

## SEVERE LOCAL STORMS, JUNE 1934

(Compiled by Mary O. Souder)

[The table herewith contains such data as have been received concerning severe local storms that occurred during the month. A revised list of tornadoes will appear in the Annual Report of the Chief of Bureau]

| Place                                                                                 | Date | Time           | Width of path, yards | Loss of life | Value of property destroyed | Character of storm                 | Remarks                                                                                                                                                                                                                                                                                                                                                                                            | Authority                      |
|---------------------------------------------------------------------------------------|------|----------------|----------------------|--------------|-----------------------------|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
| Malad, Idaho.....                                                                     | 1    | 11:45 am.      | 12                   |              |                             | Hail.....                          | Leaves of vegetation punctured; no estimate available of property destroyed, probably light; path 3½ miles long.                                                                                                                                                                                                                                                                                   | Official, U.S. Weather Bureau. |
| Jacksonville, Fla.....                                                                | 1    | 1:51-8:40 p.m. |                      |              |                             | Thunderstorm, heavy rain and hail. | Considerable damage to streets and gardens.                                                                                                                                                                                                                                                                                                                                                        | Do.                            |
| Leesburg (near), S.C.                                                                 | 1    | 3:30 p.m.      | 3,080                |              | \$10,000                    | Hail.....                          | Loss to crops.....                                                                                                                                                                                                                                                                                                                                                                                 | Do.                            |
| Garfield and Roseburg Counties, Mont.                                                 | 1    | 4-5 p.m.       | 2,640                | 1            | 5,000                       | Wind and hail.....                 | \$5,000 property damage in southern county alone; sheep herder killed near Grisdella when the sheep wagon in which he sought shelter was demolished; winter wheat crop wiped out and loss in spring wheat; path 10 miles long.                                                                                                                                                                     | Do.                            |
| Troy, S.C.....                                                                        | 1    | 5 p.m.         | do.                  |              | 6,000                       | Hail.....                          | Loss to crops; damage to buildings.....                                                                                                                                                                                                                                                                                                                                                            | Do.                            |
| Sunray, Tex.....                                                                      | 1    | 5:30 p.m.      | do.                  |              | 1,500                       | Wind.....                          | Damage to buildings.....                                                                                                                                                                                                                                                                                                                                                                           | Do.                            |
| Pana, Ill., and vicinity.....                                                         | 1    |                | 880                  |              | 2,500                       | Hail.....                          | Loss to crops; property damaged; path 3 miles long.                                                                                                                                                                                                                                                                                                                                                | Do.                            |
| Philadelphia (near), Miss.                                                            | 1    | P.m.           |                      | 1            |                             | Electrical and rain                | Woman killed taking clothes from wire line.....                                                                                                                                                                                                                                                                                                                                                    | Do.                            |
| North St. Louis, Mo.....                                                              | 1    | do.            |                      |              | 200,000                     | Electrical and wind.               | Several buildings damaged, trees, wires, and poles blown down; lightning caused fire in warehouse where several bales of cotton were stored.                                                                                                                                                                                                                                                       | Do.                            |
| Butte, Mont.....                                                                      | 1    | P.m.           |                      |              |                             | Snow.....                          | Snow after several hours of heavy rain; motorists and pedestrians unprepared; traffic seriously hampered.                                                                                                                                                                                                                                                                                          | Do.                            |
| Chester (near), S.C.                                                                  | 1    | do.            | 11                   |              | 3,000                       | Hail.....                          | Crop damage.....                                                                                                                                                                                                                                                                                                                                                                                   | Do.                            |
| Gering and Scottsbluff, Nebr.....                                                     | 2    | 8-11 p.m.      | 1,333                |              | 32,000                      | Hail, wind, and rain.              | About 8 square miles of crops destroyed by hail; irrigation ditches damaged by flooding; electric transmission lines blown down.                                                                                                                                                                                                                                                                   | Do.                            |
| Nettleton, Miss.....                                                                  | 2    |                |                      |              | 1,500                       | Electrical.....                    | No details.....                                                                                                                                                                                                                                                                                                                                                                                    | Do.                            |
| West Point, Miss.....                                                                 | 2    |                |                      |              | 8,000                       | Thundersquall.....                 | Storm attended by high wind and heavy hail, resulting in damage to mercantile establishments.                                                                                                                                                                                                                                                                                                      | Do.                            |
| Springfield, Mo.....                                                                  | 2    |                |                      |              |                             | Wind, rain, and hail.              | Trees and telephone wires damaged; streets flooded in northeastern portion of the city.                                                                                                                                                                                                                                                                                                            | Do.                            |
| Stillwater County, Mont.....                                                          | 2-5  |                |                      |              | 100,000                     | Hail.....                          | Severe loss to crops; sheep killed; storm of 5th most extensive, and damaging path varied from 1½ to 3 miles; storm of 2d covered only narrow strip through extreme south end of the county.                                                                                                                                                                                                       | Do.                            |
| Marathon, Tex.....                                                                    | 3    | 11:45 p.m.     |                      | 1            |                             | do.....                            | Sheep and goats killed; damage to roofs, houses, and outbuildings.                                                                                                                                                                                                                                                                                                                                 | Do.                            |
| St. Louis and St. Louis County, Mo.                                                   | 3    | P.m.           |                      | 2            |                             | Electrical and hail.               | Trees damaged; 2 boys killed by lightning.....                                                                                                                                                                                                                                                                                                                                                     | Do.                            |
| Lee County, S.C.....                                                                  | 3    | do.            |                      |              | 1,000                       | Hail.....                          | Damage to crops; path narrow.....                                                                                                                                                                                                                                                                                                                                                                  | Do.                            |
| Electric Mills, Miss.....                                                             | 3    |                |                      |              | 20,000                      | Electrical.....                    | No details.....                                                                                                                                                                                                                                                                                                                                                                                    | Do.                            |
| Cortland, N.Y.....                                                                    | 3    |                |                      |              |                             | Thundersquall and hail.            | Hail caused considerable damage to windows, roofs, and automobile tops; high winds damaged telephone and power lines.                                                                                                                                                                                                                                                                              | Do.                            |
| Killawog, N.Y.....                                                                    | 3    |                |                      |              | 1,000                       | Severe thunderstorm.               | Flood waters washed 900 feet of track of the Lackawanna R.R.; sawmill and piles of lumber carried away.                                                                                                                                                                                                                                                                                            | Do.                            |
