

WEEKLY WEATHER AND CROP BULLETIN

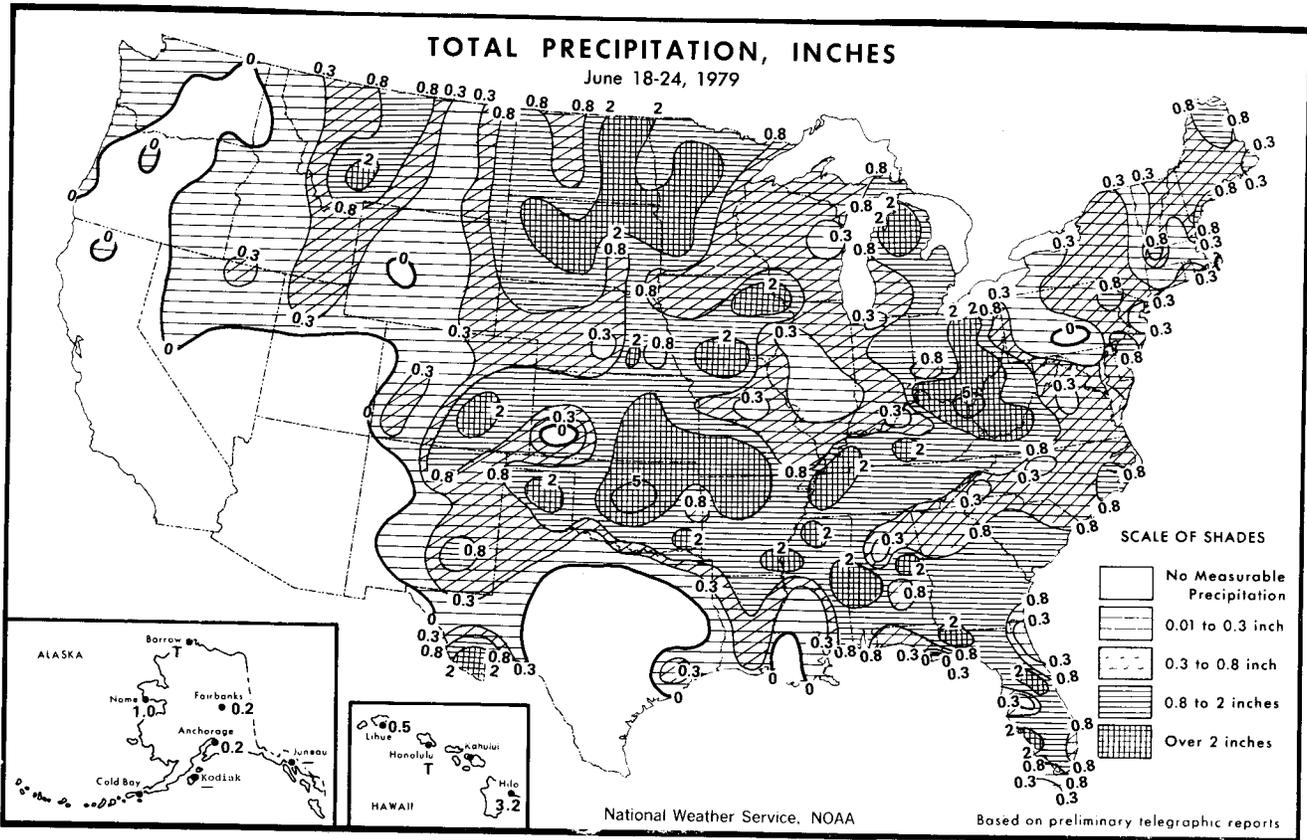
U.S. DEPARTMENT OF COMMERCE
National Weather Service, NOAA

U.S. DEPARTMENT OF AGRICULTURE
Economics, Statistics, and Cooperatives Service

Volume 66, No. 26

Washington, D.C.

June 26, 1979



National Weather Summary

June 18 - 24

HIGHLIGHTS: A cold front moved into the northern Plains early in the week. The system edged southward and eastward producing some of the most severe weather of the season, especially in Michigan and Ohio, where numerous tornadoes and hailstorms were reported.

More than 5 inches of rain soaked parts of the Ohio Valley and Oklahoma.

Cool air followed the front dropping average temperatures for the week 3 to 6 degrees below normal across the northern tier of States from the Plains to New England. The central Rockies also averaged cooler than normal. The only consist-

ently warm area of the country spanned north central Texas; readings rose about 5 degrees.

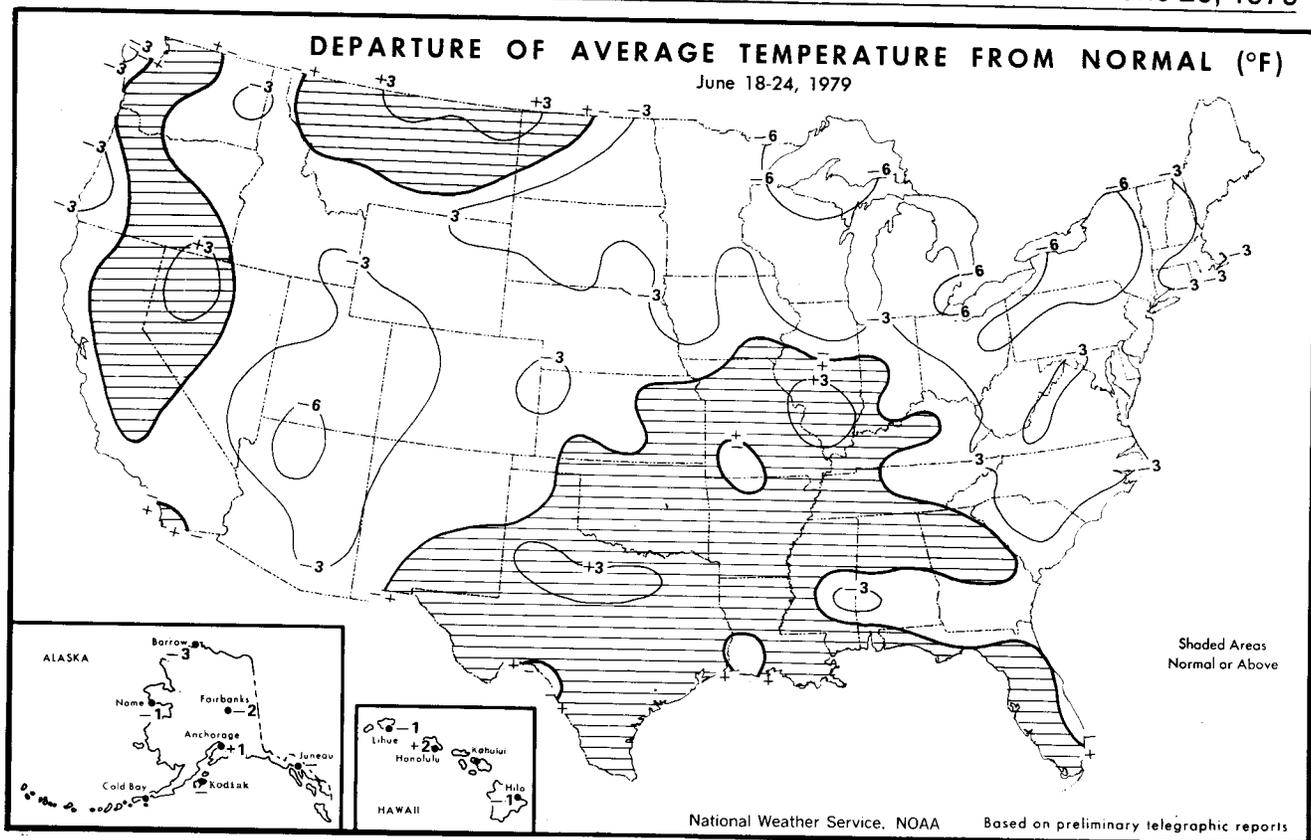
On Monday, a low pressure system over southern Montana set off heavy thunderstorms. An inch and one-quarter of rain soaked Helena, Mont.; hail reached into Wyoming, Colorado, Nebraska, and Kansas; and tornadoes touched down in Sheridan and Gillette, northern Wyoming, and in Kimball, western Nebraska. By day's end, storms rumbled over the northern Plains, where Dickinson, western North Dakota, collected an inch of rain.

Thunderstorms popped up over the Midwest, where Waterloo, northeastern Iowa, measured 2.85 inches, and Chicago posted nearly three-quarters inch.

Early-evening storms formed over the Northeast; Portland, on Maine's coast, chalked up 1.85 inches.

Some of the most severe weather of the season rolled over the northern halves of the Plains and Mississippi Valley on Tuesday.

One to 3 inches of rain fell on many points, while hail pelted several areas. More than 35 tornadoes were sighted---a sampling showed a dozen



in Iowa, 11 in South Dakota, and several in Minnesota, Nebraska, Kansas, and Missouri.

Thunderstorms also dotted the lower East Coast States and the middle Appalachians.

While Pensacola, in the Florida Panhandle, scored a record-tying high of 96°, temperatures dipped sharply from Phoenix eastward in Arizona and in the Great Lakes Region. Phoenix noted a record-equaling 61°, and Tucson's record dropped to 56°. To the north, Winslow's 39° and Flagstaff's 25° set new marks. Other records included 37° at Traverse City, northern Michigan, and 44° at Erie, northwestern Pennsylvania.

On Wednesday, the system that had produced 63 tornadoes the day before pushed the unsettled weather eastward and southward.

The eastern Mississippi Valley, Great Lakes, and Ohio Valley experienced 2-inch rains, hail, and 28 tornadoes, 16 of which touched down in Michigan.

In the southern Plains, Piedmont, near Oklahoma City, accumulated more than 5 inches of rain. The Southeast also weathered storms, when Fort Benning, western Georgia, got an inch of rain, and Cross City, northern Florida, reported a twister.

Temperatures plummeted behind the storm system in the western Plains. In southern Colorado, Alamosa, at 30°, and Pueblo, at 42°, established records. El Paso, Tex., tied its 1895 low reading with 52°.

The cold front trailing from the low pressure system continued to produce heavy rains and hail in the Ohio Valley and Appalachians on Thursday.

Meantime, severe weather ranged across the Nation's southern tier from Oklahoma to Florida. Oklahoma City and Greenville, west central Mississippi, collected 2 inches of rain. El Dorado, southern Arkansas managed an inch and one-half, and in southwestern Florida, Fort Myers tallied

3.5 inches. Hail and tornadoes accompanied the various storms---three twisters hit Oklahoma.

Unseasonably cool weather continued in Colorado and chilled some Atlantic Coast States. Alamosa again checked in with a record low, 34°; in the East, Norfolk, southeastern Virginia, had 52°, and Raleigh, N.C., tied its 1954 mark of 56°.

Rain persisted in the Ohio Valley on Friday causing rising flood waters. Paducah, western Kentucky, measured more than 3 inches.

Storms were scattered over several sections of the country. One to 2 inches of rain soaked Wichita, Kans., Orlando, Fla., and Philadelphia, Pa. Hail and tornadoes struck several points from the Plains to New York State---five tornadoes clipped southern Kansas.

On Saturday, heavy storms formed over the southern Plains; the Tulsa, Okla. vicinity, reported 2 to 5 inches of rain.

An area from the middle Mississippi and Tennessee Valleys southward received heavy rains. Springfield, southern Missouri, gathered 3.75 inches; Dyersburg, northwestern Tennessee, measured 2.7 inches; and Tuscaloosa, western Alabama, got 1.25 inches.

Hail and tornadoes extended over portions of Colorado, Oklahoma, and the Texas Panhandle.

A slow-moving cold front spread showers from the southern Plains to the Virginias on Sunday. Rain totals showed 2 inches at Pueblo, Colo., Oklahoma City's 1.35 inches, and an inch at New Bern, eastern North Carolina, and Lynchburg, southern Virginia. Hail and tornadoes swept over sections of the Plains.

