1.7	+1.0	N.Y. Binghamton . . .	64	- 2	.2	-.6	WASH. Omak . . .	65	- 2	.8	+ .7
ILL. Moline . . .	71	0	1.2	+ .4	N.Y. Buffalo . . .	69	+ 2	1.5	+ .7	WASH. Quillayute . . .	58	- 1	2.6	+1.9
ILL. Peoria . . .	72	0	.5	-.2	N.Y. New York . . .	71	- 2	1.6	+ .6	WASH. Seattle-Tacoma . . .	61	- 2	3.2	+2.8
ILL. Rockford . . .	69	- 1	1.2	+ .4	N.Y. Rochester . . .	67	- 1	1.3	+ .7	WASH. Spokane . . .	61	- 5	.8	+ .7
ILL. Springfield . . .	73	0	1.4	+ .8	N.Y. Syracuse . . .	64	- 4	.7	-.1	WASH. Walla Walla . . .	67	- 5	1.3	+1.2
IND. Evansville . . .	76	+ 1	3.7	+3.1	N.Y. Utica . . .	64	- 2	.2	-.6	WASH. Yakima . . .	85	- 2	1.1	0
IND. Ft. Wayne . . .	71	+ 1	T	-.6	N.C. Asheville . . .	72	0	.7	-.3	W.Va. Beckley . . .	70	+ 2	1.3	+ .5
IND. Indianapolis . . .	73	+ 1	.8	+ .2	N.C. Charlotte . . .	79	+ 2	.1	-.7	W.Va. Charleston . . .	72	- 1	1.5	+ .7
IND. South Bend . . .	71	+ 1	2.3	+1.6	N.C. Greensboro . . .	75	0	.5	-.5	W.Va. Charleston . . .	74	+ 1	1.5	+ .8
IOWA. Burlington . . .	71	- 1	.9	+ .1	N.C. Hatteras . . .	77	0	.1	-1.4	W.Va. Huntington . . .	73	0	.4	-.3
IOWA. Des Moines . . .	71	0	8.2	+7.4	N.C. Raleigh . . .	79	0	.3	-1.2	W.Va. Parkersburg . . .	73	0	.4	-.5
IOWA. Dubuque . . .	66	- 3	1.2	+ .2	N.C. Wilmington . . .	79	0	.3	-1.2	WIS. Green Bay . . .	65	- 1	.1	-.5
IOWA. Sioux City . . .	70	- 1	T	-.7	N.DAK. Bismarck . . .	62	- 5	.8	+ .4	WIS. La Crosse . . .	66	- 4	.9	+ .2
KANS. Concordia . . .	73	- 2	2.7	+1.9	N.DAK. Fargo . . .	63	- 4	1.4	+ .8	WIS. Madison . . .	63	- 4	.8	+ .1
KANS. Dodge City . . .	79	+ 3	1.5	+ .9	N.DAK. Williston . . .	62	- 4	.1	-.3	WIS. Milwaukee . . .	66	- 2	1.4	+ .8
KANS. Goodland . . .	72	0	.2	-.2	OHIO. Akron-Canton . . .	68	- 1	1.1	-.5	WYO. Casper . . .	65	- 2	.7	+ .6
KANS. Topeka . . .	75	0	2.4	+1.5	OHIO. Cincinnati . . .	73	0	1.6	+1.1	WYO. Cheyenne . . .	64	- 2	.4	+ .1
KANS. Wichita . . .	78	0	1.5	+ .8	OHIO. Cleveland . . .	68	- 1	.1	-.5	WYO. Lander . . .	62	- 5	.1	0
KY. Lexington . . .	76	+ 2	1.0	+ .3	OHIO. Columbus . . .	70	- 1	.4	-.2	WYO. Sheridan . . .	64	- 3	.5	+ .2
KY. Louisville . . .	76	+ 1	2.3	+1.6	OHIO. Dayton . . .	70	- 2	.3	-.3	P.R. San Juan . . .	82	0	.9	-.6
					OHIO. Toledo . . .	69	- 1	.1	-.6					

Based on 1941-70 normals

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State Summaries of Weather and Agriculture

These summaries provide brief descriptions of crop and weather conditions important on a national scale. More detailed data are available in Weather and Crop Bulletins published each Monday by SRS State offices in cooperation with the National Weather Service.

ALABAMA: Hot days, warm nights and scattered showers. Temperatures 3° above normal. Rainfall light.

Fieldwork: 5.2 days. Soil moisture short to adequate. Cotton fair condition; 14% with bolls open, 2% 1976. Corn poor condition, 69% mature, 64% 1976, 61% average. Harvest well underway 26% completed, 19% 1976. Soybeans fair to good condition; 76% setting pods, 70% 1976, 78% average. Peanuts fair to good. Pastures fair.

ALASKA: Very warm and dry conditions.

Nearly ideal weather conditions hastened ripening of small grains and maturity of vegetables throughout railbelt. Good progress combining barley and wheat. Harvest of mixed grain for silage gained momentum. Few growers digging potatoes. Second crop haying made good progress. Soil moisture varied from short to adequate. Vegetable harvest active and moderate supplies available.

ARIZONA: Heavy, spotty precipitation north and southeast 22d and 23d. Temperatures normal.

Cotton good growth, insect problems south central. Yuma Valley cotton showing damage from boll rot, insects. Limited sorghum harvest underway. Alfalfa dormant many areas, water diverted to cotton. Fall sugarbeets growing well. Field preparations, planting fall vegetables delayed heavy rain, Yuma. Lettuce good stands. Melon growth hampered wet soils Yuma. Lemon harvest underway west. Scattered to heavy showers improved range conditions. Stock water supplies short some areas. Livestock condition poor to good.

ARKANSAS: Highest near 85°; lowest 78°. Extremes: 99 and 60°. Most precipitation 3.49 in., least 0.

Soil moisture short. Fieldwork: 6.1 days suitable. Soybeans mostly good condition; fungus disease anthracnose severe. Limited amount cotton defoliation; worms feeding on foliage. Open bolls 15% of acreage, 1% last year. Rice condition good; 5% harvested, 1% last year, some lodging. Corn harvest 23% complete. Sorghum harvest 22% complete, 9% last year. Apple harvest continued. Small grain land preparation continued. Hay harvest continued. Pastures below average.

CALIFORNIA: Above normal temperatures with exception of few stations in Central Valley where mercury averaged 1 or 2° below normal. Precipitation spotty and limited to north coast, Sacramento Valley and northern mountains.

Cotton reaching maturity; last irrigation being applied. Some rice in early dough stage. Corn and milo progressing well. Blackeye dry bean harvests continued. Land preparation for 1978 crops beginning. Red delicious apples breaking color. Fig harvest begun; quality good. Tokay, Champagne grape picking started. Pomegranates coloring and sizing. Lemon harvest slowing. Preparation for walnut harvest beginning. Harvest continues in almonds, avocados, table grapes, Valencia orange, nectarines, freestone and clingstone peaches, pears, plums, prunes. Raisin laying active. Artichoke, brussels sprouts beginning. Broccoli, cauliflower, cantaloup, celery, sweet corn, honeydew, lettuce, peppers, tomatoes, watermelons moderate to heavy. Processing tomato full swing Sacramento Valley, past peak San Joaquin Valley. Carrots light. Rangeland conditions poor, higher

areas better. Stock water hauling prevalent. Cattle moved lighter weights, flooded feedlots. Hot, humid weather Imperial Valley--poor gains.

