

Noah's Flood: Hard evidence helps us interpret the scriptures

Fireside talk 2010-01-31

- 1 My few qualifications. Most of this material is my opinion, not church doctrine.
- 2 Purposes of the talk:
 - 2.1 help members deal with a problematic scriptural story that could weaken faith
 - 2.2 supply a solid example of a scripture “not translated correctly”
 - 2.3 improve correctness of how we think about the past and about God
- 3 Basic review of the story of the Great Flood
 - 3.1 Sketchy causes: rain and the great deep breaking up.
 - 3.2 Six traditional landing places
 - 3.3 No extra details outside of Genesis, just a flood, an ark, and destruction of the wicked.
- 4 Geologists look for evidence left behind by such a cataclysm.
- 5 Puzzling Problem: No world-wide flood has ever happened in the last 10000 years, at least not in the way it is described in Genesis 6-8.
- 6 Two extreme reactions to this problem, and a middle way:
 - 6.1 “The Bible is just a bunch of fairy tales. How can I believe *any* of that?”
 - 6.2 “Don't confuse me with facts – my mind is made up. Are you trying to tear down my testimony?”
 - 6.3 I stand in the middle and say:
 - 6.3.1 Noah was real; there really was a flood, but our available text of Genesis includes mistaken elements added long after Moses.
 - 6.3.2 The flood was of regional or local extent, instead of being world-wide.
 - 6.3.2.1 The whole earth was not really baptized; that's just a poetic metaphor of some early brethren.
 - 6.3.2.2 The ark was not Biosphere 1.5, but a colonist's supply ship, like Jared's or Lehi's.
- 7 Advantages of this intermediate position:
 - 7.1 Joseph Smith said that the Bible text suffered from changes while being transmitted down to us.
 - 7.1.1 “We believe the Bible to be the word of God, as far as it is translated correctly.” AoF 8.
 - 7.1.2 “I believe the Bible as it read when it came from the pen of the original writers. Ignorant translators, careless transcribers, or designing and corrupt priests have committed many errors.” TPJS p. 327.
 - 7.1.3 Calling everything you disagree with “translated incorrectly” makes you impervious to the scriptures.
 - 7.1.4 You need strong evidence to establish an exception, including a theory how it happened.
 - 7.2 Regional-scale floods are realistically possible. We know some big ones happened.
 - 7.3 We can still accept the other scriptural and prophetic witnesses that Noah and a flood were real.
 - 7.4 Stephen L. Richards said that it would be unfair of us to expect the biblical writers to think in terms of our experience and our concepts and categories of understanding, instead of their own experience and concepts.

- 8 Problems with a global flood as described in Genesis:
 - 8.1 Mount Everest is more than 5 miles high. There is no water available to raise sea level that high for most of a year.
 - 8.1.1 If all the moisture in the whole atmosphere rained dry and it were spread evenly over the earth, it would only be 1 inch deep.
 - 8.1.2 We would need 4.4 billion km³ of water, 3-4 world ocean fulls, to cover Everest.
 - 8.1.3 Imaginary deities might “poof” that much water into and out of existence, but the D&C reveals that the elements and intelligences, too, are eternal and cannot be created or destroyed.
 - 8.2 Many surface features we see now have never been inundated in the last 10000 years.
 - 8.2.1 Ice sheets on Antarctica and Greenland have uninterrupted annual layers going back tens of thousands of years.
 - 8.2.1.1 Deluged glaciers and ice sheets would want to float, of course, and then melt.
 - 8.2.1.2 A de-iced Greenland would not grow a new ice cap in neolithic-to-modern climate.
 - 8.2.2 In the Himalayas and Antarctica it is much too dry and cold to ever rain. Most of the time it is too cold to snow.
 - 8.2.3 Old cinder cones in Auvergne, France and the Mojave Desert, California did not get washed away.
 - 8.2.4 Some high lakes have annual varve layers in the bottom sediments which are undisturbed.
 - 8.2.5 Generally, features that used to be called “diluvial” turn out to be caused by Ice Age glaciation.
 - 8.2.6 Egyptian and Chinese records go back well before the 23rd century BC, and they don't mention having to repopulate the whole land after a flood, or any such interruption.
 - 8.3 An ark like Noah's would be very much inadequate for the task of preserving all life through a global flood.
 - 8.3.1 Freshwater fish would die in the salty flood waters, or ocean fish in fresh flood waters.
 - 8.3.1.1 Some fish need fresh water, some brackish, some sea water, some saltier water.
 - 8.3.1.2 Even anadromous fish need to acclimate gradually in shifting between salt and fresh water.
 - 8.3.2 Under a 5 mile depth of flood waters, corals and sea creatures of the tidal zone would die for lack of sun and oxygen.
 - 8.3.2.1 Sea creatures like corals and anemones were not loaded on the ark.
 - 8.3.2.2 Some older reefs like the Great Barrier Reef have been growing for millions of years.
 - 8.3.3 Most kinds of land plants would die from over-watering and lack of sun. Seeds may survive, but many plants don't grow from seeds but propagate by rhizomes, cuttings, or by dividing.
 - 8.3.4 Noah had no means to gather all the animal species living in different habitats around the world, nor to return them to their homeland after the flood. If the animals migrated by themselves, the trip would cross oceans, span too great a distance, and

