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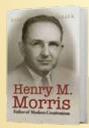
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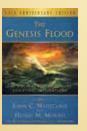
Answers to 32 Big Ques-

tions about the Bible and

and stratigraphic extent, and decay rate of collagen in ancient bones. The experiments and descriptions show that yes, creation scientists do real science. How does science resolve the dilemma of having short-lived collagen in supposedly very old dinosaur bones? This book provides the solid technical background needed to address this key question.



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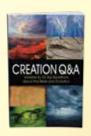


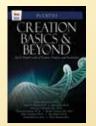
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The Goodness of God

s I read through this issue of *Acts & Facts*, I'm reminded of the goodness of our Creator. The One who originally proclaimed His creation "good" and even "very good" is the One who is still personally involved with us today. He loves us and cares about every detail of our individual lives just like He intricately designed the details of creation.

Our Creator is Jesus. I see His hand as I look at the things He guided the team at the Institute for Creation Research to do this past year—just as He guided ICR in the years and decades before. From events, presentations, and publications to the ICR Discovery Center for Science & Earth History, the scientists' research, and the changed lives of those who interact with our ministry, God has used ICR's work to spread His truth. For almost 50 years, His hand has blessed and protected us through growth and expansion, change and transition.

We experienced His help—and yours—as we completed the Discovery Center this year. As Dr. Henry Morris III said, "The Discovery Center is a marvelous tool that will extend and further empower our mission to showcase the voluminous research and scientific evidence that demonstrate the accuracy and authority of the Bible" ("Maintaining the Mission," pages 5-7).

Visitors to the Discovery Center have had the opportunity to explore Dr. Brian Thomas' recent research in the area of soft tissues in dinosaur fossils. Many have taken a closer look at Dr. Tim Clarey's work related to the Flood and Earth's geological sequences. Dr. Jeffrey Tomkins' research comparing human and chimp DNA is also on display in the current research exhibit.

As I reflect on God's goodness, I realize there are so many remarkable things I've encountered through my years working at ICR. I've interviewed a NASA astronaut who loves the Lord and sometimes speaks at ICR events. I've filmed at breathtaking locations that vividly reveal majestic details of God's creation. And I have the honor of working with an incredibly talented team that writes, edits, and

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creates resources to

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answer readers' questions and point them to our good God. These rank near the top of my unforgettable experiences list, but I also fondly remember meeting a little boy named Cooper outside the Discovery Center a few months ago.

Cooper attended the Discovery Center grand opening. He was so excited to be here, and our photographer and I caught him as he was leaving with his family. He wore an Earth shirt and a giant smile. He opened his ICR Discovery Store bag and pulled out our Science for Kids *Earth* book that he'd picked out from the many resources in our shop. He clearly had a passion for studying God's created world, and it was thrilling to play a part in encouraging his enthusiasm for our Creator.

Meeting friends of ICR face to face always reminds me why this ministry matters. And God's goodness is displayed over and over again through your ongoing support. You have offered kind words, finances, and prayer over decades of ministry, and you've been a huge part of our mission outreach and ministry growth in 2019.

> Because of your generosity, thousands of Discovery Center visitors have come to see the work of our Creator and celebrate His goodness with us. We're grateful for you, our faithful friends— Merry Christmas from all of us here at ICR!

Jayme Durant

Jayme Durant Executive Editor

article highlights

- The ICR Discovery Center for Science & Earth History opened September 2, 2019.
- While completing this monumental project, ICR's core ministry continued—research, publishing, online outreach, donor relations, and almost 200 events nationwide in the past year.
- ICR's supporters helped make the Discovery Center a reality while also providing for our ongoing projects.
- You are a crucial part of ICR's mission to proclaim the scientific evidence that demonstrates the Bible's validity from cover to cover.

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HENRY M. MORRIS III, D. MIN

David also girded on his sword. And about four hundred men went with David, and two hundred stayed with the supplies. (1 Samuel 25:13)

avid spent a long time as an outlaw running from King Saul even after the Lord had Samuel anoint him king. During those years, he gathered a small army of "everyone who was in distress, everyone who was in debt, and everyone who was discontented" (1 Samuel 22:2). Before David was established as king in Jerusalem, his army fought several battles, two of which required some of the fighting force to remain behind and guard the "stuff" (as the King James Version translates the term).

On both occasions, David made sure the stuff was cared for since no army can exist without a steady stream of supplies. On the second occasion (recorded in 1 Samuel 30), some of the fighters wanted to keep the spoils for themselves. Their reasoning was that the guys guarding supplies didn't do the hard work, so they didn't deserve any reward. David would have none of it. His response became a law in Israel—and among many armies since.

Image credit: Joseph Haubert

"But as his part is who goes down to the battle, so shall his part be who stays by the supplies; they shall share alike." So it was, from that day forward; he made it a statute and an ordinance for Israel to this day. (1 Samuel 30:24-25)

Three Years of Hard-Fought Battles

Regular Acts & Facts readers will be aware that for the past few years the bulk of ICR's time, talent, money, and energy has been focused on designing, funding, and building the ICR Discovery Center for



Science & Earth History. Many of you have played a part in that, either by sharing your resources or interceding for us in prayer—or both—during this very arduous and intense time.

During late spring and summer this year, our Events department planned and held dozens of "sneak peek" presentations in the new Founder's Hall of the Discovery Center, hosting well over 1,000 teachers, administrators, and pastors to give them an advance look at what would be available when



the Discovery Center opened. Those 1,000+ have mostly since visited the center, and many of them have either brought or scheduled group tours for their students, teachers, and churches.

The Discovery Center opened on September 2, 2019, with over 1,600 in attendance. All of us are grateful for your help, your prayers, and your many, many letters and words of encouragement. Yes, there is still work to be done. We will be updating things as new information becomes available, as well as incorporating feedback from the guests, students, and vendors who are constantly coming through the doors. And yes, we still need your gifts. Thank you for your support. Thank you for your feedback. All of that has helped and will help as the days continue.

The Stuff of ICR Has Continued

However, and this really is a big "however," ICR has not slowed down with the research, the publications, and the public presentations that have been the core of our ministry for nearly 50 years. While it may seem like ICR did nothing but build the Discovery Center the past few years, we have continued the various aspects of our regular ministry with very little pause or letup.

ICR research continues with geneticist Dr. Jeff Tomkins' human-chimp DNA analysis, geologist Dr. Tim Clarey's Column Project, paleobiochemist Dr. Brian Thomas' ancient biochemistry studies, nuclear physicist Dr. Vernon Cupps' radiometric dating research, physicist Dr. Jake Hebert's climate and Ice Age work, medical doctor and Professional Engineer Dr. Randy Guliuzza's continuous environmental tracking project, and zoologist Frank Sherwin's investigations on parasites, predators, and poisons. In addition, our excellent science team has lent its time and expertise to the Discovery Center to make sure the science behind its exhibits is as informative,

cutting- edge, and up-to-date as possible, as well as giving regular live presentations to Discovery Center guests.



Acts & Facts has been published and sent out every month with the latest information that was ready to be made public. Those articles don't write themselves, and ICR's five full-time editors, supplemented by specialty talent, printers, mailing houses, etc., have continued to produce this quality publication for you as a gift. That gift is made possible by your financial support, but we don't require subscribers to pay for it. It is our ministry to you.