| Norwich, N.Y.....                                                                     | 3    |                |                      |              | 30,000                      | Electrical.....                    | Lightning caused fire in Elliott lumber mill.....                                                                                                                                                                                                                                                                                                                                                  | Do.                            |
| Acton, Mont., 9 miles east.....                                                       | 3    |                |                      | 1            |                             | Heavy rain, electrical.            | Man and horse killed during severe electrical storm.                                                                                                                                                                                                                                                                                                                                               | Do.                            |
| Fort Laramie (near), and Jay Em, Wyo.                                                 | 3    |                |                      |              |                             | Heavy rain and hail.               | All crops washed out.....                                                                                                                                                                                                                                                                                                                                                                          | Do.                            |
| Maple Plain, Minn., and vicinity.                                                     | 4    | 1:30 p.m.      |                      |              | 5,000                       | Thundersquall.....                 | Several barns and sheds blown over, others moved from their foundations or damaged; branches of trees blown off and trees uprooted.                                                                                                                                                                                                                                                                | Do.                            |
| Dexter, Minn.....                                                                     | 4    | 2:15 p.m.      | 13                   |              | 1,200                       | Tornado.....                       | Barn and silo demolished; path 110 yards long.....                                                                                                                                                                                                                                                                                                                                                 | Do.                            |
| St. Louis and St. Louis County, Mo.                                                   | 4    | P.m.           |                      | 1            |                             | Thunder squall and hail.           | Trees uprooted and wires blown down; boy killed by lightning at Pine Lawn.                                                                                                                                                                                                                                                                                                                         | Do.                            |
| Aledo (near), Ill.....                                                                | 4    |                |                      |              | 4,000                       | Wind.....                          | No details.....                                                                                                                                                                                                                                                                                                                                                                                    | Do.                            |
| Sumner, Richfield, Postville, Elkport, and Hawkeye, Iowa.                             | 4    |                |                      |              | 1,500                       | Rain, electrical, and wind.        | Barn and 25 tons of hay, corn crib and windmill destroyed by lightning and 8 cattle killed; another barn moved 8 inches from its foundation, silo blown down and machine shed demolished; in Elkport, barn and cattle shed struck by lightning and burned; in Hawkeye several windmills destroyed, dwelling moved from its foundation and buildings damaged; loss in Elkhorn, only estimate given. | Do.                            |
| Marquette, Mich.....                                                                  | 4    |                |                      |              |                             | Thunderstorm.....                  | Farmhouse struck by lightning and several persons stunned.                                                                                                                                                                                                                                                                                                                                         | Do.                            |
| Valmora, N.Mex.....                                                                   | 5    | 1 p.m.         | 16                   |              |                             | Hail.....                          | Considerable damage to gardens.....                                                                                                                                                                                                                                                                                                                                                                | Do.                            |
| Alpena, Mich.....                                                                     | 5    | 4 p.m.         |                      | 1            |                             | Electrical.....                    | Telephone pole and tree struck; man killed and a woman injured by lightning.                                                                                                                                                                                                                                                                                                                       | Do.                            |
| Clovis, N.Mex.....                                                                    | 5    | 5 p.m.         | 17                   |              |                             | Hail.....                          | 30 to 50 percent of growing wheat damaged.                                                                                                                                                                                                                                                                                                                                                         | Do.                            |
| Chicago, Ill., and vicinity.....                                                      | 5    | P.m.           |                      |              |                             | Hail, wind and heavy rain.         | Trees and high-tension wires blown down; basements flooded.                                                                                                                                                                                                                                                                                                                                        | Do.                            |
| Downing, Mo., 7 miles north                                                           | 6    | 4 p.m.         |                      |              | 3,000                       | Heavy hail.....                    | Damage to property, orchards, crops, and trees.....                                                                                                                                                                                                                                                                                                                                                | Do.                            |
| Marathon, Tex., north of                                                              | 6    |                |                      |              |                             | Hail.....                          | 1,000 sheep and 23 cattle killed.                                                                                                                                                                                                                                                                                                                                                                  | Do.                            |
| McKinley, Wyo.....                                                                    | 6    |                |                      |              | 1,500                       | Heavy rain and hail.               | 2 storms caused losses in beets, grains, and alfalfa.                                                                                                                                                                                                                                                                                                                                              | Do.                            |
| Wishek (near), N. Dak.....                                                            | 6-7  |                |                      |              |                             | Tornado.....                       | 4 C.C.C. workers hurt and several buildings damaged.                                                                                                                                                                                                                                                                                                                                               | Do.                            |
| Iowa, Big Sioux Watershed.....                                                        | 6-8  |                |                      | 1            |                             | Heavy rainfall and wind.           | High water and flood; bridges and culverts in all sections of Sioux City threatened; damage to crops and tangible property; man killed by live wire which had blown down.                                                                                                                                                                                                                          | Do.                            |
| Orchard, Nebr.....                                                                    | 7    | 11:20 a.m.     | 833                  |              | 2,000                       | Tornado.....                       | Barn wrecked; livestock killed.....                                                                                                                                                                                                                                                                                                                                                                | Do.                            |
| Norton-Almena, Kans., and vicinity.                                                   | 7    | 6 p.m.         | 12                   |              | 50,000                      | Heavy hail.....                    | Damage to crops, path 15 miles long.....                                                                                                                                                                                                                                                                                                                                                           | Do.                            |
| Montezuma-Cimarron, Kans.....                                                         | 7    | 6:30 p.m.      | 17                   |              | 100,000                     | Heavy hail and rain.               | Chief damage from hail; wheat beaten into ground; path 20 miles long.                                                                                                                                                                                                                                                                                                                              | Do.                            |
| Chippewa, Lac Qui Parle, Yellow Medicine, Lyon, Redwood, and Renville Counties, Minn. | 7    | 6:30-12 p.m.   |                      |              | 2,000                       | Wind.....                          | Small damage reported.....                                                                                                                                                                                                                                                                                                                                                                         | Do.                            |
| Redwood Falls, near, Minn.....                                                        | 7    | 8 p.m.         |                      |              | 10,000                      | Tornadic wind.....                 | Damage to buildings at fair grounds.....                                                                                                                                                                                                                                                                                                                                                           | Do.                            |

¹ Miles instead of yards.

