National Weather Service
Storm Data and Unusual Weather Phenomena

July 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
OKLAHOMA, Western, Central and Southeast									
Kay County									
Tonkawa	**01**	**0545CST 0645CST**			**0**	**0**			**Flash Flood**
Numerous thunderstorms developed over Kay County during the early morning of the 1st resulting in water flowing over many roadways in Tonkawa, Blackwell, Ponca City, and Newkirk. The water department in Blackwell measured 3.5 inches of rain for a 5 hour period before flooding started.									
Atoka County									
Caney	**02**	**1728CST 1740CST**			**0**	**0**			**Hail (1.00)**
Kingfisher County									
Kingfisher	**07**	**0100CST**			**0**	**0**	**0.20K**		**Lightning**
Lightning struck a power pole behind Southside Auto Body causing power to be out for 4 hours on the south side of the city.									
Custer County									
Clinton	**07**	**1630CST**			**0**	**0**	**34K**		**Thunderstorm Wind**
Custer County									
Weatherford	**07**	**1630CST**			**0**	**0**	**10K**		**Thunderstorm Wind**
Washita County									
4 NW Bessie	**07**	**1730CST**			**0**	**0**			**Thunderstorm Wind (G50)**
Measured by Oklahoma Mesonet.									
Seminole County									
2 E Little	**07**	**1807CST**			**0**	**0**	**0.01K**		**Thunderstorm Wind (G52)**
Dewey County									
Leedey	**07**	**1833CST**			**0**	**0**	**0.01K**		**Thunderstorm Wind**
Ellis County									
9 S Arnett	**07**	**1835CST**			**0**	**0**	**7K**		**Thunderstorm Wind**
Ellis County									
Arnett	**07**	**1845CST**			**0**	**0**	**0.01K**		**Thunderstorm Wind**
Caddo County									
Eakly	**07**	**1849CST**			**0**	**0**	**15K**		**Thunderstorm Wind**
Dewey County									
Vici	**07**	**1850CST**			**0**	**0**	**1K**		**Thunderstorm Wind**
Caddo County									
Alfalfa	**07**	**1853CST**			**0**	**0**			**Hail (0.75)**
Caddo County									
Alfalfa	**07**	**1853CST**			**0**	**0**	**3K**		**Thunderstorm Wind**
Washita County									
1 NE Cowden	**07**	**1915CST**			**0**	**0**			**Hail (0.75)**
Ellis County									
Fargo	**07**	**1930CST**			**0**	**0**			**Thunderstorm Wind (G52)**
Grady County									
2 SSW Minco	**07**	**1945CST 1950CST**			**0**	**0**			**Thunderstorm Wind (G72)**
Winds gusted to 58 mph at 1945 CST, measured by Oklahoma Mesonet. Winds gusted to 83 mph at 1950 CST, also measured by Oklahoma Mesonet.									
Woodward County									
Ft Supply	**07**	**1950CST**			**0**	**0**			**Thunderstorm Wind (G56)**
Ellis County									
17 N Gage	**07**	**2000CST**			**0**	**0**			**Thunderstorm Wind (G52)**

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

OKLAHOMA, Western, Central and Southeast

Harper County

11 E Buffalo	**07**	**2015CST 2035CST**	**0**	**0**	**0.01K**		**Thunderstorm Wind**

Scattered severe thunderstorms developed over western and central Oklahoma during late afternoon and early evening of the 7th resulting in numerous reports of wind damage and some large hail. In the city of Clinton in Custer County thunderstorm winds toppled a semi-truck trailer at Interstate 40 and South 28th St., ripped apart a camper trailer on Petty Lane, damaged a roof at Washington Elementary and a house in the 1200 block of Avant in Neptune Park. Several mobile homes and house roofs were damaged in Weatherford in Custer County. Damaging winds from another severe thunderstorm 2 miles east of Little in Seminole County downed large limbs from a pecan tree. Large limbs were also blown down near Leedey in Dewey County. Thirteen high line poles and one tree were downed 9 miles southeast of Arnett in Ellis County leaving parts of Arnett without power for 12 hours. An observer in the same location also recorded 3 inches of rain during the storm. As the severe thunderstorm moved north to near Arnett, large limbs were blown off of 2 elm trees. In Caddo County near Eakly, severe thunderstorm winds damaged a school, blew down barns and fences, damaged many other barn roofs, and also blew the roof off from a set of bleachers at the ballpark. The same severe thunderstorm was responsible for ripping a barn roof off and destroying several awnings at a baseball park in Alfalfa, also in Caddo County. In Vici in Dewey County a 300 gallon tank was blown into a nearby house. Lastly, a severe thunderstorm 11 miles east of Buffalo in Harper County lasted for 20 minutes knocking large tree limbs from 2015 CST to 2035 CST.

