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On This We Stand

Abiogenesis: Water and Oxygen Problems

Assembling the Pre-Flood World page 11

Evolutionary Mysticism and the End of Science page 14

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# ACTS @FACTS

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Cover: Hiker in a slot canyon observing sandstone layers and erosion.

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# Looking for Jesus

atthew 28 describes how on resurrection morning, women came to the empty tomb looking for Jesus. Have you looked for Jesus recently? Do you see Him through His work in creation (Romans 1:20)? He is the beginning and the end (Revelation 21:6). He created the universe and everything in it in six days (Genesis 1; Colossians 1:16; John 1:3). Our Maker is our helper (Psalm 121:1-2). He created you and me (Genesis 1:27; Psalm 139:13-14), and He created us to do good works that He prepared for us in advance (Ephesians 2:10).

In the feature this month, "On This We Stand," Dr. Henry Morris III reminds us that our Redeemer Jesus is also our Creator. Dr. Morris says, "[Many passages of Scripture] are more than sufficient to identify the 'Word made flesh' as the second Person of the Godhead through whom God 'made the worlds.'...ICR will always publicly honor the Lord Jesus Christ as the Creator" (page 6).

Consider Jesus' work as Creator as you read the articles in this issue. In Dr. Jeff Tomkins' article, see how the Lord clearly reveals Himself through what we observe about water and the nature of life ("Abiogenesis: Water and Oxygen Problems," pages 8-9). Notice how everything Jesus made has a distinct purpose in Dr. Jerry Bergman's article "Do 'Useless' Organs Prove Humans Evolved?" (page 20), and witness His incredible design of living organisms in Dr. Randy Guliuzza's article "Active Environmental Tracking Explains Similar Features" (pages 17-19).

When we look for Jesus, He reveals Himself in creation for us to clearly see—He



makes Himself known. Just as He showed Himself to Mary outside the empty tomb, He visits us. And we're left to marvel: "O LORD, our Lord, how excellent is Your name in all the earth!" (Psalm 8:9).

We can observe His works and say with the psalmist, "When I consider Your heavens, the work of Your fingers, the moon and the stars, which You have ordained, what is man that You are mindful of him, and the son of man that You visit him?" (Psalm 8:3-4).

This is the time of year when many homeschoolers are planning for the upcoming school year. If you've been wondering how to strengthen your emphasis on creation in your science studies, the Institute for Creation Research can help. We've put together an outline showing how you can use ICR resources in a 36-week creation unit study. You can find this free outline at **ICR.org/homeschool**. We've also put together a creation unit study pack with the many resources listed in the creation unit study outline. For a limited time, you can get this pack at a more than 50% discount (see page 24).

This edition of *Acts & Facts* will arrive in your mailboxes just as you and your family are celebrating Easter. We hope you will experience anew the wonders of our risen Lord! He is risen—He is risen indeed!

Jayme Durant Javme Durant

Jayme Duran Executive Editor



#### HENRY M. MORRIS III, D. MIN.

#### article highlights

- The Genesis creation account is key to understanding our Christian faith.
- Scripture is clear that the universe and all it contains were created recently.
- For almost 50 years, ICR has demonstrated that empirical science affirms the accuracy and authority of the Bible.
- ICR's Discovery Center will be a powerful presentation of the truth of biblical creation.

I am not ashamed, for I know whom I have believed and am persuaded that He is able to keep what I have committed to Him until that Day. (2 Timothy 1:12)

he Institute for Creation Research was founded almost 50 years ago to encourage Christians to get "back to Genesis." The account of special creation and early human history recorded in the Bible's first book is foundational to an understanding of the Christian faith, and we work to equip believers with evidence of the Bible's accuracy and authority. That message has not always been welcome. Recently I was reminded that some within the broader creationist movement think ICR is an embarrassment because of our strong stand on the inerrancy of the Bible—particularly our insistence that a plain reading of the words of Scripture clearly indicates a recent creation. Apparently this is keenly felt within the academic and sci-



entific community since "everyone knows" science has proved the earth to be billions of years old.

Some within these communities may feel that if they present the evidence against evolution in any way that connects their presentation to a personal, omniscient, omnipotent Creator who spoke the universe into

# ICR will always publicly honor the Lord Jesus Christ as the Creator.

existence just a few thousand years ago, that evidence would be dismissed out of hand because it would be seen as an embarrassingly "simple" belief in the Bible. But if the origins question is between evolution and creation, can one really leave God and what He has explicitly revealed out of the picture?

There is no doubt that the more one sides with the clear message of Scripture, the less the broader secular world will tolerate it. This teaching is so prevalent in Scripture it hardly needs a reminder. Jesus said, "If you were of the world, the world would love its own. Yet because you are not of the world, but I chose you out of the world, therefore the world hates you" (John 15:19). The more one identifies with the person, work, and teaching of the Lord Jesus, the more confidence one can have that He will identify with us. "Therefore whoever confesses Me before men, him I will also confess before My Father who is in heaven. But whoever denies Me before men, him I will also deny before My Father who is in heaven" (Matthew 10:32-33).

There are a number of pillars on which ICR stands and on which we will not waver.

#### We Affirm That Jesus Christ Is the Creator

John 1:1-4, Colossians 1:16-17, Hebrews 1:1-3, among many other passages throughout the Old and New Testaments, are more than sufficient to identify the "Word made flesh" as the second Person of the Godhead through whom God "made the worlds." From the declaration of the Ten Commandments through the stunning passages in the book of Revelation, God makes it clear that He is "the LORD, that is My name: and my glory I will not give to another" (Isaiah 42:8). We who are privileged to live in the New Testament last days are commanded "whether you eat or drink, or whatever you

> do, do all to the glory of God" (1 Corinthians 10:31). ICR will always publicly honor the Lord Jesus Christ as the Creator.

#### We Uphold the Scriptures as the Written Word of God

"I will worship toward Your holy temple, and praise Your name for Your lovingkindness and Your truth; for You have magnified Your word above all Your name" (Psalm 138:2). "For whoever is ashamed of Me and My words in this adulterous and sinful generation, of him the Son of Man also will be ashamed when He comes in the glory of His Father with the holy angels" (Mark 8:38). Those two passages alone of the creation debate that the age of Earth is a touchy subject. This is simply because the evolutionary argument cannot stand without unmeasurable and unimaginable eons in which to set the story that random chance interaction among molecules could produce the stunningly complex and absolutely beautiful design we see all around us. Furthermore, if there were eons of death and destruction prior to Adam's sin (Romans 5:12), then the entire gospel message is swept into the black hole of allegory and symbolism.

No, the text of Scripture is clear. The week of creation took place during six normal 24-hour days. God rested on the seventh day and insisted that we remember that seventh day *because* God "worked" for six days and rested on the seventh (Exodus 20:11). ICR will always present the evidence for a recent creation. "Indeed, let God be true but every man a liar. As it is written: "That You may be justified in Your words, and may overcome when You are judged" (Romans 3:4).

#### If there were eons of death and destruction prior to Adam's sin (Romans 5:12), then the entire gospel message is swept into the black hole of allegory and symbolism.

should cause every child of God to delight in declaring the writings of Scripture to be "profitable for doctrine, for reproof, for correction, for instruction in righteousness, that the man of God may be complete, thoroughly equipped for every good work" (2 Timothy 3:16-17).

ICR often states in its publications, public seminars, and resources that we are privileged to use empirical science to affirm the accuracy and authority of the written Word of God.

