



Creation Matters

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Grand Canyon: Where is the pre-Flood/Flood boundary?

Are skeptics of Darwinism well read?

A defensive strategy for Japanese honeybees

Membership Matters: New international rates

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Membership Matters

by Glen Wolfrom, Ph.D.

New international membership fees

Effective immediately, it is necessary to increase international rates for memberships and nonmember subscriptions. The old surface mail (slow boat) option is no longer available. All international mailing rates from the US are now, in effect, "airmail" (technically called "First Class Mail International," FCMI).

The good news is that most persons paying the full rate will now receive the *CRS Quarterly* and *Creation Matters* a week or two after mailing, rather than in 4-8 weeks. The bad news is that the membership/subscription rates have almost doubled for most of our international supporters

(specifically, those outside North America). They have increased by a smaller proportion for our Canadian and Mexican friends.

Some of the additional costs have been absorbed by the CRS budget, since we are not passing on 100% of the postage increases. But we will have to watch the budget carefully. Those who can afford to do so are encouraged to make contributions to help offset the increased cost of international postage.

To relieve the financial burden for our international members, we are now offering, at a substantially reduced rate, a paperless option whereby they do not receive a hard copy of our periodicals, but they retain all the benefits of membership, including ac-

cess to the online versions of our periodicals and to bookstore discount pricing. This option is also being made available to US members. However, the paperless option is not yet available to nonmembers (subscribers).

In the online members area of the website, we have now made available the *Quarterly* for downloading in its entirety, in either low resolution or high resolution PDF format. This is in addition to the single article downloads which have been available for a number of years.

The new fee schedule is shown below.

Category	Paper			Paperless
	USA	Canada Mexico	other countries	
Voting and Sustaining				
regular [<i>per year</i>]	\$35	\$53	\$70	\$31
senior [<i>per year</i>]	\$30	\$48	\$65	\$26
life member	\$500	\$500	\$500	\$500
Student [<i>one year</i>] (multi-year not permitted)	\$30	\$48	\$65	\$26
Subscriber [<i>per year</i>]	\$38	\$56	\$73	not yet available

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Cover Photo

View of south wall of Grand Canyon inner gorge from Toroweep Overlook. Photo by Glen Wolfrom.

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Defining the Pre-Flood/Flood Boundary within the Grand Canyon: Were All the Pre-Flood Sediments Scoured Down to Basement during the Flood?

by Carl R. Froede Jr., P.G. and Michael J. Oard, M.S.

What did the surface of the antediluvial world look like? How did the Flood impact that world? In examining today's rock record, where would we expect to define the stratigraphic contact between pre-Flood and Flood sediments and strata? Presently, there is some disagreement regarding where this boundary might be located in the rock record at the Grand Canyon. This article seeks to present a means of understanding how we can define this important boundary at this important locale.

The pre-Flood/Flood Boundary within the Grand Canyon

The Grand Canyon stratigraphic section presents a record of Earth history to both uniformitarians (e.g., Beus and Morales, 2003) and creation diluvialists (e.g., Austin, 1994; Austin and Wise, 1994; Froede, 1999a, 1999b; Wise and Snelling, 2005). This wonderful feature provides an excellent locale in which to study thousands of vertical feet of sedimentary rocks (Figure 1).

Of particular interest for diluvialists is the location of the pre-Flood/Flood boundary. Most of the attention has focused on stratigraphic contacts near the top of the Grand Canyon Supergroup (Figure 2). In a recent *Back to Genesis* article, Hoesch (2007) pronounced the pre-Flood/Flood boundary for the Grand Canyon at the base of the Tapeats Sandstone. He stated that:

If one is looking for the boundary between pre-Flood rock below and Flood strata above, look no further. This is a logical place to put it. (Hoesch, 2007, p. c)

Austin (1994) originally proposed this same boundary for the Grand Canyon, but later rejected it for an underlying contact at the base of the Sixtymile Formation (Austin and Wise, 1994). Both of these boundaries were subsequently challenged based on the remains of metazoans and plant spores found beneath the Sixtymile Formation

