

# ACTS & FACTS

INSTITUTE FOR  
CREATION RESEARCH

ICR.org

MARCH | APRIL  
2023

VOL. 52 NO. 2



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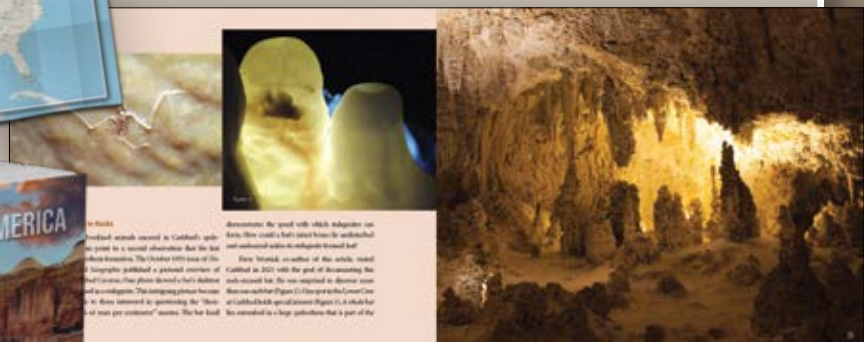
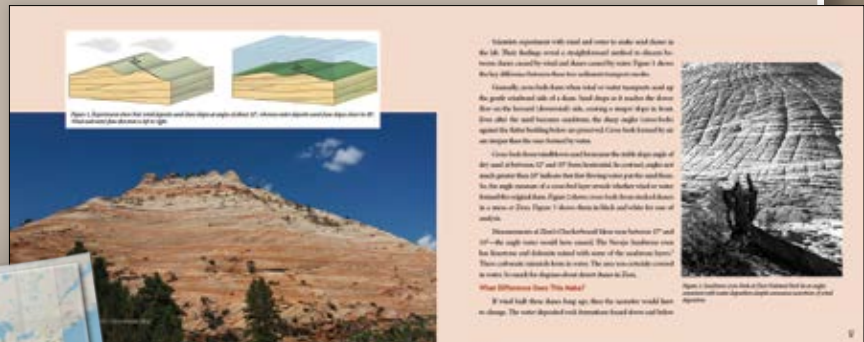
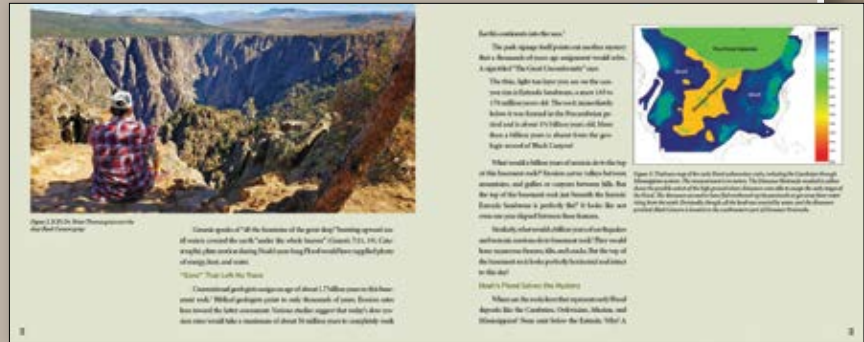
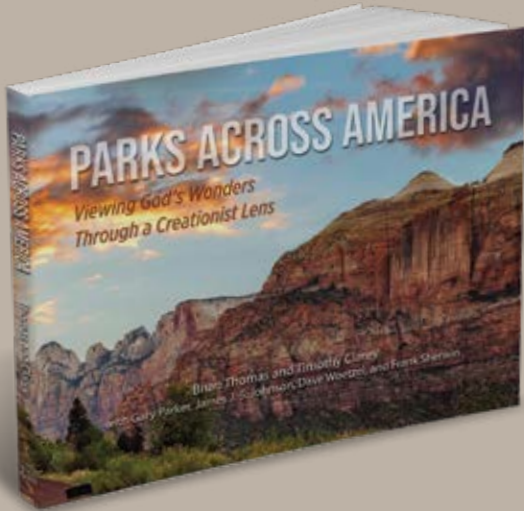




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#### DESIGNER

Dennis Davidson

[Jesus Christ] is the image of the invisible God, the firstborn over all creation. For by Him all things were created that are in heaven and that are on earth, visible and invisible, whether thrones or dominions or principalities or powers. All things were created through Him and for Him. And He is before all things, and in Him all things consist. And He is the head of the body, the church, who is the beginning, the firstborn from the dead, that in all things He may have the preeminence. For it pleased the Father that in Him all the fullness should dwell, and by Him to reconcile all things to Himself, by Him, whether things on earth or things in heaven, having made peace through the blood of His cross.

(Colossians 1:15-20)

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Institute for Creation Research

ISSN (print): 1094-8562

ISSN (online): 2833-2806

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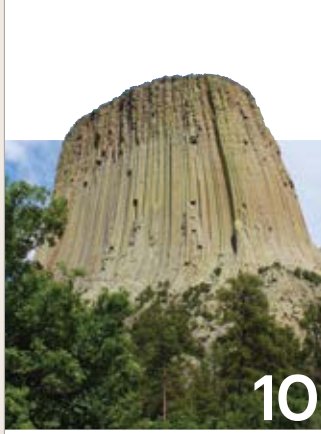


Front cover: Front cover: *Astyanax mexicanus* surface fish (top) and cavefish (middle, bottom) in left-lateral views  
Image credit: ICR

Unlike cavefish, surface fish have functional eyes and distinct pigmentation patterns along the body. The juvenile cavefish in the middle exhibits a pigmentation pattern that's intermediate between the adult cavefish below and the surface fish above.



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# MUTATION-SELECTION

## A Calamitous Creationist Concession



*Darwin's finch in Galapagos*

Creation scientists sometimes say to evolutionists, “We have the same data you do, but we have different interpretations.” That statement is definitely true of the different approaches to geology. Interpreting geological features as artifacts of a global, yearlong flood differs radically from the conventional belief that present geological processes are key to understanding the past.

But it isn't true that creationists have historically interpreted biological adaptation differently than Darwinists. We've almost always assented to the Darwinian mechanism of mutation and selection. Sure, we've tacked on some disclaimers that while mutation-selection is true, it's limited. We've added more disclaimers to force-fit it into a biblically *inconsistent* explanation. This jury-rigging of our explanation should be a wake-up call that we're way off base. The fact is that creationists have been playing Darwin's game, on his field, by his rules.

For instance, when it comes to the extraordinary biological changes observed in finch beaks, flightless birds on islands, or even peppered moths, creation scientists have historically failed to provide a biblically consistent and scientifically sensible alternate explanation for them—or even a new hypothesis. For decades, we've interpreted things like the loss of eyes in cavefish by applying the same ill-conceived, scientifically foolish narrative gloss of random genetic mutations that are mystically acted on by Darwin's conception of natural selection.

Somehow, we've believed that we could tack on something like “but all Darwin shows is a loss of eyes (i.e., information) and not the evolution of eyes” and thus conform our thinking wholly to the Darwinian mechanism while fortuitously escaping the anti-theistic effects of its thinking. But we haven't escaped. By playing Darwin's game, we compromise biblical truth and impede scientific research. We can't refute the Darwinian explanation of adaptative change because we're saying the same thing.

### How Does Evolution Tend Toward Atheism?

Ask yourself *how* evolutionary thinking tends toward atheism. Once pinpointed, an anti-biological design to anti-theistic connection is obvious. Evolutionists excel at swaying people to believe a counterintuitive anti-design view of biological adaptation. Accepting their mutation-selection view tends to move people from a general belief in God—acknowledged by

## article highlights

- Creation biologists have traditionally accepted some form of mutation-selection in their models.
- This is a fundamental error because accepting mutation-selection means accepting an anti-design explanation for life.
- Mutation-selection implies a process without purpose, a random sequence of events.
- Christ Jesus engineered every living thing with precise purpose, therefore genetic selection is specifically directed and designed.
- ICR's continuous environmental tracking (CET) model of adaptation is engineering-based and organism-focused, and it sees genetic sequences as being purposefully designed to solve specific environmental challenges.
- Creation scientists have the opportunity to provide a pro-design explanation for biological change that honors our Creator.

even the famed evolutionist Richard Dawkins—to an atheistic destination. Though an atheist, Dawkins grants that

We are entirely accustomed to the idea that complex elegance is an indicator of premeditated crafted design. This is probably the most powerful reason for the belief, held by the vast majority of people that have ever lived, in some kind of supernatural Deity.<sup>1</sup>

Remarkably, though, people's prior perceptions are radically transformed after embracing a key evolutionary assumption—random, purposeless adaptation, as embodied by the Darwinian mutation-selection approach to biology. Although many theistic selectionists miss it, the late philosopher Bertrand Russell recognized exactly what mutation-selection implies, saying:

But even more purposeless, more void of meaning, is the world which Science presents for our belief...that Man is the product of causes which had no prevision of the end they were achieving; that his origin, his growth, his hopes and fears, his loves and his beliefs, are but the outcome of accidental collocations of atoms.... A strange mystery it is that Nature, omnipotent but blind, in the revolutions of her secular hurrying through the abysses of space, has brought forth...[mankind] with the capacity of judging all the works of his unthinking Mother.<sup>2</sup>

How does Darwinism move people from their intuitive thoughts that creatures are “premeditated crafted design” by God to believing that they are just purposeless outcomes of “Mother Nature”? We need to peel off some layers to see how the Darwinian mutation-selection mechanism fills that bill.

