Welcome to Bible Mysteries of the Bible

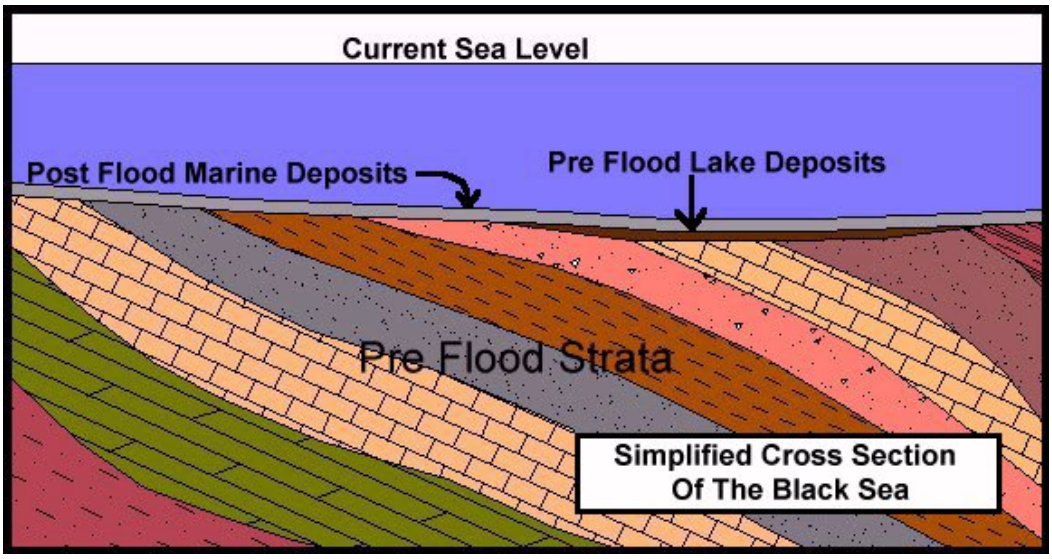
THE FLOOD IS FOUND

by D. Laing

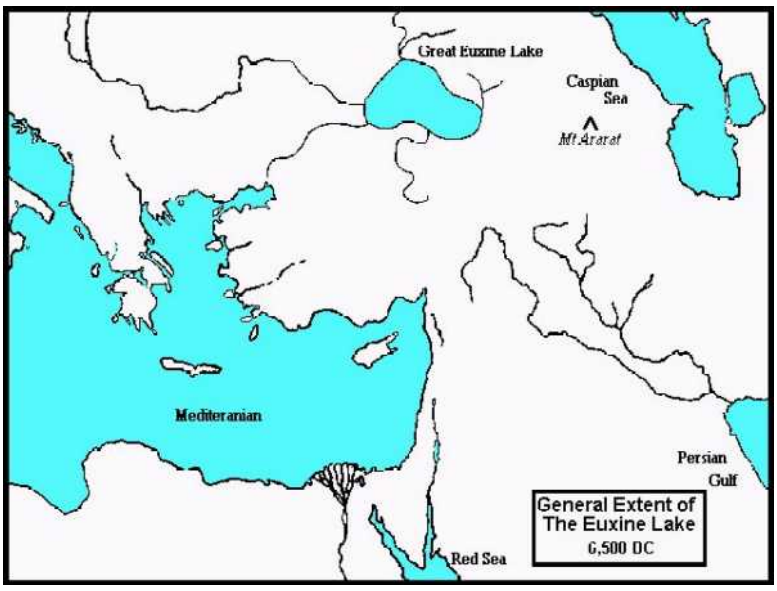
In the late 1980's and early 1990's, Dr. Walter Pitman and Dr. Bill Ryan, adjunct geology professors at Columbia University and senior scientists at the Lamont-Doherty Earth Observatory were working on an exciting new discovery of a well recorded ancient event - the Great Deluge. The team had examined the description of the flood as recited in the Sumerian epic Gilgamesh, and had determined that there was in fact a possible explanation for the ancient accounts. Based on their studies and advice from scholars of the Gilgamesh epic, they determined that there may have been a flood that occurred even earlier than that of the epic or of the one at Ur (5000 BC). They believed that this event occurred around 7,000 BC based on radiocarbon dating of shells from an underwater beach front, and that the epic of Gilgamesh may have been adapted from stories of this earlier flood. This would have meant that it took place as the ice sheet from the last period of glaciation was in retreat and global sea levels were rising. Continuing that logic and based on the account in Gilgamesh, they determined that what they had read was a description by a primitive people of a possible event that was adapted by the Sumerians and passed on in the form of an epic. They reasoned that the description was of the flooding of a large area of land that was below sea level (a basin) due to the rise in global sea levels. The result would be the same as if Death Valley in California and Arizona were suddenly open to the Pacific - a new sea. Armed with this theory, they began to search the area surrounding the Eastern Mediterranean for a body of water that possibly would fit what they determined were desirable parameters. The Persian Gulf, the Red Sea, and the Caspian Sea were discarded as suitable sites. This left the Black Sea with its entry to the Mediterranean, the Bosphorous Strait.