Days of Praise is the devotional quarterly booklet we provide to you without charge. Those devotions require hours *each* to write, and many hours more to edit and prepare so that you can join us every day to explore in-





depth insights into the riches of Scripture. We know the discipline of studying and reading God's Word is both a pleasure and a requirement for a godly Christian life. Again, that is our gift to you.

Books, Books, and More Books. During this past year, ICR published several books. The Science for Kids and Little Creation Books series continue to be soughtafter big sellers. Dr. Vernon Cupps' technical book *Rethinking Radiometric Dating* was released this past summer, and after Brian Thomas received his Ph.D. in paleobiochemistry, we published his dissertation, *An*-





cient and Fossil Bone Collagen Remnants, for those who really like to think in "big" words. Several other books of a technical nature are currently in the editing process.

Functional and Operational Stuff. All of us would be completely *IN*-operative if our electronic and security apparatus were to fail. During the later stages of finishing the Discovery Center, we completed major upgrades to our security systems, our phone systems, and the fiber optic cabling. Further upgrades were made to our major servers with all constituent data to secure and protect our information. All our internal computers were upgraded to Windows 10 since the old suite is no longer supported by Microsoft. And, just to be sure everything works okay, we installed fiber optic "backbones" between all of our campus buildings.

Internet Outreach. ICR sends many email updates per month to existing ICR constituents, all the while maintaining compliance with PCI banking regulations and keeping a continuous intrusion detection on existing web infrastructure, maintain-



ing security updates and patches as necessary. While this work is not among the "beautiful" things everybody likes to talk about, when it doesn't work the "sky falls!"

Events and Donations. ICR still gives presentations to churches and schools, and offers seminars throughout the country. From January through December 2019, we were involved in 195 events. Busy! Now that the Discovery Center is open full-time, some of our science staff must be available there to give lectures-especially on weekends and when large groups attend. Henry 4 (as he is called at ICR) carried the bulk of the detail labor with the Discovery Center while at the same time keeping up with writing various letters and individual thank you notes, putting together 24 new Charitable Gift Annuities for some of our donors, and maintaining the constant tracking and recording of the thousands of gifts from those who help fund our ministry.

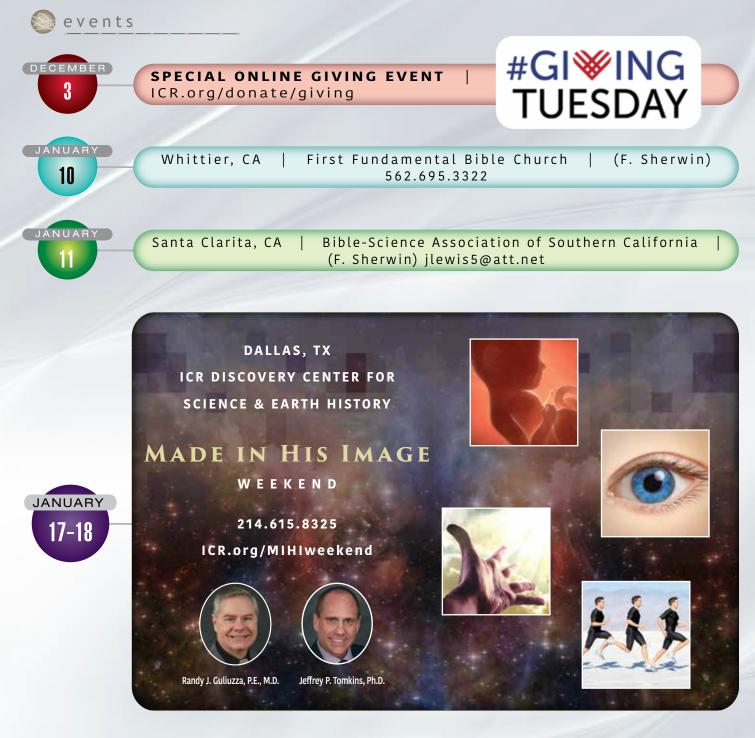
New and Improved but Stable and Focused

This has been just a quick look at the past 12 months at ICR. The Lord has brought about a wonderful new asset with the ICR Discovery Center for Science & Earth History. We thank you for your prayers and support that have allowed us to launch this innovative facility while at the same time maintaining our core "stuff." Under the leadership of Director Chris Kinman, the Discovery Center is a marvelous tool that will extend and further empower our mission to showcase the voluminous research and scientific evidence that demonstrate the accuracy and authority of the Bible.

That, in simple terms, is what ICR is all about.

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.





On October 23, 2019, ICR scientists Dr. Jeff Tomkins and Dr. Brian Thomas were invited on the *Point of View* radio program and interviewed by guest host Dr. Merrill Matthews, with Pastor Charles Stolfus of Denton Bible. Listen to the interview on this podcast: **ICR.org/article/point-of-view**





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

For information on event opportunities, email the Events department at **Events@ICR.org** or call **800.337.0375**.



article highlights

- Whale fossils appear in rock layers located above what some creation scientists claim is the post-Flood boundary.
- Some creationists propose that whales evolved from an unknown land animal that was aboard the Ark, but there is no evidence for this.
- Geological and paleontological data suggest these whales were buried and fossilized late in the Flood year.
- This makes perfect sense if the Neogene-Quaternary is the real post-Flood boundary, as ICR's megasequence research revealed.

Whale Fossils Confirm Post-Flood Boundary

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

n 2018, as a complement to ICR's ongoing megasequence research, ICR scientists Drs. Jeffrey Tomkins and Tim Clarey described the beginning of a research project to document fossils formed late in the Genesis Flood.¹ Earlier, our study of global oil well data and rock outcrops demonstrated that the Genesis Flood deposits range from near the base of the Cambrian System up through Neogene strata in the upper Cenozoic.²⁻⁴ Study of global fossils and geological data confirms the end of the Flood is late in the rock record at the Neogene-Quaternary (N-Q) boundary.

Many types of animal and plant fossils first appear in the uppermost sedimentary rock layers that are part of the Tejas Megasequence, which corresponds to the Paleogene and Neogene rock units of the Cenozoic. These fossils represent plants and creatures that inhabited ecological zones at higher elevations in non-coastal temperate regions in the pre-Flood world and were buried late in the global Flood. Documented evidence shows marine mammals, including whales, first appear in Cenozoic strata as well (Figure 1).^{1,5-8}

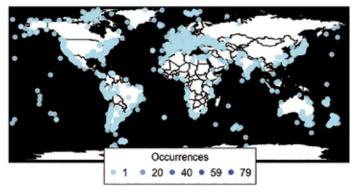


Figure 1. Global occurrences of Cetacea (whale) fossils using data from the Paleobiology Database posted on paleobiodb.org

In fact, whale fossils are located on the coastal margins of nearly every major landmass and are also found across the entire continent of Europe. This is not surprising since ICR's Column Project has shown that Cenozoic marine sediments cover most of Europe.⁹

Unfortunately, some creation scientists have prematurely placed the post-Flood boundary at the end of the earlier Cretaceous System. So, how do they explain the sudden appearance of whale fossils beyond this boundary? They claim these large marine mammals evolved rapidly from ancestors that walked out of the Ark.¹⁰

But did whales really evolve from land-dwelling Ark ancestors? Whale evolution would have required numerous and exceptionally rapid changes in anatomy and physiology. There is no evidence to support this idea from either genetics or the fossil record.

