

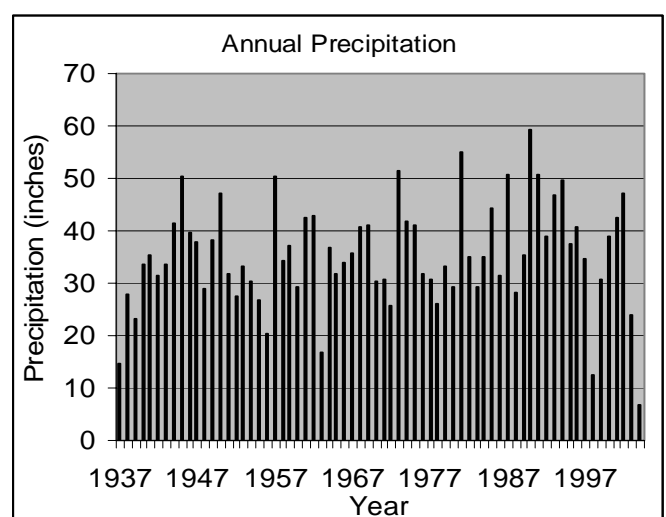
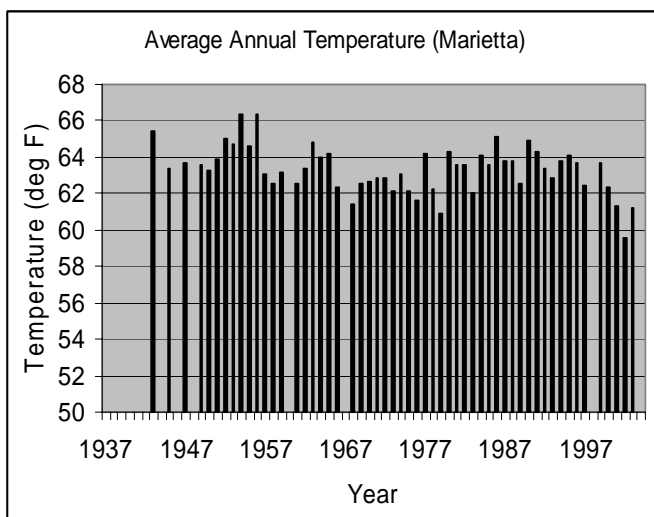
The Climate of Love County

Love County is part of the Crosstimbers. This is a transitional region from the Central Great Plains to a more irregular landscape. Average annual precipitation ranges from about 36 inches in western Love County to 42 inches in the east. April and October are the wettest months, on average, but much of the spring through fall receives sufficient rainfall. Nearly every winter has at least one inch of snow, with one year in thirteen having ten or more inches.

Temperatures average near 63 degrees, with a slight increase from north to south. Temperatures range from an average daytime high of 95 degrees in July and August to an average low of 30 degrees in January. Love County averages a growing season of 224 days, but plants that can withstand short periods of colder temperatures may have an additional three to seven weeks.

Winds from the south to southeast are quite dominant, averaging just over seven miles-per-hour. Relative humidity, on average, ranges from 39% to 94% during the day. During the year, humidity is highest in May and June and lowest in July. Winter months tend to be cloudier than summer months. The percentage of possible sunshine ranges from an average of about 55% in winter to nearly 80% in summer.

Thunderstorms occur on about 44 days each year, predominantly in the spring and summer. During the period 1950 - 2003, Love County recorded 19 tornadoes. The most recent significant tornado (F2 intensity or greater) occurred on May 8, 2003. This F2 tornado made a 4 mile path through Love County near Overbrook. There were no injuries. Typically, there are about 3 events each year of hail exceeding one inch in diameter. As information collection improves, both the number of reported tornadoes and the number of severe hail events have increased.



