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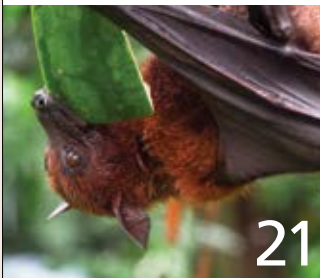
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# Eyes of Wonder

**M**erry Christmas from the Institute for Creation Research! Some of my favorite memories of Christmas surround my children and grandchildren. It's always fun to watch their faces as they open gifts and discover something new underneath all the wrapping. The gift is always worth the price to see their eyes of wonder.

What if we looked at God's blessings that way? With the eyes of a child—with eager anticipation, delight, and even wonder. Have you paused long enough to look at God's gifts with fresh eyes lately?

Consider His great love for us—how

He loved us so much that He sent His Son to die for our sin so we can enjoy a relationship with Him forever. Do we live each day anticipating His presence throughout the day? The details of our daily lives are stamped with His goodness—have you noticed? We can search the Scriptures for a new gem of truth tucked away, and we can anticipate a new discovery every time we open His Word. Our days would probably be different if we delighted in His great grace with every step. How He blesses us when we least deserve it!

Do we look with awe at His creation? Perhaps we've become so accustomed to His masterpiece that we fail to notice the grandeur of this world. His majesty drips from the trees, and His splendor calls with the wind. If we see His creation with eyes of wonder, we'll recognize His handiwork in the stars and His dignity in the eyes of a child. How great is our God!

In this issue, we take a fresh look at the many wonders in God's divine design. ICR Science Writer Brian Thomas marvels at the many ways ICR's recent research confirms the Bible:

"[Our] calling would be very difficult indeed if science verified molecules-to-man evolution instead of creation. But thanks be to God that His world matches His Word time after time" ("The

Gospel and ICR," page 5). Frank Sherwin examines the wonders of "The Created Placenta" (page 14), and Dr. Randy Guliuzza describes how racecar drivers display God's incredible engineering with their coordinated feats ("Beauty in Motion: Formula 1 Drivers," page 17). All of these revelations of God's power and wisdom in creation are gifts to us, and we can see them clearly if we keep our eyes open.

Our Lord provides for our needs and requires nothing in return—He understands how feeble our efforts are and how our righteousness falls far short of any repayment. And, yet, He gives. We enjoy the fruit of our God's goodness, and He delights in the wonder in our eyes.

As you read *Acts & Facts*, please know that we have prayed for you. We ask God to use every resource we develop to provide a deeper understanding about our Creator and to equip you to share His truth with others. We've asked God to draw you to Him, to reveal His truth, and to let you see His wondrous works in creation.

This Christmas, we hope you will celebrate Christ's birth with renewed vision. As Henry Morris IV reminds us, "He is so much more than a babe in a manger; He is the very Creator Himself" (page 22).

*Jayme Durant*

**Jayme Durant**  
EXECUTIVE EDITOR



# The Gospel and ICR

B R I A N T H O M A S , M . S .

**T**he Institute for Creation Research (ICR) exists to explore and explain the science that confirms the Bible. We target scientific discoveries and analyses that confirm biblical creation. Scripture tells us that God exists outside the universe and commanded the worlds into being without pre-existing material<sup>1</sup> over six days<sup>2</sup> only thousands of years ago. Why do these specifics matter? They come from the same Word as the gospel, and eternal destinies are on the line.

In today's culture, evolution and evo-

lutionary time masquerade as science and rank among the top objections to believing the Bible. Evolution of molecules to man contradicts Scripture's assertion that God created molecules and humans separately and simultaneously. Evolutionary time collides with Scripture's chronological data that indicate the creation of all things only about 6,000 years ago.

Therefore, ICR's mission involves more than debating scientific facts. Our research team uses science to answer objections to biblical history. It's our task and privilege to encourage all people that good

science gives us more reason to trust the Word of Christ—including His gospel—than ever before. This calling would be very difficult indeed if science verified molecules-to-man evolution instead of creation. But thanks be to God that His world matches His Word time after time.

Four examples show how ICR science helps clear the way for the life-saving gospel to take full effect.

## **DNA Similarity and the Last Adam**

ICR geneticist Dr. Jeffrey Tomkins often staples the first page of his peer-reviewed

## The Gospel and ICR

technical publications to the hallway wall opposite his office. The wall is almost covered now, and human-chimp DNA sequence comparisons headline his many finds. He uses high-performance computer systems to see how closely human and chimp sequences match one another. In keeping with little-known results from some secular reports, Dr. Tomkins' data confirmed an overall sequence similarity of no more than about 85%.<sup>3</sup>

Secular scientists need a DNA similarity of close to 99% for known mutation rates to seem theoretically capable of generating enough new information to transition a chimp-like genome into a human genome. So, Dr. Tomkins' results falsify the evolutionary meme that asserts a nearly 99% genetic identity between humans and chimpanzees. Refuting that number also refutes the evolutionary doctrine it was intended to bolster—that humans and chimps somehow share a common ancestor that supposedly lived from three to six million years ago.

How does this 85% similarity relate to the gospel? It means a 15% difference between human and chimp DNA. When you consider that these genomes have over three billion DNA bases, we're looking at 450,000,000 information bits that unintel-

**This calling would be very difficult indeed if science verified molecules-to-man evolution instead of creation. But thanks be to God that His world matches His Word time after time.**

ligent forces of nature would have had to expertly encode over only a few million years.<sup>4</sup> Creation thus remains the only scientifically defensible origins option to explain so much information packed in human DNA. You and I came from Adam and Eve, not from any animal. Therefore, we all inherited Adam's sin nature. We need a sinless man—the last Adam—to pay our sin penalty.<sup>5</sup>

### Ice Cores, Recent Creation, and the Gospel

ICR physicist Dr. Jake Hebert recently completed a multiyear analysis of some of the methods secular scientists use to assign ages to different depths within drill cores extracted from deep-sea sediments and polar ice sheets.<sup>6</sup> A 1976 technical article gave secular scientists confidence they could correlate chemical “wiggles” within cores to certain earth-sun cycles that they assume have been happening for millions of years. The article's authors needed to pin the cores' astronomy-correlated wiggles onto a timeline. So, they chose 700,000 years ago—a time that others assigned to a reversal of Earth's magnetic field—to help date the core. But Dr. Hebert discovered a huge error that erases confidence in the whole dating process.

In the early 1990s, workers could not match other sediment cores to the 1976 age scheme, so they revised the magnetic reversal age from 700,000 to 780,000 years to force a better fit. No one fully determined the destructive impact of this change until Dr. Hebert looked into it. He discovered that the revised magnetic reversal age threw off the

original core age assignments. This result calls into question the validity of the original 1976 paper's conclusions as well as the highly-touted method of matching chemical wiggles to assumed astronomical ages.

Dr. Hebert's findings exposed a supposedly scientific enterprise as a house of cards—many, complicated, interlocking cards—with none set upon the table of verifiable science. Now, scientists who claim that astronomical and isotope dates independently confirm old ages and thus refute Genesis history<sup>7</sup> face the embarrassment of having trusted “science falsely so called.”<sup>8</sup>

Once Christians begin to deny the tim-

ing of creation in Genesis, they start to deny other Genesis events that fortify our understanding of the gospel. They start asserting that death was around before Adam's sin and that the Flood covered mere regions rather than the whole globe. Why trust what Scrip-

**The picture of Noah's Flood is now clearer than ever. Combined with clues like fossils and cross-beds that point to high-energy deposition, isopach data show that fast-moving sediments covered continents repeatedly and rapidly.**

ture says about the Lord Jesus saving us from our sins through His historical death and resurrection if science says we cannot trust what Scripture says about the historical death of Adam or the historical deaths of those who refused to repent and be saved aboard the Ark? Armed with Dr. Hebert's new analysis, Christians can expose key errors in ice core age assertions.<sup>9</sup> This leaves the Bible's revelations of a recent creation, a global flood, and a relevant gospel unbroken.

