“How Do Dinosaurs Fit Into the Bible?”

My nephew and I recently saw a giant T-rex skeleton on exhibit. He was so fascinated and started asking a lot of questions. It really made me wonder, How do dinosaurs fit into the biblical story? There is no denying they exist, but when and where and why did God make them and then take them away? I want to make sure I am prepared to answer this question if he ever asks.

My husband and I have an article “How to Talk to Your Kids About Creation and Evolution,” where we discuss dinosaurs in this section: www.probe.org/how-to-talk-to-your-kids-about-evolution-and-creation/#dinosaurs

Also, please read Ray’s article “Christian Views of Science and Earth History,” [www.probe.org/christian-views-of-science-and-earth-history/] which covers the three perspectives on the age of the earth that most Christians hold. From a young earth perspective, dinosaurs existed before the flood (Noah probably would have taken juveniles on the ark) and likely went extinct after the flood because there wasn’t sufficient food to support their large body size. From an old earth perspective, dinosaurs died out 65 million years ago at the end of the Cretaceous Period and so there is no reinterpreting of anything. They don’t appear in the biblical account because by the time God created Adam and Eve, they had been gone for millions of years.

Hope you find this helpful.

Sue Bohlin
Probe Ministries Webmistress

Posted March 2017

© 2017 Probe Ministries

Apologetics and the Age of the Universe

Appendix B: Apologetics and the Age of the Universe

Note: This is one of two appendices for Steve Cable's article Are We Significant in This Vast Universe?

Is the apparent age of the universe a critical issue for Christian apologetics? I would argue that when we make it a critical issue, we are likely to add another barrier to belief rather than tearing down barriers against belief in Jesus Christ as our Savior.

How should we look at the age of the universe in applying emerging scientific observations in defending our faith? In this appendix, we will take a brief look at this question.

The vast majority of theologians and researchers agree that the actions of the inorganic world are normally governed by a set of physical laws and forces: e.g. gravity, subatomic forces, magnetism, and light waves. By understanding these laws, we can predict both the future and past behavior of physical objects ranging from galaxies to our solar system to airplanes to golf balls. As Christians, we recognize that our Creator God can and does intervene at times to suspend or alter these laws in order to accomplish His purpose: e.g. Jesus walking on the water, healing of the sick. Thus, one of the ways to recognize the presence of our Creator is when we

use our understanding of these laws to model backward from our present state and we come to a state in the past that is inconsistent with our current reality. In other words, it appears that some power must have intervened with the natural processes we currently observe because it would be practically impossible to get to our present state simply through natural processes.

Following this logic, there is a growing body of evidence from scientific observation consistent with the following two hypotheses:

1. Life as it exists on this earth is the result of the intentional work of an intelligent designer

2. Humans are significant to the designer of this universe

These two hypotheses are obviously consistent with the Bible. As apologists these hypotheses are very important because they support a biblical prerequisite for coming to God:

> And without faith it is impossible to please Him, for he who comes to God must believe that He is and that He is a rewarder of those who seek Him (Heb 11:6).

According to this passage, in order to come to God, we must believe that a God exists and that He wants us to seek Him. In many cases, if we can debunk the popular notion that science proves that there is no Creator God who cares about us, we can open the door to see what the Bible tells us about Jesus Christ, His death and resurrection.

The empirical evidence supporting these two hypotheses is strong whether the earth is 13.7 billion years old or 6,000 years old. However, some of the evidence for the significance of life on earth is based on looking at what it would take to get from an ancient creation event, e.g. big bang, to the current, observable universe. Should we ignore that evidence because it does not assume a young universe interpretation of

Genesis 1? Or should we use this evidence to show that even the oldest estimated age for our universe still demands a transcendent Creator to account for life on this earth? I suggest that we don’t have to make the age of the universe the central point in defending our faith against those who do not believe in our Creator God and who need to understand that God sacrificed His Son, Jesus to provide for their redemption from this decaying universe.