#### We Hold That the Creation of the Universe Was Recent

It should be obvious to anyone aware

### We Seek to Demonstrate That Empirical Science Affirms a Recent Creation

While it seems acceptable in some creation circles to insist that ICR does not do "real" science and/or that ICR scientists are rejects from serious science schools, that is far from the truth. Each of our Research Associates have earned masters or PhDs from well-known universities, and many have worked in laboratories or taught at the college level prior to coming to work for ICR. All of their biographies are available on our website, and their credentials are excellent. Several members of our science team have worked in the secular world long enough to have their papers published in peer-reviewed journals relevant to their disciplines. But because of ICR's open stand that empirical science affirms the biblical text, it is almost impossible to get their current papers published in secular journals whose editors reject anything that comes from ICR.

That annoying and sometimes frustrating limitation is beside the point. ICR does not answer to the secular journal editors, nor are we burdened that we are not receiving praise from an atheistic-inclined academic community. Jesus Himself felt that rejection from among some of those case thus far.

Now that we are nearing the final stages of construction, all of us have been honored by the \$20 million "extra" dollars that have been supplied for the project by the Lord's people. The remaining \$8 million seems like a small amount compared to the whole, but that money must come from those who are aware of what ICR is doing and are willing to invest the resources the Lord has provided them in the work ICR is uniquely qualified to accomplish.

This discovery center may "embar-

rass" the secular world, and perhaps some of those within the creationist community who want the praise of men rather than that of their Lord, but I can assure you ICR's stand on God's truth will benefit the thousands of visitors and guests who will find the worldclass planetarium and the stunning exhibit halls a source of delight, a wealth of accurate science, and a wonderful testimony to the glorious gospel of Christ.

Dr. Morris is Chief Executive Officer of the Institute for Creation Research. He holds four earned degrees, including a D.Min. from Luther Rice Seminary and an MBA from Pepperdine University.



ICR ultimately answers to the Lord whom we serve and secondarily to those of our supporters who faithfully give so that this ministry can continue.

who should have embraced His ministry: "Nevertheless even among the rulers many believed in Him, but because of the Pharisees they did not confess Him, lest they should be put out of the synagogue; for they loved the praise of men more than the praise of God" (John 12:42-43). ICR ultimately answers to the Lord whom we serve and secondarily to those of our supporters who faithfully give so that this ministry can continue.

#### We Partner with Fellow Believers to Present God's Creation Truth

When it became clear that the time was right to build the ICR Discovery Center for Science and Earth History, we knew at the outset that the costs would exceed any normal capital project we had ever attempted. ICR has not used debt or leveraged credit. It was our founder's position that if ICR's leadership was carefully following the Lord's leading in its decisions for the future, the funds would be forthcoming as we made those decisions known to those among whom we ministered. That has certainly been the

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For the serious science reader

research

# **Abiogenesis:** Water and Oxygen Problems

#### article highlights

- Water is necessary for life, but its presence inhibits the formation of biomolecules such as nucleotides.
- Evolutionists speculate that formamide—a clear liquid used as a solvent—was the "primordial soup" in which life first developed. But significant amounts of formamide are not found in nature.
- Earth's oxygen-rich atmosphere also inhibits the formation of biomolecules.
- Evolutionists speculate that asteroid impacts somehow helped life spring into existence, but the conditions they propose are untenable.

n addition to original research and data analysis on important themes in the origins debate, ICR scientists also evaluate the progress of secular research reported in many scientific publications. One of the fruits of this research was noted in last month's *Acts & Facts* Impact article on the topic of abiogenesis—the supposed development of life from non-life.<sup>1</sup> It reviewed the history of research



on the origin of life and showed how utterly futile the evolutionary explanations of the alleged naturalistic beginnings of life really are. The article wasn't able to include all the important recent scientific publications on the topic, so we'll cover some of those here.

#### The Water Paradox

When speculating about the naturalistic origins of life on Earth, evolutionists run into a major paradox of basic biological chemistry: While water is the critical medium for all life, it also forms a chemical barrier to the formation of chains of nucleotides such as RNA and DNA that are the foundation of life. In a living creature, this is not a problem because of the complex chemistry and machinery of the cell. But for the evolutionary theorist, this creates yet one more insurmountable barrier for how nucleic acids could have spontaneously formed in the first place. Desperate to solve the basic evolutionary impediment of this water paradox, some researchers have proposed that life may have first developed in something *other* than water.<sup>2,3</sup>

In the quest to find a water alternative, the emerging candidate is a clear liquid called *formamide* that is composed of hydrogen, oxygen, carbon, and nitrogen.<sup>2,3</sup> Formamide promotes polymer bond formation more than water and can even react with other compounds under human-engineered laboratory conditions to form nucleobases and amino acids. However, there are several major problems with this idea.

First, formamide is toxic—it's not conducive to cell life. Humans manufacture formamide and widely use it as a solvent to develop pharmaceuticals, pesticides, resins, and plasticizers. Another big problem is that formamide does not occur naturally in any significant amounts anywhere on Earth. Therefore, it has been proposed that somehow radioactive minerals irradiated hydrogen cyanide and acetonitrile with gamma rays in select pockets on the early earth.<sup>2,3</sup> But adding this speculation to the mystical laundry list of requirements needed for the evolutionary development of life still effectively brings the possibility of life arising from non-life to zilch.

#### Lasers and Asteroids to the Rescue?

Another major impediment to life's naturalistic origin is the atmospheric problem discussed in last month's article.<sup>1</sup> Earth's current atmosphere is oxidizing (i.e., oxygen rich) and prohibits the spontaneous formation of biomolecules outside the protection of a living cell. Geological data indicate Earth's atmosphere has always been oxidizing. Nevertheless, evolutionists maintain that for biomolecules to spontaneously form, Earth must have had a reducing atmosphere with little or no oxygen. Even assuming it did, the problem of how nucleobases, the building blocks of DNA and RNA, could have spontaneously formed is still impossible.

Recently reported research attempted to explain the spontaneous generation of nucleobases in a reducing atmosphere by using huge modern terawatt lasers. The idea was that the lasers would somehow simulate the plasma generated from an asteroid impact. When they blasted mixtures of ammonia and carbon monoxide, researchers found that trace amounts of nucleobases could be produced. However, as the authors' report noted, "We observed hydrogen cyanide as a main product of formamide thermal decomposition."<sup>4</sup> The lasers induced the formation of formamide (discussed above), which was then broken down into hydrogen cyanide, an extremely poisonous liquid that boils at slightly above room temperature at 26 °C (79 °F). Hardly the essence of life's beginnings!

The authors also admitted that "we should note that the sub-parts per million level reached in laser experiments for pyrimidine bases is a threshold detection limit of the used method."<sup>4</sup> In other words, the levels of nucleobases temporarily produced before they could be boiled and destroyed in hydrogen cyanide were so small they could barely be detected. In addition to these problems, this abiogenesis experiment, like all the others, is still subject to the chirality, polymerization, replication, and informational impediments previously discussed.<sup>1</sup>

Not only do these new experiments add nothing to the evolutionary solution of life's origin outside a Creator, they also serve to further illustrate the profound truth of God's Word. The Bible states:

For since the creation of the world His invisible attributes are clearly seen, being understood by the things that are made, even His eternal power and Godhead, so that they are without excuse, because, although they knew God, they did not glorify Him as God, nor were thankful, but became futile in their thoughts, and their foolish hearts were darkened. Professing to be wise, they became fools. (Romans 1:20-22) 🛸

#### References

- 1. Tomkins, J. P. 2018. The Impossibility of Life's Evolutionary Beginnings. Acts & Facts. (47) 3: 11-14.
- Zyga, L. Did water-based life originate without water? *Phys.org.* Posted on phys.org January 30, 2018, accessed January 31, 2018.
  Adam, Z. R. et al. 2018. Estimating the capacity for production of formamide by radioac-
- Adam, Z. R. et al. 2018. Estimating the capacity for production of for tive minerals on the prebiotic Earth. *Scientific Reports*. 8: 265.
- Ferus, M. et al. 2017. Formation of nucleobases in a Miller–Urey reducing atmosphere. *Proceedings of the National Academy of Sciences*. 114 (17): 4306-4311.

