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| [books2.gif](http://www.christiananswers.net/creation/home.html) column1.jpg  See a [summary](http://www.christiananswers.net/godstory/flood1.html) of the Biblical Flood as described in the Bible.  Read the [Bible's account](http://www.christiananswers.net/bible/gen6.html) of the Flood catastrophe for yourself. | header-catas.jpg  See this page in: [Dutch (Nederlands)](http://www.christiananswers.net/dutch/creation/menu-catastrophe-nl.html), [Russian - Русский](http://www.christiananswers.net/russian/creation/menu-catastrophe-r.html), [Spanish (Español)](http://www.christiananswers.net/spanish/creation/menu-catastrophe-s.html)  **The Biblical Flood**  Background information…   * [The Genesis Flood](http://www.christiananswers.net/dictionary/deluge.html) (our WebBible Dictionary article) * [The Biblical account of the Flood](http://www.christiananswers.net/bible/gen6.html) (WebBible - King James Version) * [Motion picture segment](http://www.christiananswers.net/hope/thehope-c4.html) about the Bible Flood (from [The HOPE](http://www.christiananswers.net/hope/home.html)) * Where did the flood water come from? [Answer](http://www.christiananswers.net/q-aig/aig-c010.html) How could there have been enough water to possibly cover the entire earth? * Where did the flood water go afterwards? [Answer](http://www.christiananswers.net/q-aig/aig-floodwater.html) If the whole Earth was deeply flooded, where did all that water go after the Flood? * Does the Bible claim that the Flood of Noah covered the entire Earth? [Answer](http://www.christiananswers.net/q-eden/edn-c005.html) Could Noah's Flood have been a large, but localized flood? Learn nine Biblical evidences that the flood was global. * Has the Garden of Eden ever been found? [Answer](http://www.christiananswers.net/q-aig/garden-of-eden-loc.html) Many Christians naively assume that the Garden of Eden was located near the modern Tigris and Euphrates rivers. * Could Noah's Ark really hold all the animals preserved in the flood? [Answer](http://www.christiananswers.net/q-eden/edn-c013.html) Just how big was Noah's Ark? Learn how how the animals came to the Ark, fit in, and survived the months. * How did various animals get from the Ark to isolated places, such as Australia? [Answer](http://www.christiananswers.net/q-aig/aig-c006.html) How can we explain unrecorded events such as post-Flood animal migration patterns to various parts of the world? Learn the possible explanations for this interesting question. * How did FISH survive the Flood? [Answer](http://www.christiananswers.net/q-aig/aig-c037.html) How could freshwater and saltwater fish cope with changes in salinity? * How did LAND PLANTS survive the Flood? [Answer](http://www.christiananswers.net/q-aig/aig-c019.html) * Was there a thick water vapor canopy in the pre-Flood world? [Answer](http://www.christiananswers.net/q-aig/aig-c010.html#watervaporcanopy) * Did Noah need oxygen above the mountains? [Answer](http://www.christiananswers.net/q-aig/noah-above-mts.html) If mountain climbers need oxygen tanks to climb Mount Everest, how were Noah, his family, and the animals able to breathe on the Ark when they were above the mountains? * Is the Black Sea flood the flood of Genesis? [Answer](http://www.christiananswers.net/q-crs/crs-blacksea.html) Many people have naively accepted the press reports about these claims. * What is “Gopher Wood?” [Answer](http://www.christiananswers.net/q-eden/gopherwood.html) Gopher wood is only mentioned once in the Bible in connection with the construction of the Ark (Genesis 6:14). What is it? * Genesis and ancient Near Eastern stories of Creation and the Flood: an introduction. [Answer](http://www.christiananswers.net/q-abr/abr-c001.html) An up-to-date overview of stories from ancient Mesopotamia regarding the relationship between the early chapters of Genesis and Creation and the Flood. * What does the fossil record teach us about evolution? [Answer](http://www.christiananswers.net/q-eden/edn-c006.html) What do the fossils teach us? Do they demonstrate the progression from simple structures to complex organisms? * Where are all the human fossils? [Answer](http://www.christiananswers.net/q-aig/aig-c014.html) Why don't we find thousands of human fossils if the Flood of Noah is true? What happened to all the people who were not on board Noah's Ark? * How could all the human races come from Noah, his three sons and their wives? [Answer](http://www.christiananswers.net/q-aig/race-definition.html) Are the differences in the races justifiable reasons to disprove that all races descended directly from Noah and his family? Learn the truth of the matter. * [Click to learn about Mrs. Noah.](http://www.christiananswers.net/q-aig/aig-mrsnoah.html)Who was Mrs. Noah? [Answer](http://www.christiananswers.net/q-aig/aig-mrsnoah.html) What was she like? Learn about this rarely mentioned, but important woman.     **Weather**   * Does God control the weather? Does He send deadly storms? [Answer](http://www.christiananswers.net/q-eden/edn-c023.html) Are “natural disasters” truly ordained by God, even though they sometimes kill thousands? What does the Bible teach? * Has our atmosphere evolved over time? [Answer](http://www.christiananswers.net/q-eden/edn-c022.html) How should the creationist view the formation of the atmosphere?     **Continental Drift**   * What about continental drift? Have the continents really moved apart? [Answer](http://www.christiananswers.net/q-aig/aig-c001.html) Most people today believe that scientists have proved that continental drift has occurred in the past and still is occurring. But, is this the truth? Convincing evidence may show otherwise.   Top of Form  [[Click Here](http://christiananswers.net/catalog/wp-vs.html)The World That Perished](http://christiananswers.net/catalog/wp-vs.html) DVD  by Films for Christ / Eden Communications  All about Noah’s Ark and the Flood - This award-winning documentary film answers the questions of skeptics. Discover scientific and cultural evidence in support of the Bible’s cataclysmic flood that once covered our entire planet and continues to effect our lives today!  [[More Details](http://christiananswers.net/catalog/wp-vs.html)]     US$1999  Bottom of Form    Top of Form  [[Click Here](http://christiananswers.net/catalog/bk-answers.html)The New Answers Book](http://christiananswers.net/catalog/bk-answers.html)  Ken Ham, General Editor  Answers to over 25 of the most-asked questions on creation/evolution and the Bible. Great for every Christian library! Recently expanded.  [[More Details](http://christiananswers.net/catalog/bk-answers.html)]     US$1199  Bottom of Form    Top of Form  [[Click Here](http://christiananswers.net/catalog/bk-dm.html)The Great Dinosaur Mystery and the Bible](http://christiananswers.net/catalog/bk-dm.html) HARDBACK BOOK  by Paul S. Taylor (*Christian Answers*)  Kids are enthralled by dinosaurs! But secularists use that interest to indoctrinate children in an evolutionary worldview. Give your child this unique and colorful bestseller, for a proper, biblical understanding of the world in which they live.  [[More Details](http://christiananswers.net/catalog/bk-dm.html)]     US$1499  Bottom of Form    Top of Form  [[Click Here](http://christiananswers.net/catalog/fossil-vs.html)The Fossil Record](http://christiananswers.net/catalog/fossil-vs.html) DVDVHS  by Christian Answers  The fossil record is a huge embarrassment to Evolutionists. Here’s why! This fast-moving documentary reveals thought-provoking discoveries related to the Grand Canyon, geology, fossilization, “missing links,” coal formation, a worldwide flood, and more.  [[More Details](http://christiananswers.net/catalog/fossil-vs.html)]     US$1999  Bottom of Form    Top of Form  [[Click Here](http://christiananswers.net/catalog/canyon-vs.html)Grand Canyon: Monument to the Flood](http://christiananswers.net/catalog/canyon-vs.html) DVD  by Institute for Creation Research  Visitors to the Grand Canyon hear only one viewpoint about the formation of this colossal natural wonder. Don’t miss out on the better, more scientifically plausible theory (which just happens to be Bible-centered, too!).  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# The Deluge

the name given to [Noah's](http://www.christiananswers.net/dictionary/noah.html) flood, the history of which is recorded in [Genesis 7](http://www.christiananswers.net/bible/gen7.html) and [8](http://www.christiananswers.net/bible/gen8.html)

The cause of this judgment was the corruption and violence that filled the earth in the ninth generation from Adam. God in righteous indignation determined to purge the earth of the ungodly . Amid a world of crime and guilt there was one household that continued faithful and true to God, the household of Noah. "Noah was a just man and perfect in his generations."

At the command of God, [Noah](http://www.christiananswers.net/dictionary/noah.html) made an [ark](http://www.christiananswers.net/dictionary/ark.html) 300 [cubits](http://www.christiananswers.net/dictionary/cubit.html) long, 50 broad, and 30 high. He slowly proceeded with this work during a period of one hundred and twenty years ([Gen. 6:3](http://www.christiananswers.net/bible/gen6.html#3)). At length, the purpose of God began to be carried into effect. Here is a list of the order of events as they occurred:

* In the six hundredth year of his life Noah is commanded by God to enter the ark, taking with him his wife, and his three sons with their wives ([Gen. 7:1-10](http://www.christiananswers.net/bible/gen7.html)).
* The rain begins on the seventeenth day of the second month ([Gen. 7:11-17](http://www.christiananswers.net/bible/gen7.html#17)).
* The rain ceases, the waters prevail, fifteen cubits upward ([Gen. 7:18-24](http://www.christiananswers.net/bible/gen7.html#18)).
* The ark grounds on one of the mountains of [Ararat](http://www.christiananswers.net/dictionary/ararat.html) on the seventeenth day of the seventh month, or one hundred and fifty days after the Deluge began ([Gen. 8:1-4](http://www.christiananswers.net/bible/gen8.html)).
* Tops of the mountains visible on the first day of the tenth month ([Gen. 8:5](http://www.christiananswers.net/bible/gen8.html#5)).
* [Raven](http://www.christiananswers.net/dictionary/raven.html) and [dove](http://www.christiananswers.net/dictionary/dove.html) sent out forty days after this ([Gen. 8:6-9](http://www.christiananswers.net/bible/gen8.html#6)).
* Dove again sent out seven days afterwards; and in the evening she returns with an [olive](http://www.christiananswers.net/dictionary/olive.html) [leaf](http://www.christiananswers.net/dictionary/leaf.html) in her mouth ([Gen. 8:10,11](http://www.christiananswers.net/bible/gen8.html#10)).
* Dove sent out the third time after an interval of other seven days, and returns no more ([Gen. 8:12](http://www.christiananswers.net/bible/gen8.html#12)).
* The ground becomes dry on the first day of the first month of the new year ([Gen. 8:13](http://www.christiananswers.net/bible/gen8.html#13)).
* Noah leaves the ark on the twenty-seventh day of the second month ([Gen. 8:14-19](http://www.christiananswers.net/bible/gen8.html#14)).

The historical truth of the narrative of the Flood is established by the references made to it by our Lord ( [Matt. 24:37](http://www.christiananswers.net/bible/mat24.html" \l "37); compare [Luke 17:26](http://www.christiananswers.net/bible/luke17.html#26)). Peter speaks of it also ( [1 Pet. 3:20](http://www.christiananswers.net/bible/1pet3.html" \l "20); [2 Pet. 2:5](http://www.christiananswers.net/bible/2pet2.html#5)). In [Isa. 54:9](http://www.christiananswers.net/bible/isa54.html#9) the Flood is referred to as “the waters of Noah.” It swept away all men living except Noah and his family, who were preserved in the ark; and that the present human race is descended from those who were thus preserved.

Traditions of the Deluge are found among all the great divisions of the human family; and these traditions, taken as a whole, wonderfully agree with the Biblical narrative, and agree with it in such a way as to lead to the conclusion that the Biblical is the authentic narrative, of which all these traditions are corrupted versions. The most remarkable of these traditions is that recorded on tablets prepared by order of Assur-bani-pal, the king of [Assyria](http://www.christiananswers.net/dictionary/assyria.html). These were, however, copies of older records which belonged to somewhere about B.C. 2000, and which formed part of the priestly library at [Erech](http://www.christiananswers.net/dictionary/erech.html) (q.v.), “the ineradicable remembrance of a real and terrible event.”

ALSO SEE:

* [Noah](http://www.christiananswers.net/dictionary/noah.html)
* [http://www.christiananswers.net/q-eden/mrsnoah-70.jpgWho was Mrs. Noah?](http://www.christiananswers.net/q-aig/aig-mrsnoah.html) What was she like? Learn about this rarely mentioned, but important woman.
* [Shem](http://www.christiananswers.net/dictionary/shem.html)
* [Ham](http://www.christiananswers.net/dictionary/ham.html)
* [Japheth](http://www.christiananswers.net/dictionary/japheth.html) (his brother)
* [Ark](http://www.christiananswers.net/dictionary/ark.html)
* [Illustrated story of Noah and the Ark](http://www.christiananswers.net/godstory/flood1.html)
* [Frequently asked questions about the Genesis Flood](http://www.christiananswers.net/creation/menu-catastrophe.html)
* [Chaldea](http://www.christiananswers.net/dictionary/chaldea.html)

# Chaldea

The southern portion of Babylonia, Lower Mesopotamia, lying chiefly on the right bank of the Euphrates, but commonly used of the whole of the Mesopotamian plain. The Hebrew name is Kasdim, which is usually rendered “Chaldeans” ([Jer. 50:10](http://www.christiananswers.net/bible/jer50.html#10); [51:24,35](http://www.christiananswers.net/bible/jer51.html#24)).

The country so named is a vast plain formed by the deposits of the Euphrates and the Tigris, extending to about 400 miles along the course of these rivers, and about 100 miles in average breadth. “In former days the vast plains of Babylon were nourished by a complicated system of canals and water-courses, which spread over the surface of the country like a network. The wants of a teeming population were supplied by a rich soil, not less bountiful than that on the banks of the Egyptian [Nile](http://www.christiananswers.net/dictionary/nile.html). Like [islands](http://www.christiananswers.net/dictionary/island.html) rising from a golden sea of waving corn stood frequent groves of palm-trees and pleasant gardens, [affording](http://www.christiananswers.net/dictionary/affording.html) to the idler or traveller their grateful and highly-valued shade. Crowds of passengers hurried along the dusty roads to and from the busy city. The land was rich in corn and wine.”

Recent discoveries, more especially in Babylonia, have thrown much light on the history of the Hebrew [patriarchs](http://www.christiananswers.net/dictionary/patriarch.html), and have illustrated or confirmed the Biblical narrative in many points. The ancestor of the Hebrew people, [Abram](http://www.christiananswers.net/dictionary/abram.html), was, we are told, born at “Ur of the Chaldees.” “[Chaldees](http://www.christiananswers.net/dictionary/chaldees.html)” is a mistranslation of the Hebrew *Kasdim*, Kasdim being the Old Testament name of the Babylonians, while the Chaldees were a tribe who lived on the shores of the Persian Gulf, and did not become a part of the Babylonian population till the time of [Hezekiah](http://www.christiananswers.net/dictionary/hezekiah.html). Ur was one of the oldest and most famous of the Babylonian cities. Its site is now called Mugheir, or Mugayyar, on the western bank of the [Euphrates](http://www.christiananswers.net/dictionary/euphrates.html), in Southern Babylonia. About a century before the birth of Abram it was ruled by a powerful dynasty of kings. Their conquests extended to [Elam](http://www.christiananswers.net/dictionary/elam.html) on the one side, and to the Lebanon on the other. They were followed by a dynasty of princes whose capital was Babylon, and who seem to have been of South Arabian origin. The founder of the dynasty was Sumu-abi (“Shem is my father”). But soon afterwards Babylonia fell under Elamite dominion. The kings of Babylon were compelled to acknowledge the supremacy of Elam, and a rival kingdom to that of Babylon, and governed by Elamites, sprang up at Larsa, not far from Ur, but on the opposite bank of the river. In the time of Abram the king of Larsa was Eri-Aku, the son of an Elamite prince, and Eri-Aku, as has long been recognized, is the Biblical “[Arioch](http://www.christiananswers.net/dictionary/arioch.html) king of [Ellasar](http://www.christiananswers.net/dictionary/ellasar.html)” ([Gen. 14:1](http://www.christiananswers.net/bible/gen14.html#1)). The contemporaneous king of Babylon in the north, in the country termed Shinar in Scripture, was Khammu-rabi. (See BABYLON; ABRAHAM; or [AMRAPHEL](http://www.christiananswers.net/dictionary/amraphel.html).)

<http://www.christiananswers.net/hope/thehope-c04-wm-256k.html>

# Noah's Flood - Where did the water come from?

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| http://www.christiananswers.net/0.gif | http://www.christiananswers.net/0.gif | [Ocean. Photo copyrighted. Courtesy of Eden Communications.](http://www.christiananswers.net/catalog/wp-vs.html)  In telling us about the world-changing [Flood](http://www.christiananswers.net/dictionary/deluge.html) in the days of [Noah](http://www.christiananswers.net/dictionary/noah.html), the [Bible](http://www.christiananswers.net/dictionary/bible.html) gives us much information about where the waters came from and where they went. The sources of the water are given in [Genesis 7:11](http://www.christiananswers.net/bible/gen7.html#11) as “the fountains of the great deep” and the “windows of heaven.” The Fountains of the Great Deep The “fountains of the great deep” are mentioned before the “windows of heaven,” indicating either relative importance or the order of events.  What are the “fountains of the great deep?” This phrase is used only in [Genesis 7:11](http://www.christiananswers.net/bible/gen7.html#11). “Fountains of the deep” is used in [Genesis 8:2](http://www.christiananswers.net/bible/gen8.html#2), where it clearly refers to the same thing, and [Proverbs 8:28](http://www.christiananswers.net/bible/prov8.html#28), where the precise meaning is not clear. “The great deep” is used three other times: [Isaiah 51:10](http://www.christiananswers.net/bible/isa51.html#10), where it clearly refers to the ocean; [Amos 7:4](http://www.christiananswers.net/bible/amos7.html#4), where God's fire of judgment is said to dry up the great deep, probably the oceans; and [Psalm 36:6](http://www.christiananswers.net/bible/psa36.html#6) where it is used metaphorically of the depth of God's justice/judgment. “The deep” is used more often, and usually refers to the oceans (e.g., [Genesis 1:2](http://www.christiananswers.net/bible/gen1.html#2); Job [38:30](http://www.christiananswers.net/bible/job38.html#30), [41:32](http://www.christiananswers.net/bible/job41.html#32); Psalm [42:7](http://www.christiananswers.net/bible/psa42.html#7), [104:6](http://www.christiananswers.net/bible/psa104.html#6); Isaiah [51:10](http://www.christiananswers.net/bible/isa51.html#10), [63:13](http://www.christiananswers.net/bible/isa63.html#13); [Ezekiel 26:19](http://www.christiananswers.net/bible/ezek26.html#19); [Jonah 2:3](http://www.christiananswers.net/bible/jonah2.html#3)), but sometimes to subterranean sources of water ([Ezekiel 31:4, 15](http://www.christiananswers.net/bible/ezek31.html#4)). The Hebrew word (*mayan*) translated “fountains” means “fountain, spring, well.”[[1]](http://www.christiananswers.net/q-aig/aig-c010.html#1)  So, the “fountains of the great deep” are probably oceanic or possibly subterranean sources of water. In the context of the flood account, it could mean both.  [fountains-of-deep3.jpg - 6962 Bytes](http://www.christiananswers.net/catalog/wp-vs.html)  “Fountains of the great deep” scene from [The World That Perished](http://www.christiananswers.net/catalog/wp-vs.html)  If the fountains of the great deep were the major source of the waters, then they must have been a huge source of water. Some have suggested that when God made the dry land appear from under the waters on the third day of creation, some of the water that covered the earth became trapped underneath and within the dry land.[[2]](http://www.christiananswers.net/q-aig/aig-c010.html#2)  [Genesis 7:11](http://www.christiananswers.net/bible/gen7.html#11) says that on the day the flood began, there was a “breaking up” of the fountains, which implies a release of the water, possibly through large fissures in the ground or in the sea floor. The waters that had been held back burst forth with catastrophic consequences.  There are many volcanic rocks interspersed between the fossil layers in the rock record—layers that were obviously deposited during Noah's flood. So it is quite plausible that these fountains of the great deep involved a series of volcanic eruptions with prodigious amounts of water bursting up through the ground. It is interesting that up to 70 percent or more of what comes out of volcanoes today is water, often in the form of steam.  In their catastrophic plate tectonics model for the flood, Austin et al. have proposed that at the onset of the flood, the ocean floor rapidly lifted up to 6,500 feet (2,000 meters) due to an increase in temperature as horizontal movement of the tectonic plates accelerated.[[3]](http://www.christiananswers.net/q-aig/aig-c010.html#3) This would spill the seawater onto the land and cause massive flooding—perhaps what is aptly described as the breaking up of the “fountains of the great deep.”  [Rain. Photo copyrighted, Eden Communications.](http://www.christiananswers.net/catalog/wp-vs.html)  During the Flood, the world was deluged in 40 days of rain. But this was not the major source of the Flood waters. (Scene from the award-winning Christian video, [The World that Perished](http://www.christiananswers.net/catalog/wp-vs.html).) The windows of heaven The other source of the waters for Noah's flood was “the windows of heaven.” [Genesis 7:12](http://www.christiananswers.net/bible/gen7.html#12) says that it rained for 40 days and 40 nights continuously.  [Genesis 2:5](http://www.christiananswers.net/bible/gen2.html#5) tells us that there was no rain before man was created. Some have suggested that there was no rainfall anywhere on the earth until the time of the flood. However, the Bible does not actually say this, so we should not be dogmatic.[[4]](http://www.christiananswers.net/q-aig/aig-c010.html#4)  Some have argued that God's use of the [rainbow](http://www.christiananswers.net/q-eden/ednks006.html) as the sign of His covenant with Noah ([Genesis 9:12-17](http://www.christiananswers.net/bible/gen9.html#12)) suggests that there were no rainbows, and therefore no [clouds](http://www.christiananswers.net/dictionary/cloud.html) or [rain](http://www.christiananswers.net/dictionary/rain.html), before the [flood](http://www.christiananswers.net/dictionary/deluge.html). However, if [rainbows](http://www.christiananswers.net/dictionary/rainbow.html) (and clouds) existed before the flood, this would not be the only time God used an existing thing as a special “new” sign of a [covenant](http://www.christiananswers.net/dictionary/covenant.html) (e.g., [bread](http://www.christiananswers.net/dictionary/bread.html) and [wine](http://www.christiananswers.net/dictionary/wine.html) in the [Lord's Supper](http://www.christiananswers.net/dictionary/lordssupper.html)).  [Rainbow. Photo copyrighted. Courtesy of Eden Communications.](http://www.christiananswers.net/q-eden/ednks006.html)  It is difficult to envisage a pre-flood water cycle without clouds and rain, as the sun's heat, even in that era, must have evaporated large volumes of surface waters which would have to eventually condense back into liquid water. And droplets of liquid water form clouds from which we get rain.  The expression “windows of heaven” is used twice in reference to the flood (Genesis [7:11](http://www.christiananswers.net/bible/gen7.html#11), [8:2](http://www.christiananswers.net/bible/gen8.html#2)). It is used only three times elsewhere in the Old Testament: twice in 2 Kings [7:2](http://www.christiananswers.net/bible/2ki7.html#2) and [19](http://www.christiananswers.net/bible/2ki7.html#19), referring to God's miraculous intervention in sending rain, and once in [Malachi 3:10](http://www.christiananswers.net/bible/mal3.html#10), where the phrase is used again of God intervening to pour out abundant blessings on his people. Clearly, in Genesis the expression suggests the extraordinary nature of the rainfall attending the flood. It is not a term applied to ordinary rainfall. What about “the waters above”? We are told in [Genesis 1:6-8](http://www.christiananswers.net/bible/gen1.html#6) that on the second day of creation God divided the waters that were on the earth from the waters that He placed above the earth when He made a “[firmament](http://www.christiananswers.net/dictionary/firmament.html)” (Hebrew: *raqiya*, meaning “expanse”) between those waters.[[5]](http://www.christiananswers.net/q-aig/aig-c010.html#5) Many have concluded that this “expanse” was the atmosphere, because God placed the birds in the expanse, suggesting that the expanse includes the atmosphere where the [birds](http://www.christiananswers.net/dictionary/bird.html) fly. This would put these waters above the atmosphere.  However, [Genesis 1:20](http://www.christiananswers.net/bible/gen1.html#20), speaking of the creation of the birds, says (literally) “let the [birds](http://www.christiananswers.net/dictionary/bird.html) fly above the ground *across the face of* the expanse of the [heavens](http://www.christiananswers.net/dictionary/heaven.html).”[[6]](http://www.christiananswers.net/q-aig/aig-c010.html#6) This at least allows that “the expanse” may include the space beyond the atmosphere.  Dr. Russell Humphreys has argued that since [Genesis 1:17](http://www.christiananswers.net/bible/gen1.html#17) tells us that God put the sun, moon, and stars also “in the expanse of the heaven” then the expanse must at least include interstellar space, and thus the waters above the expanse of [Genesis 1:7](http://www.christiananswers.net/bible/gen1.html#7) would be beyond the stars at the edge of the universe.[[7]](http://www.christiananswers.net/q-aig/aig-c010.html#7)  However, prepositions (in, under, above, etc.) are somewhat flexible in Hebrew, as well as English. A submarine can be spoken of as both *under* and *in* the sea. Likewise, the waters could be *above* the expanse and *in* the expanse, so we should be careful no to draw too much from these expressions.  So what were these “waters above”? Some have said that they are simply the clouds. Others thought of them as a “water vapor canopy,” implying a blanket of water vapor surrounding the earth.  Vapor canopy. Illustration copyrighted, Eden Communications.  Was there an ancient vapor canopy around the Earth that shielded pre-Flood inhabitants from harmful radiation that causes everything from skin cancer, mutations, and more? Illustration from [The World that Perished](http://www.christiananswers.net/catalog/wp-vs.html) video. A water vapor canopy? Dr. Joseph Dillow did much research into the idea of a blanket of water vapor surrounding the earth before the flood.[[8]](http://www.christiananswers.net/q-aig/aig-c010.html#8) In a modification of the canopy theory, Dr. Larry Vardiman suggested that much of the “waters above” could have been stored in small ice particles distributed in equatorial rings around the earth similar to those around Venus.[[9]](http://www.christiananswers.net/q-aig/aig-c010.html#9)  The [Genesis 7:11](http://www.christiananswers.net/bible/gen7.html#11) reference to the windows of heaven being opened has been interpreted as the collapse of such a water vapor canopy, which somehow became unstable and fell as rain. Volcanic eruptions associated with the breaking up of the fountains of the great deep could have thrown dust into the water vapor canopy, causing the water vapor to nucleate on the dust particles and make rain.  Dillow, Vardiman, and others have suggested that the vapor canopy caused a greenhouse effect before the Flood with a pleasant sub tropical-to-temperate climate all around the globe, even at the poles where today there is ice. This would have caused the growth of lush vegetation on the land all around the globe. The discovery of coal seams in Antarctica containing vegetation that is not now found growing at the poles, but which obviously grew under warmer conditions, was taken as support for these ideas.[[10]](http://www.christiananswers.net/q-aig/aig-c010.html#10)  [Ferns. Photo copyrighted, Eden Communications.](http://www.christiananswers.net/catalog/wp-vs.html)  A vapor canopy would also affect the global wind systems. Also, the mountains were almost certainly not as high before the flood as they are today, as we shall see. In today's world, the major winds and high mountain ranges are a very important part of the water cycle that brings rain to the continents. Before the flood, however, these factors would have caused the weather systems to be different.  Those interested in studying this further should consult Dillow's and Vardiman's works. A major problem with the canopy theory Vardiman[[11]](http://www.christiananswers.net/q-aig/aig-c010.html" \l "11) recognized a major difficulty with the canopy theory. The best canopy model still gives an intolerably high temperature at the surface of the earth.  Rush and Vardiman have attempted a solution,[[12]](http://www.christiananswers.net/q-aig/aig-c010.html#12) but found that they had to drastically reduce the amount of water vapor in the canopy from a rain equivalent of 40 feet (12 meters) to only 20 inches (.5 meters). Further modeling suggested that a maximum of 2 meters (6.5 feet) of water could be held in such a canopy, even if all relevant factors were adjusted to the best possible values to maximize the amount of water stored.[[13]](http://www.christiananswers.net/q-aig/aig-c010.html#13) Such a reduced canopy would not significantly contribute to the 40 days and nights of rain at the beginning of the flood.  Many creation-scientists are now either abandoning the water vapor canopy model[[14]](http://www.christiananswers.net/q-aig/aig-c010.html" \l "14) or no longer see any need for such a concept, particularly if other reasonable mechanisms could have supplied the rain.[[15]](http://www.christiananswers.net/q-aig/aig-c010.html#15) In the catastrophic plate tectonics model for the flood,[[16]](http://www.christiananswers.net/q-aig/aig-c010.html" \l "16) volcanic activity associated with the breaking up of the pre-flood ocean floor would have created a linear geyser (like a wall) of superheated steam from the ocean, causing intense global rain.  Nevertheless, whatever the source or mechanism, the scriptural statement about the windows of heaven opening is an apt description of global torrential rain.  A vapor canopy holding more than 7 feet (two meters) of rain would cause the earth's surface to be intolerably hot, so a vapor canopy could not have been a significant source of the flood waters.  http://www.christiananswers.net/a.gifWhere did the Flood waters go? [Answer](http://www.christiananswers.net/q-aig/aig-floodwater.html) Footnotes  1. *Strong's Concordance* 2. Evidence is mounting that there is still a huge amount of water stored deep in the earth in crystal lattices of minerals, which is possible because of the immense pressure. See L. Bergeron, “Deep waters,” *New Scientist*, 1997, 155(2097):22-26:“You have oceans and oceans of water stored in the transition zone. It's sopping wet.” 3. S.A. Austin, J.R. Baumgardner, D.R. Humphreys, A.A. Snelling, L. Vardiman, and K.P. Wise, “Catastrophic Plate Tectonics: A Global Flood Model of Earth History,” *Proc. Third ICC*, 1994, pp. 609-621. 4. Some have claimed that because the people scoffed at Noah's warnings of a coming flood, that they must not have seen rain. But people today have seen lots of rain and floods, and many still scoff at the global flood. [Genesis 2:5](http://www.christiananswers.net/bible/gen2.html#5) says there was no rain *yet* upon the earth, but whether or not it rained after that in the pre-flood world is not stated. 5. In trying to disparage the Bible, some skeptics claim that the *raqiya* describes a solid dome and that the ancient Hebrews believed in a flat earth with a slotted dome over it. Such ideas are not in the Bible or *raqiya*. See J.P. Holding, “Is the *Raqiya* a Solid Dome?” Equivocal language in the cosmology of Genesis 1 and the Old Testament: a response to Paul H. Seely, *CEN Technical Journal*, 1999, 13(2):44-51. 6. H.C. Leupold, *Exposition of Genesis*, Vol. 1 (Grand Rapids, MI: Baker Book House, 1942), p. 78. 7. D.R. Humphreys, “A Biblical Basis for Creationist Cosmology,” (*Proc. Third ICC*, Pittsburgh, PA, 1994, pp. 255-266). 8. J.C. Dillow, *The Waters Above* (Chicago, IL: Moody Press, 1981). 9. L. Vardiman, “The Sky Has Fallen”, *Proc. First ICC*, 1986, 1:113-119. 10. Movement of tectonic plates could also explain the polar occurrence of such warm-climate plant remains. 11. Vardiman, “The Sky Has Fallen,” pp. 116, 119. 12. D.E. Rush and L. Vardiman, “Pre-flood Vapor Canopy Radiative Temperature Profiles,” *Proc. Fourth ICC*, Pittsburgh, PA, 1990, 2:231-245. 13. L. Vardiman and K. Bousselot, “Sensitivity Studies on Vapor Canopy Temperature Profiles,” *Proc. Fourth ICC*, 1998, pp. 607-618.  1. [Psalm 148:4](http://www.christiananswers.net/bible/psa148.html" \l "4) seems to speak against the canopy theory. Written after the flood, this refers to “waters above the heavens” still existing, so this cannot mean a vapor canopy that collapsed at the flood. Calvin, Leupold, Keil, and Delitzsch all wrote of “the waters above” as merely being clouds. 2. Of course, we may never arrive at a correct understanding of exactly how the flood occurred, but that does not change the fact that it did occur. 3. Austin et al., *Catastrophic Plate Tectonics*…  Further reading  * Does the Bible really claim that the Flood covered the ENTIRE Earth? [Answer](http://www.christiananswers.net/q-eden/edn-c005.html) * Could Noah's Ark have really held all the animals preserved in the Flood? [Answer](http://www.christiananswers.net/q-eden/edn-c013.html) * So where are all the fossils of pre-Flood people? [Answer](http://www.christiananswers.net/q-aig/aig-c014.html) * Origin of races—How could all human races come from Noah, his three sons and their wives? [Answer](http://www.christiananswers.net/q-aig/race-definition.html) * Has anyone really seen Noah's Ark? [Answer](http://www.christiananswers.net/q-abr/abr-a001.html) * Dinosaurs - Did Noah take them on the Ark too? [Answer](http://www.christiananswers.net/dinosaurs/j-ark1.html) * Are dinosaur fossils evidence for the great Flood? [Answer](http://www.christiananswers.net/q-eden/ednks004.html) * How many people survived the Flood catastrophe? [Answer](http://www.christiananswers.net/q-eden/ednks003.html) * Kids wordsearch puzzle [Go](http://www.christiananswers.net/kids/wrdsrch2.html)… * Kids coloring page - Noah's Ark on the water. [Go](http://www.christiananswers.net/kids/clrpg004.html)… * Outstanding Christian video available on this subject: [The World That Perished](http://www.christiananswers.net/catalog/wp-vs.html) [Read about it](http://www.christiananswers.net/catalog/wp-vs.html)…   Edited by Don Batten, Ph.D. / Authors: [Ken Ham](http://www.christiananswers.net/catalog/kenham.html), Jonathan Sarfati, and Carl Wieland, adapted from [*The Revised & Expanded Answers Book*](http://www.christiananswers.net/catalog/bk-answers.html) (Master Books, 2000). / Supplied by [Creation Ministries International](http://www.CreationOnTheWeb.org/)  [Copyright ©](http://www.christiananswers.net/copyrite.html) 1996, 1999, 2000, Creation Ministries International, All Rights Reserved - except as noted on attached [“Usage and Copyright”](http://www.christiananswers.net/copyrite.html) page that grants ChristianAnswers.Net users generous rights for putting this page to work in their homes, personal witnessing, churches and schools. 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# Where did the Flood waters go?