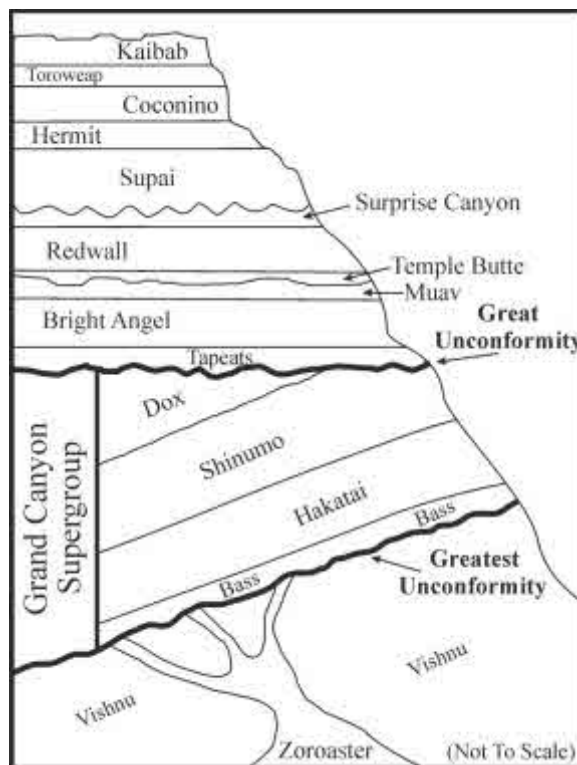


Figure 1. A generalized cross section through the Grand Canyon. The Great Unconformity marks the contact with the Grand Canyon Supergroup (GCS). Defining the pre-Flood/Flood boundary has largely focused on stratigraphic contacts at or near the top of the GCS. Application of all of the discontinuity criteria results in defining the pre-Flood/Flood boundary at or near the top of the igneous/metamorphic basement rocks. Modified from Kamilli and Richard (1998).

(Froede, 1999a, 1999b). More recently, Wise and Snelling (2005) have reasserted support for the pre-Flood/Flood boundary at the base of the Sixtymile Formation, but they did not address the presence of plant and animal life forms in underlying strata.

Taking a completely different approach to defining the pre-Flood/Flood boundary, Hunter (1992) proposed that it should be located below Earth's crust and possibly down into the mantle. This proposal has not been developed for the strata exposed at the Grand Canyon, and the condition of the contacts between the basement rocks and overlying clastic sediments does not appear to support such a dramatic proposal.

Where Should the pre-Flood/Flood Boundary be Located in the Grand Canyon?

As noted above, the debate regarding the appropriate place to mark the pre-Flood/Flood boundary at the Grand Canyon has been discussed and debated since it was first proposed over a decade ago. The differing perspectives in locating an appropriate pre-Flood/Flood boundary reflect the complexity of defining and defending one's perception of the rock record based on what might have happened during the Flood.

Several years ago, a proposal was made by some creationist geologists to define the pre-Flood/Flood boundary using certain geological features or contacts defined as "discontinuity criteria" (Austin and Wise, 1994). According to Austin and Wise (1994, p. 38), the five criteria are:

1. A mechanical-erosional discontinuity. This feature would reflect one or more erosional contacts between rock layers. The bottommost unconformity would likely reflect the contact between pre-Flood/Flood strata.
2. A time or age discontinuity. This feature is marked by the presence of conglomerates with clasts derived from underlying presumed pre-Flood sedimentary units.
3. A tectonic discontinuity. This feature would have been created due to the rapid tectonism experienced with the onset of the Flood.
4. A sedimentary discontinuity. This feature would be reflected by transgressive megasequences of which the base of the bottommost unit would coincide with the pre-Flood/Flood boundary.
5. A paleontological discontinuity. The pre-Flood rock record is viewed as containing little by way of fossilized organic materials. Flood deposits would contain an abundance of fossilized life remains. The boundary between pre-Flood and Flood strata would

be marked by a mechanical-erosional unconformity with few fossils below and an abundance of fossils above.

The weight and importance of each of these discontinuities are established at the actual rock outcrop. This is important as diluvialists seek to define the rock record consistent with Scripture. Unfortunately, the application of these criteria at any one locale can be rather subjective. This is demonstrated by the different pre-Flood/Flood boundaries proposed for the Grand Canyon section.

The Flood — What Should We Expect?

Our perception of the Flood shapes how we define the rock record. The Flood was an Earth-changing event so dramatic that it can hardly be imagined. Geologically, all that can be known about this historic event is only found in the rock record. Instead of building models and forcing the rock record into those constructs, diluvialists need to start with the actual rocks and then build geologic models from the physical evidence. The five discontinuity criteria provide the means of conducting just this sort of activity.

The Grand Canyon section presented in Figure 1 reflects the effects of the Flood for this particular area. Not all of these same strata occur outside of this area. Therefore, any attempt to identify a pre-Flood/Flood boundary for another location would require an examination of the strata and rocks within that particular area. Basically, no single stratigraphic contact on Earth can be used to globally define a pre-Flood/Flood boundary. The selection of this boundary will have to occur at specific locations where the discontinuity criteria might allow the boundary to be defined.

How much of the pre-Flood world would we expect to find preserved in the rock record? This is an important question, and one not so easily resolved. It is not unreasonable to imagine that the Flood scoured away most of the pre-Flood strata overlying basement rocks during the highly energetic initial stages of the Flood event. This would leave little to no sedimentary evidence of the pre-Flood world in today's rock record. The five discontinuity criteria listed above can assist in possibly narrowing