Some suggest that these whales were fossilized in localized post-Flood catastrophes, but pervasive global distribution of whale fossils debunks this claim. Even secular research has shown that a massive global extinction event that involved many marine mammals occurred near the top of the Pliocene (uppermost Neogene), just below the Quaternary boundary.¹¹ The global Flood easily explains this apparent extinction.

ICR's contention that the N-Q boundary in the rock record marks the end of the Flood not only matches global megasequence data and paleontology but also debunks rapid whale evolution and other untenable early-Flood boundary ideas. We expect future findings will continue to affirm this boundary as the true ending to the watery catastrophe recorded in Genesis. Sev

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





's Column Project team recently finished work on the European continent, including Turkey and the area surrounding the Caspian Sea. We have now compiled stratigraphic data across four entire continents: North and South America, Africa—including the Middle East—and Europe. For Europe alone, we compiled 499

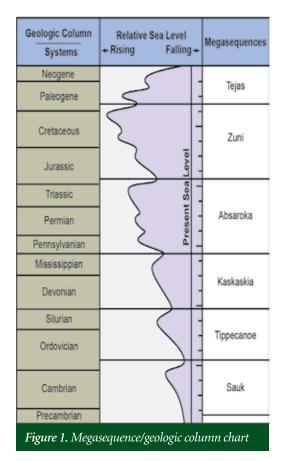
stratigraphic columns using oil industry wells, outcrops, and seismic data and published cross-sections across the continent. At each location, we input detailed lithology data and the megasequence boundaries (Figure 1).¹ We used Rockworks version 17, a commercial software program for geological data.

The stratigraphic patterns across the

European Stratigraphy Supports a Global Flood

article highlights

- ICR's cutting-edge Column Project recently compiled data on 499 European stratigraphic columns.
- These data show similar sedimentary layers as those covering Africa, North America, and South America, presenting compelling evidence of a global catastrophe.
- The vast marine deposits found in Europe also reconfirm the K-Pg boundary wasn't the end of the global Flood. Rather, the Flood peaked globally in the Zuni Megasequence and receded in the Tejas.
 - This study powerfully confirms the year-long Genesis Flood and continues to reveal its progress in great detail.



first three continents were also found across Europe with slight differences. The Flood across Europe began in a limited extent in the Sauk, peaked in the Absaroka, and finally receded in the Tejas, the final megasequence. This is strong evidence for a global flood. All four continents we have studied share the same general pattern and timing of limited early flooding, followed by peak flooding, and then receding.

Europe Peaks in the Absaroka Megasequence

The earliest two megasequences (Sauk and Tippecanoe) show very limited coverage across Europe (Figure 2). This is the same pattern we observed across the other three continents. The totals across the four continents show the least volume and extent of sedimentary rocks in the earliest two megasequences. The later four megasequences (Kaskaskia, Absaroka, Zuni, and Tejas, respectively) show much more volume and surface extent.

Oddly, Europe has a peak volume and surface coverage extent in the Absaroka Megasequence, which encompasses the Pennsylvanian through Lower Jurassic rocks. Most of the other continents peak a bit later. But the four continent totals still show the maximum extent

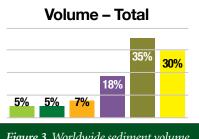


Figure 3. Worldwide sediment volume breakdown

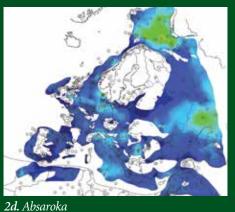
and volume occurring in the fifth megasequence, the Zuni-Middle Jurassic through Cretaceous rocks (Figure 3).

We still believe this peak in the Zuni represents the high point of the Flood. In terms of stratigraphy, this falls

Figure 2. Thickness and extent maps of sedimentary layers by megasequence



2a. Sauk



2b. Tippecanoe



2e. Zuni

2c. Kaskaskia



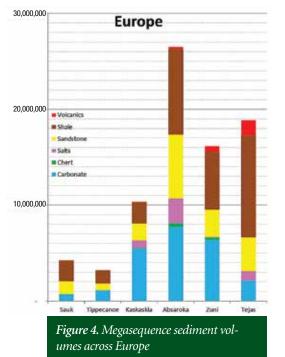
near the end of the Cretaceous when most of the other continents also peak. This global high-water level is interpreted as Day 150 in the Flood year.

Europe Dominated by Lowlands and Shallow Seas

Why does Europe peak one megasequence earlier than most of the others? The answer seems to be in the pre-Flood configuration of Europe. Most of the pre-Flood European continent appears to have been lowlands and shallow seas, similar to the Dinosaur Peninsula concept for North America.2 The floodwaters were able to inundate most of Europe earlier than the other continents, giving a peak in sedimentary volume one megasequence earlier (Figure 4). In contrast, Africa, South America, and North America had more extensive pre-Flood uplands. Europe apparently only had uplands across the Scandinavian Peninsula and parts of Ukraine.

Rock Data Indicate Late Cenozoic Post-Flood Boundary

There is still debate among creation scientists about the location of the post-Flood boundary in the stratigraphic record.



Some have claimed the K-Pg (formerly K-T) boundary marks the end of the Flood as well as the end of marine deposition across the continents. These scientists have insisted that the massive volumes of post-K-Pg sediments observed globally are merely the result of local, post-Flood catastrophes. In contrast, other creation scientists have argued that the K-Pg wasn't the end of the Flood but that it continued through much of the Cenozoic rock record. ICR scientists agree with the latter position and interpret much of the Cenozoic strata as the receding phase of the Flood.

As we predicted, the results of the European study dramatically conflict with the K-Pg post-Flood boundary interpretation. The sedimentary rocks across much of central Europe indicate that marine depositional processes continued without interruption from the Cretaceous through the Upper Cenozoic (Figure 5). Many locations show con-

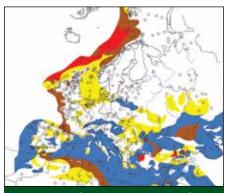


Figure 5. Basal Tejas across Europe indicates marine deposits. Color codes match Figure 4.

tinuous deposition of carbonate rocks across the K-Pg boundary from the Cretaceous through Miocene.

These results demonstrate that the Cenozoic rock deposit across Europe wasn't due to highly speculative and improbable localized post-Flood catastrophes but rather to the receding phase of the global Flood itself. Massive marine deposits across such vast areas of the world indicate Flood processes were still active well into the Upper Cenozoic, possibly as high as the top of the Pliocene, where a major paleontological extinction event is observed,³ coinciding with the end of the Flood.

The other continents also support this Late-Pliocene Flood boundary interpretation, especially North America. The Cenozoic (Pliocene) Ogallala Formation covers about 174,000 square miles from Texas to South Dakota.⁴ While it's only 20 to 40 feet thick in some locations, it increases to over 700 feet across much of the Great Plains. Igneous and metamorphic cobbles in the basal conglomerate of the Ogallala layer are sourced from the Rocky Mountains, hundreds of miles to the west.

Localized post-Flood catastrophism can't explain the massive extent of the Ogallala Formation, just like isolated regional processes can't explain the huge deposit of the Whopper Sand in the deep Gulf of Mexico.⁵ This sandstone is well over 1,000 feet thick and is found over 200 miles offshore. The only conceivable explanation for this vast deposit at the base of the Tejas Megasequence is its formation by the highenergy runoff conditions at the onset of the receding phase of the Flood as the continents and their mountain ranges were uplifting.