(continued on page 15)



National Agricultural Summary

June 18 - 24

HIGHLIGHTS: Subnormal temperatures in extreme northern parts of the Nation slowed crop development. Precipitation in the Nation's midsection and eastern Corn Belt slowed haying activities and, in some areas, produced hail and heavy rainfall which may force replanting of some late crops. Most areas of the Nation had at least five days suitable for fieldwork. Soil moisture generally rated short to mostly adequate; only some parts of the western north central States and the Southeast reported surplus moisture. Winter wheat harvest reached 15%, equal to last year but short of the 26% average. Corn planting continued in extreme northern areas, while average growth in the Corn Belt ranged from 8 to 23 inches. Soybean planting advanced to 95%, surpassing 1978's 94% and the 92% average. Cotton planting was virtually complete, except in Texas and Oklahoma where progress stood at 98%. Grain sorghum planting reached 94%, equaling last year and one point ahead of average. Rice seeding neared completion with only 1% of the acreage remaining to seed in Arkansas. Pastures generally rated fair to good, although western ranges were drying. Rain delayed hay harvests in the western north central States. Spring vegetable harvests advanced northward, while northern growers finished planting summer crops. Growers harvested peaches, Valencias, sweet cherries, and grapes. Fuel supplies tightened from the previous week. LP gas rated 85% adequate and 11% tight. Diesel supplies showed 51% adequate and 43% tight. Gasoline supplies were 61% adequate and 31% tight. Both gasoline and diesel fuel supplies were substantially tighter than the previous week. Vegetable growers throughout the Nation expressed concern over truck shortages, which left them unable to move produce to market. The truck strike may also affect transportation of fresh fruit if the strike continues.

SMALL GRAINS: Small grains generally rated fair to good with winter wheat coloring advancing into all but the extreme northern areas. Winter wheat harvest stood at 15%, the same as last year but short of the 62% average. Kansas harvest began but rains delayed combining. Oklahoma harvest stood at 51%, equaling last year but 21 points short of the average. Texas harvest advanced to 52%, surpassing last year's 45% but below the 67% average. North Dakota growers sprayed to control weeds and insects in small grains. Grasshoppers became more troublesome in the Great Plains and the Pacific Northwest.

CORN: Corn planting continued in extreme northern areas. The crop generally rated fair to mostly good. In the eastern Corn Belt, average corn growth ranged from 11 to 23 inches. This generally surpassed last year but fell 2 to 4 inches below the average. In the western Corn Belt, corn growth ranged from 8 to 18 inches, 5 to 10 inches below the average. Corn ranged from 25 to 44% silked across the South and 11 to 26% in the dough stage.

SOYBEANS: Soybean planting advanced to 95% complete, surpassing last year's 94% and the 92% average. Planting was virtually complete throughout the north central States; only Kansas and Missouri reported some acreage to seed. In the Southeast, planting advanced to 89%, falling

between last year's 90% and the 88% average. In the south central States, seeding reached 88%, one point less than last year but 2 points above the average. Most acreage remaining to seed in the South is double-cropped. Soybeans generally rated fair to mostly good and improving. In the Corn Belt, average plant growth ranged from 4 to 6 inches, generally ahead of last year but short of the average. Hail in Minnesota may force replanting some stands. Dry soils delayed planting in the Southeast.

COTTON: Cotton planting was about done, except in Texas and Oklahoma where progress stood at 98%. Squaring was well advanced in the Southeast where Georgia reported 94% and North Carolina 30%. In the Delta States, squaring ranged from 7% in Tennessee to 44% in Mississippi. Boll set ranged from 14 to 22% in the Southeast. Only a few Texas fields remained for planting; dry winds caused emergence problems for recently planted cotton but at the same time promoted growth on earlier stands. Texas squaring stood at 19% and boll set at 10%. California cotton reached 69% squared and 8% boll set. The crop generally rated fair to good.

OTHER CROPS: Grain sorghum seeding advanced to 94%, equaling last year and one point above the average. Planting activities were on schedule in all major producing areas. Most of the crop was emerged and in good condition. Texas sorghum reached 47% headed, 24% turning color, and 3% mature.

Rice seeding neared completion except in Arkansas where 1% of the acreage remained to be seeded. Texas rice reached 23% headed.

FRUITS & NUTS: Growers harvested sweet cherries in the Pacific Northwest, Michigan, and the Northeast. Tart cherry harvests should start in a week to 10 days. Apples and peaches sized well and generally rated good; some growers thinned apples in the Northwest. Peach harvests ranged from 14% in North Carolina to 15% in Mississippi, 18% in South Carolina, and 48% in Georgia. A prolonged trucking strike may curtail peach shipments from the Southeast.

California almonds and walnuts rated good. Oregon walnuts rated good; filberts also rated good, but the crop appeared light.

Florida citrus groves rated excellent. Soil moisture proved adequate, and only a few growers applied supplemental irrigation. Abundant new growth appeared on most trees. Old crop fruit harvest was almost complete. The Arizona citrus harvest also wound down; new crop fruit rated good. California citrus crops developed normally while the Valencia harvest continued.

VEGETABLES: Vegetable planting neared completion in northern production areas. Green pea harvest got underway in the Pacific Northwest. Vegetable harvests advanced into the Middle Atlantic States. The truck strike slowed shipments of fresh produce from all areas. Florida shipments declined seasonally as most harvests were complete; all crops registered a decline with the truck strike having some effect on volume. Texas growers harvested a wide range of crops, but movement in some areas was light because of a lack of available trucks. California growers harvested decreasing supplies of vegetables in most areas; transportation to market continued to be very tight.

(continued on page 15)

Temperature and Precipitation Data for the Week Ending Midnight, 1st., June 24, 1979

| States and Stations | Temperature OF | | Precipitation Inches | | States and Stations | Temperature OF | | Precipitation Inches | | States and Stations | Temperature OF | | Precipitation Inches | |
|--------------------------|----------------|-----------|----------------------|-----------|---------------------------|----------------|-----------|----------------------|-----------|-------------------------|----------------|-----------|----------------------|-----------|
| | Average | Departure | Total | Departure | | Average | Departure | Total | Departure | | Average | Departure | Total | Departure |
| ALA. Birmingham . . . | 78 | 0 | .2 | -.8 | LA. Baton Rouge . . . | 81 | 0 | 0 | -.9 | Youngstown . . . | 62 | -7 | .5 | -.3 |
| Mobile . . . | 82 | +1 | .9 | -.6 | Lake Charles . . . | 81 | -1 | .3 | -.9 | OKLA. Okla. City . . . | 79 | +1 | 6.0 | +5.1 |
| Montgomery . . . | 79 | 0 | .3 | -.7 | New Orleans . . . | 82 | +1 | .1 | -1.1 | Tulsa . . . | 81 | +2 | 3.1 | +2.0 |
| ALASKA Anchorage . . . | 57 | +1 | .2 | -.1 | Shreveport . . . | 82 | +1 | .5 | -.2 | OREG. Astoria . . . | 57 | 0 | .2 | -.4 |
| Barrow . . . | 32 | -2 | .2 | -.1 | MAINE Caribou . . . | 60 | -1 | .9 | + .1 | Burns . . . | 62 | +1 | T | -.2 |
| Fairbanks . . . | 59 | -2 | T | -.2 | Portland . . . | 63 | -1 | 1.9 | +1.1 | Medford . . . | 64 | -2 | 0 | -.2 |
| Juneau . . . | --- | --- | --- | --- | MD. Baltimore . . . | 71 | -3 | .2 | -.7 | Pendleton . . . | 66 | -1 | 0 | -.2 |
| Kodiak . . . | --- | --- | --- | --- | MASS. Boston . . . | 68 | -2 | .2 | -.5 | Portland . . . | 64 | +1 | T | -.4 |
| Nome . . . | 46 | -1 | 1.0 | + .7 | Chatham . . . | 62 | --- | T | --- | Salem . . . | 62 | 0 | 0 | -.3 |
| ARIZ. Flagstaff . . . | 54 | -6 | 0 | -.2 | MICH. Alpena . . . | 58 | -5 | 1.2 | + .5 | PA. Allentown . . . | 67 | -4 | .3 | -.5 |
| Phoenix . . . | 86 | 0 | 0 | -.1 | Detroit . . . | 64 | -6 | .9 | + .1 | Erie . . . | 61 | -5 | .1 | -.7 |
| Tucson . . . | 81 | -3 | 0 | -.1 | Flint . . . | 63 | -4 | .9 | + .1 | Harrisburg . . . | 69 | -4 | T | -.7 |
| Winslow . . . | 69 | -2 | 0 | 0 | Grand Rapids . . . | 65 | -4 | .3 | -.5 | Philadelphia . . . | 69 | -5 | 1.2 | + .3 |
| Yuma . . . | 85 | -4 | 0 | -.1 | Houghton Lake . . . | 59 | -4 | 2.3 | +1.5 | Pittsburgh . . . | 66 | -4 | .8 | -.7 |
| Yuma . . . | 85 | -4 | 0 | 0 | Lansing . . . | 65 | -4 | .6 | -.2 | Scranton . . . | 63 | -6 | .1 | -.7 |
| ARK. Fort Smith . . . | 79 | 0 | .3 | -.6 | Marquette . . . | 54 | -7 | .5 | -.5 | R.I. Providence . . . | 66 | -2 | .4 | -.2 |
| Little Rock . . . | 79 | 0 | 1.7 | -.9 | Muskegon . . . | 63 | -4 | .4 | -.2 | S.C. Charleston . . . | 79 | 0 | 1.0 | -.6 |
| CALIF. Bakersfield . . . | 78 | 0 | 0 | 0 | S. Ste. Marie . . . | 56 | -4 | 1.0 | + .2 | Columbia . . . | 76 | -4 | 1.3 | + .4 |
| Eureka . . . | 55 | -1 | 0 | -.1 | MINN. Duluth . . . | 56 | -5 | .7 | -.4 | Greenville . . . | 74 | -3 | .7 | -.3 |
| Fresno . . . | 76 | +1 | 0 | 0 | Internat Falls . . . | 57 | -5 | 1.6 | + .6 | S.D. Aberdeen . . . | 63 | -4 | 4.6 | +3.7 |
| Los Angeles . . . | 68 | -1 | 0 | 0 | Minneapolis . . . | 65 | -3 | .5 | -.4 | Huron . . . | 67 | -2 | .7 | -.2 |
| Red Bluff . . . | 77 | 0 | 0 | -.1 | Rochester . . . | 66 | -2 | .3 | -.8 | Rapid City . . . | 64 | -2 | 1.7 | + .8 |
| San Diego . . . | 68 | +2 | 0 | 0 | St. Cloud . . . | 61 | -5 | 1.1 | 0 | Sioux Falls . . . | 66 | -3 | .6 | -.4 |
| San Francisco . . . | 60 | -2 | 0 | 0 | MISS. Jackson . . . | 80 | 0 | .1 | -.7 | TENN. Chattanooga . . . | 77 | 0 | .7 | -.2 |
| Stockton . . . | 74 | +1 | 0 | 0 | Meridian . . . | 77 | -3 | 2.3 | +1.4 | Knoxville . . . | 76 | -1 | 1.4 | + .5 |
| COLO. Denver . . . | 66 | -2 | .1 | -.3 | MO. Columbia . . . | 75 | +1 | T | -1.1 | Memphis . . . | 82 | +2 | 1.6 | + .8 |
| Grand Junction . . . | 70 | -3 | T | -.1 | Kansas City . . . | 74 | 0 | .7 | -.6 | Nashville . . . | 77 | -1 | 1.4 | + .6 |
| Pueblo . . . | 71 | -1 | 2.2 | +1.8 | St. Louis . . . | 80 | +4 | .3 | -.8 | TEX. Abilene . . . | 86 | +4 | 0 | -.6 |
| CONN. Bridgeport . . . | 67 | -3 | .7 | + .1 | Springfield . . . | 74 | -1 | 4.0 | +2.9 | Amarillo . . . | 75 | -1 | .5 | -.3 |
| Hartford . . . | 68 | -1 | .1 | -.7 | MONT. Billings . . . | 65 | +1 | .3 | -.3 | Austin . . . | 84 | +1 | 0 | -.7 |
| D.C. Washington . . . | 71 | -5 | .4 | -.4 | Glasgow . . . | 65 | +2 | .1 | -.6 | Beaumont . . . | 83 | +1 | .1 | -1.0 |
| FLA. Apalachicola . . . | 81 | 0 | 0 | -1.4 | Great Falls . . . | 62 | 0 | .5 | -.2 | Brownsville . . . | 85 | +2 | 0 | -.7 |
| Daytona Beach . . . | 78 | -2 | .2 | -1.5 | Havre . . . | 66 | +3 | 1.0 | + .4 | Corpus Christi . . . | 84 | +1 | 0 | -.6 |
| Ft. Myers . . . | 84 | +2 | 4.1 | +1.9 | Helena . . . | 61 | 0 | 1.8 | +1.2 | Del Rio . . . | 84 | -1 | T | -.4 |
| Jacksonville . . . | 80 | +2 | T | -1.6 | Kalispell . . . | 59 | +1 | .2 | -.4 | El Paso . . . | 83 | +2 | T | -.2 |
| Key West . . . | 85 | +1 | T | -1.1 | Miles City . . . | 67 | 0 | .1 | -.7 | Fort Worth . . . | 86 | +4 | 0 | -.7 |
| Lakeland . . . | --- | --- | --- | --- | Missoula . . . | 60 | 0 | T | -.5 | Galveston . . . | 84 | +2 | T | -1.0 |
| Miami . . . | 83 | +2 | .6 | -1.6 | NEBR. Grand Island . . . | 71 | -1 | .2 | -.8 | Houston . . . | 82 | 0 | .5 | -.5 |
| Orlando . . . | 81 | 0 | 2.1 | + .3 | Lincoln . . . | 72 | -2 | .7 | -.5 | Lubbock . . . | 83 | +5 | .3 | -.3 |
| Tallahassee . . . | 79 | -2 | 2.1 | + .4 | Norfolk . . . | 70 | -2 | .9 | -.3 | Midland . . . | 83 | +2 | T | -.3 |
| Tampa . . . | 82 | +1 | .6 | -1.1 | N. Platte . . . | 68 | -2 | .7 | -.2 | San Angelo . . . | 84 | +1 | 0 | -.4 |
| W. Palm Beach . . . | 80 | -1 | .6 | -1.4 | Omaha . . . | 69 | -3 | 1.7 | + .5 | San Antonio . . . | 85 | +2 | 0 | -.6 |
| GA. Atlanta . . . | 79 | +2 | .6 | -.3 | Valentine . . . | 65 | -4 | 2.0 | +1.2 | Victoria . . . | 84 | +1 | 0 | -.7 |
| Augusta . . . | 79 | 0 | 1.1 | + .2 | NEV. Ely . . . | 58 | -1 | T | -.2 | Waco . . . | 84 | +1 | 0 | -.6 |
| Macon . . . | 81 | +1 | .8 | -.1 | Las Vegas . . . | 82 | -2 | 0 | 0 | Wichita Falls . . . | 85 | +2 | T | -.7 |
| Savannah . . . | 79 | -1 | .8 | -.7 | Reno . . . | 63 | 0 | 0 | -.1 | UTAH. Blanding . . . | 64 | -3 | T | -.1 |
| HAWAII. Hilo . . . | 74 | -1 | 3.2 | +1.7 | Winnemucca . . . | 67 | +4 | .1 | -.1 | Salt Lake City . . . | 66 | -2 | .2 | -.1 |
| Honolulu . . . | 81 | +2 | T | -.1 | N.H. Concord . . . | 63 | -3 | T | -.8 | VT. Burlington . . . | 62 | -5 | .2 | -.6 |
| Kahului . . . | --- | --- | --- | --- | N.J. Atlantic City . . . | 68 | -4 | .5 | -.3 | VA. Lynchburg . . . | 70 | -4 | 1.3 | + .5 |
| Lihue . . . | 77 | -1 | .5 | + .1 | Trenton . . . | 69 | -4 | .1 | -.7 | Norfolk . . . | 71 | -5 | .7 | -.2 |
| IDAHO. Boise . . . | 65 | -1 | .1 | -.1 | N. MEX. Albuquerque . . . | 75 | -1 | T | -.1 | Richmond . . . | 71 | -4 | .5 | -.4 |
| Lewiston . . . | 65 | -1 | 0 | -.4 | Roswell . . . | 79 | +1 | 1.0 | + .7 | Roanoke . . . | 71 | -2 | 2.0 | +1.2 |
| Pocatello . . . | 59 | -4 | .5 | + .2 | N.Y. Albany . . . | 64 | -5 | .2 | -.5 | WASH. Colville . . . | 60 | -2 | 0 | -.4 |
| ILL. Cairo . . . | 81 | +2 | .4 | -.6 | Binghamton . . . | 59 | -7 | .4 | -.4 | Omak . . . | 65 | 0 | .1 | -.2 |
| Chicago . . . | 67 | -5 | .6 | -.4 | Buffalo . . . | 64 | -3 | .1 | -.4 | Quillayute . . . | 52 | -4 | .1 | -.7 |
| Moline . . . | 70 | -2 | .2 | -.9 | New York . . . | 70 | -3 | .1 | -.6 | Seattle-Tacoma . . . | 62 | +1 | .1 | -.3 |
| Peoria . . . | 72 | -1 | .3 | -.6 | Rochester . . . | 63 | -6 | .2 | -.4 | Spokane . . . | 60 | -3 | T | -.3 |
| Rockford . . . | 66 | -4 | .7 | -.4 | Syracuse . . . | 62 | -7 | .7 | 0 | Walla Walla . . . | 67 | -2 | T | -.2 |
| Springfield . . . | 77 | +3 | .2 | -.8 | N.C. Asheville . . . | 72 | 0 | .2 | -.8 | Yakima . . . | 64 | -2 | 0 | -.1 |
| IND. Evansville . . . | 79 | +3 | .7 | -.1 | Charlotte . . . | 74 | -3 | .5 | -.4 | W. VA. Beckley . . . | 64 | -5 | 4.5 | +3.5 |
| Ft. Wayne . . . | 68 | -3 | 1.4 | + .5 | Greensboro . . . | 72 | -4 | .3 | -.7 | Charleston . . . | 70 | -3 | 1.7 | + .9 |
| Indianapolis . . . | 73 | 0 | .3 | -.7 | Hatteras . . . | 73 | -2 | .6 | -.6 | Huntington . . . | 72 | -2 | 6.3 | +5.5 |
| South Bend . . . | 68 | -2 | .3 | -.6 | Raleigh . . . | 71 | -5 | .4 | -.5 | Parkersburg . . . | 68 | -5 | 2.5 | +1.5 |
| IOWA. Burlington . . . | 74 | +1 | .3 | -.7 | Wilmington . . . | 77 | -1 | .5 | -.9 | WISC. Green Bay . . . | 63 | -3 | .2 | -.6 |
| Des Moines . . . | 69 | -3 | .9 | -.2 | N. DAK. Bismarck . . . | 62 | -3 | .6 | -.3 | La Crosse . . . | 66 | -4 | .4 | -.7 |
| Dubuque . . . | 65 | -4 | 2.1 | + .8 | Fargo . . . | 62 | -4 | 1.4 | + .6 | Madison . . . | 64 | -3 | .3 | -.8 |
| Sioux City . . . | 69 | -3 | .7 | -.4 | Williston . . . | 67 | +3 | 1.2 | + .4 | Milwaukee . . . | 62 | -4 | .4 | -.5 |
| KANS. Concordia . . . | 74 | 0 | 1.6 | + .4 | O.HIO. Akron-Canton . . . | 63 | -7 | .5 | -.3 | WYO. Casper . . . | 62 | -2 | T | -.3 |
| Dodge City . . . | 76 | +1 | .8 | -.8 | Cincinnati . . . | 72 | -1 | 2.6 | +1.7 | Cheyenne . . . | 61 | -2 | .5 | -.1 |
| Goodland . . . | 68 | -3 | 1.7 | +1.0 | Cleveland . . . | 64 | -5 | 2.3 | +1.5 | Lander . . . | 61 | -2 | T | -.4 |
| Topeka . . . | 75 | 0 | 1.1 | -.3 | Columbus . . . | 69 | -3 | 1.4 | + .4 | Sheridan . . . | 59 | -4 | .1 | -.6 |
| Wichita . . . | 76 | -1 | 2.7 | +1.6 | Dayton . . . | 71 | -2 | .6 | -.3 | P.R. San Juan . . . | 85 | +4 | .3 | -1.0 |
| KY. Lexington . . . | 75 | +1 | .4 | -.6 | Toledo . . . | 67 | -3 | 1.3 | + .5 | | | | | |
| Louisville . . . | 73 | -2 | .2 | -.7 | | | | | | | | | | |