OKZ025 **Oklahoma**

	09	**1100CST**	**1**	**0**			**Excessive Heat**

A 73 year-old man died in his home in Oklahoma City due to the excessive heat.
M73PH

OKZ019 **Logan**

	10	**1100CST**	**1**	**0**			**Excessive Heat**

A 79 year-old man died in his mobile home in Mulhall due to the excessive heat.
M79MH

Cotton County

Walters	**11**	**0100CST 0300CST**	**0**	**0**	**40K**		**Lightning**

Lincoln County

4 W Prague	**11**	**0430CST 0445CST**	**0**	**0**	**12K**		**Thunderstorm Wind**

Isolated thunderstorms developed over central and southwest Oklahoma the morning of the 11th. One thunderstorm was responsible for a lightning strike at the Historic Eagle Park in Walters in Cotton County resulting in a fire that destroyed a skating rink, ghost mine, carousel, and several bumper cars. Also, a severe thunderstorm containing damaging straight line winds 4 miles west of Prague in Lincoln County snapped a tree, destroyed a barn, damaged a trailer home, and blew a camper from a pickup truck over a fence and into some trees.

OKZ031 **Seminole**

	11	**1100CST**	**1**	**0**			**Excessive Heat**

A 51 year-old woman died in her home in Wewoka due to the excessive heat.
F51PH

Cotton County

Walters	**13**	**1720CST**	**0**	**0**	**1.5K**		**Thunderstorm Wind**

Tillman County

Grandfield	**13**	**1730CST**	**0**	**0**	**0.50K**		**Thunderstorm Wind**

Cotton County

9 E Randlett	**13**	**1740CST**	**0**	**0**			**Thunderstorm Wind (G52)**

Cotton County

Temple	**13**	**1740CST**	**0**	**0**	**0.60K**		**Thunderstorm Wind**

Cotton County

6 SW Randlett	**13**	**1745CST**	**0**	**0**			**Hail (0.75)**

Scattered severe thunderstorms developed over Cotton and Tillman Counties the afternoon of the 13th resulting in power lines being blown down in Grandfield in Tillman County leaving three hundred residents without power for several hours, while in Cotton County,

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OKLAHOMA, Western, Central and Southeast

a trampoline blew into some trees in Walters, and several utility poles and large tree limbs were blown down in Temple leaving 200 residents without electricity for several hours.

Dewey County									
Aledo	**15**	**1425CST**			**0**	**0**			**Hail (0.75)**
Ellis County									
3 E Harmon	**15**	**1455CST**			**0**	**0**			**Hail (0.88)**
Ellis County									
9 SE Harmon	**15**	**1455CST**			**0**	**0**			**Hail (0.88)**
Custer County									
11 NW Arapaho	**15**	**1500CST**			**0**	**0**			**Hail (0.75)**
Custer County									
5 SW Butler	**15**	**1510CST**			**0**	**0**			**Thunderstorm Wind (G52)**
Roger Mills County									
5 W Angora	**15**	**1520CST**			**0**	**0**			**Hail (1.00)**

Scattered severe thunderstorms developed over western Oklahoma the afternoon of the 15th resulting in several occurrences of large hail including dime, nickel and quarter size. There was also one report of severe thunderstorm winds, an Oklahoma Mesonet measurement of 60 mph 5 miles southwest of Butler in Custer County at 1510 CST.

OKZ036	**Jackson**								
	17	**1100CST**			**1**	**0**			**Excessive Heat**

A 79 year-old man died in his home in Altus due to the excessive heat.

M79PH

OKZ019-025-025	**Logan - Oklahoma**								
	19	**1100CST**			**3**	**0**			**Excessive Heat**

Three people died on the 19th due to the excessive heat. The first fatality occurred to a man of unknown age. He was found dead in his vehicle in Oklahoma City (Oklahoma County). A 55 year-old woman was found dead in her Guthrie (Logan County) home, and a 78 year-old woman was found dead in her Oklahoma City apartment.
M?VE, F55PH, F78PH

OKZ039	**Stephens**								
	20	**1100CST**			**1**	**0**			**Excessive Heat**

A 78 year-old woman died in her house in Duncan due to the excessive heat.