Temperature (deg Fahrenheit)												
	AVERAGES (1971-2000)			EXTREMES (1940-2003)				AVG # DAYS PER MONTH (1971-2000)				
	Daily Max	Daily Min	Daily Avg	Record High		Record Low		Max>100	Max>90	Max<32	Min<32	Min<0
Jan	52.6	30.4	41.5	85	(22nd, 1943)	-3	(4th, 1947)			2	18	*
Feb	58.8	34.8	46.8	96	(22nd, 1996)	0	(18th, 1978)		*	1	12	*
Mar	67.4	42.8	55.1	97	(31st, 1974)	7	(11th, 1948)		*	*	5	
Apr	75.0	50.8	62.9	97	(12th, 1972)	24	(3rd, 1975)		*		1	
May	81.3	59.8	70.6	101	(30th, 1985)	37	(3rd, 1954)	*	2			
Jun	88.7	67.7	78.2	111	(27th, 1980)	49	(1st, 1964)	1	14			
Jul	94.4	71.6	83.0	110	(24th, 1943)	55	(6th, 1972)	5	26			
Aug	94.6	70.5	82.5	112	(16th, 1956)	54	(25th, 1966)	7	25			
Sep	86.8	63.7	75.3	110	(3rd, 2000)	33	(27th, 1942)	1	12			
Oct	77.1	53.4	65.3	102	(3rd, 1951)	20	(31st, 1993)	*	2		*	
Nov	63.9	41.9	52.9	87	(4th, 1948)	13	(29th, 1976)			*	6	
Dec	54.8	32.9	43.9	88	(30th, 1951)	-8	(23rd, 1989)			1	16	*
Annual	74.7	51.8	63.3	112	(Aug 16, 1956)	-8	(Dec 23, 1989)	15	82	5	57	*

Precipitation (inches)											
	AVERAGE	EXTREMES (1937-2003)			AVG # DAYS PER MONTH (1971-2000)						
	1971-2000	Monthly Max	Daily Max		any	meas	0.10"+	0.25"+	0.50"+	1.00"+	
Jan	1.74"	4.87" (1958)	2.11"	(29th, 2001)	7	6	4	2	1	*	
Feb	2.10"	8.10" (2001)	3.53"	(9th, 1966)	6	6	4	3	2	*	
Mar	3.34"	9.56" (1945)	4.33"	(27th, 1977)	8	7	5	3	2	1	
Apr	3.40"	13.72" (1990)	4.25"	(26th, 1990)	8	7	5	4	2	1	
May	5.16"	11.56" (1950)	5.50"	(9th, 1993)	9	9	7	5	3	2	
Jun	4.25"	11.61" (1951)	4.59"	(6th, 1985)	8	7	6	4	3	1	
Jul	2.23"	8.08" (2002)	3.37"	(31st, 2002)	6	5	4	2	2	1	
Aug	2.76"	10.92" (1996)	4.57"	(27th, 1974)	5	5	4	2	1	1	
Sep	3.97"	10.16" (1970)	5.65"	(28th, 1980)	7	7	5	4	2	1	
Oct	4.39"	24.00" (1981)	9.48"	(13th, 1981)	7	7	5	4	3	1	
Nov	2.74"	7.13" (1964)	3.41"	(22nd, 1961)	7	6	5	3	2	1	
Dec	2.38"	8.01" (1987)	3.75"	(14th, 1992)	7	6	4	3	2	1	
Annual	38.46"	24.00" (Oct 1981)	9.48"	(Oct 13, 1981)	85	78	57	40	26	12	

