



“The heavens declare the glory of God” (Psalm 19:1)

REASONS TO BELIEVE - SEATTLE AREA CHAPTER

NEWS AND VIEWS

April 2004

FYI

April UW Event

Dr. Fuz Rana, RTB’s VP of Science Apologetics, will speak at the UW, April 15th at 7:30 PM. The talk, titled “The Truth about Evolution,” and will be in Kane Hall, Room 120. See our chapter webpage at www.reasons.org/seattle for more information.

WATCH Conference

The chapter will be sponsoring a booth at the WATCH (Homeschooling) Conference April 16-17 at Overlake Christian Church in Redmond. If you attend the conference, be sure to stop by the booth and say hi.

Presentations

The chapter does presentations on a wide range of topics. If your church or group would be interested in hosting one of our speakers, please contact the chapter at seattle@reasons.org.

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How High the Moon?

PAT LEWIS

One of our readers recently posed a question on a fascinating topic, the Moon’s recession from the earth. Is the rate of recession decreasing, accelerating or remaining constant? What governs the rate?

Several lines of evidence show the Moon is receding from Earth, and has been doing so for long ages—a fact awkward to reconcile with the young-earth cosmology. Ever since the Apollo missions to the Moon, we have been able to measure its distance with great accuracy by aiming laser beams at retro-reflectors placed on the surface by the astronauts. Currently the recession is around a centimeter per year. Studies of growth bands in coral reef rocks, which display daily, monthly and yearly features, show that during the Devonian period around 800 million years ago the earth rotated about 400 times in a year with a day being only 22 hours long. Much earlier than that, scientists believe, Earth rotated more than a thousand times a year, making a day only about 8 hours long. In our two-body system, the earth’s rotation period and the Moon’s distance are gravitationally linked, and the Moon was much closer to Earth in those times.



The Moon’s distance has far more importance than the mere satisfying of curiosity. By its gravitational attraction, the Moon raises tides on the earth. Since the force of gravity varies inversely with the square of the distance, a Moon only half as far away would raise tides four times more powerful than those we have today, with severe consequences for shoreline erosion and tidewater life. Our satellite also stabilizes the tilt of Earth’s axis by exerting a pull on its equatorial bulge. This stabilization would be less effective if the Moon were more remote. The planet Mars, which lacks a large stabilizing moon, is believed to have undergone several catastrophic shifts of its axis.

An intriguing fact is that both the Sun and the Moon subtend the same angle as seen from Earth. They are not same actual size—the Sun is 400 times the Moon’s

See MOON, page 6

Rapid Post-Flood Speciation

GREG MOORE

One problem for the global-Flood view is explaining how the earth was repopulated with land animals after the Flood. Young-earth creationists who recognize the problem of fitting all the land animals on the ark now conclude Noah only took pairs of the Genesis “kinds.” These, they say, were the ancestral seeds God provided to repopulate the post-Flood world. As the “kinds” spread-out from the ark, they gave rise to the many different species on Earth today.¹

If true, the amount of post-Flood speciation must have been staggering. Young-earth creationists estimate Noah took 8,000 to 20,000 “kinds” on the ark. They also say a large number of these species went extinct after the Flood.^{2,3} Based on their dating system, approximately 7 million species have existed since the Flood—about 2 million have gone extinct and 5 million are alive today. Thus, 7 million species must have arisen from far less than 20,000 species in time frame of a few hundred years.⁴

How could these new species have appeared so fast? Young-earth creationists say God endowed the “kinds” with a rich genetic coding that permitted them to shift their major characteristics to adapt to a wide range of post-Flood environments.⁵ Because the changes occurred through recombinations of existing genes in the created genomes of the “kinds,” rather than mutations, they say the changes could have occurred rather quickly after the Flood.⁶



According to their speciation model, these changes were triggered by environmental pressure working on small, isolated populations. After the Flood, they say, the earth experienced several hundred years of residual catastrophism.⁷ There were earthquakes, volcanoes, temperature variations and harmful radiation.⁸ As the “kinds” left the ark, small groups became geographically isolated. Each group, having a small gene pool, suffered genetic loss as they reproduced. So, over time, each group started looking and living differently than original “kind.”⁹

Young-earth creationists are adamant this was not evolution. Evolution, they say, is a process of progress involving the mutation of new genes and new genetic information. Speciation, on the other hand, is a degradative process. Through the reproduction of a limited number of individuals, genetic information is recombined and genes and/or the function of genes is lost. Thus, the daughter species have less “information” than the parent population.^{10,11,12}

Many creationists consider the fixity of the species to be a central pillar of biblical creationism. Given the implications of the young-earth model, it is important to look at some of the assumptions.