Dr. Jeffrey Tomkins is Director of Life Sciences at the Institute for Creation Research and earned his Ph.D. in genetics from Clemson University.



The Design and Complexity of the Cell Dr. Jeffrey P. Tomkins

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# Assembling the Pre-Flood World

nowledge of the pre-Flood world is limited because the Bible only gives a few details. Some creationists have relied heavily on secular interpretations in their studies on continental configurations and pre-Flood geography. ICR's geological research is the first to tackle this issue using actual rock data from around the globe.

Most of the Phanerozoic rock record is divided into megasequences of deposition (Figure 1). Megasequences are discrete packages of sedimentary rock bounded on the top and bottom by erosional surfaces, often with coarse sandstone layers at the base.<sup>1</sup> These packages were stacked one on top of another as each was sequentially deposited during the year-long Flood.

Our data set consists of over 1,500 stratigraphic columns from North America, Africa, the Middle East, and South America. Each rock column was compiled from published outcrop data, oil well boreholes, cores, cross-sections, and/or seismic data tied to boreholes. Rock type and megasequence data were put into a database, allowing thickness maps to be generated for all six megasequence intervals. These data were used to create a three-dimensional stratigraphic model across each of the three continents studied so far. When examined megasequence by megasequence, these models allow us to visualize the pre-Flood geographic relief.

Earlier, we identified a pre-Flood land mass across the central United States that we labeled "Dinosaur Peninsula."<sup>2</sup> We found that the deposition of the earliest Flood sediments (the Sauk, Tippecanoe, and Kaskaskia Megasequences) was thickest in the eastern and far western U.S., including Grand Canyon. In contrast, the early Flood deposits across much of the center of the country are commonly less than a few hundred yards deep, and in many places there was no deposition at all (Figure 2). We concluded:

It seems the dinosaurs were able to survive through the early Flood in the West simply because they were able to congregate and scramble to the elevated remnants of land—places where the related sedimentary deposits aren't as deep—as the floodwaters advanced....In this way, dinosaurs were able to escape burial in the early Flood.<sup>2</sup>

#### article highlights

- Little is known about the pre-Flood world because the Flood destroyed or altered most of it.
- ICR is using rock data from around the world to determine Earth's geographical features before, during, and after the deluge.
- By examining the stratigraphic data, we can visualize the pre-Flood world's giant continent— Pangaea.
- The ICR Discovery Center will display the progression of the Flood and the breakup of Pangaea on an OmniGlobe.

Geologic Column Periods	Short-Term Changes + Rising meters Falling + 300 200 100 0 -100-200		Megasequences
Tertiary	2	١.	Tejas
Cretaceous	Ę		Zuni
Jurassic			
Triassic	Level		
Permian			Absaroka
Pennsylvanian	2		
Mississippian			
Devonian			Kaskaskia
Silurian	7		
Ordovician			Tippecanoe
Cambrian			Sauk
Precambrian			

*Figure 1.* The six global megasequences and the secular geologic column. Modified after Sloss and Vail.<sup>1</sup>



*Figure 2.* Pre-Flood map showing the proposed Dinosaur Peninsula, a lowland land mass extending from Minnesota to New Mexico likely inhabited by pre-Flood wetland plants and animals including dinosaurs.

#### The Pre-Flood World

Using the thicknesses of the various megasequence intervals, we made reasonable inferences about the relative topography of the pre-Flood world. We assumed the pre-Flood lows would be filled in first by the earliest deposits and the uplands later as the Flood levels increased, as described in Genesis 7. By comparing the megasequence data to the fossil record, we gleaned three broad environments—pre-Flood shallow seas, lowlands, and uplands, shown in Figure 3.

#### **Shallow Seas**

Results indicate shallow seas existed across much of the eastern and southwestern U.S. (including Grand Canyon) and across North



**Figure 3.** Pre-Flood geography map for North America, Africa, and South America combined into a Pangaea-like configuration. It is likely the land masses continued to the east near Greenland (Europe) and Africa (India). Note that the western edge of North America does not include the majority of the West Coast states since these terranes were added later during plate motion as part of the Flood. Also, much of Central America is not shown since it was formed from activity during the Flood.

Africa and the Middle East where the earliest three megasequences were deposited (Figure 1). The areas show extensive deposition of early Flood sediments and contain almost exclusively shallow marine fauna. There are virtually no trees or land animals in these megasequences. Apparently, only limited amounts of land were inundated at this stage in the Flood. We described this in detail in a recent peerreviewed paper.<sup>3</sup>

#### **Lowland Areas**

During the deposition of the Absaroka Megasequence (Figure 1), the sediments began extending onto the land proper as water levels rose, starting with the lowland and wetland areas. This included the Karoo Supergroup across much of southern Africa and the Coconino Sandstone that extends across the southwestern U.S.

The first prolific deposits of coal (Pennsylvanian lycopod forests) and land animals mixed with marine flora and fauna also appear in the Absaroka. This indicates the Flood was now impacting significant amounts of pre-Flood land, such as the broad lowlands in East Africa and the central U.S., including Dinosaur Peninsula.

#### **Upland Areas**

All of the megasequences thinned toward the crystalline shield areas on each of the three continents. The sedimentary units do not merely show evidence of erosion and truncation, they become thinner in the direction of the shields—implying they were deposited on the flanks of extensive uplands.

> Many of these interpreted upland areas are completely devoid of sedimentary rock because post-Flood erosion stripped the thin Zuni sediment that might have been deposited there. According to Genesis 7:20, the highest hills were only flooded by a modest amount of water, likely leaving little room for thick sedimentary deposits to accumulate. However, there are a few Zuni remnants in Hudson Bay and Michigan and Illinois that indicate the highest water level was achieved at this point in the Flood.

> The lack of sediments preserved across the pre-Flood uplands may also help explain the lack of human fossils in the rock record. Most pre-Flood humans likely survived until close to Day 150 and probably congregated on the areas of highest ground. As the water levels crested on Day 150, humans were wiped off their higher gathering spots, and their bodies were washed away and transported in all directions. This process lessened the likelihood of finding any concentration of human fossils. It also made it less likely for them to be buried deeply enough in sediment to be preserved as fossils. And 4,500 years of post-Flood erosion would affect the highest strata the most. Any human remains buried in the

uppermost feet of sediment most likely would have been eroded and destroyed.

#### Pangaea, Not Rodinia

Debate exists over the pre-Flood continental configuration, with some creation geologists advocating for an initial created supercontinent called Rodinia.4 However, we chose a slightly modified Pangaea because it has the most empirical geological evidence supporting it, including the best fit of the continents.<sup>5</sup> We placed a narrow sea (300 km) between North America and Africa/Europe, allowing for limited plate subduction, an early Flood closure of the pre-Atlantic, and the formation of the Appalachian/Caledonian Mountains. The width of this pre-Atlantic is based on subducted plate remnants that diminish beneath the Appalachians below 300 km, supporting this narrowsea interpretation.6

Another reason we favored Pangaea over Rodinia is that our current ocean floor was evidently created when the original creation week seafloor was consumed by subduction during the Flood event. It was the density contrast of the heavy, cold, original ocean crust (the lithosphere) that allowed the runaway subduction process to begin and continue. The density difference served essentially as the "fuel." Geophys-

icist John Baumgardner described it as "gravitational energy driving the motion" of the plates.7 The "runaway" process continued until the original oceanic lithosphere was consumed. There was no geophysical means or reason to stop the rapid plate motion until the density contrast was fully alleviated. At that moment, the newer, more buoyant lithosphere ceased subducting, bringing plate motion to a virtual standstill. As a consequence, today we only witness small, residual plate motions of centimeters per year.

