

Weekly Weather & Crop Bulletin

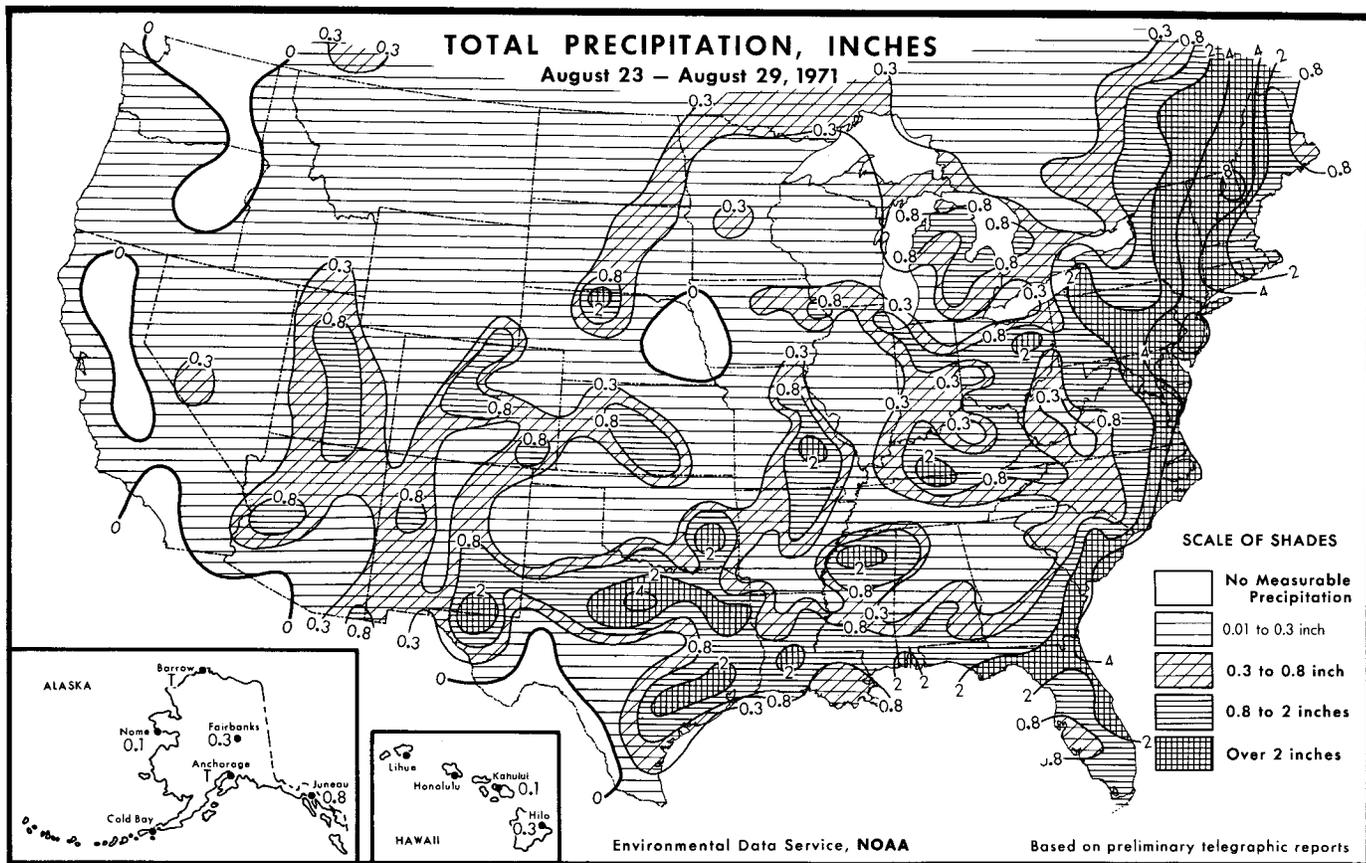
U. S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Environmental Data Service

U. S. DEPARTMENT OF AGRICULTURE
Statistical Reporting Service

Volume 58, No. 35

Edited by Lucius W. Dye

August 30, 1971 Washington, D. C.

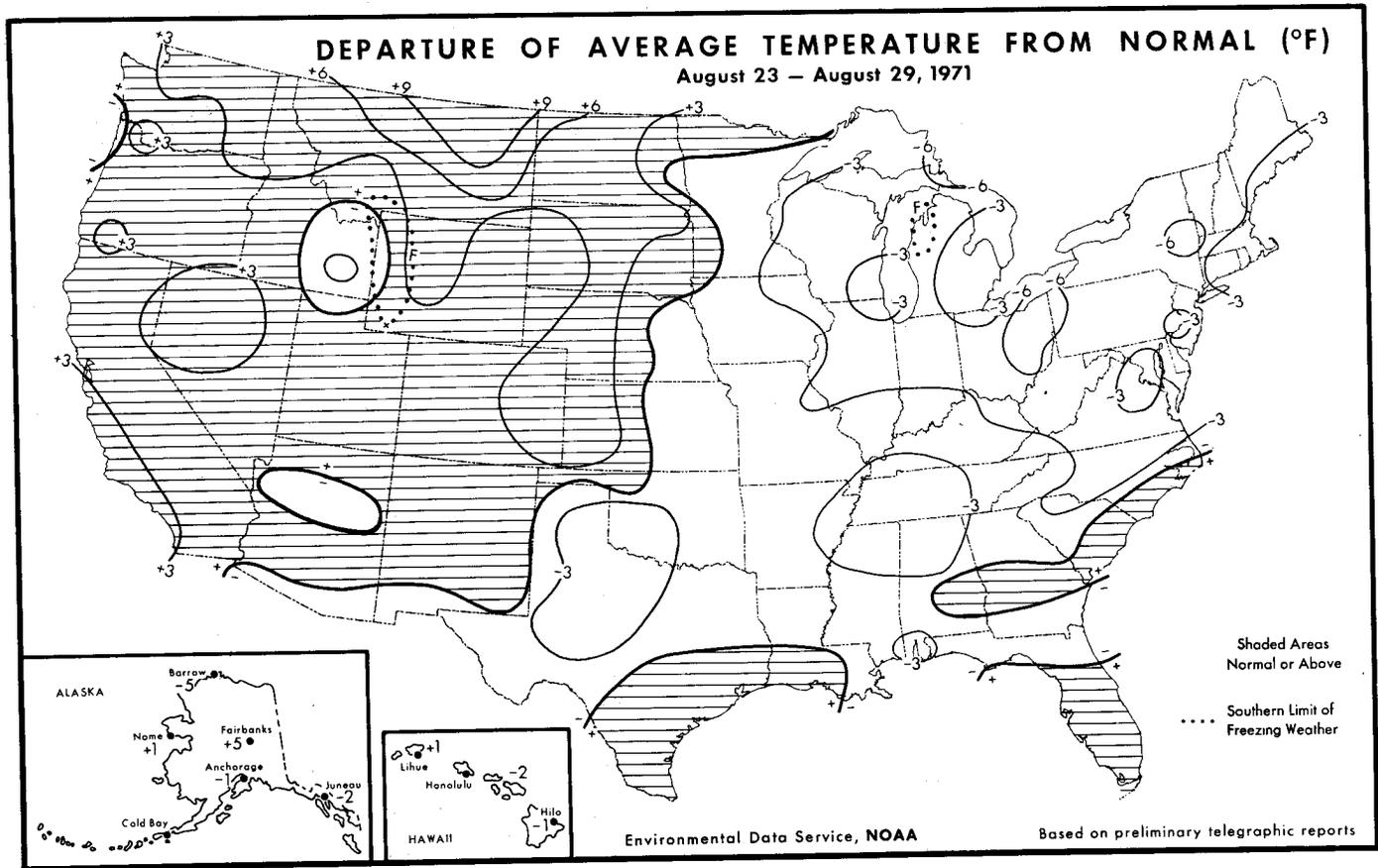


NATIONAL WEATHER SUMMARY

HIGHLIGHTS: Temperatures averaged near normal over most of Nation. Tropical Storm Doria drenched the Atlantic Coast late in the week.

PRECIPITATION: Lines of thunderstorms marched across the Great Lake region to New England early in the week. In the Chicago, Ill., area some of the thunderstorms were accompanied by strong winds, hail, and heavy showers. A tornado near Naperville, about 30 miles west of Chicago, destroyed 2 residences. Winds at Lake Forest northwest of Chicago gusted to 60 m.p.h. and hail up to 3/4 inch in diameter accompanied the strong winds. Other thunderstorms dotted the Southwest, the central Rocky Mountains, and the Gulf States. Over 2.00 inches of rain fell in spots north of Abilene, Tex., and some localities near the Gulf of Mexico from Texas to Florida received over

1.00 inch of rain late Tuesday and early Wednesday. Tropical Storm Doria moved northward along the Atlantic Coast late in the week soaking most areas with 4.00 to more than 6.00 inches of rain. Trenton, N. J., received 6.05 Friday. The weekly total at Trenton was 8.09 inches. Winds associated with T.S. Doria were generally about 60 m.p.h. but gusts occasionally approached hurricane speed. Philadelphia, Penna., recorded 74 m.p.h. gusts and Bridgeport, Conn., 75 m.p.h. gusts. Doria lost much of her energy as she moved across New England Saturday. Flooding and wind damage were widespread but pleasant weather returned to most of the Northeast by Sunday. A new tropical depression moved westward across the Florida Peninsula Sunday night. As we go to press this depression is about 100 miles west of Tampa.