SEVERE LOCAL STORMS, JUNE 1934—Continued

| Place                                                                                                                             | Date  | Time              | Width of path, yards | Loss of life | Value of property destroyed | Character of storm                     | Remarks                                                                                                                                                                                                                                   | Authority                      |
|-----------------------------------------------------------------------------------------------------------------------------------|-------|-------------------|----------------------|--------------|-----------------------------|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
| Liberal, Kans.                                                                                                                    | 7     | P.m.              |                      |              | \$3,000                     | Wind and hail                          | Damage mostly at airport.                                                                                                                                                                                                                 | Official, U.S. Weather Bureau. |
| Avon, S.Dak., 16 miles north-east.                                                                                                | 7     | do.               |                      | 1            |                             | Tornado                                | Outbuildings on farm demolished, residence only left standing; man and livestock killed when barn blew over; 3 injured, 1 seriously; buildings on another farm damaged considerably.                                                      | Do.                            |
| Brookings, Moody, Minnehaha, and Union Counties, S.Dak.                                                                           | 7-8   |                   |                      |              | 39,000                      | Heavy rain                             | High water and flood damage to crops and tangible property.                                                                                                                                                                               | Do.                            |
| Big Sioux River, Perry Creek, and Floyd River, Iowa.                                                                              | 7-9   |                   |                      |              | 521,500                     | Heavy rain and flood.                  | 3,000 persons homeless; 541 homes and business places flooded; bridge collapsed.                                                                                                                                                          | Do.                            |
| Newberry, near, S.C.                                                                                                              | 8     | 2:30 p.m.         |                      |              | 3,000                       | Electrical                             | Large barn and contents burned.                                                                                                                                                                                                           | Do.                            |
| Reeseville, Wis.                                                                                                                  | 8     | do.               | 220                  |              | 4,000                       | Tornado                                | No details.                                                                                                                                                                                                                               | Do.                            |
| Greensburg, Kans., and vicinity.                                                                                                  | 8     | 4:15 p.m.         |                      | 33           | 3,000                       | Tornado                                | Telephone and power lines damaged; many small buildings blown over; path 20 miles long.                                                                                                                                                   | Do.                            |
| Lower Red Lake, south shore, Minn.                                                                                                | 8     | 5 p.m.            |                      |              |                             | Thunderstorm and heavy hail.           | Considerable damage to gardens and fruits.                                                                                                                                                                                                | Do.                            |
| Lafayette, Green, Rock, and Walworth Counties, Wis.                                                                               | 8     | 8:30-9:30 p.m.    |                      |              | 30,000                      | Thundersquall                          | Considerable structural damage reported.                                                                                                                                                                                                  | Do.                            |
| Brown and Doniphan Counties, Kans.                                                                                                | 8     | P.m.              |                      |              |                             | High wind and hail.                    | Telephone and power lines damaged; small buildings blown down, larger ones damaged; amount of loss not estimated.                                                                                                                         | Do.                            |
| Raymond, S.Dak., 3 miles northwest.                                                                                               | 8     | do.               |                      |              | 5,000                       | Tornadoes                              | Observers report 4 funnel clouds; 1 dwelling, several barns and other small buildings demolished.                                                                                                                                         | Do.                            |
| Orient and Northwood, Iowa.                                                                                                       | 8     |                   |                      |              | 7,000                       | Wind                                   | Large barn wrecked; farm buildings damaged; 2 windmills blown down; an orchard ruined.                                                                                                                                                    | Do.                            |
| Sac County, Iowa, northeastern portion.                                                                                           | 8     |                   | 17                   |              |                             | Tornado                                | 2 persons injured; buildings on 10 farms demolished; trees and buildings in path destroyed.                                                                                                                                               | Do.                            |
| Omaha, Nebr.                                                                                                                      | 8     |                   |                      |              | 5,000                       | Wind and hail                          | Most of damage to greenhouses; telephone and power lines, signboards and trees blown down.                                                                                                                                                | Do.                            |
| Cairo, Ill.                                                                                                                       | 9     | 5:32 p.m.         |                      |              | 1,000                       | Thundersquall                          | Lightning struck and blew up intake well of the Illinois Power & Light Corporation; city in darkness several hours; tree branches blown down breaking many wires.                                                                         | Do.                            |
| Bucklin, Kans.                                                                                                                    | 10    | 2:30 a.m.         |                      |              |                             | Electrical                             | Granary, automobile, truck, feed grinder, and other implements on a farm destroyed by fire after being struck by lightning.                                                                                                               | Do.                            |
| Binghamton, N.Y., and vicinity.                                                                                                   | 10    | 11:52 a.m.-4 p.m. |                      | 1            |                             | Electrical and heavy rain.             | In Taylor Center a girl, sitting by the telephone in her home, killed by lightning with no damage to the house; barn in North Pitcher and one in Merrill Creek destroyed by lightning; heavy rain caused landslide which delayed traffic. | Do.                            |
| Providence, R.I., and vicinity.                                                                                                   | 10    | 3:33-4:55 p.m.    |                      |              |                             | Thunderstorm, excessive rain and hail. | In Greenwood plane damaged and forced down; 1,000 telephones out of commission; in Pawtucket 2 houses were struck; many automobiles disabled because of water in distributors.                                                            | Do.                            |
| Tontitown, Ark.                                                                                                                   | 10    | 8 p.m.            | 14                   |              | 450,000                     | Tornado and hail.                      | Path 12 miles long; no details.                                                                                                                                                                                                           | Do.                            |
| Millford, Windham, Windsor, East Granby, Simsbury and Ellington, Conn.                                                            | 10    |                   |                      |              |                             | Heavy thunderstorm.                    | 3 buildings struck by lightning; in Windham tree fell across high tension wires delaying traffic; damage to orchards.                                                                                                                     | Do.                            |
| Atlanta, Ga.                                                                                                                      | 11    |                   |                      |              |                             | Electrical                             | Several buildings struck by lightning causing much damage.                                                                                                                                                                                | Do.                            |