In considering which came first, and thanks to the much later estimates of the Deluge by Biblical scholars, the account in Gilgamesh had been given the greatest credence, and scholars for some time have believed that the story of Noah had been borrowed in no small part from Sumerian legends. Now however, obscure references from other prehistoric cultures as well as its proximity to the hills surrounding Mount Ararat tended to favor the Black Sea Basin and therefore Noah's Flood as the story of greatest antiquity.

With the exciting discovery of aeolian (wind blown) sand dunes discovered by underwater camera at a depth of 140(+) feet the theory that the Black (Euxine) Sea was the site of a catastrophic flood during human prehistory gained credence. The presence of the dunes indicated that the theory might be correct, and in spite of the accumulation of thousands of years of marine sediments there were still recognizable remnantal land structures existing on the sea floor. Spurred by this discovery, Pittman and Ryan joined a Russian marine exploration team bringing some advanced western technology with them. Sophisticated seismic equipment revealed a uniform layer of horizontal marine sediments overlying steeply tilting and well eroded strata. Such a horizon in geology and geophysics is known as an unconformity, and represents a transition from a terriginous surface that is exposed to erosion from rain, wind, and running water to a marine environment that quietly and gradually accrues sediments. What the team had discovered was obvious proof of a recent, in geologic time, inundation of the Black Sea or Euxine Basin.



In order to date the time of the incursion of the Mediterranean waters into the Black Sea, cores were taken along both its length and breadth. Examination of the core material just above and just below the unconformous horizon confirmed the team's theory. Just above, the sediments were soft and contained shells of marine organisms. Just below, the sediments were hard. Clays in the cores showed evidence of desiccation: there were obvious mud cracks caused by drying in the sun that contained sand blown into them by the wind. A large number of the cores also contained remains of wood plants, grasses, and other land plants in the material just below the unconformous horizon. This material was carefully packed and sent to a laboratory for radiocarbon dating. The results from these tests were astonishing, for the date resulting from every test yielded an age of not 9,000(+) years as the team had postulated, but one of 7,540 years. The fact that all the samples were of the same age means that the unconformous event horizon did not represent a gradual transition as is normal for unconformities, but instead pointed to an abrupt inundation of the entire Black Sea Basin. *It also meant that a fairly reliable date was finally established for the most significant event in the chronological timeline as recorded in Genesis - the Flood occurred sometime around 5,550 BC.*



The Sumerian Flood in Gilgamesh

The Sumerian culture was colorfully rich in legend and myth. Many of the tales that have been recovered from ancient texts since the turn of the century are not dissimilar from those of the Bible. Some of these are clear parallels to the stories of Job and Noah. Early laws that precede Hammurabi's are very

similar or identical to those that were given to the Hebrews by Moses (not the ten commandments). Armed with the knowledge that Terah and his tribe had remained in lands controlled by and therefore influenced by the Assyrians until the days of Jacob, and convinced by Biblical scholars that the stories of Eden and Noah were of a much later date than those recovered, archaeologists have argued for some time now that the Bible borrowed more than a little from Sumerian laws and legends.

