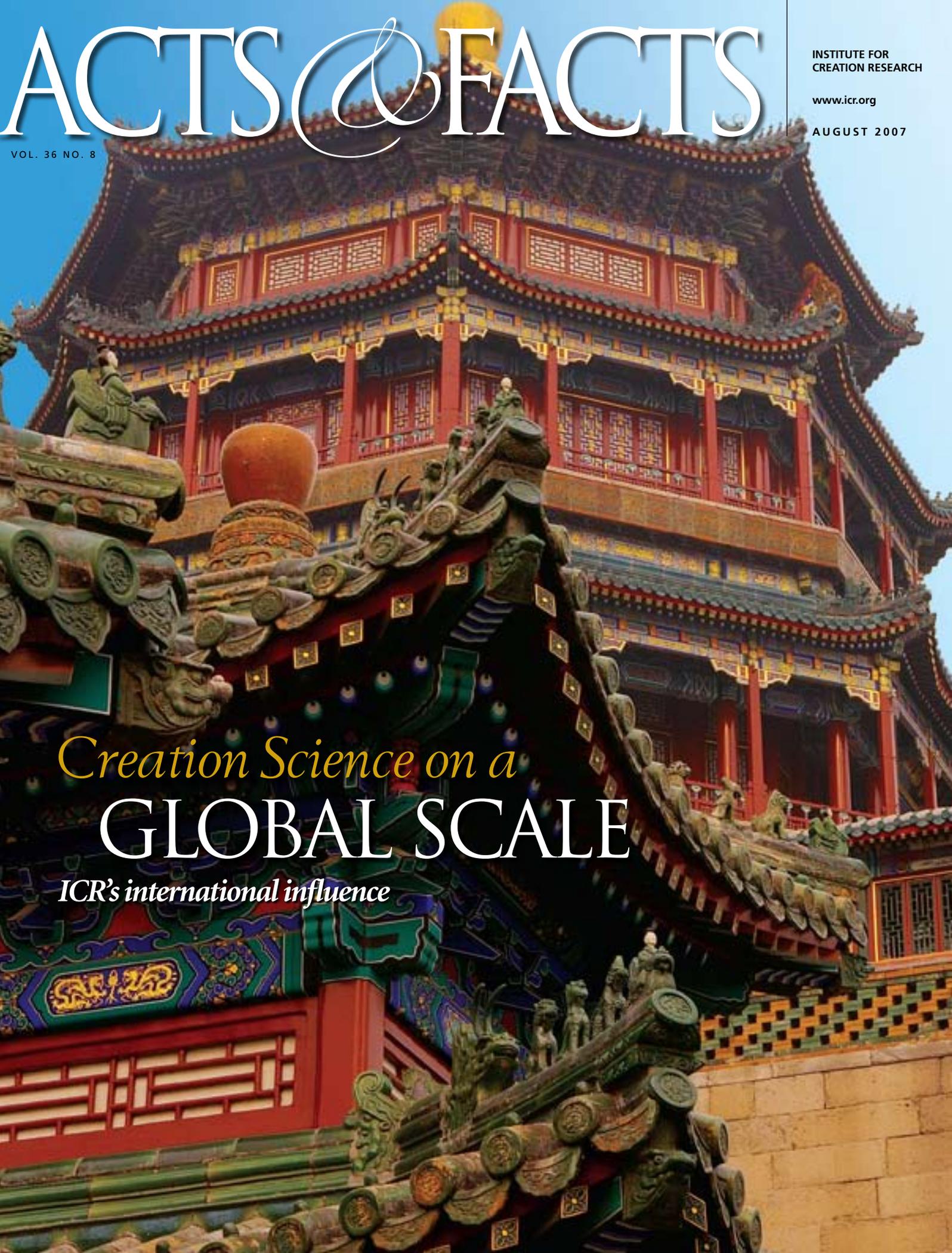


ACTS & FACTS



INSTITUTE FOR
CREATION RESEARCH

www.icr.org

AUGUST 2007

VOL. 36 NO. 8

Creation Science on a **GLOBAL SCALE**

ICR's international influence

Renew Your Mind. Defend His Truth. Transform Our Culture.

The CREATIONIST WORLDVIEW

Comprehensive Online Studies for the Christian Leader

Our post-modern world is saturated with compromise in politics, science, law, medicine, and even theology. Knowing and defending God's truth has never been more vital.