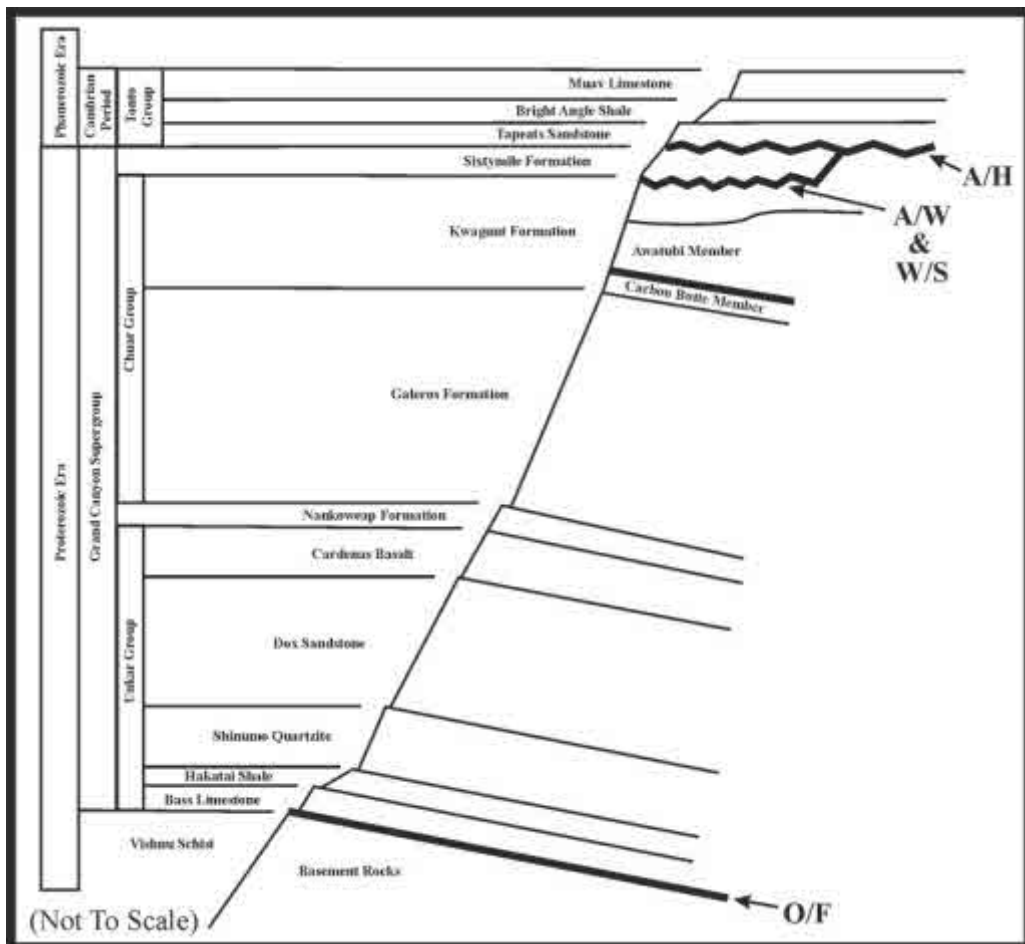


Figure 2. A composite cross section of the lower section of the Grand Canyon. The three different pre-Flood/Flood boundaries are indicated by the arrows: 1) A/H - Austin (1994) and Hoesch (2007), 2) A/W - Austin and Wise (1994) and W/S - Wise and Snelling (2005), and 3) O/F - Oard and Froede (this paper). The Great Unconformity was originally proposed as the pre-Flood/Flood boundary. Subsequently, and based on the five discontinuity criteria, the boundary has moved even deeper within the canyon geological section. The contact between the basement and overlying infill of clastic deposits meets all five criteria for defining the pre-Flood/Flood boundary at this stratigraphic position. Locating the pre-Flood/Flood boundary at the top of the basement rocks reflects the tremendous erosional energy that this area experienced during the Flood. Modified from Elston (1989, Figure 2, p. 261).

down the probable contact between pre-Flood/Flood sediments and in resolving these questions.

From our experience, this contact usually is best defined at or near the top of the igneous/metamorphic basement. However, this boundary could be shifted either downward where it is determined that some of the basement was melted during the Flood (e.g., Zoroaster Granite), or upward where pre-Flood sediments might have been buried and preserved. This determination would be made at a specific location with evidence from the actual rock record, based on the many discontinuity criteria.

The presence of plant and animal fossils in some of the deepest rocks in the Grand Canyon section indicates that the pre-Flood/Flood boundary should be located at or near the basement contact. This location would be consistent with all five of the discontinuity criteria and reflect the tremen-

dous erosional/depositional conditions of the global Flood of Genesis for this particular area.

It is important to note that in moving the pre-Flood/Flood boundary down to the igneous/metamorphic basement contact, there is no way of knowing the physical appearance of the pre-Flood world for that particular locale. The former sediments and strata have been permanently removed from the rock record. What we have within the Grand Canyon today are infill deposits created during the Flood. Hence, any attempt to define a pre-Flood setting based on the sediments exhibited along the canyon side-walls is pure speculation.

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We are grateful for the review assistance provided by Jerry Akridge and John Reed.

... continued on p. 6

Do Darwin Skeptics Read Evolution Books? A Pilot Survey

by Jerry Bergman, Ph.D.