One of the areas where this tension between fixed physical laws and supernatural intervention applies is in scientific theories for the origin of the universe. The prevailing scientific view is that the universe is expanding at an increasing rate. Combining this view with what we know about the relevant natural forces implies that all the matter in the universe began expanding from a single point approximately 13.7 billion years ago. If we take as an axiom that the correct interpretation of general revelation through scientific observation and special revelation through the Bible must be consistent, there are three possible situations consonant with that axiom:

1. The scientific data is incomplete, corrupted, or misinterpreted. There are many instances where the current prevailing view of science has been shown by new evidence to be wrong, so this is a definite possibility.

2. The universe is indeed expanding, but it is much less than 13.7 billion years old because it was created at a point where it was already spread out to near its current volume. This is the apparent age argument, i.e., when God creates a living being such as Adam, Adam is going to appear to be physically mature even when he was only seconds old. There are issues with applying this apparent age concept to the age of the universe. For example, we can observe supernovae that are hundreds of thousands of light years away. If the earth is less than 10,000 years old, then we are observing the explosions of stars that never really existed. Why would God

want to confuse us in this way? Perhaps because these "past" supernovae are consistent with what would have happened to create the current state of our universe.

3. The interpretation of Genesis 1 as defining the time from the beginning of the universe to the creation of Adam as literally 120 hours is not actually the intent of that passage. This interpretation issue is a continuing topic of debate among evangelical scholars who believe that the Bible is God's inerrant special revelation.

I can appreciate those who consider finding out which of these three alternatives is correct to be an important life issue. But, it seems clear that selecting the right answer is not a prerequisite for salvation (e.g. see Romans 10:9-10). I encourage Christians to understand how the current state of scientific knowledge can be used as a bridge to share the gospel. For a more detailed discussion of contrasting Christian views on the origins of the universe, see the article "Christian Views of Science and Earth History" on our website.

© 2009 Probe Ministries International

"Why Don't You Cite Young Earth Creationists in Your Material?"

Ray:
I couldn't help but notice that ICR/Dr. Henry Morris and Answers In Genesis/Ken Ham aren't cited (or at least I did not see their viewpoints) in some of your material about

creation/evolution. Are there points of disagreement? Do you take a stand beyond design that commits to either a young earth or old earth?

I do occasionally refer to writings from young earth creationists. The article on human fossils, for instance, comes directly from young earth creationist Marvin Lubenow's book *Bones of Contention.* I focus on intelligent design because it is an area that nearly all creationists, young and old earth agree on. At Probe we do not take an official position on the age of the earth question primarily because most of us here, including myself are undecided (see Christian Views of Science and Earth History) about this critical issue. I agree with Phillip Johnson that we need first to stand united against the current naturalistic filibuster in science by opposing the naturalistic approach to origins and then come back to the age of the earth question later.

Respectfully,

Ray Bohlin
Probe Ministries

"What About the Ice Age?"

My son told his teacher that he was tired of learning about the Ice Age because there is nothing about it in the Bible and he shouldn't have to learn about things that aren't in the Bible. Any advice?

The quick and simple answer to your question is that yes, there was an ice age, but there is disagreement as to its extent, length of time, and actual time of occurrence. Standard old earth (this would include old earth creationists;

see our article Christian Views of Science and Earth History) rendering concludes that there were several ice ages over the last 50,000 years with the ice advancing and retreating several times. Young earth creationists also accept an ice age but there was only one and it occurred much more recently (within the last 10,000 years) as a post-flood event.

The dilemma you write about can indeed prove difficult for young minds at times. They have difficulty drawing a distinction between learning about something and believing it is true. In my article How to Talk to Your Kids about Creation and Evolution I address this in section seven titled, "Responding to Evolutionary Theory." I basically suggest you tell your kids that simply demonstrating knowledge about evolution is not the same as believing it. You can always phrase your answer this way, "According to evolution . . ." This way you can demonstrate you understand the material but not necessarily believe it. I also address this in the section "Cultivate a Teachable Spirit" in the article Campus Christianity.

