Review: Ken Ham and Bodie Hodge, A Flood of Evidence: 40 Reasons Noah and the Ark Still Matter, Master Books, Green Forest, Arizona, January 2017

Pages: 295

The Pivotal Catastrophe of World History

Despite the 'progressive' attitude in modern society towards Noah's flood (of scorning disbelief), it explains so many phenomena pivotal to understanding the world today.

Topics include the extremely long lifespans of early man which could account for ancient technological wonders, explanation of the only ice age and rapid biogeographical dispersion via continental land bridges, and modern manufacturing technology proving mineral formation can occur in mere *days* under the right temperature, pressure, and chemical conditions (no millions of years needed).

It also refutes the many 'long-age' theological combinations which compromisers attempt in Genesis (e.g. Gap, Day-Age, and Framework Hypothesis) to twist the meaning of the word "day".

Clinging to an old and broken uniformitarian philosophy leaves the atheist pitifully endarkened and also shipwrecks the faith of many Christians which makes this book a critical read.

I) The Flood and Noah's Ark: An Introduction-Getting Down to the Basics (pp. 9-12)

America's Research Group in 2015 conducted a survey asking "Do you believe Noah's ark" which showed a strong positive correlation (0.71) between age group and belief in Noah's ark.

Over 20% of pastors teach there is no problem if Christians believe the earth is millions or billions of years old.

II) The Genesis Account of the Flood (pp. 13-22)

Gopherwood may refer to how the wood was worked (e.g. plywood or pressed planking style).

Pitch may have been sap/plant-based.

Ancient cubits vary from 18 to 21 inches.

The resting place of the ark was probably not Mt Ararat which is an active volcano.

While most animals went on the ark in pairs, they probably left as *families* due to breeding on the ark.

III) Why Was it Necessary to Kill All Those Innocent People in the Flood? (pp. 23-29)

The right question is why was Noah's Flood the right time for all the people to die.

God gave a 120-year countdown to the Flood.

If the whole world was so wicked that half the population were murderers, the population would be halved in a day!

IV) Flood Legends (pp. 31-40)

There are over 300 Flood legends.

While Noah's wife's name is unknown, the *Genesis Rabba* midrash claims it was *Naamah*. Lamech's daughter and Tubal-Cain's sister.

A massive global flood in an evolutionary story makes no sense.

V) A Changing View of the Flood Evidence (pp. 41-44)

The Geologic Scale is more accurately a Flood Layer scale.

VI) Biblically How Old Is the Earth (pp. 45-51)

James Ussher in 1658 calculated the beginning of the world as 4004B.

Anglo-Saxon secular culture goes back to '5,200 BC' and Irish history to '4,000BC'.

VII) Origin of the Old-Earth Worldview (pp. 53-56)

Naturalistic uniformitarianism excludes major catastrophes.

In 1899, Lord Kelvin calculated the Earth's age based on a cooling initial molten sphere of 20-40Ma.

In 1913, Arthur Holmes gave an age of 1.6Ga.

VIII) Age of the Earth Battle: Millions of Years of a Global Flood (pp. 57-62)

A catastrophe destroys the idea of rock layers slowly and gradually formed over millions of years.

IX) A Lesson in Radiometric Dating (Semi-Technical) (pp. 63-70)

It would take three times the estimated secular age of the universe for half of a quantity of Rubidium-87 to change to Strontium (which is the 15th most common element on the earth).

Radioactive decay rates have only been observed over days, weeks, and years to be extrapolated out to constants over billions of years!

Two lava flow layers on the top of the Grand Canyon have been Rb-Sr dated at 250Ma *older* than basalt at the basement of the layers!

X) Can't Christians Just Take the Idea of 'Long Ages' and Insert Them Into the Bible Somewhere? (pp. 71-78)

The General Theory of Evolution (GTE) encompasses:

-Cosmological/Astronomical evolution.

-Geological evolution.

-Chemical evolution.

-Biological evolution.

Gap Theories include:

-Pre-time gap (time before Genesis 1.1).

-Ruin-reconstruction gap: between Genesis 1.1 and 1.2 posited by Thomas Chalmers in the early 1800s. It has a Luciferian fall and flood.

-Modified gap: long ages between Genesis 1.2 and 1.3.

-Late gap: between chapters 2 and 3 where Adam and Eve lived in the Garden for long ages before sin.

Satan could not have fallen until after Genesis 1.31's goodness declaration.