### Isopach Maps and the Lord Jesus

Isopach maps, or thickness maps, outline continuous geological layers found mostly below ground. ICR petroleum geologist Dr. Tim Clarey and his assistant Davis J. Werner used geology software to map the thicknesses of each rock type measured and recorded in over 1,600 oil wells, cores, and rock exposures across North and South America and Africa—with the rest of the world in the research pipeline. Over the last three or so years, they accumulated and merged these data into the first-ever images of the upper, lower, and outer boundaries for each major rock layer. Some of these single sedimentary layers are larger than we thought, extending

across now-separated continents.

The project revealed where and how far muddy floodwaters must have flowed to deposit each vast, continent-size, continuous rock layer. It turns out that the maximum level of coverage is the same on all three continents—as though the same global phenomenon affected them all. The picture of Noah’s Flood is now clearer than ever. Combined with clues like fossils and cross-beds that point to high-energy deposition, isopach data show that fast-moving sediments covered continents repeatedly and rapidly. Then, very soon after, sedimentation changed direction. Floodwaters carried recent deposits off continental margins at the same time on all three continents mapped so far.

Despite mainstream scientists who essentially ban Genesis from their brains no matter what the evidence shows, Earth’s rocks shout “worldwide Flood!” This geology confirms the very words of the Lord Jesus, who said,

“For as in the days before the flood, they were eating and drinking, marrying and giving in marriage, until the day that Noah entered the ark, and did not know until the flood came and took them all away, so also will the coming of the Son of Man be.”<sup>10</sup>

Scientific evidence that confirms the Flood also confirms the reality of God’s judgment on ancient sinners, as well as salvation through His appointed vessel. This accurate biblical account motivates us to seek salvation from our own just judgment. The Lord Jesus offers just such a redemption for those who repent and believe.

### Environmental Tracking and the Great Creator

ICR medical doctor and engineer Randy Guliuzza’s research helps remove another key objection. The real mechanisms creatures use to better fit themselves into various environments stand poised to flip the common nature-does-it-all mindset into a new

God-designed-it confidence.

For example, how do normal-looking fish transform into the pale Mexican blind cavefish within just a few generations? They thrive in the dark, complete with scales where their eyes used to be and with super-sensitive chemical, pressure, and touch organs. Secular scientists studied this fish hoping to reveal how nature—which in this case takes the form of darkness—does its evolutionary magic. They must have felt cheated when they found sophisticated fish-altering mechanisms within the fish instead of their

**Dr. Guliuzza is finding case after case of creature-driven trait adjustments. And who but our great Creator could conceive and craft such intricately integrated, forward-thinking, creature-changing features?**

environment. Water-conductivity sensors on fish eggs signal the inhibition of a specific developmental protein. Epigenetic controls shut down eye genes during development in such a clever way that those traits can revert back to their original settings in future generations.<sup>11</sup> Indeed, blind cavefish can spawn sighted offspring.

If any and every creature change represented evolution and if that same kind of evolution brought forth man from molecules, then the Bible is wrong about creation. Internal mechanisms automatically select trait variations, refuting Darwin’s external selection concept. Dr. Guliuzza is finding case after case of creature-driven trait adjustments. And who but our great Creator could conceive and craft such intricately integrated, forward-thinking, creature-changing features?

### Good Science Leads to the Gospel

When we find creatures using innate environmental tracking instead of evolution

to adjust their features, evolution poses less of a threat to Genesis creation. When we show how the Flood explains extensive, fast-deposited rock layers far better than long ages of slow deposition, then evolutionary deep time dries up. When we discover that the eons matched to various sediment cores rest on bad assumptions, then they dwindle into empty threats against the Bible’s history. And when we find more precisely specified, uniquely human DNA than any natural random process could possibly compose, we are left with our origins in Adam and a dire need for rescue from our sin.

What we believe about creation impacts what we believe about salvation. So, ICR is all about using science to answer key questions and to remove objections to the gospel. We offer web articles and videos, DVD series, devotionals, *Acts & Facts*, books, speaking events, and someday soon a brick-and-mortar discovery center<sup>12</sup> to showcase our gospel-confirming finds. As long as the Lord and His generous people fuel this mission, we will conduct and communicate science that supports biblical creation and builds confidence in the truth of the gospel. ☞

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Mr. Thomas is Science Writer at the Institute for Creation Research and earned his M.S. in biotechnology from Stephen F. Austin State University.



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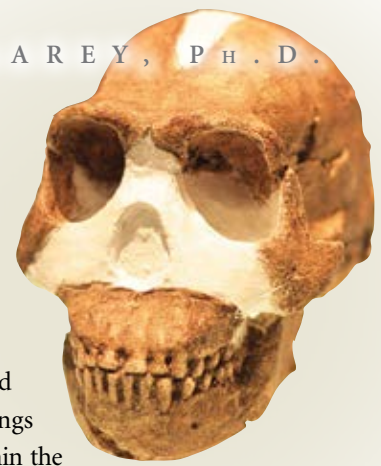
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# Just What Is *Homo naledi*?



Over four years have passed since Lee Berger's discovery of *Homo naledi* bones in the Rising Star Cave system of South Africa.<sup>1</sup> Yet, back-and-forth bone disputes in the scientific literature leave many still wondering what these fossils truly represent. Is *H. naledi* some type of human, or does it better match an extinct ape like the famous *Australopithecus* "Lucy"? To answer this question, I examined the latest published research on the anatomy of the varied *H. naledi* specimens.

Two known chambers contained *H. naledi* bone fragments: the original Dinaledi Chamber and a newer site called the Lesedi Chamber.<sup>2</sup> Lee Berger's team recently reopened the excavations in both chambers, finding additional bones in the Dinaledi Chamber.<sup>3</sup> They also found a third cave chamber at a nearby site that reportedly has additional *H. naledi* bones.<sup>4</sup>

Of course, the secular world hailed this discovery as some type of human ancestor. But God clearly communicates in Genesis that there is no evolution linking His created kinds. Therefore no evolution links the ape-like *H. naledi* to mankind.

So, what is *H. naledi*? A couple of creation scientists weighed in on the debate, first claiming the bones represented some type of human. They believed the presence of the bones inside the cave indicated intentional burial of the dead.<sup>5-7</sup> These creationist studies focused primarily on the skull and dental features of the specimens and on secular geological interpretations for deliberate disposal.

In response, other creation scientists studied the bones, includ-

ing the postcranial characters like vertebrae and ribs,<sup>8,9</sup> and the deliberate disposal hypothesis suggested by secular scientists.<sup>10</sup> Their findings showed that *H. naledi* falls not within the human (*Homo sapiens*) kind but within the *Australopithecus* kind. Essentially, this makes *H. naledi* another example of an extinct ape, the same kind as Lucy.

My own research examined the disposal hypothesis and found that the presence of bones in two nearby but separate chambers makes deliberate disposal in the hard-to-reach Dinaledi Chamber highly unlikely.<sup>10</sup> The majority of the bones in both chambers were quite disarticulated and fragmented, and no artifacts like stone tools or jewelry were found to indicate a ritual burial typical of humans. Instead, the *H. naledi* bones could have simply washed into both chambers nearly simultaneously during Ice Age flooding episodes of the cave system.