TEMPERATURE: Weekly mean temperatures averaged slightly above normal west of the Rocky Mountains, over the western edge of the northern and central Great Plains, and along the eastern portion of the Gulf Coast. Two high-pressure areas, one over the Pacific Northwest and the other over the Great Lakes, spread fair skies and early autumn temperatures from the Pacific coast to New England. Some northern localities were 15° to 20° cooler Monday morning than 24 hours earlier. For instance Spokane, Wash., registered 44° Monday morning in contrast to a minimum temperature of 61° Sunday. The minimum temperature at Marquette, Mich., was 46° Monday; 64° Sunday. The cool weather did not reach South Dakota until a day later. Numerous stations in South Dakota registered 100° or higher Monday. Pierre recorded 106° Monday. Maximums in

South Dakota Tuesday were generally in the 80's, 84° at Pierre. Freezing weather occurred in the high Rockies and at some northern locations. Big Piney, Wyo., registered 26°; West Yellowstone, Mont., 32°; and Pellston, Mich., 32° Tuesday morning. A warming trend occurred over much of the Nation late in the week. Miles City, Mont., registered 100° and Minot, N. Dak., 101° Saturday afternoon. Maximums over the Northeast held mostly in the 60's and low and middle 70's Friday due to cloudiness and rain associated with Tropical Storm Doria. The Northeast warmed to near or above 80° by Sunday. Maximums exceeded 100° every day in the Southwestern Deserts, reaching 107° at Imperial, Calif., Wednesday and Thermal and Blythe Sunday.

L. W. Dye

AGRICULTURAL HIGHLIGHTS: Dry weather caused slight crop decline western Corn Belt. * Harvest 1971 grain crops nearing completion. * Corn and cotton harvesting underway in South.

SMALL GRAINS: Grain harvesting moved ahead rapidly from the Rocky Mountains to the Great Lakes. Hot temperatures with only a trace of rain were ideal for getting the northern grain crop under cover. Winter wheat is all cut in Montana, with spring wheat and oats 80 percent combined. Harvest is complete in Idaho, except for fields in the Eastern part of the State. Only spring-seeded grains are left to combine in Colorado, Wyoming, Utah, and Nevada. Early week showers interrupted combining in Washington and Oregon, but late week progress was good.

In the central region of the Nation, farmers were busy preparing seedbeds for fall sowing. A few fields of wheat were planted in Oklahoma and Nebraska. Winter wheat seeding is behind last year in South Dakota and Minnesota due to the dry soils. However, moisture is plentiful in Pennsylvania and growers have 20 percent of their wheat and barley acreage planted. Growers are also planting wheat in Colorado, New Mexico, Utah, and Wyoming. Showers caused soil crushing in Washington, thus damaging newly sown wheat.

CORN: Corn prospects declined slightly in the western Corn Belt. Only a trace of rain was received, and non-irrigated corn is under stress. A general rain is needed. Some ears are not filling properly in areas of Minnesota and Illinois. The moisture situation is good in the eastern Corn Belt, with much of Indiana, Ohio and Michigan receiving over an inch of rain. Stalk and ear rot are increasing in southwestern Indiana, giving expectations of an early harvest in this region. Maturity of the Corn Belt crop continues ahead of last season in most States. Over half the crop is in the dent stage, with some acreage already mature. Illinois leads with 25% of its crop ripe. Silage cutting is underway in the Corn Belt.

Corn harvesting has started in the South. Prospects remain favorable. Picking started on blight damaged fields as far North as Maryland. Tropical storm Doria knocked down corn in its swing from North Carolina to New England.

There was no noticeable change in the spread of Southern Corn leaf blight. Dry weather is of more concern to western Corn Belt growers than the blight.

SOYBEANS: Dry, hot weather hastened crop maturity during the week in the North Central States. Beans are ripening ahead of last year. The soybean outlook deteriorated slightly as dry weather prevailed. Pod filling is being affected by insufficient rainfall. Moisture and crop development remain excellent in the South. However, weeds continue to be a nuisance. Most fields are blooming with pod set very good. Over 2/3 of the Kentucky and Tennessee acreage has podded.

COTTON: In the South, the crop continues to fruit heavily, with bottom bolls starting to open in early-planted fields. About 12 percent of the bolls are open in South Carolina, with bolls starting to open as far north as Missouri.

The first bale of 1971 crop cotton was ginned in Alabama, but no significant amount will be ginned until after mid-September. Boll rot is causing concern in various States. Some bottom defoliation started to curb the problem. Harvest remains behind last year in Texas, 8% picked. Fields have been defoliated in Yuma, Arizona in preparation of harvest and picking should start soon in the Desert areas of California.

OTHER CROPS: Sorghum cutting started in California's Sacramento Valley; with combining also active in other Southwestern and Southern States. Late planted fields are under stress in Nebraska due to the dry moisture situation. Rains from tropical storm Doria halted tobacco harvesting late in the week along the Atlantic Coast. Dryer weather enabled Kentucky burley harvest to gain momentum, but 1/4 of the crop still remains to be topped. Potato digging was slowed by rain in Michigan and Long Island, New York. Digging in Maine increased, but marketings were light in California. The Idaho crop is 10% dug. Nearly 2/3 of the Louisiana rice crop is combined. California growers are draining their fields to make them ready for harvest. Combining should also start soon in Arkansas. Dry beans matured rapidly in Michigan, but rains slowed early harvest headway. Beans are nearly mature in New York, cutting began in Colorado. Louisiana sweetpotato digging increased during the week. Both yields and quality of the crop are good. Nearly 29 percent of the Mississippi crop is also dug.

Fruits and Nuts: Gale winds damaged fruit trees in New England, with reports of over 10% of the apple crop blown to the ground in eastern Connecticut and central Massachusetts. Apples are coloring and sizing well in other areas of the Northeast, except dry soils are retarding sizing in Michigan. Peach harvest continues strong in the Northeast. Bartlett pears are just coming into maturity. In Washington, hop growers continue to harvest their crop. A few pears also remain to be picked.

Vegetables: Tropical storm Doria halted vegetable harvesting along the Atlantic Coast late in the week. Fields will have to dry a few days before machine harvesting resumes. Some damage occurred in New Jersey and New England, but the extent is unknown. Summer vegetables are in good supply in Northern producing areas. Watermelon picking ended in South Carolina, but good supplies are available from the Delmarva Peninsula. Fields dried and harvest increased on the Texas High Plains.

PASTURES AND LIVESTOCK: Hot, dry weather was responsible for a further decline in pasture conditions from the western Corn Belt to the Rocky Mountains. Pastures are becoming so poor in some sections of Nebraska that supplemental feeding is necessary. In Montana 10% of the range livestock have already been removed from summer pastures. Local showers aided grass growth in the Southwest, thus pastures continued on their road to recovery. Livestock in the Southeast sector of the Country are grazing on lush green grass.

Steve Pscodna
Agricultural Statistician

Temperature and Precipitation Data for the Week Ending Midnight, L.s.t., August 29, 1971