Day-Age Models include:

-Standard: by Hugh Miller in the early 1800s.

-Progressive creation: Dr Hugh Ross and Reasons to Believe.

-Theistic Evolution: heavy reinterpretation of Genesis 1.1-11.

-Framework Hypothesis: Dr Meredith Kline (1922-2007) believed Genesis 1 was a literary device.

XI) Biblically Could Death Have Existed Before Sin? (pp. 79-89)

Plants were not "alive" in the biblical sense.

Genesis 2.17 also means Adam and Eve began to die physically.

XII) Global or Local Flood? (pp. 91-97)

Parts of modern Iraq occupied by ancient Sumerians are extremely flat.

XIII) The Religious Attack of Humanism's "Millions of Years"...in My Era (pp. 99-104)

XIV) Doesn't it Take Millions of Years to Form Rock and Rock Layers? (pp. 105-112)

Cretaceous rock layers are said to be 72-79Ma and began forming 145Ma. The period is said to be part of the Mesozoic.

The secular view posits that imaginary space between rock layers *is* evidence for millions of years.

XV) Doesn't it Take Millions of Years to Form Canyons (pp. 113-116)

Secularist assume catastrophes didn't occur in the past.

In 2002, Guadalupe River in Texas had extensive flooding with 70,000 cubic feet of water flowing per second which carved out a mile-long gorge.

XVI) Isn't Coal and Oil Millions of Years Old? (pp. 117-122)

Peat was supposedly pressurised by overlaid rock until the water came out, eventually turning into coal, oil, petroleum, and natural gas over millions of years. However, Mount St. Helens and Spirit Lake produced a coal-like sediment in just minutes and months.

A mixture of wood, water, and acidic clay heated to 300° F for 1-9 months can form black coal.

Oil miners use dinosaur logos to market their product's 'age' (e.g. Sinclair Oil's apatosaurus).

XVII) What About Stalagmites and Stalactites - Do They Take Millions of Years (pp. 123-131)

Apollo Diamond Incorporated and Genesis Corporation currently manufacture diamonds. Apollo makes them over a few days using chemical vapour deposition and Genesis via high-pressure and temperature which mimics geologic conditions. A graphite capsule atomises then travels through a metal solvent to bond to a tiny seed diamond, crystallising layer-by-layer.

Some companies are making diamonds from the ashes of dead loved ones and pets!

Opals are said to require millions of years as silica layers accumulate, but Len Cram can "grow" them in weeks.

"Flame Fusion" was a a process in the early 1800s to create rubies.

Volcanoes often produce gemstones due to rapid heat and pressure.

Igneous rocks may contain quartz (including amethyst, citrine, and ametrine), beryl (emerald, morganite, and aquamarine), garnet, apatite, diamond, topaz, and zircon.

XIX) Isn't Petrified Wood Millions of Years Old? (pp. 133-136)

Hypoxatic conditions cause wood to petrify as minerals fill in wood matrix voids. It can be manufactured via a two-day acid bath, followed by a silica solution bath, air-drying, and 1,400°C two-hour bake. The interior becomes stone (SiC).

Much of the wooden pilings Venice was built on have petrified meaning it now has *stone* foundations.

XX) Doesn't it Take Millions of Years to Form Fossils? (pp. 137-146)

Most phosphate for fossilisation comes from the animal itself.

Ediacara jellyfish fossils must have formed in less than twenty-four hours, and there is an entire Ediacara formation 500km across Australia.

80% of Chinese marine fossils are said to be fake.

Things living closer to sea level have a greater chance of being fossilised.

Thorn fossils disprove theistic evolution since they only existed *after* Adam had sinned.

XXI) Does it Take Long Ages to Grow Coral, Lay Down Ice Layers (Cores) and Grow Tree Rings? (pp. 147-152)

The geological record indicates coral reef ecosystems formed at least 240Ma and most coral beds are 5-10Ka (per NOAA).

At 1,400m the Enimetok Atoll has the highest known growth rates and would have taken about 3,240 years to rise from the ocean floor.

'Old Tjikko' is a tree said to be 9,550 years' old via counting tree rings on the assumption that each ring is an annual cycle. However, ring growth is dependent on water availability.

XXII) Was There an Ice Age That Followed the Flood? (pp. 153-156)

The Ice Age occurred after the flood at 2,348BC which secularists say was 10,000Ka.

The Mt Tambora blast in 1815 stopped summer in the Northern Hemisphere ("year without a summer") and dropped global temperatures by 3°C.