When reviewing books and articles, I have noted that Darwinists often claim that creationists and intelligent design supporters avoid reading, or refuse to read, material that does not support their position. They also often imply, or openly state, that even educated Darwin skeptics hold their anti-Darwin views largely out of ignorance. This claim may be an isolated statement, added almost as an afterthought, or on the advice of an editor, but I have never seen the claim backed up with scientific evidence. Typical is the claim that Darwin skeptics

... lie, cheat and misrepresent. They have no evidence. They refuse to look at the evidence that does exist. They are the most infuriating dunderheads on the planet. They have made up their minds. They don't care that the evidence is 99.9% against them ... We are very annoyed having the same lies thrown at us time and time again. We get very annoyed having our own words twisted by lying fundamentalists. We get very annoyed when people who pretend to be interested in these issues refuse to do any research on them (Green, 2006).

For instance, the claim that Darwin skeptics are not aware of the evidence for Darwinism, or choose to ignore it, is illustrated by the following statement.

The best example I know to illustrate this difference is a debate I witnessed at a Christian Life Center in Solano County some years ago.

1. An audience member asked the scientists that [sic] if enough evidence were presented to you against evolution, would you change your minds? Of course, the scientists all said yes.

2. The Creationists were then asked if any amount of evidence could ever convince them to change their minds about special creation, and they all answered no, absolutely not (Watson, 1997).

The inconsistency of Darwinists was apparent, first, when Princeton University Professor John Bonner wrote in a book review that

Table 1. Results of Pilot Survey on Reading Habits of Darwin Skeptics

1. How often do you read pro-evolution including general biology, science books and articles?

N	%	Response
0	0	a. never
3	6	b. rarely
12	24	c. sometimes
9	18	d. often
25	51	e. regularly

2. How often do you read anti-creation and/or anti-ID books and articles?

N	%	Response
1	2	a. never
4	8	b. rarely
5	10	c. sometimes
20	41	d. often
19	39	e. regularly

3. If you answered from b to e to the above question, estimate how often you read anti-creation ID articles and books.

N	%	Response
3	6	a. less than one article a year
7	14	b. about one article a month
10	20	c. about one article a week
4	8	d. about one or two articles a week
10	20	e. about three or four articles a week
15	30	f. over four articles a week

4. If you answer from b to e to question 1, estimate how often you read pro-evolution books.

N	%	Response
16	3	a. less than one book a year
26	51	b. about one book a month
4	8	c. about one book a week
2	4	d. about one or two books a week
0	0	e. about three or four books a week
1	2	f. over four books a week

5. Compare the number of pro-creation and evolution materials you read.

N	%	Response
15	31	a. many more pro-creation/ID
20	41	b. about the same of each
14	29	c. many more pro-evolution

Darwin was originally a creationist, and remained so during his entire voyage on the *Beagle*. ... and showed no signs of deviating from church doctrine. Furthermore, he was greatly inspired by the theologian William Paley, who was more or less the father of intelligent design (2006, p. 355).

Then, after noting that "it is illuminating and convincing to see how Darwin, in his intellectual maturing changed from intelligent design to evolution," Bonner concluded that the new book he reviewed, titled *Intelligent Thought*,

... is a book for scientists; that is, for those who see evolutionary biology as a science. If you are a creationist you will be unmoved; there is no point in looking at the evidence (2006, p. 356).

If Darwin converted from a creationist to an evolutionist on the basis of the evidence, and the book Bonner reviewed provided that evidence, isn't the advice "if you are a creationist you will be unmoved; there is no point in looking at the evidence" irrational? Evolutionists today claim they have much more evidence than in Darwin's day, and so it would seem that modern day Darwin skeptics would be *easier* to convince than was Darwin.

Cambridge Professor Simon Conway Morris even openly advises Darwin skeptics *not* to look into the evidence for Darwinism. After stating that "evolutionary trends are real, and that adaptation is not some occasional cog in the organic machine, but is central to the explanation of how we came to be here," he adds that evolutionary

... ideas are in themselves so unremarkable as to require no comment, were it not for the ferocious attacks by such writers as S.J. Gould. What, one wonders, did he get so excited about, and how, one may ask, has our understanding of evolution really changed despite more than forty years of polemic? ...we should stand back and consider what a very odd set-up it is we inhabit, from the eerily efficient genetic code, to the deeply peculiar molecule DNA, to a set of biological organizations that repeatedly throw up complex structures, not least the brain. The late Fred Hoyle, no friend of most biologists, carried some strange ideas about the origins of biological complexity to his grave, yet his remark that the Universe was a set-up job rings strangely true (2003, p. xv).

Morris then concludes by stating that if "you happen to be a 'creation scientist' (or something of that kind) and have read this far, may I politely suggest that you put this book back on the shelf. It will do you no good" (2003, p. XV). If the case for Darwinism is "so unremarkable as to require

no comment,” I would think that Morris would enthusiastically recommend that all creationists carefully read his book and be converted to evolutionism as Darwin was. Many authors argue that creationists refuse to look at the evidence because, if they did, they would be converted.