Anyone with a rudimentary knowledge of the story of Noah will recognize the extremely similar parallel with the following passage from Gilgamesh: "*I looked for land in vain, but fourteen leagues distant there appeared a mountain, and there the boat grounded; on the mountain of Nisir the boat held fast, she held fast and did not budge. One day she held, and a second day on the mountain of Nisir she held fast and did not budge. A third day and a fourth day she held fast on the mountain and did not budge; a fifth day and a sixth day she held fast on the mountain. When the seventh day dawned I loosed a dove and let her go. She flew away, but finding no resting place she returned. Then I loosed a swallow, and she flew away but finding no resting place she returned. I loosed a raven, she saw that the waters retreated, she ate, she flew around, she cawed, but she did not come back. Then I threw everything open to the four winds, I made a sacrifice and poured a libation on the mountain top.*"

This is a tale of the Sumerian King Utnapishtim who reigned in Shurrapak 70 miles north of Ur in the early third millennium BC. The flood described lasted six days according to Sumerian tablets, and has been confirmed by archaeologists. The mountain mentioned is in the Zagros mountains to the east between present day Iraq and Iran.

Another flood was recorded in archaeological evidence in Mesopotamia. In a dig in Ur, layer after layer of artifacts from the ancient Ubadian culture were found in an excavation pit until workers encountered a level that contained only river sediments. This layer proved to be eight feet thick, and beneath it workers began to encounter more artifacts. The river sediments have been interpreted to have resulted from a flood that would have killed thousands in the valley, and from a much earlier period than that which gave rise to the Gilgamesh epic.

The Sumerian culture either grew from the Ubaidian, or was adapted by later immigrants from the Ubaidian. The Ubaidians arrived in southern Mesopotamia sometime between 5,500 BC and 5,000 BC Coincidental with the arrival of the Ubaidian culture there appeared what was for the time perhaps, advanced technology. Within early Ubadian strata, archaeologists have recovered beaten copper tools, ceramics of a more advanced design than previously encountered, advanced irrigation techniques, and on occasion, what remains of some tightly woven textiles. The ceramics are particularly notable for they imply a more advanced kiln technology - one that might be capable of smelting copper from ores. In addition, there is some very circumstantial evidence that they or contemporary immigrants also brought with them knowledge of boat construction. In examining archaeological evidence, we must always remember that the earliest dates established for the use of a device or principle is that for which the archaeologists have evidence. A ceramic model of a boat with sails which was recovered from around 4,000 BC at Ur does not mean that boats were not used in that culture until then. It merely means that this is the oldest evidence yet recovered of their use. Other evidence may yet be recovered, or may not have been preserved.

For the sake of argument we will assume that the Ubaidians arrived in Southern Mesopotamia with the knowledge of these more advanced techniques and technology. Where then did they come from?

The Physical Mechanics of the Deluge

The Black Sea has an area of 162,280 sq miles and a maximum depth of 7,250 feet. On the east, the Black Sea is bordered by the Caucasus Mountains and on the south by the Pontic range. Neither area has much of a coastal lowland. The western coast is much less steep, except where the Istranca and Balkan ranges meet the sea. The Crimean Mountains are the only cliffs on the generally flat north coast.

The Bosphorus (bahs'-pur-uhs) is a narrow strait between Europe and Asia connecting the Black Sea to the Sea of Marmara, which in turn is connected by the Dardanelles, then to the Aegean, part of the Mediterranean Sea. The strait has a maximum width of 2.3 miles and is 19 miles long. It is easy to envision this narrow channel as having been filled with sediments. Drainage of the area would have been bilateral. Some areas would have drained into the Sea of Marmara, and some would have drained to the Black Sea Basin. Ice sheets from the last period of glaciation had been retreating for thousands of years slowly raising the levels of the world's oceans and seas. Indeed, there are still hundreds of remnants of glaciers in the upper valleys of the Caucasus Mountains, the flanks of which drain to the Black Sea.