States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches	
	Average	Departure*	Total	Departure*		Average	Departure*	Total	Departure*		Average	Departure*	Total	Departure*
ALA. Birmingham . . .	76	- 5	.2	-. 8	New Orleans . . .	80	- 1	.6	-. 6	OKLA. Okla. City . .	79	- 3	T	-. 7
Mobile . . .	82	+ 1	2.8	+1.6	Shreveport . . .	81	- 2	T	-. 5	Tulsa . . .	81	0	.1	-. 8
Montgomery . . .	78	- 3	1.9	+1.1	MAINE. Caribou . . .	56	- 4	1.0	+ .2	OREG. Astoria . . .	60	- 1	T	-. 4
ALASKA. Anchorage . .	54	- 1	T	-. 6	Portland . . .	64	- 1	1.4	+ .8	Burns . . .	67	+ 2	0	-. 1
Barrow . . .	32	- 5	T	-. 2	MD. Baltimore . . .	71	- 3	4.4	+3.2	Medford . . .	73	+ 3	T	-. 1
Fairbanks . . .	56	+ 5	.3	-. 1	MASS. Boston . . .	68	- 1	.8	-. 1	Pendleton . . .	73	+ 3	T	-. 1
Juneau . . .	51	- 2	.8	-. 4	Nantucket . . .	60	- 3	.2	-. 2	Portland . . .	69	+ 3	T	-. 2
Nome . . .	49	+ 1	.1	-. 8	MICH. Alpena . . .	60	- 3	.9	+ .2	Salem . . .	67	+ 1	T	-. 1
ARIZ. Flagstaff . . .	62	- 1	.6	0	Detroit . . .	69	- 2	.5	-. 2	PA. Allentown . . .	67	- 3	4.6	+3.7
Phoenix . . .	91	+ 4	T	- 3	Flint . . .	65	- 2	.7	0	Erie . . .	69	- 4	2.5	+1.7
Tucson . . .	82	0	.1	-. 5	Grand Rapids . . .	61	- 3	.4	-. 2	Harrisburg . . .	71	- 1	6.6	+5.5
Winslow . . .	75	- 1	.2	-. 1	Houghton Lake . . .	65	- 3	1.2	+ .5	Philadelphia . . .	67	- 3	.8	+ .1
Yuma . . .	91	0	T	- 1	Lansing . . .	59	- 5	.6	0	Pittsburgh . . .	65	- 3	1.8	+1.0
ARK. Fort Smith . . .	79	- 2	.4	-. 3	Marquette . . .	64	- 5	.3	-. 5	Scranton . . .	67	- 1	1.0	+ .1
Little Rock . . .	78	- 3	1.0	+ .4	Muskegon . . .	56	- 6	.5	-. 2	R. I. Providence . .	80	+ 1	5.3	+4.0
CALIF. Bakersfield . .	83	+ 3	.1	+ .1	S. Ste. Marie . . .	60	- 1	.1	-. 8	S. C. Charleston . .	80	0	.8	-. 4
Eureka . . .	59	+ 2	.1	+ .1	MINN. Duluth . . .	60	- 1	.1	-. 8	Columbia . . .	80	0	.8	-. 4
Fresno . . .	78	0	0	0	Internatl Falls . .	61	+ 1	.3	-. 5	Greenville . . .	75	- 3	T	-1.0
Los Angeles . . .	78	+ 5	0	0	Minneapolis . . .	66	- 2	T	-. 8	S. DAK. Aberdeen . .	74	+ 5	.4	-. 1
Red Bluff . . .	80	0	0	0	Rochester . . .	64	- 4	T	-. 9	Huron . . .	72	+ 1	0	-. 4
San Diego . . .	75	+ 3	0	0	St. Cloud . . .	64	- 2	.4	-. 4	Rapid City . . .	72	+ 2	T	-. 4
San Francisco . . .	66	+ 3	T	0	MISS. Jackson . . .	80	- 1	.5	-. 1	Sioux Falls . . .	71	+ 1	.1	-. 7
Stockton . . .	77	+ 1	0	0	Meridian . . .	79	- 2	1.1	-. 6	TENN. Chattanooga .	76	- 3	T	-. 8
COLO. Denver . . .	73	+ 3	T	-. 3	MO. Columbia . . .	73	- 3	T	-. 9	Knoxville . . .	75	- 2	.7	0
Grand Junction . . .	76	+ 2	.2	-. 1	Kansas City . . .	77	- 1	T	-1.0	Memphis . . .	77	- 3	0	-. 6
Pueblo . . .	76	+ 3	T	-. 4	St. Louis . . .	74	- 2	T	-. 8	Nashville . . .	75	- 4	.2	-. 3
CONN. Bridgeport . . .	69	- 1	3.6	+2.6	Springfield . . .	77	0	0	-. 8	TEX. Abilene . . .	78	- 4	2.6	+2.3
Hartford . . .	67	- 2	3.1	+2.2	MONT. Billings . . .	74	+ 5	.1	-. 3	Amarillo . . .	74	- 5	T	-. 6
D. C. Washington . . .	73	- 2	3.9	+2.7	Glasgow . . .	76	+11	T	-. 3	Austin . . .	85	+ 1	.4	0
FLA. Apalachicola . .	81	0	2.2	+ .3	Great Falls . . .	71	+ 6	.1	-. 2	Beaumont . . .	82	0	.7	-. 6
Ft. Myers . . .	82	- 1	1.2	-. 5	Havre . . .	74	+10	T	-. 2	Brownsville . . .	84	0	.1	-. 6
Jacksonville . . .	81	- 1	4.5	+2.9	Helena . . .	65	+ 1	.3	+ .1	Corpus Christi . .	84	0	.4	-. 2
Key West . . .	84	0	1.3	+ .2	Kalispell . . .	66	+ 5	T	-. 3	Dallas . . .	83	- 1	1.2	+ .7
Lakeland . . .	82	0	1.3	-. 3	Miles City . . .	77	+ 7	.2	-. 1	Del Rio . . .	81	- 4	0	-. 5
Miami . . .	83	0	1.3	-. 4	Missoula . . .	67	+ 4	T	-. 2	El Paso . . .	78	- 2	.3	0
Orlando . . .	84	+ 1	1.6	+ .1	NEBR. Grand Island .	73	0	0	-. 6	Fort Worth . . .	81	- 3	1.5	+1.1
Tallahassee . . .	79	- 2	2.6	+1.1	Lincoln . . .	74	- 1	0	-. 8	Galveston . . .	84	+ 1	.1	-1.0
Tampa . . .	82	0	.6	-1.3	Norfolk . . .	71	- 2	0	-. 6	Houston . . .	82	0	.2	-. 7
GA. Atlanta . . .	76	- 2	T	-. 8	North Platte . . .	72	0	T	-. 5	Lubbock . . .	75	- 3	.6	+ .2
Augusta . . .	78	- 1	.3	-. 5	Omaha . . .	71	- 2	0	-. 9	Midland . . .	77	- 4	0	-. 4
Macon . . .	82	+ 2	T	-. 9	Valentine . . .	75	+ 5	3.2	+2.7	San Angelo . . .	79	- 5	.2	-. 1
Savannah . . .	81	0	3.0	+1.4	NEV. Ely . . .	66	+ 2	T	-. 1	San Antonio . . .	84	+ 1	---	---
HAWAII. Hilo . . .	75	- 1	.3	-2.2	Las Vegas . . .	86	0	T	-. 1	Victoria . . .	84	+ 1	.7	0
Honolulu . . .	77	- 2	.1	+ .1	Reno . . .	69	+ 5	.1	-. 1	Waco . . .	83	- 2	.1	-. 3
Kahului . . .	80	+ 1	.1	-. 5	Winnemucca . . .	71	+ 6	T	0	Wichita Falls . . .	81	- 4	1.3	+ .9
Lihue . . .	77	- 2	.2	+ .1	N. H. Concord . . .	61	- 4	1.4	+ .7	UTAH. Blanding . . .	70	+ 1	.6	+ .3
IDAHO. Boise . . .	72	+ 2	.2	+ .1	N. J. Atlantic City .	67	- 5	3.6	+2.6	Salt Lake City . . .	73	+ 1	1.5	+1.3
Lewiston . . .	74	+ 4	0	-. 1	Trenton . . .	69	- 3	8.1	+8.0	VT. Burlington . . .	61	- 4	3.7	+3.0
Pocatello . . .	65	- 3	.5	+ .3	N. MEX. Albuquerque .	75	0	.2	-. 1	VA. Lynchburg . . .	70	- 4	.8	-. 2
ILL. Cairo . . .	76	- 3	T	-. 8	Roswell . . .	77	+ 2	1.3	+ .9	Norfolk . . .	73	- 4	3.7	+2.4
Chicago . . .	70	- 3	1.0	+ .2	N. Y. Albany . . .	62	- 6	4.9	+4.2	Richmond . . .	72	- 3	1.4	+ .3
Moline . . .	69	- 3	T	-. 8	Binghamton . . .	---	---	1.3	+ .5	Roanoke . . .	70	- 5	.1	-. 8
Peoria . . .	69	- 4	.1	-. 6	Buffalo . . .	64	- 3	2.1	+1.4	WASH. Colville . . .	69	+ 4	0	-. 2
Rockford . . .	68	- 3	.2	-. 7	New York . . .	70	- 4	5.7	+4.6	Omak . . .	---	---	---	---
Springfield . . .	70	- 4	T	-. 6	Rochester . . .	66	- 3	.8	+ .2	Quillayute . . .	60	+ 1	T	-. 6
IND. Evansville . . .	76	0	.8	+ .1	Syracuse . . .	62	- 6	1.4	+ .7	Seattle-Tacoma . .	66	+ 3	0	-. 3
Fort Wayne . . .	68	- 3	.1	-. 6	N. C. Asheville . . .	71	- 2	.2	-. 6	Spokane . . .	70	+ 4	T	-. 1
Indianapolis . . .	68	- 4	.6	-. 1	Charlotte . . .	75	- 3	.3	-. 6	Walla Walla . . .	75	+ 3	0	-. 1
South Bend . . .	65	- 5	.7	-. 1	Greensboro . . .	71	- 4	.5	-. 4	Yakima . . .	69	+ 2	T	-. 1
IOWA. Burlington . . .	71	- 2	.1	-. 7	Hatteras . . .	78	+ 1	4.6	+3.5	W. VA. Beckley . . .	65	- 4	T	-. 9
Des Moines . . .	71	- 1	T	-1.0	Raleigh . . .	73	- 4	1.6	+ .3	Charleston . . .	69	- 4	.2	-. 5
Dubuque . . .	63	- 6	.9	0	Wilmington . . .	78	- 1	4.0	+2.4	Huntington . . .	69	- 4	.2	-. 5
Sioux City . . .	70	- 3	0	-. 6	N. DAK. Bismarck . .	72	+ 5	T	-. 4	Parkersburg . . .	68	- 6	.7	-. 1
KANS. Concordia . . .	76	- 1	T	-. 7	Fargo . . .	66	- 2	.3	-. 4	WIS. Green Bay . . .	62	- 5	.3	-. 4
Dodge City . . .	80	+ 3	T	-. 5	Williston . . .	72	+ 6	T	-. 3	La Crosse . . .	65	- 4	0	-. 9
Goodland . . .	76	+ 4	T	-. 5	OHIO. Akron-Canton .	65	- 6	2.6	+1.9	Madison . . .	65	- 3	.4	-. 4
Topeka . . .	75	- 2	T	-1.0	Cincinnati . . .	71	- 3	1.0	+ .3	Milwaukee . . .	65	- 1	.2	-. 6
Wichita . . .	79	- 1	.9	+ .3	Cleveland . . .	61	- 8	.2	-. 6	WYO. Casper . . .	70	+ 2	T	-. 1
KY. Lexington . . .	72	- 3	.2	-. 5	Columbus . . .	66	- 6	1.5	+ .9	Cheyenne . . .	68	+ 2	1.0	+ .7
Louisville . . .	73	- 2	.3	-. 4	Dayton . . .	68	- 5	.2	-. 4	Lander . . .	71	+ 4	.1	0
LA. Baton Rouge . . .	82	0	.6	-. 7	Toledo . . .	68	- 1	T	-. 8	Sheridan . . .	70	+ 3	.3	+ .1
Lake Charles . . .	83	+ 1	1.6	+ .6	Youngstown . . .	62	- 7	.7	0	P. R. San Juan . . .	82	+ 1	2.1	+ .6

* 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 and warm days and fair and mild nights prevailed throughout the week with average temperatures a little cooler than usual. Rain-fall mainly as widely scattered showers with a few locally heavy rains mainly in south. Totals for the week ranged from none to more than 2.00 inches. Adequate moisture and open weather aided crop development. Farmers busy preparing for harvest and for planting fall crops. Large volume hay saved. Few cotton bolls open as far north as Tennessee Valley and several counties reported "first bale ginned". Cool damp weather delayed opening and no significant ginning expected before second half September. Corn escaped serious blight damage. Prospects continue favorable with about 85% dented and 25% mature. Silage cutting continues. Most soybeans blooming and about 3/4 setting pods. Harvest late crop tomatoes, water-melons, and peppers continued. Pastures supplied adequate to surplus grazing. Peak week of vaccinating horses and mules for Venezuelan equine encephalomyelitis.

