

**THE PAINTED DESERT  
AND THE PETRIFIED  
FOREST  
( EVIDENCE FOR A  
CATASTROPHY)**

**BY DR JOHN G. LESLIE**

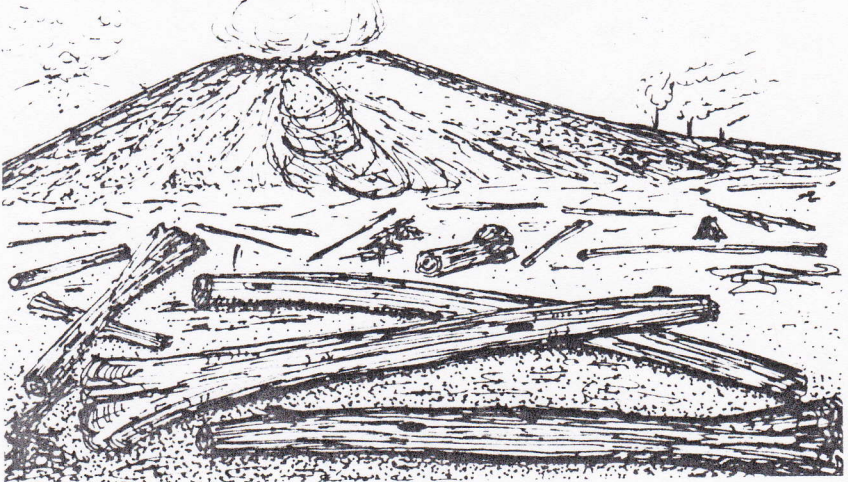
# UNIFORMITARIANISM



JGL



# CATASTROPHISM





## The current views of the National Park Service

Petrified Forest National Park comprises both the Painted Desert, and the Petrified Forest. It covers more than 100 square miles of what is called the Chinle Formation, which is assigned to what has been designated the Triassic Age. It is composed of various layers of red, brown, purple, and gray/white clayey-sandstone. The usual scenario to explain its physical properties state that this area was once located in a more Mediterranean latitude with high upland forests and meandering streams in low grasslands. Volcanic activity resulted in occasional local floods and catastrophic deposits of trees, plants, and organisms. During this time inland lakes and seas were supposed to have contributed as well to the strata. Movement of the continents(plate tectonics) are used to explain its present latitude. The ages are thought to be about 200-250 million years ago. This concept of the process of gradual prolonged accumulation of the earth's surface is called uniformitarian geology - "as things have been so they are." Over 600,000 people per year hear this story through film, books and the park rangers.

### Another view

The physical geology of the park reveals much information that is markedly different to the above story. The flood plains are not just local, but cover a minimum of 150,000 square miles within the Colorado Plateau region of Utah, Colorado, Arizona, and New Mexico, with a probable extension of somewhat similar strata into New Jersey, Europe, and South America. The strata are up to 1500-1800 feet thick. There is also evidence for continuous sequential deposition of the Chinle strata, thus compressing into days or weeks what was expected to take millions of years. The evidence points to a catastrophic flood of worldwide proportions, with ebbing/flowing of the mixed mud/ash flows (with punctuated volcanic activity) resulting in the present geologic structures. Subsequent faulting/uplifting of the Chinle strata (and more) occurring during a process of continental separation resulted in the formation of mountain systems. This viewpoint is called catastrophism, and many geologists now accept that the physical evidence is consistent with it.

\*

Uniformitarian sketch is done after park painting seen in the Crystal Forest PFNP.

## A TOUR THROUGH THE PARK

Below are some thoughts on the evidence for catastrophic geology as seen in some highlights of the Petrified Forest National Park. **SEE ENCLOSED MAP.**

### Painted Desert

The eroding mounded hills seen in this area of the park are composed of clayey-sandstone layers. Iron contributes to the reddish layers, whereas manganese to the purplish ones. Whitish gray bands have increased carbonate or silica concentration. While some refer to these layers as soil plains, it is more accurate to call them flood plains composed of mixtures of volcanic ash, mud, and scant organic remains. These layers do not demonstrate the horizons seen in soils supporting the scant tropical fossil vegetation identified in them, much less forests. As well, the composition of the strata and the aridity of this area still support only sparse vegetation. Often, the layers are seamless from one uniform layer to another. In other areas there are alternating and interdigitating bands between layers that correlates with a process of ebbing and flowing. Yet these processes are seen over large areas, and are best explained by massive flood deposition.

