

INTERVIEW WITH DR. RICHARD COLLING

The Age of the Earth



Dr. Richard Colling is a professor and chairman in the Department of Biology at Olivet Nazarene University and author of the book *Random Designer*.

CNJ: *How is the age of the Earth calculated?*

Colling: The age of the Earth is calculated by a variety of methods. Radioisotope decay analysis of rocks, minerals, meteorites, and moon rocks is perhaps the most widely utilized and reliable technique. The most common radioisotopes for these studies are:

Uranium 235 – Lead 207, and Potassium 40 – Argon 40 with a half-lives of 713 million years, and 1.25 billion years, respectively. Other isotopes can also be utilized for independent verification.

According to the U.S. Geological Survey data, radioisotope techniques provide fairly consistent data pointing to an age for the Earth of approximately 4.5 to 4.6 billion years. For more recent time frames, tree ring analysis shows an earth nearly 12,000 years old (to most recent ice age), and ice core studies of Antarctica and Greenland trace Earth's history back to approximately 180,000 years.

CNJ: *What is your opinion on carbon dating related to the calculating the age of the Earth?*

Colling: I participated in a series of training conferences around the country this past summer speaking to pastors about my book, “Random Designer,” and encouraging them to envision a God who is bigger than previously known or understood. One of the things I discovered to be a common misunderstanding among these pastors is the idea that radiocarbon dating is routinely used for measuring the age of the Earth. In reality, Carbon 14 radioisotope dating techniques are not particularly useful for measuring the age of the Earth. The reason is the half-life of Carbon 14 (5,730 years) is simply too short to provide meaningful measurements of age beyond about 50,000 years. My hope is that we, as Christian scientists, can do a more effective job of helping pastors and other Christians to become more knowledgeable in areas of science

and biology. If successful, perhaps Christians might present a more realistic and credible image of the Christian faith to people searching for meaningful answers to their questions regarding faith and science.

CNJ: *Do you believe religion plays a role in determining the age of the Earth?*

Colling: In short, no. I see nothing in Scripture that would lead me to the conclusion that God is trying to tell us the age of the Earth. The message of scriptural accounts of creation appears to be primarily a spiritual message, telling how we should live and relate to one another, and to God. The Bible provides a very clear proclamation that, “In the beginning, God ...”, but He seems to have left it to us to discover the mechanisms of His creative genius. The processes that mold and shape the physical world, and even life itself, are evident in many ways that scientists can reliably discover and report. Indeed, many Christian scientists find deciphering the subtle, yet absolutely astounding mechanisms of God's creative action, to be an immensely satisfying experience.

CNJ: *Is it possible to calculate the Earth's age solely based on evidence given by the Bible?*

Colling: Individuals who hold to an ultra-literal interpretation of the Biblical accounts of Genesis sometimes make some rough assumptions regarding human generation times and based upon this data arrive at an estimate of the Earth's age. However, their conclusions (8000 years) are at odds with the entire scientific communities of geology, physics, paleontology, astronomy, and biology. In other words, the scientific calculations of the Earth's age come not only from many independent measurement techniques, but also from multiple independent scientific groups. For Christians to conclude that the scientists in these diverse fields are all wrong is to suggest that the core underlying principles, upon which each of these scientific disciplines is grounded, are fundamentally flawed.

CNJ: *How old is the Earth?*

Colling: According to the U.S. Geologic Survey, approximately 4.54 billion years old.

CNJ: *What evidence can you give to support your estimated age of the Earth?*

Colling: Please refer to the answer to question #1. In addition, the age estimations for Earth of 4 to 5 billion years are consistent with independent measurements by astronomers of the age of our galaxy and the universe. We live in a consistent reality!

INTERVIEW WITH DR. KEN HAM & DR. JASON LISLE

CNJ: *How is the age of the Earth calculated?*

Ham/Lisle: First off, contrary to what many people believe, there is no scientific way to prove the age of the earth. Observational science operates in the present, and deals with observable, repeatable processes.

But the Earth was created in the past. And this happened only once. So we cannot study it in a laboratory. Furthermore, age is not a “substance” that can be measured by scientific means.

Of course, there are many different ways in which people have attempted to use scientific processes to estimate the age of the Earth. It is simply that none of these can absolutely prove the age of the Earth. Many of these techniques give ages that are very consistent with an Earth that is a few thousand years old.

However, evolutionists reject such estimations because they first believe evolution, which requires many billions of years. Evolutionists only accept estimations of the age of the Earth that are compatible with billions of years.

Many secular scientists claim that radiometric dating proves that the earth is billions of years old. This technique measures the decay of certain kinds of radioactive atoms in rocks. But, in order to estimate the age of the rock, the scientists must use several untestable assumptions about the past based on what they already believe.

We know that radiometric dating can give wrong ages. In fact, rocks from very recent volcanoes have been tested using this method; their radiometric “ages” show up as being hundreds of thousands to millions of years old – even though we know the rocks are only a few years old! So radiometric dating certainly does not prove that the Earth is billions of years old.

Because of these inaccuracies, we need a more reliable method to determine the age of the Earth – such as an eyewitness account. For example, if someone asked when Abraham Lincoln lived, would we get a sample of his body and carbon 14 test it in the lab? No, we would look up written eyewitness accounts to determine when he lived.

