

# ACTS & FACTS



INSTITUTE FOR  
CREATION RESEARCH

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## *The Grabbiti of* JUDGMENT



# DEMAND THE EVIDENCE

## CONFERENCE



OCTOBER 23-24, 2009  
GRACE COMMUNITY CHURCH  
SUN VALLEY, CALIFORNIA

### SPEAKERS



Dr. John MacArthur



Dr. Henry Morris III



Dr. John Morris



Dr. Randy Guliuzza



Mr. Lalo Gunther

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## Taking God at His Word

“Please open your Bibles to Genesis chapter one.” With this, Dr. John MacArthur opened the 2009 Shepherds’ Conference. For the next hour, he told nearly 3,200 church leaders that no self-respecting pastor, evangelical, or Christian should attempt to deny that God created the heavens and earth in six literal days. Those who have difficulty believing the historical account of Genesis, he warned, will have much more difficulty trusting the rest of the Bible and its accounts of the virgin birth, Christ’s atonement for our sins, and the resurrection of the dead, all miracles that cannot—that must not—be subjected to the reasoning of finite men.

It was a blessing to hear this great Christian leader expound in his typical no-nonsense fashion that God meant what He said, that the Bible can be trusted from the very first chapter. This contrasted with a number of other conferences ICR has attended where speakers did their best to avoid the issue of the authority and accuracy of the Bible, or, sadly, compromised God’s Word with evolution-based “creation” theories such as day-age, theistic evolution, progressive creation, and the like.

During 2009, ICR will continue producing resources for pastors and Christian educators who teach their congregations and students an uncompromising message of the Creator. We have distributed some 15,000 “Pastor Packs” with the updated *Some Call It Science*, and the newly-released *5 Reasons to Believe in Recent Creation* and *Exploring the Evidence for Creation*. These books, along with our special February Darwin issue of *Acts & Facts*, will allow pastors and teachers to assess the battlefield between atheistic natu-

ralism and biblical theism, between evolutionism and creationism.

ICR attended the Shepherds’ Conference in preparation for the “Demand the Evidence Conference” to be held October 23-24 at Grace Community Church, where Dr. MacArthur is celebrating his 40th year as pastor-teacher. ICR will repeat these special conferences in other cities in 2009-10, such as at First Baptist Church in Jacksonville, Florida. (Contact our Events staff to invite ICR for one of these Friday/Saturday conferences in your city.)

Beginning with this April 2009 issue, *Acts & Facts* has been expanded to 24 pages in a move that both reduces production costs and allows more content each month. Look for new authors and new columns as we continue to upgrade and enhance our ministry publications.

On pages 13-16 is our Spring Resource Guide, updated with new books from ICR to help you in your study of the Creator and His Word. Our Impact article by Dr. Dan Criswell on pages 10-12 explores the issue of speciation, a topic that evolutionists and hybrid theorists like Hugh Ross use in their attempt to undermine the clear teaching of the Bible. Don’t forget to get your copy of *Old-Earth Creationism on Trial*, detailing the fallacies of those who refuse to take God at His Word.

As we begin the spring season with renewed life all around us, consider renewing your commitment to the mission and ministry of ICR as we research, educate, and communicate the enduring and unfailing truths of Scripture. Your gift to us at this time will be a special blessing.

**Lawrence E. Ford**  
EXECUTIVE EDITOR

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**W**hen Bible-believing Christians who hold to creation are discriminatorily “expelled” from the academic arena, they can look to the Book of Daniel for encouragement. Why? Because Daniel was excluded, unjustly, from a government-sponsored conference of experts, and Daniel’s God was the real reason for the discrimination.

In Daniel’s case, when God’s truth was excluded, God decided to “crash” the party. In doing so, God taught an unusual lesson about mankind’s accountability for extra-biblical truth. The lesson requires a bit of Aramaic philology (word study), but it sheds light on the academic and governmental politics of today’s creation science controversies.

Daniel 5 recounts how an incumbent government wrongly rejected Daniel’s well-documented expertise. Yet Daniel was later proven right and the government was proven wrong. Ironically, the condemning proof used to judge that humanistic leadership was *not* Scripture—it was forensic evidence. And although Daniel’s experience occurred in a completely different culture from ours, the kind of discriminatory exclusion that Daniel encountered is shared today by some Bible-believing creationists.

### A Royal Hedonistic Romp

It began with a lavish celebration, a royal party, hosted by ancient Babylon’s King Belshazzar. (As we shall see, it is important that Belshazzar was a grandson of the famous King Nebuchadnezzar.)

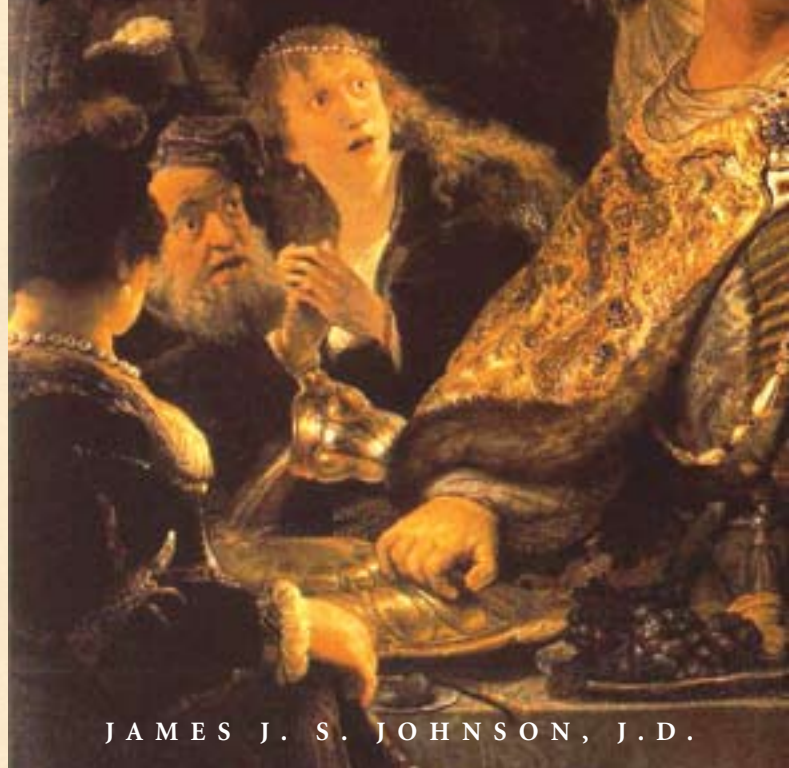
Belshazzar the king made a great feast to a thousand of his lords, and drank wine before the thousand. Belshazzar, while he tasted the wine, commanded to bring the golden and silver vessels which his father [literally “male ancestor”] Nebuchadnezzar had taken out of the temple which was in Jerusalem; that the king, and his princes, his wives, and his concubines, might drink therein. Then they brought the golden vessels that were taken out of the temple of the house of God which was at Jerusalem; and the king, and his princes, his wives, and his concubines, drank in them. They drank wine, and praised the gods of gold, and of silver, of brass, of iron, of wood, and of stone. (Daniel 5:1-4)

Belshazzar was serving as regent on behalf of his father, Nabonidus, who was taking an extended vacation to escape Babylon’s pesky imperial politics. Belshazzar knew that holy vessels taken from the Jewish temple in Jerusalem were stored in Babylon, because those vessels had been captured by his maternal grandfather, Nebuchadnezzar. He decided to make sport of God’s holy vessels, and to thereby mock the God whom those holy vessels were dedicated to serving.

Interestingly, he would soon make sport of another one of God’s holy vessels: Daniel, a godly servant known for his righteousness.<sup>1</sup> In doing so, Belshazzar mocked Daniel’s God. However, God interrupted his blasphemous party with an unusual message of judgment:

In the same hour came forth fingers of a man’s hand, and wrote over against the candlestick upon the plaister of the wall of the king’s palace: and the king saw the part of the hand that wrote. Then the king’s countenance was changed, and his thoughts troubled him, so that the joints of his loins were loosed, and his knees smote one against another. (Daniel 5:5-6)

# The Grabbiti of JUDGMENT



JAMES J. S. JOHNSON, J.D.