We begin by recognizing that from a biblical perspective, any theory starting with the assumption that creatures weren't designed is anti-theistic. How, then, is mutation-selection inherently anti-design and thus anti-theistic? As Russell summed up, it introduces the notion that organisms are produced in such a haphazard, accidental, and thoughtless way that it persuades a person to conclude that no ratio-

nal engineer (i.e., God) would ever have had a hand in it. Once people accept that anti-design processes can produce creatures, then they're pointed toward atheism.

### Purposeless Mutation: The Segue to Anti-Design Thinking

The goal of Darwinism has always been to explain the design of living things without recourse to a supernatural Designer. The renowned evolutionist Francisco Ayala explained:

The conundrum faced by Darwin can hardly be overestimated. The strength of the argument from design to demonstrate the role of the Creator had been forcefully set forth by philosophers and theologians. Wherever there is function or design, we look for its author. It was Darwin's greatest accomplishment to show that the complex organization and functionality of living beings can be explained as the result of a natural process—natural selection—without any need to resort to a Creator or other external agent.<sup>3</sup>

The anti-theistic power of Darwinism lies in one thing only—its anti-engineering assumptions. A classical Darwinian mechanism for adaptive change *must* use words that convey anti-design characteristics. Why? Well, if scientific literature can persuade people that organisms came about via a chaotic, purposeless process, then this fact would negate God directly creating them, and Darwinism would seem to make more causal sense.

The evidence for the vital anti-design themes of randomness and purposelessness emerges in what evolutionists themselves repeatedly say are core beliefs essential to Darwinian thinking. Beginning with anti-engineering assumptions and an anti-design goal, evolutionists interpret the genetic changes they observe with words that express the *opposite* of what a real engineer would do. Selectionist literature constantly instills anti-design thoughts through descriptive words like random, accidental, broken, non-controlled, purposeless, etc.

Several evolutionary theorists explain why anti-design is a non-negotiable axiom or deeply embedded core tenet.

The random occurrence of mutations with respect to their consequences is an axiom upon which much of biology and evolutionary theory rests. This simple proposition has had profound effects on models of evolution developed since the modern synthesis, shaping how biologists have thought about and studied genetic diversity over the past century.<sup>4</sup>

The core tenet of the MS [modern synthesis, or current evolutionary theory] is that adaptive evolution is due to natural selection acting on heritable variability that originates through accidental changes in the genetic material. Such mutations are random in the sense that they arise without reference to their advantages or disadvantages.<sup>5</sup>

Evolutionary theory asserts that adaptive mutations, which improve cellular fitness in challenging environments, occur at random and cannot be controlled by the cell....The assertion that adaptation occurs purely through natural selection of random mutations is deeply embedded in our understanding of evolution.<sup>6</sup>

A classical or Darwinian evolutionary system embodies a basic principle: purposeless genetic variation of reproductive individuals, united by common descent, coupled with... natural selection of those rare individuals that fortuitously express the traits that complement or thwart the contemporary selective pressures.... It's a process replete with chance.<sup>7</sup>

How do these words instill an anti-engineering view of biology? It's because neither the engineering design process nor its products are random, accidental, broken, trial-and-error, non-controlled, purposeless, and the like. All of the anti-design thoughts conveyed by these words are summed up in the mutation-selection mechanism in just one word—mutation. Consider this: what anti-theistic power would the mutation-selection mechanism have if the word mutation were replaced with “directed genetic change”? The anti-theistic thrust would vanish.

The anti-design framework expects non-purposeful changes to genes, and interpretations are colored thereby. So, when selectionists see a change in DNA (or traits), they mechanically label it a random mutation. But, it must be emphasized that these labels do *not* reflect observation-based descriptions. Selectionists don't have tests to demonstrate that these genetic changes are random, or even that the genes are broken. These are merely anti-design characterizations of genetic change—strictly a narrative gloss—that are drilled into biologists from their earliest days of training. The vast majority of evolutionary biologists would adamantly maintain that genetic changes are undeniably purposeless, undirected mistakes. They cannot comprehend—or countenance—biology operating in any other way.

### Blind Cavefish: Creationists Have Adopted Darwinism

Regrettably, most creationists and Intelligent Design advocates also couldn't fathom biological adaptation happening in any other way. So, we'd publicly endorse the Darwinian mechanism of randomly occurring broken genes that are “worked on” by Darwin's concept of natural selection (i.e., passive creatures being shaped by “selection pressures”).

A prime illustration is the exhibit describing the origin of cavefish displayed in ICR's original creation museum in Santee, California.<sup>8</sup>

As genetic information is copied and passed on generation after generation, occasionally there are copying “mistakes” known as mutations. Mutations have been observed to destroy, damage, or corrupt genetic information or to be neutral, but have never been observed to add new information. This is true even of so-called

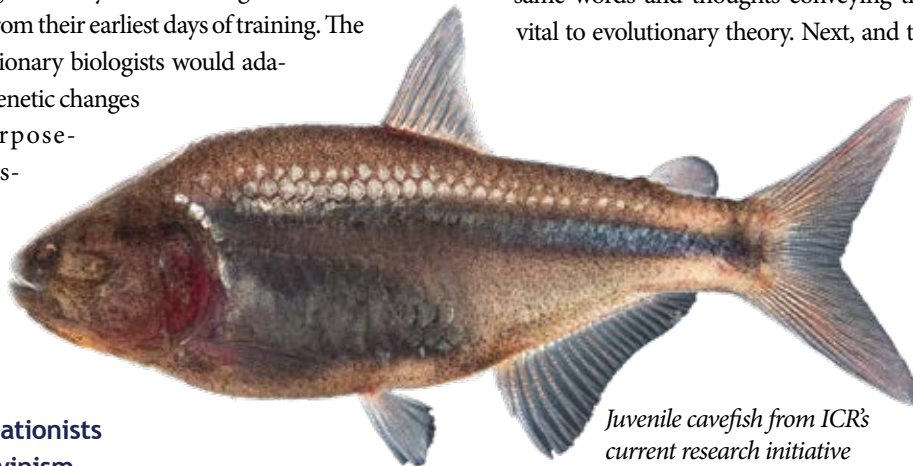
“beneficial” mutations that may be advantageous to the surviving organism in some circumstances....When a mutation occurs in a light environment that causes animals' offspring not to have eyes, it is an enormous disadvantage...so natural selection eliminates this flaw....When the eyeless defect occurs here [in a cave], it does not give any disadvantage so it is not eliminated. In fact, it gives advantages. Those with eyes can crash into things, injuring the eyes, and can get diseases of the eyes, possibly leading to death....Eventually, selective pressures ensure that all are eyeless....These ghostly fish [are] prime examples of how mutation and natural selection lead to a reduction of functioning systems....These adaptations are no evidence at all for the belief that complexity has arisen by such processes—they only show how information can be lost in a fallen world.

In sum, creationists also claim that surface-dwelling ancestors gradually morphed into cave-dwelling forms due to random genetic mutations that result in a loss of information through a purposeless, trial-and-error process of death and survival (i.e., natural selection) that produces depigmentation and blindness. Selection pressures ensure that all are eyeless.

What's usually missed is that both the non-evolutionary and evolutionary interpretations are identical. Both invoke the mutation-selection mechanism. Two problems arise. First, creationists use the same words and thoughts conveying the anti-design assumptions vital to evolutionary theory. Next, and this may shake *Acts & Facts*

readers to the core, essentially every assertion in our old explanation has been shown to be scientifically untrue.

Consider another example of two statements describing how biological adaptation occurs. One is made by the vehemently anti-design atheist



*Juvenile cavefish from ICR's current research initiative*

Massimo Pigliucci. The other was published in a creationist journal reflecting what I thoughtlessly repeated for years. Which one is Pigliucci's?

- 1) “All organisms share common descent and are adapted to the environment through natural selection.”
- 2) “Every organism [descends from ancestors] and natural selection has acted upon ancestral variation and *de novo* mutations to adapt them to changing environments.”

