

ACTS & FACTS

INSTITUTE FOR
CREATION RESEARCH

ICR.org

JANUARY 2021

VOL. 50 NO. 1



Pterosaurs Didn't Have Feathers

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Unity Worthy of Our Creationist Heritage

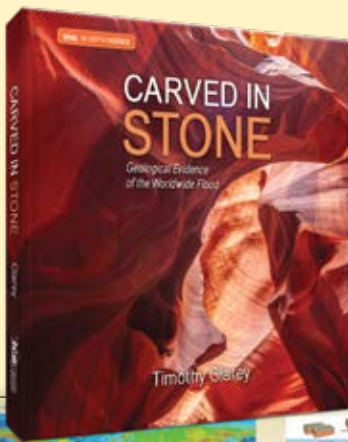
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Grand Canyon: Exposing the Flood

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ICR IN-DEPTH SCIENCE

CARVED IN STONE Geological Evidence of the Worldwide Flood

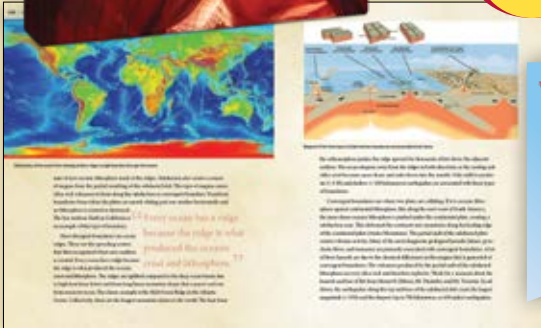
Dr. Timothy Clarey

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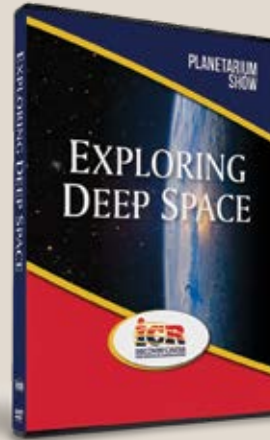
WORLD magazine's
short list for 2020
Science Book
of the Year!



Genesis records a worldwide cataclysm that reshaped Earth's surface and destroyed almost all land-dwelling creatures. Secular geologists insist the global Flood is a myth—but they've never studied the rock record across multiple continents simultaneously.

ICR geologist Dr. Timothy Clarey does just this in *Carved in Stone: Geological Evidence of the Worldwide Flood*. With an oil industry background, Dr. Clarey utilizes oil well and seismic data to explain what the rock strata actually reveal about Earth's past.

Rather than reflecting millions of years, Earth's rock record demonstrates that a global flood occurred thousands of years ago. *Carved in Stone* examines the sedimentary rock record continent by continent, layer by layer. The data provide clear evidence of a year-long progressive flood just as described in the Bible. The rocks do not lie!



EXPLORING DEEP SPACE

The ICR Discovery Center for Science & Earth History's new planetarium show, *Exploring Deep Space*, takes you through our solar system and beyond to learn what blue stars, spiral galaxies, and mysterious black holes reveal about our awesome Creator, who knows and cares for each one of us. Along the way, you'll discover compelling evidence for a young universe that fits the Genesis account of creation. Now you can view this show in your own home!

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DEDS

NEW!

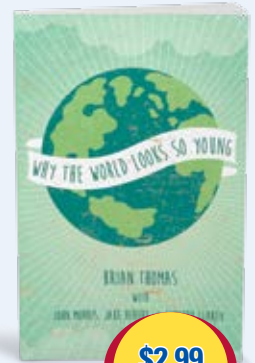
WHY THE WORLD LOOKS SO YOUNG

Scientific Evidences for the
Genesis Creation and Flood

What difference would it make to discover that real, measurable processes show a young world? This kind of science would support the Bible's teaching that God created the world in six days only 6,000 or so years ago. It would mean the Bible's history is spot-on.

Does God's world match God's Word when it comes to the history of our beginnings? Dr. Brian Thomas and his ICR colleagues explore this question in *Why the World Looks So Young: Scientific Evidences for the Genesis Creation and Flood*.

This short collection of young-looking features ranging from our own bodies to outer space gives good reasons to favor the Bible's timeline.



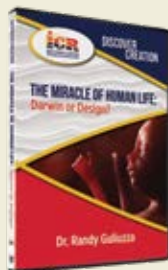
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BWTWLSY

THE MIRACLE OF HUMAN LIFE: DARWIN OR DESIGN?

Dr. Randy Guliuzza

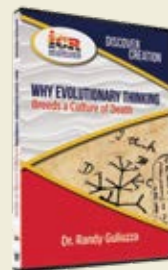
We often talk about the "miracle of life"—but do we really know what that means? Medical doctor and Professional Engineer Randy Guliuzza guides viewers through the remarkable design of human reproduction in all of its wonderful complexity. Bonus material includes a Q&A session. Note: Parental guidance suggested. Presentation might not be suitable for children.



WHY EVOLUTIONARY THINKING BREEDS A CULTURE OF DEATH

Dr. Randy Guliuzza

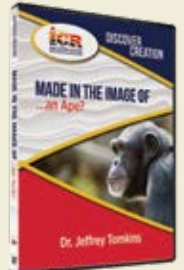
Charles Darwin observed the struggle of creatures and concluded that death is the driving force behind the advancement of life. Instead of viewing death as evil, people started viewing death as good. Medical doctor and Professional Engineer Randy Guliuzza cautions us against this way of thinking and points us toward Christ, who is the ultimate Life-Giver. Bonus material includes a Q&A session.



MADE IN THE IMAGE OF... AN APE?

Dr. Jeffrey Tomkins

We've all seen the famous evolutionary lineup that transforms crouching ape to upright man. But how much of this is based on actual fossil evidence? Come investigate with geneticist Dr. Jeffrey Tomkins and be assured that humanity is unique—just as God created us to be. Bonus material includes a Q&A session.



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Front cover: Pteranodon
Image credit: Alamy.W8HRB1



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Be Astonished by Jesus



We at ICR hope your Christmas season was filled with celebration of the birth of our Lord Jesus, delight in His wonders in creation, and meaningful time with family and friends. As we turn the corner to 2021, we can look forward to the continued gift of walking with our Lord, experiencing the privilege of being His children, and anticipating more of His goodness along the way—enough to astonish us!

In this month's feature "Unity Worthy of Our Creationist Heritage" (pages 5-7), ICR President Dr. Randy Guliuzza reminds us that Jesus' "words alone astounded everyone," and "everybody was awestruck by His miraculous works." When was the last time Jesus' words and works left you astonished?

As Dr. G points out, the demeanor of humble men can also leave us aston-

ished. When he reflected on the lives of ICR founder Dr. Henry Morris, Dr. Duane Gish, and another influential creationist, Dr. Gary Parker, Dr. G says they "not only held distinctive beliefs but tried to reflect Christ's behavior, marked by humility and love." These Christians are "an example worth emulating."

As Dr. Jeffrey Tomkins continues his series "The Fossils Still Say No" (pages 10-12), he examines fossils with backbones and demonstrates how the gap in the fossil record is "one more example highlighting the lack of evidence for molecules-to-man evolutionary theory." Dr. Jake Hebert points out problems with evolutionary claims as well in "Pterosaurs Didn't Have Feathers" (page 13). He says, "There are enormous challenges in explaining how a dinosaur came to morph into a bird."

We're excited to begin our park series in this issue of *Acts & Facts*, starting with one of the most magnificent ("Grand Canyon: Exposing the Flood," pages 14-18). These beautiful "learning labs" across our country display evidence of God's work in creation, and we'll point out significant exhibits and creation features as we explore each one from a biblical perspective. It's our hope these featured parks will leave you astonished at the beauty of our Creator's handiwork in forests, mountains, rocks, and canyons throughout the United States.

Sometimes the familiar can amaze us anew when we see it through a fresh lens, so we've made some changes to *Acts & Facts* for the new year. Look closely for a few additions that will help you spot logical fallacies and evolutionary language (pages 7 and 12). Our "By the Numbers" box on page 20 offers fun facts and statistics that reveal how God is working in the details at ICR. And if you turn the pages a bit further, you'll see we've added a "Creation Kids" learning and activity section for our young creationist readers (page 22).

Whether we're age eight or 98, we can still be astonished by Jesus' words and works, as long as we have eyes to see them. So, in this new year, let's seek His words of life in Scripture and keep our eyes open to His activity in the world. Who knows what astonishing discoveries 2021 will bring?

Jayme Durant

Jayme Durant
EXECUTIVE EDITOR



UNITY

Worthy of Our Creationist Heritage

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

How much richer would our lives be if we more often had experiences that gave us a delightful rush of wonder and overwhelming surprise? It's too bad that as we age fewer experiences leave us feeling totally astonished. I can't help but envy the close followers of the Lord Jesus during His time on Earth who saw first-hand daily events that left them astonished. A word study of "astonished" as it relates to Jesus shows that His words alone astounded everyone—for "no man ever spoke like this Man!" (John 7:46). Everybody was awestruck by His miraculous works.

Perhaps for many of us, though, we'd simply marvel at how differently Jesus behaved than anyone we'd ever met. Knowing that Christ is the Son of God, we're bewildered by one example in Jesus' life that He summed up as "If I then, your Lord and Teacher, have washed your feet, you also ought to wash one another's feet"

article highlights

- The forerunners in creation science provided a worthy example of humble Christian leadership.
- Biblical creationists are united by a common belief that the inspired Word of God guides our work and sets our goals.
- In the spirit of unity, love, and humility, ICR wants to start off the year thanking some of the smaller creation science organizations across the country.

(John 13:14). Seeing such humility is truly astonishing.

Why reflect on Jesus' humility here? Humility and love were key factors powering the growth of the creation science movement. I knew Dr. Duane Gish fairly well. He is remembered for the voluminous number of collegiate-level debates that he won and *also* the consistent Christ-like treatment

that he showed to his opponents. I briefly met ICR founder Dr. Henry Morris only a couple of times, but I'm told by many who knew him that a gracious spirit was his most distinguishing characteristic. The same is true for Dr. Gary Parker and numerous other creationist pioneers. The science they presented was convincing—especially the overwhelming geological evidence for a worldwide flood and the intuitive evidence for the design of creatures. But the fact that they "were right" never went to their heads.

