

ACTS & FACTS

INSTITUTE FOR
CREATION RESEARCH

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DINOSAUR DNA RESEARCH

Is the tale wagging the evidence?



NEW from the INSTITUTE for CREATION RESEARCH

EARTH'S CATASTROPHIC PAST

GEOLOGY, CREATION & THE FLOOD

ANDREW A. SNELLING

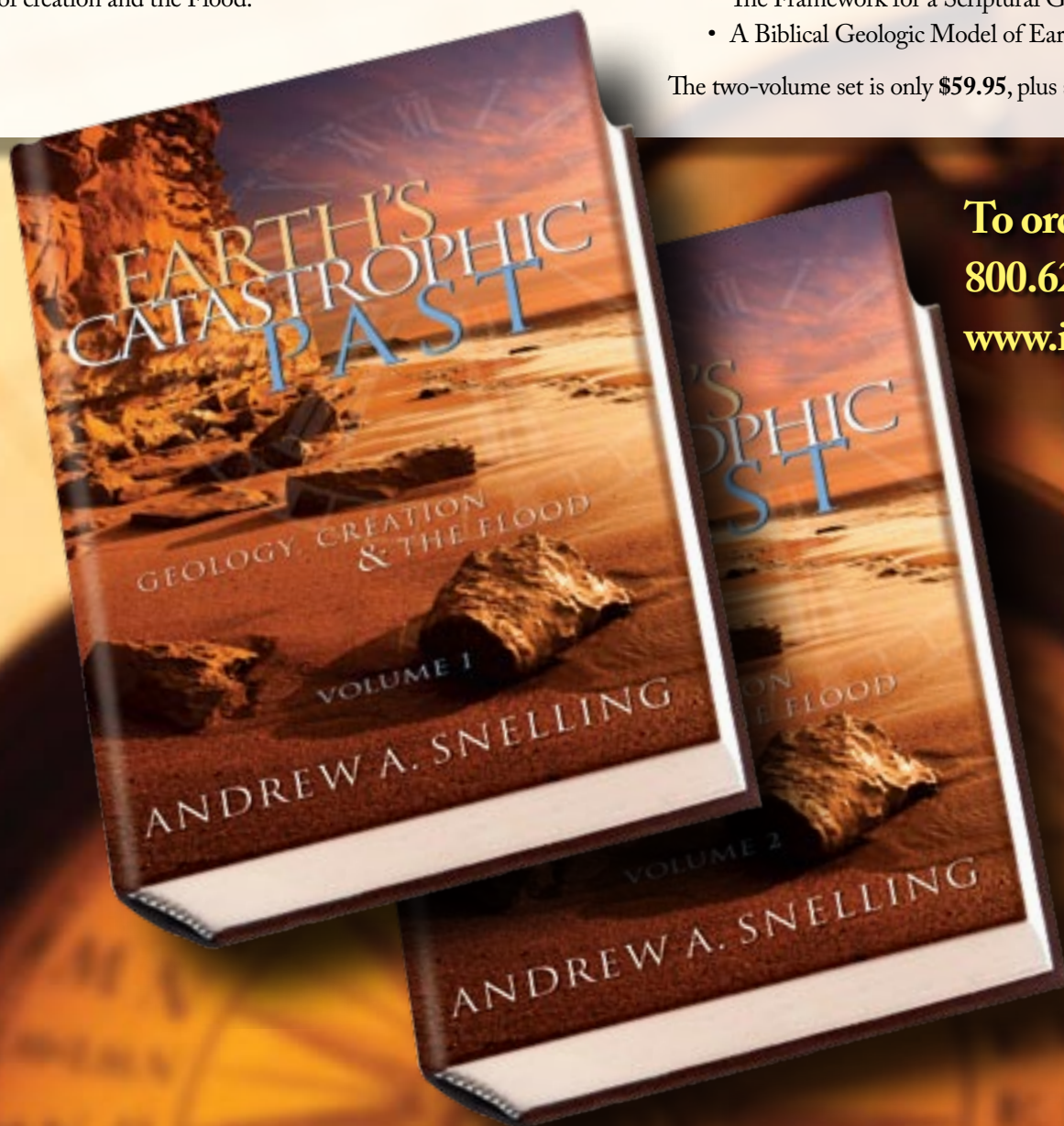
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Standing in the Gap

I'm writing this month's column looking out over the Black Hills of South Dakota. What a gorgeous site! Rolling hills, beautiful pines, and even Mount Rushmore a few miles away. Vacations have been few and far between in the last three years with the enormity of our tasks at ICR—relocating our headquarters to Dallas, expanding our publications department, initiating brand new conferences and seminars across the country, and upgrading our media, just to name a few. Much thanks to Dr. and Mrs. Randy Guliuzza for the hospitality of their “cabin in the woods.” Dr. Henry Morris' August 30th devotional “Prepared for You” in *Days of Praise* was a reminder that the Lord Jesus has prepared a special place—not a vacation home, but a permanent residence—for all of us who have been adopted into His family. Best of all, the reservation is guaranteed!

Speaking of beautiful places on earth, in September ICR led a fantastic group of adventurers on our Yosemite Creation Tour. If you've never been on an ICR tour, you're missing out on a tremendous blessing. I'll have a full report for you in our November issue.

This is ICR's busiest time of year at conferences and seminars around the country. It also begins the annual ACSI convention season. ICR speakers are conducting some 70 seminars at ACSI conventions alone. Read more about this on page 8. If you are a Christian school teacher, consider attending one of these regional meetings. The launch of our new Science Education Essentials curriculum supplements is drawing much attention from teachers. It is K-12 science education from the experts at the ICR Graduate

School—those who have the credentials and experience to design and teach Christian educators how to fully integrate biblical creation principles in science classrooms.

And don't forget to register for one of three Demand the Evidence conferences being held across the United States in October and November. The cost is just \$25.00 (\$20.00 if you register early, and \$15.00 for students). For more details, visit www.icr.org/conference.

Enclosed in *Acts & Facts* this month is our Fall Resource Guide, which keeps expanding as ICR publishes and acquires many new books, DVDs, and teaching aids on science, Bible, and apologetics topics. One of these new items is our annual teaching poster, this year titled Fossil Record of Noah's Flood. The iconic images of fossils—normally used in evolution-based geologic column charts—have been arranged according to Flood geology. Kudos to graphic designer Susan Windsor for her original artwork and stunning design. Science Writer Brian Thomas and ICR President Dr. John Morris expertly reviewed the content for accuracy. This is a great resource for science teachers in Christian schools!

ICR continues to stand in the gap for truth as we confront our culture with the veracity of the biblical record and teach men and women how to defend their faith. But we need you to contend for the faith with us. The battle is the Lord's, and your faithfulness as intercessors and supporters is needed more than ever. Thank you for standing with us.

Lawrence E. Ford
EXECUTIVE EDITOR

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DINOSAUR DNA RESEARCH



Is the tale wagging the evidence?

Dinosaurs are a popular topic of study, whether in the public imagination or in scientific research. The scientific community, however, has a dirty little secret regarding the manner in which that research is handled. If dinosaur DNA doesn't "look like chicken" (or a crocodile), it will most likely be discarded as "unreliable data" prior to publication—and thus be effectively censored from public access.

Why? Because evolutionary scientists are committed to only publish dinosaur DNA data that match their naturalistic tale of origins. Despite the amazing discoveries of soft tissue from dinosaur bones,¹ dinosaur DNA research results (and other dinosaur "connective tissue" research) continue to be steered by evolutionary dogmatism.

JAMES J. S. JOHNSON, J.D.,
JEFFREY TOMKINS, PH.D.,
AND BRIAN THOMAS, M.S.

Dino DNA

An article published in *Science* in 1993 illustrates how and why dinosaur bone research has been chillingly censored. “Dino DNA: The Hunt and the Hype” by Virginia Morell stated that “several groups are racing to get the first DNA out of dinosaur bones, but other researchers say their efforts are taking attention away from the real scientific value of ancient DNA.”

This article referenced then-recent findings of fresh dinosaur tissue:

Mary Schweitzer, a biology graduate student at Montana State University’s Museum of the Rockies, was examining a thin section of *Tyrannosaurus rex* bone... when she noticed a series of peculiar structures. Round and tiny and nucleated, they were threaded through the bone like red blood cells in blood vessels. But blood cells in a dinosaur bone should have disappeared eons ago. “I got goose bumps,” recalls Schweitzer. “It was exactly like looking at a slice of modern bone. But, of course, I couldn’t believe it. I said to the lab technician: ‘The bones, after all, are 65 million years old. How could blood cells survive that long?’”

Why was Schweitzer, an eyewitness who microscopically observed the insides of a *T. rex* bone, afraid to believe her own eyes? Isn’t empirical science all about *observation*?

Furthermore, Morell reported, “Schweitzer has already extracted a molecule that might be dinosaur DNA.”