A Real Global Flood

The stratigraphy across Europe and the other three continents confirms a global flood occurred. All four continents in our study show a limited beginning to the Flood in terms of volume and extent, followed by a steady increase to a maximum water level, concluding with a receding phase that continued well into the Upper Cenozoic. Marine conditions across Europe prevailed well into the Miocene and Pliocene, dispelling the myth of a K-Pg end to the Flood. Stratigraphic data across four continents confirm the high Flood boundary and the truth of the Genesis Flood. Stati-

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Dr. Clarey is Research Associate at the Institute for Creation Research and earned his Ph.D. in geology from Western Michigan University.



Homology: Descent or Design?

A n evolutionist friend and I recently chatted about animals. He said it's amazing how many different animals' skeletons look so similar. Just stretch, shrink, and shape the bones of one creature to transform them into the skeletal arrangement of another. I recognized this as his way of expressing the keystone argument for evolution called *homology*. The conversation reminded me of two major flaws with this idea.

To scientists who reject the existence of a Creator, homology basically means that two different creatures with a similar feature must have evolved from a shared ancestor that also had that feature.¹ Evolutionists label these

similarities *homologous* features. For example, raccoons and humans have five fingers on each hand. Does this require that raccoons and humans both evolved from an unknown five-fingered mammal that lived millions of years ago?

Perhaps the most obvious flaw in this view is that the evidence fails to favor one origins option over the other. One may argue that evolution explains it, but what if a Creator crafted those five fingers only thousands of years ago to ensure raccoons and humans have just the right tools to thrive across a range of times and places? Either creation or evolution could explain the fact of five fingers.

That leads us to the second flaw in the homology argument—it oversimplifies similarities between the features. Creature features may look simple from a distance, but they actually require personal, skillful, preplanned precision engineering of the same sort that cars need. Cars and trucks have metal frames to which their engines and four wheels attach. At first glance, one

might remark about how amazingly similar so many vehicles look. All you'd need to do is stretch and scrunch one frame to transform it into another vehicle's frame. But zoom in closer and you'll see that each tiny difference precisely accommodates a specific part. Even very similar vehicles often require different-size bolts, increased frame thicknesses to support higher engine torque ratios, and many other body style specifications. One can pretend that a car frame evolved into a truck frame, but we know that actual engineers customized each of these design details. The same could certainly be true of living creatures.

Imagine replacing a bone with the corresponding bone from a different creature. Would your hand work better with a raccoon thumb stuck on it, or the raccoon's with yours? Instead, the length, width, size, shape, thickness, density, and angle of each bone's facet makes a precise fit with its neighboring bone.

Where can we witness nature engineering features? When have we seen an animal skeleton morphing into that of another

article highlights

- Homology is a similarity in the features of two different creatures.
- Evolutionists see homology in creatures as evidence of evolution.
- But such features are uniquely tailored for their particular creatures —they are not interchangeable.
- Custom engineering in each animal displays design—not chancebased evolution.



animal? As I saw printed on a recruitment poster for an engineering school, "Cool stuff doesn't just make itself." This truth applies just as much to man-made parts as it does to God-made creatures, despite the chatter about homology.

Upon closer examination, we find that similar creature features don't point to a common ancestor but to a common designer. The precision engineering observed in both animals and people suggests that a Creator handcrafted every part.

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Dinosaurs Had Reptilian Metabolic Adaptation

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

Cientists have long wondered how coldblooded reptiles (ectotherms) like dinosaurs could have been so active and vigorous. Anatomical analyses of dinosaur fossils have clearly revealed that they were very similar in their anatomy, growth, and physiology to living reptiles.^{1,2}

Despite this, evolutionary speculation that dinosaurs may have been warm-

blooded, bird-like creatures that were very different from today's reptiles has become extremely popular. New research in reptile genetics and physiology and its comparison to what we know about dinosaur fossils reveal exciting insights into this debate.

Dinosaurs have a variety of features that indicate they were cold-blooded like many living reptiles. For example, an analysis of dinosaur skulls (including theropods such as *T. rex*) reveals narrow nasal cavities that lack the nasal turbinates many warmblooded mammals use to filter and warm air. Instead, the theropods had reptile-like respiratory systems that would have provided low lung ventilation rates. Fossilized soft tissue associated with the abdominal cavity of a theropod dinosaur revealed a lung ventilation system like that of modern crocodiles.^{1,2}

Based on these findings, researchers have proposed that many dinosaurs had low metabolic levels during resting or low-activity periods but could rapidly expand their lung ventilation levels for bursts of activity associated with running, attacking, and defensive maneuvers. This type of adaptation would also have allowed large dinosaurs to sustain life within a reasonable level of caloric intake. Indeed, research showed that if large dinosaurs were warm-blooded, they wouldn't have been able to ingest enough food to maintain their metabolism.^{1,2}

article<u>highlights</u>

- Evolutionary scientists speculate that dinosaurs were warm-blooded creatures similar to birds.
- But dinosaur fossils indicate they were cold-blooded and very similar to modern reptiles in their anatomy, growth, and physiology.
- Dinosaurs could probably adjust their metabolism like modern Komodo dragons, which can achieve great bursts of speed for hunting.
- These creatures' ability to adapt to the needs of the moment displays God's creative design.

Recent studies of Komodo dragons and alligators support these scientific predictions about dinosaur metabolism. Komodo dragons are the biggest land lizards on Earth and can reach 10 feet in length and weigh up to 300 pounds. They are top-level predators that live on remote Indonesian islands, and their amazing chemosensory systems enable them to detect large prey, like deer, from over seven miles away.

Since they're relatively large coldblooded reptiles, they can also provide possible insight into dinosaur metabolism. Komodo dragons rapidly ramp up their metabolism to near-mammalian levels for incredible bursts of speed and even extended arduous sprints. When researchers recently sequenced the genome of the Komodo dragon and compared its various metabolic genes known to be common among reptiles, they discovered some genetic novelties associated with this ability.^{3,4}

In yet another study, researchers analyzed the skulls of both a T. rex dinosaur and living alligators.5 They showed that, similar to a T. rex, alligators have two large holes on top of their skulls. In alligators, these holes are filled with specialized blood vessels and thermoregulatory tissues. Thermal imaging showed that the tissues in these holes metabolically fluctuated with external temperature. The researchers deduced that this was part of a crosscurrent circulatory system associated with an internal thermostat. Until this study, scientists had erroneously assumed that these spaces in dinosaur skulls contained muscles. Given that dinosaur brains are similar in shape and structure to living reptiles like alligators, this new finding comes as no surprise.6

The continually emerging similarities between dinosaurs and living reptiles are confirming dinosaurs as true cold-blooded reptiles, not relatives of birds. And these new research findings give us amazing insights into God's creative genius as revealed in His creatures' unique adaptive design.

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he origin of the oceans has long been a puzzle to secular scientists.1 Recently, however, progress has been made. Evolutionists are suggesting a novel idea regarding the source of Earth's oceans-and it sounds quite biblical. In 2010, Bruce Dorminey said, "A new study suggests that Earth supplied its own water."2 Five years later, New Scientist magazine suggested that "our planet had water from the very beginning."3

According to Genesis, Earth began

article highlights

- New research suggests that Earth has had oceans since the beginning.
- It seems the source of the oceans' water was within Earth itself.
- Earth's magnetic field maintains the oceans, making life possible.
- The oceans teem with life everywhere, even in the pitch-black depths.
- Our oceans point to the work of a Creator just as Genesis proclaims.

ery creature inhabiting the oceans. For example, God designed the magnificent blue whale with a heart that weighs half a ton, a tongue that weighs two tons, and calves (baby whales) that drink 100 gallons of fatrich milk daily from their mothers' specially designed abdominal mammary slits. How does a calf actually nurse without getting mouthfuls of seawater? Zoologists are still not sure. Evolutionists are convinced that these aquatic mammals were not created but evolved from land animals some

Genesis and the Oceans

as a watery chaos about 6,000 years ago. Water was paramount on Earth from the start. "The earth was without form, and void; and darkness was upon the face of the deep. And the Spirit of God moved upon the face of the waters" (Genesis 1:2).