See SPECIATION, page 5

INCREASING RTB'S IMPACT

In a perfect world, ministries could focus all their energies on bringing people to Jesus Christ. Imagine the impact they could have on the world. But the reality is ministries face a number of real world constraints. The biggest of these obstacles, of course, is money.

Money is a touchy subject. We all want it, all need it, yet we hate to talk about it. It's easier to tell people they're going to hell for their sins than to ask them to open their wallets. I'm not sure why. It's not that people don't want to give, I guess they just don't want to feel like they have to.

Reasons to Believe has a number of goals that depend on, well, here's that word, money. They want to expand their team of scholars, increase their worldwide outreach programs and produce new resources that provide compelling evidence—from the cutting edge of science research—for the God of the Bible.

The Seattle chapter also has a number of ambitious goals. One is we want to equip local teachers and homeschoolers. For example, we recently sent books to a teacher at a small Christian school in Idaho. Another is we want to continue to bring top-quality speakers, like Hugh Ross and Fuzz Rana, to the area. Of course, this is a costly undertaking. The upcoming event at the UW alone will cost the chapter about \$2,000. But, we are stepping out in faith, knowing God will provide if we follow his direction.

That brings us back to the “m” word. Here's how you can help. First, consider subscribing to RTB's Message of the Month Program. For information and a free sample tape, contact the Seattle chapter at seattle@reasons.org. Second, consider contributing to the Seattle Chapter. We are a 501C3 organization and donations are tax-deductible. All funds will go directly into our outreach efforts. You can send donations to: Seattle RTB, 1314 Mukilteo Boulevard, Everett, WA 98203.

God bless and thank you for your support!

Greg Moore
Chapter President

Theistic Evolution

JON GREENE

Darwin's *Origin of Species by Means of Natural Selection*, published in 1859, had a powerful effect on the Christian community of the late 19th century. Evolution was represented as scientifically proved fact. Some Christians believed divine creation and evolution could both be true. Because of their desire to remain scientifically and culturally relevant in the modern world, "theistic evolution" was born in the church in the late 1800s.

Theistic evolution is the belief God used evolutionary processes as His means of producing the various forms of plant and animal life. Theistic evolutionists concede God created matter and even the first life, but after that, every other living thing, including human beings, simply emerged through natural evolutionary processes superintended by God.

The problem with theistic evolution, is the component parts—theism and evolution—are incompatible. Like water and oil, they simply don't mix. Thus, theistic evolution violates both Scripture and the principles of evolution:

- Scripture teaches purposefulness in God's work of creation. Evolution teaches mutational processes proceed randomly with no purpose.
- Scripture pictures God's creative efforts as bringing immediate results. Evolution teaches life advances gradually through millions of years of innumerable mutations.
- Scripture indicates specification and distinction between living things. Evolution suggests smooth transitions between species.
- Scripture teaches God purposely created man. Theistic evolution suggests man is just the end-result of millions of years of non-purposeful, accidental processes somehow guided by the hand of God.

Theologian Louis Berkof wrote, "Theistic evolution is really a child of embarrassment, which calls God in at periodic intervals to help nature over the chasms that yawn at her feet. It is neither the biblical doctrine of creation, nor a consistent theory of evolution."

Incidentally, some creationists equate progressive (old-earth) creationism with theistic evolution. This is erroneous. Old-earth creationists advocate God specially created the species.

Jon Greene is a retired and worked in the pharmaceutical field. He is a trained apologist and is active in the Seattle Chapter.

REFERENCES:

1. Norman L. Geisler, *Baker Encyclopedia of Christian Apologetics*, Baker Reference Library (Logos Research Systems)
2. Wayne Grudem, *Systematic Theology*, (Zondervan, 1994), pp. 275-279
3. *Vine's Complete Expository Dictionary of Old and New Testament Words* (Thomas Nelson Publishers, 1996), pp. 51,52,86,87
4. John MacArthur, *The Battle for the Beginning*, (W Publishing Group, 2001), p. 65

APOLOGETICS TOOL KIT

[Weekly Creation Update](#)

Join Hugh Ross each Tuesday for an exciting discussion about how the latest scientific discoveries provide powerful new evidence for the God of the Bible. Listen to the webcast live and ask questions, Tuesdays 11:00 AM to 1:00 PM (PT), at www.oneplace.com/ministries/creation_update. Past episodes are available free on-line for a limited time.



