

THE CANYON OF CANYONS

Clifford L. Burdick
2323 Tenth Street
Council Hse., Box 112
Tucson, AZ 85719

INTRODUCTION

One of the grandest spectacles in all the world is the Grand Canyon, the king of canyons, the colossus of canyons. This spectacle has inspired many to write of it in superlative terms. Robert Sterling Yard declared that the Grand Canyon is the colossus of canyons, by far the hugest example of stream erosion in all the world. According to Charles Dudley Warner, "It is by common consent the most stupendous spectacle in the world." Early explorers heading for the North suddenly found their northward progress stopped by this impassable canyon.

Coming down to the 19th century, we read about Lt. J. C. Ives a Confederate soldier in the Civil War. He was a resourceful and articulate explorer of the Colorado River who gave this report upon seeing the canyon: "Ours are the first, and doubtless the last whites to visit this profitless locality." Lt. Ives could hardly have been more mistaken. Long before the lapse of the century, the Grand Canyon teemed with explorers, painters, prospectors, photographers, scientists, musicians, writers and tourists.

The Grand Canyon is nature's finest monument of combined forces of uplift and erosion. Evolutionary geology accords a time period of some thirty million years for this uplift and subsequent erosion. Creational geology crowds all this upheaval and subsequent erosion in a time period since Noah's Flood of few thousand years, when we measure some half a million tons of sediment being carried down the stream every day. That means rapid erosion between the Rocky Mountains and Arizona. It is equivalent to nearly 100,000 five-ton dump trucks passing by one second apart for 24 hours to carry away the load the Colorado seems to carry so easily. Studies show the overall rate of denudation for the entire Colorado River range is 6.5 inches each 1000 years.

Now we arrive at fallacy number ONE in evolutionary time measurements. Between the river and the north rim of the canyon we find Mississippian Redwall limestone resting apparently conformably on the Cambrian Muav limestone, with no sign of erosion. This repetition occurs twice. The Ordovician and Devonian are missing with no sign of erosion. What happened during this hundred million year gap? Apparently nothing. Let's be logical--the geologic column is pure EVOLUTION.

After President Theodore Roosevelt visited the Grand Canyon, he wrote the following observation for posterity: "In the Grand Canyon, Arizona is a natural wonder which so far as I know is in kind absolutely unparalleled throughout the rest of the world." Professor Charles Schuchert of Yale University made this comment: "For eight days the writer had the greatest scientific pleasure of his life in that geological wonderland, the Grand Canyon of the Colorado River in Arizona. It is a paradise for the stratigrapher."

EXPLORATION OF THE GRAND CANYON

Cardenas was perhaps the first white man to have seen the Grand Canyon while on the Coronado Expedition searching for the seven golden cities, which were never found. The first real scientific investigation of the Grand Canyon was made by Major John Wesley Powell soon after the end of the Civil War. If he had been a less determined man his status as a disabled veteran would have been sufficient excuse to deter him, but as it turned out, like Columbus, he sailed an uncharted water, never knowing if or when the expedition would end in disaster. In fact O. J. Holland, his brother, the best educated of the group, and Bill Dun, got "cold feet" and deserted the party at one point where the rapids were too swift. They climbed out of the canyon only to be massacred by unfriendly Indians.

The only information concerning the canyon was wild rumor and maps of the area were complete blanks. Much of the account of Powell's exploration came from his own copious notes, which later became a geological report to the U. S. Government. Powell started on his journey as an unknown adventurer. He returned to Washington a hero. His scientific report advertised the Grand Canyon to the world and made it one of the nation's greatest showplaces. Powell was granted \$10,000 for continued exploration. In May 1871 he set out again from Green River to do a more scientific job of mapping the area. He was equipped with a camera and equipment weighing nearly a ton. Today we get the same or better results in color with equipment weighing hardly a pound.

In 1903 President Theodore Roosevelt camped for a while on the spot known as Phantom Ranch where visitors now spend the night. Because of his interest as a conservationist President Roosevelt proclaimed the Grand Canyon a national monument in 1908, and in 1919 it became a national park. Senator Barry Goldwater of Arizona is presently trying to get Congress to enlarge the Grand Canyon National Park area.