ALASKA: Temperatures last week were mostly near to slightly above normal. Minimums in the upper 30's occurred in the Tanana Valley. Precipitation was generally light except for heavy amounts midweek in the Upper Tanana Valley. Seasonal cumulative precipitation is still far below average in this area. Topsoil moisture supply adequate, subsoil moisture generally short to adequate. Second cutting hay and silage underway with quantity good, but quality fair to good. Oats and barley for grain about 70% turned color. Harvest vegetables continues, with lettuce supply best in recent years. Potato harvest begun with most delivered for local sales. Few harvested for storage. Most potato fields look good, but tubers are small with more growth desired. Frequent rain showers and cooler weather hampered crop maturity.

ARIZONA: Showers widespread over State again this week with heaviest totals in mountains in central and eastern parts of State. Temperatures averaged near normal most sections. Cotton makes satisfactory progress. Rains, humidity causing boll rot many fields. Control programs for bollworms most of State. Fields Yuma area and Harquahala Valley defoliated. Early plantings sorghum being harvested Yuma area. Later plantings making satisfactory development. Weed growths causing some problems southeast. Field preparations continue for fall-planted sugar beets. Alfalfa seed harvesting Yuma and central areas. Planting fall lettuce active central-western areas. Planting delayed Pima County heavy rains. Fall cantaloupes making good progress central-western areas. New crop citrus good. Ring picking lemons continues Yuma. Scattered rains localized greening of ranges. Cattle and calves fair, sheep and lambs fair to poor, limited supplemental feeding required.

ARKANSAS: Humid week; cooler and drier over weekend. Weekly temperatures averaged about 3° below normal ranging in the mid- and upper 70's. Daily extremes: 47° to 95°. Rainfall well below 1.00 inch most sections and restricted to west, with little or none elsewhere. Clarksville high with 1.21 inches. Open weather beneficial to crops. Soil moisture adequate, but remains short north-

west and north-central areas. Fruiting rate slowed on cotton and scattered opening bolls reported. Insect infestation heavy, but control measures satisfactory. Boll rot remains threat due rank plant growth. Rice generally good to excellent. Soybeans extremely variable, but bulk crop good, especially early beans. Fair to good crops feed grains expected. Harvest underway sorghums. Good late hay yields reported most areas. Apple, grape harvest continues. Pastures providing above normal grazing all areas.

CALIFORNIA: Average temperatures 1° to 4° above normal, except lower desert. Scattered showers, thunderstorms on Thursday from southern Sierra Nevada, San Joaquin Valley through northern coastal mountains. Amounts near 0.25 inch mountain locations. Sugar beet harvest spreading Sacramento Valley. Digging continues San Joaquin, Salinas Valleys. Cutting dry beans started. Alfalfa 2d cutting north areas, 6th cutting south. Cotton harvest near Desert areas. Milo and corn harvest started Sacramento Valley. Rice fields being drained. Fruit, nut crops developing well. Harvest almonds just underway. Grape beginning accelerate. Thompson seedless being packed. Harvesting freestone peaches, plums, nectarines. Quality good. Clingstone peach, pear harvest continues. Picking apples coastal areas. Harvest Valencia oranges active southern California, slow Central Valley. Picking grapefruit declining, lemons, avocados moderate levels. Livestock making good weight gains. Range feed, water adequate. Turkeys move to market. Santa Maria, Salinas broccoli-cauliflower seasonally light. Westside cantaloupe active; decline slightly this week. Salinas-King City carrots moderately active. Celery light Salinas-Santa Maria. Sweet corn southern California active. Sacramento, San Joaquin honeydews active. Salinas lettuce increased. Central coast, San Joaquin onions active. Potato marketings light all districts. Pink tomatoes slight decrease. Oxnard-King City green-wraps active.

COLORADO: Temperatures normal or above. Widely scattered showers eastern plains. Precipitation mostly light or none except for some local heavy rains. Light to moderate rain other areas, heavy in southwest with totals from 1.00 to 2.00 inches. Winter wheat seeding gained momentum eastern plains, 15% intended acreage seeded, 3% emerged. Grasshoppers southeast causing concern. Emerging wheat plants vulnerable to large insect population. Surface and subsoil moisture supply short. Development most crops behind year earlier. Corn condition good, 97% silked, 64% dough, 11% dented. Sorghum condition good, 94% headed, 14% turned color, 1% ripe. Limited acreage harvested for forage. Spring barley and oat harvest 91% and 90% complete. Dry beans 6% cut. Late summer potatoes 73% dug. Fall potatoes San Luis Valley generally fair. Sugar beets good to excellent. Range and pastures fair.

FLORIDA: Temperatures averaged 1° to 2° below normal as afternoon cloudiness and thunderstorms reduced daily high temperatures to low 90's. Rainfall averaged near 1.00 inch most sections with over 2.00 inches in north Florida. Only scattered showers in Keys. Jacksonville reported

4.46 inches for week with 3.30 inches at Kissimmee and 2.70 inches at Brookville. During weekend of 28th and 29th, a low pressure area over south Florida caused increased cloudiness and rain southern part of State. Rain delayed harvest of corn and peanuts. Some fieldcrops being cut for silage. Spraying for army worms in some areas. Pastures providing abundant feed. Cattle and calf marketing active. Citrus groves excellent. Adequate moisture conditions continue. Heavy new growth on pruned trees. Very little fruit splitting. Light to moderate afternoon showers continue frequently over most of vegetable producing areas. Soil moisture varied and irrigation necessary many fields to insure seed germination and vigor of young plants. Seeding and transplanting of small crops expected to increase seasonally during next several weeks.

GEORGIA: Rainfall was heavy to excessive in the coastal area and most of the southeast for 2d straight week. Some local flooding and many streams were full or overflowing. Rainfall was light to moderate over most northern and central sections with amounts generally less than 0.50 inch. Several places had no measurable rain. Temperatures were near seasonal until the weekend when cooler air moved into the northern 1/3 of State. Highs were mostly in the 80's in the north and high 80's and low 90's in the south. Lows were in the low 70's in the south throughout the week. Early morning temperatures dropped to the low 50's in the mountains and low 60's over most of north Georgia on Saturday and Sunday. Averages ranged from slightly above to slightly below normal. Soil moisture surplus over south Georgia, adequate elsewhere. Conditions unfavorable for hay and peanut harvest, disease and insect control measures. Excessive moisture causing deterioration hay crops by over maturity, cotton by increased boll rot. Weeds and grass troublesome soybean fields. Cotton and corn harvest started. Peanut digging 13% completed, much later than normal.

HAWAII: Dry weather throughout State. Irrigation water use restricted east Maui. Water reserves depleted other areas. Sugar production to date above last year. Pineapple harvest slackening; planting operation becoming active. Banana harvest increasing seasonally. Papaya supplies steady. Pastures dry most areas.

IDAHO: After 3 weeks with above normal temperatures, they returned to near normal. Precipitation was light and scattered except north and southeast where locally heavy amounts recorded. Lewiston and Grangeville, north, and Malad, southeast, recorded 0.42 to 0.45 inch for the larger amounts. Long season of hot weather matured crops ahead of schedule. Potato vines dying early in some fields. Potato harvest starting south-central and southwest, less than 10% dug. Grain harvest in windup except in east. Fruit harvest underway: 30% peaches, 50% pears picked. Bean harvest started.

ILLINOIS: Precipitation range 0.10 inch Peoria, 2.00 inches Antioch; Flora dry. Some heavy rains but spotty. Thunderstorm damage in Chicago. Average temperature cooler, range from 95° at Chicago and Carlinville, 47° at Walnut. Corn and soybean conditions remain mostly good to excellent, but declined slightly. Dry weather affecting soybean pod filling. Dry weather hindered corn ear filling in some areas. Scattered showers helped soybeans and pasture. Corn condition 33% excellent, 56% good, 11% fair; 85% corn dented,

25% mature. Soybeans 38% excellent, 52% good, 10% fair. Soybean leaves turning yellow 50% crop, 10% completely yellow. Plowing for wheat 70% complete. Pasture condition 6% excellent, 25% good, 43% fair, 26% poor. Soil moisture short 71%, adequate 29%. Activities haying, mowing, plowing, farm maintenance, filling silos.

INDIANA: Sixth cool week in past 7. Temperatures averaged 3° to 6° below normal. Few 90's in south, few 40's in north. Few showers early in week heavy near Vevay in southeast. Over 6.00 inches in 3 days. Six days suitable fieldwork. Topsoil moisture short to adequate. Subsoil moisture short to mostly adequate. Corn half dented, 5% mature. Little blight damage in north and east. Great deal stalk and ear rot southwest, giving expectations of an early harvest and considerable damage. Soybeans 90% podded and 15% turning yellow, 10% average. Wheat land 55% plowed, 40% average. Rye 10% seeded, 5% usual. Barley 5% planted, same as usual. Pastures fair.

IOWA: Subnormal temperatures with scattered light showers, 7th consecutive dry week. Corn and soybean condition still mostly good. Dry conditions causing more concern than Southern corn leaf blight. Growing crops showing stress due lack of rain. Nearly 7 days suitable fieldwork. Corn 85% in or past dough stage, with 50% nearly in or past dent stage. Last year 90% dough and 65% dent. Corn condition 13% excellent, 68% good, 16% fair, 2% poor, 1% very poor. Some silage being cut. No noticeable change Southern corn leaf blight infection. Damage increasing some fields by expansion previous ear infection. Nearly all soybeans setting pods. Soybean condition 9% excellent, 66% good, 22% fair, 2% poor and 1% very poor. Pastures mostly fair, decreasing due to dry weather. Topsoil moisture 90% short, 10% adequate.