A pre-Flood world that resembled Rodinia would require the consumption of nearly all the pre-Flood ocean crust twice. The first time would be while the continents from Rodinia moved into the configuration of Pangaea, and then a second time when Pangaea split into the present global configuration. Geophysically, the first breakup of Rodinia and reconfiguration into Pangaea would be possible, but it would also consume all of the dense pre-Flood ocean crust. A second move would then be rendered impossible since any significant amount of new ocean crust created while splitting up Rodinia would not have enough density contrast to fuel a second episode of subduction. As mentioned above, it is the consumption of the cold, more dense pre-Flood ocean crust that caused runaway subduction in the



Figure 4. OmniGlobe projection system showing the projection of the pre-Flood map and our data point locations.

first place.7 Therefore, if there had been a Rodinia, we would still be in a Pangaea continental configuration today.

#### Garden of Eden?

Many Christians have wondered if the current nation of Israel was the location of the pre-Flood Garden of Eden. Our maps demonstrate this is likely not the case. Figure 3 shows that an area of shallow seas probably existed across much of the Middle East, including Israel. Based on our research, the likely locations of the Garden are in what is now Canada, Brazil, West Africa, Asia, or even Greenland, depending on which direction was eastward of the place referenced in Genesis 2:8. The exact location of the Garden of Eden will likely never be known, but these results allow us to determine the major topographic highs and lows of the pre-Flood world. And it appears that the highest areas-the so-called shield areas-were the most likely locations of human habitation.

#### **Discovery Center Globe**

ICR will display our megasequence and pre-Flood maps on a 48-inch OmniGlobe projection system as part of an interactive exhibit in the ICR Discovery Center for Science and Earth History. Visitors will see the pre-Flood

world continent by continent (Figure 4) and view the Flood's progression as subsequent sedimentary megasequence layers were deposited, as well as supercontinent Pangaea's breakup. This will be a valuable visual tool demonstrating the geological effects of the Flood as God's judgment reshaped the world.

We are presently working our way across the continent of Europe to see what the data reveal there. Be sure to catch our results in future issues of Acts & Facts and on ICR.org. 😒

#### References

- Sloss, L. L. 1963. Sequences in the Cratonic Interior of North America. Geological Society of America Bulletin. 74 (2): 93-114; Vail, P. R. and R. M. Mitchum Jr. 1979. Global Cycles of Rela-tive Changes of Sea Level from Seismic Stratigraphy. American Association of Petroleum Geologists Memoir 29, 469-472.
- Clarey, T. 2015. Dinosaur Fossils in Late-Flood Rocks. Acts & Facts. 44 (2): 16. Clarey, T. L. and D. J. Werner. 2017. The Sedimentary Record Demonstrates Minimal Flooding of the Continents During Sauk Deposition. Answers Research Journal. 10: 271-283. 3
- Snelling, A. A. 2014. Geological Issues: Charting a scheme for correlating the rock layers with the Biblical record. In *Grappling with the Chronology of the Genesis Flood.* S. W. Boyd and A. A. Snelling, eds. Green Forest, AR: Master Books, 77-109.
- Clarey, T. 2016. Empirical data support seafloor spreading and catastrophic plate tectonics. *Journal of Creation.* 30 (1): 76-82. Schmandt, B. and F.-C. Lin. 2014. *P* and Swave tomography of the mantle beneath the United 6.
- States. Geophysical Research Letters. 41 (18): 6342-6349 7.
- Baumgardner, J. R. 2016. Numerical Modeling of the Large-Scale Ero-sion, Sediment Transport, and Deposition Processes of the Genesis Flood. Answers Research Journal. 9: 1-24.

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volutionary secularists often fancy themselves as hardnosed empiricists who are immune to the allures of "magical" thinking. However, as the inadequacies of materialistic naturalism become more and more obvious, we shouldn't be surprised to see them embracing mys-

tical ideas—a trend noted by ICR founder Dr. Henry M. Morris more than 30 years ago.<sup>1</sup>

The origin of life and the origin of consciousness are arguably the two most difficult things for evolutionists to explain. They must insist that life somehow came from non-living chemicals even though there is *zero* experimental evidence for this.<sup>2</sup>

Another naturalistic puzzle is that if humans are nothing more than material, biological machines, why are they selfaware? And if humans are just biological machines, why don't other machines such as personal computers possess consciousness? Some evolutionists think they have an answer-a personal computer is conscious. And not just personal computers, but everything else in the universe! This belief, called panpsychism, holds that consciousness is a fundamental feature of matter itself, not just something humans possess. According to panpsychism, everything has some rudimentary level of consciousness, even individual particles.

If this were true, then a self-aware object could perhaps move by its own volition apart from any outside influences. Incredibly, this is what some scientists are actually suggesting. Astronomer and physicist

#### article highlights

- Secular scientists tend to scoff at scientific conclusions connected to a Christian worldview, yet they are embracing mystical concepts to explain phenomena that cannot be explained by materialistic naturalism.
- Some evolutionists propose panpsychism—the mystical idea that all material objects have consciousness—as a reason why organisms such as humans are self-aware.

Gregory Matloff theorized that some stars can consciously alter their motions. Two of the mechanisms he proposed for this are jets of material a star purposefully emits in just one direction and, I kid you not, a psychokinetic force!<sup>3</sup>

It's hard to believe that evolutionary scholars, who pride themselves on their supposed adherence to hard science, would actually suggest such things. It's also hard to see how modern science could have ever come about if such an intellectual environment had existed centuries ago.

The Bible provides a reasonable explanation for the existence of life and consciousness, both of humans and animals (Genesis 1:20-31, 2:7). God created mankind, and we have both an immaterial, spiritual component and a physical one. Likewise, the "higher" animals possess a possibly lesser form of *nephesh* consciousness, according to Genesis 1:21. But because evolutionists reject the Bible's explanation, they are forced to propose ideas that have the potential to undermine not just future scientific advancements but also the vast scientific knowledge that has already been attained!

For instance, why use Newton's Laws of Motion to infer an object's path through space if the object can change its own motion at will? If an object starts to move, did it move because an unbalanced external force acted on it or because the object *chose* to move? Do secular physicists really want to go down this path? And if they do, what is this going to do to science—especially physics?

Evolutionists claim that acceptance of creation thinking will stifle scientific progress, but the exact opposite is true. We have modern science today largely because the founders of science had a Christian worldview.<sup>4</sup> Yet, many of today's scientists are determined to reject that worldview, regardless of the consequences for science. Such irrational behavior cannot be motivated by a love of knowledge or science but rather seems to indicate a disdain for the Creator and a desire to banish Him from their thoughts.

This is one more reason why the creation vs. evolution controversy is not just a side issue. What one believes about origins is of immense practical importance. All scientists need to humble themselves before their Creator and get back to Genesis. S

#### References

- 1. Morris, H. M. 1987. Evolution and the New Age. Acts & Facts. 16 (3).
- Tomkins, J. P. 2018. The Impossibility of Life's Evolutionary Beginnings. Acts & Facts. (47) 3: 11-14.
- Matloff, G. L. 2017. Stellar Consciousness: Can Panpsychism Emerge as an Observational Science? *EdgeScience*. (29): 9-14.
- 4. Hebert, J. 2016. How Theology Informs Science. Acts & Facts. 45 (5): 14.