The handwriting on the wall, *MENE MENE TEKEL UPHARSIN*, spelled judgment to Belshazzar, both politically and personally.

### Excluding the Magicians to Keep the Chief Magi “Out”

Belshazzar’s reaction, calling for “experts,” is what proves his bias against Daniel and Daniel’s God:

The king cried aloud to bring in the astrologers [*ashephin*], the Chaldeans [*kasda’in*], and the soothsayers [*gazerin*]. (Daniel 5:7a)

This is a telltale verse in this incident, a forensic “smoking gun” of sorts. Notice that Belshazzar did not call for another category of “wise men” who repeatedly appeared earlier in the Book of Daniel. Belshazzar *excluded* the magi (*hartûmmin*; the King James Version says “magicians”). The reason why the *magi* are excluded is apparently revealed when the queen mother arrives at the blasphemous party. The uninvited Daniel should be called, she informs Belshazzar:

There is a man in thy kingdom...whom the king Nebuchadnezzar thy [fore]father, the king, I say, thy [fore]father, made master of the magicians [*rab + hartûmmin*], astrologers [*ashephin*], Chaldeans [*kasda’in*], and soothsayers [*gazerin*]. Forasmuch as an excellent spirit, and knowledge, and understanding, interpreting of dreams,





thy concubines, have drunk wine in them; and thou hast praised the gods of silver, and gold, of brass, iron, wood, and stone, which see not, nor hear, nor know: and the God in whose hand thy breath is, and whose are all thy ways, hast thou not glorified. (Daniel 5:22-23)

### Rejecting God's Truth

So why was Belshazzar divinely judged? He had rejected truth about God, which left him without excuse, even though that truth does not appear to have been from the Bible itself. Rather, Belshazzar had both the general revelation truth of God's creatorship (as everyone does, Romans 1:20 informs us) and also the *forensic evidence* of God working in the life of his grandfather, Nebuchadnezzar, whose life displayed God's truth as a kind of "living epistle" (see 2 Corinthians 3:1-3).

In other words, although Belshazzar never saw the invisible God *empirically* (empirical science is all about "sight"—i.e., direct, sense-based observations), he did have sufficient notice of God's existence and glory—e.g., the irrefutable logic-based proof of God's divine character demonstrated through His creation, and also by the proof of God working in human lives. Belshazzar ignored and mocked God "without excuse."

How does this compare to the political *exclusion* of biblical creationists today who oppose the humanistic doctrine of origins-by-accident evolution, who have been subjected to the same exclusionary politics recently documented in Ben Stein's movie *Expelled: No Intelligence Allowed*?<sup>2</sup>

The academic viewpoint discrimination and hostility against creation science is *not* based on scientific merit, as the real history of science has repeatedly proven.<sup>3</sup> Rather, the political exclusion of creationist scientists and creationist science educators, either by *marginalizing* creation science—or by *expelling* creation science altogether—is routinely traceable to efforts to keep an inconvenient Truth out.<sup>4</sup>

As with the prophet Daniel's exclusion, the God of modern-day biblical creationists is the real reason for anti-creationist discrimination, ostracism, and exclusion. While *Expelled*-style discrimination has come to be expected in the academic politics of our Darwin-idolizing society, maybe we should pray for the Truth to come crash the evolutionary establishment's Creator-mocking "party." ●

#### References

1. Regarding human "vessels," see Acts 9:15; Romans 9:21-23; 2 Corinthians 4:7; 1 Peter 3:7; Revelation 2:27.
2. Ben Stein's documentary *Expelled: No Intelligence Allowed* can be ordered on DVD at [www.icr.org/store](http://www.icr.org/store).
3. See generally Henry M. Morris, *Men of Science, Men of God* (Master Books, 2000); Duane Gish, in Bill Cooper's *Paley's Watchmaker* (New Wine Press, 1997); Christine Dao, *Thinking God's Thoughts After Him: Great Scientists who Honored the Creator* (ICR, 2009); Terry Mortenson, *The Great Turning Point: The Church's Catastrophic Mistake on Geology Before Darwin* (Master Books, 2004). Real scientific achievement, long before Darwin, is illustrated in such empirical science benchmarks as John Ray's *The Wisdom of God Manifested in the Works of Creation* (England, 1691), which preceded Linnaeus by several decades, and Konrad Gessner's five-volume *Historiae Animalium* (Swiss, 1551-1558), which founded modern zoology as a science.
4. In this phrase, the "inconvenient" Truth is the living Word of God, the Lord Jesus, whom we know through the written Word of God, the Holy Bible. (See John 1:1-18; 14:6; and 17:17.)

Dr. Johnson is Special Counsel at ICR.



and shewing of hard sentences, and dissolving of doubts, were found in the same Daniel...now let Daniel be called, and he will shew the interpretation. (Daniel 5:11-12)

Why had Daniel been excluded when he was "master of the magicians"? The queen mother's words agree with Daniel 4:9, where Nebuchadnezzar himself called Daniel "master of the magicians" (*rab + hartûmmin*). The basic word for "magician" (*hartûm*) appears earlier in Nebuchadnezzar's reign, in Daniel 2:2, 2:27, and 4:7. The queen mother's listing of four categories of "wise men" in Daniel 5:11 is exactly the same four categories listed by Nebuchadnezzar in Daniel 4:7.

In other words, King Belshazzar did an unusual and intentional thing by *excluding* the "magi" (*hartûmmin*) when he wanted an explanation for the divine graffiti. And as Belshazzar's attitude shows later that fateful evening (e.g., talking down to Daniel in 5:13-16), he was not eager to invite the master of the magicians. Why? Because Belshazzar already knew about Daniel's God and he did not welcome Daniel's message:

And thou his son [literally "male descendant"], O Belshazzar, hast not humbled thine heart, though thou knew all this; but hast lifted up thyself against the Lord of heaven; and they have brought the vessels of his house before thee, and thou, and thy lords, thy wives, and



# The Vital Doctrine of a Global Flood



Few biblical teachings are as controversial among evangelicals as that of the global nature of Noah's Flood. If Scripture is our guide, however, it could not have been just a local flood covering the Mesopotamian River Valley, as taught by most leading evangelicals today, but must have been worldwide in extent and effect.

For instance, Scripture lists the primary mechanisms for the Flood as the wrenching open of "the fountains of the great deep" (Genesis 7:11). Such cataclysmic faulting as Scripture indicates on the ocean floor (the great deep) would trigger continual tsunamis racing onto the continents. Similarly, "the windows of heaven were opened" for six straight months. At the very least, the "heavens" implies the atmosphere, signifying global torrents of rain.

The depth of the flood waters, covering the tops of the mountains, also implies a global flood, as does the length of the flood—over one full year. A mountain-covering, year-long, tectonically-controlled flood could not be a local flood.

If the flood was merely local, Noah could have easily escaped it simply by migrating out of the valley. Nor would there have been any need for an Ark. Animals certainly lived in outlying areas, so representatives wouldn't need to be rescued. Those restricted to the valley could have migrated to safety. Why was Noah commanded to build such an immense boat, a brutally difficult task, if it was not truly needed?

The primary purpose for the Flood was the destruction of all mankind. Population calculations indicate men had increased in number far beyond the capacity of one valley. Furthermore, Genesis repeatedly employs terms of global extent to describe the Flood and its impact: "all the high hills...the mountains were covered...all in whose nostrils was the breath of life...everything under the high heavens," etc. It seems like God went out of His way to remove every possible excuse for thinking that the Flood was only local.

After the Flood, God issued an unconditional promise not to send another such flood. If the Flood was not global, He has broken that promise, for there have been many local floods since Noah's day. But God keeps His promises. He cannot lie. The Flood must certainly have been global in extent.

Why is this point important? If you ask an evolutionist "Where is the evidence for evolution?" his answer will most likely include the rock and fossil records. If the Flood was global and geologically, tectonically significant, it laid down the rock and fossil records of the earth. "The world that then was, being overflowed with water, perished" (2 Peter 3:6). If the true origin of the rock layers and fossils is the Flood,

they cannot be the remains of ordinary processes acting over great ages. On the authority of God's Word, the Flood was global and restructured the earth's surface, thus the earth is young. Few doctrines are clearer in Scripture, which contains no evidence that points to an old earth.