| St. Francis, Kans., and vicinity.                                                                                                 | 12    | 3 p.m.            | 16                   |              | 30,000                      | Heavy hail                             | Chief damage to crops which were, in some localities, completely destroyed; path 15 miles long.                                                                                                                                           | Do.                            |
| Sherman and Thomas Counties, Kans.                                                                                                | 12    | 3-4 p.m.          | 16                   |              | 200,000                     | do.                                    | One of the most severe storms known locally; in some places hailstones piled up 4 to 5 inches; much damage to crops; path 20 miles long.                                                                                                  | Do.                            |
| Scott City, Kans., 10 miles north.                                                                                                | 12    | 5:30 p.m.         |                      |              | 5,800                       | Tornado                                | Several small buildings destroyed and trees blown down.                                                                                                                                                                                   | Do.                            |
| Ravenna, Kans., and vicinity.                                                                                                     | 12    | 8:30 p.m.         | 10                   |              |                             | High wind                              | A residence and several small farm buildings blown down or badly damaged; amount of loss not estimated; path 14 miles long.                                                                                                               | Do.                            |
| Dodge City, Kans., 20 miles northwest.                                                                                            | 12    | P.m.              | 16                   |              |                             | Tornado                                | Barns, windmills, granaries and trees destroyed.                                                                                                                                                                                          | Do.                            |
| Norton, Kans., 18 miles northwest of.                                                                                             | 12    | do.               | 12                   |              | 25,000                      | Heavy hail                             | Damage to crops; path 12 mile long.                                                                                                                                                                                                       | Do.                            |
| Griggsville, Ill.                                                                                                                 | 12    |                   |                      |              |                             | Wind                                   | Damage to telephone and electric lines.                                                                                                                                                                                                   | Do.                            |
| Lehigh Valley, Pa., and adjacent areas.                                                                                           | 12    |                   |                      |              | 30,000                      | Electrical                             | Many buildings destroyed by fire; greatest single loss electric power plant at Easton estimated to be \$30,000.                                                                                                                           | Do.                            |
| Tampa, Davenport, St. Leo, De Land, and Glen St. Mary, Fla.                                                                       | 12-14 |                   |                      |              | 100,000                     | Heavy rain and flood.                  | Much loss to crops; rivers, ponds, and lakes overflowed causing much damage to highways, bridges, and railway fills.                                                                                                                      | Do.                            |
| Otis, Colo.                                                                                                                       | 14    | P.m.              |                      |              |                             | Rain                                   | Rancher's family marooned over night on hilltop; ranch outbuildings swept away; 40 cattle drowned.                                                                                                                                        | Do.                            |
| Yankton, S.Dak.                                                                                                                   | 14    |                   |                      |              |                             | Tornado and heavy rain.                | Roof torn from North Western Depot and carried 200 feet; box cars blown along track and derailed; tree uprooted, wrecking sidewalks; communication and power lines down.                                                                  | Do.                            |
| Buffalo, N.Y., and vicinity.                                                                                                      | 15    | 1:45-2:15 p.m.    |                      | 1            | 106,000                     | Thunderstorm and hail.                 | Boy killed and 2 others seriously injured when they took refuge under a tree; crops reported ruined by large hailstones over an area 1 mile wide and 6 miles long.                                                                        | Do.                            |
| Wiley, Colo.                                                                                                                      | 15    | 3 p.m.            | 12                   |              | 10,000                      | Hail                                   | Standing grain ruined; some loss to poultry.                                                                                                                                                                                              | Do.                            |
| McClave, Colo.                                                                                                                    | 15    | 4-5 p.m.          | 11                   |              | 1,500                       | do.                                    | Some damage to grain fields.                                                                                                                                                                                                              | Do.                            |
| Lefors-Pampa, Tex.                                                                                                                | 15    | 5 p.m.            | 14                   |              | 200,000                     | Hail and wind                          | 22 oil derricks blown down; buildings and houses damaged; loss to wheat crop.                                                                                                                                                             | Do.                            |
| Leoti, Kans., and vicinity.                                                                                                       | 15    | 6 p.m.            | 850                  |              | 1,500                       | Small tornado                          | Path 3 miles long; no details reported.                                                                                                                                                                                                   | Do.                            |
| Lamar, Colo.                                                                                                                      | 15    | P.m.              |                      |              |                             | Rain                                   | Streets and parks flooded; highways washed out temporarily delaying motor travel.                                                                                                                                                         | Do.                            |
| Grayrocks-Glendon, Wyo.                                                                                                           | 15    |                   |                      |              | 10,000                      | Heavy hail                             | Loss to crops.                                                                                                                                                                                                                            | Do.                            |
| Hillsdale, Wyo., and vicinity.                                                                                                    | 15    |                   |                      |              |                             | do.                                    | Sheep and chickens killed; crop loss; paint and shingles on buildings damaged.                                                                                                                                                            | Do.                            |
| Canton, Okla.                                                                                                                     | 16    | 1-1:30 a.m.       | 14                   |              | 40,000                      | Hail and wind                          | Principal loss to wheat and cotton, cotton crop being practically ruined; path 30 miles long.                                                                                                                                             | Do.                            |
| Oklahoma, southwestern and central-western portions.                                                                              | 16    | P.m.              |                      | 1            |                             | Tornadoic wind, rain and hail.         | 4 persons injured; much damage by wind; cotton and other crops harmed by blistering sand storm and hail.                                                                                                                                  | Do.                            |
| Louisiana, Marsh Island, through Iberia, St. Martin, and West Baton Rouge Parishes, through East Feliciana Parish to Mississippi. | 16    |                   |                      | 3            | 2,605,000                   | Tropical storm.                        | Amount stated to buildings alone; loss to crops, principally corn, gardens, truck and cotton, considerable but not yet known; business temporarily suspended in Baton Rouge.                                                              | Do.                            |