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xtraordinary designs found all over the world simply demand divine creation.<sup>1</sup> But people who reject God's Son and the salvation He supplies often reject this clearly seen evidence as well. How can believers shape spiritual conversations in the face of such strong anti-Creator bias?

Certain folks simply don't want to believe in creation. They invent objections to truth that, like smokescreens, shield them from God. The Lord Jesus cut through smokescreens to the root of unbelief when He said to Nicodemus:

"And this is the condemnation, that the light has come into the world, and men loved darkness rather than light, because their deeds were evil.

Communicate Creation with Mirror Questions

For everyone practicing evil hates the light and does not come to the light, lest his deeds should be exposed.<sup>22</sup>

At least for some, evil deeds, not scientific evidence, prompt doubts about creation. How can believers make headway in this situation without sermonizing? Jesus again points the way. During a tense dinner conversation, our Lord used "mirror questions" that got to the root issue with unbelieving Pharisees.

Now it happened, as He went into the house of one of the rulers of the Pharisees to eat bread on the Sabbath, that they watched Him closely [for a flaw]. And behold, there was a certain man before Him who had dropsy [painful body swelling]. And Jesus, answering [their unspoken thoughts], spoke to the lawyers and Pharisees, saying, "Is it lawful to heal on the Sabbath?" But they kept silent. And He took him and

#### article highlights

- Evidence for creation abounds.
- Many who deny creation do so because they want to deny their Creator.
- Instead of simply preaching to scoffers, humbly asking questions may help them dig deeper for answers.

healed him, and let him go. Then He answered them, saying, "Which of you, having a donkey or an ox that has fallen into a pit, will not immediately pull him out on the Sabbath day?" And they could not answer Him regarding these things.<sup>3</sup>

Jesus' questions led the Pharisees to realize that their man-made law that healing "work" was not allowed on the Sabbath actually condemned them, not Him. Who among them would fail to tend his own animal on the Sabbath, though no animal is as important as a human being? The Lord Jesus did not discuss evidence with these religious hypocrites. Instead, He asked thoughtful mirror questions.<sup>4</sup>

So, the next time a friend objects to creation or salvation, try a mirror question that helps identify a root cause of unbelief. For example, if they doubt that God exists because of all the evil He allows in the world, then ask where they think the universal moral code that defines evil

came from.

Or say that someone objects to a Noah's Ark that could "never hold all of Earth's species." Instead of telling how a bibli-

cal "kind" can include many modern species,<sup>5</sup> calmly ask how he so clearly knows that the Bible's kinds equal today's species. Ask if he would have any interest in learning evidence for the feasibility of Noah's Ark. If not, why not? Mirror questions, when asked gently and humbly, show you care for the questioner and help bridge the broad chasm between light and darkness.<sup>6</sup>

#### References

 For example, see Guliuzza, R. J. 2015. Made in His Image: Designed Control Systems. Acts & Facts. 44 (8): 16-17.

- John 3:19-20.
  Luke 14:1-6.
- 4. Jesus also demonstrated unmistakable evidence of His omnipotence and omnibenevolence in healing the man. Plus, His audience should have recognized His omniscience when He answered their very thoughts.
- 5. Criswell, D. 2009. Speciation and the Animals on the Ark. Acts & Facts. 38 (4): 10.
- 6. 1 Peter 3:15.

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## ICR Discovery Center Update



The planetarium's exterior windows are set in place.

*A model expert works on the Mount St. Helens exhibit.* 

A life-size ankylosaur is ready for shipment.



A saber-toothed tiger is being prepared for display. Machairodus giganteus, a large species of saber-toothed cat, lived during the Ice Age and had elongated upper canines efficient for slicing meat.

#### Help Us Complete the ICR Discovery Center's Exhibits

As we build the ICR Discovery Center, we're raising funds for the interior exhibits. We're developing the most educational and inspirational exhibits possible. Together, let's point people to the truth of our Creator, the Lord Jesus Christ.

Visit **ICR.org/DiscoveryCenter** to find out how you can join us in this vital project. Partner with us in prayer and help us finish strong!

My seven-year-old son loves science, but we're constantly battling evolutionary ideas that infiltrate nearly every area of children's education and media. We can't wait for completion of the ICR Discovery Center! Walking through the Garden of Eden, Noah's Ark, the Ice Age room, and more will solidify Earth's true history in his growing mind.

I can only imagine the memories we'll make and discussions we'll have about scientific evidence that supports the Bible. I want my son's love for science to point him to the Maker of all things, not naturalistic philosophy. I have many church friends who parent young children and are just as excited as I am about the discovery center's construction. But ICR still needs funds for the exhibits! Please support the discovery center to share creation truth with young families like ours.

— Christy Hardy, ICR editor

I love witnessing the "light-bulb" moments people have as they hear our speakers answer questions, or when they express amazement in some new understanding of the intricacies of God's creation. The discovery center will be a powerful way to facilitate these moments as visitors interact with the exhibits, attend presentations in the auditorium, and experience the wonders of our Creator's universe in the state-of-the-art 3D planetarium. Will you join me in supporting the discovery center project so that even more people can be impacted in a life-changing way?

— Joel Kautt, ICR event coordinator

Each month ICR reaches over a half-million souls around the world with the message of biblical creation because of faithful, monthly support from God's people. We constantly receive messages of thanksgiving on social media from followers whose lives have been impacted for eternity. **Many have shared that they became Christians as a result of ICR's ministry!** Will you join ICR's family and take part in this life-transforming Kingdom work? Prayerfully consider partnering with us on a monthly basis to help spread the truth—our Creator is also our Savior, the Lord Jesus Christ!

— Michael Hansen, executive assistant to ICR's CEO



# Active Environmental Tracking Explains **Similar Features**

#### article highlights

- Evolutionists invented convergent evolution to rescue their theory from its inability to explain how unrelated creatures could develop similar features.
- Evolutionary scientists believe selection pressure drives similar adaptations in diverse organisms, but selection pressure is a metaphor. It can't be a cause.
- Using selection pressure as an explanation shuts down investigation into tangible, internal mechanisms that better explain trait development in response to environmental change.

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arwin's followers appear to be comfortable embracing totally contradictory explanations for the same thing. When diverse groups of organisms share nearly identical traits, evolutionists see that as solid evidence of descent from a common ancestor. But when similar traits can't be due to common descent, they see it as equally solid evidence for evolution. This is called "doublethink" in George Orwell's classic novel *1984*, which features a fictional totalitarian regime that cunningly uses misnomers or deceptive redefinitions as a means of thought control.

You have to pay close attention to disentangle evolutionary "doublethink." The fact that many organisms share highly similar, non-inherited traits is actually strong evidence *against* evolution, pointing instead to the information underlying common design.<sup>1</sup> So, evolutionists invented *convergent evolution*, a mental construct devised to rescue their theory from conflicting observations.<sup>2</sup> For example, they claim the echolocation ability shared by some bats and whales somehow evolved convergently through identical genetic changes in both groups.<sup>3</sup>

This is where one must carefully watch evolutionists shuffle the pea in their shell game. One shuffle moves the pea between the opposing mechanisms of "divergent" and "convergent" evolution as needed to account for similar features among diverse creatures. Then a trickier shuffle occurs. Evolutionists first use convergent evolution in the traditional sense as a magical term to explain the existence of non-inherited similarities that evolution otherwise can't account for. Then they shuttle the meaning of the term "convergent evolution"—an imaginary process that can't be observed—to one that includes patterns of repeatable (indeed, predictable) similarities that *can* be observed.