As a relatively new Christian, I admired how these founders didn't come across in a proud, ill-tempered, or dismissive way toward evolutionists and other creation scientists. Their demeanor left me rather, shall I say, astonished...given that all I had experienced in the scientific world up to that time was a vicious one-upmanship between researchers. Creation science's founders left an example worth emulating.

United Around Central Beliefs

A few fundamental and distinctive beliefs unite creation scientists. We believe that the Bible is the Word of God. It is inspired, inerrant, able to be reliably translated in a way that's clearly understandable, the highest authority, and the avenue to know Christ and His truth. We do not believe that nature is the 67th book of the Bible—even though the invisible things of Christ are clearly seen (understood intuitively and through the scientific method) from His workmanship in nature (Romans 1:20). As such, the Bible provides the definitive framework guiding our scientific studies. From Genesis, we know that the Lord Jesus created the universe in six literal 24-hour days with distinct kinds of biological entities and humans made in God's image only about 6,000 to 7,000 years ago. The biblical framework from which creation scientists view natural history is radically different from the secular interpretive framework of materialistic naturalism and an ancient universe.

As I think about the minority of Christian scientists (and bold non-scientist believers) who hold—without flinching—to a normal interpretation of the Bible, the Philip P. Bliss gospel song “Dare to be a Daniel” comes to mind. The refrain portrays the risk one takes in affirming the central

beliefs of creation scientists: “Dare to be a Daniel, Dare to stand alone! Dare to have a purpose firm! Dare to make it known.”

Living like Jesus as a Scientist

It wasn't enough for the bold pioneers of creation science to have biblical truth and scientific evidence on their side. Their mission was to win science *and scientists* back to Christ. Truth surrounded by love is a powerful force, and they used this to great effect in the academic arena. They not only held distinctive beliefs but tried to reflect Christ's behavior, marked by humility and love. In particular, it was the way they handled scientific disagreements with evolutionists (and between themselves) that made our forerunners in creation science noticeably different.

On the one hand, in the secular academic world anyone who openly resists conforming their beliefs to secular naturalism—and particularly selectionism—is apt to be ostracized. Singling out a fellow scientist for painful treatment because of their rogue thinking is considered justified as being vital for protecting the integrity of the prevailing evolutionary consensus. Academic leaders' playbook for dispensing professional sorrow includes several effective means. A few actions they regularly attempt are suppressing opposing views by simply ignoring contrary

research or killing it through an abusive peer review process; ruining another scientist's credibility or assassinating their character by public humiliation either in person, in blogs, or in so-called “peer reviewed” papers; and bringing on professional exile by shunning rogue scientists at conferences or in employment.

On the other hand, when early creationists disagreed with evolutionists and each other, they acted differently. I was impressed with how they submitted to these biblical admonitions:

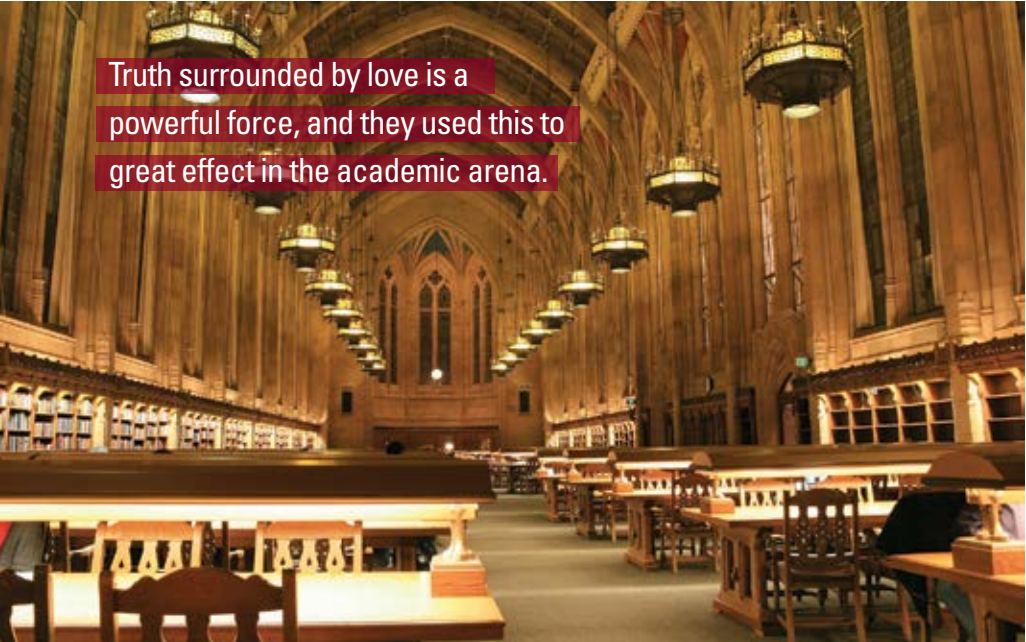
- “These things I command you, that you love one another” (John 15:17).
- Be kindly affectionate to one another with brotherly love, in honor giving preference to one another (Romans 12:10).
- ...bearing with one another, and forgiving one another (Colossians 3:13).

They also took seriously warnings about how Christians should treat “one another” such as do not bite and devour one another, envy one another, provoke one another (Galatians 5:15, 26), or be puffed up with pride with one another (1 Corinthians 4:6).

Our science staff believes that our creationist forerunners pleased the Lord Jesus, and with His help we hope to emulate them. Thus, we'll guard the tone of our communications even while vigorously advocating for ICR's distinctive positions. And we'll endeavor not to weaponize our social media, news articles, videos, and *Acts & Facts* articles to rebuke others, damage their reputation, or respond in kind to worldly behavior.

Creationists Have Few Allies

Creationists need each other. The biblical and secular frameworks are not only fundamentally different from each other, they are utterly opposed to each other. The evolutionary juggernaut is not invincible, but it's large and well-funded, and ruthlessly defends its monopoly in education, entertainment, and government. We'd best not lose sight of who our *real* opponents are.



Truth surrounded by love is a powerful force, and they used this to great effect in the academic arena.



“One sows and another reaps.”

— John 4:37

The truth is creationists need all of the brainpower, all of the research talent, and all of the communication skills within our forces. Looking over today’s company of creation scientists, it’s clear that Christ has assembled highly talented people with critical skill sets from within His church. The diverse gifts are most effective when they work selflessly together, “for in this the saying is true: ‘One sows and another reaps’” (John 4:37). Creationists serve other Christians by providing them with answers to the challenges coming from a huge crowd of secular scientists and skeptics who menace the church today.

A Long-Overdue “Thank You!”

In my short time so far as president of ICR, some have counseled that I must build on, trade in, protect, or advance the ICR “brand” like other ministries nurture their brands. Advised actions to protect our brand, however, seem self-serving and at the

expense of other creation science ministries. A better approach is to build on each other’s strengths and, by God’s grace, astound those watching us by trying to demonstrate the humility of Christ.

ICR is one of a few larger creation science ministries. *Acts & Facts* readers may not be aware that many smaller creation science ministries have for many years been faithfully teaching the truth of creation alongside us. Size of ministry is irrelevant with the Lord Jesus. Some ministries have limited outreach, some have been bruised by attacks of the enemy, and some hold positions that we would find out of date. We all have weaknesses and differences. However, to begin the New Year we would like to say a public “thank you” to some smaller sister ministries that perhaps have rarely been thanked before.

At the risk of overlooking a friend, ICR thanks: Alpha Omega Institute; Biblical Discipleship Ministries; Creation Train-

ing Initiative; The Starting Point Project; Search for the Truth; Genesis Apologetics; the Creation Biology, Creation Geology, and Creation Theology Societies; Living Waters Bible Camp; Creation Today; Compass Cinema; Glendive Dinosaur and Fossil Museum; David Rives Ministries; Mount St. Helens Creation Center; Canyon Ministries; Creation Moments; Beyond Intelligent Design; Creation, Evolution & Science Ministries; Center for Scientific Creation; Logos Research Associates; Patrick Henry College; and Shasta Bible College.

Several local creation science organizations that have worked with ICR may be of interest to our readers: Arizona Origin Science Association; Northwest Creation Network (Seattle); Design Science Association (Portland); Northwest Science Museum (Boise); Denver Society of Creation; Rocky Mountain Creation Fellowship (Denver); Twin Cities Creation Science Association; Midwest Creation Fellowship (Chicago); San Antonio Bible Based Science Association; Greater Houston Creation Association; and Space Coast Creation Club (Cocoa Beach).

We love and appreciate you. ✉

Dr. Guliuzza is President of the Institute for Creation Research. 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 and holds a B.A. in theology from Moody Bible Institute.



Logical Fallacies: Tricky Compound Questions

James J. S. Johnson, J.D., Th.D.

Have you encountered this “trick question” that requires accepting an illegitimate assumption: “Are you a science denier, or have you admitted that the Bible is wrong about evolution?” If you reply “yes,” you have agreed that the Bible is wrong about evolution and thus have disagreed with the Lord Jesus Himself, because He trusted the Bible as perfect. But if you simply reply “no,” you appear to admit you are a science denier!

Requiring a yes-or-no answer to this question illustrates the either-or fallacy, be-

cause a true response should clarify: “Because real science doesn’t prove evolution, to believe the Bible is completely true, as I do, does not make me a science denier.”

In courtroom contexts, a cross-examination question is objectionable (i.e., it can be disallowed as illegitimate) if it compounds questions such that an answer appears to accept assumptions that may be false or misleading. Such compound trick questions are often linked to either-or fallacy assertions, as in “Do you believe in evolution, or are you a science

denier?”¹ When you are confronted with a tricky compound question, don’t take the bait! Confront the invalid inquiry with logic and clarity. Peel apart the layers, spotlight the clouded assumptions, then answer only one question at a time.²

References

1. “This fallacy is sometimes called ‘trick question’ since it tries to trick its victim into assuming something without proof.” McDurmon, J. 2009. *Biblical Logic in Theory and Practice*. Powder Springs, GA: American Vision, 62.
2. Johnson, J. J. S. 2010. Hidden Assumptions Play “Hide and Seek”: Using Context and Clarification to “Tag” Bible Critics. *Acts & Facts*. 39 (6): 8-9.