A final research paper compared the brain size (endocranial volume) to body mass of various human groups and hominins, including *H. naledi* (Figure 1).<sup>11</sup> Jean O'Micks found that *H. naledi* clusters closest to *Australopithecus* and *Paranthropus* and "give[s] further support to the idea that *H. naledi* is not a member of the human holobaramin [kind], but is rather a species of ape, most likely an australopithecine."<sup>11</sup>

So, what is the verdict on *H. naledi*? Detailed research shows that it is nothing more than another species of extinct ape—another version of Lucy. There are no "almost human" ancestors, only humans and apes—two separate kinds—just as God created them around 6,000 years ago. ☞

Mean endocranial volume of several hominin species according to mean body mass

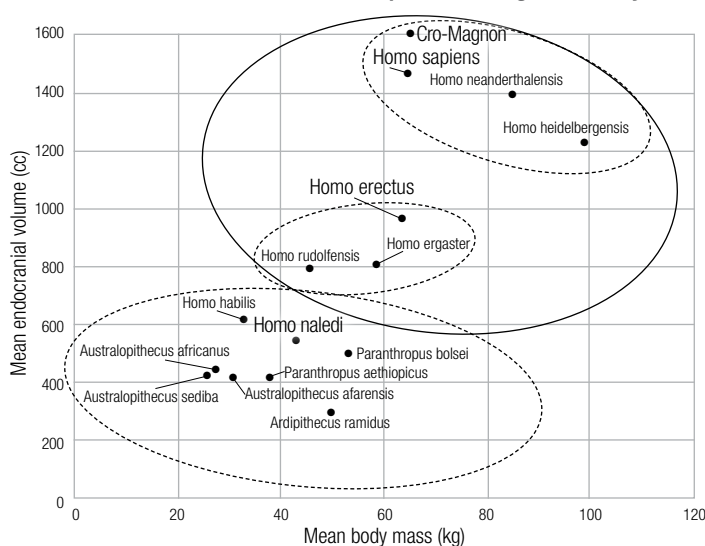


Figure 1. Mean brain size (endocranial volume) to body mass for 15 human and hominin species. Taken from Jean O'Micks; see reference 11. Used with author's permission.

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Dr. Clarey is Research Associate at the Institute for Creation Research and earned his Ph.D. in geology from Western Michigan University.



# Testing Old-Earth Climate Claims

## PART 2

There is strong geological evidence for a single Ice Age, which creation scientists attribute to the aftereffects of the Genesis Flood.<sup>1</sup> However, secular scientists claim that dozens of ice ages have occurred within the last few million years. These ice ages were supposedly paced by subtle variations in the way sunlight falls on the earth, caused by slow changes in Earth's orbital and rotational motions.

Although this astronomical (or Milankovitch) ice age theory has many problems,<sup>2</sup> it's widely accepted because of a well-known 1976 paper titled "Variations in the Earth's Orbit: Pacemaker of the Ice Ages."<sup>3</sup> This paper examined chemical wiggles called *oxygen isotope ratios* (denoted by the symbol  $\delta^{18}\text{O}$ ) within two deep-sea sediment cores from the southern Indian Ocean, designated as RC11-120 and E49-18. After assigning timescales to the two cores, the Pacemaker authors found apparent climate cycles with lengths matching the periods of about 100, 41, and 23 thousand years (ka) expected from astronomical calculations, as well as within a composite "PATCH" data set they constructed by combining data segments from the two cores. Thus, the Pacemaker paper was seen as a strong argument for the astronomical ice age theory.

Creation scientists do not accept the vast ages uniformitarian scientists have assigned to these deep-sea cores. However, we will assume those ages for the sake of argument in order to show that secular scientists have since invalidated their own results! This ar-

gument, explained in the Part 1 article last month, made use of the fact that the Pacemaker authors assigned time intervals of 273, 363, and 486 ka to their data sets. But the article did not explain *how* to calculate those time intervals, so here we tie up the loose ends by showing how to do this. Readers who missed Part 1 may wish to read it online at ICR.org.<sup>4</sup> You may find it helpful to have a copy of the Pacemaker paper to refer to, as well as a copy of a 1973 paper cited by the Pacemaker authors.<sup>3,5</sup>

### Wiggle Matching and Marine Isotope Stages

Uniformitarian scientists believe that, ideally, the  $\delta^{18}\text{O}$  record is a global climate indicator. This means that a significant feature, such as a prominent peak or trough, in the  $\delta^{18}\text{O}$  record within one sediment core should be the same age as a corresponding  $\delta^{18}\text{O}$  feature within another core. This is thought to be true even if the cores are separated by thousands of miles. So, if ages can somehow be assigned to features within the  $\delta^{18}\text{O}$  record of one sediment core, those ages can presumably be transferred to the corresponding  $\delta^{18}\text{O}$  features within *other* cores—even if they were sourced from halfway around the globe.

In order to facilitate this "wiggle matching" process, uniformitarian scientists devised a numbering system called *marine isotope stages* (MIS). Numbers are assigned to different parts of the wiggly  $\delta^{18}\text{O}$  signal. The boundaries between stages are called *MIS boundaries*.



### An Ice Age “Rosetta Stone”

Because radioisotope dating methods generally cannot be used to date seafloor sediments, the Pacemaker authors needed another way to assign ages to the RC11-120 and E49-18 cores. For this, they used another deep-sea core from the western Pacific Ocean, designated as V28-238.

Because seafloor sediments contain magnetic minerals, “flips” or reversals of Earth’s magnetic field can sometimes be identified within the sediments. The most recent of these magnetic reversals is called the Brunhes-Matuyama (B-M) magnetic reversal. Within the V28-238 core, the B-M magnetic reversal was identified at a depth of 1200 centimeters. Secular scientists had already used radioisotope dating to assign an age of 700,000 years (700 ka) to volcanic rocks containing the B-M reversal. Therefore, the sediments at 1200 cm in the V28-238 core were assumed to also be 700 ka. Because the sediments at this location were thought to have been deposited at a nearly constant rate,<sup>6</sup> and since the age at the top of the V28-238 core was thought to be zero, secular scientists reasoned that sediment age at any given depth in the core could be obtained using this formula:

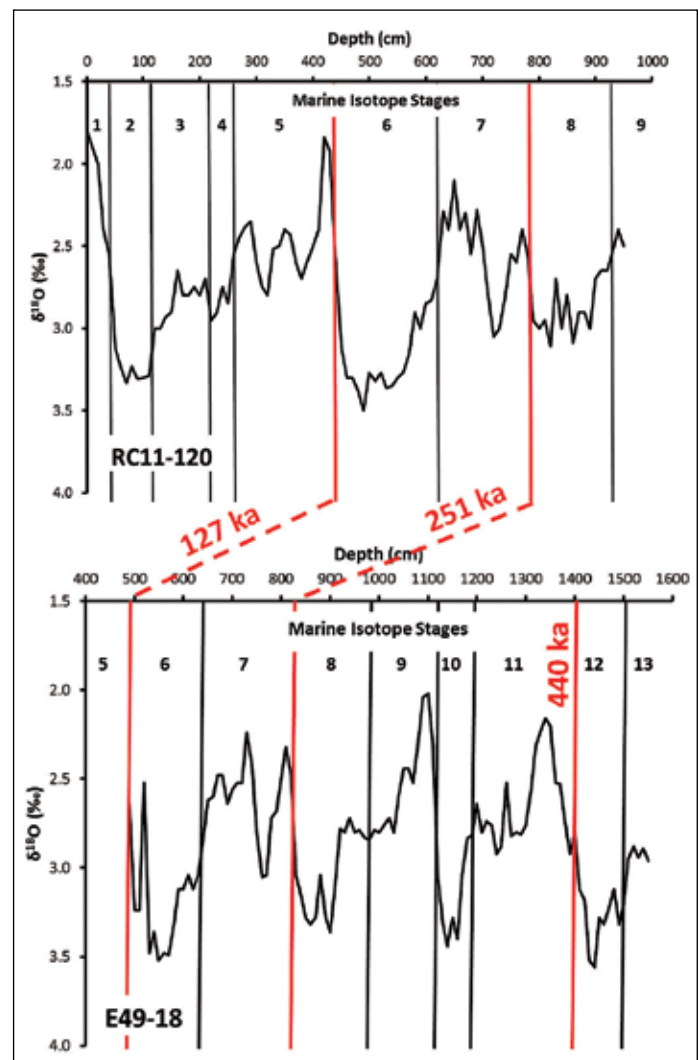
$$\text{Age (ka)} = \frac{\text{Depth (cm)}}{1200 \text{ cm}} \times 700 \text{ ka} \quad (1)$$

The Pacemaker authors used Equation (1) to assign ages

to the MIS boundaries within the V28-238 core—three of which are shown in Table 1. You can verify these ages by substituting the depths from Table 1’s second column into Equation (1). This yields the ages in the table’s third column, which also appear in Table 3 of the 1973 paper.<sup>5</sup> Believing the  $\delta^{18}\text{O}$  signal to be a global climate indicator, the Pacemaker authors transferred these three ages to the presumed corresponding MIS boundaries within the RC11-120 and E49-18 cores (Figure 1).<sup>3,5,7</sup> They then used these ages to set up the timescales for those two cores.