There is a time to maximum glaciation (a few hundred years after the Flood).

XXIII) Do We Find Human Fossils With Dinosaur Fossils? (pp. 157-161)

The fossil record is 95% marine animal with most of the remainder algae and plants/trees.

One population range pre-Flood was 5 to 17 billion based on 16-22 generations.

There are about 700M km³ of flood sediment.

XXIV) Was There Originally One Continent? (pp. 163-168)

Evolutionists first posit 'Rodinia', which geologically evolved into the familiar 'Pangaea'.

XXV) How Long Did it Take for Noah to Build the Ark? (pp. 169-172)

Noah took 55-75 years to build the ark so of the 120 years he would have had ample to time to study and research, as well as obtain supplies.

XXVI) Timeline of the Flood (pp. 173-180)

XXVII) Where Is the Flood Rock (pp. 181-189)

Flood and post-Flood rock delineation is a hot topic.

Day 150 is a geological milestone since this is when Mt Ararat must have formed for the Ark to land on it and that the four plates (Eurasian, African, Arabian, and Indian) had already collided to build mountains.

The second milestone is day 314 when the water receded (lasting about 5 1/2 months).

The Devonian layer is named after Devon in England, Cambria (Latin) for Wales, Ordovician and Silurian for early Britons, etc. The Permian is named after the Perm district in Russia.

The pre-Flood boundary is between the Pre-Cambrian and Cambrian layers.

The Tapeats Sandstone is the lowest Grand Canyon layer and sits on top of the Great Unconformity.

The 'Geologic Record' progresses as Pre-Cambrian-->Cambrian-->Cretaceous-->Tertiary.

The Cretaceous/Tertiary boundary is also called K/T boundary (Cretaceous is 'Kriede' in German and this is where smaller regional sedimentary deposits appear). Regional effects are likely due to the recessional stage of the Flood.

Because there are six continental plates, there is a one-in-six chance of any animal kind repopulating the same area post-Flood as before.

XXVIII) What About the Size of Noah's Ark (pp. 193-199)

The Ark was 300 cubits long, 50 cubits wide, and 20 cubits tall. Cubit is 'אמה' in Hebrew.

There is a Long Cubit in Ezekiel of a "cubit plus a hand breath".

The Wyoming was built with 1800s technology and was a comparable size to the Ark. It sunk after fourteen years but was built with later European technology which was the reverse of ancient technology (i.e. where the strakes were built *before_*the ribs¹). The ancient Greeks also used thousands of precise mortise and tenon joints for strength in their ramming ships. They built the 425-foot τεσσακροντερες.

Other family and friends could have helped Noah until they died.

XXIX) What Was the Shape of Noah's Ark? (pp. 201-208)

P. Simms made an engraving in 1760, London, of the ark.

Rising floodwater would have been very similar to the process of flooding a dry-dock.

A simple rectangular prism would have failed due to sharp forces on its corners.

The Ark Encounter's ark is based on the Lovett design of mechanical engineer Tim Lovett, which is stable in wind and water and self-righting

XXX) Did the Animals Fit on Noah's Ark? (pp. 209-218)

A *blinx* is the offspring of a bobcat father and linx mother.

In 1973, *Creation Research Society Quarterly*, Arthur Jones suggested about 1,000 animal families went on the Ark.

In 1996, John Woodmorappe used minimalist assumptions (e.g. a shorter cubit, genus-level animal classification and high volumetric-food) and came up with 8,000 kinds. This only took took up 72.5% of the space on board (\sim 50% for the animals).

XXXI) How Could Noah Get and Care for All the Animals? (pp. 219-222)

XXXII) Could Noah Really Build the Ark By Himself? (pp. 223-227)

Noah was 500 when Japheth was born and 600 when the Flood hit.

Since Shem was 100 two years after the Flood he was 98 when it came meaning he was born when Noah was 502 and is two years' younger than Japheth.

Since Methuselah was righteous he surely died before the Flood (perhaps seven days before as a mourning period for him per Genesis 7.4).

Less than ten were aboard the Ark which is consistent with Abraham and God's discussion in Genesis 18 over Sodom.

XXXIII) Was There a Canopy Around the Earth Until the Flood? (pp. 229-241)

One canopy idea is water at the edge of the universe as a product of White Hole cosmology.