There have always been challenges to Scripture from within and without the church. My late father, Dr. Henry Morris, kept in the flyleaf of his Bible a quote from Martin Luther that motivated and encouraged him as he unswervingly called the church to account for its compromise. It has been used in these pages before, but it bears repeating, for we all need encouragement and motivation.

If I profess with the loudest voice and clearest exposition every portion of the truth of God except precisely that little point which the world and the devil are at that moment attacking, I am not confessing Christ, however boldly I may be professing Christ. Where the battle rages, there the loyalty of the soldier is proved, and to be steady on all the battlefield besides, is mere flight and disgrace if he flinches at that point.

  
John D. Morris, Ph.D.  
PRESIDENT



# ICR EVENTS

## APRIL 2009

### April 1-3

Redding, CA – Alpha-Omega Bible Conference  
(Vardiman) 530.221.4275

### April 5

Redding, CA – Genesis Presentation  
(Vardiman) 530.222.2128

### April 5

Shasta, CA – Genesis Presentation  
(Vardiman) 530.241.4614

### April 5

Dallas, TX – Genesis Presentation  
(J. Morris) 214.762.3287

### April 19

Dallas, TX – Genesis Presentation  
(Gunther) 214.762.3287

### April 19-20

Arcadia, OK – Genesis Presentation  
(Sherwin) 405.396.2502

### April 19 & 21

Oklahoma City, OK – Genesis Presentation  
(Sherwin) 405.672.7530

### April 24-26

Branson, MO – Worldview Weekend  
417.336.0219

### April 26

Dallas, TX – Genesis Presentation  
(Guliuza) 214.762.3287

### May 1-2

Oklahoma City, OK – Oklahoma City Home Educators' Convention  
405.810.0386

### May 3

Dallas, TX – Genesis Presentation  
(Sherwin) 214.762.3287

For more information on these events or to schedule an event, please contact the ICR events department at 800.337.0375 or [events@icr.org](mailto:events@icr.org).



These stamps were on a letter that was recently received at the ICR office. It shows just another way in which England is worshipping Darwin.

## Take a Creation Education Vacation in Florida

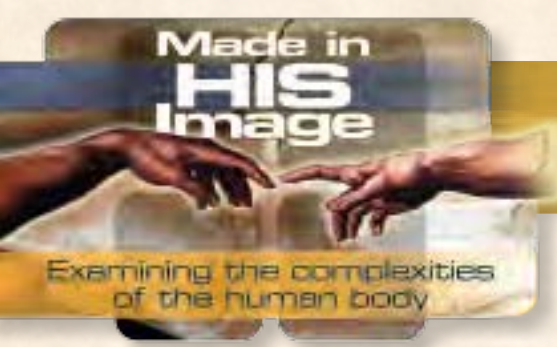
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his spring, you and your family can join Dr. Gary Parker, Professor of Biology for ICR Graduate School, and his wife, Mary, for a unique adventure in creation science. The Parkers' Creation Adventures Museum near Arcadia,

Florida, is offering hands-on workshops, classes, and field trips on April 12-17 and April 26-May 1. Come explore the world of fossils and the wonders of nature from a biblical creation perspective. For costs, reservations, or further information, contact Dr. and Mrs. Parker at **863.494.9558**, or visit **[CreationAdventuresMuseum.org](http://CreationAdventuresMuseum.org)**.

Course credit is available for participating ICRGS students. For more information, contact Dr. Patricia Nason at [pnason@icr.edu](mailto:pnason@icr.edu).





# Balancing Body Temperature

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

A major achievement for design engineers is building precise control mechanisms for active processes. Lives depend on the precision in which certain processes are maintained, such as the manufacture of drugs.

Even more vital to survival is the human body's complex, integrated system that maintains precise control over the body's temperature even when it generates tremendous quantities of internal heat through strenuous activity or is exposed to wide-ranging external temperatures.

## Temperature Regulation Is Essential for Life

The organs in the skull, chest, and abdomen are the most temperature-sensitive organs in the human body. Biochemical processes, particularly enzyme activities, within these organs are essential for life and function best in a narrow temperature range of 96 to 101°F, which is called the "core" body temperature range. For most people, average temperature is 98.6°F, which is the "set point" established by the master temperature regulator within the brain—the hypothalamus.

If core body temperature varies by about 10°F above or below this range, it poses a high risk of being lethal. Why? For every 1.8°F increase in the core, crucial chemical reaction rates in organs are deranged and increase by 10 percent. Also, as temperatures rise outside the normal range, proteins—particularly enzymes—start losing both their shape and function, while nerve tissue activity is increasingly depressed. Small children risk going into seizures at about 106°F and most people will be dead if the core reaches 109°F. Conversely, if the core is chilled to below 87°F, electrochemical activity in the heart

starts becoming so disrupted that most people will die of cardiac arrest.

It is critical to balance the body temperature within the core range. However, the difficulty of that task cannot be fully appreciated without considering the quantity of heat energy the body needs to manage. How much heat does a person generate? Even while sleeping, with skeletal muscles totally relaxed, heat is still produced as a byproduct of basic metabolism. In fact, about 60 percent of daily energy needs—enough heat to raise the temperature of 20 pounds of water about 2°F every hour—is expended just staying alive.

Now add on activities. For every one hour of hard work or exercise, the heat generated could raise the temperature of the same water almost 20°F—and well-trained athletes can produce almost twice as much heat. An increased level of heat productions lasts several

About 60 percent of daily energy needs—enough heat to raise the temperature of 20 pounds of water about 2°F every hour—is expended just staying alive.

hours even after activity ceases. Some engineers assert that offices built to optimal energy efficiency could be heated through the winter using only the body heat of the occupants themselves. Depending on the external environment surrounding a person, this generated heat can be a friend or foe—but it must be precisely regulated.

## An Integrated Temperature Regulatory Center

The whole brain helps regulate body temperature, but the main thermoregulatory center is the hypothalamus (located midline in the brain behind the eyes), which possesses two specialized sections: a heat-losing center and a

heat-promoting center. Just like in man-made systems designed to modulate temperature, a means of sensing the actual temperatures must be in place. The body has two distinct specialized cells—heat sensors and cold sensors called "thermoreceptors"—that are capable of detecting a temperature change as low as 0.4°F. To keep surveillance on the outside world, hundreds of thermoreceptors are optimally located in the skin, mucous membranes of the nose and mouth, the eyes, and in some muscles.

Sensors send impulses to the brain depending on both how fast and how much the temperature changes—as many as 240 impulses per second for each receptor. Data from these sensors is kept organized by being segregated from other input sent to the brain via exclusive pathways in the nervous system.

The data is continuously analyzed by the hypothalamus and converted to information that is compared to a pre-set bank of information that was present from birth. This allows the hypothalamus to anticipate external temperature changes that may

affect core temperature and begin processes to adjust body temperature accordingly. The actual core temperature is monitored by the hypothalamus itself using thermoreceptors that measure the temperature of blood within this core organ.

## Eliminating Excess Heat

The heat-losing center and heat-promoting center each have body systems under its control that can be regulated to keep heat production equal to heat loss. When one center is stimulated, a concurrent inhibitory signal is sent to the other. So when it is hot outside or increased physical exertion raises the body





Heat can be produced rapidly through an increase in muscle tone. By sending the right neurological signals, the muscle fibers rapidly pull against each other in an involuntary repetitive cycle known as shivering. In just a few minutes this process can raise the heat production rate to over four times the normal rate.

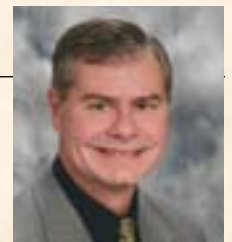
### Conclusion

Incredibly, all of these processes working together keep a person's core temperature within 2°F of the set point over a 24-hour period. People groups also have some innate genetic capability to adapt over several generations to different climates through selection of variable traits such as basic metabolism, skin color, subcutaneous fat thickness, and behavior modification.