COLORADO: Precipitation heavy northeast portions of central and northern mountains. Light rains in San Luis Valley. Temperatures 2 to 3° above normal until 27th. Cold front lowered readings 10 to 20° and brought first measurable snow to high country. Heavy rains northwest and east weekend.

Spring barley harvested 71% 1977, 73% 1976, 63% average. Corn very good, 57% dough stage. Dry beans good except southwest fair to poor. Alfalfa, 82% 2d cutting, 46% 3d cutting. Sorghum 87% headed. Range and pasture very poor west, fair to good east. Livestock good. Limited apple harvest underway.

FLORIDA: Heaviest rains central, north portions early week, shifting to south weekend. Rainfall averaged 2.00 in. south and 2.00 to 3.00 in. central, north. Amounts highly variable. Temperatures averaged near normal.

Soil moisture mostly adequate. Harvest of corn, tobacco and hay active. Hay condition improved. Peanut harvest underway. Soybeans good condition. Spraying for worms active. Tobacco marketing active. Sugarcane good condition. Cutting cane for seed underway. Pasture condition mostly fair to good. Some areas eastern Panhandle remain poor. Cattle condition mostly good. Citrus tree, fruit condition excellent, moisture adequate, abundance of new growth, some late bloom continues, testing new crop fruit but no shipping yet. Land preparation, vegetable fall plantings very active. Tomato plantings progressing well. Crop good to excellent condition. Cucumber seeding increasing west central area; pickle plantings underway Dade County. Eggplant, pepper plantings increasing; rain causing more replanting than normal. Squash, okra Dade County making good growth; some light volume to local markets from early plantings.

GEORGIA: Temperatures 1° below normal. Scattered showers, amounts near 2.00 in. east central and southeast, 0.25 to 0.50 in. elsewhere. Widely scattered showers weekend.

Soil moisture short to adequate; some improvement. Fieldwork: 5 days suitable. Heavy infestation of insects. Crop conditions slightly improved. Corn rated poor, 30% harvested, last year 24%. Tobacco harvest still in progress, usually complete by this date. Cotton rated poor to fair; 32% open, last year 5%. Soybeans improved rated mostly fair to good. Peanuts rated poor to mostly fair, 1% dug; last year 6% dug, 4% threshed. Pastures poor to mostly fair condition, improved. Cattle mostly fair to good. Hogs fair to good. Peach harvest virtually complete. Apples rated fair to good; harvest 42% complete. Pecans fair. Small grain planting getting underway.

HAWAII: Warm humid weather continues. Occasional showers beneficial on Kauai and Hawaii. Most other areas dry.

Irrigation heavy. Spraying frequent. Vegetable supplies most leafy crops, bearing tomatoes short; others adequate. Banana supplies moderate to heavy. Papaya supplies moderate. Pineapple harvesting down. Sugar harvesting steady. Pasture fair to good.

IDAHO: Hot temperatures early week; cold front dropped temperatures 20° and brought substantial moisture.

Grain crops ahead of last year. Harvesting in full swing. Winter wheat 90% harvested, 50% 1976; spring wheat 60% harvested, 45% in 1976; barley 65% harvested, 35% in 1976. Second cutting alfalfa 85%, 75% in 1976. Sugarbeets progressing satisfactorily. Potatoes less dying than last year, 13% this year, last year 25%. Dry bean harvest just starting, crop maturing well.

ILLINOIS: Temperatures 1 to 3° below normal extreme north, 3 to 4° above normal central and south. Precipitation varied widely, 0.10 in. to almost 3.75 in.

Corn good; 95% reached dent, 70% 1976, 63% average; 65% mature, 14% 1976, 19% average. Soybeans good; 21% turning yellow, 40% 1976, 22% average. 1978 winter wheat 80% plowed, 63% last year, 65% average. Third crop alfalfa hay 85% cut, 58% 1976, 53% average; mostly good. Pastures mostly good. Soil moisture adequate. Fieldwork: 4.8 days suitable.

INDIANA: Good rains. Temperatures 2° above normal and ranged from 45 to 90°. Rainfall 0.60 to 1.10 in. central, 1.00 to 1.30 in. north, and 1.20 to 1.80 in. south. Normal is 0.70 in.

Fieldwork: 4 days suitable. Topsoil moisture mostly adequate to surplus. Subsoil moisture short to mostly adequate. Corn 15% mature, 1976 5%, average 5%. All corn in dough or later stages, 1976 90%. Corn fair to mostly good. Soybeans 100% set pods. Soybeans 10% turning yellow, 1976 15%. Soybeans fair to mostly good. Wheat land 25% plowed, 1976 45%, average 50%. Tobacco 25% cut, 1976 25%. Tomatoes 85% picked. Pastures fair to mostly good.

IOWA: Temperatures near normal. Moderate to heavy rain caused localized flooding.

Soil moisture improved; topsoil adequate, subsoil short. Fieldwork: 4.9 days suitable. Corn 22% in dough, 75% dent; last year 63% dented, average 46%. About 9% corn cut for silage. Soybeans 70% setting pods, 29% leaves turning; last year, 32% leaves turning, 15% average. 3d cutting alfalfa 66% complete. Corn mostly good to fair, soybeans good, alfalfa good. Pastures improved; mostly good to fair. Livestock faring well with increased pasture and water supplies.

KANSAS: Rains 0.50 in. west central to 3.00 in. north central. Few areas southwest received little or no rain. Temperatures averaged 73° north central, 2° below normal; 81° southwest, 4° above normal.

Row crops, grasses excellent. Fieldwork halted. Moisture supplies improved tremendously. Corn 90% dough stage, last year and average 85%. Corn dented 65%, last year 45%, average 50%. Corn fully mature 35%, last year and average 20%. Common corn rust prevalent fields central, east central. Sorghum grain excellent; 85% headed, last year 75%, average 80%. Sorghum grain coloring 35%, last year and average 20%. Soybeans excellent; 85% set pods, identical last year, average 80%. Green cloverworm larvae in fields southeast, south central. Cutting alfalfa hay continues. Pastures, ranges excellent. Livestock grazing native pastures, wheat stubble, volunteer wheat. Farm activities: fertilizing, haying, early wheat seeding, last minute machinery repair for harvest.

KENTUCKY: Temperatures near normal; in 70's. Rain around 0.75 to 1.50 in.

Soil moisture adequate west and east; central surplus. Some slowdown fieldwork but still 4½ days suitable. Farmers cutting tobacco and hay between showers, chopping silage, spraying soybeans and shelling corn. About 26% corn mature, 47% dented, 20% in dough stage, only 7% milk or earlier. Silage chopping well underway with 18% completed. About 20% soybeans turning yellow; average for date. Burley 25% cut, 35% last year and 19% average. Dark types 33% cut, same last year but well above average. Plowing for fall seeding also lagging at 14% complete.

LOUISIANA: Temperatures 2° below normal to normal. Extremes: 69 and 95°. Rain most days; heavy south, light north.