| Mississippi, western area.                                                                                                        | 16-17 |                   |                      | 4            | 3,000,000                   | do.                                    | Numerous injuries reported; loss to crops alone indicated.                                                                                                                                                                                | Do.                            |
| Lake Alice, N.Mex.                                                                                                                | 17    | P.m.              |                      |              |                             | Hail                                   | Hail covered the ground to depth of 3 inches; gardens destroyed; no replanting because of drought.                                                                                                                                        | Do.                            |

1 Miles instead of yards.

## SEVERE LOCAL STORMS, JULY 1934—Continued

| Place                                                                                                             | Date  | Time        | Width of path (yards) | Loss of life | Value of property destroyed | Character of storm          | Remarks                                                                                                                                                                                                                                                                                                                                                                                                       | Authority                      |
|-------------------------------------------------------------------------------------------------------------------|-------|-------------|-----------------------|--------------|-----------------------------|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
| Red River Valley, Tenn.                                                                                           | 17    |             |                       |              | \$250,000                   | Excessive rain              | Estimated loss to crops \$150,000; damage to roads and bridges \$100,000.                                                                                                                                                                                                                                                                                                                                     | Official, U.S. Weather Bureau. |
| Davidson and Robertson Counties, Tenn.                                                                            | 17-18 | 5 p.m.      | 50                    |              | 3,000                       | Tropical storm and tornado. | Small tornado occurred on the 17th in sparsely settled area north of Joelton with damage to farm buildings.                                                                                                                                                                                                                                                                                                   | Do.                            |
| Fort Hall, Idaho                                                                                                  | 18    | 1 p.m.      | 1                     |              |                             | Hail                        | Value of property destroyed not estimated, probably slight, path 13 miles long.                                                                                                                                                                                                                                                                                                                               | Do.                            |
| Idaho Falls, Idaho, vicinity of.                                                                                  | 18    | 4-5 p.m.    |                       |              |                             | do                          | Considerable damage to peas in small area; less damage to grain.                                                                                                                                                                                                                                                                                                                                              | Do.                            |
| Collbran, Colo.                                                                                                   | 18    | 6 p.m.      |                       |              |                             | Small tornado               | Slight damage to buildings; considerable loss in hay.                                                                                                                                                                                                                                                                                                                                                         | Do.                            |
| Maryland, eastern portion                                                                                         | 18-19 |             |                       |              | 50,000                      | Wind and rain               | Winds of gale force caused unusually high tides in Chesapeake Bay and Baltimore Harbor.                                                                                                                                                                                                                                                                                                                       | Do.                            |
| Leoti, Kans., east of.                                                                                            | 19    |             |                       |              |                             | Tornado                     | 2 small buildings damaged; path not well defined.                                                                                                                                                                                                                                                                                                                                                             | Do.                            |
| Cherry County, Nebr., 5 miles south of Valentine.                                                                 | 19    | 3:30-6 p.m. | 10                    |              |                             | Wind and hail               | Hailstones as large as medium sized oranges; damage mostly to range land; loss in poultry and hay; path 40 miles long.                                                                                                                                                                                                                                                                                        | Do.                            |
| Leoti and Marienthal, Kans., and vicinity.                                                                        | 19    | 5:45 p.m.   |                       |              |                             | Tornado                     | Small buildings damaged; path, not well-defined, was 15 miles long; 5 other tornado clouds reported at about the same time.                                                                                                                                                                                                                                                                                   | Do.                            |
| Aberdeen-Mitchell and eastward, S.Dak.                                                                            | 19    | 7-10 p.m.   |                       |              | 50,000                      | Wind and dust               | Several thunderstorms, moving along a wide front, were preceded by winds of gale force and caused thick dust and much property damage; lowest visibility, objects obscured at distance of 10 feet; hangar at Mitchell Airport destroyed and airplane wrecked; communication wires down; considerable structural damage and many trees broken.                                                                 | Do.                            |
| Yellow Medicine, Lac Qui Parle, Chippewa, Swift, Stevens, Kandiyohi, Meeker, Stearns, and Lincoln Counties, Minn. | 19    | 9-10 p.m.   | 120                   |              | 898,000                     | Tornadoes                   | 2 persons injured; much livestock and poultry killed; serious loss in corn crop; many trees uprooted and much property damaged. These storms originated in east-central South Dakota, and struck the Minnesota border near Canby; minor losses over a belt extending eastward from Beardsley to Taylor Falls and southward to the Iowa border; path of greatest destruction 20 miles wide and 100 miles long. | Do.                            |
| Superior, Nebr.                                                                                                   | 19    | 9-11 p.m.   | 880                   |              | 5,000                       | Wind                        | Small buildings, silos, and trees blown down.                                                                                                                                                                                                                                                                                                                                                                 | Do.                            |
| Ruthven, Iowa                                                                                                     | 19    | P.m.        |                       |              | 5,500                       | Tornado                     | Town pumphouse and church wrecked; roof of church carried a block; numerous chimneys wrecked; trees uprooted and windows broken.                                                                                                                                                                                                                                                                              | Do.                            |
| Honey Creek, Iowa                                                                                                 | 19    |             |                       |              |                             | Wind                        | Telephone lines damaged; trees blown down.                                                                                                                                                                                                                                                                                                                                                                    | Do.                            |
| Galena-Menominee, Ill.                                                                                            | 20    |             |                       |              | 3,000                       | do                          | No details.                                                                                                                                                                                                                                                                                                                                                                                                   | Do.                            |