MIS Boundary	V28-238 Depth (cm)	Original Age Estimate (ka)	Revised Age Estimate (ka)
6-5	220	128	143
8-7	430	251	280
12-11	755	440	491

**Table 1.** Old and new MIS boundary age assignments for the V28-238 deep-sea sediment core.



**Figure 1.** Ages for the 6-5, 8-7, and 12-11 MIS boundaries from the V28-238 core were transferred to the (presumed) corresponding MIS boundaries in the RC11-120 and E49-18 cores.

Age Models

The Pacemaker authors first assigned simple age models (which they called SIMPLEX) to the RC11-120 and E49-18 cores. They assumed the sediments within a core were deposited at a constant rate and used the ages at two different depths to find that rate. These depths and their corresponding ages are listed at the top of their Table 2. For the RC11-120 core (see Figure 2), they used the core top (depth

Data Set	T <sub>0</sub> (ka)	T <sub>new</sub> (ka)	Stretch Factor
RC11-120	273	309	1.13
E49-18	363	403	1.11
PATCH	486	544	1.12

Table 2. The revised age for the Brunhes-Matuyama magnetic reversal boundary stretches the reported climate periods from the RC11-120, E49-18, and PATCH data sets by about 13, 11, and 12% respectively.

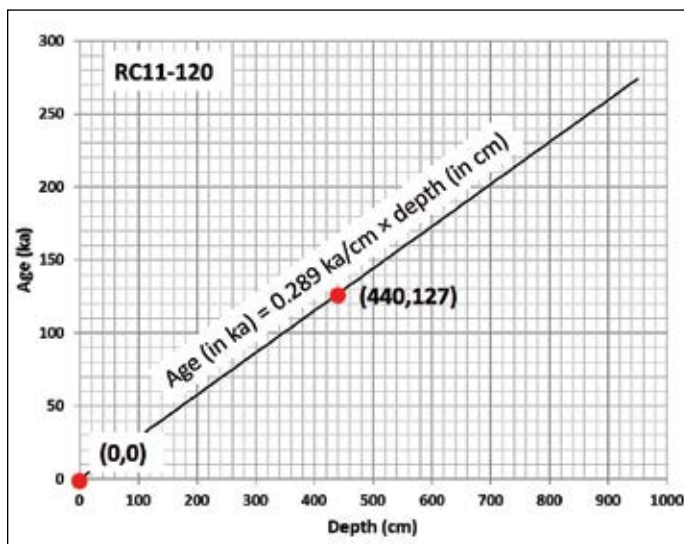


Figure 2. A preliminary age model for the RC11-120 core was obtained by finding the equation of a straight line passing through the points (0,0) and (440, 127). The same technique was used to find the age model for the E49-18 core.

of 0 cm) and the MIS 6-5 boundary (depth of 440 cm). The age of the top of the RC11-120 core was assumed to be 0 ka, and the age at 440 cm depth was assumed to be 127 ka.<sup>3,7</sup> So, the Pacemaker authors found the equation of a straight line passing through the points (0, 0) and (440, 127) to obtain a formula that assigned ages to different depths within the RC11-120 core:

$$\text{age}_{\text{RC11-120}} \text{ (in ka)} = 0.289 \text{ ka/cm} \times \text{depth (in cm)} \quad (2)$$

Even if your high school algebra is rusty, you can still check that Equation (2) is correct. Substituting a depth of 0 cm into Equation (2) yields an age of 0 ka, as required, and a depth of 440 cm yields an age of 127 ka, also as required.

The Pacemaker authors used the same procedure to assign ages to the bottom section of the E49-18 core; they only used depths at

or below 490 cm in their analysis.<sup>3</sup> They used the 6-5 and 12-11 MIS boundaries in the E49-18 core, located at depths of 490 and 1405 cm respectively, to calculate the equation of a straight line passing through the points (490, 127) and (1405, 440):

$$\text{age}_{\text{bottom of E49-18}} \text{ (in ka)} = 0.342 \text{ ka/cm} \times \text{depth (in cm)} - 40.619 \text{ ka} \quad (3)$$

Again, substituting depths of 490 cm and 1405 cm into Equation (3) yields respective ages of 127 ka and 440 ka, as required.

Calculating the Original Time Intervals

According to Table 3 of the Pacemaker paper, the total time interval assigned to the RC11-120 core was 273 ka. How was this number obtained? The RC11-120 core was 950 cm long, so inserting a depth of 950 cm into Equation (2) gives the presumed age at the core bottom: 0.289 ka/cm × 950 cm = 275 ka. However, one of the “quirks” of the method of spectral analysis used by the Pacemaker authors is that the data points used in the analysis must be separated by *precisely equal* time intervals.<sup>8</sup> Even for the simple age models in Equations (2) and (3), round-off errors usually cause slight differences in the time intervals between data points. So, one usually has to replace the original data set with an “interpolated” data set that mimics the original data set but whose data points are spaced perfectly evenly in time. Because the Pacemaker authors chose a time interval of 3,000 years (3 ka) to separate their interpolated data points,<sup>3</sup> the total time interval assigned to the RC11-120 core had to be an integer multiple of 3 ka. The highest number less than 275 ka that meets this requirement is 273 ka, as shown in their Table 3.

Likewise, the 1550 cm length of the E49-18 core was used to find the total time interval assigned to the bottom section of the E49-18 core. Inserting 1550 cm and 490 cm into Equation (3) yields respective ages of 489 ka and 127 ka (see their Table 3). Subtracting these two numbers and rounding to the nearest integer multiple of 3 ka gives a time interval of 363 ka.

After obtaining initial results favorable to the astronomical theory, they applied a more complicated ELBOW age model to the PATCH data set that used four straight-line segments instead of just one. Although I don’t show the math here due to space constraints, you can use algebra and the ELBOW data in their Table 2 to verify that this resulted in a total time interval of 486 ka for the PATCH data set.<sup>9,10</sup>

New Timescales

However, in the early 1990s, secular scientists changed the age claimed for the B-M magnetic reversal boundary to 780 ka.<sup>6</sup> So, by their own reckoning, the ages they originally assigned to the MIS boundaries are no longer valid. And since the Pacemaker results depended on these ages, the Pacemaker results are invalid, too! You can confirm the revised MIS boundary age estimates (fourth column of



Table 1) by changing the 700 in Equation (1) to 780 and re-doing the calculations. The same procedure as before yields new SIMPLEX age equations for the two cores:

$$\text{age}_{\text{RC11-120}} \text{ (in ka)} = 0.325 \text{ ka/cm} \times \text{depth (in cm)} \quad (4)$$

$$\text{age}_{\text{bottom of E49-18}} \text{ (in ka)} = 0.380 \text{ ka/cm} \times \text{depth (in cm)} - 43.227 \text{ ka} \quad (5)$$

These equations yield new time intervals of 309 and 403 ka for the RC11-120 and E49-18 cores. The new time interval assigned to the PATCH data set is 544 ka.