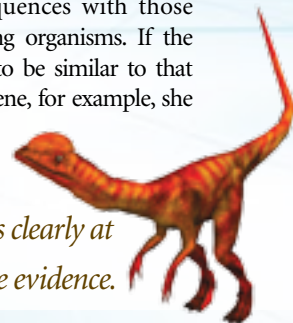
However, connective tissue ruins and degrades over time, such that DNA should not survive at all, even if the creature only lived 50,000 years ago.³ The existence of 65 million-year-old DNA is biochemically unthinkable. In other words, the old-earth evolutionary tale is clearly at odds with the fresh dinosaur bone evidence. How embarrassing to the academic establishment! This may be why ongoing dinosaur soft tissue discoveries are generally not broadcast through popular media channels.

Research Censorship

Evolutionary “damage control” is observed in the form of “chilling” (i.e., coerced) censorship of research, with severe consequences to those who “buck the system.” Consider the research flowchart pictured here describing the process of extracting dinosaur DNA. Note steps 7 and especially 8. Why must the research results be dismissed if the DNA extract doesn’t look like birds or crocodiles? The answer is evolutionary gatekeeping:

To make sure she’s liberated the right molecule, Schweitzer compares the extracted DNA sequences with those of hundreds of living organisms. If the sequence turns out to be similar to that of a known fungal gene, for example, she knows the sample has been contaminated.

The old-earth evolutionary tale is clearly at odds with the fresh dinosaur bone evidence.



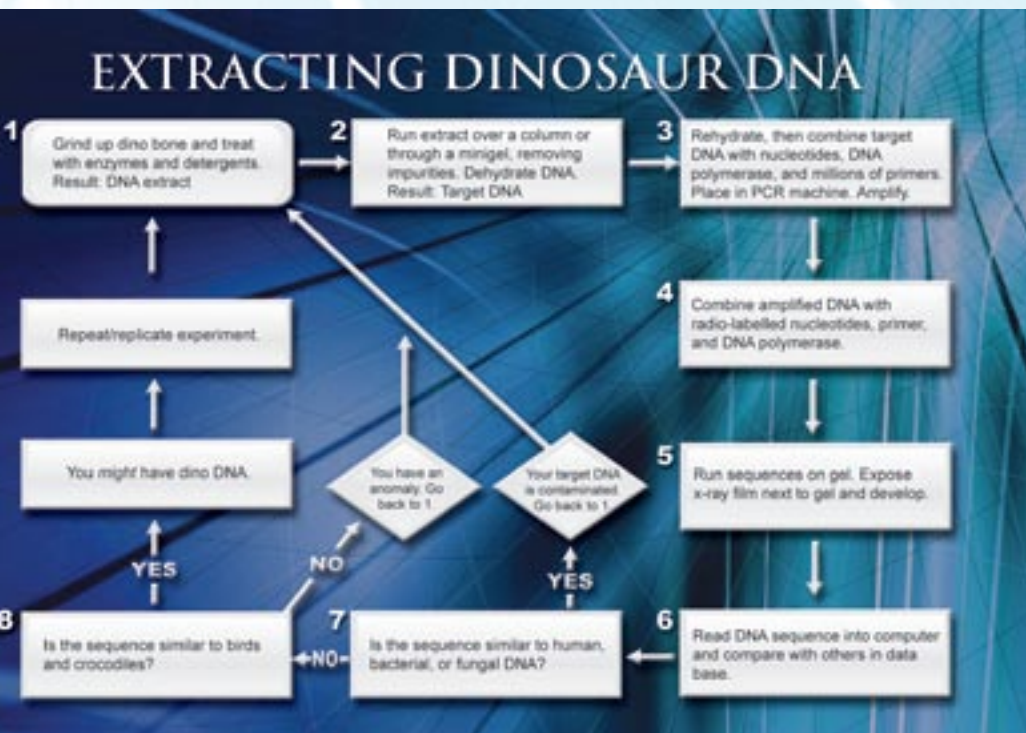
That’s how DNA hunters know they’ve gone wrong. But how do they know when they’re on the right track, given that there are no living dinosaurs to provide a handy sample of DNA for comparison? The answer is that they rely on paleontological theory, which (according to most researchers) holds that dinosaurs and crocodiles came from the same stock, and that the dinosaurs’ only living descendants are birds. Therefore researchers look for DNA that is similar, but not identical, to DNA from these groups of organisms.⁴

In other words, only DNA research that provides dinosaur DNA sequences similar to those of birds and crocodiles is allowed. As the flowchart indicates, all other results are deemed anomalies that should be rejected as though they were known contaminants, like fungal genes. This approach is not observation-directed empirical research; this is assumption-driven, theory-dictated censorship—“science” falsely so-called.⁵

Coerced Spoliation of Evidence

This purposeful pattern of coerced concealment of the nonconforming DNA data from unfossilized dinosaur bones (labeled “an anomaly” on the chart) involves what courtroom lawyers and judges call “chilling” coercion and “spoliation of evidence”—inducing the concealment (and eventual destruction) of embarrassing information in order to prevent one’s opponent from using it at trial.

Whenever any kind of evidence is concealed, one immediately questions the spoliators’ motives for doing so. The intuitive answer is that they dislike what the information



Flowchart outline of the procedure for extracting, purifying, sequencing, and verifying dinosaur DNA. Adapted from an illustration by D. De Francesco, as found in Virginia Morell’s article.²

would reveal. Therefore, to spoliage evidence suggests that the spoliators' argument or theory would be weakened, or embarrassed, by that evidence. This suggestion is so strong, forensically speaking, that it is treated as a rule of *presumptive inference* in law courts. In other words, if someone hides evidence in this way, the law presumes that the hidden evidence was damaging to the argument of the spoliator. The spoliator then bears the burden of proof to show otherwise.⁶

A kindred rule to the foregoing...is that the intentional spoliage or destruction of evidence relevant to a case raises a presumption that the evidence would have been unfavorable to the cause of the spoliator...The deliberate destruction of evidence gives rise to the presumption that the matter destroyed is not favorable to the spoliator.⁷



Evolutionary “damage control” is observed in the form of “chilling” (i.e., coerced) censorship of research, with severe consequences to those who “buck the system.”

This shows that the civil law courts understand the importance of evidence spoliage—it points to a willingness to conceal or otherwise suppress truth in order to advance a specific cause. The name Arthur Andersen comes to mind, as this accounting firm's shredding of Enron documents hindered SEC investigators.⁸

Follow the Procedure, or Else

In suppressed dinosaur DNA research—which is a subset of the irrefutable, but hushed, dinosaur soft tissue discoveries—the same issue of evidence spoliage is relevant. Why? Because today's dinosaur DNA controversy in particular, and today's dinosaur “connective tissue” controversy in general, directly puts at issue the real age of the dinosaurs: Did they live millions of years ago, or in much more recent history on an earth inhabited by humans—descendants of Adam and Eve?⁹

How will anyone really know what dinosaur DNA sequences look like until uncensored data from dinosaur bones are

published for public scrutiny? And how will such data be published at all if “embarrassing” research results are routinely discarded as anomalous, simply because they didn't “look like chicken”? One way to acquire more reliable data in this case would be to repeat the DNA research across multiple labs, until consistent results emerge.

In fact, a similar approach was taken in 1994. The winners of the race to sequence dinosaur DNA were Scott Woodward and his colleagues, who published their results in *Science*.¹⁰ They extracted DNA from a purportedly well-preserved dinosaur bone. However, they were not rewarded for their victory. The sequence they discovered was not like birds or reptiles, but seemed unique.

These researchers decided not to follow the procedure outlined in the 1993 flowchart, which would have “told” them that what they

found was an unacceptable “anomaly.” Since this 1994 DNA did not fit the evolutionary

interpretive filter, the authors were raked over the academic coals. Moreover, the objections to their results were not based on conflicting research results, but appeared in editorials and reviews. As a result of the uproar from the scientific community, their dinosaur DNA sequence never became a permanent entry in any public database. In fact, since this very public academic flogging, no scientist has attempted to publish any dinosaur DNA research (resulting in “chilled” academic speech).

Interestingly, Schweitzer has never published any of her purported DNA research on dinosaur tissue, although she has published on tissue analyses and, recently, data on protein sequence. While the tissue analyses reported over the past decade are nearly impossible to dispute, this recently published dinosaur protein sequence from a *T. rex* came under extreme criticism and the data were highly questioned by peers as having been manipulated to produce close similarities with chicken and ostrich protein.¹¹ Was this done as per the “paleontological theory and protocol” described in 1993?

Conclusion

The gatekeeping approach to ancient DNA research established as a protocol in 1993 is a product of dogmatic evolutionary theory. The 1994 results put the dogma to the test, with the result that:

1. Ancient DNA, known to be unstable, was extracted from “80 million-year-old” bone.
2. The sequence, though it showed evidence of decay, was no more bird-like than it was mammal-like.