The information for these traits and all of the thermoregulatory process could never have

been built up gradually through some long evolutionary route of trial and error. For survival's sake, thermoregulation has to be 100 percent in place and functioning. This process incorporates nearly every system in the body—which themselves have to be fully functional. The Lord Jesus' understanding of the human body He created and the magnificent complexities of His design are truly beyond description! ●

*Dr. Guliuzza is ICR's National Representative.*



temperature above the set point, the activated heat-losing center first inhibits the signal to tiny muscle fibers lining blood vessels in the skin. This decreases muscle tone, allowing the vessels to dilate and become flush with warm blood shunted away from the core. The skin acts as a giant radiator that offloads body heat to air currents that carry it away, directly transfers it to cooler objects, or radiates it away as electromagnetic energy.

Using body heat to convert liquid water to a vapor is used continuously to maintain the core. The lungs and the skin each exchange almost a half a quart of water per day to cool the body just for basic needs. When a large heat transfer is needed, sweat glands on the skin can be massively recruited to cover the skin in very tiny droplets that can be easily evaporated. This method works best, because evaporating water removes up to ten times more heat than water that simply runs off in large drops from the skin. When heat-stressed, a person could potentially evaporate off up to two quarts of sweat per hour from the skin.

### Maintaining Necessary Heat

When cold conditions threaten to lower

the core temperature, the heat-promoting center initiates actions to conserve the heat that is made and produce more heat if it is needed. First, a signal is sent to the muscle fibers around the blood vessels in the skin to constrict and de-

**When heat-stressed, a person could potentially evaporate off up to two quarts of sweat per hour from the skin.**

crease flow. This reduces a large amount of heat loss and warm blood is kept in the deep body areas. Skin temperature begins to approach that of the external environment.

If more heat is needed, internal metabolic rates are increased. A rapid increase in cellular metabolism is begun when the hypothalamus sends a nerve signal to the adrenal glands, which sit on top of the kidneys. A quick infusion of hormones from these glands, commonly called "adrenaline," increases cellular "burning" of sugars to make heat. A slower process is started when the thyroid gland is stimulated with a subsequent release of thyroid hormone to increase overall metabolism.



Many people who use biological data to support an old-earth position believe that the appearance of millions of animal species does not support a young earth interpretation of creation. Nor do they think that a recent global Flood would support the existence of a great number of animals today if Noah only took two of each kind on the Ark. However, the science of how speciation occurs, and the definition of a species versus the biblical kind, does explain how many variations of the same kind of animal can arise quickly from small populations, such as those on Noah's Ark.

### Reproductive Isolation and Speciation

The definition of species is different for many scientists and is not a standardized term. Many scientists define species as a population of animals that are reproductively isolated from other similar species. Reproductive isolation can occur in a number of ways and result

in speciation from one kind of animal through events that isolate one variation (species) from another. Many of these isolation events have been identified and are described as behavioral isolation, ecological isolation, and geographical isolation, to name a few.

Geographical isolation is one of the best understood events and likely the most common. Geographical isolation results when two variations of the same kind of animal migrate and become separated by a geographical barrier preventing the two animal variations (species) from having contact and interbreeding. Once completely separated, the two populations of animals possess variations of some genes, resulting in two "species" that differ in appearance (color, size, etc.) and behavior.

The colorful *Ensatina* salamanders of the Pacific coast are good examples of geographical isolation. These little salamanders migrated south through the Sierra Nevada Mountains and the coastal mountains of California. The drier San Joaquin Valley, between the two

mountain ranges, prevents large-scale interbreeding between several species of these salamanders. Each species looks different, but when they are brought into contact with each other they will breed and produce hybrid offspring. The migration pattern that facilitated *Ensatina* speciation and the ability to hybridize indicate that these salamanders belong to the same kind of animal. African leopards and South American jaguars would be another good example of two species of the same kind of animal geographically isolated from each other.

Ecological isolation results when animals of the same kind live in different habitats. Bears provide another example of how scientists classify animals as different species that are the same kind. Grizzly bears (*Ursa arctos*) and polar bears (*U. maritimus*) are ecologically isolated most of the year, but can produce fertile offspring when they come in contact with each other. The ability to reproduce in the wild suggests that they are a single kind of animal separated only by their different fur color and

# Speciation and the Animals on the Ark

DANIEL CRISWELL, PH.D.





other minor physical features that enable them to adapt to different ecosystems.

Eastern and western meadowlarks, *Sturnella magna* and *S. neglecta* respectively, are classified as different species and provide a good example of behavioral isolation. Eastern and western meadowlarks don't typically interbreed in the wild, partly because they don't readily recognize the mating song of the other species and partly because they prefer slightly different habitats. Both species are nearly identical in appearance and are physically capable of interbreeding in the laboratory, and occasionally hybrids between the two species are identified in natural habitats. The potential to reproduce, and the nearly identical appearance and genetic constitution of these two bird species, certainly qualifies them as the same biblical kind, in spite of their classification as different species.

There are more examples of how different kinds of reproductive isolation cause speciation from a common kind of animal. Speciation events are documented for nearly every kind of animal that has been described, and recently it has been estimated that 10 percent of all animal species still hybridize (mate with other species, producing fertile offspring) in the wild, and even more when brought into contact with each other in captivity. This evidence indicates that most species had a common ancestor from which similar species have descended. This might appear as evolution, but it is not. How this would happen without evolution can be illustrated by considering the descendants of the animals aboard Noah's Ark.

### Millions of Species in a Few Hundred Years?

Some people who object to a recent-

creation interpretation of Genesis point to the fact that such a view requires that all modern animal species on earth must have descended from these same species saved on the Ark. If the Ark had roughly 30,000 animals (less than 15,000 species or different kinds), how could the animals on the Ark produce millions of species within a few hundred, or a few thousand, years after the Flood? Surely this would require a faster evolutionary rate than even the most ardent evolutionist would propose.

However, it is not correct to assume that a few thousand species would have produced the millions of species extant (alive) today. There are fewer than 30,000 extant species of mammals, birds, reptiles, and possibly land-reproducing amphibians (many salamanders) that were represented on the Ark. The millions of other species are the invertebrates (>95

### The genetic potential of each kind of animal and the freedom from genetic equilibrium, combined with mutations, would allow the appearance of many different species from the few animals on the Ark.

percent of all animal species), fish, and a few aquatic mammals and reptiles that survived in the water during the Flood. The processes of speciation discussed above need to only double the number of animal species from 15,000 to 30,000. This is certainly a feasible process based on observable science.

Evolution, defined as large-scale changes that produce one kind of organism from another kind, is not capable of producing the millions of species observed today from the 15,000 different kinds of animals on the Ark. However, the genetic potential of each kind of animal and the freedom from genetic equilibrium, combined with

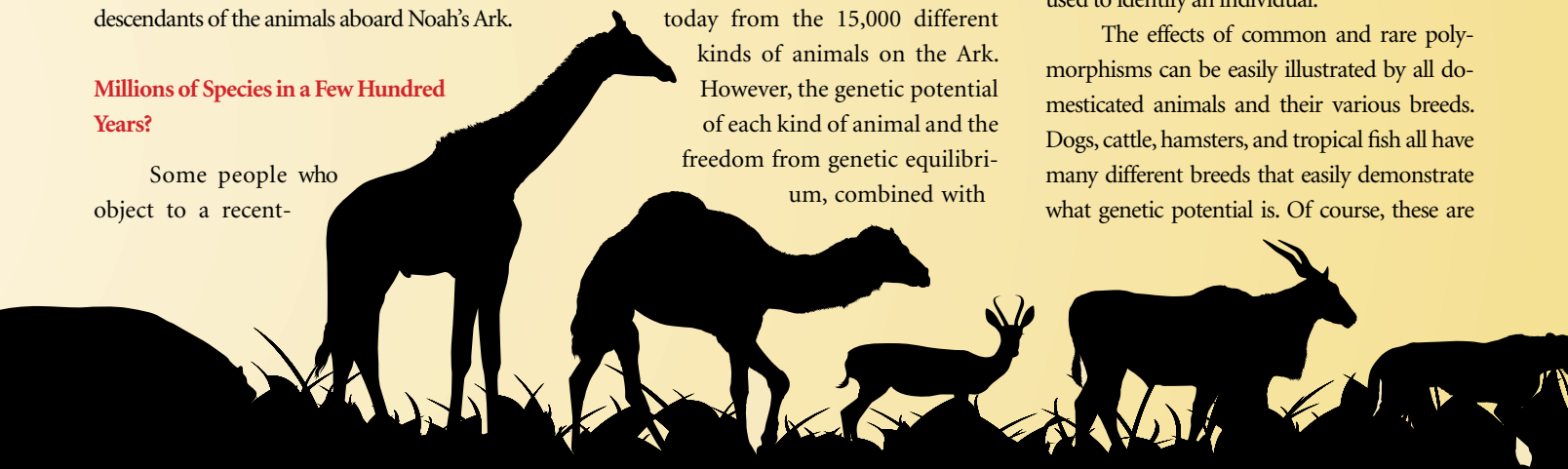
mutations, would allow the appearance of many different species from the few animals on the Ark.