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| http://www.christiananswers.net/0.gif | http://www.christiananswers.net/0.gif | Earth. NASA. Courtesy of Eden Communications.  The whole earth was covered with the Flood waters, and the world that then existed was destroyed by the very waters out of which the earth had originally emerged at God's command ([Genesis 1:9](http://www.christiananswers.net/bible/gen1.html#9); [2 Peter 3:5,6](http://www.christiananswers.net/bible/2pet3.html#5)). But where did those waters go after the flood?  There are a number of Scripture passages that identify the flood waters with the present-day seas ([Amos 9:6](http://www.christiananswers.net/bible/amos9.html#6) and [Job 38:8-11](http://www.christiananswers.net/bible/job38.html#8) note “waves”). If the waters are still here, why are the highest mountains not still covered with water, as they were in [Noah's](http://www.christiananswers.net/dictionary/noah.html) day? [Psalm 104](http://www.christiananswers.net/bible/psa104.html) suggests an answer. After the waters covered the mountains (verse 6), God rebuked them and they fled (verse 7); the mountains rose, the valleys sank down (verse 8) and God set a boundary so that they will never again cover the earth (verse 9)[[1]](http://www.christiananswers.net/q-aig/aig-floodwater.html" \l "1). They are the same waters!  Isaiah gives this same statement that the waters of [Noah](http://www.christiananswers.net/dictionary/noah.html) would never again cover the earth ([Isaiah 54:9](http://www.christiananswers.net/bible/isa54.html#9)). Clearly, what the Bible is telling us is that God acted to alter the earth's topography. New continental landmasses bearing new mountain chains of folded rock strata were uplifted from below the globe-encircling waters that had eroded and leveled the pre-Flood topography, while large deep ocean [basin](http://www.christiananswers.net/dictionary/basin.html) were formed to receive and accommodate the Flood waters that then drained off the emerging continents.  [Mountains & Water](http://www.christiananswers.net/catalog/wp-vs.html)  That is why the oceans are so deep, and why there are folded mountain ranges. Indeed, if the entire earth's surface were leveled by smoothing out the topography of not only the land surface but also the rock surface on the ocean floor, the waters of the ocean would cover the earth's surface to a depth of 1.7 miles (2.7 kilometers). We need to remember that nearly 70 percent of the earth's surface is still covered by water. Quite clearly, then, the waters of Noah's Flood are in today's ocean basins. A Mechanism? The catastrophic plate tectonics model gives a mechanism for the deepening of the oceans and the rising of mountains at the end of the flood.  As the new ocean floors cooled, they would have become denser and sunk, allowing water to flow off the continents. Movement of the water off the continents and into the oceans would have weighed down the ocean floor and lightened the continents, resulting in the further sinking of the ocean floor, as well as upward movement of the continents.[[2]](http://www.christiananswers.net/q-aig/aig-floodwater.html#2) The deepening of the ocean basins and the rising of the continents would have resulted in more water running off the land.  The collision of the tectonic plates would have pushed up mountain ranges also, especially toward the end of the flood.  Mountain top (photo copyrighted, Courtesy of Eden Communications). Could the Water Cover Mt. Everest? Mount Everest is more than 5 miles (8 kilometers) high. How, then, could the flood have covered “all the high hills under the whole heaven”?  The Bible refers only to “high hills,” and the mountains today were formed only toward the end of, and *after*, the flood by collision of the tectonic plates and the associated upthrusting. In support of this, the layers that form the uppermost parts of Mount Everest are themselves composed of fossil-bearing, water-deposited layers.  This uplift of the new continental landmasses from under the Flood waters would have meant that, as the mountains rose and the valleys sank, the waters would have rapidly drained off the newly emerging land surfaces. The collapse of natural dams holding back the flood waters on the land would also have caused catastrophic flooding. Such rapid movement of large volumes of water would have caused extensive erosion and shaped the basic features of today's earth surface.  Canyons (photo copyrighted, courtesy of Eden Communications).  Thus, it is not hard to envisage the rapid carving of the landscape features that we see on the earth today, including places such as the Grand Canyon of the United States.  The present shape of Uluru (Ayers Rock), as sandstone monolith in central Australia, is the result of erosion, following tilting and uplift, of previously horizontal beds of water-laid sand. The feldspar-rich sand that makes up Uluru must have been deposited very quickly and recently. Long-distance transport of the sand would have caused the grains to be rounded and sorted, whereas they are jagged and unsorted. If they had sat accumulating slowly in a lake bed drying in the sun over eons of time, which is the story told in the geological display at the park center, the feldspar would have weathered into clay.  Ayers Rock (Uluru), Australia (photo copyrighted) (Courtesy of Eden Communications).  Likewise, if Uluru had sat in the once-humid area of central Australia for millions of years, it would have weathered to clay.[[3]](http://www.christiananswers.net/q-aig/aig-floodwater.html#3) Similarly, the nearby Kata Tjuta (the Olgas) are composed of an unsorted mixture of large boulders, sand, and mud, indicating that the material must have been transported and deposited very rapidly.  The erosion caused by receding flood waters is the reason that river valleys are far larger than the rivers now flowing in them could have carved. The water flow that carved the river valleys must have been far greater than the volume of water we see flowing in the rivers today. This is consistent with voluminous flood waters draining off the emerging land surfaces at the close of Noah's flood, and flowing into the rapidly sinking, newly prepared, deep ocean basins.  Our understanding of how the flood could have occurred is continually developing. Ideas come and go, but the fact of the flood remains. Genesis clearly testifies to it, Jesus and the apostles confirmed it, and there is abundant global geological evidence for a global watery cataclysm.  http://www.christiananswers.net/a.gifNoah's Flood—Where did all that water come from? [Answer](http://www.christiananswers.net/q-aig/aig-c010.html) Footnotes  1. The most natural translation for the beginning of [Psalm 104:8](http://www.christiananswers.net/bible/psa104.html#8) is “The mountains rose up; the valleys sank down.” See C.V.Taylor, “Did the Mountains Really Rise According to Psalm 104:8?” *CEN Technical Journal*, 1998, 12(3), p. 155. 2. The geological principle involved is *isostasy*, where the plates are “floating” on the mantle. The ocean basins are composed of denser rock than the continents, so the ocean basins sit lower in the mantle than the less dense continents with their mountains. 3. A.A. Snelling, “Uluru and Kata Tjuta: Testimony to the Flood;” *Creation*, 1998, 20(2):36-40.  Further reading  * Does the Bible really claim that the Flood covered the ENTIRE Earth? [Answer](http://www.christiananswers.net/q-eden/edn-c005.html) * Could Noah's Ark have really held all the animals preserved in the Flood? [Answer](http://www.christiananswers.net/q-eden/edn-c013.html) * Where did all that water come from? Was there a water vapor canopy? (updated & expanded) [Answer](http://www.christiananswers.net/q-aig/aig-c010.html) * How did the FISH survive? [Answer](http://www.christiananswers.net/q-aig/aig-c037.html) * How did the LAND PLANTS survive? [Answer](http://www.christiananswers.net/q-aig/aig-c019.html) * So where are all the fossils of pre-Flood people? [Answer](http://www.christiananswers.net/q-aig/aig-c014.html) * Origin of races—How could all human races come from Noah, his three sons and their wives? [Answer](http://www.christiananswers.net/q-aig/race-definition.html) * Has anyone really seen Noah's Ark? [Answer](http://www.christiananswers.net/q-abr/abr-a001.html) * Dinosaurs—Did Noah take them on the Ark too? [Answer](http://www.christiananswers.net/dinosaurs/j-ark1.html) * Are dinosaur fossils evidence for the great Flood? [Answer](http://www.christiananswers.net/q-eden/ednks004.html) * How many people survived the Flood catastrophe? [Answer](http://www.christiananswers.net/q-eden/ednks003.html)] * Kids wordsearch puzzle - [Go](http://www.christiananswers.net/kids/wrdsrch2.html) * Kids coloring page - Noah's Ark on the water - [Go](http://www.christiananswers.net/kids/clrpg004.html) * Outstanding Christian video available on this subject: [The World That Perished](http://www.christiananswers.net/catalog/wp-vs.html) [[Read about it](http://www.christiananswers.net/catalog/wp-vs.html)]   [ If this information has been helpful, please prayerfully consider a [donation](http://www.christiananswers.net/eden/donate.html) to help pay the expenses for making this faith-building service available to you and your family! Donations are tax-deductible. ]  Edited by Don Batten, Ph.D. / Authors: [Ken Ham](http://www.christiananswers.net/catalog/kenham.html), Jonathan Sarfati, and [Carl Wieland](http://www.christiananswers.net/creation/people/wieland-c.html), adapted from [*The Revised & Expanded Answers Book*](http://www.christiananswers.net/catalog/bk-answers.html) (Master Books, 2000). / Photographs: [Eden Communications](http://www.christiananswers.net/eden/home.html).  [Copyright ©](http://www.christiananswers.net/copyrite.html) 1996, 1999, 2000, [Creation Ministries International](http://www.CreationOnTheWeb.org/), All Rights Reserved - except as noted on attached [“Usage and Copyright”](http://www.christiananswers.net/copyrite.html) page that grants ChristianAnswers.Net users generous rights for putting this page to work in their homes, personal witnessing, churches and schools. Illustrations and layout copyright, 1999, 2000, [Eden Communications](http://www.christiananswers.net/eden/home.html) |

# Does the Bible really claim that the Flood covered the ENTIRE Earth?

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| http://www.christiananswers.net/0.gif | http://www.christiananswers.net/0.gif | See this page in: [Indonesian (Bahasa Indonesia)](http://www.christiananswers.net/indonesian/q-eden/edn-c005i.html), [Dutch (Nederlands)](http://www.christiananswers.net/dutch/q-eden/edn-c005-nl.html), [French (Français)](http://www.christiananswers.net/french/q-eden/edn-c005f.html), [Japanese - 日本語](http://www.christiananswers.net/japanese/q-eden/edn-c005j.html), [Portuguese (Português)](http://www.christiananswers.net/portuguese/q-eden/edn-c005-pt.html), [Spanish (Español)](http://www.christiananswers.net/spanish/q-eden/edn-c005s.html)  [Noah's Ark. Copyrighted by Eden Communications.](http://www.christiananswers.net/catalog/wp-vs.html) Nine Biblical Evidences that the Flood was Global Some evangelical teachers today are claiming that Noah's flood did not cover the entire Earth nor all the mountains of the day. Further, they claim that Noah and the animals floated on a shallow, temporary inland sea caused by the flood, somehow covering only the Mesopotamian region. Thus, they must claim that the Earth's entire human population was limited to this area, or that not all humans were killed in the flood. Is there really biblical evidence for claims of this nature?   1. **All The Mountains Were Covered.** The tops of all the high mountains under the entire heavens were at least 20 feet beneath the waters surface ([Genesis 7:19-20](http://www.christiananswers.net/bible/gen7.html#19)). It would be absurd to think that a flood covering the highest mountains of the Middle East would not affect the rest of the world. In addition, the waters remained at this awesome, mountain-covering height for five months! (Genesis [7:18-24](http://www.christiananswers.net/bible/gen7.html#18), [8:1-5](http://www.christiananswers.net/bible/gen8.html#1)). 2. **The Ark Was Huge.** The ark was necessary to prevent the extinction of humans and animals. If the Flood were merely local, God could have sent them to a safer part of the world. God warned Noah about the Flood 120 years prior to its start. Surely, Noah and his family could have traveled a great distance in that time. Also, if the Flood was local, the ark was [unnecessarily large](http://www.christiananswers.net/q-eden/edn-c013.html). Until the first metal ships were constructed in modern times, the ark was the largest ship ever built. It was [big enough](http://www.christiananswers.net/q-eden/edn-c013.html) to house representative pairs of every created-kind of air-breathing, land animal on Earth. 3. **Humans Populated The Entire World.** After more than 1600 years of habitation on Earth, the planet's population was surely large (millions or billions). The Bible confirms that (a) Man had multiplied upon the face of the Earth ([Genesis 6:1](http://www.christiananswers.net/bible/gen6.html#1)), (b) Violence and corruption filled the Earth ([Genesis 6:11-12](http://www.christiananswers.net/bible/gen6.html#11)). The Bible is clear that man could not have existed only in the Mesopotamian region - a region too small to support such a large population, especially considering the natural dispersion affect of a violent society. 4. **All Humans Were Killed.** The Bible clearly teaches that all flesh died…every man ([Genesis 7:21](http://www.christiananswers.net/bible/gen7.html#21)). [Genesis 9:1](http://www.christiananswers.net/bible/gen9.html#1) confirms that only Noah's family was saved and that every person living today is descended from his family. 5. **All Air-Breathing, Land Animals Killed.** The world's entire population of air-breathing, land animals died, except those taken into the ark ([Genesis 7:21](http://www.christiananswers.net/bible/gen7.html#21)) - “everything on Earth” ([Genesis 6:17](http://www.christiananswers.net/bible/gen6.html#17)) - "all [living creatures](http://www.christiananswers.net/dictionary/livingcreatures.html) of every kind on the Earth" ([Genesis 9:16](http://www.christiananswers.net/bible/gen9.html#16)). If only those animals in a specific geographic location died, it would seem unnecessary for God to protect pairs in the ark for the express purpose of preventing their extinction. Surely there would be representatives of their kinds in other areas. If, on the other hand, there were some unique kinds of animals in the local flood's path, then it would seem more logical for God to send representative pairs out of the area, rather than to the ark, as He did. The Bible is clear that all the air-breathing, land animals perished during the flood, except those preserved with Noah - from which all modern animals are descended. 6. **A “Cataclysm,” Not A Mere Flood.** Both Hebrew (Old Testament) and Greek (New Testament) use words to describe Noah's flood which are different than the ordinary words for flood. In this way, Noah's flood was represented as a totally unique occurrence. [Hebrew / “Mabbool” - Greek / “Kataklusmos” (cataclysm)]. 7. **God's Rainbow Promise.** God promised never again to send a global flood (Genesis [8:21](http://www.christiananswers.net/bible/gen8.html#21), [9:8-17](http://www.christiananswers.net/bible/gen9.html#8)). This promise is demonstrated by the symbol of the rainbow, a sign for God's promise to all the Earth. The rainbow is a sign to every living creature, mankind and animals. If this promise was not made to all creatures on Earth, then God has broken His promise. Local floods have repeatedly killed hundreds and even thousands of humans and animals since Noah's time. 8. **Why Stay In The Ark A Year?!** Noah was in the ark for more than a year, not just 40 days ([Genesis 8:14](http://www.christiananswers.net/bible/gen8.html#14)). 53 weeks is absurdly long to stay in the ark for a local flood since dry land would have been just over the horizon. After the flood waters had been going down for 4 months, the dove could still find no suitable ground ([Genesis 8:9](http://www.christiananswers.net/bible/gen8.html#9)). This does not seem to fit the circumstances for a local flood in which the dove could fly to dry land. However, these situations are consistent if the Flood was global. 9. **The Whole Earth Was Devastated.** God said, "I am surely going to destroy both them (the people) and the Earth" ([Genesis 6:13b](http://www.christiananswers.net/bible/gen6.html#13)). The global extent of the Flood is referred to more than 30 times in Genesis 6-9 alone! In [Isaiah 54:9](http://www.christiananswers.net/bible/isa54.html#9), God states, "I swore that the waters of Noah would never again cover the Earth." Peter delivered a clear global warning, confirming that God created the Earth, devastated it by the Flood, and will one day destroy it again by fire ([2 Peter 3:5-7](http://www.christiananswers.net/bible/2pet3.html#5)). Peter certainly did not mean that just a local area on Earth would be burned. Just as the Flood was global, so will be [the final judgment](http://www.christiananswers.net/dictionary/judgmentthefinal.html).   The Bible specifically teaches that the Flood of Noah's time was global in extent and that all air-breathing, land animals and all humans were killed, except those saved in the Ark. How could the Bible be any more clear concerning the global nature of the Flood?! Or, if this was actually a local flood, how could the Bible have been any more misleading about its extent?! Related information  * Is the Black Sea Flood the Flood of Genesis? [Answer](http://www.christiananswers.net/q-crs/crs-blacksea.html) * How could all the world's animals fit on the Ark? [Answer](http://www.christiananswers.net/q-eden/edn-c013.html) * Where did all that water come from? Was there a water vapor canopy? (updated & expanded) [Answer](http://www.christiananswers.net/q-aig/aig-c010.html) * Where did all the water go after the Flood? How was Mount Everest covered by the Flood? [Answer](http://www.christiananswers.net/q-aig/aig-floodwater.html) * How did the FISH survive? [Answer](http://www.christiananswers.net/q-aig/aig-c037.html) * How did the LAND PLANTS survive? [Answer](http://www.christiananswers.net/q-aig/aig-c019.html) * So where are all the fossils of pre-Flood people? [Answer](http://www.christiananswers.net/q-aig/aig-c014.html) * Origin of races—How could all human races come from Noah, his three sons and their wives? [Answer](http://www.christiananswers.net/q-aig/race-definition.html) * Dinosaurs - Did Noah take them on the Ark too? [Answer](http://www.christiananswers.net/dinosaurs/j-ark1.html) * Are dinosaur fossils evidence for the great Flood? [Answer](http://www.christiananswers.net/q-eden/ednks004.html) * How many people survived the Flood catastrophe? [Answer](http://www.christiananswers.net/q-eden/ednks003.html) * Has anyone really seen Noah's Ark? [Answer](http://www.christiananswers.net/q-abr/abr-a001.html) * Kids wordsearch puzzle [[Go](http://www.christiananswers.net/kids/wrdsrch2.html)] * Kids coloring page - Noah's Ark on the water - [Go](http://www.christiananswers.net/kids/clrpg004.html) * Outstanding Christian video available on this subject: [The World That Perished](http://www.christiananswers.net/catalog/wp-vs.html) [Read about it](http://www.christiananswers.net/catalog/wp-vs.html)   Authors: Mark Van Bebber and Paul S. Taylor of [Eden Communications](http://www.christiananswers.net/eden/home.html)  This page is located at: http://www.christiananswers.net/q-eden/edn-c005.html  [Copyright ©](http://www.christiananswers.net/copyrite.html) 1995, 1999, Eden Communications, All Rights Reserved - except as noted on attached [“Usage and Copyright”](http://www.christiananswers.net/copyrite.html) page that grants ChristianAnswers.Net users generous rights for putting this page to work in their homes, personal witnessing, churches and schools. |