But as we have seen in this Engineered Adaptability article series, these patterns are actually better interpreted as outcomes of creatures' innate systems and not as the results of some mystical evolutionary process. Separate populations of similar and even diverse creatures are observed over and over again rapidly and independently producing the same traits to solve similar environmental challenges. This observation could prompt a testable hypothesis that these creatures share common programming that directs the production of specific traits suitable for certain conditions.

Rather than look to creatures' innate abilities, however, evolutionists hang their hats on an omnipotent agent of nature called *selection pressure* as the catalyst for adaptation. This, along with habitually tagging "convergent evolution" to non-hereditary similarities, clouds their understanding of the situation and shuts down investigation into alternate explanations. When selection pressure is exposed as a misleading metaphor underlying convergent and most divergent evolution, then the smoke will clear to reveal the vital elements of the continuous environmental tracking (CET) mechanism. This mechanism allows creatures to continuously track environmental changes as they solve challenges and fill new niches.



#### Selection Pressure Is a Metaphor, Not a Real Pressure

Evolutionists approach adaptation from the externalist paradigm, which sees active environments molding the body plans of essentially passive organisms over time.<sup>4</sup> Accordingly, they have concocted the notion of a force called selective pressure acting over a population. Per Jerry Coyne, evolutionists believe selection pressures are up to the task of molding organisms into life's diversity and can easily account for the widespread pattern of non-inherited similar features:

But evolution *does* explain the pattern by invoking a well-known process called *convergent evolution*. It's really quite simple. Species that live in similar habitats will experience similar selection pressures from their environment, so they may evolve similar adaptations, or converge, coming to look and behave very much alike even though they are unrelated.<sup>5</sup>

Like Coyne, most evolutionary biologists rarely conceive of adaptive processes apart from selection pressures. These pressures have taken on a life of their own in evolutionary literature, which treats them as real forces driving organismal form toward greater diversity. Evolutionists see them accomplishing much adaptive work, but this convincingly simple narrative is misleading. "Selection pressures" are only metaphors. None have yet been scientifically quantified. The only place where they are "observed" is in imaginary visualizations.

A careful reading of Ernst Mayr's description of selection pressure reveals that rather than being externally pressured, the organism's internal systems are what produce traits that may or may not solve environmental challenges—which causes those traits to increase or decrease in populations.

In evolutionary discussions, it is often stated that "selection pressure" resulted in the success or elimination of certain characteristics. Evolutionists here have used terminology from the physical sciences. What is meant, of course, is simply that a consistent lack of success of certain phenotypes [the organism's traits] and their elimination from the population result in the observed changes in a population. It must be remembered that the use of words like force or pressure is strictly metaphorical, and that there is no force or pressure connected with selection, as there is in discussion in the physical sciences.<sup>6</sup>

Logically, evolutionists need something to cull through the randomness of mutation. The notion of an external pressure driving a population down a directional path—like an agent of nature—carries a basic believability. Yet, evolutionists' use of a metaphorical selection pressure derails them from arriving at precise scientific explanations. The late evolutionist Robert Reid perceptively objected to injecting mysticism into biology and complained that "selection pressure is now given a metaphorically creative sense by modern biologists....A creative selection pressure is not only superfluous... [it is] an imaginary external force" and neo-Darwinists "ought to be flagellating themselves for selection pressure."<sup>7</sup> He noted: Indeed the language of neo-Darwinism is so careless that the words "divine plan" can be substituted for "selection pressure" in any popular work in the biological literature without the slightest disruption in the logical flow of argument.<sup>7</sup>

Later, Reid simply called it "a metaphorical external agent."8

The evolutionary scenario including selection pressure and convergence is reasonably seen as an illusory narrative built by stacking metaphors upon many lucky coincidences. Nevertheless, Jonathan Losos of Harvard recently exclaimed, "In recent years, scientists have identified convergence in almost any type of trait you might imagine."<sup>9</sup> If a metaphorical external force can't be the cause, what could explain observations of multiple organisms rapidly, independently, and repeatedly producing similar traits to solve the same types of environmental challenges? Losos' book only offers selection pressure, which he envisions as a "strong agent of natural selection."<sup>10</sup> But, could it be that innate mechanisms still awaiting full description are enabling organisms to track environmental changes? Let's look at a couple of examples.

#### Predictable Traits for Different Snakes in Similar Niches

Although pythons and boas are constrictors, they are altogether different snakes. For example, boas bear live young while pythons lay eggs. Evolutionists believe that their ancestors diverged between 63 and 96 million years ago.

ICR geneticist Dr. Jeffrey Tomkins reported on Scott Keogh's research findings that pythons and boas have independently and repeatedly developed similar suitable traits for specific ecological niches.<sup>11</sup> Keogh's data from 1,073 specimens representing over 80% of species show that tree-dwelling pythons and boas look much more like each other than either snake looks like one of its own kind living underground (see Figure 1).<sup>12</sup>

Keogh identified that boas and pythons had separately expressed trait patterns for skin texture and color, eye shape, and head size and shape that fit them for dwelling in five different niches: arboreal (trees), semi-arboreal, terrestrial, semi-aquatic, and semi-fossorial (underground). These traits were so specific and repetitive for certain environments that they were described as "predictable"—an atypical word for random evolution.

The study didn't document any mutations that silenced or activated genes. Nor did it explore the death of "less fit" snakes compared to "fitter" ones, and no "pressures" were quantified. Keogh found snakes with traits already suited to specific niches, yet he says:

We have demonstrated that the strong selective pressures related to habitat-use have driven the remarkable and ubiquitous ecomorphological convergent evolution among pythons, [and] boas...to this repeated evolution of the same morphologies.<sup>12</sup>

But what conclusions would he have reached if his research hadn't been sidetracked by that metaphor-based explanation? Isn't it reasonable to investigate whether pythons and boas may have simi-



**Figure 1.** Boas and pythons independently and repeatedly develop many similar traits including skin texture and color, eye shape, and the size and shape of their heads that are most suitable for filling five different ecological niches.

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lar sensors for environmental conditions and similar internal if-then logic mechanisms controlling expression of traits so that they produce similar responses that fit certain niches?

#### Mice Repetitively Express Specific Traits to Colonize Similar Niches

Hopi Hoekstra's lab at Harvard specializes in researching field mice (*Peromyscus maniculatus*) in diverse environments. Her team recently showed that "from a short-tailed prairie-dwelling ancestor" for "geographically distant populations" across North America, mice living in prairies have shorter tails relative to other mice whose "lon-



Figure 2. Representative x-ray photographs of deer mouse tails from four subspecies of the Peromyscus maniculatus lineage showing a similar shorter tail for eastern and western populations inhabiting the prairie and longer tails, due to increased vertebral length and number, for populations inhabiting the forest. Longer tail length developed independently for forest subspecies.

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ger tails have evolved repeatedly in similar forested habitat." Interestingly, longer tails represented an increase in both the number and the length of tail vertebrae (see Figure 2), and that "variation in these traits is controlled by separate genetic loci." Additionally, the mechanisms underlying this repetitive phenomenon were not "stochastic [random] processes," but evidence "implicat[ed] similar mechanisms of tail elongation in eastern and western forest populations."<sup>13</sup>

In terms of causality, the researchers believe that "it is more likely that environmental selection pressures have led to the independent evolutionary appearance of these two morphs in different *maniculatus* lineages"<sup>13</sup> even though they lack the same documentation to support their conclusion that Keogh does. Given that the tail length of forest-dwelling mice seems to be controlled by similar, repetitive, non-random mechanisms in independent populations, it might prove informative to conduct research into biomechanical benefits to mice with long tails in forests, innate biomechanical sensors, and developmental programming to respond with longer tails.

