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#### DESIGNER

Dennis Davidson

He 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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## JESUS CHRIST IS OUR DERECT MEDIALOR

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

#### article highlights

- God the Father gives us exactly what He requires and what we need in His perfect Son—Christ Jesus—the perfect mediator.
- When human engineers design two different entities to work together a common connecting medium is central to the effort.
- Vastly different creatures interface with each other throughout nature. These numerous interfaces are so intricate and unique that they must have been specifically designed for that purpose.
- Jesus knows each of us completely and loves each of us perfectly. He is our one and only High Priest and makes intercession for us.

e'll never get bored throughout eternity. There is always something wonderfully new to learn about our precious Lord Jesus, the uplifting Holy Spirit, and our good Heavenly Father. Even now, as we read passages of Scripture that we've repeatedly studied, we still find new nuggets for living. At this time of year, we are prompted to turn our focus to the Lord Jesus...and what we learn about Him is always astounding.

While attending Moody Bible Institute, fellow students and I would have lengthy discussions on a new subject or intriguing Bible passages. For instance, in Matthew 1:22-23 we are given the first New Testament confirmation of the incarnation of the Lord Jesus, "So all this was done that it might be fulfilled which was spoken by the Lord through the prophet, saying: 'Behold, the virgin shall be with child, and bear a Son, and they shall call His name Immanuel,' which is

translated, 'God with us." Here's an interesting question: What was *accomplished* when the Creator of the universe became a real human? No theologian can fully comprehend this extensive truth. But we can always fill in our understanding with additional biblical awareness.

One passage conveying important insights about the incarnation of Lord Jesus is 1 Timothy 2:5-6, which says, "For there is one God and one Mediator between God and men, the Man Christ Jesus, who gave Himself a ransom for all, to be testified in due time." Thus, the incarnation provides a perfect intermediary between God the Father and humanity. This means that Jesus can facilitate a totally new relationship with humanity that is better than it's been since Adam's sin—perhaps even better than Adam's pre-Fall relationship. We were in desperate need of a mediator, and the Lord Jesus came to the rescue.

#### Why Mediators and Interfaces Are Vital

A publication from ICR might be the only place where a reader would get a Christ-honoring discussion of His role as a Mediator from a *scientific* perspective—which has some interesting theological parallels. For instance, a common problem facing all types of engineers is this: How do you get two independent entities to work together? Whether the entities are radically different or quite similar, they both have distinct boundaries and unique characteristics. Simply trying to force them together doesn't work. The solution is to design a mediating device (or perhaps a system) that is known as an "interface." The necessity of an interface to enable distinct entities to work together is a basic principle of engineering.

Interface design can be extremely complex. For one thing, the designers have to know vital details about how each independent entity operates. They will then select a feasible common medium where a certain trait of each entity can relate to the medium in some way (e.g., physically, electronically, chemically, etc.). The engineers then develop rules called "protocols" that govern the relationship, such as the exchange of information or products. One example is when your computer connects to a company's computer by an engineered interface that uses electricity as the common medium.

When we look at creatures, we see all different kinds relating to each other in innumerable ways. If biologists did research like engineers, they would find that interfaces are ubiquitous. Many evolutionary biologists are ignorant of even basic engineering principles. So, their investigations rarely look for the protocols, authentication systems (a specialized type of protocol), or common medium that *must* exist. Instead, their peer-reviewed papers unfailingly invoke a crude, imagination-based explanation for how two creatures can work together so closely. They simply assert that they "co-evolved." This really shortchanges scientific research.

What the reality of biological interfaces does exceedingly well is showcase the astounding breadth of knowledge of the Lord Jesus about His creatures. One evidence for His omniscience is that He created a myriad of essential interfaces—altogether—right from the beginning.

Even more astounding is that the infinitely wise first Inventor of interfaces became an interface. Christ Himself—as the God-man—*is* the common medium that both we and our Heavenly Father can relate to. Let's consider three ways in which "the Man Christ Jesus" is the perfect "Mediator between God and men."

#### **Representing Our Heavenly Father to Us**

The truth that Jesus is "God with us" is incredibly rich. Other remarkable passages attest to our personal knowledge into God's nature through Christ. Paul said of Christ, "who, being in the form of God, did not consider it robbery [an unlawful taking of something] to be equal with God" but emptied Himself and came "in the likeness of men" (Philippians 2:6-7). Of the Lord Jesus, John said, "No one has seen God at any time. The only begotten Son, who is in the bosom of the Father, He has declared Him," adding that "we beheld His glory, the glory as of the only begotten of the Father, full of grace and truth" (John 1:14, 18).

Many people wonder what God is like. Christians could invest hours reading good commentaries about knowing God. Yet, if you want to see, hear, and experience what God is truly like, then consider Jesus as God with "us." That is, experience Him as those who saw Him in action. Thus, if you want to know what God is like, then embrace the forthright claim of the Lord Jesus that "He who has seen Me has seen the Father" (John 14:9).

So, if you want to know how God feels about masses of people—lost without a shepherd, anxious over sick loved ones, or deeply ashamed of sinful behaviors—then look to the actions of Christ. If you want to know what God thinks of religious hypocrisy, hardened hearts fixated on worldly fulfillment, or just plain cool indifference toward Him, then look to the words of the Lord Jesus. Do you want to know if God cares for children, widows, poor old people, rich young rulers, foreigners, adulterers, tax collectors, Centurions, people struggling with doubt, the death of those whom He loves (e.g., Lazarus, Stephen), and even yourself? Then look to the heart of Jesus!

The Lord Jesus is the perfect representation of our Heavenly Father to us. He let all know, "I and my Father are one" (John 10:30) and no one can honor the Father unless they honor the Son (John 5:23). Studying Christ is very personal and so practical. He's the gateway to know God.

#### **Representing the Truth**

We live surrounded by the world's lies. News organizations, educational institutions, the entertainment industry, the government, and even religious leaders shamelessly promote lies. The rate at which the number and severity of lies is compounding could leave us wondering if we will ever again fully trust what we're being told.

In utter contrast to the world, the Lord Jesus is "the Faithful and True Witness" (Revelation 3:14). Jesus represents truth perfectly. Any-

#### feature

one listening to Him speak heard the words of the Father (John 14:10). The Bible compares lies with darkness and truth with light. John said that Jesus "was the true Light which gives light to every man coming into the world (John 1:9).

The Lord Jesus is always the antidote to a world full of lies. Recall that Pilate seems to have immersed himself in deceiving and being deceived. He had become so cynical from pervasive lying that he retorts, "What is truth?" when the Lord said, "I have come into the world, that I should bear witness to the truth" (John 18:37-38). Just imagine how liberating that would have been to hear trustworthy words from He who is Truth standing before you? Concerning the gospel, lost people are depicted as those "whose minds the god of this age has blinded," but the Father shines "the light of the knowledge of the glory of God in the face of Jesus Christ" (2 Corinthians 4:3-6).

Knowing Jesus is to know a truth that will set you free (John 8:32). None other than Jesus could declare, "I am the light of the world. He who follows Me shall not walk in darkness, but have the light of life" (John 8:12). The Lord Jesus is the only true way to find-ing life with the Father.

#### Representing Us to Our Heavenly Father

The truth of Christ's humanity is equally as important as His deity. This fact has important theological implications. Yet, that Jesus left the glory that He shared with the Father (John 17:5) is quite *personal* for us as well. We are told that "we do not have a High Priest who cannot sympathize with our weaknesses, but was in all

points tempted as we are, yet without sin" (Hebrews 4:15). We can be assured that the Father knows what we are feeling because He is one with the Son and the Son is one of us.