JANUARY 5-9 ONLINE ONLY

BIBLICAL CREATION 101: WINTER INTENSIVE | Dallas, TX | ICR Discovery Center | ICR.org/Creation101



Randy Guliuzza, P.E., M.D.



Jeffrey Tomkins, Ph.D.



Brian Thomas, Ph.D.



Tim Clarey, Ph.D.



Jake Hebert, Ph.D.



Frank Sherwin, M.A.



James J. S. Johnson, J.D., Th.D.



Charles Morse

JANUARY 15-17

Dallas, TX

The Lighthouse Church

(B. Thomas, T. Clarey, F. Sherwin)

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Mercersburg, PA

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Dr. Randy Guliuzza (left), Gen. Mark Shackelford (center), and Chas Morse discuss the importance of biblical creation at a live event in October.



For the latest ICR Discovery Center live science presentations, check our schedule at ICRdiscoverycenter.org/Live-Presentations

Providing a safe and enjoyable experience is a priority for ICR, and we are closely monitoring the COVID-19 situation. Since the public health recommendations are changing on a frequent basis, please check ICR.org/events for the most up-to-date event information. If you have questions about a specific event, please send an email to events@icr.org or call **800.337.0375** and press 6.

Microscopy May Detect Fossil Bone Collagen

Longtime followers of ICR should be familiar with our research into original organics in fossils. Over 100 peer-reviewed secular publications have shown that one might discover original tissue remnants in fossils from any region.¹ Still-soft organics hail from almost every continent.² Could organics still exist in fossils near ICR's Dallas offices, where summer sunlight regularly bakes the earth with triple-digit heat?

ICR's new research cooperation with an award-winning microscopist has focused on fossils from West Texas. No original organics would remain after one million years, especially in the Texas heat since high temperatures accelerate biochemical breakdown.³ If original organics occur in the fossils from these rocks, then they will look younger than ever.

One technique that targets the protein collagen in bone is called *cross polarized light microscopy* (XPOL). Research begins with preparing very thin sections of bone. A microscope fitted with crossed polarizers ("cross polars") can detect regions in the sample where something twists the light. In bone, that something is collagen.

Fresh bone comes densely packed with collagen, which looks bright gold under cross polars. Bone with no collagen looks almost black—it shows no image.⁴ Between these extremes, ancient bone shows traces of collagen that twist wisps of light into the detector.

Sure enough, we looked at spectacular XPOL images in very old fossils that showed exactly what collagen traces should do to polarized light. Figure 1 shows fossil bone from an extinct alligator-size tetrapod named *Diadectes* collected from the famous red beds of West Texas. The small dark dots

article highlights

- Secular scientists regularly find organics original to vertebrate fossils.
- Organics like proteins can't last a million years, especially in a hot location.
- Microscopy appears to detect collagen remnants in fossil bone.
- A West Texas *Diadectes* fossil shows the presence of collagen, consistent with the fossil being only thousands of years old.

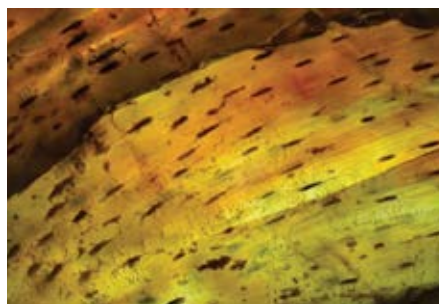


Figure 1. XPOL light micrograph of *Diadectes*

are lacunae that once held bone cells. Long streaks show the banded pattern of collagen in bone.

A first order retardation plate⁵ attachment enhances the presence of the light-bending agent found within this Permian bone, assigned a secular age of about 280 million years. Figure 2 shows the same spot as Figure 1 within the *Diadectes* bone but with the first order red plate that phase-shifts some of the gold light into other colors. As long as collagen remains embedded in the bone matrix, blues turn gold and vice versa while a microscopist rotates the sample. Visit the online version of this article at ICR.org to access a video of light shifting through partly collagenated fossil bone.

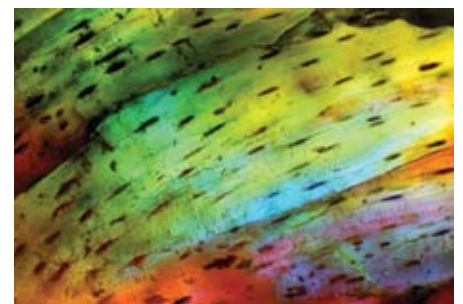
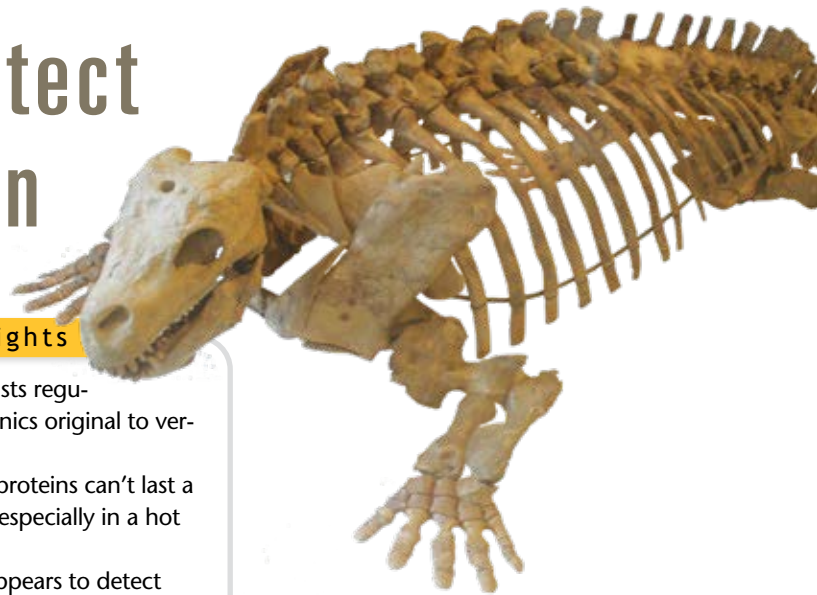


Figure 2. Micrograph of *Diadectes* bone under XPOL with a first order red retardation plate

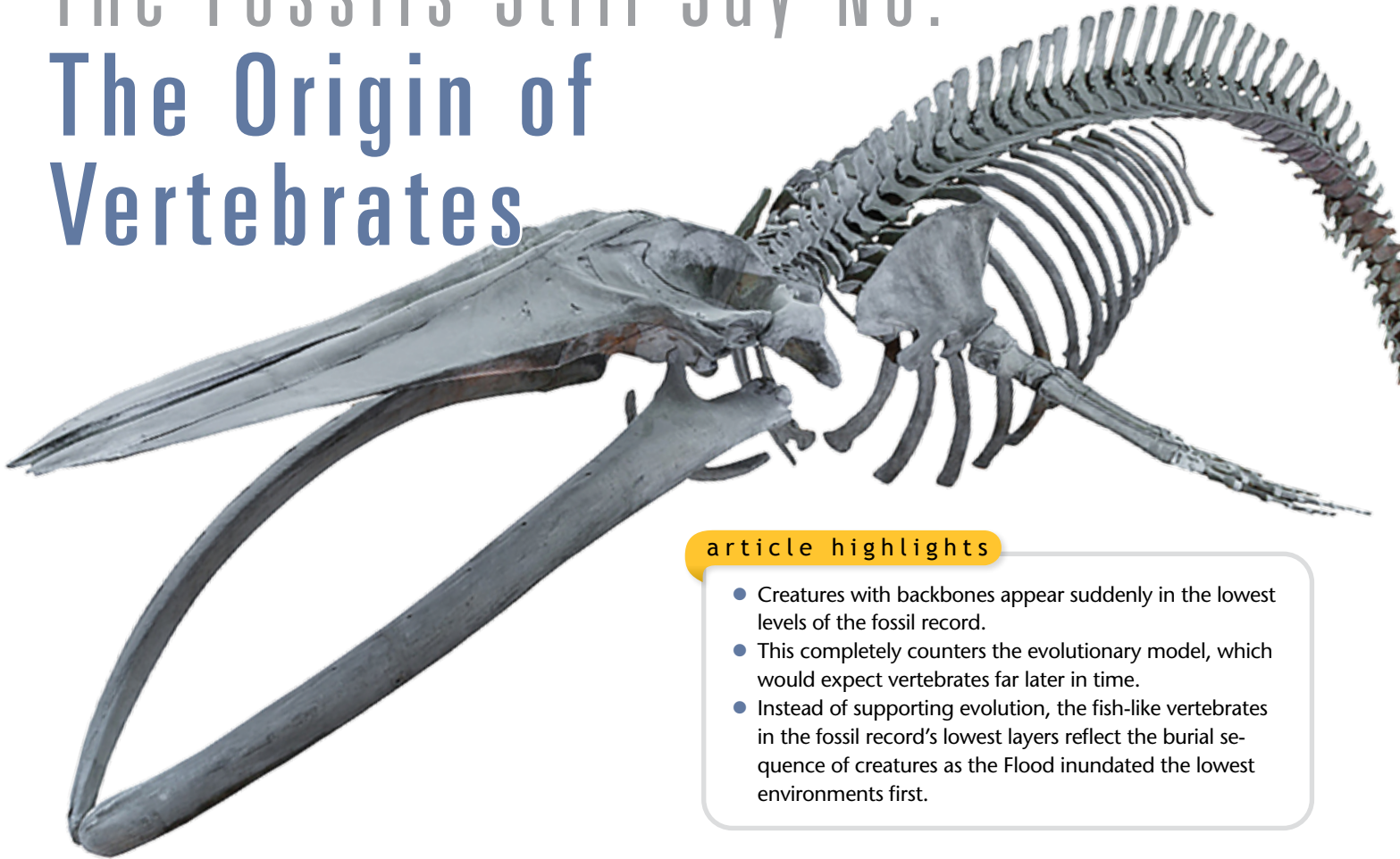
XPOL light microscopy is just one more tool—alongside a few dozen others—that scientists use to help describe collagen in fossil bone. As with the other 100-plus soft tissue discoveries, these bones look thousands, not millions, of years old. A burial of these animals in Noah's Flood among the vast red beds only thousands of years ago could account for the presence of collagen despite the Texas heat. ❧

References

1. List of Biomaterial Fossil Papers (maintained). Online document. Posted on docs.google.com, accessed November 8, 2020.
2. Thomas, B. 2020. Soft Tissue Fossils Reveal Incriminating Trends. *Acts & Facts*, 49 (11): 9.
3. Thomas, B. 2019. Collagen Decays Too Fast for Evolutionary Time. *Acts & Facts*, 48 (8): 9.
4. Using two pairs of polarized sunglasses, align two lenses in front of your eyes with one swiveled 90 degrees from the other to demonstrate the light-extinguishing effect of cross polars.
5. See the Introduction to the Compensators and Retardation Plates fact sheet. Olympus. Posted on olympus-lifescience.com.