Based on 1941-70 normals

Publication of the Weekly Weather and Crop Bulletin began in 1872 as the Weekly Weather Chronicle. It is issued under general authority of the Act of January 12, 1895 (44 USC 213), 53d Congress, 3d Session. Contents of the Bulletin may be reprinted freely, with proper credit. Standard copy for the Bulletin is prepared by Donald J. Haddock, Lyle Denny, and O. W. Byrd, National Weather Service, Climate Analysis Center,

National Oceanic and Atmospheric Administration; Harry DeLong and Jim Carlin, Economics, Statistics, and Cooperatives Service, U.S. Department of Agriculture. Yearly subscription rate: \$13.00 domestic and \$18.00 foreign airmail. Order from the Agricultural Weather Facility, USDA South Building, Room 1248, Washington, D.C. 20250. Make checks payable to Department of Commerce, NOAA.

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 ESCS State offices in cooperation with the National Weather Service.

ALABAMA: Temperatures 1° subnormal though highs in 90's common. Showers widespread 24th, up to 1.00 in. common; heaviest amount 1.76 in.

Fieldwork: 5.9 days suitable. Soil moisture short, very short some southern areas. Haymaking, wheat harvest, soybean and sorghum planting main activities. Soybeans fair to good; 91% planted, 92% 1978, 90% average. Sorghum fair to good; 80% planted, 83% 1978. Corn fair; 47% silked, 47% 1978, 35% average. Cotton fair to good; 26% squaring, 26% 1978, 34% average. Peanuts good; 17% pegging, 18% 1978, 24% average. Wheat 89% harvested, 75% 1978, 82% average. Pastures fair to good. Fuel supplies and truckers' strike causing problems. Some farmers out of fuel.

ARIZONA: Record-breaking low temperatures early week. Temperatures averaged 2 to 10° below normal. No precipitation.

Cotton good progress, 60% setting bolls west, 10 to 15% central; 30% squaring southeast. Barley harvest nearly complete. Wheat harvest good progress. Safflower, corn, sorghum good growth. Sugarbeet harvest good progress, quality. Fourth cutting alfalfa well underway west, third cutting well advanced central areas, second cutting eastern areas. Lettuce harvest nearly complete. Melon harvest large scale Yuma, good progress central area, some harvest. Grape harvest gaining momentum west, volume proportions shortly central. Citrus harvest virtually complete, new crop prospects good. Diesel fuel supplies tight to adequate depending on area. LP gas good supply, gasoline supplies tight to adequate. Cattle, calves good condition; on summer ranges. Lower ranges fair. Fire danger extreme. Higher ranges good. Stock water, soil moisture adequate. Summer feed sufficient.

ARKANSAS: Temperatures near normal, departures 2° subnormal to 3° above normal. Precipitation near normal but with wide variations. Most precipitation 4.05 in.; least 0 in.

Fieldwork: 5.5 days suitable. Soil moisture below average. Cotton fair condition; squaring 7%; acceptable stands 83%. Soybean planting 81%, 86% 1978, average 89%; good to fair condition, improved stands. Rice good to fair; planting 99%; slightly behind 1978, and average. Corn and sorghum good to fair condition; 97% planted, 99% 1978. Sorghum planting 87%, 95% 1978. Wheat 85% harvested, 87% 1978. Oats 75% combined, 98% 1978. Peach harvest excellent. Tomato volume increasing. Pastures average. Second cutting alfalfa and fescue. Cattle making good gains.

CALIFORNIA: Temperatures near normal 20th and 21st, warming followed 22d. Moderately high relative humidities over weekend lowered during week.

Wheat 97% ripened and 45% harvested. Barley 50% harvested. Cotton 69% squared and 8% setting bolls. Planting corn virtually complete, 96% emerged. Harvesting alfalfa hay continued. Second cutting south coast, third cutting San Joaquin. Orchard crops continue normal. Apricot harvest continued. Cherry harvest slowing. Light harvest of Thompson seedless began. Peach harvest increasing Central and San Joaquin Valleys. Bartlett pear crop good. Plum harvest continued, some size problems. Citrus crops developing normally. Valencia harvest continued. Almond crop making good progress. Walnuts showing good crop. Transportation continued

very tight. Artichoke, asparagus volume decreasing seasonally. Broccoli, cauliflower harvest slowing temporarily but still good volume. Cantaloup harvest decreasing desert. Celery supplies decreasing south coast, increasing central coast. Sweet corn slowing desert, increasing south coast. Lettuce harvest delays due lack of transportation. Market tomato harvest winding up desert, increasing south coast, San Joaquin Valley. Processing tomato harvest still slow desert. Watermelons increasing desert, just started San Joaquin Valley. Range and pastures continued dry lower elevations, fire potential high. Cattle move into feedlots, summer pastures, beet tops. Cattle good to excellent condition. Fuel supplies generally adequate. Few areas reported a deficit of LP gas and gasoline for first time. Surplus fuel was available in some isolated areas.

COLORADO: Scattered hailstorms early week and at weekend throughout eastern plains. Isolated reports of extensive crop damage in northeastern areas. Temperatures 3° below normal except southeast where 1 to 3° above normal.