The coerced suppression of the results by the evolutionary scientific community has dissuaded anyone else from publishing dinosaur DNA research that is not in line with evolutionary dictates. Such self-censorship “chills” empirical research, which prevents the public reporting of observable DNA sequences in order to insulate the larger story of particles-to-people evolution from cross-examination.

Where are the real scientists in dinosaur DNA research who refuse to kowtow to evolution's gatekeepers? ●

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3. *Ibid*, 161. (This illustrates the thermodynamic maxim “as time increases, chemistry wins over biology.”)
4. Difficulties With Dinosaur DNA, *ibid*, 161.
5. 1 Timothy 6:20.
6. See *Wal-Mart Stores, Inc. v. Johnson*, 106 S.W.3d 718, 46 Tex. Supr. Ct. J. 685 (Tex. 2003) (summarizing Texas jurisprudence regarding spoliage of evidence), citing *Armory v. Delamirie*, 1 Strange 505, 93 Engl. Rep. 664 (K.B. 1722) (illustrating how spoliage of evidence, as a legal problem, predates the USA's existence).
7. Quoting *H.E. Butt Grocery Co. v. Bruner*, 530 S.W.2d 340, 344 (Tex. Civ. App. – Waco, 1975, writ dismissed by agr't), citing McCormick & Ray, TEXAS EVIDENCE (2nd ed.), Volume I, § 103, pages 141-142.
8. See, e.g., *In re Enron Corporation Securities, Derivative & “ERISA” Litigation*, 2003 WL 25508889 (S.D. Tex. 2003) (discussing how Arthur Andersen accountants committed spoliage of evidence by shredding Enron documents to hinder the SEC's investigation of Enron, etc.).
9. There are indications that dinosaurs have lived within the last few thousands, and maybe even hundreds, of years. See Cooper, B. 1995. *After the Flood*. Chichester, UK: New Wine Press, 130-161, which documents and discusses historical records of human encounters with strange creatures during various centuries after Christ, involving detailed descriptions of wild animals that today would be called dinosaurs.
10. Woodward, S. R., N. J. Weyand and M. Bunnell. 1994. DNA Sequence from Cretaceous Period Bone Fragments. *Science*. 266 (5188): 1229-1232.
11. For more details, see “Dinosaur Protein Sequences and the Dino-to-Bird Model” on page 12.

Dr. Johnson is Special Counsel at ICR. Dr. Tomkins, ICR Research Associate, worked in academic research in genetics and genomics for 18+ years, 12 involving research in cloning and sequencing DNA from a wide variety of plants, animals and microbes. Mr. Thomas is Science Writer.

ICR EVENTS

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Education is a primary mission of the Institute for Creation Research. We seek to provide teachers with the tools they need to proclaim the accuracy and authority of God's Word, as well as the information to combat the errors that are rampant in our school systems.

One avenue for reaching teachers has been our attendance at the annual regional conferences held by the Association of Christian Schools International (ACSI)

for teachers and administrators. In recent years, ICR has been invited to more ACSI meetings, and this fall we will give at least 70 talks at the various conventions—including two keynote speeches (Dr. John Morris in South Bend, IN, and Dr. Randy Guliuzza in Minneapolis, MN).

This fall will also see the launch of Science Education Essentials especially to ASCI schools and science teachers. Attendees can visit the ICR booth to get their hands on this exciting new series of curriculum supplements.

ICR will have booths and/or speakers at the following ACSI conventions:

October 1-2: Portland, OR
Dr. Patricia Nason

October 8-9: South Bend, IN
Dr. John Morris, Keynote Speaker

October 15-16: Minneapolis, MN
Dr. Randy Guliuzza, Keynote Speaker

October 15-16: Kansas City, MO
Dr. Patricia Nason

October 22-23: Seattle, WA
Dr. Patricia Nason

October 22-23: Columbus, OH
Dr. Charles McCombs

October 29-30: Metro New York City
Dr. James J. S. Johnson, Frank Sherwin

October 29-30: Sacramento, CA
Dr. Patricia Nason

November 5-6: Sturbridge, MA
Dr. James J. S. Johnson, Frank Sherwin

November 12-13: Lexington, KY
Frank Sherwin

November 12-13: Raleigh, NC
Dr. Patricia Nason, Dr. Gary Parker,
Dr. Charles McCombs

November 23-24: Anaheim, CA
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November 23-24: Orlando, FL
Dr. Gary Parker

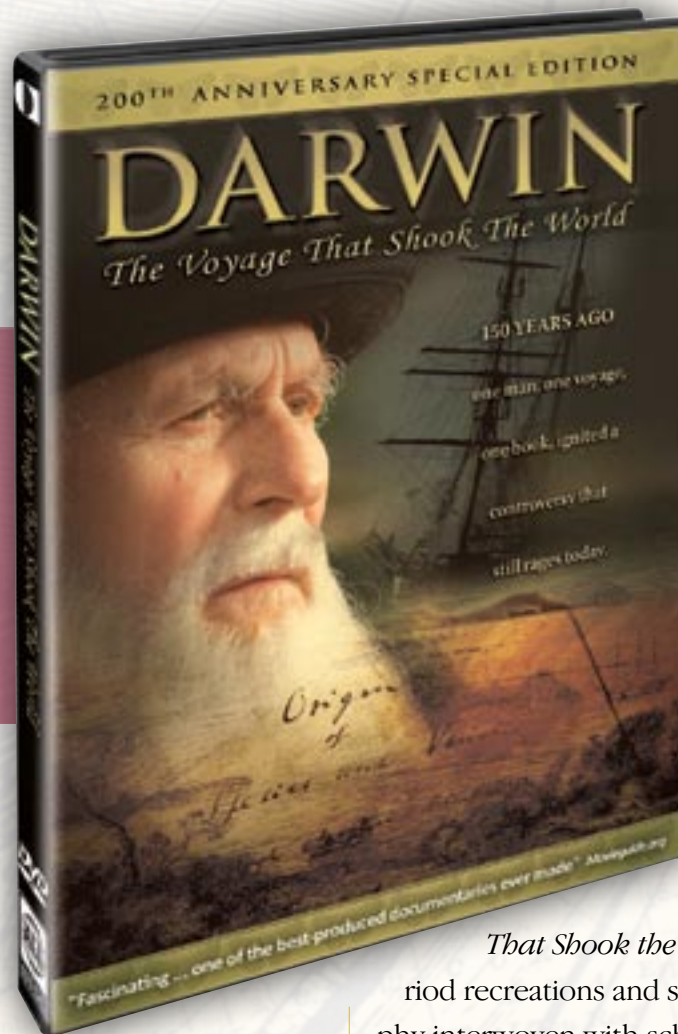
November 23-24: Dallas, TX
Dr. John Morris, Dr. Charles McCombs

November 23-24: Washington, DC

If you are an ACSI member, please visit our booth at your local convention and check the schedule for ICR's speakers. If you are a non-member and would like to attend, call 719.528.6906 or visit www.acsi.org for more information and the costs involved.



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OFFER GOOD THROUGH OCTOBER 31, 2009

The Connecting Power of Hands

RANDY J. GULIUZZA, P.E., M.D.

A boom in affordable housing in the 1950s was helped by the invention of a distinctive multifunctional piece of equipment: the backhoe. Its strong yet relatively slender articulated arm allowed precise yet rapid placement for digging or lifting. The manipulative device is trim and fast, since hoses transfer power *to it* from a powerful hydraulic pump within the main chassis.

The “arm” of the backhoe makes many people think the equipment design is similar to a human arm, but what makes it so versatile is that it is actually more like a giant human finger. If a valuable piece of equipment mimicking just one finger can be so useful, what capability is possible in a real human hand?

The Formation of Hands

That capability begins as an embryo reaches the end of the fourth week of gestation. A special patch of tissue on the budding limbs stimulates invading cartilage cells to become templates for future bone. Other signals induce muscle-forming cells to develop a muscle mass in the arm and hand. These masses automatically subdivide into twelve muscles of the forearm that act on the wrist and fingers, and nineteen intrinsic muscles of the hand that manipulate only fingers.

The hands are initially flat plates, with the cells making vital internal structures of fingers. The skin cells *between* fingers undergo a programmed cell death, allowing the formation of five separate digits arranged in the uniquely human hand pattern—right from the start. Muscular ability develops fast. By sixteen weeks an embryo can firmly grip a small rod, and at six months the fetal grip is so tight that he can be lifted by it.

Finger Flexing

To curl fingers, forearm muscles on the front pull tendons attached to finger bones

while muscles on the back concurrently relax. The reverse happens to straighten them. Both groups can pull simultaneously, working with intrinsic muscles, to hold fingers stiff.

Functions depend on coordinated control *and* on component arrangement. The tendon to the finger’s middle bone actually splits apart and allows the tendon for the bone on the tip to pass through the center of it. This allows the fingertip to flex independently while keeping both tendons tight to the finger bones.