# Could Noah's Ark really hold all the animals that were supposed to be preserved from Flood?

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| http://www.christiananswers.net/0.gif | http://www.christiananswers.net/0.gif | See this page in: [Hungarian (magyar)](http://www.christiananswers.net/hungarian/q-eden/edn-c013h.html), [Japanese - 日本語](http://www.christiananswers.net/japanese/q-eden/edn-c013j.html), [Spanish (Español)](http://www.christiananswers.net/spanish/q-eden/edn-c013s.html)  [Noah's Ark as shown in The World That Perished. Copyright, Eden Communications.](http://www.christiananswers.net/catalog/wp-vs.html)A growing number of scientists believe that geological evidence indicates our world has undergone a catastrophic flood. This is causing them to question whether or not the biblical account of Noah's ark could be true. Many people are rereading the Biblical description of the Ark to ascertain the feasibility of such a vessel to fulfill its designated purpose in light of present day knowledge of both zoology and our present day knowledge of shipbuilding.  Noah's Ark size comparison to house. Illustration copyrighted, Eden Communications.  Size comparison between average size one-story home and Noah's Ark. Illustration from [The World that Perished](http://www.christiananswers.net/catalog/wp-vs.html). How big was Noah's Ark? "And God said unto [Noah](http://www.christiananswers.net/dictionary/noah.html)… Make [thee](http://www.christiananswers.net/dictionary/thee.html) an ark of [gopher](http://www.christiananswers.net/dictionary/gopher.html) wood; rooms shalt though make in the ark, and thou shalt pitch it within and without with pitch. And this is the fashion which thou shalt make it of… the length of the ark shall be three hundred [cubits](http://www.christiananswers.net/dictionary/cubit.html), the breadth of it fifty cubits, and the height of it thirty cubits. A window shalt thou make in the ark, and in a cubit shalt thou finish it above; and the door of the ark shalt thou set in the side therof; with lower, second, and third stories shalt thou make it." ([Gen. 6:14-16](http://www.christiananswers.net/bible/gen6.html#14))  [Cubit measurement. Photo copyrighted, Eden Communications.](http://www.christiananswers.net/catalog/wp-vs.html)  A cubit is the distance between an adult's elbow and tip of the finger, no less than 18-inches [45.72 centimeters]. (Scene from [The World that Perished](http://www.christiananswers.net/catalog/wp-vs.html).)  Most Hebrew scholars believe the cubit to have been no less than 18 inches long [45.72 centimeters]. This means that the ark would have been at least 450 feet long [137.16 meters], 75 feet wide [22.86 meters] and 45 feet high [13.716000000000001 meters]. [Noah's](http://www.christiananswers.net/dictionary/noah.html) Ark was said to have been the largest sea-going vessel ever built until the late nineteenth century when giant metal ships were first constructed. Its length to width ratio of six to one provided excellent stability on the high seas. In fact, modern shipbuilders say it would have been almost impossible to turn over. In every way, it was admirably suited for riding out the tremendous storms in the year of the flood.  These dimensions are especially interesting when compared to those given in the mythical, Babylonian account of the Ark. Here the ark is described as a perfect cube, extending 120 [cubits](http://www.christiananswers.net/dictionary/cubit.html) in all directions and with nine decks. Such a vessel would spin slowly round and round in the water and from the standpoint of stability, would be a disaster. Was the ark big enough to hold the number of animals required? The total available floor space on the ark would have been over 100,000 square feet, which would be more floor space than in 20 standard-sized basketball courts.  [Railroad stock cars. Copyrighted, Eden Communications.](http://www.christiananswers.net/catalog/wp-vs.html)  Assuming an 18-inch [cubit](http://www.christiananswers.net/dictionary/cubit.html) [45.72 centimeters], Noah's Ark would have had a cubic volume equal to 569 modern railroad stock cars.  The total cubic volume would have been 1,518,000 cubic feet [462,686.4 cubic meters] --that would be equal to the capacity of 569 modern railroad stock cars.  Now comes the question, how many land dwelling air breathing animals would have had to be taken aboard the ark to survive the flood?  According to Ernest Mayr, America's leading taxonomist, there are over 1 million species of animals in the world.  [Undersea. Photo copyrighted, Eden Communications.](http://www.christiananswers.net/catalog/wp-vs.html)  God only provided the Ark for the protection of humans and land-dwelling, air-breathing creatures. A huge number of animals would not need to be taken aboard the Ark because they are water dwellers. Representatives would be expected to survive the catastrophe. With God's protection against extinction during the Deluge, survival would have been assured. (Scene from [The World that Perished](http://www.christiananswers.net/catalog/wp-vs.html), a Christian motion picture about the Flood)  However, the vast majority of these are capable of surviving in water and would not need to be brought aboard the ark. Noah need make no provision for the 21,000 species of fish or the 1,700 tunicates (marine chordates like sea squirts) found throughout the seas of the world, or the 600 echinoderms including star fish and sea urchins, or the 107,000 mollusks such as mussels, clams and oysters, or the 10,000 coelenterates like corals and sea anemones, jelly fish and hydroids or the 5,000 species of sponges, or the 30,000 protozoans, the microscopic single-celled creatures.  In addition, some of the mammals are aquatic. For example, the whales, seals and porpoises. The amphibians need not all have been included, nor all the reptiles, such as sea turtles, and alligators. Moreover, a large number of the arthropods numbering 838,000 species, such as lobsters, shrimp, crabs and water fleas and barnacles are marine creatures. And the insect species among arthropoda are usually very small. Also, many of the 35,000 species of worms as well as many of the insects could have survived outside the Ark. How many animals needed to be brought aboard? Doctors Morris and Whitcomb in their classic book,*The Genesis Flood* state that no more than 35,000 individual animals needed to go on the ark. In his well documented book, *Noah's Ark: A Feasibility Study*, John Woodmorappe suggests that far fewer animals would have been transported upon the ark. By pointing out that the word “specie” is not equivalent to the “created kinds” of the Genesis account, Woodmorappe credibly demonstrates that as few as 2,000 animals may have been required on the ark. To pad this number for error, he continues his study by showing that the ark could easily accommodate 16,000 animals.)  [Noah's Ark. Copyrighted, Eden Communications.](http://www.christiananswers.net/catalog/wp-vs.html)But, let's be generous and add on a reasonable number to include extinct animals. Then add on some more to satisfy even the most skeptical. Let's assume 50,000 animals, far more animals than required, were on board the ark, and these need not have been the largest or even adult specimens.  Remember there are really only a few very large animals, such as the [dinosaur](http://www.christiananswers.net/dinosaurs/j-ark1.html) or the elephant, and these could be represented by young ones. Assuming the average animal to be about the size of a sheep and using a railroad car for comparison, we note that the average double-deck stock car can accommodate 240 sheep. Thus, three trains hauling 69 cars each would have ample space to carry the 50,000 animals, filling only 37% of the ark. This would leave an additional 361 cars or enough to make 5 trains of 72 cars each to carry all of the food and baggage plus Noah's family of eight people. The Ark had plenty of space.  The bigger problem would have been the construction of the Ark. But the Bible indicates that Noah did this under Divine guidance and there is no reason to believe he did not hire additional workmen. How were the animals gathered? Another enormous problem some have posed is the problem of gathering specimens of each kind of air-breathing land animal and bringing them aboard the Ark. However, the Genesis account indicates that God gathered the animals and brought them to Noah inside the ark two by two. Some have suggested this may have involved the origin of animal migratory instincts or, at least, an intensification of it. We also know that most animals possess the ability to sense danger and to move to a place of safety. How could Noah's family take care of all those animals? [Noah with the animals. Copyrighted, Eden Communications.](http://www.christiananswers.net/catalog/wp-vs.html)  Noah with the animals, as depicted in the motion picture, [The World that Perished](http://www.christiananswers.net/catalog/wp-vs.html).  Once aboard, many have suggested that Noah's problems really began, with only 8 people to feed and water, to provide fresh air and sanitation for the huge menagerie of animals for a total of 371 days. However, a number of scientists have suggested that the animals may have gone into a type of dormancy. It has been said that in nearly all groups of animals there is at least an indication of a latent ability to hibernate or aestivate. Perhaps these abilities were supernaturally intensified during this period. With their bodily functions reduced to a minimum, the burden of their care would have been greatly lightened. Conclusion It is evident, when all the facts are examined that there is no scientific evidence that the biblical account of Noah's ark is a myth or fable. The facts support the view that Noah's ark was large enough to carry the number of animals required to repopulate the earth after the flood and that Noah and his family were capable of caring for the animals during their time on the Ark.  The [flood](http://www.christiananswers.net/dictionary/deluge.html) of [Noah's](http://www.christiananswers.net/dictionary/noah.html) day was a universal [judgment](http://www.christiananswers.net/dictionary/judgmentsofgod.html) of [sin](http://www.christiananswers.net/dictionary/sin.html). God destroyed the world that existed at that time because of their wickedness. When we look at nature, with its testimonies to the flood, we are viewing a reminder that God does judge sin. It is also a reminder that God will [save](http://www.christiananswers.net/dictionary/salvation.html) those who have [faith](http://www.christiananswers.net/dictionary/faith.html) in Him from [judgment](http://www.christiananswers.net/dictionary/judgmentthefinal.html). God [promised](http://www.christiananswers.net/dictionary/rainbow.html) that He would never again destroy the world with water, but that a future judgment would take place. [Jesus Christ](http://www.christiananswers.net/gospel/home.html) came into the world to die for our sins and to restore man's relationship with God, so that we need not fear [His judgment](http://www.christiananswers.net/dictionary/judgmentthefinal.html).  Noah pleaded with the people of his day to have faith in God. They would not listen and the door to the ark was closed. Now, Christ is calling unto the world to once again have faith in God. Will you answer His calling and be saved from future judgment? [The decision is yours.](http://www.christiananswers.net/godstory/prayer1.html) Related information  * Dinosaurs - Did Noah take them on the Ark, too? [[answer](http://www.christiananswers.net/dinosaurs/j-ark1.html)]  |  | | --- | | **More Information** | | [Creation SuperLibrary.com](http://www.christiananswers.net/creation/home.html)  [Visit the Catastrophe index](http://www.christiananswers.net/creation/menu-catastrophe.html) in our [Creation SuperLibrary](http://www.christiananswers.net/creation/home.html) for much more information about the biblical Flood.  [The Great Dinosaur Mystery On-line](http://www.christiananswers.net/dinosaurs/home.html)  Learn about [DINOSAURS and the Flood](http://www.christiananswers.net/dinosaurs/j-extinct1.html) in our [Great Dinosaur Mystery](http://www.christiananswers.net/dinosaurs/home.html) section |  * Are dinosaur fossils evidence for the great Flood? [Answer](http://www.christiananswers.net/q-eden/ednks004.html) * How did FISH (freshwater and saltwater) survive the Flood? [Answer](http://www.christiananswers.net/q-aig/aig-c037.html) * How did land plants survive the Genesis Flood? [Answer](http://www.christiananswers.net/q-aig/aig-c019.html) * The water—Where did it come from? And where did it all go after the Flood? [Answer](http://www.christiananswers.net/q-aig/aig-c010.html) * How many people survived the Flood catastrophe? [Answer](http://www.christiananswers.net/q-eden/ednks003.html) * Origin of races—How could all human races come from Noah, his three sons and their wives? [answer](http://www.christiananswers.net/q-aig/race-definition.html) * Does the Bible really claim that the Flood covered the ENTIRE Earth? [Answer](http://www.christiananswers.net/q-eden/edn-c005.html) * Has anyone really seen Noah's Ark? [answer](http://www.christiananswers.net/q-abr/abr-a001.html) * So where are all the fossils of pre-Flood people? [Answer](http://www.christiananswers.net/q-aig/aig-c014.html) * Kids wordsearch puzzle [Go](http://www.christiananswers.net/kids/wrdsrch2.html) * Kids coloring page - Noah's Ark on the water [Go](http://www.christiananswers.net/kids/clrpg004.html) * Outstanding Christian video available on this subject: [The World That Perished](http://www.christiananswers.net/catalog/wp-vs.html) [[Read about it](http://www.christiananswers.net/catalog/wp-vs.html)]   This page (christiananswers.net/q-eden/edn-c013.html) has been selected as an “APPROVED SITE” that "provides excellent educational value" for students. WebPathExpress (Follett Software Company), an educational Internet service.  [ If this information has been helpful, please prayerfully consider a [donation](http://www.christiananswers.net/eden/donate.html) to help pay the expenses for making this faith-building service available to you and your family! Donations are tax-deductible. ]  Authors: Stanley E. Taylor and Paul S. Taylor, adapted from from their motion picture [*The World That Perished*](http://www.christiananswers.net/catalog/wp-vs.html), produced and distributed by [Eden Communications](http://www.christiananswers.net/eden/home.html).  This page is located at: http://www.christiananswers.net/q-eden/edn-c013.html  [Copyright ©](http://www.christiananswers.net/copyrite.html) 1997, 1999, 2002, Eden Communications, All Rights Reserved - except as noted on attached [“Usage and Copyright”](http://www.christiananswers.net/copyrite.html) page that grants ChristianAnswers.Net users generous rights for putting this page to work in their homes, personal witnessing, churches and schools.  Top of Form  [[Click Here](http://christiananswers.net/catalog/wp-vs.html)The World That Perished](http://christiananswers.net/catalog/wp-vs.html) DVD  by Films for Christ / Eden Communications  All about Noah’s Ark and the Flood - This award-winning documentary film answers the questions of skeptics. Discover scientific and cultural evidence in support of the Bible’s cataclysmic flood that once covered our entire planet and continues to effect our lives today!  [[More Details](http://christiananswers.net/catalog/wp-vs.html)]     US$1999  Bottom of Form |

How did animals get from the Ark to isolated places, such as Australia?

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| http://www.christiananswers.net/0.gif | http://www.christiananswers.net/0.gif | See this page in: [Dutch (Nederlands)](http://www.christiananswers.net/dutch/q-aig/aig-c006-nl.html)   |  |  | | --- | --- | | http://www.christiananswers.net/0.gif | Photo copyrighted, Eden Communications/Films for Christ. Special effects reconstruction of Noah's Ark, from the motion picture ["The World That Perished"](http://www.christiananswers.net/catalog/wp-vs.html) |   Let us begin by reaffirming that God's Word does indeed reveal, in the plainest possible terms, that the [whole globe](http://www.christiananswers.net/q-eden/edn-c005.html) was inundated with a violent, watery cataclysm—Noah's flood. All land-dwelling, air-breathing creatures not on the ark perished and the world was re-populated by those surviving on the ark.    How Did the Animals Get to the Ark?  Skeptics paint a picture of [Noah](http://www.christiananswers.net/dictionary/noah.html) going to countries remote from the Middle East to gather animals such as kangaroos and koalas from Australia, and kiwis from New Zealand. However, the Bible states that the animals came to Noah; he did not have to round them up ([Genesis 6:20](http://www.christiananswers.net/bible/gen6.html#20)). *God* apparently caused the animals to come to [Noah](http://www.christiananswers.net/dictionary/noah.html). The Bible does not state how this was done.  We also do not know what the geography of the world was like before the flood. If there was only one continent at that time, then questions of getting animals from remote regions to the ark are not relevant.  Animal Distribution After the Flood  There are severe practical limitations on our attempts to understand the hows and whys of something that happened once, was not recorded in detail, and cannot be repeated.  Difficulties in our ability to explain every single situation in detail result from our limited understanding. We cannot go back in a time machine to check what has happened, and our mental reconstructions of what the world was like after the flood will inevitably be deficient. Because of this, the patterns of post-flood animal migration present some problems and research challenges for the biblical creation model. However, there are clues from various sources which suggest answers to the questions.  Clues from Modern Times  When Krakatoa erupted in 1883, the island remnant remained lifeless for some years, but was eventually colonized by a surprising variety of creatures, including not only insects and earthworms, but [birds](http://www.christiananswers.net/dictionary/bird.html), lizards, snakes and even a few mammals. One would not have expected some of this surprising array of creatures to have crossed the ocean, but they obviously did. Even though these were mostly smaller than some of the creatures we will discuss here, it illustrates the limits of our imaginings on such things.  Land Bridges   |  |  | | --- | --- | | http://www.christiananswers.net/0.gif | Map of Australia. Copyrighted. Courtesy of Eden Communications. |   Evolutionists acknowledge that men and animals could once freely cross the Bering Strait, which separates Asia and the Americas.[[1]](http://www.christiananswers.net/q-aig/aig-c006.html#1) Before the idea of continental drift became popular, evolutionists depended entirely upon a lowering of the sea level during an ice age (which locked up water in the ice) to create land bridges, enabling dry-land passage from Europe most of the way to Australasia, for example.  The existence of some deep-water stretches along the route to Australia is still consistent with this explanation. Evolutionist geologists themselves believe there have been major tectonic upheavals, accompanied by substantial rising and falling of sea floors, in the time period which they associate with an ice age. For instance, parts of California are believed to have been raised many thousands of feet from what was the sea floor during this ice age period, which they call “Pleistocene” (one of the most recent of the supposed geological periods). creationist geologists generally regard Pleistocene sediments as post-flood, the period in which these major migrations took place.  In the same way, other dry-land areas, including parts of these land bridges, subsided to become submerged at around the same time.[[2]](http://www.christiananswers.net/q-aig/aig-c006.html#2)  There is a widespread, but mistaken, belief that marsupials are found only in Australia, thus supporting the idea that they must have evolved there. However, living marsupials, opossums, are found also in North and South America, and fossil marsupials have been found on every continent. Likewise, monotremes were once thought to be unique to Australia, but the discovery in 1991 of a fossil platypus tooth in South America stunned the scientific community.[[3]](http://www.christiananswers.net/q-aig/aig-c006.html#3) Therefore, since evolutionists believe all organisms came from a common ancestor, migration between Australia and other areas must be conceded as possible by all scientists, whether evolutionist or creationist.  Creationists generally believe there was only one Ice Age after, and as a consequence of, the flood. The lowered sea level at this time made it possible for animals to migrate over land bridges for centuries. Some creationists propose a form of continental break-up after the flood, in the days of Peleg. This again would mean several centuries for animals to disperse, in this instance without the necessity of land-bridges. However, continental break-up in the time of Peleg is not widely accepted in creationist circles.  Did the Kangaroo Hop All the Way to Australia?  How did animals make the long journey from the [Ararat](http://www.christiananswers.net/dictionary/ararat.html) region? Even though there have been isolated reports of individual animals making startling journeys of hundreds of miles, such abilities are not even necessary. Early settlers released a very small number of rabbits in Australia. Wild rabbits are now found at the very opposite corner (in fact, every corner) of this vast continent. Does that mean that an individual rabbit had to be capable of crossing the whole of Australia? Of course not. Creation speakers are sometimes asked mockingly, "Did the kangaroo hop all the way to Australia?" We see by the rabbit example that this is a somewhat foolish question.  KangarooPopulations of animals may have had centuries to migrate, relatively slowly, over many generations. Incidentally, the opposite question (also common), as to whether the two kangaroos hopped all the way *from* Australia to the ark, is also easily answered. The continents we now have, with their load of flood-deposited sedimentary rock, are not the same as whatever continent or continents there may have been in the pre-flood world.  We also lack information as to how animals were distributed before the flood. Kangaroos (as is true for any other creature) may not have been on any isolated landmass. [Genesis 1:9](http://www.christiananswers.net/bible/gen1.html#9) suggests that there may have been only one landmass. ("Let the waters under the heavens be gathered together into one place, and let the dry *land* appear.") For all we know, kangaroos might have been feeding within a stone's throw of Noah while he was building the Ark.  It may be asked, if creatures were migrating to Australia over a long time (which journey would have included such places as indonesia, presumably) why do we not find their fossils en route in such countries?  Fossilization is a rare event, requiring, as a rule, sudden burial (as in the flood) to prevent decomposition. Lions lived in israel until relatively recently. We don't find lion fossils in Israel, yet this doesn't prevent us believing the many historical reports of their presence. The millions of bison that once roamed the United States of America have left virtually no fossils. So why should it be a surprise that small populations, presumably under migration pressure from competitors and/or predators, and thus living in only one area for a few generations at most, should leave no fossils?  Unique Organisms  Another issue is why certain animals (and plants) are uniquely found in only one place. Why is species x found only in madagascar and species y only in the Seychelles? Many times, questions on this are phrased to indicate that the questioner believes that this means that species y headed only in that one direction, and never migrated anywhere else. While that is possible, it is not necessarily the case at all. All that the present situation indicates is that these are now the only places where x or y *still survive*.  The ancestors of present-day kangaroos may have established daughter populations in different parts of the world, most of which subsequently became extinct. Perhaps those marsupials only survived in Australia because they migrated there ahead of the placental mammals (we are not suggesting anything other than “random” processes in choice of destination), and were subsequently isolated from the placentals, and so protected from competition and predation.  Palm Valley in central Australia is host to a unique species of palm, *Livingstonia mariae*, found nowhere else in the world. Does this necessarily mean that the seeds for this species floated only to this one little spot? Not at all. Current models of post-flood climate indicate that the world is much drier now than it was in the early post-flood centuries. Evolutionists themselves agree that in recent times (by evolutionary standards), the sahara was lush and green, and central Australia had a moist, tropical climate. For all we know, the Livingstonia mariae palm may have been widespread over much of Australia, perhaps even in other places which are now dry, such as parts of Africa.  The palm has survived in Palm Valley because there it happens to be protected from the drying out which affected the rest of its vast central Australian surroundings. Everywhere else, it died out.  Incidentally, this concept of changing vegetation with changing climate should be kept in mind when considering post-flood animal migration—especially because of the objections (and caricatures) which may be presented. For instance, how could creatures that today need a rain forest environment trudge across thousands of miles of parched desert on the way to where they now live? The answer is that it wasn't desert then!  The Koala and Other Specialized Types   |  |  | | --- | --- | | http://www.christiananswers.net/0.gif | Koalas in Australia. Copyrighted: Paul S. Taylor (Eden Comm.) Koalas in a tree in Australia. |   Some problems are more difficult to solve. For instance, there are creatures that require special conditions or a very specialized diet, such as the giant panda of China or Australia's koala. We don't know, of course, that bamboo shoots or blue gum leaves[[4]](http://www.christiananswers.net/q-aig/aig-c006.html#4) were not then flourishing all along their eventual respective migratory paths. In fact, this may have influenced the direction they took.  But, in any case, there is another possibility. A need for unique or special conditions to survive may be a result of specialization, a downhill change in some populations. That is, it may result from a loss in genetic information, from thinning out of the gene pool or by degenerative mutation. A good example is the many modern breeds of dog, selected by man (although natural conditions can do likewise), which are much less hardy in the wild than their “mongrel” ancestors. For example, the St. Bernard carries a mutational defect, an overactive thyroid, which means it needs to live in a cold environment to avoid overheating.  This suggests that the ancestors of such creatures, when they came off the Ark, were not as specialized. Thus they were more hardy than their descendants, who carry only a portion of that original gene pool of information.[[5]](http://www.christiananswers.net/q-aig/aig-c006.html#5) In other words, the koala's ancestor may have been able to survive on a much greater range of vegetation. Such an explanation has been made possible only with modern biological insights. Perhaps as knowledge increases some of the remaining difficulties will become less so.  Such changes do not require large time periods for animals under migratory pressure. The first small population that formed would tend to break up rapidly into daughter populations, going in different directions, each carrying only a portion of the gene pool of the original pair that came off the ark.  Sometimes all of a population will eventually become extinct; sometimes all but one specialized type. Where all the sub-types survive and proliferate, we find some of the tremendous diversity seen among some groups of creatures which are apparently derived from one created kind. This explains why some very obviously related species are found far apart from each other.  The sloth, a very slow-moving creature, may seem to require much more time than Scripture allows to make the journey from [Ararat](http://www.christiananswers.net/dictionary/ararat.html) to its present home. Perhaps its present condition is also explicable by a similar evolutionary process. However, to account for today's animal distribution, evolutionists themselves have had to propose that certain primates have traveled across hundreds of miles of open ocean on huge rafts of matted vegetation torn off in storms.[[6]](http://www.christiananswers.net/q-aig/aig-c006.html#6) Indeed, iguanas have recently been documented traveling hundreds of miles in this manner between islands in the caribbean.[[7]](http://www.christiananswers.net/q-aig/aig-c006.html#7)  The Bible suggests a pattern of post-flood dispersal of animals and humans that accounts for fossil distribution of apes and humans, for example. In post-flood deposits in Africa, ape fossils are found below human fossils. Evolutionists claim that this arose because humans evolved from the apes, but there is another explanation. Animals, including apes, would have begun spreading out over the earth straight after the flood, whereas the Bible indicates that people refused to do this (Genesis [9:1](http://www.christiananswers.net/bible/gen9.html#1), [11:1-9](http://www.christiananswers.net/bible/gen11.html#1)). Human dispersal did not start until Babel, some hundreds of years after the flood. Such a delay would have meant that some ape fossils would be found consistently below human fossils, since people would have arrived in Africa after the apes.[[8]](http://www.christiananswers.net/q-aig/aig-c006.html#8)  We may never know the exact answer to every one of such questions, but certainly one can see that the problems are far less formidable than they may at first appear.[[9]](http://www.christiananswers.net/q-aig/aig-c006.html#9) Coupled with all the biblical, geological, and anthropological evidence for noah's flood, one is justified in regarding the [Genesis](http://www.christiananswers.net/bible/gen1.html) account of the animals dispersing from a central point as perfectly reasonable.[[10]](http://www.christiananswers.net/q-aig/aig-c006.html#10) Not only that, but the biblical model provides an excellent framework for the scientific study of these questions.   |  | | --- | | [Click to read](http://www.christiananswers.net/q-aig/aig-kangaroos.html) |   **KANGAROOS** - Where do they come from? Why the pouch? Why do they hop? Did they evolve from some other animal? [Answer](http://www.christiananswers.net/q-aig/aig-kangaroos.html)  Footnotes   1. S.A. Elias, S.K. Short, C.H. Nelson, and H.H. Birks, "Life and Times of the Bering Land Bridge," *Nature*, 1996, 382:60-63. 2. Note that the region around the north of Australia to Southeast asia is a tectonically active part of the world. 3. Anon., "Platypus Tooth Bites Hard into Long-held Beliefs," *Creation*, 1992, 14(1):13, based on an article in *New Scientist*, August 24, 1991. A platypus is a monotreme (an egg-laying mammal). 4. Actually, the koala can eat other types of gum leaves. Australia has around 500 species of eucalypt (gum) trees. Koalas eat the leaves of about 20 species, with the blue gum a favorite. Recent work has shown that the koala's insistence on eucalypt is actually an *addiction* to certain chemicals in the leaf which it first eats in the mother's milk. Bottle-raised koalas can survive on a non-eucalypt diet (see *CEN Technical Journal* 8(2):126). Also, the giant panda, which normally only eats bamboo shoots, has been known to eat small animals occasionally. 5. See [Origin of Races](http://www.christiananswers.net/q-aig/race-definition.html) for an example of the way in which a very light-skinned “race” deriving from a mid-brown one is missing some of the information in the parent population. 6. Anon., “Hitchhiking Lemurs,” *Creation*, 1993, 15(4):11, commenting on J. Tattersall, “Madagascar's Lemurs,” *Scientific American*, 1993, 268(1):90-97. 7. Anon., "Surfing Lizards Wipe Out Objections," *Creation*, 1999, 21(2):8. 8. Dr. Sigrid Hartwig-Scherer, paleoanthropologist, on the video, *The Image of God*, Keziah Videos. 9. In recent literature about some of the problems of animal distribution, even within an evolutionary framework, there has been an occasional suggestion that early man may have been a much better boat-builder and navigator than previously thought. Various types of animals may thus have accompanied people on boats across the sea. This should be kept in mind as a possibility in some instances. Animals brought in this way to a new continent may have prospered, even though the accompanying people did not stay, or perished. 10. For further reading: J. Whitcomb and H. Morris, *The Genesis Flood*, (Phillipsburg, NJ: Presbyterian and Reformed Publ. Co., 1961); J. Woodmorappe, "Causes for the Biogeographic Distribution of Land Vertebrates After the Flood," *Proc. Second ICC*, Pittsburgh, PA, 1990, pp. 361-367.   **Related questions**   * Could Noah's Ark have really held all the animals preserved in the Flood? [Answer](http://www.christiananswers.net/q-eden/edn-c013.html) * Does the Bible claim that the Flood of Noah covered the entire Earth? [Answer](http://www.christiananswers.net/q-eden/edn-c005.html) * Noah's Flood - Where did the water come from? [Answer](http://www.christiananswers.net/q-aig/aig-c010.html) * Noah's Flood - Where did the water go afterwards? [Answer](http://www.christiananswers.net/q-aig/aig-floodwater.html)   [ If this information has been helpful, please prayerfully consider a [donation](http://www.christiananswers.net/eden/donate.html) to help pay the expenses for making this faith-building service available to you and your family! Donations are tax-deductible. ]  Edited by Don Batten, Ph.D. / Authors: [Ken Ham](http://www.christiananswers.net/catalog/kenham.html), Jonathan Sarfati, and Carl Wieland, adapted from [*The Revised & Expanded Answers Book*](http://www.christiananswers.net/catalog/bk-answers.html) (Master Books, 2000).  Text supplied by [Creation Ministries International](http://www.CreationOnTheWeb.org/)  [Text copyright ©](http://www.christiananswers.net/copyrite.html) 1996, 1999, 2000, Creation Ministries International, All Rights Reserved - except as noted on attached [“Usage and Copyright”](http://www.christiananswers.net/copyrite.html) page that grants ChristianAnswers.Net users generous rights for putting this page to work in their homes, personal witnessing, churches and schools. Illustrations and layout copyright, 1999, 2005, [Eden Communications](http://www.christiananswers.net/eden/home.html) |