Soil moisture adequate north, surplus south. Fieldwork: 2.3 days suitable. Main activities: Worm control cotton, soybeans, hay pasture; harvesting rice and corn; draining fields. Rice fair to good condition, lodging heavy with downed rice sprouting; 73% ripe, 57% harvested, 55% last year, 48% average. Cotton fair to good; 13% open, 3% last year. Soybeans fair to good, worm infestation heavy, rains hampering control; 87% setting pods. Corn fair; 91% mature, 28% harvested, 25% last year, 31% average. Sorghum fair, 58% turning color. Sugarcane good. Sweetpotatoes fair to good; 25% dug, 57% last year, 52% average. Pastures fair to good and improving. Hay quality dropping; excessive growth delayed harvest. Cattle fair to good.

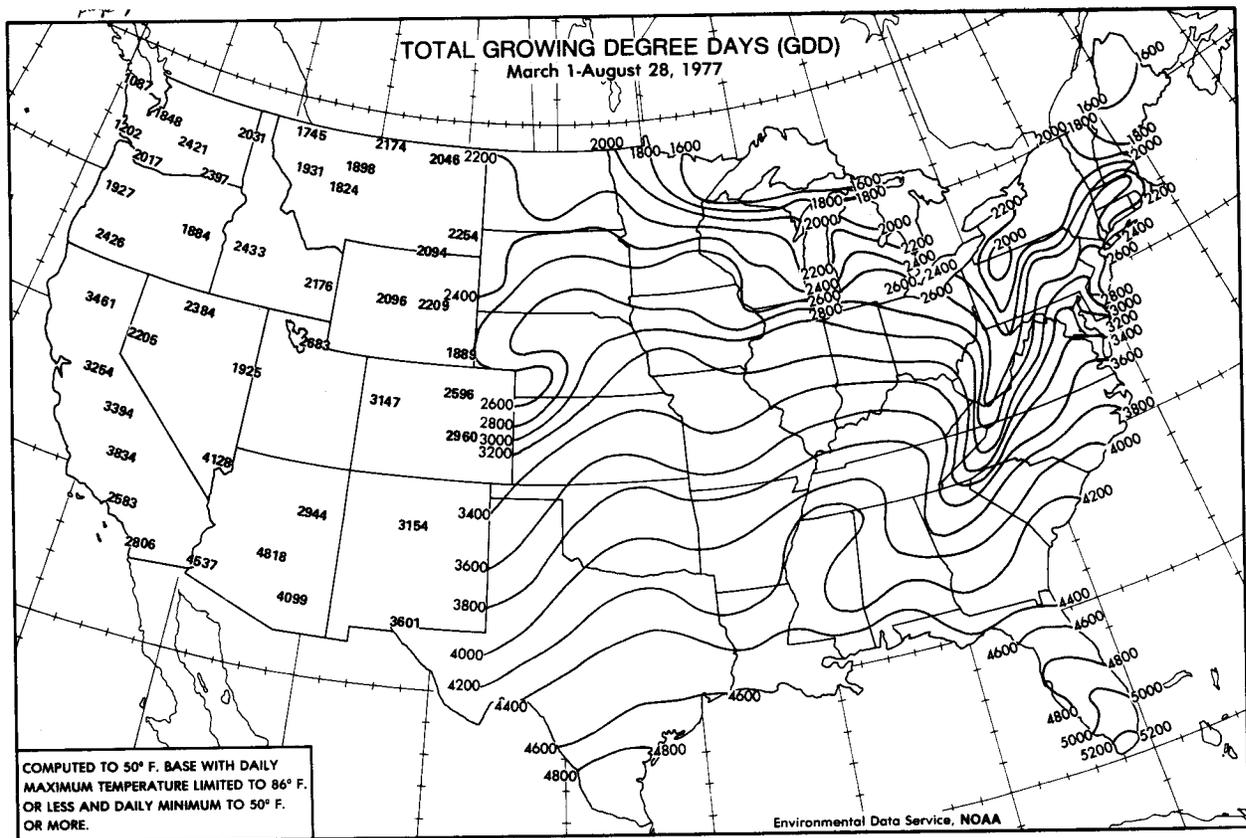
MARYLAND & DELAWARE: Temperatures 4° below normal. Highs, low 80's; lows, low 60's. Precipitation light, less than 1.00 in. except southern Maryland with up to 2.00 in.

Soil moisture adequate. Pastures below average. Corn 70% dent stage, 1976 50%; 20% mature. Tobacco 40% harvested. Peach harvest nearing completion. Apple harvest to start first week September.

MICHIGAN: Temperatures 1 to 4° below normal over Upper and northern Lower to around normal over southern Lower. Minimum temperatures in 30's and 40's on 25th and 26th. Maximum temperatures 60's and 70's to 80's and 90's on weekend. Precipitation 0.18 in. southeast Lower and 0.50 to 1.50 in. elsewhere.

Topsoil moisture adequate, subsoil dry but improving. Pasture feed supplies average. Fieldwork: 5 days suitable. Plowing for winter wheat planting and cover crop seeding in progress. 2d cut hay 95% complete, 91% 1976. Third cut hay 25% complete. Corn 40% dent, 26% 1976, 22% normal. Oat harvest 97% complete, 94% 1976. Dry beans 40% leaves turning, 15% shedding. Soybeans 90% pods set or more advanced, 10% leaves turning. Summer potatoes 20% dug, 20% 1976, 22% normal. Fruit and vegetable harvest slowed by cool, wet weather. Summer apples 60% picked, 80% 1976. Fall apples starting. Pickles 75% picked, equal last year.

MINNESOTA: Temperatures 2 to 5° below normal. Extremes: 91 and 32°. Precipitation 1.50 to 2.50 above normal over portions of west central through northeast to near normal southeast and northwest sections. Totals ranged from less than 1.00 in. portions of southeast and northwest to over 3.00 in. portions of central and northeast.



Corn maturing rapidly; out of frost danger in 1 or 2 weeks. Late soybeans filling better with recent moisture. Some fields need 3 weeks before safe from frost. Early varieties shedding leaves. Showers slowing completion of small grain harvest. Some farmers delaying winter wheat, rye seeding until more moisture available. Corn 93% denting, 1976 68%, normal 37%; 22% mature, 1976 13%, normal 6%. Soybeans 51% turning yellow, 1976 45%, normal 26%; 10% shedding leaves, 1976 13%, normal 5%. Combined: Spring wheat 90%, 1976 91%, normal 70%; oats 98%, 1976 99%, normal 85%; barley 99%, 1976 98%, normal 84%; flax 44%, 1976 50%, normal 39%. Seeded: Winter wheat 10%, 1976 9%, normal 13%; rye 11%, 1976 8%, normal 11%.

MISSISSIPPI: Temperatures near or slightly below normal. Extremes: 94 and 59°.