Years ago, I was assigned to a Naval Air Station in Sicily. My family went north to visit the ruins of Pompeii, Italy. While there we noticed an idol niche in a wall in *every* room of every home. We witnessed a city wholly given over to idolatry—the destiny that follows rejection of the true Creator God. In addition, it's hard to envision the bleak uncertainty that inhabitants must have felt praying to lifeless figurines. People today still revere idols—including the equally idolatrous worldview of Darwinian selectionism that venerates nature itself as a creative agent.

Christians, however, beseech their omnipotent Savior. We are greatly blessed that we can "come boldly to the throne of grace, that we may obtain mercy and find grace to help in time of need" (Hebrews 4:16) fully confident that the God-man Jesus Christ truly hears prayers and is touched with our feelings.

Not only does Christ hear our prayers, He "is also risen, who is even at the right hand of God, who also makes intercession for us" (Romans 8:34). We are certain that His prayers prevail. Since "Jesus

For there is one God, and one mediator between God and men, the man Christ Jesus; limothy 2:5



Have a joyous Christmas reassured that the Man Christ Jesus is the perfect Mediator between God and men.

#### Information for our *Acts & Facts* Family as 2021 Comes to a Close

You may recall the September article "A New Commitment to Deep Research," where I reaffirmed ICR's responsibility to original scientific investigations related to creation. Two main areas will occupy much of our effort. First, a voluminous body of published information will be re-framed within the biblically consistent theo-

> ries of Flood geology and engineered biology. These will point toward clear and concise explanations of natural phenomena that Christians can communicate. Currently, we are laboring on crafting a theory of biological design—a basis to advance hypothetical models explaining key biological functions like adaptation, metabolism, etc. Second, we will fiercely oppose the deification of nature by exposing Darwinian selectionism as an idolatrous worldview. In September I also detailed how the amount

of *time* (not money) it took to produce *Acts & Facts* greatly constrained our scientists on doing new research and our communications team from getting that material to Christians. I asked for your feedback on the suggestion that we consider reducing to 10, 9, or 8 issues per year.

As I write this, you have contributed over 1,750 thoughtful emails and letters. Since everyone likes to know the raw numbers, here they are: 0.03% recommended keeping 12 issues, and the rest recommended a reduced number with a great majority urging that we go to a predictable bi-monthly schedule of six issues per year. In addition, we were encouraged that in numerous messages you discussed our finances. You recognized the risk that we are taking in decreased support with reduced issues of *Acts & Facts* in exchange for more research...and affirmed your continued backing. Thank you.

So, starting in January 2022 we will transition to a bimonthly schedule. Next year will enable us to collect data to assess results, and, if time allows, produce a "special issue." Thank you again for your deep and abiding love for ICR!

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



For the serious science reader

research

## ICR's First Dinosaur Excavation

#### article highlights

- An ICR team went on a fossil expedition during September 2021.
- They dug up fossils on private property and plan to return in the near future.
- The fossils might be displayed at the ICR Discovery Center.
- Hopefully, some soft tissue—which can't be millions of years old—will also be discovered.
- Please pray for our continued research efforts.

**ICR** conducted its first paleontological excavation on September 4-5, 2021. Last years' inspection of a site on private property in Wyoming concluded that bone material partly exposed from a Morrison Formation outcrop might indicate a dig site. This years' pilot excavation tested the feasibility of conducting regular digs there. They would fulfill at least two purposes.

One purpose for conducting an annual dig has more to do with relationships than with science. There's nothing like sharing the experiences of sleeping and eating outdoors and working with a team that intends to uncover buried bone. Being with folks who are enthusiastic about ways that these fossils confirm Noah's Flood builds unity.

To actually find and extract bone fossils comes as a bonus! Blessings from this year's brief dig included half a sauropod femur and what looks like the tip of a *Camarasaurus* tooth. Further investigation may reveal that the two specimens belong to the same carcass. The rough facilities and small dig area would limit future excavations to a few hardy participants who could share thrills of discovery that strengthen lifelong friendships.

Another purpose for conducting annual digs is to collect and catalogue specimens. We could display them in the Discovery Center. Even better, we might display evidence of original organics (such as proteins) if we can find it.

Why? In short, measured decay rates show protein should not last a million years. The presence of proteins already confirmed in many fossils thus aligns with the Flood, which deposited these sediments with their plant and animal remains only thousands of years ago. This was the subject of my Ph.D. thesis, which ICR has made available.<sup>1</sup> Large diameter bones are more likely to contain protein remnants, and few bones grew bigger than sauropod femora.

Before we can look for proteins or display a bone, we first had to obtain it. The Lord blessed our excavation with a good first step. Now we must trust Him to lead us in building relationships and conducting science that honor Him.

#### Reference





Top: ICR Editor Truett Billups (left) and other expedition members stand by as ICR Research Coordinator Scott Arledge uses surveygrade GPS to mark the sauropod fossil's location, orientation, and elevation.

*Middle:* ICR Events Director Joel Kautt carefully unearths the fossil.

**Bottom:** Fossil detail of a sauropod bone fragment uncovered by the expedition.



<sup>1.</sup> Thomas, B. 2019. Ancient and Fossil Bone Collagen Remnants. Dallas, TX: Institute for Creation Research. Available at store.ICR.org.

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

## The Oceans Point to a Young Earth

#### JEFFREY P. TOMKINS, PH.D., AND TIM CLAREY, PH.D.

Ver 70% of Earth's surface is covered by water, most of which is marine and contained in the oceans. On average, the depth of the ocean is about 2.3 miles. However, the oceans also fill deep trenches that extend to 6.8 miles below sea level.<sup>1</sup> Interestingly, if Earth's surface were completely level, the massive amount of water contained in the oceans would be sufficient to cover it to a depth of about 8,000 feet.

When people question where the vast amount of water came from and went regarding the global Flood of Genesis, we can point directly to the vast amount of water in the oceans. In fact, the earth's oceans and the seafloor contain many clues to its history. Not surprisingly, they all support a young Earth (about 6,000 years) and a global Flood that occurred about 4,300 years ago.<sup>2</sup>

#### **Young Sea Floor Sediments**

impact

the serious science reade

Not only do the earth's oceans contain all the water needed to explain the global Flood, but the ocean floors themselves are geologically very young, pointing directly to the Flood and the tectonic and sedimentary processes that were involved. Most of the seafloor around the world includes the upper layer of the geological column known as the Tertiary, or more specifically the Tejas megasequence.<sup>3</sup> On top of these layers are some minor Pleistocene (Ice Age) and more recent sediments, but these are relatively thin by comparison to the Tejas.

The Tejas ocean layers have two sources of origin that both point to recent Flood processes. The first source for these sediments had to do with the break-up of the pre-Flood mega-continent called Pangaea which began earlier in the Flood during the deposition of the Triassic layers.<sup>3,5-7</sup> This continental separation accelerated as the Jurassic layers were being formed and continued on through the Cretaceous (about the high-water mark of the Flood). During the time that the Flood was forming the Jurassic and Cretaceous layers, there was also a rapid injection of new, hot, buoyant magma into ocean ridges that formed new ocean crust between the separating continents.