Compared to animals, human behavior with hand tools is fundamentally distinct.

If a valuable piece of equipment mimicking just one finger can be so useful, what capability is possible in a real human hand?

Exclusive elements of hand movement are attained *only* when the unique human hand’s muscular configuration and the brain’s disproportionately large hand sensory and motor function centers *are integrated together*.

Grip: Manly or Microforce

The most important element of hand movement is *opposition*, meaning the ability to squeeze (such as between fingers and thumb or palm and fingers). While some weightlifters generate “bone crushing” grips, an average man’s grip is a respectable 100 pounds of force. To grasp something, people must subconsciously or purposively control three acting forces for the object, three tendencies for it to twist on an axis, and six mechanical variables for *each* finger (such as degree of participation).

Massive investments in brain capacity with direct projections to many hand muscles means that grip control combinations are

infinite and remarkably versatile. A construction worker can easily take one hand and curl three fingers around a bucket handle in a looser “endurance grip,” while the thumb can press a note card tight to the index finger and the pinky can hook a plastic sack. At the same time, the other hand can curl the last three fingers and press the palm firm over their fingertips locked in a “power grip” to carry a heavy hammer, while the thumb and index finger gently pluck up a potato chip without crushing it.

When it comes to either passively detecting or making *extremely* small movements, the fingers may be great, but the human thumb is extraordinary. This is due to a forearm muscle called the *flexor pollicis longus* (FPL), whose tendon independently bends the thumb’s tip. The FPL is not present in chimpanzees, gorillas, orangutans, or monkeys.

The human brain employs exquisite muscle motor commands over the FPL, especially at low levels of effort. Individual muscle fiber units can be recruited—in order—by very low rates of nerve stimulation to generate a finely graded thumb-tip twitch force of only 7/100 of an ounce. The same muscle units pull double duty as sensors to accurately estimate magnitudes of extremely low forces *against* the thumb—which underpins the superior accuracy of the thumb for highly skilled tasks requiring a “precision pinch.”

Fine Finger Movements

Fine manipulation is possible using just the fingertips. This results primarily from combining muscle actions of seven muscles that actuate the index finger, five major muscles unique to the thumb, and even three additional muscles dedicated to the pinky finger. Besides movement, the muscle-tendon networks of the fingers also store a measurable quantity of elastic energy that is monitored—independent of the nervous system—by analyzing how much the tendon network is deformed.



It is altogether fitting for the Lord Jesus to use the skill, strength, and awesome connecting power of hands to express His love.

Nonlinear mathematical computations, made *at the cellular level* to describe the network in a type of sophisticated “body logic,” act like power switches to regulate force production. This means hand muscles can be directed to perform like hydraulic rams, springs, or even force-dampening devices in just the right situations.

In addition, a seamless “muscle-sensor” continuum combines the muscle data with additional neural input on information such as spatial position and pressure from fingertips, nails, and fatty portions of the hand. The fingerprint structure of elevated curved and straight parallel skin ridges is an exquisite sensor that functions like a piece of corduroy fabric in which the ridges provide contact sensation but the directional nature of the fabric in each ridge is detectable.

This degree of control is vital to handling things using just fingertips, since fingertips must rapidly transition from three *mutually incompatible* actions to pick up objects—motion toward it, abrupt contact with it, and then an increasing but precisely-directed isometric force against it. Mathematical models show that the brain devises a time-critical *predictive* strategy that enables massive neural-muscular patterns to swap out the fingertip actions from “movement” to “pinch” in only about 60 *milliseconds* (about 1/6 the time it takes to blink an eye).

The brain calculates exactly how long to hold back executing the strategy so that fingertips start flashing through their

movement changes about 65 milliseconds right *before* contact. High speeds are attained as the nervous system controls only task-relevant muscular parameters but allows task-irrelevant ones to fluctuate. Neuromuscular control is so optimized that performance approaches the physical boundary of a hand’s capability. Recall this the next time your fingertips squeeze to crack an egg with about ten pounds of force and abruptly stop within the distance of the shell’s thickness—about 1/100 of an inch.

Finger Speed and Forward Planning

Human finger movements excel in precision and *speed*. The average time a person takes to make a common choice between two things is about half of a second. But rapid finger motions are much faster—in fact even faster than is physically possible using only the body’s sensor-to-motor loops. To obtain the highest possible finger speeds, sensors and conscious thought are augmented in the brain with an *anticipatory function* for individual finger movements called a *forward plan*, which is extraordinarily complex and significantly subconscious. Evidence shows that the central nervous system predicts the best outcome of every finger movement *several movements ahead* of its current state.

Thus, skilled typists will visually process up to eight characters in advance and then—in anticipation—the forward plan for muscle movements will commit the finger muscles to an action about three characters

in advance of actually striking the keys. Times between keystrokes are commonly as low as 60 milliseconds. Interestingly, speed is fastest if successive keystrokes are between fingers on opposite hands.

So imagine the quantity of mental data processed for a skilled pianist who can play 20-30 successive notes with each hand every second—about 40 milliseconds apart—since the nervous system executes a forward plan (prescribing speed, direction, pressure, duration, etc.) for *every* finger *simultaneously* and updates all plans after *every* successive finger movement. The plan is compiled in the cerebellum, which may, if needed, retain memory of the plan (one or several varieties). This becomes an integral part of skilled learning. So far, no limits have been found on the number of plans that can be kept in memory.

Conclusion

The astounding performance of human hands allows them to excel in an even more powerful way—hands connect. Hands are a main avenue to express creativity and feeling (including conveying language), are the primary apparatus to implement a person’s will, and coupled with eyes become the principle sensors for self-awareness. Thus, they are a vital link to connect a person’s inner immaterial spirit to their physical body. They can connect a person to a loved one with a caress and then to the rest of the world—mostly through work.

It is altogether fitting for the Lord Jesus to use the skill, strength, and awesome connecting power of hands to express His love. He promises that His hand will guide (Psalm 139:10), uphold (Isaiah 41:10), and faithfully keep His own in His powerful grip (John 10:28). ●

Dr. Guliuzza is ICR’s National Representative.





Dinosaur Protein Sequences and the Dino-to-Bird Model

J E F F R E Y T O M K I N S , P H . D .

Evolutionists have maintained that the fossil record supports a long-ages history for earth, but material extracted from dinosaur bones is providing an interesting challenge to that theory. The recent discoveries of soft dinosaur tissues, defined cell matrices, elastic blood vessels, and clearly observable cell microstructures such as cell nuclei have been a source of both shock and excitement to the paleontology community.

The shock comes from the fact that degradative processes somehow did not completely destroy all evidence of tissue from the supposedly millions-of-years old fossils. The excitement comes from the fact that, given the pristine state of these tis-

sues, scientists should be able to extract macromolecules. These would then be used in studies of molecular evolution to bolster the evolutionary ideas that are competing for supremacy in the scientific community, such as the currently touted “dinosaur to bird” transition model.

In fact, soft tissues from the bones of a *Tyrannosaurus rex* and a *Brachylophosaurus canadensis* (duck-billed hadrosaur) did yield protein fragments that were subjected to amino acid sequence analysis and then used in theoretical computational analyses.^{1,2} But did the data demonstrate a dinosaur to bird transition, or was it possibly manipulated in the spirit of academic politics?

The First Protein Sequences

A protein is a chain of amino acids and, generally speaking, is the functional end-product of a gene. Evolutionary scientists commonly use both DNA and protein sequences in comparative analyses, comparing the same type of gene or protein sequence between organisms to determine how closely related one is to another. Two organisms are considered closely related if they share a high percentage of amino acid sequence similarity for a certain protein. Evolutionary tree diagrams can be constructed based on this concept of sequence similarity, with the branches and grouping of organisms supposedly indicating their evolutionary relationships.

As things stand, the dinosaur proteins that were characterized are largely controlled by the dinosaur-to-bird proponents. Jack Horner, a world-renowned paleontologist, is a leading figure in this group. His faith in the dino-to-bird concept is so strong that he recently published a book describing how one might possibly reverse-engineer a dinosaur by modifying key developmental genes in the chicken genome.³ Dr. Mary Schweitzer, one of his colleagues and his former graduate student, is the leading scientist in the United States working with dinosaur soft tissue. Dr. Schweitzer and protein biochemist John Asara have led the effort to research and publish the dinosaur protein sequence findings.

The first protein sequences to be characterized and analyzed were collagen proteins from a *T. rex* femur bone, in which a number of papers were published describing both the soft-tissue and protein data.^{4,5,6,7} Collagen is a very durable protein that is common to most animals and is found in skin, bone, and other connective tissue.

In general, the scientific community found very little to dispute regarding the presence of real dinosaur tissue such as blood vessels and intact bone matrix, clearly defined cell types, and clearly defined cell microstructures such as nuclei and filipodia (osteocyte tendrils). The recently published *T. rex* collagen sequences, however,

have met with some legitimate criticism from scientists who specialize in protein characterization and analysis techniques.