# How Did Fish Survive the Flood?

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| http://www.christiananswers.net/0.gif | http://www.christiananswers.net/0.gif | See this page in: [Dutch (Nederlands)](http://www.christiananswers.net/dutch/q-aig/aig-c037-nl.html)  [Salt water fish and diver (photo copyrighted) (Courtesy of Eden Communications.](http://www.christiananswers.net/q-eden/home.html)  If the whole earth were covered by water in the flood, then there would have been a mixing of fresh and salt waters. Many of today's fish species are specialized and do not survive in water of radically different saltiness to their usual habitat. So how did they survive the flood?  Note that the Bible tells us that only land-dwelling, air-breathing animals and [birds](http://www.christiananswers.net/dictionary/bird.html) were taken on the ark ([Genesis 7:14-15, 21-23](http://www.christiananswers.net/bible/gen7.html#14)).  **We do not know how salty the sea was before the flood.** The flood was initiated by the breaking up of the “fountains of the great deep” ([Genesis 7:11](http://www.christiananswers.net/bible/gen7.html#11)). Whatever the “fountains of the great deep” were (see Noah's Flood—[What did all the water come from?](http://www.christiananswers.net/q-aig/aig-c010.html)), the flood must have been associated with massive earth movements, because of the weight of the water alone, which would have resulted in great volcanic activity.  Volcanoes emit huge amounts of steam, and underwater lava creates hot water/steam, which dissolves minerals, adding salt to the water. Furthermore, erosion accompanying the movement of water off the continents after the flood would have added salt to the oceans. In other words, we would expect the pre-flood ocean waters to be less salty than they were after the flood.  The problem for fish coping with saltiness is this: fish in fresh water tend to absorb water, because the saltiness of their body fluids draws in water (by osmosis). Fish in saltwater tend to lose water from their bodies because the surrounding water is saltier than their body fluids.  [Starfish (photo copyrighted) (Courtesy of Eden Communications).](http://www.christiananswers.net/eden/home.html) Saltwater/Freshwater Adaptation in Fish Today Many of today's marine organisms, especially estuarine and tidepool species, are able to survive large changes in salinity. For example, starfish will tolerate as low as 16-18 percent of the normal concentration of seawater.  [Salmon (illustration copyrighted) (Courtesy of Eden Communications).](http://www.christiananswers.net/eden/home.html)There are migratory species of fish that travel between salt and fresh water. For example, salmon, striped bass, and Atlantic spurgeon spawn in fresh water and mature in salt water. Eels reproduce in salt water and grow to maturity in fresh water streams and lakes. So, many of today's species of fish are able to adjust to both fresh water and salt water.  There is also evidence of post-flood specialization within a kind of fish. For example, the Atlantic sturgeon is a migratory salt/freshwater species but the Siberian sturgeon (a different species of the same kind) lives only in fresh water.  Many families[[1]](http://www.christiananswers.net/q-aig/aig-c037.html" \l "1) of fish contain both fresh and saltwater species. These include the families of toadfish, garpike, bowfin, sturgeon, herring/anchovy, salmon/trout/pike, catfish, clingfish, stickleback, scorpionfish, and flatfish. Indeed, most of the families alive today have both fresh and saltwater representatives. This suggests that the ability to tolerate large changes in salinity was present in most fish at the time of the flood. Specialization, through natural selection, may have resulted in the loss of this ability in many species since then.  Hybrids of wild trout (fresh water) and farmed salmon (migratory species) have been discovered in Scotland,[[2]](http://www.christiananswers.net/q-aig/aig-c037.html" \l "2) suggesting that the differences between freshwater and marine types may be quite minor. Indeed, the differences in physiology seem to be largely differences in degree rather than kind.  [Saltwater fish.](http://www.christiananswers.net/eden/home.html)  The kidneys of freshwater species excrete excess water (the urine has low salt concentration) and those of marine species excrete excess salt (the urine has high salt concentration). Saltwater sharks have high concentrations of urea in the blood to retain water in the saltwater environment whereas freshwater sharks have low concentrations of urea to avoid accumulating water. When sawfish move from salt water to fresh water they increase their urine output 20 fold, and their blood urea concentration decreases to less than one-third.  Major public aquariums use the ability of fish to adapt to water of different salinity from their normal habitat to exhibit freshwater and saltwater species together. The fish can adapt if the salinity is changed slowly enough.  **So, many fish species today have the capacity to adapt to both fresh and salt water within their own lifetimes.**  Aquatic air-breathing mammals such as whales and dolphins would have been better placed than many fish to survive the flood because of the turbidity of the water, changes in temperature, etc. The fossil record testifies to the massive destruction of marine life, with marine creatures accounting for 95 percent of the fossil record.[[3]](http://www.christiananswers.net/q-aig/aig-c037.html#3) Some, such as trilobites and ichthyosaurs, probably became extinct at that time. This is consistent with the Bible account of the flood beginning with the breaking up of the “fountains of the great deep” (i.e., beginning in the sea; “the great deep” means the oceans).  There is also a possibility that stable fresh and saltwater layers developed and persisted in some parts of the ocean. Fresh water can sit on top of salt water for extended periods of time. Turbulence may have been sufficiently low at high latitudes for such layering to persist and allow the survival of both freshwater and saltwater species in those areas.  Conclusion  There are many simple, plausible explanations for how fresh and saltwater fish could have survived the flood. There is no reason to doubt the reality of the flood as described in the Bible.  Footnotes   1. Family is one of the main levels of classification for fish. In fish there is plenty of evidence for hybridization within families — the trout/salmon family, for example — suggesting that families may represent the biblical ‘kind’ in fish. 2. B. Charron, “Escape to Sterility for Designer Fish” *New Scientist*, 1995, 146(1979):22. 3. There is a huge number of marine fossils. If they really formed in the manner claimed by evolutionists (over hundreds of millions of years), then transitional fossils showing gradual change from one kind to another should be most evident here. But they are conspicuous by their absence. Furthermore, fossils of such things as jellyfish, starfish, and clams are found near the bottom of the fossil record of multi-cellular organisms, and yet they are still around today, fundamentally unchanged.   Recommended Reading   * How did land plants survive the Genesis Flood? [Answer](http://www.christiananswers.net/q-aig/aig-c019.html) * Answers to many more PUZZLING QUESTIONS ABOUT THE BIBLICAL FLOOD! [Go](http://www.christiananswers.net/creation/menu-catastrophe.html) * John Woodmorappe, *Noah's Ark: A Feasibility Study* (Santee, CA: Institute for Creation Research, 1996).   [ If this information has been helpful, please prayerfully consider a [donation](http://www.christiananswers.net/eden/donate.html) to help pay the expenses for making this faith-building service available to you and your family! Donations are tax-deductible. ]  Edited by Don Batten, Ph.D. / Authors: [Ken Ham](http://www.christiananswers.net/catalog/kenham.html), Jonathan Sarfati, and [Carl Wieland](http://www.christiananswers.net/creation/people/wieland-c.html), adapted from [*The Revised & Expanded Answers Book*](http://www.christiananswers.net/catalog/bk-answers.html) (Master Books, 2000). / Supplied by [Creation Ministries International](http://www.CreationOnTheWeb.org/).  [Copyright ©](http://www.christiananswers.net/copyrite.html) 1996, 1999, 2000, Creation Ministries International, All Rights Reserved - except as noted on attached [“Usage and Copyright”](http://www.christiananswers.net/copyrite.html) page that grants ChristianAnswers.Net users generous rights for putting this page to work in their homes, personal witnessing, churches and schools. Illustrations and layout copyright, 1999, [Eden Communications](http://www.christiananswers.net/eden/home.html) |

# How did land plants survive the Genesis Flood?

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| http://www.christiananswers.net/0.gif | http://www.christiananswers.net/0.gif | [Plants (photo copyrighted) (Courtesy of Eden Communications)](http://www.christiananswers.net/eden/home.html)  Many terrestrial seeds can survive long periods of soaking in various concentrations of salt water.[[1]](http://www.christiananswers.net/q-aig/aig-c019.html#1) Indeed, salt water impedes the germination of some species so that the seed lasts better in salt water than fresh water.  Other plants could have survived in floating vegetation masses, or on pumice from the volcanic activity. Pieces of many plants are still capable of asexual sprouting.  Many plants could have survived as planned food stores on the ark, or accidental inclusions in such food stores ([Genesis 6:21](http://www.christiananswers.net/bible/gen6.html#21)).  Many seeds have devices for attaching themselves to animals, and some could have survived the flood by this means. Others could have survived in the stomachs of the bloated, floating carcasses of dead herbivores. The [olive](http://www.christiananswers.net/dictionary/olive.html) leaf brought back to Noah by the dove ([Genesis 8:11](http://www.christiananswers.net/bible/gen8.html#11)) shows that plants were regenerating well before [Noah](http://www.christiananswers.net/dictionary/noah.html) and company left the ark. Conclusion There are many simple, plausible explanations for how plants could have survived the flood. There is no reason to doubt the reality of the flood as described in the Bible.   * How did FISH survive the Flood, both fresh and saltwater types? [Answer](http://www.christiananswers.net/q-aig/aig-c037.html)  Footnotes  1. G.F. Howe, “Seed Germination, Sea Water, and Plant Survival in the Great Flood,” *Creation Research Quarterly*, 1968, 5:105-112. Ironically, Charles Darwin similarly proved that seeds could survive months of soaking in sea water.  Recommended Reading  * John Woodmorappe, *Noah's Ark: A Feasibility Study* (Santee, CA: Institute for Creation Research, 1996).   [ If this information has been helpful, please prayerfully consider a [donation](http://www.christiananswers.net/eden/donate.html) to help pay the expenses for making this faith-building service available to you and your family! Donations are tax-deductible. ]  Edited by Don Batten, Ph.D. / Authors: [Ken Ham](http://www.christiananswers.net/catalog/kenham.html), Jonathan Sarfati, and Carl Wieland, adapted from [*The Revised & Expanded Answers Book*](http://www.christiananswers.net/catalog/bk-answers.html) (Master Books, 2000). / Supplied by [Creation Ministries International](http://www.CreationOnTheWeb.org/)  [Copyright ©](http://www.christiananswers.net/copyrite.html) 1996, 1999, 2000, Creation Ministries International, All Rights Reserved - except as noted on attached [“Usage and Copyright”](http://www.christiananswers.net/copyrite.html) page that grants ChristianAnswers.Net users generous rights for putting this page to work in their homes, personal witnessing, churches and schools. Illustrations and layout copyright, 1999, [Eden Communications](http://www.christiananswers.net/eden/home.html) |

# Did Noah need oxygen above the mountains?

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| http://www.christiananswers.net/0.gif | http://www.christiananswers.net/0.gif | “If mountain climbers need oxygen tanks to climb Mount Everest, how were Noah, his family, and the animals able to breathe on the Ark when they were above the mountains?” (see [Genesis 7:20](http://www.christiananswers.net/bible/gen7.html#20))  Mountains. Photo copyrighted. Courtesy of Eden Communications.  This question presupposes that Mount Everest was the height it is now, and that the air pressure would not have changed at that height above normal sea level with the addition of the flood water.  Mount Everest was not the height it is now during the Flood. Earth's highest mountains have fossils of sea creatures at their tops, showing they were once under the sea. The possibilities are that...   * the sea rose to cover the mountains * or the mountains were once under the sea and have since risen out of the sea, * or a combination of the two.   Measurements suggest that Everest is currently rising at up to 15 centimeters (six inches) per year. If we extrapolate backwards, taking the rate of rise of 15 cm per year and the current height of Everest (8,848 meters, or 29,028 feet), Everest would have been at sea level only 59,000 years ago. If the current rate of rise is only the tail end of what has been happening in the past, the rise in the past could have been much greater, bringing the origin of Everest to the time of [Noah's](http://www.christiananswers.net/dictionary/noah.html) Flood.  Creationist scientists currently think that mountains such as the Himalayas were probably built by catastrophic movement of the Earth's continental plates during and after the Flood. The rate of rise now measured is just the remnant of the processes which occurred much faster in the past.  Mountain building occurred as a part of the geologic processes which deepened the oceans to take the waters off the land towards the end of the Flood. Some mountains could have existed before the Flood, but none like the current Himalayas, Alps, or Andes in height. In any case, there is only enough water on all the Earth to cover mountains about 3 kilometers (2 miles) high, if all the ocean basins were raised.   |  | | --- | | Noah's Ark on floodwaters. Photo copyrighted, Eden Communications.  Noah's Ark on floodwaters - Scene from [The World That Perished](http://www.christiananswers.net/catalog/wp-vs.html) by [Films for Christ/Eden Communications](http://www.christiananswers.net/eden/home.html) |   So, if the waters were not 9 kilometers deep, but much less, the question is no longer an issue.  Even if the flood waters were 9 kilometers deep, would Noah and company have had trouble breathing?  Absolutely not. Air pressure is caused by the weight of air above the point where the pressure is experienced. If the water was 9 kilometers deep, then the air that was in that 9 kilometers deep volume of what was atmosphere would have been pushed out and would then have sat above the water at 9 kilometers above the Earth's surface.  However, if we assume the worst case scenario of the radius of the Earth increasing by 9 kilometers due to the water, the surface area of the Earth plus water would have been greater than the Earth, so that the weight of air would have been spread over a bigger area so that the pressure would have been less.  How much would the air pressure have been reduced? Less than 0.3%. This is equivalent to standing on top of a 30 meter (100 feet) high building at sea level! There would also have been a negligible effect on the pressure due to changes in the force of gravity (which affects the weight of the air).  It is certain, therefore, that those on the Ark would have had no trouble breathing - **without** oxygen tanks.  Further Reading   * Does the Bible claim that the Flood of Noah covered the entire Earth? [Answer](http://www.christiananswers.net/q-eden/edn-c005.html) * Could Noah's Ark really hold all the animals preserved in the flood? [Answer](http://www.christiananswers.net/q-eden/edn-c013.html) * Where did the flood water come from? [Answer](http://www.christiananswers.net/q-aig/aig-c010.html) * [Answers to frequently-asked-questions about Noah's Flood](http://www.christiananswers.net/creation/menu-catastrophe.html)   [ If this information has been helpful, please prayerfully consider a [donation](http://www.christiananswers.net/eden/donate.html) to help pay the expenses for making this faith-building service available to you and your family! Donations are tax-deductible. ]  *Author:* Dr. [Don Batten](http://www.christiananswers.net/creation/people/batten-d.html), [Creation Ministries International](http://www.CreationOnTheWeb.org/).  [Text Copyright ©](http://www.christiananswers.net/copyrite.html) 1996, 1999, Creation Ministries International, All Rights Reserved - except as noted on attached [“Usage and Copyright”](http://www.christiananswers.net/copyrite.html) page that grants ChristianAnswers.Net users generous rights for putting this page to work in their homes, personal witnessing, churches and schools.  www.ChristianAnswers.Net Christian Answers Network PO Box 200 Gilbert AZ 85299         [Submit your Questions](http://www.christiananswers.net/forms/multi-purposeform.html) |

# Is the Black Sea Flood the Flood of Genesis?

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| http://www.christiananswers.net/0.gif | http://www.christiananswers.net/0.gif | [Black sea. Photo copyrighted.](http://www.christiananswers.net/creation/menu-catastrophe.html)  [Learn more about the Genesis Flood](http://www.christiananswers.net/creation/menu-catastrophe.html)  *Summary:* Geological evidence obtained through rock cores indicates the presence of freshwater flora and fauna beneath the Black Sea, suggesting that this area was once a smaller freshwater lake. It has recently been proposed by a few uniformitarian geoscientists that prehistoric human communities living adjacent to this body of water were rapidly displaced when the Mediterranean overflowed and filled the Black Sea with saltwater.  Some marine geologists believe this event to be the basis of the Biblical Flood story. However, none of the work being conducted by these researchers has any bearing on the Flood reported in Scripture. I propose that the drowned dwellings in the Black Sea (if they prove to be such) represent post-Flood communities adversely impacted by the rapid rise of sea level associated with the close of the Ice Age. The overflow of the Mediterranean into the Black Sea forced the people, living in the communities adjacent to the small freshwater lake, to migrate to higher ground.  Relatively shallow submerged areas around portions of the Black Sea are proving to be of considerable interest for both marine geologists and archaeologists. Several years ago, submerged in tens of feet of water, freshwater shells were discovered and reported by scientists conducting underwater research around the Black Sea ([Ross and Degens](http://www.christiananswers.net/q-crs/crs-blacksea.html#ross), 1974). More recently, discoveries have been made of what appear to be the remains of human habitation in almost one hundred feet of water. Several uniformitarian scientists are now claiming that the flooding of the Black Sea several thousand years ago provided the basis of the Flood myth of Genesis as well as that of many other cultures ([McInnis](http://www.christiananswers.net/q-crs/crs-blacksea.html#mcinnis), 1998; [Ryan and Pitman](http://www.christiananswers.net/q-crs/crs-blacksea.html#ryan-98), 1998). How does this discovery fit with Scripture, and is this the Flood of Genesis?  http://www.christiananswers.net/eden/joidesjournal.jpg Exploration and Discovery of the Glomar Challenger For many years geologists have wondered about the stratigraphy and composition of the worlds continental shelves and ocean basins. The interest in finding valuable mineral resources in these submerged settings pushed for their exploration. The technology necessary to undertake such challenging research initiatives only became available in the middle 1960s. Drilling the ocean floors and continental shelves became a reality with the formation of the *Joint Oceanographic Institutions for Deep Earth Sampling (JOIDES)* more commonly known as the *Deep Sea Drilling Project (DSDP)*. This research program operated from 1968 to 1983. Ninety-six drilling projects (i.e., legs) were conducted covering areas within the Gulf of Mexico; the Atlantic, Pacific, and Indian Oceans; and the Mediterranean and Black Seas. ([Hs](http://www.christiananswers.net/q-crs/crs-blacksea.html#hsu-92), 1992).  Two legs of the DSDP (portions of Leg 13 in 1970, and Leg 42A in 1975) drilled the Mediterranean Sea floor and contributed much to understanding the origin and stratigraphy of this submerged area ([Hs](http://www.christiananswers.net/q-crs/crs-blacksea.html#hsu-83), 1983). Probably the biggest theory advanced as a result of the drilling was proposed by Kenneth Hs when he stated that the Mediterranean had dried up during the Miocene (1983, 1992). I will not pursue his ideas further and suggest that the interested reader consult the references cited for additional information. However, much of the information obtained in the drilling of the Mediterranean later contributed toward similar theories about the origin and history of the Black Sea. The Black Sea In 1969 the *Atlantis II* cruised the Black Sea, taking 40 shallow cores from various portions of the floor of the Black Sea. None of these cores reached beyond 250 feet below the sediment-water interface ([Ross and Degens](http://www.christiananswers.net/q-crs/crs-blacksea.html#ross), 1974, p. 184). Deeper drilling would have to wait for the DSDP drill ship *Glomar Challenger*.  DSDP drilling in the Black Sea was originally conducted to determine if it had potential as a large oil and gas province ([Hs](http://www.christiananswers.net/q-crs/crs-blacksea.html#hsu-92), 1992). What was found surprised the investigators. It was surmised, through the examination of various rock cores, that the Black Sea was in the recent past a large freshwater lake ([Figure 1](http://www.christiananswers.net/q-crs/crs-blacksea.html#blacksea)). This required a disconnection from the Mediterranean, as today saltwater flowing through the Bosporus Strait makes the Black Sea brackish.  It was proposed that during the last ice age, when global sea level was considerably lower, the Black Sea became a land-locked lake which received freshwater from areas to the north. At that time the Mediterranean did not flow into the Black Sea. This interpretation was based on freshwater fossils (both plant and animal) recovered from rock cores drilled in the Black Sea ([Hs](http://www.christiananswers.net/q-crs/crs-blacksea.html#hsu-92), 1992; [Ryan and Pitman](http://www.christiananswers.net/q-crs/crs-blacksea.html#ryan-98), 1998). Interest in the Black Sea waned as the geology of the Mediterranean took center stage during this leg of the DSDP.  William “Bill” Ryan was the co-chief scientist on Leg 13, which later set the stage for his further investigating the Black Sea (Ryan and Pitman, 1998, p. 74). The DSDP experience in the Black Sea would later contribute to his own work on its origin and history. Black Sea Research Begins Bill Ryan took the information obtained from DSDP Leg 13 and the *Atlantis II* cruise and began his own investigation into the geology of the Black Sea. Over the following years several research cruises and collecting efforts documented both geologic features and freshwater fossils which could only be explained if the Black Sea were formerly much lower, possibly as much as 350 feet below todays sea level position ([Ryan and Pitman](http://www.christiananswers.net/q-crs/crs-blacksea.html#ryan-98), 1998, p. 106). I will not review the details of the Ryan and Pitman theory for the origin and history of the Black Sea; the interested reader can consult their work. Rather, **I wish to focus on the many differences between the Scriptural Flood documented in Genesis and the local tranquil flood proposed by Ryan and Pitman.**   |  | | --- | | Figure 1. The Black Sea. Figure 1. The Black Sea with the former freshwater lake elevation (-350 feet) shown as a dotted line inside of the present sea level. Rivers flowed into the former freshwater lake from the north. The overflow of the Mediterranean Sea through the Bosporus Strait is believed to have initiated the flood which some uniformitarians believe to be the Flood of Genesis. Modified from [Ross and Degens](http://www.christiananswers.net/q-crs/crs-blacksea.html#ross) (1974, Figure 1, p. 184). |   However, before proceeding further it should be noted that research conducted by [Ross and Degens](http://www.christiananswers.net/q-crs/crs-blacksea.html#ross) (1974) during the *Atlantis II* cruise documented what they believed to be a slow transition of the Black Sea from a freshwater lake to its present brackish state, starting approximately 9,000 years ago and terminating 7,000 years ago—based on shallow rock cores. Their work did not indicate that the flooding of the Black Sea by the Mediterranean occurred catastrophically, as has been proposed by Ryan and Pitman. The Genesis Account Versus The Flooding of a Freshwater Lake The [Ryan and Pitman](http://www.christiananswers.net/q-crs/crs-blacksea.html#ryan-98) thesis (1998, p. 57) regarding the flooding of the Black Sea as the basis for the Biblical Flood myth can best be summarized using their own words:  …what if the myth story is examined in a different light, one that asks if human history was cleaved into a before and after primarily because the inundation was permanent and not temporary? Might a flood that never subsided have expelled a people from their former homeland and forced them to find a new place to live? Might the boat that the survivors built and filled with seed and animals have been not for the purpose of repopulating the earth but for transporting to safety the items vital to a continued subsistence (domesticated plants, animals, and knowledge of the arts)? And what if in addressing such a hypothesis one does not limit the investigation to Mesopotamia but looks beyond its borders?  The Ryan and Pitman proposal simply states that communities of humans once lived around the freshwater lake that eventually became the Black Sea. The sea level rise of the Mediterranean, approximately 5,600 years ago, breached the Bosporus Strait and began to fill the freshwater lake with saltwater ([Ryan and Pitman](http://www.christiananswers.net/q-crs/crs-blacksea.html#ryan-98), 1998, p. 157). People living adjacent to the lake observed water levels rising in the range of several feet per hour, and they escaped by either floating on the rising water or attempting to outrun it. The eventual result was the filling of the Black Sea and the dispersion of those peoples to areas across Europe, the Middle and the Far East. This, according to their book, is the basis of the Flood myth among the different cultures.  An obvious problem with the Ryan and Pitman concept is that it is completely different from what Genesis records. They believe that the Flood is a mythological story adapted by the many cultures impacted by the event at the time of its occurrence. Ryan and Pitman (1998, p. 56) stated:  Belief in the flood as an agent of global change has subsided in the century since Louis Agassizs momentous discovery of the Ice Age and the conversions of Buckland and Lyell… A modern essay on the Genesis story in Western thought says the "diluvial theory came to be seen as what it was: one of the many imaginative but mistaken ventures that have accompanied the development of earth-science."  Statements such as this throughout their book imply that the Biblical account of the Flood is one of mythology which is equal to all the other transcultural accounts of a flood. The Ryan and Pitman version of Noahs Flood is sans everything Scriptural except the water, which they never withdrew from the Black Sea. Anyone who wishes to base his worldview on how scientists interpret Scripture should really appreciate this book.  The Ryan and Pitman account completely discounts everything before the Flood. No discussion is provided regarding the Garden of Eden or the first sin. They simply start at what they view as a flood myth which needs to be addressed because it has its basis in so many different cultures. However, they have made a major oversight and I want to offer them another aspect of the flood legend to add to their own. This way they can explain the flood myths and legends of many different cultures, not only locally/regionally, but globally. The Flooding of Coastal Environments and the Global Rise in sea level Ryan and Pitman only appear to address cultures found in association with the Middle East. So, their version of a flood myth would only occur in those cultures which had some direct experience with the event. What about all the other cultures, which had already settled away from this area, and which were not impacted by this event, for example, the native Americans? Why do they have flood legends if they were already in the New World and were not affected by the rise and dispersion of cultures from the Black Sea?  The answer is quite simple, and I offer this up for their use to help them explain why almost every ancient culture of people has some version of a flood legend. Simply stated, they, too, were displaced by a global rise in sea level position associated with the breakdown of the polar ice caps, which occurred just a few thousand years earlier.  Dr. Brian Rucker and I reported on the many evidences of drowned paleo-Indian communities which have been documented along the coast of Florida ([Rucker and Froede](http://www.christiananswers.net/q-crs/crs-blacksea.html#rucker), 1998). These ancient communities were rapidly displaced when the polar ice caps began to disintegrate, and worldwide sea level rose tens of feet in what was probably a decade at the close of the Ice Age. These cultures also developed flood myths to deal with the local flooding. The only problem with this approach is their account of a boat—one which sounds like the Ark of Genesis. Perhaps they, too, built such a craft to float to the new sea level position? Good thing they knew beforehand to build that boat so that they got the story straight! What About the Submerged Ruins? Marine geologist Robert Ballard is exploring the Black Sea in an effort to document the dwellings and structures of folks who were displaced by the rise of the Black Sea thousands of years ago ([Reed](http://www.christiananswers.net/q-crs/crs-blacksea.html#reed), 2000). While this effort is not being done to “prove” the Ryan and Pitman hypothesis, it is being advanced by the popular press as proof of the flood myth. I predict that all of the work done by Ballard and others will be used to explain away what Scripture accurately records. The local and tranquil flood of the Black Sea will help certain folks sleep better knowing that “science” can explain away the “myths” of the Bible.  I propose that the structural ruins and tools discovered by Ballard and others in the Black Sea (if they prove to be of human design and origin) reflect post-Flood cultures which moved into the basin seeking food and a fresh water supply. Their eventual dispersion from these areas followed the end of the Ice Age and the concomitant rise in global sea level position. This is in opposition to the Ryan and Pitman belief that these artifacts reflect the onset of the localized and tranquil flood which inspired its incorporation into Scripture. I believe that the Ryan and Pitman book provides an interesting account of what may have happened to post-Flood communities living adjacent to the freshwater lake when the Mediterranean overflowed and filled the Black Sea.  The submerged ruins and artifacts documented in the [Rucker and Froede](http://www.christiananswers.net/q-crs/crs-blacksea.html#rucker) (1998) article can also be used by individuals uncomfortable with the Genesis account to document the flood and dispersion of paleo-Indian cultures living in the new world. These cultures would have developed a flood myth, only a few thousand years earlier from those cultures displaced with the flooding of the Black Sea basin. Thank goodness the flood myth has been solved by “science” in a way that does not create a conflict. Science and the Bible do not conflict when the Bible totally yields everything to what science dictates. Synopsis According to Ryan and Pitman, the flooding of a large freshwater lake (the ancestral Black Sea) by the Mediterranean Sea, approximately 5,600 years ago, permanently displaced the human communities living around it. These various groups of people spread away from the Black Sea region, taking with them a flood story which eventually became the flood myth recorded by many different cultures. A serious problem with this approach occurs where Ryan and Pitman fail to follow Scripture or explain how other cultures, not impacted by this event, came up with their own similar story of the global Flood, including a large boat to save a few individuals and the animals, which is faithfully recorded in Genesis.  The entire concept of the flooding of the Black Sea, as the basis of the Genesis Flood story, provides an excellent example where “science” supersedes the facts of Scripture with the ideas of man. The Ryan and Pitman tale begins with the idea of explaining away the mythological fable of the flood. However, their flood story simply stands on its own merit—with nothing to compare it to the Biblical account. Ryan and Pitman (1999, p. 16) readily admit this in a reply to a letter written in complaint of the scientific basis for the flood story of the Bible; they stated:  It is a stretch to link the catastrophic filling of the Black Seas freshwater lake to the deluge myth recorded in Scripture. The circumstances of this special flooding (one without 40 days and nights of rain, and one that never receded) deserve elaboration for readers curious about prehistory.  …the belief that this particular flood or any other is the one directly experienced by Noah is an individual decision. It is not a question that can be answered by scientific method.  In following the Ryan and Pitman hypothesis, Rucker and I could just as easily have proposed that the displacement of paleo-Indian cultures living out on the Florida continental shelf adjacent to the smaller Gulf of Mexico, during the close of the Ice Age, lead to the flood stories recorded in native American legends. This suggestion, like that of Ryan and Pitman, fails to acknowledge the accuracy of Scripture over the ever-changing concepts of mankind. Conclusion The discovery of drowned villages in the Black Sea (if additional research proves such) possibly records the rise of sea level following the climax of the Ice Age. Many such post-Flood human communities found themselves displaced from their dwellings with the rapid rise of sea level associated with the close of the Ice Age. The structures that Ballard and others might identify in the Black Sea were not a part of the Genesis Flood; rather, they reflect post-Flood communities living close to a source of food and water.  Marine geologists and oceanographers are just now starting to look for drowned structures associated with displaced people and the rise of sea level. I am sure that many more will be found, especially along coasts impacted by the rapid rise of sea level associated with the close of the Ice Age. Brian Rucker and I have identified several such sites around the Florida coast. Nothing being discovered in the Black Sea defends the Ryan and Pitman flood hypothesis.  Rather it shows that the earth was much different from the present during the Ice Age. Sea level rise at the end of the Ice Age, which was a recent event, did more than raise water levels globally—it displaced various late ice-age communities.   |  | | --- | | Does the Bible claim that the Flood of Noah covered the entire Earth? [Answer](http://www.christiananswers.net/q-eden/edn-c005.html) Could Noah's Flood have been a large, but localized flood? Learn nine Biblical evidences that the flood was global. |  Acknowledgments Thanks to Dr. J. K. Reed for his encouragement to write this article, and to Dr. E. L. Williams for providing a helpful review. Any mistakes are my own. As always, I thank my wife, Susan, who continues to support my research and writing efforts. ([Proverbs 3:5-6](http://www.christiananswers.net/bible/prov3.html#5)). References  1. Hs, K. J. 1983. *The Mediterranean Was a Desert*. Princeton University Press. Princeton, NJ. 2. Hs, K. J. 1992. *Challenger at Sea: The Ship that Revolutionized Earth Science*. Princeton University Press. Princeton, NJ. 3. McInnis, D. 1998. And the waters prevailed. *Earth* 7(4):46-54. 4. Reed, C. A. 2000. Noahs village. *Geotimes*. p. 15. 5. Ross, D. A., and E. T. Degens. 1974. Recent sediments of Black Sea. In Degens, E. T. and D. A. Ross (Editors). *The Black Sea—Geology, Chemistry, and Biology*. Memoir 20. American Association of Petroleum Geologists. Tulsa, OK. pp. 183-199. 6. Rucker, B. R. and C. R. Froede, Jr. 1998. Archaeological and geological evidence of a recent and rapid sea level rise from sites along coastal Florida. *Creation Research Society Quarterly* 35:54-65. 7. Ryan, W. B. F. and W. C. Pitman III. 1998. *Noahs Flood: The New Scientific Discoveries about the Event that Changed History.* Simon and Schuster. New York. 8. Ryan, W. B. F. and W. C. Pitman III. 1999. Reply to "On the trail of the great flood." *Discover* 20(3):16.   Carl Froede Jr., is a professional geologist and young-earth creationist author who lives and works in Atlanta, Georgia. He has been active in creation-science for over ten years and has written numerous articles for various creationist organizations.  Author: Carl R. Froede, Jr., P.G. Text previously published in *Creation Research Society Newsletter*, Volume 6, Number 1 Jan. / Feb. 2001. Provided by [Creation Research Society](http://www.creationresearch.org). 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# Genesis and ancient Near Eastern stories of Creation and the Flood: an introduction