The second source of Tejas ocean layers was due to late-Flood runoff that occurred as mountain ranges and the continents were being uplifted on the newly separated continents during the Tejas. The sediment-laden waters poured off the continents into the oceans as

#### article highlights)

- Sediment deposits on the bottom of the ocean aren't nearly thick enough to account for the rate they're being deposited today if the ocean crust is hundreds of millions of years old.
- Subducted tectonic plates now lie over 900 miles beneath Earth's surface and are still cold—evidence that they are only thousands of years old.
- There isn't nearly enough salt in the oceans if Earth is billions of years old.
- Our oceans are a profound testament to a young earth.



Figure 1: The Whopper Sand in the deep Gulf of Mexico

the Flood water receded, forming massive ocean deposits, some of which contained transported vegetation that became offshore coal beds. Evolutionists admit that Tejas coal beds, such as those found in the South China Sea, were "both thick and rapidly deposited."<sup>8</sup> One of the most spectacular examples of offshore Tejas deposits is the Whopper Sand in the Gulf of Mexico (Figure 1). Recent discoveries by oil company exploration have confirmed that the Whopper Sand extends across 40,000 square miles in the Gulf of Mexico, residing in water depths of 10,000 feet, and is over 1,000 feet thick on average with some sections nearly 2,000 feet thick.<sup>9</sup>

#### Not Enough Ocean Sediment for An Old Earth

When we observe the current processes (rain, wind, waves) that deposit eroded soil and rock from the continents into the oceans, there is simply not enough sediment in the oceans to account for an



Figure 2: Sediment-laden Mississippi Delta

over 200 million-year old sea floor. In fact, on land we observe that the continents are eroding rapidly as gullies, gorges, and canyons grow bigger by the year and even coastlines are disappearing (Figure 2). Secular scientists have estimated that about 22 billion tons of sediment disappear into the oceans every year which builds up as soft layers of mud on the hard rock of the sea floor.<sup>10</sup> Surveys across the oceans indicate that the average depth of all the sediment on the ocean floor is less than 1,300 feet.<sup>10</sup> Some regions of the oceans have virtually no mud at all.<sup>11</sup> If the oceans are over 200 million years old, then why is there not more sediment?

Some secular scientists claim that the gradual shifting of the ocean floors by tectonic plate movement (a few inches a year) forces the mud deep inside the ocean trenches (subduction zones).<sup>10</sup> But at best, that would only account for about one billion tons of sediment a year. The remaining 21 billion tons would have accumulated on the seafloor in less than 12 million years. If the ocean crust was several hundred millions of years old, mud should be literally choking the oceans, but it is simply not there. As mentioned above, the really thick sediment deposits are isolated in thick offshore ocean basins and are best explained as late-Flood runoff during the final months of the global Flood. Nevertheless, there is not nearly enough mud to support an old earth.

The Flood geology model prevails yet again.

#### **Oceanic Subducted Slabs Are Cold**

For the past 20 years, scientists have been mapping out the oceanic lithosphere (which includes the crust and uppermost mantle) that descends hundreds of miles below ocean trenches into subduction zones.<sup>12</sup> These descending tectonic plates have been characterized all the way down to the top of the earth's outer core and are made of cold, brittle, dense rock about 60 miles thick. Evidence from plate tectonics only makes sense in light of the global Flood, where the original ocean lithosphere was completely consumed by subduction during the Flood year and a new hotter seafloor was produced.<sup>13</sup>

This so called "runaway" or rapid subduction ceased at the end of the Flood once all the original created ocean lithosphere was com-



**Figure 3:** Map of relative ocean crust age by color. Yellow, orange, and red represent the youngest crust (Cenozoic); these areas formed during the receding phase of the Flood and after. The green and blue formed earlier during the rising and peak phase of the Flood (Zuni

megasequence or Cretaceous and Jurassic). The purple is the oldest ocean crust, formed when the Flood first inundated the pre-Flood land (Absaroka megasequence). Image credit: NOAA

pletely consumed. This also explains why the ocean seafloor rocks are young. At present, we only observe a small amount of residual plate motion.<sup>14</sup> In other words, the slow plate speeds we observe today are left over after the rapid subduction phase that occurred during the Flood.

Recent data from seismic tomography reveals cold subducted plates deep in the mantle that are surrounded by extremely hot mantle, even after traveling to a depth of more than 930 miles through the mantle itself.<sup>12</sup> The catastrophic plate tectonic model of the global Flood suggests subduction during the Flood year (discussed above) occurred rapidly, with plates moving at rates of several miles per hour.14 These fast rates could have easily placed long slabs of cold lithosphere deep within the hot mantle, just as we observe today. Because the slabs have only been placed within the mantle about 4,300 years ago, they are still much colder than the surrounding mantle.

If these lithospheric slabs, including those at the base of the mantle, have only been moving at a few inches per year-as evolutionists claim-then these slabs should have warmed up and assimilated long ago. There should not be such a visible density contrast caused by the temperatures of the rocks. The clear implication is that these cold lithospheric slabs were rapidly emplaced just thousands of years ago, not millions.

#### Ocean Salt Content and Accumulation

Another interesting piece of evidence that points to a young ocean directly relates to the water's composition and specifically to the amount of salt it contains and the rate at which it accumulates. On average, the water of the world's oceans has a salinity of about 3.5% which is predominantly sodium (Na+) and chloride (Cl-) ions from salt.<sup>15,16</sup> The worldwide contribution of Na+ to the oceans by input from rivers has been recognized by scientists for hundreds of years, and until the early 1900s, the amount of salt in the oceans was considered to be a legitimate method to estimate the age of the earth.

However, scientists eventually discovered that radioisotope dating could give age estimates to igneous rocks in the billions of years (based on faulty assumptions) that were more favorable to evolution. After this, they modified ocean salt content theories such that the concentration of Na+ was proposed to give an estimate of residence time rather than an age for the earth. The idea of residence time is the average length of time the sodium ion would survive in the ocean before being removed.

This idea of a steady state model for salt in the ocean claims that Na+ is eliminated from the ocean about as quickly as it is replenished, causing the amount of Na+ in the ocean to remain roughly constant with time. However, both evolutionists and creationists have noted that the steady state model is in error because the data clearly shows that salt ions are gradually increasing in the ocean over time, not holding steady.16,17

Two creation scientists (a geologist and a physicist) took the

secular ocean salt model to task, generously using assumptions and parameters most favorable to an old-Earth evolutionary model.<sup>17</sup> They assumed no initial Na+ and minimum input and maximum output rates. Inputs were calculated from eleven sources of Na+ to seawater including rivers, river sediments, atmospheric and volcanic dust, glaciers, ground water, and hydrothermal vents. Outputs included seven sinks of Na+ from the ocean such as sea spray, cation exchange, pore water, halite deposition, basalt alteration, and albite and zeolite formation.

In the end, they determined that the ocean could be no more than 62 million years old. The problem for evolution is that this is about 75 times less than the 4.6 billion-year estimate for the age of the earth. When more realistic numbers were used within a creation model, such as a non-zero initial concentration of Na+ and the likely effect of the Genesis Flood most likely adding salt to the oceans, a biblical timeframe of thousands of years was achieved.

#### **Young-Earth Evidence Abounds**

Not only do the oceans prove that the earth is young, but so does the evidence from astronomy, biology, and geology.<sup>18-21</sup> There really is no good reason from any of the major scientific disciplines for Christians to compromise the literal narrative of creation and the global Flood described in the book of Genesis in the Bible.