Because the question of whether creationists and ID advocates read pro-evolution and anti-creation/ID books has rarely been empirically researched, I decided to do a brief pilot survey to explore this topic in some detail. I knew, from personal experience with Darwin skeptic friends, that most read anti-creation/ID literature extensively. My subjective conclusions, though, are limited, so I did a survey to further explore this topic. The survey results, which included 49 respondents, are provided in Table 1.

It is my experience, judging by extensive reading of Darwinist literature, that few Darwinists have read much creation or ID literature. They usually read only anti-creation/ID literature and repetitiously quote the same incorrect information. This survey, nonetheless, shows that most (69%) of the respondents “regularly” or “often” read pro-evolution books. Furthermore, fully 80% often read anti-creation or anti-ID material, and 94% read at least one pro-evolution and/or anti-creation/ID article a month.

The comments by the respondents in the survey were probably more helpful than the survey itself. No one said they avoided reading anti-creation/ID or evolution material because they did not want to challenge their faith. Actually, several respondents said that they would like to read many more books and articles on evolution (as well as for and against creation), but school, family, and work obligations, and/or health, prohibited them from doing so.

A common concern was that many respondents did not feel motivated to come home and extensively read science after 8 to 10 hours of scientific work that itself often involves much reading. Several said they once read pro-evolution/anti-creation/ID books and articles extensively, but found them less useful now because they are very repetitive. Many mentioned that anti-creation/ID material often included many of the same arguments that have been refuted by evolutionists themselves, such as the putatively poorly designed, backwards eye retina, and fossil transitional forms that have now been discredited.

Another person wrote that anti-ID or creation articles angered him because they repeat so many claims that he *personally* knows are completely untrue. For example, it is often stated that ID and creation groups are extremely well-funded when, in fact, he

knows from his own involvement in several large creation groups that finances are a *major* problem. Many creation groups work out of homes, and even their full-time staff do not draw a salary, but rely on retirement income and donations to survive. Another person wrote that much anti-creation/ID literature contained little science and few facts, but rather mostly ad-hominem attacks against the persons involved in the movement, or the movement as a whole.

This survey was only a pilot study and needs to be replicated using both a revised questionnaire and a sample that includes both anti-Darwinists and Darwinists.

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Flood Boundary

...continued from page 4

Any mistakes that may remain are our own. Glory to God in the highest (Proverbs 3:5-6).

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Carl Froede Jr. is a professional geologist, and Michael Oard is a retired meteorologist. Each has published articles on a variety of topics in both Creation Matters and the Creation Research Society Quarterly.

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Speaking of Science

Commentaries on recent news from science

Editor's note: All S.O.S. (Speaking of Science) items in this issue are kindly provided by David Coppedge. Opinions expressed herein are his own. Additional commentaries and reviews of news items by David, complete with hyperlinks to cited references, can be seen at: www.creationsafaris.com/crevnews.htm.

Motorized Ears Give Mammals Acoustic Acuity

Back in March 2001, the discovery of prestin, a motor protein that acts as an amplifier in the inner ear, was reported.¹ One of the fastest-acting molecular motors known,² prestin works by stiffening the rod-shaped cell body with its cilia. Somehow, the action of this motor protein amplifies hearing in mammalian ears by several orders of magnitude.



In the intervening years, cell biologists and physiologists studying prestin have debated its role in amplification. Some have thought that the cilia were the main players in amplifying the sound, as in non-mammals. Now, according to an article in *Science Daily*,⁴ prestin's role is to affect the sensitivity of the entire cell, not just the cilia. Researchers at St. Jude Children's Research Hospital bred mice with mutated prestin that extends the cilia instead of pulling them in. If cilia were the key agents of amplification, they should have shown more gain — but they did not.

Somehow, prestin assists the entire cell to “bounce” more effectively in response to the sound ripples in the cochlear fluid. This whole-cell response is called somatic motility.

‘The researchers concluded that somatic motility was not simply a way to make cilia do their job better; rather, there is no connection between the hair cell contractions and how the cilia do their job,’ the article explained. ‘Instead, somatic motility, generated by prestin, is the key to the superior hearing of mammals.’

The presence of these prestin-assisted outer hair cells in mammals increases sound sensitivity a hundredfold, the article said. “The finding could explain why dogs, cats, humans and other mammals have such sensitive hearing and the ability to discriminate among frequencies.”

Motors in your ears that amplify sound. What more could be said? He who has ears to hear, let him hear.

¹ Karow, J. 2001. Ear motor helps play sounds. *ScientificAmerican.com* (27 March 2001). www.sciam.com/article.cfm?articleID=000913B8-FBB8-1C5A-B882809EC588ED9F

² Dallos, P. and B. Fakler. 2002. Prestin, a new type of motor protein. *Nature Reviews Molecular Cell Biology* 3:104–111.