[Connections Magazine](#)

RTB's free magazine, *Connections*, is packed full of great articles on a wide range of issues. To subscribe, phone RTB at 626-335-1480 or go to the RTB website and click on the newsletter icon. You can also search past issues and download articles at: www.reasons.org/resources/connections/index.shtml?main.



[Message of the Month](#)

Through the M.O.M. program, you can receive fresh, faith-building messages each month. At the same time, you'll be helping to support the RTB ministry and the Seattle Chapter. The 2004 series focuses on "the problem of evil." The cost is \$30 per month. For more information and a sample tape contact the Seattle chapter at seattle@reasons.org.



[Apologetics Training Program](#)

In January, RTB launched a brand new apologetics training program called the "Science and Evangelism Correspondence Course." This course is designed to help lay people use the ever-growing evidence from science to defend Christianity and point non-believers to the God of the Bible. The course retails for \$129 which includes the course materials and five books. It is available through the chapter for a limited time at a special price of \$65. For more information, contact the Seattle Chapter at seattle@reasons.org.

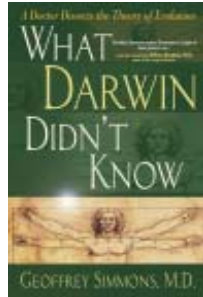


Book Reviews

What Darwin Didn't Know

Geoffrey Simmons, M.D.
Harvest House, 2004

Reviewer: Dave Ouellette



In this book, Geoffrey Simmons, a medical physician for 35 years, puts forth the following premise: what if Darwin were to submit his book, "On the Origin of Species," for publishing today? Given what scientists now know, would Darwin's theories hold up to scrutiny and get published?

Simmons points-out the vast complexity of living systems and how in Darwin's day cellular theory was still in it's infancy. He then muses on possible rejection letters Darwin might receive from scientists. One point Simmons makes is Darwin didn't have a clue how complex biological systems are, but today's scientists do and it doesn't seem to stop them from publishing their naturalistic theories.

In Part I, "Basic Issues," Simmons begins his arguments against the theory of evolution by describing the "whole package phenomenon." This "all-or-none" concept is built on Michael Behe's irreducible complexity and deals with the problem of intermediates. Simmons argues correctly that systems such as how the body heals a wound, how insulin is regulated in the bloodstream, or even why is there sex, are very difficult to explain in an evolutionary manner.

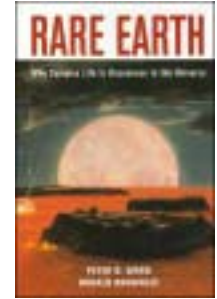
In the Parts II and III, Simmons examines the complexity of the human body in terms of external connections (vision, hearing, balance, etc.) and internal systems (endocrine, respiratory, gastrointestinal, etc.). In Part IV, "More Enigmas," Simmons examines some other very interesting aspects of the human body such as the built-in self-protection mechanisms, gifts (communication, imagination, etc.) and biorhythms (i.e. why do we sleep?).

Overall the book is a good read and helps one realize how intricate and complex the human body is. One possible criticism is Simmons often argues certain systems are so complex they must have been designed. This type of argument works well with believers but not skeptics. Such design arguments must be backed up with verifiable data to be seen as a viable alternative to Darwinian evolution.

Rare Earth

Peter Ward & Donald Brownlee
Copernicus Books, 2000

Reviewer: Greg Moore



This book examines Carl Sagan and Frank Drake's conclusion (called the Drake Equation) that intelligent life should be common in the universe.

The author's position, called "the rare earth hypothesis," is simple life may be extremely common but complex is likely to be far rarer than most scientists assume.

The authors begin by examining reasons why simple life might be widespread. They discuss how extremophiles—organisms that live deep within the earth and in deep sea hydrothermal vents—demonstrate life can exist in a much wider range of habitats than previously thought. This, they say, has caused scientists to revise their thinking on the requirements for life and suggests simple life may be common throughout our galaxy and the universe.