### Conclusion

Now that you know *how* the ages were assigned to the Indian Ocean cores, you can verify the results presented in last month's Part 1 article. The new age assignment for the B-M magnetic reversal boundary stretches the climate periods originally reported in Tables 3 and 4 of the Pacemaker paper. Some reflection shows that the method described in Part 1 is equivalent to dividing the new time interval  $T_{\text{new}}$  for a core by the original time interval  $T_0$  to calculate a "core stretch factor" (my Table 2). Multiplying the stretch factor for a particular data set by the climate periods reported for that data set (in their Tables 3 and 4) gives the new climate periods. Unfortunately for Milankovitch proponents, most of these new climate periods no longer agree with the astronomical expectations!<sup>4</sup>

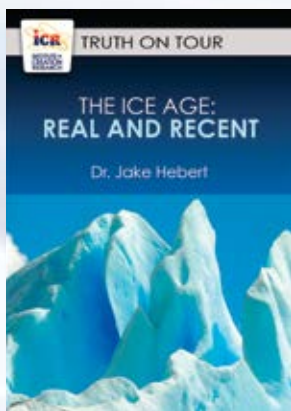
Without the Pacemaker results, it is doubtful there's any con-

vincing evidence for the Milankovitch theory, even by secular reckoning. Yet, many scientists routinely use the astronomical theory as an age-dating method, and the theory is making subtle contributions to global warming alarmism.<sup>11</sup> Secular scientists are either unaware of this age revision and its implications or they're ignoring them. How, then, can anyone trust these scientists' pronouncements about Earth history and climate change if they have allowed this error in such an important paper to go uncorrected for over 25 years? ❄️

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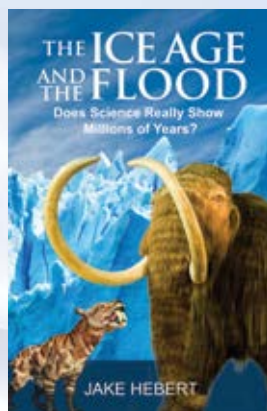
Dr. Hebert is Research Associate at the Institute for Creation Research and earned his Ph.D. in physics from the University of Texas at Dallas.



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# THE CREATED PLACENTA

The complex mammalian placenta is an organ to which, in a sense, we all owe our lives. It's formed by the fusion of maternal and embryonic tissues and establishes vascular contact between mother and child at the onset of pregnancy.

Evolutionists struggle to explain the origin of placental mammals,<sup>1</sup> but the Bible states they originated during creation week thousands of years ago. Vivipary (modes of reproduction) for humans involves the development and growth of the embryo inside the body of the mother, eventually leading to the birth of the baby. This is indeed an amazing process designed by our Creator,<sup>2</sup> but evolutionists can only say “viviparity has evolved many times.”<sup>3</sup> Viviparity means to give live birth as opposed to hatching from an egg (i.e., oviparity). It's common among many animals, including some insects like aphids.

The unique placenta is complex and found in many vertebrate groups. For example, when evolutionists address the placental origin found in large order of snakes and lizards (Squamata), they must appeal to the highly questionable doctrine of convergent evolution. Convergence is the supposed development of similar or analogous structures—such as placentas—in creatures that are unrelated as each separately adapts to a similar way of life. Two evolutionists said convergence in the squamates is “astonishing”<sup>4</sup> while another evolutionist, Kathleen Smith, said the specialized and complex placenta is an “invention.”<sup>5</sup> Smith also said, “viviparity is common in squamates, where it has evolved independently at least 100 times.” This is an altogether amazing statement. To have an organ as complex as the placenta evolve once by time and chance only once stretches into incredulity, but an independent evolution of this “invention” *at least 100 times*? Darwinists maintain convergent structures were not present in the last common ancestor of those groups, but of course fossil evidence of the last common ancestor has yet to be found in any group. A more reasonable explanation is that similarity among complex structures such as the placenta is clear evidence of a common Designer.

Evolutionists also appeal to the doctrine of homology—the basic similarity of structures in various creatures, which they assume to be due to descent from an unknown common ancestor. But the homology of the placenta in various viviparous organisms is controversial at best.

Layered membranes are on the fetal side of the placenta: the allantois, amnion, and chorion. The placenta also has the “primitive” yolk sac,<sup>6</sup> but there is actually nothing primitive about this structure—also called the umbilical vesicle. Indeed, it's absolutely critical for the developing embryo. It's true that the yolk sac of birds and reptiles contains yolk to nourish the embryo, but in Eutheria (placental mammals) the yolk sac “contains no yolk.”<sup>7</sup> The next logical question is, if it doesn't have yolk, then what *does* it have that makes it so important? The answer is blood—or blood islands—that is important in early embryonic blood supply. One can only wonder why evolutionists would call this structure by the wrong name and label it primitive when it's absolutely necessary for the survival of the developing individual.

In conclusion, the placenta is formed of both maternal and fetal tissues supporting nutritional and respiratory functions of the baby via intimate vascular contact. Evolutionary descriptions of placental origin and its profound structures are found wanting, but a design explanation fits the scientific observations far better. ✍

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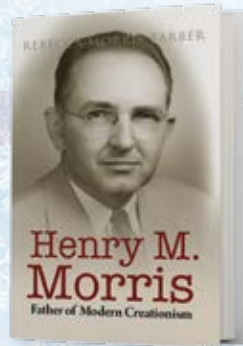
Mr. Sherwin earned his master's in zoology from the University of Northern Colorado. He is Research Associate, Senior Lecturer, and Science Writer at the Institute for Creation Research.



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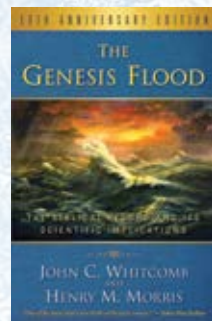
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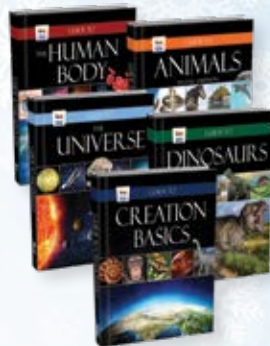
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## CONSTRUCTION UPDATE



*Beck construction crew pours 100s of yards of concrete on October 11, 2017.*



*The crane arrived during the last week of October to erect steel beams.*



*The Origin of the Universe exhibit begins to take shape.*



*The planetarium foundation after the large-scale pour.*



*A drone shot of the construction site.* Image credit: Parker Eng.



Construction workers recently poured the foundation for the ICR Discovery Center's planetarium and auditorium. Though it may be just another day at the office for these guys, they're laying the groundwork for state-of-the-art educational centers we'll use to delight guests with the wonders of God's creation. The 3-D planetarium will offer journeys into worlds unknown—like outer space, ocean habitats, and the inside

of a cell. The 200-seat auditorium will host educational seminars, pastoral training sessions, continuing education units, and summer institutes for creation advocates. We're praying for the thousands of eyes, ears, and hearts we'll reach with scientific evidence that confirms the truth of God's Word.

To date we've poured around 600 yards of concrete! These pours include the underground piers, grade beams, parking lots, and the slab itself. The drone shot above shows the extent of the concrete work.

Please visit [ICR.org/Construction-Progress](http://ICR.org/Construction-Progress) to see how far we've come. Join us

in prayer for this project and help us finish strong!

### **Help Us Complete the ICR Discovery Center**

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*Beauty in Motion:***Formula 1 Drivers**

R A N D Y J . G U L I U Z Z A , P . E . . , M . D .