### Bidahochi/Chinle Unconformity

An unconformity, in uniformitarian terms, is where two layers of earth lie juxtaposed where they should not. At this particular point, lava dated at 2 to 4 million years old by certain methods, lies directly on the Chinle strata which has been dated at 230 million years old (some other dating methods give much younger dates). Missing, by the usual concepts are the upper Triassic, Jurassic, and Cretaceous Strata. However, the lack of these layers can be the result of the least two mechanisms- both requiring catastrophism on a scale not seen by present processes. Firstly, it is possible that in this area those strata never existed. All sedimentary strata show large variations in depth and extension, even ones widely dispersed as in the Chinle. Secondly, if these layers were eroded off, it would have involved strata thousands of feet thick and which covered many thousands of square miles. As well, unconformities are found below the Chinle. When river delta masses of the present age are measured none reveal such volumes of debris having been removed under current rates of erosion. This one unconformity alone requires results in which either of these processes would need to have happened on a scale not observed today. Yet it is consistent with the ebbing, flowing, and erosive processes of a massive worldwide flood.



## Agate Bridge

Most of the petrified wood, scarce plant life, and amphibian/reptile remains of this area are found in or associated with sandstone. The process of agate fossilization often involves replacing each molecule of wood with silica, and with calcium, iron, or manganese contributing colors. The rate of fossilization is affected by pH, temperature, and pressure, as well as the concentration of minerals and the flow of water. Synthetic fossilized wood can be rapidly produced for commercial purposes.

Many of the trees in the Sonsela sandstone (a major layer mid-level in the Chinle) are oriented in a northeastern direction indicating significant water flow in that direction. Others, including Agate Bridge are oriented in a southeastern direction. In other areas bedding planes of the sandstone indicate that water flows and mud deposition occurred in other directions. This is consistent with significant turbulence during strata deposition occurring over a large area.

## Long Logs/Giant Trees

Even in the park brochures, it is acknowledged that the trees in the Long Logs area represent a log jam; yet directly across from it within 1/2 mile the Giant Trees area does not give that appearance. But almost all trees show that significant abrasive forces have assaulted them before and during deposition. Most trees show limb sockets without limbs, rootballs without roots, and often the bark is missing. Many trees reveal forces of compression, having been buried while still alive (not rotten) and then flattened with heavy overburden. This is similar to the appearances of trees seen at Mount St. Helen after recent volcanic activity. In this area the trees are also associated with sandstone, especially in the Giant Logs area. As well, petrified logs are found throughout the vast area of the Chinle.

It is significant that only scant amounts of roots, and virtually no leaves/limb structures are associated with these logs, nor are they in many other areas of the Chinle.

Uranium halos, in which radioactive uranium decays to lead and leaves tracer marks in crystalline material, occurs in the logs of the Colorado Plateau region. Dating by this method has given a much younger age for them than by other methods. It also supports the concept of rapid fossilization; with prolonged periods of fossilization the halos would not have been formed or they would have been destroyed.

All of these characteristics are consistent with massive, watery burial of the logs, and not of a burial in a swamp, local stream, or the periphery of an inland lake/sea area.

### Museum

The museum has dioramas that portray the Chinle late triassic times as one of inland streams and upland forest inhabited by reptiles and amphibians such as the Placerias, Phytosaur, Metoposaurus, Desmatosuchus, and the Coelophysus. Molluscs including the *Unio arizonensis*, and plants such as the Calamities are listed. Common trees of the Chinle, including *Araucarioxylon* (of which a living tree is very similar), *Schilderia* and *Woodworthia* are displayed. It is told that all of these conditions and life forms gradually passed away, being replaced with what is now present.

Yet each of the fossils and their geologic conditions reveals a different story of catastrophic proportions. The Placerias, Metoposaurus, Phytosaurus, and Coelophysus are all found in large deposits called death assemblages. Often these are interpreted as occurring in watershed areas, but the frequency of such assemblages, the numbers involved, and often that articulated animals are found crushed together argues against this. Mixing with other flora and fauna not expected to be found with these animals is also supportive of a catastrophic burial. Phytosaurs, within variation, are also found on most continents, and the *Desmasuchus* is found spread across Arizona/Texas reflecting a wide distribution of the of the burial process.

Molluscs, which are generally found in the lower layers, are often found in death assemblages fragmented/broken, as well as in concretions (usually in the half shell) consistent with conditions of rapid harsh burial.

Plants such as ferns, similar to plants found in tropical environs and not the present environment have been identified in isolated sandstone formations. The Calimites, a fragile large hollow plant, which as been estimated to be up to 30 ft. in height has been found in Colorado Triassic strata as upright, and packed aggregates. It appears as though they had been washed and silted together. Trees, as has been indicated, reveal the trauma of an overflowing mud/ash deposition.

All these observations are supportive of rapid massive burials of plants and animal life occurring over widely dispersed places in the Chinle formation, and with probable transport over long distances of some of the animal and plant remains.



## Conclusions

There are two views regarding the present geologic formations seen in the Painted Desert and Petrified National Forest Park areas. The first, presented by the National Park Service, utilizes the concept of uniformitarianism. We have presented an alternative view, catastrophism, in which the geologic observations are viewed to be the result of massive, continuous but ebbing/flowing processes, which occurred in worldwide flood conditions. This view is consistent with the Noachian Flood described in Genesis.

