

How Cold it REALLY Gets: Albuquerque

David Cristiani | 2/2004

This list was compiled to help increase the plant palette in Albuquerque, by providing accurate cold weather data, as opposed to opinion, false information or memory; the habit of many.

Plants also have tolerances and requirements of heat and cold, how temperature changes occur, and soils preferences...but cold is the most obsessed over **and** misunderstood.

One example:

Albuquerque* (USDA zone 6-8, arid) **compared to Dallas**** (USDA zone 8, sub-humid):

longest duration of damaging cold <32F recorded

Albuquerque NM - **192** consecutive hours, Dec. 1990 (8 days, maximum)

Dallas TX - **295** consecutive hours, Dec. 1983 (12 days, 7 hours)

Simple math shows that Dallas has experienced **103 more** consecutive hours below the critical 32F mark than Albuquerque. Dallas also averages more heat (and longer durations of it), but they also average more cloud cover, humidity, and rain throughout the year; they even have much more frequent day-to-day temperature fluctuation; all decrease winter hardiness and human comfort further.

Albuquerqueans often obsess over cold, unnecessarily limiting it's plant palette where there are not limits, while stifling creativity; Dallas is open to trying new plants and maximizing the design of their outdoor spaces. Many in the Duke City think nothing of pushing limits by using aspens, while in the Big D they push limits by using fan palms; an unfortunate bias, indeed!

*Albuquerque source: *the late Fred Trauger's records (the longest recording station at one location in Albuquerque, since 1957)*

**Dallas sources: *A Field Guide to Texas Trees, Benny Simpson, p.301 / <http://www.srh.noaa.gov/fwd/?n=d32info>*

Another example:

Albuquerque (USDA zone 6-8, arid) **compared to Carlsbad NM***** (USDA zone 7-8, arid):

longest duration of damaging cold <32F recorded

Albuquerque NM - 192

Carlsbad NM - ?

coldest temperature recorded

Albuquerque NM - -17F (1/7/1971)

Carlsbad NM - -18F (1/11/1962)

<32F daytime high temperatures recorded

Albuquerque NM - 4.0 days (average annual)

Carlsbad NM - 2.4 days (average annual)

<0F low temperatures recorded

Albuquerque NM - .3 days (average annual) / 24 (total since 1914)

Carlsbad NM - .3 days (average annual) / 11 (total since 1942)

Those differences are real, but less than some think; Carlsbad may be the hottest city in New Mexico, but it does not have the mountains to moderate extremes of heat and cold that Albuquerque does, either. A rather similar palette of plants, in nature and cultivation, thrives in both towns, too.

***Albuquerque and Carlsbad source: <http://www.wrcc.dri.edu/>

Numerous species indicate Albuquerque's true climate and having a successful landscape. Many of those do not tolerate much cold, thriving and/or are native in Albuquerque, or were so prior to urbanization.

Albuquerque is not unique in experiencing occasional below average winters: so does every other location. Consider facts before making plant choices; verify popularly held information with the truth. Think **mild vs. wild**, not just colder vs. warmer---or perceptions.

Albuquerque's Coldest Recorded Temperatures*

EACH occurrence below 10F since 1957, in context to same-day high temperatures (in °F)- the late Fred Trauger's home