The traditional canopy was thought to protect against harmful radiation, increase atmospheric oxygen pressure, limit weather extremities, and create a consistent global temperature. These were all thought to create conditions favourable to longevity. Some creatures may also have found it easier to fly. Canopy models originated with Dr Henry Morris and Dr John Whitcomb in 1961 with *The Genesis Flood*. Dr Joseph Dillow and Dr Larry Vardiman have also proposed models.

Some have said the canopy was simply clouds which would block out the sun and stars preventing navigation.

Another suggestion is an ice canopy which would coat with other molecules and water vapour from evaporation.

An invisible vapour canopy would not really be a canopy at all as it would be indistinguishable from the rest of the atmosphere.

II Corinthians 12.2 speaks of three heavens (perhaps the atmosphere, space, and the fifth dimension outside the universe).

Standard canopy models are plagued with greenhouse effect problems since solar radiation would have to decrease by 25%.

A Dillow vapour canopy of 40-feet thick, upon condensation, would have boiled the atmosphere off (due to the exothermic ice-to-water reaction. Vardiman's 2-6 feet canopy would not, but would have lacked the volume to sustain rain for forty days and nights.

Higher oxygen concentrations may have contributed to aging with the formation of free radicals.

XXXIV) Did Noah Need Oxygen on the Ark? (pp. 243-249)

This argument completely ignores the flat topography of earth before the flood.

There are cities (e.g. Cusco) higher than the possible elevation of the Ark (~2km) on a smooth sphere covered by water.

XXXV) Where Did the Water for the Flood Come From and Where Did it Go? (pp. 251-254)

The flood waters initially covered the *visible* surface by 15 cubits based on Genesis 7.20, with there being underwater mountains.

Plates collide at *convergent boundaries*.

Tectonics had largely ceased by day 150. The Ararat mountains are part of the large *Alpine-Himalayan Belt* which extends from Spain and North Africa almost to Australia.

XXXVI) How Did Animals Get to Places All Over the World Like Australia? (pp. 255-261)

Marsupials can travel farther and faster than most placentals.

Bones usually decompose before permineralisation can occur.

The post-Flood Ice Age locked up ice lower in sea levels and exposing inter-continental land bridges which enabled migration. Some estimates are a drop of 107m from the present.

Some animals may have had memory of previous latitude and longitudinal habit position and sought to migrate back there.

Much of animal migration is driven by humans, e.g., the Romans spread organisms from one side of the empire to the other.

XXXVII) Has Noah's Ark Been Found? (pp. 263-274)

The door must have been sealed with pitch as well otherwise the Ark would have sunk.

Two popular speculative sites are Mt Ararat and Mt Cudi in around Turkey and Armenia.

From Genesis 8.4-5 it seems the Ark was on a higher mountain than its surroundings since the "tops of the mountains" were seen. Mt Ararat does tower over the others, it would have taken about two months for surrounding waters to subside, and it is covered in permafrost which would preserve wood.

However, the visibility may *not* have been due to height as perhaps the localised area where the ark rested was foggy.

Oxygen-percentage is based on sea level (which is constant at $\sim 21\%$).

Mt Ararat are volcanoes sitting on top of fossil-bearing sediment which makes them extremely unlikely as being pre-Flood or Floodformed.

At 6,800 feet, Cudi is shorter than Ararat and it is not a volcano.

XXXVIII) What About the Window Pitch Door, 'Gopher' Wood and Other Ark Features? (pp. 275-282)

Draft is the submerged area of the ship.

Modern cruise liners have a 13% draft which when applied to the Ark's 20 cubit height gives a 7-cubit or \sim 140" draft. This could easily place the Ark door at the middle deck.

Resin plant-pitch could have been used (internally as well for double waterproofing).

Gopher wood may have referred to the processing method of the wood (e.g. pressed planks) rather than wood species.

Iron-working was already well-know since the beginning and Tubal-Cain's day.

XXXIX) How Many People Died in the Flood? (pp. 283-291)

From Adam to the Flood was 1,656 years by genealogies.

Tom Pickett estimated 5 to 17 billion people over 16-22 generations prior to the Flood. This seems to high as since the Flood there have been 100 generations and the population is only 7 billion.

Dr Henry Morris estimated 235 million.

In I Chronicles 7.22-27, Joshua was in the tenth generation in his lineage from Joseph and there were 600,000 adult males, or a total population of about 1.2m.

Given the wickedness of man this 'upper limit' may have been considerably less; a few hundred thousand.

XXXX) Our Real Motive for Building Ark Encounter (pp. 295-300)

¹Including the famous Viking ships.