Winter wheat condition good; heading nearly complete; turning color 30%, 50% 1978, 72% average. Corn condition good. Sorghum 90% seeded, 100% 1978, 100% average. Dry beans 93% seeded, 98% 1978, 97% average. Sugarbeets 81% thinned. First cutting of alfalfa 67% complete. Range and pasture condition good to very good. Fieldwork: 5 days suitable. Gasoline and diesel fuel tight to adequate. LP gas supplies adequate.

FLORIDA: Thunderstorms widely scattered but more numerous, 21st and 22d and across central 23d. Rainfall averaged 0.60 to 1.00 in. with locally heavier amounts. Highs generally upper 80's to mid-90's; lows, upper 60's to mid-70's.

Soil moisture short many areas. Adequate in a few central and upper east coast areas. Corn poor condition due to dry weather. Soybean planting delayed by lack of moisture. Peanuts fair condition, but need moisture. Tobacco harvest active all areas. Sugarcane good condition. Hay harvest increasing. Fuel supplies mostly adequate. Diesel a little tight in central areas. All types short in south due to strike. Improvement expected this week. Pastures poor to fair Panhandle and north. Mostly good elsewhere. Need moisture statewide. Cattle fair to good. Citrus groves excellent condition. Soil moisture generally adequate, only scattered supplemental irrigation. Abundant new growth on most trees. Harvest old crop fruit about complete. Vegetables declining seasonally. Harvest about complete for season most crops. Shipments down 38% from previous week. All crops registered a decline. Truckers strike having some effect on volume. Watermelon harvest steady central, northern areas; size 25 pound average. Quality variable. Harvest underway west. Progress slow partly due to truck strike. Dry weather reduced yields.

GEORGIA: Temperatures below normal. Departures ranged from normal to 6° subnormal. Average temperatures ranged from 68 to 78°. Scattered rainfall with southeast receiving most.

Soil moisture varied. Fieldwork: 6 days suitable. Crops still need moisture in some areas. Corn fair to good. Tobacco fair to good; 14%

June 26, 1979

harvested, 7% last year, 17% average. Soybeans good; 92% planted, 90% last year. Dry weather delaying late plantings. Peanuts good; 86% blooming, 83% last year; 44% pegging, 43% last year. Cotton good; 94% squaring, 67% last year; 22% setting bolls, 20% last year, 27% average. Sorghum 80% planted, 75% last year. Wheat 93% harvested, 87% last year. Oats 97% harvested, 90% last year. Watermelons fair to good; 11% harvested, 9% last year. Peaches fair to good; 48% harvested, 43% last year, 56% average. Apples good. Vegetables fair to good. Pastures fair to good. Cattle and hogs good. LP gas 5% tight, 92% adequate. Diesel fuel 40% tight, 55% adequate. Gasoline 5% deficit, 23% tight, 71% adequate.

HAWAII: Weather favorable. Continuing hot, humid. Showers some sections replenished soil moisture. Heavier irrigation, frequent spraying necessary. Young germinating cucumber plants suffered bird damage, fields replanted. Vegetable supplies adequate. Banana supplies light. Papaya supplies increasing on all islands, soil moisture supplies adequate. Pineapple harvesting approaching peak. Sugar production steady. Pastures generally fair to good. Fuel supplies LP, diesel, gasoline adequate but getting tight.

IDAHO: Temperatures below normal with a high of 90° and low of 28°. Varied abundance of precipitation fell with 1.75 in. greatest amount. Winter wheat 67% headed, 60% last year. Spring wheat and barley 30% headed, 25% last year. Potatoes 95% emerged and 50% with growth over 6 in.; last year 80% emerged and 40% with growth over 6 in. Dry beans 95% emerged. First crop hay 50% completed. Fieldwork: 5.5 days suitable. Soil moisture short to adequate. Farm fuel supplies adequate to tight.

ILLINOIS: Temperatures 5° below normal north, 1 to 4° above normal south. Precipitation varied, spotty 0.10 to 6.00 in. Soil moisture short to adequate. Corn good; height all fields 23 in., 18 in. 1978, 27 in. average; height most advanced fields 35 in., 32 in. 1978, average 41 in. Soybeans good. Wheat 95% turning yellow, 68% last year, 93% average; 35% ripe, 22% 1978, 69% average; 8% combined, 0% 1978, 25% average. Oats 85% headed, 70% last year, 88% average; 50% filled, 30% last year, 58% average; 10% turned yellow, 0% 1978, 14% average. Alfalfa hay 2d cutting 15% complete, 16% 1978, 8% average. Red clover hay 85% cut, 79% 1978, 81% average. Pastures and crops fair to good. Fieldwork: 6.3 days suitable.

INDIANA: Cool, sunny, low humidities. Temperatures ranged from 40 to 96°. Rainfall 1.30 in. west central and southeast, 0.40 in. northwest, 0.80 in. northeast and southwest, and 1.20 in. west central and central.

Fieldwork: 5 days suitable. Topsoil and subsoil moisture adequate. Fuel supplies generally adequate, with some tightness developing. Wheat 15% ripe, 1978 10%, average 40%. Corn most good condition; 21 in. high, 1978 14 in., average 23 in. Soybeans fair to mostly good; 6 in. tall, 1978 4 in., average 7 in. Clover hay 85% cut, 1978 75%, average 65%. Pastures mostly good.

IOWA: Cool with light to moderate showers. Heaviest showers fell on 23d over southwest third to ease dryness in west central and southwest. Northwest and north central reported only half the normal 4-week rainfalls and the north central rainfalls were down more than a third since April 1.

Fieldwork: 4.8 days favorable. Topsoil and subsoil moisture adequate. Corn 81% cultivated first time; height averaged 18 in. Soybeans 47% cultivated first time; 89% of normal stand. Percent of oats headed 67%, 1978 73%, normal 82%. First crop alfalfa hay harvested 90%, 1978 89%, normal 87%. First crop clover hay harvested 52%, 1978 57%, normal 58%. Crop conditions: Pasture, corn, beans improved; clover hay, alfalfa hay, oats, and wheat slight decline. Livestock market movement slowed, transport problems.

KANSAS: Hot and humid. Temperatures around 71° northwest, 78° southwest and northeast. Temperatures slightly below normal south central, near normal northwest and southeast; elsewhere slightly above normal readings. Precipitation general with 0.50 to 2.00 in. common. Heaviest amount 6.00 in. Wheat harvest in few southern areas; halted over weekend by rain and cloudy skies; less than 5% harvested, last year 5%, average 20%. Wheat ripe 15%, last year 20%, average 55%. Sorghum planting 90% complete, last year 90%, average 85%. Soybean planting 85% completed, last year 85%, average 80%. Second cutting alfalfa 20%, 1978 25%, average 25%. Fieldwork: 6 days suitable. Diesel and gasoline supplies tightened.

KENTUCKY: Precipitation averaged 1.00 to 3.00 in. occurring mostly during middle and end of week. Temperatures several degrees above normal.

Fieldwork: 4.8 days suitable. Soil moisture short to adequate. Most planting complete except for double crop soybeans. Crops making good progress where summer showers adequate. Tobacco little later than normal with over half of plants still under 6 in. height. Some fields have thin stands, but probably will not be replanted because of lateness of season. Barley harvest winding down. Wheat harvest about 30% complete. Quality good.

LOUISIANA: Temperatures 1° below to 1° above normal. Extremes: 98 and 61°.

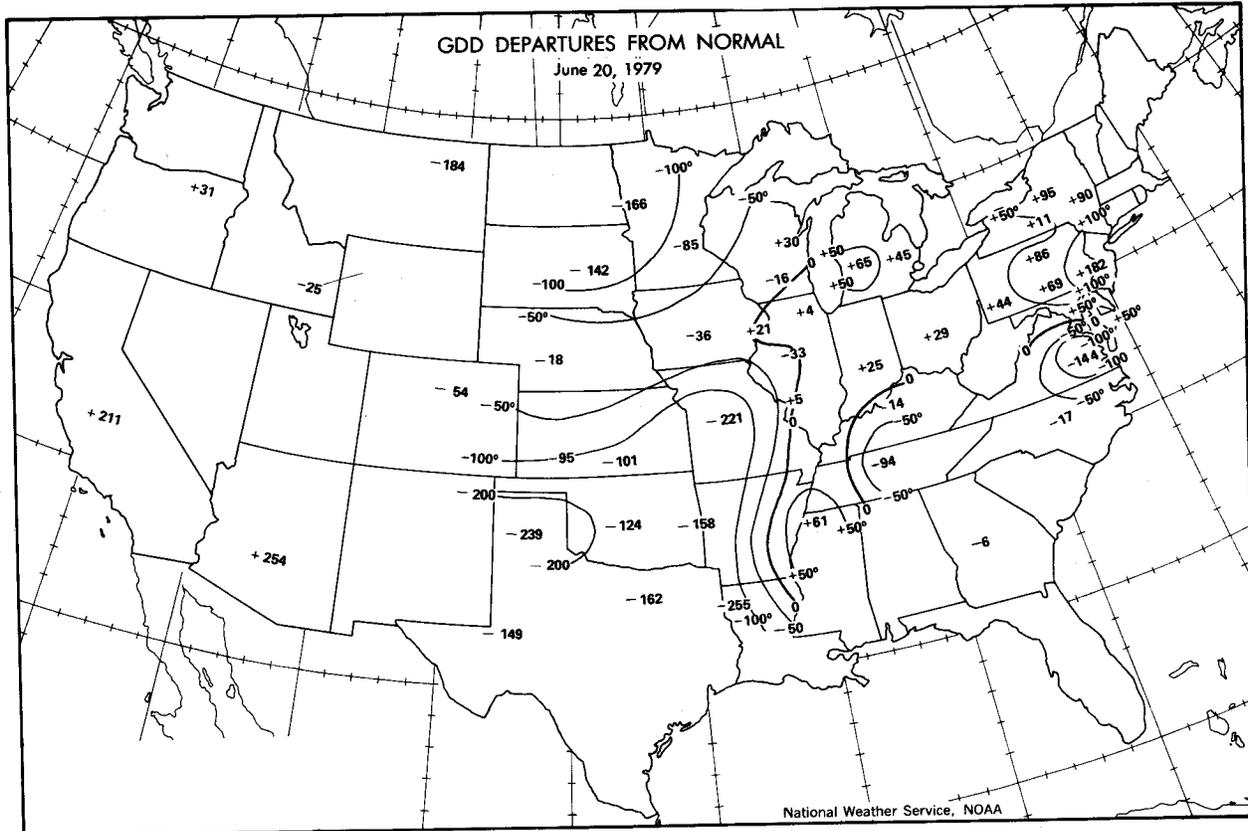
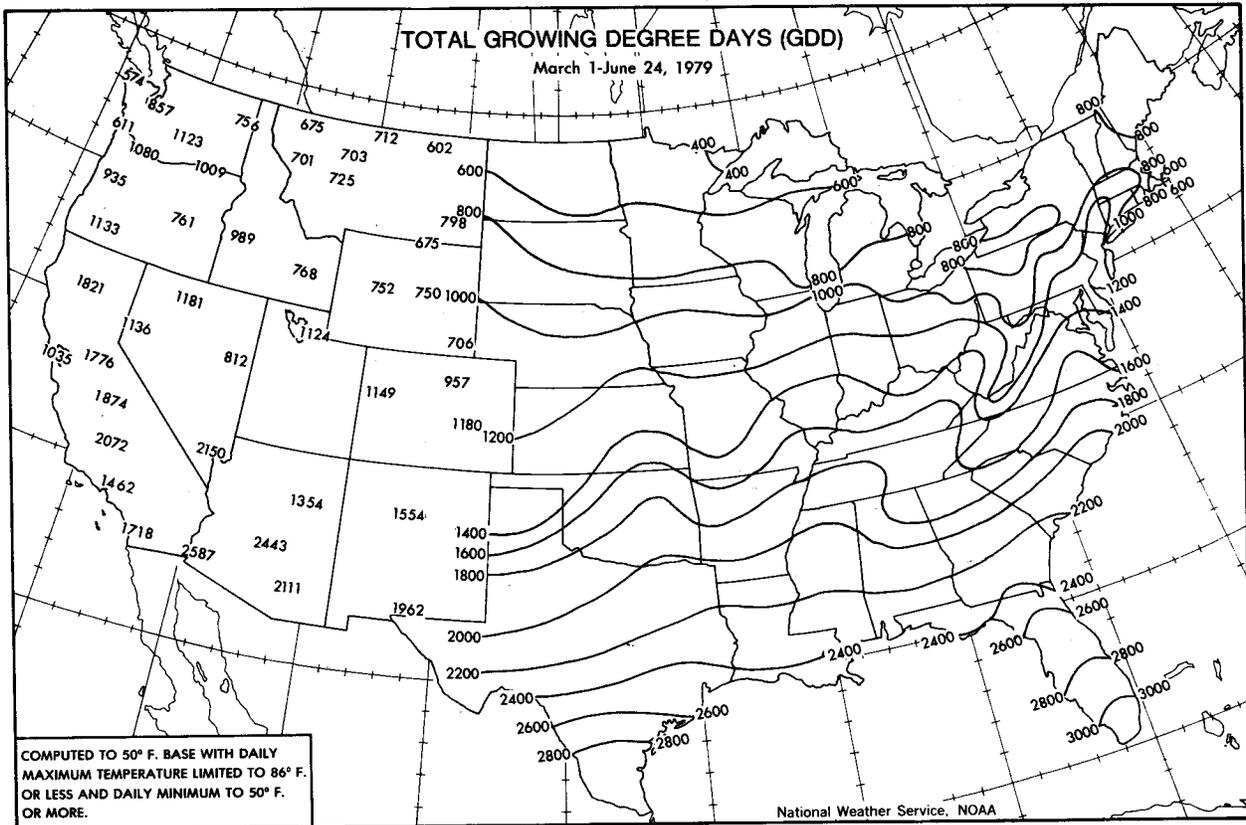
Fieldwork: 6.5 days suitable. Soil moisture short to adequate. Main activities: Planting late soybeans and sorghum, cultivation, applying herbicides, hay and vegetable harvest. Soybeans fair to good; 97% planted, 95% last year, 89% average; 89% emerged. Cotton fair to good; 27% squared, 38% last year. Rice good. Corn good; 83% tasseled, 84% last year; cutting silage. Sorghum fair to good; 92% planted, 95% last year, 84% average; 85% emerged. Sweetpotato fair to good; 97% transplanted, 95% last year, 91% average. Sugarcane fair to good, layby near complete. Peach, vegetable harvest active. Wheat 98% cut, 99% last year and average. Pastures fair to good, need rain. Cattle good.