³ Anonymous. 2007. Mystery of mammalian ears solved. *Science Daily* (30 July 2007). www.sciencedaily.com/releases/2007/07/070727172839.htm

Deep Sea Vents Tantalize Evolutionists

A team of Chinese and American scientists have pulled up fragments of deep-sea vents and analyzed their contents, reported *Science Daily*.¹ They said the creatures inhabiting these vents are the “most primitive life forms on Earth,” and so thought that the fragments might provide clues to the origin of life. Timothy

Kusky of Saint Louis University said,

‘This discovery provides tantalizing suggestions that early life may have developed and remained sheltered in deep-sea hydrothermal vents until surface conditions became favorable for organisms to inhabit the land.’

And so another just-so story is born. The sagacious primitives of the deep knew that all good things must wait, so they hid out in the depths till the surface was ready. Perhaps they sent pioneers upwards every few million years to see if any returned with good news.

The article asserts unknowable things with feigned certainty. They said these vents are 1.43 billion years old, as if they read the time off a stopwatch to 3 significant figures. They called these organisms primitive, even though there are complex bacteria, worms, fish, crustaceans, and arthropods often inhabiting the vents. They provided no mechanism by which complex life could “emerge” in the dark, scalding heat and turbulence of one of the most vicious habitats on the planet. They ignored the problem of composing ribose, proteins and many other essential molecules of life. They forgot how damaging sea salt is to incipient life.

“This discovery offers scientists valuable on-land samples for geological and geobiological research with implications for the origin and evolution of early life on Earth,” Kusky crowed. Yet Harvard medical illustrator David Bolinsky said that life would not be possible without complex molecular machines.² How did these machines just happen to come together, Tim?

The data in this article provide no information on the origin and evolution of early life on Earth. What they do reveal is the marketing hype used by certain scientists needing research funds for geological and geobiological research. The article also reveals how easily certain people are tantalized by the power of suggestion.

¹ Anonymous. 2007. Discovery provides key evidence of life's beginnings. *Science Daily* (31 July 2007).

www.sciencedaily.com/releases/2007/07/070727184902.htm

² Anonymous. 2007. Life not possible without nano-machines. *Uncommon Descent* (3 August 2007). www.uncommondescent.com/intelligent-design/life-not-possible-without-nano-machines/

Is the Universe Hole-y?

Cosmologists are trying to avoid a void. Since astronomers at the University of Minnesota announced a gaping hole in a distant part of the universe, representing a region of space devoid of matter a billion light-years across, others are scrambling to discern what it means. The issue was discussed on *BBC News*,¹ *Science Now*,² and *Space.com*.³ It even made the nightly TV news.

The Minnesota team compared observations from the Very Large Array of radio telescopes with WMAP data, and looked closer at a region showing a remarkable drop in the number of



galaxies in a region toward the constellation Eridanus. Other voids have been detected in the past, but never one this large. “Astronomers don’t know why the hole is there,” said science writer R.R. Britt. Others don’t know *that* it’s there.

Cosmological observations are so deeply intertwined with theory, it is often hard to tell the one from the other. The hole could be real, or it could be an artifact of the theory and techniques used. Some cosmologists (see the BBC article) are claiming this as a confirmation of dark energy. *ScienceNow* said it contradicts the inflation theory. And it quoted one astronomer who thought the conclusion was premature. The Minnesota team said their announcement will need independent confirmation, so it is unwise to lean too heavily on the reports. Still, it’s fun to see scientists get surprised once in a while.

¹ Anonymous. 2007. Great ‘cosmic nothingness’ found. *BBC News* (24 August 2007). <http://news.bbc.co.uk/2/hi/science/nature/6962185.stm>

² Berardelli, P. 2007. A void within the void. *ScienceNOW Daily News* (24 August 2007). <http://sciencenow.sciencemag.org/cgi/content/full/2007/824/1>

³ Britt, R.R. 2007. Huge hole found in the Universe. *Space.com* (23 August 2007). www.space.com/scienceastronomy/070823_huge_hole.html

Tales of Two Footprints

Footprints in the sands of time have been found at two different locations. What tales do they tell?

One is a footprint of a Roman soldier. *EurekaAlert*¹ described how the sandal print was uncovered at Hippos, or Susita, on a hill east of the Sea of Galilee. It hints that soldiers participated in building the walls of the city.

The Israel newspaper Haaretz² provided more details about the find, and Todd Bolen commented on its limited tie-in to Biblical history on his *Bible Places Blog*.³

Another print is claimed to be far older. The *BBC News*⁴ reported what may be the “oldest human footprint ever found.” The article did not describe the print, but called it “human” instead of ape-like. The problem is that it is claimed to be two million years old, or more — as much as 3 million, maybe even older than Lucy. The secretary general of the Egyptian Supreme Council of Antiquities, Zahi Hawass, is calling it possibly “the most important discovery in Egypt.” Others are not so sure what to think of it.

You, too, could leave tracks that will allow future scientists to speculate. For fun, leave a note with your next footprint saying, “Today’s date is August 28, 1,598,251 BC.”