A STRUCTURAL STUDY OF THE GRAND CANYON

I believe most geologists will agree that the Grand Canyon has not always existed. It is a product of crustal movements on the Earth's surface. The question arises as to the causes of crustal movements. If we start from a concept of crustal ISOSTATIC equilibrium before the Flood of Noah, I believe this shifting of crustal equilibrium was caused by flood waters eroding mountainous areas and dumping the sediment in the valleys. To readjust crustal equilibrium, mountains rise higher and more water concentrates in the oceans. Ever since the Flood we have been witnessing this receding equilibrium movement in earthquakes, volcanic eruptions, etc.

Where does this apply to the Grand Canyon? Structural geologists generally agree the present Rocky Mountains are of comparatively recent origin. What happened in Arizona? A north-south compression or crustal shortening of the land mass took place causing a 9,000 foot upward thrust north of the present canyon. A split then occurred at the crest where the tension is greatest, and the Grand Canyon formed. This did not take thirty million years--perhaps not thirty years. It just "popped."

But before this anticline began to form what about the flood runoff? That was being taken care of by the formation of the Colorado River. Then just what happened as the dam began to form? Only one thing could have happened: the Colorado River could no longer drain the runoff from the Rocky Mountains in Colorado. Nature took its course and built an immense sea as the mountains in Arizona grew and grew. But finally the tension at the crest of the newly forming mountains grew until it cracked. Down roared the torrent from the inland sea. Moving water increases in strength, not in proportion to increasing speed, but as the square of increasing velocity. The concept of thirty million years required to cut the canyon is not good science. The inland sea in Utah emptied in a week. I can't conceive of more than a week for the Colorado River to cut the Grand Canyon. Evolutionary slow motion? Don't be silly. In this power-packed upheaval I find a one mile movement between the north and south halves along the river with greater movement on the north side of the river where some formations are upside down.

As we take a hike down in the canyon from the north rim, which is a thousand feet higher than the south rim, drinking water is found to be more available than from the south rim. As we pass the Cambrian formation we should encounter the Ordovician formation and then the Silurian, theoretically occupying some hundred million years. On top of these we naturally expect to find the Mississippian Redwall, which we do. But why does the Mississippian lie so undisturbed on the Cambrian Muav with no sign of erosion. Here we find one of the objections of evolutionary science. No effects of erosion are observed to have taken place during those hundred million years of Ordovician and Silurian time. Not only that, but we repeatedly find Cambrian on top of Redwall formations! Geologic time in reverse? Evolutionist thinking faulty!

A PALYNOLOGICAL STUDY OF THE GRAND CANYON

This study was made possible when Dr. Gerhard Kremp, a famed palynologist from Germany who became a member of the faculty of the University of Arizona and headed the Palynology Department. The microfossils or pollen grains have a hard, exine coating which preserves them in the rocks. They are actually in a better state of preservation than the macrofossils, which can be studied without the microscope. Also these microfossils are far more abundant than are the larger fossils. They provide us with a better record of what types of plants were growing when the fossils became embedded in the rocks. They also indicate the age of the rocks. Palynology can thus be a very good discipline of fossil study.

In the early development of the science, immersion in boiling hydrofluoric acid was one step in fossil separation, but it was a difficult technique and often left the slides coated with undissolved quartz, rendering them useless. With suggestions from Dr. Kremp, I was able to devise a better method without the use of hydrofluoric acid, using centrifugal action to obtain separation.

The method of sample-taking from the canyon is also a very important step. Surface samples are never to be used for fear of contamination. It is necessary to dig deeply to get uncontaminated samples. The samples must then be sealed in sterile plastic bags to prevent the entrance of contaminated air. I was chosen for this Grand Canyon project because of the good results I obtained from a previous assignment in the Petrified Forest in eastern Arizona.

The purpose behind this project? For many years the Grand Canyon was considered very important for evolutionists wishing to prove evolution from fossils, but macrofossils, or large fossils, were too few to prove much. Consequently they reasoned that the numerous microfossils would supply the evidence they needed. As laboratory work progressed, what was found tended to disprove evolution. The earliest fossil-bearing strata was the Proterozoic, which should be expected to bear microfossils, if anything. Actually the Precambrian HAKATI shale produced both Angiosperm and Gymnosperm fossils in abundance which were not supposed to appear until much later in the geologic column!

At that time I was merely an unbiased laboratory technician. However I was blamed for the disappointment and charged with "sloppy work" and was excluded from the laboratory in disgrace. I saw the same treatment accorded an American student in Germany because he discovered laboratory evidence in India and Columbia, South America that confirmed my laboratory results in Tucson, Arizona.