Next, the authors examine a number of factors that make Earth an extremely rare place. They discuss the earth's position relative to the sun, the unique atmosphere, the proportion of land to oceans, the CO₂-silicate cycle that regulates planetary temperatures, plate tectonics and a number of other things. Their conclusion is the conditions necessary for the survival of higher life forms are much too exacting to have arisen in many other places.

The authors also discuss a couple of very interesting topics. One is the enigma of the Cambrian explosion. The other is the mass extinctions that occurred throughout early earth history. Both of these discussion provide useful insight on these issues these events raise for evolutionists.

The book is very readable and does not require an extensive science background to understand. Although the authors examine things from an evolutionary slant, the book makes a compelling case that life on Earth may be much more precious than many have thought. In fact, their evolutionary perspective is useful in a sense because it helps the reader understand how naturalists try to deal with these issues. Incidentally, Ward and Brownlee are astrobiologists at the University of Washington.

- The Conditions – The young-earth model assumes the post-Flood world was ecologically unstable.¹³ However, scientists find no evidence of recent tectonics, volcanism or erosion on a scale nearly as great as the global Flood model requires.¹⁴ Equally important, the Bible does not state the the earth was dramatically altered by the Flood or that Noah was alarmed by the post-Flood conditions. Instead, the Bible states Noah and his family immediately began farming—impossible if conditions were as harsh as young-earth creationists suggest.¹⁵
- Mass Migration – The young-earth model assumes today’s land dwelling animals migrated to their present locations after the Flood.¹⁶ However, based on their Flood model, the continents separated and moved to their present locations during the months of the Flood.^{17,18} Thus, there is no explanation for how the “kinds” made their way to the different continents, or how small, delicate creatures made their way to such distant destinations. If their model is true, we would also expect to find fossil evidence of a major radiation from Ararat but we don’t.
- Super Species – The young-earth model maintains the “kinds” were endowed with a special genetic coding that enabled them to quickly change after the Flood. However, there is not a single example from field research that backs-up this claim. If species descended from a common ancestors, we should see small differences between species and large differences within species but we don’t. Another problem is extinctions. If God endowed the “kinds” with special coding, did so many species, like the dinosaurs, go extinct after the Flood?
- Rapid Speciation – Young-earth creationists say examples of rapid adaptation abound, even to the point of producing new species.¹⁹ As evidence, they point to populations of mosquitoes, salmon and other creatures that no longer interbreed with their main populations.^{20,21} However, these are examples of reproductive isolation—as subpopulations get isolated they sometimes won’t interbreed with the main population due to behavioral, not morphological, reasons. Fish living in the same lake, for example, can acquire different food choices which leads to different sizes and different mating preferences.
- Horizontal Change – Young-earth creationists say the changes were horizontal and at the same level of complexity.²² However, this is not what we see. An example is the Bear Family. Sloths have a specialized head and dental structure that creates a vacuum device for consuming termites. Polar Bears have webbed feet and specialized fur, dentition and digestive tracts. Pandas have a specialized thumb, head, reproductive system and esophagus.²³ If these features resulted from adaptations, they represent improvements and increased complexity.

- Defining “Kinds” – The young-earth model has to explain how all the independent, non-interbreeding species descended from a few species on the ark. This is problematic because a species is defined as a stable, reproducing population that does not interbreed with other populations. Young-earth creationists try to get around this by arguing if two species can be made to hybridize, they must be descended from the same “kind.” However, crossbreeding animals in a zoo or laboratory proves nothing. For this to be true, every animal in a genus or family would have to crossbreed naturally.

While the young-earth model is not evolution in the molecules-to-man sense of the term, it is still evolution. Evolution also refers to limited common descent—the idea that groups of organisms have descended from a common ancestor—and to the mechanisms responsible for change, chiefly natural selection acting on variations or mutations.²⁴ In reality, young-earth creationists appeal to the same processes evolutionists do, except mutation. The only significant difference is the timeframe—they propose speciation rates far faster than even the most optimistic Darwinist would dare to suggest.²⁵

While young-earth creationists contend their speciation is not evolution because no “information” is produced, they do indirectly argue for new information. A gene sequence is a code or a combination of letters. The information that is conveyed by the gene sequence is both syntactic and semantic—the genes occur in a certain order (syntactic) and certain sequences have meaning attached to them (semantic). When genes are reshuffled and the sequence changes, the code changes and it takes on a different meaning. Thus, the changes they attribute to reshufflings are the result of new semantic information.