KANSAS: Significant moisture parts central and southwest 1/3 of State; locally 0.50 to 1.25 inches. Generally very dry elsewhere. Prolonged dry weather most severe east-central to northeast 1/4 of Kansas. No measurable precipitation during August some localities. Weekly mean temperatures averaged above normal western 1/3 of State, 1° to 2° below normal elsewhere. Maxima mostly 80's and 90's. Minima from mid-40's extreme northeast 27th to mid-70's parts northeast August 24. Crops and pastures suffered severely from lack of moisture over much of State. Corn 92% dough stage, average 87%; 62% dented, average 58%; and 25% fully matured; 9-year range 18% to 54%. Field chopping of corn for silage full swing. Few fields harvested for grain. Corn ear worms, spider mites, and Southern corn leaf blight problem some areas. Sorghum 86% headed, average 80%. Grain coloring 28%, range 16% to 49% last 10 years. Sorghum grain harvest begun southeast. Soybeans suffering from dry weather, 88% podded, average 83%. Dry bean harvest began northwest. Land preparation for wheat full swing and few early fields seeded. Cattle marketings off grass increased. Some supplemental feeding and water hauling. Alfalfa 3d cutting 81% completed, average 82%. New seedings need rain. Western area irrigating pumps running full capacity.

KENTUCKY: Rainfall spotty, from less than 0.05 inch to more than 5.00 inches occurring mostly on 26th. Little or no rain and sunny most other days. As of 29th, 25 days since last rain of at least 0.25 inch most of central and southern Bluegrass. Temperatures near to below normal, then warm and humid midperiod and cooler and less humid last 3 days. At Lexington, driest August

in about 100 years. Soil moisture 29% short, 59% adequate and 12% surplus. Burley tobacco cutting became active, and 10% cut. Nearly 1/4 burley remains to be topped indicating lateness of crop. Dark types 15% cut. Corn 12% mature with another 59% dented. Corn prospects variable, but generally good. Silage cutting active. Dry weather and cool nights slowed blight. Soybeans good condition, 69% podded. Pastures dry in many areas, but excellent for this season.

LOUISIANA: Temperatures averaged slightly above normal south and mostly below normal north. Warm humid weather prevailed during the week, slightly cooler and drier over weekend. Daily temperature extremes 97° Baton Rouge and Shreveport Friday and 59° Oak Grove Sunday. Precipitation light to moderate from scattered thundershowers. Several areas had less than 0.10 inch while a few points all sections had more than 2.00 inches. Greatest 1-day totals 2.10 inches Diamond 5 p.m. Tuesday and 2.20 inches Alexandria 7 a.m. Tuesday. Fieldwork active as weather and soil moisture favorable. Cotton continued to fruit heavily and bottom bolls in early fields were opening. Combining rice active with 65% harvested, yield good. Sugarcane growth behind year earlier, but still very good. Early soybeans through fruiting, late beans growing rapidly. Infestation worms increasing some areas. Corn and grain sorghum producing fair to good yields, harvest active. Sweetpotato digging increasing, both yield and quality good. Plowing fall pastures active. Pastures above normal with livestock good condition.

MARYLAND AND DELAWARE: Cool with heavy rainfall. Weekly temperatures averaged 3° to 7° below normal. Extremes: 80's, 40's and low 50's. Tropical Storm Doria on the 27th and 28th gave totals as much as 4.00 to over 7.00 inches in an area extending from southern Maryland through northern Delaware; also including central Eastern Shore and central Delaware. Damage reported light, mostly the result of flooding in low-lying or poorly-drained areas. Least rainfall in Washington and Allegany Counties, less than 0.75 inch. Rainfall raised soil moisture to surplus level most areas. Crop damage limited to low spots. Corn harvest started, chiefly scattered blight damaged fields. Soybean prospects improved by rain. Moisture supply adequate to size late fruit crops. Cantaloupe harvest nearing end, watermelon harvest still active.

MICHIGAN: Temperatures for week averaged from 4° to 6° below normal in Upper Peninsula. In Lower Michigan, temperatures generally averaged from 2° to 4° below normal except near normal in extreme southeast portion of State. Only minor day-to-day changes until some warming over weekend. Frequent showers mostly during midweek. Isolated airmass thunderstorms produced some local heavy rains in excess of 2.00 inches, with some reports of over 4.00 inches. Hail in a few areas. Heavy local showers helped hay, pastures, and late-maturing crops central and east-central counties, but came too late to help most corn. Soil moisture critically short west-central and southern counties, adequate northern Lower Peninsula and Upper Peninsula. Corn maturing rapidly, 40% dented or more advanced. Corn silage 5% harvested. Soybeans, southern counties seriously hurt by dry soils, 1/4 turning color or more advanced. Dry beans maturing rapidly, rains slowed early harvest. Potato digging slowed by rain. Pasture feed supplies below average Lower Peninsula. Dry soils retarding apple sizing. Peach Harvest full swing. Pickle harvest nearing completion, sweet corn 80% harvested.

MINNESOTA: Temperatures were normal across the State. Extremes: 97°, 34°. Little to no rainfall in southern half of State and light showers of about 0.25 inch in northern half. This is the 7th consecutive dry week in the southern half of the State. Precipitation only about 1/3 of normal in past 7 weeks. Moisture critically short south. Corn and soybean prospects declining. Ears and pods not filling properly. Corn 69% dough stage, 54% normal; 18% denting, normal 19%. Southern corn leaf blight remains very light. Soybeans turning yellow 37%, normal 28%; shedding leaves 7%, normal 4%. Flax seed 51% combined, normal 41%. Winter wheat 11% seeded, normal 20%; rye 13% seeded, normal 17%.

MISSISSIPPI: One to 3 days of rain with weekly totals under 1.50 inches most stations. A 1-day total of 2.93 inches was measured at State University morning of 23d. Weekly temperature averages rose slightly at most stations and were 3° below to 1° above normal. Weekly extremes: 96° on 21st at Greenwood; 58° on 27th at University. Over weekend, mostly dry and sunny. Temperatures dropped to 56° at University on Saturday. Soil moisture short to adequate northwest, elsewhere adequate. Average 5 days suitable fieldwork. Sweetpotatoes 29% harvested. Corn 80% dented, 48% mature. Soybeans 84% podding, 9% turning. Sorghum 91% headed, 20% mature. Rice 80% headed. Cotton and pecans mostly fair to good. Soybeans, corn, hay crops, pastures, and livestock fair to mostly good.

MISSOURI: Continued hot and dry southwest portion of State with temperatures averaging 3° to 7° above normal. Elsewhere temperatures averaged 1° to 4° below normal as cool air spread over the area by midweek. Precipitation occurred Thursday August 23, with the heaviest amounts in the southwest. Corn majority good condition, 80% dent, 74% last year; 20% mature. Southern corn leaf blight spread light. Dry weather leveling off situation. Soybeans good, dry weather affecting some areas; 85% setting pods, 78% last year, 14% turning color. Grain sorghum 31% mature. Cotton 4% bolls opening, same last year. Soil moisture short southwest and mostly adequate elsewhere. Pasture condition 31% poor, 54% fair, 15% good.

MONTANA: Hot and dry through Saturday with temperatures averaging up to 11° above normal. Sharp cooling Sunday with first general rain in 2 months spreading over western half of State and continuing at end of period. Rainfalls of 0.50 inch or more common southwestern quarter of State. No precipitation northeastern Montana. Temperature range: 26° to 102°. Topsoil moisture short, but rain brought relief to portions State. Winter wheat harvest virtually complete. Winter wheat planting will start early September. Spring wheat and oats 80% harvested. Barley 75% in. Second cut alfalfa 65% stacked and wild hay harvest virtually complete. Corn silage harvest just getting underway. Ten percent range livestock moved from summer ranges, more than average.

NEBRASKA: Showers Sunday night left 1.00 to 3.00 inches moisture from southern Panhandle to north-central Nebraska; otherwise, dry weather continued in State. Dryland crop conditions declined many areas with soil moisture supplies less than adequate. Irrigated crops making very good development. About 60% corn acreage reached dent stage, slightly ahead normal, and 5% is ripe. Some corn cut for silage. Southern corn leaf blight made little development as warm, dry conditions pre-

vail. Sorghum heads turning color 30% of fields. Late-planned sorghum under stress from dry weather. Soybeans leaves turning color 15% of acreage. Farmers working seedbeds and some legumes have been planted. Few fields wheat planted. Pastures becoming short and supplemental feeding necessary in few areas. Livestock conditions generally good.

NEVADA: Temperatures at all stations averaged 2° to 5° above normal. Spotty precipitation all divisions. Numerous thunderstorms in northwest with some local damage. Yerington had nearly 1.00 inch precipitation with hail. Second cutting alfalfa hay nearing completion. Alfalfa 3d cutting beginning Fallon area, and 5th cutting 50% complete southern valleys. Harvest winter grains complete. Harvest other grains continue active some areas. Recent rains damaged hay; but good crop reported. Alfalfa seed harvest begun Pershing County. Bolls starting to open cotton crop Pahrump Valley. Ranges dry but holding up well. Livestock remain generally good.