Dr. Thomas is Research Associate at the Institute for Creation Research and earned his Ph.D. in paleochemistry from the University of Liverpool.

The Fossils Still Say No: The Origin of Vertebrates



article highlights

- Creatures with backbones appear suddenly in the lowest levels of the fossil record.
- This completely counters the evolutionary model, which would expect vertebrates far later in time.
- Instead of supporting evolution, the fish-like vertebrates in the fossil record's lowest layers reflect the burial sequence of creatures as the Flood inundated the lowest environments first.

One of the greatest problems for evolutionists is the sudden appearance of complex animal life with no evolutionary precursors, as seen in the Cambrian Explosion.¹ But equally problematic is how complex creatures with backbones (vertebrates) could have possibly evolved. For all practical purposes, no transitional form has been found that links invertebrates like soft-bodied creatures and arthropods (creatures with a hard exoskeleton) to vertebrates. This glaring gap in the fossil record is just one more example highlighting the lack of evidence for molecules-to-man evolutionary theory.

Vertebrates include fishes, amphibians, reptiles, birds, and mammals. Living vertebrates exhibit a huge range in size, from a miniature frog found in Papua New Guinea that is only about a quarter of an inch long to the massive blue whale, which is over 100 feet long. Overall, vertebrates comprise only about 5% of all known animal species. The rest of animal life is known as invertebrates, which have no vertebral columns (backbones).

The problem with identifying a proto-vertebrate ancestor is that vertebrate fish-like creatures appear in the lowest levels of the Cambrian strata, the sedimentary rock layers where complex forms of animals make their first appearances. In other words, there is no

time or space for evolution to occur since vertebrates show up fully formed at the beginning of the fossiliferous rock record sequence.

Your First Vertebrate Ancestor: The Sea Squirt?

According to the grand evolutionary story, the first proto-vertebrate was a sea squirt,² a sea creature that is still alive today. While sea squirts are common ocean creatures, their presence in the fossil record has been difficult to determine because they are soft-bodied and don't fossilize easily. Even so, paleontologists think they have found evidence of them at the base of the Cambrian rock layers (or slightly before), which would place them smack dab in the Cambrian Explosion where so many complex forms of animal life first appeared suddenly with no evolutionary precursors.¹

Technically, sea squirts are called *tunicates*, and they represent a marine invertebrate that is part of the phylum Chordata, a group of creatures that includes all animals with dorsal nerve cords or notochords. Vertebrates are a sub-group of the chordates. The adult form of the sea squirt is a stationary bag-shaped creature (Figure 1) that typically attaches to ocean rocks around the world. It often has translucent skin and two siphons (or openings) at its top for interfacing



Figure 1. A Komodo National Park sea squirt

Image credit: Nick Hobgood

with the ocean water to acquire food and resources.

The main reason evolutionists like to imagine the sea squirt as a vertebrate ancestor is that its larval stage comprises a free-swimming creature that has a mouth, a nerve cord, and a tail.² The larva attaches itself to a rock and then undergoes an extraordinary metamorphosis into the radically different structure of the stationary adult animal. The entire developmental process of this creature in all its complexity is exquisitely programmed by the innate genetic blueprint and cellular systems the Creator engineered into it. There is absolutely no evidence at any level that the chordate-containing larval stage of this creature decided to break free from its internal programming and somehow evolve into a fish. An evolutionary transition of that magnitude would require an extensive amount of new genetic information and many novel innate cellular features.

The hemichordate, another creature typically lumped into the first evolutionary branch with sea squirts, is entirely unrelated to either sea squirts or fish.^{2,3} The acorn worm, a creature also still living today in our world's oceans, is a hemichordate. The reason acorn worms are lumped into the base of the vertebrate evolutionary tree is because they have a section of their foregut called a *stomochord* that was previously thought to be related to the notochord of the chordates. However, evolutionists now claim that it evolved independently from chordates and call it an example of convergent evolution rather than a homology. A hollow neural tube does exist among some species early in their development, but this is thought to be an evolutionary enigma. Given this inability to determine any consensus evolutionary relationship, renowned vertebrate evolutionist Michael Benton admits, "The phylogeny of hemichordates is actively debated."²

Amphioxus: Another Vertebrate Ancestor?

Next in the evolutionary chain are the lancelets, also known as



Figure 2. A lancelet (or amphioxus)

Image credit: Hans Hillewaert

amphioxi (singular amphioxus), a group of about 30 species of jawless filter-feeding fish that forage for food near the ocean floor (Figure 2). They are considered the closest evolutionary link between sea squirts and so-called primitive fish. And, like sea squirts, they are alive and well in the world today even though they are considered the early basal evolutionary ancestor of vertebrates.

In the fossil record, lancelets appear suddenly in the lower Cambrian strata at roughly the same time as many other creatures with complex body plans. This initial explosion of life is often known as the "main burst" of the Cambrian Explosion and occurred ~530 million years ago according to evolutionary dating. The oldest fossil lancelets are known as *Haikouella lanceolata* and include about 305 fossil specimens found in the Cambrian rocks of Haikou near Kunming, China.⁴ Fossil *Haikouella* have basic features of a vertebrate fish, including a fully developed fish-like heart with arteries, gill filaments, a caudal fin for fish-like locomotion, a neural cord with a sizeable large brain, and a head with eyes.⁵

Just above the amphioxus (lancelet) in the theoretical early vertebrate evolutionary tree is a recently discovered fish called *Pikaia*.⁶ This fish looks nearly identical to modern living lancelets and is probably just another type of lancelet. Because it appears in the Cambrian at a slightly higher level, it has been placed above *Haikouella* in the fictional evolutionary tree.³ However, its placement by evolutionists is uncertain, as noted by Michael Benton, who states, "Determining the phylogenetic position of *Pikaia* is problematic."²

Other Fully Formed Fish Appear Suddenly in the Cambrian

Three other fish with somewhat similar overall body plans to lancelets also appear in the early-to-middle Cambrian and are also believed by evolutionists to be early ancestral vertebrates.^{2,3} Scientists typically clump these three fish together just one node above *Pikaia*, representing a supposedly more-evolved fish form in the vertebrate evolutionary tree.³

These three Cambrian fish are *Myllokunmingia*, another alleged basal vertebrate that appears in the Lower Cambrian Maotian-



Figure 3. A *Myllokunmingia fengjiaoa* reconstruction

Image credit: Degan Shu, Northwest University, Xi'an, China

shan shales of China and is claimed to be about 530 Mya (Figure 3); *Metaspriggina*, found in the Burgess Shale and containing a somewhat similar body plan to other Cambrian fish but with the unusual feature of two well-developed, upward-facing eyes with nostril-like features directly behind them (Figure 4); and *Haikouichthys*, a fish with a similar body plan to the other Cambrian fish found near Yun-nan, China (Figure 5). All three fish are fully developed, complex vertebrate creatures that appear suddenly in the Cambrian Explosion with no evolutionary precursors. They most likely merely represent different created kinds of fish.



Figure 4. A *Metaspriggina walcotti* reconstruction

Image credit: Nobu Tamura



Figure 5. A *Haikouichthys ercaicunensis* reconstruction

Image credit: Talifero

Early Vertebrate Evolution: A Tree Without Roots

The evolutionary origin of vertebrates is a speculative theory with absolutely no fossil data to support its contentions. Creatures with backbones (fish) appear suddenly in lower Cambrian rock layers. They are found in the midst of the explosive first appearance of other complex marine life.

In all this, no evolutionary precursors are uncovered. Nowhere has anything been found that could be considered a transitional creature between invertebrate and vertebrate. And the sea squirt and the acorn worm are both entirely unique in their own right; they're not intermediate or transitional in any way. So, not only is there no evidence of vertebrates evolving, but creatures with backbones appear at the very beginning of the fossil record in the Cambrian strata along with a large array of invertebrates in a huge explosion of complex animal life that utterly confounds evolution across the board.¹

The main reason we find sea squirts, acorn worms, and various types of fish in these early Cambrian rock layers is that they were creatures dwelling on or near the ocean bottom, so they were the first to be buried in the global Flood. ICR geologist Tim Clarey has documented that the Cambrian Flood strata correspond to the Sauk Megasequence and represent the initial sedimentary deposits of the Flood.⁷ This initial phase buried many different types of marine creatures living in shallow seas—exactly what would be expected in a model of progressive burial by ecological zonation and increasing water levels during the global Flood.

When it comes to vertebrate evolution, the fossils still say no. 🦋

References

1. Tomkins, J. P. 2020. The Fossils Still Say No: The Cambrian Explosion. *Acts & Facts*. 49 (12): 10-13.
2. Benton, M. J. 2015. Vertebrates Originate. In *Vertebrate Paleontology*. West Sussex, UK: John Wiley & Sons Ltd.
3. Morris, S. C. and J.-B. Caron. 2014. A primitive fish from the Cambrian of North America. *Nature*. 512: 419-422.
4. Shu, D.-G. et al. 1999. Lower Cambrian vertebrates from South China. *Nature*. 402: 42-46.
5. Shu, D.-G. et al. 2003. Head and backbone of the Early Cambrian vertebrate *Haikouichthys*. *Nature*. 421: 526-529.
6. Thomas, B. Cambrian Fossil Intensifies Evolutionary Conundrum. *Creation Science Updates*. Posted on ICR.org September 26, 2014, accessed October 29, 2020.
7. Clarey, T. 2020. *Carved in Stone: Geological Evidence of the Worldwide Flood*. Dallas, TX: Institute for Creation Research, 312-353.