The Black Sea is a remnant of the Tethys Sea Basin, which split off from the Mediterranean about 40 million years ago. The present-day sea may be divided into three concentric submarine relief zones. The outer ring, about 25 percent of the area, is in a shallow shelf zone less than 100-110 m (330-360 ft) deep. The second zone comprises the slopes that lead to the third zone, the central depths. This central area is a featureless plain covering about a third of the total area. *An underwater mountain range lies off the coast of Turkey between Sinop and Samsun.*

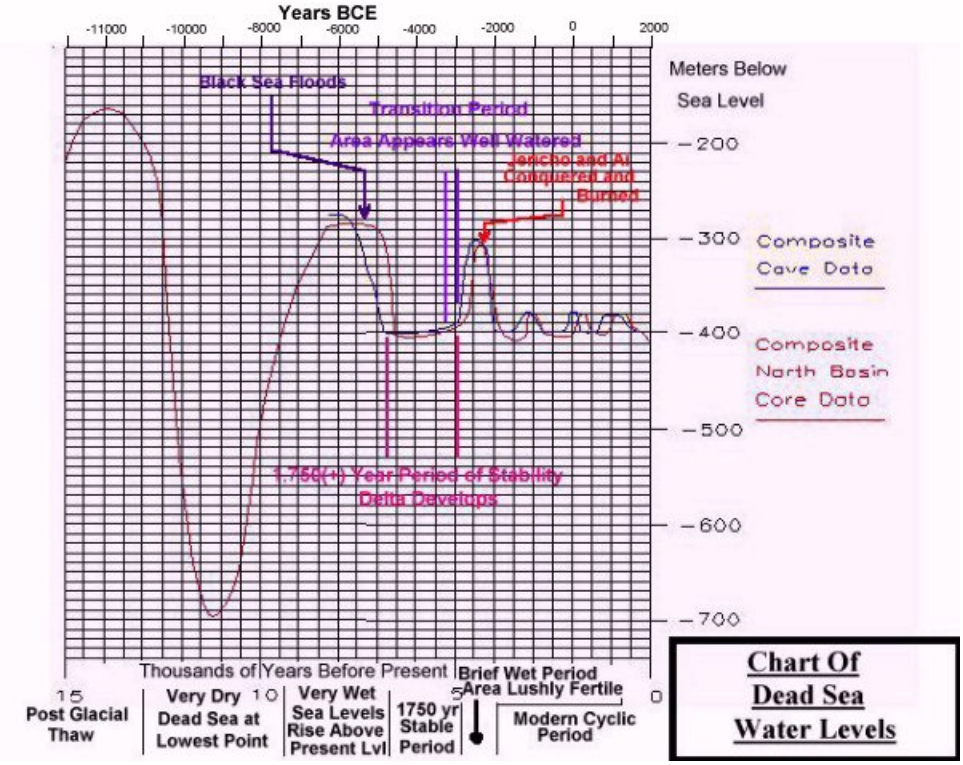
The sea's salinity, which averages 22 parts per thousand, is about half that of the oceans and is much reduced where the principal tributaries--the Danube, Dnestr Bug, and Dnepr rivers enter in the northwest. Wind-driven currents run counterclockwise.