MARYLAND & DELAWARE: Temperatures 3° below normal. Highs in low 80's and lows in low 60's. Precipitation light, about 0.50 in.

Fieldwork: 6.0 days suitable. Soil moisture adequate. Fuel supplies adequate to tight. Corn stands generally good. Soybean planting over 70%, 82% last year, 85% normal. Barley harvest nearly 50% complete. Haymaking in full swing. Tobacco fields over 85% planted.

MICHIGAN: Temperatures 2 to 8° below normal. Minimum temperatures in 30's. Precipitation varied from 0.50 to 2.00 in. Most of precipitation occurred 20th as thunderstorms.

Fieldwork: 5 days suitable. Soil moisture short to adequate. Pasture feed supplies average. Corn height 11 in., 13 in. last year and normal. Soybean planting virtually completed, 98% last year, 93% normal. Dry beans 95% planted, 88% last



year, 78% normal. Wheat 95% headed, 87% last year and normal. Wheat yellowed is above 5%. Oats 25% headed, 18% last year, 28% normal. First cut hay 60% complete, 55% last year, and 50% normal. Sweet cherry harvest started southwest. Tart cherry expected start July 4th. Asparagus harvest over 95% complete. Strawberry harvest 33% complete.

MINNESOTA: Temperatures 1 to 5° below normal. Extremes: 86 and 36°. Precipitation 0.50 in. below normal in south and east, up to 2.50 in. above normal in north and west. Precipitation less than 1.00 in. southeast half and extreme northwest corner, greater than 1.00 in. northwest half. Up to 4.00 in. west central.

Wet, cool limited fieldwork, plant growth. Heavy rains caused standing water, erosion damage to some fields. Hail will necessitate replanting many soybean, sunflower fields. Alfalfa hay baling stalled by poor drying conditions. Most flax seeded. Height: Corn 9 in., 1978 16 in., normal 19 in.; soybeans 4 in., 1978 6 in., normal 7 in. Heading: Spring wheat 1%, 1978 16%, normal 37%; oats 4%, 1978 26%, normal 45%; barley 1%, 1978 26%, normal 39%; winter wheat 66%, 1978 92%, normal 83%; rye 74%, 1978 93%, normal 92%. Alfalfa hay 42% cut, 1978 76%, normal 72%.

MISSISSIPPI: Temperatures below normal. Extremes: 55 and 96°. Mostly fair except 21st central and southern areas and over weekend in upper two-thirds.

Soil moisture mostly adequate northern third and delta, mostly short elsewhere. Fieldwork: 5.7 days suitable. Scattered rain improved growing conditions many areas. Soybeans 87% planted, 88% 1978, 79% average; 65% up to stand, 72% 1978, 71% average; condition good to fair. Cotton 44% squaring, 48% 1978, 43% average; 2% blooming, 1% 1978; 0% setting bolls, 0% 1978, 5% average; condition fair. Corn 44% silked, 42% 1978, 44% average; 11% dough stage, 8% 1978; condition good. Winter wheat 88% harvested, 83% 1978, 84% average. Sorghum 87% planted, 82% 1978, 80% average. Sweetpotatoes 93% planted, 91% 1978, 86% average. Hay crops 36% harvested, 38% 1978, 34% average. Peaches 15% harvested, 15% 1978, 31% average. Watermelons 1% harvested, 1% 1978. Rice condition good to fair. Pastures good to fair condition. Supplies of diesel and gasoline tightened with both rated tight to adequate. LP gas supplies mostly adequate.

MISSOURI: Temperatures ranged from near normal in northwest prairie to 4° above normal Bootheel. Rainfall less than 0.25 in. northeast prairie to nearly 1.00 in. west Ozarks.

Fieldwork: 5.8 days suitable. Grain sorghum 92% planted, last year 87%, normal 87%. Soybeans 92% planted, last year 88%, normal 85%. Wheat 96% turned color, last year 85%, normal 100%; 42% ripened, last year 45%, normal 73%; 18% harvested, last year 21%, normal 38%. Alfalfa hay 1st cutting 93% complete, last year 82%, normal 94%; 2d cutting 17% complete, last year 7%, normal 24%. Other hay 65% harvested, last year 57%. Condition of wheat, corn and pasture mostly fair to good. Topsoil moisture short to adequate. Gasoline and diesel fuel supplies tight to adequate. LP gas supplies mostly adequate.

MONTANA: Major rainstorm over central early week. Precipitation of from 3.00 to 5.00 in. Very little hail or strong winds accompanied storm. Smaller but more destructive storm hit extreme northeast 22d. Many areas received above normal rains but northeast, southeast, and extreme southern portions of southwest came up short. Temperatures cool early week but warmed significantly by weekend. Temperatures averaged near normal.

Moisture situation improved many areas. Fieldwork: 5 days suitable. Small grains mostly fair condition; sugarbeets, corn and potatoes fair to good. Winter wheat 35% headed, 55% 1978, 55% average. Spring wheat 0% headed, 5% 1978, 20% average. Barley 0% headed, 5% 1978, 20% average. Oats 0% headed, 5% 1978, 20% average. Sugarbeets thinned 60%, 1978 100%, average 80%. First cutting alfalfa hay 15%, 1978 25%, average 20%. Wild hay cut 5%, 1978 15%, average 5%. Stock water adequate, range feed mostly adequate.

NEBRASKA: Temperatures 2° below normal. Precipitation general, averaged 0.75 to 1.50 in.

Corn mostly good condition. Sorghum emergence 95%, year ago 100%. Soybeans over 90% emerged, year ago 100%. Wheat 35% turning, 50% year ago, 70% normal. Diesel fuel supply 75% tight, 5% deficit. Gasoline 55% tight, 5% deficit. LP gas adequate. Fieldwork: 4.7 days suitable.

NEVADA: Cool with snow and hail early, warming trend end of week. Temperatures averaged 5° below normal for period. Precipitation confined Sierras and north border.

Small grains showing good growth. Alfalfa hay harvest gaining momentum. Summer ranges providing ample grazing.

NEW ENGLAND: Temperatures 5 to 10° above normal 18th, 3 to 8° below 19th through 22d, 3° above 23d and 6 to 12° below 24th. The 18th gave 0.10 to 0.30 in. rain and 0.40 to 4.00 in. on coast. Showers, 0.03 to 0.20 in. on 22d and on 23d and 24th in north.

Excellent haying weather. First cutting hay, 25 to 80% cut. Second cutting begun in Vermont. Corn planting 80 to 100% complete. Leaching created need for nitrogen topdressing. Weed control successful so far but fruit and vegetables plagued with fungi and insects. Soil moisture short to surplus. Available grazing adequate. Fuel supplies tight to adequate with some report of diesel fuel short.

NEW JERSEY: Temperatures 4 to 7° below normal. Extremes: 41 and 89°. Rainfall 0.32 in. north, 0.49 in. central and 0.62 in. south. Soil moisture in percent of field capacity 78% north, 77% central and 71% south. Soil temperature 65° north, 69° central and south.

Fieldwork: 6 days suitable. Cool temperatures slowing crop development. Transportation shortages delaying produce harvest and distribution. Short gas supplies limiting machine fieldwork and availability of day-haul worker crews. Blueberry harvest becoming general. Barley combining underway. Hay making active. Fuel supplies reported adequate to deficit.

NEW MEXICO: Mostly dry but scattered showers lower Rio Grande Valley 20th evening and eastern plains on 24th. Temperatures near normal.

Moisture short to adequate. Cotton improving with warmer temperatures, but still behind normal. Alfalfa harvest first cutting 70% complete north, second cutting 50% complete south. Wheat and barley harvest in full swing on eastside. Corn good. Grain sorghum 95% planted. Onion harvest active in Mesilla Valley, but both trucks and railroad cars in short supply. Chile and pecans good. Pastures very good.

NEW YORK: Temperatures 3 to 7° below normal, scattered frost in Adirondacks. Rainfall below normal, most areas now dry.

Good work week. Corn, dry bean planting about finished. First cutting alfalfa 60% done, 53%

1978. Clover-timothy 45% complete, 35% 1978. Grass silage 65% cut, 1978 same. Strawberry picking well underway. Sweet corn planting nearly done, 85% 1978. Tomato planting done. Snap bean planting continued. Apples, pears developing well. Sweet cherries coloring. Tart cherry condition good.

NORTH CAROLINA: Temperatures 3 to 5° subnormal east of mountains. Precipitation subnormal.

Fieldwork: 4.0 days suitable. Soil moisture adequate. Condition of corn, soybeans, hay crops, Irish potatoes, sweetpotatoes, apples, peaches, and pasture fair to mostly good; tobacco, cotton mostly fair to good; peanuts and vegetables fair to good. Planted: Burley tobacco 99%, 1978 95%, average 98%; soybeans 85%, 1978 89%, average 86%; sorghum 82%, 1978 86%, average 86%; sweetpotatoes 92%, 1978 88%, average 89%. Harvested: Wheat 52%, 1978 49%, average 60%; oats 62%, 1978 59%, average 70%; barley 73%, 1978 74%, average 75%; rye 68%, 1978 58%, average 70%; peaches 14%, 1978 16%, average 24%; hays 60%, 1978 66%, average 54%; Irish potatoes 42%, 1978 56%, average 44%; spring snap beans 100%; spring cabbage 100%; spring cucumbers 40%. Corn silking 25%. Cotton squared 30%.

NORTH DAKOTA: Wet week with rain on 4 days. Largest amount 4.05 in.; least amount 0.18 in. Temperatures near normal west and 2 to 4° below normal east. Extremes: 89 and 43°.

Welcome rains improved crop prospects. Precipitation more scattered in west where additional moisture still needed. Small grains rated mostly fair to good. Major activity row spraying for weed and insect control. Some cutworm and grasshopper damage in sunflower fields. Haying general rest week. Spring planting near complete, development behind normal.

OHIO: Temperatures ranged from upper 30's to low 90's. Averages in low 60's to low 70's, 1 to 7° below normal. Rainfall from 0.40 to over 2.80 in., generally above normal. Growing degree day accumulations slightly below normal.

Fields being cultivated, sprayed. Some soybean replanting. Farmers putting up hay. Corn at 10-leaf stage. Armyworm infestation in north and northwest in wheat.

Corn height 20 in., 15 in. 1978, 15 in. average. Beans height 8 in., 6 in. 1978, 8 in. average. Alfalfa hay cut 90%, 90% 1978, 90% average. Other hay cut 70%, 65% 1978, 70% average. Wheat turning 70%, 45% 1978, 70% average. Wheat ripe 5%, 5% 1978, 10% average. Oats headed 70%, 60% 1978, 80% average. Fieldwork: 5 days favorable. Pasture condition very good. Soil moisture adequate.