Ironically, many evolutionists now question whether descent through modification can produce the amount of change required to account for the diverse body plans and organs we see in the world. Animals, especially advanced animals, simply cannot and do not change at the rates young-earth creationists propose. If speciation really did operate at such a rapid pace, we would find fossil evidence of it and we would be able to observe it happening.²⁶ Thus, the idea genetic shuffling is capable of producing limitless biological change is more an article of faith than fact.²⁷

The young-earth speciation model is not derived from the evidence—either biblical or scientific—rather, it is driven by the necessities of the global-Flood view. The Reasons to Believe position is the different species were specially created by God. We would concede speciation might occur at the level of bacteria (given the extremely small body size, large population size,

diameter—but by a near-incredible coincidence it is also 400 times farther away! It is this circumstance that makes possible the awesome spectacle of a “perfect” total eclipse of the Sun complete with its pearly corona.

Clearly this has not always been the situation, since as we have seen, the Moon was once much closer and in the remote future it will be much farther away. The gradual increase over the eons is regulated by one of the laws of physics, the Conservation of Angular Momentum.

Each of the two bodies in the Earth-Moon system possesses angular momentum that is calculated by taking into account its mass, speed of rotation, distance from the center of mass, and velocity in orbit around the center of mass. According to the law, unless an outside force interferes, the total angular momentum of the system must be conserved (i.e., it must remain constant). If the angular momentum of one body should change, the motion of the other body must adjust to keep the total constant.

Our well-designed planet possesses large liquid oceans bounded by shorelines. The tides caused by the Moon exert a force on the shores tending to slow the Earth’s rotation and causing it to lose angular momentum. To compensate, the Moon’s distance gradually increases, keeping the total constant.

The human race has occupied this planet for only a few thousand years. In the distant past, when the Moon was nearer, in an eclipse the Sun and its wide corona would have been completely covered up. On the other hand, perhaps a few million years from now, the Moon will be so far away that it cannot cover the Sun completely—again, the corona will not be visible. Only at this time are perfect eclipses possible, just when the Creator has placed us here. What the significance of this is, who can say? For some of us, the sight of that flaming eye-in-the-sky can be a thrilling experience, imparting a deep appreciation of the Designer of the universe.

Projecting farther into the future, we see the time will come when the Moon’s tidal brake will slow Earth until it rotates just once for each time the Moon revolves around it. Already the Moon itself is caught in this relationship to Earth, so it always presents the same side to Earth. This is called captured or synchronous rotation. Another solar system example is the ninth planet Pluto and its large moon Charon.

We questioned above whether the Moon’s rate of recession is constant or varies. The answer is the rate decreases because the more distant the Moon gets, the less forcefully the tidal waters will beat upon the earth’s shores. The rate of slowing of Earth’s rotation will decrease, so there will be less requirement for the Moon to move away to compensate. Has the rate of change been uniform all through history? Not necessarily, for it seems possible that tectonic continent-building episodes, or “Snowball Earth” epochs, may have caused tidal effects to increase or decrease at times.

When Earth’s and Moon’s rotations become synchronized, there will no

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GREAT RESOURCES



In this brand new RTB book, *Origins of Life*, Hugh Ross and Fuz Rana explode the myth that scientific evidence supports a naturalistic origin of life. This book examines the latest data from the origin-of-life field. Available from the RTB webstore at www.reasons.org.



Looking for a book that lays out the cosmological evidence for a Creator? This is it. In this third and expanded edition of *The Creator and the Cosmos*, Hugh Ross examines the theological significance of discoveries about the universe. Available from the RTB webstore.



Does the Bible teach the Earth is less than 10,000 years old? How does science and Genesis relate? *The Genesis Question* by Hugh Ross examines the Genesis 1 creation account from an old-Earth perspective. Available from the RTB webstore.



While the vast majority of UFO sightings have natural causes, some seem to defy explanation. In this book, *Lights in the Sky and Little Green Men*, Hugh Ross and other scholars provide a Christian perspective on UFOs. Available from the RTB webstore.



Is life in the universe common or rare? What are the odds of other Earth-like planets? Take an amazing journey with Hugh Ross as he examines how the universe that has been meticulously fine-tuned for human life. Available from RTB in VHS or DVD.

extremely rapid reproductive cycle and other factors) but to little, if any, speciation above that level. Before we abandon the fixity of the species principle, let's make sure the facts warrant it.