NEW ENGLAND: Week ranged from near normal along the coast to mostly 3° to 5° below normal inland. Cool early in week with many minima in 30's on 25th. Grafton, N. H., had 29° with tender vegetation killed. Showers at beginning of week with heavy yields in north. More general rain on 27th and 28th in advance of and with Tropical Storm Doria. Totals mostly 1.00 to 3.00 inches in week, but locally heavier in west up to near 7.00 inches in western Connecticut but some much less in extreme east with only about 0.10 inch on Cape Cod. Doria caused widespread mostly minor damage on 28th to trees, with many branches falling on utility lines, causing thousands of outages, mostly in the southern half. One injured in Hartford, Conn., by a falling tree, and two in Massachusetts when a limb hit their car. Peak wind gusts reported to 75 m.p.h. at Brideport, Conn., and 80 m.p.h. at Blue Hill in Milton, Mass. Mostly minor damage to boats and coastal installations from high surf. One drowning at Marblehead, Mass., attributed to Doria. Needed rain accompanying Tropical Storm Doria except cranberry area. Gale winds caused some damage to vegetable crops and fruit trees. Damage variable with reports of over 10% apples blown to ground eastern Connecticut and central Massachusetts. Cool nights adding color to apples and cranberries. Peach harvest at peak southern areas. Aroostook, Maine harvesting potatoes for processing picking up momentum. All fresh summer vegetables good supply. Connecticut Valley tobacco growers winding down harvest excellent crop. Potato digging continues on schedule in the valley.

NEW JERSEY: Heavy rainfall on 27th from a slow-moving frontal system preceded Tropical Storm Doria on 28th. Rainfall totals varied from 3.10 to 9.80 inches. North Jersey averaged 7.30 inches, central and southern interior 6.50 inches, and coastal division 3.20 inches. General flooding occurred over central and northeastern counties with spotty flooding elsewhere in State. A tornado struck Cape May City early in morning of 27th and moved northward through Cape May Peninsula. Temperatures for week averaged from 3° to 6° below normal. Soil moisture adequate to excessive. Some crop damage occurred from heavy rains. The extent of damage unknown at this time. Machine harvest will be curtailed for several days until fields dry off. White potato harvest about half complete, peaches nearing 3/4 mark. Apples coloring and sizing well. MacIntosh and red delicious will be available in volume 10 days to 2 weeks.

NEW MEXICO: Scattered light showers throughout week, most frequent on Tuesday. Few local showers of more than 1.00 inch mostly in southeast. Very little rain in northeastern plains. Temperatures averaged near normal over most of State with little change except for warming to above normal in Clovis and Roswell areas. Soil moisture short to adequate. Rains delayed some harvest. Cotton, sorghum, peanuts, other crops good condition. Alfalfa harvest slowed with some rain damage. Winter wheat seeding, broomcorn harvest underway. Onion harvest nearing completion, other vegetables continuing. Livestock good, ranges continue improvement.

NEW YORK: Tropical Storm Doria on 27th and 28th yielded very heavy rain of 5.00 to over 7.00 inches in coastal and Hudson Valley section, Poughkeepsie 7.30 inches. Storm totals 2.00 to 2.50 inches as far west as line from Oneonta to Plattsburg, decreasing to moderate amounts western half of State. Precipitation for week ending on 27th totaled 2.00 to over 3.00 inches western 1/3 and St. Lawrence Valley with 1.00 to 1.50 inches central interior. Temperatures unseasonably cool early half of week. Minimums low to mid-30's southern plateau and upper 30's to mid-40's elsewhere Up State on 24th and 25th. Light frost in susceptible interior localities. Fieldwork curtailed by rain. Oat harvest nearly complete. Early-planted dry beans turning color and nearing maturity. Corn crop remains good. Regrowth of 3d cutting hay aided by rain. Heavy rains delayed Long Island potato harvest. Rains improved soil moisture Steuben County potatoes. Heavy rains delayed onion harvest Orange County, but no damage reported. Upstate onion tops are down, but green, pulling started. Quality and volume of celery good. Sweet corn remains at peak. Hudson Valley over half complete. Seasonal volume continues for snap beans, cabbage, cauliflower, pepper, cucumbers, and tomatoes. Harvesting early McIntosh Hudson Valley and western New York. Peach harvest continues. Beginning to harvest Bartlett pears.

NORTH CAROLINA: Temperatures averaged near normal with only small changes related to cloudiness. Heavy rains 26th and 27th with Tropical Storm Doria and related weather. Total precipitation trace to 9.00 inches averaging 2.00 to 4.00 inches coastal plain and 1.00 inch rest of State. Storm winds with peak gusts to 50 m.p.h. blew corn down and caused minor damage to crops several coastal plain counties. Soil moisture mostly adequate to surplus. Mostly surplus northern and southern Piedmont, northern and central coastal plain. All crops mostly good, little change from previous week. Few cotton bolls opened early fields, spraying interrupted frequently, crop promising. Flue-cured tobacco nearly 3/4 harvested. Burley harvest beginning. Some corn harvested for grain Coastal Plain and Piedmont. Apple harvest slowed, peaches about 95% complete. Labor demand high tobacco areas.

NORTH DAKOTA: Temperatures averaged 2° to 4° above normal southeast and east-central sections. Elsewhere temperatures ranged from 6° to 10° above normal. Precipitation ranged from none to 0.01 inch except in east where amounts ranged from 0.10 to 0.40 inch in southeast to 1.00 inch in northeast. Small grain harvest moved ahead rapidly as hot dry weather speeded activity. Topsoil and subsoil moisture supplies very short over more than half of State. Row crops and pastures need moisture badly.

OHIO: Cloudy and cool with widespread showers 25th and 26th; clear and cool remainder of week. On 25th several locations over southern half of State received more than 1.00 inch of rain. The following day the heavy showers occurred in the northeast where Akron reported nearly 2.50 inches of rain. Days favorable for fieldwork 6. Topsoil moisture 50% short, 45% adequate and 5% surplus. Corn 2/3 dented. Corn 15% safe from frost. Soybeans 75% pod set with green leaves. Corn silage 15% harvested. Potatoes 40% dug. Second cutting clo-tim 90% harvested. Tobacco 70% topped and 15% harvested. Last year 25% harvested. Winter wheat land 50% plowed. Southern corn leaf blight confirmed 80 of 88 Counties; however, cool weather of past 6 weeks delayed spread of disease and significant damage will be limited.

OKLAHOMA: Rainfall varied from 0.10 inch Panhandle to 1.30 inches southeast and southwest. Substantial but scattered rains fell in Kiowa, Caddo, Washita, and Custer Counties, and southwest, and west-central areas over weekend. Temperatures averaged from 2° above normal Panhandle to 3° below normal south-central. Extremes: 102° and 55°. Soil moisture declined substantially. Irrigated crops good to excellent. Non-irrigated crops mostly fair to good, but additional moisture needed. Crops southwest area mostly fair to good. Harvest corn and sorghum for grain under way many areas eastern 2/3 State. Mostly dough stage important Panhandle district. Cotton development about same year ago, 4/5 setting bolls, 1% open. Weevil damage generally light. Peanuts 4/5 spiking, same year earlier. Soybeans 67% setting pods, 6% mature, essentially same year ago. Fourth cutting alfalfa hay 20% complete. Pastures providing good to excellent grazing eastern 1/3, generally fair to good elsewhere. Farmers busy preparing seedbeds for fall-sown grains and some acreage seeded.

OREGON: Cooling and showery until mid-period: sunny and warmer last half of week. Temperatures averaged mostly 2° to 5° above normal. Minima 30's northeast valley, 34° to 52° elsewhere. Maxima 70° to 76° along coast, 86° to 98° elsewhere. Showery days generally through 23d followed by light amounts again southwest last 2 days. Dry week southeast 1/4, elsewhere mostly 0.05 to 0.20 inch except 0.40 to 0.90 inch Willamette Valley and coast with 1.50 inches extreme north coast. Grain harvest continues. Seed harvest complete, except bent grass, red clover and alfalfa seed. Haymaking continues. Pole bean harvest nearly complete some areas. Sweet corn harvest active. Onion digging begun western Oregon. At Ontario, onions moving to market in good condition. Fire danger was lessened by rain received last weekend.

PENNSYLVANIA: Heavy rains and flash flooding southeast corner Friday and early Saturday from Tropical Storm Doria. Two to 4.00 inch rains eastern quarter of State, up to 6.50 inches at Philadelphia. One to 2.00 inch weekly totals northern and west-central counties, elsewhere mostly 0.50 inch or less. No known injuries nor deaths due Doria. Damage estimate not yet available. Some power outages. Coolest week since end of May. Averages 4° to 5° below normal north, 2° to 4° subnormal elsewhere. Quite cool early in week, warmer thereafter. State maximum 85°, minimum 33°. Rains improved plowing conditions. Topsoil moisture mostly adequate. Harvest corn slowly picked up momentum. Corn 2/3 dough stage 1/3 dented. Fall plowing almost 45% completed. Barley and wheat over 20% seeded. Pas-

ture and hay outlook improved. Early potato harvest active. Tomatoes continue to ripen slowly. Sweet corn and cabbage harvest continues.

PUERTO RICO: A tropical depression passing north of Puerto Rico early in the week brought heavy rains to the southeast portion of the Island where highest weekly total of 9.19 inches reported of which 6.70 inches fell on Monday and Tuesday. Average Island rainfall 1.97 inches or 0.35 inch above normal. Only light showers in western sections. Crop moisture excesses southeastern section with heavy rains causing local flooding and some minor crop damage. Rest of island generally near normal. Temperatures averaged 79° to 80° on coast and about 75° to 76° interior divisions with average departure of 1.1° above normal. Highest maximum 94°. Lowest minimum 56°. Sugar-cane seeding and cultivating operations delayed by rains southeast, otherwise fieldwork progressing normally other zones. Coffee zones report good progress all fieldwork. Pastures good to excellent all zones with some minor flooding southeast, except few zones which need more rain. Minor crop fieldwork delayed southeast, but otherwise good progress.