The design of this planet with its oceans and protective magnetic field is clearly seen (Romans 1:20). Astrobiology. com says, "The sheer strength of Earth's magnetic field helps to maintain liquid water on our blue planet's surface, thereby making it possible for life to thrive."4

The apostle Paul urged the skeptics on Mars Hill that they "should turn from these useless things to the living God, who made the heaven, the earth, the sea, and all things that are in them" (Acts 14:15). Indeed, the oceans that God created and the organisms within them account for the majority of life on this planet. It's a three-dimensional living space, and we find life all the way down to the bottom. The psalmist said in Psalm 104:24-25, "The Earth is full of Your possessions-this great and wide sea, in which are innumerable teeming things, living

things both small and great."

Even the crushing dark depths have creatures designed for such environments.

During the discovery dive [40 years ago] in the submersible vehicle Alvin, geologist Jack Corliss called up to the crew on the surface ship from his position [1.5 miles] below to ask, "Isn't the deep ocean supposed to be like a desert?" "Yes," was the reply. "Well, there's all these animals down here," he responded.5

This design aspect appears with ev-

50 million years ago. "Looking at a great blue whale 30m long, or a fast-swimming dolphin, it is hard to imagine how they evolved from terrestrial mammal ancestors, and yet that is what happened."6 Instead, the evidence is that God created whales as whales during the creation week thousands of years ago. Whale fossils look just like modern whales.

Viewing the oceans, we can agree with psalmist who said, "The LORD on high is mightier than the noise of many waters, than the mighty waves of the sea" (Psalm 93:4).

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ICR Discovery Center Volunteers!

he ICR Discovery Center for Science & Earth History has welcomed thousands of guests since its September 2 Grand Opening. Word is spreading through social media, radio, print ads, and (most effectively) by word of mouth. Every week, school groups, churches, families, and others enjoy learning through high-tech exhibits, stunning planetarium shows, and live science presentations how science confirms the Bible.

Given our limited budget, how do we offer the growing number of visitors such a positive, faith-building experience? We couldn't do it without the volunteers who fill over half of the Discovery Center's staffing needs. Their donation of time and talents enables us to keep things running smoothly and provides a personal touch to the Discovery Center experience. ICR Volunteer Coordinator Lauren Pennington said, "Volunteers are, in a lot of ways, the face of the Discovery Center. They're the ones that people interact with the most during their time here."

Ryan, an Army veteran, serves regularly as a docent in the exhibit hall. He grew up with some awareness of ICR resources, but after completing his military service he returned to civilian life searching for answers to his questions about faith and science. Reading *Acts & Facts* over the following years helped him see how science and the Bible are in harmony. When he heard the Discovery Center needed volunteers, he said, "I saw the opportunity to give back to the organization that really helped sustain me and feed my soul. I've been volunteering every week since it opened."

Marci retired this past year and was looking for a meaningful way to spend her time. Knowing ICR's emphasis on trusting God's Word in a culture of doubt, she immediately filled out the volunteer application. She said, "With time on my hands, it gives me great joy to do something like this-it enables me to expand my sphere of people I know but still stay within the same community of faith." When asked why she thinks the Discovery Center is a great volunteer opportunity, Marci said she loves the flexibility to choose when she's available to serve. She added, "Everyone at the Discovery Center is friendly, ready to help, and it's just so well done. When you enjoy it, it's just easy to do."

ICR volunteers fill a variety of roles, from answering questions to turning on exhibits to running hourly planetarium shows. Whatever the need, each team member ensures that guests experience all the Discovery Center has to offer.

Lauren has noticed that the volunteer team members' biggest impact is in their interaction with visitors. She said, "I can think of a couple of volunteers who try to talk with every guest who comes through. After the guests move into the next part of the exhibit hall, those volunteers stop briefly and pray for those they've just spoken with. It's so encouraging to watch the fellowship that occurs."

After three months, does the Discovery Center have enough volunteers to meet the need? Lauren thinks there's room for more: "Our volunteer program is thriving,



Discovery Center staff and volunteers: Audrey, Ernie Carrasco, Lauren Pennington, and Laurel, left to right.

and we want it to continue to grow. If you have a passion for ICR's mission, if you want the world to know that the Bible is right...if you want to personally grow and learn more about this amazing universe God has created, and if you want to meet other believers passionate about creation science, then I would encourage you to at least fill out an application."

If you live in the Dallas area and would like to apply, go to **ICR.org/volunteer**. If you have questions about this opportunity, email Volunteer@ICR.org. We'd love to have you join us.



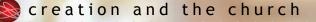
Volunteer Sherri and ICR editor Christy Hardy



Terry serves as a docent near the Dragon Encounters exhibit.



Meg assists guests as they enter the Founders of Science room.



Is the Body of Christ

special year-long Christmas gift that Christian parents can give to their children would be family time spent sharing heartwarming accounts of adventure, courage, and love drawn

RAND

from Christian history as well as their own lives. Go ahead and call it a "story"—just as long as the kids know it's a true story in which parents play an important role and the kids can, too. This will give kids some "roots" and stir up feelings of belonging and a sense of their own importance in God's plan. They need to hear the true narrative that connects them to their Christian ancestors. "Now I know who I am!"

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The power of feeling connected has greatly influenced my life. When I was young, genealogical businesses didn't exist, and my

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article highlights
Christian parents can gift their children with their remarkable Christian heritage.
Knowing this beritage being shape believers?

GULIUZZA

- Knowing this heritage helps shape believers' perspectives and purpose.
- Enemies of Christianity attack it by portraying a distorted account of Christian history.
- It is vital for parents, pastors, and teachers to set the record straight about our Christian ancestors.

Feeling like you belong to a story that began before you and unfolds with you—helps to shape your perspective and purpose. In fact, this is the appeal of businesses that sell genealogical information. They market testimonies of excited clients claiming parents didn't know much about their ancestors. However, I was not adrift. I was connected to a different history. Through accounts of brave American patriots, what they stood for, and the legacy they entrusted to me, I felt deeply connected to my country. I knew who I was as an American. Knowing that I belong to this ongoing American pageant is still important to me.

When we believe in the Lord

Jesus as Savior, we become members of a new family with a rich history of its own. Even apart from our national or family history, the Bible tells us who we are in Christ. Our Christian genealogical record begins in true royalty—the Lord Jesus. Ephesians 4:11-15 identifies the church *not* as a man-made organization but uniquely and spiritually as Christ's "body."

Opposing Christianity by Misrepresenting Its Past

What we believe about our heritage influences our motivations and allegiance. No one knows this better than an enemy of either the church or America. Enemies attack by distorting history. They put their divisive slant on history by *downplaying* valuable beliefs that inspired many of our ancestors' admirable feats while endlessly *replaying* their failures or human weaknesses. Why? People who are made to feel embarrassed or ashamed of their ancestors are more easily influenced to resent—and eventually abandon—their family, country, or faith.