Year of Extreme	Date of Occurrence	Low Temp. 1° - 10°	High Temp. That Day	Date of Occurrence	Low Temp. 0° and < 0°	High Temp. That Day	Extreme Low Temp. for Each Year	Date of Occurrence
1957	-	-	-	-	-	-	14°	11/22, 11/23, 12/25
1958	1/21	7°	38°	12/31	-2°	34°	-2°	12/31
1959	1/1	3°	40°	1/4	0°	37°	0°	1/4
	1/2	10°	47°					
	1/5	4°	37°					
1960	1/2	9°	33°	-	-	-	6°	1/18
	1/3	8°	33°					
	1/4	7°	37°					
	1/18	6°	34°					
	1/19	7°	38°					
1961	12/12	9°	28°	-	-	-	9°	12/12
1962	1/10	7°	20°	1/11	-1°	27°	-1°	1/11
	1/12	6°	26°					
1963	1/12	4°	17°	1/13	-6°	19°	-6°	1/13
	1/14	7°	30°					
	1/15	8°	37°					
	1/16	10°	42°					
	1/20	7°	31°					
	2/12	8°	30°					
1964	1/9	7°	33°	-	-	-	2°	1/13, 1/14
	1/12	7°	32°					
	1/13	2°	32°					
	1/14	2°	33°					
	1/15	6°	41°					
	2/7	6°	35°					
	2/8	9°	43°					
1965	3/4	9°	43°	-	-	-	9°	3/4
1966	1/22	6°	33°	-	-	-	6°	1/22, 12/29
	1/23	9°	36°					
	12/29	6°	35°					
	12/30	8°	38°					
1967	1/7	6°	31°	-	-	-	4°	1/8
	1/8	4°	35°					
	1/9	9°	46°					
1968	12/19	7°	38°	-	-	-	6°	12/22
	12/22	6°	32°					
	12/23	8°	45°					
1969	-	-	-	-	-	-	12°	12/30, 12/31
1970	1/2	6°	35°	-	-	-	2°	1/6
	1/3	6°	38°					
	1/4	9°	36°					
	1/6	2°	37°					
	1/7	5°	40°					
1971	1/4	8°	20°	1/5	-11°	15°	-14°	1/6
	1/9	7°	43°	1/6	-14°	15°		
	12/16	8°	33°	1/7	-13°	18°		

**the
XERIC
ZONE**

Quercus : : :

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Year of Extreme	Date of Occurrence	Low Temp. 1° - 10°	High Temp. That Day	Date of Occurrence	Low Temp. 0° and < 0°	High Temp. That Day	Extreme Low Temp. for Each Year	Date of Occurrence
1971	12/17	7°	33°	1/8	-4°	28°		
1972	1/4	7°	21°	-	-	-	3°	1/5
	1/5	3°	35°					
1973	-	-	-	-	-	-	13°	12/20
1974	1/3	7°	24°	-	-	-	7°	1/3
	1/5	8°	40°					
1975	1/3	9°	27°	-	-	-	5°	1/12
	1/4	6°	30°					
	1/12	5°	25°					
1976	1/2	7°	28°	11/28	-3°	19°	-3°	11/28
	11/30	7°	36°	11/29	0°	27°		
1977	1/10	4°	29°	-	-	-	4°	1/10
	1/11	5°	33°					
	1/12	8°	33°					
1978	12/8	6°	16°	-	-	-	4°	12/9
	12/9	4°	23°					
	12/10	8°	33°					
1979	1/2	9°	2°	-	-	-	6°	1/31
	1/30	9°	27°					
	1/31	6°	34°					
1980	-	-	-	-	-	-	17°	2/9
1981	-	-	-	-	-	-	16°	12/24
1982	12/29	8°	30°	-	-	-	8°	12/29
1983	-	-	-	-	-	-	11°	1/1
1984	1/19	9°	34°	-	-	-	9°	1/19
1985	2/1	7°	19°	-	-	-	5°	2/2
	2/2	5°	29°					
1986	-	-	-	-	-	-	12°	2/11
1987	1/18	6°	25°	-	-	-	5°	1/19
	1/19	5°	27°					
	1/22	7°	34°					
	12/15	8°	31°					
1988	12/28	8°	35°	-	-	-	8°	12/28
	12/30	9°	37°					
1989	1/9	7°	39°	-	-	-	7°	1/9
1990	12/23	1°	15°	12/25	0°	26°	0°	12/25
	12/24	3°	22°					
	12/26	7°	30°					
	12/27	10°	30°					
1991	-	-	-	-	-	-	16°	1/1, 11/3
1992	-	-	-	-	-	-	11°	1/16
1993	-	-	-	-	-	-	16°	1/4, 12/23
1994	-	-	-	-	-	-	13°	2/2
1995	-	-	-	-	-	-	14°	12/26
1996	12/18	9°	29°	-	-	-	9°	12/18
1997	1/15	7°	31°	-	-	-	7°	1/15
1998	-	-	-	-	-	-	15°	12/8
1999	-	-	-	-	-	-	16°	12/23

Albuquerque's Average Annual Minimum Temperature (1957-1999) = +7°