The thoughts these statements share are no foresight, random broken genes, gradual change, active environments adapting passive organisms (e.g., “adapt them to”) “acted on” by Darwinian selection—and no hint of a designed, purposeful process. Statement one is Pigliucci's.<sup>9</sup> Therefore, the statement that creationists have the same data



but have different interpretations isn't really true in this case.

## Don't Play Darwin's Game; Develop a New Theory

Everyone knows that engineers don't produce designs in a purposeless, chaotic fashion. But, if the status of "true science" is retained for the evolutionary scenario that randomness and mistakes truly can cobble together living organisms, then people will continually be persuaded away from accepting that creatures originated from a supernatural engineer called God.

Creation scientists have been doing a disservice to fellow believers. We've been teaching that the Darwinian mutation-selection mechanism is real but just limited in effect, and that evolutionists' error is claiming that its effect is nearly unlimited. This has been a colossal mistake. The evidence from the mouths of evolutionary theorists is that key assumptions epitomized in mutation-selection *itself* are the segue to anti-design and thus are anti-theistic assumptions.

At ICR, we greatly regret ever having endorsed the mutation-selection mechanism. When you stop to think about it, that whole notion of a chaotic mechanism for adaptation is inconsistent with all the other incredibly complex and purposeful biological systems the Lord Jesus created.

We compromised creationist thinking with Darwin's death-driven worldview by using the phrase "for this fallen world" as our own segue to accommodate the misery associated with mutation-selection in our model of adaptation and to advance our lighter version of evolution—theistic selectionism. Worse, some of our museum displays even taught that it was God who ordained mutation-selection "as a conservative mechanism" to cull animals or people with genetic defects from the "gene pool" for the benefit of the rest. Mutation-selection derailed us into looking to the Fall and not to creation for biblical insights about adaptation. Why wouldn't the *original* purposeful, orderly adaptation mechanisms that the Lord built into creatures still be the principal mechanisms in operation today?

From a scientific standpoint, our explanations about fish eyes getting scratched in caves and birds being blown off islands until mutation-selection made them all flightless are as ridiculous as any other evolutionary story. Our most important mistake was accepting that a whole suite of changes associated with life in a cave resulted from random, broken genes. This was also absurd. Many would be shocked to know that for about two decades, there have been so many scientific papers pointing to directed genetic changes toward purposeful ends that books have been written about them. The whole

random mutation idea—so foundational to Darwinism's anti-design premise for adaptation—is falling apart.

Since creationists weren't considering anything other than mutation-selection, we weren't even thinking about built-in mechanisms conferring multigenerational adaptive abilities. We claimed that creatures were intelligently designed, yet our fixation on mutation-selection inhibited us from thinking about integrating engineering principles into models of biological systems.

This is why ICR's continuous environmental tracking (CET) model of adaptation is so liberating. It's the first engineering-based, organism-focused model that interprets altered genetic sequences as purposeful modifications and not broken genes, and as regulated changes rather than random mutations. It views such sequences as being targeted to intentionally bring about rapid and predictable adaptations in order to solve specific environmental challenges. ICR's experiments on blind cavefish are confirming our pro-design assumptions.

Perceptive evolutionists know that the true victory resides in people embracing their anti-design mechanism. Once everyone is playing their anti-design game, on their anti-design field, by their anti-design rules, then they've

already won and we've lost—no matter how many caveats or disclaimers we attach.

Playing Darwin's game only pits creationists against evolutionists in a highly subjective squabble over what mutation-selection can accomplish—and without them even considering whether it's true or dishonors the Lord Jesus. Creationists have an opportunity to provide a pro-design and far more Christ-honoring and scientifically accurate explanation of biological change...if we'll just pursue it. 🙏

### References

1. Dawkins, R. 1986. *The Blind Watchmaker*. New York: Norton, xii.
2. Russell, B. 2008. A Free Man's Worship. *The Meaning of Life*. E. D. Klemke and S. Cahn, eds. Oxford: Oxford University Press.
3. Ayala, F. J. 2007. Darwin's greatest discovery: Design without designer. *Proceedings of the National Academy of Sciences*. 104 (suppl. 1): 8567-8573.
4. Monroe, J. G. et al. 2022. Mutation bias reflects natural selection in *Arabidopsis thaliana*. *Nature*. 602: 101-105. Referencing Futuyma, D. J. 1986. *Evolutionary Biology*, 2nd ed. Sunderland, MA: Sinauer Associates.
5. Charlesworth, D., N. H. Barton, and B. Charlesworth. 2017. The sources of adaptive variation. *Proceedings of the Royal Society B*. 284 (1855): 20162864.
6. Hull, R. M. et al. 2017. Environmental change drives accelerated adaptation through stimulated copy number variation. *PLoS Biology*. 15 (6): e2001333.
7. Greaves, M. and C. C. Maley. 2012. Clonal Evolution in Cancer. *Nature*. 481: 306-313.
8. This explanation is still featured in The Creation and Earth History Museum, which was established after ICR's move to Texas when the ICR museum and its contents were sold.
9. Pigliucci, M. 2008. Is evolvability evolvable? *Nature Reviews Genetics*. 9: 75-82.

Dr. Guliuzza is President of the Institute for Creation Research. He earned his Doctor of Medicine 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.



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**APRIL 4**

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David Napier presents to Living Stones Christian Fellowship Church members during their January visit to the ICR Discovery Center



Dr. Brian Thomas describes why Lucy was an ape and not a transitional creature at the January 14 Made in His Image Seminar at the ICR Discovery Center



Trey Bowling, Dr. Jeff Tomkins, and Dr. Brian Thomas answer questions during the Made in His Image Q&A session at the Discovery Center in January





# DEVILS TOWER MYSTERIOUS COLUMNS AND ENGINEERED LICHENS

T I M C L A R E Y , P H . D .



**M**any people have seen pictures of Devils Tower or visited the site in Wyoming. Very few of the 500,000 annual visitors, though, may understand the mystery of its formation or the distinct role the global Flood played in its development.

Army Lt. Col. Richard Dodge assigned the tower's name while leading a military expedition into the region in 1875. In 1906, President Theodore Roosevelt established Devils Tower as America's first national monument. Located in northeastern Wyoming about 100 miles west of Rapid City, South Dakota, the 1,000-plus-acre monument draws curious travelers driving between Yellowstone and the Black Hills, as well as 5,000 to 6,000 rock climbers each year.

The mystery of its formation begins with its general cone shape and a unique fracture pattern known as columnar jointing. Many lavas form hexagon-shaped columns as they cool, but none are as large as the column widths (10 feet) at Devils Tower, or as tall. The National Park Service reports, "Devils Tower is 867 feet from its base to the summit. It stands 1,267 feet above the Belle Fourche River and is 5,112 feet above sea level!"<sup>1</sup>

### Cooling Magma Columns

Evolutionary geologists are still uncertain how Devils Tower formed, but they assert it happened 50 million years ago. Made of a rock called phonolite, it has a greenish-gray color.<sup>2</sup> Early interpreters deduced it was the core of an ancient volcano. Others believed it to be a laccolith, a large magma that squeezes into overlying sedimentary rocks and

### article highlights

- The formation of Devils Tower is a puzzle to evolutionary geologists. The tower's polygonal columns are unusually large, and its cone shape and composition point to a complex formation process.
- It appears that magma ascended into groundwater and exploded upward through overlying Flood sediments, forming a huge cylinder shape that filled and hardened into a tower.
- Runoff from floodwaters eroded the surrounding sediments and left the dramatic tower alone in an otherwise smoothed landscape.
- Mutualistic lichens comprised of an alga and a fungus display the purposeful design of both.
- Devils Tower provides yet another astonishing testament to the recent Genesis Flood.

bows the sediments upward into a mushroom shape.<sup>3</sup> But we see no evidence that the surrounding sediments were bent upward. They remain flat, layer after layer, just the way they were deposited in the Flood.

Prokop Závada and his colleagues formulated the latest idea concerning the tower's formation. They proposed the tower was a maar-diatreme volcano.<sup>3,4</sup> This is a special volcanic feature that forms when magma encounters groundwater, which becomes superheated and then explodes to the surface, puncturing the overlying sediments. The new hole fills with rising magma to create a cylinder-shaped underground lava tower.<sup>4</sup> Soon after Devils Tower was formed, draining floodwaters eroded the surrounding

*Dr. Clarey walks past fallen polygonal-shaped columns at the foot of Devils Tower.*

Image credit: Clint Loveness



sediment layers and left the lava monolith behind.

This process would only work with freshly deposited sediments that were still uncemented. Similar superheated water at Yellowstone doesn't blow out a big hole since the rocks above are already hardened. So, if the tower did form as a maar-diatreme, only the conditions of the Flood could have allowed its development.