Greg Moore is a trained apologist and president of the Seattle Chapter. He works for the City of Everett.

REFERENCES:

1. Mike Brown, "Biological Revolution," www.creation-science-prophecy.com/biology
2. Jonathan Sarfati, "How did all the animals fit on Noah's Ark?" *Creation* 19:2 (Mar/May 1997): pp. 16-19 March-May 1997, www.answersingenesis.org/Home/Area/Magazines/docs/cen_v19n2_animals_ark.asp
3. John Morris, "How Could all the Animals Get on Board Noah's Ark?" BTG No. 39b (Mar 1992), www.icr.org/cgi-bin/pfp.cgi
4. Hugh Ross, *The Genesis Question*, first edition (CO, Nav Press, 1998), p. 91
5. Mike Brown, "Biological Revolution," www.creation-science-prophecy.com/biology
6. Henry M. Morris, "The Microwave of Evolution," *Back to Genesis* #152 (Aug 2001) www.icr.org/pubs/btg/btg-152.pdf
7. Steven A. Austin, John R. Baumgardner, et al., "Catastrophic Plate Tectonics: A Global Flood Model of Earth History," www.icr.org/research/as/platetectonics.html
8. Paul S. Taylor, "Noah's Ark Part II," <http://christiananswers.net/dinosaurs/j-fate1.html>
9. Mike Brown, "Biological Revolution," www.creation-science-prophecy.com/biology
10. David J. Tyler, "Adaptions in the Bear Family," *Creation Matters* Vol. 2, No. 5 (Sep/Oct 1997), www.creationresearch.org/creation_matters/97/cm9707.html
11. Don Batten, "Ligers and wholphins? What Next?" *Creation Ex Nihilo* 22:3 (Jun/Aug 2000): pp. 28-33, www.answersingenesis.org/home/area/magazines/docs/v22n3_liger.asp
12. "What Were the Originally Created Kinds of Plant and Animals?" ICR FAQ #45, www.icr.org/bible/bhta45.html.
13. Paul S. Taylor, "Noah's Ark Part II," <http://christiananswers.net/dinosaurs/j-fate1.html>
14. Hugh Ross, *The Genesis Question*, first edition (CO, Nav Press, 1998), p. 149
15. Ibid.
16. Don Batten, "Ligers and wholphins? What Next?" *Creation Ex Nihilo* 22:3 (Jun/Aug 2000): pp. 28-33, www.answersingenesis.org/home/area/magazines/docs/v22n3_liger.asp
17. John R. Baumgardner, "Catastrophic Plate Tectonics: The Geophysical Context of the Genesis Flood," *Technical Journal* 16:1 (2002): pp. 58-63 www.answersingenesis.orgd/home/area/magazines/tj/docs/16n1p58baumgardner.asp
18. Ken Ham, Jonathan Sarfati, Carl Wieland, "What About Continental Drift?" First published in *The Revised & Expanded Answers Book*, Chapter 11, www.answersingenesis.org/home/area/answersbook/continent11.asp

QUOTES OF THE MONTH

"Christ never meant that we were to remain as children in intelligence; on the contrary, He told us to be not only 'as harmless as doves,' but also 'as wise as serpents.'...The fact that you are giving money to a charity does not mean that you need not try to find out whether that charity is a fraud or not." -C.S. Lewis

"Jesus Christ calls us to follow him in faith—but not in blind faith. He asks not for belief without evidence, but for commitment with reservation. So he tells us to love God with all our mind as well with all our heart and strength." -Cliffe Knechtel

"If we submit everything to reason, our religion will be left with nothing mysterious or supernatural. But if we offend the principles of reason our religion will be absurd and ridiculous." -Blaise Pascal

"We live in what may be the most anti-intellectual period in the history of western civilization...We must have passion—indeed hearts on fire for the things of God. But that passion must resist with intensity the anti-intellectual spirit of the world." -R.C. Sproul

"Our churches are filled with Christians who are idling in intellectual neutral. As Christians, their minds are going to waste. One result of this is an immature, superficial faith...If Christian laymen don't get intellectually engaged, then we are in serious danger of losing our children." - William Lane Craig

"Science can purify religion from error and superstition; religion can purify science from idolatry and false absolutes. Each can draw the other into a wider world in which both can flourish...Such bridging ministries must be nurtured and encouraged." -Pope John Paul