I think you'll find both of these articles helpful.

Respectfully,

Ray Bohlin
Probe Ministries

"How Do You View the Age of the Earth?"

Dear Dr. Bohlin,

As a Christian, how do you view the age of the earth? I was

wondering how scientists calculate the age of the stars and the earth.

Please see my article "Christian Views of Science and Earth History" which will give a fuller explanation of my view. Briefly, I am currently undecided or uncommitted to any particular view of the age of the earth. I continue to find the six 24-hour literal day interpretation of Genesis 1 & 2 to be the most convincing, but I find great evidence for long ages for the universe and the earth. Basically I feel that there is not sufficient evidence either biblically or scientifically to decide the issue. We need more time and more data.

The age of the stars is principally determined by what is known as the red-shift. Light from galaxies that are moving away from us is shifted toward the red end of the light spectrum. The farther away the galaxy is the further toward the red, the light is shifted. If galaxies are moving towards us, their light would be shifted toward the blue end of the spectrum. The vast majority of galaxies are shifted toward the red and those which appear to be the youngest also demonstrate the strongest red-shift. There are Christian as well as a few non-Christian astronomers that are critics of this view of red-shifts but the majority find this explanation to be persuasive and authoritative. You may try visiting an astronomy web site from a planetarium for a fuller explanation.

Respectfully,

Ray Bohlin, Ph.D.

“What are the Best Scientific Evidences for a Young Earth/Old Earth?”

I read with great interest your article on the Origins Web site “Christian Views of Science and Earth History .” I am doing research on this age issue, focusing on the scientific data especially. The earth is either young or is old. You said it well, “all truth is God’s truth.” I am looking for the best scientific evidences for a young earth/old earth and want to investigate what the other side would say to those opposing arguments. Can you help me out with this?

There are several books I can recommend.

From a biblical perspective, there is a recent volume titled *Three Views on Creation and Evolution* edited by J. P. Moreland and John Mark Reynolds in the Counterpoints series from Zondervan (1999). Hugh Ross has his *The Genesis Question* for an old earth perspective, and there is Henry Morris’s *The Genesis Record* and John Whitcomb’s *The Early Earth* from a young earth perspective.

From a scientific perspective, Hugh Ross wrote his definitive biblical and scientific treatise on the old earth called *Creation and Time* in 1994 from NavPress. Young earth creationists Van Bebber and Taylor published a response titled *Creation and Time: A Report on the Progressive Creationist Book by Hugh Ross* also in 1994 from Eden Productions. ICR (The Institute for Creation Research) has published numerous technical monographs on a young earth which can be viewed and ordered at www.icr.org. Other young earth books, including Russ Humphrey’s *Starlight and Time* can be found there, as well as at the Answers in Genesis website, www.AnswersinGenesis.org. Hugh Ross’ organization Reasons to

Believe also has online ordering at www.reasons.org.

This should give you more than enough to get started on.

Respectfully,

Ray Bohlin
Probe Ministries

The Grand Canyon and the Age of the Earth – A Christian Scientist's View

As a Christian scientist, Dr. Bohlin is open to examining the theories of both young-earth and old-earth scientists to explain what we can observe today. The Grand Canyon provides an excellent venue to consider the theories of both groups on how the geological layers were formed and when this occured.

The Age of the Earth and Genesis 1

How old is the earth? How long has this planet been here? Ask most Christians this question and you will likely receive a quick, self-assured answer. All would be well if you could count on receiving the same answer! However, some will very quickly tell you that the earth was created during creation week and can be no more than six to ten thousand years old. Other Christians will tell you, with just as much confidence, that the earth is 4.5 billion years old. This is no minor discrepancy! What adds even more to the confusion is the fact that you can find both opinions within conservative evangelical circles. You can even find both opinions within the ranks of the few Christian geologists with Ph.D.s! Let me

assure you that this is just as confusing for me as it is for you.

