

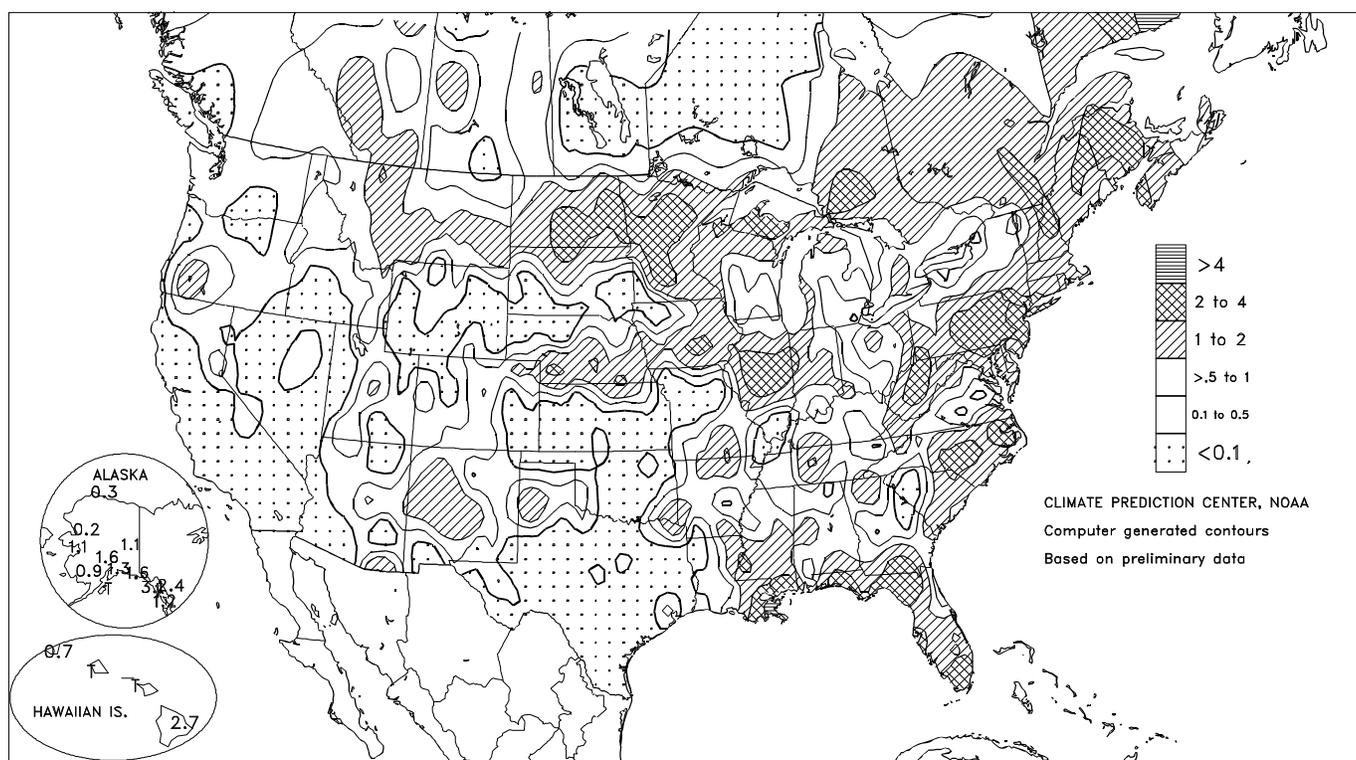
# WEEKLY WEATHER AND CROP BULLETIN

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

U.S. DEPARTMENT OF AGRICULTURE  
National Agricultural Statistics Service  
and World Agricultural Outlook Board

## Total Precipitation (Inches)

AUG 8 - 14, 1999



CLIMATE PREDICTION CENTER, NOAA  
Computer generated contours  
Based on preliminary data

## HIGHLIGHTS

August 8 - 14, 1999

In the **South**, dry, very hot weather (weekly temperatures ranged from 2 to 7°F above normal and peaked at or above 100°F) persisted for a third consecutive week, further depleting topsoil moisture and severely stressing livestock, pastures, and immature summer crops. Farther north, **Corn Belt** temperatures remained favorable for the second consecutive week following the late-July heat wave, averaging as much as 5°F below normal and peaking below 95°F in most areas. In addition, scattered showers provided welcomed moisture for **Midwestern** corn and soybeans, with the most significant rainfall (1 inch or more) reported from **southern Nebraska** to **central Indiana**. Despite the showers, soil moisture remained unfavorably low in the

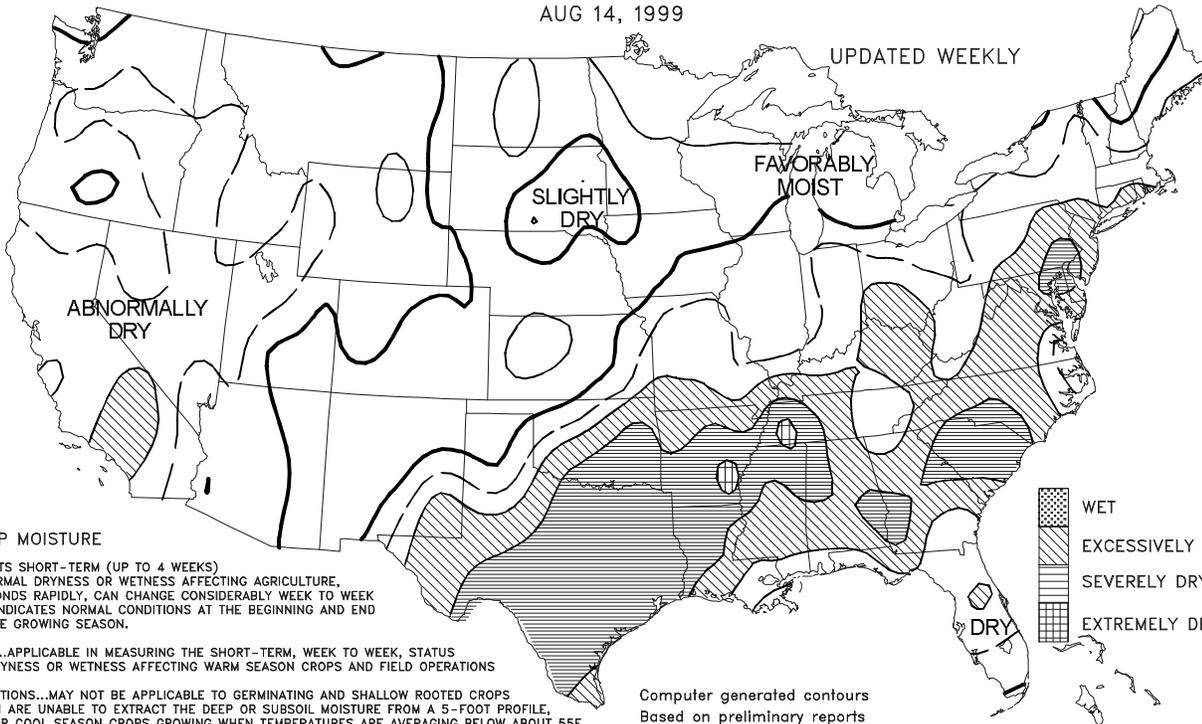
*(Continued on page 5)*

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Crop Moisture  
 SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE  
 AUG 14, 1999

UPDATED WEEKLY



CROP MOISTURE

DEPICTS SHORT-TERM (UP TO 4 WEEKS) ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE, RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK AND INDICATES NORMAL CONDITIONS AT THE BEGINNING AND END OF THE GROWING SEASON.

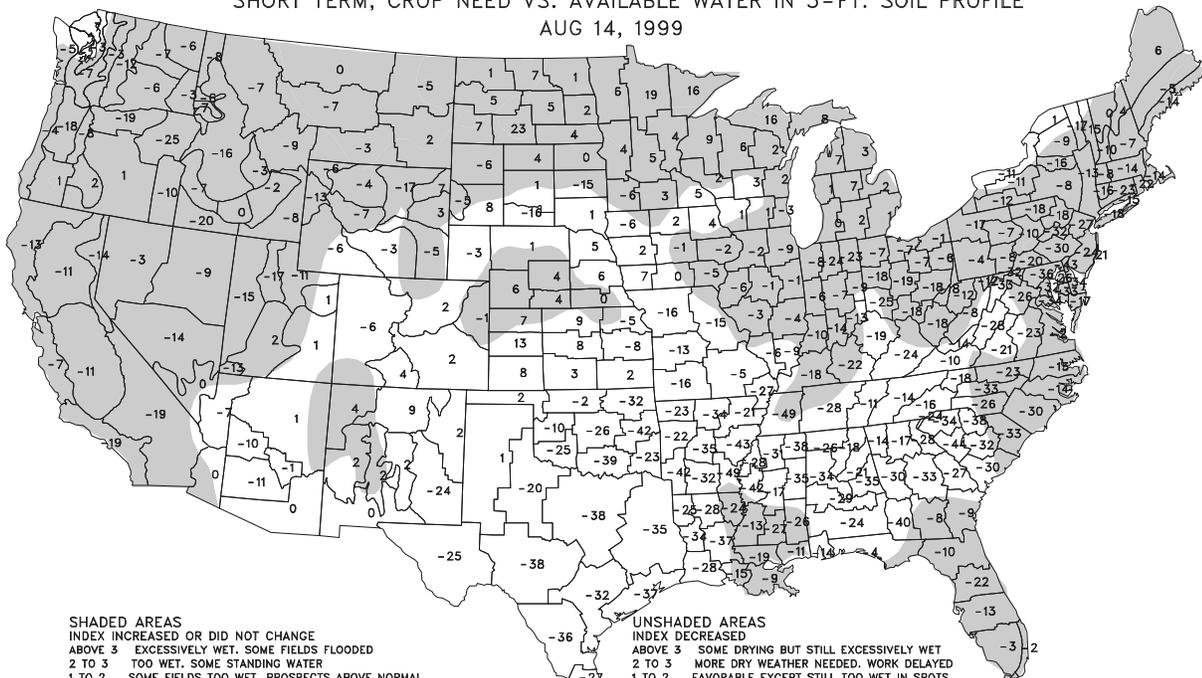
USES...APPLICABLE IN MEASURING THE SHORT-TERM, WEEK TO WEEK, STATUS OF DRYNESS OR WETNESS AFFECTING WARM SEASON CROPS AND FIELD OPERATIONS

LIMITATIONS...MAY NOT BE APPLICABLE TO GERMINATING AND SHALLOW ROOTED CROPS WHICH ARE UNABLE TO EXTRACT THE DEEP OR SUBSOIL MOISTURE FROM A 5-FOOT PROFILE, OR FOR COOL SEASON CROPS GROWING WHEN TEMPERATURES ARE AVERAGING BELOW ABOUT 55F. IT IS NOT GENERALLY INDICATIVE OF THE LONG-TERM (MONTHS, YEARS) DROUGHT OR WET SPELLS WHICH ARE DEPICTED BY THE DROUGHT SEVERITY INDEX.

Computer generated contours  
 Based on preliminary reports

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

Crop Moisture Index  
 SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE  
 AUG 14, 1999



**SHADED AREAS**  
 INDEX INCREASED OR DID NOT CHANGE  
 ABOVE 3 EXCESSIVELY WET. SOME FIELDS FLOODED  
 2 TO 3 TOO WET. SOME STANDING WATER  
 1 TO 2 SOME FIELDS TOO WET. PROSPECTS ABOVE NORMAL  
 0 TO 1 MOISTURE ADEQUATE FOR PRESENT CROP NEEDS  
 0 TO -1 PROSPECTS IMPROVED BUT RAIN STILL NEEDED  
 -1 TO -2 SOME IMPROVEMENT BUT STILL ABNORMALLY DRY  
 -2 TO -3 DRYNESS EASED BUT FIELDS STILL EXCESSIVELY DRY  
 -3 TO -4 SEVERE DRYNESS CONTINUES. MORE RAIN URGENTLY NEEDED  
 BELOW -4 NOT ENOUGH RAIN. STILL EXTREMELY DRY

**UNSHADED AREAS**  
 INDEX DECREASED  
 ABOVE 3 SOME DRYING BUT STILL EXCESSIVELY WET  
 2 TO 3 MORE DRY WEATHER NEEDED. WORK DELAYED  
 1 TO 2 FAVORABLE EXCEPT STILL TOO WET IN SPOTS  
 0 TO 1 FAVORABLE FOR NORMAL GROWTH AND FIELDWORK  
 0 TO -1 TOPSOIL MOISTURE SHORT. GERMINATION SLOW  
 -1 TO -2 ABNORMALLY DRY. PROSPECTS DETERIORATING  
 -2 TO -3 EXCESSIVELY DRY. YIELD PROSPECTS REDUCED  
 -3 TO -4 POTENTIAL YIELDS SEVERELY CUT BY DRYNESS  
 BELOW -4 EXTREMELY DRY. MOST CROPS RUINED

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

BASED ON PRELIMINARY DATA

**Weather Data for Selected Locations in the Delta**

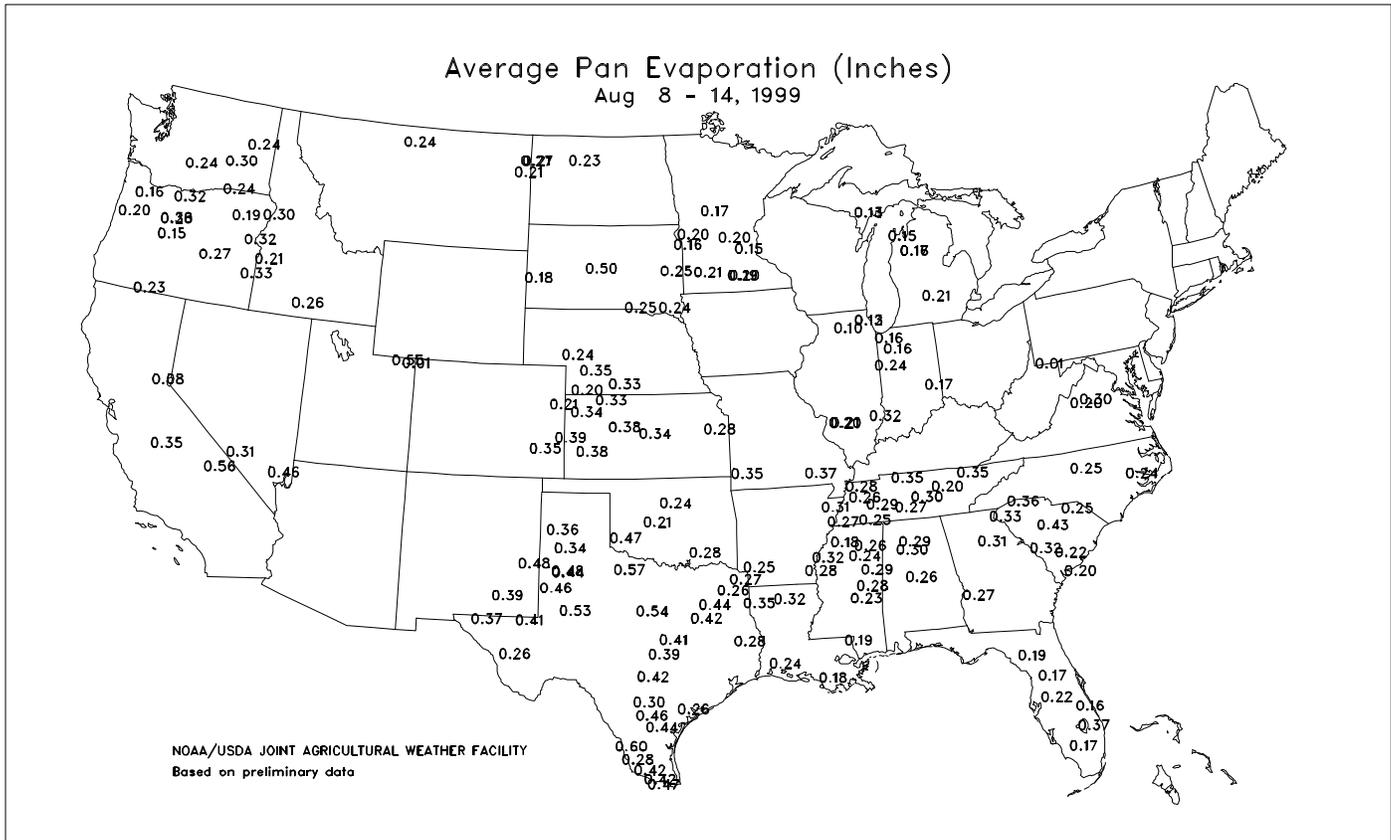
**Weather Data for the Week Ending August 14, 1999**

Data provided by the Mississippi State Delta Research and Extension Center and compiled by USDA/OCE/WAOB's Stoneville Field Office

| STATES AND STATIONS | TEMPERATURE °F  |                 |              |             |         |                       | PRECIPITATION     |                       |                          |                       |                         |                       | 4-INCH SOIL TEMP, °F    |                 | NUMBER OF DAYS  |              |              |                  |                  |
|---------------------|-----------------|-----------------|--------------|-------------|---------|-----------------------|-------------------|-----------------------|--------------------------|-----------------------|-------------------------|-----------------------|-------------------------|-----------------|-----------------|--------------|--------------|------------------|------------------|
|                     | AVERAGE MAXIMUM | AVERAGE MINIMUM | EXTREME HIGH | EXTREME LOW | AVERAGE | DEPARTURE FROM NORMAL | WEEKLY TOTAL, IN. | DEPARTURE FROM NORMAL | GREATEST IN 24-HOUR, IN. | TOTAL IN, SINCE Jun 1 | PCT. NORMAL SINCE Jun 1 | TOTAL IN, SINCE Jan 1 | PCT. NORMAL SINCE Jan 1 | AVERAGE MAXIMUM | AVERAGE MINIMUM | TEMP. °F     |              | PRECIP.          |                  |
|                     |                 |                 |              |             |         |                       |                   |                       |                          |                       |                         |                       |                         |                 |                 | 90 AND ABOVE | 32 AND BELOW | .01 INCH OR MORE | .50 INCH OR MORE |
| MS BATESVILLE       | 92              | 72              | 96           | 63          | 82      | 4                     | 0.92              | 0.33                  | 0.92                     | --                    | --                      | --                    | --                      | --              | --              | 6            | 0            | 1                | 1                |
| BELZONI             | 98              | 73              | 102          | 73          | 86      | 5                     | 0.00              | -0.62                 | 0.00                     | --                    | --                      | --                    | --                      | --              | --              | 6            | 0            | 0                | 0                |
| CLARKSDALE          | 94              | 74              | 100          | 80          | 84      | 4                     | 0.00              | -0.56                 | 0.00                     | --                    | --                      | --                    | --                      | --              | --              | 6            | 0            | 0                | 0                |
| CLEVELAND           | 95              | 73              | 101          | 63          | 84      | 4                     | 0.08              | 0.24                  | 0.08                     | --                    | --                      | --                    | --                      | --              | --              | 6            | 0            | 1                | 0                |
| GREENVILLE          | 98              | 76              | 100          | 72          | 87      | 5                     | 0.00              | -0.48                 | 0.00                     | --                    | --                      | --                    | --                      | --              | --              | 7            | 0            | 0                | 0                |
| GREENWOOD           | 95              | 73              | 100          | 65          | 84      | 3                     | 0.13              | -0.43                 | 0.13                     | --                    | --                      | --                    | --                      | --              | --              | 6            | 0            | 1                | 0                |
| INDIANOLA 1S        | 97              | 75              | 101          | 68          | 86      | --                    | 0.08              | --                    | 0.08                     | 4.69                  | --                      | 32.06                 | --                      | 92              | 85              | 6            | 0            | 1                | 0                |
| INVERNESS 5E        | 97              | 76              | 101          | 70          | 87      | --                    | 0.00              | --                    | 0.00                     | 5.40                  | --                      | 30.52                 | --                      | 91              | 80              | 6            | 0            | 0                | 0                |
| LYON                | 95              | 74              | 100          | 63          | 85      | --                    | 0.22              | --                    | 0.22                     | 6.71                  | --                      | --                    | --                      | --              | --              | 6            | 0            | 1                | 0                |
| MOORHEAD            | 97              | 76              | 101          | 70          | 87      | 6                     | 0.00              | -0.56                 | 0.00                     | --                    | --                      | --                    | --                      | --              | --              | 6            | 0            | 0                | 0                |
| ONWARD              | 97              | 76              | 99           | 69          | 87      | --                    | 1.49              | --                    | 1.49                     | 12.13                 | --                      | 40.29                 | --                      | 84              | 82              | 7            | 0            | 1                | 1                |
| ROLLING FORK        | 98              | 74              | 101          | 69          | 86      | 5                     | 0.12              | -0.35                 | 0.12                     | --                    | --                      | --                    | --                      | --              | --              | 7            | 0            | 1                | 0                |
| SIDON               | 96              | 74              | 100          | 69          | 85      | --                    | 0.00              | --                    | 0.00                     | --                    | --                      | --                    | --                      | 99              | 89              | 6            | 0            | 0                | 0                |
| TUNICA              | 93              | 74              | 99           | 63          | 84      | 4                     | 1.07              | 0.47                  | 1.07                     | --                    | --                      | --                    | --                      | --              | --              | 6            | 0            | 1                | 1                |
| VICKSBURG           | 94              | 76              | 96           | 69          | 85      | 4                     | 1.28              | 0.65                  | 1.28                     | --                    | --                      | --                    | --                      | --              | --              | 7            | 0            | 1                | 1                |
| YAZOO CITY          | 95              | 77              | 97           | 79          | 85      | 1                     | 0.34              | -0.30                 | 0.34                     | --                    | --                      | --                    | --                      | --              | --              | 6            | 0            | 1                | 0                |
| STONEVILLE *        | 99              | 75              | 101          | 77          | 87      | 6                     | 0.07              | -0.43                 | 0.07                     | 4.01                  | 48                      | 35.11                 | 105                     | 101             | 87              | 7            | 0            | 1                | 0                |

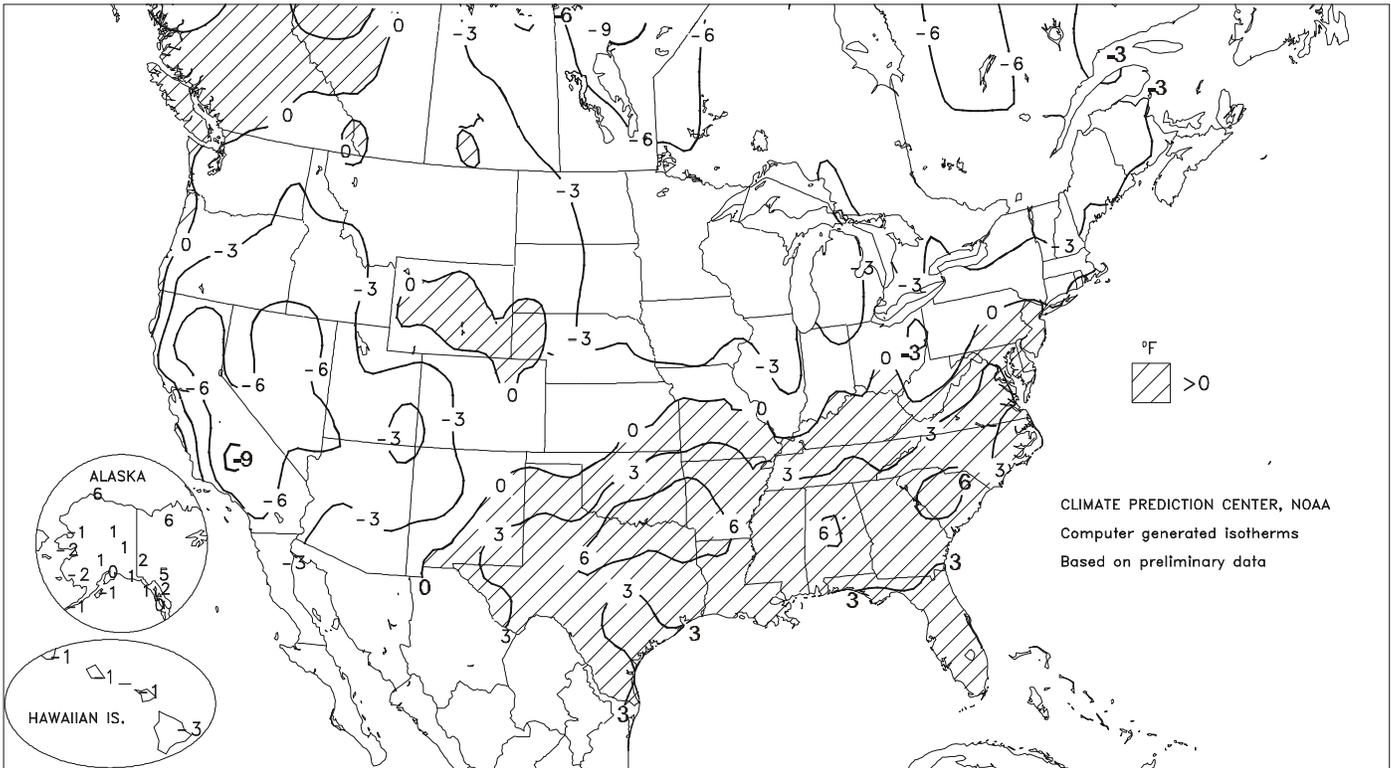
\* Based on 1964-93 normals.

**Delta Weather and Crop Summary:** Despite widely scattered thunderstorms, unfavorably dry conditions continued across the Delta last week. Many farmers began harvesting corn and some rice near the end of the week. Both crops escaped the drought with minimal damage due to most of the corn reaching maturity by the time the dry spell began and rice fields being purposely flooded for weed control. However, other crops, particularly cotton and soybeans, were further stressed by the hot, dry weather.



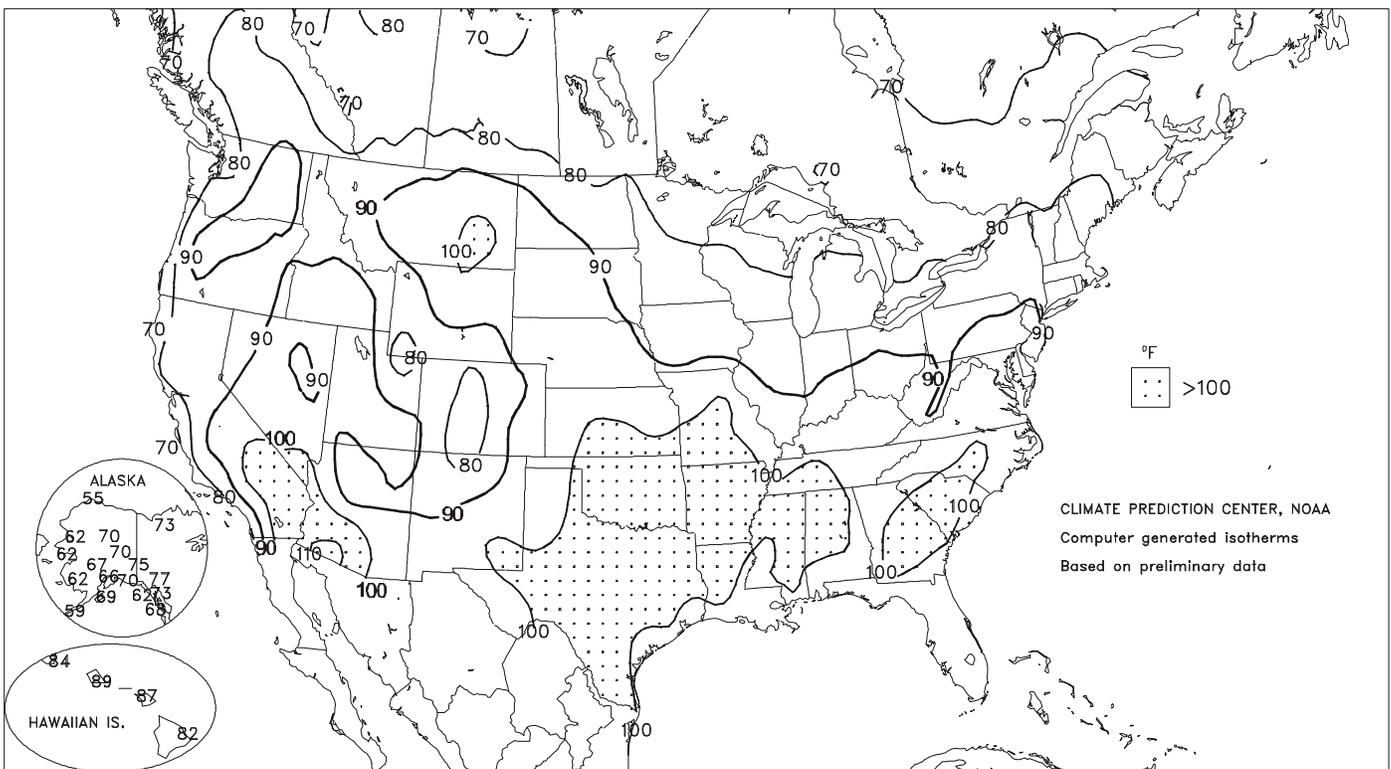
Departure of Average Temperature from Normal (°F)

AUG 8 - 14, 1999



Extreme Maximum Temperature (°F)

AUG 8 - 14, 1999



(Continued from front cover)

**southwestern and eastern Corn Belt.** Meanwhile in the **East**, widespread showers provided limited relief from the 13½-month drought. More than 2 inches of rain fell in parts of the **eastern Carolinas** and from the **central Appalachians** to the **northern Mid-Atlantic region**, including **eastern Pennsylvania** and **New Jersey**. Beneficial showers also dampened some areas from the **lower Mississippi Valley** to **Florida**. In the **northern Plains** and the **Northwest**, cool, showery weather disrupted small grain harvesting, but improved soil moisture and aided immature summer crops. Weekly temperatures averaged as much as 6°F below normal in **eastern North Dakota** and 4°F below normal in the **interior Northwest**. In **California** and the **Great Basin**, very cool weather (3 to 10°F below normal) slowed crop development but eased the threat of wildfires. Seasonal showers returned to the **Southwest** at week's end, following a brief lull.

Extreme heat gripped the **South** until week's end, when a cold front's passage provided some relief in the **Southeastern States**. In **North Carolina**, **Raleigh-Durham** noted four daily-record highs during the week, including maxima of 101°F on August 8 and 11. So far this year, **Raleigh-Durham** has tallied 23 daily-record highs and 12 days with highs at or above 100°F (their previous record was 8 days in 1952). Farther south, six daily-record highs were set or tied during the week in **Augusta, GA**, including maxima of 103°F on August 12 and 13. **Little Rock, AR** posted a high of 105°F on August 11, their highest temperature since an all-time-record high of 110°F on July 31, 1986. In **Missouri**, similarly, **Joplin's** high of 104°F on August 12 was their highest since July 30, 1986, when the mercury reached 108°F. As slightly cooler air trailed the front into the **South** on Sunday, August 15, highs reached only 87°F in **Raleigh-Durham** and 89°F in **Little Rock**. For **Little Rock**, Sunday represented the first day since July 14 that the high temperature failed to reach the 90-degree mark, a span of 31 days. **Little Rock's** most recent longer such streak occurred just last year (33 days, from June 9 to July 11), and their longest such streak on record occurred in 1980 (57 days, from July 22 to September 16).

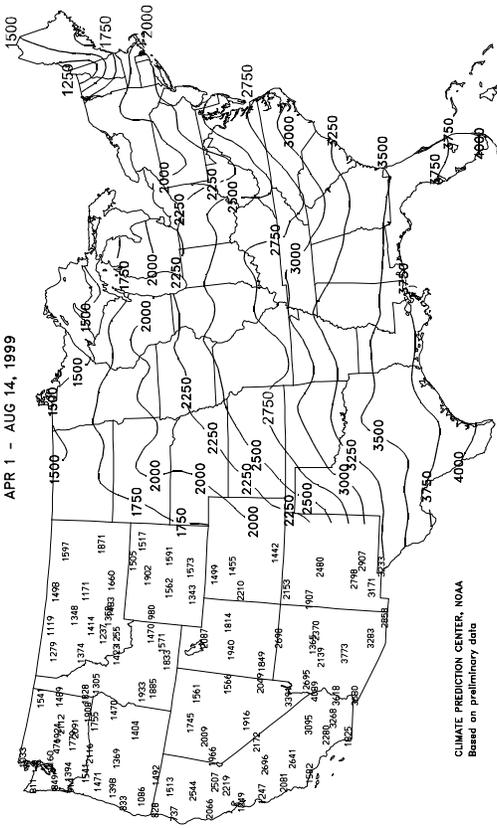
The heat wave did not break at week's end across the **South-Central States**, where **Dallas-Ft. Worth, TX** recorded their 19th consecutive day of 100-degree heat on Sunday, August 15. **Dallas-Ft. Worth** first experienced triple-digit heat this year on July 23, but has registered highs at or above 100°F on all but 2 days since. Just last year, **Dallas-Ft. Worth** noted 29 consecutive days (July 6 - August 3) with 100-degree heat, second only to a 42-days such streak in 1980. August 15 also represented **Dallas-Ft. Worth's** 36th consecutive day without measurable rainfall. Rainfall has also been scarce (less than 25 percent of normal in many areas) for the past 5 weeks in a broad swath from the **southeastern Plains** to the **Tennessee and mid-Mississippi Valleys**. In addition, extreme heat briefly crept as far north as **central Plains**, where **Wichita, KS** weathered their highest reading (106°F on August 11) since June 20, 1998. However, heat remained just south of the **Corn Belt**, where extreme highs generally ranged from 80 to 95°F.

Cool air made a significant push into the **Northeast**, prior to the arrival of late-week rainfall. In **Washington, DC**, an 18-day streak (July 22 - August 8) with highs at or above 90°F--the city's longest since a record-setting 21-day heat wave from July 29 to August 18, 1988--ended with a high of 84°F on Monday. The next morning, scattered frost occurred in the northern portions of **New York** and **New England**, as lows dipped to 32°F in **West Burke, VT** and 36°F in **Saranac Lake, NY**. On Wednesday, localized heavy rainfall developed on and near **Long Island**, resulting in a 6-hour total of 4.37 inches in **Upton (Suffolk County), NY**. More widespread rains arrived at week's end across the **northern Mid-Atlantic region**, totaling 2 to locally as much as 6 inches from **central Pennsylvania** into **New Jersey** and **southeastern New York**. During the 48-hour period ending at 8 a.m. EDT on Sunday, August 15, rainfall reached 5.70 inches in **Southampton (Bucks County), PA** and 4.41 inches in **Trenton (Mercer County), NJ**.

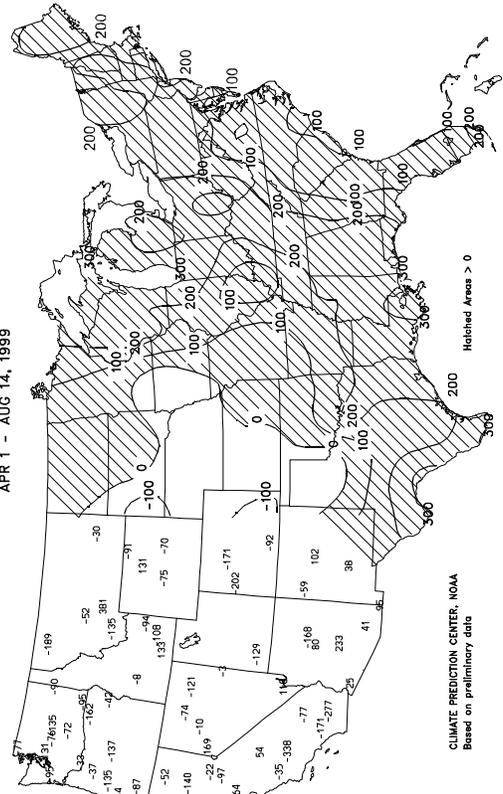
Heavy rain also fell on the **northern Plains**, boosting soil moisture but disrupting fieldwork. **Bismarck, ND** received 4.74 inches of rain on August 11-12, their heaviest 24-hour precipitation total on record in August. Their previous record, 4.64 inches, was set just last year on August 21-22. In **Montana**, August 11 rainfall totaled 1.03 inches in **Great Falls** and 1.79 inches in **Cut Bank**, the greatest 1-day totals since May 30, 1998 (1.88 inches), and June 6, 1995 (2.09 inches), respectively. Rain also dampened the **interior Northwest**, where **Boise, ID** (0.26 inch on August 11) received a measurable amount for the first time since 0.03 inch fell on June 15, a span of 56 days. A day earlier, unusually heavy August showers fell as far south as **northern California**, where **Redding** (0.23 inch) and **Red Bluff** (0.25 inch) posted daily-record totals. The cool, showery weather aided fire containment efforts in the **Great Basin**, where wildfires burned more than 1 million acres during the first half of August. As of August 15, the Nation's year-to-date wildfire acreage reached 3.85 million acres, 173 percent of the 10-year average. More than three-quarters of the acreage burned in three areas: the **western Great Basin** (34 percent of the Nation's year-to-date total), **Alaska** (27 percent, mostly during July), and the **South** (17 percent, mostly during the spring). Meanwhile, a brief break in seasonal shower activity allowed the temperature in **Tucson, AZ** (102°F on August 13) to reach the 100-degree mark for the first time since July 6, ending a 37-day streak. The only longer summer stretches of sub-100°F heat in **Tucson** occurred in 1955 (44 days) and 1968 (42 days).