### Columns from Cooling

What about those massive polygonal columns? Devils Tower is again unique in that it has many pentagon-shaped columns. Studies suggest all of these columns cool from the top, with contraction forming regularly spaced fractures that propagate downward. During the Flood, groundwater percolating along the open fractures likely caused the lower part of the magma to cool quickly. Fast cooling makes less orderly fracture patterns.<sup>5</sup> We see this at the base of the tower where the columns become chaotic and disorganized.

Magmas similar in age to Devils Tower also intruded into the surrounding region.<sup>6</sup> ICR scientists determined that these magmas formed during the receding phase of the Flood after most of the sediments were deposited.<sup>7</sup>

### Rapid Landscape Erosion

Devils Tower stands alone above the surrounding landscape. Signage at Devils Tower claims that a “mighty current millions of years ago” from the nearby Belle Fourche River swept away the sediments. But rivers are too small to sweep away an entire landscape and leave it so uniformly level. Rivers instead follow confined channels and don't

erode vast terrains. What was the source of this vast “current”?

The best explanation is that all of the sediments that once covered the magma intrusion were eroded during the final recession of the Flood. These missing strata included layers deposited in the Zuni Megasequence, a vast package of rock layers found on every continent. ICR research has shown that the Zuni was deposited when floodwater completely covered the earth.<sup>8</sup> Some of these eroded strata included the dinosaur-rich Morrison Formation, where ICR's team of scientists found bones from *Allosaurus* and *Camarasaurus* a few miles south of Devils Tower.<sup>9</sup>

### Why Devils Tower Is Young

The Flood's receding phase preserved the phonolite monolith because igneous rocks are more resistant than wet, uncemented sediments. However, because the columns are so uniformly fractured, they erode more rapidly than most igneous rocks. Vast temperature changes, rain, and snowmelt cause the columns to break free and fall. The base of Devils Tower is piled with broken columns up to 150 feet deep.

But if Devils Tower was exposed 5 to 10 million years ago, as conventional scientists claim, it probably would have completely eroded away in this amount of time. At the very least, it should be entirely buried in its own debris of broken columns. And the Belle Fourche River doesn't seem to be eroding away any broken columns since none are found within its waterway. The relatively thin buildup of broken columns at the tower's base fits its recent exposure 4,500 years ago during the draining of the floodwaters.

*Massive phonolite columns and the debris pile surrounding the tower's base*

Image credit: Clint Loveness







*The Belle Fourche River flows through the Devils Tower National Monument*

lichens can survive on very low water content with very slow rates of growth (0.04 to 0.4 inches per year). Some lichens may be 4,500 years old, dating back to the immediate post-Flood period.<sup>11</sup>


Yet, the lichen is not thriving in isolation. As it weathers the rocks, it alters their surfaces, aiding in the settlement and colonization of other lichens, including foliose (“leafy”) and fruticose (“shrubby”) forms.<sup>10</sup> In turn, these engineering marvels invite vine-like foliage growth or the attachment and germination of seeds that enable trees to take root upon the vertical rock faces of the Devils Tower columns. We shouldn’t be surprised by this because if we look

closely, we’ll recognize even more signatures of the wise and thoughtful hand of our Creator Jesus Christ.

### The Flood Explains the Mystery

Devils Tower stands as a monument to the Flood, whose conditions laid the foundation for its catastrophic development. Groundwater within the recently deposited Flood sediments likely became superheated by the intruding magma, which then exploded and created a hole that a tower of magma filled. As the molten material began to cool, additional groundwater seeped down the column fractures, causing rapid cooling of the remaining magma.

Erosion during the receding stage of the Flood swept away the covering Flood sediments, leaving the subdued landscape that surrounds the tower. The thin pile of columns at the tower’s base demonstrate that Devils Tower has been exposed for only thousands of years. Now lichen, marvels of God’s design, work in engineered harmony to thrive and help break down these exposed rocks.

With Genesis in hand, the mystery of Devils Tower’s formation can be solved. 

#### References

1. Frequently Asked Questions. Devils Tower National Monument Wyoming. National Park Service. U.S. Department of Interior. Posted on [nps.gov/deto](https://nps.gov/deto), updated October 26, 2020.
2. Devils Tower is made of phonolite porphyry, an unusual type of extrusive igneous rock that’s low in quartz and has white feldspar crystals. Porphyry indicates the rock had a complex cooling history. The large, visible minerals it contains presumably crystallized deep in the earth. The surrounding finer-grained crystals (the matrix) cooled more rapidly near the surface after it was emplaced.
3. How the Tower Formed. Devils Tower National Monument Wyoming. National Park Service. U.S. Department of Interior. Posted on [nps.gov/deto](https://nps.gov/deto), updated December 5, 2019.
4. Závada, P. et al. 2015. Devils Tower (Wyoming, USA): A lava coulée emplaced into a maar-diatreme volcano? *Geosphere*. 11 (2): 354-375.
5. Clarey, T. 2022. Entablature Reveals Flooding of Columbia River Basalts. *Acts & Facts*. 51 (7): 7.
6. We can date the relative time of these intrusions elsewhere by the layers they penetrate. Any intrusion had to occur after the overlying layers were deposited.
7. Clarey, T. 2019. Black Hills Sites Showcase Creation and the Flood. *Acts & Facts*. 48 (9): 5-7.
8. Clarey, T. 2020. *Carved in Stone: Geological Evidence of the Worldwide Flood*. Dallas, TX: Institute for Creation Research.
9. Thomas, B. 2021. ICR’s First Dinosaur Excavation. *Acts & Facts*. 50 (12): 7.
10. Raven, P. H. et al. 1999. *Biology of Plants*, 6th ed. New York: W. H. Freeman & Company.
11. Tomkins, J. P. 2020. Symbiotic Lichens Showcase Our Creator’s Ingenuity. *Acts & Facts*. 49 (2): 15.

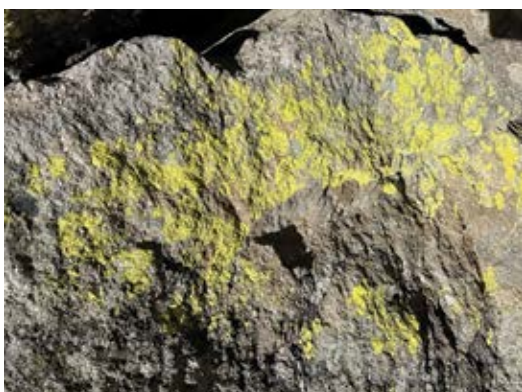
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### Lichens: Engineered Partnerships

The phonolite columns of Devils Tower and the boulder debris surrounding it are encrusted with a phenomenon that exemplifies a uniquely designed living collaboration—lichens. These systems comprise a mutualistic combination of two individuals, a photosynthetic alga (photobiont) and a fungus (mycobiont).<sup>10</sup> The fungal species provides structure, moisture, and protection for the alga, which in turn harnesses light energy from the sun to produce food for itself and its host fungus. Neither organism can flourish without the other, pointing to unmistakable evidence of purpose in biological engineering. Together, the two organisms acquire an integrated set of adaptable properties that differ from those of each respective entity.

The most visible lichen covering these rocks is a yellow-green crustose form known as *Acarospora* sp. Ecologically, this mutualist produces acids that break down solids and minerals, contributing to the weathering of rocks and other objects upon which the lichen grows. It reproduces by fragmentation, growing outward, or by sending buds and spores into the wind. Available substrates in the area have become a “canvas” of lichen colonization. Additionally,



*Yellow lichen seen at Devils Tower by ICR’s 2021 science expedition*

Image credit: Tim Clarey



# THE FINAL WORLD

## Renovation or New Creation?

### article highlights

- The Bible gives information on key past events, such as Jesus Christ's creation of the universe 6,000 years ago.
- Scripture also provides information about key future events, like Jesus' return for His children and judgment of the people who didn't put their faith in Him.
- Some believe that the Bible's prediction of a new heaven and earth signals a renovation of what's already here rather than a replacement.
- Our present world will come to a destructive end, and then Jesus will completely recreate heaven and earth, and all believers will live there with Him forever.





In the beginning about 6,000 years ago, Jesus Christ created the heavens and the earth out of nothing, or *ex nihilo*, which I discussed in a previous article.<sup>1</sup> The Bible not only gives us information about key events of the past such as the creation week but also tells us about key events of the future.

In the end times, Jesus Christ will return for His followers and judge the world that rejected His salvation. The present earth will then be destroyed by fire, and God will create a new heavens and earth. The new heavens and new earth are the final phase of God's prophetic program and will be the eternal home of Christ's followers.