### Genetic Potential for Variation

The genetic potential to produce a wide range of variation in any animal kind or species, regardless of how these terms are defined, easily provides 30,000 different species from fewer than 15,000 different kinds. Genetic potential is the amount of variation that a kind or type of organism can produce from the genetic material that is already present. It is possible for a pair of animals to harbor nearly all of the alleles (variations of a type of gene) for their kind in their genome.

Other alleles result from mutations to existing genes (human red hair color would be a good example of this). For example, two humans (Adam and Eve?) could have all the common DNA variations (called polymorphisms) found in all ethnic groups. This would require only one DNA base difference every 667 bases between the two of them. This is hardly a difficult situation for the genomes of two people and can account for much of the genetic variation observed in people today. Rare polymorphisms are few in number compared to common polymorphisms and are likely the result of the accumulation of mutations. These rare polymorphisms are frequently referred to as personal polymorphisms, since they can be used to identify an individual.

The effects of common and rare polymorphisms can be easily illustrated by all domesticated animals and their various breeds. Dogs, cattle, hamsters, and tropical fish all have many different breeds that easily demonstrate what genetic potential is. Of course, these are





all artificially selected animals and selecting for these breeds has led to a much faster rate of variation (what some call evolution) than would be expected in the wild. (Most dog breeds have been developed in the last 200 years.)

### Species Classification

Domesticated animals, as examples of genetic potential, do not motivate a scientist to name a new breed of dog a species. However, there is more phenotypic and genetic variation in domesticated animals than there are in many, if not most, wild “species” of animals that were discussed above. The only requirement to be classified as a species, in many cases, is for two populations of animals to be reproductively isolated. Most people would be hard pressed to identify an eastern meadowlark from a western meadowlark, but they are classified as different species simply because they have different mating songs and are reproductively isolated in the wild. Many of these animals are so close phenotypically (in appearance) that only an expert can tell them apart.

Even humans have far more phenotypic variation than many animals that are divided into separate species, and scientists are not about to start classifying different ethnic groups of humans as different species. The decision to classify an animal as a new species isn't completely arbitrary, but the modern scientific definition of a species is not determined by the biblical kind.

To maximize the number of animals on the Ark with the genetic potential to produce all the variation we see today requires a genetic engineer who knows the genetic composition of each animal. Genesis 6:20 tells us that God brought the animals to Noah to be put on the Ark. It clearly indicates that God chose the ani-

mals to be saved and it is likely that *the choice of animal was based on the genetic potential to produce a variety of animals after the Flood. God is the omniscient genetic engineer who chose each animal and made the variation in extant animals possible from all the animals on the Ark.*

### Hardy–Weinberg Equilibrium

The other important factor to be considered in this scenario is something called genetic (Hardy–Weinberg) equilibrium for the gene frequencies of a particular population of organisms. The change in gene frequency is used in evolutionary theory as evidence for microevolution, but this theorem can also be applied to a creation scenario since it does not involve the formation of novel genes from no genes. Hardy–Weinberg theory states that gene (or more accurately, allele) frequencies will remain constant as long as these requirements are met: random mating, no migration in or out of the population, no mutation, no genetic drift (chance changes in gene frequencies), and no selection for traits.

When the animals left the Ark none of these conditions would be met, enabling microevolution (change in allele frequency) and speciation events. These events include the selection of mates (for humans specifically), environmental selection of some traits, accumulation of mutations, chance genetic drift, and migration of animals taking with them different combinations of genetic material. Because of the small populations of animals immediately after the Flood, gene (allele) frequencies would rapidly be altered as animals migrated around the globe, adapted to various environments based on their genetic constitution, and became reproductively isolated.

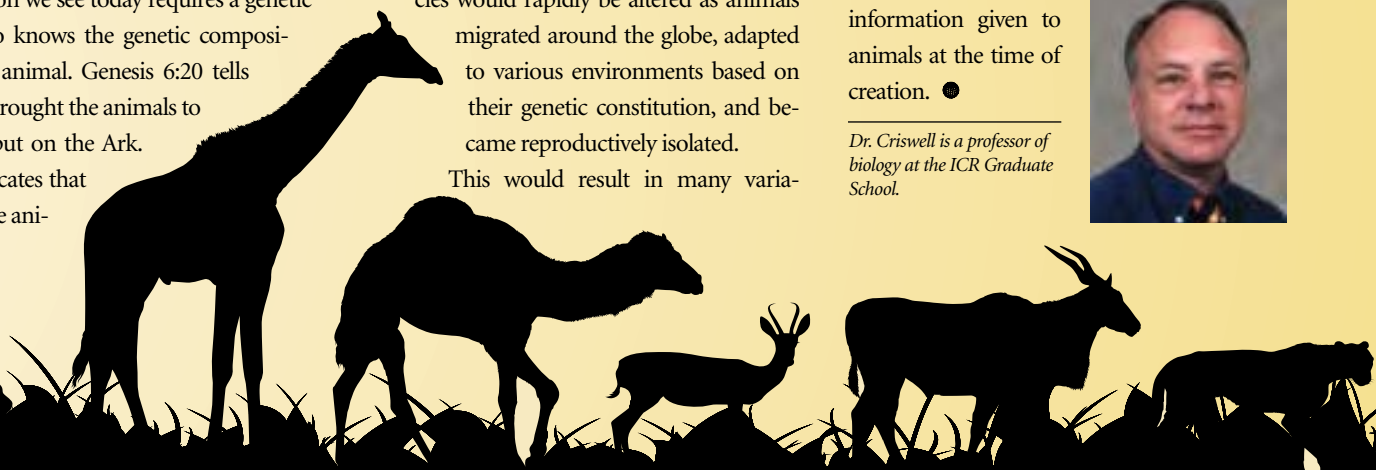
This would result in many varia-

tions of the original animals on the Ark, just like artificial selection produces many variations in domestic animals. This is not just a creation paradigm. Many population genetic studies, for any animal, include migration and reproductive isolation leading to speciation. The migration of humans around the globe is well-documented and based on the changing gene frequencies (such as ABO blood alleles and mitochondrial DNA) in each population. It is also well documented from DNA and protein sequences that all animals had migratory events that contributed to the ecological, behavioral, and geographic speciation events observable today.

All of the examples given above do not require creation of new genes or genetic information via natural processes from genetic information not previously in existence (evolution). The genetic information we observe today was supplied at the time of creation in these animals in their genomes, and their genetic potential has created the variations frequently classified as species. It is true that mutations create many new variations, but this is not an example of Darwinian evolution. Mutations work on pre-existing genetic material, are accompanied with a loss of information, and lead to extinction, not the conversion of one animal kind into another animal kind, regardless of how many years mutations are given.