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Evolutionary Vocabulary

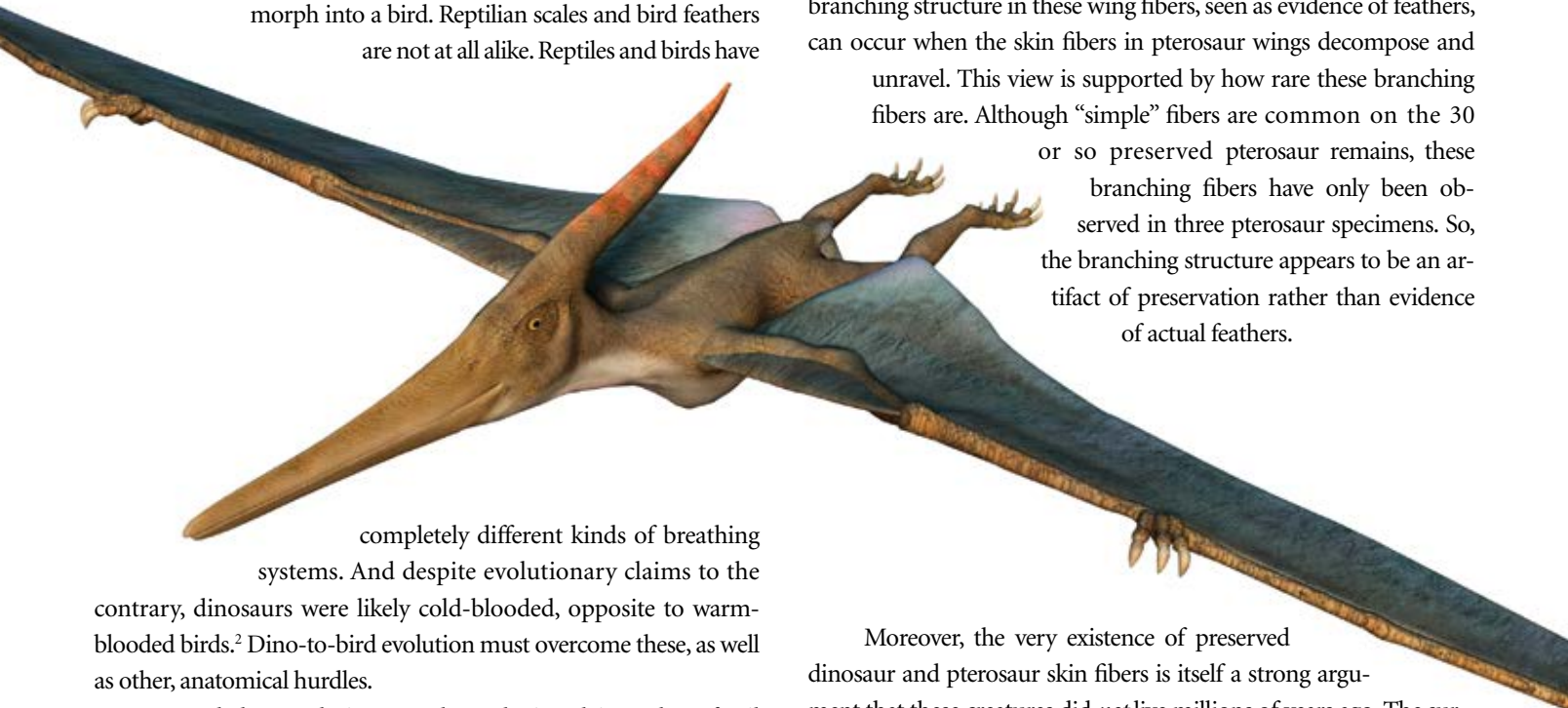
James J. S. Johnson, J.D., Th.D.

Did you know that scientific words can carry a hidden evolutionary bias? Consider the word prokaryote. Single-cell protozoa are eukaryotes (meaning they have a “true nucleus”). Bacteria that don’t have a nucleus are called prokaryotes. Why not call them akaryotes (“no nucleus”) like mature human red blood cells are called? Because prokaryote means “before nucleus,” which assumes that bacteria somehow evolved before living organisms formed nuclei. So, even scientific vocabulary is trying to trick people into buying the evolutionary story!

Pterosaurs Didn't Have Feathers

Evolutionary scientists have recently claimed that pterosaurs had feathers.¹ Pterosaurs were winged reptiles. Although they're sometimes called "flying dinosaurs," they are technically distinct from dinosaurs. The scientists claimed the "brush-like" appearance of fibers in pterosaur wings indicate these structures were protofeathers, a kind of primitive feather.

Evolutionists claim theropod dinosaurs evolved into birds, so it follows that they embrace feathered dinosaurs. However, there are enormous challenges in explaining how a dinosaur came to morph into a bird. Reptilian scales and bird feathers are not at all alike. Reptiles and birds have



completely different kinds of breathing systems. And despite evolutionary claims to the contrary, dinosaurs were likely cold-blooded, opposite to warm-blooded birds.² Dino-to-bird evolution must overcome these, as well as other, anatomical hurdles.

Nevertheless, evolutionary paleontologists claim to have fossil evidence that some dinosaurs had feathers. Many creationists would counter that in some cases feathers belonging to birds have been mistakenly attributed to dinosaurs. In other cases, they are the remnants of decaying collagen fibers in dinosaur skin.³

This view is supported by the fact that these so-called *protofeathers* are not like the bird feathers we are familiar with. Rather, they are simple or hair-like filaments or fibers called *dino fuzz*. Evolutionist paleo-ornithologist Alan Feduccia has strongly argued that these "feathers" are actually decaying skin fibers. Dino fuzz has been found on the remains of non-theropod dinosaurs, on ichthyosaurs, and on the carcasses of dolphins and sharks.³ Obviously, the presence of protofeathers on the remains of animals totally unrelated to birds shows that these features are not diagnostic. How could one explain feathers on marine creatures?

Paleobiologists Dr. David Unwin and David Martill recently

article highlights

- Pterosaurs are extinct flying reptiles.
- Some scientists claim these creatures had primitive feathers, much like the claim that dinosaurs had feathers.
- Even some evolutionists admit that what appear to be primitive feathers are likely decomposing skin fibers.

weighed in on the issue of feathered pterosaurs.⁴ They noted that the branching structure in these wing fibers, seen as evidence of feathers, can occur when the skin fibers in pterosaur wings decompose and unravel. This view is supported by how rare these branching fibers are. Although "simple" fibers are common on the 30 or so preserved pterosaur remains, these branching fibers have only been observed in three pterosaur specimens. So, the branching structure appears to be an artifact of preservation rather than evidence of actual feathers.

Moreover, the very existence of preserved dinosaur and pterosaur skin fibers is itself a strong argument that these creatures did *not* live millions of years ago. The survival of preserved collagen (skin) fibers is just another example of preserved soft or original dinosaur tissue. Laboratory experiments show that these biomaterials cannot survive for even one million years, let alone hundreds of millions of years!

Unwin and Martill have unwittingly corroborated ICR's position that these fossil fibers represent decayed skin fragments. Pterosaur fibers look like dinosaur fibers, both of which look like decayed skin. And without feathered dinosaurs, the case for dino-to-bird evolution flies away. ✎

References

1. Yang, Z. et al. 2018. Pterosaur integumentary structures with complex feather-like branching. *Nature Ecology & Evolution*. 3: 24-30.
2. Clarey, T. 2015. *Dinosaurs: Marvels of God's Design*. Green Forest, AR: Master Books, 121-124.
3. Tay, J. 2019. Feathered pterosaurs: ruffling the feathers of dinosaur evolution. *Journal of Creation*. 33 (2): 93-98.
4. Unwin, D. M. and D. M. Martill. 2020. No protofeathers on pterosaurs. *Nature Ecology and Evolution*. doi.org/10.1038/s41559-020-01308-9.

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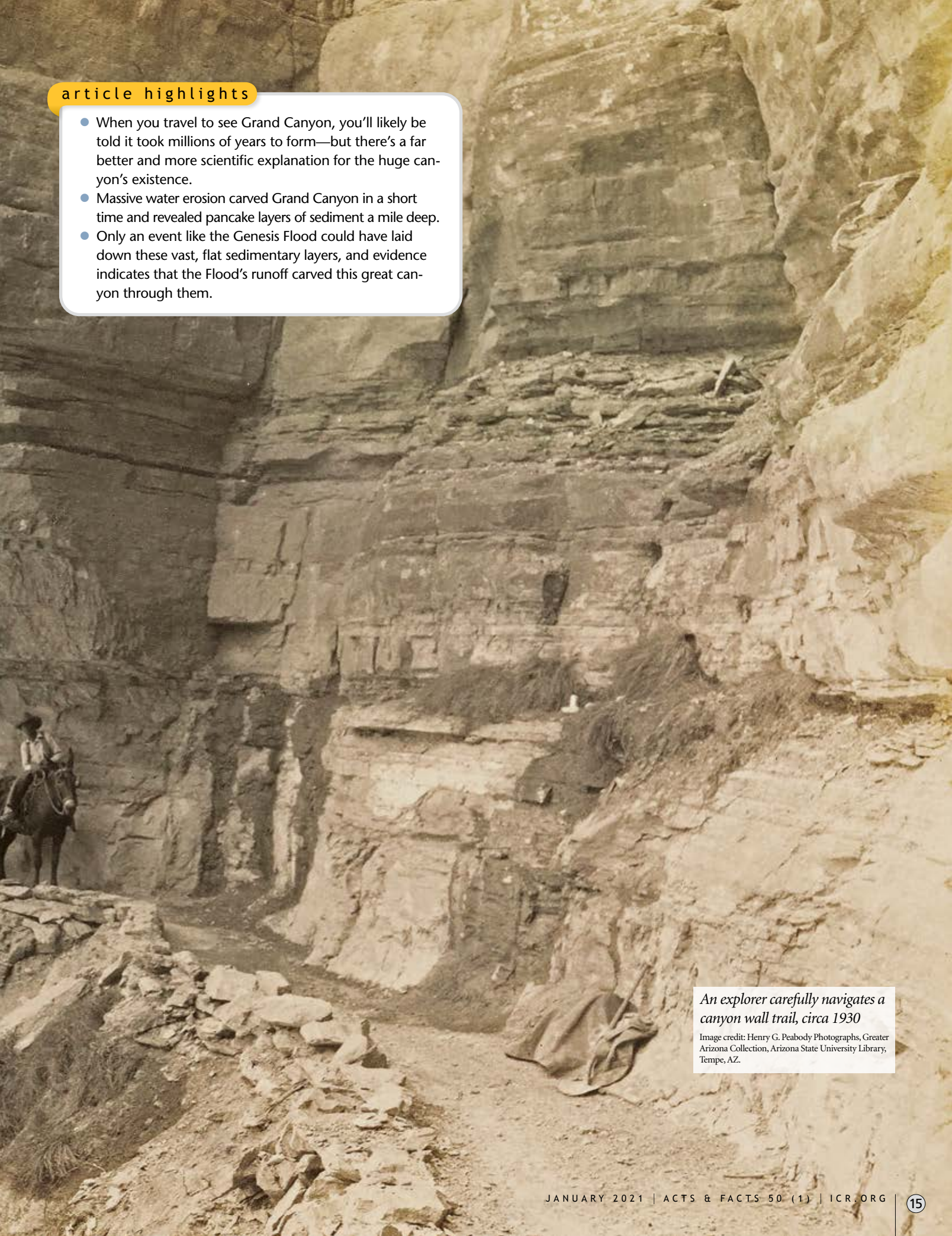
GRAND CANYON:

Exposing the Flood

TIM CLAREY, PH.D., AND BRIAN THOMAS, PH.D.

article highlights

- When you travel to see Grand Canyon, you'll likely be told it took millions of years to form—but there's a far better and more scientific explanation for the huge canyon's existence.
- Massive water erosion carved Grand Canyon in a short time and revealed pancake layers of sediment a mile deep.
- Only an event like the Genesis Flood could have laid down these vast, flat sedimentary layers, and evidence indicates that the Flood's runoff carved this great canyon through them.



An explorer carefully navigates a canyon wall trail, circa 1930

Image credit: Henry G. Peabody Photographs, Greater Arizona Collection, Arizona State University Library, Tempe, AZ.

Grand Canyon carves a 277-mile-long chasm through northwestern Arizona. Running from Lee’s Ferry to Lake Mead, the expansive landscape reveals some of the most colorful geology in the world and provides strong evidence for the global Flood.

Lateral Extent of Strata

As you look across Grand Canyon, observe the layers on both walls. The cliffs and the colors match from one side to the other. The gaps between the cliffs were once filled solid, the layers continuous, but the space in between has since been removed by erosion. The bottom flat layers are older and were deposited first; these are called Cambrian system rocks. The youngest layers are on the canyon’s rim; these are identified as Permian system rocks.

All of these layers were deposited dur-

ing the rising phase of the global Flood. Powerful tsunami-like waves spread massive, continuous sedimentary layers for hundreds of miles in all directions across this part of North America. Even relatively thin layers extend across Grand Canyon.

Flat Contacts Show Little Time Between Layers

Grand Canyon’s layers are like stacked pancakes. The lowermost flat layer at Grand Canyon is called the Tapeats Sandstone. At about 200 feet thick, it makes a thin, dark brown layer from a distant view. This layer represents the first extensive Flood deposit at this location. The basal boundary of the Tapeats is a special type of unconformity¹ called a *nonconformity*, where sedimentary rock resides on top of pre-Flood crystalline rock. This surface is also referred to as the Great Unconformity (Figure 1).

This global phenomenon is found in countless locations where Cambrian system sedimentary layers overlie Precambrian crystalline rocks. Just below the contact, we observe metamorphic crystalline rocks that are oriented nearly vertically, but the overlying Cambrian Tapeats is horizontal. Although secular geologists claim the Precambrian rock surface here experienced over a billion years of erosion, the contact with the Tapeats is almost perfectly planar—it’s flat! Where are the gullies and chasms from billions of years of erosion?

The Redwall Limestone is Grand Canyon’s most prominent layer—a red, thick, vertical cliff that spans the middle of the exposed rock layers. It’s part of the Mississippian system. Right below it, the Muav Limestone of the Cambrian system appears a bit more grayish. The evolutionary narrative claims 160 million years of erosion occurred



Figure 1. ICR geologist Dr. Tim Clarey addresses a Grand Canyon tour group with the Great Unconformity behind him

Image credit: Kevin Turley

between these two rock units. But where are the v-shaped channel patterns that gullies and canyons should have carved on top of the Muav? Instead, one flat limestone lies flat on another nearly everywhere you look.

A third flat unconformity lies between the Coconino Sandstone and the Hermit Shale. If you look toward the top of the layers in the canyon, you'll see a thin, light, tan-colored cliff on top of a dark red layer. About a million years of erosion supposedly separates these two units (Figure 2). But if they were really deposited millions of years apart, valleys and canyons should be found between each of these layers. Instead, the contact is almost perfectly flat everywhere we see it.

Badlands Topography Shows Catastrophic Carving

By examining the topography of areas that have been catastrophically restructured

recently, we can estimate the effects of the Flood and compare that estimation with Grand Canyon's topography. A mudflow following the 1982 eruption of Mount St. Helens created a steep-walled, 140-foot-deep canyon system, complete with side canyons, in a single day.² It looks remarkably like a 1:40 scale of Grand Canyon.

And we see similar deep gorges and butte-and-basin (badlands) topography associated with the flooding that followed the bursting of Ice Age Lake Missoula. This occurred about 4,000 years ago in the American Northwest. Even secular geologists now recognize that this catastrophic megaflood created the Channeled Scablands of eastern Washington and widened the Columbia River Gorge.

Today's processes do not form broad, flat rock layers or carve such big and clean canyons. Different processes must be re-

sponsible—catastrophic processes. Therefore, it's reasonable to conclude that early floodwaters laid down Grand Canyon rocks while the water was rising, and the receding floodwater carved most of the Canyon.

The present narrative for Grand Canyon's formation is insufficient. Most of today's secular scientists assume the Colorado River slowly carved Grand Canyon over a period of six million years. But today's flow rates simply don't have the power to push the 1,000 cubic miles of rocks and debris all the way out to the Pacific Ocean. Even after millions of years, we should see a lot more talus and debris. Talus refers to rock piles that lean against the cliff walls where they fell. The canyon's base looks like it was swept clean. Only catastrophic water flow and water volume many times greater than what flows there today could sculpt badlands topography and wide gaps in the canyon.³

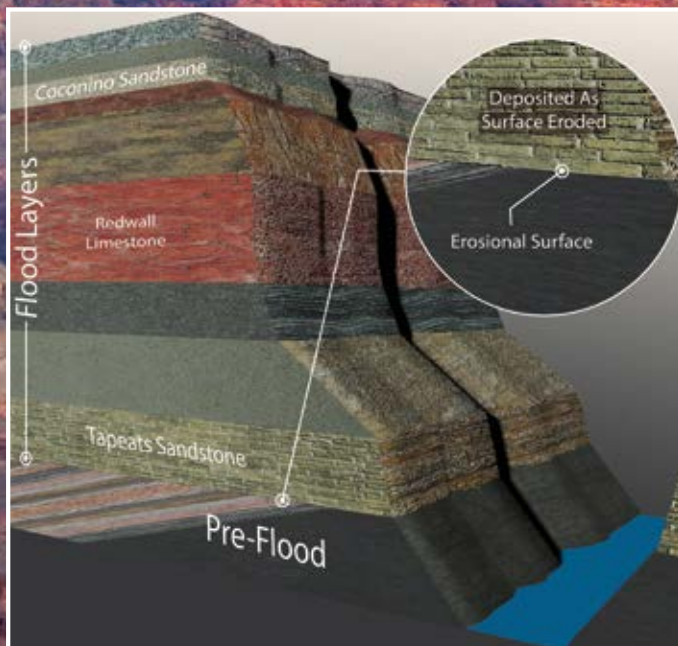


Figure 2. Flat contact shows no erosion and thus no time between the deposition of the Muav Limestone (gray) and the overlying Redwall Limestone (red). The inset shows the Great Unconformity.

Illustration by Scott Arledge

Noah's Flood Explains Grand Canyon

Secular interpretations still cannot adequately explain why the Colorado River cuts right through the Kaibab Uplift that formed on the western flank of the Colorado Plateau. The Kaibab Uplift has warped an arch of rock about 3,000 feet above the surrounding terrain. Water should have flowed around it, not uphill and through it.⁴

How do Flood geologists explain this? The year-long Flood narrative in Genesis helps us understand what we see. After sediments like the Coconino, Redwall, and Tapeats were deposited in the rising phase of the Flood, the Colorado Plateau was pushed up 5,000 feet during the receding phase of the Flood. This caused the floodwaters to drain off rapidly. Grand Canyon is on the western edge of that plateau. When packed, wet sand is lifted up, it stretches and cracks. Water naturally follows the cracks and

fractures. Some of those would have run through the Kaibab Uplift to create a path for lots of water to flow downhill and carve a vast canyon.