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| http://www.christiananswers.net/0.gif | http://www.christiananswers.net/0.gif | Much has been written about the relationship between the early chapters of [Genesis](http://www.christiananswers.net/bible/gen1.html) and [creation](http://www.christiananswers.net/dictionary/creation.html) and [flood](http://www.christiananswers.net/dictionary/deluge.html) stories from ancient [Mesopotamia](http://www.christiananswers.net/dictionary/mesopotamia.html). This is the first of a series of articles presenting an up-to-date overview of this subject. Creation [Creation](http://www.christiananswers.net/creation/home.html) has been one of the most interesting and intriguing subjects in the Old Testament. In modern Biblical scholarship, a number of new interpretations of the early chapters of Genesis have been suggested, especially in the areas of comparative study and literary analysis. Genesis 1-2 Double Creation Stories? A theory has long been advocated that the early chapters of Genesis contain a “doublet” of creation stories and that these stories, characterized by the distinctive divine names, Elohim and YHWH, are of different origins with two independent, and even opposing, cosmologies. According to this traditional critical theory, the former is the priestly account (P source) of creation from the postexilic period, while the latter is an earlier Yahwistic account (J source). Hence, it is usually assumed that there exist some discrepancies or contradictions between the two accounts. [[1]](http://www.christiananswers.net/q-abr/abr-c001.html#1)  Recently, however, it has been emphasized by scholars like Alter that whatever their origins may be, "the two accounts are complementary rather than overlapping, each giving a different kind of information about how the world came into being." According to him, "the two different creation stories," i.e., the P and J stories, constitute a “composite narrative” that encompasses “divergent perspectives” by placing in sequence "two ostensibly contradictory accounts of the same event," such as two stories of the creation of woman. [[2]](http://www.christiananswers.net/q-abr/abr-c001.html#2)  When one takes a closer look at both stories, it is evident that they are not two “parallel” versions of the same or similar “creation” stories, since the theme and purpose of the two are certainly different. Castellino distinguishes [Genesis 1](http://www.christiananswers.net/bible/gen1.html), "un vrai recit de creation" ("a true creation account"), from [Genesis 2](http://www.christiananswers.net/bible/gen2.html), which is in a strict sense not a creation story but "*un texte d'organisation*" (“an organizational text”) and serves as an “introduction” to [Genesis 3](http://www.christiananswers.net/bible/gen3.html) (Castellino 1957). A story without any reference to the sun, the moon and the stars, or the sea is certainly not a true cosmological myth. Genesis 2 and following, therefore, should not be treated as the same literary genre as Genesis 1, which locates the creation of humankind at the grand climax of the creation of the cosmos,[[3]](http://www.christiananswers.net/q-abr/abr-c001.html#3) while the former is concerned with the immediate situation of mankind on the earth.  However, as I recently demonstrated, both chapters do reflect essentially the same cosmology. In [Genesis 1:2](http://www.christiananswers.net/bible/gen1.html#2), the initial situation of the “world” is described positively in terms of the still unproductive and uninhabited (*toh- waboh-*)[[4]](http://www.christiananswers.net/q-abr/abr-c001.html#4) “earth” totally covered by “ocean-water,” while in [2:5-6](http://www.christiananswers.net/bible/gen2.html#5) the initial state of the “earth” is described negatively in terms of the not-yet-productive “earth” in more concrete expressions, “no vegetation” and “no man.” And the underground-water was flooding out to inundate the whole area of the “land,” but not the entire earth as in Genesis 1:2.[[5]](http://www.christiananswers.net/q-abr/abr-c001.html#5) Thus, Genesis 1 describes an earlier stage in the one creation process in which the waters cover the earth, Genesis 2a a later stage (in [1:9-10](http://www.christiananswers.net/bible/gen1.html#9)) in which the waters have separated and the dry land has appeared.  The Double Creation of Mankind? The Genesis account as it stands mentions the creation of mankind twice, in [1:27](http://www.christiananswers.net/bible/gen1.html#27) and [2:7](http://www.christiananswers.net/bible/gen2.html#7). Kikawada hence suggests that there are two creations of mankind in Genesis, comparing Genesis 1-2 with the myth of Enki and Ninmah and the “Atra-Hasis Epic” (I 1-351) (Kikawada 1983; Kikawada and Quinn 1985: 39ff). According to him, Genesis 1 refers to "the first creation of mankind," while Genesis 2 refers to "the second creation of mankind," namely the creation of the specific persons [Adam](http://www.christiananswers.net/dictionary/adam.html) and [Eve](http://www.christiananswers.net/dictionary/eve.html), and these two Biblical creation accounts are parallel to each other.  It should be noted, however, that in Genesis those “double creation stories” deal with the same topic, the origin of humankind (*'adam*), and do not necessarily refer to “two” separate creative actions regarding human creation. The debate is whether the reason for this twofold description is (1) that there were actually two independent creation stories of the same event or (2) that there were actually two separate creation acts or (3) that a technique of narrative discourse was used that recounts one and the same event from two different viewpoints. To this third possibility I now turn.  Discourse Grammar.[[6]](http://www.christiananswers.net/q-abr/abr-c001.html#6) It has been noted by scholars such as U. Casssuto (1961: 89-92; also Kitchen 1966: 116-17) that Genesis 1 gives a general description of mankind in the framework of the entire creation of the world and Genesis 2 gives a detailed description of humankind and their immediate context on the earth.[[7]](http://www.christiananswers.net/q-abr/abr-c001.html#7) From a discourse grammatical point of view, this relationship between Genesis 1 and Genesis 2 may be explained as a generic-specific relationship (Longacre 1983: 119, 122) and the two constitute a “hyponymous”[[8]](http://www.christiananswers.net/q-abr/abr-c001.html" \l "8) parallelism, so to speak.  This feature might also be explained as a phenomenon of what Grimes calls a “scope change” in narrative discourse, which is a phenomenon of "zooming in from an overall perspective to a closeup, with a corresponding shift in reference" (1975: 46-47). This is the way I have described the nature of the relationship between the two “creation” stories of Genesis elsewhere (1985); they have different scopes or viewpoints by which the author or narrator describes one and the same creation of mankind, first with relation to the cosmos, and then with a narrower focus on the man’s relationship with the woman, the animals, and the environment in the second story. Therefore, the flow of discourse runs from Genesis 1 to Genesis 2 and following, not vice versa, as assumed by the traditional source critics.  As for [2:4](http://www.christiananswers.net/bible/gen2.html#4), whose two halves constitute a chiastic parallelism, Wenham takes this verse as serving "both as a title to 2:5-4:26 and as a link with the introduction [1:1-2:3](http://www.christiananswers.net/bible/gen1.html#1).[[9]](http://www.christiananswers.net/q-abr/abr-c001.html#9) In another context I have suggested that it serves as a link between the two stories and that this linkage is a kind of transitional technique that according to Parunak points to a surface pattern of repetition or similarity that joins successive textual units together (Tsumura 1985: 48; Purunak 1983). Genesis 1-2 could thus be explained as Parunak’s A/aB pattern; in [2:4a](http://www.christiananswers.net/bible/gen2.html#4) (a) the narrator repeats the keywords of Genesis 1:1-2:3 (A) and initiates a new section of story, 2:4b-4:26 (B). Genesis 1 Genesis 1 and “Enuma Elish.” Ever since H. Gunkel’s famous book *Sch“pfung und Chaos in Urzeit und Endzeit* (1895), scholars have taken it for granted that the Hebrew teh”m in [Genesis 1:2](http://www.christiananswers.net/bible/gen1.html#2) has its mythological background in the ancient Babylonian goddess Tiamat of the “creation” myth “Enuma elish,” in which the storm-god Marduk fights with and wins over the sea dragon Tiamat, establishing the cosmos.[[10]](http://www.christiananswers.net/q-abr/abr-c001.html#10) I have thoroughly reexamined the problem from a linguistic point of view, and it is now clear that it is phonologically impossible to conclude that *teh"m* “ocean” was borrowed from Tiamat. The Hebrew *teh"m* “ocean” together with the Ugaritic thm, the Akkadian *tiamtu*, the Arabic *tihamat*, and the Eblaite *ti-'...-ma-tum /tiham(a)tum*/ is simply a reflection of a common Semitic term \**tiham-* (1989: 45-52).  While the [Hebrew](http://www.christiananswers.net/dictionary/hebrewlanguage.html) and [Akkadian](http://www.christiananswers.net/dictionary/akkad.html) terms refer to the “primeval” water, as Lambert notes, "the watery beginning of Genesis in itself is no evidence of [Mesopotamian](http://www.christiananswers.net/dictionary/mesopotamia.html) influence" (Lambert 1965: 293). He also notes that while the horizontal division of the cosmic water in [Genesis 1:6-8](http://www.christiananswers.net/bible/gen1.html#6) has its parallel description in Ee IV 135-V 62, "the case for a battle as a prelude to God’s dividing of the cosmic waters is unproven." In other words, "neither on the Hebrew side nor on the Mesopotamian is there any clear proof that a battle is necessarily tied to the dividing of the waters." So, Genesis 1 and “Enuma elish,” which was composed primarily to exalt Marduk in the pantheon of Babylon,[11] have no direct relation to each other. Not only is the creation by divine *fiat* in Genesis unique in the ancient Near East, the creation of light as the first creating act appears only in Genesis (Lambert 1980: 71; 1965). Thus the creation in the Genesis story is quite different from the idea of "order out of chaos," though the latter is also often called “creation” (McCarthy 1967).  It is not correct to say that “Enuma elish” was adopted and adapted by the [Israelites](http://www.christiananswers.net/dictionary/israel.html) to produce the Genesis stories. As Lambert holds, there is "no evidence of Hebrew borrowing from [Babylon](http://www.christiananswers.net/dictionary/babylon.html)" (1965: 296). Sj"berg accepts Lambert’s opinion that "there was hardly any influence from that Babylonian text on the Old Testament creation accounts" (1984: 217). Hasel thinks rather that the creation account of Genesis 1 functions as an antimythological polemic in some cases (e.g., with the "[sun](http://www.christiananswers.net/dictionary/sun.html)," the "[moon](http://www.christiananswers.net/dictionary/moon.html)," and *tnnm* (“sea monsters”?), etc. (1974). One thing is clear with regard to the religious nature of the creation story of Genesis: in Genesis 1 and 2 no female deity exists or is involved in producing the cosmos and humanity. This is unique among ancient creation stories that treat of deities having personality.  [Canaanite](http://www.christiananswers.net/dictionary/canaanite.html) Background to Genesis 1? According to Jacobsen, "the story of the battle between the god of [thunderstorms](http://www.christiananswers.net/dictionary/thunder.html) and the sea originated on the coast of the Mediterranean and wandered eastward from there to [Babylon](http://www.christiananswers.net/dictionary/babylon.html)" (1968: 107). Along the same line, Sj"berg as an [Assyriologist](http://www.christiananswers.net/dictionary/assyria.html) warns Old Testament scholars that "it is no longer scientifically sound to assume that all ideas originated in Mesopotamia and moved westward" (1984: 218).  Recently Day asserted that [Genesis 1:2](http://www.christiananswers.net/bible/gen1.html#2) was a demythologization of an original *Chaoskampf* (“chaos-battle”) myth from ancient [Canaan](http://www.christiananswers.net/dictionary/canaan.html) (1985: 53). However, the conflict of the storm-god [Baal](http://www.christiananswers.net/dictionary/baal.html) with the sea-deity Yam in the Ugaritic myth has nothing to do with a creation of cosmos like that of Marduk with Tiamat in “Enuma elish.” Kapelrud notes that "with the existing texts and the material present so far we may conclude that they have no creation narrative" (1980: 9). Also de Moor recently demonstrated that Baal in Ugaritic literature is never treated as a creator-god (1980). I have noted elsewhere that if the Genesis account were the demythologization of a Canaanite dragon myth, we would expect the term *yam* “sea,” which is the counterpart of the Ugaritic sea-god Yam, in the initial portion of the account. However, the term *yam* does not appear in Genesis 1 until v. 10. It is difficult to assume that an earlier Canaanite [dragon](http://www.christiananswers.net/dictionary/dragon.html) myth existed in the background of Genesis 1:2.[[12]](http://www.christiananswers.net/q-abr/abr-c001.html#12)  Chaos in Genesis 1:2? (a) *toh- waboh-*. The expression *toh- waboh-*, which is traditionally translated in English as "without form and void" (RSV) or the like, is often taken as signifying the primeval “chaos,” in direct opposition to “creation.” I have demonstrated, however, that the phrase *toh- waboh-* has nothing to do with primeval chaos; it simply means “emptiness” and refers to the earth in a “bare” state, without [vegetation](http://www.christiananswers.net/dictionary/plants.html) and [animals](http://www.christiananswers.net/dictionary/animals.html) as well as without humans. This "unproductive and empty, uninhabited" earth becomes productive with vegetation and inhabited by animals and humankind by God’s fiats (Tsumura 1989: 41-43).  I have also pointed out that in Genesis 1:2 *ha'ares* and *teh"m* are a “hyponymous” word pair and hence the “ocean” (*teh"m*) is a part of the “earth” (*ha'ares*), since the term *ha'ares*, which constitutes an antonymous word pair with *hassamayim* “the [heavens](http://www.christiananswers.net/dictionary/heaven.html)” in [Genesis 1:1](http://www.christiananswers.net/bible/gen1.html), must refer to everything under the heaven.[[13]](http://www.christiananswers.net/q-abr/abr-c001.html#13) However, vv. 6ff. suggest that the water of *teh"m* in [Genesis 1:2](http://www.christiananswers.net/bible/gen1.html#2) covered all the “earth” (Tsumura 1989: 78-79). This water-covered earth is described in this passage by a pair of expressions, toh- waboh- // hosek, not yet normal, that is to say, not yet productive or inhabited and without [light](http://www.christiananswers.net/dictionary/light.html). But it was not chaotic. It should be noted that even in “Enuma elish” the initial mingling of Apsu and Tiamat (Ee I 5) was orderly, not chaotic (Tsumura 1989: 60 n. 70).  (b) *r-ah 'elohm*. Albright, who rejected the “world egg theory” (Gunkel) and the view that "the *r-ah* corresponds to the winds which Marduk sends against Timat," suggested as the most probable view that *"r-ah 'elohm* means “spirit of God,” but is substituted for an original *r-ah*, “wind,” in order to bring the personality of God into the cosmogony from the beginning." Albright, however, thinks that "the *r-ah 'elohm* was evidently still thought of as exercising a “sexual” influence upon the *teh"m*." The verb *rahap* (“hovered”), according to him, suggests that "the *r-ah 'elohm* was conceived of originally in the form of a [bird](http://www.christiananswers.net/dictionary/bird.html) (Albright 1924: 368 and n. 10).  Recently, DeRoche suggested that just as the *r-ah* “wind” in [Genesis 8:1](http://www.christiananswers.net/bible/gen8.html#1) and [Exodus 14:21](http://www.christiananswers.net/bible/exo14.html#21) "leads to the division within the bodies of water, and consequently, the appearance of dry land," so "the *r-ah 'elohm* “wind or spirit of God” of Genesis 1:2c must also be a reference to the creative activity of the deity" (1988: 314-15). However, he holds, r-ah *'elohm* is not "a wind sent by God," that is to say, a creature, but "a hypostasis for *'elohm*." He does not think that it is "part of the description of chaos." According to him, "It expresses *Elohim’s* control over the cosmos and his ability to impose his will upon it. As part of v 2 it is part of the description of the way things were before Elohim executes any specific act of creation" (1988: 318).  Reprinted by permission from *I Studied Inscriptions From Before the Flood*, ed. R.S. Hess and D.T. Tsumura, Winona Lake IN: Eisenbrauns, pp. 27-34.  David T. Tsumura is Professor of Old Testament at Japan Bible Seminary, Tokyo. He is author of *The Earth and the Waters in Genesis 1 and 2: A Linguistic Investigation* (1989), as well as numerous articles on the Hebrew Bible and Semitic languages. NOTES  1. For a useful summary of recent critical discussions, see Wenham 1987: xxv-xlii; Wenham 1988; Whybray 1987: 17-131. 2. Alter 1981: 141-17. As an example of contradiction between Genesis 1 and 2, he notes that in Genesis 1 the woman was created "at the same time and in the same manner" as the man (p. 145). However, in [Genesis 1:27](http://www.christiananswers.net/bible/gen1.html#27), which constitutes a three-line “parallelism,” the human being is simply described as being created as male and female. The text does not necessarily imply the simultaneous creation of both sexes. 3. For the literary structure of Genesis 1, see below. 4. See below. 5. Tsumura 1989: 168. This conclusion is entirely different from the traditional critical view, represented by von Rad that the nature of the earth-waters relationship in 1:2 (“watery chaos”) is totally different from that in 2:5-6 (“dry chaos”). See von Rad 1961: 76-77; also Otzen 1980: 40-41. 6. For recent works on the discourse analysis of Genesis, see Longacre 1989 and Anderson 1987. For a brief summary of discourse analysis with bibliographies see Bodine 1987. 7. For this “general-detailed pattern” in Ugaritic, Akkadian and Egyptian literatures, see Tsumura 1984: 18-19 n. 37. The same pattern appears also in Japanese narrative stories such as the initial section of “Suma” in The Story of Genji; see Tsumura 1984: 77 n. 64. For the pattern in the genealogical doublets, see Hess 1990: 146-47. 8. On this term, see Tsumura 1988: 258-60. 9. For the chiastic structure of 2:4, see Cassuto 1961: 98-99; Wenham 1987: 55. 10. For a useful translation and discussion of this text, see Heidel 1963; also Speiser 1969. The most recent translation can be found in Dalley 1991: 233-74. 11. Lambert (1980: 71-72) discusses the nature of “Enuma elish,” which is "in reality occupied with the ascent of Marduk in the pantheon" and whose "creation account takes only a subordinate position within the whole." The myth, according to him, was probably composed around 1100 BC and it is “extremely eclectic.” In A New Look (1965: 291), he concludes similarly: "The Epic of Creation is not a norm of Babylonian or Sumerian cosmology. It is a sectarian and aberrant combination of mythological threads woven into an unparalleled compositum." 12. For a detailed discussion, see Tsumura 1989: 62-65. I also note that if any comparison with Genesis 1:2 should be drawn from Ugaritic materials, it would be with the Canaanite god El’s residence at the source of “two oceans” (thmtm). This association of a creator-god with his watery [abode](http://www.christiananswers.net/dictionary/abode.html) or domain can be seen also in the case of Ea, one of the Mesopotamian triad deities. This motif of a watery beginning appears also in Egyptian, Anatolian, and Greek myths. For a detailed discussion, see Tsumura 1989, chapter 8. 13. The cosmology in vv. 1-2 is bipartite, not tripartite, describing the entire world in terms of “heavens and earth.”  REFERENCES  * Albright, W.F. 1924 "Contributions to Biblical Archaeology and Philology." *Journal of Biblical Literature* 43. * Alter, R. 1981 *The Art of Biblical Narrative*. New York: Basic Books. * Andersen, E.I. 1987 "On Reading Genesis 1-3." Pp. 137-50 in *Backgrounds for the Bible*, ed. M.P. O'Connor and D.N. Freedman. Winona Lake: Eisenbrauns. * Bodine, W.R. 1987 *Linguistics and Philology in the Study of Ancient Near Eastern Languages*. Pp. 39-54 in "Working with No Data: Semitic and Egyptian Studies Presented to Thomas 0. 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Sheffield: Sheffield Academic Press.   [ If this information has been helpful, please prayerfully consider a [donation](http://www.christiananswers.net/eden/donate.html) to help pay the expenses for making this faith-building service available to you and your family! Donations are tax-deductible. ]  Author: David T. Tsumura, with permission from [Associates for Biblical Research](http://www.biblearchaeology.org/)  [Copyright ©](http://www.christiananswers.net/copyrite.html) 1996, Associates for Biblical Research, All Rights Reserved - except as noted on attached [“Usage and Copyright”](http://www.christiananswers.net/copyrite.html) page that grants ChristianAnswers.Net users generous rights for putting this page to work in their homes, personal witnessing, churches and schools. |

What does the fossil record teach us about evolution?