Pittman and Ryan now postulate a model in which the Black Sea Basin was once inhabited by an agrarian people which inhabited numerous villages. The Mediterranean had risen a few thousand years earlier to the point that it onlapped a sedimentary plug in what is now the Bosphorus Strait. Over a period of time, rivulets that drained from this blockage to the Mediterranean and to the Black Sea Basin joined to create a conduit for the waters of the Mediterranean to the much lower Black Sea Basin. At some point, just as an earthen dam may fail once it is breached, so too did the natural dam in the Bosphorus Straits. This would have occurred suddenly and catastrophically. The inrushing waters would have quickly scoured all soil, sediments, and loose rock down to the bedrock from the passage to create what is estimated to have been *a cataract the flow of which would have been in excess of a thousand times greater than that now observed during flood stage at Niagra Falls, or approximately twelve billion (12,000,000,000) cubic feet per minute.* Those fleeing the encroaching waters would have had to move over a kilometer a day up gradient in order to escape drowning. Pittman and Ryan postulate that the Black Sea Basin was the cradle of agrarian society where the transition from hunter-gatherers to farming took place. If this is correct, given the topography and geographic extent of the area, many thousands would have perished. The populace would have had to leave their food resources behind to climb out of the basin, and many would have found themselves isolated to perish on hill tops that they had climbed as flood waters in surrounding valleys rose.

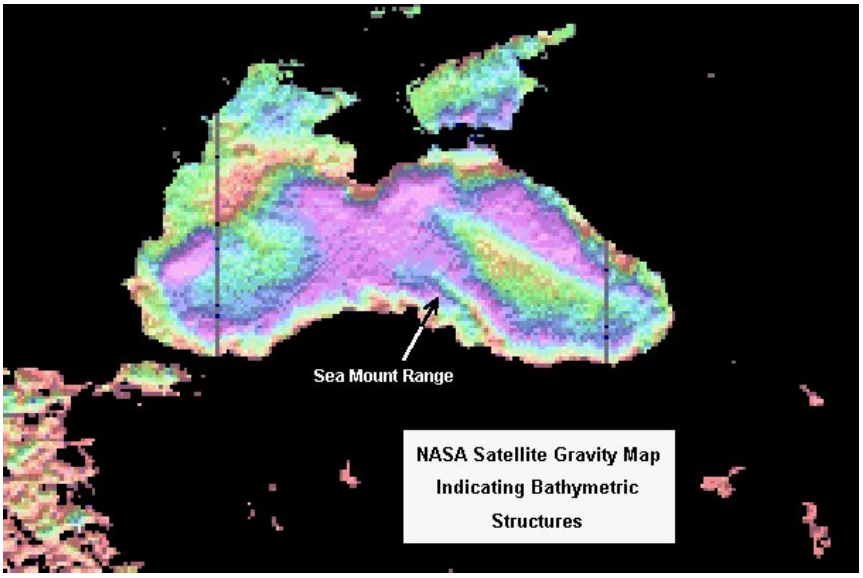
Having established the reality of the flood, Pittman and Ryan now have gone on to attempting to attribute the sudden appearance of irrigation in Anatolia and Mesopotamia to the displaced inhabitants of the Black Sea Basin. It is the author's opinion however that much remains to be completed of their original work.

It has been estimated that the volume of water it took to fill the Black Sea Basin accounted for the lowering of the world's oceans by as much as one foot! In terms of tectonics the surrounding area is a highly active region. Rifts, faults, and volcanoes abound from Italy around the coast to Egypt. The Earth's crust under all the major sea basins of the world shows signs of deformation due to the enormous mass they contain, their depth, and the plasticity of the lower crustal rock. It is inconceivable that an area 162,280 square miles and up to 7,250 feet deep could suddenly be subjected to a load of billions of tons of water without causing crustal deformation leading to tectonic consequences. Studies should be initiated that would model regional crustal deformations under the sudden load to determine possible reactive adjustments. Further, a cataract of the size that was estimated could have played havoc with the meteorological and ecological conditions in the region. The increased moisture in the air due to evaporation from both the cataract as well as sheet flooding of the dry basin could have resulted at some

point in truly torrential rains in a region which had not experienced the like for millions of years (when the Mediterranean itself was flooded). Interestingly enough, studies of the Dead Sea reflect that the Black Sea flood occurred during an unusually wet historical period, and shortly thereafter the weather in the region assumed a pattern close to that of the present.