So, Christian parents and grandparents, let's gift time to our kids to set the record straight about their Christian forebears. With-

out omitting our predecessors' mistakes, by simply passing on the rest of their stories we can counterbalance society's pervasive attempts to distort Christians' view of themselves by belittling their past.

It's not an overstatement to say that the life stories of many Christians are heartwarming accounts of adventure, courage, and love. I found this to be true while listening to Moody Radio's *Stories of Great Christians* as a student at Moody Bible Institute. The ICR bookstore has a fantastic book, *Men of Science, Men of God*, by ICR founder Dr. Henry Morris, and Christian bookstores stock many inspiring biographies that Christians can

use to explore their past. Parents, even if you're not familiar with individual histories, you can relate the following accounts illustrating two beautiful characteristics that are historically true of the body of Christ.

The Church Loves Like Christ

The Lord Jesus' marvelous qualities are all framed in love. Jesus is the embodiment of genuine, unrelenting love. His body, the church, has endeavored to love in the same way. Love was to be an identifying attribute of God's people, as Jesus said:

"A new commandment I give to you, that you love one another; as I have loved you, that you also love one another. By this all will know that you are My disciples, if you have love for one another." (John 13:34-35)

Non-Christians recognized this distinguishing behavior from the church's earliest days. Vincent Carroll and David Shiflett's telling book *Christianity on Trial: Arguments Against Anti-Religious Bigotry* details that early Christians were immersed in a culture in which "mercy and pity were pathological emotions," and, therefore, Christian mercy and sacrificial love—especially to strangers—were "revolutionary ideas."1 It adds that our Christian ancestors persevered, even though

Others viewed such practices [loving charity] with mockery. The pagan writer Lucian (130–200), very much a man of his world, was slack-jawed over the beliefs of those Christian misfits, easily seduced by con artists. "The earnestness with which the people of this religion help one another in their needs is incredible. They spare themselves nothing for this end. Their first lawgiver put it into their heads that they were all brethren!"¹

To love as these Christians loved is nothing for us to be ashamed of today. But was that sacrificial love restricted to a special period close to the lifetimes of the Lord Jesus and the apostles? Not at all. We now fast-forward another 1,500 years to the devoutly Christian "Pilgrims" crossing from Europe to North America on the *Mayflower*. Upon their arrival in New England, a terrible period of sickness occurred called "the starving time" in Governor William Bradford's

> historical work *Of Plymouth Plantation*. The beauty of Christ-like love in Bradford's description shines through the horrible misery they endured:

So as there died some times two or three of a day...[so] there was but six or seven sound persons who to their great commendations, be it spoken, spared no pains night nor day, but with abundance of toil and hazard of their own health...made their [the sick and dying] beds, washed their loathsome clothes, clothed and unclothed them. In a word, did all the homely and necessary offices for them which dainty

and queasy stomachs cannot endure to hear named; and all this willingly and cheerfully, without any grudging in the least, showing herein their true love unto their friends and brethren; a rare example and worthy to be remembered.²

Even more memorable is the Pilgrims' same loving care for the gravely ill *Mayflower* crew members who had shamefully abused the Pilgrims throughout their time together. Bradford tells how their charitable love melted even hardened sailors' hearts.

[The Pilgrims] yet aboard showed them [crew members] what mercy they could, which made some of their hearts relent, as the boatswain (and some others) who was a proud young man and would often curse and scoff at the passengers. But when he grew weak, they had compassion on him and helped him; then he confessed he did not deserve it at their hands, he had abused them in word and deed. "Oh!" (saith he) "you, I now see, show your love like Christians indeed one to another, but we let one another lie and die like dogs."²

Lucian, Bradford, and *Mayflower* sailors were astounded by these admirable Christians. Their selflessness exquisitely modeled 1 Peter 2:21: "For to this you were called, because Christ also suffered



hardest expression of

love is forgiving a person

who inflicted painfully

deep wounds.

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for us, leaving us an example, that you should follow His steps." We belong to their daring venture for truth and to the story of their bravery. They are worthy of our respect, not resentment. By reminding our Christian offspring of these quiet acts of Christian love—and doubtless many more—by our forebears in the faith, we help fill in the side of the ledger of their stories that's routinely omitted.

The Church Forgives Like Christ

The hardest expression of love is forgiving a person who inflicted painfully deep wounds. It seems that even much of the world equates Christianity with forgiveness. In writing a defense of Christians from state-sanctioned persecution in the 2nd century, a church leader highlighted this amazing virtue: "Know from them that a superfluity of benevolence is enjoined on us, even so far as to pray God for our enemies and to entreat blessings for our persecutors."³ How could we possibly overlook these moving expressions of love by our Christian family? These include two recent unprompted and powerful examples of forgiveness. We shouldn't let them simply fade away.

During a Bible study on June 17, 2015, at Emanuel African Methodist Episcopal Church in Charleston, South Carolina, a young man welcomed into the study suddenly murdered nine of the twelve Christians, including the pastor, as they were closing in prayer. The next day, heartbroken family members and fellow Christians publicly and sincerely forgave the murderer. One report on *Today* had the co-hosts doubting whether they could forgive like these church members had.⁴ An interview with three Christian widows ended with them all singing "Amazing Grace," emphasizing how it "saved a wretch like me. I once was lost, but now am found, was blind but now I see." This act of Christian forgiveness left the *Today* hosts visibly moved.

In October 2019, news outlets in America carried a remarkable courtroom drama. As the trial of a former Dallas police officer convicted of murder was ending, the victim's brother out of Christsupplied love asked the judge's permission to hug the remorseful defendant as he forgave her. Seeing firsthand where "mercy triumphs over judgment" (James 2:13), many in the court wept openly, including the judge. The defendant asked the judge if God would forgive her. In another demonstration of Christ-like forgiveness, this judge, also a follower of Christ, came down from her bench and gave away her personal Bible as she hugged the defendant and told her to begin with John 3:16.⁵

One faultfinder of the judge's action said, "When's the last time you've EVER seen a JUDGE come off the bench and HUG A CON-VICTED MURDERER. THIS IS TOO MUCH."⁶ Well, we have seen it before. The Lord Jesus stepped down from His bench to not only hug a world of convicted murderers but to die for their sins, thereby demonstrating that He is "just and the justifier of the one who has faith in Jesus" (Romans 3:26). Yes, that is "TOO MUCH" for us to truly fathom...but it goes to the heart of why we celebrate Christmas.



Feeling Connected to a Magnificent Heritage

Knowing that we belong to a long, unbroken line of truly grand Christian forerunners helps shape our perspectives and purpose. Christian parents, pastors, and teachers must make time to remind the next generation of what our rarely discussed Christian ancestors did and what they were like. In spite of sinful impulses, they exemplified exceptional characteristics of selfless love, faithfulness, devotion, and invincible determination. With neither boasting nor chest-thumping, they quietly amassed a string of remarkable accomplishments. For almost 2,000 years they've built churches, schools, hospitals, sanctuaries for lepers, orphanages, widows' homes, halfway houses, and myriads of other ministries to relieve suffering throughout the world. All the while, they embodied steadfastness under relentless adversity, courage in the face of painful threats, and forgiveness of their unmerciful tormentors.