SOUTH CAROLINA: The southern Coastal Plains had heavy rains with 4.00 to 6.00 inches in Charleston and Berkeley counties. The mountains and Piedmont areas were relatively dry with about 0.25 inch. Other areas were near the weekly normals. Temperatures averaged about 1° above normal in all sections. Soil moisture adequate all areas, excessive Coastal Plains parts Pee Dee. Tobacco harvest practically complete. Cotton conditions mostly good. Bolls opening, 12%. Boll rot now causing concern, some farmers bottom defoliation to curb problem. Soybeans good to excellent. Peanut harvest 36% complete. Corn good to excellent, 70% matured, 6% harvested. Grapes, pecan mostly good. Apples good to excellent, harvest 27% finished. Hay crops mostly good, pastures good to excellent. Watermelons harvest practically complete.

SOUTH DAKOTA: Weekly temperatures averaged from 3° below normal in the southeast to 6° above normal in the west. Extremes ranged from 39° at Flandreau on the 27th to 108° at Kennebec on the 23d. Dry most of week but widespread shower and thundershower activity occurred morning of 30th with early morning amounts up to about 2.00 inches. Showers over most of State August 30 helped alleviate moisture conditions. Although too late for corn some areas; rain will help fill soybean pods and sorghum heads. Pasture growth will be revived with moisture. Corn 50% dent stage, compared with 27% last year. About 48% sorghum turned color. Flax 78% harvested, compared with 85% last year. Winter rye seeding 7% complete. Planting winter wheat 4% in the ground. Dry soils have slowed fall seeding and plowing. Green bugs causing damage to sorghum. Southern corn leaf blight causing little damage. Before the rain, pastures were extremely dry and livestock were receiving supplemental feed many areas.

TENNESSEE: Warm first half of week, cooling on weekend. Extremes: 91°, 55°. Temperatures averaged slightly below normal. Scattered light showers on 27th. A few locations reported rainfall of 0.75 to 1.00 inch, but most areas received less than 0.25 inch of precipitation. Weather favorable for crop development, except northwest where excessive rainfall August 21 and 22 caused lowland flooding. Some crops completely destroyed. Tobacco good prospects,

30% harvested. Cotton, corn, and soybeans good prospects, except for localities where floods occurred. Practically all cotton setting bolls. Corn 25% mature. Soybeans 70% setting pods. Silage and hay harvest active. Lespedeza 40% harvested. Fruits and vegetables, good growth except where excessive rainfall occurred. Days favorable fieldwork averaged 4.2. Soil moisture 62% adequate, 28% surplus, and 10% short.

TEXAS: Widely scattered light showers during week. Eastern part of Low Rolling Plains, North-central and East Texas benefitted most. Temperatures unchanged from previous week. Scedbed preparation for wheat and oats underway High and Low Plains. Harvest of corn, cotton, sorghum, peanuts, rice, making poor to fair progress. Moisture on High and Low Plains boosted crop outlook but accompanying cool weather delayed maturity. Wet weather reduced yield and quality potential of cotton, corn, sorghum southern 1/2 of State. Hay baling full swing southern 1/2. Percent harvest major crops: cotton 8, 10 last year; corn 33, 36 last year; sorghum 41, 45 last year. Rice 84, 74 last year. Peanuts 7, 12 last year. High Plains vegetable harvest activity increased from previous week as fields dried. Potato, onion harvest final stages. Carrot digging at slow pace but expected to increase soon. Pepper harvest gaining momentum. Light supplies cabbage, cucumbers, with harvest cantaloupes, watermelons, tomatoes underway High Plains. Cantaloupe harvest declining Pecos, North Texas. Watermelon harvest continues active North Texas, nearing completion East Texas. Sweet potatoes digging underway Northeast Texas. Fall peppers, tomatoes satisfactory progress South Texas with seeding fall cucumbers continuing. Early plantings winter cabbage, carrots good progress. Seeding winter vegetables will increase in September. Citrus sizing fruit with fruit set fair to good. Peach harvest nearly complete. Disease, insects causing some damage.

UTAH: Scattered showers and thundershowers, principally south portion first part period. Quite general storm covering much of State over weekend. Accumulated amounts of moisture locally moderate to heavy. Cooler temperatures accompanied storm but averages for period continued near to little above normal. Weekend rains improved soil moisture, particularly benefiting fall planting winter wheat and prospects for feed on fall and winter range land. Rains reduced threat grass and forest fires. Winter wheat harvest completed. Spring grain harvest 97% completed for spring wheat, 90% barley, and 80% oats. Harvest vegetable crops 60% finished sweet corn, 85% snap beans, and 5% tomatoes. Pear harvest started August 27. Early variety peach harvest in progress. Main crop Elberta and Hale peach harvest will start September.

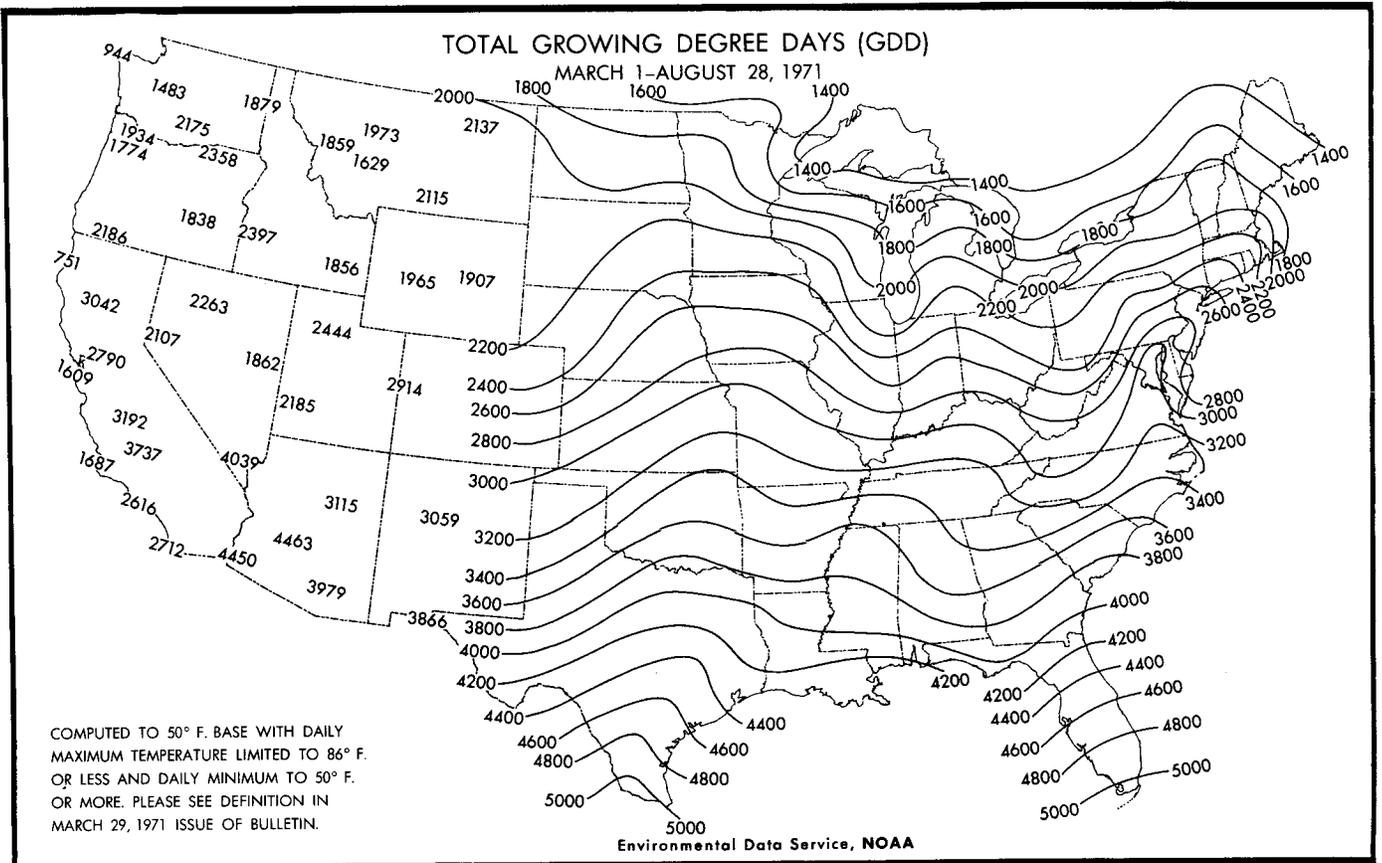
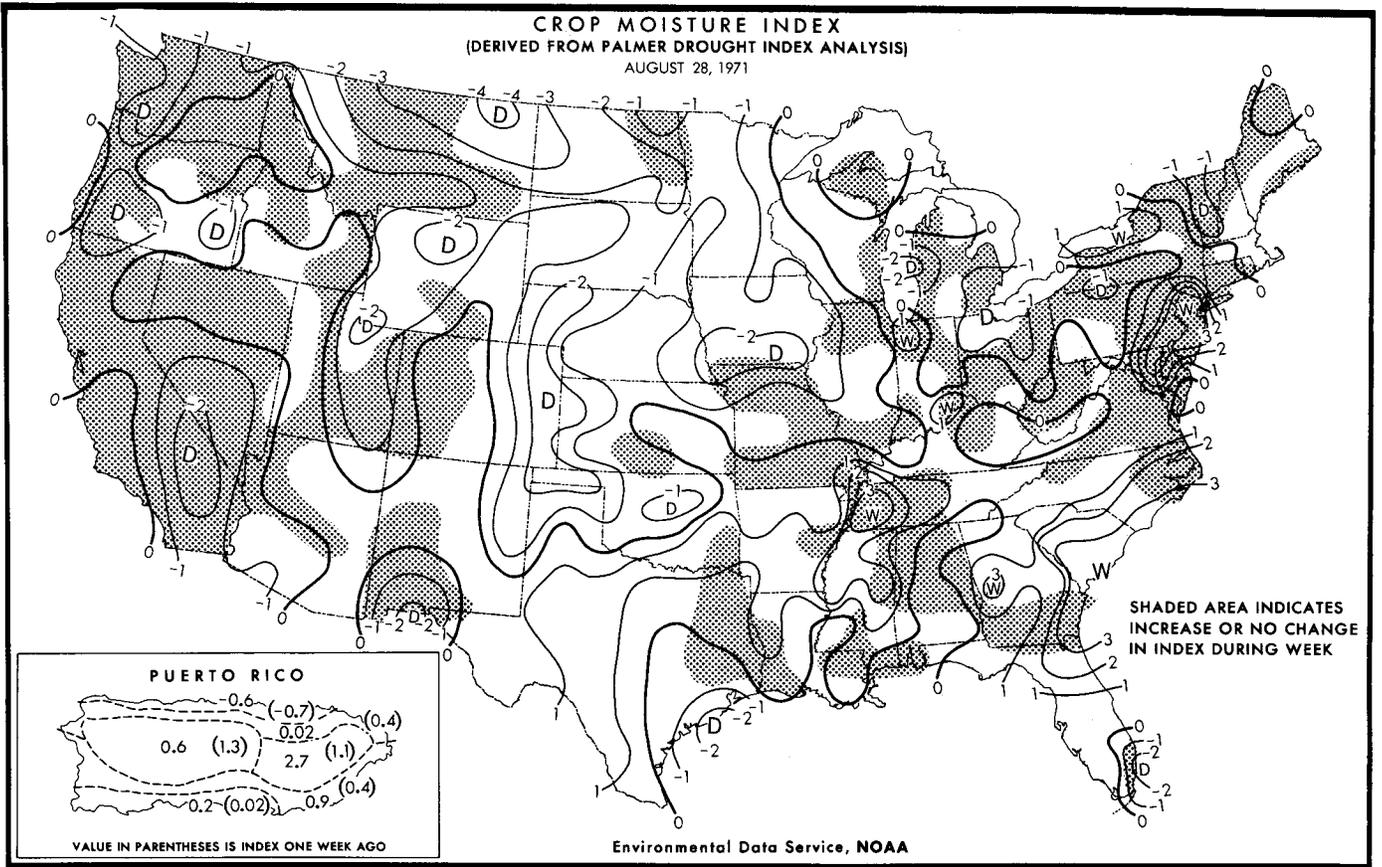
VIRGINIA: Temperatures mostly normal to below normal. Scattered showers and thundershowers at beginning and on Thursday and Friday except for heavy rains from Doria east of the Blue Ridge. Corn for grain 2% harvested. Making silage. Alfalfa, clover, and grasses sown. Flue-cured tobacco 1/2 harvested, fire-cured 1/4, burley 5% and sun-cured 10% harvested. Soybeans sprayed for Mexican bean beetles. Harvest peaches, apples, tomatoes, watermelons, cabbage, and peppers continued. Sweetpotato digging began on eastern shore. Red clover seed 25% harvested.