### Fiery Destruction of the Present World

While many Christians debate the details of eschatology, the Bible is quite clear that the present world will be destroyed. Peter said, "But the heavens and the earth which are now preserved by the same word, are reserved for fire until the day of judgment and perdition of ungodly men" (2 Peter 3:7), and "the heavens will pass away with a great noise, and the elements will melt with fervent heat; both the earth and the works that are in it will be burned up" (2 Peter 3:10).

Psalms 102:25-26 connects this end-time destruction to the original creation.

Of old You laid the foundation of the earth, and the heavens are the work of Your hands. They will perish, but You will endure; Yes, they will all grow old like a garment; Like a cloak You will change them, and they will be changed.

### New Creation or Renovation

According to Revelation 21:1, after the final resurrection, there will be a new heaven and new earth: "Now I saw a new heaven and a new earth, for the first heaven and the first earth had passed away. Also there was no more sea." Peter mentions this new heaven and new earth as well. "Nevertheless we, according to His promise, look for new heavens and a new earth in which righteousness dwells" (2 Peter 3:13). Isaiah 65:17 says, "For behold, I create new heavens and a new earth; and the former shall not be remembered or come to mind."

The fact that there will be a new creation seems to be plainly stated in the Scriptures, but one issue that's been debated about the coming new heaven and new earth is how new it will really be. In other words, will it be a remodeling operation (renovation) or a brand-new creation of the current world—something like Earth 2.0? If it is a re-creation, the present earth would be utterly destroyed and replaced by a totally new heaven and earth.

The renovation perspective was promoted and best described by Christian writer Randy Alcorn in his widely popular book *Heaven*.<sup>2</sup> It's noteworthy that Alcorn is a young earth creationist, so we can't really say that his idea was influenced by an old earth perspective.<sup>3</sup> Alcorn advocates and explains the renovation view as follows:





Romans 8:19-23 inseparably links the destinies of mankind and Earth. As such, the earth will be raised to new life in the same way our bodies will be raised to new life....The perfection of creation once lost will be fully regained, and then some....It will be as if an artist wiped away the old paint, stained and cracking, and started a new and better painting, but using the same images on the same canvas....The cleansing with fire will be more thorough than the Flood in that it will permanently eliminate sin. But just as God's judgment by water didn't make the earth permanently uninhabitable, neither will God's judgment by fire.<sup>2</sup>

Now I saw a new heaven and a new earth, for the first heaven and the first earth had passed away. Also, there was no more sea. (Revelation 21:1)

It's very difficult to reconcile these passages with the notion of a remodel job or renovation for the present creation.

These verses seem to clearly teach a total destruction of the present world followed by a complete re-creation, or new creation. The Bible couldn't have made it any clearer that this present world will be destroyed by fire and utterly pass away.

### Biblical Evidence for a Re-Creation

While the concept of renovation or restoration of the present earth is an interesting view, a number of biblical passages seems to clearly tell a different story. They support the total destruction of the present heaven and earth and replacement by a new heaven and earth.

One of these Scriptures is a powerful declaration by Christ, who compared the eternal nature of His Word to the temporal nature of the current world. Matthew 24:35 says, "Heaven and earth will pass away, but My words will by no means pass away." It's noteworthy that Christ uttered these words immediately after saying, "Now learn this parable from the fig tree," in which He cursed a fig tree, and it withered and died (Matthew 24:32-34).

A passage from Isaiah likens the end of the world to the withering and death of a plant or tree. "All the host of heaven shall be dissolved, and the heavens shall be rolled up like a scroll; all their host shall fall down as the leaf falls from the vine, and as fruit falling from a fig tree" (Isaiah 34:4). Isaiah 51:6 also includes this withering theme for the end of the world:

Lift up your eyes to the heavens, and look on the earth beneath. For the heavens will vanish away like smoke, the earth will grow old like a garment, and those who dwell in it will die in like manner; but My salvation will be forever, and My righteousness will not be abolished.

And Peter's description of the end of the world tells us exactly how this withering will take place.

The heavens will pass away with a great noise, and the elements will melt with fervent heat; both the earth and the works that are in it will be burned up....The heavens will be dissolved, being on fire, and the elements will melt with fervent heat. (2 Peter 3:10, 12)

John adds additional details in his vision in Revelation.

Then I saw a great white throne and Him who sat on it, from whose face the earth and the heaven fled away. And there was found no place for them. (Revelation 20:11)

In addition to the clear statements in these Bible verses in the English translation, there's one additional textual point that favors the destruction and re-creation view. In the Greek text of Revelation 21:1 above, we see the phrase "passed away," which is the verb *aperchomai*. This verb is modified in the aorist tense (*apēlthon*) to indicate that it's a completed action in the fulfillment of this prophetic vision. This is the same aorist verb used in Revelation 21:4, which says regarding the redeemed saints in heaven, "And God will wipe away every tear from their eyes; there shall be no more death, nor sorrow, nor crying. There shall be no more pain, for the former things have *passed away*."

The meaning of "passed away" in Revelation 21:4 is unambiguous, and no one would argue that the tears, mourning, crying, or pain are only renovated or remodeled. Everyone would agree that this means these things are eliminated forever. Since this same Greek word appears just three verses apart in Revelation 21 in the same end-time context, it's logical to assume that it carries the same meaning in verse one that it does in verse four. This further supports the idea that the present heaven and earth will be destroyed and completely removed to make way for a new heaven and new earth.

### Conclusion

The original creation was created very good, as proclaimed by God when He was done making the man and woman on the sixth day (Genesis 1:31). However, Adam plunged the human race into a world of sin and misery, bringing a curse upon the whole of creation.

According to many prophecies in the Scriptures, Jesus Christ came to redeem mankind through His death on the cross and resurrection from the dead. And this same Jesus, "through whom also He [God] made the worlds" (Hebrews 1:2), will come again and bring an end to both sin and this fallen world—bringing in a new one. 🙏

#### References

1. Tomkins, J. P. 2023. Creation *Ex Nihilo* Through Jesus Christ. *Acts & Facts*. 52 (1): 14-16.
2. Alcorn, R. 2004. *Heaven*. Carol Stream, IL: Tyndale Momentum.
3. Alcorn, R. What Is Your Position on the Age of the Earth? *Eternal Perspectives Ministries*. Posted on emp.org February 15, 2010, accessed January 5, 2023.

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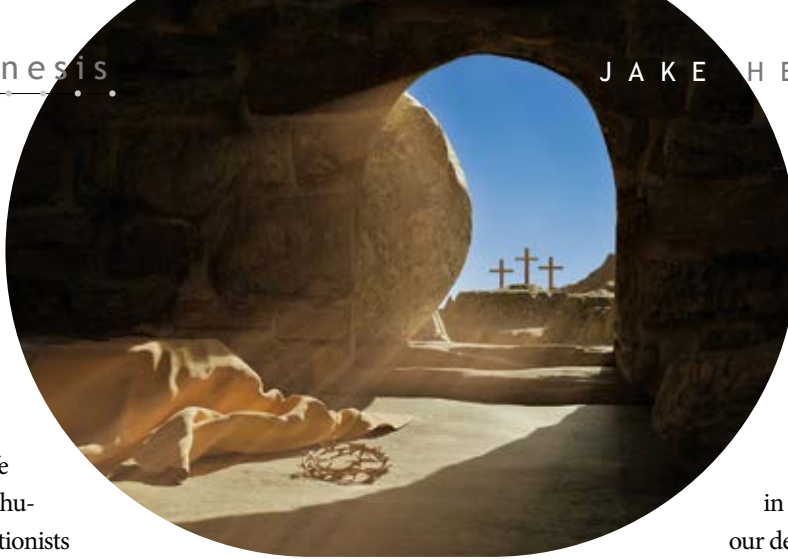


# CAVEFISH RESEARCH



**A**t the Institute for Creation Research, we're investigating *Astyanax mexicanus* (Mexican tetra) as an experimental model of rapid adaptation by animals to different environmental conditions, such as moving from an underground cave system into sunlight. These images show two blind cavefish morphotypes in left-lateral views. In the upper image is an adult cavefish showing native features, including the absence of an eye, a semitransparent orange body, visible blood vessels, reflective lateral stripe, and low

numbers of black melanin pigment spots. In the lower image is a juvenile cavefish raised under daily cycles of full-spectrum high-intensity light for 40 days, followed by four months of treatment with artificial daylight. In contrast to the upper image, pigmentation has comprehensively increased in this juvenile cavefish. The juvenile's parents were treated with high-intensity light for five months before reproducing this fish.