Their uncommon behavior is compelling evidence of Christ's power to impart new life to a person formerly dead in trespasses and sin. For us, they set a standard for walking with Jesus. Though they were mostly humble and obscure people by any measure of this world, as a group their deeds would argue that they are some of the world's most impressive figures.

In fact, the Bible would rank them with those "of whom the world was not worthy" (Hebrews 11:38). So, when we rise together and echo with them the words of the ancient Apostles' Creed "I believe in God, the Father almighty, *creator of heaven and earth*," we connect ourselves with a great cloud of witnesses who have gone before us—all for God's glory. How beautiful is the body of Christ!

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Quick and easy answers for the general science reader

creation q & a

Do Carbon Ages Refute a Biblical Timeline?

Many reporters and scientists treat carbon dates like facts.
Of course, the more recent dates work well enough. But
news reports, textbooks and even movies present enormous ages like "47,00 BCE" all the time.

Yet, the Bible records only about 6,000 years from creation until today. Does the science of carbon dating disprove the Bible's reckoning? To find out, we need to peek into the carbon dating process that specialists use to arrive at tens of thousands of years.

Carbon-14 is an isotope of the element carbon. It forms from nitrogen high in the sky at a certain rate on today's Earth. It turns

back into nitrogen usually long after it filters back down to Earth and enters plant and animal tissues. A sensitive instrument measures the ratio of carbon-14 in organic remains to the more common and stable carbon-13 and carbon-12 isotopes. No scientist can measure the actual age of any artifact. We can measure amounts of things, like grains of sand in the two chambers of an hourglass, but not ages. Carbon dating is no exception. It begins with isotope ratio measurements. Scientists must use math formulas to convert isotope ratios into age estimates.

The formulas they use have unknowns—numbers that cannot be mea-

sured. Workers make four key assumptions for these unknowns:

- 1. Carbon-14 has been decaying at basically the same rate throughout Earth's history.
- 2. No carbon-14 or carbon-12 was added to, or taken from, the sample since it got buried.
- 3. The carbon isotope ratio in the sample matched the ratio in the rest of the world at that time.
- 4. The carbon isotope ratio in the ancient skies was the same as it is today.

Even when a radiocarbon laboratory measures very precise isotope ratios in a sample, any age estimate from the formula will only be as good as the four assumptions that went into it. Let's accept the first three assumptions for the sake of argument. How can anyone cross-check the fourth one?

Here's the catch. If Noah's Flood actually happened about 4,500 years ago, as the Scriptures record, then it would have affected, and possibly steamrolled, carbon-14 ratios in very old samples.¹ In particular, Earth's magnetic field strength has weakened since the Flood.

Mummified baby mammoth from Siberian permafrost Image credit: Copyright © 2016 R. Hartnup. Used in accordance with federal copyright (fair use doctrine) law. Usage by ICR does not imply endorsement of copyright holder.

article highlights

- Carbon ages appear to date ancient specimens far older than the Bible allows.
- But these dates rely on some unprovable assumptions.
- If the Flood changed Earth's magnetic field, it would've lowered the carbon-14 ratio and skewed the carbon ages of samples from that time.

Almost two centuries of measurements show that Earth's magnetic field still decays. Back when it was much stronger, it would have stymied carbon-14 production in the sky. Fewer carbon-14 atoms in plant and animal specimens (a lower carbon-14 ratio) would give them far more carbon years than they deserve.^{2,3}

When it comes to artifacts from the last 2,000–3,000 years, carbon dates generally match historical ages. But the magnetic field strength has been pretty constant across that timespan. What about the vast ages assigned

to older Ice Age material like mammoth bones? Those who treat very old carbon years as if they were actual years must assume that the Flood and its drop in magnetic field strength never happened.

In the end, whoever insists that carbon dates of tens of thousands of years refute the Bible's 4,500-year-old Flood merely reasons in a circle. Of course, the Bible's Flood never happened in the minds of those who already assume it never happened! On the other hand, placing the Flood back into world history reveals a bad assumption beneath higher carbon ages. The Bible, not carbon "ages," gives us reliable history.

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- It turns out that the decay of Earth's magnetic field (with a half-life of 700 years) is another process that indicates age. Pushing its current rate into the past shows it would have been strong enough only 10,000 years ago to wreck all life. See Humphreys, D. R. 1993. The Earth's Magnetic Field Is Young. Acts & Facts. 22 (8).

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Sanctifying Our Hearts with Apologetics

he church's big Bible conference was over, and it was time to evaluate its success or failure. "Looks like no one was converted," said one leader. "So, this event was a nice try, but we have nothing to show for it as far as eternity is concerned."¹

apologetics

Was that a fair assessment of the event? Is the number of converts all that counts for eternity? Some ask similar questions about the Institute for Creation Research's apologetics-oriented events, implying that the number of public professions of conversion (e.g., secular-minded evolutionists converting to biblical young-earth creation thinking) are the most relevant metric for appraising the value of ICR's truth-sharing events. But what does Scripture say about the role of apologetics?

But sanctify the Lord God in your hearts, and always be ready to give a defense to everyone who asks you a reason for the hope that is in you, with meekness and fear. (1 Peter 3:15)

When talking about apologetics, many Christians focus on the second portion of the verse but omit the first phrase about sanctification. Why?

Many have downplayed apologetics, saying, "The goal is to win souls, not arguments." There is a lot of truth to that saying.² However, the apostle Peter reminds us that the primary purpose for apologetics is not the "horizontal" service of educating humans with truth. Rather, it's the "vertical" action of glorifying God with how we value and present His truth.³

In other words, as we practice apologetics in formal or informal contexts, we should be sanctifying God in our hearts so that our ongoing motive for communicating truth is ultimately an act of worship, glorifying God.

This is not to suggest that apologetics requires a choice of *either* sharing truth to honor God *or* sharing truth to help humans. That is a false dichotomy. If we really sanctify God in our hearts as we share



article highlights

- Converts are not the only metric for determining a church event's success.
- When we properly share God's truth, we are simultaneously fulfilling the two greatest commandments: to love God and to love your neighbor as yourself.
- The critical criterion for real success is faithfully glorifying God.

and clarify His truth with others, we are simultaneously fulfilling the two greatest commandments: love God, and love your neighbor as yourself.³

What about the church event where the Bible messages were presented yet no public conversions were announced—did the event properly glorify God? The event's presiding organizer replied with this biblical insight: "Our job is to proclaim God's truth, in season and out of season; our job is to be faithful and honor God as we caringly give His truth to others. If we are faithful, trusting the results to God, it does count for eternity, because God Himself rewards our faithfulness."⁴

And today, ICR's new Discovery Center for Science & Earth History provides a careful blending of these same biblical priorities.⁵ Accordingly, the Lord God is repeatedly sanctified in the science exhibits, artwork, movies, lectures, etc., as the reasonableness of our faith is presented to share and clarify truth for those with "eyes to see" so that both the "vertical" and "horizontal" priorities of the Bible's two greatest commandments are addressed and fulfilled.³

ICR continually strives to serve God, in season and out of season, trusting our ministry results to Him. Help us to be faithful in our calling to sanctify God as we provide creation apologetics to those with "ears to hear." To see this commitment in action on a grand scale, plan a visit to our new Discovery Center in Dallas!⁵

References

- The above church-sponsored event occurred in Maryland during the mid-1970s, yet similar events and conversations have surely occurred in other places at other times.
- 2. Proverbs 11:30; Daniel 12:3. The value of one redeemed soul is everlastingly precious (Luke 15:7).
- 3. Matthew 22:36-40.
- Isaiah 55:8-11. The above conversation is accurately paraphrased, memory permitting. It was Chaplain Bob Webel who clarified that the proper metric is faithfulness to God (1 Corinthians 3:8-15 and 4:1-2; 2 Corinthians 5:10).
- 5. For information on the opportunities to benefit from what the Discovery Center has to offer, see ICRdiscoverycenter. org. Expect to experience Genesis-based science and history informed by biblical apologetics perspectives that accomplish four goals simultaneously: (1) corroborating Scripture, (2) debunking evolutionary theories, (3) clarifying confusion about scientific evidences, and (4) glorifying God as the wonderful Creator He is. Regarding these four categories, see Johnson, J. J. S. 2017. Polar Bears, Fitted to Fill and Flourish. Acts & Facts.