Soil moisture short to very short north, short to adequate central, adequate to surplus south. Fieldwork: 5.5 days suitable. Soybeans 97% blooming, 97% 1976; 77% podding, 68% 1976; 8% turning. Cotton 32% open bolls, 4% 1976, 5% average. Rice 88% headed, 78% 1976; 10% mature, 9% 1976. Corn 99% dented, 95% 1976; 67% mature, 57% 1976; 10% harvested. Sorghums 62% ripe, 48% 1976; 19% harvested, 19% 1976. Hay crops 70% harvested, 75% 1976, 69% average. Sorghum silage 53% harvested, 51% 1976. Peanuts 28% harvested, 19% 1976. Watermelons 90% harvested, 95% 1976. Corn silage 80% harvested, 64% 1976. Sweetpotatoes 15% harvested, 16% 1976, 24% average. Soybeans and cotton in good to fair condition. Rice in good condition. Corn in fair to poor condition. Pecans in fair condition. Pastures in fair to good condition.

MISSOURI: Temperatures 3° above normal while central and north around normal. Precipitation general with heavier amounts in east and north and lesser amounts in central and southwest. Eastern Ozarks and Bootheel averaged around 1.00 in.

Corn 91% dented, last year 60%, normal 65%; matured 29%, last year 14%, normal 16%; 6% harvested. Condition of corn fair to good. Soybeans 86% setting pods, last year 74%, normal 76%; condition fair to good. Grain sorghum 36% mature, last year 12%, normal 17%. Cotton with open bolls 25%, last year 4%, normal 3%. 3d cutting alfalfa 82% harvested, last year 71%, normal 73%. Moisture supply short to adequate. Fieldwork: 5.4 days suitable.

MONTANA: Unsettled and cool with temperatures well below normal. Precipitation above normal southwest and east but near normal elsewhere.

Soils dry, recent rains helped north central. Harvest progress continued ahead of normal. About 90% winter wheat harvested, 85% last year, 80% normal. Spring wheat 60% harvested, 65% last year, 40% normal. Barley 60% harvested, 70% last year, 50% normal. Oats 55% harvested, 80% last year, 50% normal. Second cutting of alfalfa 70% done, last year 60%, 55% normal. About 20% cattle moved from summer ranges, last year only 5%. Winter wheat seeding started, normal starting time is September 7.

NEBRASKA: Precipitation ranged from 0.25 to 3.75 in. with heaviest amounts central and south central. Temperatures rose above normal midweek but below most of period.

Corn 75% denting, 85% year ago, 60% normal. Sorghum 75% turning, 55% year ago, 45% normal. Soybeans 35% leaves turning, 30% year ago, 20% normal. Alfalfa hay third cutting 70% completed, 70% year ago. Soil moisture adequate.

NEVADA: Thunderstorms early week local heavy rain hail central and northeast. Late week windy, precipitation pattern followed by local freezing north. Rainfall 0.25 in. northeast and south central, 0.10 northwest and a few hundredths extreme south. Temperatures ranged 29 to 105°. Near normal northeast, few degrees above elsewhere. Grain harvest continues; second cutting alfalfa underway north. Fifth cutting extreme south. Ranges extremely dry and fire prone. Hauling water to livestock.

NEW ENGLAND: Temperatures fluctuated from near normal to 20° below normal. Rainfall varied from less than 1.00 to over 2.00 in.

Maine potato crop doing well, harvest for processing has started. Vegetable growth slowed by cooler weather. Peaches, apples, pears, and cranberries doing well. Field corn progressing well in most areas. Showers hindered hay harvest.

NEW JERSEY: Cool, very wet. Temperatures 2 to 4° below normal. Extremes: 40 and 91°. Rainfall averaged 0.48 in. north, 0.90 in. central and 2.29 in. south. Soil moisture, in percent of field capacity 77% north, 78% central and 74% south. Soil temperature averaged 70° north, 74° central and south.

Soil moisture adequate to surplus in some areas. Late cuttings of hay being made where dry enough. Silos being filled. Fall plowing underway, some seeding for alfalfa. Vegetable harvest continues in moderate decline. Snapbeans and pepper harvest active. Both peaches and apples picked.

NEW MEXICO: Scattered showers north early, isolated thundershowers south last half of week. Rainfall very light generally but ranged to nearly 2.00 in.

Irrigated grain sorghum, cotton, corn, good. Dryland grain sorghum, fair. Cotton 97% setting bolls with a few bolls opening. Irrigated grain sorghum, 95% heading; dryland 85% heading. Corn 90% in dough stage. Alfalfa third cut 50% completed north, fourth cut 60% completed south. Early summer apple harvest underway northern areas. Ranges fair and improving from recent rains. Livestock fair to good.

NEW YORK: Temperatures near normal. Rainfall above normal in north and southeast, below normal elsewhere. Cold weather, lows in 30's and 40's 25th and 26th. Warmer, more humid 27th and 28th with 90° readings.

Rain slowed drying and harvesting. Oats 90% combined. Plowing for winter wheat underway. Second cutting alfalfa 90% in, third cutting 20%. Onion, snapbean, cabbage, sweet corn, tomato, potato harvests progressing. Early apple, peach, and pear harvests continuing. Finger Lakes Concord grapes coloring.

NORTH CAROLINA: Precipitation generally light except some locally heavy thundershowers. Temperatures averaged near normal.

Fieldwork: 5.2 days suitable. Soil moisture adequate. Main farm activities: Harvesting and selling tobacco, spraying for insects and harvesting corn. Condition: Corn, pastures and hay mostly poor to fair; tobacco, soybeans, cotton and Irish potatoes fair; peanuts and sweetpotatoes fair to good; apples mostly good. Insect infestation in soybeans, peanuts and cotton requiring frequent spraying. Harvested: Tobacco 61% complete, 1976 79%, average 77%; apples 18%, 1976 21%, average 21%; sweetpotatoes 9%, 1976 7%.

NORTH DAKOTA: Cloudy, damp weather. Moderate rain every day. Rainfall ranged from 0.23 in. south central to 0.83 in. east central. Temperatures near normal. Extremes: 41 and 87°.

Harvest operations slow due to wet weather but overall progress about week ahead of normal. Hard red spring wheat 75% combined, durum 60%, barley 95%, oats 85%. Dry edible bean harvest in progress and some early potato fields dug. Pastures in poor to fair condition with supplemental feeding in dryer areas. Livestock generally good condition.

OHIO: Temperatures below normal. Extremes: 90 and 44°. Precipitation variable, 1.63 to 0.04 in.

Fieldwork: 5 days suitable. Main activities: Fruit and vegetable harvest, haying, clipping pastures, plowing for winter wheat (35%). Crop development: 60% corn in dent stage, 1976 60%, average 50%. Soybeans: 75% set pods, 1976 75%, average 70%. Corn cut for silage: 15% complete, 1976 15%, average 10%. Alfalfa, 3d cutting 55%, 1976 50%, average 35%. Tobacco cutting 15% complete, 1976 10%, average 10%. Corn, soybeans and pastures mostly good. Soil moisture adequate.

OKLAHOMA: Warm weather early week caused temperatures to average 2° above normal in central and southwest to 5° above Panhandle. Precipitation averaged from 0.81 in. west central to 2.98 in. northeast. Heavy amounts caused some local flooding.