#### References

- How Deep is the Ocean? National Ocean Service. Posted on oceanservice.noaa.gov, updated 1. February 2, 2021, accessed October 4, 2021.
- 2. Hardy, C. and R. Carter. 2014. The biblical minimum and maximum age of the earth. Journal of Creation, 28 (2): 89-96
- 3. Clarey, T. 2020. Carved in Stone: Geological Evidence of the Worldwide Flood. Dallas, TX: Institute for Creation Research, 312-353.
- Tomkins, J. P. 2021. The Fossils Still Say No: The Surly Cenozoic Flood Finale. Acts & Facts. 50 (10): 8-11
- 5. Tomkins, J. P. 2021. The Fossils Still Say No: Capping a Cretaceous Conundrum. Acts & Facts. 50 (9): 8-11.
- Tomkins, J. P. 2021. The Fossils Still Say No: Jostle in the Jurassic. Acts & Facts. 50 (8): 10-11. Tomkins, J. P. 2021. The Fossils Still Say No: Tumultuous Triassic Tussle. Acts & Facts. 50 (7): 6. 7. 10-11.
- 8. Lunt, P. 2019. A new view of integrating stratigraphic and tectonic analysis in South China Sea and north Borneo basins. Journal of Asian Earth Sciences. 177: 220-239.
- Clarey, T. 2021. Extending the Whopper Sand Mystery. Acts & Facts. 50 (8): 7.
   Hay, W. et al. 1988. Mass/age distribution and composition of sediments on the ocean floor and the global rate of sediment subduction. Journal of Geophysical Research. 93 (B12): 14,933-14, 940.
- 11. Rea, C. et al. 2006. Broad region of no sediment in the southwest Pacific Basin. Geology. 34 (10): 873-876.
- 12. Clarey, T. 2018. Cold Slabs Indicate Recent Global Flood. Creation Science Update. Posted on ICR.org November 8, 2018, accessed October 4, 2021.
- 13. Baumgardner, J. 1994. Runaway Subduction as the Driving Mechanism for the Genesis Flood. In Proceedings of the Third International Conference on Creationism. R. Walsh, ed. Pittsburgh, PA: Creation Science Fellowship Inc., 63-75.
- 14. Hebert, J. 2017. The Flood, Catastrophic Plate Tectonics, and Earth History. Acts & Facts. 46 (8): 11-13
- Rubey, W.W. 1988. Geologic History of Seawater: An Attempt to State the Problem, *Geological Cycles in The Evolution of the Earth.* New York: John Wiley. pp. 5-16.
   Drever, J. I., Y. H. Yi, J. B. Maynard. 1988. Geochemical Cycles: the Continental Crust and the
- Oceans in Chemical Cycles in the Evolution of the Earth. Gregor, C. B., R. M. Garrels, F. T., Mackenzie, and J. B. Maynard, eds. New York, NY. pp. 17-53.
- 17. Austin, S. A. and D. R. Humphreys, The Seas Missing Salt: A Dilemma for Evolutionists, Proceedings of the Second International Conference on Creationism, Pittsburgh, PA: Creation Science Fellowship, Inc. pp. 17-33, 1990.
  18. Hebert, Ph.D. 2018. Our Young Solar System. Acts & Facts. 47 (9): 10-13.
  19. Hebert, J. 2019. Deep-Space Objects Are Young. Acts & Facts. 48 (9): 10-13.

- 20. Tomkins, J. P. 2019. Six Biological Evidences for a Young Earth. Acts & Facts. 48 (5): 10-12.
- 21. Clarey, T. 2019. Four Geological Evidences for a Young Earth. Acts & Facts. 48 (6): 10-12.

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Quick and easy answers for the general science reader

creation q & a

### Are Birds "Cousins" to Reptiles?

Are today's birds genealogical "cousins" to today's reptiles, due to a shared evolutionary ancestry?

No. However, birds and reptiles share the same Creator, the Lord Jesus Christ, who created them to share the same Earth.

According to the evolutionary sequence of events, birds are supposed to have evolved from reptiles.<sup>3</sup> If that *had* occurred in the past, it would mean that today's birds such as robins and roadrunners—would be distant cousins of reptiles (such as cobras and crocodiles).

The Darwinian tale portrays today's birds as winged dinosaurs who supposedly survived a global extinction event that supposedly occurred about 66 million years ago.<sup>1,2</sup> Is there any eyewitness report supporting this magical scenario, or even evidence of any such timeframe? No and no.<sup>4,5</sup> Also, don't look for missing-link fossils of such reptile-to-bird transitions. Those missing links are still missing.

There are myriads of errors in this evolutionary speculation, but only a few are mentioned here. In particular, this pseudoscience scenario requires swallowing at least three invalid and drastic premises:

- The assumption that reptiles are not fundamentally different from birds,<sup>3</sup>
- (2) The assumption that a secret agent (oxymoronically named "Natural Selection," as if naturalistic outcomes were intended) can accidently *in-vent*—and then *secure* (i.e., genetically "lock down")—such traumatic transitional transmogrifications,<sup>5</sup> and
- (3) The assumption that any such transitions' biochemical and genetic details, in defiance of entropy's universal destructiveness, repeatedly escaped thermodynamic reality.<sup>5</sup>

#### article highlights

- Birds and reptiles don't share a common ancestor, but they do share a common Designer.
- Warm-blooded birds and cold-blooded reptiles are fundamentally different creatures and no intermediate fossils have been found.
- Birds have light-weight bones, four-chambered hearts, and unique lungs—all vastly different from reptiles.
- Birds have been birds, and reptiles have been reptiles from the beginning.

For starters, just imagine the first-listed problem: the complicated anatomical and physiological differences between birds and reptiles.

- Birds have hollow bones; reptiles, except for marrow cavities, have solid bones.
- Birds use air sacs for non-stop unidirectional (one-way) airflow through their lungs; most reptiles have two-way breathing systems.
- Birds are endothermic (warm-blooded), actively controlling their body temperature; reptiles are mostly ectothermic (cold-blooded).
- Birds have muscle-controlled feathers; reptiles have dry skins or scales.
- Birds have four-chambered hearts; reptiles usually have three-chambered hearts.
- Most birds have major muscles anchored to their front, attached to a keeled sternum (breastbone), facilitating perching; reptiles' main muscles anchor to their vertebral column (backbone), attached in arrangements conducive for standing, walking, and running.<sup>2</sup>

Don't expect rep-

tiles to accidentally change their genes to produce birds as descendants. As Fiona Smith says: "In other words, you don't just put feathers on a reptile and then it can fly. There are a multitude of attributes, all working together, that make a bird fly."<sup>2</sup>

There is much more proof—to borrow Dr. Frank Sherwin's observations—that birds have always (and only) been birds, and that reptiles have always (and only) been reptiles. See