46 (8): 21.

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stewardship

any books of the Old Testament contain prophecies of Christ's incarnation—even the heartbreaking account of the prophet Jeremiah.

Jeremiah, the last of the pre-exile prophets, saw Babylon carry Judah away into captivity. He is often referred to as the "weeping prophet" for his impassioned

pleas to his people to repent from flagrant apostasy and turn back to God. On the other hand, his book contains many marvelous

Messianic prophecies promising deliverance and future restoration, most notably in Jeremiah 31. This chapter contains the first revelation of the coming "new covenant" (v. 31) that God would make with Israel and Judah and that, according to the author of Hebrews, would eventually incorporate all of God's people in every age through Christ (Hebrews 8:6–10:10).¹ But before this could happen, God would create "a new thing in the earth" via "a woman [who] shall encompass a man" (Jeremiah 31:22).

The creation of anything new seemingly conflicts with Solomon's declaration years before that "there is nothing new under the sun" (Ecclesiastes 1:9). Even the scientific laws of conservation recognize that nothing (matter, energy, mass, etc.) is now being created or destroyed.² As such, some see this woman as symbolic of the nation of Israel, the formerly chaste virgin now banished in disgrace who would one day embrace the Lord and be received back, fully forgiven.

But this view hinges on a rather poor interpretation of the word "encompass." The Hebrew verb *cabab*, expressed here in the Poel imperfect tense, literally means "enclose" or "envelop," and no other understanding of this promise would require a



The New Thing of Promise

article highlights

- Jeremiah prophesied that God would make a "new thing" through "a woman [who] shall encompass a man."
- This "new thing" referred to the future incarnation of Christ in Mary's womb.
- ICR's central focus is the lordship of Jesus Christ, our Creator, Savior, and coming King.
- Prayerfully consider a gift to ICR as we expand our ministry and share His message.

"new thing" to be accomplished. When considered in proper context—especially in view of the following verses that lead to the great new covenant promise—this "new thing" can be nothing less than the miraculous conception and virgin birth of the promised Savior.³

Only God can create, so a truly "new thing" must be fashioned by the Creator Himself. While God had long ago finished His original creative work (Genesis 2:1-3), He soon had to begin a new work of reconciliation due to mankind's rebellion in the Garden of Eden. This would culminate with the promised "Seed" of the woman, who would come and finish this great work (Genesis 3:15).²

To accomplish this, God would miraculously create a completely "new thing" by His mighty power—one without inherited sin in the womb of a specially called virgin. She encompassed "that Holy One" (Luke 1:35) while He developed and grew,

> and "when the fullness of the time had come, God sent forth His Son, born of a woman...to redeem those who were under the

law" (Galatians 4:4-5).²

It is *this* "new thing" that we honor and worship at Christmas. He is so much more than a babe in a manger! He is the promised "'Immanuel,' which is translated, 'God with us," who "became flesh and dwelt among us" (Matthew 1:23; John 1:14). We can rejoice that "God so loved the world that He gave His only begotten Son" and "according to the promise, [He] raised up for Israel a Savior—Jesus" (John 3:16; Acts 13:23).

The Lord Jesus Christ—revealed in God's Word as our Creator, Savior, and coming King—is the primary focus of ICR's ministry. We're grateful for those who support our work, and your gifts this Christmas will be a sweet blessing as we make plans for the coming year. If you are able, please prayerfully consider how you can help. May God bless you richly as we celebrate God's "new thing" of promise to us. Merry Christmas!

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- 1. Morris, H. 2012. *The Henry Morris Study Bible*. Green Forest, AR: Master Books, 1087.
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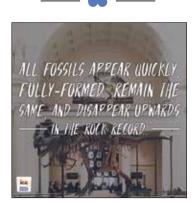
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With each new copy of Act & Facts, I devour it the same day I receive it! The articles are very interesting and timely. I encourage you to keep

on. There are so many lives that have been touched. After I finish reading the magazine, I pass it on so it can bless others.

— J. O.



Contrary to the story we've been fed, eh? I figured out that the "story" was science fiction in my first year of college as a biology major. **Finding the truth took a lot of investigation.** ICR was a great find for me. A gold mine of truth for scienceminded people who need that truth to cut down the obstacles that get in the way of a willingness to even hear the gospel. Praise God.

— S. F.



Finally, a place to go where I'm not assaulted by secular evolution.

66 -

A very informative, scientific, relaxing experience. Thank you to the staff of ICR! Highly recommended! — C. C.

Incredibly well done! I especially enjoyed the section on the Ice Age that



Image credit: Joseph Haubert

gathers relevant geological principles to explain how the consummation of the global Flood could result in such a massive displacement of evaporated moisture, which led to an abundance of snow and ice. **Modern science will typically extrapolate time over many millions of years to explain events like these, so I appreciated ICR's willingness to let the evidence speak for itself.** Come open-minded and examine the geological, archaeological, and historical evidence for yourself.

— C. O.

Having followed the progress of the [ICR] Discovery Center from the dream to the completion of the facility, I wasn't prepared for the actual experience of visiting the center firsthand. It was simply more remarkable and far beyond what I had anticipated. The interactive touchscreens allow a visitor to spend additional time researching areas that may be of particular interest. The quality of the presentations are supported with the results of cutting-edge scientific research. A onetime visit will only scratch the surface of the available resources. The Discovery Center not only shows how true science fits perfectly within the biblical framework, it gives full glory to the Lord Jesus Christ as our Creator and Savior. I have been telling my friends whatever they might think the Discovery Center to be, it is not. It's much more.

— L. N.



I am writing in response to your fine article "Why Did God Make Mosquitos?" in the October 2019 Acts & Facts. I'm a fourthgeneration cattle rancher in the rolling grasslands of Wyoming. I have observed a positive contribution of mosquitos to the semi-arid plains ecosystem. Mosquitos, and other biting pests, primarily inhabit the riparian habitats of the plains. The vegetation of those areas primarily grows during a few short months in the spring/ summer. Large grazing animals crave those lush plants and would, if not pestered away by such insects, give those plant communities intense pressure and no time to mature and **reproduce.** Because of the pests, the grazers retreat to the uplands, slipping back to the riparian areas briefly during wet or windy times and later in cooler seasons. This all allows the plains' ecosystem to balance the impact of the large grazers. In areas where man sprays for his own comfort, for example near towns or cities, this balance is disrupted. Once again, God's wisdom is out ahead of ours. — A. K.

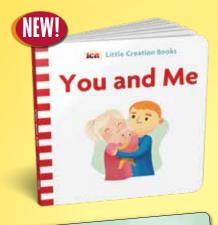
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