New evidence emerges to boost ‘Noah’s Flood’

BY JOHN NOBLE WILFORD
New York Times

TWO Columbia University marine geologists, inviting incredulity, came forward in 1996 with astonishing evidence suggesting that a catastrophic flood of the Black Sea 7,000 years ago could have played a pivotal role in the spread of early farming into Europe and much of Asia.

The deluge also may have cast such a long shadow over succeeding cultures that it inspired the flood account in the Babylonian epic of Gilgamesh and, in turn, the story of Noah in the book of Genesis.

Now the geologists, William B.F. Ryan and Walter C. Pitman III of Columbia’s Lamont-Doherty Earth Observatory in Palisades, N.Y., say they have even more archaeological, geological and climate data to support their provocative thesis. They argue their case in "Noah’s Flood: The New Scientific Discoveries About the Event That Changed History," published this month by Simon & Schuster.

While the authors have yet to win over skeptics of the Black Sea flood’s possibly sweeping influence on history, other scientists say the rhythm of this new work is in harmony with new findings that seem to confirm the fact of the flood itself.

In about 5600 BC, with rising global sea levels, salt water from the Mediterranean and Aegean seas apparently burst into the Black Sea, then a landlocked freshwater lake. The Black Sea rose with terrifying swiftness, inundating more than 60,000 square miles of coastal plains and giving the body of water its current size and configuration.

The thesis, however it is ultimately judged, has already inspired a wave of archaeological and other scientific research in the previously neglected Black Sea region.

"It has captured the archaeological community’s attention and enthusiasm," Ryan said in a recent interview. "The atmosphere has changed in just two years. People from many countries are keen to take part in exploring the idea."

Working on Turkey’s Black Sea coast at Sinop, Fredrik T. Hiebert, a University of Pennsylvania archaeologist, has detected possible ruins of a Stone Age village submerged in the flood. He plans an expedition this summer to expand the search for pre-flood settlements. One objective is to determine whether the people were farmers and so, as refugees from the deluge, might have spread agriculture into Europe for the first time.

Robert D. Ballard, the oceanographer who used modem underwater technologies to find and explore the Titanic, is preparing an ambitious survey of submerged Black Sea archaeological sites this summer. Ballard, formerly with the Woods Hole Oceanographic Institution on Cape Cod, is president of the Institute for Exploration in Mystic, Conn.

Until Ryan and Pitman advanced their hypothesis, archaeologists had little reason to believe the pre-exchanged ideas and languages."

The timing of the flood, Pitman said, happened to coincide with archaeological evidence of newcomers in the Balkans and in northeastern Europe and with some of the earlier signs of agriculture in these regions. Some pottery at these sites is similar to that found near the Sea of Marmara in Turkey from around the time of the flood.

Making connections between people displaced by the flood and the rise of agriculture in Europe — even in Egypt and central Asia — is the most controversial aspect of the Ryan-Pitman thesis. In a review of the book in the current issue of Archaeology magazine, Mark Rose, the managing editor, said the farming connection is "predicated on a huge archaeological assumption" that there was a drought and it did force Middle Eastern farmers to find refuge on the pre-flood Black Sea coast. He also noted that some farming had already begun to appear in parts of Europe 500 years before the flood.

Rose concluded: "If Ryan and Pitman are right about the inundation of the Black Sea, they have made a real advance in our understanding of the region’s past. But making it Noah’s flood and claiming it was the ‘event that changed history’ was a mistake."

In other recent research, Gilles Lericolais, a French oceanographer, led an expedition last spring that conducted more seismic and echo-sounding probes of the submerged shelf off the Black Sea coast. He discovered deep underwater canyons where the Danube and Dniester rivers had once cut deep to reach the declining waters of the pre-flood Black Sea.

Turkish geologists recently reported evidence that, contrary to most assumptions, the Bosporus Strait was cut at the time of the flood and not before. At the end of the last ice age, more than 12,000 years ago, the outlet connecting the freshwater Black Sea to the Mediterranean was probably a channel through the Salaria range to the Gulf of Izmit, an eastern arm of the Sea of Marmara. But this passageway had closed well before the flood.

A new book makes connections between people displaced by the flood and the rise of agriculture in Europe.

flood Black Sea shore was particularly hospitable.

In the past two years, moreover, new cores from the Greenland ice cap have revealed that the world underwent a cold, arid period beginning in 6200 BC and ending about two centuries before the flood. Archaeological digs in the Middle East appear to show many Neolithic settlements being abandoned during this drought.

"We speculate that this cold and arid period may have driven people to the Black Sea as an oasis," Pitman said. "They would have brought farming with them to this water hole, so to speak, and also..."