#### References

- For centuries evolutionists have proposed the notion that birds somehow evolved from reptiles, imagining "feathered dinosaurs" or dinosaur-like flying reptiles (like pterodactyls) as speculative 'transitional' animals. Burnett, R. W., H. I, Fisher, H. S. Zim. 1958. Zoology: An Introduction to the Animal Kingdom. New York, NY: Simon and Schuster, 5-7, 13-17, 72-75; Zim, H. S. and I. N. Gabrielson. 1964. Birds: A Guide to the Most Familiar American Birds. New York, NY: Golden Press, 12-13.
- 2. "Birds are incredible flying (and occasionally non-flying) machines. The Creator has designed these creatures with specialized flight apparatus, an amazing respiratory system, not to mention unbelievable migration and navigation abilities." Sherwin, F. 2006. A 'One-Hundred-Million-Year-Old Bird' Is Still a Bird. Creation Science Update. Posted on ICR.org June 20, 2006, accessed October 15, 2021. See also Johnson, J. J. S. 2020. Wandering Albatross: Wide Wings on the Winds. Creation Science Update. Posted on ICR.org July 2, 2020, accessed October 15, 2021. Job 39:26-27 illustrates God's bioengineering that enables heavy birds to efficiently use wind current for launching their heavier-than-air bodies into the sky.
- Smith, F. 2015. Evidence for Creation: A Tour through Some East-Australian Zoos. Fremantle, Western Australia: Vivid Publishing, 164-165 (quotation), 251. Fiona Smith, an Australian professional geoscientist and science educator, graduated ICR's School of Biblical Apologetics, during 2015 with a Master of Christian Education degree (joint major in Biblical Education & Apologetics). See also 1 Corinthians 15:39.
- Regarding the need for reliable eyewitnesses, to learn the truth about unique events of the no-longer-observable past, see Johnson, J. J. S. 2016. There's Nothing Like an Eyewitness. Acts & Facts. 45 (12): 20.
- 5. Regarding the ubiquitous and inescapable destructiveness of biochemical entropy, see Johnson, J. J. S. 2018. Infinite Time Won't Rescue Evolution. Acts & Facts. 47 (6): 21. Regarding the animistic role that selectionists imagine "nature" as playing, in order to "favor" or "select" a series of genetic mistakes (for supposedly producing phenotypically survivability "fit" outcomes), see Guliuzza, R. 2011. Darwin's Sacred Imposter: The Illusion that Natural Selection Operates on Organisms. Acts & Facts. 40 (9): 121-15.

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On October 9-10, 2021, ICR held a Russian-language Uncovering the Truth about Creation Conference at Word of Grace Bible Church in Battle Ground, Washington. The conference was translated and streamed to Russianspeaking churches around the world.



*Dr. Frank Sherwin explores the mighty* Tyrannosaurus rex *with a group of children.* 



Participants gather for worship at Word of Grace Bible Church.

"My faith has been literally encouraged by science. I never thought I would say that, but after today, I can say it's true." A young man shared this after attending Dr. Randy Guliuzza's presentation on the CET (continuous environmental tracking) biological model and internaldriven adaptation.



Dr. Randy Guliuzza explains why nature has no ability to select.



The conference sessions drew many attendees.



Dr. Tim Clarey shares insights into biblical creation science.



Dr. Jake Hebert delves into the mysteries of dinosaurs during a fossil walk.

park series

# HALEAKALA NATIONAL PARK:

## JNG-LOOKING VOLCANDES

BRIAN THOMAS, PH.D.

#### article highlights

- The volcanic Hawaiian Islands pierce the Pacific Ocean. Their formation continues today on the Big Island's active volcano.
- Hawaiian stick spiders use rapid innate speciation, not eons of evolution.
- Isotope ages regularly fail miserably to provide accurate results for rocks of known ages found in Hawaii and around the world.
- Today's erosion rates would have erased the Hawaiian Islands in less time than their standard age assignments.

ou can start the day atop the cold peak of Mt. Haleakala and end it on a warm beach on Maui. The sprawling volcanic mountain rises 10,000 feet above sea level. Nēnē birds, cattle, horses, and people populate its slopes and summits. When did Haleakala form?

Maui formed after Oahu and before the Big Island. Hawaiian schoolchildren memorize the standard age assignments. From west to east, Kauai formed supposedly about five million years ago, Oahu three million, Maui Nui one million, and the Big Island 0.4 million. The Big Island is still forming today.<sup>1</sup> But three unique observations in and around this national park make Haleakala look only thousands of years old, not millions.

#### 1. Circular Reasoning with Hawaiian Spiders

Spider studies suggest the first clue to a more recently formed Maui. Elusive, nocturnal Hawaiian stick spiders creep among the tropical forests on the mountain's north side. Biologists marvel at how fast these arthropods switch between different body colors. Gold ones live on leaves, white ones on lichen, and dark ones among rocks.



Figure 1. The Nēnē (Branta sandvicensis), a variety of goose, is the state bird of Hawaii. Image credit: Brenda Zaun, U.S. Fish & Wildlife.

ICR's Video Producer Clint Loveness films the author near the peak of Haleakala.

#### park series



Figure 2. Hawaiian Island chain

Patterns in their DNA suggest that they pioneered the Hawaiian Islands moving east, starting at Kauai (Figure 2). When a dark stick spider lands on a new island, its offspring suddenly display dark, gold, or white forms. They deploy their color changes faster than "gold and white spiders from the old island have time to reach the new one," according to *Cell Press* via ScienceDaily.<sup>2</sup> These fast flips suggest that internal programming, not many generations of death, sits at the helm of these spider adaptations.

Authors publishing in the journal *Current Biology* framed a spider history using the standard times assigned to the islands as an initial assumption.<sup>3</sup> Does this sound like circular reasoning?

They offered a defense, writing, "Because of the inevitable circularity of using island age for calibration, we applied a general arthropod molecular clock estimate of 2.3%/myr."<sup>3</sup> Then they referenced a 1994 study as a basis for their "clock." Problem solved?

Not at all, for the author of that 1994 study wrote, "The estimates of divergence times for these [arthropod] taxa [kinds] are based on dated geological events reported by the authors." Of course, the use of "dated" geological events is just as circular as using "island age" to

> calibrate timelines, since "island age" equals "dated" geological events.

> > Circularity is a poor substitute for good science but opens the door to considering a second observation that casts even more doubt on standard dating.

#### 2. Wrong Isotope Ages for Volcanic Rocks

Secular scientists use radioactive isotopes to estimate ages for certain rocks. The process requires workers to assume how much of which isotope was present when the rock cooled. Some classic tests of this assumption used Hawaiian lava rocks.



The tests were simple: Compare radioisotope age estimates to actual recorded ages. Table 1 below shows some results.<sup>4</sup>

Sample	Location	Isotope Age	Actual Age	Reference
Hualalai basalt	Hawaii	1.6-0.19 ma*	1800 – 1801 A.D.	5
Hualalai basalt	Hawaii	22.8 – 16.5 ma	1800 – 1801 A.D.	6
Kilauea Ika basalt	Hawaii	8.5 – 6.8 ma	1959 A.D.	6
Kilauea basalt	Hawaii	21–8 ma	< 200 years old	7
Table 1         * "ma" is millions of years.				

Just like these Hawaiian lava rocks, isotope age estimates fail to capture known ages for rocks found around the world. Clearly, we need a whole new way to date rocks. What if we built our world history on what the Lord Jesus—who has always been there—says in His Word? The Bible-based alternative of a flood that reshaped the globe may sound silly to those who first hear it, but it fits our next observation: landforms.

Figure 4. Author faces Haleakala while investigating lava rocks



end of Noah's Flood only thousands of years ago.8

Steep-walled cliffs erode faster than other landforms. We peered over steep cliffsides near the top of Haleakala. Indeed, the measured erosion rate of five inches per year would have rounded cliffs and flattened whole islands after a million years.<sup>9</sup> How could these islands keep their cliffs so long?

The next time you visit Haleakala National Park, remember how circular reasoning in spider "ages" and isotope dating failures both cast doubt on millions-of-years thinking. Flat-lying lava layers, fragile lava tubes, and steep cliffs with measured erosion rates point to a Bible-friendly age of thousands of years for the whole world, including its volcanoes.