The Creator God endowed His creatures with the potential for all the wondrous varieties that not only are evident in the fossil record, but also surround us today. This variation is made possible by the genetic information given to animals at the time of creation. ●

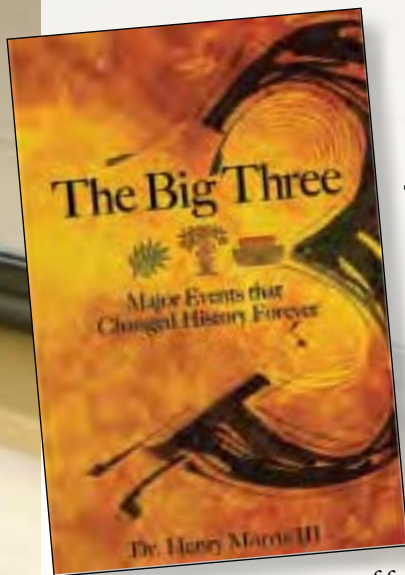
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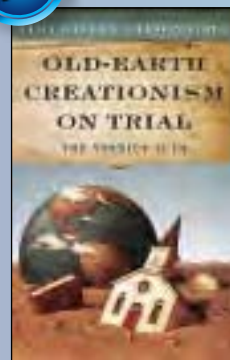
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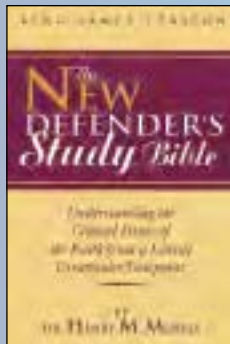
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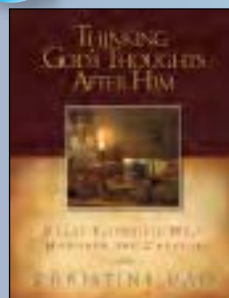
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# A Shocking Group of Fish and Eels

FRANK SHERWIN, M.A.

Imagine going to a doctor with a flare-up of gout or a migraine. To your utter shock, the physician calmly instructs you to reach into a water tank and hug an electric fish. This is what Roman physician Scribonius Largus prescribed in his *Compositiones Medicae* in 46 AD, and it worked.

Some of the more amazing fish are those that are designed to produce electricity. The South American electric eel of the genus *Electrophorus* can produce almost 600 volts, enough to stun a man and even knock a horse off its feet. Like the pacemaker in a heart patient's heart, these creatures use bioelectric generators to build up, then rapidly discharge a shock. The neurotransmitter acetylcholine is released from electromotor neurons (nerve cells) to the eel's neatly-stacked electrocytes (the voltage-generating cells) and zap!

The Pacific electric ray (*Torpedo*) can also deliver a jolt when bothered. And a family of fish called stargazers, with heavy, large heads, are designed to remain motionless on the bottom until a victim swims nearby. Then the prey is stunned with a 50-volt punch and eaten.

Researchers long ago learned that these aquatic creatures had bundles of muscle fibers that act much like a car battery. These fibers are highly efficient, able to deliver discharges hundreds of times per second at different volt-

ages according to the creature's need. How do electric fish and eels generate their charges, as well as use them for a wide variety of purposes? Is there a cogent and compelling evolutionary explanation?

In 2004, British and French scientists discovered that weakly electric fish in Africa and South America send out pulses and waves of electricity, respectively. This is fascinating because they hunt tiny larvae at night, when their eyes are useless. So the Creator gave them electric eyes. Neuroscientist Curtis Bell of Oregon Health & Science University described how the fish can "see their three-dimensional electrical world."<sup>1</sup>

Christian Graff of the Laboratoire de Biologie du Comportement in Grenoble, France, and three others used the term "electroperception" to describe how the fish can discern distances, shapes, motions, and textures.<sup>2</sup> Each object the fish encounters has its own electrical signature. The fish detects that signature with special nerve structures in its skin that act like a retina, although these sensors are tuned to electricity rather than light. The rich amount of information received is coordinated and mapped to produce a 3D color image.

Electric eels have stimulated the field of medical implants. Researchers at Yale University and the National Institute of Standards and Technology seem to recognize superior design,

if not the obvious implication of the superior Designer:

Applying modern engineering design tools to one of the basic units of life, they argue that artificial cells could be built that not only replicate the electrical behavior of electric eel cells but in fact improve on them.<sup>3</sup>

NIST engineer David LaVan also used this creation language while addressing model electric eel cells.

Do we understand how a cell produces electricity well enough to design one—and to optimize that design?<sup>4</sup>

If humans, as intelligent agents, have a difficult time reverse-engineering biological mechanisms like these electricity-producing organs, then it is reasonable to assume that nature, as an unintelligent non-agent, was not responsible for the initial engineering. As shocking as this idea is to worshippers of nature, that glory belongs to the Creator. ●

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Mr. Sherwin is Senior Science Lecturer.





# The Apobetics of Aesthetics: *A Hairy Problem for Evolution*

B R I A N T H O M A S , M . S .

**W**hy do men have beards and women do not? Deep in the brain, the hypothalamus produces surges of gonadotropin-releasing hormone, a small chemical that acts like a key to turn on the manufacture and export of follicle-stimulating hormone and leutenizing hormone (LH) from the pituitary gland. A scientist might explain that men have beards because in males LH stimulates testicular Leydig cells and other tissues to produce yet another hormone, testosterone. In response to specific levels of androgenic hormones (primarily testosterone), hair follicles in certain areas of the body build “androgenic hair,” which includes beards.

This particular explanation, however, only really answers the question “How do beards form?” and not the deeper questions of the origin or purpose of beards. Some evolutionary scientists believe that body-covering fur from ape-like ancestors was phased out because extra body fat added enough insulation. Or perhaps it was a response to increased sunlight exposure, or because less hair led to fewer fleas and ticks and thus resulted in fewer diseases. However, these “explanations after the fact” still do not answer the original question of why only male humans have beards.

Since beards are routinely shaved, it seems there is no pragmatic biological function

for them. Yet according to Darwinian evolution, nature selects individuals with novel, advantageous features. If, for vertebrates in general, “the developmental origin of hair is...mysterious” for evolution,<sup>1</sup> then the specification of androgenic hair on male humans is even more so.

On the other hand, if everything was created by a God who exists outside the physical world, there is a ready answer, one with broad application: beards present a certain appearance. Aesthetic features were emplaced by Someone who knew how things look in addition to how things work. Beards do not confer any selectable survival advantage to humankind, but they do serve to add distinction to men, perhaps as different features distinguish women.

It would be consistent to think that it simply pleased the Creator to outfit humans and other creatures with certain visually appealing characteristics. “But God giveth it a body as it hath pleased him” (1 Corinthians 15:38). The study of purposes is called apobetics, and beards are evidence that God designed certain features simply with aesthetics in mind.

In addition to this, and by His grace, God provided humans with the ability to recognize and appreciate beauty, distinguishing it from ugliness. Only with this ability can people give God proper credit for inventing human beards, lion manes, peacock feathers, salamander spots,

crustacean coloration, ultraviolet color patterns in deep sea fish (where there is no ultraviolet light), and the hot-pink spiny dragon millipede discovered in Greater Mekong.<sup>2</sup> All these creatures could conceivably serve their purposes and be ugly, but instead they seem to have been uniquely adorned by a Master Artist.

Researchers have not yet found a metaprogram in this universe that guides clouds of space dust into raw functional, let alone variously aesthetic, forms. After all, what does the impersonal universe care about beauty? A Creator God who appreciates beauty and wants others to appreciate His handiwork must be responsible for the origin of aesthetic features. Men have beards—some thick, some sparse—because it pleased God to adorn them so. ●

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1. Anderson, J. and H-D. Sues, eds. 2007. *Major Transitions in Vertebrate Evolution*. Bloomington, IN: Indiana University Press, 153.
2. New species discovered in Greater Mekong. *The Telegraph*. Posted on telegraph.co.uk December 15, 2008. Dr. Thomas Ziegler, one of the Mekong researchers, remarked, “It is a great feeling being in an unexplored area and to document its biodiversity for the first time...both enigmatic and beautiful” (emphasis added). Quoted in Poston, L. More than 1000 New Species Discovered in Rivers, Jungles...and Restaurants of the Greater Mekong in Past Decade. World Wildlife Fund press release, December 17, 2008.

Mr. Thomas is Science Writer.





# The Nature of Naturalism

DAVID F. COPPEDGE

The arrogance of anti-creationists stems largely from their pride in offering natural explanations for the world instead of supernatural explanations. No matter how much evidence can be shown for God's action in nature, secular scientists always rule it out of bounds from the outset, because they argue that any appeal to the supernatural is forbidden in science. It is time to challenge this claim, because it is flawed at its core. The natural/supernatural distinction breaks down under scrutiny.

