

The Red Rock Canyon National Conservation Area is located in the eastern foothills of the Spring Mountains in southern Nevada. The two most widely visited parts of this area are Red Rock Canyon and Spring Mountain Ranch State Park. The lower elevations in this area are around 3,500 feet with the higher canyon walls rising to near 6,000 feet. Weather conditions can vary greatly in the area depending on elevation, orientation of terrain and location, and also differ tremendously from nearby Las Vegas. Temperatures can vary by 3°F to 5°F for each thousand feet (1°C to 3°C for every 304 meters).

The Spring Mountains act as a barrier to storms moving in from the Pacific. As a result, storms passing through southern Nevada originating from the Pacific tend to produce much more precipitation here than in Las Vegas. However, given the Red Rock National Conservation Area is 3,000 to 4,000 feet lower than the higher terrain of the Spring Mountains, some Pacific storms will even fail to result in precipitation here. During the summer, pushes of monsoon moisture into the area will result in a few days with thunderstorms developing especially over the highest terrain. Strong winds are also common in this area during the cool season when cold fronts pass through as winds get enhanced by the terrain. However, most of the year is dominated by sunshine and low humidity.

Temperatures, Precipitation and Snowfall													
	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Year
Avg.	53.7°F	56.8°F	63.9°F	71.0°F	81.2°F	90.9°F	96.7°F	94.7°F	87.6°F	75.4°F	62.0°F	52.7°F	74.0°F
High	12.1°C	13.8°C	17.7°C	21.7°C	27.3°C	32.7°C	35.9°C	34.8°C	30.9°C	24.1°C	16.7°C	11.5°C	23.3°C
Avg.	29.2°F	32.3°F	37.9°F	44.1°F	53.6°F	63.6°F	70.4°F	68.5°F	58.9°F	46.7°F	35.3°F	28.6°F	47.5°F
Low	-1.6°C	0.2°C	3.3°C	6.7°C	12.0°C	17.6°C	21.3°C	20.3°C	14.9°C	8.2°C	1.8°C	-1.9°C	8.6°C
Record	71°F	81°F	86°F	95°F	103°F	114°F	111°F	108°F	101°F	97°F	82°F	73°F	114°F
High	22°C	27°C	30°C	35°C	39°C	46°C	44°C	42°C	38°C	36°C	27°C	22°C	46°C
and													
Year	1990	1986	2004	1980	2003	1977	1985	1977	2005*	1980	1978	1980	1977
Record	9°F	9°F	21°F	19°F	28°F	38°F	45°F	45°F	32°F	26°F	16°F	3°F	3°F
Low	-13°C	-13°C	-6°C	-7°C	-2°C	3°C	7°C	7°C	0°C	-3°C	-9°C	-16°C	-16°C
and													
Year	2007	1985	2002	1979	1988	1995	1979	1979	1977	1991*	2006*	1990	1990
Normal	1.38 in	2.02 in	1.47 in	0.55 in	0.17 in	0.12 in	0.82 in	1.00 in	0.55 in	0.54 in	0.80 in	1.13 in	10.55 in
Precip.	3.50cm	5.10cm	3.70cm	1.40cm	0.40cm	0.30cm	2.10cm	2.50cm	1.40cm	1.40cm	2.00cm	2.90cm	26.8 cm
Wettest	7.39 in	7.31 in	7.09 in	3.21 in	1.45 in	0.85 in	3.60 in	8.96 in	3.53 in	2.81 in	2.65 in	8.75 in	23.89in
Amount	18.8cm	18.6cm	18.0cm	8.2cm	3.7cm	2.2cm	9.1cm	22.8cm	9.0cm	7.1cm	6.7cm	22.2cm	60.70cm
and													
Year	2005	1998	1992	1978	1998	1998	1984	1983	1997	2005	1984	2010	1983
Driest	0.00 in	0.04 in	0.00 in	0.00in	4.49 in								
Amount	0.00cm	0.10cm	0.00cm	11.40cm									
and													
Year	2003*	2002	1997*	2008*	2009*	2011*	2000*	2002*	2001*	2007*	2005*	2005*	2002
Normal	1.3 in	0.4 in	0.5 in	0.1 in	0.0 in	0.1 in	0.5 in	2.9 in					
Snow	3.3 cm	1.0 cm	1.3 cm	0.3 cm	0.0 cm	0.3 cm	1.3 cm	7.4 cm					
Snowiest	8.0 in	10.0 in	7.0 in	2.0 in	0.0 in	2.0 in	10.9 in	13.1 in					
Ever	20.3 cm	25.4 cm	17.8 cm	5.1 cm	0.0 cm	5.1 cm	27.7 cm	33.3 cm					
and Year	1990	1979	1991	2009	2011*	2011*	2011*	2011*	2011*	2011*	1983	2008	1987

*Indicates a record was also set in previous years.