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| http://www.christiananswers.net/0.gif | http://www.christiananswers.net/0.gif | See this page in: [Chinese](http://christiananswers.cn/q-eden/edn-c006c.html), [French](http://www.christiananswers.net/french/q-eden/edn-c006f.html), [Indonesian](http://www.christiananswers.net/indonesian/q-eden/edn-c006i.html), [Spanish](http://www.christiananswers.net/spanish/q-eden/edn-c006s.html)  Fossils  What does the fossil record really teach concerning the theory of evolution? Do the fossils demonstrate the progression from simple structures to complex organisms? The following facts need to be considered:   * **Abrupt appearance of animals.** All the different, basic kinds of animals appear abruptly and fully functional in the strata - with no proof of ancestors. "Evolution requires intermediate forms between species and paleontology does not provide them." (David Kitts, paleontologist and Evolutionist) Darwin was embarrassed by the fossil record. It contains no proof for macroevolution of animals. * **Plants appear abruptly, too.** Evolutionist Edred J.H. Corner: "… I still think that to the unprejudiced, the fossil record of plants is in favor of special creation." (Evolution in Contemporary Thought, 1961, p.97) Scientists have been unable to find an Evolutionary history (beginning to end) for even one group of modern plants. * **Animals unchanged.** Contrary to common belief, most fossils are not of extinct types of animals. Most fossils are very similar (and often totally identical) to creatures living today. It is said there are many more living species of animals than there are types known only as fossils. If Evolution is true, one may wonder why the case is not just the reverse! Evolutionary history is supposed to be filled with temporary, intermediate stages of Evolution, from amoeba to man. * **Sufficient fossils.** There is a continuing lack of evidence for Evolution despite an enormous number of fossils. Although scientists will continue to discover new varieties of fossil animals and plants, it is generally agreed that the millions of fossils already discovered (and the sediments already explored) provide a reliable indication of which way the evidence is going. That is, there will continue to be little or no fossil evidence found to support Evolutionism. * **Fast strata formation.** There is increasing evidence that many sedimentary rocks, which some thought took thousands or millions of years to accumulate, almost certainly were deposited in only months, days, hours, or minutes. * **Rapid coal formation.** The old Evolutionary theory about coal forming in swamps is wrong. There is increasing evidence that massive coal deposits were formed in deep flood waters. Various coal layers in the U.S. consist mainly of sheets of tree bark abraded from huge masses of uprooted trees. The bark layers were buried in mud and carbonized into coal. Coal formation is relatively quick when heat is applied. * **Fossilization requires very special conditions.** Dinosaur and other fossils could not have formed in the way suggested by most Evolutionary books. Animals almost never fossilize unless they are buried quickly and deeply - before scavengers, bacteria and erosion reduce them to dust. Such conditions are highly unusual. In almost all cases, the very existence of the fossils, in the types and numbers discovered, strongly indicates catastrophic conditions were involved in their [burial](http://www.christiananswers.net/dictionary/burial.html) and preservation. Without such conditions, there seems to be no plausible way to explain their existence. Huge dinosaurs, huge schools of fish, and many diverse animals are found entombed by massive muddy sediments which hardened into rock. Almost all fossils are found in water-laid sediments. * **Wrong order for evolution.** It has been reported that "80 to 85% of Earth's land surface does not have even 3 geologic periods appearing in 'correct' consecutive order" for Evolution.   The fossil record does not provide evidence in support for Evolution.  "Fossils are a great embarrassment to Evolutionary theory and offer strong support for the concept of Creation." ([Dr. Gary Parker](http://www.christiananswers.net/creation/people/parker-ge.html), Ph.D., Biologist/paleontologist and former Evolutionist)  [ If this information has been helpful, please prayerfully consider a [donation](http://www.christiananswers.net/eden/donate.html) to help pay the expenses for making this faith-building service available to you and your family! Donations are tax-deductible. ]  Authors: Mark Van Bebber and Paul S. 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# Where are all the human fossils?

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| http://www.christiananswers.net/0.gif | http://www.christiananswers.net/0.gif | See this page in: [Chinese](http://christiananswers.cn/q-aig/aig-c014c.html)  What happened to all the people who were not on board [Noah's](http://www.christiananswers.net/dictionary/noah.html) [Ark](http://www.christiananswers.net/dictionary/ark.html)? If there were many millions of people populating the earth at the time of the [Flood](http://www.christiananswers.net/dictionary/deluge.html) as creationists have suggested, wouldn't many of those people have been buried in Flood sediments? So why do we not find hundreds or even thousands of human fossils in the rock layers regarded as Flood sediments, with perhaps even some human fossils alongside, say, [dinosaur](http://www.christiananswers.net/dictionary/dinosaur.html) fossils?  These are, of course, fair questions that are commonly asked. Because of our understanding of the Flood from the [Scriptures](http://www.christiananswers.net/dictionary/scripture.html), we might expect to find human fossils in Flood strata, so it is rather surprising, at first glance, that we don't find any. However, Scripture (backed up by so much other evidence) is very clear that there was a global [Flood](http://www.christiananswers.net/dictionary/deluge.html) and the pre-Flood people were destroyed, so there must obviously be an explanation for this lack of human fossils. Consequently, we are going to attempt an explanation by exploring possible processes during the Flood and logical deductions from present observations that could help us understand why there are no undisputed human fossils found in Flood strata. Reported artifacts and skeletons There are some claims and reports of human artifacts and remains in rock layers that are clearly part of the Flood sediments. However, many of these claims are not adequately documented in any scientific sense, while those few reports that have appeared in the scientific and related literature remain open to question or other interpretations. For example, the book *Ancient Man: A Handbook of Puzzling Artifacts*[(1)](http://www.christiananswers.net/q-aig/aig-c014.html#1) looks like an impressive and voluminous collection of such evidence, but on closer examination many of the artifacts, though puzzling archaeologically, still belong to the post-Flood era, while other reports and claims are either antiquated or sketchy and amateurish.  Often lay scientists claiming to have found human artifacts or fossils have not recorded specific location details, so that professional scientists investigating the claims have had difficulty finding the location from which the sample in question came. ALSO, lay scientists have in the past not kept some of the rock which encloses the fossil or artifact as proof of its *in situ* occurrence. These two oversights have often made it well nigh impossible to reconstruct and/or prove where fossils or artifacts came from, thus rendering such finds virtually useless.  Fossilized hammers and supposed human footprints in ancient geological strata, regarded by evolutionists as deposited millions of years before man evolved, but regarded by creationists as Flood deposits, are extremely difficult to document scientifically above reproach and/or with any conclusive finality. (Merely finding rock around an implement does not prove it is pre-Flood.)  For example, it has been claimed that a gold chain was found in black coal.[(2)](http://www.christiananswers.net/q-aig/aig-c014.html#2) However, the artifact evidently was exhibited as a clean gold chain with no coal clinging to it, so we see no evidence that the chain was actually found in the coal, just the claim that it was. While one would never assume any dishonesty on the part of the people concerned, because proper scientific procedures have not been followed the exhibit has proven to be almost useless in convincing a generally skeptical scientific community and apathetic lay public.  Thus, should genuine human fossils or artifacts from the time of [Noah's](http://www.christiananswers.net/dictionary/noah.html) Flood be found, then it is mandatory that proper scientific procedures be followed to document the geological context, in order to guarantee that the scientific significance of such a find is unequivocally demonstrated. Regretfully, of course, the hardened skeptic would still remain unconvinced, but at least such a find may still awaken some in the apathetic public and a few of the more open-minded scientists.  What is needed, of course, are actual human bones fossilized *in situ* as an integral part of rock strata that are demonstrably ancient in evolutionary terms, and therefore are usually Flood sediments of the creationist framework for earth history. Yet here is where the real hard unequivocal evidence is lacking and why people ask the question “Where are all the human fossils?”  We simply cannot point to the report of a human skull found in so-called Tertiary brown coal in Germany, for there is no definitive scientific report available on this object, even though its existence has been verified by the staff of the Mining Academy in Freiberg.[(3)](http://www.christiananswers.net/q-aig/aig-c014.html#3) If it is a coalified human skull, how is it possible to distinguish it from a clever carving in such a way that it becomes conclusive proof? Even if it were demonstrated as genuine, are we sure that the Tertiary brown coal in question was a Flood stratum? In some parts of the world some of the isolated so-called Tertiary sedimentary basins could easily be classified, according to some creationist geological schemes, as post-Flood strata. After all, the early Flood geologists, prior to the advent of Lyellian uniformitarianism and the evolutionary geological time-scale, applied the term “Tertiary” to those rock strata that they believed to be post-Flood.  The controversial Guadeloupe skeletons are another case in point.[(4)](http://www.christiananswers.net/q-aig/aig-c014.html#4) Without wishing to take sides in the debate, and in any case the hard data are still inconclusive either way, the fact remains that even if perchance these skeletons were so-called Miocene, that in and of itself would still not prove that the skeletons were in Flood sediments and therefore represented the remains of pre-Flood people. Being a subdivision of the so-called Tertiary, these Miocene rocks may still be post-Flood sediments and so these Guadeloupe skeletons may still not be human fossils from Noah's Flood.  Perhaps the fossilized human skeletons that come closest to having been pre-Flood humans buried in Flood strata are those skeletons found at Moab, Utah (USA).[(5)](http://www.christiananswers.net/q-aig/aig-c014.html#5) In a copper mine there, two definitely human skeletons were found in Cretaceous “age” sandstone (supposedly more than 65 million years old), the bones still joined together naturally and stained green with copper carbonate. While many regard these bones as recently buried, there still remains the remote possibility that they are pre-Flood human “fossils”.  We can only concur that there is no definite unequivocal evidence of human remains in those rock strata that can definitely be identified as Flood sediments. This realization is at first rather perplexing. But some clues to unraveling this puzzle emerge on investigation. The nature of the fossil record Let's begin by considering the nature of the fossil record. Most people don't realize that in terms of numbers of fossils 95% of the fossil record consists of shallow marine organisms such as corals and shellfish.[(6)](http://www.christiananswers.net/q-aig/aig-c014.html#6) Within the remaining 5%, 95% are all the algae and plant/tree fossils, including the vegetation that now makes up the trillions of tonnes of coal, and all the other invertebrate fossils including the insects. Thus the vertebrates (fish, amphibians, reptiles, [birds](http://www.christiananswers.net/dictionary/bird.html) and mammals) together make up very little of the fossil record—in fact, 5% of 5%, which is a mere 0.25% of the entire fossil record. So comparatively speaking there are very, very few amphibian, reptile, [bird](http://www.christiananswers.net/dictionary/bird.html) and mammal fossils, yet so much is often made of them. For example, the number of dinosaur skeletons in all the world's museums (both public and university) totals only about 2,100.[(7)](http://www.christiananswers.net/q-aig/aig-c014.html#7) Furthermore, of this 0.25% of the fossil record which is vertebrates, only 1% of that 0.25% (or 0.0025%) are vertebrate fossils that consist of more than a single bone! For example, there's only one Stegosaurus skull that has been found, and many of the horse species are each represented by only one specimen of one tooth![(8)](http://www.christiananswers.net/q-aig/aig-c014.html#8)  In any regional area where vertebrate fossils are found, there is a general tendency for these land animals to be higher up in the rock strata sequence on top of the strata containing marine organisms. This has been interpreted by evolutionists as representing the evolutionary sequence of life from marine invertebrates through fish and amphibians to the land-based vertebrates.  However, this same observation can be more reasonably explained by Flood geologists as due to the order of burial of the different ecological zones of organisms by the Flood waters. For example, shallow marine organisms/ ecological zones would be the first destroyed by the fountains of the great deep breaking open, with the erosional runoff from the land due to the torrential rainfall concurrently burying them. On this basis then we would probably not expect to find human remains in the early Flood strata, which would contain only shallow marine organisms. The fossil record as we understand it at the moment certainly fits with this.  Additionally, the majority of the few mammal fossils in the fossil record are in the so-called Tertiary strata, which most creationist geologists nowadays regard as post-Flood strata. If this is the case, then there really aren't very many mammal fossils in the late Flood sediments (there are a few mammal fossils in the so-called Mesozoic rocks). Consequently, it's not only human fossils that are not found in the Flood sediments, but there is a relative lack of other mammal fossils also.  Of course, in the post-Flood era humans would have been able to make the necessary decisions to get away from the local residual catastrophes responsible for the post-Flood (Tertiary) strata, so we wouldn't expect to find humans fossilized in post-Flood sediments like we find other mammals.  Another problem in the fossil record is, as we have already seen, the fragmentary nature of what is often found, which makes identification difficult. For example, "a five million year-old piece of one tooth!(8) Destruction of skeletons The next question to ask is: Would all the people still alive when the Flood waters finally covered all the land and swept them away be buried and preserved as fossils in the later Flood sediments? Can we assume that there was no destruction of the people's bodies in the Flood waters and by other processes operating during the Flood and subsequently? Probably not!  The turbulence of the water, even in a local flood, can be horrific, particularly when the fast-moving current picks up not only sand and mud, but large boulders. Under such conditions, human bodies would probably be thrown around like flotsam and would tend to be destroyed by the agitation and abrasion.  But even if human bodies were buried in the later Flood sediments, destruction could still occur subsequently (that is, post-deposition). For example, if ground waters permeating through the sediments (such as sandstone) contain sufficient oxygen, then the oxygen would probably oxidize the organic molecules in the buried bodies and so destroy them. (This could be regarded as a type of weathering.) Likewise, chemically active ground waters could also be capable of dissolving human bones, removing all trace of buried people.  Many Flood sediments have also undergone chemical and mineralogical changes due to the temperatures and pressures of burial, plus the presence of the water trapped in between the sediment grains. This process of change, known technically as metamorphism, eventually obliterates many fossils in the original sediments, whether they be fossils of shellfish, corals or mammals, particularly with increasing depth of burial, and higher temperatures and pressures.  Yet another process that could destroy buried human bodies would be the intrusion of molten (igneous) rock into the Flood sediments, and through them to the surface to form volcanoes and lava flows. Such processes involve heat intense enough to melt rocks and recrystallize them. As the hot molten rock rises through the sediments, the sediments are often baked by the heat, and again chemical and mineralogical changes occur that obliterate many contained fossils.  All of these factors greatly lengthen the odds of finding a human fossil today. Differential suspension Not only would the turbulence of the sediment-laden Flood waters probably destroy some of the human bodies swept away, but differential suspension in the waters could have made it hard to bury those bodies that survived the turbulence. This is because human bodies when immersed in water tend to bloat, and therefore become lighter and float to the surface. This is what is meant by differential suspension. The human bodies floating on the water surface could therefore for some time be carrion for whatever [birds](http://www.christiananswers.net/dictionary/bird.html) were still flying around seeking places to land and food to eat. Likewise, marine carnivores still alive in their watery habitat would also devour corpses.  Furthermore, if the bodies floated long enough and were not eaten as carrion, then they would still have tended to either decompose or be battered to destruction on and in the waters before any burial could take place. This could explain why we still don't find human fossils higher up in the fossil record/geological column, that is, the later Flood sediments.  When we take all these factors into account, it would seem unlikely that many of the people present at the time the Flood waters came could have ended up being fossilized. Even if a handful, perhaps a few thousand, were preserved, when such a small number is distributed through the vast volume of Flood sediments, the chances of one being found at the surface are mathematically very, very low, let alone of being found by a professional scientist who could recognize its significance and document it properly.  Putting all these factors together and assuming that they are all realistic possibilities, then the probability of finding a human fossil in the Flood sediments today would be very, very small. To date, our investigations of the fossil record indicate that there are no human fossils in Flood strata, so perhaps the above explanations could be some of the reasons why this is so. God's purpose for the Flood Finally, however, we need to consider the purpose for which God sent the Flood, for this provides yet another reason, and perhaps the main reason, why we do not find any human fossils in the Flood sediments and why we should not expect to find any. In [Genesis 6:7](http://www.christiananswers.net/bible/gen6.html#7) we read that God said He would destroy man, whom He had created from the face of the earth. So perhaps God deliberately made sure that the Flood waters did just that, destroying every trace of man and his artifacts from the pre-Flood world, if this is what He meant by what He had recorded in the Scriptures.  Yes, God did say that He would send a Flood to destroy the beasts of the field and every living thing in whose nostrils was the breath of life also, but yet we find fossils of all the animals, etc. How then can it be that we find animal fossils and not human fossils or artifacts, when God said that He was equally going to destroy the animals *and* man from the face of the earth by the Flood?  Elsewhere in Scripture we learn that as far as God's judgment of sin is concerned, when God says that He wants the offenders removed, then this means utter destruction. We see this in the case of the children of Israel moving into the Promised Land. They were told to utterly destroy the Canaanites because of their evil and evil practices. God had pronounced judgment on the Canaanites and the Israelites were but His instruments in executing judgment. The fact that they didn't utterly destroy the Canaanites ended up being a lingering malignant problem, as the Israelites repeatedly lapsed into the sinful practices of the Canaanites who had survived the conquest.  Similarly, we see that God issued the instruction to King Saul to utterly destroy the [Amalekites](http://www.christiananswers.net/dictionary/amalekite.html), again as a judgment on them for their evil ([1 Samuel 15](http://www.christiananswers.net/bible/1sam15.html)). Again, when God meant His judgment to be utter destruction, He meant what He said, and Saul's disobedience in not carrying through this instruction led to his own downfall.  It would seem to us unloving of God to execute such relentless judgment, but such is God's [abhorrence](http://www.christiananswers.net/dictionary/abhor.html) of sin that its penalty must be seen for what it is -utter destruction and removal of all trace. If God cannot tolerate sin (His holiness cannot “look” on sin), then all trace of sin has to be removed in judgment, which necessitates utter destruction. Should human remains have been allowed to survive the Flood as fossils, then there could also have been the possibility of such remains being worshiped and revered.  However, at least some of the animals became fossilized. Though [Genesis 6](http://www.christiananswers.net/bible/gen6.html) implies that they were affected by the entry of sin into the world, they were not morally accountable. Also, they serve as a witness to God's judgment at the time of the Flood. In other words, when we look at the fossil record and seem not to see any human fossils, this should remind us how much God hates sin. We should see the fossils as a sober reminder of the penalty of sin and the character of God's judgment, and as a testimony to the reality of [Noah's](http://www.christiananswers.net/dictionary/noah.html) Flood and the trustworthiness of the Scriptural record.  The [Apostle](http://www.christiananswers.net/dictionary/apostle.html) [Peter](http://www.christiananswers.net/dictionary/peter.html) takes up this theme in [2 Peter 3](http://www.christiananswers.net/bible/2pet3.html). He says that just as God created the world and [judged](http://www.christiananswers.net/dictionary/judgmentsofgod.html) the world the first time by the [Flood](http://www.christiananswers.net/dictionary/deluge.html), then so too He is going to keep His word and judge the world the second time by fire. Man therefore should take heed and make peace with his Creator while there is still time, before God comes again as Judge with sudden and swift judgment. Conclusions As far as we are aware at the present time, there are no indisputable human fossils in the fossil record that we could say belong to the pre-Flood human culture(s). When we endeavor to understand some of the processes that may have occurred during the Flood, and also the real nature of the fossil record, we are not embarrassed by the seeming lack of human fossils.  We don't have all the explanations as to how the evidence came to be that way, and it may be that in the future we will discover some human fossils. However, there is also much about the fossil record that the evolutionists have a hard time explaining. On the other hand, we should also realize that we don't have all the answers either, and we never will.  Even though God has left us with evidence for creation and the Flood, the Bible still says that without faith it is impossible to please *and* believe Him ([Hebrews 11:6](http://www.christiananswers.net/bible/heb11.html#6)). Because we weren't there at the time of the Flood we cannot scientifically prove exactly what happened, so there will always be aspects that will involve our faith. However, it is not blind faith. As we have investigated the evidence, we have seen nothing to contradict what the Bible says about a world Flood. We can be satisfied that there are reasonable explanations, consistent with Scripture, for the seeming lack of human fossils in Flood rocks. Footnotes  1. *Ancient Man: A Handbook of Puzzling Artifacts*, compiled by William R. Corliss, The Sourcebook Project, Glen Ann, Maryland, USA, 1978. 2. “A Necklace of a Prehistoric God”, *Morrisonville Times*, Illinois, June 11, 1891.   Evidently, in 1889 a Mrs S.W. Culp broke a chunk of coal and found embedded therein a 10- inch [25.4 centimeters], eight-carat gold chain, or so it was claimed (Wysong R.L., *The Creation/Evolution Controversy*, Inquiry Press, Midland, Michigan, 1976, p. 370).   1. Whitcomb, J.C. and Morris, H.M., *The Genesis Flood*, The Presbyterian and Reformed Publishing Company, Philadelphia, 1961, pp. 175-176 quote from Otto Stutzer, *Geology of Coal* (translated by A.C. Noe, University of Chicago Press, 1940), p. 271:   “In the coal collection in the Mining Academy in Freiberg [Stutzer was Professor of Geology and Mineralogy in the School of Mines at Freiberg, in Saxony], there is a puzzling human skull composed of brown coal and manganiferous and phosphatie limonite, but its source is not known. This skull was described by Karsten and Dechen in 1842.” I (the present author) have personally verified the existence of this object via correspondence with Prof. Dr R. Vulpius, Professor of Coal Geology at the Freiberg Mining Academy. He describes it as a petrified object which resembles a human skull, and indicated that wide-ranging scientific studies to elucidate its composition and origin were in progress.   1. The existence and potential significance of these skeletons were first brought to our attention by Bill Cooper, “Human fossils from Noah's Flood”, *Ex Nihilo*, vol. 5, no. 3, January 1983, pp. 6-9. Since then debate has raged in the pages of *Ex Nihilo* (vol. 6, no. 2, November 1983, pp. 31-35) and the *Ex Nihilo Technical Journal* (vol. 1, 1984, pp. 3051; vol. 2, 1986, pp. 119-153 and vol. 4, 1990, pp. 108-137).   The skeletons do exist, one being housed in the collections of the British Museum (Natural History) in London, and the report of the excavators indicate that more are in the limestone strata east of the village of Moule on the island of Guadeloupe in the Caribbean.   1. Burdick, C.L., “Discovery of human skeletons in Cretaceous Formation”, *Creation Research Society Quarterly*, vol. 10, no. 2, September 1973, pp. 109-110. 2. Wise, K.P., “The Flood and the fossil record”, an informal talk given at the Institute for Creation Research, San Diego (USA) on August 17, 1988. 3. Lewin, R., 1990. *New Scientist*, vol. 128, no. 1745, p. 30. 4. Wise, Ref. 6. 5. Dr Tim White (anthropologist at the University of California, Berkeley), as quoted by lan Anderson, “Hominoid collar-bone exposed as dolphin's rib”, *New Scientist*, 28 April 1983, p. 199.   Excerpt from [*Creation Magazine*](http://www.CreationOnTheWeb.org/), Dec. 91-Feb. 92, Vol. 14, No. 1, pp. 28-33. Supplied by [Creation Ministries International](http://www.CreationOnTheWeb.org/)  [Copyright ©](http://www.christiananswers.net/copyrite.html) 1996, Creation Ministries International, All Rights Reserved - except as noted on attached [“Usage and Copyright”](http://www.christiananswers.net/copyrite.html) page that grants ChristianAnswers.Net users generous rights for putting this page to work in their homes, personal witnessing, churches and schools. |