In **California's San Joaquin Valley**, **Bakersfield** collected four consecutive record-low maximum temperatures (79, 80, 84, and 82°F) from August 6-9, and another (82°F) on August 11. Farther east, **Flagstaff, AZ** notched consecutive daily-record lows (36 and 39°F) on August 12-13. **Elko, NV** posted a record low of 35°F on Saturday. Farther east, **Kansas City, MO** (55°F) also tallied a daily-record low on August 14, just 2 days after highs in the State had soared as high as 105°F in **Columbia** and 104°F in **Joplin**.

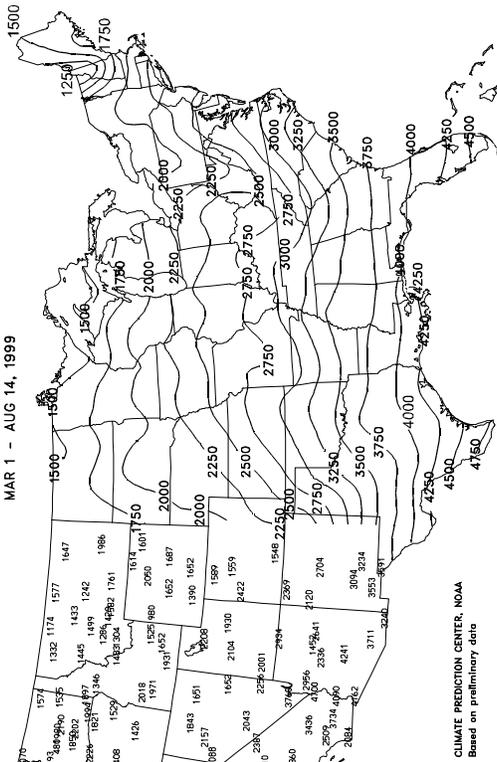
Total Growing Degree Days  
APR 1 - AUG 14, 1999



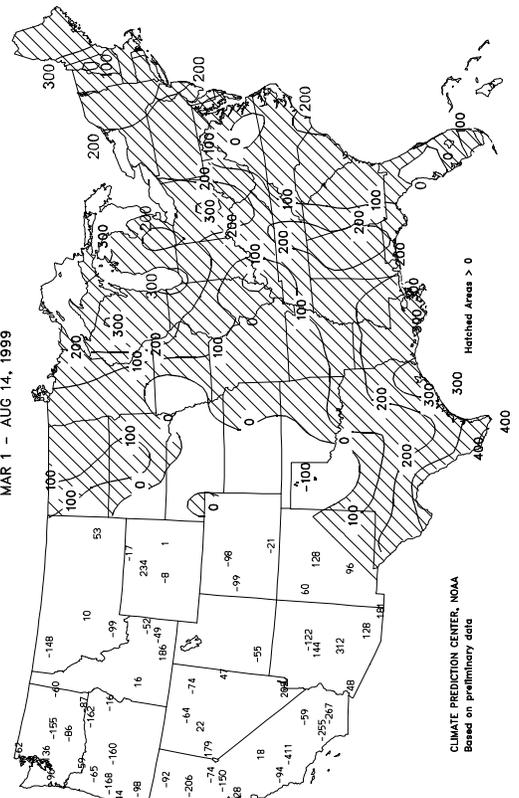
Departure From Normal Growing Degree Days  
APR 1 - AUG 14, 1999



Total Growing Degree Days  
MAR 1 - AUG 14, 1999



Departure From Normal Growing Degree Days  
MAR 1 - AUG 14, 1999



National Weather Data for Selected Cities

Weather Data for the Week Ending August 14, 1999

Data Provided by Climate Prediction Center (301-763-8000 EXT. 7503)

| STATES AND STATIONS | TEMPERATURE °F  |                 |              |             |         |                       | PRECIPITATION     |                       |                          |                       |                         |                       |                         |                 | RELATIVE HUMIDITY, PERCENT |              | NUMBER OF DAYS |                 |                 |         |  |
|---------------------|-----------------|-----------------|--------------|-------------|---------|-----------------------|-------------------|-----------------------|--------------------------|-----------------------|-------------------------|-----------------------|-------------------------|-----------------|----------------------------|--------------|----------------|-----------------|-----------------|---------|--|
|                     | AVERAGE MAXIMUM | AVERAGE MINIMUM | EXTREME HIGH | EXTREME LOW | AVERAGE | DEPARTURE FROM NORMAL | WEEKLY TOTAL, IN. | DEPARTURE FROM NORMAL | GREATEST IN 24-HOUR, IN. | TOTAL IN. SINCE Jun 1 | PCT. NORMAL SINCE Jun 1 | TOTAL IN. SINCE Jan 1 | PCT. NORMAL SINCE Jan 1 | AVERAGE MAXIMUM | AVERAGE MINIMUM            | 90 AND ABOVE | 32 AND BELOW   | TEMP. °F        |                 | PRECIP. |  |
|                     |                 |                 |              |             |         |                       |                   |                       |                          |                       |                         |                       |                         |                 |                            |              |                | 01 INCH OR MORE | 50 INCH OR MORE |         |  |
| AL BIRMINGHAM       | 97              | 75              | 102          | 68          | 86      | 6                     | 0.01              | -0.82                 | 0.01                     | 12.30                 | 115                     | 37.31                 | 102                     | 89              | 45                         | 7            | 0              | 1               | 0               |         |  |
| AL HUNTSVILLE       | 95              | 71              | 102          | 65          | 83      | 4                     | 0.28              | -0.50                 | 0.28                     | 8.42                  | 79                      | 35.57                 | 95                      | 97              | 42                         | 6            | 0              | 1               | 0               |         |  |
| AL MOBILE           | 95              | 76              | 99           | 74          | 85      | 3                     | 0.21              | -1.39                 | 0.13                     | 12.89                 | 85                      | 33.41                 | 80                      | 96              | 59                         | 7            | 0              | 4               | 0               |         |  |
| AL MONTGOMERY       | 97              | 75              | 100          | 73          | 86      | 5                     | 0.00              | -0.84                 | 0.00                     | 13.82                 | 127                     | 31.51                 | 88                      | 93              | 47                         | 7            | 0              | 0               | 0               |         |  |
| AK ANCHORAGE        | 62              | 52              | 66           | 50          | 57      | 0                     | 1.30              | 0.77                  | 0.71                     | 5.59                  | 144                     | 8.10                  | 107                     | 95              | 68                         | 0            | 0              | 5               | 1               |         |  |
| AK BARROW           | 51              | 39              | 55           | 35          | 45      | 6                     | 0.27              | 0.05                  | 0.14                     | 1.35                  | 80                      | 1.81                  | 75                      | 100             | 82                         | 0            | 0              | 4               | 0               |         |  |
| AK FAIRBANKS        | 65              | 53              | 70           | 49          | 59      | 1                     | 1.07              | 0.60                  | 0.41                     | 4.88                  | 116                     | 6.07                  | 94                      | 97              | 57                         | 0            | 0              | 5               | 0               |         |  |
| AK JUNEAU           | 65              | 51              | 73           | 45          | 58      | 2                     | 2.40              | 1.25                  | 1.23                     | 9.25                  | 97                      | 35.71                 | 131                     | 100             | 72                         | 0            | 0              | 6               | 1               |         |  |
| AK KODIAK           | 61              | 49              | 69           | 40          | 55      | -1                    | 0.03              | -1.05                 | 0.03                     | 15.65                 | 148                     | 38.28                 | 102                     | 92              | 64                         | 0            | 0              | 1               | 0               |         |  |
| AK NOME             | 53              | 44              | 62           | 37          | 49      | -2                    | 1.07              | 0.46                  | 0.79                     | 6.97                  | 156                     | 10.34                 | 134                     | 99              | 79                         | 0            | 0              | 6               | 1               |         |  |
| AZ FLAGSTAFF        | 74              | 44              | 79           | 36          | 59      | -6                    | 0.53              | -0.07                 | 0.26                     | 5.17                  | 115                     | 9.95                  | 74                      | 89              | 27                         | 0            | 0              | 4               | 0               |         |  |
| AZ PHOENIX          | 103             | 79              | 107          | 75          | 91      | -1                    | 0.08              | -0.14                 | 0.08                     | 3.04                  | 219                     | 4.46                  | 112                     | 46              | 17                         | 7            | 0              | 1               | 0               |         |  |
| AZ TUCSON           | 98              | 71              | 102          | 68          | 85      | 0                     | 0.03              | -0.49                 | 0.01                     | 4.74                  | 129                     | 6.08                  | 95                      | 63              | 20                         | 7            | 0              | 3               | 0               |         |  |
| AZ YUMA             | 103             | 78              | 108          | 73          | 91      | -2                    | 0.00              | -0.15                 | 0.00                     | 2.49                  | 130                     | 4.26                  | 278                     | 53              | 18                         | 7            | 0              | 0               | 0               |         |  |
| AR FORT SMITH       | 103             | 76              | 106          | 68          | 89      | 8                     | 0.05              | -0.61                 | 0.05                     | 7.92                  | 103                     | 30.13                 | 119                     | 86              | 34                         | 7            | 0              | 1               | 0               |         |  |
| AR LITTLE ROCK      | 97              | 75              | 102          | 69          | 86      | 5                     | 0.25              | -0.47                 | 0.13                     | 3.52                  | 41                      | 26.10                 | 84                      | 90              | 47                         | 7            | 0              | 2               | 0               |         |  |
| CA BAKERSFIELD      | 86              | 60              | 89           | 59          | 73      | -10                   | 0.00              | -0.03                 | 0.00                     | 0.00                  | 0                       | 5.42                  | 140                     | 81              | 33                         | 0            | 0              | 0               | 0               |         |  |
| CA EUREKA           | 66              | 56              | 68           | 53          | 61      | 3                     | 0.06              | -0.04                 | 0.03                     | 0.46                  | 56                      | 27.50                 | 130                     | 94              | 78                         | 0            | 0              | 3               | 0               |         |  |
| CA FRESNO           | 89              | 62              | 93           | 59          | 75      | -6                    | 0.01              | 0.01                  | 0.01                     | 0.21                  | 300                     | 5.97                  | 86                      | 76              | 30                         | 3            | 0              | 1               | 0               |         |  |
| CA LOS ANGELES      | 74              | 64              | 76           | 62          | 69      | -1                    | 0.00              | -0.03                 | 0.00                     | 0.98                  | 1633                    | 7.18                  | 92                      | 84              | 62                         | 0            | 0              | 0               | 0               |         |  |
| CA REDDING          | 87              | 61              | 90           | 57          | 74      | -6                    | 0.23              | 0.14                  | 0.22                     | 0.64                  | 73                      | 17.16                 | 90                      | 75              | 27                         | 1            | 0              | 2               | 0               |         |  |
| CA SACRAMENTO       | 81              | 57              | 85           | 56          | 69      | -7                    | 0.00              | 0.00                  | 0.00                     | 0.03                  | 20                      | 9.91                  | 92                      | 90              | 39                         | 0            | 0              | 0               | 0               |         |  |
| CA SAN DIEGO        | 71              | 63              | 73           | 60          | 67      | -5                    | 0.00              | -0.03                 | 0.00                     | 0.04                  | 33                      | 5.08                  | 82                      | 88              | 69                         | 0            | 0              | 0               | 0               |         |  |
| CA SAN FRANCISCO    | 69              | 58              | 70           | 56          | 64      | 0                     | 0.05              | 0.05                  | 0.05                     | 0.24                  | 200                     | 12.93                 | 105                     | 89              | 62                         | 0            | 0              | 1               | 0               |         |  |
| CO ALAMOSA          | 78              | 47              | 80           | 39          | 62      | -1                    | 0.46              | 0.20                  | 0.23                     | 2.25                  | 95                      | 4.75                  | 106                     | 92              | 30                         | 0            | 0              | 4               | 0               |         |  |
| CO CO SPRINGS       | 81              | 56              | 85           | 52          | 69      | -1                    | 0.09              | -0.64                 | 0.05                     | 10.37                 | 156                     | 22.02                 | 190                     | 81              | 35                         | 0            | 0              | 3               | 0               |         |  |
| CO DENVER           | 85              | 59              | 88           | 50          | 72      | 0                     | 0.59              | 0.23                  | 0.56                     | 8.04                  | 181                     | 17.06                 | 157                     | 83              | 27                         | 0            | 0              | 2               | 1               |         |  |
| CO GRAND JUNCTION   | 85              | 59              | 92           | 54          | 72      | -5                    | 1.18              | 0.99                  | 1.02                     | 2.30                  | 151                     | 5.44                  | 108                     | 71              | 26                         | 2            | 0              | 2               | 1               |         |  |
| CO PUEBLO           | 91              | 57              | 94           | 51          | 74      | -2                    | 0.06              | -0.42                 | 0.04                     | 4.36                  | 101                     | 12.18                 | 155                     | 92              | 24                         | 5            | 0              | 2               | 0               |         |  |
| CT BRIDGEPORT       | 80              | 67              | 85           | 56          | 73      | 0                     | 3.42              | 2.67                  | 1.77                     | 5.20                  | 59                      | 24.48                 | 92                      | 93              | 54                         | 0            | 0              | 4               | 3               |         |  |
| CT HARTFORD         | 82              | 62              | 92           | 53          | 72      | -1                    | 1.13              | 0.32                  | 0.77                     | 4.44                  | 52                      | 21.82                 | 81                      | 93              | 45                         | 2            | 0              | 5               | 1               |         |  |
| DC WASHINGTON       | 93              | 72              | 97           | 64          | 83      | 3                     | 0.38              | -0.53                 | 0.31                     | 3.66                  | 41                      | 18.86                 | 79                      | 84              | 40                         | 5            | 0              | 3               | 0               |         |  |
| DE WILMINGTON       | 87              | 68              | 92           | 56          | 78      | 2                     | 0.29              | -0.49                 | 0.26                     | 2.81                  | 30                      | 22.65                 | 87                      | 86              | 46                         | 3            | 0              | 2               | 0               |         |  |
| FL DAYTONA BEACH    | 93              | 75              | 95           | 73          | 84      | 3                     | 0.03              | -1.34                 | 0.03                     | 13.83                 | 98                      | 24.44                 | 86                      | 96              | 51                         | 7            | 0              | 1               | 0               |         |  |
| FL JACKSONVILLE     | 93              | 75              | 98           | 74          | 84      | 3                     | 0.26              | -1.51                 | 0.25                     | 12.74                 | 87                      | 22.20                 | 70                      | 97              | 55                         | 6            | 0              | 2               | 0               |         |  |
| FL KEY WEST         | 89              | 80              | 91           | 75          | 84      | 0                     | 3.39              | 2.31                  | 3.06                     | 15.07                 | 140                     | 24.08                 | 112                     | 85              | 64                         | 4            | 0              | 3               | 1               |         |  |
| FL MIAMI            | 91              | 77              | 94           | 74          | 84      | 1                     | 2.27              | 0.60                  | 0.75                     | 21.11                 | 116                     | 30.83                 | 91                      | 89              | 58                         | 6            | 0              | 5               | 3               |         |  |
| FL ORLANDO          | 93              | 74              | 95           | 72          | 84      | 1                     | 0.89              | -0.65                 | 0.80                     | 20.14                 | 114                     | 31.79                 | 101                     | 98              | 51                         | 7            | 0              | 3               | 1               |         |  |
| FL PENSACOLA        | 92              | 78              | 98           | 75          | 85      | 3                     | 2.27              | 0.54                  | 1.90                     | 18.13                 | 105                     | 35.67                 | 87                      | 96              | 64                         | 4            | 0              | 4               | 1               |         |  |
| FL TALLAHASSEE      | 94              | 75              | 100          | 73          | 85      | 3                     | 3.37              | 1.60                  | 2.25                     | 19.38                 | 100                     | 36.34                 | 82                      | 99              | 56                         | 6            | 0              | 5               | 2               |         |  |
| FL TAMPA            | 90              | 79              | 93           | 76          | 84      | 2                     | 2.60              | 0.86                  | 1.30                     | 12.82                 | 83                      | 18.79                 | 68                      | 89              | 64                         | 5            | 0              | 6               | 2               |         |  |
| FL WEST PALM BEACH  | 91              | 76              | 94           | 73          | 83      | 1                     | 1.34              | 0.07                  | 1.02                     | 17.74                 | 106                     | 29.43                 | 84                      | 93              | 58                         | 5            | 0              | 6               | 1               |         |  |
| GA ATHENS           | 98              | 71              | 101          | 69          | 85      | 5                     | 0.56              | -0.30                 | 0.44                     | 11.00                 | 104                     | 25.56                 | 76                      | 94              | 37                         | 7            | 0              | 3               | 0               |         |  |
| GA ATLANTA          | 95              | 74              | 98           | 71          | 85      | 6                     | 0.10              | -0.75                 | 0.10                     | 9.37                  | 90                      | 25.57                 | 75                      | 89              | 42                         | 7            | 0              | 1               | 0               |         |  |
| GA AUGUSTA          | 101             | 72              | 103          | 69          | 87      | 6                     | 0.00              | -1.06                 | 0.00                     | 10.11                 | 96                      | 24.13                 | 79                      | 94              | 32                         | 7            | 0              | 0               | 0               |         |  |
| GA COLUMBUS         | 98              | 75              | 102          | 73          | 86      | 4                     | 0.97              | 0.09                  | 0.54                     | 6.24                  | 54                      | 18.83                 | 54                      | 94              | 43                         | 6            | 0              | 4               | 1               |         |  |
| GA MACON            | 99              | 74              | 102          | 72          | 87      | 6                     | 0.30              | -0.55                 | 0.28                     | 10.20                 | 106                     | 23.12                 | 75                      | 97              | 39                         | 7            | 0              | 2               | 0               |         |  |
| GA SAVANNAH         | 95              | 76              | 100          | 72          | 86      | 4                     | 1.63              | -0.13                 | 0.79                     | 23.06                 | 149                     | 36.60                 | 110                     | 96              | 55                         | 7            | 0              | 3               | 2               |         |  |
| HI HILO             | 80              | 67              | 82           | 64          | 74      | -3                    | 2.68              | 0.53                  | 1.41                     | 9.02                  | 45                      | 76.50                 | 96                      | 94              | 65                         | 0            | 0              | 6               | 1               |         |  |
| HI HONOLULU         | 88              | 74              | 89           | 72          | 81      | -1                    | 0.02              | -0.09                 | 0.02                     | 0.76                  | 56                      | 7.01                  | 59                      | 72              | 44                         | 0            | 0              | 1               | 0               |         |  |
| HI KAHULUI          | 85              | 71              | 87           | 68          | 78      | -1                    | 0.03              | -0.08                 | 0.03                     | 0.15                  | 17                      | 6.62                  | 50                      | 80              | 51                         | 0            | 0              | 1               | 0               |         |  |
| HI LIHUE            | 84              | 73              | 84           | 71          | 78      | -1                    | 0.70              | 0.31                  | 0.33                     | 5.03                  | 109                     | 19.13                 | 78                      | 84              | 59                         | 0            | 0              | 4               | 0               |         |  |
| ID BOISE            | 84              | 57              | 96           | 52          | 71      | -3                    | 0.27              | 0.19                  | 0.26                     | 0.74                  | 56                      | 6.57                  | 88                      | 76              | 24                         | 2            | 0              | 2               | 0               |         |  |
| ID LEWISTON         | 82              | 59              | 92           | 54          | 71      | -4                    | 0.00              | -0.17                 | 0.00                     | 1.71                  | 76                      | 6.64                  | 84                      | 85              | 28                         | 2            | 0              | 0               | 0               |         |  |
| ID POCATELLO        | 85              | 50              | 95           | 45          | 68      | -2                    | 0.29              | 0.15                  | 0.23                     | 1.86                  | 96                      | 9.05                  | 118                     | 76              | 20                         | 2            | 0              | 4               | 0               |         |  |
| IL CHICAGO/O'HARE   | 79              | 61              | 88           | 54          | 70      | -3                    | 0.47              | -0.48                 | 0.35                     | 9.35                  | 101                     | 29.16                 | 134                     | 94              | 51                         | 0            | 0              | 3               | 0               |         |  |
| IL MOLINE           | 80              | 60              | 87           | 53          | 70      | -4                    | 1.05              | 0.08                  | 0.97                     | 8.90                  | 80                      | 23.84                 | 95                      | 97              | 58                         | 0            | 0              | 4               | 1               |         |  |
| IL PEORIA           | 80              | 62              | 87           | 55          | 71      | -3                    | 1.08              | 0.39                  | 1.06                     | 9.41                  | 98                      | 23.82                 | 104                     | 95              | 58                         | 0            | 0              | 2               | 1               |         |  |
| IL ROCKFORD         | 78              | 59              | 86           | 50          | 68      | -4                    | 0.67              | -0.27                 | 0.48                     | 10.15                 | 97                      | 26.68                 | 117                     | 99              | 58                         | 0            | 0              | 4               | 0               |         |  |
| IL SPRINGFIELD      | 82              | 63              | 89           | 56          | 73      | -2                    | 2.99              | 2.25                  | 2.94                     | 8.26                  | 98                      | 20.83                 | 94                      | 94              | 55                         | 0            | 0              | 3               | 1               |         |  |
| IN EVANSVILLE       | 87              | 63              | 94           | 56          | 75      | -2                    | 0.62              | -0.10                 | 0.60                     | 8.95                  | 99                      | 30.57                 | 108                     | 95              | 51                         | 3            | 0              | 3               | 1               |         |  |
| IN FORT WAYNE       | 81              | 58              | 87           | 52          | 70      | -3                    | 0.48              | -0.30                 | 0.26                     | 2.96                  | 34                      | 19.77                 | 89                      | 97              | 52                         | 0            | 0              | 3               | 0               |         |  |
| IN INDIANAPOLIS     | 83              | 63              | 89           | 59          | 73      | -1                    | 1.07              | 0.21                  | 0.96                     | 6.77                  | 70                      | 26.24                 | 101                     | 93              | 50                         | 0            | 0              | 3               | 1               |         |  |
| IN SOUTH BEND       | 80              | 60              | 87           | 52          | 70      | -2                    | 1.23              | 0.40                  | 0.96                     | 6.39                  | 67                      | 21.39                 | 90                      | 92              | 51                         | 0            | 0              | 4               | 1               |         |  |
| IA BURLINGTON       | 84              | 66              | 91           | 58          | 75      | 1                     | 0.07              | -0.81                 | 0.03                     | 10.48                 | 104                     | 25.75                 | 114                     | 84              | 52                         | 2            | 0              | 4               | 0               |         |  |
| IA CEDAR RAPIDS     | 78              | 57              | 85           | 50          | 68      | -5                    | 0.72              | -0.19                 | 0.66                     | 11.77                 | 112                     | 26.47                 | 122                     | 100             | 62                         | 0            | 0              | 5               | 1               |         |  |
| IA DES MOINES       | 80</            |                 |              |             |         |                       |                   |                       |                          |                       |                         |                       |                         |                 |                            |              |                |                 |                 |         |  |

Weather Data for the Week Ending August 14, 1999

| STATES AND STATIONS | TEMPERATURE °F  |                 |              |             |         |                       | PRECIPITATION     |                       |                          |                       |                         |                       |                         |                 | RELATIVE HUMIDITY, PERCENT |              | NUMBER OF DAYS |                 |                 |         |  |
|---------------------|-----------------|-----------------|--------------|-------------|---------|-----------------------|-------------------|-----------------------|--------------------------|-----------------------|-------------------------|-----------------------|-------------------------|-----------------|----------------------------|--------------|----------------|-----------------|-----------------|---------|--|
|                     | AVERAGE MAXIMUM | AVERAGE MINIMUM | EXTREME HIGH | EXTREME LOW | AVERAGE | DEPARTURE FROM NORMAL | WEEKLY TOTAL, IN. | DEPARTURE FROM NORMAL | GREATEST IN 24-HOUR, IN. | TOTAL IN, SINCE Jun 1 | PCT. NORMAL SINCE Jun 1 | TOTAL IN, SINCE Jan 1 | PCT. NORMAL SINCE Jan 1 | AVERAGE MAXIMUM | AVERAGE MINIMUM            | 90 AND ABOVE | 32 AND BELOW   | TEMP. °F        |                 | PRECIP. |  |
|                     |                 |                 |              |             |         |                       |                   |                       |                          |                       |                         |                       |                         |                 |                            |              |                | 04 INCH OR MORE | 50 INCH OR MORE |         |  |
| KY WICHITA          | 94              | 70              | 106          | 60          | 82      | 1                     | 0.17              | -0.49                 | 0.17                     | 11.44                 | 130                     | 28.26                 | 147                     | 82              | 34                         | 4            | 0              | 1               | 0               |         |  |
| KY JACKSON          | 84              | 66              | 95           | 60          | 75      | 1                     | 1.28              | 0.37                  | 0.92                     | 7.86                  | 70                      | 26.56                 | 82                      | 89              | 48                         | 2            | 0              | 3               | 1               |         |  |
| KY LEXINGTON        | 87              | 65              | 98           | 59          | 76      | 1                     | 0.23              | -0.70                 | 0.22                     | 7.97                  | 75                      | 23.84                 | 81                      | 88              | 37                         | 4            | 0              | 2               | 0               |         |  |
| KY LOUISVILLE       | 89              | 69              | 99           | 64          | 79      | 2                     | 0.49              | -0.33                 | 0.41                     | 9.11                  | 94                      | 30.09                 | 102                     | 87              | 43                         | 4            | 0              | 2               | 0               |         |  |
| KY PADUCAH          | 91              | 66              | 100          | 57          | 78      | 1                     | 0.36              | -0.39                 | 0.36                     | 9.79                  | 100                     | 31.56                 | 99                      | 93              | 47                         | 4            | 0              | 1               | 0               |         |  |
| LA BATON ROUGE      | 94              | 77              | 97           | 75          | 85      | 3                     | 0.00              | -1.40                 | 0.00                     | 12.64                 | 90                      | 31.13                 | 79                      | 96              | 57                         | 6            | 0              | 0               | 0               |         |  |
| LA LAKE CHARLES     | 95              | 78              | 100          | 77          | 87      | 4                     | 0.00              | -1.19                 | 0.00                     | 13.71                 | 110                     | 28.64                 | 87                      | 95              | 53                         | 7            | 0              | 0               | 0               |         |  |
| LA NEW ORLEANS      | 93              | 78              | 97           | 76          | 85      | 3                     | 3.31              | 1.90                  | 1.80                     | 19.57                 | 132                     | 31.96                 | 80                      | 96              | 61                         | 6            | 0              | 5               | 2               |         |  |
| LA SHREVEPORT       | 99              | 78              | 100          | 77          | 89      | 6                     | 0.00              | -0.54                 | 0.00                     | 10.78                 | 118                     | 41.10                 | 140                     | 86              | 40                         | 7            | 0              | 0               | 0               |         |  |
| ME CARIBOU          | 69              | 50              | 77           | 44          | 60      | -4                    | 2.30              | 1.36                  | 0.81                     | 9.67                  | 110                     | 20.81                 | 99                      | 98              | 58                         | 0            | 0              | 5               | 2               |         |  |
| ME PORTLAND         | 76              | 56              | 83           | 45          | 66      | -2                    | 0.62              | -0.03                 | 0.33                     | 3.44                  | 44                      | 23.24                 | 89                      | 96              | 56                         | 0            | 0              | 4               | 0               |         |  |
| MD BALTIMORE        | 89              | 66              | 95           | 54          | 78      | 1                     | 1.00              | 0.10                  | 0.80                     | 5.09                  | 56                      | 19.90                 | 78                      | 92              | 42                         | 4            | 0              | 3               | 1               |         |  |
| MA BOSTON           | 79              | 64              | 88           | 58          | 72      | -1                    | 0.52              | -0.21                 | 0.49                     | 4.52                  | 61                      | 19.78                 | 79                      | 89              | 54                         | 0            | 0              | 3               | 0               |         |  |
| MA WORCESTER        | 77              | 60              | 85           | 52          | 68      | -1                    | 1.03              | 0.18                  | 0.93                     | 5.17                  | 55                      | 22.37                 | 78                      | 93              | 48                         | 0            | 0              | 4               | 1               |         |  |
| MI ALPENA           | 73              | 52              | 79           | 45          | 62      | -3                    | 0.69              | -0.08                 | 0.46                     | 6.64                  | 89                      | 14.07                 | 80                      | 97              | 51                         | 0            | 0              | 3               | 0               |         |  |
| MI GRAND RAPIDS     | 76              | 57              | 84           | 50          | 67      | -4                    | 0.36              | -0.41                 | 0.29                     | 8.97                  | 107                     | 24.11                 | 116                     | 94              | 54                         | 0            | 0              | 3               | 0               |         |  |
| MI HOUGHTON LAKE    | 73              | 51              | 81           | 40          | 62      | -4                    | 0.43              | -0.31                 | 0.16                     | 12.96                 | 184                     | 20.61                 | 125                     | 96              | 53                         | 0            | 0              | 5               | 0               |         |  |
| MI LANSING          | 76              | 53              | 84           | 45          | 65      | -5                    | 0.47              | -0.22                 | 0.24                     | 10.22                 | 135                     | 21.91                 | 121                     | 97              | 62                         | 0            | 0              | 4               | 0               |         |  |
| MI MARQUETTE        | 67              | 48              | 75           | 40          | 57      | -6                    | 1.61              | 0.87                  | 0.97                     | 9.64                  | 124                     | 26.70                 | 133                     | 93              | 56                         | 0            | 0              | 4               | 1               |         |  |
| MI MUSKEGON         | 76              | 58              | 79           | 48          | 67      | -2                    | 1.35              | 0.62                  | 0.83                     | 8.81                  | 151                     | 22.22                 | 126                     | 97              | 56                         | 0            | 0              | 3               | 2               |         |  |
| MN DULUTH           | 70              | 53              | 75           | 45          | 61      | -4                    | 3.23              | 2.34                  | 2.67                     | 17.07                 | 186                     | 26.11                 | 142                     | 97              | 60                         | 0            | 0              | 4               | 2               |         |  |
| MN INT'L FALLS      | 69              | 48              | 73           | 39          | 59      | -6                    | 1.27              | 0.57                  | 0.70                     | 11.57                 | 129                     | 21.71                 | 139                     | 99              | 52                         | 0            | 0              | 5               | 2               |         |  |
| MN MINNEAPOLIS      | 77              | 59              | 85           | 53          | 68      | -4                    | 1.29              | 0.46                  | 0.76                     | 9.61                  | 104                     | 24.54                 | 130                     | 93              | 52                         | 0            | 0              | 4               | 2               |         |  |
| MN ROCHESTER        | 75              | 56              | 80           | 49          | 65      | -4                    | 1.56              | 0.67                  | 1.28                     | 14.20                 | 146                     | 29.87                 | 156                     | 98              | 65                         | 0            | 0              | 4               | 1               |         |  |
| MS ST. CLOUD        | 76              | 54              | 85           | 46          | 65      | -3                    | 1.07              | 0.17                  | 0.59                     | 9.06                  | 96                      | 17.92                 | 101                     | 96              | 53                         | 0            | 0              | 3               | 1               |         |  |
| MS JACKSON          | 96              | 76              | 99           | 73          | 86      | 5                     | 1.19              | 0.32                  | 1.14                     | 9.94                  | 105                     | 29.86                 | 83                      | 94              | 47                         | 7            | 0              | 2               | 1               |         |  |
| MS MERIDIAN         | 97              | 73              | 100          | 71          | 85      | 4                     | 0.73              | -0.10                 | 0.72                     | 7.04                  | 67                      | 26.17                 | 69                      | 99              | 46                         | 7            | 0              | 2               | 1               |         |  |
| MS TUPELO           | 95              | 75              | 102          | 66          | 85      | 5                     | 0.20              | -0.49                 | 0.20                     | 9.54                  | 100                     | 42.36                 | 117                     | 88              | 44                         | 5            | 0              | 1               | 0               |         |  |
| MO COLUMBIA         | 89              | 65              | 105          | 57          | 77      | 1                     | 0.04              | -0.68                 | 0.03                     | 5.80                  | 62                      | 20.92                 | 85                      | 95              | 41                         | 2            | 0              | 2               | 0               |         |  |
| MO KANSAS CITY      | 87              | 66              | 94           | 55          | 76      | -1                    | 0.10              | -0.78                 | 0.09                     | 10.49                 | 97                      | 30.09                 | 127                     | 90              | 51                         | 2            | 0              | 2               | 0               |         |  |
| MO SAINT LOUIS      | 86              | 69              | 96           | 64          | 78      | -1                    | 1.02              | 0.37                  | 0.79                     | 11.30                 | 127                     | 28.24                 | 118                     | 87              | 50                         | 2            | 0              | 3               | 1               |         |  |
| MO SPRINGFIELD      | 94              | 67              | 104          | 57          | 80      | 3                     | 0.64              | -0.10                 | 0.63                     | 5.76                  | 61                      | 28.39                 | 110                     | 92              | 36                         | 4            | 0              | 2               | 1               |         |  |
| MT BILLINGS         | 85              | 57              | 97           | 53          | 71      | -1                    | 1.03              | 0.81                  | 0.58                     | 3.48                  | 105                     | 8.63                  | 83                      | 80              | 30                         | 2            | 0              | 3               | 1               |         |  |
| MT BUTTE            | 79              | 46              | 88           | 40          | 63      | 0                     | 1.34              | 1.04                  | 0.60                     | 4.52                  | 114                     | 9.98                  | 118                     | 98              | 28                         | 0            | 0              | 5               | 2               |         |  |
| MT GLASGOW          | 84              | 58              | 97           | 55          | 71      | 0                     | 0.14              | -0.18                 | 0.11                     | 4.87                  | 109                     | 11.15                 | 140                     | 84              | 29                         | 2            | 0              | 2               | 0               |         |  |
| MT GREAT FALLS      | 80              | 52              | 93           | 48          | 66      | -2                    | 1.37              | 1.02                  | 0.92                     | 4.00                  | 93                      | 8.91                  | 82                      | 89              | 29                         | 1            | 0              | 4               | 1               |         |  |
| MT KALISPELL        | 77              | 49              | 87           | 43          | 63      | -1                    | 0.59              | 0.28                  | 0.36                     | 3.67                  | 94                      | 9.30                  | 89                      | 99              | 37                         | 0            | 0              | 5               | 0               |         |  |
| MT MILES CITY       | 88              | 60              | 102          | 57          | 74      | 0                     | 1.24              | 0.99                  | 1.02                     | 3.84                  | 79                      | 8.80                  | 87                      | 78              | 28                         | 3            | 0              | 2               | 1               |         |  |
| MT MISSOULA         | 78              | 53              | 89           | 49          | 66      | -2                    | 0.70              | 0.43                  | 0.55                     | 4.88                  | 152                     | 8.36                  | 93                      | 92              | 32                         | 0            | 0              | 5               | 1               |         |  |
| NE GRAND ISLAND     | 85              | 61              | 92           | 53          | 73      | -2                    | 1.81              | 1.18                  | 1.81                     | 10.82                 | 135                     | 21.59                 | 124                     | 96              | 51                         | 2            | 0              | 1               | 1               |         |  |
| NE LINCOLN          | 86              | 63              | 94           | 52          | 74      | -2                    | 0.71              | -0.05                 | 0.71                     | 9.55                  | 111                     | 22.88                 | 123                     | 94              | 49                         | 3            | 0              | 1               | 1               |         |  |
| NE NORFOLK          | 84              | 60              | 93           | 50          | 72      | -2                    | 0.15              | -0.43                 | 0.13                     | 11.50                 | 130                     | 22.62                 | 126                     | 94              | 50                         | 1            | 0              | 3               | 0               |         |  |
| NE NORTH PLATTE     | 85              | 57              | 91           | 46          | 71      | -2                    | 0.70              | 0.29                  | 0.54                     | 8.84                  | 121                     | 14.83                 | 101                     | 96              | 45                         | 1            | 0              | 2               | 1               |         |  |
| NE OMAHA            | 82              | 62              | 89           | 53          | 72      | -3                    | 1.09              | 0.37                  | 1.09                     | 12.07                 | 137                     | 28.34                 | 145                     | 97              | 59                         | 0            | 0              | 1               | 1               |         |  |
| NE SCOTTSBLUFF      | 89              | 57              | 94           | 53          | 73      | 0                     | 0.02              | -0.24                 | 0.02                     | 5.81                  | 110                     | 12.06                 | 104                     | 87              | 27                         | 4            | 0              | 1               | 0               |         |  |
| NE VALENTINE        | 88              | 56              | 94           | 44          | 72      | -2                    | 0.00              | -0.55                 | 0.00                     | 8.37                  | 118                     | 15.36                 | 113                     | 89              | 35                         | 3            | 0              | 0               | 0               |         |  |
| NE ELY              | 82              | 45              | 88           | 38          | 64      | -3                    | 0.16              | -0.02                 | 0.16                     | 2.46                  | 126                     | 4.87                  | 76                      | 60              | 14                         | 0            | 0              | 1               | 0               |         |  |
| NE LAS VEGAS        | 98              | 72              | 102          | 69          | 85      | -5                    | 0.21              | 0.10                  | 0.21                     | 2.54                  | 368                     | 3.35                  | 132                     | 35              | 15                         | 7            | 0              | 1               | 0               |         |  |
| NE RENO             | 81              | 52              | 87           | 47          | 67      | -4                    | 0.26              | 0.19                  | 0.24                     | 0.82                  | 96                      | 3.72                  | 79                      | 76              | 23                         | 0            | 0              | 2               | 0               |         |  |
| NE WINNEMUCCA       | 85              | 44              | 91           | 38          | 65      | -6                    | 0.06              | -0.05                 | 0.06                     | 1.32                  | 99                      | 4.67                  | 90                      | 75              | 21                         | 2            | 0              | 1               | 0               |         |  |
| NH CONCORD          | 77              | 54              | 88           | 42          | 66      | -3                    | 1.16              | 0.39                  | 0.61                     | 7.65                  | 96                      | 22.31                 | 102                     | 96              | 52                         | 0            | 0              | 5               | 1               |         |  |
| NJ NEWARK           | 85              | 70              | 89           | 61          | 78      | 0                     | 2.06              | 1.16                  | 1.10                     | 3.76                  | 39                      | 23.47                 | 84                      | 81              | 48                         | 0            | 0              | 4               | 2               |         |  |
| NM ALBUQUERQUE      | 84              | 63              | 89           | 61          | 74      | -3                    | 0.26              | -0.13                 | 0.23                     | 4.14                  | 152                     | 6.48                  | 126                     | 78              | 28                         | 0            | 0              | 2               | 0               |         |  |
| NY ALBANY           | 79              | 59              | 86           | 51          | 69      | -2                    | 2.19              | 1.39                  | 1.21                     | 6.53                  | 78                      | 20.42                 | 91                      | 95              | 53                         | 0            | 0              | 4               | 2               |         |  |
| NY BINGHAMTON       | 75              | 56              | 83           | 50          | 65      | -3                    | 0.51              | -0.26                 | 0.18                     | 6.30                  | 73                      | 19.23                 | 85                      | 95              | 55                         | 0            | 0              | 5               | 0               |         |  |
| NY BUFFALO          | 76              | 60              | 84           | 53          | 68      | -2                    | 0.37              | -0.57                 | 0.25                     | 3.97                  | 47                      | 18.30                 | 82                      | 94              | 59                         | 0            | 0              | 3               | 0               |         |  |
| NY ROCHESTER        | 74              | 59              | 82           | 54          | 67      | -2                    | 0.50              | -0.27                 | 0.25                     | 6.61                  | 91                      | 19.29                 | 101                     | 93              | 59                         | 0            | 0              | 6               | 0               |         |  |
| NY SYRACUSE         | 77              | 59              | 84           | 54          | 68      | -1                    | 0.45              | -0.34                 | 0.30                     | 5.37                  | 58                      | 18.48                 | 80                      | 89              | 53                         | 0            | 0              | 5               | 0               |         |  |
| NC ASHEVILLE        | 89              | 63              | 95           | 58          | 76      | 4                     | 0.41              | -0.66                 | 0.34                     | 8.66                  | 79                      | 26.12                 | 86                      | 100             | 46                         | 2            | 0              | 4               | 0               |         |  |
| NC CHARLOTTE        | 95              | 70              | 99           | 68          | 83      | 4                     | 0.08              | -0.77                 | 0.08                     | 7.53                  | 83                      | 20.65                 | 75                      | 92              | 41                         | 6            | 0              | 1               | 0               |         |  |
| NC GREENSBORO       | 92              | 71              | 96           | 67          | 81      | 5                     | 1.88              | 0.98                  | 1.74                     | 10.28                 | 101                     | 24.50                 | 90                      | 89              | 42                         | 5            | 0              | 3               | 1               |         |  |
| NC HATTERAS         | 86              | 77              | 88           | 72          | 81      | 2                     | 1.25              | -0.12                 | 1.22                     | 8.54                  | 72                      | 29.77                 | 90                      | 89              | 69                         | 0            | 0              | 2               | 1               |         |  |
| NC RALEIGH          | 96              | 71              | 101          | 64          | 83      | 6                     | 1.82              | 0.88                  | 1.61                     | 6.06                  | 63                      | 21.59                 | 80                      | 95              | 41                         | 6            | 0              | 3               | 1               |         |  |
| NC WILMINGTON       | 93              | 75              | 98           | 69          | 84      | 4                     | 0.90              | -0.73                 | 0.45                     | 9.11                  | 52                      | 31.74                 | 88                      | 90              | 57                         | 5            | 0              | 4               | 0               |         |  |
| ND BISMARCK         | 80              | 56              | 90           | 47          | 68      | -2                    | 4.76              | 4.37                  | 4.57                     | 13.08                 | 231                     | 23.42                 | 209                     | 93              | 51                         | 1            | 0              | 2               | 1               |         |  |
| ND DICKINSON        | 82              | 55              | 94           | 47          | 69      | -2                    | 2.44              | 2.11                  | 1.80                     | 5.96                  | 100                     | 13.46                 | 114                     | 89              | 41                         | 1            | 0              | 3               | 2               |         |  |
| ND FARGO            | 77              | 56              | 83           | 49          | 70      | -4                    | 1.78              | 1.22                  | 1.47                     | 5.97                  | 90                      | 13.66                 | 104                     | 96              | 53                         | 0            | 0              | 4               | 1               |         |  |
| ND GRAND FORKS      | 73              | 52              | 82           | 44          | 63      | -6                    | 1.07              | 0.52                  | 0.79                     | 6.76                  | 101                     | 15.93                 | 130                     | 96              | 53                         | 0            | 0              | 3               | 1               |         |  |
| ND JAMESTOWN        | 76              | 54              | 85           | 46          | 65      | -5                    | 2.46              | 1.98                  | 2.09                     | 8.33                  | 123                     | 18.03                 | 149                     | 98              | 55                         | 0            | 0              | 4               | 1               |         |  |
| ND WILLISTON        | 83              | 56              | 94           | 46          | 70      | -1                    | 0.28              | -0.01                 | 0.20                     | 6.46                  | 130                     | 12.77                 | 129                     | 89              | 35                         | 1            | 0              | 3               | 0               |         |  |
| OH AKRON-CANTON     | 77              | 59              | 83           | 50          | 68      | -3                    | 0.70              | -0.06                 | 0.24                     | 8.56                  | 97                      | 23.19                 | 99                      | 96              | 69                         | 0            | 0              | 4               | 0               |         |  |
| OH CINCINNATI       | 83              | 63              | 92           | 58          | 73      | -1                    | 1.43              | 0.65                  | 1.38                     | 7.75                  | 80                      | 22.93                 | 84                      | 91              | 49                         | 1            | 0              | 3               | 1               |         |  |
| OH CLEVELAND        | 77              | 62              | 85           | 57          | 70      | -2                    | 0.47              | -0.30                 | 0.19                     | 7.11                  | 82                      | 19.90                 | 88                      | 91              | 58                         | 0            | 0              | 6               | 0               |         |  |
| OH COLUMBUS         | 84              | 64              | 93           | 57          | 74      | 2                     | 0.23              | -0.64                 | 0.12                     | 4.07                  | 40                      | 18.04                 | 72                      | 92              | 45                         | 1            | 0              | 5               | 0               |         |  |
| OH DAYTON           | 83              | 61              | 92           | 55          | 72      | -1                    | 0.03              | -0.71                 | 0.01                     | 6.61                  | 74                      | 21.63                 | 90                      | 90              | 41                         | 1            | 0              | 2               | 0               |         |  |
| OH MANSFIELD        | 77              | 58              | 84           | 49          | 68      | -4                    | 0.67              | -0.27                 | 0.36                     | 8.67                  | 88                      | 24.59                 | 98                      | 95              | 58                         | 0            | 0              | 5               | 0               |         |  |