OKLAHOMA: North averaged 1° above normal while southwest and southeast 3° above normal. Central section had widespread rains, some heavy. Rains spotty and ranged from 0.06 in. south central to 2.21 in. central.

Topsoil and subsoil supplies adequate. Wheat rated good with 51% harvested, 51% 1978, 72% normal. Sorghum rated good with 92% planted 1979 and normal, 90% 1978. About 70% sorghum up to stand, 56% 1978, 67% normal. Cotton rated good to fair with 98% planted, 100% 1978, 96% normal. Cotton up to stand 78%, 80% 1978, 77% normal. Pasture and range rated good and making good growth. Livestock good condition. Fieldwork: 6.1 days suitable.

OREGON: Maximum temperatures generally in mid-60's to upper 70's. However weekend temperatures on rise. Minimum temperatures ranged from upper 30's to lower 50's. Temperatures 5° below normal. Most rain concentrated in coastal and northeastern

areas with 1.00 in. average. Most other areas received 0.50 in. or less.

Soil moisture short; rain brought some relief to many areas. Winter wheat 95% headed; 29% turning color. Moisture stress in shallow soil. Grass seed harvest beginning. Haying nearing completion for first cutting. Mint fields filling in fields spotty. Barley ripening fairly fast, harvest to begin by July 1. Grasshopper outbreak critical; spraying underway. Strawberry harvest past peak. Raspberry harvest underway. Sweet cherry harvest begun with good quality cherries; some cracking from rain but not extensive. Apples, pears and peaches sizing up well. Prune crop good. Cranberries past full bloom. Walnuts good. Filberts good but light. Vegetable crops generally good. Pea harvest continued in Umatilla County; lower yields in marginal rainfall areas. Potatoes and onions good. Livestock condition generally good except dry areas where forage short. Range and pastures fair to good. Grasshoppers destroying much grazing acreage; massive spray program underway.

PENNSYLVANIA: Cool, sunny and mostly dry. Temperatures 5 to 8° below normal. Extremes: 88 and 32°. Showers and thunderstorms 21st and 22d, some with strong winds and hail that produced less than 0.25 in. rainfall west and south central, 0.50 in. northeast and up to 1.40 in. parts of southeast. Crop data not available.

PUERTO RICO: Island average rainfall 0.68 in. or 0.70 in. below normal. Temperatures averaged about 81° on coasts and 76° interior. Extremes: 94 and 61°.

SOUTH CAROLINA: Coolest near midweek when most highs dropped into 70's, other readings near normal. Scattered showers, thundershowers throughout period, northwest lightest.

Soil moisture adequate. Fieldwork: 4.5 days suitable. Corn condition good with adequate moisture for maximum growth; dough stage 26% of acreage, 19% last year. Cotton fair to good in cool conditions; 14% setting bolls, 4% last year; adequate soil moisture all areas. Soybean condition good, growth favored by ample moisture; 91% planted, 90% last year and average. Tobacco condition fair to good, blue mold, mosaic causing trouble; 54% topped, 30% last year; 5% harvested. Peaches 18% harvested with sizing excellent due to ample moisture, 17% last year, 27% average; trucker strike not yet affected harvest; crop condition good to excellent. If trucks not available over peak volume next few weeks, much of crop will be lost. Coastal tomato harvest slowed due to truck strike; if trucks not immediately available to move crop, much of it will be lost. Tomatoes 31% harvested; cucumbers 94%; snap beans 78%. Watermelon condition good, 6% harvested, last year 7%.

SOUTH DAKOTA: Temperatures 3° subnormal. Extremes: 89 and 37°. Good rainfall; precipitation 2.23 in. central and west, 1.89 in. northeast, 0.78 in. southeast.

Topsoil moisture restored to adequate central and west, surplus east; northwest and southwest corner remain short. Fieldwork: 3 days suitable. Farm fuel supplies tightened. Grasshoppers problem west, gophers north central. Row crop planting virtually complete. Winter wheat 88% headed, 1978 97%, average 96%. Rye 96% headed, 1978 99%, average 99%. Oats 35% headed, 1978 26%, average 59%. Spring wheat 25% headed, 1978 15%, average 47%. Barley 31% headed, 1978 32%, average 57%. Winter wheat 9% turning color, 1978 38%, average 29%. Rye 9% turning color, 1978 11%, average 28%. Flax

8% blooming, 1978 8%, average 21%. Corn 57% cultivated 1st time, 1978 75%, average 84%. Corn height 8 in., 1978 10 in., average 13 in. Alfalfa 1st cut 39%, 1978 76%, average 72%.

TENNESSEE: Dry weather early week. Rain at mid-week and weekend. Amounts ranged from 0.35 to 4.86 in. Temperatures 1 to 3° above normal west, 1 to 3° below normal east.

Fieldwork: 5.2 days suitable. Soil moisture adequate. Pastures and livestock good. Soybeans 87% planted, 1978 87%, average 82%. Cotton squaring 7%, 1978 13%, average 21%. Wheat ripe 97%, 1978 90%, average 93%; harvested 55%, 1978 40%, average 58%. Oats ripe 94%, 1978 74%, average 94%; harvested 40%, 1978 30%, average 45%. Barley ripe 96%, 1978 84%, average 96%; harvested 59%, 1978 49%, average 64%. Corn, cotton and soybeans fair. Tobacco and small grains good. Fuel supplies tightening.

TEXAS: Precipitation below normal except for near normal northern High Plains and Trans-Pecos regions. Temperatures 3 to 4° above normal over Low Plains, Cross-Timbers, and upper coast. Elsewhere, near normal temperatures prevailed.

Open weather enabled small grain harvest to advance into Panhandle. Fuel supplies for farming tightened from previous week, however this can be attributed to increased demand. Cotton planting winding down. High Plains finished planting and only a few fields on Low Plains and Cross-Timbers remained to be planted. Hot, dry winds caused some emergence problems for recently planted cotton on Plains but this same weather promoted excellent growth on earlier cotton. Thrips caused damage on Plains while fleahoppers were abundant elsewhere. Substantial peanut acreages remain to be planted in Cross-Timbers and south central where many producers waiting for rain. Soybean planting continued to lag as south Texas and Gulf Coast producers await planting showers for fields that remain to be planted. Wheat harvest moved onto northern High Plains where dryland fields were being harvested in earnest. Irrigated wheat on Plains remains a week away from optimum harvest. Harvest is complete in south and is winding down in many other areas. Sorghum planting reached completion in all areas except Plains. Stands generally good although staggered unevenness of crop has caused severe midge problems, particularly south. Cotton planted 98%, 98% 1978, 98% average; squaring 19%; setting bolls 10%. Rice headed 23%. Sorghum planted 97%, 96% 1978, 97% average; headed 47%; coloring 24%; mature 3%. Wheat coloring 100%; harvested 52%, 45% 1978, 67% average. Barley harvested 51%, 49% 1978, 80% average. Oats harvested 91%, 90% 1978, 95% average. Peanuts planted 87%, 83% 1978, 84% average. Soybeans planted 83%, 82% 1978, 89% average. Sunflowers planted 80%, 55% 1978, 75% average.

Lower Rio Grande Valley cantaloup harvest winding down. Harvest cucumbers, honeydews, watermelons, tomatoes, bell peppers continued. Land preparation fall crops active. Coastal Bend harvest watermelons and cucumbers continued. San Antonio-Winter Garden onion harvest continued; because low prices some fields plowed out. Harvest watermelons, cabbage, cucumbers, beets and tomatoes continued. Movement of produce light because lack of available trucks. East Texas cucumber and sweet-potato planting complete. Watermelons making good progress; beginning to ripen. Tomato harvest active. Central Texas tomato harvest active; quality low. Supplies okra, squash, onions and beets available. Grasshoppers a problem in some areas. North Texas grasshopper damage reported some fields. High Plains potatoes, onions and

cabbage progress well. Bell pepper stands fair condition; tomatoes beginning to bloom. Trans-Pecos cantaloups making good progress; powdery mildew reported in some fields. El Paso squash, onions and cabbage harvested. Peach harvest winding down in south. Harvest mid-season varieties underway in central and east. Freestones good supply in Hill Country. Pecan nutlets developed. Heavy aphid infestations in central and north. Some trees shedding nutlets in south central.

Pastures, rangeland continued provide adequate grazing although some areas beginning to dry; additional moisture soon needed for continued forage production. South and Trans-Pecos continued provide above average grazing response recent rains. Grasshopper populations on increase on High Plains and across north. Fly and tick populations increasing, livestock conditions ranged fair to excellent.

UTAH: Recurring rain in valleys and snow in mountains forepart period principally northwest portions. Little or none south and east. Amounts moisture generally light to moderate but locally heavy thunderstorms few areas. Rising trend temperatures but averages ranging between 1 and 8° below normal.

Harvest of first crop alfalfa hay nearing completion. Fieldwork: 5.5 days suitable. Spring wheat 60% headed, oats and barley 40 to 45%. Growth of field and sweet corn rated good. Soil moisture short but range feed supplies adequate. Fire hazard high. Livestock moving to high summer ranges.

VIRGINIA: Rather cool temperatures, averaged several degrees below normal. Extremes: Mid-40's and low 90's. Rainfall moderate varying from very light in some sections to several inches in southwest; averaged near 1.00 in.

Topsoil moisture mostly adequate; getting short east; mostly surplus southwest. Fieldwork: 4.1 days suitable. Small grain combining: Wheat 25%, 14% 1978, 30% average; barley 60%, 50% 1978, 55% usual; oats 15%, 13% 1978, 37% average. Corn 1% silked, 1% 1978, 4% usual. Peanuts fair. Soybeans, corn, tobacco, hay, pastures good. Potato digging, snap bean picking started on Eastern Shore. Shortage trucks Eastern Shore reported. Straw baling followed small grain harvests. Cherries, raspberries picked north. Squash harvest active. Diesel, gasoline supplies for farmwork tightening.

WASHINGTON: West: Temperatures 1 to 3° below normal. Precipitation 0.20 to 0.30 in. below normal. Light rains early in week followed by dry, cool conditions.

Strawberry harvest in full swing. Raspberry picking started in early areas. Overlap of berry harvest could intensify picker shortage. Radishes, lettuce, chard, new potatoes being harvested. Green pea harvest in another week. Corn showing good growth. Rain slowed hay baling. Irrigation active.

East: Temperatures 5 to 6° below normal. Precipitation 0.10 in. below normal to 0.50 in. above normal. Early week rains followed by clearing, cool temperatures.

Cherry picking active with concern over transportation. Hand thinning apples active. Good early apple size. Asparagus cutting complete. Green pea harvest in full swing. Digging fresh market carrots underway. Rains and cool weather improved prospects for grains. Moisture stress a problem in areas which did not receive rain. Working summerfallow main activity. Some hay rained on but generally in excellent condition. Grasshopper population growing. Wheat headed 86%, 1978 84%.

WEST VIRGINIA: Temperatures below normal. Extremes: 94 and 40°. Precipitation well above normal southwest, slightly below northeast and slightly above elsewhere.

Fieldwork: 3.8 days suitable. Soil moisture adequate to surplus. Main farm activities: Haying, planting corn, and harvesting barley. Barley harvested 8%, 4% 1978. Wheat ripe 8%, 4% 1978. Oats 56% pre-headed, 40% headed, 3% ripe and 1% harvested. Corn good to fair condition; 94% planted, 94% emerged. Tobacco set 76%, 56% 1978. Pasture and hay condition mostly good, 1st cutting of hay 65% complete. Fuel supply adequate to tight.

WISCONSIN: Temperatures averaged 5° below normal. Cool beginning and end of week, warm and windy midweek. Extremes: 89 and 33°. Widely scattered showers and thunderstorms 18th to 21st, lingering light rain extreme north 22d to 23d. Rainfall averaged about 0.50 in. Sunny and pleasant 24th.

Fieldwork: 4 days suitable. First crop haying 55% completed, 1978 65%, normal 50%. Many done south, wet fields slowing progress north. Quality high south where little hay rained on. Alfalfa weevil activity has spread northward, some second crop being sprayed. Corn average height 13 in., 1978 15 in., normal 15 in. Much variance in corn

development, some knee high south and some just emerged north. Little planting of corn still going on. Oats 15% headed, 1978 20%, normal 30%. Early oats heading on short straw south half. Wheat and rye look good. Soybean growth improved with warmer temperatures and some moisture. Pastures in good condition. Good crops of early peas and strawberries being harvested. Tobacco transplanting continuing. Topsoil moisture short south, adequate central, surplus north. Subsoil moisture adequate.