The age of the earth is a question both of biblical interpretation and scientific investigation. Unfortunately, neither Christian conservative Old Testament scholars nor Christian scientists are in universal agreement. This topic covers a broad spectrum of issues so I am going to try and narrow the focus of the discussion. I will first briefly discuss the biblical aspects of the question, then move on to geology, the flood, and the Grand Canyon.

First, how do the “young-earth” and “old-earth” positions view the Scriptures? Let me emphasize right at the start that both young- earth and old-earth creationists bring a reverent and submissive attitude to Genesis. The difference is a matter of interpretation. Well-known young-earth creationists Henry Morris, Duane Gish, and Steve Austin, from the Institute for Creation Research, interpret the days of Genesis 1 as literal 24-hours days, the genealogies of Genesis 5 and 11 as consecutive or nearly consecutive generations, and the flood as a universal, catastrophic event. This leaves little room for much more than ten to thirty thousand years as the true age of the earth.

Old earth creationists such as astronomer Hugh Ross of Reasons to Believe see the days of Genesis as long periods of time, perhaps even millions of years. Genesis 1, then, describes the unfolding of God’s creation through vast periods of time. God still does the work, it is still a miracle, but it takes a lot longer than seven days. The flood of Noah necessarily becomes a local event with little impact on world-wide geology. Other old-earth creationists simply suggest that what is communicated in Genesis 1 is a literary form of the ancient Near East describing a perfect creation. Genesis 1 was never intended to communicate history, at least in their view. Personally, my sympathies lie with a Genesis interpretation that is historical, literal, and with 24-hour days in the

recent past. But the testimony of science, God's natural revelation, is often difficult to correlate with this view. The earth has many layers of sediments thousands of feet thick. How could one year-long catastrophe account for all this sediment? The answers may surprise you!

The Grand Canyon

The Grand Canyon is almost three hundred miles long, a mile deep, and four to twelve miles across. One's first view of the Grand Canyon is a humbling experience. You truly have to see it to believe it. I was mesmerized and could hardly contain my excitement when I caught my first glimpse of the canyon. I was there to partake in a six-day geology hike into the canyon with the Institute for Creation Research, a young-earth creationist organization. ICR believes that the strata, the layers of rock in the Grand Canyon, were primarily formed during Noah's flood perhaps only five thousand years ago. Most geologists, including Christian old-earth creationists, believe that the strata were laid down over hundreds of millions of years. What better way, then, to equip myself for the study of the earth's age, than to spend nine days around the Grand Canyon (six of them in it) with ICR geologists, physicists, and biologists. ICR has been conducting these tours for over ten years, so everything runs extremely well. Though I was a member of a hiking group, they also sponsored a group going down the Colorado River in rafts and a group touring the whole area by bus. All were accompanied by ICR scientists. Each day we received mini-lectures from the leaders as we broke for lunch or at points of interest along the trail. Topics included the sudden appearance of fossils, the complexity of the earliest canyon fossils such as the trilobites, the age of the earth's magnetic fields, the role of continental drift in the onset of the flood, where does the ice age fit into a young-earth model, water- canopy theories, carbon-14 dating, and the dating of the Grand Canyon basalts (rock layers derived from ancient lava flows).

We examined many evidences for rapid formation of rock layers, which is essential to the young-earth model. We spent nearly two hours at the Great Unconformity between the Tapeats Sandstone, which is dated at about 500 million years old, and the Hakatai Shale, which is dated at about 1.5 billion years old. These two formations were formed nearly one billion years apart in time, yet one lies right on top of the other. Nearly a billion years is missing between them! The night before entering the canyon for the hike, I wrote these words in my journal:

> *If these strata are the result of Noah's flood and the canyon carved soon afterward, the canyon stands as a mighty testament to God's power, judgment, and grace. Even if not, what a wonderful world our Lord has sculpted for us to inhabit. His love is bigger than I can grasp, bigger—infinitely bigger—than even the Grand Canyon!*

Evidence of Noah's Flood in the Grand Canyon

One of the more obvious formations in the Grand Canyon is the Coconino Sandstone. This prominent formation is found only a few hundred feet below the rim of the canyon and forms one of the many cliffs in the canyon. Its distinctive yellow cream color makes it look like a thick layer of icing between two cake layers.