Weather Data for the Week Ending August 14, 1999

| STATES AND STATIONS | TEMPERATURE °F  |                 |              |             |         |                       | PRECIPITATION     |                       |                          |                       |                         |                       |                         | RELATIVE HUMIDITY, PERCENT |                 | NUMBER OF DAYS |              |                  |                 |
|---------------------|-----------------|-----------------|--------------|-------------|---------|-----------------------|-------------------|-----------------------|--------------------------|-----------------------|-------------------------|-----------------------|-------------------------|----------------------------|-----------------|----------------|--------------|------------------|-----------------|
|                     | AVERAGE MAXIMUM | AVERAGE MINIMUM | EXTREME HIGH | EXTREME LOW | AVERAGE | DEPARTURE FROM NORMAL | WEEKLY TOTAL, IN. | DEPARTURE FROM NORMAL | GREATEST IN 24-HOUR, IN. | TOTAL IN, SINCE Jun 1 | PCT. NORMAL SINCE Jun 1 | TOTAL IN, SINCE Jan 1 | PCT. NORMAL SINCE Jan 1 | AVERAGE MAXIMUM            | AVERAGE MINIMUM | 90 AND ABOVE   | 32 AND BELOW | PRECIP           |                 |
|                     |                 |                 |              |             |         |                       |                   |                       |                          |                       |                         |                       |                         |                            |                 |                |              | 0.1 INCH OR MORE | 50 INCH OR MORE |
| OK TOLEDO           | 79              | 59              | 87           | 51          | 69      | -2                    | 0.49              | -0.25                 | 0.30                     | 5.72                  | 67                      | 21.78                 | 106                     | 95                         | 52              | 0              | 0            | 3                | 0               |
| OK YOUNGSTOWN       | 76              | 56              | 83           | 50          | 66      | -3                    | 1.57              | 0.82                  | 0.85                     | 10.42                 | 109                     | 27.38                 | 117                     | 94                         | 60              | 0              | 0            | 4                | 2               |
| OK OKLAHOMA CITY    | 98              | 74              | 103          | 66          | 86      | 4                     | 0.00              | -0.54                 | 0.00                     | 11.79                 | 148                     | 28.27                 | 132                     | 82                         | 37              | 7              | 0            | 0                | 0               |
| OK TULSA            | 99              | 73              | 107          | 61          | 86      | 3                     | 0.03              | -0.62                 | 0.03                     | 5.56                  | 63                      | 30.13                 | 120                     | 85                         | 32              | 7              | 0            | 1                | 0               |
| OR ASTORIA          | 66              | 56              | 70           | 53          | 61      | 0                     | 0.43              | 0.17                  | 0.22                     | 5.00                  | 123                     | 54.84                 | 151                     | 96                         | 75              | 0              | 0            | 3                | 0               |
| OR BURNS            | 78              | 47              | 88           | 36          | 62      | -3                    | 0.31              | 0.17                  | 0.16                     | 0.89                  | 59                      | 5.94                  | 101                     | 88                         | 24              | 0              | 0            | 3                | 0               |
| OR EUGENE           | 78              | 56              | 89           | 50          | 67      | -1                    | 0.02              | -0.20                 | 0.01                     | 1.56                  | 66                      | 27.89                 | 104                     | 91                         | 37              | 0              | 0            | 2                | 0               |
| OR MEDFORD          | 82              | 59              | 91           | 55          | 71      | -3                    | 1.15              | 1.04                  | 1.15                     | 1.63                  | 160                     | 11.52                 | 119                     | 85                         | 34              | 2              | 0            | 1                | 1               |
| OR PENDLETON        | 83              | 57              | 93           | 53          | 70      | -3                    | 0.04              | -0.07                 | 0.04                     | 0.91                  | 75                      | 5.45                  | 77                      | 75                         | 29              | 1              | 0            | 1                | 0               |
| OR PORTLAND         | 75              | 60              | 86           | 57          | 68      | -2                    | 0.33              | 0.11                  | 0.23                     | 2.73                  | 107                     | 25.63                 | 130                     | 88                         | 46              | 0              | 0            | 2                | 0               |
| OR SALEM            | 78              | 57              | 89           | 53          | 67      | 0                     | 0.14              | -0.01                 | 0.10                     | 2.08                  | 95                      | 31.41                 | 149                     | 94                         | 42              | 0              | 0            | 2                | 0               |
| PA ALLENTOWN        | 86              | 62              | 93           | 51          | 74      | 1                     | 0.32              | -0.64                 | 0.31                     | 1.75                  | 18                      | 17.59                 | 65                      | 87                         | 37              | 3              | 0            | 2                | 0               |
| PA ERIE             | 77              | 62              | 86           | 55          | 69      | -2                    | 2.08              | -0.81                 | 0.06                     | 7.02                  | 76                      | 22.97                 | 98                      | 87                         | 54              | 0              | 0            | 3                | 0               |
| PA MIDDLETOWN       | 88              | 66              | 95           | 60          | 77      | 2                     | 2.01              | 1.27                  | 1.53                     | 7.01                  | 78                      | 20.98                 | 82                      | 83                         | 42              | 3              | 0            | 2                | 1               |
| PA PHILADELPHIA     | 89              | 70              | 94           | 64          | 80      | 3                     | 1.62              | 0.75                  | 1.38                     | 4.00                  | 41                      | 22.87                 | 86                      | 89                         | 47              | 4              | 0            | 3                | 1               |
| PA PITTSBURGH       | 79              | 59              | 87           | 54          | 69      | -2                    | 0.34              | -0.40                 | 0.18                     | 9.32                  | 104                     | 26.15                 | 109                     | 94                         | 51              | 0              | 0            | 3                | 0               |
| PA WILKES-BARRE     | 82              | 60              | 90           | 51          | 71      | 0                     | 1.23              | 0.48                  | 1.08                     | 6.08                  | 142                     | 19.86                 | 87                      | 88                         | 40              | 1              | 0            | 2                | 1               |
| PA WILLIAMSPORT     | 84              | 60              | 91           | 54          | 72      | 0                     | 0.51              | -0.26                 | 0.51                     | 7.27                  | 74                      | 22.22                 | 87                      | 89                         | 44              | 1              | 0            | 1                | 1               |
| RI PROVIDENCE       | 80              | 64              | 85           | 54          | 72      | 0                     | 0.79              | -0.03                 | 0.72                     | 1.83                  | 22                      | 23.15                 | 84                      | 89                         | 56              | 0              | 0            | 2                | 1               |
| SC BEAUFORT         | 96              | 77              | 99           | 74          | 86      | 6                     | 0.12              | -1.72                 | 0.08                     | 21.62                 | 134                     | 34.48                 | 101                     | 94                         | 55              | 7              | 0            | 2                | 0               |
| SC CHARLESTON       | 95              | 77              | 99           | 74          | 86      | 5                     | 1.12              | -0.57                 | 0.94                     | 6.63                  | 40                      | 20.02                 | 58                      | 95                         | 51              | 7              | 0            | 3                | 1               |
| SC COLUMBIA         | 100             | 75              | 101          | 73          | 87      | 7                     | 0.83              | -0.60                 | 0.83                     | 8.02                  | 61                      | 21.66                 | 65                      | 89                         | 34              | 7              | 0            | 1                | 1               |
| SC GREENVILLE       | 97              | 71              | 100          | 69          | 84      | 7                     | 0.02              | -0.88                 | 0.02                     | 6.67                  | 59                      | 21.00                 | 63                      | 86                         | 35              | 7              | 0            | 1                | 0               |
| SD ABERDEEN         | 81              | 56              | 87           | 51          | 69      | -3                    | 1.14              | 0.64                  | 1.07                     | 9.57                  | 138                     | 16.05                 | 119                     | 96                         | 52              | 0              | 0            | 3                | 1               |
| SD HURON            | 85              | 57              | 91           | 51          | 71      | -2                    | 0.27              | -0.19                 | 0.21                     | 4.61                  | 66                      | 11.61                 | 79                      | 94                         | 46              | 2              | 0            | 3                | 0               |
| SD RAPID CITY       | 86              | 56              | 95           | 51          | 71      | -1                    | 0.09              | -0.30                 | 0.08                     | 9.43                  | 160                     | 16.75                 | 135                     | 89                         | 37              | 3              | 0            | 2                | 0               |
| SD SIOUX FALLS      | 81              | 57              | 89           | 47          | 69      | -4                    | 0.01              | -0.62                 | 0.01                     | 7.41                  | 101                     | 19.70                 | 126                     | 94                         | 51              | 0              | 0            | 1                | 0               |
| TN BRISTOL          | 88              | 62              | 93           | 57          | 75      | 1                     | 0.07              | -0.66                 | 0.07                     | 11.22                 | 120                     | 26.38                 | 98                      | 95                         | 47              | 3              | 0            | 1                | 0               |
| TN CHATTANOOGA      | 95              | 72              | 101          | 68          | 84      | 5                     | 0.01              | -0.79                 | 0.01                     | 9.80                  | 98                      | 36.57                 | 106                     | 92                         | 39              | 6              | 0            | 1                | 0               |
| TN KNOXVILLE        | 90              | 68              | 95           | 64          | 79      | 2                     | 0.32              | -0.41                 | 0.32                     | 18.55                 | 182                     | 41.26                 | 132                     | 94                         | 46              | 4              | 0            | 1                | 0               |
| TN MEMPHIS          | 94              | 76              | 100          | 70          | 85      | 3                     | 0.33              | -0.44                 | 0.33                     | 6.38                  | 72                      | 34.93                 | 106                     | 87                         | 50              | 5              | 0            | 1                | 0               |
| TN NASHVILLE        | 92              | 70              | 99           | 64          | 81      | 2                     | 2.02              | 1.23                  | 1.76                     | 8.77                  | 96                      | 30.88                 | 101                     | 90                         | 38              | 5              | 0            | 3                | 1               |
| TX ABILENE          | 102             | 78              | 104          | 72          | 90      | 6                     | 0.00              | -0.60                 | 0.00                     | 5.07                  | 83                      | 13.18                 | 91                      | 61                         | 24              | 7              | 0            | 0                | 0               |
| TX AMARILLO         | 89              | 66              | 92           | 62          | 78      | 0                     | 0.89              | 0.15                  | 0.69                     | 8.53                  | 110                     | 23.15                 | 174                     | 82                         | 38              | 3              | 0            | 2                | 1               |
| TX AUSTIN           | 100             | 74              | 102          | 70          | 87      | 2                     | 0.00              | -0.42                 | 0.00                     | 9.70                  | 148                     | 21.89                 | 111                     | 94                         | 32              | 7              | 0            | 0                | 0               |
| TX BEAUMONT         | 96              | 77              | 101          | 76          | 86      | 3                     | 0.00              | -1.17                 | 0.00                     | 12.49                 | 94                      | 24.33                 | 72                      | 97                         | 49              | 7              | 0            | 0                | 0               |
| TX BROWNSVILLE      | 97              | 77              | 100          | 75          | 87      | 2                     | 0.00              | -0.50                 | 0.00                     | 4.29                  | 77                      | 12.79                 | 97                      | 94                         | 44              | 7              | 0            | 0                | 0               |
| TX CORPUS CHRISTI   | 98              | 75              | 101          | 73          | 86      | 2                     | 0.00              | -0.65                 | 0.00                     | 9.05                  | 129                     | 15.14                 | 91                      | 97                         | 48              | 7              | 0            | 0                | 0               |
| TX DEL RIO          | 103             | 79              | 105          | 76          | 91      | 5                     | 0.00              | -0.30                 | 0.00                     | 7.10                  | 156                     | 12.50                 | 116                     | 71                         | 25              | 7              | 0            | 0                | 0               |
| TX EL PASO          | 93              | 71              | 96           | 67          | 82      | 1                     | 0.31              | -0.05                 | 0.31                     | 4.86                  | 166                     | 5.02                  | 111                     | 74                         | 33              | 7              | 0            | 1                | 0               |
| TX FORT WORTH       | 104             | 81              | 107          | 77          | 93      | 7                     | 0.00              | -0.47                 | 0.00                     | 1.76                  | 28                      | 16.17                 | 76                      | 65                         | 28              | 7              | 0            | 0                | 0               |
| TX GALVESTON        | 91              | 82              | 92           | 80          | 86      | 2                     | 0.02              | -0.79                 | 0.02                     | 9.91                  | 98                      | 19.02                 | 80                      | 83                         | 61              | 6              | 0            | 1                | 0               |
| TX HOUSTON          | 99              | 78              | 102          | 74          | 89      | 6                     | 0.01              | -0.73                 | 0.01                     | 10.42                 | 104                     | 21.97                 | 79                      | 91                         | 40              | 7              | 0            | 1                | 0               |
| TX LUBBOCK          | 98              | 69              | 99           | 67          | 83      | 4                     | 0.00              | -0.55                 | 0.00                     | 5.41                  | 87                      | 14.74                 | 129                     | 70                         | 27              | 7              | 0            | 0                | 0               |
| TX MIDLAND          | 100             | 74              | 102          | 72          | 87      | 5                     | 0.00              | -0.35                 | 0.00                     | 3.49                  | 88                      | 6.33                  | 76                      | 57                         | 22              | 7              | 0            | 0                | 0               |
| TX SAN ANGELO       | 102             | 74              | 105          | 69          | 88      | 5                     | 0.00              | -0.37                 | 0.00                     | 5.39                  | 132                     | 11.74                 | 102                     | 72                         | 23              | 7              | 0            | 0                | 0               |
| TX SAN ANTONIO      | 100             | 75              | 102          | 73          | 87      | 2                     | 0.00              | -0.54                 | 0.00                     | 5.57                  | 80                      | 12.83                 | 68                      | 88                         | 28              | 7              | 0            | 0                | 0               |
| TX VICTORIA         | 98              | 75              | 101          | 72          | 86      | 2                     | 0.00              | -0.59                 | 0.00                     | 7.02                  | 75                      | 19.76                 | 90                      | 100                        | 42              | 7              | 0            | 0                | 0               |
| TX WACO             | 103             | 79              | 104          | 78          | 91      | 4                     | 0.00              | -0.32                 | 0.00                     | 3.39                  | 72                      | 14.10                 | 71                      | 82                         | 34              | 7              | 0            | 0                | 0               |
| TX WICHITA FALLS    | 105             | 78              | 111          | 70          | 92      | 7                     | 0.00              | -0.50                 | 0.00                     | 6.07                  | 98                      | 23.56                 | 131                     | 67                         | 25              | 7              | 0            | 0                | 0               |
| UT SALT LAKE CITY   | 89              | 65              | 95           | 56          | 77      | 0                     | 0.20              | 0.01                  | 0.20                     | 1.27                  | 60                      | 9.93                  | 96                      | 56                         | 19              | 4              | 0            | 1                | 0               |
| VT BURLINGTON       | 76              | 57              | 85           | 48          | 67      | -3                    | 0.62              | -0.32                 | 0.38                     | 5.09                  | 57                      | 15.09                 | 74                      | 92                         | 48              | 0              | 0            | 3                | 0               |
| VA LYNCHBURG        | 91              | 66              | 97           | 60          | 79      | 3                     | 0.13              | -0.70                 | 0.11                     | 6.46                  | 69                      | 19.63                 | 76                      | 91                         | 37              | 5              | 0            | 3                | 0               |
| VA NORFOLK          | 91              | 72              | 98           | 65          | 82      | 4                     | 1.62              | 0.50                  | 1.57                     | 11.46                 | 103                     | 28.10                 | 97                      | 90                         | 49              | 5              | 0            | 3                | 1               |
| VA RICHMOND         | 92              | 69              | 98           | 59          | 80      | 3                     | 0.36              | -0.68                 | 0.35                     | 9.55                  | 89                      | 25.11                 | 91                      | 93                         | 46              | 5              | 0            | 2                | 0               |
| VA ROANOKE          | 91              | 65              | 96           | 57          | 78      | 3                     | 0.01              | -0.95                 | 0.00                     | 7.04                  | 78                      | 20.63                 | 81                      | 85                         | 33              | 4              | 0            | 1                | 0               |
| VA WASH/DULLES      | 91              | 64              | 97           | 51          | 78      | 3                     | 0.47              | -0.44                 | 0.30                     | 6.01                  | 65                      | 22.36                 | 89                      | 89                         | 37              | 5              | 0            | 3                | 0               |
| WA OLYMPIA          | 74              | 53              | 82           | 49          | 63      | -1                    | 0.16              | -0.10                 | 0.08                     | 3.03                  | 103                     | 39.54                 | 146                     | 95                         | 48              | 0              | 0            | 3                | 0               |
| WA QUILLAYUTE       | 68              | 51              | 72           | 46          | 60      | 0                     | 0.00              | -0.53                 | 0.00                     | 6.81                  | 101                     | 73.20                 | 126                     | 100                        | 73              | 0              | 0            | 0                | 0               |
| WA SEATTLE-TACOMA   | 73              | 56              | 80           | 56          | 65      | -2                    | 0.03              | -0.20                 | 0.02                     | 3.80                  | 140                     | 24.74                 | 126                     | 93                         | 54              | 0              | 0            | 2                | 0               |
| WA SPOKANE          | 77              | 54              | 90           | 51          | 66      | -4                    | 0.43              | 0.26                  | 0.43                     | 2.37                  | 104                     | 9.37                  | 95                      | 83                         | 29              | 1              | 0            | 1                | 0               |
| WA YAKIMA           | 83              | 54              | 94           | 48          | 69      | -1                    | 0.31              | 0.23                  | 0.25                     | 1.43                  | 170                     | 4.69                  | 105                     | 82                         | 31              | 1              | 0            | 2                | 0               |
| WV BECKLEY          | 80              | 62              | 88           | 56          | 71      | 2                     | 1.29              | 0.51                  | 0.97                     | 6.78                  | 67                      | 23.13                 | 86                      | 93                         | 50              | 0              | 0            | 3                | 1               |
| WV CHARLESTON       | 83              | 62              | 92           | 53          | 72      | -2                    | 1.63              | 0.69                  | 0.81                     | 8.39                  | 80                      | 23.50                 | 86                      | 99                         | 56              | 1              | 0            | 4                | 2               |
| WV ELKINS           | 81              | 54              | 89           | 46          | 68      | -1                    | 0.85              | -0.15                 | 0.52                     | 4.69                  | 43                      | 23.71                 | 82                      | 99                         | 45              | 0              | 0            | 3                | 1               |
| WV HUNTINGTON       | 88              | 62              | 99           | 55          | 75      | 1                     | 0.88              | -0.03                 | 0.63                     | 4.03                  | 40                      | 18.42                 | 68                      | 85                         | 40              | 4              | 0            | 2                | 1               |
| WI EAU CLAIRE       | 77              | 57              | 87           | 53          | 67      | -3                    | 1.11              | 0.09                  | 0.80                     | 9.73                  | 96                      | 24.24                 | 120                     | 95                         | 47              | 0              | 0            | 2                | 1               |
| WI GREEN BAY        | 74              | 54              | 81           | 47          | 64      | -4                    | 0.21              | -0.57                 | 0.12                     | 10.53                 | 131                     | 19.04                 | 109                     | 98                         | 58              | 0              | 0            | 3                | 0               |
| WI LACROSSE         | 77              | 58              | 83           | 49          | 68      | -4                    | 0.61              | -0.27                 | 0.52                     | 11.94                 | 126                     | 26.71                 | 137                     | 98                         | 54              | 0              | 0            | 2                | 1               |
| WI MADISON          | 75              | 56              | 82           | 51          | 65      | -4                    | 0.47              | -0.44                 | 0.24                     | 11.45                 | 130                     | 25.56                 | 134                     | 96                         | 59              | 0              | 0            | 3                | 0               |
| WI MILWAUKEE        | 74              | 60              | 80           | 53          | 67      | -3                    | 0.46              | -0.34                 | 0.35                     | 13.28                 | 160                     | 29.87                 | 146                     | 89                         | 58              | 0              | 0            | 3                | 0               |
| WY CASPER           | 89              | 53              | 94           | 48          | 71      | 1                     | 0.00              | -0.15                 | 0.00                     | 2.02                  | 66                      | 6.81                  | 77                      | 68                         | 15              | 4              | 0            | 0                | 0               |
| WY CHEYENNE         | 81              | 53              | 85           | 47          | 67      | 0                     | 0.05              | -0.35                 | 0.04                     | 5.08                  | 102                     | 13.08                 | 124                     | 86                         | 30              | 0              | 0            | 2                | 0               |
| WY LANDER           | 87              | 57              | 91           | 49          | 72      | 2                     | 0.40              | 0.29                  | 0.28                     | 2.10                  | 84                      | 10.96                 | 120                     | 66                         | 18              | 4              | 0            | 2                | 0               |
| WY SHERIDAN         | 87              | 53              | 99           | 48          | 70      | 0                     | 0.36              | 0.19                  | 0.24                     | 2.12                  | 61                      | 8.97                  | 90                      | 81                         | 30              | 3              | 0            | 3                | 0               |

NOTE: These data are preliminary and subject to change. In the past, precipitation totals from a number of stations have been incomplete.

## National Agricultural Summary

August 9 - 15, 1999

### HIGHLIGHTS

**A narrow band of thunderstorms delivered much-needed moisture for dry crops as they moved eastward across the Corn Belt. Crops in areas of the Corn Belt north and south of the storms continued to be stressed by moisture shortages. Below-normal temperatures partially alleviated crop stress caused by dry soils. In eastern Pennsylvania, heavy rains soaked dry soils and boosted vegetative growth, but came too late to help the most advanced crops.**

**Scattered rains aided crops in the Southeast, but crops suffered in most areas due to moisture shortages and excessive heat. Dry weather aided small grain harvest activities in the northern Great Plains and Pacific Northwest. In the southern Great Plains and Southeast, growers harvested row crops and prepared fields for fall seeding. Crop development lagged in the Southwest due to below-normal temperatures.**

**Corn:** Corn in the dough stage or beyond was at 65 percent, slightly ahead of last year's 60-percent pace, and well-ahead of the 46-percent average. Corn in the dough stage advanced more than 30 percentage points in Iowa, Nebraska, and South Dakota, despite below-normal temperatures. Many other areas of the Corn Belt advanced 25 percentage points or more. In Ohio, acreage at the dough stage or beyond was nearly twice the normal rate. Twenty-two percent of the crop was dented, compared with 18 percent last year and the average of 14 percent. Above-normal temperatures aided progress in the southern Great Plains and the Southeast, where corn at the dent stage or beyond ranged from about two-thirds to nearly complete. Corn rapidly entered the dent stage in most areas in the eastern Corn Belt. Along the Ohio River Valley in the southern Corn Belt, more than one-fourth of the acreage entered the dent stage, nearly doubling in Kentucky. Cooler weather limited denting progress in parts of the western Corn Belt. A line of storms delivered much-needed moisture to a band that stretched across southern sections of Nebraska and Iowa through central Illinois to western Indiana. Moisture shortages stressed corn in most other areas of the Corn Belt, but below-normal temperatures limited crop damage caused by dry soils.

**Soybeans:** Ninety-six percent of the acreage was blooming, slightly ahead of last year's 94-percent progress and 4 percentage points ahead of the average. Nearly all of the acreage was blooming in the Corn Belt. Acreage entering the blooming stage remained active in the northern Mississippi Delta and lower Ohio and Tennessee River Valleys. Blooming progress lagged in the Southeast, despite warm weather. Soybeans setting pods advanced to 80 percent, slightly ahead of a year ago, and 10 percentage points ahead of the 5-year average. In many areas of the Corn Belt and lower Mississippi Valley, more than 90 percent of the crop was setting pods. Nearly all of the acreage was setting pods in Ohio, 31 percentage points ahead of the normal for this date. Soybeans deteriorated in the Mississippi Delta and Southeast due to dry soils and above-normal temperatures. Milder weather eased stress in many areas of the Corn Belt. Rain aided development in a narrow band that extended across the Corn Belt from Nebraska to Indiana.

**Cotton:** Ninety-four percent of the acreage was setting bolls, slightly ahead of last year, but equal to the average for this date. Hot weather promoted rapid progress in the southern Great Plains. Bolls were

opening on 13 percent of the Nation's cotton acreage, slightly behind the average and 7 percentage points behind last year. Development advanced about 20 percentage points in Louisiana, Mississippi, and Missouri. Progress lagged in many areas of the Southeast, southern Great Plains, and Southwest. Scattered rains aided some fields in the Southeast, but conditions continued to deteriorate in many areas of the Carolinas and parts of Georgia, Alabama, and Mississippi due to heat and dry soils. Conditions improved in Oklahoma, despite diminishing moisture supplies and high temperatures.

**All Wheat:** The winter wheat harvest was 94 percent complete, compared with 96 percent last year and the average of 95 percent. Dry weather aided harvest progress in the Pacific Northwest and northern High Plains. Field preparations for fall seeding rapidly progressed in the southern Great Plains. Spring wheat harvest advanced to 29 percent complete, 2 percentage points behind the average and well behind last year's 56-percent pace. Harvest delays due to scattered rains were minimal in Minnesota. Below-normal temperatures delayed ripening and harvest in North Dakota.

**Other small grains:** The barley crop was 22 percent harvested, 12 percentage points behind the average and well-behind last year's rapid progress. Harvest remained active in South Dakota and Minnesota, but late ripening delayed progress in North Dakota and the Pacific Northwest. The oat crop was 74 percent harvested, 11 percentage points behind last year, but ahead of the 66-percent average. Growers made rapid harvest progress in the northern Great Plains and Northeast.

**Rice:** Eighty-four percent of the acreage was headed and 16 percent was harvested, ahead of last year and the average. Warm weather accelerated development in Arkansas and Mississippi. Forty percent of the acreage in California was heading, up 27 percentage points from the previous week and ahead of last year's slow pace, but well behind the average for this date. Harvest continued in Texas and Louisiana, with few delays.

**Other crops:** Sorghum was 81 percent headed and 32 percent was turning color. Development trailed last year's progress, with 82 percent headed and 38 percent turning color. Normally, 78 percent is headed and 34 percent is turning color by this date.