F78PH

OKZ019	**Logan**								
	21	**1100CST**			**1**	**0**			**Excessive Heat**

A 78 year-old woman died in her home in Guthrie due to the excessive heat. Reports indicated she rejected numerous offers of an air conditioner.
F78PH

OKZ038	**Comanche**								
	22	**1100CST**			**0**	**3**			**Excessive Heat**

Three US Army troop members from Fort Sill were rushed to a local hospital and treated for heat related injuries.

Blaine County									
4 W Okeene	**23**	**1510CST**	**0.1**	**10**	**0**	**0**			**Tornado (F0)**
Blaine County									
Okeene	**23**	**1510CST**			**0**	**0**	**0.50K**		**Thunderstorm Wind**
Blaine County									
Okeene	**23**	**1530CST**	**0.2**	**50**	**0**	**0**	**3K**		**Tornado (F0)**

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

OKLAHOMA, Western, Central and Southeast

Blaine County
1.5 N Okeene | **23** | **1530CST** | **0** | **0** | **1K** | **Thunderstorm Wind**

Major County
18 N Chester | **23** | **1725CST 1740CST** | **0** | **0** | **Hail (0.75)**

An isolated severe thunderstorm in Blaine County was responsible for spawning a short-lived tornado 4 miles west of Okeene at 1510 CST, and was witnessed by a trained spotter on the ground in an open field for less than 1 minute. No damage was reported and thus was rated an F0. Numerous trees were also uprooted in Okeene at 1510 CST. One tree fell across 6th St. blocking traffic until it could be removed by city employees. This damage was associated with damaging straight-line winds. Another F0 tornado was spotted near the hospital in Okeene at 1530 CST. A radio communications tower was destroyed, and one vehicle was damaged in the parking lot due to flying debris. Additional damage was reported 1.5 miles north of Okeene where a large metal shed was destroyed by damaging straight-line winds.

Oklahoma County
Oklahoma City | **24** | **2005CST** | **0** | **0** | **3K** | **Lightning**

Lightning struck the roof of a house at 1500 NW 48th in Oklahoma City causing it catch on fire. Extent of damage was unknown.

Woodward County
21 NNE Mooreland | **25** | **1600CST** | **0** | **0** | **Thunderstorm Wind (G65)**

Woods County
Lookout | **25** | **1610CST** | **0** | **0** | **Hail (0.75)**

Major County
3 E Meno | **25** | **1800CST** | **0** | **0** | **Thunderstorm Wind (G60)**

Isolated severe thunderstorms developed over northwest Oklahoma during late afternoon of the 25th resulting in measured wind gusts of 75 mph 21 miles north-northeast of Mooreland in Woodward County and 69 mph 3 miles of east of Meno in Major County, both measured by Oklahoma Mesonet. There was also one report of large hail, dime size at 1610 CST in Lookout in Woods County.

Oklahoma County
Oklahoma City | **26** | **1300CST 1310CST** | **0** | **0** | **25K** | **Thunderstorm Wind**

Harper County
7 NW Laverne | **26** | **2130CST** | **0** | **0** | **Thunderstorm Wind (G52)**

Ellis County
9 NE Catesby | **26** | **2215CST** | **0** | **0** | **Thunderstorm Wind (G56)**

Isolated severe thunderstorms developed over central and western Oklahoma during the afternoon and evening of the 26th. In Oklahoma City in Oklahoma County the roof was damaged at Wholesale Carpet Warehouse on N. Ann Arbor and at Payless Cashways at the corner of Reno and MacArthur. Numerous trees and large tree limbs were blown down across the area. Broken windows and roof damage also occurred to a few homes.

OKZ025-031 **Oklahoma - Seminole**
27 | **1100CST** | **2** | **0** | **Excessive Heat**

Two persons died on the 27th due to the excessive heat. The first victim was a 61 year-old man who was found dead in his Oklahoma City (Oklahoma County) home. The other victim was also found dead in his home, this time in Cromwell (Seminole County).
M61PH, M67PH

Washita County
Burns Flat | **27** | **2015CST** | **0** | **0** | **Thunderstorm Wind (G52)**

Washita County
1 S Foss | **27** | **2100CST** | **0** | **0** | **Thunderstorm Wind (G52)**

Ellis County
8 N Shattuck | **28** | **1735CST** | **0** | **0** | **Thunderstorm Wind (G61)**

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
OKLAHOMA, Western, Central and Southeast									
Woodward County									
20 NE Woodward	**28**	**1855CST**			**0**	**0**			**Thunderstorm Wind (G61)**
Woods County									
1 W Lookout	**28**	**1915CST**			**0**	**0**			**Hail (0.75)**
Woodward County									
4 SE Woodward	**28**	**2110CST**			**0**	**0**			**Thunderstorm Wind (G52)**
OKZ025	**Oklahoma**								
	30	**1100CST**			**1**	**0**			**Excessive Heat**

Excessive heat and drought conditions affected western and central Oklahoma from May through early October with the most intense heat and severe drought conditions occurring from mid-June through early September across central and southern Oklahoma. The excessive heat and drought was less severe across northwest and north central Oklahoma. There were 19 fatalities and at least 3 injuries directly related to the heat. Agricultural losses are estimated at nearly 2 billion dollars for the entire state of Oklahoma. Sixty of Oklahoma's 77 counties were declared federal disaster areas.