Snow and Sleet (inches)											
	AVERAGE	EXTREMES (1937-2003)				AVG # DAYS PER MONTH (1971-2000)					
	1971-2000	Monthly Max	Daily Max		Greatest Depth		any	meas	0.50"+	1.00"+	Pot. Glazing
Jan	1.7"	14.0" (1992)	7.0"	(13th, 1992)	7.0"	(13th, 1992)	1	1	1	1	1
Feb	1.3"	15.1" (1978)	6.5"	(7th, 1961)	7.0"	(7th, 1961)	1	1	1	1	1
Mar	0.3"	9.4" (1942)	7.5"	(1st, 1942)	5.0"	(6th, 1989)	*	*	*	*	*
Apr											
May		0.0" (1950)	0.0"	(2nd, 1950)							
Jun											
Jul											
Aug											
Sep	0.0"	0.0" (1997)	0.0"	(22nd, 1997)			*				
Oct											
Nov	0.3"	3.5" (1976)	2.5"	(14th, 1976)	2.0"	(17th, 1980)	*	*	*	*	*
Dec	0.8"	9.5" (1983)	8.0"	(16th, 1983)	8.0"	(16th, 1983)	1	*	*	*	1
Annual	4.4"	15.1" (Feb 1978)	8.0"	(Dec 16, 1983)	8.0"	(Dec 16, 1983)	3	2	2	2	3

TEMPERATURE AND PRECIPITATION

From Marietta Cooperative Observer Station (345563); September 1937 – December 2003

Latitude: 3356N Longitude: 09707W Elevation: 844 ft

Exceedence values (2 in 10 years)				
Month:	Maximum Temperature Higher Than:	Minimum Temperature Lower Than:	Precipitation Less Than:	Precipitation More Than:
January	79	4	0.47	2.67
February	83	11	1.01	3.36
March	89	19	1.36	4.36
April	91	30	1.76	5.70
May	95	41	2.85	7.66
June	100	52	2.01	6.66
July	106	61	0.74	3.90
August	107	58	0.69	3.75
September	103	44	0.94	6.37
October	94	33	1.22	5.82
November	85	20	0.81	4.36
December	79	10	0.93	3.81
Annual	107	3	30.22	44.36

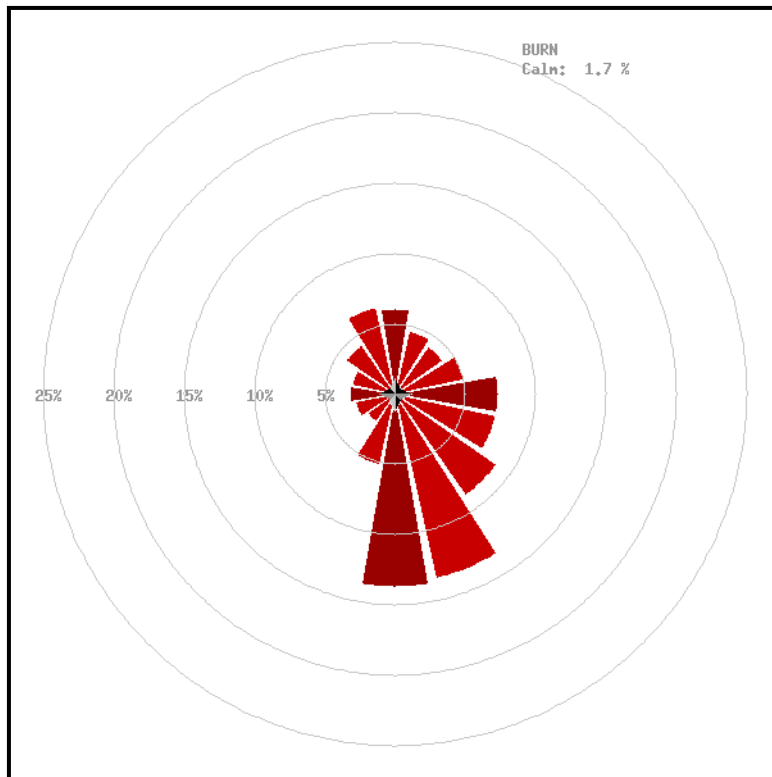
First Freezing Temperature in Fall			
Probability	24 F or Lower	28 F or Lower	32 F or Lower
1 Year in 10 Earlier Than –	November 8	November 1	October 27
2 Years in 10 Earlier Than –	November 14	November 4	November 1
5 Years in 10 Earlier Than –	December 1	November 15	November 7
Last Freezing Temperature in Spring			
Probability	24 F or Lower	28 F or Lower	32 F or Lower
1 Year in 10 Later Than –	March 25	April 3	April 14
2 Years in 10 Later Than –	March 15	March 27	April 10
5 Years in 10 Later Than –	March 2	March 16	March 28