Protein Sequence Methodology

In order to understand their criticisms, it is important to know something of protein sequencing methodology. First, proteins are isolated and separated into subgroups based on their various masses. Then they are chopped into small fragments using an enzyme called *trypsin*. The trypsinized fragments are then run through a highly specialized instrument called a mass spectrometer, which determines the mass of each protein fragment (peptide) in the sample.

A tandem mass spectrometer setup will not only determine the mass of the trypsin fragments in the initial sample, but will also send them through a second mode where they are physically fragmented further and the mass of these sub-fragments is also determined. Peptide mass databases are then searched for matching fragment sizes for all data collected. Using a specialized algorithm on the sub-fragment data, it is possible to computationally assemble the actual amino acid sequence of a sizeable peptide fragment.

The first accusation against the *T. rex* protein sequences was that they were too small and had possibly suffered too many chemical modifications to be reliable.^{8,9} It was also pointed out by critics that the lab that published the protein

sequence data did not indicate if or how they controlled error rates, such as the discovery of false positives.⁹ Establishing the proper experimental controls and statistical measures for the presence of false positives is essential to providing an accurate protein sequence, especially for ancient proteins. As one journal article that critiqued the protein data stated, “Extraordinary science requires extraordinary proofs.”⁹

A Dino-to-Bird Filter

Based on reported experimental methods and deduced peptide sequences, error rates would have been unacceptably high for all but one of the sequences the researchers reported. By ignoring error rates, one could choose from among hundreds of peptide fragments in a database those that most closely resemble bird proteins. In fact, a number of dinosaur protein fragments were chosen with 100 percent amino acid similarity to that of chicken collagen. One published critique quipped, “Maybe *T. rex* was a chicken after all.”⁹

Those sequences of high enough quality to be usable were then analyzed using dino-to-bird evolution as a filter.¹⁰ Interestingly, an external laboratory re-analyzed the data using a computational technique called Neighbor-Net analysis that was better suited to the type of data collected.⁸ Their results showed that the *T. rex* protein

Did the data demonstrate a dinosaur to bird transition, or was it possibly manipulated in the spirit of academic politics?

grouped more closely with amphibians and did not show a close relationship with either chicken or ostrich—two birds that evolutionists like Jack Horner claim actually have dinosaur genomes with just a few minor differences to make them birds.

Having said all that, there is no doubt that fragments of real dinosaur proteins were obtained, because antibody experiments conclusively identified collagen in the tissue samples. The problem is that the quality of the samples was very poor, fragment identification did not properly account for error, and the evolutionary analyses appear to have been manipulated to support a politically correct dinosaur-to-bird model.

The more recent hadrosaur collagen sequencing appears to have been handled with more care in the lab side of the project, and peptide sequences of much larger size were reported and submitted to the public databases.² So far, there has not been much time for critical responses to have been published, but it appears that the ancient protein recovery and sequencing techniques have improved. However, once again the dinosaur sequences are represented as being closer to chicken and ostrich than even other reptiles.

Where Is the Data?

At the Institute for Creation Research, a number of preliminary protein alignments have been done using different algorithms at a variety of alignment/gap parameter settings. In these studies, the large *T. rex* peptide fragment and the hadrosaur protein sequences typically align more closely with a variety of animals other than chicken. The ostrich sequence was generated in-house by the Schweitzer-Asara group and, rather oddly, has never been submitted to any of the public protein database repositories. This is also the case with the alligator collagen sequence they developed in-house.

At the time of this article, DNA/protein database searches at both the National Center for Biotechnology Information and the European Molecular Biology Laboratory have contained no alligator or ostrich collagen sequence. While it is possible to obtain the ostrich and alligator sequence data from material on the Internet posted as supplements to publications, why has the data not been submitted to any of the major public databases so it can be cataloged, annotated, and curated? This seems a little odd, considering that the researchers readily submitted all of the possibly errant *T. rex* sequence to the public databases.

Based on comments about hypothetical sequences being utilized during the procurement of the ostrich data (which also included real mass-spec data), how does one know if the ostrich sequence wasn't manipulated in the process to be more dinosaur-like? The au-

thors do state that the hypothetical ostrich sequence developed was based on a dino-to-bird transitional model.¹

Conclusion

Although the supposedly 90 million-year-old hadrosaur collagen sequence appears to have been interpreted within the assumption of dino-to-bird evolution—a concept that a number of other leading evolutionists do not share—the fact that real tissue and proteins have been found seriously brings into question the whole concept of evolution and its required long ages. The remarkable preservation of these tissues found in sedimentary rock (sandstone) really speaks of only one thing: a rapid burial in a catastrophic worldwide flood as recorded in the Bible.

In fact, even evolutionists have contemplated the implications, as illustrated in the quote below from Jack Horner's recent book. The setting for this excerpt is a conversation between Dr. Horner and Mary Schweitzer when she was his graduate student. Schweitzer had just discovered

and verified the presence of intact dinosaur tissue and was relaying the news to her mentor.

When Mary was first working on this material, she called me up to say she had found osteocytes. I assumed she meant the spaces where the osteocytes would have been, which is what I suggested.

"No Jack, actually we have the cells and they have filipodia and they have nuclei."

"Mary, the freaking creationists are just going to love you."

"Jack, it's your dinosaur."¹¹

That about sums it up! ●

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Dr. Tomkins is Research Associate at the Institute for Creation Research.



The remarkable preservation of these tissues really speaks of only one thing: a rapid burial in a catastrophic worldwide flood as recorded in the Bible.

A Classic Polystrate Fossil



Photo credit: Ian Jubly

J O H N D . M O R R I S , P H . D .

Years ago, *National Geographic* published a remarkable photograph of a polystrate fossil, a fossilized tree that extended stratigraphically upward through several layers of rock in Tennessee. Its roots were in a coal seam, and the overlying deposits included bedded shale and thin carbon-rich layers. An advocate of any form of uniformitarianism would believe that it took many, many years to deposit this sequence of layers (much longer than it takes for a tree to grow and eventually die and decay), yet one vertical fossil extends through them all. This one fossilized tree offered a direct contradiction to the evolutionary mantra that “the present is the key to the past.”

The specific strata surrounding the fossil provided a history. According to uniformitarianism, many years are required for a thick layer of peat to accumulate in a swampy environment. This type of location is quite different from the marine environment in which tiny shale-sized particles are deposited. Over “millions and millions of years” of heat and pressure generated by the subsequently deposited overlying marine sediments, the peat is thought to have metamorphosed into coal.

The tree was a mature tree, yet could not have grown in the location where the surrounding shale was deposited, since trees don’t live long under the sea. Furthermore, the time required for shaley sediments to accumulate must be added to the tree’s lifespan, as must the time to deeply bury the coal precursor and create the pressure to generate enough heat to alter the peat into coal. No scenario possible today could account for this sequence of events if evolution’s interpretation of earth history is true.

Creationists immediately recognized the educational value of this remarkable fossil, but evolutionists routinely ignore it. The name *polystrate* (“many layers”) is used only by creationists. You will seldom find it in the standard literature, even though the related concepts are easily grasped.

Unfortunately, *National Geographic* requires a not-insignificant fee for the use of its photographs, and only on occasion was this one used by creationists. The fossil looked rather fragile, and since many polystrates are known, we never tried to go to the site and relocate this particular one.

Recently, however, creationist Ian Jubly decided to try and track it down. Much to his surprise, it was still there, looking even better than ever. But there’s more—the fossilized tree stood in the neighborhood of numerous other trees. It suggests a significant dynamic event that uprooted, transported, and buried many trees in an upright position.

Just such an event happened at Mount St. Helens in 1980, when an eruption toppled a standing forest. The tree trunks were deposited in Spirit Lake. After a few years of waterlogging, the trunks sunk roots down, in life’s position but not life’s location. Today there are tens of thousands of upright trees standing on the bottom of the lake. They are being engulfed by fine particles of volcanic ash and clay, and if the underlying organic layer of bark were heated by a future eruption, it would likely metamorphose into coal and duplicate the scenario revealed in the photo.

The eruption at Mount St. Helens taught us much about the effects of dynamic processes. It provided a model for deciphering unseen past geologic cataclysms, and produced effects which before had puzzled us.

Our understanding of possible events during the great Flood of Noah’s day was substantially expanded, including that rapid deposition of sediments and burial of fossils could be expected during such a deluge. The more evidence that science uncovers, the more it supports the biblical account of earth’s history. ●

Dr. Morris is President of the Institute for Creation Research.



Photo credit: Ian Jubly

The field of biology has provided much support for a recent creation, and physical evidence of very young-looking biological materials from supposedly ancient fossils continues to accrue from around the world, and from various depths under the earth.

