



GRAND CANYON

ENGLISH GUIDE

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SUNSET AND SUNRISE

SUNRISE:	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
	0731	0701	0617	0537	0513	0510	0514	0534	0559	0622	0650	0720
SUNSET:	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
	1724	1754	1822	1849	1915	1939	1934	1858	1814	1734	1714	1713

MEDIAN YEARLY TEMPERATURES*

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Inside Canyon	7	11	15	20	25	30	33	31	28	22	13	7
South Rim	-1	-1	-3	5	8	13	16	15	12	10	3	1
North Rim	-3	-2	-1	5	8	13	16	15	12	7	2	-1

* Temperatures are in Celsius

HISTORY OF THE GRAND CANYON AND THE COLORADO RIVER

The Grand Canyon is known worldwide as the best example of the effects of water erosion. It exists as a sort of monument to the power of the Colorado River. This river has flowed for millions of years exactly as it flows today using the silt and earth like sandpaper to dig this canyon deeper and deeper. Erosion still changes the canyon by approximately one inch in depth each year. The question still remains as to how the original formation of the canyon began.

Some 35 million years ago movements inside the earth caused the creation of the Rocky Mountains to the east. At the same time, the region where the Grand Canyon is located, lifted up forming a sort of crowned dome of a plateau known today as Kaibab Plateau. The Colorado River as we know it today did not exist but, rather, there were two rivers very near to what has now become the Grand Canyon, The source of one of the rivers was in the Rockies and flowed east of the Kaibab Plateau. The other flowed to the summit of the plateau towards the west. Over the centuries the western river flowed closer and closer to the river from the east digging canyons that became deeper and longer. Later the river flowing east became blocked and the water from the Rockies created a very large lake located in what is now called "The Painted Desert".

The westerly flowing river continued its path across the plateau. Eventually the western flowing river met the blocked eastern river and a larger, new river was born—The Colorado River. The birth of this stream, ten million years ago, marks the beginning of the creation of the Grand Canyon.

The powerful Colorado River eroded its bed to the extent that in places the river is 16 meters in depth. This erosion continues today and the river flows at a rate of some 19 kilometers per hour using the sand and the lime as sandpaper that it carries along as a tool digging the floor of the river much like a carpenter uses a plane to form a piece of wood.

The Colorado River is in places about 300 feet wide (one hundred meters) and 45 feet deep (16 meters) but it has seen a great change since 1963 by the construction of Glen Canyon Dam. Before the creation of this dam the river would move some 500,000 tons of silt daily. Today the river moves some 80,000 tons of silt per day or up to 27 million tons in flood season and times of high water levels. The amount of silt and debris carried down the Colorado River daily could fill a train of freight cars stretching all the way from New York City to San Francisco and back again as far as St. Louis.

The erosive forces of the silt, earth, rocks and debris carried by the river have gradually created many other side canyons to the Grand Canyon. All of this continues even today.

The Grand Canyon today is in places 6 to 29 kilometers (4 miles to 20 miles) wide, 1400 meters (4000 feet) deep and 349 kilometers (277 miles) long. Too this day most of the canyon is rarely visited.

This is truly a Grand Canyon!!!

In 1699, the Spaniard Juan Manje may have been the first to use the name "Colorado" to refer to the river but many years would pass before the name took hold. The explorer John Wesley Powell is credited with promoting the name "Grand Canyon". In 1869 Powell, a 35 year old, one armed Civil War veteran and a motley crew of nine men boarded four wooden boats in Green River, Wyoming and floated in to the great unknown. Ninety-eight days, 1,000 miles, and countless rapids later, minus two boats, and four members, Powell emerged from the Grand Canyon. Powell commented: "You cannot see the Grand Canyon in one view...you have to toil month to month through its labyrinths".

Not until 1919 did President Theodore Roosevelt succeed in having the US Congress officially create the Grand Canyon as a US National Park.

It is not possible to consider the Grand Canyon without mentioning its primary residents as far back as the beginning of time--the Native American Indians. Going back to 2,000 BC one sees evidence of the Paleo-Indians. As early as 700-1200 AD the canyon residents were hunters and farmers called the Anasazi and Cohonina tribes. Their ancestors today include the Havasupai and Hualapai tribes among others that still live and prosper within the Grand Canyon. In fact, there are tribes in the Grand Canyon that can only be reached by horse or helicopter--they keep it that way on purpose!

Check at the Grand Canyon for information about the history, flora and fauna, abundant wildlife and the delicate eco systems within the canyon.

ENJOY your visit and **thank you** for choosing Vision for your once-in-a-lifetime excursion to the Grand Canyon.