Scientific evidence for evolution is utterly lacking. Were evolution true, innumerable transitional fossil forms between basic kinds of creatures would clearly document the evolution of life from single-cell organisms to humans. Yet even among evolutionists there are no undisputed examples of these “missing links.”<sup>1</sup> Moreover, the spontaneous emergence of life from nonlife has never been observed and seems absolutely prohibited by the laws of physics and chemistry. Despite intellectual pretensions to the contrary, people accept evolution not because of scientific evidence but because of its emotional appeal.

When one honestly reflects on one’s own sins and moral failures, the prospect of a future accounting to a supernatural Creator is terrifying. Even Darwin famously acknowledged in his autobiography that, for him, the doctrine of hell was a compelling reason to wish Christianity *not* to be true.<sup>2</sup> But evolution supposedly removes the possibility of future judgment.

Also, evolution, at least as it’s popularly perceived, superficially holds hope for the future, with our descendants eventually becoming higher and better versions of us. Given enough time, our descendants will supposedly evolve into beings with, in the words of the old *Adventures of Superman* television show, “powers and abilities far beyond those of mortal men.” Such a possibility is admittedly appealing—no wonder this is such a common theme in comic books and science fiction movies!

Yet, even if our descendants were to evolve into superior beings, what hope does this offer those of us alive today? What hope

does it offer to the billions who have already suffered and died before humanity could reach this better future? Moreover, the evolutionary story ends when the universe reaches a maximum state of disorder billions of years in the future. When this happens, our descendants will perish, regardless of any “more highly evolved” state they may have achieved.


What a contrast between the gospel of Christ and the unsupported fictional story of evolution. There’s zero evidence we humans are becoming better and better over time. But there’s abundant evidence we’re deteriorating mentally and physically, generation after generation,<sup>3</sup> as taught by

# FUTURE HOPE EVOLUTION OR RESURRECTION?

Scripture (Genesis 3; Romans 8:22-23).

However, because of the “many infallible proofs” of Christ’s resurrection from the dead (Acts 1:3), Christians can be confident that our sins are forgiven, giving us peace with God (Romans 5:1). We can also be confident that Christ will keep His promise to “upgrade” His followers with immortal, powerful, and glorious new bodies (1 Corinthians 15:42-44), bodies like His own supernatural resurrected body (Philippians 3:21). If one thinks about it, this is the *only* way we humans can ever realistically hope to rise to a higher, more exalted state. Performance can only be improved with a design upgrade from the Manufacturer, not by random mistakes in the production process!

Moreover, the sinful tendencies that estrange us from both God and others will be forever banished, and we will rejoice in the Lord’s presence for all eternity, with no more death, suffering, or pain (Revelation 21:4). And this blessed state will *never* be taken from us.

Creationists have spent much effort pointing out the scientific problems with evolution. But since belief in evolution is ultimately rooted in wishful thinking, not evidence, perhaps we should also work to show that the evolutionary story is emotionally unfulfilling as well. Only in the gospel of Christ can the deepest longings of the human heart be met. 

### References

1. Morris, J. D. and F. J. Sherwin. 2011. *The Fossil Record*. Dallas, TX: Institute for Creation Research.
2. Morris, H. M. 1994. Birthrights and Pottage. *Acts & Facts*. 23 (7).
3. Sanford, J. C. 2008. *Genetic Entropy and the Mystery of the Genome*, 3rd ed. Waterloo, NY: FMS Publications.

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**article highlights**

- If evolution were true, transitional fossils should document the development of life from simple to complex forms—but there are no undisputed missing links.
- Many accept evolution because of its emotional appeal and seeming escape from God’s judgment.
- Even if evolution were true, it gives people no real hope for the future.
- Christ’s defeat of death and sin on the cross and His resurrection from the dead are the only hope for humanity. Only in Him can our hearts’ longings be met.



# TEENAGE NINJA TURTLE FOSSILS

What would you think if you discovered a dust-covered iPhone next to a mummy inside an Egyptian coffin? You might suspect someone recently tampered with it, but you see no signs of that. Perhaps instead you consider that this mummy and therefore thousands of other ancient Egyptian artifacts were deposited *after* iPhones were invented. This would be too outlandish—unless researchers found more iPhones in more coffins. Then we might revise our concepts of ancient history.

This kind of mystery presents itself in the fossils I like to study. We find no modern tech inside fossil bones to make them look recently deposited, but we do find blood vessels, animal proteins, bone cells, and sometimes DNA. I've been keeping a list of published papers on such fossil soft tissue

A turtle fossil has now joined the soft tissue list. Researchers described blood vessels they freed from extinct turtle and crocodile-like creatures by dissolving fossil bone.<sup>5</sup> Weak acid dissolves bone mineral but not certain proteins. The team also took pictures of whole bone cells and used a silver stain to see the proteins extracted from the bones, further confirming the presence of original biomolecules.<sup>6</sup>

Our list of 122 fossil tissue discoveries feels like finding iPhones next to mummies in 122 coffins. Unlike finding anachronisms in just one place like northern Egypt, proteins in fossils represent time capsules from around the world. And like finding more than one type of out-of-time artifact, these biomolecules come from all kinds of animals. Land, sea, and sky creatures look like they were buried the world over only thousands of years ago.

“Teenage” is in this article’s title because these turtle and other fossils really do look young—like they belong to a teenaged world instead of an ancient one. “Ninja” is there because the fossils clash with the concept of millions of years. Like little iPhones in ancient coffins, biomolecules in teenage ninja turtles and so many other fossils suggest that evolutionary history needs a rewrite. 🐢

## References

1. Thomas, B. 2013. A Review of Original Tissue Fossils and Their Age Implications. *Proceedings of the Seventh International Conference on Creationism*. Pittsburgh, PA: Creation Science Fellowship.
2. Thomas, B. and S. Taylor. 2019. Proteomes of the Past: The Pursuit of Proteins in Paleontology. *Expert Review of Proteomics*. 16 (11-12): 881-895.
3. A colleague helps me curate an online list of soft tissue discoveries. See Thomas, B. and J. Tay. List of Biomaterial Fossil Papers, Google doc. This is free to view at [tinyurl.com/4htm54w9](https://tinyurl.com/4htm54w9).
4. Thomas, B. et al. 2023. Attenuated Total Reflection Fourier Transform Infrared (ATR FT-IR) Spectroscopy Sensitivity to the Thermal Decay of Bone Collagen. *Applied Spectroscopy*. 77 (1): 53-61.
5. Voegelé, K. K. et al. 2022. Soft Tissue and Biomolecular Preservation in Vertebrate Fossils from Glauconitic, Shallow Marine Sediments of the Hornerstown Formation, Edelman Fossil Park, New Jersey. *Biology*. 11 (8): 1161.
6. Silver ions cling to protein molecules as long as those proteins haven't yet turned into some more resistant substance or into gases.

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## article highlights

- Various kinds of soft tissues are routinely found in fossils all over the world.
- Soft tissues can't survive for millions of years, refuting evolution's age assignments.
- Recently discovered biomolecules in a turtle fossil add to the evidence suggesting that evolutionary history needs a rewrite.

discoveries. The list contained 40 by 2013,<sup>1</sup> 85 by 2019,<sup>2</sup> and grew to 122 in 2022.<sup>3</sup>

The ever-increasing soft tissue finds challenge the millions of years assigned to their fossils. Biomolecules like proteins and DNA decay and disappear in thousands of years, yet biomolecules are still present in all these fossils. In our most recent study, my colleagues and I tested a new protocol to measure protein decay,<sup>4</sup> which adds to the protocols already used. Our results confirmed that the proteins decay relentlessly.

Turtle leg bone fossil found in Montana by the author and Daryl Robbins



Carapace fossil found in Montana by the author and Daryl Robbins



When you eat eggs—boiled, poached, as omelets, or otherwise—do you discard the eggshells? Likewise, if you eat trout or turkey, do you recycle your fish or fowl bones?

Some birds and mammals eat broken eggshells or snail shells to get nutritionally valuable calcium.<sup>1</sup> Birds such as woodpeckers and sandpipers also munch on bones for this fundamental mineral, especially during breeding season.<sup>2,3</sup> Getting calcium (from CaCO<sub>3</sub>, calcium carbonate) is essential, of course, but how do these animals know they need it, especially during the breeding season?