Rapid uplift and drainage of the receding floodwaters provide both the pathway and the necessary volume of water to quickly carve Grand Canyon.⁴ This was all accomplished before the Ice Age began. How do we know? Because there are about 150 lava flows that originated on the Uinkaret Plateau and poured down into Grand Canyon during the Ice Age. The canyon had to exist before these lava falls poured in.⁵

The lateral extent of the sedimentary layers, flat contacts between the layers, and vast badlands topography all point to rapid deposition and ultra-high-volume erosion. The rocks reveal the enormity of the global Flood, and the canyon exhibits catastrophic carving from receding floodwaters. Grand

Canyon is a reminder of the immense power of the judgment of the Flood. ☞

References

1. An unconformity is where some amount of erosion has taken place, removing a segment of the rock record. Unconformities can also occur if there was a brief hiatus in deposition. Unconformities do not imply vast amounts of time since they can form quickly as tsunami-like waves wash across the landscape, eroding the surface as they go.
2. Morris, J. and S. A. Austin. 2003. *Footprints in the Ash: The Explosive Story of Mount St. Helens*. Green Forest, AR: Master Books, 72-76.
3. Austin, S. A. 1986. Mt. St. Helens and Catastrophism. *Acts & Facts*. 15 (7).
4. Clarey, T. 2018. Grand Canyon Carved by Flood Runoff. *Acts & Facts*. 47 (12): 10-13.
5. Clarey, T. 2020. Lava Flows Disqualify Lake Spillover Canyon Theory. *Acts & Facts*. 49 (10): 10-12.

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False Hypotheticals—Beyond Darwin’s Imagination

Don’t believe it if someone tells you that a pair of “walking whale”-like mammals trudged off the Ark and later procreated a line of descendants that somehow evolved into ocean-dwelling whales that replaced their ancestral “legs” with fins and flukes.¹

Consider answering this challenge: “Some of the animals that are aquatic or marine today may not have been aquatic at the time of the Flood.”²

“Name one,” you could reply.

“Whales,” the walking-whale advocate says, alleging that there are no whale fossils in Flood-deposited sedimentary rock layers.²⁻⁴ “The fossil record proves” (and this paleontological assumption is the critical false hypothetical fallacy), says he, “that today’s whales didn’t exist before Noah, so they must have speedily evolved after the Flood, from Ark-preserved ‘walking whale’ ancestors, who quickly shed hips and legs, producing modern whales.”^{1,2,4}

Did the legged-whale proponent fail to disclose invalid assumptions about the fossil record? Are false hypotheticals employed that the unwary are misled to accept?^{1,2} Yes, this fantasy isn’t new—Darwin proposed similar science fiction but later quietly retracted it.³

Unlike Darwin, today’s “saltation” (hyper-evolution) advocate anchors his argument in the assumption that the Flood was completely finished (including drainage depositions) by the time Cretaceous sedi-

mentary rock layers were deposited—i.e., at the K-T/K-Pg (Cretaceous-Paleogene) boundary level.^{2,4}

If that assumption were true, all fossil-bearing sedimentary rock layers located *above* the K-T/K-Pg boundary could not be Flood-deposited. Accordingly, cetacean fossils that are found between the K-T/K-Pg and N-Q (Neogene-Quaternary) boundaries would be interpreted as post-Flood fossils, i.e., fossils buried centuries after the Flood was completely over.⁴

Furthermore, if the K-T/K-Pg boundary represented the level where Flood drainage ceased—and if cetacean fossils are found only above the K-T/K-Pg boundary—this would appear consistent with the scenario that legless whales first appeared on Earth after the Flood finished, inviting the notion that today’s whales evolved only centuries after the Flood.⁴ Beyond that double-assumption-based scenario, the post-Flood whale evolution concept also requires high-speed hyper-evolution, which is beyond what even Darwin imagined.^{1,4}

Don’t be fooled by false hypotheticals that displace the N-Q boundary with saltationists’ premature K-T/K-Pg boundary to promote whale hyper-evolution.

Thankfully, in 1961, Drs. Henry Morris and John Whitcomb clarified that Earth’s sedimentary rocks match the Genesis Flood account, showing that Flood-deposited fossils should be expected in sedimentary rocks as high as what’s now called the N-Q

article highlights

- Various animals were buried during the Flood’s drainage phase in sedimentary rocks below the N-Q boundary level.
- Whale fossils appear in these sedimentary layers, right where we would expect them if they were buried during the Flood year.
- Claiming that whale fossils were formed after the Flood is a false hypothetical.
- Today’s whales have no “walking whale” ancestors because they were created on Day 5 of the creation week as ocean-dwelling creatures.

boundary.⁵ There was no need for a legged whale ancestor to suddenly hyper-evolve after the Flood. Instead, God created whales as whales on Day 5 of the creation week (Genesis 1:21). 📖

References

1. Johnson, J. J. S. 2019. Beware the Bait of False Hypotheticals. *Acts & Facts*. 48 (2): 22. See also Johnson, J. J. S. Noisy Narwhals in Greenland’s Frigid Fjords. *Creation Science Update*. Posted on ICR.org June 18, 2020, accessed October 25, 2020.
2. Atheistic evolutionists deny the Genesis Flood. However, people who mix the Bible with evolutionary theory (in violation of Deuteronomy 4:2) often combine Genesis history with imagined evolutionary processes that deny the biogenetic fixity of God’s created animal kinds, such as proposing that terrestrial quadrupeds disembarked Noah’s Ark to procreate descendants who somehow morphed into today’s oceanic legless whales. Such proponents claim that vestigial legs and hips in modern whales are evidence of recent legged ancestors. But real-world whales have no such “vestigial” hips or legs! See reference 3.
3. Sherwin, F. 1998. Scientific Roadblocks to Whale Evolution. *Acts & Facts*. 27 (10).
4. Tomkins, J. and T. Clarey. 2019. Whale Fossils Confirm Post-Flood Boundary. *Acts & Facts*. 48 (12): 9; Tomkins, J. and T. Clarey. 2020. Paleontology Confirms a Late Cenozoic N-Q Flood Boundary. *Acts & Facts*. 49 (11): 10-13.
5. “In general, the record of the entire Tertiary [including Neogene] and early Quaternary...can be reasonably interpreted as preserving the [fossil] record of the last phases of the Flood, including both the final deposits and geomorphic phenomena related to the [orogenic] rising of the lands and sinking of the [oceanic] basins that terminated the inundation.” Whitcomb, J. C. and H. M. Morris. 1961. *The Genesis Flood*. Phillipsburg, NJ: Presbyterian & Reformed Publishing, 287.

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Q. Did God Make Harmful Parasites in the Beginning?



A Parasites are a unique form of life in today's world. These invertebrates come in all shapes and sizes, from single-cell animals (e.g., *Plasmodium* that causes malaria) to a tapeworm (*Polygonoporus giganticus*) that can grow up to 131 feet! Despite these varied forms, parasite origin and macroevolution are strange and unknowable in the naturalistic worldview.

In 1993, two evolutionists stated, "Parasites are still an enigma."¹ Not much has changed for the naturalist since then. "Hence, tempo and mode of host-parasite co-evolution at the macro-evolutionary scale remain a major challenge to understand."² Evolutionary biologists Eric Loker and Bruce Hofkin stated, "Macroevolutionary patterns among parasites are not yet very clear."³ The origin of these fascinating creatures is still a puzzle for secular zoologists.

What is the origin of parasites? Were Adam and Eve infected with them at creation?

In the biblical model, creation occurred thousands of years ago, and God saw that everything was very good (Genesis 1:31). There were no parasites, not like we have today. But in Genesis 3, God's creation

was corrupted when Adam and Eve fell (Genesis 3:6), and God cursed His creation, the full force falling on humans and all their dominion (Genesis 3:17-19). God drove our first parents from the Garden to a land where they experienced sorrow and death. There, parasites made their appearance.

Before the Fall, parasites were not yet parasites. Rather, they were most likely free-living creatures independent from Adam, Eve, and the animals. An evolutionist stated, "Parasitic species have retained some morphological [structural] resemblance with their free-living counterparts."⁴

In addition, the transition to parasitism doesn't require long periods of evolutionary time: "In fact, free-living species could become parasitic without substantial anatomical or physiological changes."⁵

In all likelihood some of these invertebrates lived together before the Fall, providing benefits to each other—a state called *mutualism*. But when God cursed the earth, these creatures probably experienced changes in their body systems and became parasitic.⁶

After the Fall, Adam and Eve and their descendants were exposed to everything from pathogenic bacteria and harmful

article highlights

- Parasites live on or in another living creature.
- Evolutionists are baffled trying to explain parasite evolution.
- It appears parasitic creatures were not parasites until after Adam and Eve's fall.
- Christ Jesus came to remove the curse of sin and death, and when He returns the curse will be gone.

mutations—including cancer—to poisonous plants, harmful insects, and parasites. In this good-yet-groaning world (Romans 8:22), parasites in particular remind us that the curse (under the law of sin and death described in Romans 8) is operating unchecked today. But we can rejoice that someday death will be swallowed up in victory by the Author and Giver of life (1 Corinthians 15:54)! 🌿

References

1. Brooks, D. and D. McLennan. 1993. *Parascript: Parasites and the Language of Evolution*. Washington, DC: Smithsonian Institution Press, 209.
2. Schmid-Hempel, P. 2011. *Evolutionary Parasitology: The Integrated Study of Infections, Immunology, Ecology, and Genetics*. Oxford, UK: Oxford University Press, 359.
3. Loker, E. S. and B. V. Hofkin. 2015. *Parasitology: A Conceptual Approach*. New York: CRC Press, 293.
4. Poulin, R. 2007. *Evolutionary Ecology of Parasites*, 2nd ed. Princeton, NJ: Princeton University Press, 13.
5. Miller, S. and J. Harley. 2013. *Zoology*, 9th ed. New York: McGraw Hill, 235.
6. Guliuzza, R. and F. Sherwin. 2015. Does Our Immune System Indicate Disease Before the Fall? *Acts & Facts*. 44 (1): 17.

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By the Numbers

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Savvy Sons of Light

article highlights

- Jesus taught about money on many occasions.
- The parable of the unjust steward is baffling because he is dishonest and yet his master commends him.
- When we dig deeper, it's clear Jesus wants us to make shrewd use of our resources and opportunities to acquire things of eternal value.

Many Christians grow uncomfortable when their pastor teaches about money. If it's any consolation, I know many pastors who feel the same way. But not so with Jesus! Christ spoke frequently on the subject, and of the nearly 40 parables recorded in the synoptic gospels, approximately one third address the use of money in one form or another.

More often than not, Jesus warned against an obsession with money and the damaging effect it can have on our lives. But He didn't regard money itself in a negative light—it can be a powerful tool if used for righteous purposes. To illustrate this point, Jesus told a rather perplexing parable about an unjust steward that continues to challenge believers today.