**B**right red with perfect details, a Ferrari Formula 1 F1 SF15-T diecast model race car would make a great present! Young boys around the world push their model Ferraris across the floor while making sounds of growling engines and squealing tires. They envision themselves seated behind the wheel, racing on winding tracks and reaching speeds over 200 miles per hour. A select few will become race drivers. Along the way they will be physically transformed into something they probably haven't considered: a world-class competitive athlete.

Watching a Formula 1 (F1) car maneuver at high speeds is exciting. Seated in one during its performance is a different story altogether. Even riding as a passenger in dual-seated racing vehicles provides a whole set of sensations—mostly quite uncomfortable—that must be experienced to be appreciated. They are so unlike average driving that a realistic experience in one of these machines can't be imagined. The physical strains demand that the drivers be in excellent physical shape.

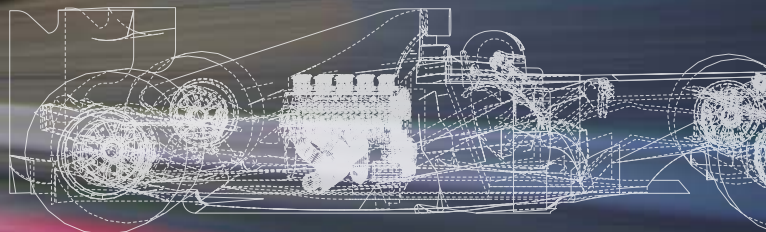
As with most athletic challenges, mental concentration must equal physical performance. Skilled operators can only effectively operate these high-performance machines by managing a barrage of

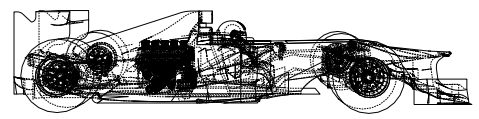
incoming data and executing rapid responses. Unlike fighter aircraft, where computers are being continually integrated into operation to help manage the flood of data, F1 racing rules greatly limit computer operation of the vehicle. This keeps the sport as challenging as possible. The race is a competition of driver skill and car performance—with driving ability as the greater factor. Fortunately, the human body comes well-equipped to handle the challenges.

**The Challenge: Formula 1 Car's Ultra Performance**

Formula 1 cars are the fastest course-racing cars in the world. Despite rules limiting their weight and performance, these vehicles are incredible engineering achievements. The entire vehicle weighs only around 1,520 pounds, including the fuel and driver, but comes equipped with a 900-horsepower engine. The engine speed hits 15,000 revolutions per minute. Formula 1 cars accelerate from a dead stop to 100 miles per hour in about three seconds and exceed 230 mph.

Though some street-legal sports cars are fast, none match F1 cars for high-speed maneuvering. At high speeds, the low and wide body style develops very low pressures under the car. High air pressure pushes down on the body to keep it on the track, equaling al-





most three times the weight of the car itself. This feature, combined with exotic suspension and large tires made of “sticky” rubber, enable the car to resist skidding off the track on tight, high-speed turns.

If you are susceptible to motion sickness riding through the mountains in a minivan, then F1 racing is not for you. When a car rapidly accelerates or makes a turn, the force you feel pushing you backward or sideways is called *g-force*. One “g” is equal to the force of your body weight. The sensation of *g-force* against the body contributes to feeling nauseous. By comparison, commercially available sports cars only develop about one *g* of lateral force during turns, but when an F1 car turns at high speed, the driver sustains up to five *gs*, or five times their body weight. Moving one’s arm can feel as if there’s a bowling ball attached to it. Rapid decelerations are physically harder to tolerate. In some races, the driver moves out of one turn and accelerates to about 220 mph and then decelerates in two seconds to 35 mph for another turn. This maneuver applies over four *gs* of forward force on the body against the restraining harness. To make this rapid deceleration, the driver’s left leg modulates the brake with over 240 pounds of force, and then gradually eases back during the turn while the right foot moderates the accelerator.

Since F1 cars can cover the length of a football field in one second, drivers must monitor approaching track activities over 200 yards in front of them...as well as the speeding cars around them. In addition to just driving the car, information management competes for the driver’s attention. Modern helmets enable constant two-way communication with support engineers. The F1 car is packed with sensors that relay information to the car’s nerve-center that resides right on the steering wheel. The steering wheel in Figure 1 shows that drivers must manage an incredible volume of incoming information with split-second timing. How can they do it?



**Figure 1.** The Sauber C33 is a typical Formula 1 steering wheel. While traveling over 200 mph, the driver manages this jam-packed steering wheel housing, his gear-shift paddles, communications toggles, and 16 buttons and nine rotary switches—all sending vehicle information. This steering wheel costs in the neighborhood of \$40,000.

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### The Solution: Formula 1 Driver’s Superior Performance

If the engineering genius behind the F1 car is incredible, then the design of the human drivers who compete in 19 annual races, rain or shine, is simply beyond comparison. Like many athletes, they endure grueling conditions. Drivers will lose about five pounds in water weight during the two hours they are strapped into a cockpit where temperatures can reach 120 degrees. Power-assisted functions for steering and braking are disallowed. Noise levels can exceed 130 decibels—an intensity approaching a jet engine at takeoff. Engine vibrations are transferred throughout the vehicle. Seated only four inches above the ground with tight suspension, road lumps and bumps punish the body throughout the race.

*If the engineering genius behind the F1 car is incredible, then the design of the driver who competes in 19 annual races, rain or shine, is simply beyond comparison.*



Without many unique sensors, neither the F1 car nor the driver would be able to relate to their environment. In fact, they would be functionless since a sensor acts as the “trigger” in either’s response to specific stimuli. Sensors are the key elements that make a system responsive and/or adaptable, yet, regrettably, they are often omitted in descriptions of biological function. The F1 driver’s body is packed with thousands of sensors gathering data for the brain that, compared to his car’s, are highly miniaturized and even more sophisticated.<sup>1</sup>

During an interview, one F1 driver described what he senses during the race and how he interprets this incoming data in real time.<sup>2</sup> Steering wheel vibrations in his hands tell him about the grip of his tires in a turn. His fingers constantly modulate the gear shifter, not just for speed, but to also manage the bite point of the tires. His eyes take in data that make him spatially aware of the other cars and road hazards. He smells the odors coming from the tires and fluids of the car in front of him to discern the performance of his competitor’s vehicle. He deftly manages his right foot to regulate speed, wheel spin, and control tire wear. His left foot moves less than a quarter of an inch to apply and release several hundred pounds of force on the brake for a fraction of a second, while sensing small vibrations indicative of a skid or locked brakes. The strain on his neck resisting the *g* forces that cause his head to weigh up to five times the normal amount is part of managing correct turning speeds. The sound of the revving engine is constantly monitored, along with tire chatter and track sounds. The rest of his body senses motions associated with wheel spin, lateral skidding, or mechanical problems.

An enormous amount of data reaches the human brain from just the inner-ear sensor that monitors linear motion. The resting

signal rate is about two million impulses per second. Now add signals from the thousands of other sensors whose rates are fluctuating due to motion. Through processes that are still unclear, the brain can readily process this data into information, program the driver's responses in less than a second, and enable a driver to previsualize his actions two turns in advance.<sup>3</sup>

ICR's resident geneticist, Dr. Jeffrey Tomkins, reveals the latest research on human brain capacity. He says,

[The] oversimplified belief was that synapses acted like basic on/off switches—but nothing could be further from the truth since the brain acts more like a quantum computer than a digital computer. Just one synapse alone can contain about 1,000 molecular-scale microprocessor units acting in a quantum computing environment. An average healthy human brain contains some 200 billion nerve cells connected to one another through hundreds of trillions of synapses....The study's results showed a

single human brain has more information processing units than all the computers, routers, and Internet connections on Earth.<sup>4</sup>

The equivalent man-made devices would require at least 10 megawatts of power to operate. The human brain uses only about 10 watts.