- require surviving in foreign habitats.
- 8.3.4.1 Marsupials live only in Australia, both before and after the Flood.
- 8.3.5 The animal species to save would number much more than a million (perhaps 10m, [May 1992]) and would not fit in the ark.
- 8.3.5.1 If you hypothesize significantly fewer species on the ark than that, you must explain evolution rates faster than any evolutionists propose to account for all the present species.
- 8.3.6 The number of animals of each species needed to perpetuate their kind after the flood would be many more than 1 pair, or even 7 pairs.
- 8.3.6.1 Predators would need many prey animals to eat right after the flood.
- 8.3.6.2 Isolated populations with fewer than 20 members are usually doomed to extinction, even when extraordinary measures are taken to protect them, because of random dangers. [Simberloff, 1988]
- 8.3.6.2.1 “Critically Endangered” Species have populations in the hundreds or thousands.
- 8.3.6.3 Inbreeding caused by a single ancestral pair would be extreme.
- 8.3.7 Such a large wooden ship could not be made seaworthy. The longest wooden ships in modern times are about 300 feet long, and these require reinforcing with iron straps and leak so badly they must be constantly pumped.
- 8.3.8 Imagine restraining predators and feeding picky eaters on the Ark.
- 8.3.8.1 Some animals eat one kind of plant, like the Koala eating only Eucalyptus leaves.
- 8.3.8.2 Some predators eat only fresh kills.
- 8.3.9 Genesis 10 describes Noah's descendants spreading out over the Mediterranean world and western Asia, not out over the whole world we know of now.
- 8.4 Because we see these plants and animals and icecaps here now, we know Noah's flood was not global.
- 9 Some regional floods that we know happened:
 - 9.1 Rising sea-levels after the last ice age several times broke through barriers to suddenly flood a valley.
 - 9.1.1 The Black Sea filled up around 5200 BC, after breaking through the Hellespont.
 - 9.1.1.1 Pitman and Ryan estimate flow tens of meters deep up to 100 km/hr for 200-300 days, with shoreline level rising 15 cm/day, totaling 155 m of depth.
 - 9.1.2 The Red Sea and Persian Gulf filled similarly, the former likely bursting a shelf barrier from the Indian Ocean.
 - 9.1.3 The Dogger banks in the North Sea flooded through the English Channel.
 - 9.1.4 Earlier, the Mediterranean filled suddenly through the gates of Hercules, 6-8 million years ago.
 - 9.2 Ice dams break
 - 9.2.1 There was an outburst of Lake Bonneville into the Snake river valley.
 - 9.2.2 Lake Missoula burst out over northern Washington, suddenly carving the “scablands”.
 - 9.3 Hurricane storm surge and tsunamis can inundate large, flat coastal areas.
 - 9.3.1 This happened to the Greater Sunda Wetlands of Indonesia.
 - 9.3.2 Charleston, South Carolina lies on a very flat coast at the mouth of two rivers. It can get flooded for miles due to hurricane storm surge and river overflow together.
 - 9.3.2.1 Oliver B. Huntington reported Joseph Smith to have said Noah built his ark in or near South Carolina.

- 9.3.3 Bangladesh, seemingly every few years.
- 10 Genesis is a combination of multiple records edited together, not always for the best.
 - 10.1 I picture the flood as the Lord's planned way to move Noah's family from America to the Near East, while Noah's neighbors, ripe in sin, would have to perish. The trip resembled Jared's in Ether 2, 6.
 - 10.2 Hebrew "eretz" means land or earth. "The whole earth" and "the entire land" are the same in Hebrew.
 - 10.2.1 3 Nephi 8:5,6,12,17 on the great destruction evidently confounds "land" and "earth".
 - 10.3 Hebrew for "all flesh" may refer to all humans or all animals or all terrestrial animals??
 - 10.4 Noah's simple eyewitness account said that his entire land, all that he could see, was inundated.
 - 10.5 This could be misunderstood by a later, uninspired editor who thought the whole planet was flooded and who then filled in the details to support that misunderstanding.
- 11 Moses 7:52 is a prophecy about Noah's seed being found *among* all nations, not constituting all nations.
- 12 We don't need a global flood in order to explain fossils and strata on a young earth.
- 13 With the 8th Article of Faith, we can deal with the problem of Noah's flood in a principled way that our Protestant neighbors will not be able to, because of their commitment to an inerrant Bible. This is one evidence of Joseph Smith's inspiration.
- 14 All truth is part of one great whole.
 - 14.1 Science and Religion try to reveal the same real world, with differing focuses.
 - 14.2 Worry first about what is right before we fight over who is right.
 - 14.3 Nobody wants a religion that applies only to a fantasy world. We want real salvation.
- 15 People who disagree
 - 15.1 Donald W. Parry, "The Flood and the Tower of Babel", *Ensign*, Jan 1998, pp. 35-41
 - 15.1.1 Other scriptures prove Noah and a flood happened. How the global flood happened is a mystery.
 - 15.2 F. Kent Nielsen, "The Gospel and the Scientific View: How Earth Came to Be," *Ensign*, Sep 1980, 67
 - 15.2.1 The laws of nature have only limited applicability, and God can change them.
- 16 References
 - 16.1 Balsiger, Dave and Charles E. Sellier, Jr., *In Search of Noah's Ark*, Sun Classic Books, Los Angeles, 1976.
 - 16.2 Jeffrey, Duane E., *Noah's Flood: Modern Scholarship and Mormon Traditions*, Sunstone, October 2004, pp. 27-45.
 - 16.3 Widstoe, John, *Evidences and Reconciliations*
 - 16.4 Wilson, Ian, *Before the Flood: The Biblical Flood as a Real Event and How it changed the Course of Civilization*, St. Martin's Press, New York, 2002.
 - 16.5 Winchell, Alexander, *Preadamites: Or a Demonstration of the Existence of Men Before Adam*, S. C. Griggs, Chicago, 1880.
 - 16.6 Young, Davis A., *The Biblical Flood: A Case Study of the Church's Response to Extrabiblical Evidence*, Eerdmans, Grand Rapids, 1995.