# Where did the human races come from?

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| http://www.christiananswers.net/0.gif | http://www.christiananswers.net/0.gif | See this page in: [Dutch (Nederlands)](http://www.christiananswers.net/dutch/q-aig/race-definition-nl.html)  Three men of different ethnic groups. Illustration copyrighted. Courtesy of Eden Communications.  According to the [Bible](http://www.christiananswers.net/bible/home.html), all humans on earth today are descended from [Noah](http://www.christiananswers.net/dictionary/noah.html) and his wife, his three sons and their wives, and before that from [Adam](http://www.christiananswers.net/dictionary/adam.html) and [Eve](http://www.christiananswers.net/dictionary/eve.html) ([Genesis 1-11](http://www.christiananswers.net/bible/gen1.html)). But today we have many different groups, often called “races,” with what seem to be greatly differing features. The most obvious of these is [skin color](http://www.christiananswers.net/q-aig/race-skincolor.html). Many see this as a reason to doubt the Bible's record of history. They believe that the various groups could have arisen only by evolving separately over tens of thousands of years. However, as we shall see, this does not follow from the biological evidence.  [The Bible](http://www.christiananswers.net/bible/about.html) tells us how the population that descended from [Noah's](http://www.christiananswers.net/dictionary/noah.html) family had one language and by living in one place were disobeying God's command to “fill the earth” ([Genesis 9:1](http://www.christiananswers.net/bible/gen9.html#1), [11:4](http://www.christiananswers.net/bible/gen11.html#4)). God confused their language, causing a break-up of the population into smaller groups which scattered over the earth ([Genesis 11:8-9](http://www.christiananswers.net/bible/gen11.html#8)). Modern [genetics](http://www.christiananswers.net/creation/menu-species.html) show how, following such a break-up of a population, variations in [skin color](http://www.christiananswers.net/q-aig/race-skincolor.html), for example, can develop in only a few generations. There is good evidence that the various people groups we have today have *not* been separated for huge periods of time.[1](http://www.christiananswers.net/q-aig/race-definition.html#1) What is a “race”? There is really only one race—the human race. The [Bible](http://www.christiananswers.net/bible/home.html) teaches us that God has "made of one [blood](http://www.christiananswers.net/dictionary/blood.html) all nations of men" ([Acts 17:26](http://www.christiananswers.net/bible/acts17.html#26)). Scripture distinguishes people by tribal or national groupings, not by skin color or physical appearance. Clearly, though, there are groups of people who have certain features (e.g., [skin color](http://www.christiananswers.net/q-aig/race-skincolor.html)) in common, which distinguish them from other groups. We prefer to call these “people groups” rather than “races,” to avoid the evolutionary connotations associated with the word “race.”  All peoples can interbreed and produce fertile offspring. This shows that the biological differences between the “races” are not very great. In fact, the DNA differences are trivial. The DNA of any two people in the world would typically differ by just 0.2 percent.[2](http://www.christiananswers.net/q-aig/race-definition.html#2) Of this, only 6 percent can be linked to racial categories; the rest is “within race” variation.   |  | | --- | | Variation in DNA between human individuals **The variation in DNA between human individuals shows that racial differences are trivial.** *This genetic unity means, for instance, that white Americans, although ostensibly far removed from black Americans in phenotype, can sometimes be better tissue matches for them than are* other *black Americans.* |   Anthropologists generally classify people into a small number of main racial groups, such as the Caucasoid (European or “white”),[3](http://www.christiananswers.net/q-aig/race-definition.html" \l "3) the Mongoloid (which includes the Chinese, Inuit or Eskimo, and Native Americans), the Negroid (black Africans), and the Australoid (the Australian Aborigines). Within each classification, there may be many different sub-groups.  Virtually all evolutionists would now say that the various people groups did not have separate origins. That is, different people groups did not each [evolve](http://www.christiananswers.net/creation/menu-humans.html) from a different group of animals. So they would agree with the [biblical creationist](http://www.christiananswers.net/creation/home.html) that all people groups have come from the same original population. Of course, they believe that such groups as the Aborigines and the Chinese have had many tens of thousands of years of separation. Most believe that there are such vast differences between the groups that there *had* to be many years for these differences to develop.  One reason for this is that many people believe that the observable differences arise from some people having unique features in their hereditary make-up which others lack. This is an understandable but incorrect idea. **Let's look at skin color**, for instance. What about SKIN COLORS? It is easy to think that since different groups of people have “yellow” skin, “red” skin, “black” skin, “white” skin, and “brown” skin, there must be many different skin pigments or colorings. And since different chemicals for coloring would mean a different genetic recipe or code in the hereditary blueprint in each people group, it appears to be a real problem. How could all those differences develop within a short time?   |  | | --- | | [Black woman and man. Photo copyrighted. Courtesy of Eden Comm.](http://www.christiananswers.net/q-aig/race-blacks.html) |   However, we all have the same coloring pigment in our skin—melanin. This is a dark-brownish pigment that is produced in different amounts in special cells in our skin. If we had *none* (as do people called albinos, who inherit a mutation-caused defect, and cannot produce melanin), then we would have a very white or pink skin coloring. If we produced a little melanin, we would be European white. If our skin produced a great deal of melanin, we would be a very dark black. And in between, of course, are all shades of brown. There are no other significant skin pigments.[4](http://www.christiananswers.net/q-aig/race-definition.html#4)  In summary, from currently available information, the really important factor in determining skin color is melanin—the amount produced.  Eye differences - Caucasian vs. Asian. Illustration copyrighted.This situation is true not only for skin color. Generally, whatever feature we may look at, no people group has anything that is essentially different from that possessed by any other. For example, the Asian, or almond, eye differs from a typical Caucasian eye in having more fat around them. Both Asian and Caucasian eyes have fat—the latter simply have less. What does melanin do? Man in bathing suit. Photo copyrighted. Provided by Eden Communications.It protects the skin against damage by ultraviolet light from the sun. If you have too little melanin in a very sunny environment, you will easily suffer sunburn and skin cancer. If you have a great deal of melanin, and you live in a country where there is little sunshine, it will be harder for you to get enough vitamin D (which needs sunshine for its production in your body). You may then suffer from vitamin D deficiency, which could cause a bone disorder such as rickets.  We also need to be aware that we are not born with a genetically fixed amount of melanin. Rather, we have a genetically fixed *potential* to produce a certain amount, and the amount increases in response to sunlight. For example, you may have noticed that when your Caucasian friends (who spent their time indoors during winter) headed for the beach at the beginning of summer they all had more or less the same pale white skin color. As the summer went on, however, some became much darker than others.  **How is it that many different skin colors can arise in a short time?** Remember, whenever we speak of different “colors” we are referring to different shades of the one color, melanin.  [Child. Photo copyrighted. Provided by Eden Comm.](http://www.christiananswers.net/q-aig/race-skincolor.html)  If a person from a very black people group [marries](http://www.christiananswers.net/q-sum/sum-g003.html) someone from a very white group, their offspring (called mulattos) are mid-brown. It has long been known that when mulattos marry each other, their offspring may be virtually any “color,” ranging from very dark to very light. Understanding this gives us the clues we need to answer our question, but first we must look, in a simple way, at some of the basic principles of heredity. Heredity  |  | | --- | | [http://www.christiananswers.net/q-eden/dna-drawing2.jpg](http://www.christiananswers.net/creation/menu-species.html) DNA drawing. Copyright, Eden Communications. |   Each of us carries information in our body that describes us in the way a blueprint and specifications describe a furnished building. It determines not only that we will be human beings, rather than cabbages or crocodiles, but also whether we will have blue eyes, short nose, long legs, etc. When a sperm fertilizes an egg, *all* the information that specifies how the person will be built (ignoring such superimposed factors as exercise and diet) is already present. Most of this information is in coded form in our DNA.[5](http://www.christiananswers.net/q-aig/race-definition.html#5)  To illustrate coding, a piece of string with beads on it can carry a message in Morse code. The piece of string, by the use of a simple sequence of short beads, long beads (to represent the dots and dashes of Morse code), and spaces, can carry the same information as the English word “help” typed on a sheet of paper. The entire Bible could be written thus in Morse code on a long enough piece of string.  In a similar way, the human blueprint is written in a code (or language convention) which is carried on very long chemical strings of DNA. This is by far the most efficient information storage system known, greatly surpassing any foreseeable computer technology.[6](http://www.christiananswers.net/q-aig/race-definition.html#6) This information is copied (and reshuffled) from generation to generation as people reproduce.  The word “gene” refers to a small part of that information which has the instructions for only one type of enzyme, for example.[7](http://www.christiananswers.net/q-aig/race-definition.html#7) It may be simply understood as a portion of the “message string” containing only one specification.  For example, there is one gene that carries the instructions for making hemoglobin, the protein that carries oxygen in your red blood cells. If that gene has been damaged by mutation (such as copying mistakes during reproduction), the instructions will be faulty, so it will often make a crippled form of hemoglobin, if any. (Diseases such as sickle-cell anemia and thalassemia result from such mistakes.)  So, with an egg which has just been fertilized—where does all its information, its genes, come from? One half comes from the father (carried in the sperm), and the other half from the mother (carried in the egg).  Genes come in pairs, so in the case of hemoglobin, for example, we have two sets of code (instruction) for hemoglobin manufacture, one coming from the mother and one from the father.  This is a very useful arrangement, because if you inherit a damaged gene from one parent that could instruct your cells to produce a defective hemoglobin, you are still likely to get a normal one from the other parent which will continue to give the right instructions. Thus, only half the hemoglobin in your body will be defective. (In fact, each of us carries hundreds of genetic mistakes, inherited from one or the other of our parents, which are usefully “covered up” by being matched with a normal gene from the other parent—see "[Where Did Cain Get His Wife?](http://www.christiananswers.net/q-aig/aig-c004.html)") Further information about racial issues  * [Racism, Racial Issues and Christianity](http://www.christiananswers.net/race.html) Answers to Frequently-Asked-Questions * How did different skin colors come about? [Answer](http://www.christiananswers.net/q-aig/race-skincolor.html) * What are the consequences of false beliefs about the origin of races? [Answer](http://www.christiananswers.net/q-aig/race-falsebeliefs.html) * Are black people the result of a curse on Ham? [Answer](http://www.christiananswers.net/q-aig/race-blacks.html) * What about the “Stone Age” people? [Answer](http://www.christiananswers.net/q-aig/race-stoneage.html) * Is interracial marriage biblical? [Answer](http://www.christiananswers.net/q-sum/sum-g003.html) * Science, and the Origin of Humans [GO](http://www.christiananswers.net/creation/menu-humans.html) * The Origin of Species [GO](http://www.christiananswers.net/creation/menu-species.html)   Top of Form  [[Click Here](http://christiananswers.net/catalog/bk-oneblood.html)One Blood: The Biblical Answer to Racism](http://christiananswers.net/catalog/bk-oneblood.html) book  by Ken Ham, Carl Wieland and Don Batten  Everyone concerned with racial discrimination and misunderstanding will really appreciate the content and spirit of this timely, Bible-based book, full of fascinating scientific facts and information. Eye-opening and encouraging!  [[More Details](http://christiananswers.net/catalog/bk-oneblood.html)]     US$1099  Bottom of Form   Footnotes  1. Worldwide variations in mitochondrial DNA (the “Mitochondrial Eve” story) were claimed to show that all people today trace back to a single mother (living in a small population) 70,000 to 800,000 years ago. Recent findings on the rate of mitochondrial DNA mutations shorten this period drastically to put it within the biblical time-frame. See L. Lowe and S. Scherer, "Mitochondrial Eve: The Plot Thickens," *Trends in Ecology and Evolution*, 1997, 12(11):422-423; C. Wieland, "A Shrinking Date for Eve," *CEN Technical Journal*, 1998, 12(1):1-3. 2. J.C. Gutin, "End of the Rainbow," *Discover*, November 1994, pp. 71-75. 3. However, people inhabiting the Indian subcontinent are mainly Caucasian and their skin color ranges from light brown to quite dark. Even within Europe, skin color ranges from very pale to brown. 4. **Other substances can in minor ways affect skin shading**, such as the colored fibers of the protein elastin and the pigment carotene. However, once again we all share these same compounds, and the principles governing their inheritance are similar to those outlined here. Factors other than pigment in the skin may influence the shade perceived by the observer in subtle ways, such as the thickness of the overlying (clear) skin layers, the density and positioning of the blood capillary networks, etc. In fact, “melanin,” which is produced by cells in the body called melanocytes, consists of two pigments, which also account for hair color. Eumelanin is very dark brown, phaeomelanin is more reddish. People tan when sunlight stimulates eumelanin production. Redheads, who are often unable to develop a protective tan, have a high proportion of phaeomelanin. They have probably inherited a defective gene which makes their pigment cells "unable to respond to normal signals that stimulate eumelanin production." See P. Cohen, "Redheads Come Out of the Shade," *New Scientist*, 1995, 147(1997):18. 5. Most of this DNA is in the nucleus of each cell, but some is contained in mitochondria, which are outside the nucleus in the cytoplasm. Sperm contribute only nuclear DNA when the egg is fertilized. Mitochondrial DNA is inherited only from the mother, via the egg. 6. W. Gitt, "Dazzling Design in Miniature," *Creation*, 1997, 20(1):6. 7. **Incredibly, sometimes the same stretch of DNA can be “read” differently, to have more than one function**, by starting the reading process from different points. The creative intelligence behind such a thing is mind-boggling.   Edited by Don Batten, Ph.D. / Authors: [Ken Ham](http://www.christiananswers.net/catalog/kenham.html), Jonathan Sarfati, and [Carl Wieland](http://www.christiananswers.net/creation/people/wieland-c.html), adapted from [*The Revised & Expanded Answers Book*](http://www.christiananswers.net/catalog/bk-answers.html) (Master Books, 2000).  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[](http://www.christiananswers.net/catalog/wp-vs.html)  
Noah's Ark as shown in the video,  
[The World That Perished](http://www.christiananswers.net/catalog/wp-vs.html)

**Discover amazing facts about Mrs. Noah…**

…the woman most responsible for the survival of the human race  
  
…a woman of courage and determination  
…a woman of purity  
…a farmer  
…a shipbuilder  
…a zookeeper  
…a faithful helper  
…a woman of God

[God's Story Online home](http://www.christiananswers.net/godstory/home.html)  
Also, read the story of Noah's family - [GO](http://www.christiananswers.net/godstory/flood1.html)…



See this page in: [Dutch (Nederlands)](http://www.christiananswers.net/dutch/q-aig/aig-mrsnoah-nl.html)

**Who was Mrs. Noah?**

Mrs. Noah is undoubtedly one of the most significant women in Bible history—yet we have no record of her name. She is merely referred to as [Noah's](http://www.christiananswers.net/dictionary/noah.html) wife the five times she is mentioned ([6:18](http://www.christiananswers.net/bible/gen6.html#18); [7:7](http://www.christiananswers.net/bible/gen7.html#7), [13](http://www.christiananswers.net/bible/gen7.html#13); [8:16](http://www.christiananswers.net/bible/gen8.html#16), [18](http://www.christiananswers.net/bible/gen8.html#18)). What was she like? How did she live?

**From a Different World**

Her world was different from ours in many ways. Disease would have been less prevalent only about 1,600 years or so after the [Fall](http://www.christiananswers.net/dictionary/fallofman.html) ([Genesis 3](http://www.christiananswers.net/bible/gen3.html)). We've had a few thousand more years for deterioration to occur, for example more [bad mutations](http://www.christiananswers.net/q-eden/genetic-mutations.html) in us, and in viruses and bacteria. Apparently, the average man in Mrs. Noah's day expected to become a father after he was a hundred years old, and to live more than 900 years. How long would women like Mrs. Noah have expected to be capable of child-bearing?

The fossil record shows larger animals and plants when compared to the same types found today. Is this why giants figure in children's fairy-stories? And there were no racial problems because there were no races. Everyone spoke the same language ([Genesis 11](http://www.christiananswers.net/bible/gen11.html)).

In many ways, however, Mrs. Noah's world was similar to ours. Its population was swelling rapidly. Various estimates have been made from the genealogy in [Chapter 5](http://www.christiananswers.net/bible/gen5.html). A conservative calculation based on four children per family and 18 generations from creation to the Flood gives a population of about one billion. This is equal to the world population during the first half of the nineteenth century. Today the world population is about five times as large. This population may have been spread right around the globe, although we have no way of knowing for certain what the pre-Flood land area was like. It might have been one single land-mass ([1:9](http://www.christiananswers.net/bible/gen1.html#9)).

**No Grunting Cavemen**

Neither were they grunting cavemen, for they had developed many skills ([Genesis 4](http://www.christiananswers.net/bible/gen4.html)). The first city was built by [Adam's](http://www.christiananswers.net/dictionary/adam.html) son, [Cain](http://www.christiananswers.net/dictionary/cain.html). By the seventh generation, there were shepherds, [musical instruments](http://www.christiananswers.net/dictionary/music.html)—both wind and string-metallurgy (bronze and [iron](http://www.christiananswers.net/dictionary/iron.html))—and poetry (by [Lamech](http://www.christiananswers.net/dictionary/lamech.html)).

These people with such abilities were descended from [Adam](http://www.christiananswers.net/dictionary/adam.html), who named the animals in one day ([1:20](http://www.christiananswers.net/bible/gen1.html#20)), even before his wife was created to help him! This was before his intellect was spoiled by sin. Our intellects are no doubt considerably dulled by the ravages of sin. Contrary to popular opinion concerning those who lived so long ago, Mrs. Noah would have been far from primitive.

**A Light in an Extremely Sinful World**

One of the greatest similarities between the pre-Flood world and ours was its sinfulness ([6:5](http://www.christiananswers.net/bible/gen6.html#5), [11-13](http://www.christiananswers.net/bible/gen6.html#11)); the failure of God's people to be separate from the ungodly, especially in marriage ([6:1,2](http://www.christiananswers.net/bible/gen6.html#1)); the slavery to sin ([6:5](http://www.christiananswers.net/bible/gen6.html#5)); the sweeping violence ([6:11-12](http://www.christiananswers.net/bible/gen6.html#11) . And Mrs. Noah's world was being watched by God ([6:5,6](http://www.christiananswers.net/bible/gen6.html#5); [7:3](http://www.christiananswers.net/bible/gen7.html#3), [13](http://www.christiananswers.net/bible/gen7.html#13)) as is ours.

[](http://www.christiananswers.net/catalog/wp-vs.html)Mrs. Noah knew her world was under God's judgment. Her husband had told her that God planned to destroy the earth with water because of its sin ([6:13](http://www.christiananswers.net/bible/gen6.html#13), [17](http://www.christiananswers.net/bible/gen6.html#17)). God also gave [Noah](http://www.christiananswers.net/dictionary/noah.html) specific directions for building an [Ark](http://www.christiananswers.net/dictionary/ark.html) (meaning 'box') to preserve his family and a pair of each air-breathing, land-dwelling member of the animal kingdom.

I think that Mrs. Noah would not have had a problem with this. She would have been well aware that her God had created her ancestor [Eve](http://www.christiananswers.net/dictionary/eve.html) to be [Adam's](http://www.christiananswers.net/dictionary/adam.html) helper. The events of [creation week](http://www.christiananswers.net/q-eden/edn-ordercreation.html) and the details of her family tree were probably recorded on tablets which were later loaded on to the Ark.

She would have known that God revealed His commands to Adam before He gave him Eve to be his helper ([2:15](http://www.christiananswers.net/bible/gen2.html#15), [18](http://www.christiananswers.net/bible/gen2.html#18)). This man was responsible to God for himself and his wife. He was the one called to account when they disobeyed God even though she started it ([3:9-12](http://www.christiananswers.net/bible/gen3.html#9)). Of course, God communicated with Eve as well, and Mrs. Noah had her own personal relationship with her Creator. It was just that this Creator relayed His instructions to His people via their leaders.

**Faithful Helper**

Mrs. Noah was not a nobody, but rather a real somebody fulfilling her feminine role. She obeyed God by submitting to her husband's leadership. Noah, being a righteous man ([6:9](http://www.christiananswers.net/bible/gen6.html#9)) would not have abused his position or corrupted it into tyranny. She faithfully helped Noah during several hundred years of farming ([5:29](http://www.christiananswers.net/bible/gen5.html#29)), up to 120 years of boat-building, more than a year of zoo-keeping (under divine guidance) on an enormous houseboat, then during a few hundred years of farming with a side-line in wine-making ([Genesis 9](http://www.christiananswers.net/bible/gen9.html)). She also supported him in his preaching ministry ([2 Peter 2:5](http://www.christiananswers.net/bible/2pet2.html#5)).

[](http://www.christiananswers.net/catalog/wp-vs.html)Nobody without faith could have done what she did. How otherwise could she have backed her husband in building a large ocean-going vessel to escape a flood when she had never even seen rain ([2:5-6](http://www.christiananswers.net/bible/gen2.html#5))? Without faith how could she have raised three sons with hammering in her ears as a constant reminder of the coming doom? Without faith how could she have stepped on the Ark and left nearly everything behind? She must have believed that God could and would save them as He had promised. She was probably aware that her husband was destined for a special service to God when she married him. [Lamech](http://www.christiananswers.net/dictionary/lamech.html) had named [Noah](http://www.christiananswers.net/dictionary/noah.html) from a word meaning 'rest' because God had revealed to him that this son would bring rest to God's people ([5:29](http://www.christiananswers.net/bible/gen5.html#29)).

Crucial to Mrs. Noah's faith was the fact that her eyes had to be fixed on the world to come after the Flood. She lived and raised her family for more than half her life in a world she knew was doomed for destruction. She had to teach [Shem](http://www.christiananswers.net/dictionary/shem.html), [Ham](http://www.christiananswers.net/dictionary/ham.html) and [Japheth](http://www.christiananswers.net/dictionary/japheth.html) to live differently from their friends and to prepare themselves for this future world. She couldn't allow herself or her family to become too attached to the temporary trappings around them.

**Close Family**

She must have fostered a very close family life. They had to be close because they had to move further and further away from the beliefs and practices of the people around them. They also had to prepare for a time when there wouldn't be anyone else. During the long years of working and waiting she and Noah did have the support of believing members of their wider family circle.

There was paternal grandfather [Lamech](http://www.christiananswers.net/dictionary/lamech.html) (not to be confused with the Lamech of [Chapter 4](http://www.christiananswers.net/bible/gen4.html)) who died five years before the Flood and was great grandfather of [Methuselah](http://www.christiananswers.net/dictionary/methuselah.html) (the oldest man who ever lived—969 years) who survived till the year of the Flood. God had mercy on them in their old age and didn't put them through the ordeal. Nor did he put babies or children or adolescents through it; he timed the arrival of offspring to fit in with His sovereign plan. Four married couples went through it—the senior pair to manage and the other three to multiply.

There must have been a sense in which Mrs. Noah was free from the bondage of other people's opinions—free to obey God no matter what. She was the only believing female of her generation to board the Ark. There were only three in the next generation—the young women who became her son's wives. Were they brought to faith by her husband's preaching and her prayers? They were to have an absolutely crucial place in human history. From their descendants all the nations of the earth originated ([Genesis 10](http://www.christiananswers.net/bible/gen10.html) and [11](http://www.christiananswers.net/bible/gen11.html)).

**A Woman of Courage**

What courage and determination she must have possessed to sustain her lonely position; to face the destruction of everything she knew. What spiritual strength would have been necessary to endure the hostility and ridicule. Nothing but sheer steel could have weathered the cries of those drowning. Great grace must have been granted for her to be shut in with seven others and many thousands of animals for more than a year. Only uncommon courage could face what she first viewed from the mountains of [Ararat](http://www.christiananswers.net/dictionary/ararat.html) where the [Ark](http://www.christiananswers.net/dictionary/ark.html) lodged: the totally transformed world with its fossil reminders of death and destruction.

This woman a nobody? She must have been one of the greatest women who ever lived. It matters not that her name wasn't recorded. She impacted the world's history for ever.

**How did she do it?** She did it by being a godly wife and mother. She was married to a 'savior', Noah, who was used of God to save believers from physical death in the Flood and therefore the world's population from extinction. Her oldest son, [Shem](http://www.christiananswers.net/dictionary/shem.html), was the ancestor of the [Jews](http://www.christiananswers.net/dictionary/jew.html). From this nation came [Jesus](http://www.christiananswers.net/dictionary/jesus.html), the incarnate Creator and Savior. By His death on the cross He gave salvation from spiritual death to all believers. He is the only One who can save us from everlasting destruction in [Hell](http://www.christiananswers.net/dictionary/hell.html). He is the only One who can deliver us when our world is destroyed by fire ([2 Peter 3:7](http://www.christiananswers.net/bible/2pet3.html#7)). He has promised to come back and collect His own ([2 Peter 3:4ff](http://www.christiananswers.net/bible/2pet3.html#4)).

Author: Gill Middleton. Text supplied by [Creation Ministries International](http://www.CreationOnTheWeb.org/). Earlier version published in *Creation Ex Nihilo* 15(2):22-24, March-May 1993. Used by permission. Edited for ChristianAnswers publication by Paul S. Taylor, [Eden Communications](http://www.christiananswers.net/eden/home.html). [Text Copyright ©](http://www.christiananswers.net/copyrite.html) 2002, Creation Ministries International. Illustrations Copyright © Eden Communications.

Mrs. Middleton taught biology at Sydney Teachers' College, and has been involved with Inter-School Christian Fellowship and has taught science and biology at Sydney Girls' High School.