WYOMING: Temperatures near normal. Extremes: 89 and 30°. Precipitation below normal except few stations.

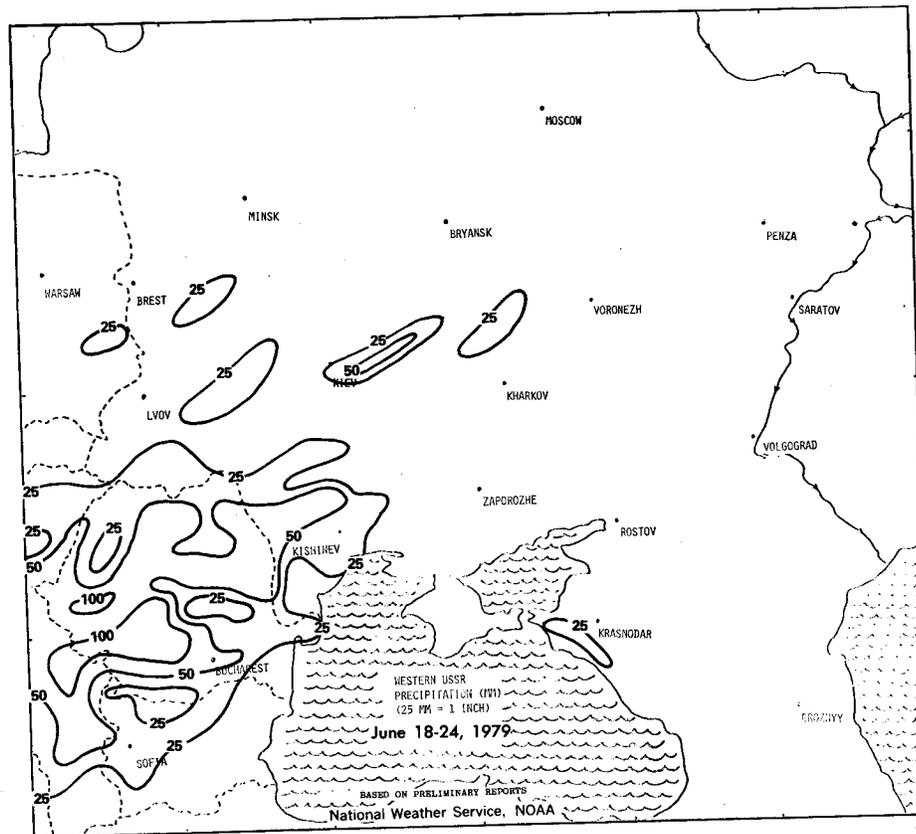
Soil moisture short to adequate. Planting of dry beans almost completed. Percent emerged: Potatoes 76%, dry beans 78%, corn 98%. Crops except corn behind last year. Percent headed: Winter wheat 68%, barley 42%, oats 22%. Sugarbeets 66% thinned. Hay harvested: Alfalfa 20%, other 8%. Condition of crops fair to good. Hail damage to crops light to moderate in northern and southeastern areas. Fieldwork: 5.5 days suitable. Fuel supplies: LP and gasoline adequate, diesel tight in some areas.

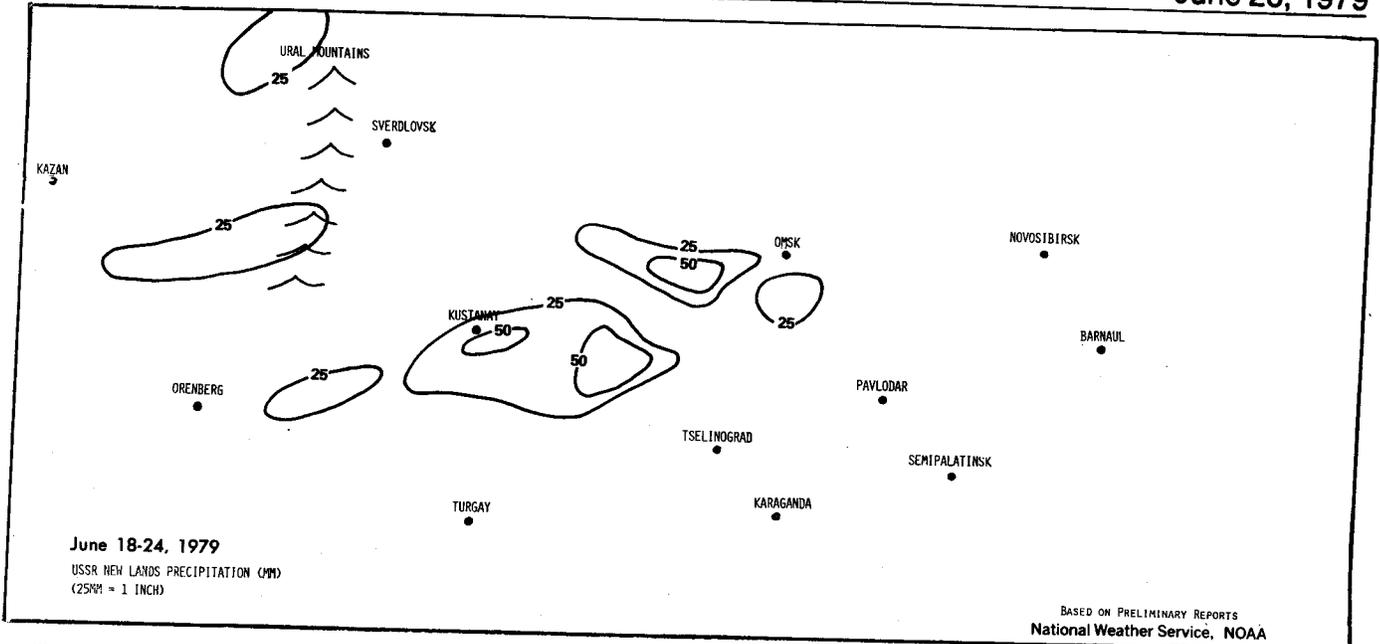
World Weather and Crop Update

June 18 - 24

USSR. The eastern half of the winter grains area continues to experience dry weather. Temperatures ran near normal, but humidities were quite low, and only scattered, light rainfall was reported. Harvest reports from Krasnodar have not indicated any extreme shortfalls in yields, but conditions may have been more severe to the northeast, where

spring grains in the Volga Valley may never really have gotten a good start. On the other hand, normal to much-above-normal rains fell in the New Lands and western Ukraine maintaining good growing conditions in those areas. In fact, drier weather will be needed in southwestern grain areas as harvest time nears.



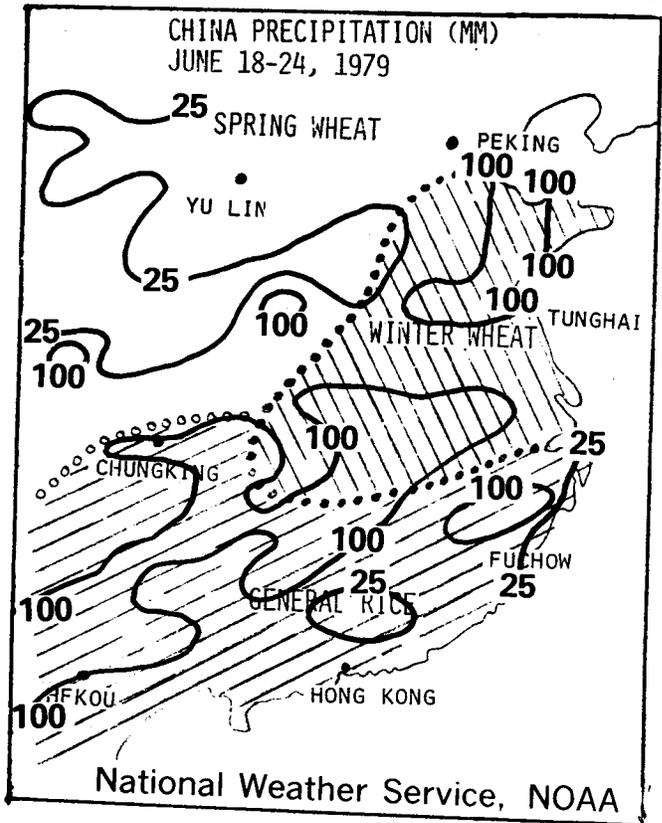


CHINA. As the winter wheat harvest finished up in the North China Plain, abundant rainfall swept the country. Totals in the Yangtze Valley often ranged above 100 mm, and there should be no shortage of water in the southeastern half of the country. Drier weather will be needed in the extreme south as early varieties of rice near maturity. Spring wheat areas of the north received much-above-normal rains of more than 35 mm maintaining good growing conditions.

AUSTRALIA. Winter grains in New South Wales and Queensland had been getting a little dry during the last several weeks, but above-normal rains of about 40 mm have ameliorated conditions. Other areas in Victoria and South Australia had been nearer to normal, and now the crop appears to be in good condition as it goes into dormancy.

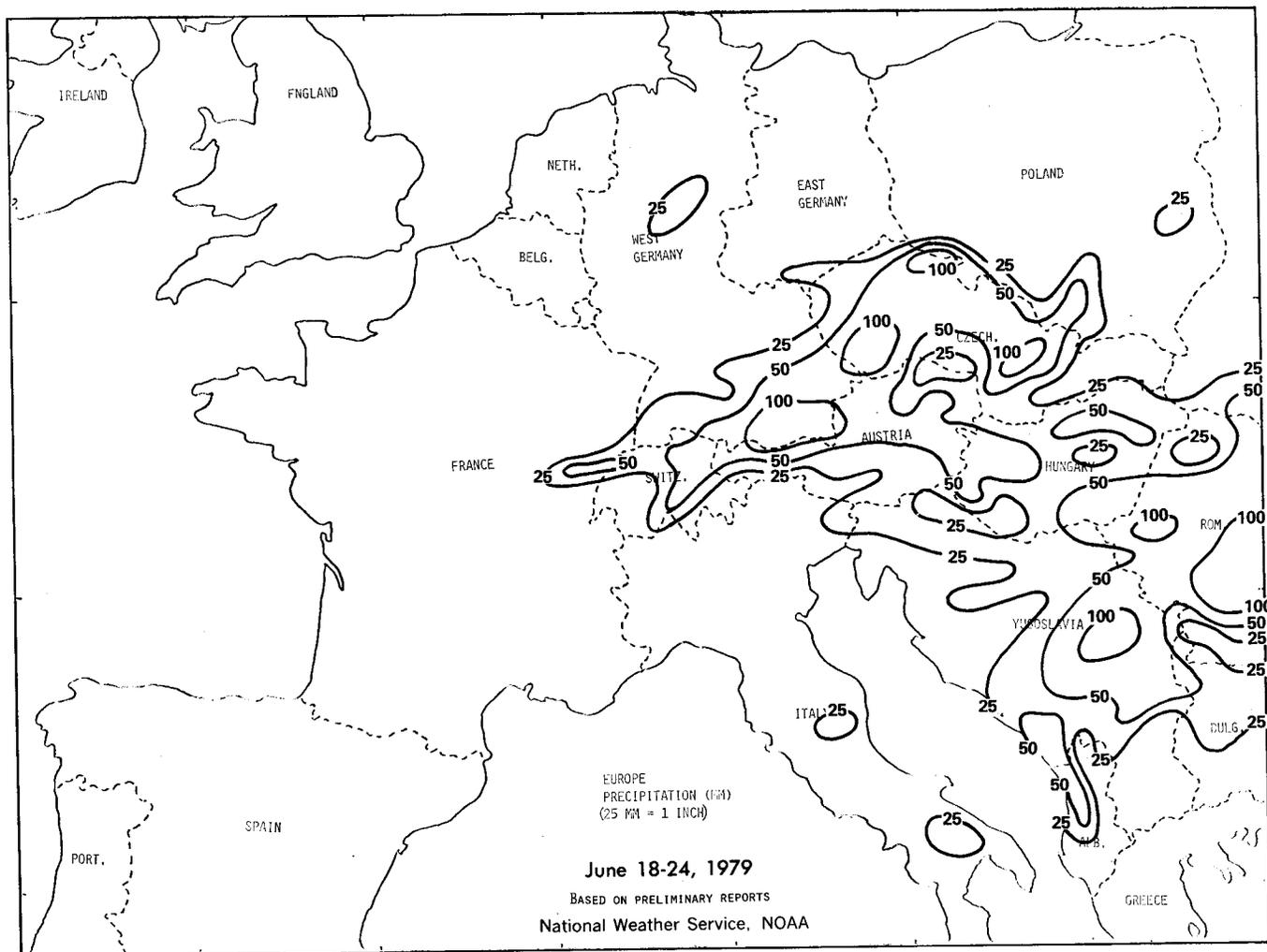
INDIA-SOUTHEAST ASIA. Monsoon rainfall strengthened in some parts of India and weakened in others. Much-above-normal totals fell in a band across the center of the country and along the south-western coast, probably causing some localized flooding. Portions of north central India and the southern peninsula received only light rainfall, but agricultural impacts depend mainly on the extent of rice transplanting in response to earlier rains. Bangladesh rainfall remained near normal, and in Southeast Asia, only a limited area in Thailand missed widespread, abundant rains. The new rice crop of the region should be in good condition.