The Bible is God’s eyewitness account of creation. So we add up the genealogies in the Bible from Adam to Christ and then add five days to that (since Adam was created on the sixth day, there were five prior to that). This is how we arrive at approximately 6,000 years ago.



CNJ: *What is your opinion on carbon dating related to calculating the age of the Earth?*

Ham/Lisle: Most people are really confused about carbon dating and don’t realize that it actually is not a method that has anything to do with millions or billions of years. Evolutionary

scientists who understand carbon dating will explain to you that it can only date things thousands of years old – not millions. Unlike radiometric dating of rocks, carbon dating is very consistent with the idea of a “young” Earth. Carbon dating gives estimations of ages that are recent – a few thousand years old at most. It never gives ages of millions or billions of years (even on things that evolutionists claim are millions of years old such as coal beds.)

However, even carbon dating is not infallible, and sometimes gives inflated ages (though never millions or billions of years). In fact, the only infallible way to age-date the Earth is to have an historic document that records the event of its creation. And that is exactly what we have in the Bible.

CNJ: *Do you believe religion plays a role in determining the age of the Earth?*

Ham/Lisle: It certainly does. A person’s beliefs affect how that individual interprets the evidence. An evolutionist, for example, cannot consider the possibility of a young earth because of his “religion” (his beliefs). Any evidence that is consistent with a young Earth must be reinterpreted by an evolutionist. We all interpret evidence in light of our beliefs – our worldview. Everyone has a worldview that affects his or her interpretation of the scientific data.

The real issue is: which worldview is best?

We can either base our interpretation of evidence on the fallible opinions of other human beings (evolution). Or we can interpret the evidence in light of the authoritative, infallible Word of God – the Bible (creation). Only God was actually there when the universe was first created. He is the only eyewitness. When it comes to the age of the Earth, we can either trust in the fallible speculations of humans, or we can trust in the eyewitness testimony of the Creator.

For those who are Christians, who take Genesis as literal history and truly understand the Bible, they cannot believe in millions of years and the Bible’s record of creation at the same time. The Bible makes it clear that death, bloodshed, disease

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and suffering of animals and man did not exist until after the first man Adam sinned.

Originally, all the animals and Adam and Eve were vegetarian (Genesis 1:29-30). The fossil record that many scientists (and many Christian leaders) believe was laid down by millions of years is incompatible with what the Bible teaches. In that fossil record, one finds evidence of cancer and brain tumors as well as many other diseases in various bones. If all this existed before Adam sinned and then God said everything was very good – that would mean that God is saying that cancer and brain tumors are very good. This doesn't make sense at all.

Also, in the fossil record there is much evidence of animals eating other animals with the bones of their prey in their stomachs. There is even evidence that dinosaurs ate each other, which would mean examples of cannibals in the fossil record. How could all this exist before Adam sinned and God called that a very good Earth? For those who are Christians and truly believe God's Word, as they cannot add millions of years to the Bible as it destroys the whole basis of the Gospel. Death is an enemy as described in the Bible and is a result of sin and that is why Jesus Christ came to die on a cross and to be raised from the dead to pay the penalty for our sin. This is the whole basis of salvation.



CNJ: *Is it possible to calculate the Earth's age solely based on evidence given by the Bible?*

Ham/Lisle: The Bible does give us enough information to compute the approximate age of the Earth. We read in Exodus 20:11 that God made the heaven and earth and all that is in them in six days. It is clear from context that these days were literal, ordinary, approximately 24-hour days. (In fact, that is where we get our idea for a week).

Genesis 1:26-31 teaches that human beings were created on the sixth day. And by adding the ages of the people listed in Scripture in places such as Genesis 5, we know that Adam lived a few thousand years ago. But since the Earth is only five days older than Adam, it too is only a few thousand years old.

CNJ: *How old is the Earth?*

Ham/Lisle: By addition of the genealogies and other information given in Scripture, we can compute that the Earth is about 6,000 years old. Jesus confirmed that the Earth is "young" in Mark 10:6. Here we read that God made human beings from the "beginning of creation." If the Earth were billions of years old, then human beings were not around at the beginning, but only appeared recently. But if we accept a straightforward reading of Genesis 1, then we see that human beings were there at the beginning – right on the first week of history.

CNJ: *What evidence can you give to support your estimated age of the Earth?*

Ham/Lisle: There is a tremendous amount of scientific evidence that is consistent with the biblical age of the Earth. For example, sediment accumulates on the ocean floor at a rate of 25 billion tons per year. If the oceans were really billions of years old (as evolutionists teach), then there would be many times more sediment than we have. But the amount of sediment is perfectly consistent with a few thousand of years.

Another example is the earth's magnetic field. This field is decaying; it gets weaker every year. That means it was much stronger in the past. If the Earth were older than a few thousand years, the magnetic field would have been much too strong for life in the past. This isn't a problem for the biblical age of 6,000 years, but it is inconsistent with billions of years.

But even these arguments do not prove that the Earth is young. They are certainly consistent with a young Earth, but science cannot ultimately prove the past. The best way to find out about past events is to consult a history book – especially one written by eyewitnesses. That is why the best evidence for a young Earth (and the only absolutely conclusive one) is the Bible. It contains the true record of Earth's history, and is the inspired, infallible Word of God and there is nothing in operational (observable, repeatable) science that conflicts with this. ■