It has recently been pointed out that based solely on a flow rate of twelve million gallons per minute, it would take appreciably more time than 40 days to fill the basin. It would have been natural for the inhabitants to have sought shelter on high ground in the face of the flood. Had the refugees taken refuge on what is now the sea mount range, they would have felt secure from the rising waters below. It would indeed seem ludicrous that such a mountain might eventually be covered itself, so the concept of disbelief by all but Noah would be understandable.



If Pittman and Ryan are looking for effects of the displacement of the inhabitants of the Black Sea Basin due to the flood, why not examine other possibilities as well? It is unlikely that even given instructions by God, that a people not familiar with open water vessels would have the engineering expertise to construct a ship the size of the Ark. The story of Noah's Ark has long been viewed by the

scientific community as a fable borrowed by the writers of Genesis from the Sumerian myths, and hence itself must be a myth. Some of the greatest archaeological discoveries however, including Pittman and Ryan's, have originated from the descriptions obtained from what were once considered myths. These include, but are not limited to, Troy, Sodom and Gommorah, Jericho, and of course that of Pitman and Ryan. Genesis 10:1 through 10:5 reads: "Now these are the generations of the sons of Noah, Shem, Ham, and Japheth: and unto them were sons born after the flood. The sons of Japheth; Gomer, and Magog, and Madai, and Javan, and Tubal, and Meshech, and Tiras. And the sons of Gomer; Ashkenaz, and Riphath, and Togarmah. And the sons of Javan; Elishah, and Tarshish, Kittim, and Dodanim. *By these were the isles of the Gentiles divided in their lands*; every one after his tongue, after their families, in their nations.". Note that the passage reads isles, not lands. Could Noah's tribe have included some seafaring individuals prior to the flood? If not then how would they have obtained the expertise to construct the ark? There is some evidence that trade existed between the cities of Anatolia and other cities along the Mediterranean coast. Could these cities have been outposts of a greater civilization located somewhere in the Black Sea Basin? Biblical scholar Michael Sanders has recently pointed out that the establishment of early Sumerian cities in the northern plain of the Tigris and Euphrates occurred shortly after the date of the Black Sea Flood. It seems obvious that a cause and effect may be assumed.

It may prove wise to reconsider much of Genesis as a source of valuable information concerning origins, environment, geography and technology of both late Paleolithic and early bronze age civilizations in light of the importance that the chroniclers of the accounts placed on them. This being that through oral records the legitimacy of land and property claims were established, and these in turn were chronologically established in memory with their association with a major event such as a flood, invasion, war, or the reign of a chieftain or king. Through these accounts, descendants of a particular patriarch could legitimize his position as tribal leader, lay claim to ancient treaties and agreements, and request fair treatment while passing through the lands of his kindred and remote relations. Early Egyptian history was recorded in exactly the same manner - dates were tied to major events. Their records also contain engineering, medical, agricultural, astronomical, tidal, flood, lunar and solar eclipse, and ethnic and conquest data and records. This would be a natural development for any self sufficient culture of the time that included potters, engineers, philosophers, farmers, herders, weavers, and other specialists. Each profession or specialty would pass on from generation to generation the techniques of its trade. Nomadic peoples would naturally favor oral histories and traditions lacking as it were the luxury of a permanent location at which to inscribe their history and technologies on fragile but heavy clay or stone tablets. This being the case, certain precautions to insure the accuracy of these accounts would seem to make sense, such as adopting the litanic form. While the Egyptians had a method for recording important information related to self survival and national welfare, the Hebrews did not adopt a written method for recording important data until after 1000 BC. A litanic form of record keeping apparently had sufficed until then. If any credence at all is given to the accuracy of Genesis accounts then we may treat these as we would data obtained from other sources in which verbal reports, the accuracy of which the teller has a vested interest in, are recorded. That is to say that the narratives would be for the most part literal within the understanding of the chronicler, and would be prone to anomalous, although identifiable, discrepancies due to misinterpretation or the loss of data. If this is the case, we may quickly accept some of these data for the purpose of speculation. Such speculations, as fanciful as they may seem at first, will raise some very interesting questions that warrant investigation.

References

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