#### References

- Jones, C. Hawaii's Kilauea volcano erupts, lava fountains form in park. Associated Press. Posted on APnews.com September 29, 2021, accessed October 1, 2021.
- 2. Hawaiian stick spiders re-evolve the same three guises every time they island hop. *Cell Press*. Posted on ScienceDaily.com March 8, 2018, accessed October 1, 2021.
- Gillespie, R. G. et al. 2018. Repeated Diversification of Ecomorphs in Hawaiian Stick Spiders. Current Biology. 28: 941-947.
  - Snelling, A. A. 1998. Andesite Flows at Mt. Ngauruhoe, New Zealand, and the Implications for Potassium-argon "Dating" *Proceedings of the Fourth International Conference on Creationism*. Pittsburgh, PA: Creation Science Fellowship.
  - Dalrymple, G. B. 1969. <sup>40</sup>Ar/<sup>36</sup>Ar Analyses of Historic Lava Flows. *Earth and Planetary Science Letters*. 6: 47-55.
  - Krummenacher, D. 1970. Isotopic Composition of Argon in Modern Surface Volcanic Rocks. Earth and Planetary Science Letters. 8: 109-117.
  - Noble, Ć. S. and Naughton, J. J. 1968. Deep-Ocean Basalts: Inert Gas Content and Uncertainties in Age Dating. Science. 162: 265-267.
  - Austin, S. A. et al. 1994. Catastrophic Plate Tectonics: A Global Flood Model of Earth History. In *Proceedings* of the Third International Conference on Creationism. R. E. Walsh, ed. Pittsburgh, PA: Creation Science Fellowship.
  - Fletcher, C. H. et al. National Assessment of Shoreline Change: Historical Shoreline Change in the Havaiian Islands. U.S. Geological Survey Open-File Report, 2011-1051, 55.

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#### 3. Three Youthful Landforms

Our hike along Haleakala's Halemau'u Trail revealed flat-lying lava layers. All the islands have these. It looks like the lava landed in sheets, one right after the other. If eons elapsed on Maui between these layers, then where are the ruts and valleys that normal erosion would have etched into the top of each lava layer?

Visitors enjoy Hana Lava Tube northeast of Haleakala. All the islands have lava tubes. The brittle, hollow structures should collapse after only hundreds of thousands of years. The islands and their tubes must have arisen when new seafloors formed near the



**Figure 5.** Flat-lying lava layers, uncollapsed lava tubes, and steep cliffsides on Kauai—the oldest of the Hawaiian Islands—signal recent and rapid formation for all the islands, including Maui.

back to genesis



n a recent interview discussing his new book In Quest of the Historical Adam, philosopher and Christian apologist William Lane Craig acknowledged his biased assumptions when interpreting how the words of the Bible should be understood. What prejudices his interpretation of words contrary to their plain and normal meaning is his longstanding "great fear" that young-Earth creationists are correct that the book of Genesis should be understood as real history.1 Dr. Craig is concerned that this would require a wholesale challenge to all of modern science. However, during the interview Dr. Craig made numerous revealing claims which show that science has nothing to do with why he rejects a historical Genesis.

He ridiculed clear biblical narratives that Eve was beguiled by a real "talking snake" and the "anthropomorphic" idea that God walked and talked with Adam and Eve as stories akin to ancient mythology. It is important to realize that these objections have nothing to do with modern science science cannot inform us whether God would, or wouldn't, walk with Adam and Eve. Nor can we scientifically test the ability of Satan to possess an animal and speak through it.

These are *philosophical* objections to a literal Genesis, not scientific ones. So, it cannot be the science *per se* that has Craig worried. However, affirming a literal Genesis does offend modern sensibilities that considers biblical truths to be foolish (1 Corinthians 2:14). Like the Corinthian Christians, we all need to guard against the fear of appearing foolish in the eyes of the world.

It's Craig's biases that he brings to the Bible-not anything in the Bible itself-that underlie his attack on biblical clarity, which undermines not just the first eleven chapters of Genesis, but the entire Bible. If Craig rejects the normal meaning of Genesis 3 as real history because God walked and talked with Adam and Eve, then what does he do with Genesis 18, where God and two angelic visitors talk-and even eat-with Abraham? And what of Numbers 22:28-30 and 2 Peter 2:16, both of which affirm that the prophet Balaam was rebuked by his donkey? And what about 2 Corinthians 11:3, where the Apostle Paul also affirms that Eve was deceived by a serpent?

Biblical creation has always seemed foolish in the world's eyes, but this is not because evidence for creation is lacking. The ranks of biblical creationists include researchers recognized as world-class scientists.<sup>2</sup> Scientific and historical evidence for even the earliest chapters of Genesis are abundant, and

#### article highlights

- Noted apologist William Lane Craig's new book denies a 6-day Genesis creation.
- Craig's rejection of many historical narratives has nothing to do with science.
- Craig believes that Christians cannot interpret the Bible for themselves but must be told the meaning by non-Christian experts possessing special knowledge.
- Denying the historical narrative of Genesis undermines the whole Scripture.
- Evidence for a young Earth is far stronger than Craig realizes.

the Creation-Flood model of the Ice Age is vastly superior to anything proposed by the Creator-denying scientists to which Craig eagerly conforms his understanding of Genesis 1-11. Moreover, creation researchers have published scientific evidence refuting iconic arguments for evolution and an old Earth and, like evolutionists, Craig fails to engage this primary literature. Evidence for biblical creation is not getting weaker over time, it is getting stronger.<sup>3</sup>

Is it really science that is keeping so many Christians from embracing a straightforward understanding of Genesis, or is it something else? Every Christian needs to guard against the sin of intellectual pride. Obedience to Christ *does* seem foolish in the world's eyes. We all would do well to remember the admonition of the Apostle Paul: "If anyone among you seems to be wise in this age, let him become a fool that he may become wise."<sup>4</sup> See

#### References

- Sean McDowell Interviews William Lane Craig: Is Adam Historical? Uncommon Descent. Posted on uncommondescent.com September 26, 2021, accessed September 28, 2021.
- Examples include geophysicist Dr. John Baumgardner, plant geneticist and co-inventor of the "gene gun" Dr. John Sanford, and Dr. Raymond Damadian, inventor of the MRI.
- 3. Morris III, H. M., et al. 2020. *Creation Basics & Beyond*, 2<sup>nd</sup> ed. Dallas, TX: Institute for Creation Research.
- Corinthians 3:18b.

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William Lane Craig

## **Early Land Plant Evolution?**

n a recent Science article, two evolutionists consider land plants (embryophytes) to have evolved from stoneworts (charophyte algae).1

A spore is a haploid (single, unpaired chromosome), which is a single or multi-cellular reproductive structure produced by certain species (e.g., fungi) that detaches from the parent and gives rise to a new individual. Spores were recently extracted from Australian deposits dated by secular scientists to be 480 million years old. They maintain "these spores are of intermediate morphology [form or appearance] between confirmed land plant spores and earlier forms of uncertain relationship. This finding may help to resolve discrepancies between molecular and fossil data for the timing of land plant origins."1 Creation scientists predict the discrepancies will not be resolved.

Evolutionists have a very difficult time bringing together the fossils of plants and comparing these fossils with DNA and protein sequences (molecular dating):

"When we consider spores as an important component of the evolution of land plants, there is no longer a gap in the fossil record between molecular dating and fossil recovery," Strother said.2

But who said spores are an important element of plant macroevolution? Evolutionists are certainly free to ponder that spores could be an intermediate of the otherwise troublesome evolution of land plants-and then declare the missing links have been filled.