But transforming our culture with truth begins with allowing His truth to first transform us.

Your Role as God's Steward

As a Christian leader, you have a tremendous opportunity to influence men and women by modeling a worldview that recognizes the authority of the Creator and the authenticity of His Word.

ICR's **Creationist Worldview** program will equip you with the knowledge and tools required to mentor those within your sphere of influence, motivating them to discern truth, defend truth, and demonstrate truth to a culture on the verge of moral bankruptcy.

Each course will cover biblical, scientific, and cultural topics relevant to the issues you face each day as a leader in your field, such as:

- How to understand the impact of biblical creation on worldview
- How to apply God's *Stewardship Mandate* to our changing culture
- How to handle conflicts between Scripture and science
- How to integrate the Creationist Worldview with the secular workplace
- How to train staff to maintain biblical principles on the job
- How to respond to non-creationist Christians
- and many more

Professional Development for Leaders

Designed as a web-based study program, the **Creationist Worldview** is conveniently tailored around the needs of the working professional. Online course materials and tests are supplemented with textbooks from leading authorities and other audio/visual media that allow participants to dig deeper into each area of study. Coursework is completed at your own pace.



Start impacting your world.

Enroll today.

*The Creationist Worldview online program is offered exclusively through
ICR Distance Education.*

The Henry M. Morris Center for Christian Leadership, a strategic ministry initiative established by the Institute for Creation Research, conducts seminars, leadership conferences, and comprehensive educational programs for professionals and leaders within the Christian community who desire to impact their world for Christ.

To Register, call

800.337.0375

or visit us online at:

icr.org/MorrisCenter



Henry M. Morris Center
for Christian Leadership

Institute for Creation Research



Sweet Home Virginia

Two major events occurred this past spring that brought back poignant memories of my years in Virginia: the massacre at Virginia Tech and the home-going of Dr. Jerry Falwell.

As you may know, my father served on the faculty of Virginia Tech as Chair of the Civil Engineering Department from 1956 to 1970, during which time the department came to national prominence. I majored in civil engineering there, graduating in 1969. The tragic shootings this spring occurred in the same building where my father's department was located. The images of the campus and interviews with the faculty reminded me of the roots of the modern creation movement.

Research for the seminal work *The Genesis Flood* took place at Virginia Tech's university library. This book catalyzed the entire creation movement and resulted in numerous speaking opportunities. As the book gained acceptance and influence, the idea of a creation study and promotion group began to take shape. This led to the founding of the Creation Research Society in 1963, and ultimately the Institute for Creation Research in 1970.

However, this kind of notoriety was not welcomed by the faculty. A witnessing Christian was bad enough, but a creationist? Several efforts were made to have my father removed, but his department was one of the most successful on campus, publishing influential papers, receiving noteworthy grants, and producing quality graduates. Because of tenure, there was no acceptable way to oust him. And so, his books kept pouring out, and the creation movement continued to gain ground.

The liberal First Baptist Church in Blacksburg, which our family attended, was so alarmed by the rapid growth of my father's Sunday School class that he was removed. No tenure there. So he and several others started Harvest Baptist Church, which still flourishes and has an effective ministry on campus.

As anti-creation academic pressure mounted on campus, he resigned his post and partnered with Dr. Tim LaHaye to launch the new Christian Heritage College and its research branch, the Institute for Creation Research. The "embarrassed" Virginia Tech fac-

ulty actually threw a party to celebrate his departure. Since that time, Virginia Tech has been a bastion for evolution teaching. While it is not possible to claim that evolution teaching itself was responsible for the recent actions of a madman, one can't help but wonder if a distorted view of man as an evolved animal played a part in the deranged killer's actions.

One frequent guest speaker at Harvest Baptist Church was a young preacher from Lynchburg, Jerry Falwell. My father would also speak at Thomas Road Baptist Church, and over the years the two men forged a deep friendship that bore much fruit. Dr. Falwell remained a strong creationist, and even at the time of his sudden death in May, the ICR Graduate School and Liberty University were exploring ways to jointly sponsor graduate training and research in creation science.

Often Dr. Falwell would include creation in his preaching, and he insisted the university retain an emphasis in creation apologetics, in spite of adversarial accreditation demands. I remember the two times I was scheduled to debate Dr. Stephen J. Gould on national television. Both times Dr. Gould backed out at the last minute, refusing to debate another scientist. Not willing to legitimize creation, he insisted the program find a preacher for him to debate. Dr. Falwell was more than willing, knowing the evolutionist ploy to couch the debate as religion versus science. Not only did he uphold the "gospel of Christ" (Romans 1:16), but he took every opportunity to reference ICR's scientific work and contributions.