Who can begin to grasp the knowledge and capability of the Lord Jesus, who designed F1 drivers and other world-class athletes? The quality of His craftsmanship evidenced in human beings should cause the best F1 engineers to stand in applause. ✉

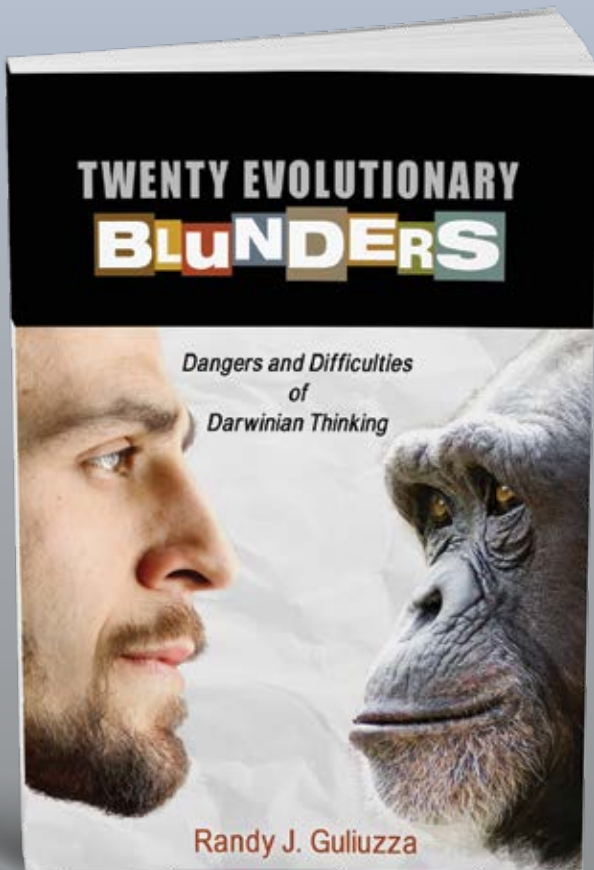
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*Dr. Guliuzza is ICR's National Representative. He earned his M.D. from the University of Minnesota, his Master of Public Health from Harvard University, and served in the U.S. Air Force as 28th Bomb Wing Flight Surgeon and Chief of Aerospace Medicine. Dr. Guliuzza is also a registered Professional Engineer.*



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# Q: Who Were Cro-Magnon People?

**A:** If you're like me, you appreciate the variations God designed the human frame to express. Wide or narrow, tiny or giant, having high or shallow nose bridges or foreheads, every person differs in some unique way from everyone else. The same holds true for human fossils like those some still call "Cro-Magnon." Who were these ancient people, and do they somehow suggest humans evolved from non-humans?

Cro-Magnons lived in rock shelters and hunted woolly mammoths, but that doesn't mean they were *becoming* human—they were fully human like us. These people were skilled artists and left exquisite carvings and paintings. Archaeologists haven't found any hint of crude scratches or splashes from some imagined pre-human. Cro-Magnons made jewelry from teeth, shells, and tusks. They painted and carved colorful pictures of their prey, sometimes with graphic mortal wounds, on apparently sacred cave walls.<sup>1</sup> They used earth minerals, charcoal, and animal fat to craft their paints, which they carefully applied as liquids or powders.<sup>2</sup>

As expert hunters, they used spears, stone knives, slings, and pitfall traps. Some of them sewed clothes and sorted out clever ways to survive severe cold—like Inuit peoples still do. And just like the Inuit and others, these early Europeans survived in a primitive setting but were not primitive in mind or body.



Cro-Magnon does not really refer to a particular archaeological culture or a species other than *Homo sapiens*. Cro-Magnons were named after the rock shelter in France where they were first discovered in 1868. Scientists named the sedimentary layers with their bones and artifacts "Upper Paleolithic."

Though Cro-Magnons head sizes were sometimes larger than our current *average*, if alive today they would fit into any international crowd. Their anatomy did not differ from ours—it fits well within modern human variance. The only significant difference is when they lived. These first modern-looking humans to inhabit Europe lived in cold, hard times. Many of them lived among limestone outcrops in southern France during the Ice Age.

The Ice Age happened right after the global Flood only several thousand years ago—between Noah's and Abraham's gen-

erations.<sup>3,4</sup> Hot magma rose through rifts in Earth's crust and heated the oceans during the horrendous Flood. This caused vapor to rise into the sky. It cooled and fell frozen on land and sea.<sup>5</sup> For several hundred years, snow piled up faster than it could melt, creating giant ice sheets that covered northern Europe. Cro-Magnon people lived just south of those ice sheets.

They dwelt alongside Neanderthal peoples, proving that Neanderthals did not evolve into Cro-Magnon or other people. These ancients lived at the same time and sometimes in the same places. Other people soon entered their lands, then fought or mingled with them as nations have done ever since. The fancy label "Cro-Magnon Man" might suggest they played an exotic role in some evolutionary pageant. But if we stick to the facts from science and Scripture, we could just as easily call them "Europe's first folks." ❧

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A portion of the stunning cave mural of Lascaux, France.

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Mr. Thomas is Science Writer at the Institute for Creation Research and earned his M.S. in biotechnology from Stephen F. Austin State University.

# Cactus, Bats, and Christmas Gift-Giving

**D**arwinists teach that nature is just a gladiatorial arena of cutthroat competition and selfish struggle—a conquer-or-be-conquered “survival of the fittest” contest. They routinely skew their caricature of nature to overemphasize its brutal death struggle as if death were some sort of good, driving life force.

But how should a Christian view nature? Scripture teaches that creation is seriously fallen.<sup>1</sup> However, creation retains much of its created goodness and harmony, even while “groaning” with entropy and mortality.<sup>1</sup> If we look carefully, the original neighborliness of nature is still easy to see.

## Saguaro Cactus, Receiving and Giving

Saguaro cacti provide food, perching sites, and shelter cavities for desert birds such as the Gila woodpecker, elf owl, Chihuahuan raven, Inca dove, cactus wren, and many



others. Likewise, saguaro fruit is eaten by hungry peccary, deer, tortoises, rabbits, rodents, and skunks. Fallen saguaro branches constitute shelter for scorpions, tarantulas, insects, lizards, and snakes.<sup>2</sup>

Yet saguaro cacti, helpful and generous as they are to their neighbors, also receive vital benefits from them, illustrating the symbiotic dynamics of America’s southwestern deserts.

Without other species, Saguaros themselves could not persist. The giant cactus is dependent upon pollinators, now mostly bees [or white-winged doves] but traditionally bats. Saguaros also need “nurse trees” such as paloverdes to provide shade during the early years of slow growth.... [Also,] a Saguaro whose stem is injured is subject to rapid and fatal necrosis from bacterial invasion. However, the site of the injury is an ideal place for a Gila Woodpecker to begin excavating a nest cavity. In doing so, the woodpecker may remove all of the diseased tissue, essentially curing the cactus of what might have been a fatal infection.<sup>2</sup>

When bat populations were higher, they were the primary pollinators of saguaro and other desert cacti such as the cardon and organ pipe.<sup>2,3</sup>

## Tropical Bats, Receiving and Giving

Bats provide pollinating services in deserts and elsewhere while acquiring nectar from cactus flower blossoms. Insectivorous bats consume crop-pest bugs. Fruit-eating (frugivorous) bats provide yet another plant-helping service: far-flung seed dispersal.