Scattered rains limited fieldwork but improved crop conditions. Additional topsoil moisture needed some areas. First wheat seeded western Panhandle. Some early seeding elsewhere intended for grazing. Seedbed preparation and fertilizer application active where conditions permitted. Corn silage cutting in full swing Panhandle, with limited grain harvest East. Sorghums in good to fair condition with 95% crop headed, earlier than near 90% year ago and 92% average. Some early harvest will begin after fields dry. Cotton crop in good condition; insect problems light. Nearly all acreage setting bolls, compared 85% year ago and 83% average. Very few open bolls to date. Peanuts improved from rains, with 85% spiking, ahead of 80% average and 83% year ago. Soybeans far ahead of average with 75% setting pods; condition good in spite some pod worms. Average pod set 57%. Pastures and ranges mostly good. Cattle in top condition.

OREGON: Temperature departures ranged from 1 to 7° above normal. Greatest departures limited to east. Rainfall substantial. West measured 1.00 to 2.00 in. East reported 0.33 to 0.60 in. Extremes: High 90's, low 40's, east and south; mid-80's, low 50's, west.

Grain harvest nearly complete west; final stages slowed by rain. Mixed stages of completion east depending on elevation. Some storage shortage northeast. Mint harvest nearly complete west, about 50% complete east. Seed crop harvest nearly complete. Bean harvest continues in Willamette Valley and sweet corn harvest beginning. Haying continues. Potatoes doing well throughout east with harvest of early varieties continuing. Ranges and livestock poor to fair east; fair to good west. Stock water situation acute east. Cattle movement increasing.

PENNSYLVANIA: Pleasant with seasonable and lower temperatures through 26th when heat and humidity returned and remained through the balance of period. Temperatures averaged near to 2° below normal with extremes 33 and 95°. Scattered showers and thunderstorms 22d and 23d provided 0.50 in. rainfall northwest and southeast but only 0.10 in. or less most other areas.

Fieldwork: 5 days suitable. Moisture mostly adequate to some surplus north. Activities: Combining oats and baling straw; spraying; fall plowing; seeding winter grains; digging potatoes; cutting tobacco; picking apples, peaches and tomatoes. Oats harvest complete, same as last year. Tobacco cut 44%, last year 36%. Potatoes dug 26%, last year 23%. Corn 23% in dent, last year 18%. Fall plowing 33%, last year 31%. Alfalfa hay second cut complete, third cut 49%. Feed from pastures average to somewhat above. Barley and wheat sown under 5%.

PUERTO RICO: Island rainfall 2.31 in. or 0.60 in. above normal. Temperatures about 81° coasts and 76° interior. Extremes: 95 and 62°.

Adequate rains received all portions. Crop conditions improved considerably due rains. Farmers fertilizing, cultivating and using insecticides on pastures. Coffee trees good condition and good harvest expected. Soil preparation for tobacco seedbeds active.

SOUTH CAROLINA: Temperatures slightly above normal. Rainfall above normal over all but northwest, northeast.

Soil moisture adequate. Insect infestation high. Farmers spraying chemicals to control pests. Tobacco harvesting nearing completion. Cotton condition poor; insect infestation. Farmers harvesting corn crop for hay, silage, grain; over 90% mature. Soybean condition fair; insect infestation high and hard to control. Peach harvesting about over. Grain sorghum and pecan condition poor to fair. Apple harvest progressing normally. Grape condition good; harvest active. Planting fall vegetables almost finished.

SOUTH DAKOTA: Frequent showers and cool temperatures. Precipitation mostly 0.50 to 1.00 in. Temperatures 1 to 7° below normal.

Topsoil and subsoil moisture short. Row crop development slowed slightly by cool weather, still ahead of normal. Silage cutting underway. Greenbugs a problem in sorghum. Rains helped soybeans fill pods. Flax harvest slowed by humidity and showers. Livestock good condition. Hay supplies vary from short to plentiful. Corn in dent stage or past 66%, 1976 50%, normal 53%. Corn mature (safe from frost) 14%, 1976 12%, normal 4%. Flax combined 76%, 1976 93%, normal 71%. Soybeans shedding leaves 12%, 1976 4%, normal 1%. Grain sorghum showing color 52%, 1976 33%, normal 29%. Fall plowing complete 46%, 1976 36%, normal 31%. Winter wheat seeded 5%, 1976 2%, normal 1%. Rye seeded 7%, 1976 3%, normal 6%.

TENNESSEE: Scattered showers early week. Temperatures averaged from 2 to 5° above normal west and mid to 1° below normal northeast. Precipitation light in west averaging less than 0.10 in.; mid and east averaged 0.25 to 0.50 in.

Soil moisture adequate. Fieldwork: 5 days suitable. Cattle and crops in good condition. Some insect problems. Soybeans setting pods 86% 1977, 61% 1976, 65% normal. Cotton open bolls 19% 1977, 3% normal. Corn dented 81% 1977, 65% 1976, 69% normal. Corn mature 36% 1977, 14% 1976, 23% normal. Corn harvested 5% 1977. Dark fired tobacco harvested 61% 1977, 60% 1976, 39% normal. Burley tobacco harvested 55% 1977, 64% 1976, 37% normal. Air cured tobacco harvested 61% 1977, 15% 1976, 34% normal. Fall plowing completed 37% 1977, 30% 1976, 35% normal.

TEXAS: Temperatures 3 to 5° above normal. Rainfall: Near normal southern High Plains, northern Low Plains, upper coast; well below normal Trans-Pecos, Edwards Plateau; above normal Lower Valley; elsewhere amounts averaged 0.50 in.

Rains improved crops, pastures, hay crops many areas. Cotton harvest continues at fast pace from Lower Valley into Blacklands. Cotton on plains maturing; open bolls many fields. Bollworm activity increasing. Corn harvest some progress. Harvest begun few fields High Plains, mostly high moisture. Silage cutting continues on plains. Sorghum harvest active Edwards Plateau, Cross-Timbers; slowed by showers southern Low Plains. Peanut harvest continues. Some areas received showers but dryland peanut fields most areas need rain. Rice harvest progressing; but slowed by showers. Soybeans making good progress; fields on High Plains, parts of Upper Coast received needed rain. Early sunflowers High Plains ready for harvest; few fields cut. Head moths damaged some fields. Wheat planting getting underway on High Plains. Growers preparing seedbeds, fertilizing. Recent rains on plains improved planting conditions. Sorghum harvested 60% 1977, 52% 1976, 53% average. Rice harvested 93% 1977, 92% 1976, 81% average. Corn harvested 17% 1977, 26% 1976, 29% average. Cotton harvested 10% 1977, 5% 1976, 8% average. Peanuts harvested 7% 1977, 9% 1976, 9% average. Wheat planted 2% 1977, 1% 1976, 2% average.

Fall vegetable planting begun. Fall carrots, cucumbers, cabbage, kale developing well. Dry weather taking toll some areas. Tomato, carrots, cucumbers, cabbage, peppers, cantaloupe, melon harvest continue. Late peaches continue ripen north. Pecan trees plagued by insects, dry weather. Producers north, central spraying pecan weevil.

Recent rains caused renewed grass growth many areas but pastures Edwards Plateau, south, south central, and other scattered areas remain dry with available grazing decreasing. Armyworm active pastures, hay fields east. Livestock in general fair to good condition; supplemental feeding continuing dry areas.

UTAH: Recurring shower and thunderstorms, accumulated moisture generally moderate to heavy. Cooling trend weekend. Averages ranged from 2° below normal to 7° above.