¹ Anonymous. 2007. Ancient sandal print uncovered near Sea of Galilee. *EurekaAlert* (26 August 2007). www.eurekaalert.org/pub_releases/2007-08/uoh-asp082607.php

² Ilani, O. 2007. Archeologists discover footprint made by sandal of Roman soldier. *Haaretz.com* (15 August 2007). www.haaretz.com/hasen/pages/ShArt.jhtml?itemNo=893560

³ Bolen, T. 2007. Sandal print found near Sea of Galilee. *Bible Places blog* (15 August 2007). <http://blog.bibleplaces.com/2007/08/sandal-print-found-near-sea-of-galilee.html>

⁴ Anonymous. 2007. Egypt footprint ‘could be oldest.’ *BBC News* (21 August 2007). http://news.bbc.co.uk/2/hi/middle_east/6956902.stm



Crows Use Tools on Tools

Crows can use one tool on another to get food. A report in *Science Daily*¹ says they appear to use analogical reasoning, not just trial and error, to figure out how to manipulate objects. They used a short stick to get a longer stick out of a toolbox in order to reach a snack too far for the short tool. In this, “The birds’ tool-use skills rival those seen among great apes, according to the researchers” at University of Auckland.

Analogical reasoning was thought to be at the core of human innovation. One said, “It was surprising to find that these ‘bird-brained’ creatures performed at the same levels as the best performances by great apes on such a difficult problem.”

Let’s be good empirical Darwinists and take the evidence where it leads. Chimps evolved into birds, which evolved into humans. Mustn’t let species bias cloud our reasoning, now. Darwinists have made a big deal over intelligence as evidence of our evolutionary kinship to apes. Now, having to eat crow at this finding, they must be feeling in the mood for some Old Crow at the Crow Bar.

¹ Anonymous. 2007. New Caledonian crows find two tools better than one. *Science Daily* (20 August 2007). www.sciencedaily.com/releases/2007/08/070816121111.htm

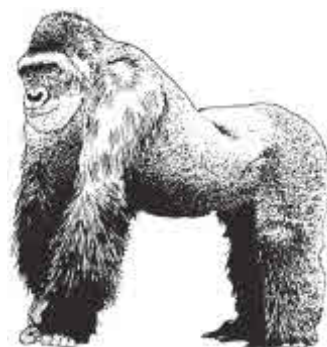
Fossil Gorilla Forces Hominid Ancestor Earlier

A set of gorilla teeth found in Ethiopia pushes the evolutionary story of a split between apes and humans back almost twice as far as previously thought. *Nature* reported the fossil announcement that estimated the date of the teeth as 10.5-11 million years old.¹ The prior estimate for a human-ape divergence was about 6 million.

The authors named the fossil a new species, but Rex Dalton in the same issue of *Nature*² reported the team lead saying that the teeth “are collectively indistinguishable from modern gorilla sub-species” in form, size, internal structure and proportion.

Both papers alluded to an extreme paucity of fossils from the period of 7 to 12 million years on the evolutionary time scale. Dalton claimed this fossil “helps to fill in a huge gap in the fossil record.” Yet the original paper admitted that “Phylogenetically, these fossils represent the first Miocene ape species to be recognized as a strong candidate for membership in the modern gorilla clade,” because the teeth are indistinguishable from those of modern gorillas except that they show a large size variation.

*National Geographic*³ put a good-news-bad-news spin on the story. The good news, to them, was that the discovery “fills an important gap in the fossil record” but at the same time, unfortunately for paleoanthropologists, it “could also demolish a working theory of human evolution.” Why? It means that “everything has



to be put back” farther in time than expected. This gorilla was essentially modern at least 2 million years earlier than the alleged common ancestor was thought to have existed. The common ancestor, therefore (for which there is no fossil evidence), had to live even earlier by millions of years.

If you take out the evolutionary dates and assumptions, the facts show this: modern-looking gorilla teeth of unknown age were found fossilized in water-laid sediments in Ethiopia. Where is the evolution? There is none. The ancestry/phylogeny talk is all inference based on the usual dogmatic evolutionary rules that require every fossil bone to contribute to the supposed human evolutionary tree, somehow, even if the fit is poor.

They now have to believe that gorilla evolution was even more rapid from the time of some mythical common ancestor that must also have evolved rapidly from earlier primates. They even tried to wave the magic wand of “convergent evolution” to explain some of the modern features. Their whole story just got even more convoluted and implausible than it already was. The story was already more gap than bone. Some nice transitional form would have been welcome — but not modern-looking gorilla teeth farther back than they were supposed to exist.

Nothing in the observable evidence suggests millions of years, nor any evolution or any ancestry between chimps, gorillas, and humans. Don’t fall for the evolutionists’ talking points. Instead, follow their eyes. The surprised looks are more revealing than their claims.

¹ Suwa, G., R.T. Kono, S. Katoh, B. Asfaw, and Y. Beyene. 2007. A new species of great ape from the late Miocene epoch in Ethiopia. *Nature* 448:921–924.

² Dalton, R. 2007. Oldest gorilla ages our joint ancestor. *Nature* 448: 844–845.