The parable in Luke 16:1-13 relates the unscrupulous dealings of a rich man's steward who had been accused of squandering his employer's goods. When the master confronts his steward, he informs the steward he would be relieved of his duties once a final accounting had been made. Realizing he would soon lose his position, the steward quickly calls all of his master's debtors and reduces their debts in the hope of currying favor from them in the future. These business deals, while personally advantageous,

were fundamentally dishonest and cheated the owner out of money he was rightfully owed. But rather than condemning the man once the truth became known, "the master commended the unjust steward because he had dealt shrewdly" (Luke 16:8).

Is Jesus signaling His approval of deceitful transactions? If you're confused at this point, you're not alone. To complicate matters, Christ further expounds on this parable with two statements that appear to conflict: "And I say to you, make friends for yourselves by unrighteous mammon [wealth]" (Luke 16:9), which seems directly opposed to His conclusion that "no servant can serve two masters. . . . You cannot serve God and mammon" (Luke 16:13). How can we reconcile this? Is it possible to use unrighteous wealth to make friends on one hand while serving God honestly and honorably on the other?

The difficulty disappears when we realize that Jesus never endorses the steward's deception. Rather, Christ commends the steward's clever money management, keen people sense, and financial plans. We see this especially when Christ draws a contrast between "the sons of this world [unbelievers]" who "are more shrewd in their generation than the sons of light [believers]" (Luke 16:8). Jesus' point is that believers are often

not as financially savvy about investing in things of eternal value as unbelievers are toward investing in things of this world.

The unjust steward knew how to use money to make friends, albeit in a deceptive fashion for worldly gain. The Lord Jesus wants His "sons of light" to use money to make friendships that last for eternity, "that when you fail, they may receive you into an everlasting home" (Luke 16:9). It is a far greater thing to use the resources God allows us to have to make true friends, "lay[ing] up for yourselves treasures in heaven" (Matthew 6:20) by pointing people to Christ and encouraging their faith in Him. We can then look forward to their everlasting fellowship when we "fail" from this life and go home to glory.

What better way to start the new year than by resolving to be savvy "sons of light," using our time, talents, and financial resources for the gospel of Christ and God's glory? ICR would be thrilled to have your support as we proclaim the truth of our Creator, Savior, and coming King in another year of service to Him. ✝

Portions of this article were adapted from ICR founder Henry M. Morris' *Days of Praise* articles "The Unjust Steward" and "Friends of Mammon."

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



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GALATIANS 6:9-10

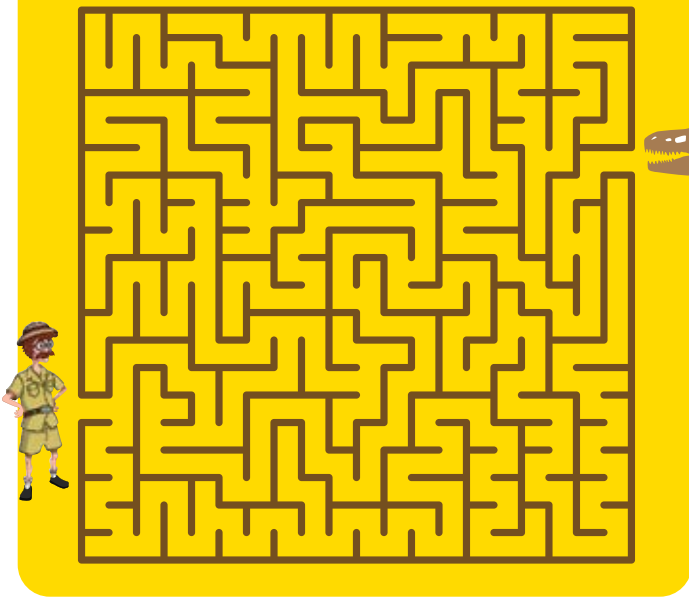
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Compare what you might hear on TV or in school with what the Bible and scientific evidence actually tell us.

- ✓ God created dinosaurs and people on Day 6 of the creation week only thousands of years ago.
- ✓ Dinos lived at the same time as people, though probably not in the same places.
- ✓ Scientists are finding real blood cells, leftover skin, and bone inside many fossils! This means dinosaurs were alive a lot more recently than many people think.

Help the scientist find the fossil.



Word Search

H	B	E	H	E	M	O	T	H	K	H	E	N	E
N	E	H	I	I	R	I	I	I	D	I	E	S	T
Y	T	R	N	S	K	I	N	N	B	D	T	U	H
D	N	C	B	E	D	E	K	O	V	H	R	E	A
T	N	D	N	I	F	H	C	R	T	A	I	L	E
I	B	A	G	I	V	G	N	T	R	O	S	E	O
T	X	Y	S	S	T	O	O	E	O	O	Y	I	S
G	I	S	H	E	H	X	R	O	R	G	N	N	I
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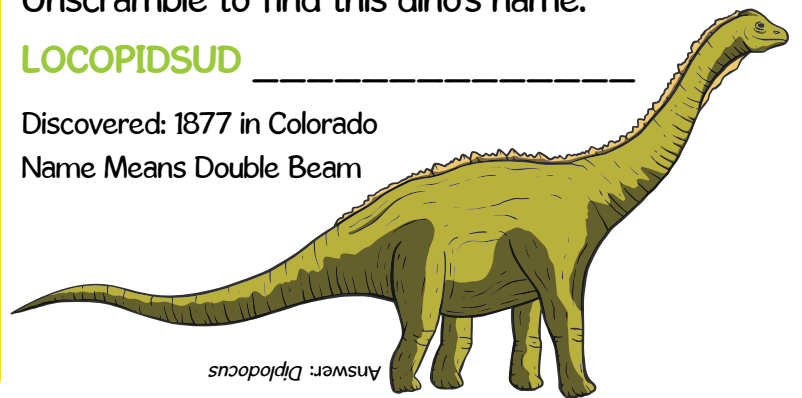
- | | | | |
|-----------|----------|---------|----------|
| DESIGN | CREATION | SKIN | DINOSAUR |
| TAIL | DAY SIX | EXTINCT | FOSSIL |
| HERBIVORE | BEHEMOTH | BONES | |

Unscramble to find this dino's name:

LOCOPIDSUD _____

Discovered: 1877 in Colorado

Name Means Double Beam



Write the dinosaur name next to the correct image.

- Lambeosaurus Struthiomimus Ankylosaurus
Parasaurolophus Stegosaurus Velociraptor




Answers: 1. Velociraptor, 2. Parasaurolophus, 3. Struthiomimus, 4. Ankylosaurus, 5. Stegosaurus, 6. Lambeosaurus



Took the family here [to the ICR Discovery Center for Science & Earth History] yesterday. **A gem in Dallas.** Very professional with all their exhibits, volunteers, and guides. Highly recommend this spot for the fam.

— A. C.



 Beautiful words [in Creation by Design, November 2020 Acts & Facts]. I have learnt a lot from your ministry, and it has made me stand firm on Genesis and a young, supernatural creation. May the Lord bless you.


— G. H.



I'm perpetually amazed at how God holds every molecule together with the precise pressure needed to sustain life, even as the tides roll in on cue, seasons come and go in their time, birth and death happen in His time, and not one star fades without His command.

— P. P.



 Engineers like me enjoy His design. We can put all the variables that man can know to put everything around us in an equation...and yet it is just a minuscule drop in

the vast ocean of God's knowledge and wisdom in creating the physical world we see.

— E. A. A.

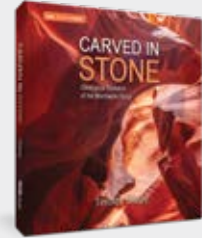


●●●●● **Creation Science Done Right!**

This discovery center is put together so well! I have teenagers and 10-year-olds, and we all enjoyed the exhibits. **The exhibits flow beautifully and are very high quality. There is a ton of information available at the kiosks along the way that contain the corresponding scriptural references and science data, as well as some interactive stations.**

There's a lot of knowledgeable staff to direct you and answer any questions you may have. You can spend as little as an hour, but we spent four including the planetarium. Parking is free, and there are picnic benches and outdoor exhibits...We went and brought back fast food to enjoy outside before our planetarium show. I highly recommend this discovery center—it is rich in biblical history, creation science, and the life of Jesus. They just opened in September [2019]—go enjoy this amazing experience!

— H. M. N.



★★★★★ – **WOW!!! What a Great Book!!!**

Reviewed in the United States on June 20, 2020

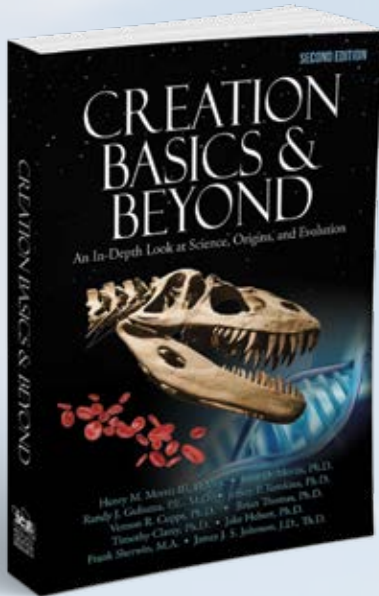
This is one of the most professional-looking books in my collection.

It's a beautiful book and could be listed as a work of art. Yes, it's big. Yes, it's heavy. Yes, it's loaded with facts and figures, and yes, the photo reproductions contained therein are spectacular! For years and years, I had bought into the long-age/ Darwin evolutionary theory until I finally found out how fossils are really made. (Read the book!) Once you realize that you've been lied to all these years about how fossils are made, you'll begin questioning every evolutionary concept and discover how little evidence on which the evolutionary theory is based. You'll find that the foundation of evolution is imagination—not scientific fact. **If you're searching for truth, this book has many answers to your questions as to the beginning of Earth and the origin of life, and I would highly recommend this book to you. If you're an evolutionist who cares about scientific truth, this book is a must-read for you.**

Have a comment? Email us at Editor@ICR.org or write to Editor, P. O. Box 59029, Dallas, Texas 75229.

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