WASHINGTON: Western Washington: Considerable night and morning cloudiness, clearing afternoons. Normal temperatures. Good rainfall early in period, heavy along the north coast. Carrot, beet, cucumber, cabbage, lettuce and bean harvest continues. Picking blueberries peaked and blackberry harvest beginning. Lack of adequate moisture has caused pasture shortage. Eastern Washington: Fair and warm with average temperatures near normal. Showers early in period brought above normal amounts to many sections. Strong winds Yakima area damaged some fields and slowed harvesting. Sweet corn picking underway. Potatoes and bean harvests continue. Showers restricted small grain harvest and damaged newly-sown furrow drill wheat due to crusting. Hop picking still underway, and a few pears remain to be harvested.

WEST VIRGINIA: Cold frontal thunderstorms weekend August 21 and 22 gave locally heavy rain many areas. Rainfall from tropical storm Doria August 26 and 27 gave 1.00 inch amounts eastern Panhandle, less elsewhere. Foreshadow of fall occurred August 24 as temperatures dipped into the 40's many areas and down to 32° at Canaan Valley. Average 4.7 days suitable fieldwork. Showers and foggy mornings slowed haying progress. Oats nearly harvested; only few late-planted fields remain. Main farm activities making hay, clipping pastures, and general repair work. Tobacco damaged quite seriously by wet conditions, especially low spots. Apple trees heavy with fruit. Peach harvest continues, but declining. Pastures and hay mostly good condition. Corn maturing rapidly.

WISCONSIN: Mostly sunny and cool week. Thundershowers east and south on Tuesday. Crops generally doing good, though short of moisture southwest. Corn 20% in dent, last year 45%. Corn looks very good. Some blight and insect problems remain which may not show up until harvest. Oats harvest finishing up north. Northern farmers also cutting 2d crop hay. Third cutting getting underway south. Pastures continue to improve most areas. Tobacco harvest starting. Yields may be down from last year. Soybeans generally good but need moisture on lighter soils. Potato, cabbage, and sweet corn harvests continuing. Apple crop excellent. Cranberry yields will be down from last year due dry weather and hail damage.

WYOMING: Scattered light showers most areas, some heavy in mountains. Foxpark reported the most moisture with 0.80 inch. Temperatures averaged 2° to 6° above normal statewide. Maxima were mostly 80's west of Divide and Upper Platte Drainage, 90's to low 100's elsewhere. Minima were mostly 30's and 40's west of Divide, 40's east. Temperature extremes were 103° at Sheridan Field Station and 26° at Big Piney. Main agricultural activities were haying, irrigating and harvest late grains. Hay harvest continued good progress, nearly 1/2 2d cutting alfalfa cut, wild hay harvest about finished. Approximately 2/3 barley combined, about 80% spring wheat and 60% oats in the bin. Some potatoes dug. Windrowing dry beans begun. Fall seeding winter wheat underway. Corn for grain generally in dough stage. Surface soil moisture supplies continue short.





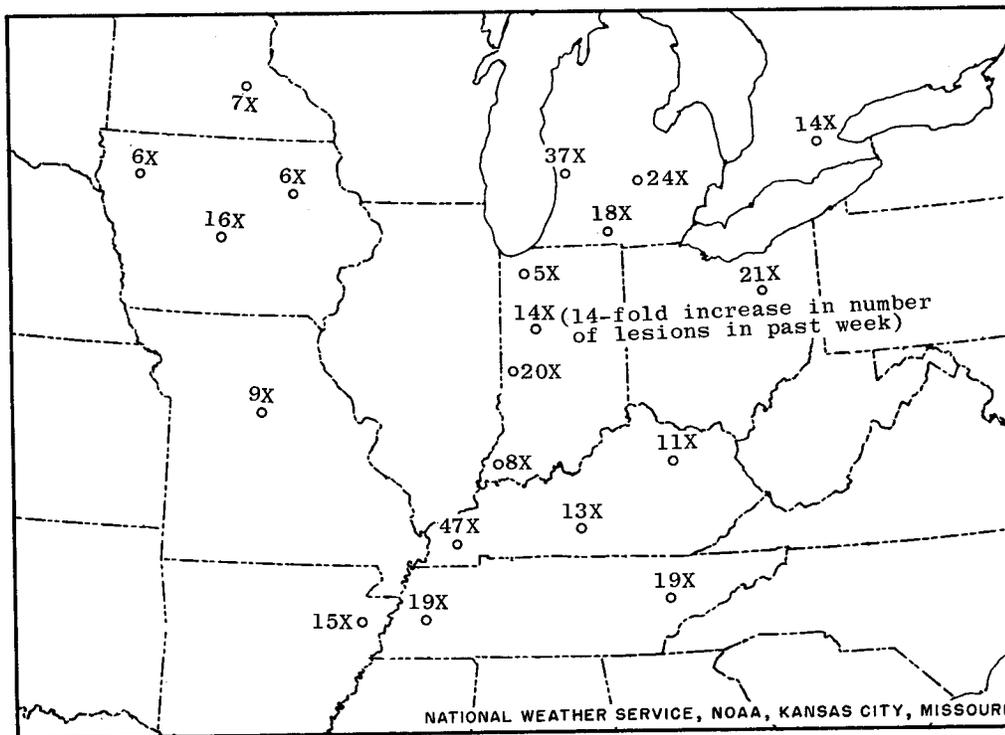
FIRST CLASS MAIL

Subscription price \$5.00 per year in U. S. and possessions, foreign mailing \$6.25 per year. For period December to March, \$1.50 domestic, \$2.00 foreign. If air mail is desired, add the appropriate amount. Make checks payable to "Superintendent of Documents."

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., Ill. Sess. Quotation or reproduction of this material is encouraged. Please give credit to this publication and, in case of special articles, to authors.

Questions and comments are invited; please send to Editor in Agricultural Climatology Service Office, address above.

CORN BLIGHT SIMULATION ESTIMATED AUGUST 20 - 26, 1971, MULTIPLICATION RATE



BLIGHT SEPARATES CORN BLENDS

With more cool weather (see page 2) and developing drought (see page 11) in much of the Corn Belt, Southern Corn Leaf Blight can hardly become epidemic this year. But a serious problem is developing in Indiana which probably will affect harvested yield in adjoining areas. Fields planted to blended "Texas male sterile" and "Normal" seed are maturing at different rates where blight has hastened drying of the susceptible male sterile hybrid. The Normal hybrid characteristically remains green.

Machine picking is shattering some blight infected areas if the crop is not harvested until the healthier corn is dry enough to pick. An alternative is cutting for ensilage while the

non-susceptible hybrid is green and stalk and ear rot have not advanced too far in the susceptible corn.

The corn blight simulator program continues to produce less than critical rates of multiplication of number of estimated lesions. Occasionally higher rates such as the 37 times increase last week in western Michigan indicate favorable (but not epidemic) weather for blight. We plan to print a blight simulator summary article, probably in October, after we have studied the season's output more thoroughly.

Gerald L. Barger