# Does God control the weather? Does He send deadly storms?

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| http://www.christiananswers.net/0.gif | http://www.christiananswers.net/0.gif | Beautiful Sunset. Copyrighted. Courtesy of Eden Communications.Storms, floods, and earthquakes are indeed a part of the present world. We sometimes call them “natural disasters,” but they are not a surprise to God. Yes, God certainly can control the weather and send deadly storms.  Some have concluded that suffering occurs because it is beyond God's control. This is incorrect. God has indeed established certain laws and principles that govern nature, but he remains sovereign over these laws. [Psalm 148:8](http://www.christiananswers.net/bible/psa148.html#8) declares that storms **“do his bidding.”** Concerning Jonah, it was the Lord who **"sent out a great wind into the sea, and there was a mighty tempest in the sea"** ([Jonah 1:4](http://www.christiananswers.net/bible/jonah1.html#4) KJV). Old Testament writers did not hesitate to attribute the forces of nature to God: **"thy waterspouts … thy waves … thy billows"** ([Psalm 42:7](http://www.christiananswers.net/bible/psa42.html#7) KJV). Today, God's creation is too often depersonalized. He is in control, and has His reasons for all kinds of weather, both fair and stormy. JOB'S FAMILY KILLED BY A SEVERE STORM One biblical example is the story of Job. Severe weather had killed Job's sheep, his servants, and all ten of his children. As Job suffered further physical affliction, he asked, "Why is there evil in the world?" His friends were not of great help in answering the question. Finally, after much dialogue, God spoke directly to Job out of a whirlwind ([Job 38-41](http://www.christiananswers.net/bible/job38.html)). The Lord made clear that His control over nature and His ultimate purposes are to be trusted. We simply cannot understand all the details of the divine plan. Job's testimony demonstrates how trials should bring us closer to God instead of driving us away: **"The Lord gave and the Lord has taken away; blessed be the name of the Lord"** ([Job 1:21](http://www.christiananswers.net/bible/job1.html#21) KJV).  [Job 37:13](http://www.christiananswers.net/bible/job37.html#13) declares that God sometimes brings storms to punish people. This brings to mind the experiences of both [Noah](http://www.christiananswers.net/dictionary/noah.html) and Jonah; storms played a major part in their lives. DIVINELY DIRECTED WEATHER THAT CHANGED HISTORY **BIBLICAL EXAMPLES**. Scripture contains many examples of God controlling the weather and using it to direct people and nations…   * [Genesis 6:5-9:19](http://www.christiananswers.net/bible/gen6.html#5) (Earth destroyed by flood, people and animals killed) * [Exodus 9:23-29](http://www.christiananswers.net/bible/exo9.html#23) (hail and fire from heaven on Egypt) * [Joshua 10:11](http://www.christiananswers.net/bible/josh10.html#11) (hail on the [Amorites](http://www.christiananswers.net/dictionary/amorites.html), etc.) * [I Samuel 7:10](http://www.christiananswers.net/bible/1sam7.html#10) (thunder disperses the Philistines) * [Nahum 1:3](http://www.christiananswers.net/bible/nahum1.html#13) (judgment with whirlwind and drought) * [Leviticus 26:19-20](http://www.christiananswers.net/bible/lev26.html#19) (rainless sky, parched earth) * [Deuteronomy 11:13-15](http://www.christiananswers.net/bible/deu11.html#13) (rain as reward for obedience) * [Deuteronomy 28:24](http://www.christiananswers.net/bible/deu28.html#24) (drought punishment) * [I Samuel 12:18](http://www.christiananswers.net/bible/1sam12.html#18) (thunder and rain to get people's attention) * [II Samuel 21:1](http://www.christiananswers.net/bible/2sam21.html#1) (drought and famine) * [I Kings 8:35-36](http://www.christiananswers.net/bible/1ki8.html#35) (good weather reward) * [I Kings 16:30-18:45](http://www.christiananswers.net/bible/1ki16.html#30) (rain withheld and given) * [Hosea 13:15](http://www.christiananswers.net/bible/hosea13.html#15) (dry weather) * [Amos 4:7](http://www.christiananswers.net/bible/amos4.html#7) (rain given and withheld from certain cities) * Jonah [1:4](http://www.christiananswers.net/bible/jonah1.html#4),[10-15](http://www.christiananswers.net/bible/jonah1.html#10) (man punished and redirected by sea storm) * [Zechariah 14:17](http://www.christiananswers.net/bible/zec14.html#17) (rain withheld as judgment) * [Revelation 16:21](http://www.christiananswers.net/bible/rev16.html#21) (hailstone punishment)   **MORE RECENT EXAMPLES.** In more recent centuries, there are various examples that seem to show the providence of God in history using weather…   * GEORGE WASHINGTON. In a famous painting, General George Washington is shown crossing the Delaware River on Christmas night 1776. With snow falling, his forces were able to surprise and defeat the enemy. This victory fanned the revolution's fading embers. Weather continued to play an important role in America's Revolutionary War. * DUNKIRK. In June 1940, 400,000 British and French soldiers were trapped on the north coast of France at Dunkirk. The Nazi forces were only ten miles away and could have cornered Allied troops. However, at this time thick fog and clouds settled over the beaches. The English Channel also became unusually calm, and many small boats from England were able to ferry soldiers across to safety. The protective weather pattern lasted nine days while the men were evacuated. The Allied army was thus preserved to fight another day. Winston Churchill called the evacuation of Dunkirk a “miracle of deliverance.” * SPANISH ARMADA. Four centuries ago, Philip II of Spain set out to rule the world. His goal was to reunite all of Christianity under the Catholic faith, and also under Spanish control. Philip was a heartless leader who had earlier supported the harsh measures of the Spanish Inquisition. He did not get along well with either Britain or Holland. When the Netherlands declared their independence from Spain in 1588, Philip sailed north with an “invincible” Armada of 130 warships and 30,000 men. Then, while far from home, bad weather hit the fleet. With no port available the ships were forced to anchor at sea. The smaller British fleet under Sir Francis Drake than harassed the Spanish by releasing flaming “tar ships” among the anchored fleet. The Spanish Armada fled north through the English Channel and around the coast of Scotland, where continued fierce storms pushed the fleet onto the rocky shores. As the history books used to say, "God blew and they were scattered." Only half of the original Spanish fleet finally limped back home. The great Spanish sea power had been diminished by the weather, instead of by war. Perhaps a worldwide dictatorship was averted by this defeat of the Spanish Armada.  EARTH'S WEATHER CHANGED BY DEGENERATION AND CATASTROPHE Hurricane!A serious flaw in secular environmentalism is that it sees nature as inherently good and normal. The biblical view is that creation and the weather were originally “very good” when God created the world and until the first man sinned.  **"And God saw everything that He had made, and, behold, it was very good…"**   —[Genesis 1:31](http://www.christiananswers.net/bible/gen1.html#31), KJV  Due to man's sinfulness, the world did not stay “very good.” Not long after creation, all of nature was affected by man's fall to sin and God's curse. The pain and sorrow of this present world, along with severe weather, demonstrate an imperfect world.  [Weather and the Bible](http://www.christiananswers.net/catalog/bk-weatherbible.html)  Content adapted from [*Weather and the Bible*](http://www.christiananswers.net/catalog/bk-weatherbible.html)  Furthermore, the worldwide flood of [Noah's](http://www.christiananswers.net/dictionary/noah.html) time would clearly have caused radical changes in our environment. Before the flood, the weather was evidently very mild and different from today; it did not even rain (Genesis [2:5-6](http://www.christiananswers.net/bible/gen2.html#5), [7:11-12](http://www.christiananswers.net/bible/gen7.html#11)). Thankfully, a new world is coming, when God will burn up this universe and create a new heavens and new Earth ([II Peter 3:10-13](http://www.christiananswers.net/bible/2pet3.html#10), [Isaiah 65:17](http://www.christiananswers.net/bible/isa65.html#17), [Revelation 21](http://www.christiananswers.net/bible/rev21.html)). Paradise will be restored. Once again, deadly storms will not be a part of our world.  See also: [Has our atmosphere evolved over time?](http://www.christiananswers.net/q-eden/edn-c022.html)  [ If this information has been helpful, please prayerfully consider a [donation](http://www.christiananswers.net/eden/donate.html) to help pay the expenses for making this faith-building service available to you and your family! Donations are tax-deductible. ]  Author: Dr. Donald DeYoung, Ph.D. (Physics) with Paul S. Taylor. Content adapted from [*Weather and the Bible*](http://www.christiananswers.net/catalog/bk-weatherbible.html), pgs. 105-106 & 123-125, published by Baker Book House / Supplied by [Eden Communications](http://www.christiananswers.net/eden/home.html) (used with permission)  This page is located at: http://www.christiananswers.net/q-eden/edn-c023.html  [Copyright ©](http://www.christiananswers.net/copyrite.html) 1998, Eden Communications, All Rights Reserved - except as noted on attached [“Usage and Copyright”](http://www.christiananswers.net/copyrite.html) page that grants ChristianAnswers.Net users generous rights for putting this page to work in their homes, personal witnessing, churches and schools.  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# Has our atmosphere evolved over time?

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| http://www.christiananswers.net/0.gif | http://www.christiananswers.net/0.gif | Satellite Weather PhotoIn the creationist view, the atmosphere was fully functioning by the third day, when plants appeared; on the fifth day, [birds](http://www.christiananswers.net/dictionary/bird.html) flew and fish swam the seas ([Genesis 1:11, 20](http://www.christiananswers.net/bible/gen1.html#11)). Thus there is no biblical evidence for a slowly evolving atmosphere.  In the naturalistic view, however, the earth's atmosphere is required to have changed drastically over time. Air on the early earth is assumed to have come from volcanic gases and from meteorite bombardment.  Some scientists believe the primitive earth had gases somewhat similar to present-day Venus and Mars: carbon dioxide (CO2), nitrogen (N2), water vapor (H2O), hydrogen (H2), carbon monoxide (CO), methane (CH4), and ammonia (NH3).  Scientists have no general agreement on which of these gases might have dominated the early atmosphere, and, in fact, engage in considerable debate over the early existence of methane and ammonia.  This supposed early atmosphere is called reducing; it would have supplied electrons to substances and chemically reduced them to other forms. This reducing process often separates molecules into smaller components. Thus, the early atmosphere would actually have broken down any building blocks of life that were present.  Other speculations on the forming of today's atmosphere are also highly questionable, such as these:   1. Anaerobic (without oxygen) bacteria came to life in the sea. 2. Blue-green algae evolved and began making oxygen by photosynthesis. A half-billion years ago the oxygen level finally reached its present value.   Clearly this speculation is closely connected with the assumed evolution of life. However, geochemical evidence for the assumed early atmosphere theory has added unnecessary complications to our understanding of the earth's atmosphere.  Some “old earth” creationists have attempted to find divine direction in the evolution of the earth's atmosphere. They emphasize that blue-green algae came along at just the opportune time, making oxygen in preparation for higher forms of life. They also suggest that early, heavy carbon dioxide concentrations dwindled just in time to avoid runaway greenhouse warming on earth. Thus God directed a slowly changing atmosphere for our eventual benefit. This reasoning is certainly interesting, but these cautions are advised:   1. If the young-age view is correct, then this compromise with the evolutionary time scale is misleading. 2. No general agreement or evidence exists that the atmosphere was once abundant with carbon dioxide, or depleted in oxygen. 3. Secular scientists usually are not impressed by “theistic evolution” arguments. The atmosphere did somehow evolve in step with life, they say, regardless of probabilities against it. 4. In [Genesis 1:11](http://www.christiananswers.net/bible/gen1.html#11), land plants and trees are described as the first life on earth. The compromise view begins with algae in water, and then with land vegetation appearing long afterward, about one billion years later.   [Weather and the Bible](http://www.christiananswers.net/catalog/bk-weatherbible.html)  Content adapted from [*Weather and the Bible*](http://www.christiananswers.net/catalog/bk-weatherbible.html)  The idea of a slow, providential alteration of earth's air in preparation for life might sound appealing to some, at first. However, accomodation to long-age, evolutionary views eventually leads to deeper problems theological and scientific.  The refreshing alternative is that the earth's atmosphere was created with maturity, complete with the oxygen that our first parents, Adam and Eve, needed.  [ If this information has been helpful, please prayerfully consider a [donation](http://www.christiananswers.net/eden/donate.html) to help pay the expenses for making this faith-building service available to you and your family! Donations are tax-deductible. ]  Author: Dr. Donald DeYoung, Ph.D. (Physics) as excerpted from [*Weather and the Bible*](http://www.christiananswers.net/catalog/bk-weatherbible.html), pgs. 128-130, published by Baker Book House  Supplied by [Eden Communications](http://www.christiananswers.net/eden/home.html) (used with permission)  This page is located at: http://www.christiananswers.net/q-eden/edn-c022.html  [Copyright ©](http://www.christiananswers.net/copyrite.html) 1997, Eden Communications, All Rights Reserved - except as noted on attached [“Usage and Copyright”](http://www.christiananswers.net/copyrite.html) page that grants ChristianAnswers.Net users generous rights for putting this page to work in their homes, personal witnessing, churches and schools.  Top of Form  [[Click Here](http://christiananswers.net/catalog/bk-weatherbible.html)Weather and the Bible](http://christiananswers.net/catalog/bk-weatherbible.html) book  by Donald DeYoung, Ph.D.  If you know an “amateur Einstein” who loves to explore, experiment, or read about science, you know someone who would love this interesting book!  [[More Details](http://christiananswers.net/catalog/bk-weatherbible.html)]     US$1299  Bottom of Form |

# What about continental drift?

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| http://www.christiananswers.net/0.gif | http://www.christiananswers.net/0.gif | See this page in: [Bulgarian](http://www.christiananswers.net/bulgarian/q-aig/aig-c001-bul.html)  Mountains and clouds. Photo copyrighted. Courtesy Eden Communications.Before the 1960s, most geologists were adamant that the continents were stationary. A handful promoted the notion that the continents had moved (continental drift), but they were accused by the majority of indulging in pseudo-scientific fantasy. Today, that opinion has reversed—plate tectonics, incorporating continental drift, is the ruling theory. Interestingly, it was a creationist, Antonio Snider, who in 1859 first proposed horizontal movement of continents catastrophically during the [Genesis flood](http://www.christiananswers.net/godstory/flood1.html).[1](http://www.christiananswers.net/q-aig/aig-c001.html#1) The statements in [Genesis 1:9-10](http://www.christiananswers.net/bible/gen1.html#9) about the gathering together of the seas in one place, which implies there was one landmass, influenced his thinking.  Geologists put forward several lines of evidence that the continents were once joined together and have moved apart, including:   * The fit of the continents (taking into account the continental shelves). * Correlation of fossil types across ocean basins. * A zebra-striped pattern of magnetic reversals parallel to mid-ocean floor rifts, in the volcanic rock formed along the rifts, implying seafloor spreading along the rifts. * Seismic observations interpreted as slabs of former ocean floor now located inside the earth.   The current theory that incorporates seafloor spreading and continental drift is known as “plate tectonics.”[2](http://www.christiananswers.net/q-aig/aig-c001.html#2) Plate Tectonics The general principles of plate tectonic theory may be stated as follows.[3](http://www.christiananswers.net/q-aig/aig-c001.html#3) The earth's surface consists of a mosaic of rigid plates, each moving relative to adjacent plates. Deformation occurs at the edges of the plates by three types of horizontal motion: extension (or rifting, moving apart), transform faulting (horizontal slipping along a fault line), and compression, mostly by subduction (one plate plunging beneath another).  Extension occurs as the sea floor pulls apart at rifts, or splits.  Transform faulting occurs where one plate slips horizontally past another (e.g., the San Andreas Fault of California).  Compression deformation occurs when one plate subducts beneath another, e.g., the Pacific Plate beneath Japan and the Cocos Plate beneath Central America, or when two continental plates collide to produce a mountain range, e.g., the Indian-Australian Plate colliding with the Eurasian Plate to form the Himalayan Mountains. Volcanoes often occur in regions of subduction. Seafloor Spreading The Mid Atlantic Ridge. Illustration copyrighted.  One argument advanced for plate tectonics is seafloor spreading. In ocean basins, along mid-ocean ridges (e.g., the Mid-Atlantic Ridge and East Pacific Rise), observations are interpreted to indicate that plates are diverging, with molten material from the mantle[4](http://www.christiananswers.net/q-aig/aig-c001.html#4) rising up in the gap between the plates and cooling to form new crust under the ocean. The youngest crust is at the ridge axis, with progressively older rocks away from the axis. Worldwide, it is estimated that currently about 20 cubic kilometers of molten magma rises each year to create new oceanic crust.[5](http://www.christiananswers.net/q-aig/aig-c001.html#5)  At the time of cooling, some of the rocks' minerals acquire magnetism from the earth's magnetic field, recording the field's direction at the time. Evidence indicates that the earth's magnetic field has reversed many times in the past. So, during the cooling, some of the oceanic crust was magnetized in a reverse direction. If seafloor spreading is continuous, the ocean floor should possess a smooth magnetic “tape-recording” of reversals.  Indeed, the zebra stripe pattern of linear “magnetic anomalies” parallel to the mid-ocean ridge crest has been recorded in many areas.[6](http://www.christiananswers.net/q-aig/aig-c001.html#6) Problems for “Slow and Gradual” Plate Tectonics While the zebra-stripe pattern has been confirmed, drilling through the basalt adjacent to the ridges has shown that the neat pattern recorded by dragging a magnetometer above the ridge is not present when the rock is actually sampled. The magnetic polarity changes in patches down the holes, with no consistent pattern with depth.[7](http://www.christiananswers.net/q-aig/aig-c001.html#7) This would be expected with rapid formation of the basalt, combined with rapid field reversals, not the slow-and-gradual formation with slow reversals assumed by uniformitarians.  Very Rapid Processes. Illustration copyrighted.  Physicist [Dr. Russell Humphreys](http://www.christiananswers.net/creation/people/humphreys-dr.html) predicted that evidence for rapid field reversals would be found in lava flows thin enough to cool in a few weeks.[8](http://www.christiananswers.net/q-aig/aig-c001.html#8) He suggested that such rapid reversals could have happened during Noah's flood. Such evidence for rapid reversals was later found by the respected researchers Coe and Prvot.[9](http://www.christiananswers.net/q-aig/aig-c001.html#9) Their later work[10](http://www.christiananswers.net/q-aig/aig-c001.html#10) confirmed these findings and showed that the magnetic reversals were “astonishingly rapid.” A Biblical View Evidence indicates that the continents have moved apart in the past, but can today's supposed drift rates of 0.78 - 5.9 inches [ 1.98 to 14.99 centimeters] per year be extrapolated far back into the past? Is the present really the key to the past, as uniformitarians earnestly proclaim? Such extrapolation would mean that an ocean basin or mountain range would take about 100 million years to form.  The Bible does not speak directly about continental drift and plate tectonics, but if the continents were once together, as [Genesis 1:9-10](http://www.christiananswers.net/bible/gen1.html#9) suggests, and are now apart, how does that fit into a biblical view of geology with a time line of only thousands of years?[11](http://www.christiananswers.net/q-aig/aig-c001.html#11)  Dr. John Baumgardner, working at the Los Alamos National Laboratories (New Mexico), has used supercomputers to model processes in the earth's mantle to show that tectonic plate movement could have occurred very rapidly, and “spontaneously.”[12](http://www.christiananswers.net/q-aig/aig-c001.html#12) This concept is known as *catastrophic plate tectonics*. At the time of writing, Baumgardner, a creation-scientist, is acknowledged as having developed the world's best 3-D super-computer model of plate tectonics.[13](http://www.christiananswers.net/q-aig/aig-c001.html#13) Catastrophic Plate Tectonics The model proposed by Baumgardner begins with a pre-flood super-continent (“Let the waters... be gathered together into one place” [Genesis 1:9](http://www.christiananswers.net/bible/gen1.html#9)) and dense ocean floor rocks. The process starts with the cold and dense ocean floor beginning to sink into the softer, less dense mantle beneath. The friction from this movement generates heat, especially around the edges, which softens the adjacent mantle material, making it less resistant to the sinking of the ocean floor.[14](http://www.christiananswers.net/q-aig/aig-c001.html#14) The edges sink faster, dragging the rest of the ocean floor along, in conveyor belt fashion. Faster movement creates more friction and heat in the surrounding mantle, reducing its resistance further and so the ocean floor moves even faster, and so on. At its peak, this thermal runaway instability would have allowed for subduction at rates of meters-per-second. This key concept is called runaway subduction.  The sinking ocean floor would displace mantle material, starting large-scale movement throughout the entire mantle. However, as the ocean floor sank and rapidly subducted adjacent to the pre-flood super-continent's margins, elsewhere the earth's crust would be under such tensional stress that it would be torn apart (rifted), breaking up both the pre-flood super-continent and the ocean floor.  Thus, crustal spreading zones would rapidly extend along cracks in the ocean floor for some 6,000 miles where the splitting was occurring. Hot mantle material displaced by the subducting slabs would well up, rising to the surface along these spreading zones. On the ocean floor, this hot mantle material would vaporize copious amounts of ocean water, producing a linear geyser of superheated steam along the whole length of the spreading centers (perhaps the “[fountains of the great deep](http://www.christiananswers.net/q-aig/aig-c010.html)”? Genesis [7:11](http://www.christiananswers.net/bible/gen7.html#11); [8:2](http://www.christiananswers.net/bible/gen8.html#2)). This steam would disperse, condensing in the atmosphere to fall as intense global rain (“and the flood-gates of heaven were opened” Genesis 7:11). This could account for the rain persisting for 40 days and 40 nights (Genesis 7:12).  Earth's Current Structure. Illustration copyrighted.  Baumgardner's catastrophic plate tectonics global flood model for earth history[15](http://www.christiananswers.net/q-aig/aig-c001.html#15) is able to explain more geological data than the conventional plate tectonics model with its many millions of years. For example, rapid subduction of the pre-flood ocean floor into the mantle results in new ocean floor that is dramatically hotter, especially in its upper 60 miles, not just at spreading ridges, but everywhere. Being hotter, the new ocean floor is of lower density and therefore rises 3,000 to 6,000 feet higher than before and implies a dramatic rise in global sea level.  This higher sea level floods the continental surfaces and makes possible the deposition of large areas of sedimentary deposits on top of the normally high-standing continents. The Grand Canyon provides a spectacular window into the amazing layer-cake character of these sediment deposits that in many cases continue uninterrupted for more than 600 miles.[16](http://www.christiananswers.net/q-aig/aig-c001.html#16) Uniformitarian (“slow and gradual”) plate tectonics simply cannot account for such thick continental sediment sequences of such vast horizontal extent.  Moreover, the rapid subduction of the cooler pre-flood ocean floor into the mantle would have resulted in increased circulation of viscous fluid (note: plastic, not molten) rock within the mantle. This mantle-flow (i.e., “stirring” within the mantle) suddenly altered the temperatures at the core-mantle boundary, as the mantle near the core would now be significantly cooler than the adjacent core, and thus convection and heat loss from the core would be greatly accelerated. The model suggests that under these conditions of accelerated convection in the core, rapid geomagnetic reversals would have occurred. These in turn would be expressed on the earth's surface and recorded in the so-called magnetic stripes.[17](http://www.christiananswers.net/q-aig/aig-c001.html#17) However, these would be erratic and locally patchy, laterally and at depth, just as the data indicate,[18](http://www.christiananswers.net/q-aig/aig-c001.html" \l "18) even according to the uniformitarian scientists cited earlier.  This model provides a mechanism that explains how the plates could move relatively quickly (in a matter of a few months) over the mantle and subduct. And it predicts that little or no movement would be measurable between plates today, because the movement would have come almost to a standstill when the entire pre-flood ocean floor was subducted. From this we would also expect the trenches adjacent to subduction zones today to be filled with undisturbed late-flood and post-flood sediments, just as we observe.  Runaway Subduction. Illustration copyrighted.  Aspects of Baumgardner's mantle modeling have been independently duplicated and thus verified by others.[19](http://www.christiananswers.net/q-aig/aig-c001.html#19) Furthermore, Baumgardner's modeling predicts that because this thermal runaway subduction of cold ocean floor crystal slabs occurred relatively recently, during the flood (about 5,000 or so years ago), then those slabs would not have had sufficient time since to be fully assimilated into the surrounding mantle. So, evidence of the slabs above the mantle-core boundary (to which they sank) should still be found today. Indeed, evidence for such unassimilated relatively cold slabs has been found in seismic studies.[20](http://www.christiananswers.net/q-aig/aig-c001.html#20)  One of Baumgardner's computer images. Illustration copyrighted.  The model also provides a mechanism for retreat of the flood waters. [Psalm 104:6-7](http://www.christiananswers.net/bible/psa104.html#6) describes the abating of the waters which had stood above the mountains. Verse 8 most naturally translates as, “The mountains rose up; the valleys sank down,”[21](http://www.christiananswers.net/q-aig/aig-c001.html#21) implying that vertical earth movements were the dominant tectonic forces operating at the close of the flood, in contrast to the horizontal forces dominant during the spreading phase.  Plate collisions would have pushed up mountains, while cooling of the new ocean floor would have increased its density, causing it to sink and thus deepen the new ocean basins to receive the retreating flood waters. It may be significant, therefore, that the “mountains of [Ararat](http://www.christiananswers.net/dictionary/ararat.html)” ([Genesis 8:4](http://www.christiananswers.net/bible/gen8.html#4)), the resting place of the ark after the 150th day of the flood, are in a tectonically active region at what is believed to be the junction of three crustal plates.[22](http://www.christiananswers.net/q-aig/aig-c001.html#22)  If an inch [2.54 centimeters] or so per year of inferred movement today is extrapolated back into the past as uniformitarians do, then their conventional plate tectonics model has limited exploratory power. For example, even at a rate of four inches [10.16 centimeters] per year, it is questionable whether the forces of the collision between the Indian-Australian and Eurasian Plates could have been sufficient to push up the Himalayas. On the other hand, catastrophic plate tectonics in the context of the flood can explain how the plates overcame the viscous drag of the earth's mantle for a short time due to the enormous catastrophic forces at work, followed by a rapid slowing down to present rates.  Continental separation solves apparent geological enigmas. For instance, it explains the amazing similarities of sedimentary layers in the northeastern United States to those in Britain. It also explains the absence of those same layers in the intervening North Atlantic ocean basin, as well as the similarities in the geology of parts of Australia with South Africa, India, and Antarctica. Conclusion Early skepticism about plate tectonics has largely evaporated because the framework has such great explanatory power. The catastrophic plate tectonics model for the flood not only includes these explanatory elements, but also accounts for widespread evidences of massive flooding and catastrophic geological processes on the continents. Future refinement of the model may also help to explain the order and distribution of fossils observed in the fossil record in the context of the Genesis flood.  The Bible is silent about plate tectonics. Many creationists believe the concept is helpful in explaining earth's history. Some are still cautious. The idea is quite new, and radical, and much work has yet to be done to flesh out the details. There may even be major modifications to the theory that increase its explanatory power, or future discoveries could cause the model to be abandoned. Such is the nature of scientific progress. Scientific models come and go, “But the word of the Lord endures forever” ([1 Peter 1:25](http://www.christiananswers.net/bible/1pet1.html#25)). Footnotes  1. A. Snider, *Le Cration et ses Mystres Devoils* (Paris: Franck and Dentu, 1859). 2. Some geologists are still skeptical of various aspects of plate tectonics. 3. D.R. Gish and D.H. Rohrer, editors, *Up with Creation!* “Continental Drift, Plate Tectonics, and the Bible,” S.E. Nevins [S.A. Austin] (San Diego, CA: Creation-Life Publishers, 1978), pp. 173-180. See also *Longman Illustrated Dictionary of Geology* (Essex, UK: Longman Group, 1982), pp. 137-172. 4. The zone within the earth that extends from below the crust down to the core—i.e., to a depth of about 1,800 miles. 5. J. Cann, “Subtle Minds and Mid-ocean Ridges,” *Nature*, 1998, 393:625,627. 6. A. Cox, editor, *Plate Tectonics and Geomagnetic Reversals* (San Francisco, CA: W.H. Freeman and Co., 1973), pp. 138-220. 7. J.M. Hall and P.T. Robinson, “Deep Crustal Drilling in the North Atlantic Ocean,” *Science*, 1979, 204:573-586. 8. D.R. Humphreys, “Reversals of the Earth's Magnetic Field During the Genesis Flood,” *Proc. 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However, the [Hebrew](http://www.christiananswers.net/dictionary/hebrewlanguage.html) translated “the earth” can as easily refer to people (nations) divided because of Babel. Also, the short time involved would lead to enormous difficulties in accounting for the heat energy to be dissipated, not to mention the destruction at the earth's surface that would result from rapid continent-wide motion. This would be a global catastrophe as devastating as the Noachian flood itself. 12. J.R. Baumgardner, “Numerical Simulation of the Large-scale Tectonic Changes Accompanying the Flood,” *Proc. First ICC*, 1986, 2:17-30.  J.R. Baumgardner, “3-D Finite Element Simulation of the Global Tectonic Changes Accompanying Noah's Flood,” *Proc. Second ICC*, 1990, 2:35-45.  J.R. Baumgardner, “Computer Modeling of the Large-scale Tectonics Associated with the Genesis Flood,” *Proc. Third ICC*, 1994, pp. 49-62.  J. Beard, “How a Supercontinent Went to Pieces,” *New Scientist*, January 16, 1993, 137:19.  J.R. Baumgardner, “Runaway Subduction As the Driving Mechanism for the Genesis Flood,” *Proc. Third ICC*, Pittsburgh, PA, 1994, pp.63-75. 13. Beard, “How a Supercontinent Went to Pieces.” 14. Baumgardner, “Runaway Subduction As the Driving Mechanism for the Genesis Flood.” 15. S.A. Austin, J.R. Baumgardner, D.R. Humphreys, A.A. Snelling, L. Vardimann, and K.P. Wise, “Catastrophic Plate Tectonics: A Global Flood Model of Earth History,” *Proc. Third ICC*, Pittsburgh, PA, 1994, pp. 609-621. 16. S.A. Austin, editor, *Grand Canyon: Monument to Catastrophe* (Santee, CA: Institute for Creation Research, 1994). 17. D.R. Humphreys, “Has the Earth's Magnetic Field Ever Flipped?” *Creation Research Society Quarterly*, 1988, 25(3):130-137. 18. Hall and Robinson, “Deep Crustal Drilling in the North Atlantic Ocean.” 19. S.A. Weinstein, “Catastrophic Overturn of the Earth's Mantle Driven by Multiple Phase Changes and Internal Heat Generation,” *Geophysical Research Letters*, 1993, 20:101-104.  P.J. 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The Septuagint (LXX), a Greek translation done about 250 B.C., Luther's German translation, which pre-dates the KJV, and French and Italian translations all agree. English translations that convey this meaning include the ASV, RSV, and NASB. See C.V. Taylor, "Did the Mountains Really Rise According to Psalm 104:8?" *CEN Technical Journal*, 1998, 12(3):312-313. 22. J.F. Dewey, W.C. Pitman, W.B.F. Ryan, and J. Bonnin, “Plate Tectonics and the Evolution of the Alpine System,” *Geological Society of America Bulletin*, 1973, 84:3137-3180.   [ If this information has been helpful, please prayerfully consider a [donation](http://www.christiananswers.net/eden/donate.html) to help pay the expenses for making this faith-building service available to you and your family! 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