

MOGOLLON RIM
(Taken from Arizona Highways, October, 1967)

The Mogollon Rim - Arizona's mighty backbone is an epic in natural, human history.

It is a wilderness rampart of ethereal beauty, carved majestically into unmatched proportions. The Rim Road itself is a twisting, graveled legacy to settlers and cavalry tenacity. With only minor changes much of General Gook's road is still being used today. All of the gorges have one thing in common. Exposed walls of horizontally layered, sedimentary rocks indicate a great upheaval took place, attesting to the dynamic discomforts of a young and vigorous earth millions of years ago.

Climatic conditions changed radically as this one great block of sea bottom, encompassing portions of southern Utah, northern Arizona, the southwest corner of Colorado and the northwest corner of New Mexico, continued to rise. It is the southern margin of the Colorado Plateau, stretching for more than two thirds of the way across central Arizona. Sweeping from northwest to southeast, into New Mexico, it is more than 200 miles long.

Simply stated, the Rim is of structural origin and exposes for examination a series of sedimentary plateau rocks which have been deposited upon one another more or less uniformly during the Paleozoic Age.

From Pine to Young, the Rim's buttressed face is rarely less than a near vertical drop of 1,200 feet. At many overlook points its height is close to 2,000 feet above the mountains which stretch across Tonto Basin.

South of Show Low the steep scarp is again blanketed by comparatively recent volcanism. Forming the White Mountains, the once molten blanket covers much evidence of the Plateau's edge as one travels on into New Mexico.

Central Arizona is dependent upon the storm patterns which drive in from the Pacific and come up from the Gulf of Mexico. The clouds release their burden of moisture when they struggle to rise over this huge wall. The top of the Rim flows into the little Colorado, and all runoff below the backbone flows into the Verde, the Salt and the Gila rivers.

Around 1600, the Rim country and adjacent mountains in New Mexico became known as the Mogollones, named for Juan Ignacio Flores Mogollon, a Spanish governor and captain general of New Mexico which was a portion of New Spain.

ARIZONA'S MIGHTY BACKBONE

THE MOGOLLON RIM

Geology of the Mogollon Rim

By Wayne Ranney

With the exception of the Grand Canyon, no other physical feature of Arizona's landscape is more prominent than the Mogollon Rim. Five of the six National Forest in Arizona contain or border this spectacular escarpment (the only exception is the Coronado).

But what is the Mogollon Rim? How did it form and when? The answers are only now becoming clearer as earth scientists complete detailed studies within Arizona's Transition Zone Province, that area between the Colorado Plateau to the north, and the Basin and Range to the South. The Mogollon Rim lies in the heart of the Transition Zone and has undergone a fascinating evolutionary history.

The Mogollon Rim is a high, forested escarpment, or line of cliffs that stretch almost continuously from Seligman, AZ to the Arizona-New Mexico state line. The heart of the Mogollon Rim goes from the small town of Strawberry to the developing communities of Pinetop-Lakeside. The name may have been derived from that of the colonial governor of Spanish New Mexico, Juan Ignacio Flores Mogollon, who administered these frontier lands between 1712 and 1715.

Geologically, the Rim has been forming since at least 35 million years ago. Its story begins with the birth of the Rocky Mountains, when a mountain range was uplifted in central Arizona. Geologists call this now-eroded uplift the Mogollon Highlands after the escarpment they help create. When the Mogollon Highlands were uplifted, the sedimentary layers which make up the rim were tilted down to the northeast. And this tilted stack of sediments, which are most spectacularly exposed in the Sedona area, have been eroding (retreating) to the northeast ever since. House Mountain, which is a shield volcano located southeast of Sedona in the Coconino National Forest, erupted between 15 and 13 million years ago at the very base of the ancestral Mogollon Rim. new can trace the distance from the edge of its lava flows to the present-day Rim, and determine that the Rim has been retreating at the rate of one foot every 625 years. At this rate, which is only an average, the colorful cliffs north of Sedona will erode back to downtown Flagstaff in another 79 million years!

This escarpment, which provides Arizonans with a multitude of recreational opportunities and scenic vistas, is now being eyed by the thirsty desert cities to the south for its valuable water resources. The citizens of Arizona will be the ones who decide whether these resources are best utilized for continues urban growth or for a myriad of recreational pursuits. An informed educated public can best decide the wisest course of the Mogollon Rim's future management. Your involvement with NANHA promotes this educational mission.