"Natural" is a slippery word. Its meaning is dependent on context. We think of nature when visualizing wildlife and natural parks, or untamed wilderness, or unprocessed food. But we also speak of human nature, natural affection between family members, and natural reason (i.e., common sense). Natural can mean probable, normal, sensible, or unadorned. It can mean the sum of traits that characterize an object—that is its nature. The Bible says the natural man does by nature the things in the law.<sup>1</sup> It even speaks of the divine nature!<sup>2</sup> Clearly, *nature* and *natural* are very flexible words.

Scientists assume one meaning, but then switch meanings in practice. Nature is supposed to be limited to the universe of particles and forces. To them, that excludes gods, angels, and whatever other "superstitious" entities are not amenable to sense perception. Intelligent Designers intervening in the natural order (i.e., doing miracles) are out. But then the scientists will turn right around and use reason and morality, which cannot be reduced to particles and forces. Some of the objects in their toolkit would

be hard to distinguish from ghosts.

Consider the following non-physical entities frequently discussed in scientific literature: action-at-a-distance, singularities, infinities, consciousness, mind, extraterrestrial intelligence, the placebo effect, and unobservable phenomena like the interiors of stars, dark matter, dark energy, quarks, superstrings, the Big Bang, the origin of life. Some physicists even posit parallel universes or an infinite multiverse. How natural is that?

Then there is the whole realm of concepts: information, mathematics, the laws of logic, philosophy, history, reason, the scientific method, rationality, classification, causation, induction, objectivity. Science itself is a concept. It requires additional non-physical concepts: the moral categories of truth, honesty, ethics, integrity, and fairness. These all refer to absolutes that are timeless and universal. Science, therefore, depends on a host of things that extend beyond particles and forces.

Within the biblical worldview, these things all cohere and make sense, but how can a so-called naturalist derive concepts from particles? The journal *Nature* recently said that science itself is unnatural: "Science insists on the value of truth even when it is inconvenient or harmful; most people's beliefs tend to reinforce their self-interest. In this unnaturalness lies the great strength of science."<sup>3</sup> Well, then, if it is unnatural, is it supernatural?

Since a materialist has no categories for up or down, it doesn't matter if you call it unnatural, non-natural, or supernatural: it won't fit in a natural box. A scientist is therefore a supernatu-

ralist in spite of himself. Any time he offers a scientific explanation, avoids self-interest, or seeks the truth, he plagiarizes the biblical worldview. Any time she creates something by design, or uses concept words like observation, information, or causation, she is a supernaturalist, aware of it or not. Supernaturalism is inescapable.

Kurt Gödel famously proved that mathematics cannot validate itself. David Wolpert recently extended this into all scientific reasoning. As paraphrased by Binder, he proved that "the entire physical Universe cannot be fully understood by any single inference system that exists within it."<sup>4</sup> Welcome to supernaturalism, everybody!

Biblical creationists have the resources to understand the world, because they know the One who made it. Denying a transcendent Creator undercuts science. The bottom line: everyone is a supernaturalist, and everyone believes in miracles. Intentional miracles have more explanatory power than chance miracles. Bible believers, therefore, can do better science. Don't let evolutionists get away with nonsense about disallowing the supernatural in science. Pulling the rug out from under oneself is not natural. ●

## References

1. Romans 2:14.
2. Romans 1:20; 2 Peter 1:4.
3. Editorial. 2009. Humanity and evolution: Charles Darwin's thinking about the natural world was profoundly influenced by his revulsion for slavery. *Nature*. 457 (7231): 763-764.
4. Binder, P.-M. 2008. Philosophy of science: Theories of almost everything. *Nature*. 455 (7215): 884-885.

David Coppedge works in the Cassini Program at the Jet Propulsion Laboratory. The views expressed are his own.



## LETTERS TO THE EDITOR



Just wanted to send along a note of thanks for the *Acts & Facts* magazine and *Days of Praise* devotionals. I receive the devotionals by e-mail, and they are always a GREAT way to start out the day. I love how each devotional is brief, insightful, and filled with Scripture references. I often jot down the notes in the margins of my Bible, which will be used in years to come for sermons and lessons. Thanks for these excellent resources, and please keep up the good work!

— D.B.

I have taught science in public school for 22 years. Darwinism is being so slyly packaged and argued these days that many Christians, especially children, are buying it. Your organization is like an oasis in the desert to me. Thank you and may God bless your efforts.

— W.B.

*From a Virginia radio station:* “Thank you for your wonderful Bible-based programs. Your format is always scriptural, informative, and challenging. We never have to be concerned with improper content or questionable material, and we air your programs with the joy of informing our listeners [of] the truth of God’s creation, benefits and blessings.”

Great idea to advertise on Facebook. I am so used to seeing unchristian types of advertisements there that I was surprised to see your ad. I clicked on it immediately and was so pleased. I too am a creationist and have created lessons for children...I believe it is so important to ground our young children in faith in God as our Creator.

— E.L.

I wrote a letter to the editor recently in response to an article lauding Darwin alongside Abraham Lincoln...I simply stated that evolution was still a theory and has yet to be proved. I suggested that Darwin would probably have rejected it by now if he were still alive. I was amazed at the angry responses I received. I went to your website to find some scientific evidence to back up my statements and to form a rebuttal. I gave credit to all my sources which came from your website. So I thank you for the good work you are doing.

— R.H.

Have a comment? Email us at [editor@icr.org](mailto:editor@icr.org). Or write to Editor, P. O. Box 59029, Dallas, Texas 75229.



### This month on “Science, Scripture, & Salvation”

WEEKEND OF APRIL 4

#### April Fool’s Evolutionary Style

How many times have you fallen for an April Fool’s prank? You’re not alone. At times, evolutionary scientists and well-respected publications have been embarrassed by some of their own “April Fool’s jokes.” Tune in to discover what tricks have been played and to learn how to avoid being fooled by evolution!

WEEKEND OF APRIL 11

#### The Power of His Resurrection

As Christians, we often reflect on the infinite power of God and the fact that He can do anything. At Easter time, we especially focus on the fact of Christ’s resurrection and how He defeated sin and death. Rejoice with us as we consider the Lord Jesus Christ and the power of His resurrection!

WEEKEND OF APRIL 18

#### Australian Animals

All over the world we find an array of fascinating animals created with unique features and abilities, but perhaps some of the most popular and amazing creatures are found in the land down under. What’s so special about Australian animals? Come with us, mate, as we discover some awesome and fun facts about these wonderful creatures.

WEEKEND OF APRIL 25

#### Origin of Cats and Dogs

We all know that Adam and Eve were our earliest ancestors, but have you ever wondered about the beginnings of our cat and dog friends? According to the Bible, they were created on day six, but were they the same back then as they are today? Don’t miss this purrfectly interesting discussion!

**To find out which radio stations in your city air our programs, visit our website at [www.icr.org](http://www.icr.org). On the radio page use the station locator to determine where you can hear our broadcasts in your area. You can also listen to current and past *Science, Scripture & Salvation* programs online, so check us out!**



# TROUBLED TIMES, *Unspeakable Joy*

HENRY M. MORRIS IV

In troubled times, many ministries are often forced to scale back in order to survive. ICR is no exception to economic pressures, of course, but our perspective remains solidly focused on our Lord's promise to "supply all your need" (Philippians 4:19). As such, ICR will remain wholly committed to knowing, following, and teaching the truth of our Creator as revealed in His perfect Word and expressed through His matchless creation. Our focus will not change as long as the Lord tarries, no matter how difficult the economic times may appear.

Scripture is full of examples where God used periods of great stress, evil, and trouble to perfect His will and refine His people. One thinks of Job as arguably the best example of personal affliction, as God allowed a period of severe testing to ultimately bring Job even closer to Him (Job 1:8-22). So from God's perspective, difficult times can be of great benefit to us, with God often using them to deepen our faith, improve our effectiveness, and focus our energies on winning the world for Christ. No matter how bad our situation, personally or in ministry, God "will not fail thee, nor forsake thee" (Deuteronomy 31:6), and will further provide great joy and contentment as we continue seeking His will.

