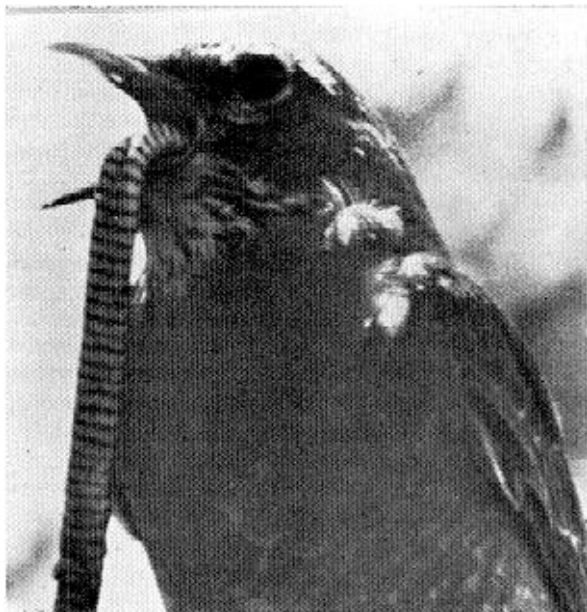


## PICTURING THE LIGHTER SIDE OF CREATION



"Tried it—Don't like it! Just can't swallow this line about snakes going into birds."

Robin, *Turdus migratorius*, in unsuccessful attempts to swallow a 14 inch garter snake. While this bit of whimsy suggests an absurd analogy to avian "evolution" from reptiles, it also points up a basic disparity of more than casual import.

This picture was enlarged from a 16 mm. movie taken by Willis E. Keithley. Mr. Keithley, an evangelist and nature photographer, lives at 1819 N.W. 25th, Lincoln City, Oregon 97363.

## THE GENESIS FLOOD AND THE GEOLOGICAL RECORD

G. L. JOHNSON\*

The book of Genesis contains a detailed account of a great flood, apparently covering the entire earth. It is reasonable to ask how God caused this flood and what the geological data are to support the Genesis record. God, of course, could have created enough additional water to have covered the earth with a flood, and then annihilated the water afterwards. However, the assumption is made that God stayed within the boundaries of the natural laws he had established at creation. This paper is an examination of what the Bible author related about the flood.

### Introduction

Noteworthy is the fact that the Bible author did not state the year in which the flood occurred. By use of chronologies in Genesis, one can compute a minimum date of about 4800 years ago, or about 2800 B.C.

However, the Hebrew thought patterns on chronologies were different from those of the present culture. An author could write that Jesus was the son of David, meaning that these two important men were related, with emphasis on the importance of the people, rather than the number of years or generations between them.

Because of this custom, some Bible scholars feel that the flood could have occurred 8,000 or 9,000 years ago with no injustice done to the

scriptural record.<sup>1</sup> Such dates would have better agreement with the rise of early civilization, the estimated time necessary to repopulate the earth, etc.

Next one should note that the Bible author wrote that the climate before the flood was different from that after the flood, as in Genesis 2:5,6:

. . . the Lord God had not caused it to rain upon the earth, and there was no man to till the ground; but a mist went up from the earth and watered the whole face of the ground.

There is no reference to rain or to a changed climate until Genesis 7:12, "And rain fell upon the earth forty days and forty nights."

Then after the flood, in Genesis 9:12, 13, one reads, "And God said, 'This is the sign of the covenant which I make between me and you and

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every living creature that is with you, for all future generations: I set my bow in the clouds.'” If there had been rain before the flood, there would have also been rainbows, but the language of these verses implies that the rainbow was something new. Therefore it appears that there was no rain from the time of Adam to the time of Noah.

### Pre-Flood Climate Considered

What then was the climate like before the flood? One prominent idea<sup>2</sup> is that a large quantity of water was present in the atmosphere as water vapor, forming a canopy over the earth. Support for this idea may be found in Genesis 1:7, “And God made the firmament and separated the waters which were under the firmament from the waters which were above the firmament.”

Perhaps the most literal interpretation of this verse would be that the world before Noah had little surface water. Most of the water now in the oceans was then either subterranean or in a canopy above the earth. Such a canopy would have a profound influence on the climate, causing it to be uniformly warm and temperate around the earth.

The notion of a uniformly warm climate is widely accepted by scholars. Speaking of the Mesozoic Era, the age of the great reptiles, Colbert has written,

In those days the earth had a tropical or sub-tropical climate over much of its land surface, and in the widespread tropical lands there was an abundance of lush vegetation. The land was low and there were no high mountains forming physical or climatic barriers.<sup>3</sup>

With no rain to wash the dead vegetation away, it would accumulate to great depths. The effect may have been similar to peat formation in some modern day bogs or swamps.

Conceivably, when the rains of the flood came and the oceans rose, much of this vegetation would have been washed loose by wave action and deposited elsewhere, producing large thicknesses of vegetation some places, little or none in other places. Continuing wave action would then have eroded away the bare earth where it was exposed, and layers of sediment would have been deposited on top of the vegetation. In the following years this vegetation would have produced the bulk of our coal, oil, and gas deposits.