Heat and drought conditions began in May, intensified in July and August, and diminished in September and early October. Oklahoma City experienced its 6th warmest and 16th driest May on record. Heat and drought conditions escalated after June 11th, which was the last day of widespread rainfall across western and central Oklahoma until early September. The heat and drought then ended in early October when widespread rain and cooler temperatures returned.

The first fatality directly related to the heat occurred on June 21st , when an 81 year-old woman was found dead in her house in Oklahoma City (Oklahoma County). A 76 year-old man was then found dead in his Del City (Oklahoma County) home on June 29th. The heat claimed 15 lives in July. Two persons died on the 9th. A 46 year-old man was found dead in a hotel room in Oklahoma City with no air conditioning. The temperature in the room was 115 degrees. A 73 year-old man was then found dead in his Oklahoma City home. On July 10th , a 79 year-old man was found dead in his mobile home in Mulhall (Logan County). Another heat related fatality occurred on the 11th, when a 51 year-old woman was found dead in her home in Wewoka (Seminole County).

On July 17th, in Altus (Jackson County), a 79 year-old man was found dead in his home, while on the 19th, there were 3 heat related deaths reported. The first fatality occurred to a man of unknown age. He was found dead in his vehicle in Oklahoma City. The second fatality occurred in Guthrie (Logan County) when a 55 year-old man was found dead in his house, while the 3rd fatality occurred to a 78 year-old woman when she was found dead in her Oklahoma City apartment. On July 20th, a 78 year-old woman was found dead in her Duncan (Stephens County) home, while on the 21st, another 78 year-old woman was found dead in her home, this time in Guthrie (Logan County). Two persons died in their homes from the heat on the 27th, the first, a 61 year-old man from Oklahoma City, the second, a 67 year-old man found from Cromwell (Seminole County). The last heat related fatality occurred on the 30th, when a 62 year-old woman was found dead in her Oklahoma City home.

Three heat related fatalities were reported in August. The first occurred on the 2nd when a 53 year-old man was found dead inside his Oklahoma City home. The second heat related fatality occurred on the 3rd, when an 82 year-old man was found dead inside his Oklahoma City home. The last heat related fatality in August occurred on the 5th in Gene Autry (Carter County) when a 76 year-old man was found dead inside his home. Only one heat related fatality was reported in September, and occurred on the 4th. A 76 year-old man was found dead outside of a retirement home in Oklahoma City. He was found after he went for a walk and did not return.

Only 3 heat related injuries were reported during the 5 month-long heat and drought. Three US Army troop members from Fort Sill (Comanche County) were rushed to a local hospital on July 22nd and treated for heat related injuries.

Statistics provided by the Oklahoma State Department of Agriculture indicate economic losses of approximately 2 billion dollars to Oklahoma's agriculture business. Figures were not available for individual counties. Hay and cotton crops were particularly affected. Hay producers harvested only 30 to 80 percent of the normal yield, a loss of perhaps 80 million dollars. Cotton production was reduced by about 70 percent, a loss of 38 million dollars. Other crops such as grain sorghum, peanuts and soybeans also suffered major losses. In total, crop losses across Oklahoma were near 500 million dollars, but because of the multiplying effect on the overall economy, the ecomonic impact is closer to 2 billion dollars.

The summer of 1998 (June-August) was the 4th hottest and 5th driest on record in Oklahoma City. The drought ended gradually in September and early October, but record warm temperatures continued through September. Oklahoma City recorded an average temperature of 81.2 degrees in September, 2nd hottest September on record. The summer of 1980, considered to be the last major period of excessive heat and drought to affect central and western Oklahoma, still ranks as the hottest summer ever for Oklahoma City, however Oklahoma City did experience a drier summer in 1998 than in 1980.

F62PH

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

TEXAS, Western North

TXZ086 **Wichita**

03 **1100CST** **1** **0** **Excessive Heat**

A 75 year-old man died in his house in Wichita Falls due to the excessive heat.