³ Wadhams, N. 2007. New fossil ape may shake human family tree. *National Geographic News* (22 August 2007).
<http://news.nationalgeographic.com/news/2007/08/070822-fossil-ape.html>

Stars Found Almost as Old as Universe

A new record was set by a Caltech team using the Keck telescopes on Hawaii: they detected a galaxy nearly as old as the universe. The consensus age for the universe is 13.6 billion years. The light from this galaxy, they claim, is over 13 billion years old — “a mere 500 million years after the Big Bang” itself was supposed to have brought the universe into being. The discovery was reported by the *BBC News*¹ based on a paper in the *Astrophysical Journal*.² Some astronomers are questioning the accuracy of the report and its use of gravitational lensing to see the distorted light from the distant galaxy, but agree the work was done carefully.

This report exceeds the previous redshift record ($z = 6.96$) into the 8 to 10 range. The authors found six candidates and proposed that at least two of them are real, and may lie at redshifts close to or beyond $z=10$. They assumed metallicities of 1/20 solar abundance. This means that heavy elements (metals) would have had to be products of a prior generation of hydrogen stars. The authors also believed that their candidate galaxies were representative of a large abundance of similar low-luminosity galaxies that were



present in that epoch.

These measurements are indirect and tentative. Confirmation must await observations from the refurbished Hubble, the James Webb Space Telescope, and refinements of the gravitational lensing technique. There is also a fuzzy line between observation and theory in cases such as these. Even using their own assumptions, however, the situation is paralleled by that in biology: more maturity and complexity as far back as they can see.

¹ Amos, J. 2007. Astronomers claim galaxy record. *BBC News* (11 July 2007).
<http://news.bbc.co.uk/1/hi/sci/tech/6292024.stm>

² Stark, D.P., R.S. Ellis, J. Richard, J.-P. Kneib, G.P. Smith, and M.R. Santos. 2007. A Keck survey for gravitationally lensed Ly α emitters in the redshift range $8.5 < z < 10.4$: New constraints on the contribution of low-luminosity sources to cosmic reionization. *The Astrophysical Journal* 663:10–28.



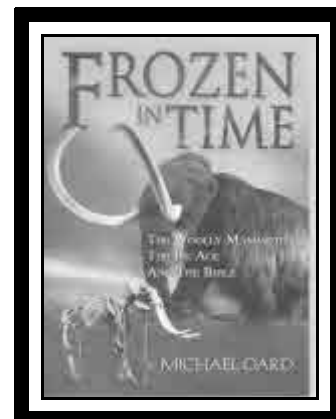
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2007 CRS Board of Directors

In June the CRS Board of Directors met for their 44th annual meeting. A portion of the deliberations took place in Phoenix, while other sessions were held at the Society's Van Andel Creation Research Center, where the accompanying photo was taken. Those who are interested in the proceedings are encouraged to consult the minutes, which will be published later this year in the *CRS Quarterly*.

Pictured in the photo, from left to right, are: George Howe, Ted Aufdemberge, Mike Oard, Mark Armitage, Gene Chaffin, Kevin Anderson, Don DeYoung, John Meyer, Lane Lester, Glen Wolfrom, Ron Samec, Dave Kaufmann, and Russ Humphreys. Not able to attend were Danny Faulkner, Gary Locklair, John Reed and David Rodabaugh. John Meyer is the former director, and Kevin Anderson is the current director of the Research Center.



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All by Design

by Jonathan C. O'Quinn, D.P.M., M.S.

Great Balls of Fire

If the evolutionary viewpoint of life's origin is correct, then the perfect physiologic "adaptations" we see everywhere in nature are the result of random genetic variation over immense periods of time. The Japanese honeybee can teach us otherwise.

Japanese giant hornets prey on colonies of honeybees, taking honeybee larvae and pupae to their own nests for feeding to their larvae. Hornet scouts mark honeybee nests that they find with a foraging-site marking pheromone to attract nearby hornets. The honeybees, however, can detect this pheromone and are put on their guard. When a hornet approaches, the honeybees signal each other to lie in wait just inside their nest entrance.

If a hornet attempts to enter the honeybee colony, it is engulfed in a tightly-packed ball of up to 500 honeybees that exhibit non-shivering thermogenesis via increased



Japanese honeybees (Apis cerana japonica) forming a "bee ball" in which two hornets (Vespa simillima xanthoptera) are engulfed and being heated. Photo courtesy of Takahashi, Wikimedia Commons (<http://commons.wikimedia.org>).

metabolism. This mass of honeybees reaches temperatures of up to 46°C (nearly 115°F) within minutes, quickly killing the hornet. Very interesting is the fact that temperatures of 48–50°C are lethal to Japanese honeybees, while Japanese hornets die if exposed to temperatures of only 44–46°C.

Enzymes that catalyze biological reactions typically operate within narrow ranges of pH and temperature, suggesting that this unique defense mechanism could not have evolved in stages. Only an intelligent Creator could have known that these honeybees would need this unique skill, as well as the ability to survive temperatures just a few degrees higher than the temperature which kills the hornets.

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