### Reports of Recent Experiments

But, a critic might maintain that coal took eons of time to form, and the flood occurred less than 10,000 years ago. The necessity for long time periods for coal formation has been assumed for

many decades, without substantiation. Recent experiments have shown that the time required may actually be quite short.

In one experiment, Bureau of Mines scientists heated cow manure at 380°C (716°F), at 2,000 to 5,000 p.s.i. for 20 minutes in the presence of carbon monoxide and steam. The product was a heavy oil of excellent quality. The yield was about three barrels of oil per ton of manure. Other cellulosic materials such as wood, bark, corn husks, rice hulls, wheat straw, sewage, sludge, and garbage could also be used.<sup>4</sup>

Another experiment was performed by Dr. George R. Hill of the College of Mines and Mineral Industries of the University of Utah. He subjected samples of cellulose, glucose, xylose, and other woody materials to high temperatures and pressures for various lengths of time.

Dr. Hill found that when the material was heated at the rate of 5°C per minute, a dramatic temperature rise occurred in the temperature range of 220° to 260°C. This sudden rise in temperature, which amounted to 200° to 400°, indicated the onset of a highly exothermic reaction. Properties of the products were similar to those found in anthracite and low volatile bituminous coals. Hill concluded:

These observations suggest that in their formation, high rank coals, i.e., anthracite and low volatile bituminous, which contain large concentrations of multi-ring carbon hydrogen structures, were probably subjected to high temperature at some stage in their history. A possible mechanism for formation of these high rank coals could have been a short time, rapid heating event.<sup>5</sup>

I suggest that the heat of decomposition of the chlorophyll and protoplasm in flood buried materials, the heat generated by compression, and the increase in temperature with depth could easily have been adequate to initiate the noted exothermic reaction. The reaction would then have proceeded to completion, producing our oil and coal deposits in a matter of days or weeks after being buried by flood sediments.

### Further Questions Cited

But what caused the water vapor canopy to suddenly condense and produce 40 days and nights of heavy rain? A prominent idea<sup>6</sup> is that of massive volcanic activity, as might be deduced from Genesis 7:11: “. . . on that day all the fountains of the great deep burst forth. . . .”

This implies that great quantities of liquids, perhaps liquid rocks or magmas, as well as water (probably steam), had been confined under great pressure below the surface rock structure of the earth, since the time of its formation and that this

material now burst forth through great fountains or volcanoes primarily in the seas.

Condensation does not begin until the water vapor has a suitable surface on which to condense. The surface of condensation is called a nucleus of condensation. Volcanic dust would have supplied large quantities of nuclei of condensation that would have precipitated the heavy rains. Such rains and the new water from underground would supply ample water to cover a relatively flat earth.

But what happened to the water so that Noah and his family could find dry land about a year later? A possible solution for this might be found in Psalms 104:6-9:

Thou didst cover it (the earth) with the deep as with a garment; the waters stood above the mountains. At thy rebuke they fled; at the sound of thy thunder they took flight. The mountains rose, the valleys sank down to the place which thou didst appoint for them. Thou didst set a bound which they should not pass, so that they might not again cover the earth.

Under the new pressures on the earth's crust that would have been caused by the flood, mountain ranges and even continental areas would have been uplifted and ocean floors would have sunk. Such readjustments of the earth's crust would have produced dry land by concentrating the water, which had been adequate to cover a relatively flat earth, in the present oceans.

The flood and all the tidal waves, heavy rains, and uplifts would have contributed to massive amounts of erosion and redeposition. There are many places in the earth's surface where geologically older materials lie on top of younger materials. This is often "explained" by the imagined phenomenon of overthrust (where earthquake-like forces caused the earth's crust to buckle and one mass of layers to slide over another).

There are many cases, however, which do not fit the overthrust "explanation." So-called older

strata are found resting conformably on top of so-called younger strata without any evidence of overthrust.

One classic example of this is the Heart Mountain Thrust of Wyoming where the older material occupies a triangular area, approximately 30 miles wide by 60 miles long. As Hubbert and Rubey have pointed out: "Since their earliest recognition, the existence of large overthrusts has presented a mechanical paradox that has never been satisfactorily resolved."<sup>7</sup>

The problem of assuming that the older material was put in place by overthrusting is that pressures necessary to move a rock layer that big will crush the rock before it will move it. Also, there should be evidence of such movement in the form of broken and pulverized rock between the two layers. Such evidence is lacking in many cases.

### Conclusion

Thus there are considerable geological data that may be used to support the Genesis account of a great flood. This does not mean that all or even most of the geological record can be explained by the flood. The first chapter of Genesis contains no indication of how old the earth is, or how much of the geological record was present before the flood. Very possibly though the flood would explain many otherwise unexplainable aspects of the rock record.

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