A related question is how do expectant human mothers, who suddenly crave seafood (or pickles, or whatever) know they need a nutritional change while their physiologically transformed wombs busily build babies?<sup>4</sup>

Actually, calcium nutrition-satisfying behavior makes sense biblically because it helps Christ's creatures to reproduce successfully; that is, to "be fruitful and multiply" so their kinds can "fill" (populate) Earth's habitats (Genesis 1:22). Thus, learning how creatures fulfill the Genesis mandate helps us to "cast down" haughty imaginations (2 Corinthians 10:5), such as the imaginations of Darwinists who try to replace Christ with animistic nature-creating-itself mythology masquerading falsely as science (1 Timothy 6:20, KJV).<sup>5</sup>

Christ commanded birds to reproduce and "fill" environments. He also equipped them with what they need to do so, and we are just now learning many of the intricate details. Successful reproduction requires a harmony of physical traits (biochemically regulated by genetics/epigenetics) and decision-based behaviors that rely upon learning by the nonphysical "soul" of a bird. This balanced blend of physical body systems with nonphysical learned actions is one of the "wonders without number" that we can admire God for as we reverently study how His creatures live (Job 9:10).<sup>5</sup>

article highlights

- Animals need dietary calcium to thrive in their various life cycles.
- Red-cockaded woodpecker females seek calcium from bones mostly during breeding seasons, demonstrating Jesus Christ's masterful timing and provision.
- Random trial-and-error evolution couldn't produce the balanced blend of physical traits and decision-based behaviors these birds demonstrate.
- The Creator designed creatures with the innate abilities they need to live and reproduce.

# Why Breeding Woodpeckers Snack on Bones



Red-Cockaded Woodpecker

When creatures purposefully search local habitats for needed nutrients—including vital minerals like calcium—they exhibit continuous environmental tracking (CET) as they hunt and select what they need from their territory.<sup>6</sup> Thus, Christ equipped animals to *actively* select what they need from their habitats. It's not true that habitats "select" or "shape" *passive* animals.<sup>7</sup>

So, what can we learn from Christ's red-cockaded woodpeckers (*Picoides borealis*)? These remarkable creatures recycle

calcium from collected bone fragments, consuming bone flakes just before and while they lay eggs. One study reported:

The females took bone fragments from raptor pellets located on the ground.... Small bone fragments were consumed at the pellets whereas larger pieces were taken to a tree trunk (by flight) where they were pecked and mandibulated.... Pieces of bone were cached by placing them between scales of [tree trunk] bark and then hammering them with the bill until they were wedged. We confirmed that bones were cached by recovering two pieces of bone from trees and by observing birds recover cached bones, handle them and cache them elsewhere.<sup>2</sup>

Selecting and ingesting bone-pecked calcium is targeted and purposeful—not random—because mother woodpeckers seek and extract calcium from bone fragments during breeding seasons (hiding pieces for later "snacks"), and then mostly ignore those bones when they cease producing eggs.<sup>2,5,7</sup> Amazing!

Darwinian trial-and-error luck cannot explain how these wise woodpeckers know to hunt and ingest calcium-rich bone flakes, timed to egg-producing seasons.<sup>5,7</sup> However, the Lord Jesus Christ is the mastermind of purposeful timing for all His creation (Ecclesiastes 3:1), including female red-cockaded woodpeckers. 🙏

References

1. Straus, M. Calcium in Homemade Dog Food. *Whole Dog Journal*. Posted on whole-dog-journal.com May 28, 2019. See also Beasom, S. L. and O. H. Pattee. 1978. Utilization of Snails by Rio Grande Turkey Hens. *Journal of Wildlife Management*. 42 (4): 916-919.
2. Repasky, R. R., R. J. Blue, and P. D. Doerr. 1991. Laying Red-Cockaded Woodpeckers Cache Bone Fragments. *The Condor*. 93 (2): 458-461.
3. MacLean, Jr., S. F. 1974. Lemming Bones as a Source of Calcium for Arctic Sandpipers (*Calidris* spp.). *Ibis*. 116 (4): 552-557.
4. You Want to Eat What? An OB/GYN's Guide to Pregnancy Cravings. *Northwestern Medicine*. Posted on nm.org, accessed January 19, 2023.
5. Johnson, J. J. S. 2017. Clever Creatures: "Wise from Receiving Wisdom." *Acts & Facts*. 46 (3): 21, citing Proverbs 30:24-28.
6. For more information on continuous environmental tracking, visit ICR.org/cet.
7. Guliuzza, R. J. 2021. A New Commitment to Deep Research. *Acts & Facts*. 50 (9): 4-5.

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(L-R) Director of Donor Relations Charles (Chas) Morse, Data Processing & Mailing Specialist Aaron Moss, Senior Data Processing Specialist Eric Bowyer, Stewardship & Trust Administrator Regina Krieg, and Data Processing Supervisor Margie Medford in the ICR Discovery Center's Beasts of the Earth exhibit

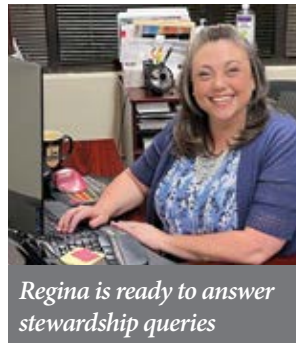
Meet our Donor Relations team led by Director Charles (Chas) Morse. Their objective is to transform donated resources into Scripture-affirming science for the benefit of thousands of people worldwide. We at ICR want to reach those desperate to hear the discoveries of science that glorify Jesus Christ as Creator, Redeemer, and coming King.

A main focus in Donor Relations is expressing gratitude to donors by letters and phone calls. Our three-year goal is to personally call and write to all ICR donors! We're reminded of Paul's declaration, "I thank my God, making mention of you always in my prayers, hearing of your love and faith which you have toward the Lord Jesus and toward all the saints" (Philemon 1:4-5). We strive to follow Paul's example of thankfulness.

ICR approaches all spending initiatives with much prayer and



Eric, Aaron, and Margie overseeing an ICR mailing



Regina is ready to answer stewardship queries

wise counsel, ensuring that all donations are invested in a manner consistent with our mission. One example of our stewardship of resources is the in-house production of weekly, monthly, and quarterly donor mailings and correspondence. Our new Canon printer and insert machine save our Lord's ministry here over \$100,000

annually, allowing us to invest these funds into furthering God-honoring research and outreach.

If you'd like to support ICR's work, questions about general donating can be directed to Margie Medford at [donations@icr.org](mailto:donations@icr.org).

Additionally, we're happy to assist you in issuing charitable gift annuities (CGAs), charitable remainder unitrusts (CRUTs), will planning, donations from IRAs, donor-advised funds, stocks, and mutual funds. All you need to know about planned giving to ICR can be found on our website at [ICRgiving.org](http://ICRgiving.org), or you can contact Regina Krieg at [stewardship@icr.org](mailto:stewardship@icr.org).

Know that the hand of our Creator, the Lord Jesus Christ, continues to guide those of us at ICR in our quest to give Him alone the glory and honor due His name (Colossians 1:15-17). 🙏

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



Prayerfully Consider Supporting ICR INSTITUTE FOR CREATION RESEARCH

- Online Donations
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Visit [ICR.org/donate](http://ICR.org/donate) and explore how you can support the vital work of ICR ministries. Or contact us at [stewardship@ICR.org](mailto:stewardship@ICR.org) or 800.337.0375 for personal assistance.





Our son,...who is 13, reads your [Acts & Facts] magazines each month. All of the donations that have come from our name are from him. **When he has been paid for a job around the house, he has chosen to give some (or all) of that money to ICR.**

— T. S.



Just wanted to share what a blessing I've found in your *Days of Praise* podcasts. The "New Name" episode [on December 12, 2022]

had me in tears because I had only recently become aware of...and cherishing this blessed truth. **I love how Jesus gives His disciples new names as God did in [the] Old Testament...then to think, in heaven we'll all get new names from our Lord! What a joy to**



**ponder.** Anyways, I had been feeling so alone in this world, not expecting much wisdom or insight

from any "Christian" or church ministry. I've been pleasantly surprised and delighted by this podcast. I'm hearing the spiritual understanding that comes from knowing and loving Him! Just know this parched soul appreciates you immensely.

— K. T.

**Editor's note:** Visit [ICR.org/podcasts](http://ICR.org/podcasts) for *Days of Praise* and other ICR programs.



**I think this publication [Acts & Facts Kids Edition 2022] was the best kids periodical I have ever seen.** I would wish the gifted people who put this together could repeat their achievements.

— G. L.

Thank you very much for the *Acts & Facts* for kids. I plan to give it to my two great-grandchildren...I not only appreciate what you are doing but also the Christianly way you are doing it. I am ninety-four years old with only twenty-five percent vision. **I can no longer read Acts & Facts but I have caregivers who read it to me.**

— P. E.

**Editor's note:** The *Acts & Facts Kids Edition* was a special issue for December 2022. You can find a PDF of it at [ICR.org/CreationKids](http://ICR.org/CreationKids).



Thanks to Dr. [Greg] Brewer for the powerful "Building a Human Body" article [in January/February 2023 *Acts & Facts*] demonstrating, as a matter of common sense, that humans were designed by a Creator and could not be the result

of unguided natural processes. I would like to add that one very, very important step was omitted from the list of 30. **The information that defines the human being, coded in the DNA, must be replicated and passed down through the generations, thus making DNA the world's most durable and longest-lasting information storage system.**

— J. H.