They credit evolution, not God, with putting together something as incredibly complex as portions of a genome, saying, "The fossil record preserves direct evidence of the evolutionary assembly of the plant regulatory and developmental genome ... "2 But what exactly is this "direct evidence" provided by the fossil record? As always, paleontologists find that plants in the past were very much like plants today (unless they go extinct). 3,4,5 Furthermore, how do changes in



#### article highlights

- Evolutionists believe land plants evolved from algae.
- They claim a new spore discovery will help fill in the gaps in the plant fossil record.
- But plant fossils appear to be just like modern plants.
- Evolutionists admit the huge discrepancies between the fossil record and molecular clocks but still somehow see the new spore discovery as proof for their case.
- This appears to be another case of circular reasoning rather than solid science.

regulatory DNA sequences give us palm trees, orchids, and buttercups? One secular scientist writes,

Evidence from recent evolutionary events indicates that anatomical changes are mostly driven by changes in regulatory DNA sequences that determine when and where developmental genes are expressed. How the striking diversity in body structures has evolved over longer times remains largely unknown...<sup>6</sup>

The theory of a molecular clock<sup>7</sup> is based on a constant rate of change in DNA sequences over time between two species and when they supposedly diverged in the evolutionary past.

However, there are huge discrepancies, up to tens of millions of years, between direct fossil data and molecular clock dates, said Strother. In addition, there are similar time gaps between the [fossils of the] oldest spores and when actual whole plants first occur. These gaps resulted in hypotheses about a "missing fossil record" of the earliest land plants..., said Strother.<sup>2</sup>

Strother and Foster then go on to suggest 480 million-year-old spores and "elements of both Cambrian and younger embryophyte spores...provides a new level of evolutionary continuity between embryophytes and their algal ancestors."1 But that's only if algae really are the ancestors of embryophytes.

Fruit trees and other seed-bearing plants were created thousands of years ago at the beginning of Day Three of the Creation week.

- References
- Strother, P. K. and C. Foster. 2021. A fossil record of land plant origins from charophyte algae. 1. Science. 373 (6556): 792-96. Early land plants evolved from freshwater algae, fossils reveal. Posted on phys.org August 12,
- 2021, accessed August 15, 2021. Tomkins, J. and T. Clarey. Intact Starch Granules in "Ancient" Plant Fossil. *Creation Science Up*-3.
- date. Posted on ICR.org May 24, 2018, accessed August 15, 2021. Clarey, T. Sudden Appearance of Flowering Plants Fit Flood Model. Creation Science Update. Posted on ICR.org July 29, 2020, accessed August 15, 2021. 4.
- Clarey, T. Diverse Devonian Plant Assemblage from Early Flood. Creation Science Update. 5.
- Posted on ICR.org July 12, 2021, accessed August 15, 2021. Alberts, B. et al. 2015. *Molecular Biology of the Cell*, 6<sup>th</sup> edition. New York: Garland Science, 1176. 6.
- Emphasis added. 7. Tomkins, J. P. and J. Bergman. 2015. Evolutionary molecular genetic
- clocks-a perpetual exercise in futility and failure. Journal of Creation. 29 (2): 26-35

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ust as monkeys can't accidently type Shakespeare texts, birds can't migrate by evolutionary luck, despite imagined eons of time for "lucky" accidents.1 Why? Because the challenging mix of birds' metabolic needs for long-distance travel, synchronized to seasonal and diurnal weather conditions, are exacerbated by unvielding entropy. This all-or-nothing complexity prohibits "lucky" bird migrations. In short, to seasonally migrate, birds need the Lord Jesus Christ's providential bioengineering care.2,3

Flight failures are tragic when malfunctioning airplanes or spacecraft fall out of the sky.<sup>3</sup> Likewise, if bird traits malfunctioned while trying to evolve migratory flight features—there would be no second chances.<sup>1</sup> So, either birds are aptly fitted by their Creator with migration traits, or they can't migrate.<sup>4,5</sup>

## Christ's Providence Is Clearly Seen in Bird Migrations



Great Indian Bustard in flight Image credit: Copyright © S.K. Anun / Mongabay. Used in accordance with federal copyright (fair use doctrine) law. Usage by ICR does not imply endorsement of copyright holder.

Consider the air speeds that birds need to maintain over long distances before their flying fuel (i.e., metabolic assets dedicated to long-distance flight needs) is depleted.

The birds' flight speed in relation to the air varies in general between approximately 30 km per hour, for the smallest birds, and 80 km per hour, for larger birds.... When the bird's mass increases 100 times, then 200 times as much flight power is required.<sup>4</sup>

Yet, powering heavier-than-air flight requires adequate bird *muscle strength* and *endurance*.

The muscle power cannot, however, increase much more than the weight. Provided that the proportions are the same, the wing area is only 20 times as great in a bird that weighs 100 times more than another. The limited muscle power and wing area of heavy birds, in combination with the very high flight power that is re-

#### article highlights)

- Birds' migratory flight is a biogeographical life-or-death challenge.
- The biophysics of bird flight requires more than luck to succeed—great precision is required.
- Avian migration successes display Christ's bioengineering handiwork that was programmed into birds from the beginning.

quired [for long-distance migrations], sets a size limit above which flying is no longer possible. This limit is estimated to be around 15 kg. This corresponds well with the weight of the largest animals in the world that can actively fly—swans, bustards, albatrosses and condors.<sup>4</sup>

Thus, interplay between flight speed and muscle power balances the complicated physics required for non-fixed-wing flying against long-distance migration.<sup>2-5</sup>

Moreover, the unforgiving biochemistry and physiology of each migratory bird's *metabolism* (food acquisition, fuel utilization, respiration, etc.) must aptly fit the ongoing needs of seasonal migrations, or else avian biochemical logistics fail.<sup>4,5</sup> Thankfully, for all migratory birds—and all birdwatchers—the phenological phenomena of bird migrations is *not* dependent upon "luck," as imagined by evolutionists.<sup>3,5</sup> Rather, none less than

the Lord Jesus Christ deserves all credit and acclaim for these winged wonders of biogeographic beauty.

"But now ask...the birds of the air, and they will tell [literally "explain to," or "clarify to"] you...that the hand of the LORD has done this, in Whose hand is the life of every living thing...." (Job 12:7-10) 🛸