All weather statistics shown above are for the official weather station located at Spring Mountain Ranch State Park located at an elevation of 3780 feet. Averages and normals are based on the period from 1981 to 2010 and are provided by the National Climatic Data Center.





In The Shadow Of The Mountain



Seasons In The Sun

Sunny and dry weather dominates throughout the year in southern Nevada, but contrary to common belief hot weather does not. The eastern foothills of the Spring Mountains, like nearby Las Vegas, experience four distinct seasons. Winter storms usually arrive from the Pacific and bring with them most of the area's yearly precipitation. Most will bring rain to the foothills of the Spring Mountains, but colder storms will bring snow.

The transition seasons of spring and fall often see a mix of several warm and several cooler days. Cold fronts in these seasons usually pass through with more limited moisture. The summer months are dry most of the time, but pushes of monsoon moisture into the area will result in increased clouds and scattered thunderstorms. Sometimes more rain may fall with one thunderstorm than from several winter storms. Low humidity, bright sunshine and hot afternoons are common though, and require keeping hydrated and being aware of your health to avoid succumbing to the desert elements.

Winds

Prevailing winds in southern Nevada are from the west. As air moves up and over the Spring Mountains, it then drops thousands of feet and gets funneled through canyons. This results in wind speeds becoming stronger. From October through May when strong cold fronts approach the area, they are usually accompanied by a belt of powerful winds aloft. As these winds get mixed down to the surface, and get dropped down the east facing slopes of the Spring Mountains, they can become even more potent. Narrow canyons help to funnel the air through and further accelerate it, essentially a squeezing process. This results in wind speeds that can easily exceed 40 mph and in many instances, 60 mph.

These winds can make travel in the area difficult, especially for high profile vehicles and also can make outdoor adventures in the area more difficult.

Although not as common, gusty winds can also be found in the summer months in and near showers and thunderstorms.





Snow

Snow levels typically drop to between 5,000 and 6,000 feet with most winter storms in southern Nevada. However, between two and four times each winter, snow levels will usually drop as low as 3,500 feet. Colder storms such as these will usually cover the higher elevations of Red Rock Canyon with several inches of snow and will even bring a few inches to the Red Rock Canyon Visitor Center and Spring Mountain Ranch State Park. Snow and ice will linger in shadowed canyons sometimes days after a storm has gone, even if the sun is shining. This can present a hazard to hikers.

Summer Storms

Several days each summer, typically between July and September, the monsoon will result in thunderstorms developing. These storms can unleash heavy rain in a short time period, resulting in flash flooding. Slot canyons can easily see water sweep through them and dry washes and low spots can quickly fill with water. Lightning will also pose a hazard.

Weather Timeline

- **1977** Official weather station established at the Spring Mountain Ranch. **Hottest temperature ever** takes place on June 30th when a high of 114°F (46°C) is recorded.
- **1979** A winter storm from January 30th through February 2nd drops 10.0 inches (25.4 cm) of snow.
- **1981 Warmest year ever** with an average temperature of 64.4°F (18°C).
- **1983 Wettest year ever**, 23.89 inches (60.70 cm) of precipitation recorded.
- **1986** A March storm brings 6.21 inches (15.80 cm) of rain in a 3 day period, with 5.38 inches (13.7 cm) recorded in a 24 hour period alone.
- 1990 Coldest temperature ever, of 3°F (-16°C) is set on December 23rd.
- **1998 Coldest year ever** with an average temperature of 57.6°F (14°C).
- **1999** A thunderstorm dropped 1.50 inches (3.80 cm) of rain in Red Rock Canyon on July 13th resulting in runoff that flooded the Red Rock Scenic Loop.
- **2002 Driest year ever**, 4.49 inches (11.40 cm) of precipitation recorded.
- **2010** A moist flow of air from the Pacific drops 8.05 inches (20.40 cm) in a multi-day period just before Christmas. The heavy rain results in rocks and debris washing onto roads and washes running full. Spring Mountain Ranch State Park is closed due to the flooding. Access to Red Rock Canyon from Summerlin is blocked due to debris. Hikers rescued in Red Rock Canyon after being stranded by rising water in a wash.
- **2011** A thunderstorm dropped 1.73 inches (4.40 cm) of rain in roughly 90 minutes on July 5th flooding roads and washing rocks onto them at Spring Mountain Ranch State Park.