"Be on guard against giving interpretations of Scripture that are farfetched or opposed to science, and so exposing the Word of God to the ridicule of unbelievers." - Saint Augustine

"It would be completely consistent with all we know to say that there was a Being who is responsible for the laws of physics." -Stephen Hawking

"The truth of our faith becomes a matter of ridicule among the infidels if any Christian, not gifted with the necessary scientific learning, presents as dogma what scientific scrutiny shows to be false." -Thomas Aquinas

19. David Catchpoole, Carl Wieland, "Speedy Species Surprise," *Creation* 23:2(Mar/May 2001): pp. 13-15, www.answersingenesis.org/home/area/magazines/docs/v23n2_speedy.asp?
20. Ibid.
21. Jonathan Sarfati, "Argument: Natural Selection Leads to Speciation," First Published in *Refuting Evolution* 2, Chapter 4, www.answersingenesis.org/home/area/re2/chapter4.asp?
22. "What Were the Originally Created Kinds of Plant and Animals?" ICR FAQ #45, www.icr.org/bible/bhta45.html.
23. David J. Tyler, "Adaptations within the Bear Family: A Contribution to the Debate about the Limits of Variation," *Creation Matters*, Vol. 2, No. 5 (Sep/Oct 1997), www.creationresearch.org/creation_matters/97/cm9709.html
24. Stephen C. Meyer and Michael Newton Keas, "The Meanings of Evolution," The Discovery Institute, www.discovery.org/articleFiles/PDFs/Meaning2000.pdf
25. Hugh Ross, *The Genesis Question*, first edition (CO, Nav Press, 1998), pp. 91-92
26. Ibid. p. 151
27. Lane P. Lester, Raymond G. Bohlin, *The Natural Limits to Biological Change* (Dallas, Probe Books, 1989) pp. 141-142.

longer be tides in the oceans. The loss of angular momentum will cease and the Moon will stop receding. After that it is believed the much fainter tidal influence of the Sun's gravitation will be able to alter the balance of angular momentum once more, causing the Moon to return closer to the earth. By then, there will be no observers to care, for Earth will have become uninhabitable. Long before that time, we trust, the Creator will have fulfilled his promise of new heavens and a new Earth.

Perhaps the story of the changing Earth-Moon distance will be useful in our discussions with unbelievers. Surely they would be blessed by coming to understand these intricate designs of the Creator. How great is our God, and how remarkable his apparent concern to allow us to see and appreciate the wonders of the solar system.

Pat Lewis is retired and worked as a research technologist at the UW. She is an amateur astronomer and is active in the Seattle Chapter.



REASONS TO BELIEVE SEATTLE CHAPTER

Who Are We?

The Seattle Chapter of Reasons to Believe is a local extension of the worldwide, interdenominational Reasons to Believe ministry. We exist to support our parent organization and foster local involvement in the ministry. We serve the Puget Sound area and we are composed of Christians of different ages and backgrounds.

It is our conviction the same God who created the universe inspired the Bible. Therefore, what God says through His written word must agree with the facts of nature. We reject the notion that science and the Bible are at odds and we seek to provide a scientifically-sound and Biblically-faithful alternative to Darwinian evolution and young-Earth creationism.

What Do We Do?

The Seattle-Area Chapter exists to remove the doubts of skeptics and strengthen the faith of believers. We provide scientific, historical and philosophical evidence that supports the Christian worldview and helps remove barriers to a belief in God, the Bible and the Gospel of Jesus Christ. We carry out this mission by:

- Helping people access RTB and other resources that are scientifically and biblically sound.
- Bringing nationally-known speakers into the area to promote the scientific reliability of the Bible.
- Providing a local team of trained apologists to address questions about science, the Bible and related topics.
- Training Christians to shed their fear of science and use science to spread the Gospel.
- Working with teachers and homeschoolers to achieve a balanced approach to the teaching of origins.
- Building alliances with local churches, ministries and groups to maximize the exposure of the RTB ministry.
- Reaching out to unbelievers with gentleness and respect, encouraging them to evaluate their worldviews.

Questions? Get Answers.

Whether you are looking for scientific support for your faith or answers to questions about God, the Bible, and science, contact us at seattle@reasons.org. You can also call the RTB hotline seven days a week, 5:00 to 7:00 PM at 626-335-5282.