Number of Days in Growing Season			
Probability	Higher than 24 F	Higher than 28 F	Higher than 32 F
9 Years in 10	245	221	200
8 Years in 10	259	228	211
5 Years in 10	275	245	224
2 Years in 10	293	260	237
1 Year in 10	308	269	244

WINDS

From Burneyville Mesonet Site (BURN); Jan 1994 – Dec 2001

Latitude: 3389N Longitude: 09727W Elevation: 748 ft



Wind Roses show the prevailing direction from which the wind is blowing. North is up in the image. The circles show the percentage of time from which the wind is blowing in that direction. For example, Burneyville records a south-southeasterly wind about 8 percent of the time, with northerly winds just over 6 percent of the time.

The table below shows the percentage of time the wind is blowing from each of the 16-point compass headings, and the percent of time the prevailing wind is recorded in each speed bin.

Maximum Gust: 70.9 mph

Maximum Sustained: 42.9 mph

Overall Average Speed: 7.5 mph

BURN	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Totals
Calm																	1.7%
1- 5 mph	1.7	1.5	1.5	2.2	3.3	2.7	2.2	1.9	1.2	0.8	0.8	1.1	1.3	1.3	1.7	2.1	27.4%
6-10 mph	1.9	2.0	1.9	2.2	3.3	3.8	5.2	6.8	5.4	1.7	0.9	1.2	1.2	1.0	1.2	1.8	41.6%
11-15 mph	1.7	1.0	0.7	0.5	0.7	0.7	1.3	3.9	4.6	1.7	0.5	0.4	0.4	0.5	0.8	1.4	20.9%
16-20 mph	0.7	0.2	0.1	0.1	0.1	0.1	0.1	0.8	2.0	0.7	0.1	0.1	0.2	0.2	0.4	0.8	6.7%
21-25 mph	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.2	0.0	0.0	0.1	0.2	0.2	1.4%
26-30 mph	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2%
31-35 mph	0.0	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
35+ mph	0.0		0.0		0.0				0.0	0.0			0.0	0.0	0.0	0.0	0.0%
Totals	6.1	4.7	4.1	5.0	7.4	7.3	8.9	13.5	13.7	5.2	2.4	2.9	3.2	3.1	4.3	6.4	100.0%
BURN	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	
Max Gust	54	45	49	41	49	47	47	46	56	53	51	57	51	56	53	71	
Max 5 Min	37	32	35	29	37	27	29	31	35	39	33	31	35	38	38	43	
Avg Speed	8.6	6.9	6.4	5.5	5.5	5.8	6.6	8.4	10.2	9.8	7.2	6.7	6.6	7.2	7.8	8.3	

Due to rounding, column and row totals may not sum to exactly 100.0%.

HUMIDITY

From Burneyville Mesonet Site (BURN); Jan 1994 – Dec 2003

Latitude: 3389N Longitude: 09727W Elevation: 748 ft

Mean Monthly Humidity and Moisture					
	Daily Maximum Relative Humidity	Daily Minimum Relative Humidity	Daily Average Relative Humidity	Daily Average Dewpoint (°F)	Daily Average Vapor Deficit
January	91	45	69	31	3.6
February	89	42	67	35	4.8
March	90	43	67	40	5.7
April	91	45	68	50	7.5
May	93	51	73	62	8.6
June	94	50	73	68	10.7
July	87	40	63	69	17.9
August	90	39	65	68	16.9
September	93	44	70	62	11.1
October	93	45	71	53	7.4
November	92	47	71	42	4.8
December	91	47	71	34	3.5
Annual	91	45	69	51	8.6

Vapor pressure is given in millibars.