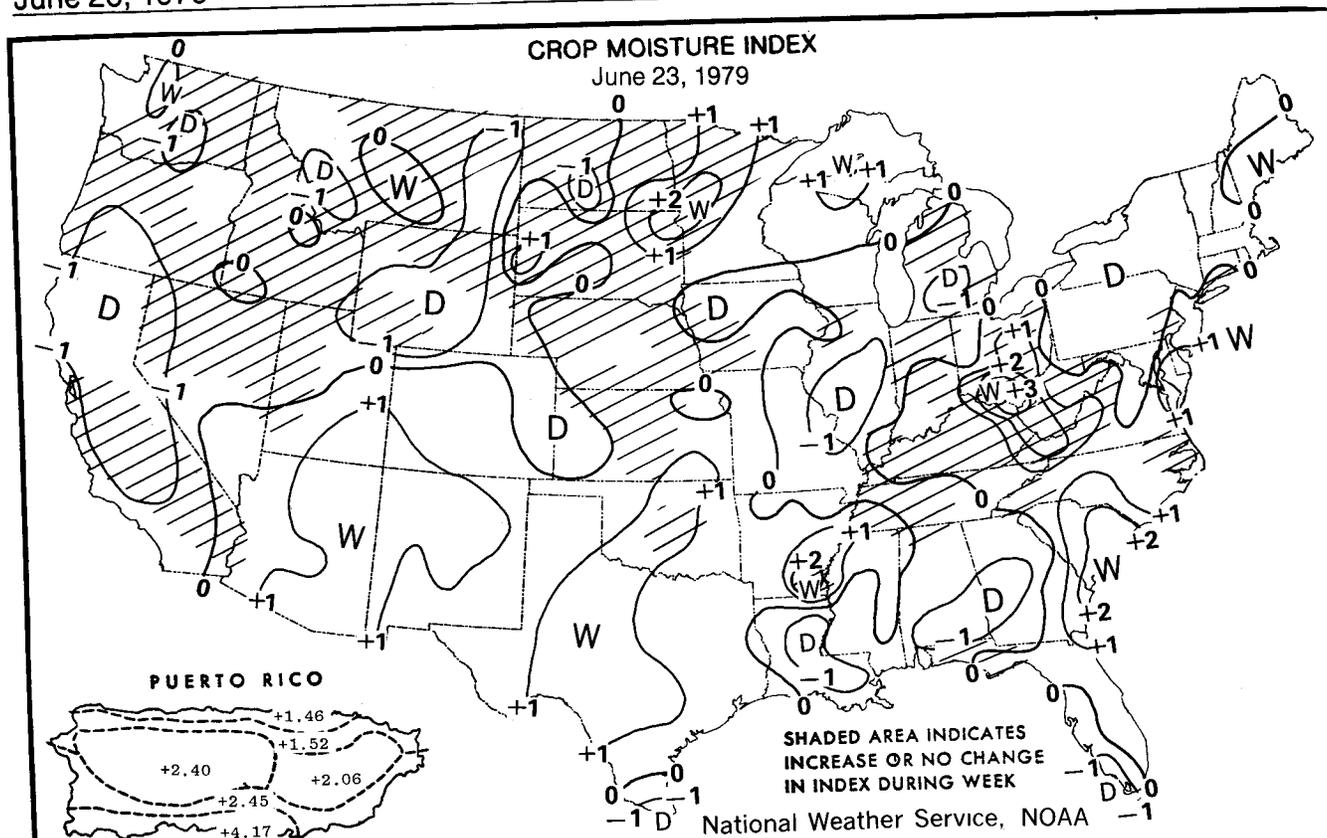
CENTRAL AFRICA. The rainfall band across central Africa remained near normal, though no reports were received from Chad, Uganda, and much of Zaire. Lighter totals were common along the Gold Coast, but previous weeks' rainfall had been quite adequate.



EUROPE. Much-above-normal rainfall (50-100 mm) doused large sections of central and southeastern Europe in a second week of good rains. Spring-sown crops there were reportedly much improved, but winter grain prospects had already been reduced somewhat by the earlier dry weather. Some

dry pockets may still remain, and eastern Poland is becoming drier. Rainfall over most of northwestern Europe has been near normal in recent weeks, and the outlook for winter grains crops is generally optimistic, though down from last year's record levels.





The Crop Moisture Index measures the degree to which moisture requirements of growing crops were met during the previous week. The index is computed from average weekly values of temperature and precipitation. These values are used to calculate the potential moisture demand. Taking into account the previous soil moisture condition and current rainfall, the actual moisture loss is determined.

If the potential moisture demand, or potential evapotranspiration, exceeds available moisture supplies, actual evapotranspiration is reduced and

the CMI gives a negative value. However, if moisture meets or exceeds demand the index is positive.

Shaded areas indicate the previous week's value; soils dried in the unshaded areas. Centers of positive and negative areas are identified by W for wet and D for dry.

Local moisture conditions may vary because of differences in rainfall distribution or soil types. The type of agriculture and stage of crop development must be considered when assessing the impact of moisture conditions based on the Crop Moisture Index. Some general guidelines follow.

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

| SHADED AREA: | INDEX INCREASED OR DID NOT CHANGE |
|--------------|---|
| ABOVE 3.0 | EXCESSIVELY WET, SOME FIELDS FLOODED |
| 2.0 to 3.0 | TOO WET, SOME STANDING WATER |
| 1.0 to 2.0 | PROSPECTS ABOVE NORMAL, SOME FIELDS TOO WET |
| 0 to 1.0 | MOISTURE ADEQUATE FOR PRESENT NEEDS |
| 0 to -1.0 | PROSPECTS IMPROVED BUT RAIN STILL NEEDED |
| 0 to -1.0 | PROSPECTS IMPROVED BUT STILL TOO DRY |
| -1.0 to -2.0 | SOME IMPROVEMENT BUT STILL SERIOUS |
| -2.0 to -3.0 | DROUGHT EASED BUT STILL URGENTLY NEEDED |
| -3.0 to -4.0 | DROUGHT CONTINUED, RAIN URGENTLY NEEDED |
| BELOW -4.0 | NOT ENOUGH RAIN, STILL EXTREMELY DRY |

THE ONLY SIGNIFICANT CHANGES IN THIS WEEK'S CROP MOISTURE INDEX ARE IN EASTERN OHIO, KENTUCKY, THE APPALACHIAN AREA OF WEST VIRGINIA AND NORTH CAROLINA, AND IN EASTERN NORTH DAKOTA AND ALL OF SOUTH DAKOTA. THE MODERATE TO HEAVY RAIN IN THESE AREAS WAS ACCOMPANIED BY SEVERE WEATHER. THE MILDLY DRY AREAS IN THE SOUTH HAVE REMAINED ABOUT THE SAME IN ALABAMA AND GEORGIA BUT HAVE INTENSIFIED SOMEWHAT IN LOUISIANA.

(continued from page 2)

Early-morning and late-evening temperatures plunged from the upper Midwest to the East Coast. Records included 36° at Duluth, eastern Minnesota, 42° at Flint, eastern Michigan, Cleveland's 45°, 44° at Akron/Canton, Ohio, Erie's 47°, 45° at

Syracuse, central New York, and 46° at Scranton/Wilkes Barre, eastern Pennsylvania. By contrast, readings rose to record high levels in Nevada, where Elko notched 98°, and Winnemucca registered 101°.

(continued from page 3)

PASTURES & LIVESTOCK: Pastures generally rated fair to good providing adequate amounts of forage. Several areas of the Nation reported soil moisture shortages including Florida, Louisiana, Texas, and most of the western States. Southwest producers reported high fire hazards on rangelands. Cattle

rated fair to mostly good. Western herdsmen moved cattle to summer ranges or feedlots. Haying activity moved actively in most areas, except in the western north central States and parts of the Pacific Northwest where rains curtailed activity.



FIRST CLASS MAIL

SEEDING PROGRESS

FOR WEEK ENDING JUNE 24

| | SOYBEANS | | |
|-----------|----------|------|------|
| | 1979 | 1978 | AVG. |
| ALA | 91 | 92 | 90 |
| ARK | 81 | 86 | 89 |
| GA | 92 | 90 | 87 |
| ILL | 100 | 97 | 100 |
| IND | 100 | 95 | 90 |
| IOWA | 100 | 100 | 100 |
| KANS | 85 | 85 | 80 |
| KY | NA | 90 | 85 |
| LA | 97 | 95 | 89 |
| MICH | 100 | 98 | 93 |
| MINN | 100 | 100 | 100 |
| MISS | 87 | 88 | 79 |
| MO | 92 | 88 | 85 |
| NEBR | 100 | 100 | 100 |
| NC | 85 | 89 | 86 |
| OHIO | 100 | 100 | 100 |
| SC | 91 | 90 | 90 |
| TENN | 87 | 87 | 82 |
| 18 STATES | 95 | 94 | 92 |

THESE 18 STATES PRODUCED 95% OF THE 1978 SOYBEAN CROP.

| | GRAIN SORGHUM | | |
|----------|---------------|------|------|
| | 1979 | 1978 | AVG. |
| COLO | 90 | 100 | 100 |
| KANS | 90 | 90 | 85 |
| MO | 92 | 87 | 87 |
| NEBR | 100 | 100 | 100 |
| OKLA | 92 | 90 | 92 |
| S DAK | 100 | 95 | 100 |
| TEX | 97 | 96 | 97 |
| 7 STATES | 94 | 94 | 93 |

THESE 7 STATES PRODUCED 92% OF THE 1978 GRAIN SORGHUM CROP.

CROP DEVELOPMENT
 FOR WEEK ENDING JUNE 24

| | WINTER WHEAT COLORED | | | COTTON SQUARING | | | |
|-------|----------------------|------|------|-----------------|------|------|----|
| | 1979 | 1978 | AVG. | 1979 | 1978 | AVG. | |
| CALIF | 100 | NA | NA | ALA | 26 | 26 | 34 |
| COLO | 30 | 50 | 72 | ARIZ | NA | NA | NA |
| IDAHO | NA | NA | NA | ARK | 7 | NA | NA |
| ILL | 95 | 68 | 93 | CALIF | 69 | NA | NA |
| IND | NA | NA | NA | GA | 94 | 67 | NA |
| KANS | 100 | NA | NA | LA | 27 | 38 | NA |
| MO | 96 | 85 | 100 | MISS | 44 | 48 | 43 |
| MONT | NA | NA | NA | MO | NA | NA | NA |
| NEBR | 35 | 50 | 70 | N MEX | NA | NA | NA |
| OHIO | 70 | 45 | 70 | NC | 30 | NA | NA |
| OKLA | 100 | 100 | 100 | OKLA | 0 | 0 | 0 |
| OREG | 29 | NA | NA | SC | NA | NA | NA |
| S DAK | 9 | 38 | 29 | TENN | 7 | 13 | 21 |
| TEX | 100 | NA | NA | TEX | 19 | NA | NA |
| WASH | 100 | NA | NA | | | | |

HARVESTING PROGRESS

FOR WEEK ENDING JUNE 24

| | WINTER WHEAT | | |
|-----------|--------------|------|------|
| | 1979 | 1978 | AVG. |
| CALIF | 45 | NA | NA |
| COLO | 0 | 0 | 0 |
| IDAHO | 0 | 0 | 0 |
| ILL | 8 | 0 | 25 |
| IND | 0 | 0 | 0 |
| KANS | 17 | 5 | 20 |
| MO | 18 | 23 | 38 |
| MONT | 0 | 0 | 0 |
| NEBR | 0 | 0 | 0 |
| OHIO | 0 | 0 | 0 |
| OKLA | 51 | 51 | 72 |
| OREG | 0 | 0 | 0 |
| S DAK | 0 | 0 | 0 |
| TEX | 52 | 45 | 67 |
| WASH | 0 | 0 | 0 |
| 15 STATES | 15 | 15 | 26 |

NA NOT AVAILABLE
 1/ LESS THAN 5%