In August of this year, paleontologists in Trowbridge, Wiltshire, England, made a discovery that astounded the evolutionary community. A “150 million-year-old” squid was discovered with an intact ink sac. “It is difficult to imagine how you can have something as soft and sloppy as an ink sac...inside a rock that is 150 million years old,” said Dr. Phil Wilby of the British Geological Survey.¹ Creationists agree and see this as physical evidence that clearly points to its recent burial and preservation.

“Living fossils” present another kind of dilemma for deep time. Sharks, horseshoe crabs, crinoids, Wollemi pine trees, tuataras, crocodiles, vampire squids, chambered nautiloids, brachiopods, clams, dragonflies, lungfish, and hundreds of other animals and plants have stayed the same over “millions of years,” despite significant shifts in their environments and supposed eons of nature-selecting mutations. But living fossils make better sense when viewed from a young-earth creation perspective, wherein natural selection does not generate new forms, and living creatures *ought* to look similar to their fossilized relatives.

In the past few decades, Darwin-unfriendly discoveries have been made of genetic material (DNA) that is supposedly from very old sources but is found in relatively pristine condition. For example, evolutionist Sangtae Kim discovered DNA sequences from Miocene fossils (supposedly over 5 million years old) and said, “This paper confirms that DNA



Squid Fossils, Ancient DNA, and a Young Earth

FRANK SHERWIN, M.A.

sequences can be obtained from Miocene-age plant remains.”² And “plants, bacteria, mammals, Neanderthals, and other archaic humans have had short aDNA [ancient DNA] sequences identified.”³ How can DNA be so intact after so long, with what is known about DNA decay rates?^{4,5}

Other samples of viable DNA have been extracted from frozen tissue dated thousands of years old by evolutionists. The energy powerhouse of the cell is called the mitochondria and it contains DNA termed mtDNA. In 2008, samples of mtDNA were extracted from a frozen human discovered in the Alps in 1991. Called the Tyrolean Iceman, he was dated at over 5,000 years old. The DNA was completely and successfully sequenced.⁶

Speaking of cold temperatures, deep ice cores have been taken from southern Greenland permafrost. Insect and plant materials re-

covered from them have revealed clean DNA sequences.⁷ Antarctic ice cores may reveal more DNA samples.

Not only is DNA found where it should not be if evolutionary ages are true, but still-living microbes have been extracted from ancient earth materials. A leader in this fascinating field is evolutionist Raul Cano of the California Polytechnic State University. His work frustrates evolutionary biologists, who maintain that the earth is very old, and therefore consider that his otherwise astonishing results are actually contaminated with recent bacteria. However, other evolutionists have been making similar discoveries.⁸

It would seem that many scientists are putting the cart before the horse—embracing long ages before they consider the physical evidence that shows otherwise.⁹ Pristine DNA from these supposedly ancient materials is predicted by the creation model, which numbers the earth’s years in the thousands rather than millions. ●

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Mr. Sherwin is Senior Science Lecturer.



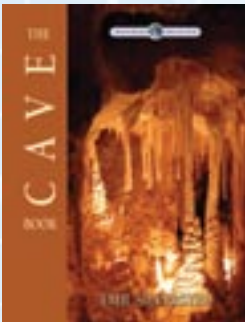
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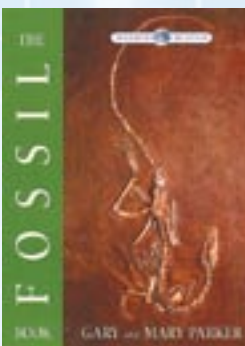
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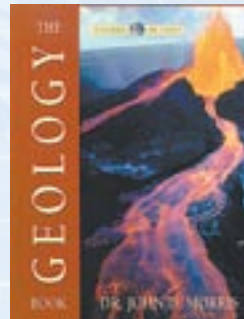
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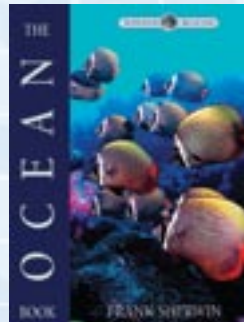
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Can Life Exist on Other Planets?

DANNY FAULKNER, P.H.D.

Many people make a distinction between the origin of life and the evolution of life. In this view, biological evolution refers to the gradual development of the diversity of living things from a common ancestor, while the ultimate origin of life is a separate question.

This is a legitimate point, but evolution is about much more than just biology. The evolutionary worldview is that all of physical existence, both living and non-living, arose through purely natural processes. With this broad definition of evolution, abiogenesis—the spontaneous appearance of life from non-living matter—is a necessity. If life did arise on earth by itself, it would be inconceivable that this is the only planet upon which there is life. Otherwise, the earth would be a remarkably special place, and that could easily lead to theistic ideas. Consequently, most evolutionists believe that life must exist elsewhere in the universe.

A Powerful Test

The creation worldview is very different, because, as usual, we start with very different assumptions. We believe that life exists on earth because God

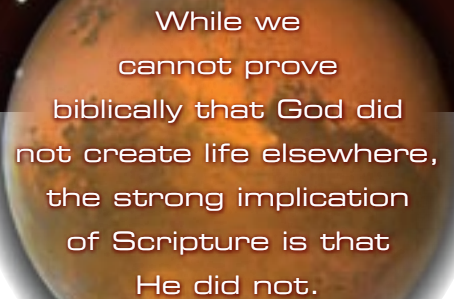
created life here, but He first had to fashion the earth to be a suitable habitation for life. The evolutionist must believe that life is inevitable wherever conditions are suitable for life, but creationists understand that even if conditions on another planet could sustain life, life there is not possible—unless God created life there or permitted life somehow to travel to that planet from earth.

While we cannot prove biblically that God did not create life elsewhere, the strong implication of Scripture is that He did not. These very different predictions of the special creation and evolution models mean that the search for life elsewhere amounts to a powerful test between the two theories of origin.

Looking for Life on Mars

In recent years, there has been much discussion in astronomy circles over the search for extraterrestrial life, so much so that a new term has been coined for this study: astrobiology. Since there is yet no evidence that life exists elsewhere, astrobiology is a science for which there is no data, or at least no data in support of the science.

Since there is no support for the contention that life exists elsewhere, much attention has been di-



While we cannot prove biblically that God did not create life elsewhere, the strong implication of Scripture is that He did not.

verted to searching for planetary conditions favorable for life. Mars has been the focus of this attention for a very long time. Mars is about half the size of the earth, and it has at least a thin atmosphere. Water exists on Mars, though likely not in abundance, and what water it does possess is in vapor or solid form. The temperature and atmospheric pressure on Mars are far too low to sustain liquid water.

The Viking craft that landed on the surface of Mars in 1976 contained three very robust experiments to detect signs of life. Two of the experiments showed no evidence of living organisms; the third experiment had weak but ambiguous data. Even the most optimistic searchers for extraterrestrial life agree that these slightly positive indications probably were the result of inorganic chemical reactions in the soil. Besides the bitter cold and sparseness of water, there are other impediments to life on Mars today. For instance, the thin Martian atmosphere provides no protection to solar ultraviolet radiation, which is lethal to living things. With these problems, interest in life on Mars has waned, though some hope is still held and many think that life may have existed on Mars in the past.

A Martian Flood

In recent years, the Mars Express Orbiter detected methane in the Martian atmosphere. Methane is a gas frequently produced by living things, though it can also form inorganically. The gamma ray spectrometer aboard the Mars Odyssey Orbiter detected a significant amount of hydrogen in the top few feet of the surface of Mars, a likely indication of abundant ice. The famous rovers Spirit and Opportunity produced conclusive evidence that liquid water once existed on the Martian surface. This latter point is confirmation of what we have known for decades—photographs from orbiting spacecraft had shown numerous features that are best interpreted as there having been much liquid water on Mars in the past. This would require Mars to have once had a much more sub-

stantial atmosphere than now, an atmosphere that provided enough pressure and warmth to sustain liquid water.

This has exciting possibilities for creationists. First, secular scientists have concluded that Mars, a planet with no liquid water, once experienced a near global flood, all the while denying that such a thing could happen on earth, a planet with abundant water. Second, many creationists think that the earth's atmosphere underwent tremendous change at the time of the Flood. Obviously, at least one other planet did experience a catastrophic change in its atmosphere as well.

Liquid Water, the Gold Standard

Notice that water figures prominently in the study of astrobiology. As the universal solvent, water is absolutely essential for life, making up the majority of the mass of many organisms. And water is one of the most abundant molecules in the universe. While water has been directly detected throughout the universe (even in the outer layers of cool stars!), we have *never* found *liquid* water anywhere in the universe. Liquid water is the gold standard for living things, for it appears that life is not possible without it. However, while water is a necessary condition for life, it is far from a sufficient condition for life—much more is required.