M75PH

Baylor County

5 W Seymour **05** **1305CST** **0** **0** **Flash Flood**

Many county roads were closed 5 miles west of Seymour in Baylor County due to high water. A spotter 1 mile northeast of Red Springs reported 5.2 inches of rain at 1100 CST.

Knox County

Knox City **12** **1945CST** **0** **0** **0.50K** **Thunderstorm Wind (G52)**
2000CST

Knox County

Goree **12** **2005CST** **0** **0** **Thunderstorm Wind (G65)**

An isolated severe thunderstorm developed over Knox County the evening of the 12th resulting in power lines being blown down in Knox City.

Wichita County

Burkburnett **13** **1715CST** **0** **1** **3K** **Lightning**

Wichita County

4 NW Wichita Falls **13** **1720CST** **0** **0** **Thunderstorm Wind (G69)**

Wichita County

Burkburnett **13** **1745CST** **0** **0** **Hail (0.75)**

Wichita County

1.5 N Sheppard Afb **13** **1745CST** **0** **0** **Hail (1.00)**
1750CST

Wichita County

Sheppard Afb **13** **1750CST** **0** **0** **Hail (1.00)**

Wichita County

5 N Wichita Falls **13** **1800CST** **0** **0** **Thunderstorm Wind (G61)**

Archer County

Holliday **13** **1810CST** **0** **0** **Hail (1.00)**

Clay County

3 SW Dean **13** **1811CST** **0** **0** **Thunderstorm Wind (G61)**

Wichita County

Burkburnett **13** **1815CST** **0** **0** **7K** **Thunderstorm Wind**

Archer County

8 S Holliday **13** **1830CST** **0** **0** **Hail (0.88)**

Clay County

10 W Henrietta **13** **1830CST** **0** **0** **0.50K** **Thunderstorm Wind**

Archer County

10 SE Megargel **13** **1903CST** **0** **0** **Thunderstorm Wind (G52)**

Numerous severe thunderstorms developed over western portions of north Texas during the late afternoon and early evening of the 13th. A roof was blown off of 5 bays of a vehicle garage at the Wichita County Precinct in Burkburnett (Wichita County). In addition, two telephone poles were blown down; eight inch tree limbs were blown down, one through the windshield of a car; two, three-foot diameter trees were blown over between the campuses of Hardin Elementary and Burkburnett Junior High School, and sheet metal roofing was blown off of a building on West 3rd St. One man was injured at a local gas station when he was standing near a utility pole as it was struck by lightning. Paramedics checked him out at the scene and released him. A house was also struck by lightning and caught on fire. The fire department quickly extinguished the fire resulting in only minimal damage. Lastly, power lines were downed 10 west of Henrietta in Clay County.

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

TEXAS, Western North

TXZ086 **Wichita**

14	**1100CST**	**1**	**0**		**Excessive Heat**

Excessive heat and drought conditions affected western portions of north Texas from May through early October with the most intense heat and severe drought conditions occurring from mid-June through early September. There were 2 fatalities and at least 2 injuries directly related to the heat. Agricultural losses are estimated at 2.1 billion dollars for the entire state of Texas. All of Texas's counties were declared federal disaster areas.

Heat and drought conditions began in May, intensified in July and August, and diminished in September and early October. Wichita Falls experienced its 3rd warmest and 3rd driest May on record. Heat and drought conditions escalated after June 11th, which was the last day of widespread rainfall across western portions of north Texas until early September. The heat and drought then ended in early October when widespread rain and cooler temperatures returned.

The first fatality directly related to the heat occurred on July 3rd, when a 75 year-old man was found dead in his home in Wichita Falls (Wichita County). The second and last report of a heat related fatality occurred on July 14th, when a 74 year-old man was found dead in his home, also in Wichita Falls.

Only 2 heat related injuries were reported during the 5 month-long heat and drought. Two persons from Wichita Falls were treated for heat related injuries on June 2nd at United Regional Health Care. Agricultural losses across Texas totaled about 2.1 billion dollars with no specific statistics available on a county-by-county basis, however cotton losses are expected to contribute significantly to the total loss.

The summer of 1998 (June-August) was the 2nd hottest and 7th driest on record in Wichita Falls. The drought ended gradually in September and early October, but record warm temperatures continued through September. Wichita Falls recorded an average temperature of 83.4 degrees in September, 2nd hottest September on record. The summer of 1980, considered to be the last major period of excessive heat and drought to affect western portions of north Texas, still ranks as the hottest summer ever for Wichita Falls.

F74PH