#### **CET Can Replace Convergent Evolution and Selection Pressure**

A design-based, organism-focused research program is neither willing to appeal to metaphors as causes, nor satisfied to believe in a fortuitous stacking of coincidences. In our next article, we will see examples showing definite linkages between mechanosensors and internal feedback that controls expression of specific genes both during embryonic development and as adults. The result is the expression of specific traits that enable these creatures to tightly track environmental changes—consistent with the CET model. By applying engineering causality to several examples, the smoke of "selection pressure" mysticism will clear to reveal creatures actively tracking environmental changes and adapting accordingly—just as their Creator designed them to do.

#### References

- Guliuzza, R. J. 2015. Major Evolutionary Blunders: Evolutionary Predictions Fail the Reality Test. Acts & Facts. 44 (9): 17-19.
- Guliuzza, R. J. 2017. Major Evolutionary Blunders: Convergent Evolution Is a Seductive Intellectual Swindle. Acts & Facts. 46 (3): 17-19.
- Cell Press. In bats and whales, convergence in echolocation ability runs deep. *ScienceDaily*. Posted on sciencedaily.com January 27, 2010, accessed January 18, 2018.
- Guliuzza, R. J. 2017. Engineered Adaptability: Adaptability via Nature or Design? What Evolutionists Say. Acts & Facts. 46 (9): 17-19.
- 5. Coyne, J. A. 2009. Why Evolution Is True. New York: Viking, 91-94. Emphasis in original.
- 6. Mayr, E. 2001. What Evolution Is. New York: Basic Books, 281.
- Reid, R. G. B. 2007. *Biological Emergences: Evolution by Natural Experiment*. Cambridge, MA: MIT Press, 35-38.
   Ibid. 393.
  - 393.
- Losos, J. B. 2017. Improbable Destinies: Fate, Chance, and the Future of Evolution. New York: Riverhead Books, 41.
- 10. Ibid, 205.
- Tomkins, J. P. Convergent Evolution or Design-Based Adaptation? *Creation Science Update*. Posted on ICR.org July 7, 2016, accessed January 22, 2018.
- Esquerré, D. and J. S. Keogh. 2016. Parallel selective pressures drive convergent diversification of phenotypes in pythons and boas. *Ecology Letters*. 19 (7): 800-809.
- Kingsley, E. P. et al. 2017. The ultimate and proximate mechanisms driving the evolution of long tails in forest deer mice. *Evolution: International Journal of Organic Evolution*. 71 (2): 261-273.

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# Do "Useless" Organs Prove Humans Evolved?

People who believe humans evolved from an ape-like animal millions of years ago claim we have many useless organs. They say these organs once had a function in our evolutionary past, and that's why these "leftover" remnants can still be found in humans today.

One common example is the human appendix. Until recent years, most evolutionists believed the appendix was once much larger and helped us digest plant fiber, as it does in rabbits. Since it is smaller than those of some apes and proportionally smaller than those of other animals, they assumed it lost much or most of its past usefulness.

Charles Darwin first described this vestigial argument over 150 years ago. He called these structures rudimentary organs, meaning they are TONSILS supposedly underdeveloped compared to those of our ape-like ancestors. The so-called useless or vestigial organs included the appendix, tonsils, wisdom teeth, coccyx ("tailbone"), thyroid, goose bumps, and those ear muscles that allow some people to wiggle their ears. Many popular books and magazines still make these vestigial claims.

Modern medical research has now found important uses for every one of these so-called useless organs. Yet, some biology textbooks still assert that many vestigial organs exist in humans. Even my new copy of the *Encyclopedia Britannica* claims that humans have over 100 vestigial organs.<sup>1</sup> I have taught college-level anatomy for over 30

#### article highlights

- Evolutionists have long believed there are numerous organs in humans and animals that have little or no function.
- These scientists see these useless "vestigial" organs as strong evidence for evolution.
- But we now know virtually all of these organs do, in fact, have a function—some quite important.
- It appears that vestigial organs do not exist.

years. Of the three different anatomy text-

books I've used, not one has made the claim

that some organ or structure is vestigial. All

of them merely noted the supposed vestigial

of vestigial organs actually revealed many

uses for each organ I studied. This helped

convince me that evolution is wrong. The

Years ago, my long search for evidence

organs' locations and functions.

results became the book *Vestigial Organs Are Fully Functional*, which documents the functions of most of these organs and structures.<sup>2</sup>

Unfortunately, past claims that these organs are useless discouraged research into their functions. Just think of the tonsils. They lie at the back of our throats and help detect invading bacteria. In the 1930s, over half of all children had their tonsils removed, partly because doctors believed they were useless and would only cause problems later in life. Early doctors thought it was best to remove tonsils when a child was young. After more research, scientists found that tonsils help defend the body, and the number of operations fell fast. Currently, less than one in 1,000 children get their tonsils removed!

Today, doctors don't usually remove tonsils unless a patient suffers from frequent severe infections or a breathing blockage. The removal of tonsils adds risks like severe bleeding, weakened immune systems, and infections. We now know that the operation, on average, helps very little. Plus, any benefits only last about a year. Do vestigial organs show evolution? No—vestigial organs don't even exist!

#### References

- Rogers, K. 7 Vestigial Features of the Human Body. *Encyclopedia Britannica*. Posted on Britannica.com.
- Bergman, J. 1990. Vestigial Organs Are Fully Functional. Terre Haute, IN: Creation Research Society Books.

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apologetics

tudying God's creation bolsters one's faith in God's Word, since careful observation of "earthly things" corroborates the information in Scripturesuch as how and why God's creatures behave as they do.1

God taught the patriarch Job a lot about His creation in the "nature sermon" (filled with rhetorical questions) in Job 38-41. God used examples of wildlife to illustrate His wise and caring providence. In particular, He challenged Job to appreciate how and why hawks and eagles fly high in the skies above, looking far and wide for earthbound food.

"Does the hawk fly by your wisdom, and spread its wings toward the south? Does the eagle mount up at your command, and make its nest on high? On the rock it dwells and resides, on the crag of the rock and the stronghold. From there it spies out the prey; its eyes observe from afar."(Job 39:26-29)

Some who read Job 39:26 assume hawk migration is the question's topic.<sup>2</sup> But because God compares the hawk's aerial behavior to eagle flight, the context suggests otherwise. Both raptors require special aerodynamics to lift their heavy bodies into the air. God designed these raptors to utilize weather-powered "elevators" to ascend into air currents.

As well as producing its own lift, a bird can take advantage of rising currents of air to carry it higher. ...Rising warm air currents are known as thermals. Many birds, including some larger-bodied migrants such as storks and eagles, follow hill ridges to use rising air currents, or soar up in tight circles in a thermal and then glide off at a height in search of the next one. Such birds will watch other soaring birds, or even glider planes, for indications of where thermals are present.3

Rising hot-air currents routinely blow in from south of Israel, so hawks can "catch a ride" simply by stretching out their wings

# Hawks and Eadles

#### article highlights

- God used hawks and eagles to show Job how He cares for creation.
- Just as He provides for creatures, God provides for us.
- We are totally dependent on Him, and He always provides what we need.

southward,<sup>4</sup> just as sailors harness wind to power boats at sea.5 Gliding and soaring on extended wings reduces air resistance as well as the hawk's need to burn energy by flapping.6

Likewise, when God commands wind to blow, eagles can "mount up" (literally, "cause to fly") upon rising thermal air currents-as if they were elevators-and glide almost effortlessly until they spy food far below with their super-powerful distance vision.3,6,7

Eagle flight should also remind us of our need to receptively rely on God's caring provision for our needs. John Stott notes:

Moreover, the biblical symbol of true freedom is not the flight of the seagull [as taught in the humanistic tale of Jonathan Livingston Seagull but the flight of the eagle. The false gospel of Jonathan Livingston Seagull is that "we can lift ourselves" out of ignorance, materialism and failure... [but] the true gospel of Jesus Christ is that he is able to lift us. So flight in Scripture is not a symbol of self-effort but of [a complete reliance on God's] salvation. The picture it presents is not the strenuous flapping of wings, but the spreading of wings to catch the wind, and effortless soaring in the sky.8

From Job, we learn that we totally depend on God, just like hawks and eagles. 🖄

- John 3:12. Corroborating Scripture with scientific and historical facts will be prioritized in ICR's future Discovery Center for Science and Earth History. See Johnson, J. J. S. 2017. Polar Bears, Fitted to Fill and Flourish. Acts & Facts. 46 (8): 21.
- Cansdale, G. S. 1976. All the Animals of the Bible Lands. Grand Rapids, MI: Zondervan, 147.
- 3. Harrison, C. and H. Loxton. 1993. The Bird: Master of Flight. Hauppauge, NY: Barron's, 49. See also Isaiah 40:31, Obadiah 1:4, and Proverbs 30:19.
- 4. Luke 12:55. On the common practice of hawks and eagles riding thermal air currents, see Stokes, D. and L. Stokes. 1989. A Guide to Bird Behavior, Volume III. Boston, MA: Little, Brown & Company, 98, 110, 139, 156.
- 5. The same Hebrew verb [paras] used to describe hawk wingspread in Job 39:26 is used in Isaiah 33:23 of boat-sails being spread out to catch the wind.
- Alerstan, T. 1993. Bird Migration. New York: Cambridge University Press, 252-253.
- 7. Near Jerusalem, eagles soar while scouting for mammals or reptiles, including tortoises, which the eagles "kill by dropping and smashing [the tortoises] on rocks from high in the air" (Noel and Helen Snyder. 1991. Birds of Prey. Stillwater,
- MN: Voyageur Press, 164). Stott, J. 1999. The Birds Our Teach-8. ers. Grand Rapids, MI: Baker, 56.

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References

#### stewardship

# Prayers, Walls, and a Mind to Work

ehemiah's campaign to rebuild the walls of Jerusalem is a fascinating account of effective leadership in the face of great adversity. More importantly, it's an outstanding lesson on the power of prayer combined with a willingness to work toward a God-given goal.

As a high-court official for Persian King Artaxerxes I, Nehemiah was accustomed to a certain level of influence that came with his position. But upon learning that Jerusalem was in ruins and the survivors were in distress (Nehemiah 1:1-3), it's remarkable that he did not immediately beseech the king for help. No, the first thing Nehemiah did was pray!

Prayer plays a significant role in Nehemiah's account. He prayed before making his request to the king (2:4) and then again as his enemies angrily mocked the people's building efforts (4:4). But "the people had a mind to work" and were committed to the cause, and under Nehemiah's capable mana<mark>rticle highlight</mark>s

- When faced with the challenge of building the walls of Jerusalem, Nehemiah "prayed to the God of heaven."
- After placing his requests before God, Nehemiah diligently went to work.
- The discovery center is ICR's "wall," and we ask for your prayers and your provision.

agement the "entire wall was joined together up to half its height" (4:6). Even as their adversaries conspired against them and the threat of attack seemed imminent, Nehemiah and his wall-builders made their prayer to God and kept on working (4:9).

Prayer is a powerful weapon, but it can be ineffective without appropriate action. After Nehemiah's prayer, he was quick to set a watch against their enemies "with their swords, their spears, and their bows" (4:13). The people were ready "to fight for [their] brethren" if necessary (4:14), but at the same time they were confident, proclaiming that "our God will fight for us" (4:20).

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Gifts

This is a sound biblical principle that we may fail to remember at times. Rather than relying simply on prayer and hoping for divine intervention, God expects us to use whatever means we have to meet the ministry need at hand. Consider the Lord Jesus' rebuke of those who asked Him to perform a miracle to test Him or merely to see something curious: "Unless you people see signs and wonders, you will by no means believe" (John 4:48). Nor does He condone prayer in lieu of obedience. As Joshua was praying for deliverance from the enemy, "the LORD said to Joshua: 'Get up! Why do you lie thus on your face? Israel has sinned, and they have also transgressed my covenant which I commanded them" (Joshua 7:10-11). The same applies to prayer in lieu of effort, for "faith by itself, if it does not have works, is dead" (James 2:17). God provides even for the birds of the air-but He still expects them to scratch for the worm (Matthew 6:26)!

Just as Nehemiah was called by God some 2,500 years ago to complete a significant project, God has called ICR to do an important work here in the 21st century. The ICR Discovery Center for Science and Earth History is ICR's "wall," and like Nehemiah, it is a project that requires much prayer and many hands. The ICR staff meets together every work day to pray, asking the Lord for His wisdom and guidance as we work through each detail. We also ask for His special financial provision-and He has been faithful to supply so much! But our wall is only half built, and we need help from God's people with "a mind to work." Will you claim a portion of our "wall" as your own? Please give generously to the ICR Discovery Center.

But above all, pray! 🛸

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



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Sounds so obvious... why isn't it obvious to those in academia? I realized in my second year in college as a biology major that there was something seriously flawed with what I was being taught. **It's good to have an organization like ICR that has been putting out the truth that's been censored out of education for years**.





**alike.** Personally I intend to create a six-to-eight week program which can be taught in a church or small-group setting. I wanted you to know how valuable this has been for me and those around me—I feel very blessed indeed.

many levels for saints and seekers

— D. H.

**Editor's note:** For information about ICR's education programs, visit ICR.edu.

While sitting in the waiting room at a hospital, I overheard a gentleman mention biological evolution and cavemen. I just smiled at him and shook my head. He asked what I was smiling about and, due to the many articles you present, I was able to refute his claim and the fossil record as well. I gave him many examples of genetics—specifically from the human genome studies and genetic recession as opposed to evolution somehow gaining information. I was also able to use many of your wonderful proofs in geology relating to the geological strata and radioisotope dating in fossils, i.e., carbon and soft tissue evidence disclaiming millions of years. I also told him of the December 13, 2016, decision of the Royal Society of London in discrediting evolution by evolutionists themselves. I guess I have retained more information than I thought I was capable of, thanks to God Almighty.



I just read your latest article in [the March 2018] *Acts & Facts* entitled "Minimal Continental Coverage During the Early Flood." **You and your colleagues do a great job of presenting the creation message through well-written, informative articles.** I have shared this magazine with a number of the brothers in my church, and some have subscribed. — D. K.

— R. W.



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Have a comment? Email us at Editor@ICR.org or write to Editor, P. O. Box 59029, Dallas, Texas 75229. Note: Unfortunately, ICR is not able to respond to all correspondence.



— S. F.

I am a homeschooler. I just wanted to say that I love all of ICR's books! My husband and I and our four homeschooled children just love ICR and everything about it! I use some of the books for science. I love that I can let my third-grader read the *Guide to* books, for example, without hovering over her worrying that she will read

**some false information that the world would try to feed her.** I trust ICR's information, just love the products, and am so thankful for them!

I look forward to our ICR collection growing for our family resources. And I look forward to the ICR Discovery Center in Texas! We live in California, so it will be more possible to visit, God willing, in the future. Praying for ICR and all you do.

— A. M.



It took longer than I thought it would, but I've finished the CW [Creationist Worldview] program! I wanted to take a minute to thank you and all at ICR for offering this program, which has been a blessing many times over. **What ICR offers is valuable on so** 

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