A few years ago, a stir was caused by the announcement of the possibility of a small ocean of liquid water beneath the surface of Europa, one of the larger satellites of Jupiter. Much of the case for this water relies upon surface features of Europa—there are large fractured segments that resemble features of polar ice pack on earth that result from upwelling water freezing between fractures. In addition, if the water were salty, it would help explain Europa's magnetic field. Since then, a similar argument has been put forth for Ganymede, another large satellite of Jupiter, though that case is not nearly as strong. Additionally, water vents on Enceladus, a medium-sized satellite of Saturn, have implied liquid water beneath its surface.

Many scientists now view Europa's possible subsurface ocean as the most likely place in the solar system to find life outside the earth. This ocean, if it exists, is very dark and likely is very cold. A few decades ago, living organisms in such a place would have been unthinkable. However, we have found organisms living in very hostile environments, such as hydrothermal vents deep in the earth's ocean. Furthermore, subsurface lakes exist far beneath the Antarctic ice sheet. The largest and most famous of these is Lake Vostok, 2.5 miles beneath the ice. While we don't know if life exists in these lakes, many scientists want to find out. They reason that if life could exist in the cold and dark of these terrestrial lakes, why could life not exist inside Europa?

Conclusion

For a long time, evolutionists thought that life on earth first evolved in warm, very hospitable pools and then colonized more difficult environments. Now many evolutionists think that life began at the margins, in very hostile locations, and then migrated the other direction to better locations.

Much of the motivation for this complete reversal in thinking stems from the need to find life elsewhere. As creationists, we ought to welcome the search for extraterrestrial life. We are confident that the experiments will continue to produce null results that verify our theory of origin while disproving the evolutionary theory of origin. ●

Dr. Faulkner is Professor of Astronomy/Physics at the University of South Carolina Lancaster.



LETTERS TO THE EDITOR

We are in agreement and endorse your [Demand the Evidence] conferences in October to November. We are in prayer for you, brethren....I have been forwarding the *Days of Praise* daily publication every evening to fifty pastors and workers and they are using it in their ministries.

— S.F.S., *Philippines*

I am an interpretive park ranger....I do programs for thousands of people each year. I was originally a “theistic evolutionist,” but in recent years newer research from a Christian perspective, including yours, has helped me to see the sciences with new eyes. I see now how many large holes there are in secular theories that I once thought were undisputed in the scientific community. Thank you for your work.

— P.M.

Thank you so much for *Acts & Facts*. The articles stimulate my understanding of creation science and stir up a heart of praise for God and His marvelous works!

— K.P.

I was a biology major last year and I’m now an environmental science major and I appreciate every resource I have to help show my professors and those around me that God is the Creator of our universe! I love love LOVE science, but as long as it gives the glory to God, and *Acts & Facts* has been a great resource thus far and I hope it will continue to bless hundreds upon thousands of people!

— C.S.

Last year I taught anatomy and physiology and found that the articles on temperature control in humans and the control of the fetus of its own development inside its mother were among the articles that were very helpful. It seems difficult to come by this sort of information at the high school level; we see little of it in any of our textbooks. So this is a great service and I shared some information with my classes. It enhanced learning for all of us, I believe

— G.C.

Editor’s Note: If you would like to read “Balancing Body Temperature,” “Human Gestation,” or other articles by Dr. Randy Guliuzza on the complexities of the human body, visit our website at www.icr.org and type “Made in His Image” in the Search field. Visit www.icr.org/essentials for additional K-12 teaching resources.

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This month on “Science, Scripture, & Salvation”

WEEKEND OF OCTOBER 3

Created Gender

Did distinct genders start evolving millions of years ago, or did God create male and female in the beginning? Don’t miss this interesting program as we discuss God’s purpose for gender in the family unit and explain why the existence of different sexes in an evolutionary setting would not be advantageous to survival.

WEEKEND OF OCTOBER 10

Columbus and the Flat Earth Myth

Did you know that Columbus did *not* think the world was flat? Furthermore, the idea that fifteenth-century people believed in a flat earth was actually made up in 1830! This myth is being used against creationists, but how? Sail away with us this week as we discover the facts about Columbus and the flat earth myth.

WEEKEND OF OCTOBER 17

Myths We Believe

At times we hear stories that seem too incredible to be true. Urban legends have been around a long time, and so have other myths and old sayings that we somehow fall for hook, line, and sinker! Tune in and discover how some of these myths and superstitions can actually be harmful to us as Christians and to society as a whole.

WEEKEND OF OCTOBER 24

Science Misconceptions

You’ve probably heard the old cliché “truth is stranger than fiction.” Perhaps this is one reason why we’re so prone to accept some popular ideas as science *fact* when they’re really science *fiction*! Listen in as we discuss popular science misconceptions and uncover the truth about these beliefs

WEEKEND OF OCTOBER 31

Autumn Leaves

Without doubt, the most awe-inspiring sight in fall is the vibrant colors of plant and tree leaves. What causes this phenomenon and why do the northern and eastern states enjoy it the most? Why not grab some apple cider and join us as we learn about changing autumn leaves and God’s marvelous hand in creation!

To find out which radio stations in your city air our programs, visit our website at www.icr.org. On the radio page use the station locator to determine where you can hear our broadcasts in your area. You can also listen to current and past *Science, Scripture, & Salvation* programs online, so check us out!

Ministry Mindset in the Land of the Midnight Sun

HENRY M. MORRIS IV

The opportunities provided by our Lord to the Institute for Creation Research never cease to amaze us. ICR experiences this on a continual basis in a multitude of areas. Whether they are new opportunities to speak, new educational programs to teach, or the personal testimonies we receive of lives transformed for Christ, we are blessed and humbled by God's guidance. Perhaps His guiding hand is especially seen in His gracious provision for us, which oftentimes springs forth from the most unexpected places.

Such was the case when ICR received most welcome help earlier this year from several longtime supporters in Alaska. At the time, we felt compelled to visit these fellow laborers to personally thank them for their generosity, but did not have the opportunity to make such a trip. So this was made an item of prayer, and "in due season" (Galatians 6:9), the Lord was faithful to provide a way. And not only did He present the chance for a group from ICR to fellowship with these supporters in Alaska, He also opened doors to visit many other partners that were spread across four additional states! Truly, His "thoughts are not your thoughts, neither are your ways [His] ways" (Isaiah 55:8)! By the time this article goes to press, we will have returned, Lord willing, from our long trek,

which began in San Francisco at the kick-off meeting for ICR's Yosemite Creation Tour, and then moved to sites in Oregon, Alaska, Washington, and Colorado.

A trip of this magnitude requires much planning, and our research brought to light several fascinating aspects related to Alaska in particular. Naturally, we were struck by the utter immensity of this great state—our home state of Texas (huge in its own right) would easily fit inside *half* of Alaska. And the vast distances that lie between our Alaskan supporters, many in remote locations, were also astonishing. ICR counts it a privilege to send materials to subscribers in Dutch Harbor (of *Deadliest Catch* TV fame) on the southern tip of the Aleutian Island chain, to Point Hope on the northwestern coast inside the Arctic Circle, and all points in between. The good news of our Savior's message, as seen through the study of His majestic creation, has indeed spread to the "uttermost part of the earth" (Acts 1:8).

And yet, the most surprising discovery was that a significantly higher percentage of Alaskan subscribers support ICR financially than subscribers in the "lower 48" states. Statistically, Alaska is one of the least religious states in the U.S.,¹ but nearly 40 percent of our individual subscribers and a remarkable 62 percent

of our church subscribers in that state partner with ICR to see that our ministry continues. Granted, as one of the least populated states in the U.S., the number of Alaskan subscribers is not large to begin with, so this could certainly be an anomaly. But this naturally begs the question....why does this group support ICR's work in higher percentages than good, God-fearing, Bible-believing Christians in other locales?

Unlike Scripture, derived statistics can never provide a sure answer. But we suspect that our Alaskan supporters may possess a more focused perspective on things of eternal value—the byproduct of which is a sensitive mindset for ministries like ICR that uphold the authority of God's Word. What are you doing to further His Kingdom on this earth while He tarries? May I suggest joining your Alaskan brothers and sisters by investing in our ministry? I believe they would wholeheartedly agree. ●

Reference

1. Alaska, Denominational Groups, 2000. *State Membership Report*. Posted on thearda.com. According to statistics collected by the Association of Religion Data Archives, only about 39 percent of Alaska's residents were members of religious congregations

Mr. Morris is Director of Donor Relations.



God's Holiness Demands a Perfect Creation

HENRY M. MORRIS III, D.M.I.N.

The holiness of God is what drives and limits His revelation of Himself to His creation. Scripture is consistent. Holiness is God's fundamental nature, and that unique nature so permeates what God is and does that no action or thought from the Godhead can override it. The majestic seraphs so tantalizingly described in Isaiah 6 and Ezekiel 1—those four unique “living creatures” standing in the presence of the Creator (Revelation 4)—continually speak of the thrice-holy nature of God as they breathe.

Humanity will never know holiness until the new heavens and the new earth. We may well experience righteousness in our lifetimes as our hearts long for the presence of the holy God, but God's holiness—God's perfection—can only be believed.