Soil moisture for 1978 winter wheat adequate in northern areas, southern areas short. Winter wheat planting getting underway. Small grain harvest 80 to 90% complete. Alfalfa seed prospects rated fair. Sweet corn and snap bean picking reached half way mark. Range feed supplies continue poor. Ranchers hauling stockwater.

VIRGINIA: Rainfall all stations; trace to 4.35 in. Temperatures average 2° below normal. Extremes: 92 and 45°.

Topsoil moisture short to adequate. Pasture area livestock water supplies slightly improved. Household and farm service supplies unchanged. Corn poor, grain harvest advancing from east. Silage operations very active. Soybeans benefited from rains. Widespread unusual infestation corn earworms. Peanuts much improved. Spraying for insects and diseases. Most tobacco good response to rains. Some slow-down in maturing. Flue 41% harvested, 46% 1976, 43% normal. Fire 33% cut, 40% 1976, 26% normal. Burley 15% cut, about average. Sun 37% harvested. Grasshopper infestation many fields southside. Fieldwork: 4.9 days suitable. Land preparation advancing. Some seeding alfalfa, grasslands, cover crops.

WASHINGTON: West: Temperatures averaged near to 2° above normal. Precipitation 1.50 to 2.50 in. above normal.

Pastures improved. Non-irrigated crop benefited. Vegetable seed, cauliflower and cucumber harvests continued. Bushbean harvest just starting.

East: Temperatures 1 to 4° above normal. Precipitation 0.50 to 0.70 in. above normal.

Bartlett pear and peach harvests continued. Nectarines ripened. Golden delicious apples beginning early. Sweet corn, alfalfa seed, and mint harvests continue. Small grains complete. Cattle-men weaning calves early. Ranges still short. Third cutting irrigated alfalfa underway. Third cut dryland alfalfa not expected to finish yet. Still not sufficient moisture to plant winter grains.

WEST VIRGINIA: Temperatures near normal; high 95°. Rainfall near normal except below, northeast and northwest.

Fieldwork: 3.9 days suitable. Soil moisture mostly adequate. 2d haying 65%, 69% 1976, 66% average. Oats 92% harvested, 97% 1976, 93% average. Corn development: 6% pre-silked, 42% silked, 52%

dough stage. Corn condition mostly good. Potatoes 33% dug, 37% 1976, 41% average. Tobacco 95% topped, 50% 1976, 70% average. Tobacco harvested 30%, ahead of last year and average. Pastures fair to good except northeast.

WISCONSIN: Temperatures 1° below normal. Highs in 60's and 70's until 19th and 20th when warmer air brought 80's and 90's. Low in 30's, with frost extreme north 24th and 25th. Rainfall scattered and light until 28th when locally heavy amounts of 1.00 to 3.00 in. fell north central and southeast, with lesser totals under 1.00 in. other areas.

Corn matured slowly but ahead of last year and normal. Corn 65% in dent, 1976 30%, normal 20%. Most corn very good, some poorer on light soils where dry. Silo filling underway. Seed corn being harvested. Silos and storage bins being erected for anticipated large corn crop. Soybeans beginning to turn yellow, look very good. Most oats combined except in some north and east areas. Third crop hay 30% harvested, 1976 10%, normal 1%. Some farmers trying to finish second crop while a few started on fourth crop. Hay yields good but difficult to dry hay in cloudy, damp weather. Pasture conditions above normal south and east. Harvesting tobacco crop continuing. Maturity and harvesting of vegetable crops slowed by cool temperatures and rain. Cranberries sizing slowly. Apple crop spotty but has good color. Soil moisture supplies short to adequate. West and north need more rain.

WYOMING: Temperatures mostly above normal. Precipitation generally above normal.

Soil moisture short. Small grain harvest generally normal progress. Spring wheat 81% harvested, barley 77% harvested, oats 58% harvested. Seeding of 1978 winter wheat 15% completed. Dry beans 4% in windrows. Grain corn 60% in dough stage. Row crop prospects generally fair to good. Hay harvest above normal progress; 14% of alfalfa third cutting put up, other hays 90%. Stored feed hay supplies short.

World Weather and Crop Update

August 22-28

USSR. Moderate showers and below-normal temperatures dominated weather in most parts of European USSR. Moderate to locally heavy rains accompanied by slightly below-normal temperatures slowed harvest operations throughout the principal spring wheat regions of western Siberia and northern Kazakhstan. By August 22, threshing was completed on 71 million hectares or 55 percent of the total areas in small grains. Although the overall pace of the grain harvest was above normal, inclement weather delayed the spring wheat harvest in Kazakhstan and other parts of the new lands. A period of dry weather was needed to get the harvest back to normal in these areas where the onset of winter not infrequently begins in mid-to-late September.

ASIA. In the People's Republic of China, precipitation was generally light throughout the major agricultural areas of northern China, including the North China Plain--a major corn, cotton, and soybean region--and the important soybean producing provinces in the northeast. Crops in these areas are recovering from excessive rainfall earlier in the summer. Moderate rains fell over most of the rice growing areas south of the Yangtse River although isolated cases of excessive precipitation were reported in some provinces. After a mid-August lull, the monsoon in India appears to be rejuvenated with a considerable increase in precipitation recently. Overall performance of the monsoon, thus far, has been favorable for fall-harvested crops, but timely and ample rains in September are needed to insure the full potential of the fall harvest. In Australia, rainfall was limited to the immediate western and southwestern coastal areas, but the main agricultural sections were without significant moisture.

AFRICA. In North Africa, light showers fell along the coast of Algeria, but Morocco and Tunisia were dry. Light showers also fell in the main agricultural areas in South Africa.

SOUTH AMERICA. Heavy rains with some localized flooding continued to drench parts of the rich

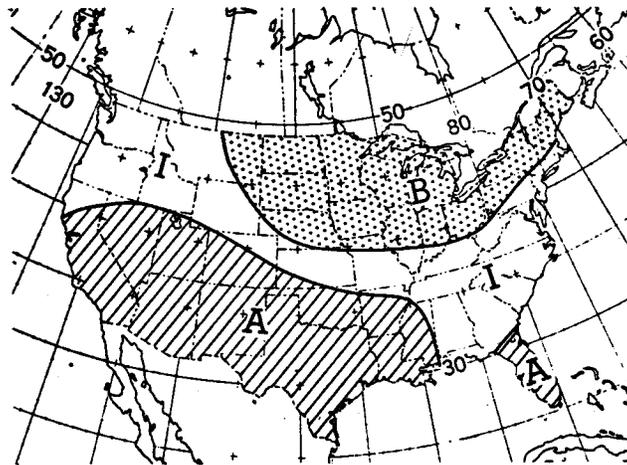
agricultural states of Rio Grande do Sul and Santa Catarina in Brazil's extreme south. Elsewhere it was generally dry in the main agricultural regions of Brazil. There were no threats of frost in the coffee growing states. Scattered light showers fell over the main grain portions in Argentina, but the precipitation did little to ease the four-month drought that has gripped this area.