Evolutionary geologists have described this sandstone as originating from an ancient desert. Remnants of sand dunes can be seen in many outcrops of the formation in a phenomenon called cross-bedding. There are many footprints found in this sandstone that have been interpreted as lizards scurrying across the desert.

These footprints would seem to pose a major challenge to young- earth geologists who need to explain this formation in

the context of Noah's flood. Since there are many flood-associated layers both above and below this sandstone, there is no time for a desert to form in the middle of Noah's flood. Recent investigations, however, have revealed that the cross-bedding can be due to underwater sand dunes and that some footprints are actually better explained by amphibians moving across sandy-bottomed shallow water. Perhaps this formation can be explained by sand deposited under water.

This explanation does not entirely solve the young-earth geologists' problem, because it is still difficult to determine where the amphibians came from and how they could be crawling around in shallow waters on top of sediments that would have to be deposited halfway through a world-wide catastrophic flood. But let's go on to another flood evidence. Earlier, I mentioned the Great Unconformity. This can be observed throughout the Grand Canyon where the Tapeats Sandstone, a Cambrian formation estimated to be 570 million years old, rests on top of any one of a number of Precambrian strata ranging from one to two billion years old.

Our group observed a location in the Unconformity where the time gap between the two layers is estimated to be one billion years. It is very unusual, even for evolutionary geology, for two layers from periods so far apart, in this case one billion years, to be right on top of one another. It is hard to imagine that no sediments were deposited in this region for over a billion years! Evolutionary geologists believe that the upper sandstone was deposited over hundreds of thousands of years in a marine environment. However, we observed large rocks and boulders from a neighboring formation mixed into the bottom few feet of the Tapeats Sandstone. This indicates tremendous wave violence capable of tearing off these large rocks and transporting them over a mile before being buried. This surely fits the description of a flood rather than slow deposition. We spent nearly two hours at this location and we were all quite impressed with the clear evidence of

catastrophic origin of the Tapeats Sandstone.

That the Coconino Sandstone likely had a water-deposited origin and that the Tapeats Sandstone was laid down in a great cataclysm are necessary elements for a young-earth flood geology scenario for the Grand Canyon.

The Erosion and Formation of the Grand Canyon

Perhaps one of the most interesting questions about the Grand Canyon is how it was cut out of rock in the first place. The answer to this question has a lot to do with how old the canyon is supposed to be. The puzzling factor about the Grand Canyon is that the Colorado River cuts directly through an uplifted region called the Kaibab Upwarp. Normally a river would be expected to flow towards lower elevation, but the Colorado has cut right through an elevated region rather than going around it.

The explanation you will still find in the National Park literature is that the Colorado began to cut the Grand Canyon as much as 70 million years ago, before the region was lifted up. As the uplift occurred, the Colorado maintained its level by cutting through the rock layers as they were lifted up. Thus the Grand Canyon was cut slowly over 70 million years! In recent years, however, evolutionary geologists as well as old-earth creationists have abandoned this scenario because it just isn’t supported by the evidence. A major reason is that even at the present rate of erosion in the Grand Canyon, it would take as little as 71,000 years to erode the amount of rock currently missing from the Grand Canyon. Also, all of the sediment that would have to be eroded away during 70 million years has not been located. And lastly, evolutionists’ own radiometric dates of some of the surrounding formations indicate that the Colorado River has been in its present location for less than five million years.

Some old-earth geologists have tentatively adopted a new theory that requires a few rather strange twists. This theory suggests that the Colorado River flowed through the area of the Grand Canyon only recently. The Colorado originally was forced in the opposite direction of its current flow by the Kaibab Upwarp and actually flowed southeast toward the Gulf of Mexico. This ancestral Colorado River may have occupied the course of what is now the Little Colorado River, only in the opposite direction of its current course.