Fruit-eating bats are one of several animals that consume ripe fruits without destroying seeds. Their post-digestion droppings facilitate seed dispersal and enhance the seedlings’ well-being.<sup>3</sup> For example, in



Africa’s Ivory Coast bats digestively “plant” fruit seeds. Birds, rodents, and simians do the same—sometimes at locations quite distant from the fruit-producing parent trees. However, research shows that seed-sowing birds routinely avoid open areas, preferring the safety of trees, so 95% of the fig seeds dropped in open areas come from fig-eating bats.<sup>3</sup> Frugivorous bats drop a lot of seeds. They deposit twice their weight each night, in flight, due to their rapid digestive systems. That’s a lot of fertilized seed droppings!<sup>3</sup>

The saguaro cactus and tropical bat are only two examples of mutually beneficial relationships found in Earth’s ecosystems. But community mutual aid abounds all over the natural world, even in habitats as different as deserts and jungles. So, as you exchange gifts with loved ones this Christmas, many of God’s creatures and plants will be exchanging gifts, too. ☞

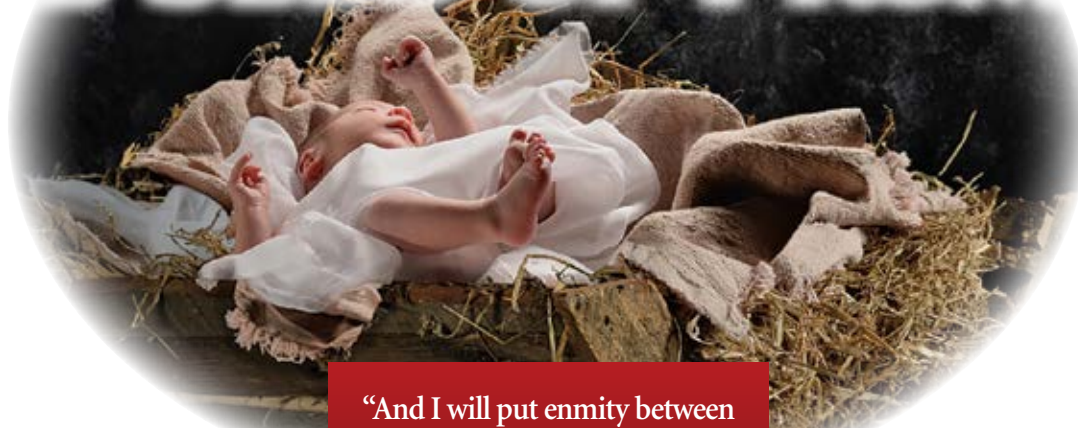
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# THE SEED OF PROMISE



**T**his great promise given by God in the Garden of Eden is known as the *Protevangelium*, the “first gospel.” Scholars debate whether Adam and Eve would have recognized this as the first anticipation of the coming Christ, but the Messianic overtones are unmistakable to believers today. Nevertheless, Adam and Eve knew their willful rebellion shattered the perfect relationship they had enjoyed with their Creator and ushered in our current world of sin, death, and decay. But thank God, even in the midst of pronouncing the Curse, He lovingly offered a resolution!

The concept of the “seed of the woman” is particularly noteworthy because it is unique in all of Scripture. Biologically, women produce no seed, and except in this case the biblical usage speaks exclusively of the seed of men. Thus, the seed of the woman can only refer to the future descendant of Eve who would have no human father. Moreover, such an extraordinarily special Seed would have to be miraculously embedded in the womb and would therefore bypass the innate sin nature that “entered the world” through Adam and “spread to all men” (Romans 5:12).

Yet, the absence of a sin nature would not spare this Seed from encountering “the

“And I will put enmity between  
you and the woman, and be-  
tween your seed and her Seed;  
He shall bruise your head,  
and you shall bruise His heel.”

(GENESIS 3:15)

sin which so easily ensnares us” (Hebrews 12:1). Indeed, He “was in all points tempted as we are” but lived a perfect life “without sin” (Hebrews 4:15). And in the process of time, this Seed, who temporarily set aside the power and authority of His deity to come “in the likeness of men,” willingly “became obedient to the point of death, even the death of the cross” (Philippians 2:7-8). Consequently, only this perfect and sinless Seed could become the “propitiation for our sins, and not for ours only but also for the whole world” (1 John 2:2).

At Calvary, “that serpent of old, called the Devil” (Revelation 12:9) inflicted a painful wound on the woman’s Seed and must have rejoiced greatly as His body was laid in the tomb. But having “suffered once for sins,” the long-promised Seed was “made alive by the Spirit” (1 Peter 3:18) and inflicted a mortal wound on the serpent by rising again the third day! And having conquered both sin

and death, the Seed fulfilled the prophecy first promised by God in the beginning soon after creation.

It is *this* great Seed of promise we honor and worship at Christmas. He is so much more than a babe in the manger; He is the very Creator Himself who “was with God” and “was God” who made all things (John 1:1-3). And it was this same Creator who walked “in the garden in the cool of the day” (Genesis 3:8) and knowingly foretold the necessity of His own death for you and for me. From the very beginning, God graciously showed His great love for us, and “according to the promise, [He] raised up for Israel a Savior—Jesus” (Acts 13:23).

It is vitally important we do not forget exactly who went to the cross for us. The Lord Jesus Christ—revealed in Scripture as our Creator, Savior, and coming King—is the singular focus of ICR’s work, and the coming ICR Discovery Center will demonstrate the truth of His magnificent handiwork. Please join us this season with your gifts of support and help us proclaim His gospel to the coming generations. ✞

Mr. Morris is Director of Donor Relations at the Institute for Creation Research.



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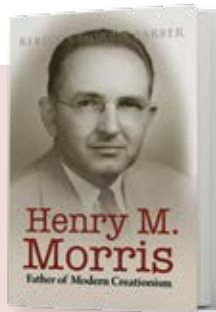
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I'm so glad *Henry M. Morris: Father of Modern Creationism* was published. It's a testimony to the goodness and wisdom of God. He keeps His promises, and He loves and honors those who honor Him from one generation to the next. He is faithful! The book is well-written and so interesting that as soon as I opened it, I started reading and couldn't put it down.

— C. F.

I received the book on the life and ministry of Henry M. Morris and must say "Thank You" for putting into print the life and work of this man so uniquely used of our Lord to open the minds of multitudes of people and move them to see the validity of the Word of God and creation over evolution's fallacy.

— K. B.



## ICR Facebook comments about recent ICR news



I remember when the article came out saying that [Canaanite ] DNA testing had proven the Bible was wrong. When I read the article, I said, "What in the world are they talking about? The Canaanites were not wiped out! They survived." I was waiting for a reply to that article and now I have it [Dr. Jeffrey Tomkins' *Creation Science Update* "Ancient Canaanite DNA Confirms Biblical Accuracy"]. Great job!

— J. A. S.

God told the Israelites to wipe out the Canaanites. But one of the big themes of the Old Testament is that the Israelites did not obey. The Canaanites and their pagan religions dragged Israel down for centuries. So anyone who claims this discovery disproves the Bible doesn't know the first thing about Old Testament history.

— B. B.

This affordable resource provides some great scientific facts infused with faith. It is beautifully written and illustrated, making it an interesting read not only for kids!

— C. B.



"Out of the mouths of babes." Our three-year-old foster son was visiting McDonald's with me recently. He was excited to talk about the toys on display as part of the kids' meal. One especially caught his attention—a plastic model of a Chinese dragon. "Do you know what it is?" I asked, not thinking he would know the name of it since we had never talked with him about mythical beasts like dragons. "Dinosaur!" was his immediate reply! As I recall, it was a young child that also called out that the king had nothing on in the tale of the Emperor's New Clothes. And Jesus said we must become like little children to enter His Kingdom. Kids know... so-called dragons are dinosaurs!

— J. U.

God made trilobites to mess with evolutionists' minds.

— W. F.

Never fear, the evolutionists will deny [the trilobites' anatomical complexity] using vivid imagination, unprovable assumptions, biased interpretations, outlandish speculation, and conjecture. They have to because it goes against their precious theory.

— G. S.



Trilobites Can't Stomach Darwinism | The Institute for Creation Research

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