# Crop Progress and Condition

Week Ending August 15, 1999

| Soybeans Percent Blooming |                |              |              |             |
|---------------------------|----------------|--------------|--------------|-------------|
|                           | Aug 15<br>1999 | Prev<br>Week | Prev<br>Year | 5-Yr<br>Avg |
| AL                        | 60             | 55           | 85           | 76          |
| AR                        | 91             | 80           | 86           | 82          |
| GA                        | 86             | 80           | 93           | 87          |
| IL                        | 99             | 96           | 94           | 92          |
| IN                        | 100            | 98           | 93           | 92          |
| IA                        | 100            | 98           | 100          | 98          |
| KS                        | 88             | 71           | 99           | 91          |
| KY                        | 86             | 77           | 73           | 70          |
| LA                        | 98             | 98           | 98           | 97          |
| MI                        | 100            | 96           | 99           | 91          |
| MN                        | 99             | 97           | 99           | 98          |
| MS                        | 100            | 99           | 100          | 95          |
| MO                        | 89             | 78           | 88           | 83          |
| NE                        | 100            | 96           | 100          | 98          |
| NC                        | 70             | 58           | 68           | 64          |
| OH                        | 100            | 100          | 99           | 96          |
| SC                        | 66             | 54           | 68           | 70          |
| SD                        | 96             | 91           | 95           | 94          |
| TN                        | 87             | 76           | 79           | 79          |
| 19 Sts                    | 96             | 91           | 94           | 92          |

These 19 States planted 93% of last year's soybean acreage.

| Corn Percent Dough |                |              |              |             |
|--------------------|----------------|--------------|--------------|-------------|
|                    | Aug 15<br>1999 | Prev<br>Week | Prev<br>Year | 5-Yr<br>Avg |
| CO                 | 15             | 8            | 32           | 32          |
| GA                 | 100            | 100          | 100          | 99          |
| IL                 | 81             | 64           | 63           | 56          |
| IN                 | 82             | 56           | 59           | 52          |
| IA                 | 52             | 21           | 47           | 30          |
| KS                 | 72             | 49           | 78           | 69          |
| KY                 | 85             | 68           | 58           | 67          |
| MI                 | 38             | 22           | 37           | 13          |
| MN                 | 38             | 10           | 57           | 27          |
| MO                 | 79             | 70           | 82           | 73          |
| NE                 | 70             | 35           | 67           | 53          |
| NC                 | 80             | 75           | 83           | 90          |
| OH                 | 83             | 70           | 56           | 42          |
| PA                 | 45             | 37           | 49           | 41          |
| SD                 | 60             | 27           | 58           | 33          |
| TX                 | 95             | 82           | 95           | 93          |
| WI                 | 56             | 31           | 60           | 35          |
| 17 Sts             | 65             | 41           | 60           | 46          |

These 17 States planted 90% of last year's corn acreage.

| Winter Wheat Percent Harvested |                |              |              |             |
|--------------------------------|----------------|--------------|--------------|-------------|
|                                | Aug 15<br>1999 | Prev<br>Week | Prev<br>Year | 5-Yr<br>Avg |
| AR                             | 100            | 100          | 100          | 100         |
| CA                             | 99             | 99           | 99           | 99          |
| CO                             | 99             | 98           | 99           | 99          |
| GA                             | 100            | 100          | 100          | 100         |
| ID                             | 32             | 15           | 56           | 52          |
| IL                             | 100            | 100          | 100          | 100         |
| IN                             | 100            | 100          | 100          | 100         |
| KS                             | 100            | 100          | 100          | 100         |
| MI                             | 100            | 100          | 100          | 99          |
| MO                             | 100            | 100          | 100          | 100         |
| MT                             | 68             | 56           | 69           | 60          |
| NE                             | 100            | 99           | 99           | 99          |
| NC                             | 100            | 100          | 100          | 100         |
| OH                             | 100            | 100          | 100          | 100         |
| OK                             | 100            | 100          | 100          | 100         |
| OR                             | 78             | 61           | 77           | 79          |
| SD                             | 100            | 97           | 99           | 95          |
| TX                             | 100            | 100          | 100          | 100         |
| WA                             | 45             | 34           | 77           | 69          |
| 19 Sts                         | 94             | 92           | 96           | 95          |

These 19 States planted 91% of last year's winter wheat acreage.

| Soybeans Percent Setting Pods |                |              |              |             |
|-------------------------------|----------------|--------------|--------------|-------------|
|                               | Aug 15<br>1999 | Prev<br>Week | Prev<br>Year | 5-Yr<br>Avg |
| AL                            | 44             | 35           | 66           | 52          |
| AR                            | 62             | 45           | 52           | 51          |
| GA                            | 66             | 52           | 69           | 62          |
| IL                            | 91             | 73           | 76           | 70          |
| IN                            | 88             | 77           | 71           | 65          |
| IA                            | 93             | 81           | 94           | 88          |
| KS                            | 55             | 37           | 86           | 68          |
| KY                            | 63             | 55           | 45           | 41          |
| LA                            | 91             | 88           | 91           | 84          |
| MI                            | 87             | 74           | 85           | 67          |
| MN                            | 83             | 59           | 96           | 84          |
| MS                            | 98             | 93           | 92           | 82          |
| MO                            | 56             | 35           | 64           | 53          |
| NE                            | 77             | 51           | 89           | 76          |
| NC                            | 35             | 28           | 36           | 36          |
| OH                            | 97             | 91           | 83           | 66          |
| SC                            | 28             | 20           | 30           | 35          |
| SD                            | 72             | 55           | 81           | 74          |
| TN                            | 62             | 50           | 51           | 46          |
| 19 Sts                        | 80             | 65           | 79           | 70          |

These 19 States planted 93% of last year's soybean acreage.

| Corn Percent Dented |                |              |              |             |
|---------------------|----------------|--------------|--------------|-------------|
|                     | Aug 15<br>1999 | Prev<br>Week | Prev<br>Year | 5-Yr<br>Avg |
| CO                  | 0              | 0            | 0            | 2           |
| GA                  | 97             | 92           | 96           | 96          |
| IL                  | 36             | 19           | 21           | 14          |
| IN                  | 30             | 13           | 11           | 6           |
| IA                  | 12             | 0            | 6            | 5           |
| KS                  | 26             | 9            | 35           | 28          |
| KY                  | 57             | 30           | 27           | 35          |
| MI                  | 6              | 0            | 9            | 2           |
| MN                  | 4              | 1            | 14           | 4           |
| MO                  | 52             | 35           | 53           | 41          |
| NE                  | 12             | 3            | 14           | 11          |
| NC                  | 65             | 55           | 65           | 73          |
| OH                  | 27             | 10           | 9            | 5           |
| PA                  | 10             | 3            | 9            | 5           |
| SD                  | 12             | 1            | 16           | 7           |
| TX                  | 63             | 59           | 76           | 72          |
| WI                  | 7              | 0            | 12           | 5           |
| 17 Sts              | 22             | 10           | 18           | 14          |

These 17 States planted 90% of last year's corn acreage.

| Oats Percent Harvested |                |              |              |             |
|------------------------|----------------|--------------|--------------|-------------|
|                        | Aug 15<br>1999 | Prev<br>Week | Prev<br>Year | 5-Yr<br>Avg |
| IA                     | 100            | 98           | 100          | 98          |
| MI                     | 87             | 79           | 91           | 63          |
| MN                     | 70             | 51           | 88           | 66          |
| NE                     | 97             | 92           | 98           | 98          |
| ND                     | 32             | 18           | 69           | 29          |
| OH                     | 100            | 97           | 94           | 89          |
| PA                     | 83             | 63           | 79           | 68          |
| SD                     | 87             | 69           | 87           | 79          |
| WI                     | 81             | 73           | 89           | 64          |
| 9 Sts                  | 74             | 61           | 85           | 66          |

These 9 States planted 57% of last year's oat acreage.

| Barley Percent Harvested |                |              |              |             |
|--------------------------|----------------|--------------|--------------|-------------|
|                          | Aug 15<br>1999 | Prev<br>Week | Prev<br>Year | 5-Yr<br>Avg |
| ID                       | 14             | 5            | 32           | 30          |
| MN                       | 38             | 20           | 81           | 41          |
| MT                       | 20             | 14           | 32           | 24          |
| ND                       | 21             | 14           | 72           | 33          |
| SD                       | 76             | 61           | 89           | 72          |
| WA                       | 17             | 8            | 61           | 53          |
| 6 Sts                    | 22             | 13           | 56           | 34          |

These 6 States planted 83% of last year's barley acreage.

# Crop Progress and Condition

Week Ending August 15, 1999

| Cotton Percent Setting Bolls |             |           |           |          |
|------------------------------|-------------|-----------|-----------|----------|
|                              | Aug 15 1999 | Prev Week | Prev Year | 5-Yr Avg |
| AL                           | 89          | 85        | 98        | 92       |
| AZ                           | 100         | 99        | 100       | 100      |
| AR                           | 100         | 99        | 100       | 100      |
| CA                           | 90          | 70        | 39        | 87       |
| GA                           | 97          | 93        | 99        | 99       |
| LA                           | 100         | 100       | 100       | 100      |
| MS                           | 100         | 100       | 100       | 100      |
| MO                           | 100         | 100       | 100       | 100      |
| NM                           | 95          | 80        | 100       | 96       |
| NC                           | 98          | 95        | 88        | 89       |
| OK                           | 90          | 67        | 93        | 82       |
| SC                           | 87          | 76        | 89        | 91       |
| TN                           | 100         | 99        | 100       | 99       |
| TX                           | 91          | 81        | 96        | 91       |
| 14 Sts                       | 94          | 87        | 93        | 94       |

These 14 States planted 98% of last year's cotton acreage.

| Cotton Percent Bolls Opening |             |           |           |          |
|------------------------------|-------------|-----------|-----------|----------|
|                              | Aug 15 1999 | Prev Week | Prev Year | 5-Yr Avg |
| AL                           | 5           | 2         | 12        | 5        |
| AZ                           | 10          | 5         | 12        | 34       |
| AR                           | 2           | 1         | 5         | 3        |
| CA                           | 3           | 1         | 1         | 8        |
| GA                           | 15          | 4         | 22        | 13       |
| LA                           | 28          | 10        | 34        | 15       |
| MS                           | 26          | 4         | 30        | 17       |
| MO                           | 21          | 1         | 4         | 4        |
| NM                           | 1           | 0         | 4         | 8        |
| NC                           | 8           | 5         | 9         | 7        |
| OK                           | 0           | 0         | 0         | 1        |
| SC                           | 5           | 4         | 9         | 4        |
| TN                           | 2           | 0         | 3         | 1        |
| TX                           | 16          | 11        | 28        | 19       |
| 14 Sts                       | 13          | 7         | 20        | 14       |

These 14 States planted 98% of last year's cotton acreage.

| Spring Wheat Percent Harvested |             |           |           |          |
|--------------------------------|-------------|-----------|-----------|----------|
|                                | Aug 15 1999 | Prev Week | Prev Year | 5-Yr Avg |
| ID                             | 16          | 11        | 25        | 25       |
| MN                             | 41          | 23        | 72        | 40       |
| MT                             | 16          | 10        | 41        | 23       |
| ND                             | 18          | 13        | 55        | 23       |
| SD                             | 82          | 63        | 82        | 64       |
| 5 Sts                          | 29          | 20        | 56        | 31       |

These 5 States planted 96% of last year's spring wheat acreage.

| Soybeans Crop Condition by Percent |    |    |    |    |    |
|------------------------------------|----|----|----|----|----|
|                                    | VP | P  | F  | G  | EX |
| AL                                 | 9  | 31 | 33 | 22 | 5  |
| AR                                 | 3  | 14 | 35 | 37 | 11 |
| GA                                 | 30 | 21 | 30 | 17 | 2  |
| IL                                 | 4  | 11 | 37 | 40 | 8  |
| IN                                 | 7  | 19 | 44 | 26 | 4  |
| IA                                 | 2  | 6  | 20 | 48 | 24 |
| KS                                 | 4  | 9  | 32 | 47 | 8  |
| KY                                 | 10 | 28 | 41 | 19 | 2  |
| LA                                 | 0  | 9  | 32 | 50 | 9  |
| MI                                 | 7  | 7  | 21 | 45 | 20 |
| MN                                 | 2  | 7  | 28 | 49 | 14 |
| MS                                 | 7  | 19 | 32 | 35 | 7  |
| MO                                 | 11 | 25 | 42 | 21 | 1  |
| NE                                 | 1  | 6  | 29 | 47 | 17 |
| NC                                 | 2  | 14 | 26 | 55 | 3  |
| OH                                 | 6  | 14 | 37 | 36 | 7  |
| SC                                 | 16 | 31 | 38 | 15 | 0  |
| SD                                 | 1  | 3  | 21 | 46 | 29 |
| TN                                 | 13 | 28 | 31 | 26 | 2  |
| 19 Sts                             | 5  | 12 | 32 | 39 | 12 |
| Prev Wk                            | 4  | 12 | 30 | 43 | 11 |
| Prev Yr                            | 3  | 7  | 23 | 49 | 18 |

| Sorghum Percent Headed |             |           |           |          |
|------------------------|-------------|-----------|-----------|----------|
|                        | Aug 15 1999 | Prev Week | Prev Year | 5-Yr Avg |
| AR                     | 99          | 95        | 95        | 94       |
| CO                     | 81          | 24        | 81        | 54       |
| IL                     | 90          | 77        | 56        | 61       |
| KS                     | 83          | 55        | 82        | 74       |
| LA                     | 100         | 100       | 100       | 97       |
| MS                     | 99          | 94        | 100       | 99       |
| MO                     | 82          | 68        | 91        | 79       |
| NE                     | 71          | 52        | 89        | 76       |
| NM                     | 60          | 50        | 22        | 33       |
| OK                     | 75          | 57        | 73        | 61       |
| SD                     | 55          | 33        | 58        | 66       |
| TX                     | 83          | 74        | 86        | 89       |
| 12 Sts                 | 81          | 63        | 82        | 78       |

These 12 States planted 99% of last year's sorghum acreage.

| Sorghum Percent Coloring |             |           |           |          |
|--------------------------|-------------|-----------|-----------|----------|
|                          | Aug 15 1999 | Prev Week | Prev Year | 5-Yr Avg |
| AR                       | 64          | 42        | 49        | 49       |
| CO                       | 6           | 0         | 1         | 1        |
| IL                       | 34          | 32        | 10        | 10       |
| KS                       | 15          | 5         | 19        | 12       |
| LA                       | 100         | 77        | 88        | 76       |
| MS                       | 76          | 67        | 84        | 79       |
| MO                       | 20          | 15        | 38        | 27       |
| NE                       | 5           | 0         | 4         | 5        |
| NM                       | 3           | 2         | 2         | 1        |
| OK                       | 15          | 9         | 11        | 16       |
| SD                       | 24          | 22        | 17        | 12       |
| TX                       | 56          | 55        | 69        | 68       |
| 12 Sts                   | 32          | 26        | 38        | 34       |

These 12 States planted 99% of last year's sorghum acreage.

| Rice Percent Headed |             |           |           |          |
|---------------------|-------------|-----------|-----------|----------|
|                     | Aug 15 1999 | Prev Week | Prev Year | 5-Yr Avg |
| AR                  | 88          | 69        | 80        | 81       |
| CA                  | 40          | 13        | 26        | 54       |
| LA                  | 98          | 98        | 97        | 91       |
| MS                  | 89          | 73        | 89        | 90       |
| TX                  | 97          | 93        | 98        | 97       |
| 5 Sts               | 84          | 69        | 78        | 81       |

These 5 States planted 96% of last year's rice acreage.

| Rice Percent Harvested |             |           |           |          |
|------------------------|-------------|-----------|-----------|----------|
|                        | Aug 15 1999 | Prev Week | Prev Year | 5-Yr Avg |
| AR                     | 0           | 0         | 0         | 0        |
| CA                     | 0           | 0         | 0         | 0        |
| LA                     | 61          | 54        | 53        | 38       |
| MS                     | 0           | 0         | 0         | 0        |
| TX                     | 42          | 28        | 46        | 32       |
| 5 Sts                  | 16          | 13        | 14        | 10       |

These 5 States planted 96% of last year's rice acreage.

| Barley Crop Condition by Percent |    |    |    |    |    |
|----------------------------------|----|----|----|----|----|
|                                  | VP | P  | F  | G  | EX |
| ID                               | 0  | 3  | 19 | 58 | 20 |
| MN                               | 13 | 18 | 41 | 23 | 5  |
| MT                               | 11 | 24 | 37 | 22 | 6  |
| ND                               | 1  | 6  | 30 | 53 | 10 |
| SD                               | 0  | 2  | 12 | 66 | 20 |
| WA                               | 10 | 25 | 43 | 22 | 0  |
| 6 Sts                            | 5  | 13 | 32 | 41 | 9  |
| Prev Wk                          | 4  | 13 | 31 | 41 | 11 |
| Prev Yr                          | 1  | 9  | 26 | 52 | 12 |

# Crop Progress and Condition

Week Ending August 15, 1999

VP -Very Poor  
 P - Poor  
 F - Fair  
 G - Good  
 EX - Excellent

| Corn Crop Condition by Percent |    |    |    |    |    |
|--------------------------------|----|----|----|----|----|
|                                | VP | P  | F  | G  | EX |
| CO                             | 1  | 2  | 8  | 57 | 32 |
| GA                             | 14 | 17 | 26 | 33 | 10 |
| IL                             | 5  | 13 | 40 | 36 | 6  |
| IN                             | 9  | 19 | 41 | 28 | 3  |
| IA                             | 3  | 7  | 21 | 47 | 22 |
| KS                             | 1  | 4  | 21 | 64 | 10 |
| KY                             | 7  | 17 | 38 | 34 | 4  |
| MI                             | 9  | 8  | 16 | 44 | 23 |
| MN                             | 2  | 6  | 24 | 52 | 16 |
| MO                             | 13 | 20 | 39 | 24 | 4  |
| NE                             | 1  | 6  | 21 | 53 | 19 |
| NC                             | 3  | 14 | 38 | 42 | 3  |
| OH                             | 9  | 18 | 36 | 31 | 6  |
| PA                             | 34 | 31 | 23 | 11 | 1  |
| SD                             | 1  | 3  | 22 | 45 | 29 |
| TX                             | 0  | 1  | 20 | 64 | 15 |
| WI                             | 0  | 2  | 11 | 52 | 35 |
| 17 Sts                         | 5  | 10 | 27 | 43 | 15 |
| Prev Wk                        | 4  | 10 | 26 | 44 | 16 |
| Prev Yr                        | 3  | 7  | 22 | 49 | 19 |

| Sorghum Crop Condition by Percent |    |    |    |    |    |
|-----------------------------------|----|----|----|----|----|
|                                   | VP | P  | F  | G  | EX |
| AR                                | 1  | 9  | 38 | 46 | 6  |
| CO                                | 0  | 0  | 15 | 59 | 26 |
| IL                                | 3  | 14 | 46 | 37 | 0  |
| KS                                | 1  | 2  | 21 | 66 | 10 |
| LA                                | 0  | 4  | 27 | 59 | 10 |
| MS                                | 1  | 5  | 34 | 50 | 10 |
| MO                                | 8  | 24 | 41 | 25 | 2  |
| NE                                | 0  | 4  | 35 | 52 | 9  |
| NM                                | 0  | 0  | 5  | 94 | 1  |
| OK                                | 0  | 3  | 26 | 68 | 3  |
| SD                                | 0  | 4  | 13 | 74 | 9  |
| TX                                | 1  | 11 | 28 | 48 | 12 |
| 12 Sts                            | 1  | 7  | 26 | 56 | 10 |
| Prev Wk                           | 1  | 7  | 24 | 56 | 12 |
| Prev Yr                           | 8  | 15 | 22 | 44 | 11 |

| Cotton Crop Condition by Percent |    |    |    |    |    |
|----------------------------------|----|----|----|----|----|
|                                  | VP | P  | F  | G  | EX |
| AL                               | 6  | 20 | 39 | 25 | 10 |
| AZ                               | 0  | 9  | 40 | 35 | 16 |
| AR                               | 0  | 6  | 29 | 44 | 21 |
| CA                               | 0  | 0  | 5  | 70 | 25 |
| GA                               | 15 | 20 | 29 | 28 | 8  |
| LA                               | 1  | 15 | 34 | 42 | 8  |
| MS                               | 3  | 10 | 29 | 49 | 9  |
| MO                               | 4  | 13 | 32 | 44 | 7  |
| NM                               | 0  | 3  | 34 | 50 | 13 |
| NC                               | 0  | 8  | 48 | 41 | 3  |
| OK                               | 0  | 1  | 10 | 68 | 21 |
| SC                               | 10 | 25 | 47 | 18 | 0  |
| TN                               | 6  | 25 | 42 | 25 | 2  |
| TX                               | 5  | 18 | 33 | 34 | 10 |
| 14 Sts                           | 5  | 15 | 32 | 37 | 11 |
| Prev Wk                          | 4  | 13 | 32 | 42 | 9  |
| Prev Yr                          | 14 | 19 | 33 | 29 | 5  |

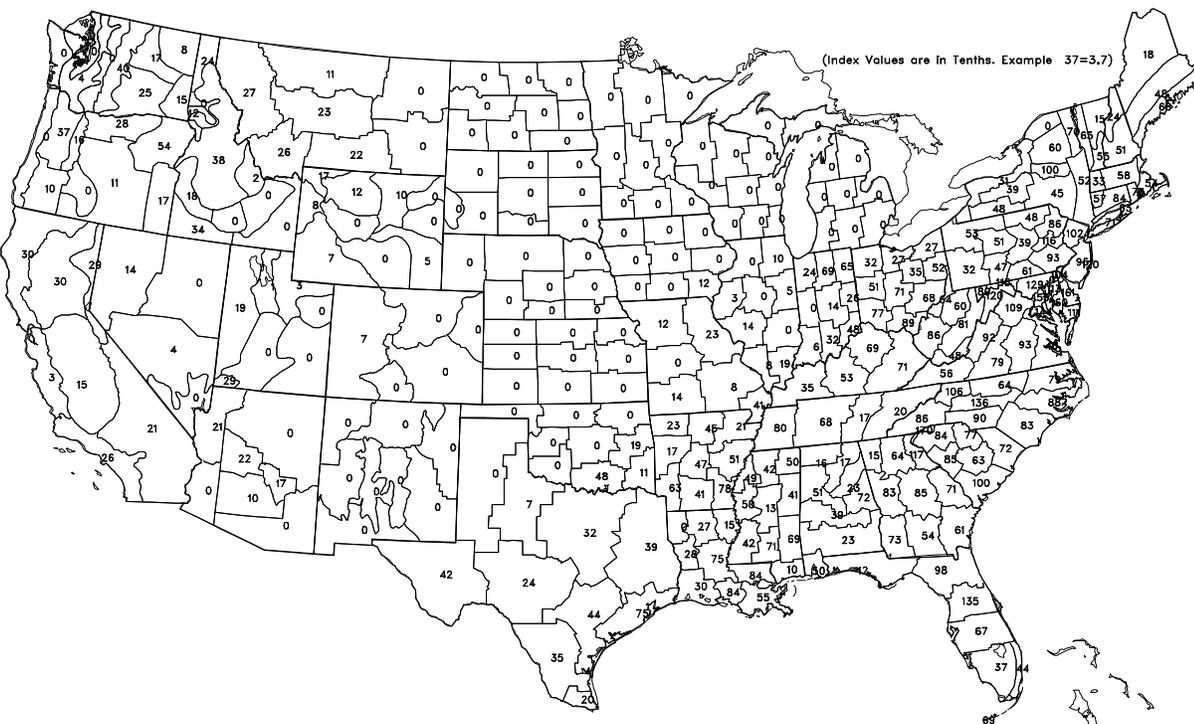
| Peanuts Crop Condition by Percent |    |    |    |    |    |
|-----------------------------------|----|----|----|----|----|
|                                   | VP | P  | F  | G  | EX |
| AL                                | 0  | 4  | 27 | 46 | 23 |
| FL                                | 0  | 0  | 13 | 64 | 23 |
| GA                                | 9  | 15 | 36 | 32 | 8  |
| NC                                | 0  | 1  | 35 | 55 | 9  |
| OK                                | 0  | 10 | 40 | 38 | 12 |
| SC                                | 8  | 21 | 40 | 25 | 6  |
| TX                                | 1  | 11 | 23 | 41 | 24 |
| VA                                | 0  | 0  | 4  | 64 | 32 |
| 8 Sts                             | 4  | 9  | 29 | 42 | 16 |
| Prev Wk                           | 1  | 7  | 27 | 47 | 18 |
| Prev Yr                           | 6  | 14 | 34 | 38 | 8  |

| Spring Wheat Crop Condition by Percent |    |    |    |    |    |
|--|----|----|----|----|----|
|  | VP | P  | F  | G  | EX |
| ID                                     | 0  | 1  | 14 | 69 | 16 |
| MN                                     | 3  | 20 | 39 | 32 | 6  |
| MT                                     | 4  | 14 | 32 | 39 | 11 |
| ND                                     | 1  | 8  | 30 | 51 | 10 |
| SD                                     | 1  | 4  | 18 | 56 | 21 |
| 5 Sts                                  | 2  | 10 | 30 | 47 | 11 |
| Prev Wk                                | 2  | 9  | 27 | 49 | 13 |
| Prev Yr                                | 1  | 6  | 33 | 50 | 10 |

| Rice Crop Condition by Percent |    |   |    |    |    |
|--------------------------------|----|---|----|----|----|
|                                | VP | P | F  | G  | EX |
| AR                             | 1  | 4 | 25 | 50 | 20 |
| CA                             | 0  | 0 | 15 | 85 | 0  |
| LA                             | 0  | 3 | 18 | 59 | 20 |
| MS                             | 2  | 5 | 27 | 49 | 17 |
| TX                             | 0  | 0 | 0  | 73 | 27 |
| 5 Sts                          | 1  | 3 | 20 | 59 | 17 |
| Prev Wk                        | 0  | 2 | 19 | 61 | 18 |
| Prev Yr                        | 1  | 4 | 26 | 59 | 10 |

| Pasture and Range Crop Condition by Percent<br>Week Ending August 15, 1999 |    |    |    |    |    |         |    |    |    |    |    |
|--|----|----|----|----|----|---------|----|----|----|----|----|
|  | VP | P  | F  | G  | EX |         | VP | P  | F  | G  | EX |
| AL   | 8  | 22 | 36 | 32 | 2  | NH      | 16 | 34 | 30 | 20 | 0  |
| AZ   | 0  | 6  | 21 | 39 | 34 | NJ      | 90 | 10 | 0  | 0  | 0  |
| AR   | 9  | 32 | 40 | 18 | 1  | NM      | 1  | 5  | 23 | 52 | 19 |
| CA   | 2  | 13 | 30 | 55 | 0  | NY      | 37 | 42 | 6  | 15 | 0  |
| CO   | 1  | 3  | 17 | 59 | 20 | NC      | 12 | 25 | 40 | 22 | 1  |
| CT   | 69 | 23 | 8  | 0  | 0  | ND      | 1  | 5  | 29 | 57 | 8  |
| DE   | 9  | 67 | 14 | 10 | 0  | OH      | 30 | 31 | 27 | 11 | 1  |
| FL   | 0  | 0  | 50 | 45 | 5  | OK      | 1  | 12 | 38 | 47 | 2  |
| GA   | 19 | 33 | 33 | 14 | 1  | OR      | 2  | 30 | 38 | 27 | 3  |
| ID   | 0  | 10 | 37 | 38 | 15 | PA      | 71 | 19 | 10 | 0  | 0  |
| IL   | 12 | 20 | 44 | 21 | 3  | RI      | 52 | 28 | 20 | 0  | 0  |
| IN   | 19 | 40 | 34 | 7  | 0  | SC      | 18 | 42 | 34 | 6  | 0  |
| IA   | 3  | 16 | 32 | 41 | 8  | SD      | 1  | 3  | 18 | 52 | 26 |
| KS   | 1  | 5  | 30 | 56 | 8  | TN      | 14 | 32 | 35 | 18 | 1  |
| KY   | 38 | 33 | 22 | 6  | 1  | TX      | 7  | 24 | 42 | 25 | 2  |
| LA   | 4  | 18 | 36 | 36 | 6  | UT      | 2  | 8  | 37 | 52 | 1  |
| ME   | 40 | 28 | 19 | 13 | 0  | VT      | 28 | 19 | 37 | 13 | 3  |
| MD   | 46 | 29 | 21 | 4  | 0  | VA      | 44 | 29 | 16 | 10 | 1  |
| MA   | 0  | 35 | 65 | 0  | 0  | WA      | 20 | 34 | 33 | 11 | 2  |
| MI   | 3  | 17 | 21 | 49 | 10 | WV      | 52 | 32 | 15 | 1  | 0  |
| MN   | 2  | 11 | 27 | 51 | 9  | WI      | 0  | 2  | 18 | 54 | 26 |
| MS   | 12 | 28 | 29 | 28 | 3  | WY      | 0  | 1  | 23 | 65 | 11 |
| MO   | 21 | 34 | 35 | 10 | 0  | 48 Sts  | 10 | 18 | 31 | 34 | 7  |
| MT   | 7  | 18 | 28 | 36 | 11 | Prev Wk | 8  | 15 | 33 | 38 | 6  |
| NE   | 2  | 7  | 26 | 54 | 11 | Prev Yr | 9  | 15 | 29 | 39 | 8  |
| NV   | 1  | 10 | 27 | 61 | 1  |         |    |    |    |    |    |

Additional Precipitation Needed to Bring Index Near Zero  
AUG 14, 1999  
(Long Term Palmer)



NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY  
Based on preliminary data

## State Agricultural Summaries

*These summaries, issued weekly through the summer growing season, 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 NASS State Statistical Offices in cooperation with the National Weather Service. The crop weather reports are also available on the Internet through the NASS Home Page on the World Wide Web at <http://www.usda.gov/nass/> or from JAWF at <http://www.usda.gov/oce/waob/jawf>.*

**ALABAMA:** Days suitable for fieldwork 6.4. Topsoil 38% very short, 44% short, 18% adequate, 0% surplus. High temperatures, scarce precipitation hurt crop condition, soil moisture supplies. Corn 86 dough stage%, 80% dented, 91% 1998, 91% average. Corn 55% mature, 72% 1998, 63% average. Corn 9% harvested, 27% 1998, 17% average. Corn condition 1% very poor, 7% poor, 25% fair, 48% good, 19% excellent. Pasture feed 8% very poor, 22% poor, 36% fair, 32% good, 2% excellent. Livestock feed 6% poor, 41% fair, 38% good, 15% excellent. Shedding of squares, small bolls observed in some cotton fields. Some cattlemen have resorted to feeding hay due to poor pasture feed.

**ALASKA:** Days suitable for fieldwork 3.3. Topsoil 5% short, 90% adequate, 5% surplus. Subsoil 10% short, 90% adequate. Weather conditions for the week were mild, damp. Rain delayed farm work in many areas. Daytime high temperatures ranged from the fifties to the seventies. Nighttime lows were mostly in the forties, fifties, with some dips into the mid-thirties. Oats 65% in dough or earlier, 35% turning color. Oat 25% fair, 50% good, 25% excellent. Barley 30% in dough or earlier, 70% turning color. Barley 5% poor, 20% fair, 60% good, 15% excellent. Hay 1st cutting 90%, 2nd cutting just underway. Second crop condition 5% poor, 50% fair, 35% good, 10% excellent. Wind damage to small grain crops, 95% none, 5% light, 5% moderate. Major activities included: Harvesting vegetables, weed control, cutting, raking hay, harvesting hay when conditions allowed, prep work for combining grains, spraying, Irrigating potatoes, planting rye grass, machinery repair.

**ARIZONA:** Cotton continues to progress. Alfalfa harvest activity was reported as 28% not being harvested, 4% light, 25% moderate, 43% active. Alfalfa condition was reported as 2% poor, 18% fair, 67% good, 13% excellent. As of August 15, Range, Pasture feed was reported as 6% poor, 21% fair, 39% good, 34% excellent. Last week central areas producers shipped a variety of melons including cantaloupe, casaba, crenshaw, golden honeydew, honeydew, orange flesh, santa claus.

**ARKANSAS:** Days suitable for fieldwork: 7. Topsoil moisture 41% very short, 47% short, 12% adequate, 0% surplus. Temperature normals were as much as 7° higher. This month may be the 4<sup>th</sup> hottest on record if the temperatures hold. A weak cold front did provide some relief on Friday with a few isolated severe storms. Most areas are well below in rainfall. Rain is needed for pasture growth. Most crops were reported in good condition. Livestock were reported in good condition, but the hot, humid weather was causing deaths in poultry, livestock. The main farm activities were: Fertilizing cotton, corn, rice, warm season forages, finishing harvesting hay, planning for fall pastures. Other activities: Irrigating corn, soybeans, cotton, sorghum, rice, draining of rice, cultivating cotton, spraying cotton for insects, other fields for insects, weeds, starting corn harvesting, scouting for sheath blight in rice, scouting for and treating webworms in soybeans, spraying of rice, cotton, soybean fields for weeds, tree fruit, small fruit harvesting, melon harvesting, dusting, ear tagging cattle for external parasites, giving Brucellosis vaccinations, weaning calves. Cotton 100% setting bolls, 2% opening bolls, 6% poor, 29% fair, 44% good, 21% excellent; Soybeans 91% bloomed, 62% setting pods, 3% very poor, 14% poor, 35% fair, 37% good, 11% excellent; Sorghum 99% headed, 64% turning color, 1% very poor, 9% poor, 38% fair, 46% good, 6% excellent; Alfalfa 9% very poor, 13% poor, 31% fair, 42% good, 5% excellent; Other Hay 8% very poor, 21% poor, 46% fair, 24% good, 1% excellent; Range, pastures feed 9% very poor, 32% poor, 40% fair, 18% good, 1% excellent.

**CALIFORNIA:** Field activities progressed normally under optimal conditions in most areas. Wheat, barley, oat harvests for grain were complete except at higher elevations. Seedbed preparations for fall-seeded small grains were underway. Rice heading continued, although warmer temperatures would assist pollination. Sacramento Valley rice fields were treated for weeds, San Joaquin Valley rice fields were being drained. Cotton boll setting was nearing completion in the San Joaquin, Sacramento valleys;

growth was still being slowed by cool temperatures. Cotton fields were sprayed for aphids, pink bollworm, whitefly. Garbanzo bean harvest gained momentum, blackeye bean harvest began in central, southern counties. Some fields of blackeye beans were sprayed for lygus. Safflower harvest was active in the San Joaquin Valley, but was just getting underway in the Sacramento Valley. Seed alfalfa was harvested in the San Joaquin, Imperial valleys. Sugarbeet harvest continued; later maturing sugarbeets were treated for armyworms, beet webworms, grasshoppers. Corn silage harvest was ongoing in the central valleys. Growers were finished putting in second crop plantings of corn on the harvested small grain fields. Sunflower harvest began in the Sacramento Valley; some fields were sprayed for weeds. Alfalfa was cut for hay or greenchopped. The fresh market harvest of San Joaquin Valley grapes gained momentum. Varieties picked included Perlette, Flame Seedless, Thompson Seedless. Vineyard floors were being prepared for the upcoming wine, raisin grape harvests. Other cultural activities in orchards, vineyards included extensive weed control, irrigation. Harvest of plums, nectarines, clingstone peaches, freestone peaches continued. Good quality was noted. Apple trees were treated for codling moth. Picking of early variety apples was active. Olive trees exhibited a good fruit set that was maturing well. Bartlett pear harvest continued in the Sacramento River delta area. Asian pear harvest was active in the San Joaquin Valley. Tree limbs in almond orchards remain supported to bear weight of the heavy nut set. The crop was nearing full maturity with some hull splitting reported. Growers were preparing orchards for harvest. Valencia oranges, lemons were picked in southern areas. The cooler than normal weather has favored fruit set for peppers, eggplant, gourds, squash, cucumbers. However, the processing tomato harvest was slowed by the cool temperatures. Tomato fields were treated to control leafminers, armyworms, fruit worms, aphids. The sweet potato harvest continued; some fields were treated for worms. The San Joaquin Valley fall broccoli, cauliflower crops were planted; some earlier planted fields were beginning to emerge. Fields for the fall crop of head lettuce were being prepared. Preparations for fall planting were also underway in the Imperial Valley, where fields were being treated for nematodes. Harvest of vineseed began in the Sacramento Valley. Cucumbers, sweet corn were being harvested. Watermelon, cantaloupe harvests continued, with less mature fields still being treated for aphids in some locations. Honeydew melons were harvested; quality was good. Ground preparation for fall strawberry planting was underway. Among the numerous other vegetables harvested were bok choy, cilantro, chayote leaves, eggplant, garlic, leeks, radishes, squash, cherry tomatoes. Irrigated pastures were in fair to good condition. Non-irrigated pastures were in poor to fair condition depending on the location. Higher elevation, non-irrigated pastures were deteriorating rapidly. Foothill pastures have been dry for some time, but cooler weather has reduced the fire hazard somewhat. Livestock were in good condition. Bees continued to pollinate seed alfalfa, the remaining melon fields.

**COLORADO:** Days suitable for fieldwork 5.2. Topsoil 6% very short, 10% short, 80% adequate, 4% surplus. Subsoil 7% very short, 13% short, 77% adequate, 3% surplus. Warmer, drier weather returned during the week allowing producers to resume field activities, late row crops to progress towards maturity. Spring wheat 87% turning color, 80% 1998, 86% avg.; 39% harvested, 28% 1998, 41% avg.; 7% poor, 18% fair, 51% good, 24% excellent. Spring barley 98% turning color, 95% 1998, 86% avg.; 30% harvested, 36% 1998, 33% avg.; 6% poor, 19% fair, 54% good, 21% excellent. Corn 15% dough, 32% 1998, 32% avg. Oats 87% turning color, 89% 1998, 88% avg.; 50% harvested, 51% 1998, 55% avg. Dry onions 5% harvested, 18% 1998, 15% avg.; 1% very poor, 2% poor, 12% fair, 65% good, 20% excellent. Sugar beets 5% poor, 13% fair, 45% good, 37% excellent. Dry beans 87% flowered, 91% 1998, 89% avg.; 1% cut, 1% 1998, 0% avg.; 2% poor, 14% fair, 63% good, 21% excellent. Summer potatoes 9% harvested, 10% 1998, 15% avg.; 1% very poor, 1% poor, 4% fair, 69% good, 25% excellent. Fall potatoes 7% poor, 13% fair, 42% good, 38% excellent. Alfalfa 75% 2<sup>nd</sup> cutting, 86% 1998, 85% avg.; 14% 3<sup>rd</sup> cutting, 12% 1998, 12% avg.; 1% very poor, 5% poor, 27% fair, 53% good, 14% excellent. Pasture, range feed in mostly good condition.

**DELAWARE:** Days suitable for fieldwork 7.0. Topsoil 30% very short, 66% short, 4% adequate. Subsoil 35% very short, 64% short, 1% adequate. Field corn 22% very poor, 33% poor, 28% fair, 16% good, 1% excellent; 55% dough, 53% 1998, 55% avg.; 26% dented, 22% 1998, 24% avg.; 20% mature, 15% 1998, 6% avg.; 27% harvested for silage, 18% 1998, 9% avg. Soybeans 10% very poor, 30% poor, 33% fair, 25% good, 1% excellent; 42% bloomed, 39% 1998, 59% avg.; 33% setting pods, 25% 1998, 33% avg.; 5% turned, 4% 1998, 1% avg. Sorghum 8% poor, 56% fair, 36% good; 48% headed, 44% 1998, 61% avg.; 13% turned, 9% 1998, 5% avg. Sweet corn 53% harvested, 50% 1998, 67% avg. Snap beans 58% harvested, 49% 1998, 62% avg. Cantaloupes 42% harvested, 69% 1998, 70% avg. Watermelons 50% harvested, 49% 1998, 52% avg. Cucumbers 55% harvested, 69% 1998, 73% avg. Lima beans 40% harvested, 31% 1998, 24% avg. Tomatoes 39% harvested, 42% 1998, 52% avg. Potatoes 58% harvested, 59% 1998, 69% avg. Apples 8% fair, 92% good; 15% harvested, 18% 1998, 19% avg. Peaches 7% fair, 93% good; 51% harvested, 55% 1998, 64% avg. Clover, other hay 94% 2<sup>nd</sup> cutting, 100% 1998, 98% avg.; 85% 3<sup>rd</sup> cutting, 68% 1998, 53% avg.; 27% 4<sup>th</sup> cutting, 19% 1998, 6% avg. Alfalfa hay 90% 3<sup>rd</sup> cutting harvested, 86% 1998, 76% avg.; 15% 4<sup>th</sup> cutting, 19% 1998, 10% avg. Hay supplies 7% very short, 66% short, 27% adequate. Pasture 9% very poor, 67% poor, 14% fair, 10% good. Activities: Corn maturing at rapid pace, farmers harvesting large amounts of corn for silage, continued vegetable harvesting.