| La Salle, Ill.                                                                                                    | 20    |             |                       |              | 2,500                       | Electrical                  | do                                                                                                                                                                                                                                                                                                                                                                                                            | Do.                            |
| Wiota, 5 miles southeast to northeast of Berea, Iowa.                                                             | 20    |             |                       | 1            | 250,000                     | Tornado                     | Telephone poles down; barns crushed like paper boxes; trees uprooted; corn cribs and chicken houses blown down; several persons injured.                                                                                                                                                                                                                                                                      | Do.                            |
| Buchanan, Platte, Nodaway, and Harrison Counties, Mo.                                                             | 20    | 2 p.m.      | 1                     |              | 68,000                      | Hail                        | Severe damage to crops.                                                                                                                                                                                                                                                                                                                                                                                       | Do.                            |
| Brodhead, Wis.                                                                                                    | 20    | 5:45 p.m.   | 330                   |              | 10,000                      | Tornado                     | Damage to farm buildings.                                                                                                                                                                                                                                                                                                                                                                                     | Do.                            |
| Grosshopper, Lancaster, and Shannon, Kans.                                                                        | 20    | 6-6:30 p.m. |                       |              | 20,000                      | Heavy hail                  | Chief loss to crops; property damaged.                                                                                                                                                                                                                                                                                                                                                                        | Do.                            |
| Rushville, Sugar Lake, and Bean Lake, Mo.                                                                         | 20    | 6-7 p.m.    |                       |              |                             | Thunderstorm and hail.      | Thousands of dollars' damage; tobacco and corn over a wide area ruined; property damaged; loss in fruits and gardens.                                                                                                                                                                                                                                                                                         | Do.                            |
| Lafayette, Green, Rock, Walworth, Jefferson, Waukesha, and Milwaukee Counties, Wis.                               | 20    | do          | 138                   | 1            | 400,000                     | Thundersquall               | Many injuries reported; much property damaged; wires and poles down; barns and buildings demolished; at Milwaukee the highest wind velocity, 51 miles, was recorded; total damage in this city \$200,000; at Monroe, Wis., a man was killed when a tree fell on his automobile just as he arrived at his residence.                                                                                           | Do.                            |
| Elmira, N.Y.                                                                                                      | 21    | 6:17-7 p.m. |                       | 1            |                             | Electrical                  | Boy killed by lightning and his companion uninjured while working in a truck garden in the school yard.                                                                                                                                                                                                                                                                                                       | Do.                            |
| Thomas County, Kans., northwestern portion.                                                                       | 21    | 11 p.m.     | 10                    |              | 4,000                       | Heavy hail                  | Damage to crops; path 20 miles long.                                                                                                                                                                                                                                                                                                                                                                          | Do.                            |
| Evansville, Ind.                                                                                                  | 21    | P.m.        |                       |              | 20,000                      | Thundersquall and hail.     | Considerable damage by high wind; trees uprooted; wires down; small loss to crops and gardens.                                                                                                                                                                                                                                                                                                                | Do.                            |
| Anderson County, Kans., southwestern portion.                                                                     | 21    | do          | 12                    |              | 500                         | Hail and wind               | Small buildings destroyed; path 3 miles long.                                                                                                                                                                                                                                                                                                                                                                 | Do.                            |
| Winchester, Ill.                                                                                                  | 22    |             |                       |              | 1,500                       | Wind                        | No details.                                                                                                                                                                                                                                                                                                                                                                                                   | Do.                            |
| Waynedale, Ind., suburb of Fort Wayne.                                                                            | 22    |             |                       |              | 20,000                      | Thundersquall               | 1 person injured; property damaged; amount estimated for buildings alone; additional loss because of many valuable trees being damaged or destroyed.                                                                                                                                                                                                                                                          | Do.                            |
| Atwood, Kans., 15 miles southwest.                                                                                | 22    |             |                       |              | 10,000                      | Heavy hail                  | Crops damaged.                                                                                                                                                                                                                                                                                                                                                                                                | Do.                            |
| Parkersburg, W.Va.                                                                                                | 22    |             |                       |              |                             | Thundersquall and hail.     | Excessive precipitation, streets flooded.                                                                                                                                                                                                                                                                                                                                                                     | Do.                            |
| Osborne County, Kans.                                                                                             | 22    | 1-2 a.m.    |                       |              |                             | Wind and rain               | At Osborne high school and contents damaged to extent of \$700; much property damaged.                                                                                                                                                                                                                                                                                                                        | Do.                            |
| McPherson County, Kans.                                                                                           | 22    | 3 a.m.      | 30                    |              | 12,000                      | Wind                        | Chief damage to oil derricks, telephone and power lines and trees; path 30 miles long.                                                                                                                                                                                                                                                                                                                        | Do.                            |
| Topeka, Kans.                                                                                                     | 22    | A.m.        |                       |              |                             | do                          | Wires down; 5 miles from city a 2-story barn was blown down; windows blown in.                                                                                                                                                                                                                                                                                                                                | Do.                            |