Throughout his life, Dr. Falwell remained a good friend of creation ministry and a partner in the work of Christ. My brother, Dr. Henry Morris III, and I traveled to Lynchburg for Dr. Falwell's memorial service, where many thousands gathered to celebrate a life well lived in the service of the King.

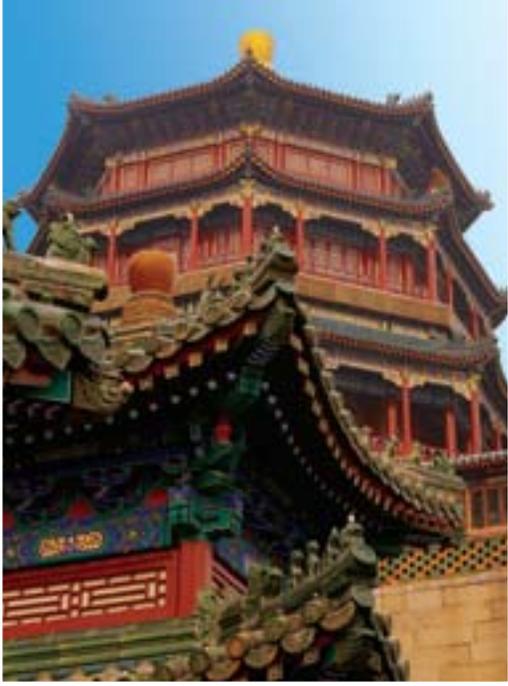
Looking back, I am reminded of both triumphs and tragedies, but remain in awe of God for His sovereign control. I long for, as I'm sure you do, the glorious return of our great Creator, Redeemer, and King to set things fully right.


John D. Morris, Ph.D.
 PRESIDENT

CONTENTS

- 4** Creation Science on a Global Scale
Lawrence E. Ford
- 6** A FAST Summer in the Grand Canyon & Wyoming
Larry Vardiman, Ph.D.
- 9** Board Approves Relocation to Dallas
Henry M. Morris III, D.Min.
- 10** The Rapid Ascent of Basalt Magmas
Andrew A. Snelling, Ph.D.
- 12** Who's Building Noah's Ark This Time?
John D. Morris, Ph.D.
- 13** Revealing Purpose in "Junk" DNA
Frank Sherwin, M.A.
- 14** Lagerstätten!
William A. Hoesch, M.S.
- 15** Imponderable Substances
David F. Coppedge
- 17** Stewardship, Service & Sacrifice
Henry M. Morris III, D.Min.





LAWRENCE FORD
Executive Editor

Creation Science on a GLOBE

In 1969, ICR founder Dr. Henry Morris opened a week of meetings in Mexico City to challenge men and women there to uphold the authority of God's Word in the realms of science, education, and the study of origins. Already a prolific creation science speaker and writer, Dr. Morris established the Institute for Creation Research the following year in partnership with Christian Heritage College. In the ensuing four decades, God has uniquely propelled ICR into prominence in both the Christian and secular science communities, using it to influence the founding of nearly every other creation ministry in the United States and around the world.

Honor Thy Creator

Considered by both friend and foe as the father of the modern creation science movement, Dr. Morris had one great passion in his research, speaking, and writing: to honor our Creator.

As the global leader in creation science, research, and education, ICR has stayed true to its mission to represent the words and works of the Creator with integrity and to impact the world with the inerrant and inspired account of God's special creative activities revealed in Genesis.

Inspired by Dr. Morris, other like-minded researchers joined the creation science movement, taking ICR's message to nearly every corner of the world. Just before his passing, Dr. Morris wrote in a May 2006 *Back to Genesis* article regarding ICR's response to the growing dilution of the Gospel:

All of this surely warrants the present international extension of Biblical creationism. For example, our ICR ministries have included books translated into many languages, meetings held in many countries, and radio broadcasts covering much of the world.

...Out of the 125+ creationist books by ICR writers, at least 50 titles have been translated into at



least one non-English language. One or more ICR books have been printed in at least 22 different languages. There are 16 titles in Spanish, 15 in German, 13 in Chinese, 11 in Russian, 9 in Korean....