**FLORIDA:** Topsoil moisture mostly short to adequate. Hot temperatures continued, weekly averages near normal to 3° above at major stations. Daytime highs 90s; Tallahassee, Gainesville reported at least one high at 100 or more. Nighttime lows 70s. Scattered rain ranged from traces at Ft. Pierce, Daytona Beach to about 3.33 in. at Gainesville, Tallahassee, Bradenton. Tobacco harvest winding down. Tobacco marketing active. Cotton, soybean, sugarcane condition normal. Haying active. Peanut growers preparing to start harvest. Peanut 13% fair, 64% good, 23% excellent. Mostly clear weather allowed land preparation for fall vegetable planting to proceed on schedule. Quincy: Tomato transplanting nearly finished, 1° of acres left to plant. About 3° of tomato acres lost to dry conditions, late July, growers replanted. Palmetto-Ruskin-Tomatoes fair to good, planting slowly increasing. Workers making first ties of oldest tomato plants, spraying to control disease, insects. Planting cherry, plum tomatoes gaining momentum, both rated fair to good. Watermelon planting underway. Planting of eggplant expected to start within next 5 to 7 days. East Coast - Scattered rains eased dry soil conditions. Pepper planting steady. Tomato transplanting slow as season gets underway. Growers starting to plant eggplant. Southwest - Producers laying plastic for transplanting tomatoes, to begin within next two weeks. Dade - Okra harvesting continues, good quality available. Growers to begin transplanting U-Pic tomatoes within next 5 to 7 days. Planting of tomatoes for out-of-State shipment to start around September first. Snap bean planting to begin about mid-September. Hot, humid weather all citrus areas with scattered rains, thunderstorms. Abundant new foliage, new crop fruit progressing well. Some splitting of early oranges, Navels, growers testing fruit for early shipments. Caretakers cutting cover crops, herbiciding, spraying, fertilizing, replanting. Pasture feed; 50% fair, 45% good, 5% excellent. Condition of cattle; 20% fair, 75% good, 5% excellent. Panhandle; cattle, calves in fair condition. Growing conditions at most locations excellent for grass. Central; cattle, calves fair condition due to only fair pasture; grass growth limited. West central; cattle fair to good condition, pastures good, green, some pastures wet. Southwest; rain spotty, with cattle, range fair to good condition.

**GEORGIA:** Days suitable for field work 6.6. Soil moisture 44% very short, 37% short, 18% adequate, 1% surplus. Corn 87% mature, 91% 1998, 87% avg.; 33% harvested for grain, 31% 1998, 24% avg. Hay 17% very poor, 30% poor, 35% fair, 17% good, 1% excellent. Sorghum 13% very poor, 28% poor, 35% fair, 18% good, 6% excellent; 4% harvested for grain, 10% 1998, 4% avg. Tobacco 75% harvested, 55% 1998, 76% avg. Watermelons 96% harvested, 97% 1998, 96% avg. Apples 26% fair, 54% good, 20% excellent; 8% harvested, 7% 1998, 10% avg. Peaches 99% harvested, 98% 1998, 99% avg. Pecans 6% very poor, 13% poor, 33% fair, 40% good, 8% excellent. Another week of dry, hot weather continued to have a negative effect on crops, pastures. Temperatures remained hot with scattered showers occurring in some areas. Poultry continued to be stressed due to the heat. Conditions helped corn harvest continue ahead of 1998, the five year average pace. Timely rains in some southwestern counties helped the crop condition slightly. The soybean condition fell. Pod set was ahead of the

five year average pace. The sorghum condition declined with harvest at the average pace. Cotton continued to suffer. Some areas reported lost bolls due to the hot, dry weather. The peanut condition also dropped. Some farmers were applying fungicides to peanuts. Tobacco harvest continued ahead of 1998 pace. Pasture, hay fields continued to deteriorate with the dry weather. Some cattle producers have begun supplemental feeding, evaluating their herd size. Pecan tree spraying continued in some areas as condition declined. Watermelon, peach harvests neared completion. Other activities included: Irrigating crops, preparing land for fall vegetable planting.

**HAWAII:** Variable weather conditions were fair for crops. Trade wind weather prevailed most of week. Mostly sunny with moderate winds, few showers in windward areas. Tropical Storm Eugene passed south of State late Thursday. Western half of State remained sunny while southern islands received some showers. Most notable were windward areas of areas island which received moderate to heavy rain. Banana orchards were in mostly good condition. Harvesting is very heavy; peak levels in some areas. Papaya orchards ranged from good to poor condition. Harvesting is active. Moderate to heavy irrigation ensured normal progress for head cabbage plantings. Harvesting remained steady.

**IDAHO:** Days suitable for fieldwork 6.0. Topsoil 7% very short, 37% short, 55% adequate, 1% surplus. Thundershowers have slowed hay, small grain harvesting. Potato harvest is underway in Southwestern, South central counties. Irrigation supply 63% excellent, 30% good, 6% fair, 1% poor. Alfalfa hay 2<sup>nd</sup> cutting 86%, 84% 1998, 80% avg.; 3<sup>rd</sup> cutting 24%, 16% 1998, 12% avg. Oats harvested for 25% grain, 16% 1998, 25% avg. Mint 38% harvested, 61% 1998, 69% avg. Peaches 19% harvested, 15% 1998, 41% avg. Dry Peas 30% harvested, 46% 1998, 44% avg. Dry Beans 1% harvested, 0% 1998, 1% avg. Lentils 22% harvested, 13% 1998, 22% avg. Onions 3% harvested, 4% 1998, 4% avg. Prunes, plums 8% harvested, 3% 1998, 8% avg. Hops 3% harvested, 2% 1998, 1% avg. Sweet Corn 26% harvested, 17% 1998, 9% avg. Potatoes with vines dead/kill 5%, 5% 1998, 5% avg. Barley 94% turning color, 14% harvested, 32% 1998, 30% avg. Spring wheat 96% turning color, 16% harvested, 25% 1998, 25% avg. Winter wheat 32% harvested, 56% 1998, 52% avg. Activities: Irrigating, weed control, spraying insects, preparing for potato harvest, harvesting small grains, fruit, mint, dry peas, lentils, onions and hay.

**ILLINOIS:** Days suitable for fieldwork 5.5. Topsoil moisture 18% very short, 39% short, 39% adequate, 4% surplus. Thunderstorms late last week provided much needed rain across most of the state. However, this was accompanied by strong winds that caused damage in some fields. The moisture combined with cooler temperatures, helped relieve stress on the crops caused by extremely dry weather which began nearly six weeks ago. The corn crop is progressing ahead of normal. Better weather conditions have also helped the soybean crop. Before the heavy rains hit, farmers were busy baling hay, mowing roadsides, caring for livestock. Oats 99% harvested, 98% 1998, 96% avg. Alfalfa 99% 2<sup>nd</sup> cut, 98% 1998, 97% avg. Alfalfa 3<sup>rd</sup> 49% cut, 43% 1998, 37% avg.

**INDIANA:** Days suitable for fieldwork 6.1. Topsoil 35% very short, 44% short, 21% adequate, 0% surplus. Subsoil 34% very short, 51% short, 15% adequate, 0% surplus. Much-needed rain, central, northern areas. Topsoil subsoil remain very dry, most areas. Corn condition improved slightly. Soybean condition declined. Corn 31% good to excellent. Soybean 30% good to excellent. Pastures, hay crops continue to deteriorate. Feeding hay some areas. Third cutting alfalfa, 75% complete, 41% 1998. Tobacco 9% harvest complete. Activities: Chopping silage, selling corn, soybeans, irrigating crops, cleaning grain bins, harvesting tobacco, mowing roads, baling hay, harvesting vegetables, monitoring fields, attending state fair, caring for livestock.

**IOWA:** Days suitable for field work 4.9. Topsoil 5% very short, 16% short, 75% adequate, 4% surplus. Subsoil 5% very short, 22% short, 70% adequate, 3% surplus. Heavy rains in southern areas scattered showers in the north. Corn 87% milk stage, 89 1998%, 75% avg.; dough 52% stage, 38% 1998, 30% avg.; dent 12% stage, 7% 1998, 5% avg. Corn 3% very poor, 7% poor, 21% fair, 47% good, 22% excellent. Soybeans setting 93% pods, 94% 1998, 88% avg. Soybean 2% very poor, 6% poor, 20% fair, 48% good, 24% excellent. Cooler temperatures continue to benefit areas livestock. Some cases of pinkeye reported. Range, pasture feed 3% very poor, 16% poor, 32% fair, 41% good, 8% excellent. Third 25% cutting of

alfalfa, 12% 1998, 14% avg. Second 76% cutting of clover hay, 81% 1998, 75% avg. Hay 2% very poor, 11% poor, 33% fair, 43% good, 11% excellent.

**KANSAS:** Topsoil 5% very short, 32% short, 61% adequate, 2% surplus. Subsoil 2% very short, 20% short, 74% adequate, 4% surplus. Warmer, drier conditions returned to the State last week causing conditions to decline slightly. Corn 4% mature, 8% 1998, 4% average. Sunflower 1% very poor, 3% poor, 21% fair, 63% good, 12% excellent. Sunflowers 86% blooming, 91% 1998, NA average. Ray flowers 19% dry, 24% 1998, NA average. Bracts 10% turning yellow, 10% 1998, NA average. Third 88% cutting alfalfa, 91% 1998, 85% average. Fourth 24% cutting alfalfa, 17% 1998, 14% average. Crop insect populations are rated at mostly light to none, with a few reports of corn borers, fall armyworms, grasshoppers, webworms in alfalfa, sorghum, soybeans. Producers were busy cutting hay, working summer fallow, wheat stubble, cultivating, spraying weeds. Hay, forage supplies 2% short, 85% adequate, 13% surplus. Stock water supplies are mostly adequate.

**KENTUCKY:** Days suitable for fieldwork 5.9. Topsoil 61% very short, 35% short, 4% adequate. Subsoil 59% very short, 37% short, 4% adequate. Scattered showers did not bring any drought relief. Crops continue to be in desperate need of moisture. Later planted corn has been more severely stressed by the hot, dry weather than earlier planted fields. Harvest has begun for some early planted corn, yields were reported as mostly good to fair with some low test weights. Most soybeans are at the critical pod fill stage, need significant rainfall in the next couple of weeks for pod fill. Without rain soon many second crop soybeans will produce little to no beans. Burley tobacco 75% topped, 22% cut. Dark tobacco 93% topped, 23% cut. Tobacco 14% very poor, 26% poor, 36% fair, 20% good, 4% excellent. Blank shank continues to be a serious problem statewide. Drought conditions have produced short plants on all but early planted or irrigated fields. Pasture feed 38% very poor, 33% poor, 22% fair, 6% good, 1% excellent. Farmers continue to feed hay due to poor pasture conditions. Unless rain is received soon, fall hay harvest will be minimal. Hay 30% very poor, 34% poor, 26% fair, 9% good, 1% excellent.

**LOUISIANA:** Days suitable for fieldwork 6.2. Soil 23% very short, 34% short, 39% adequate, 4% surplus. Corn 7% poor, 25% fair, 57% good, 11% excellent; 53% harvested, 60% 1998, 37% avg. Cotton, that was not irrigated, was showing signs of stress. Hay 47% final cutting, 48% 1998, 58% avg. Rice 83% ripe, 71% 1998, 55% avg. Sorghum 72% ripe, 56% 1998, 39% avg.; 27% harvested, 13% 1998, 8% avg. Soybeans 17% leaves turning, 21% 1998, 9% avg.; 8% leaves shedding, 8% 1998, 4% avg. Sugarcane 11% fair, 59% good, 30% excellent; 23% planted, 2% 1998, 3% avg. Sugarcane growers were spraying for borers, planting. Sweetpotatoes 3% poor, 36% fair, 56% good, 5% excellent; 9% harvested, 4% 1998, 7% avg. Livestock 1% very poor, 5% poor, 27% fair, 55% good, 12% excellent. Vegetables 6% very poor, 24% poor, 43% fair, 25% good, 2% excellent. Vegetable crops were suffering from the heat and high levels of insects.

**MARYLAND:** Days suitable for fieldwork 6.5. Subsoil 72% very short, 22% short, 6% adequate. Topsoil 62% very short, 27% short, 11% adequate. Corn 19% very poor, 33% poor, 33% fair, 13% good, 2% excellent; 48% dough, 57% 1998, 49% avg.; 25% dent, 29% 1998, 19% avg.; 16% mature, 15% 1998, 4% avg. Soybeans 14% very poor, 26% poor, 48% fair, 11% good, 1% excellent; 66% bloomed, 81% 1998, 74% avg.; 51% setting pods, 61% 1998, 48% avg. Sorghum 13% very poor, 34% poor, 50% fair, 3% good; 75% headed, 89% 1998, 77% avg.; 10% turning color, 14% 1998, 4% avg. Tobacco 16% very poor, 36% poor, 39% fair, 9% good; 80% bloomed, 79% 1998, 89% avg.; 49% topped, 65% 1998, 64% avg.; 18% harvested, 28% 1998, 23% avg. Snap beans 60% harvested, 69% 1998, 69% avg. Cucumbers 70% harvested, 79% 1998, 67% avg. Potatoes 78% harvested, 100% 1998, 93% avg. Sweet Corn 72% harvested, 76% 1998, 68% avg. Tomatoes 65% harvested, 68% 1998, 60% avg. Cantaloupes 73% harvested, 81% 1998, 77% avg. Lima beans 20% harvested, 24% 1998, 15% avg. Watermelons 65% harvested, 69% 1998, 65% avg. Peaches 5% poor, 33% fair, 61% good, 1% excellent; 62% harvested, 68% 1998, 62% avg. Apples 22% fair, 78% good; 7% harvested, 10% 1998, 7% avg. Clover, other hays 87% 2<sup>nd</sup> cutting harvested, 89% 1998, 87% avg; 39% 3<sup>rd</sup> cutting, 52% 1998, 31% avg. Alfalfa 72% 3<sup>rd</sup> cutting harvested, 58% 1998, 66% avg.; 15% 4<sup>th</sup> cutting, 25% 1998, 11% avg. Pasture feed 46% very poor, 29% poor, 21% fair, 4% good. Hay supplies 14% very short, 57% short, 29% adequate. Activities: Hay supplies getting short, livestock producers selling off parts of herd, hay yields extremely light.

**MICHIGAN:** Days suitable for fieldwork 5.0. Topsoil 7% very short, 23% short, 67% adequate, 3% surplus. Subsoil 16% very short, 28% short, 54% adequate, 2% surplus. Hay 1% very poor, 6% poor, 21% fair, 54% good, 18% excellent. Dry beans 0% very poor, 5% poor, 14% fair, 59% good, 22% excellent. Oats 2% very poor, 6% poor, 32% fair, 42% good, 18% excellent. Hay 2<sup>nd</sup> 83% cutting, 99% 1998, 86% avg. Hay 3<sup>rd</sup> 24% cutting, 29% 1998, 14% avg. Corn 83% milk, 83% 1998, 49% avg. Dry beans 97% blooming, 98% 1998, 88% avg. Dry beans 81% setting pods, 76% 1998, 68% avg. Dry beans 6% turning leaves, 3% 1998, 3% avg. Soybeans 2% turning leaves, 2% 1998, 2% avg. Normal temperatures constant as rainfall was variable. In Upper Peninsula, northern sections of Lower Peninsula, there has been too much rain. The lower half is experiencing the need for rain. Field crops continued to mature ahead of normal. Too much rain has made hay, small grain harvest difficult in the Upper Peninsula, the northern part of the Lower Peninsula. Second, 3<sup>rd</sup> hay cuttings progressed in the south. Corn was in good condition with few reports of insect pressure. Both dry beans, soybeans were sprayed for white mold. Sugarbeets have benefitted from widespread gentle rains, but spraying continued for Cercospora leafspot. As potato vines matured, fresh market harvest increased. Cantaloupe harvest was active and quality was good. Carrot harvest continued with good growth. Harvest of cucumbers for pickles continued and quality improved. Eggplant volume was increasing. Pepper harvest was in full swing with excellent quality. Pumpkin vine growth was good with some disease problems, concern over early maturity. Snap bean harvest was active with good yields, quality. Zucchini, summer squash harvest continued. Sweet corn supplies remained heavy although development has slowed a little. Market tomato harvest continued and quality was good. Apples fruit 2.5 inches diameter. Peach harvest continued. Stanley plum harvest will begin this week. Concord grapes coloring. Clapp's Favorite pears harvested. Fall raspberry bloom began. Blueberry harvest was winding down.

**MINNESOTA:** Days suitable for fieldwork 4.0. Topsoil 1% very short, 14% short, 67% adequate, 18% surplus. Corn 87% milking, 96% 1998, 73% avg. Winter Wheat 78% harvested, 96% 1998, 79% avg. Rye 87% harvested, 98% 1998, 85% avg. Sweet corn 37% harvested, 54% 1998, 30% avg. Pasture feed 2% very poor, 11% poor, 27% fair, 51% good, 9% excellent. Sugarbeets 1% very poor, 2% poor, 19% fair, 61% good, 17% excellent. Sunflowers 2% very poor, 20% poor, 39% fair, 37% good, 2% excellent. Dry beans 1% very poor, 12% poor, 36% fair, 44% good, 7% excellent. The harvest of wheat, other crops in the Northwest District is being held up by persistent rainy weather. At the same time, parts of the state are still hoping for some much-needed rain. In the Southwest District, corn, soybeans are in need of some additional moisture to complete filling of ears, pods.

**MISSISSIPPI:** Days suitable for fieldwork 6.8. Soil moisture 44% very short, 33% short, 21% adequate, 2% surplus. Corn 100% dent, 96% 1998, 90% avg.; 84% mature, 79% 1998, 55% avg.; 24% harvested, 35% 1998, 14% avg.; 58% silage harvested, 79% 1998, 63% avg.; 1% very poor, 6% poor, 27% fair, 51% good, 15% excellent. Cotton 26% open bolls, 30% 1998, 17% avg.; 3% very poor, 10% poor, 29% fair, 49% good, 9% excellent. Rice 89% heading, 89% 1998, 90% avg.; 10% mature, 8% 1998, 14% avg.; 2% very poor, 5% poor, 27% fair, 49% good, 17% excellent. Sorghum 99% heading, 100% 1998, 99% avg.; 76% turning color, 84% 1998, 79% avg.; 36% mature, 32% 1998, 31% avg.; 10% harvested, NA 1998, NA avg.; 18% silage harvested, 21% 1998, 19% avg.; 1% very poor, 5% poor, 34% fair, 50% good, 10% excellent. Soybeans 98% setting pods, 92% 1998, 82% avg.; 41% turning color, 27% 1998, 15% avg.; 21% shedding leaves, 9% 1998, 6% avg.; 7% very poor, 19% poor, 32% fair, 35% good, 7% excellent. Sweet potatoes 10% harvested, 2% 1998, 5% avg.; 1% very poor, 5% poor, 17% fair, 77% good. Hay (warm-season) 78% harvested, 76% 1998, 79% avg. Watermelons 89% harvested, 89% 1998, 90% avg. Cattle, 2% very poor, 13% poor, 29% fair, 51% good, 5% excellent. Pasture 12% very poor, 28% poor, 29% fair, 28% good, 3% excellent. Above average temperatures and dry conditions prevailed across most of the state.

**MISSOURI:** Days suitable for fieldwork 6.5. Topsoil 42% very short, 37% short, 21% adequate. Subsoil moisture was rated 33% very short, 42% short, 25% adequate. Dry weather continues to take a toll on row crops. Cattle producers in some districts are starting to feed hay due to the lack of forage in pastures. Corn in the Bootheel continues to be more advanced than the rest of the state with 64% mature, north-central, northeast districts least advanced with one-third in dent stage 2% mature. Soybean blooming ahead of normal, but pod development behind normal due to hot, dry weather.

Sorghum 46% coloring in Bootheel. Cotton opening bolls is several days ahead of the 4% normal for this date. 3<sup>rd</sup> crop alfalfa cut 63%. Pasture conditions continue to decline 21% very poor, 34% poor, 35% fair, 10% good. Precipitation for week ending August 15, 1999 avg. 0.24 in.

**MONTANA:** Days suitable for fieldwork 4.3. Topsoil 22% very short, 39% short, 37% adequate, 2% surplus. Subsoil moisture 20% very short, 47% short, 32% adequate, 0% surplus. The week started out hot, dry. But as the week progressed, conditions became cooler, many areas of the state received some amounts of precipitation. Sugar beets 0% very poor, 1% poor, 27% fair, 41% good, 31% excellent. Winter wheat 96% ripe, 92% 1998, 87% avg. Spring wheat 94% turning, 100% 1998, 95% avg. Spring wheat 50% ripe, 72% 1998, 53% avg. Barley 93% turning, 100% 1998, 93% avg. Barley 52% ripe, 68% 1998, 55% avg. Oats 92% turning, 99% 1998, 93% avg. Oats 54% ripe, 65% 1998, 51% avg. Oats 23% harvested, 30% 1998, 20% avg. Oats 2% very poor, 8% poor, 19% fair, 54% good, 17% excellent. Corn for silage 4% harvested, 0% 1998, 1% avg. Corn 0% very poor, 1% poor, 11% fair, 59% good, 29% excellent. Potatoes 0% very poor, 0% poor, 11% fair, 74% good, 15% excellent. Dry beans 0% very poor, 2% poor, 10% fair, 58% good, 30% excellent. Alfalfa 2nd 47% cutting, 36% 1998, 46% avg. Other hay 90% harvested, 88% 1998, 90% avg. Summer fallow fieldwork is reported as being finished on schedule. Evidence of the July 15<sup>th</sup> frost in many parts of Glacier county is evident. White heads are reported on wheat, other small grains, but it is still questionable at this point as to whether it will be worth harvesting or not.

**NEBRASKA:** Days suitable for fieldwork 4.6. Statewide, temperatures averaged from two to four<sup>o</sup> below normals. Precipitation across the State averaged from .14 of an inch in the Northwest to 2.31 inches in extreme eastern counties. Topsoil moisture 4% very short, 15% short, 77% adequate, 4% surplus. Subsoil 3% very short, 18% short, 78% adequate, and 1% surplus. Corn 1% very poor, 6% poor, 21% fair, 53% good, 19% excellent. Irrigated corn 76%, dryland corn 65% in good or excellent; corn 70% dough, 67% 1998, 53% avg.; corn 12% dent, below 14% 1998, above 11% average. Soybeans 77% setting pods, 89% 1998, 76% avg. Soybean 1% very poor, 6% poor, 29% fair, 47% good, 17% excellent. Sorghum 71% headed, 89% 1998, 76% average.; turning 5% color, 4% 1998, 5% avg. Sorghum 4% poor, 35% fair, 52% good, 9% excellent. Dry beans 1% very poor, 2% poor, 22% fair, 69% good, 6% excellent; 74% setting pods, above 40% 1998 same as avg. Oats 97% harvest rated, slightly below 98% of 1998 average. Third cutting of alfalfa 43% complete above 42% 1998, 34% average. Alfalfa 1% very poor, 4% poor, 24% fair, 58% good, 13% excellent. Pasture, range 2% very poor, 7% poor, 26% fair, 54% good, 11% excellent. Wild hay 4% poor, 17% fair, 62% good, 17% excellent. Livestock were doing better with last week's cooler weather. Producer activities; Haying, moving grain to market, caring for livestock, preparations for fall seeded wheat.

**NEVADA:** Fires ran rampant through norther areas range lands. Lightning fires, a few man caused fires burned over 1 million acres of range land in the Northern portion of the State during the past few weeks. The Reno area received the majority of the precipitation from these thunder storms at 0.53 inches. Elko, Ely, Winnemucca received only minimal precipitation, at 0.01, 0.03, 0.04, respectively. Southern areas received only trace amounts of precipitation. Temperatures were normal, cooled as the week progressed. The cooler temperatures, rainfall were beneficial to the range land that had not burned. The majority of the irrigation water supplies remained adequate though shortages were reported in Douglas county. Some farmers had already completed third cutting of alfalfa. Most farmers were mid way through 3rd cutting, the quality also remained good. Other hay continued to be harvested, quality remained good. Grain harvest was well underway, including burning stubble. Some wheat was reported as testing light. Cool nights have slowed vegetable growth, some potatoes began blooming. Garlic harvest continued. Main farm, ranch activities: Irrigating, harvesting hay, planting alfalfa, grain harvest, vegetable harvest preparation, garlic harvest, checking livestock.

**NEW ENGLAND:** Days suitable for fieldwork 5.6. Topsoil 23% very short, 44% short, 33% adequate. Subsoil 30% very short, 47% short, 23% adequate. Pasture feed 30% very poor, 25% poor, 33% fair, 11% good, 1% excellent. Maine potatoes <5% harvested; condition good to excellent. Massachusetts potatoes 20% harvested, 25% 1998, 25% average; condition good to fair. Rhode Island potatoes 30% harvested, 10% 1998, 10% average; condition fair. Oats in Maine 15% harvested, 10% 1998, 20% average; condition good to excellent. Barley in Maine 40% harvested, 35%

1998; condition good to excellent. Field corn <5% harvested; condition good. Sweet corn 50% harvested, 50% 1998, 45% average; condition good to fair. Shade Tobacco 75% harvested, 95% 1998, 75% average, condition good. Broadleaf Tobacco 75% harvested, 65% 1998, 60% average; condition good. First cut hay 99% harvested, 99% 1998, 99% average, condition good to fair. Second cut hay 65% harvested, 70% 1998, 60% average; condition good to fair. Third cut hay 20% harvested, 10% 1998, 15% average; condition fair. Apples 5% harvested, 5% 1998, <5% average; size average, condition good to fair. Peaches 45% harvested, 35% 1998, 30% average; size average to below average, condition fair. Pears <5% harvested, 5% 1998, <5% average; size average to below average, condition fair to poor. Cranberries size average, condition good to excellent. Highbush blueberries 85% harvested, 75% 1998, 70% average, size average, condition good to fair. Wild Blueberries 65% harvested, 60% 1998, 45% average; size average, condition good to fair. Major farm activities included: Harvesting summer vegetables, tobacco, oats, barley, potatoes, picking fruit including early varieties of apples, peaches, pears. Blueberry harvest continues. Harvesting second, third cuttings of hay where possible. Mowing weeds, hoeing fields, marketing produce at roadside stands, farmer's markets. Scouting for pest, spraying where necessary. Side dressing fields.

**NEW JERSEY:** Days suitable for field work averaged 6. Temperatures Averaged Much Above Normal. Extremes Were 96<sup>o</sup> at Several Locations on The 13th, 45<sup>o</sup> at Charlotteburg on The 10<sup>th</sup>. Weekly Rainfall Averaged 1.87 Inches North, 2.51 Inches Central, 2.00 Inches South. The Heaviest 24 Hour Total Was 4.10 Inches at Trenton on The 13th to The 14<sup>th</sup>. Estimated Soil Moisture, in Percent of Field Capacity, This Past Week Averaged 73% North, 69% Central, 48% South. Four Inch Soil Temperatures Averaged 73<sup>o</sup> North, 75<sup>o</sup> Central, 75<sup>o</sup> South. Irrigation is occurring across the state. The weekend rainfall probably arrived too late to help field corn. However, rains did ease the shortfall in the irrigation water supply. Most of the benefit occurred in the central district where irrigation water supply is now short to adequate. The supply in the north remains short, while over most of the south irrigation water supply is very short to short. Some farmers are reporting their corn for grain as a total loss. Harvesting of corn for silage is occurring, both yields, nutrient content are below normal. The soybean crop is between fair to poor condition. Farmers report the pods are falling off and there is insect damage. The condition of the 2nd alfalfa cutting is between fair, poor. Some areas did not get a 2nd alfalfa cutting. No 3rd cutting is expected in many areas. The condition of the other hay crop is in poor condition, no 2nd cutting is expected at all in some areas. Pasture condition remains very poor in most of the state despite the recent rainfall. Supplemental feeding of cattle is occurring extensively. Some farmers are already using their winter feed supplies. Most irrigated vegetable fields are in good, fair condition but heat stress has affected even irrigated fields. Some sun damage has been reported in tomato, peppers fields. Significant damage to the pumpkin crop is expected since the crop is mostly non-irrigated. Potato sizes have been reported to be somewhat smaller than normal, yields are down. Harvest of tomatoes, squash, sweet corn, peppers, cucumbers, melons, eggplant, potatoes, other minor vegetables continued. There is a limited supply of green beans due to the high temperatures. Seeding of irrigated fall vegetables is occurring in South areas. Harvest of peaches continued. Apples are also being harvested in the southern counties. Apple condition is between good, fair experiencing reduced fruit size, premature fruit drop. Blueberry harvest is virtually complete in Central areas. The water supply for cranberries is tight, there has been some scalding due to the sun.

**NEW MEXICO:** Days suitable for field work 6.0. Areas experienced a typical week for mid-August. Scattered thunderstorms were around each day, except for a brief dry period Thursday, Friday. The statewide temperature was 1<sup>o</sup> below normal. In general, temperatures were a little

above normal in the plains, slightly below normal elsewhere. As the state dried out farmers were able to return to normal activities of harvesting, irrigating, preparing land for fall planting. Haying activities were active with some rain damaged hay still being removed from fields. Chile, silage harvest were well underway in the southern part of the state. Ranchers were able to concentrate on maintenance since there was little need to haul feed or water for livestock. Pasture, Range feed conditions remained steady at 1% very poor, 5% poor, 23% fair, 52% good, 19% excellent. Cattle, sheep continued to improve slightly with approximately 85% of both being reported in good to excellent condition.

**NEW YORK:** Days suitable 5.8. Soil moisture 44% very short, 47% short, 9% adequate. Pasture feed 37% very poor, 42% poor, 6% fair, 15% good. Hay 38% poor, 38% fair, 24% good. Alfalfa 2nd cutting 96% complete, 88% 1998, 85% average. Third cuttings 45% complete, 30% 1998, 27% average. Haying slowed due to lack of regrowth. Wheat harvest complete. Good yields reported. Oats 85% harvested, 70% 1998, 48% average. Low to moderate yields reported. Corn 16% poor, 37% fair, 37% good, 10% excellent. Silage harvest expected to begin early. Sweet corn, snap bean, cabbage harvest active. Apples fair to good condition - size still a concern in non-irrigated orchards. Grapes good condition - sugar levels expected to be high. Cooler temperatures brought relief to heat-stressed livestock.

**NORTH CAROLINA:** Days suitable for fieldwork 6.3. compared to 6.5 last week. Soil moisture levels continue to decline, are rated 33% very short, 46% short, 19% adequate, 2% surplus. High pressure dominated as hot, dry weather continued throughout most of the week. However, by the weekend a cool front pushed its way along the eastern sea board spawning severe weather for a large portion of the Piedmont, Coastal areas. The slow moving system brought widespread rainfall to major agriculture areas of the State. Most reports did not reflect the weekend showers. Tobacco harvesting, marketing were among the major activities. Due to the dry weather, corn for silage harvest has picked up, is well ahead of normal. The cotton, soybean crops are developing on schedule, should benefit from the most recent rains. Other activities: Included weed control in all crops, baling hay, harvesting peaches, vegetables, crop scouting, tending livestock. Irrigation activities continued with reports of water shortages. Dry pastures benefited from the recent precipitation.

**NORTH DAKOTA:** Days suitable for fieldwork 4. Topsoil 1% very short, 9% short, 74% adequate, 16% surplus. Subsoil 0% very short, 10% short, 76% adequate, 14% surplus. Significant rainfall across most of the State last week slowed the small grain harvest but improved row crop conditions. Harvest of spring wheat, oats, barley, canola was at a standstill by midweek due to the many showers, thunderstorms. Row crops benefitted from the rainfall. Durum wheat 83% milk, 100% 1998, 92% avg.; 39% turning, 87% 1998, 65% avg.; 2% combined, 22% 1998, 9% avg. Canola 73% turning, 92% 1998; 36% swathed, 69% 1998; 3% combined, 14% 1998. Corn 73% milk, 91% 1998, 75% avg.; 10% denting, 17% 1998, 7% avg. Dry edible beans 91% podding, 100% 1998, 97% avg.; 51% fully podded, 90% 1998, 68% avg.; 20% lower leaves yellowing, 58% 1998, 30% avg. Flaxseed 39% turning, 87% 1998, 53% avg.; 1% combined, 12% 1998, 3% avg. Potatoes 7% vines killed, 19% 1998, 6% avg. Soybeans 96% podding, 97% 1998, 95% avg.; 54% fully podded, 65% 1998, 53% avg.; 5% lower leaves yellowing, 8% 1998, 9% avg. Sunflowers 72% blooming, 92% 1998, 83% avg. Sprout damage to swathed wheat was reported in the eastern part of the State. Emerged crop condition: durum 0% very poor, 4% poor, 37% fair, 54% good, 5% excellent; canola 0% very poor, 3% poor, 21% fair, 60% good, 16% excellent; corn for grain 2% very poor, 5% poor, 22% fair, 58% good, 13% excellent; corn for silage 1% very poor, 3% poor, 23% fair, 63% good, 10% excellent; dry edible beans 0% very poor, 4% poor, 15% fair, 58% good, 23% excellent; flaxseed 0% very poor, 2% poor, 26% fair, 59% good, 13% excellent; potatoes 0% very poor, 0% poor, 6% fair, 51% good, 43% excellent; soybeans 4% very poor, 11% poor, 24% fair, 51% good, 10% excellent; sugarbeets 1% very poor, 1% poor, 7% fair, 53% good, 38% excellent; sunflower 1% very poor, 5% poor, 26% fair, 56% good, 12% excellent. Stockwater supplies rated 0% very short, 1% short, 95% adequate, 4% surplus. Hay condition rated 7% above normal.

**OHIO:** Days suitable for fieldwork 6.2. Topsoil moisture 40% very short, 41% short, 19% adequate, 0% surplus. Soybeans 97% setting pods, 83% 1998, 66% avg. Alfalfa hay 3<sup>rd</sup> cutting 64%, 42% 1998, 25% avg. Alfalfa hay 4<sup>th</sup> cutting 5%. Other hay 2<sup>nd</sup> cutting 83%, 85% 1998, 77% avg. Other hay 3<sup>rd</sup> cutting 27%, 22% 1998, 9% avg. Corn 83% in dough, 56% 1998, 42%

avg. Corn 27% dented, 9% 1998, 5% avg. Corn harvested 3% for silage, 0% 1998, avg. Summer apples 82% harvested, 77% 1998, 41% avg. Peaches 68% harvested, 74% 1998. Tobacco 56% topped, 35% 1998. Tobacco 13% harvested, 6% 1998. Processing tomatoes 6% harvested, 7% 1998, 4% avg. Potatoes 25% harvested, 33% 1998, 21% avg. Cucumbers 67% harvested. Pasture 30% very poor, 31% poor, 27% fair, 11% good, 1% excellent. Corn 9% very poor, 18% poor, 36% fair, 31% good, 6% excellent. Soybeans 6% very poor, 14% poor, 37% fair, 36% good, 7% excellent. Activities: Include mowing CRP, seeding CRP, filter strips, making hay, plowing wheat stubble, spraying fence rows, seeding alfalfa, hauling manure, hauling grain, scouting for insects, preparing for harvest, attending fairs, harvesting flowers, tiling, chopping corn, visiting FSA for drought, relief information, feeding hay, hauling water to livestock. Reported weed pressures include yellow foxtail, pigweed, velvetleaf, lambs quarters, Canadian thistle, giant ragweed, poison ivy, morning glory, sourdock, quack grass, Johnson grass, mare's tail, ironweed, wild carrot, smartweed. Reported insects include spider mites, nematodes on soybeans; leaf hoppers in alfalfa, rootworms, earworms in corn, beetles in soybeans, corn. Reported diseases include sudden death syndrome, white mold, root rot in soybeans, gray leaf spot on corn, fungus on seed corn, blossom end rot, blight on tomatoes, soft rot on cabbage, scab on apples, mildew on vegetables. Fruit, vegetable conditions range from poor to excellent across the state. In Huron county, the peach crop is in excellent condition. In Medina county, sweet corn yields are high while tomatoes, peppers, pumpkins are in good condition. A Portage county reporter indicated peaches, apples are small due to dry conditions. In Jackson county, drought, blight are taking its toll on pumpkins. In Washington county, producers continue to irrigate vegetable crops. Pasture, grass conditions are fair to poor throughout the state. Spotty rains have regenerated growth in some areas although pastures are sparse where rains have missed. Pasture, grass in the northern half of the state are in better condition than much of the southern half of the state where grass is dry, dormant, weedy, short. Many producers have had no 2nd cutting of grass hay. Cooler weather this past week has improved livestock conditions. Milk production was reported up in Wayne, Medina counties but most livestock producers in the southern part of the state report that livestock are still being stressed by flies, heat. Producers continue to liquidate herds.