EUROPE. It was wet and cooler than normal over much of western Europe; a period of warm weather and sunshine is badly needed throughout the area. Most of the principal agricultural sections in Spain were without significant moisture as the drought deepened in the southern regions. Showers pelted the Italian peninsula with heaviest amounts recorded in the Po Valley. Parts of the drought-plagued south received up to an inch of moisture. Showers and cloudy weather continued to dominate the weather in the northern half of eastern Europe, including East Germany, Poland, and Czechoslovakia. Heavy showers drenched Romania producing some localized flooding, but only light to moderate showers fell in Hungary, Yugoslavia, and Bulgaria. Light rains fell in Greece, but the principal agricultural areas in Turkey were without significant moisture.

NORTH AMERICA. Heavy rains soaked parts of Iowa causing some localized flooding, but crops apparently suffered little damage. Recent rains have significantly improved soil moisture throughout the northern and central Great Plains. But the drought in western Virginia, extending into the Piedmont regions in the Southeast continued generally unabated although spotty showers deposited moisture in some areas. The drought in the Pacific Northwest was eased in places by a weather pattern that could be the beginning of an early rainy season. Fall pastures, in particular, will be helped by the much-needed rainfall. Cool, damp weather and some scattered light frost delayed the harvest across the Canadian Prairie Provinces, hurting the quality and yields of some crops.

OUTLOOK FOR FALL AVERAGE TEMPERATURES

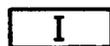
September through November 1977



Above Normal, 60% chance of occurrence



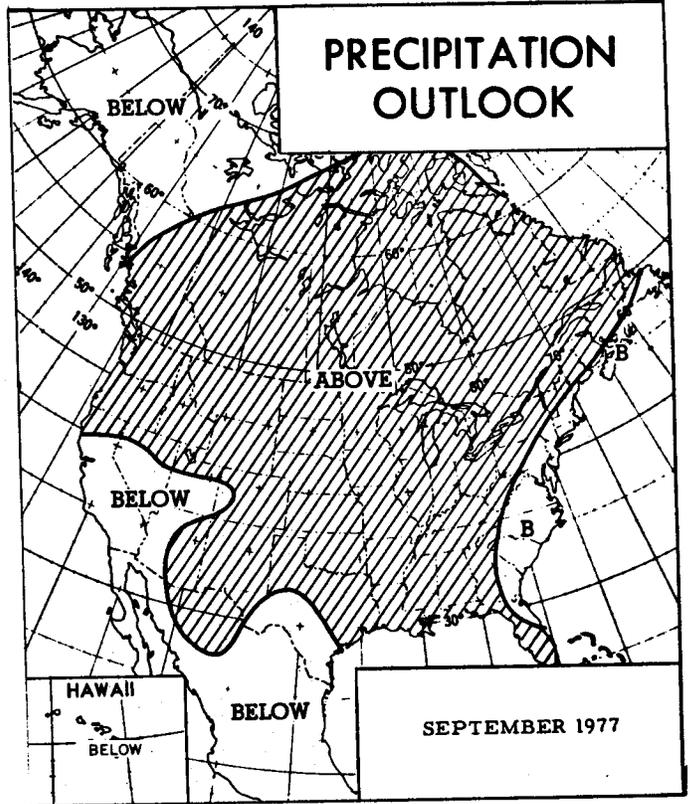
Below Normal, 60% chance of occurrence



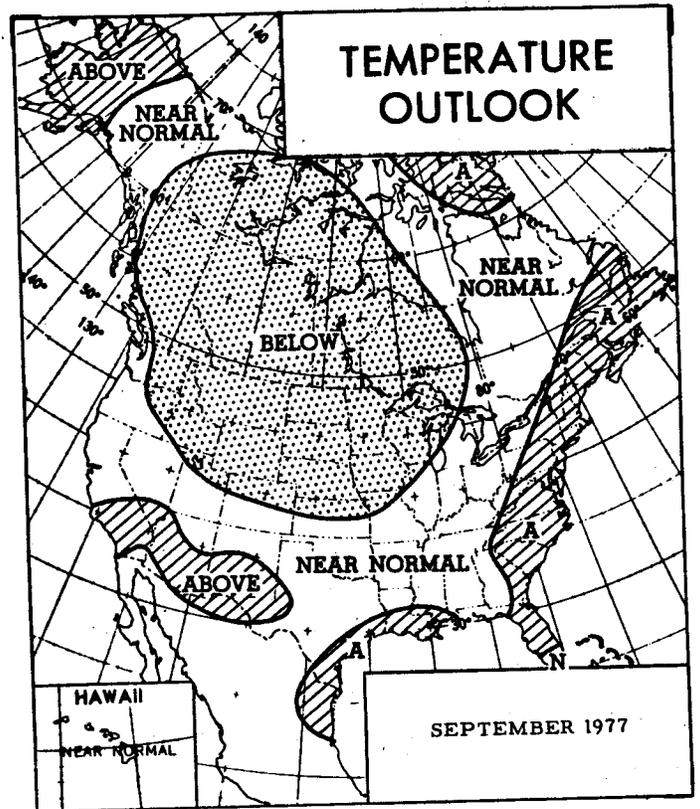
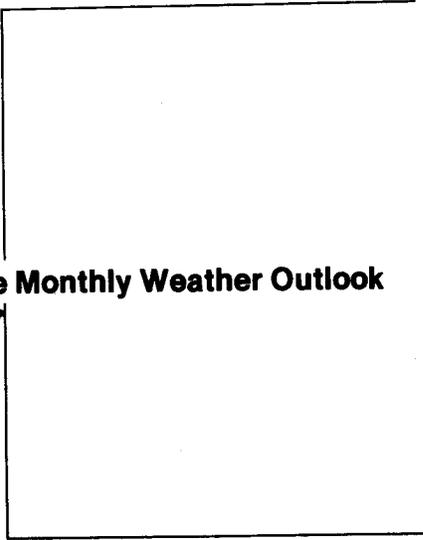
Indeterminate, 50% chance of Above Normal
50% chance of Below Normal