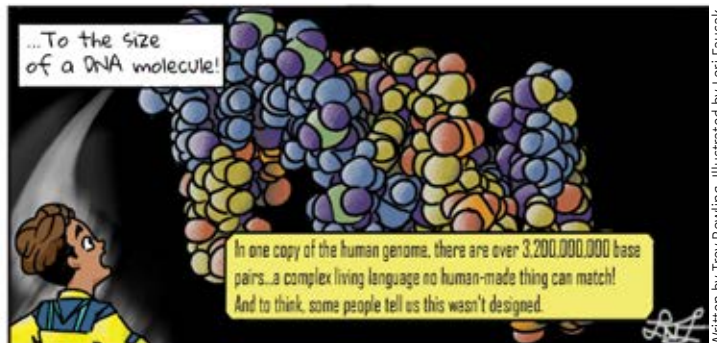


I attended one of Dr. [Tim] Clarey's seminars in South Alabama last year and was amazed at the quality of his scientific approaches. **I am a retired physician after 48 years of invasive adult cardiology and can testify wholeheartedly to the absolute proof of my and many colleagues' observations of the mysteries of the human body that are above human understanding, confirming that we are indeed made in His likeness and thus we will never understand [all He's done].**

— S. J. S., Jr., M.D.

Have a comment?

Email [Editor@ICR.org](mailto:Editor@ICR.org) or write to Editor, P. O. Box 59029, Dallas, TX 75229. **Unfortunately, ICR is unable to respond to all correspondence or accept unsolicited manuscripts, books, email attachments, or other materials.**



Written by Trey Bowling. Illustrated by Lori Fausak.



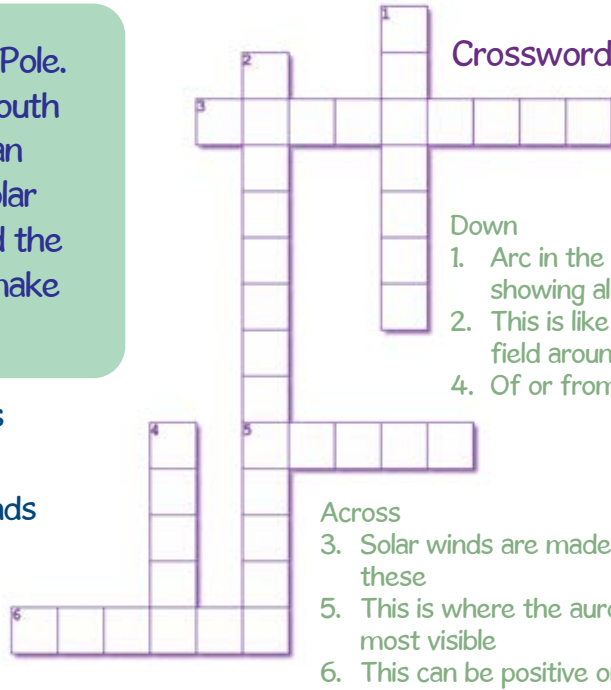
The aurora borealis can be seen near the North Pole. And the aurora australis can be seen near the South Pole. Auroras are curtains of brilliant light you can see in the night sky. They actually come from solar winds that Earth's magnetosphere sends toward the poles, heating the gases of the atmosphere to make different colors. Did you also know...

- ✓ The magnetosphere is a magnetic field that Jesus Christ designed to surround and protect Earth.
- ✓ Every day, Earth's magnetosphere blocks solar winds that could be harmful.
- ✓ Solar wind is made of charged particles that have traveled millions of miles from the sun.
- ✓ Charged particles are particles that have an electric charge, which can be positive or negative.

Unscramble the letters to form words found on this page

caltirpe \_\_\_\_\_  
 gsthli \_\_\_\_\_  
 emeosptahr \_\_\_\_\_  
 alsro \_\_\_\_\_

### Crossword Puzzle



**Down**

- Arc in the sky showing all the colors
- This is like a force field around Earth
- Of or from the sun

**Across**

- Solar winds are made up of these
- This is where the auroras are most visible
- This can be positive or negative

Paint your own aurora! You'll need watercolor paints, paintbrush, water, and heavy paper.

- Wet your paper with a very wet brush. Then add bright colors of paint onto the wet paper.
- Add more bright paints to the wet paper in the sky area and let dry.



- Add some dark blue hills or mountains along the bottom of the painting.
- Let dry. Add some black trees on the hills, and you're done!



Answers to crossword puzzle: Down: 1. rainbow; 2. magnetosphere; 4. solar; Across: 3. particles; 5. poles; 6. change  
 Answers to word scramble: particle, lights, atmosphere, solar

**NEW!**

## Fascinating Creatures

*Evidence of Christ's Handiwork*

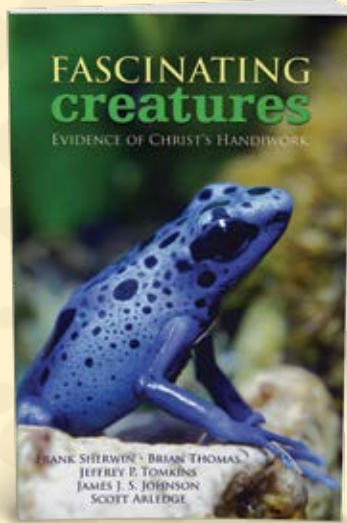
**\$2.99** | BFC

The Lord Jesus Christ, our Creator, has filled His world with an astonishing number of weird, wacky, and wonderful creatures.

*Fascinating Creatures: Evidence of Christ's*

*Handiwork* takes a look at features only creation can explain. How else do we account for the platypus, a seemingly oddball mixture of mammal, bird, and reptile? Or poison dart frogs that don't poison themselves? Or octopuses that "taste" with their tentacles?

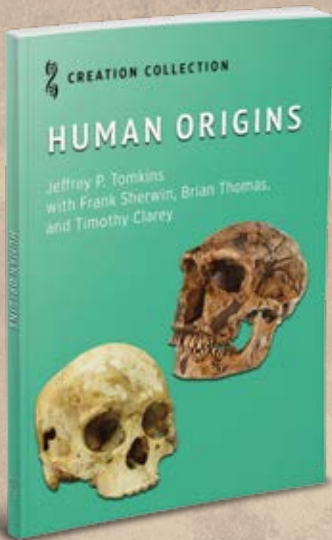
This book highlights the innate engineering and abilities Christ has given His living creations to uniquely fit them for their environments. Cross the desert, swim the ocean, and fly the breeze with us as we explore some of God's fascinating creatures.



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**NEW!**

 CREATION COLLECTION



## HUMAN ORIGINS

**\$9.99** | BHO

Conventional scientists say humans evolved, and that we and other living creatures are the products of time and chance. But the Bible offers a different answer. It

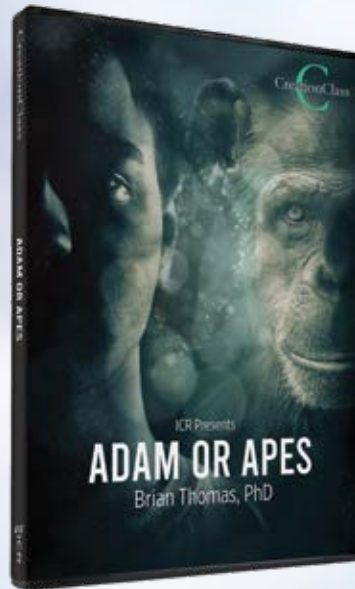
says that in the beginning, God distinctly created humans in His own image.

Explore the evidence with ICR science experts. Hear how research debunks conventional theories about "junk DNA" that's actually functional, human "ancestors" that turn out to be apes, and other evolutionary claims that fail to hold up. What does the science show? That the Bible has been right all along.

**NEW!**

 Creation Class

 DVD VIDEO



## ADAM OR APES

**\$12.99** | DAOA

**Dr. Brian Thomas**

Ever since Darwin proposed evolution by means of natural selection, scientists have looked for proof. The hunt for clues to human evolution takes center stage.

Fossil specimens are frequently presented as undeniable confirmation that modern man developed from an ape-like ancestor. Are these claims valid? ICR paleobiochemist Dr. Brian Thomas unravels the biases inherent in the scientific community and dismantles the claims regarding alleged "missing links."

Can science and faith be reconciled? Why should we believe the Bible's account of human origins and Earth history? ICR's Creation Class series affirms the accuracy and reliability of Scripture. Join ICR experts as they teach how science—from genetics to geology—confirms God's Word.

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