**OKLAHOMA:** Days suitable for fieldwork 6.5. Subsoil moisture 9% very short, 32% short, 59% adequate. Topsoil moisture 18% very short, 46% short, 36% adequate. Dwindling soil moisture accentuates drought stress, particularly south. Subsoil moisture lowest since October, 1998. Wheat 90% plowed, 91% 1998, 94% avg.; 23% seedbed prepared, 22% 1998, 28% avg. Anhydrous ammonia applications spreading north. Oats 91% plowed, 85% 1998, 95% avg.; 8% seedbed prepared, 18% 1998, 12% avg. Corn 1% poor, 3% fair, 93% good, 3% excellent; 66% milk-to-soft, 100% 1998, 96% avg.; 9% mature, 15% 1998, 15% avg. Harvest has begun south. Sorghum 3% mature, 2% 1998, 6%, avg. Soybeans 1% very poor, 8% poor, 36% fair, 50% good, 5% excellent; 73% flowering, 91% 1998, 87% avg.; 60% setting pods, 51% 1998, 61% avg.; 4% mature, 5% 1998, 8% avg. Peanuts 98% pegging, 99% 1998, 98% avg.; 91% setting pods, 89% 1998, 86% avg. Spider mites becoming troublesome. Cotton 100% squaring, 98% 1998, 99% avg. Few fields have just begun to open bolls. Watermelons 71% harvested, 80% 1998, 60% avg. Alfalfa Hay 8% poor, 35% fair, 53% good, 4% excellent; 95% 3<sup>rd</sup> cutting, 76% 1998, 83% avg.; 27% 4<sup>th</sup> cutting, 18% 1998, 21% avg. Other Hay 99% 1<sup>st</sup> cutting, 92% 1998, 96% avg.; 44% 2<sup>nd</sup> cutting, 6% 1998, 49% avg. Livestock 1% poor, 17% fair, 76% good, 6% excellent. Cattle auctions reported normal marketings. Feeder cattle prices 50 cents to \$1.50 per cwt. above last week.

**OREGON:** Days suitable for fieldwork 6.3. Topsoil 29% very short, 50% short 21%, adequate. Subsoil 28% very short, 45% short, 27% adequate. Barley 46% harvested, 62% 1998, 53% average. Spring wheat 65% harvested, 46% 1998. Winter wheat 78% harvested, 77% 1998, 79% average. Range, pasture 2% very poor, 30% poor, 38% fair, 27% good, 3% excellent. Activities: Western areas barley, spring wheat, winter wheat, hay harvest continued. Some slowing caused by rain. Most grass seed harvest done before rains. Eastern areas continued grain harvest, wheat yields ranging from the teens to single digits in Mid-Columbia Basin. Northeast grain harvest slowed by rain. Mint harvest continued. Potatoes turning in Eastern areas. Corn, pea trials below normal for Mid-Columbia Basin. Limited digging of balled, burlap nursery orders, repotting, moving of containers consumed nursery labor. Transplanting of Easter lily bulbs delayed due to fields being wet. Harvesting of potatoes for fresh market in full swing with all sheds operating in the Columbia Basin. Harvesting of early potato varieties under way in Western areas as well. Central areas Russet Norkotah potato vines are beginning to mature. Early sweet corn harvest

underway. Early cannery sweet corn maturing. Brisk sales of sweet corn, green beans, tomatoes, squash, green peppers at produce stands. In the Willamette Valley, blueberry harvest passed its peak, the Marion blackberry season finished, Evergreen blackberry harvest going strong. Strawberry, Raspberry fields being renovated. Tart cherry harvest finishing up at the highest elevations, and early apple and peach picking continued. Hazelnut growers were flailing their orchards as blank nuts began to fall. In the Rogue Valley, picking of early pear varieties, including Bartletts, started. On the south coast, blueberry harvest continued, Stevens cranberries showed more color and McFarlin cranberries sizing. Northeast, cherry harvest neared completion. Ranges, pastures continued to dry up. The best conditions in the high country of Southeast. In the Willamette Valley, recent rains caused some new growth, but not enough for sustained green up. Livestock condition mostly fair to good with better reports coming from east of the Cascades. In Central areas, cattle being forced off Forest Service allotments early due to dry conditions. Some supplemental hay feeding continued in western counties.

**PENNSYLVANIA:** Days suitable for field work 6.2. Soil moisture 62% very short, 33% short, 5% adequate. Corn silked 89% complete, 92% 1998, 89% avg. Corn dough 45% complete, 49% 1998, 41% avg. Corn dent 10% complete, 9% 1998, 5% avg. Ensilage corn harvested 8% complete, 1% 1998, 2% avg. Soybean 28% very poor, 27% poor, 36% fair, 9% good. Oats 97% ripe, 90% 1998, 91% avg.; 83% harvested, 79% 1998, 68% avg. Potato harvest 21% complete, 7% 1998, 11% avg. Alfalfa 2<sup>nd</sup> cutting 94% complete, 94% 1998, 85% avg. Alfalfa 3<sup>rd</sup> cutting 54% complete, 51% 1998, 41% avg. Alfalfa 4<sup>th</sup> cutting 6% complete, 14% 1998, 5% avg. Timothy clover 2<sup>nd</sup> cutting 53% complete, 55% 1998, 53% avg. Quality of hay made 2% very poor, 11% poor, 34% fair, 40% good, 13% excellent. Apple harvest 16% complete, 22% 1998, 15% avg. Apple 2% very poor, 12% poor, 22% fair, 58% good, 6% excellent. Peach harvest 47% complete, 66% 1998, 43% avg. Peach 1% very poor, 6% poor, 24% fair, 62% good, 7% excellent. Grape harvest 5% complete, 0% 1998, 3% avg. Fall plowing 13% complete, 11% 1998, 9% avg. Activities include: Harvesting oats, fruits, vegetables, potatoes, corn, silage, tobacco, machinery maintenance, filling silos, hauling manure, spreading lime, fertilizers, applying pesticides, caring for livestock, cutting hay, making haylage, baling straw, irrigating, hauling water.

**SOUTH CAROLINA:** Days suitable for fieldwork 6.3. Soil moisture 44% very short, 45% short, 11% adequate. Apples 4% harvested, 4% 1998, 6% avg. Cantaloupes 99% harvested, 99% 1998, 96% avg. Corn 26% harvested, 28% 1998, 20% avg.; 8% very poor, 24% poor, 39% fair, 24% good, 5% excellent. Grapes 15% poor, 55% fair, 30% good. Hay 12% very poor, 27% poor, 41% fair, 18% good, 2% excellent. Peaches 90% harvested, 92% 1998, 92% avg. Sorghum 60% turned color, 64% 1998, 12% very poor, 37% poor, 43% fair, % good. Sweet Potatoes 16% poor, 59% fair, 25% good.

**SOUTH DAKOTA:** Days suitable for fieldwork, 5.9. Light spotty rains continue to allow soil moisture levels to decline around the state. Crop progress has slowed and many fields are beginning to show signs of moisture stress. Topsoil moisture 5% very short, 31% short, 56% adequate and 8% surplus. Subsoil moisture 1% very short, 20% short, 70% adequate, 9% surplus. Alfalfa 19% excellent, 57% good, 23% fair, 1% poor. Oat 18% excellent, 68% good, 14% fair. Sunflower 16% excellent, 59% good, 22% fair, 3% poor. Flaxseed 16% excellent, 66% good, 17% fair, 1% poor. Winter rye 98% harvested, 94% 1998, 93% avg. Barley 93% ripe, 97% 1998, 94% avg. Oat 95% s ripe, 99% 1998, 94% avg. Spring wheat 96% ripe, 99% 1998, 92% avg. Flaxseed 63% ripe, 93% 1998, 49% avg. Sunflower 72% blooming, 82% 1998, 80% avg. Sunflower ray flowers 22% dry, 33% 1998, 16% avg. Sunflower bracts 20% yellow, 32% 1998, 12% avg. Corn 98% tasseled, 100% 1998, 98% avg. Corn 94% silked, 97% 1998, 89% avg. Corn mature 0%, 3% 1998, 1% avg. Alfalfa 2nd cutting 85%, 87% 1998, 79% avg. Alfalfa 3rd cutting 30%, 23% 1998. Other hay 84% harvested, 82% 1998, 82% avg. Cattle 28% excellent, 64% good, 8% fair. Sheep 39% excellent, 57% good, and 4% fair. Stock water supplies 16% surplus, 79% adequate, 5% short.

**TENNESSEE:** Days suitable for fieldwork 7.0. Topsoil moisture 36% very short, 45% short, 19% adequate. Subsoil moisture 31% very short, 46% short, 23% adequate. Corn 94% dough, 89% 1998, 89% avg.; 75% dent, 62% 1998, 57% avg.; 25% mature, 15% 1998, 12% avg.; 40% silage harvested, 17% 1998, 19% avg.; 7% very poor, 21% poor, 38% fair, 31% good, 3% excellent. Tobacco 80% topped, 65% 1998, 68% avg.; 7% very poor, 18% poor, 37% fair, 30% good, 8% excellent. Burley 27% harvested,

13% 1998, 13% avg. Dark Air-Cured 25% harvested, 13% 1998, 13% avg. Dark Fire-Cured 25% harvested, 13% 1998, 14% avg. Pasture 14% very poor, 32% poor, 35% fair, 18% good, 1% excellent. Farmers continued to watch both crops, pastures deteriorate last week as the relentless hot, dry conditions continue. Most of the State received little to no rain last week, with the exception of parts of Middle areas which received heavy rain in the form of strong thunderstorms Thursday afternoon. The persistent dry weather continues to stress the State's agricultural industry. Crop conditions again declined, but the majority were still rated in the fair to good range, most could recover somewhat if moisture is received soon. Row crop farmers are not the only one's suffering in this drought. Poor pasture conditions have forced many cattle producers to feed hay and carry water to their animals, while others have been forced to liquidate parts of their herd. The number of cattle moving through local stockyards has increased greatly over the last few weeks. Farmers were busy last week spraying for boll weevils and boll worms in cotton, harvesting tobacco, cutting corn silage, and cutting hay.

**TEXAS:** Conditions hot, dry over state last week with only widely scattered showers reported in Plains, Trans Pecos. Fieldwork moved ahead under open conditions. Extremely hot temperatures caused crop conditions to decline some areas. Grain storage problems have occurred many areas due very good yields. Haying operations continued, however production slowed due hot, dry weather. Livestock conditions remained mostly good across state. Supplemental increased some dryer areas. **Crops:** Corn: High Plains crop continued mature, harvest for grain should begin soon. Silage harvest continued during week. Harvest moved ahead in Blacklands, Central with good yields reported. Markets however have been very weak. Harvest progressed along Upper Coast, winding down most fields. Harvest virtually complete in Coastal Bend, Rio Grande Valley. 54% mature, 62% 1998, 55% avg. 38% harvested, 49% 1998, 40% avg. Cotton: Good growth, development continued in Plains, however hot temperatures have caused some small boll to drop off. Irrigation remained active, fields made good progress. Bolls continued to open rapidly in Blacklands, Central. Harvest continued in Coastal Bend, good yields reported. Along Upper Coast, harvest beginning. Harvest very active under open conditions in Rio Grande Valley. Dryland fields need more rain. 16% open bolls, 28% 1998, 19% avg. 5% harvested, 13% 1998, 7% avg. Peanuts: Fields continued look good in Plains, North Central, however irrigation very active. Dryland fields need more rain. Some producers spraying for diseases. Dryland fields South Central could also use good rain. Rice: Harvest continued along Upper Coast with very good yields, excellent quality reported. Sorghum: Fields matured rapidly in Plains under hot conditions, harvest on early fields could begin within a few weeks. Dryland fields began to stress some many areas. Harvest winding down Blacklands, virtually completed Central. Some elevators forced to store grain on ground or have stopped receiving grain until some can be moved. Harvest completed in Coastal Bend, Rio Grande Valley; 50% mature, 53% 1998, 57% avg.; 44% harvested, 50% 1998, 49% avg. Soybeans: Progress, development good in Plains, however dryland fields need more rain. Irrigation remained active. Harvest in Blacklands continued with above average yields reported. Harvest early varieties winding down along Upper Coast, good yields were reported.

**Commercial Vegetables, Fruit and Pecans:** Rio Grande Valley, some land preparations occurred. San Antonio-Winter Garden, some planting occurred. East Texas, sweetpotato, watermelon harvest continued under open conditions. High Plains, onion, potato harvest winding down many fields. Trans Pecos, a few fields cantaloups remained for harvest. Peaches: Production continued to decline as harvest in Hill Country winding down. Pecans: Hot, dry conditions continued take toll on a very good crop across state. Nut drop increased over past few weeks. Shuckworms, weevils increased some groves. Spraying occurred where numbers high. Production expectations remained high despite nut drop. Rainfall critically needed for proper nut filling.

**Range and Livestock:** Hay production slowed due recent hot, dry conditions many areas. Supplies good across state however. Because slower grass growth, some producers have begun to supplement. Extremely hot temperatures continued to cause problems poultry operations.

**UTAH:** Days suitable for field work 6. Top soil moisture 12% very short, 21% short, 62% adequate, 5% surplus. Subsoil moisture 10% very short, 23% short, 67% adequate. Pasture, range feed 2% very poor, 8% poor, 37% fair, 52% good, 1% excellent. Corn: height 80 inches, 71 inches 1998, 71 inches avg.; 80% silking, 76% avg 1998, 74% avg.; dough 6% stage, 8% 1998, 6% avg. Winter wheat 69% harvested, 61% 1998, 75% avg. Spring wheat 66% harvested, 65% 1998, 68% avg. Barley 70% harvested, 67% 1998, 69% avg. Alfalfa hay 2nd 89% cutting, 95% 1998, 91% avg.; 3rd 9%

cutting, 15% 1998, 21% avg. Other hay 1st 92% cutting, 81% 1998, 86% avg. Oats harvested 85% for hay or silage, 79% 1998, 87% avg.; harvested 36% for grain, 25% 1998, 43% avg. Tart cherries 94% picked, 98% 1998, 96% avg. Peaches 21% picked, 20% 1998, 32% avg. Irrigation water supply 7% very short, 18% short, 75% adequate. Stock water supplies 3% very short, 20% short, 75% adequate, 2% surplus. Major activities Included irrigating, harvesting small grains, hay. Rain slowed harvest, damaged some of the cut hay crop.

**VIRGINIA:** Days suitable for fieldwork 6.6. Topsoil moisture 52% very short, 32% short, 16% adequate. Subsoil moisture 60% very short, 28% short, 12% adequate. Pastures 44% very poor, 29% poor, 16% fair, 10% good, 1% excellent. Livestock 2% very poor, 10% poor, 41% fair, 42% good, 5% excellent. Hay, Other 46% very poor, 34% poor, 13% fair, 6% good, 1% excellent. Hay, Alfalfa 13% very poor, 39% poor, 33% fair, 13% good, 2% excellent. Corn for Grain 63% dough, 46% 1998, 54% avg.; 35% fair, 25% 1998, 30% avg.; 16% very poor, 39% poor, 22% fair, 18% good, 5% excellent. Corn for Silage 8% harvested, 7% 1998, 4% avg. Soybeans 52% blooming, 73% 1998, 68% avg.; 28% setting pods, 46% 1998, 39% avg.; 14% very poor, 25% poor, 31% fair, 26% good, 4% excellent. Tobacco, Flue Cured 21% harvested, 20% 1998, 24% avg.; 4% poor, 22% fair, 56% good, 18% excellent. Tobacco, Burley 2% harvested, 3% 1998, 2% avg.; 2% very poor, 2% poor, 20% fair, 47% good, 29% excellent. Tobacco, Dark Fire Cured 23% harvested, 22% 1998, 18% avg.; 7% poor, 27% fair, 46% good, 20% excellent. Tobacco, Sun Cured 2% harvested, 1% 1998, 8% avg.; 10% very poor, 30% poor, 30% fair, 30% good. Peanuts 4% fair, 64% good, 32% excellent. Cotton 90% setting bolls, 99% 1998, 99% avg.; 1% bolls opening, 2% 1998, 7% avg.; 9% fair, 54% good, 37% excellent. Summer Potatoes 95% harvested, 98% 1998, 98% avg. Apples, Summer 67% harvested, 88% 1998, 48% avg. Apples, All 5% very poor, 16% poor, 49% fair, 30% good. Peaches 57% harvested, 62% 1998, 60% avg; 9% very poor, 18% poor, 54% fair, 19% good. Topsoil moisture supplies are depleting at a rapid pace despite scattered rainfall across the Commonwealth last week. Some isolated localities received about 2 inches of rainfall over the weekend limiting tobacco harvest. Most localities continue to receive below normal rainfall. Conditions are steadily declining for pasture, hay, corn, and soybeans. Livestock producers continued with supplemental hay feeding and provided water supplies. This is forcing many producers to reduce herds or liquidate entire herds. Corn silage harvest is progressing ahead of normal as corn rapidly dries down. Some silage producers expect good quality but short quantity due to limited stalk growth. Soybean producers are hopeful for an increased amount of rainfall in mid-August as double cropped soybeans are beginning to bloom. Peanut and cotton producers anticipate better than normal yields this year. Summer fruits and vegetables such as apples, peaches, potatoes, tomatoes, and peppers are currently being harvested. Producers continued planting fall vegetables.

**WASHINGTON:** Days suitable for fieldwork 5.7. Topsoil moisture was 10% very short, 40% short, 45% adequate, 5% surplus. Subsoil moisture 18% very short, 50% short, 32% adequate. The ripeness of the winter wheat was variable throughout the state. In many areas, harvest for both irrigated, dryland winter wheat was underway, but was halted by the end of the week due to rain showers. These showers had little effect on the crop other than slowing harvest in most areas, but knocked some wheat down. Spring wheat, barley harvests continued, but still lagged behind the historical progress. Winter wheat 45% harvested, 77% 1998, 69% avg. Winter wheat, dryland 5% very poor, 14% poor, 43% fair, 34% good, 4% excellent; irrigated 100% good. Spring wheat, dryland 16% very poor, 25% poor, 41% fair, and 18% good; irrigated 100% good. Harvested, 18%, 55% 1998, 49% avg. Barley, dryland 11% very poor, 27% poor, 47% fair, 15% good, irrigated 100% good. Harvested 17%, 61% 1998, 53% avg. Potatoes 16% harvested, 15% 1998, 14% avg. Potatoes, 3% fair, 63% good, 34% excellent. Hay and other roughage supplies were 1% very short, 6% short, 72% adequate and 21% surplus. Range and pasture, 20% very poor, 34% poor, 33% fair, 11% good, 2% excellent. Third cutting of alfalfa continued throughout last week. Some hay was damaged due to the heavy rainfall that fell across the state. Many vegetables were being harvested including sweet corn, onions, carrots, tomatoes. Potatoes were being harvested, growers were reporting some late blight problems. Peaches, pears, nectarines, plums were being harvested as well as blueberries, blackberries. Apples were also being picked, weather conditions were good for fruit development.

**WEST VIRGINIA:** Days suitable for fieldwork 6.1. Drought continues to deteriorate crop, livestock, pasture conditions. Scattered rainfall brought

some relief to topsoil moisture supplies, but did little to improve crop conditions. Topsoil moisture 52% very short, 41% short, 7% adequate. Hay condition 45% very poor, 33% poor, 21% fair, 1% good; Hay 2<sup>nd</sup> cut 57%, 56% 1998, 57% 5-yr avg. Corn condition 28% very poor, 44% poor, 24% fair, 4% good, Corn 75% Silked, 80% 1998, 85% 5-yr avg.; Corn 38% doughing, 35% 1998, 39% 5-yr avg. Oats 79%, harvested, 77% 1998, 78% 5-yr avg. Soybeans condition 26% very poor, 30% poor, 44% fair; Soybeans 76% bloomed, 61% 1998, 94% 5-yr avg.; Setting 41% pods, 33% 1998, 73% 5-yr avg. Tobacco condition 43% very poor, 32% poor, 20% fair, 5% good; Topped 29%, 39% 1998, 59% 5-yr avg. Apples condition 23% very poor, 29% poor, 42% fair, 6% good. Peaches condition 23% very poor, 29% poor, 41% fair, 7% good. Cattle 6% very poor, 17% poor, 50% fair, 25% good, 2% excellent. Sheep 2% very poor, 26% poor, 54% fair, 14% good, 4% excellent.

**WISCONSIN:** Days suitable for fieldwork: 4.1 Soil Moisture 1% very short, 13% short, 69% adequate, 17% surplus. With wet weather, very little 2nd or 3rd crop hay was harvested last week. The hay that was harvested was done between spotty showers, storms. The remaining second crop hay was reported to have high yields, but the lack of dry weather has caused a rapid deterioration in its quality. The 3rd crop harvest has also been slowed, but yields, quality were reported to be good to excellent. The cool weather reduced leafhopper numbers, but they remained a problem. Second Crop hay harvested: 91% 1999, 100% 1998, 87% 5yr average. Third Crop hay harvested 22% 1999, 45% 1999, 17% 5 yr average. The showers, high humidity also teamed up to slow the small grain harvest. The weekend provided many with a chance to finish up their oat, barley combining. Besides slowing the harvest, the damp weather was also to blame for an increased presence of weeds in the remaining fields. The corn, soybean crops are doing very well throughout most of the state. Soybean conditions 3% poor, 11% fair, 49% good, 37% excellent. Soybeans setting pods 78% 1999, 82% 1998, no 5 yr average available. Many reported that they expect near record corn yields. The late-planted corn is coming along nicely, but it could have used more substantial moisture to assist pollination. There were a few weed problems reported. Sweet corn harvest continued throughout the state last week. The potato harvest continued with good yields. The snap bean harvest also progressed between showers. Pasture Feed Conditions: 2% poor, 18% fair, 54% good, 26% excellent.

**WYOMING:** Days suitable for fieldwork 6.0. Topsoil moisture 6% very short, 47% short, 47% adequate. Subsoil moisture 3% very short, 40% short, 57% adequate. Winter wheat 96% harvested, 89% 1998, 89% avg. Spring wheat 74% turning color, 100% 1998, 89% avg.; mature 44%, 74% 1998, 65% avg.; 40% harvested, 38% 1998, 30% avg. Barley 90% turning color, 99% 1998, 96% avg.; 70% mature, 78% 1998, 79% avg.; 48% harvested, 41% 1998, 44% avg. Oats 77% turning color, 95% 1998, 88% avg.; 39% mature 71% 1998, 58% avg.; 19% harvested, 38% 1998, 29% avg. Corn 92% silked, 90% 1998, 87% avg.; 61% milk, 48% 1998, 57% avg.; 30%, dough, 13% 1998, 20% avg. Dry bean 84% setting pods, 82% 1998, 87% avg.; leaves 28% turning, 1% 1998, 13% avg. Alfalfa 45% 2nd cutting, 44% 1998, 45% avg. Other hay 74% cut, 81% 1998, 80% avg. Range, pasture feed 1% poor, 23% fair, 65% good, 11% excellent. Condition of all livestock 93% good, 7% excellent. Stock water supplies 5% short, 95% adequate. Temperatures remained warm with scattered precipitation over the State.

# International Weather and Crop Summary

August 8 - 14, 1999

## HIGHLIGHTS

**FSU-WESTERN:** Hot, dry weather returned to major corn-, sunflower-, and sugar beet-producing areas of Ukraine and southern Russia, causing further declines in crop conditions.

**FSU-NEW LANDS:** Cool weather accompanied light to moderate showers in Russia and Kazakstan, benefiting spring grains in the filling stage.

**EUROPE:** Rain further delayed winter and spring grain harvesting in northwest Europe, while scattered showers benefited summer crops in the remainder of northern and central Europe.

**EASTERN ASIA:** Rain eased stress on summer crops in southern Manchuria and most of the North China Plain, but drought hit Henan province. Drier weather eased flooding across the Korean Peninsula.

**AUSTRALIA:** Widespread rain benefited vegetative winter crops.

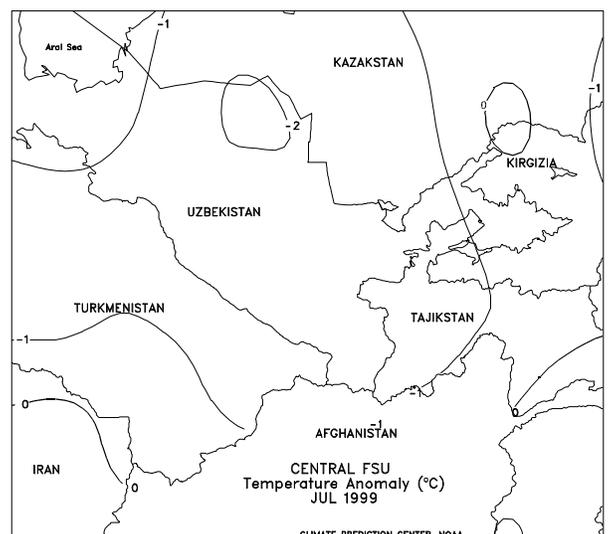
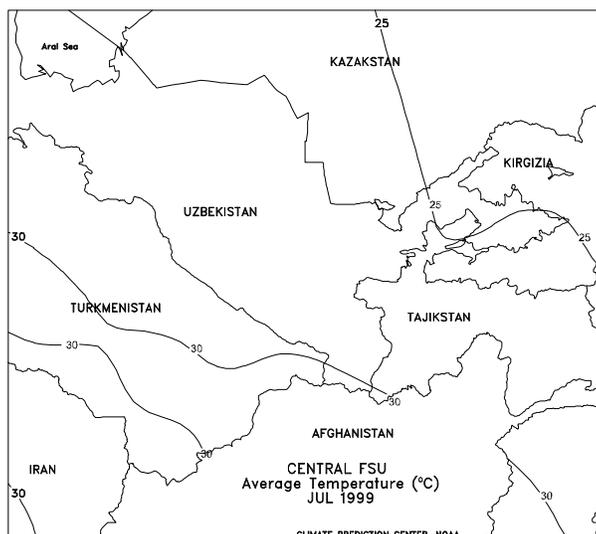
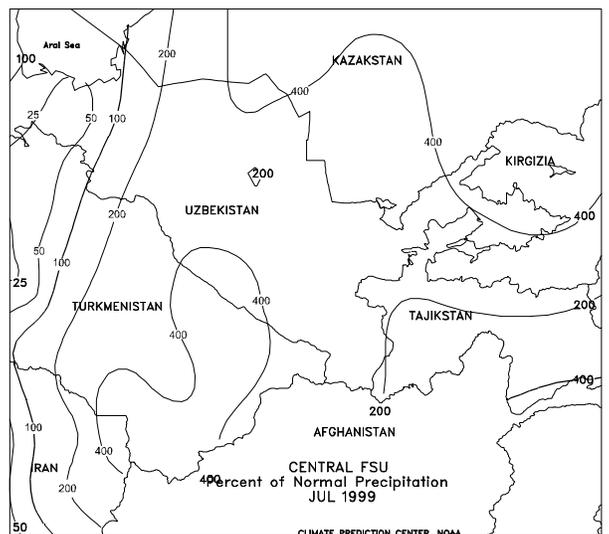
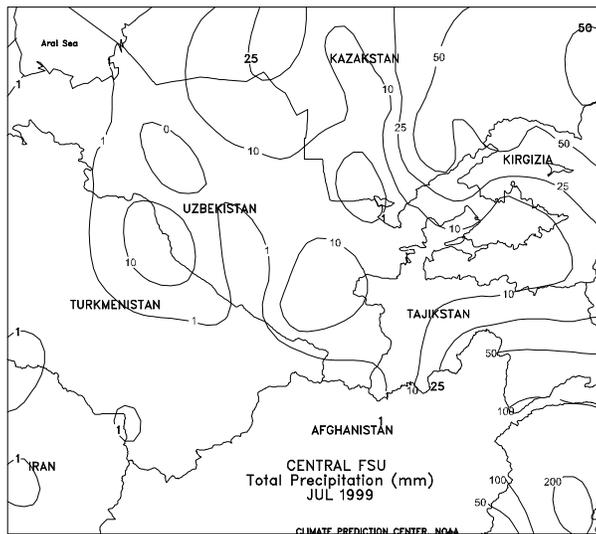
**SOUTH ASIA:** Unseasonable dryness persisted in important oilseed and cotton areas of western and southern India as localized flooding returned to the eastern rice belt.

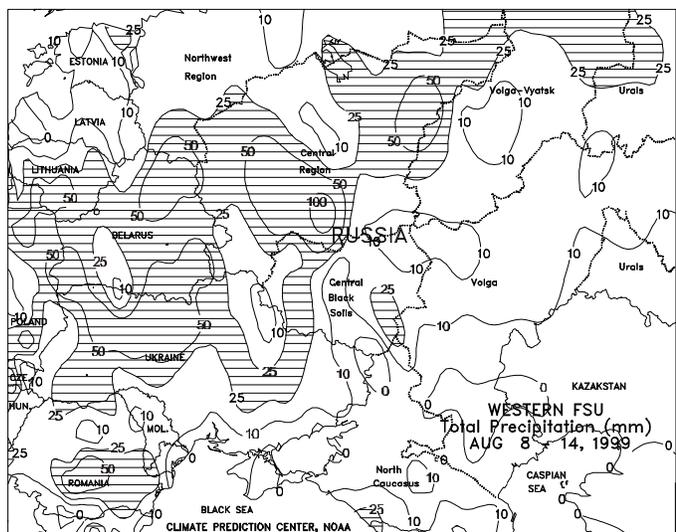
**SOUTHEAST ASIA:** Showers increased moisture supplies in northern and north-central Thailand, but unseasonably dry weather prevailed across southern Vietnam.

**SOUTH AMERICA:** In southern Brazil, weekend frost possibly damaged reproductive winter wheat, but likely had no impact on coffee. Rain is needed in portions of Argentina's wheat belt for germinating winter wheat.

**MEXICO:** Widespread showers continued to benefit corn across the Southern Plateau, while monsoonal showers subsided across northwestern Mexico.

**CANADA:** Cool, showery weather across the Prairies benefited immature spring crops, although overall development remained behind schedule.

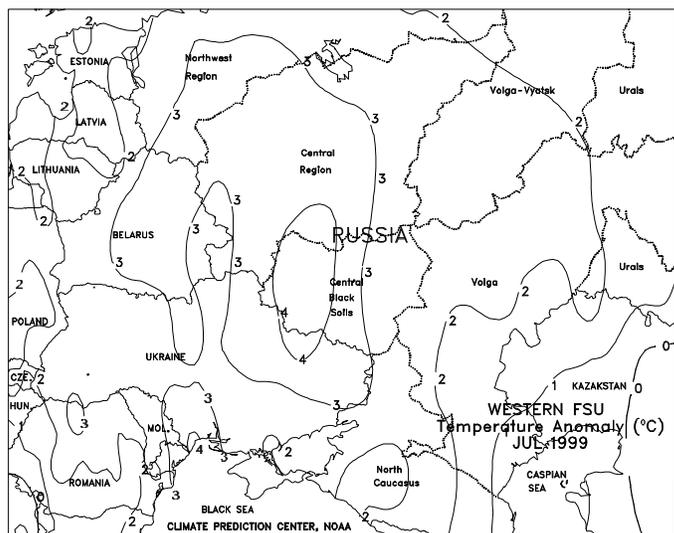
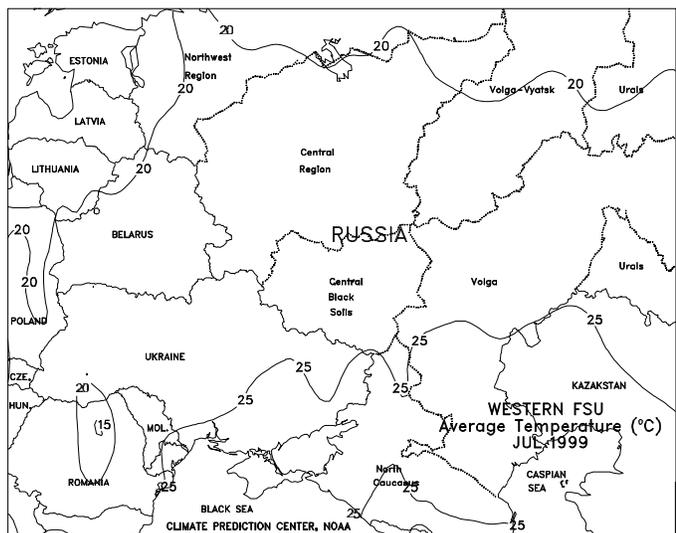
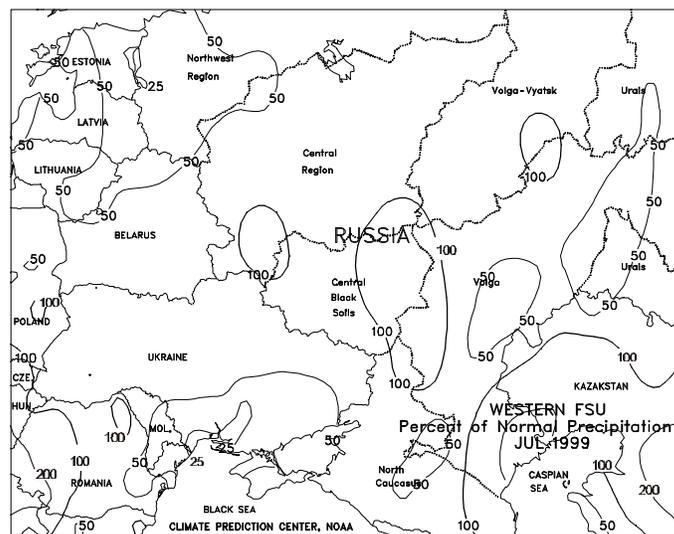
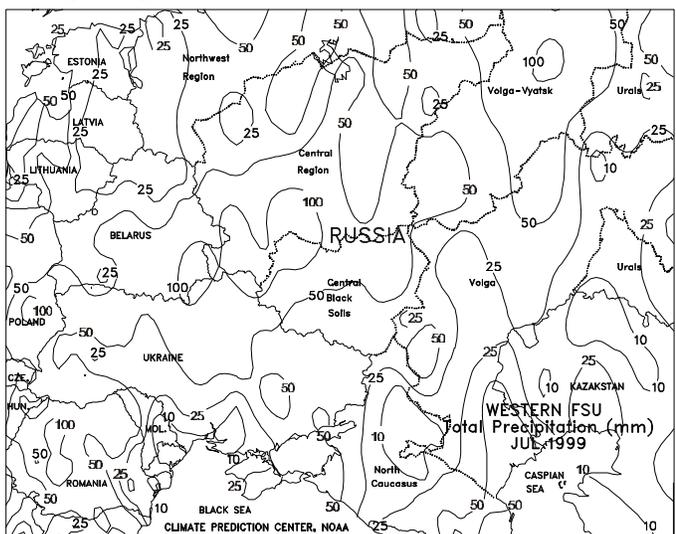


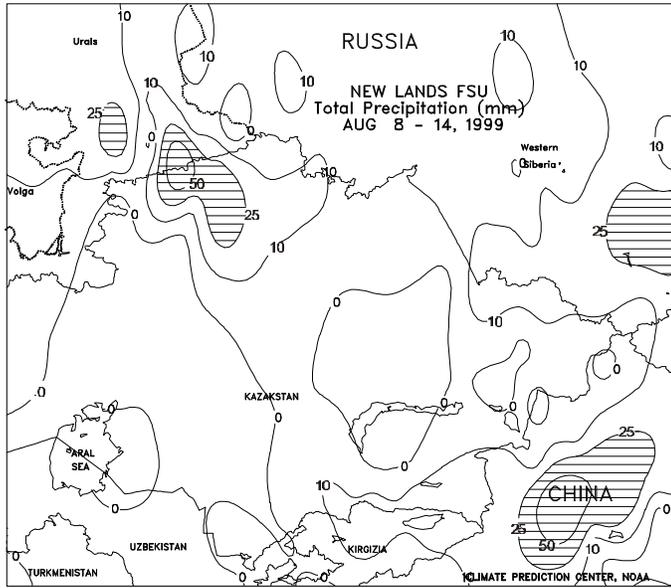


**FSU-WESTERN**

Unfavorable heat and dryness returned to major corn-, sunflower-, and sugar beet-producing areas in Ukraine and southern Russia (North Caucasus, lower Volga Valley, and the southern portion of the Central Black Soils Region), causing further deterioration in crop conditions. On several days during the week, maximum temperatures ranged from 33 to 38 degrees C, increasing heat stress on crops. At week's end, a frontal system brought welcomed cooler weather and widespread precipitation (10-50 mm) to Ukraine, stabilizing crop conditions. However, hot, dry weather continued in southern Russia. Farther north in northern Russia (Central Region and the Volga Vyatsk), light to moderate showers (10-50 mm or more) continued a wet weather pattern that has persisted since the middle of July, causing further delays in grain harvesting. Elsewhere, widespread rain (25-71 mm) in Belarus and Lithuania interrupted harvest activities but provided abundant moisture for summer crop development. Weekly temperatures averaged 2 to 4 degrees C above normal in Ukraine, southern Russia, and Belarus, and near normal in northern Russia. In July, unfavorable weather conditions continued to adversely affect spring grain and summer crop development in Ukraine and southern Russia (North Caucasus, lower Volga Valley, and the southern Black Soils Region).