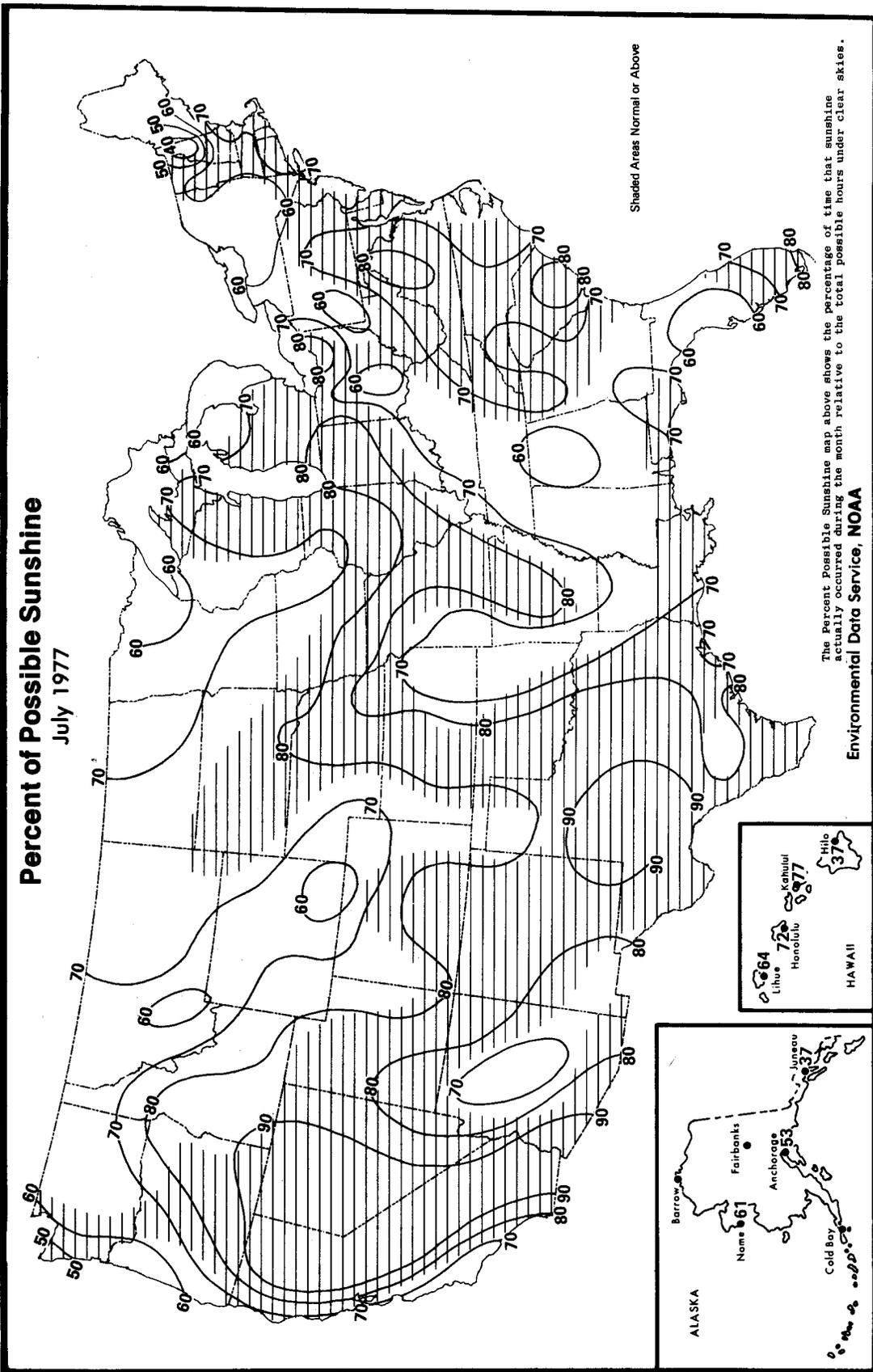
The two categories Above and Below are to be compared to the long-term average or "normal" temperatures of the years 1941-70. Each category has a natural climatic frequency or probability of 50%. Each carries a 60% probability of occurring where forecast (shaded area), based on the verification scores of eighteen years of experimental seasonal predictions.

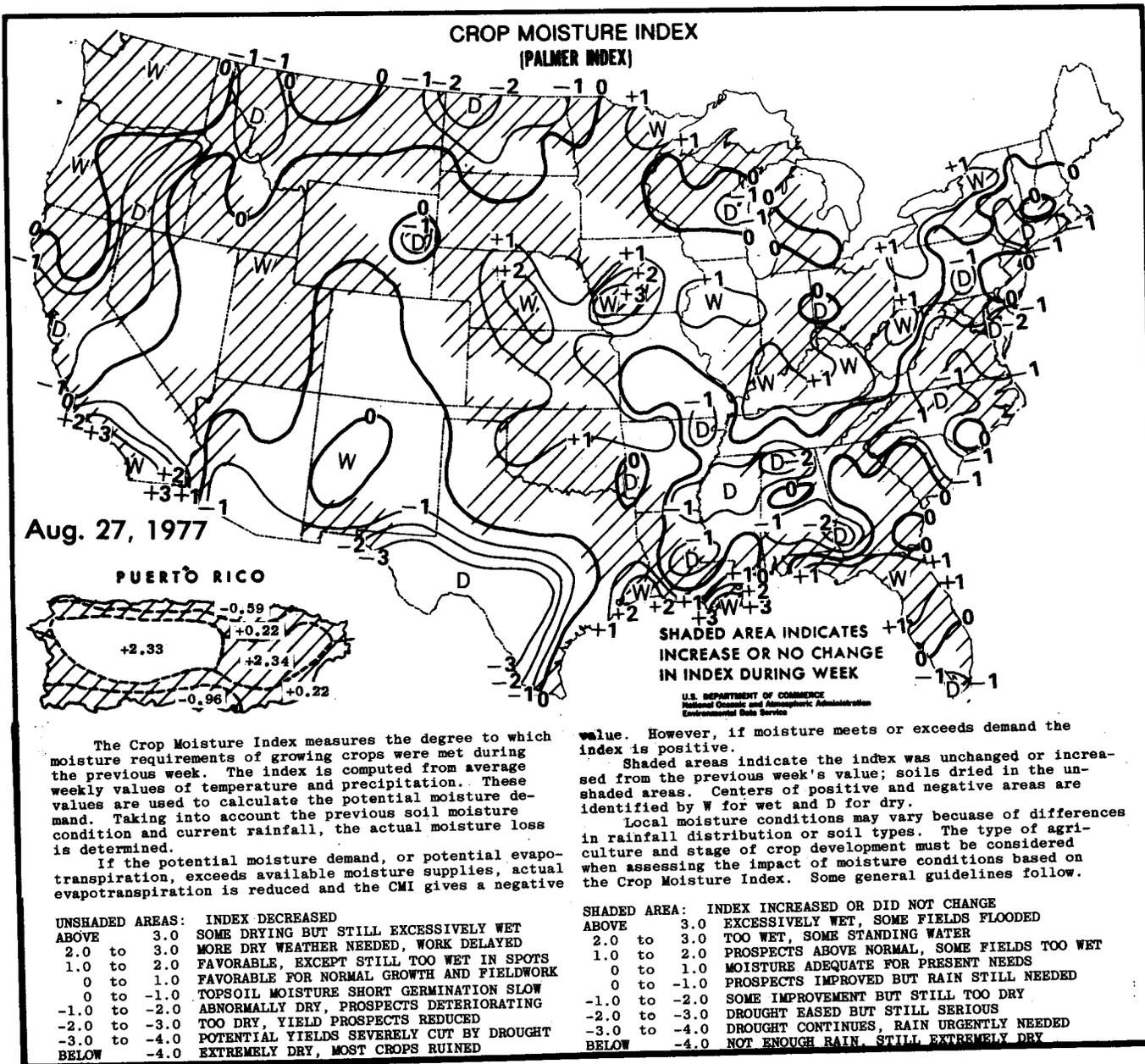
NOAA, National Weather Service
Long Range Prediction Group



Average Monthly Weather Outlook







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(continued from page 3)

PASTURES AND LIVESTOCK: Grasslands rated fair to good, and in some areas excellent east of the Rocky Mountains except the Southeast. Rains improved growth and replenished stock water supplies in most

areas. North Dakota cattlemen needed precipitation for fall grazing. In the West rangeland remained poor but recent storms helped Arizona pastures. Many livestock producers hauled water to cattle.