## Genesis

**Chapter 6:5-8** Then the Lord saw that the wickedness of man was great on the earth, and that every intent of the thoughts of his heart was only evil continually. And the Lord was sorry that He had made man on the earth, and He was grieved in His heart. And the Lord said, "I will blot out man whom I have created from the face of the land, from man to the animals to creeping things and to birds of the sky; for I am sorry that I have made them." But Noah found favor in the eyes of the Lord.

**Chapter 6:13-14** Then God said to Noah, "The end of all flesh has come before Me; for the earth is filled with violence because of them; and behold, I am about to destroy them with the earth. Make for yourself an ark of gopher wood."

**Chapter 7:11-15** In the 600th year of Noah's life, in the second month, on the 17th day of the month, on the same day all the fountains of the great deep burst open, and the flood gates of the sky were opened. And the rain fell upon the earth for 40 days and 40 nights. On the very same day Noah and Shem and Ham and Japheth, the sons of Noah, and Noah's wife and the three wives of his sons with them, entered the ark, they and every beast after its kind and all the cattle after their kind, and every creeping thing that creeps on the earth after its kind, and every bird after its kind, all sorts of birds. So they went into the Ark to Noah, by twos of all flesh in which was the breath of life.

**Chapter 7:19-22** And the water prevailed more and more upon the earth, so that all the high mountains everywhere under the heavens were covered. The water prevailed 15 cubits higher, and the mountains were covered. And all flesh that moved on the earth perished, birds and cattle and beasts and every swarming thing that swarms upon the earth, and all mankind; of all the was on the dry land, all in whose nostrils was the breath of the spirit of life, died.

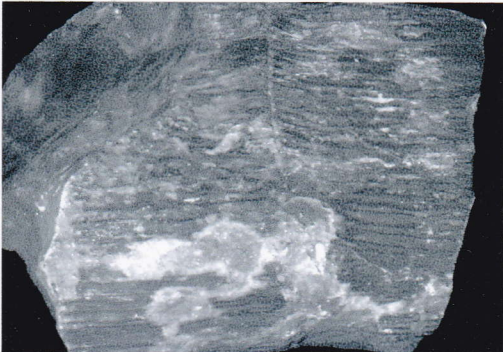
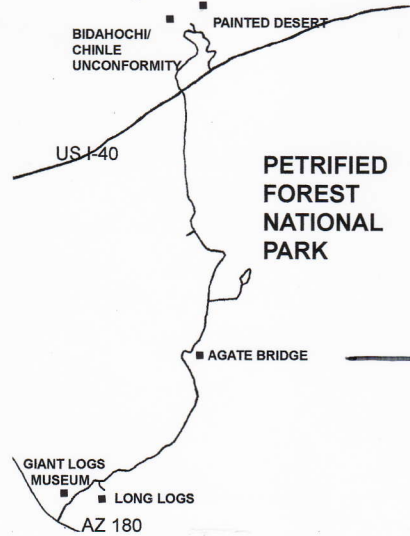
**Chapter 8:1-5** But God remembered Noah and all the beasts and all the cattle there with him in the ark; and God caused wind to pass over the earth, and the waters subsided. Also the fountains of the deep and the flood gates of the sky were closed, and the rain from the sky was restrained; and the water receded steadily from the earth, and at the end of 150 days the water decreased. And in the seventh month, on the 17th day of the month, the ark rested upon the mountains of Ararat. And the water decreased steadily until the 10th month; in the 10th month, on the first day of the month, the tops of the mountains became visible.

**Chapter 8:12-17** Then he waited another seven days, and sent out the dove; but she did not return to him again. Now it came about in the 600th and first year, in the first month, on the first of the month, the water dried up from the earth. Then Noah removed the covering of the ark and looked, and behold, the surface of the ground was dried up. And in the second month, on the 27th day of the month, the earth was dry. Then God spoke to Noah, saying, "Go out of the ark, you and your wife and your sons and your sons' wives with you. Bring out with you every living thing of all flesh that is with you, birds and animals and every creeping thing that creeps on the earth, that they may breed abundantly on the earth, and be fruitful and multiply on the earth."

**Chapter 8:20-22** Then Noah built an altar to the Lord, and took of every clean animal and of every clean bird and offered burnt offerings on the altar. And the Lord smelled the soothing aroma; And the Lord said to Himself, "I will never again curse the ground on the account of man, for the intent of man's heart is evil from his youth; and I will never again destroy every living thing as I have done. While the earth remains, seedtime and harvest, and cold and heat, and summer and winter, and day and night shall not cease."

**Chapter 9:1** And God blessed Noah and his sons and said to them, be fruitful and multiply, and fill the earth.





# EVIDENCE FOR A CATASTROPHIC FLOOD IN THE PETRIFIED FOREST NATIONAL PARK