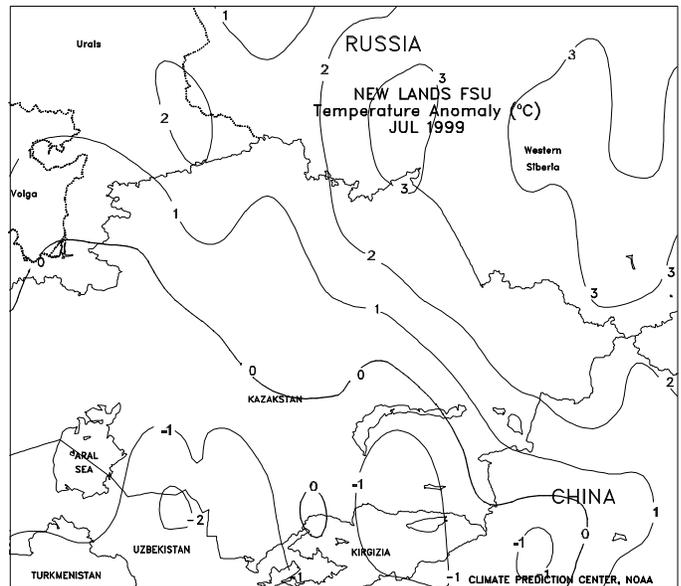
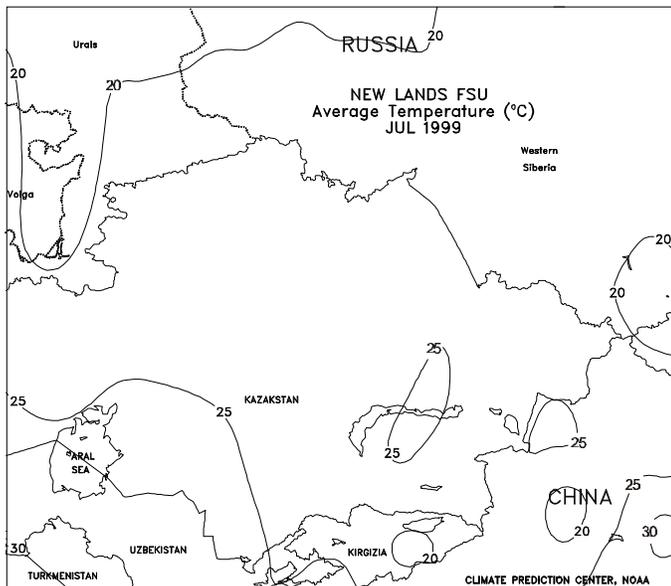
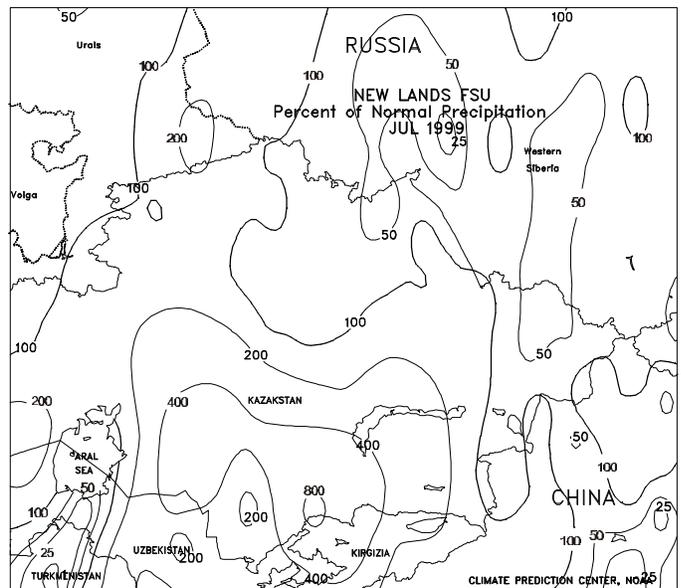
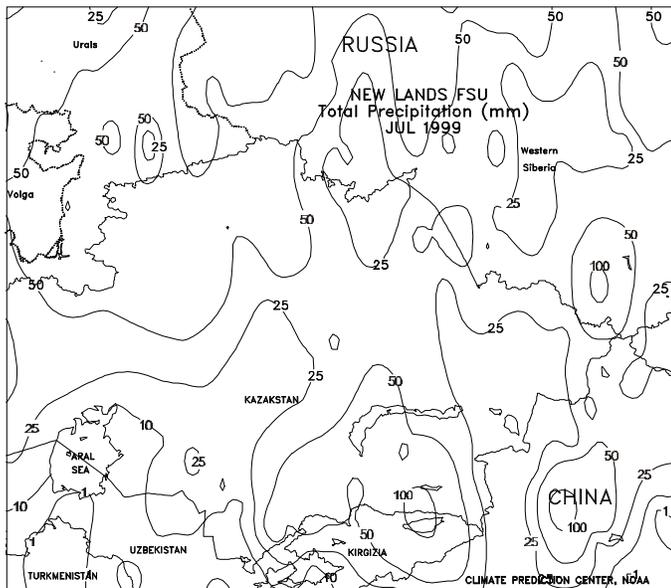
Mostly dry weather prevailed over these areas from July 4-28, accompanied by much-above-normal temperatures. Hot weather continued in southern Russia and overspread the eastern two-thirds of Ukraine, with maximum temperatures ranging from 30 to 38 degrees C on most days during the month. Although these hot, dry weather conditions favored winter wheat harvesting, they reduced yield prospects for corn and sunflowers that had advanced through the reproductive phase of development during the month. Drought conditions worsened in the Volga Valley region of Russia, where well-below-normal precipitation continued an insufficient moisture pattern that has prevailed over the region during the entire growing season.





**FSU-NEW LANDS**

Cool, showery weather prevailed over major spring grain-producing areas of Russia and Kazakhstan, benefiting crops in the filling stage. Greatest amounts of precipitation (10-50 mm) were observed in north-central Kazakhstan and parts of Russia (northern Urals, the Altay Kray region in Western Siberia, and Eastern Siberia). Less than 10 mm of rain fell over remaining crop areas. Weekly temperatures averaged 1 to 3 degrees C below normal in Russia and Kazakhstan. Elsewhere, although dry weather continued to create a moisture shortage for crops in the southern Urals and western Kazakhstan, seasonable temperatures lowered heat stress on spring grains and sunflowers in the filling stage. In July, spring grains advanced through the highly weather-sensitive reproductive phase of development. In Russia, near- to above-normal precipitation in the northern Urals maintained adequate moisture for crop development. Wet weather early in the month in Western Siberia was followed by a period of unseasonably warm, dry weather that began about July 20 and continued until month's end, lowering soil moisture. In Kazakhstan, unfavorably hot, dry weather in western areas in July accelerated crop development and increased stress on crops. However, near- to above-normal precipitation fell farther east in major spring grain-producing areas of central Kazakhstan, maintaining favorable crop prospects. In cotton-producing areas of Central Asia, seasonably hot, dry weather maintained high irrigation requirements and promoted rapid cotton development.

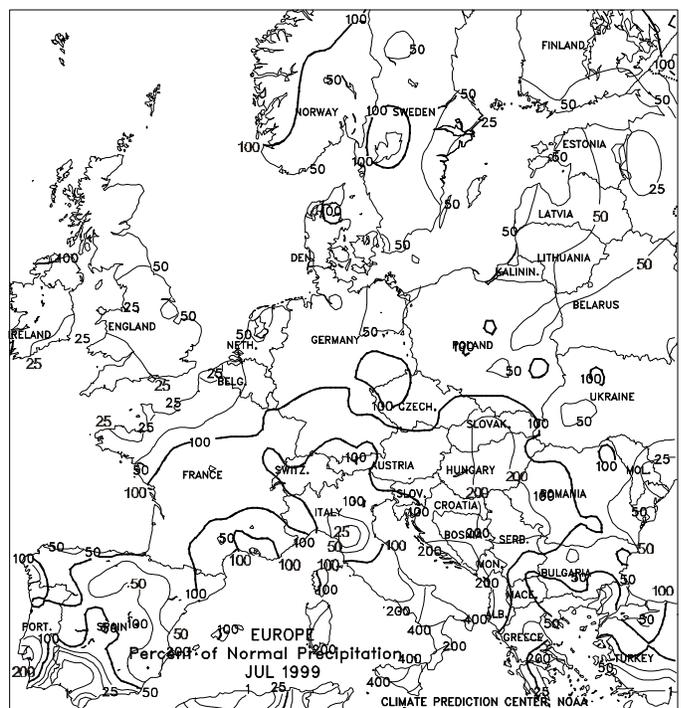
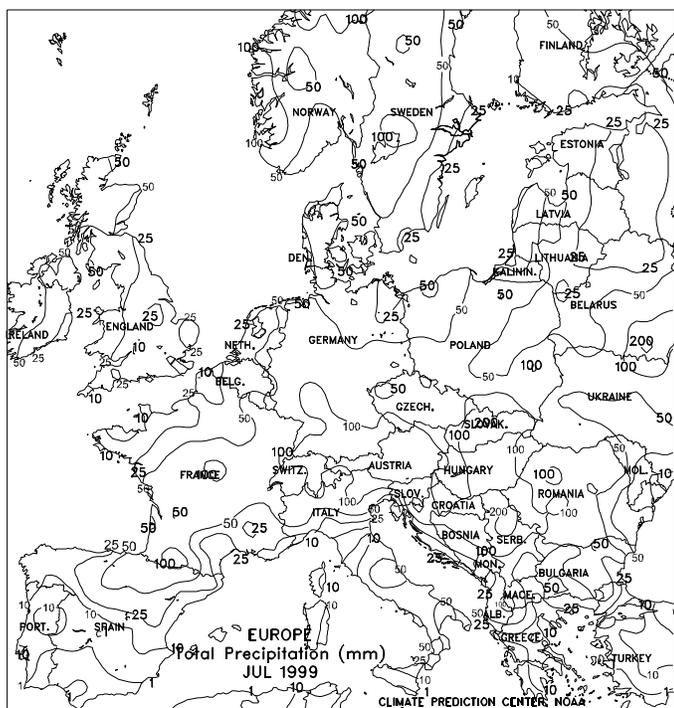


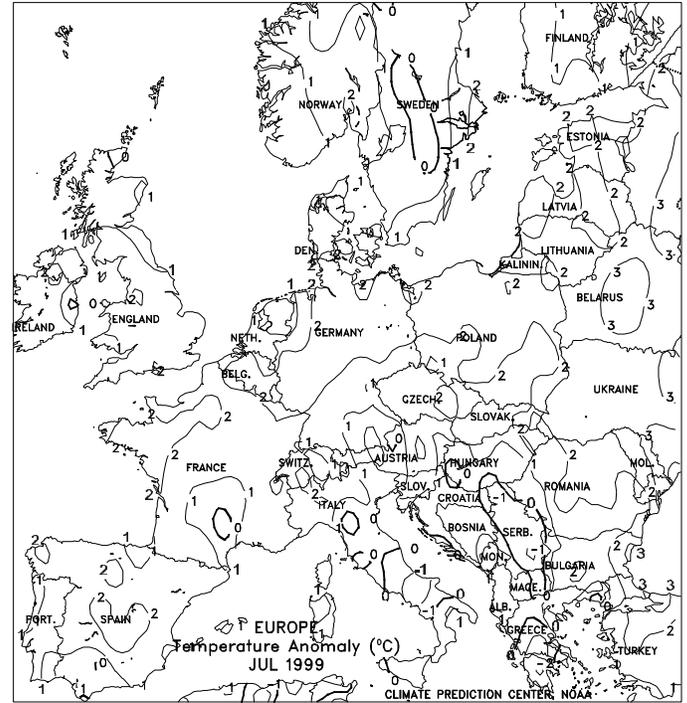


**EUROPE**

In southern England and northwest France, periods of rain (25-72 mm) delayed winter wheat and spring grain harvesting for the second straight week. Although these rains provided summer crops with beneficial moisture, unseasonably cool weather (temperatures 1 to 2 degrees C below normal) slowed crop development. Similarly, widespread showers (13-48 mm) slowed winter and spring grain harvesting in Denmark and Sweden. In the remainder of northern and central Europe, scattered showers (10-35 mm, with locally heavier amounts) and near-normal temperatures dominated most major crop-producing regions from eastern France eastward through Poland, Slovakia, and Hungary. The exception was in extreme eastern Germany and west-central Poland, where precipitation totals were generally 2 to 8 mm, contributing to a continued decline in topsoil moisture. In southeastern Europe, unseasonably warm weather (temperatures 3-5 degrees C above normal) increased crop moisture requirements through the Balkans, Romania, and Bulgaria, but showers (13-40 mm, with locally heavy amounts) maintained adequate crop moisture reserves. Elsewhere in southern Europe, dry weather dominated the Iberian peninsula and central and southern Italy. Average temperatures 2 to 4 degrees C below normal slowed crop development in Spain and Portugal. During July, below-normal rainfall in England and extreme northern France eastward through parts of Scandinavia and northern Poland promoted winter grain harvesting. Soil moisture, although declining, remained sufficient for developing spring-crops across most of this region. Below-normal rainfall also occurred in parts of southern Europe, stressing

spring-sown crops in eastern Romania, northern Bulgaria, northern Italy, and extreme southern Spain. In contrast, heavy rains caused localized flooding and further slowed winter grain harvesting in Slovakia, Hungary, and the Balkans. Across the remainder of central and southern Europe, near-normal rainfall provided adequate moisture for crop development and only temporarily delayed winter and spring grain harvesting.

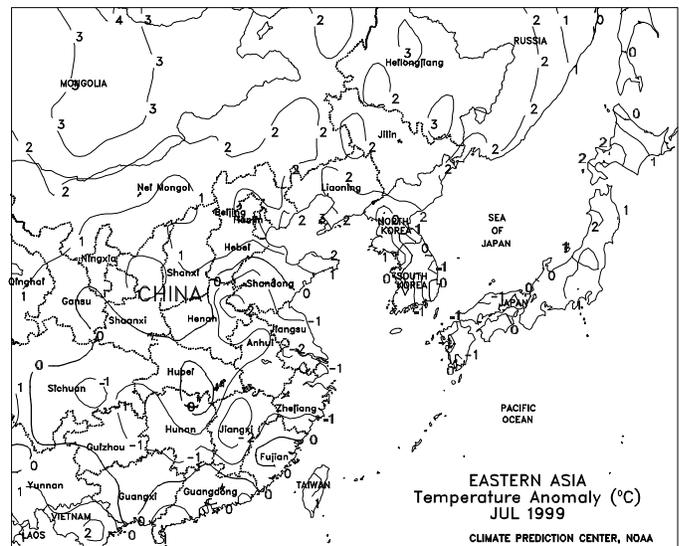
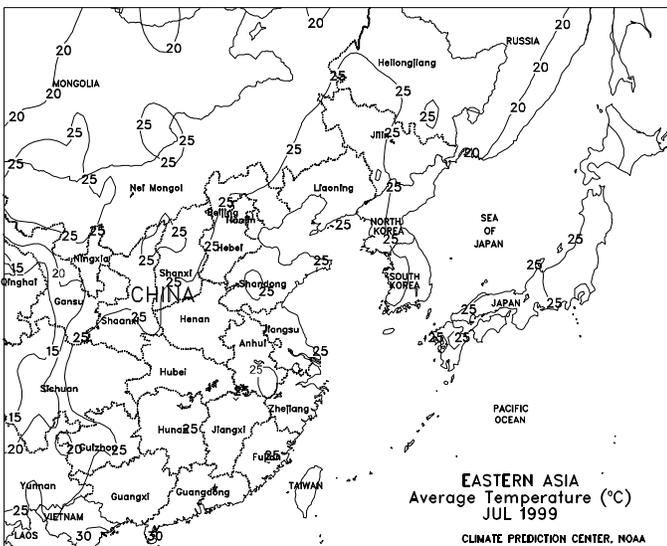
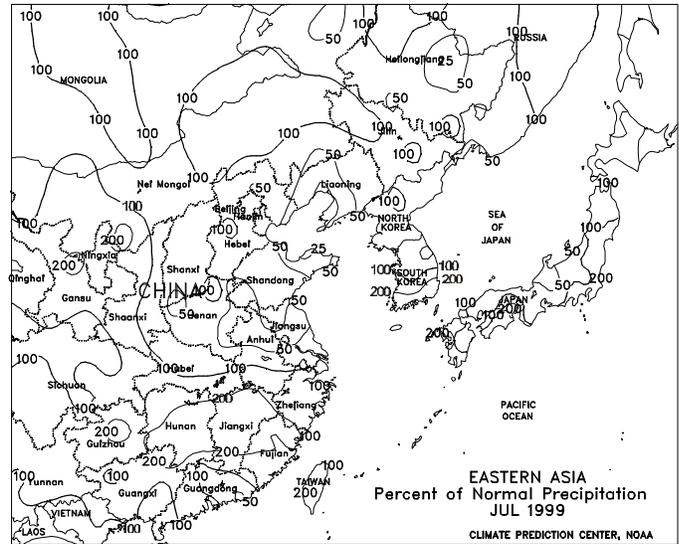
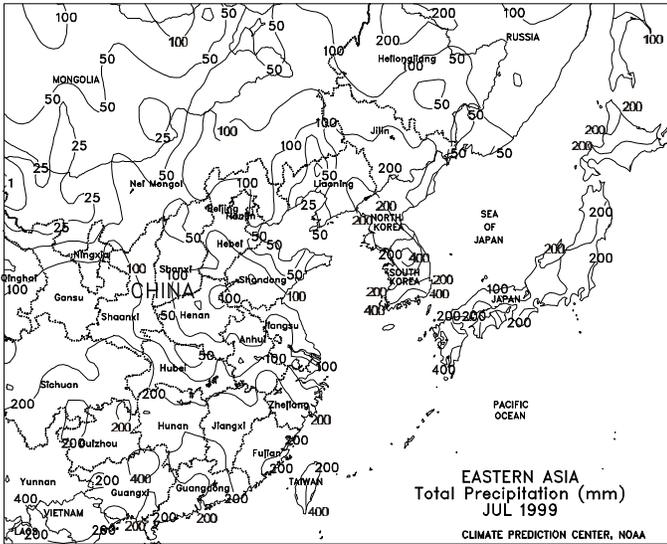


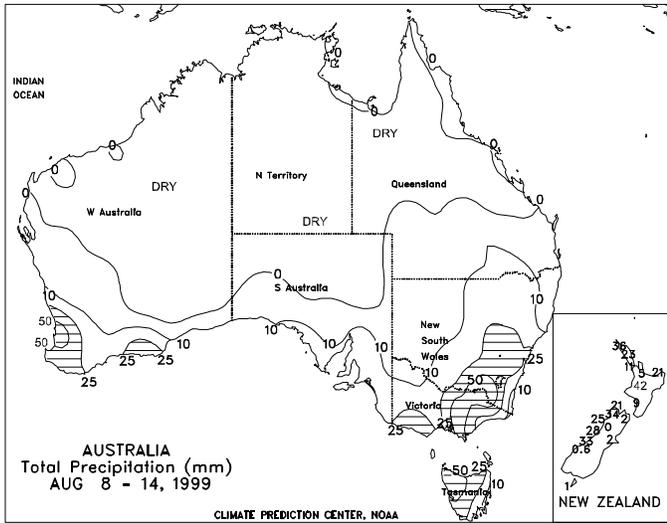


**EASTERN ASIA**

In most of the North China Plain and southern Manchuria (Liaoning), much-needed rain (50-125 mm) eased stress on filling corn and soybeans. However, little or no rain fell in most of Henan, western Shandong, and northern Anhui, where drought reduced corn and soybean yield prospects. Irrigated cotton will be less affected in the drought region. In Henan, rainfall was 36 percent of normal for the past 4 weeks. In northern and central Manchuria, widespread showers (30-70 mm) continued to benefit soybeans, but slowed spring wheat harvesting and raised quality concerns. Temperatures averaged near normal across the North China Plain and 1 to 2 degrees C above normal across Manchuria. Across the Yangtze Valley, widespread showers (25-100 mm) maintained moisture supplies for late double-crop rice and single-crop rice. However, excessive showers (125-250 mm or more) likely caused flooding and possibly replanting of late double-crop rice in Jiangxi and eastern Hunan. This region is not a major single-crop rice area. Temperatures averaged near normal across southern China. Favorably drier weather (less than 15 mm) eased flooding across the Korean Peninsula. In Japan, somewhat dry weather (less than 20 mm) aided filling rice in Hokkaido and southern Japan. In central Honshu, warm, wet weather (30-200 mm), however, caused some flooding and increased disease potential. Temperatures

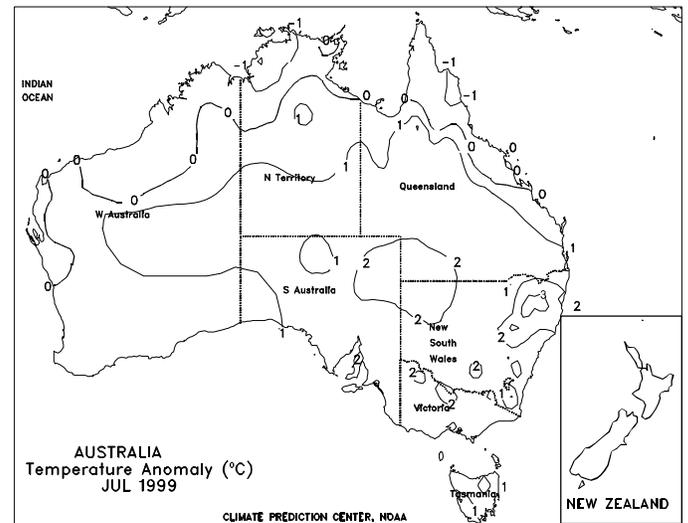
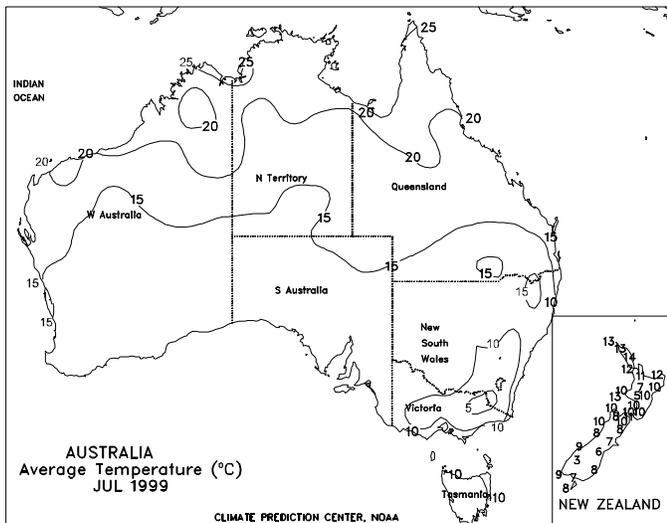
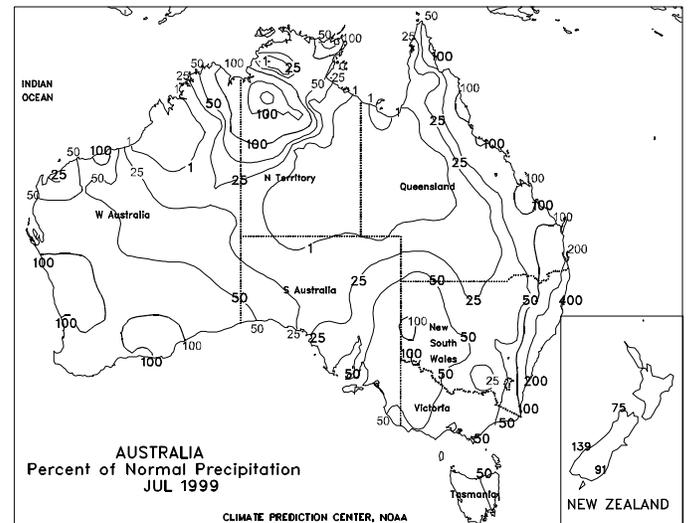
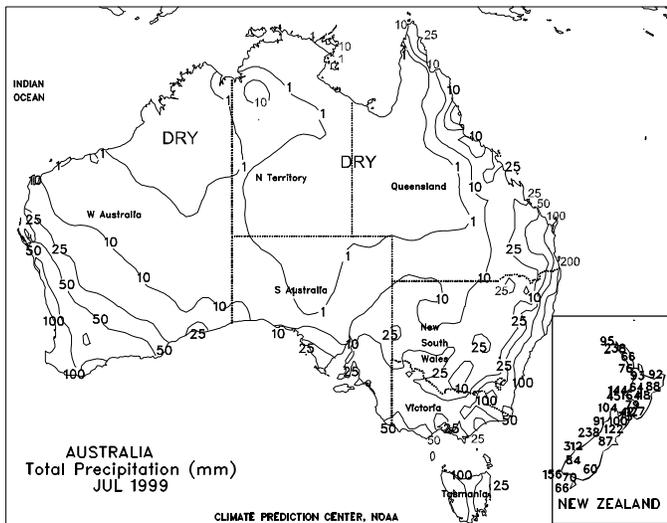
averaged 2 to 5 degrees above normal across Japan and 1 to 2 degrees C above normal across the Korean Peninsula. Mostly dry weather from early July to early August, reduced rainfed summer crop yield prospects across the North China Plain and southern Manchuria. Near-normal July rainfall favored summer crops and spring wheat in northern Manchuria. Drier weather eased excessive wetness along the northern Yangtze Valley, but above-normal July rainfall likely caused flooding across the southern portions of the Valley. Three tropical systems struck the Korean Peninsula during late July and early August, causing flooding and possible rice damage. In northern Japan, warm, wet weather during July provided average, but not ideal, conditions for rice development.





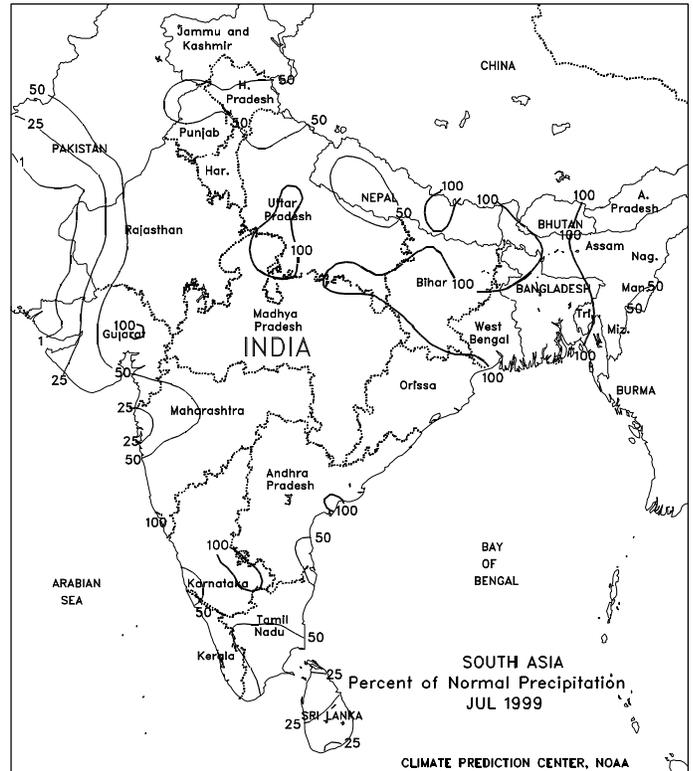
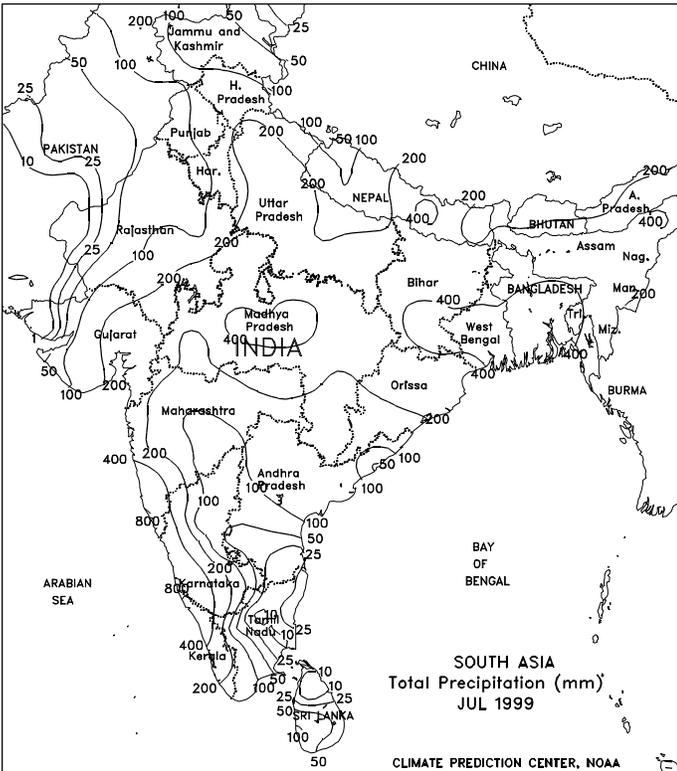
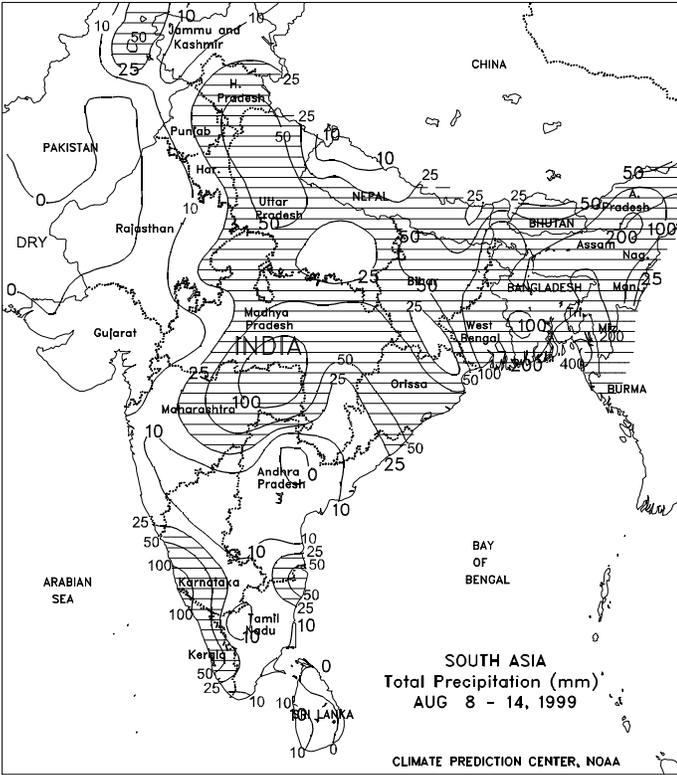
**AUSTRALIA**

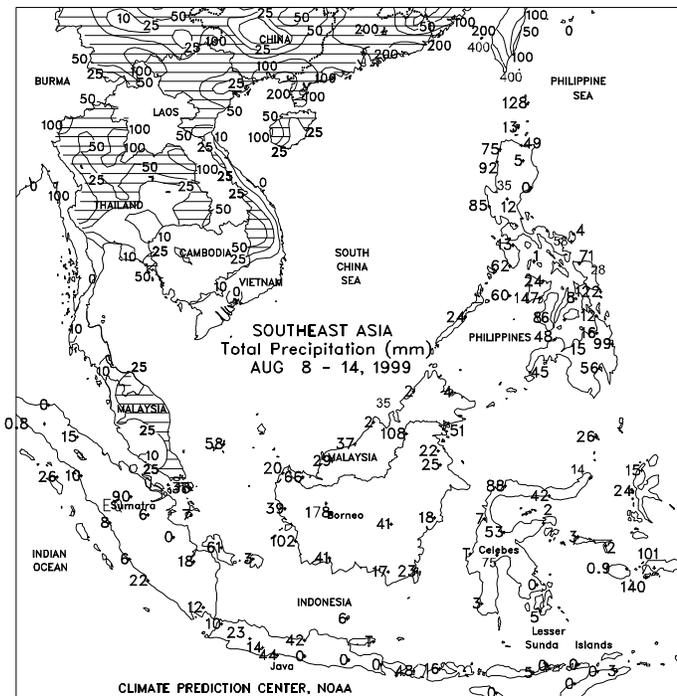
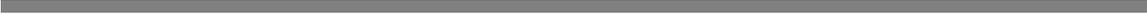
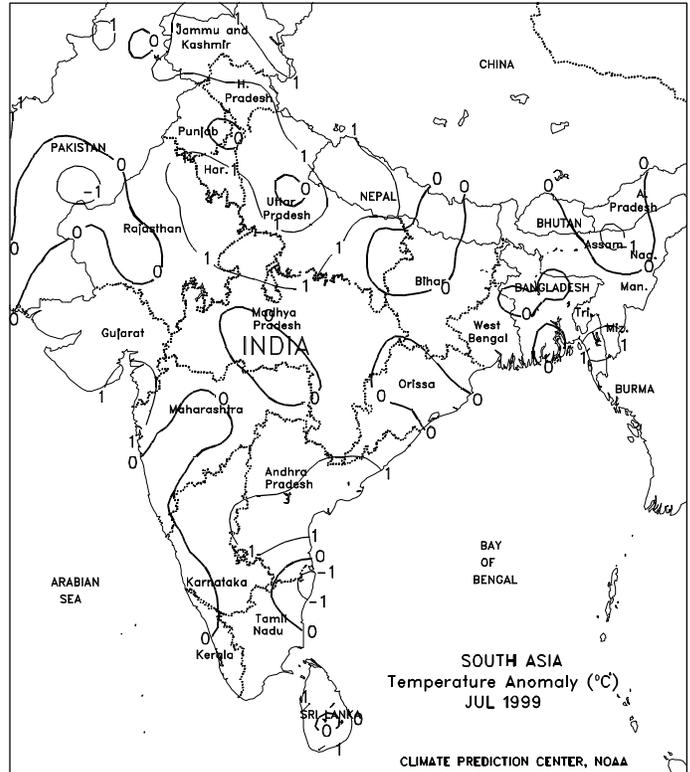
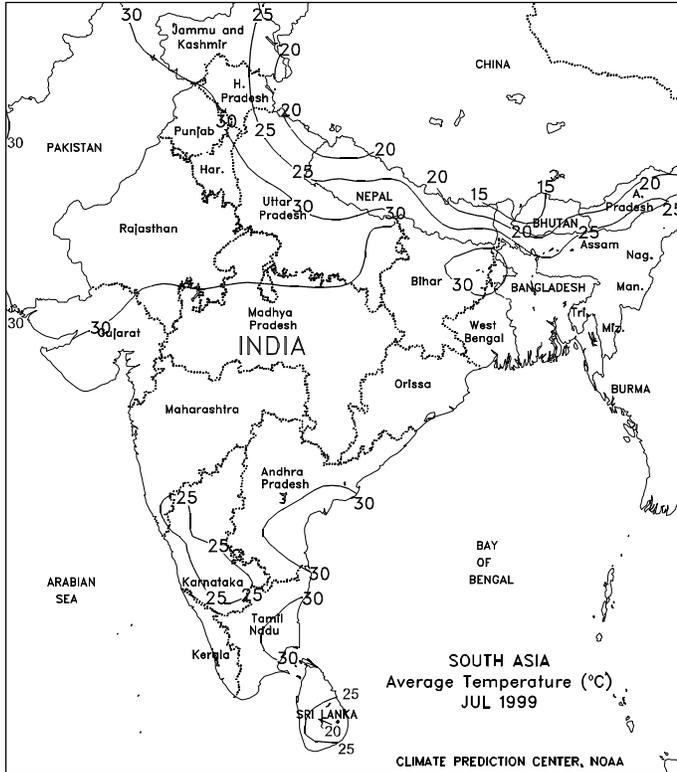
Widespread showers (10-25 mm or more, locally exceeding 50 mm) benefited vegetative winter crops throughout the west and southeast. Most winter crop areas of the southeast have received needed rain for 3 of the past 4 weeks, helping to replenish topsoil moisture reserves. The heaviest rain (25-50 mm or more) fell in sections of southern New South Wales, and the lightest rainfall (less than 10 mm) was recorded in the drought areas of northwestern Victoria. Farther north, scattered showers (7-14 mm) benefited winter grains and oilseeds in the Darling Downs region, but the more northerly crop areas of southeastern Queensland remained dry. Winter grains are likely advancing through reproduction in the northernmost crop areas and require additional moisture to ensure proper development. Near- to above-normal temperatures heightened the need for rain. In contrast, the dryness was welcomed along the coast for sugarcane harvesting. Light showers (5-15 mm) kept topsoils moist in the small grain and pasture areas of New Zealand. During July, near- to above-normal rainfall and mild temperatures in the winter grain belt of Western Australia favored semi-dormant wheat and barley. Farther east, however, rainfall was below normal in most winter crop areas, with near- to above-normal temperatures increasing crop moisture demands. Heavy rain along the coast caused localized flooding and damage to unharvested sugarcane in southern growing areas.