SOIL TEMPERATURES

From Burneyville Mesonet Site (BURN); Jan 1994 – Dec 2003

Latitude: 3389N Longitude: 09727W Elevation: 748 ft

Soil Temperatures at 10 cm (4-inch) depth				
	Average Temperature beneath sod	Average Temperature beneath bare soil	Average Daily Max Temperature	Average Daily Min Temperature
January	45	43	48	39
February	48	48	54	42
March	53	54	61	48
April	62	64	73	57
May	72	75	84	68
June	79	83	92	75
July	85	89	98	82
August	85	87	96	80
September	78	79	87	72
October	68	67	75	61
November	57	55	61	50
December	48	45	50	41
Annual	65	66	73	60

Average daily maximum and minimum temperatures based on bare soil.

TORNADOES

Significant Tornadoes (F2 intensity or greater) affecting Love County, 1880 – 2003. Source: *Significant Tornadoes, 1880-1989: Volume I* and National Weather Service, Norman office.

Date	Path	Deaths	Injuries	Rating	Counties Affected
April 25, 1893	15 miles	1	11	F4	Montague, Cooke (TX), Love
March 28, 1907	30 miles	1	3	F2	Cooke (TX), Love
March 24, 1916	10 miles	0	10	F3	Montague, Cooke (TX), Love
May 31, 1917	8 miles	3	20	F4	Love
April 8, 1925	1 mile	0	0	F2	Love
May 16, 1928	5 miles	1	4	F2	Love, Cooke (TX)
March 13, 1953	40 miles	2	11	F3	Love, Marshall, Carter, Johnston
December 14, 1971	6 miles	0	0	F2	Love, Carter
April 19, 1976	6 miles	0	0	F2	Love
April 19, 1976	6 miles	0	0	F2	Love
April 29, 1985	14 miles	0	1	F2	Love, Carter
May 7, 1995	34 miles	3	6	F3	Cooke (TX), Love, Carter
May 8, 2003	4 miles	0	0	F2	Love

About the Data:

The temperature and precipitation data from Marietta are from the National Weather Service Cooperative Observer station, which records daily maximum and minimum temperatures, precipitation, and snowfall. The station has been in operation since 1937, yielding a 66-year series of data. Extremes, frost and freeze data, and growing season lengths were determined using the entire 66-year series. The means for temperature, precipitation, and snowfall were determined using a subset of the series, from 1971-2000, corresponding with official national standards set by the National Climatic Data Center.

Wind and humidity data are compiled from the Oklahoma Mesonet station at Burneyville (2 southeast of town), which has been operational since 1994. The Burneyville Mesonet site was chosen because it is the only Mesonet site in Love County. The Oklahoma Mesonet is a cooperative project between Oklahoma State University and The University of Oklahoma. Data are collected and archived at the Oklahoma Climatological Survey. The Mesonet records a variety of weather information at 5-minute intervals throughout the day, with at least one reporting station in every county in Oklahoma. For more information on the Mesonet, see <http://www.mesonet.org/>.

Solar radiation (sunshine) data were obtained from the *Climatic Atlas of the United States*, U.S. Department of Commerce, 1968. Severe storm information is available from the National Climatic Data Center, <http://www.ncdc.noaa.gov/>, under Weather/Climate Events: Climatology & Extreme Events, U.S. Storm Events Database. The best site for online county tornado information for Oklahoma is through the National Weather Service, Norman Office, <http://www.srh.noaa.gov/oun/tornadodata/>.

The tables and summary were prepared by the Oklahoma Climatological Survey. For more information, please contact OCS at 405-325-2541. Many climate summary products are available on the worldwide web at <http://www.ocs.ou.edu/>.

Need Additional Information?

If you cannot find what you need here, or want some help interpreting what this means for your particular needs, please contact:

The Oklahoma Climatological Survey
100 E. Boyd Street, Suite 1210
Norman, OK 73019-1012
Phone: 405-325-2541
E-mail: ocs@ou.edu

In addition to maintaining records of all weather and climate information for Oklahoma, OCS has a staff of climatologists who specialize in tailoring information for particular needs. Whether you want to know how dry it has been or are planning a construction project, OCS can help.