| Philadelphia, Pa., and suburbs.                                                                                   | 22    | P.m.        |                       | 3            | 50,000                      | Electrical and wind.        | 3 roofs destroyed by lightning; an old house collapsed; church steeple damaged by lightning; other minor damage; 2 persons instantly killed, another died from shock.                                                                                                                                                                                                                                         | Do.                            |
| Pittsburgh and Arnold, Pa.                                                                                        | 22    | do          |                       |              | 50,000                      | do                          | Several buildings demolished by lightning; many trees uprooted in Pittsburgh; an old railroad station demolished by wind in Arnold.                                                                                                                                                                                                                                                                           | Do.                            |
| Westmoreland County, Pa.                                                                                          | 22    | do          |                       |              | 25,000                      | Electrical, wind, and hail. | Royal Hotel unroofed; many trees uprooted; much hail damage in Irwin.                                                                                                                                                                                                                                                                                                                                         | Do.                            |
| Franklin and Hamilton Counties, Ohio.                                                                             | 22    | do          |                       |              | 80,000                      | Thundersquall, heavy rain.  | Loss in Franklin County \$30,000, and in Hamilton County, \$50,000.                                                                                                                                                                                                                                                                                                                                           | Do.                            |
| Mountain Grove, Mo., vicinity of.                                                                                 | 23    | 11 a.m.     | 1                     |              | 7,000                       | Heavy hail and wind.        | Windows, screens, and roofs demolished.                                                                                                                                                                                                                                                                                                                                                                       | Do.                            |

1 Miles instead of yards.

SEVERE LOCAL STORMS, JUNE 1934—Continued

| Place                                                                                                                                           | Date | Time                 | Width of path (yards) | Loss of life | Value of property destroyed | Character of storm                   | Remarks                                                                                                                                                                                                                                                                                                         | Authority                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------|------|----------------------|-----------------------|--------------|-----------------------------|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
| Chisago and Washington Counties, Minn.                                                                                                          | 23   | 1:30 p.m.            |                       |              | \$17,500                    | Thundersquall, heavy rain, and hail. | Hailstones as large as baseballs in Chisago County; \$12,500 to growing crops; \$5,000 loss to window panes and automobile tops.                                                                                                                                                                                | Official, U.S. Weather Bureau. |
| La Crosse, Wis.                                                                                                                                 | 23   | 4 and 6 p.m.         |                       |              | 5,000                       | 2 hailstorms.                        | First storm, hail heavy in southeast section of the city causing slight damage to crops; second storm, at 6 p.m., crop damage in La Crosse County estimated to be \$5,000.                                                                                                                                      | Do.                            |
| Winona, S.C.                                                                                                                                    | 23   | P.m.                 | 880                   |              | 3,500                       | Wind.                                | Damage to buildings; cow killed by lightning.                                                                                                                                                                                                                                                                   | Do.                            |
| Lake County, Ill.                                                                                                                               | 23   |                      |                       | 2            |                             | Electrical.                          | Small boat capsized and 2 persons drowned.                                                                                                                                                                                                                                                                      | Do.                            |
| Wisconsin, west, east-central, and southern counties.                                                                                           | 23   |                      | 100                   | 1            | 1,000,000                   | Thundersqualls.                      | Most damage to farm buildings, smokestacks on factories, and power and telephone lines; loss to crops in some localities; heavy damage to trees reported in Green Bay, La Crosse, Madison, and Milwaukee; man killed when pinned below rafters of barn which had blown down; 5 persons injured by flying glass. | Do.                            |
| Columbia, S.C.                                                                                                                                  | 24   | 5:30 p.m.            | 880                   |              | 2,000                       | Wind.                                | Grandstand at fair grounds unroofed.                                                                                                                                                                                                                                                                            | Do.                            |
| Geneseo, Ill.                                                                                                                                   | 24   |                      | do.                   |              | 3,500                       | Hail, electrical.                    | Path 1 mile long; no details.                                                                                                                                                                                                                                                                                   | Do.                            |
| Freelandville, near, Ind.                                                                                                                       | 24   |                      |                       |              | 60,000                      | Thundersquall.                       | Church destroyed after being struck by lightning.                                                                                                                                                                                                                                                               | Do.                            |
| Hamel, Minn.                                                                                                                                    | 25   | 3:45 p.m.            | 100                   | 1            | 10,000                      | Tornadic wind.                       | Man killed when he sought refuge in a barn that was demolished, the roof being lifted and carried 60 feet; man injured when caught under falling beam of a barn that was demolished; livestock and poultry perished; property damaged; path 3 miles long.                                                       | Do.                            |
| Dakota, Mower, Dodge, Olmstead, and Winona Counties, Minn.                                                                                      | 25   | 4:30 p.m.            |                       |              | 140,000                     | Wind.                                | 1 person injured; damage to wire systems and property loss to crops; livestock killed.                                                                                                                                                                                                                          | Do.                            |
| Neilsville, Wis., vicinity of.                                                                                                                  | 25   | 5-7 p.m.             | 1,320                 |              | 10,000                      | Hailstorm.                           | Numerous window panes in residences and greenhouses broken; roofs of buildings and automobile tops punctured; 60 percent of growing crops ruined; some farmers reporting complete loss of corn crop.                                                                                                            | Do.                            |
| Briggsville, Wis., 1 mile north.                                                                                                                | 25   | 11:30 p.m.           | 880                   |              | 3,000                       | Thundersquall.                       | Barn wrecked and 2 windmills 1½ miles east of the barn demolished; few scattered trees uprooted.                                                                                                                                                                                                                | Do.                            |
| Seward, Raymond, and Ellinwood, Kans.                                                                                                           | 25   | P.m.                 | 15                    |              | 3,000                       | Wind.                                | Chief damage in Ellinwood where storm had many characteristics of a tornado; warehouse and a number of small buildings badly damaged; path 25 miles long.                                                                                                                                                       | Do.                            |