SOUTH ASIA

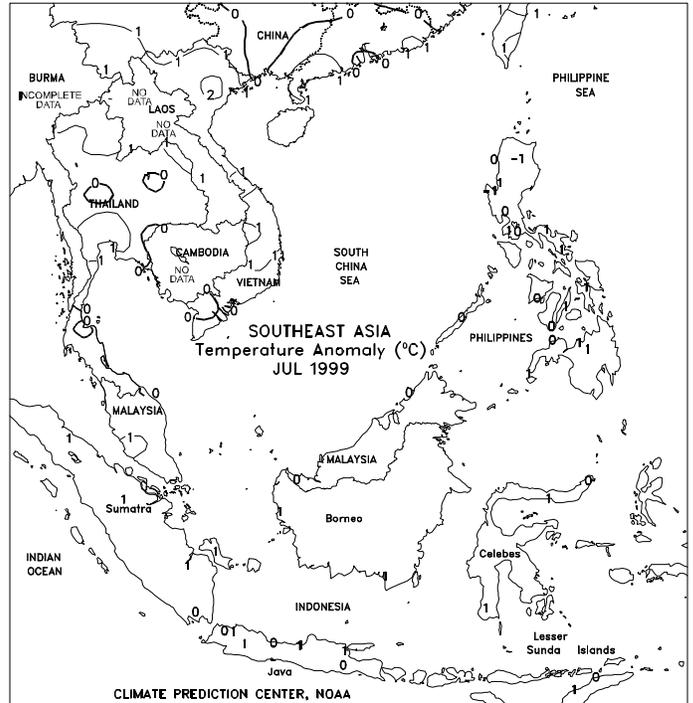
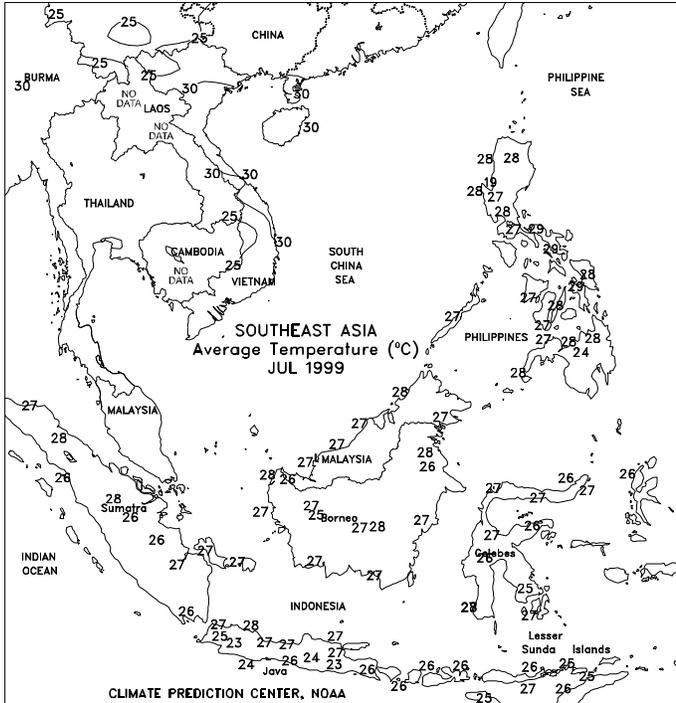
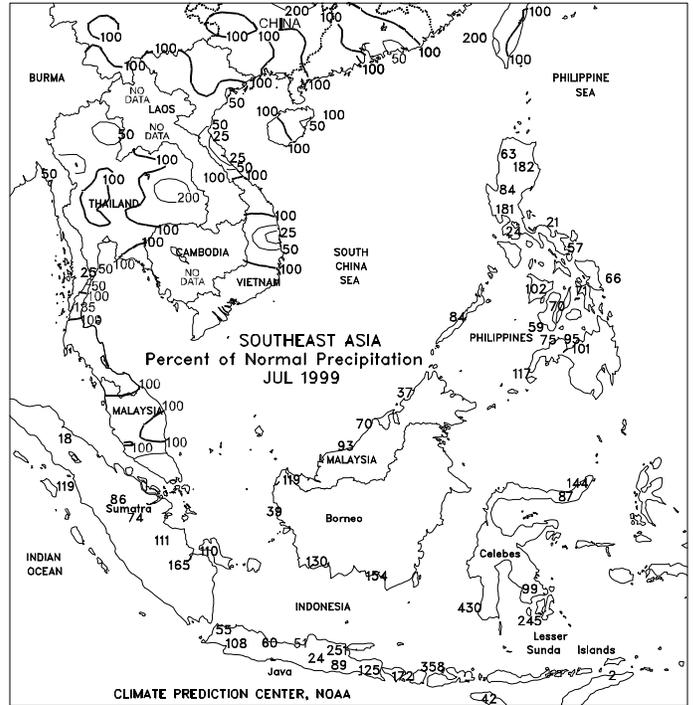
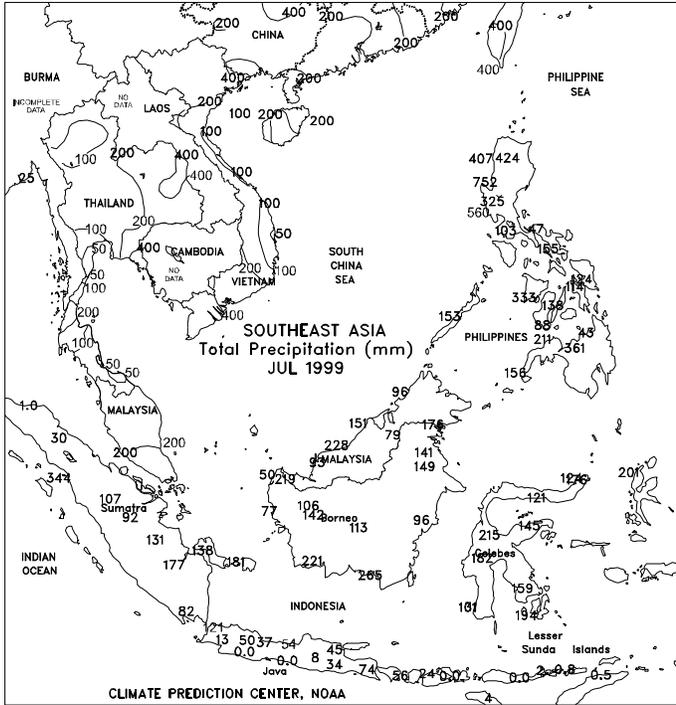
Unseasonable dryness continued to plague sections of western and southern India, stressing oilseeds, cotton, and coarse grains. In Gujarat, the groundnut basin was almost completely dry, with seasonable temperatures maintaining high evapotranspiration rates. Moderate to heavy showers (25-50 mm or more) kept cotton, soybeans, coarse grains, and sugarcane well watered in nearby Maharashtra and Madhya Pradesh, but dry pockets persisted over important growing areas of the southern interior (Karnataka and Andhra Pradesh). The areas affected by the dryness in western and southern India typically account for over half of India's total groundnut production and up to half of the country's total cotton output. In contrast to the dryness, locally heavy rain (50-100 mm or more) in Bangladesh and far eastern India likely caused additional localized flooding to rice. Across the north, monsoon showers (25-100 mm or more) increased irrigation reserves for rice and cotton in Pakistan and north-central India, although Pakistan's crop areas remained dry. During July, rainfall was near to below normal over most of the region, with temperatures generally averaging within 1 degree of normal. However, accumulated rainfall totaled 200 to 400 mm for the month across a broad section of central, northern, and eastern India and Bangladesh, providing adequate moisture for summer crop development, with localized flooding in the eastern rice belt. The monsoon appeared to be progressing well until late-July, when a dry pattern became entrenched over the west and south.

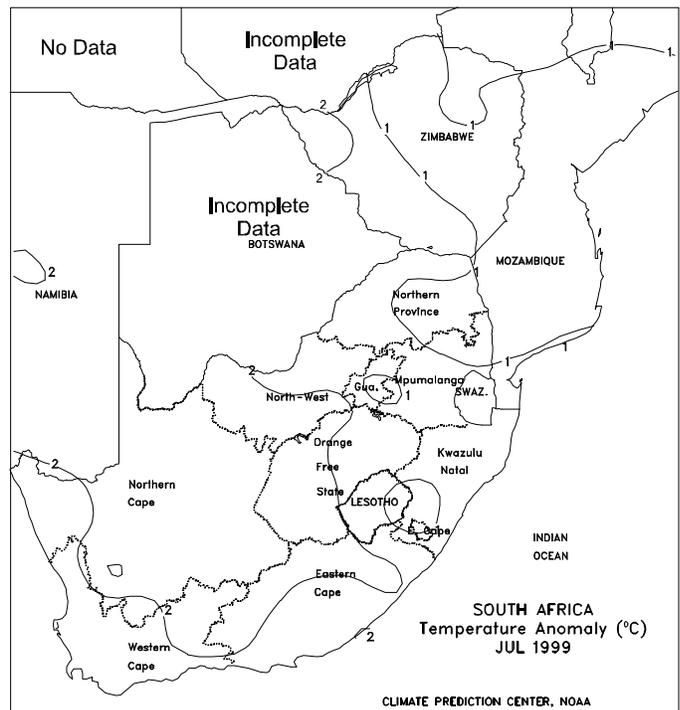
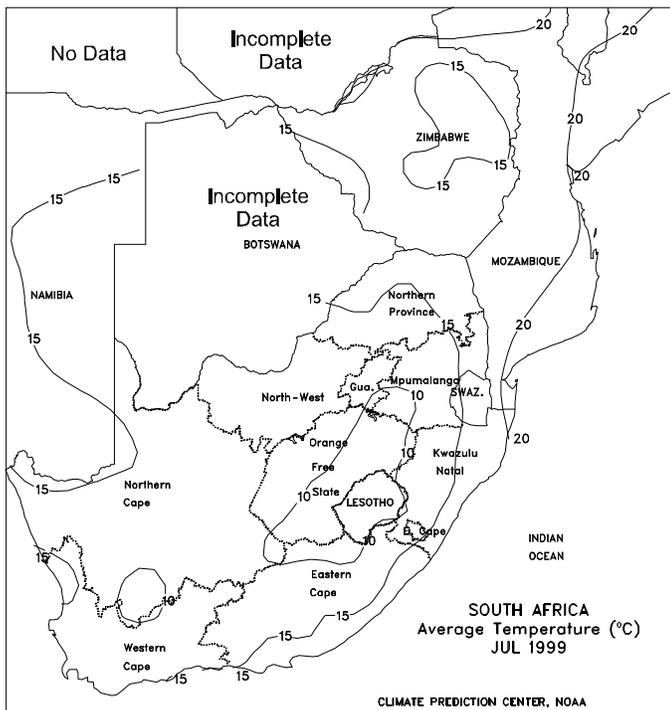
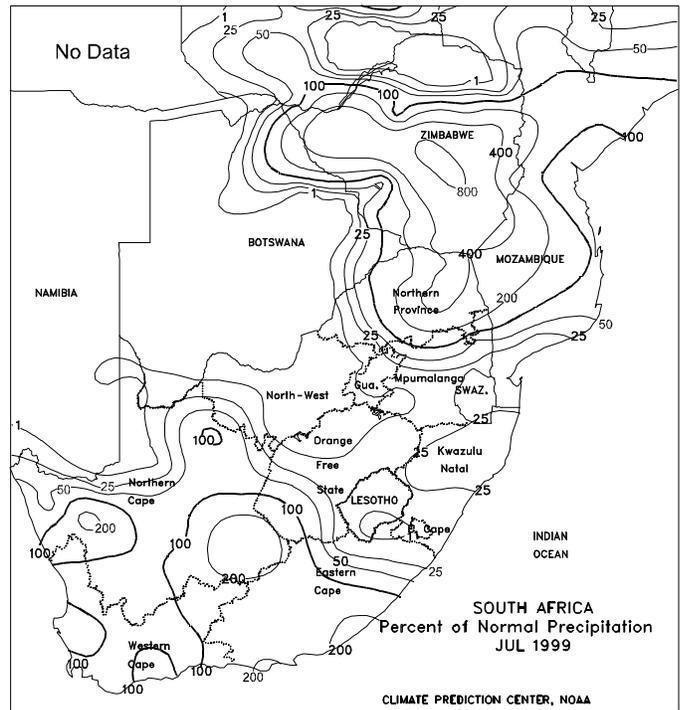
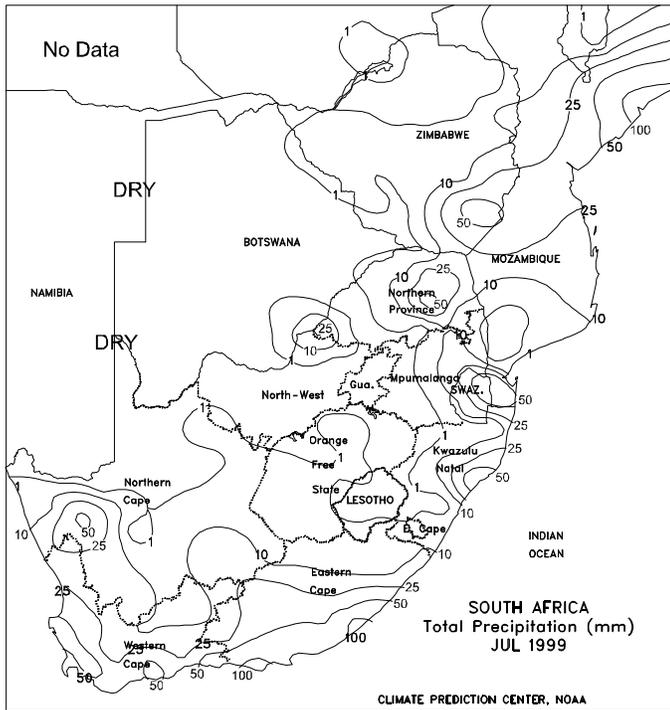


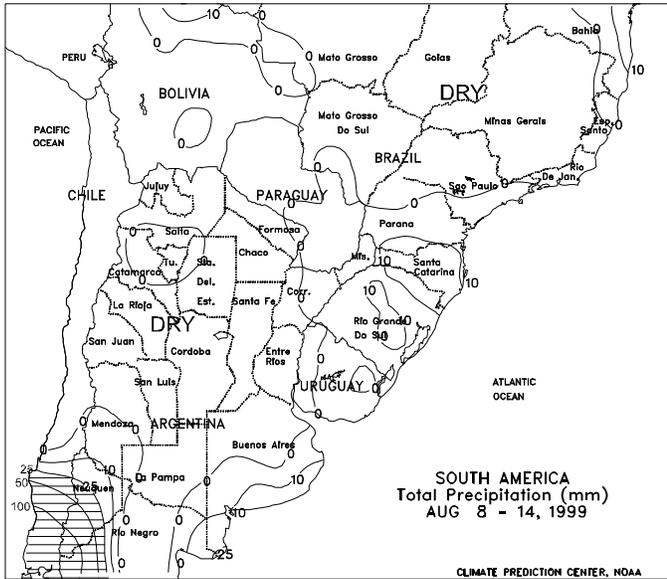


**SOUTHEAST ASIA**

Beneficial showers (40-150 mm) fell across northern and north-central Thailand, increasing moisture supplies for rice. Seasonably light showers (5-30 mm) were reported elsewhere in Thailand, where drier, sunny weather favored reproductive rice. Showers (25-50 mm) increased moisture supplies in northern Vietnam. Unseasonably dry weather (less than 10 mm), however, prevailed across south-central and southern Vietnam, reducing moisture supplies. Drier weather (25-75 mm) eased flooding across western Luzon, Philippines. Seasonable showers (50-150 mm) maintained moisture supplies elsewhere in the Philippines. Unseasonably light showers (10-25 mm) continued across peninsular Malaysia, reducing moisture supplies for oil palm and other plantation crops. Rainfall during the past 4 weeks has averaged about 50 percent of normal. Variable showers (5-20 mm) fell across Java, Indonesia, where moisture supplies are adequate for irrigated second-crop rice. Near-normal July rainfall increased moisture supplies for corn and rice across most of Thailand, Vietnam, and the Philippines. Below-normal showers in northern Thailand and south-central Vietnam, however, reduced irrigation supplies. Excessive showers in early August caused flooding in western Luzon, Philippines. Near-to above-normal rainfall favored oil palm in peninsular Malaysia and seasonable showers favored second-crop rice in Java, Indonesia.



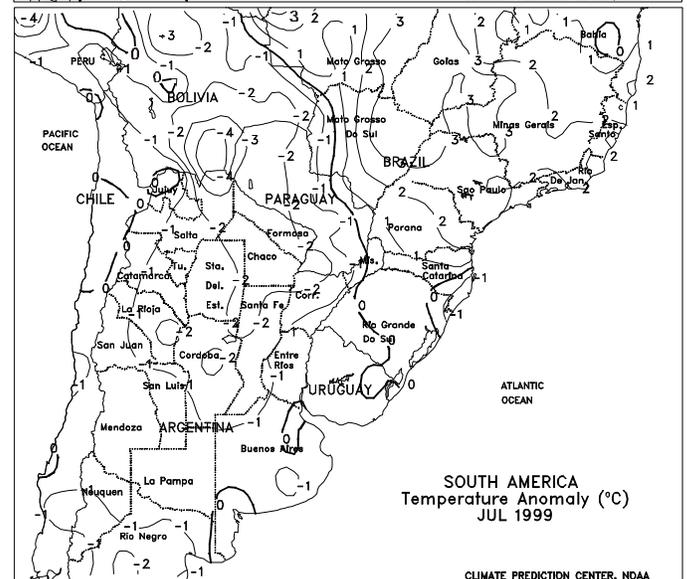
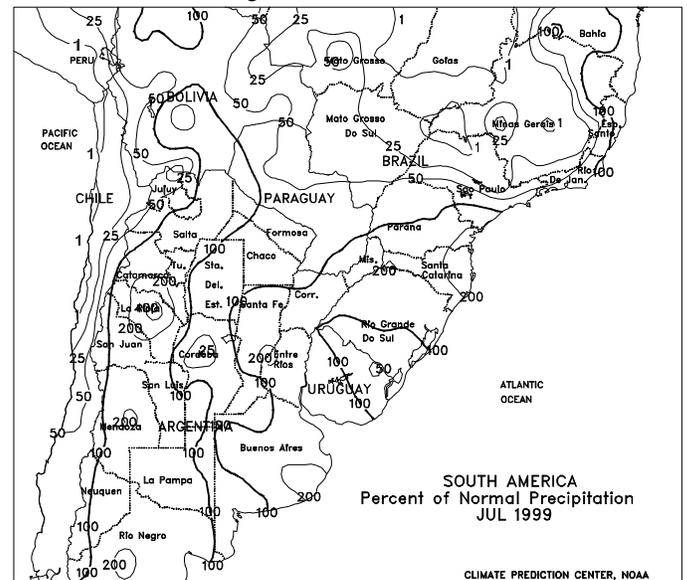
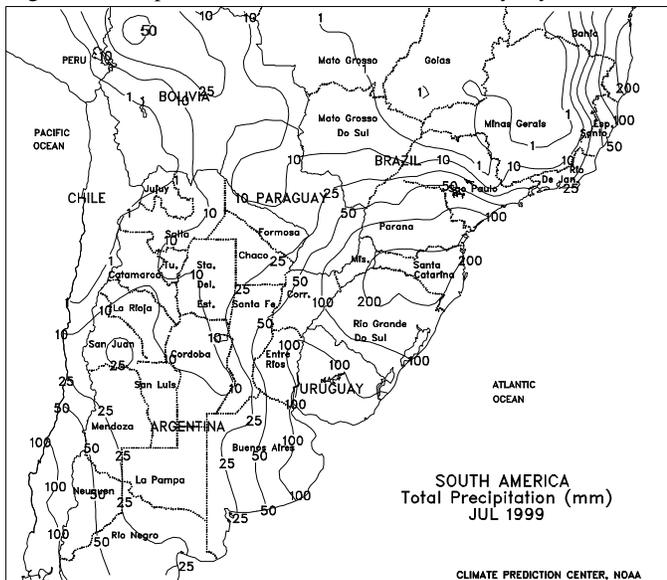


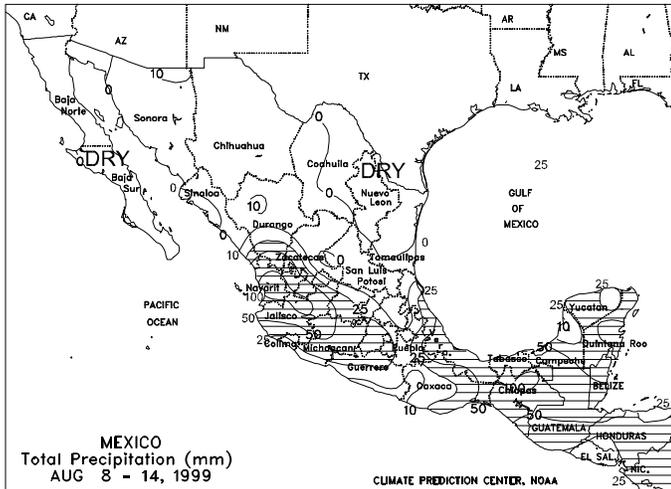


**SOUTH AMERICA**

In southern Brazil, frost on Sunday, August 15, possibly damaged reproductive winter wheat in eastern Rio Grande do Sul and eastern Parana, but likely had no impact on coffee in northern Parana. Light to moderate rain (5-25 mm) maintained adequate soil moisture for vegetative to reproductive wheat across the region (eastern Rio Grande do Sul and eastern Parana). Farther north and west in Parana and southern Mato Grosso do Sul, dry weather prevailed across the remaining wheat areas, but reproductive winter wheat had adequate soil moisture. During the week, warm, dry weather (temperatures 2-3 degrees C above normal) aided coffee and citrus harvesting in northern Sao Paulo and southern Minas Gerais. Dry weather prevailed across most of central Argentina, reducing topsoil moisture for germinating winter wheat. Currently, portions of southern Cordoba and southern Santa Fe are in the greatest need of rain to boost topsoil moisture. Throughout the region, wheat in the more advanced vegetative stage had adequate subsoil moisture. Light to moderate rain (5-20 mm) aided germinating wheat in southern Buenos Aires. Freezing temperatures over the weekend burned back winter wheat. Temperatures averaged near normal across the wheat belt of Argentina. During July, mostly near- to above-normal rainfall in central Argentina increased topsoil moisture for winter wheat

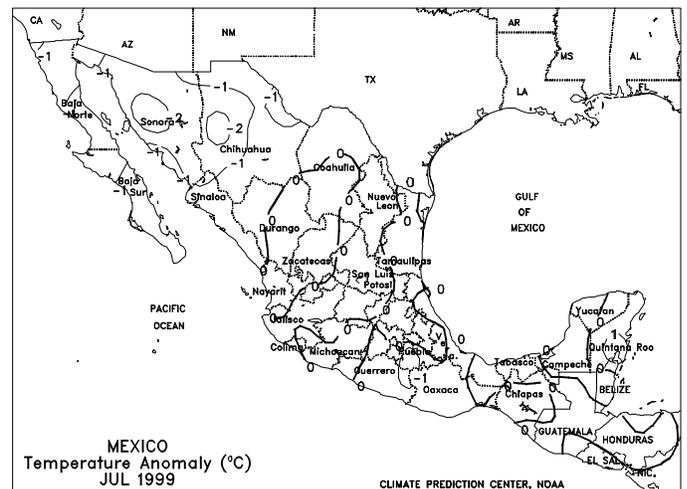
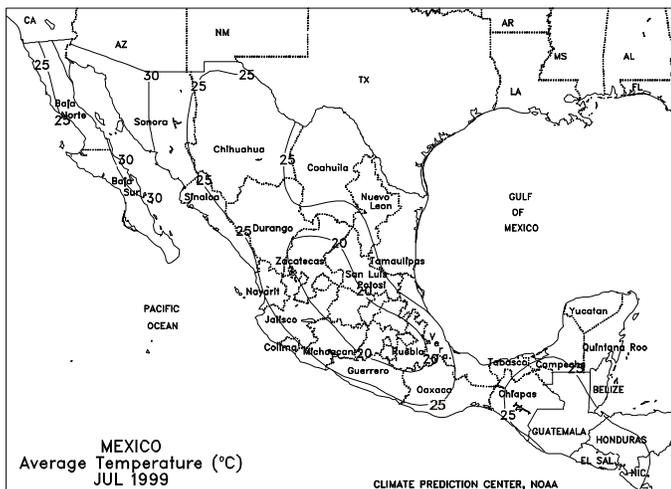
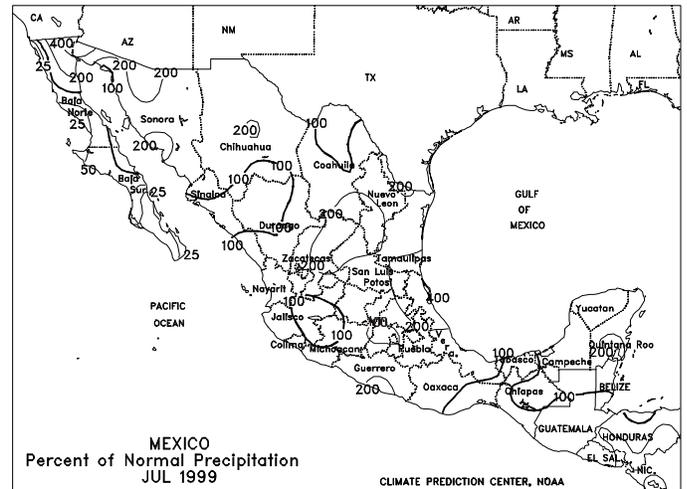
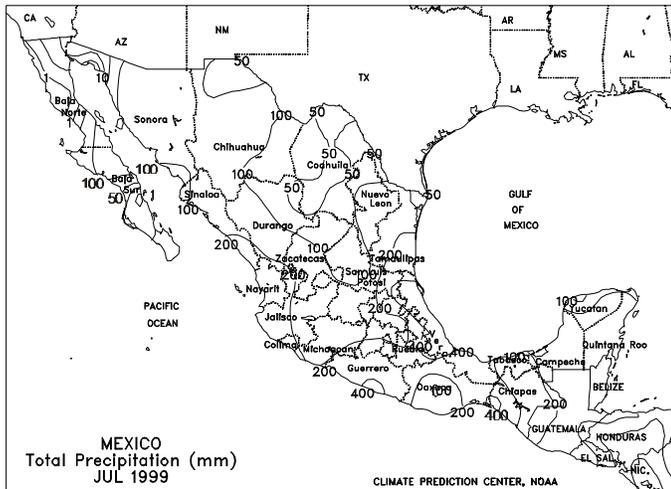
germination. However, scattered dry pockets developed across the region. In southern Brazil, near- to above-normal rainfall continued to favor vegetative to reproductive winter wheat. Seasonably dry weather aided coffee and citrus harvesting in Sao Paulo and Minas Gerais.

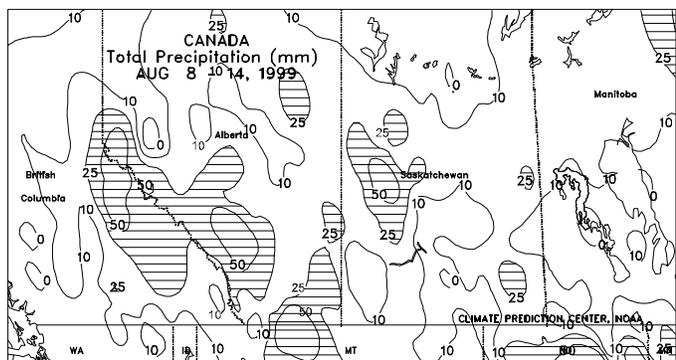




MEXICO

Widespread showers (20-70 mm, with isolated amounts greater than 90 mm) continued to favor corn across the Southern Plateau and Yucatan Peninsula. Monsoonal showers subsided across northwestern Mexico. Dry weather prevailed across north-central and northeastern Mexico, reducing moisture for summer crops. Temperatures averaged 1 to 2 degrees C above normal across most of Mexico. During July, near-normal rainfall and average temperatures favored corn development across the Southern Plateau. Above-normal rainfall helped to increase reservoir levels in north-central and northwestern Mexico.

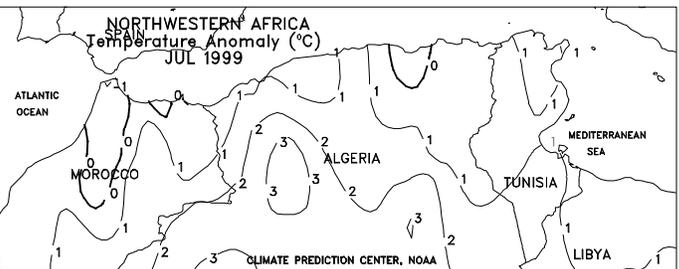
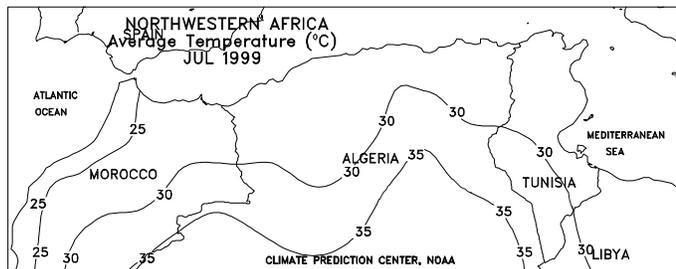
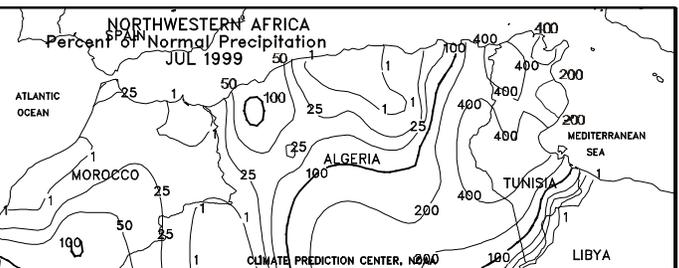
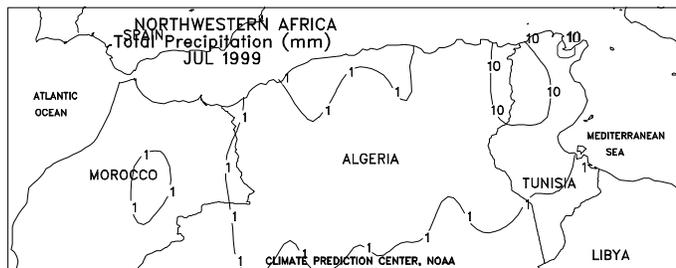
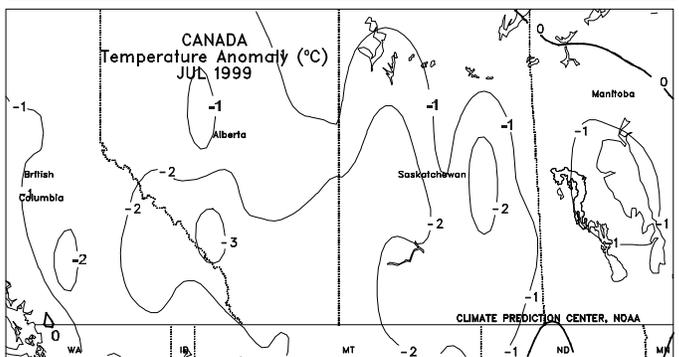
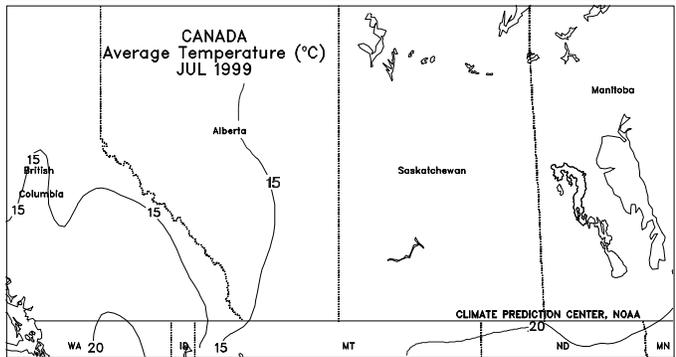
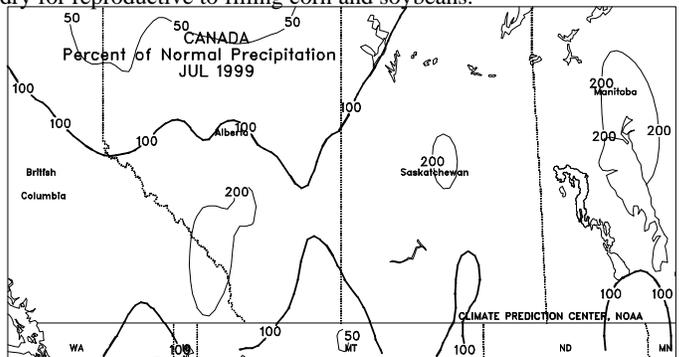
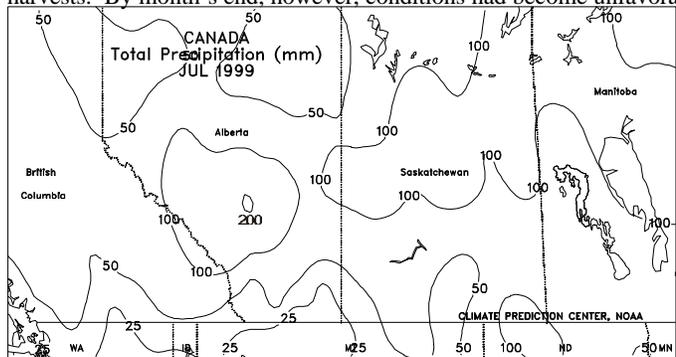




**CANADA**

Scattered, generally light to moderate showers (5-25 mm, locally exceeding 50 mm) covered the Prairies. The rainfall was favorable for immature grains and oilseeds, which in some areas reportedly continued to lag behind normal development by up to 4 weeks. However, where swathing and haying were underway, especially in southern sections of the Provinces, fieldwork delays were likely. Temperatures averaged near to slightly above normal in Alberta's northern growing areas, favoring crop growth, but elsewhere, cooler-than-normal weather kept crop development behind schedule. In eastern Canada, showery (5-25 mm), somewhat mild weather hampered winter wheat harvesting in Ontario but helped immature corn and soybeans. In Quebec, showers (25 mm or more) favored summer crop development. In July, cool, wet weather plagued most

Prairie crop areas, fostering disease and weed concerns while keeping crop development behind schedule. The exceptions were sections of southern Alberta and the Peace River Valley, which were unfavorably dry and could have used more moisture for normal crop development. Southern Alberta also experienced periodic heat stress. In mid-July, an unusual freeze reportedly caused some frost damage to oilseeds in parts of Alberta. In eastern Canada, a July drying trend, accompanied by near- to above-normal temperatures, aided winter wheat dry down and early harvests. By month's end, however, conditions had become unfavorably dry for reproductive to filling corn and soybeans.



The *Weekly Weather and Crop Bulletin* (ISSN 0043-1974) is published weekly and jointly prepared by the U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA) and the U.S. Department of Agriculture (USDA). Publication began in 1872 as the *Weekly Weather Chronicle*. It is issued under general authority of the Act of January 12, 1895 (44-USC 213), 53rd Congress, 3rd Session. NOAA is responsible for managing, printing, and distributing the bulletin. The contents may be reprinted freely, with proper credit.

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## Crop Production Highlights

The following information was released by USDA's Agricultural Statistics Board on August 12, 1999. Forecasts refer to August 1.

**Corn** production is forecast at 9.56 billion bushels, down 2 percent (%) from last year, but up 4% from 1997. Yields are expected to average 134.7 bushels per acre, up 0.3 bushel from a year ago. If realized, this would be the third-largest production and second-highest yield on record. Acreage for grain harvest is estimated at 71.0 million acres, down 84,000 acres from June.

**Soybean** production is forecast at a record-high 2.87 billion bushels, up 4% from last year's record of 2.76 billion bushels. Yields are expected to average 39.2 bushels per acre, up 0.3 bushel from 1998, but 2.2 bushels below the record set in 1994. Acreage for harvest is estimated at a record 73.3 million acres, up 3% from 1998, but down fractionally from June.

**All cotton** production is forecast at 18.3 million 480-pound bales, up 32% from 1998. Yield is expected to average 649 pounds per harvested acre, up 24 pounds from last year. Excessive heat has resulted in some stress to cotton. Producers expect to harvest 13.5 million acres, 27% above last year's drought-reduced harvested acreage. Upland accounts for 13.2 million harvested acres, 26% above 1998, and production is forecast at 17.6 million bales, a 31% increase. American-Pima harvested acreage is estimated at 316,200 acres, 35% percent above last year, and production is forecast at 667,600 bales.

**All wheat** production is placed at 2.31 billion bushels, down 1% from the July forecast, and down 9% from 1998. The yield is forecast at 42.5 bushels per acre, down 0.2 bushel from last month.

The final **winter wheat** production forecast is 1.69 billion bushels. This is up 1% from last month, but down 10% from 1998. The yield is forecast at 47.4 bushels per acre, up 0.4 bushel from last month to a new record high. Hard Red Winter, at 1.04 billion bushels, is up from a month ago by 1%. White Winter is down for the third consecutive month, and now totals 199 million bushels. Soft Red Winter is up 2% from the last forecast, at 451 million bushels.

**Durum wheat** production is forecast at 114 million bushels, down 14% from last month and 19% from 1998. Lower yields and a 150,000 acre drop in North Dakota harvested area caused the decline. The yield is forecast at 29.2 bushels per acre, 3.5 bushels less than last month.

**Other Spring wheat** production is forecast at 512 million bushels, down 3% from both last month and 1998. The yield is forecast at 34.2 bushels per acre, 0.7 bushel less than July 1. Of the production total, 460 million bushels are Hard Red Spring wheat, down 3% from last month.

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