Particularly in times of trial, we who have known and sought to follow the Lord for many



years have received countless blessings for which to thank Him. As David sang so many years ago, "Blessed be the Lord, who daily loadeth us with benefits" (Psalm 68:19). Yet there is one blessing which is so great that it cannot even be put into words—it is an "unspeakable gift" (2 Corinthians 9:15), the gift of the Creator Himself, the Lord Jesus Christ as our Redeemer and Savior, "in whom, though now ye see him not, yet believing, ye rejoice with joy unspeakable and full of glory" (1 Peter 1:8).

That gift is so great that when we try to comprehend it, the sense of awe and gratitude so overwhelms us that our joy is truly inexpressible and indescribable! To think that the mighty Creator, God the Son, would not only humble Himself to become His own creature, man, but then willingly suffer the unimaginable agony of the cross and separation from God the Father in order to deliver us from the just penalty of sin—it is almost too much to bear! We, who deserve nothing but eternal separation from God in hell, will instead enjoy eternal life in heaven with God. What love, what grace! And all because of that amazing and truly inexpressible gift!

So this Easter, let us not focus on the trouble and turbulence around us, but rather on the many, many blessings we have to be eternally thankful for. Our precious Savior's most "unspeakable" gift should be foremost in our minds and hearts, as God's

people rest in the knowledge that the Lord is in control, and loved us so deeply that He was willing to die for us. ICR invites your help to see that the message of redemption and salvation, as seen through the Creator's wondrous creation, continues to be proclaimed to a lost and dying world. ●

*Mr. Morris is Director of Donor Relations.*

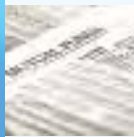


# Sowing for the Kingdom

Tax season offers a good opportunity both to pause and recognize God's provision for the past year, and to look ahead to new possibilities of taking part in His Kingdom work.

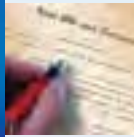
The Institute for Creation Research exists to research and communicate the creationist worldview. Using good science as our tool, we seek to uncover and explain God's matchless creation as specified in His perfect Word.

If you desire to support the work of ICR, please consider the following ways you personally can "sow" and "reap bountifully"—for your family, your finances, and your eternal legacy within the Kingdom (2 Corinthians 9:6).



**Charitable Gift Annuities.** In today's market, no greater return or source of guaranteed income can be found than that offered through a Charitable Gift Annuity. This is especially true for senior donors, who can turn assets

that are not producing an adequate income into these special annuities that provide lifetime guaranteed income, while also providing a present tax deduction and a tax-free portion of the income stream. Contact us today for a customized proposal!



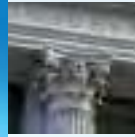
**Wills.** The most basic and important part of any estate plan is a well-thought-out will. A will can be fairly simple, but it should be designed to work in concert with other

planning tools. After making provision for your family, please consider sharing some wealth within the Kingdom. Giving to your favorite charities can usually be accomplished with a short, simple paragraph within the will, and ICR would be happy to provide information to assist you with this.

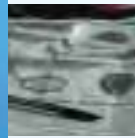


**Trusts.** Individuals with more complex estates often find that the creation of a trust—an agreement under which assets are managed by one person for the benefit

of others—is the best way to administer their financial resources. Due to their complexity, all trusts require expert advice to ensure that they are properly established. However, ICR would be happy to provide some basic information to help you determine if a trust is right for you.



**Life Insurance.** One of the easiest ways to provide for family, loved ones, and charitable work is through life insurance. By simply including specific charitable organizations as beneficiaries, you can ensure that a portion of the proceeds will go to your favorite charities.



**Gifts of Appreciated Stock.** To avoid the significant tax burden on the sale of appreciated stock, it may make sense to give the shares directly to federally-qualified charitable organizations (such as ICR). Shares that

have been held for at least one year may be given this way, providing significant tax savings by allowing the donor to deduct the full market value from income tax, while also avoiding capital gains tax. A double "bounty."



**Cash Gifts.** Cash gifts are the lifeblood of ministries like ICR. While the other various financial vehicles are tremendously beneficial, they will never replace cash as the most practical, versatile form of giving. Thankfully, our nation still acknowledges the benefits of charitable giving to federally-qualified charitable organizations. As such, any donations made to ICR are fully tax deductible—providing you another "bounty" of good stewardship.

ICR is deeply thankful for all those who co-labor with us in our mission, and we truly "thank... God upon every remembrance of you" (Philippians 1:3).

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If you would like to explore any of these options in more depth, please contact Henry Morris IV, Director of Donor Relations, at **800.337.0375** or **stewardship@icr.org**.



**T**he more we study about the great Flood of Noah's Day, the more we realize it was a time of vast tectonic change on earth. Scripture provides the basic framework for all knowledge, but doesn't necessarily give every detail, leaving it up to the Christian to "think God's thoughts after Him." Processes during the great Flood acted on an unimaginable scale, accomplishing extensive geologic work.

The Flood-Activated Sedimentation and Tectonics (FAST) project at ICR researches this great cataclysm, adding to our understanding of Scripture. One such study within FAST, funded by ICR's National Creation Science Foundation (NCSF), shows particular promise. Its title indicates its expected conclusions: "Reinterpretation of Thrust Faulted Terrains as Gravity-Driven, Catastrophic Superfaults."

This project involves one of the most studied and least understood phenomena in the world—overthrusting. Heart Mountain's strata are known to be "out of order," with the "older" layers stratigraphically above the "younger" ones. Earlier creation scientists considered this to be merely a depositional anomaly that disproved the geologic column, but consistent investigation has demonstrated the "reversed" order. Most scientists, both creationists and evolutionists, conclude that large

blocks were moved extraordinarily rapidly, requiring abnormal pore pressures building up in a saturated condition to buoy the rock along at such a rapid pace.

But how did this happen? Observations that the thick rock sequence was moved horizontally from its place of origin explained the data, but no theory existed as to how this could have been achieved. Certainly catastrophism was involved, but how did it accomplish the job? The new FAST study seeks to explain this. Excerpts from its abstract follow.

The Heart Mountain Fault and the nearby South Fork Fault (SFF) in northwest Wyoming are two of the most widely known structural enigmas in North America. The mystery of the origin and emplacement mechanism of these two faults remains unsolved after over 100 years of study.

The biggest dilemma has been the mechanical difficulty of moving 50 large carbonate blocks a distance of over 30 miles (50 km) along a slope of less than two degrees. Several authors have demonstrated quite conclusively that simple gravity sliding could not generate the pore pressures necessary to move coherent rocks down such a flat incline. More recent authors have failed to resolve this problem, other than to suggest a catastrophic genesis can somehow invalidate the pore pressure problem.

Phase 1 of this proposal aims to address the problem of large rock movements within the framework of the biblical Flood event, interpreting both faults as superfaults. Phase two involves the numerical modeling by Dr. John Baumgardner of the SFF. Phase 3 will complete the necessary field work on the SFF in 2009. Phases 4 and 5 will begin the extension of this research to other overthrust terrains in the Rocky Mountains and to understand underthrust subduction zones, searching for other superfaults.

We anticipate this project will add much to our understanding of Flood processes. It has the potential of turning a plaguing problem for creationists into a strength, providing the only adequate mechanism, and removing another stumbling block to salvation. As always, interpreting geology in light of revealed Truth will enlighten our thinking and witness.

NCSF has become the research arm of ICR and solicits designated funding to support investigations like this one, thereby equipping the Christian scholar and confronting the skeptic. Proposals for funding are welcome and can be sent directly to ICR. Gifts to help fund this research are also welcome. ●

*Dr. Morris is President and Director of Research.*

## Catastrophic Superfaults and the Biblical Flood

JOHN D. MORRIS, P.H.D.

# Yosemite Creation Tour

September 12–20, 2009

Make plans now to join the ICR Creation Tour this fall to Yosemite National Park and Mammoth Lakes. Against backdrops of breathtaking landscapes and stunning geological formations, ICR faculty will reveal the evidence of creation through God's natural wonders. For more details or to request an information packet, contact ICR's tour coordinator at **800.337.0375** or **tours@icr.org**.

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