God's holiness demands that only God can be the source of truth.

Because of His holiness, God cannot lie (Hebrews 6:18), and whenever God reveals anything, He must reveal the truth about Himself and His nature. The Creator God is “Truth” (John 14:6) and the originator of “Lie” is the Archenemy, Lucifer (John 8:44). The opposite of truth, even though it may contain partial truth, is the active agent that opposes God's truth as it is revealed to His creation.

This, of course, is the crux of all rebellion against God.

- Lie opposes the revelation of truth in the created things (universe).
- Lie opposes the revelation of truth in the written Word (Scripture).
- Lie opposes the revelation of truth in the new creation (salvation).

Whenever partial truth is presented as *the* truth, even if it is mixed with truth or just merely incomplete, that partial presentation is a lie. The Bible is very clear in this message: “God is light [truth], and in him is no

darkness [lie, untruth] at all” (1 John 1:5). That biblical axiom is true whether applied to scientific research, educational philosophy, theological speculation, or heretical doctrine. Jesus Himself laid claim to that absolute when He said, “I am the way, the truth, and the life” (John 14:6).

God's holiness demands that He “be” and “do” truth.

Therefore, the Creator God must reveal truth and cannot “be” untruth. When God speaks, He must speak truth. When God acts, God must act without “doing” error. One of the titles by which Jesus Christ is eternally known is “Faithful and True” (Revelation 19:11). God's holiness demands that the creation not distort anything about God—or about the creation itself.

God could not create a lie—He could not make anything that would inexorably lead us to a wrong conclusion. Nor could He create processes that would counter His own nature—or that would lead us to conclude something untrue about Him.

Evolutionary mechanisms are, by their very nature, both random and nonfunctional. Nothing in naturalist theory “directs” evolution. Vast eons of time, in which chaos “works” and during which death “weeds out” the ineffective, are thought to somehow produce processes and systems of apparent design. No god in this system exists to create anything.

Christians who seek to harmonize the biblical revelation of a holy God with the antithetical evolutionary theories are constructing dangerous hybrids that blaspheme the very God they insist they believe in. May God protect us from such thinking. ●

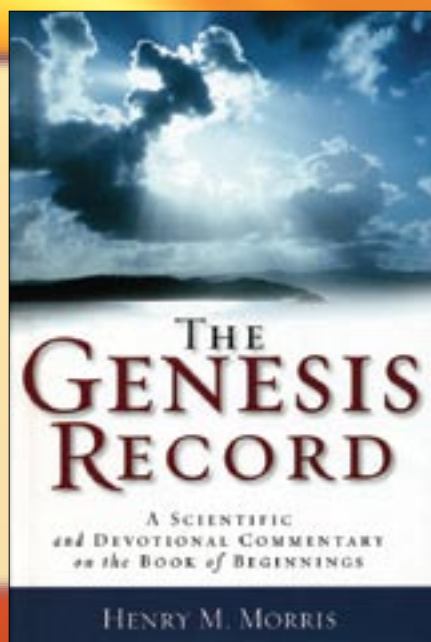
Dr. Morris is Chief Executive Officer of the Institute for Creation Research.



HOLY, HOLY, HOLY, LORD GOD ALMIGHTY.... THOU ART WORTHY, O LORD, TO RECEIVE GLORY AND HONOUR AND POWER: FOR THOU HAST CREATED ALL THINGS, AND FOR THY PLEASURE THEY ARE AND WERE CREATED.

REVELATION 4:8, 11

Explore Time's Beginning and Ending with Dr. Henry Morris

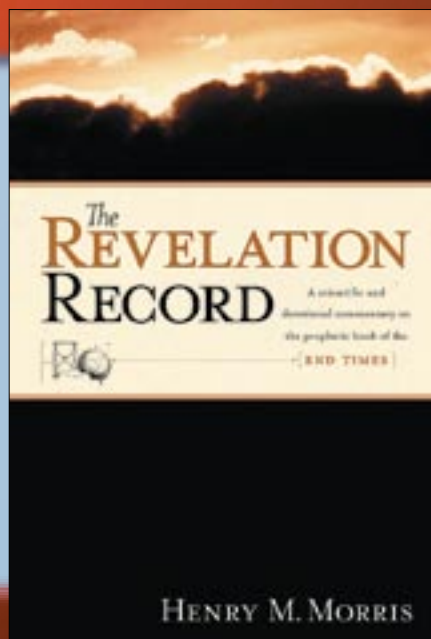


The Genesis Record is probably the most widely-used complete modern commentary on the foundational book of the Bible. ICR founder Henry M. Morris brought his considerable gifts as writer, researcher, and scientist to bear on a comprehensive scientific and devotional examination of this often-misinterpreted book of beginnings.

With its narrative-type exposition, it is easy to understand, yet has per-

suasive answers to scientific difficulties and other problems, showing Genesis to be literally and historically accurate throughout. Useful to both the theologically trained and the layperson, this hardcover book—with appendixes, maps, and indexes of subjects and Scripture references—is a “must” for the library of any serious student of the Bible.

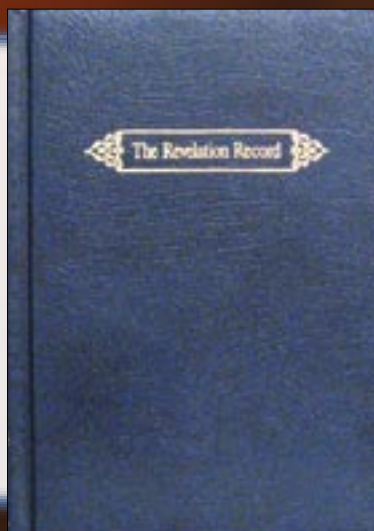
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Published in 1983, this hardcover book serves as a sequel to Dr. Morris' *The Genesis Record*, with an in-depth examination of Revelation's prophecies concerning the climactic culmination of human history. Both Jerry Falwell and Tim LaHaye, in their respective forewords, recognized it as the most literal of all commentaries on Revelation, demonstrating its scientific feasibility as well as its relevance to the last days.

This scientific and devotional book is a must-read for those who wish to understand God's revealed Word from beginning to end. Jesus gave signs for His return, charging His disciples to “watch and pray: for ye know not when the time is” (Mark 13:33). In these perilous times, every Christian needs the knowledge and assurance that can only come from God's Word.

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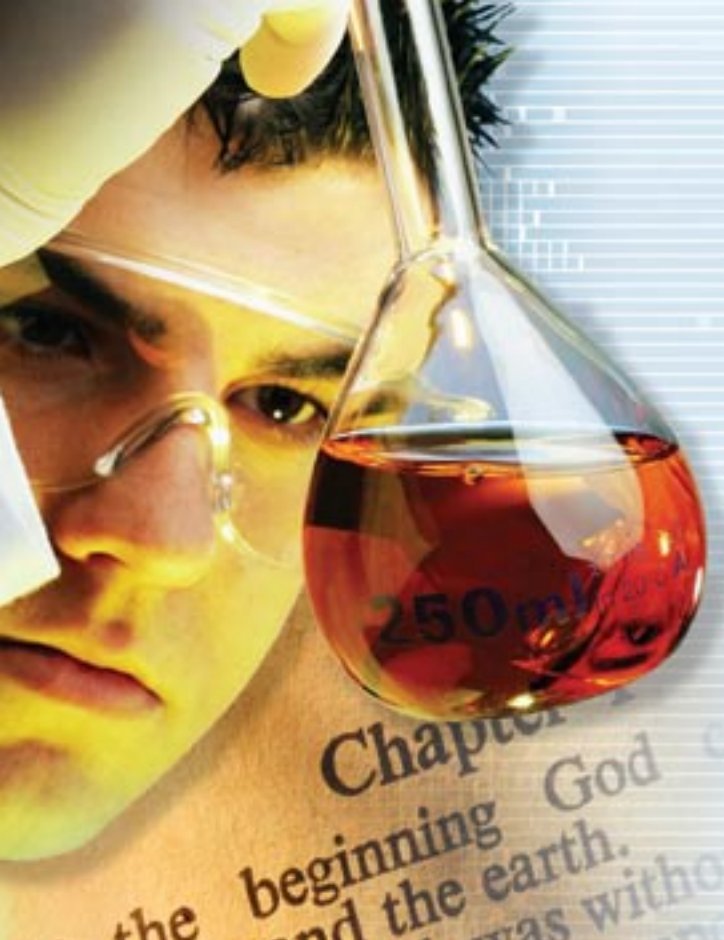
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Chapter 2
1 In the beginning God created
2 And the earth was without
void; and darkness was upon
the deep. And the Spirit of
the Lord was upon the waters.
3 And God said, Let there be
light: and there was light.

Renewing Minds, Defending Truth, Transforming Culture

“ICR exists not just to bring *scientists* to Christ,
but to win *science* back for Christ.”

DR. HENRY M. MORRIS

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