References

- I. "Thus, eons of time guarantee that the simian keypunchers can never type out Hamlet—the imagined luck is 'not to be.' Time plus entropy prevents the spontaneous generation of life and any hope of evolution.' Johnson, J. J. S. 2018. Infinite Time Won't Rescue Evolution. Acts & Facts. 47 (6): 21. Complex bird anatomies cannot spontaneously self-assemble, apart from Christ's bioengineering providence, because ubiquitous entropy (i.e., 2<sup>nd</sup> Law of Thermodynamics) absolutely prevents any mix of biochemicals from magically combining into purposeworking "all-or-nothing-unity" systems, regardless of how much time is allowed, because infinite time guarantees that (our fallen universe's) entropy bars any such luck.
- Egevang, C. et al. 2010. Tracking of Arctic terns *Sterna paradisaea* reveals longest animal migration. *Proceedings of the National Academy of Sciences*. 107 (5):2078-2081, quoted in Johnson, J. J. S. 2010. Survival of the Fittest: God's Providential Programming. *Acts & Facts*. 39 (10): 17-18. See also, regarding phenological migrations, Johnson, J. J. S. 2013. God Fitted Habitats for Biodiversity. *Acts & Facts*. 42 (3): 10-12.
- Bolarct and Julie O Larwin's Sacred Imposter: The Illusion that Natural Selection Operates on Organisms. Acts & Facts. 40 (9): 12-15; Guliuzza, R. J. 2017. Engineered Adaptability: Engineering Causality Studies Unmask Evolutionary Externalism. Acts & Facts. 46 (11): 17-19. See also Sherwin, F. 2006. A 'One-Hundred-Million-Year-Old Bird' is Still a Bird. Creation Science Update. Posted on ICR.org June 20, 2006, accessed October 1, 2021.
- 4. "The rule of thumb is that the speed roughly doubles when the mass of the bird increases 100 times. If a 10-g Willow Warbler flies at 30 km per hour, then a Raven of 1 kg [1,000 grams] flies, in round figures, at 60 km per hour. ... The capacity of the flight muscles sets a 'ceiling' to how much flight power a bird can cope with—a lower ceiling for continuous power outtake and a somewhat higher ceiling for temporary all-out bursts. After this sort of brief 'muscle spurt' the muscles have to wind down while the lactic acid which is formed in the muscle tissue when energy is produced without sufficient oxygen supply is carried away." Alerstam, T. 1993. *Bird Migration*. New York, NY: Cambridge University Press, 252.
- 5. Johnson, J. J. S. 2016. High-Altitude Flying is for the Birds. Acts & Facts. 45 (3): 20-21.

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ach Christmas, we remember how deeply God loves us. His wondrous plan of salvation-first set in motion in the Garden of Eden-was miraculously manifested in the birth of the Lord Jesus Christ some two millennia ago. But Jesus is so much more than a babe in the manger! He is the great Seed foretold in the beginning-the very Creator Himself who walked "in the garden in the cool of the day" and prophesized of the necessity of His own death for you and for me (Genesis 3:8, 15). Christ then became our Savior and Redeemer when He willingly sacrificed Himself for us, victoriously conquered sin and death, and is now alive and forevermore!

It is this Seed-the gift of God Himself-that we celebrate each Christmas. And just as the wise men brought gifts to honor the Lord Jesus (Matthew 2:11), it is fitting we give gifts to emulate His great love for us. If ICR's ministry is a blessing to you, please consider the following ways you can partner with us and honor the greatest Gift of all.

Gifts of Cash: Cash donations are the most

helpful and versatile form of support to our ministry, and are fully tax-deductible as allowed by U.S. law. Send us a gift in the mail, or visit ICR.org/donate to donate online or set up recurring monthly gifts.

IRA Gifts: IRA account owners 701/2 years or older can make qualified charitable distributions (QCDs) up to \$100,000 each year without declaring it as income. Not only are these special gifts exempt from federal income tax, they also count toward your required minimum withdrawal. Please contact your IRA administrator to bless ICR with a gift, or visit ICR.org/donate\_iras for more information.

Stock Gifts: Financial markets remain near all-time highs, so this could be the best time to give shares of stocks or mutual funds. Shares held for at least one year can be gifted directly to ICR, providing you with a full tax deduction at their current value while bypassing capital gain taxes. Contact ICR for our brokerage information, or visit ICR.org/ donate stocks.

Workplace Campaigns: Large corporations

#### article highlights

- Christ Jesus is the greatest gift of all.
- Listed below are some of the ways you can support ICR.
- Prayerfully consider standing with us as we proclaim the truth of creation to the world.

and government organizations offer automatic payroll deduction to give to charities of the employee's choosing. Employees can recognize ICR as a write-in designation, and federal government and military personnel can give through the Combined Federal Campaign (CFC #23095, National/International section).

Charitable Gift Annuities: For seniors 70 years or older, CGAs provide the best guaranteed returns in the market today. For as little as \$20,000, an ICR gift annuity will provide fixed income for life, a present tax deduction, and a tax-free portion on future payments-benefits secular annuities can't match. If you'd like to help ICR and still need ongoing income, this option may be right for you. Not all states qualify, and rates are dependent on age, so please contact us for a personal no-obligation proposal.

ICR is thankful for those who share a portion of their financial resources to support our ministry. God is well pleased by these sacrifices-He tells us so in Hebrews 13:16—and I am deeply grateful for you. My staff and I welcome the opportunity to serve you and answer any questions you might have. Please call me direct at 214-615-8313 or email us at stewardship@ICR.org. May God bless you and your family this Christmas and in the coming year!

Henry M. Morris IV is Director of Donor Relations at the Institute for Creation Research.



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Visit ICR.org/donate and explore how you can support the vital work of ICR ministries. Or contact us at stewardship@ICR.org or 800.337.0375 for personal assistance.



My wife and I... spent four days with Dr. Tim Clarey, his assistant Aedan Parkes, and Discovery Center Director Chris Kinman. What an absolutely wonderful experience it was to be in the company of these men during our trip on the Colorado River through Grand Canyon. To hear and learn from Dr. Clarey about what we saw on the walls of the canyon being a testament to the biblical Flood was nothing short of amazing. Honestly, the illogic of the rock formations being deposited any other way than by the worldwide Flood of Noah's day is astounding.

Beyond the geologic education, Tim, Aedan, and Chris were extremely attentive, friendly, and helpful to everyone in the group, for which my wife and I in particular are extremely grateful. Chris was everywhere helping people set up and tear down campsites. Dr. Tim and Aedan were also very helpful in assisting with campsites and providing helpful hints born from experience at having done Grand Canyon trips before.

This was a lifetime event and one which we will treasure... the rest of our lives.

— D. S.



We were hooked before even getting in the door [of the ICR Discovery Center]! My first impression of ICR was "Wow this place is going to be impressive" when I saw the giant strand of DNA rising from a reflection pool near the front entrance. My homeschooled grandsons got excited because we had just finished a biology class and they recognized the DNA, too.

#### Long Wait







It was dinosaur week when we were at ICR, so they had a nice interactive area where kids could dig for a bit of an actual fossil that they could take home. Bonus points for the digging medium (sand) being very calming for my spectrum kiddo! There were more fossils in the main hall with people who explained them and let the kids actually touch themfun! I thoroughly enjoyed a lecture

which tied biblical creation and scientific discovery together in a way that left me astounded. 60+ years of living and I'd come to believe that they were mutually exclusive...Not anymore!

The rest of the displays were just icing on the cake-well thought-out, artfully executed, and plausibly accurate. The walkthrough takes one on a journey down the years of the biblical timeline from the creation in Genesis right up to the culmination of Calvary in the gospels-all beautifully done. We will be making return field trips to ICR as there were displays we would have liked to spend more time enjoying. You don't have to be of a scientific mindset to enjoy this great facility-take a day, take your family, or just take yourself and enjoy!

— J. S.



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### Creation Kids

## Snowflakes



Snow falls to Earth in a blur of winter white. But if you look closely, you'll find that each flake is a work of art. How do snowflakes form? Through an amazing process designed by the Lord Jesus.



Conditions like air temperature and humidity determine the snowflake's shape.

Colder air makes snowflakes with sharper tips. Warmer air forms crystals more slowly, so they develop rounder shapes. Less moisture in the air makes simpler shapes, and high humidity makes fancier shapes.

Snowflakes grow and change even more as they fall from the sky. So each snowflake is unique, even though billions of them can fall in one snowstorm.



Colorized versions of snowflake photographs taken by Wilson Bentley in 1902.

Connect the dots.

Fill in the blanks.

"For [God] says to the \_\_\_\_\_

'Fall on the

.'" (Job 37:6)

Answers to verse: snow, earth Answer to puzzle:

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