This theory further suggests that about five million years ago a westward-flowing stream began to erode, upstream or towards the east, over what is today the Grand Canyon, through the Upwarp and capturing the ancestral Colorado River! If this sounds a little fantastic to you, you're probably right. In a recent volume on the Grand Canyon, a geologist, while maintaining this theory to be solid, admits a lack of hard data and that what evidence there is, is circumstantial. Into this controversy step the young-earth creationists, who need to explain how the Grand Canyon was formed, strata and all, in less than 5,000 years. They suggest, quite reasonably I think, that the canyon was formed when the Kaibab Upwarp acted as a dam for three lakes occupying much of Utah, Colorado, and northern Arizona. These lakes catastrophically broke through the Upwarp, and the Grand Canyon was cut out of solid rock by the drainage of these lakes through this breach in the dam. A small canyon was formed this way recently as a result of the eruption of Mount St. Helens. Grand Coulee in Washington state was formed when an ice dam broke at the end of the Ice Age. This breached-dam theory answers a lot of questions the old-earth theories do not, and it needs to be considered.

Uncertainties of Dating the Grand Canyon

I have noted that old-earth creationists believe that the Grand Canyon strata were formed over hundreds of millions of years and that the canyon itself was carved out in less than

five million years. Young-earth creationists, on the other hand, believe that the strata of the canyon were formed as a result of Noah's flood and that the canyon was carved out catastrophically less than five thousand years ago. A critical question to ask is, how can we know how old the rocks in the Grand Canyon really are? The usual solution is to date the rocks by radiometric dating methods, which are supposed to be capable of dating rocks billions of years old. Rocks of volcanic origin are the best ones to use in dating rocks this way, since radiometric elements are plentiful in them. The Grand Canyon has volcanic rocks near the bottom and at the top. ICR has been involved in a project over the last several years to date these volcanic rocks. Their results not only call into question the age of the Grand Canyon but also the reliability of radiometric dating.

The youngest rocks in the Grand Canyon are recognized by all to be volcanic rocks in western Grand Canyon that flowed from the top of and into the canyon. The oldest rocks that have been dated are volcanic rocks called the Cardenas Basalt, a Precambrian formation near the bottom of the canyon. The rubidium- strontium method, however, has dated the Cardenas basalt at one billion years and the lava flow on top of the canyon at 1.3 billion years. This is clearly impossible! Rocks on the bottom of the canyon are 300 million years younger than very recent rocks on the very top of the canyon! These dates were obtained by ICR from samples they sent to several independent dating labs. Something is amiss, either in the interpretation of the rocks, the dating methods, or both.

As we have seen, ICR scientists have come a long way in showing that many of the Grand Canyon strata could have formed rapidly, that erosion of the canyon by the Colorado River has not been going on for tens of millions of years, and that there are significant problems with the dating of the canyon.

However, there are still significant questions that remain to be answered if the young-earth model is to be taken seriously

by old- earth geologists. For example, why are there no vertebrates among the fossils of the ocean floor communities of the Grand Canyon strata when vertebrates inhabit today's ocean floors? How did the many different kinds of sediments in the Grand Canyon (limestones, sandstones, shales, mudstones, siltstones, etc.) find their way to Northern Arizona as a result of one catastrophe and become so neatly stratified with little mixing? I raise these questions only to indicate that there is much work to be done. I also want you to realize that when someone asks me whether the flood of Noah created the Grand Canyon, I have to say that I don't know. And that's okay! The creation was a real historical event, Adam and Eve were real people, and the flood of Noah was real history as well. But finding the physical signs of these events can be tricky business. We need to encourage scientific investigation from both a young-and old-earth perspective because the testimony of God's word and His revelation from nature will ultimately be in harmony. It may just be hard to discern what that harmony is right now.

©1993 Probe Ministries