| Minnesota, extreme southeastern counties.                                                                                                       | 25   | do.                  |                       |              |                             | Hail and wind.                       | Damage to growing crops, especially peas.                                                                                                                                                                                                                                                                       | Do.                            |
| Mount Pulaski, Dawson and Elkhart, Ill.                                                                                                         | 25   |                      | 10                    |              | 7,500                       | Hail.                                | Heavy loss to crops; property damaged; path 12 miles long; \$7,500 amount of damage in Mount Pulaski alone.                                                                                                                                                                                                     | Do.                            |
| Kosciusko County, Ind.                                                                                                                          | 26   |                      |                       |              | 7,500                       | Wind.                                | No details.                                                                                                                                                                                                                                                                                                     | Do.                            |
| Clarence, Iowa.                                                                                                                                 | 26   |                      | 567                   |              | 10,000                      | Tornado.                             | Damage of \$10,000 to property in area of 3 blocks; wires and trees blown down; box hurled through the dining room window of a home and across the house.                                                                                                                                                       | Do.                            |
| Cascade, Chouteau, Fergus, Hill, Judith Basin, and Teton, Phillips, Petroleum, Garfield, McCone, Richland, Dawson, and Sheridan Counties, Mont. | 26   |                      | 1-6                   |              | 600,000                     | Hail, wind, and rain.                | Property damage; loss to crops, especially winter wheat, poultry killed.                                                                                                                                                                                                                                        | Do.                            |
| Summit County, Ohio.                                                                                                                            | 26   |                      |                       |              | 10,000                      | Wind.                                | No details.                                                                                                                                                                                                                                                                                                     | Do.                            |
| Butte, Mont.                                                                                                                                    | 26   | 11:30 a.m. 2:30 p.m. |                       | 1            | 10,000                      | do.                                  | Workman swept from the runway of a gasoline refinery and hurled 20 feet to his death; property damage.                                                                                                                                                                                                          | Do.                            |
| Saline City-Clay City, Ind.                                                                                                                     | 26   | 5-6 p.m.             | 440                   |              | 2,500                       | Tornado.                             | Path several miles long.                                                                                                                                                                                                                                                                                        | Do.                            |
| Fort Wayne, Ind., southwestern portion.                                                                                                         | 26   | P.m.                 |                       |              | 10,000                      | Thundersquall, heavy rain.           | Man severely injured; very heavy toll taken of magnificent shade trees, several falling on residences causing much damage.                                                                                                                                                                                      | Do.                            |
| Williston, N.Dak.                                                                                                                               | 26   | do.                  |                       |              |                             | Wind.                                | Telegraph wires blown down; Williston Ice & Coal Co.'s tippie, 1½ miles from city blown over; roof of 2 box cars blown off.                                                                                                                                                                                     | Do.                            |
| Union and Granger Counties, Tenn.                                                                                                               | 28   | 5-6:30 p.m.          | 1                     |              | 12,000                      | Hail.                                | Destruction to crops ranged from 25 percent to almost a complete loss; property damaged; path 20 to 25 miles long.                                                                                                                                                                                              | Do.                            |
| Ebenezer, S.C.                                                                                                                                  | 28   | P.m.                 | 880                   |              | 1,000                       | Thunderstorm.                        | Damage to telephone and power lines and to buildings.                                                                                                                                                                                                                                                           | Do.                            |
| Malaga, N.Mex.                                                                                                                                  | 29   | 9 p.m.               | 1                     |              | 1,200                       | Hail.                                | 200 acres of cotton and 30 acres of feed destroyed.                                                                                                                                                                                                                                                             | Do.                            |
| New Liberty, Iowa.                                                                                                                              | 29   |                      |                       |              | 2,500                       | Wind.                                | Loss to crops; damage to farm buildings.                                                                                                                                                                                                                                                                        | Do.                            |
| Lucas County, Ohio.                                                                                                                             | 29   |                      |                       |              | 50,000                      | do.                                  | No details.                                                                                                                                                                                                                                                                                                     | Do.                            |
| Byllesby, Va., vicinity of.                                                                                                                     | 30   | 2:30 p.m.            | 440                   |              | 500                         | Wind and hail.                       | Corn and other crops damaged by hail, fruit trees by wind.                                                                                                                                                                                                                                                      | Do.                            |
| Franklin County, Va.                                                                                                                            | 30   | 3 p.m.               | 1                     |              | 500                         | Hail.                                | Damage to trees, flowers and gardens; path 5 miles long.                                                                                                                                                                                                                                                        | Do.                            |
| Chattanooga, Tenn.                                                                                                                              | 30   | 5:35-7:42 p.m.       |                       |              |                             | Electrical and heavy rain.           | Heavy and destructive discharges of lightning.                                                                                                                                                                                                                                                                  | Do.                            |
| Springfield, Ill.                                                                                                                               | 30   |                      |                       |              | 2,000                       | Electrical.                          | No details.                                                                                                                                                                                                                                                                                                     | Do.                            |

<sup>1</sup> Miles instead of yards.