Three Muslim countries—Turkey, Indonesia, and Arabia—have one or more ICR books in their respective languages. Other languages with two or more ICR book translations include French, Portuguese, Dutch, Japanese, Italian, Czech, Greek, and Hebrew. Finally, there is at least one each in Swedish, Romanian, Bulgarian, Danish, Hungarian, and Thai. ...Probably the most ambitious project was translation and publication of *The Defender's Study Bible* in Chinese.

...Altogether, I have spoken in at least 10 other countries. However, Dr. Gish has given creation messages in at least 40 other nations, including Japan, India, South Africa, Brazil (at least three tours), and most all of the nations of South America, Central America, and the Caribbean Islands. Dr. John Morris has had ministries in Communist China, Russia, Turkey, and several others, and each of the ICR science faculty has ministered in one or more other nations.

Educational Diplomacy

In February, ICR zoologist Frank Sherwin addressed members of congress in Lima, Peru, on the subject of science education, the flaws of Darwinian evolutionary philosophy, and the clear evidence of recent, young-earth creation as observed in the animal kingdom, the strata of the Grand Canyon, and genetic mutations. After his address to congress, Frank was invited to lecture at a number of universities, churches, and camps in Lima.

Mentoring Across Cultures

This past May, Dr. John Baumgardner, Associate Professor of Physics, and Dr. John Sanford, Director of ICR's GENE project, traveled to Korea to speak to faculty and students at Korea University, Yonsei University, and other

"Ivy League" schools about creation science research and education, delivering the keynote addresses at the annual conference of the Korean Association for Creation Research (KACR). Here they presented the vision of mentoring graduate students and initiating original creation research through a new entity, the Association of Christian Graduate Research (ACGR).

Dr. Baumgardner presented "The ACGR Plan" to encourage students to pursue careers in creation science, as well as to motivate professors to mentor these students. At the KACR conference, he presented a lecture entitled "Catastrophic Plate Tectonics: The Physics Behind the Genesis Flood" to an audience of about 200 students and academics.

The lectures issued a strong challenge for Koreans to conduct original creation science re-

ICR has stayed true to its mission to represent the words and works of the Creator with integrity and to impact the world...

search, with many examples of potential research topics. There is already positive interest in the ICR online masters degree program in science education with a view toward adequately training Korean middle school teachers to present the creation perspective in a clear and coherent way to their students. Participants at KACR also seemed motivated to develop online graduate-level creation courses to help train a wide spectrum of Korean professionals.

Beijing and Beyond

The Lord has provided additional opportunities this year for ICR scientists to present technical papers and the results of ongoing re-

search projects to international scientific conferences and institutes in China and other venues. In fact, Dr. Baumgardner received a warm welcome at the Institute of Geology and Geophysics of the Chinese Academy of Sciences in Beijing, where he interacted with one of its key research groups and presented a seminar entitled "Unlocking the Secrets of the Rocky Planets."

In this seminar, Dr. Baumgardner described the TERRA program (a 3-D spherical finite element model for the earth's mantle) and how it has been applied to model mantle dynamics in the earth, the moon, Mars, and earth-like planets in general. He demonstrated how TERRA has confirmed the potential for catastrophic avalanching in planets the size of the earth. Dr. Baumgardner presented evidence that just such an event happened recently inside Venus, resulting in a resurfacing of the planet with a thick layer of basaltic magma, along with evidence that the earth experienced a similar large-scale catastrophe in the recent past, likely as a result of the same mechanism. Despite the radical nature of these conclusions, the talk was warmly received.

Staying on Message

Since the publication of *The Genesis Record* in 1963, the Lord has truly confirmed the work of Dr. Morris and ICR with "favor and good repute in the sight of God and man" (Proverbs 3:4, NASB). Pray for God's continued blessing as we persevere to take this life-changing message to a world that largely denies the existence of a Creator. With an unwavering commitment to the authority and veracity of God's Word, ICR will continue to proclaim His truth around the globe and so give honor to our Creator. ●

ALSCALE

A FAST Summer in the Grand Canyon & Wyoming

LARRY VARDIMAN, P.H.D.

Professor of Atmospheric Science and Director of Research at ICR

The summer of 2007 has gone by FAST—in terms of research, that is. ICR's Flood Activated Sedimentation and Tectonics geology research program saw exciting progress in four of its seven projects.

Coconino Sandstone Project. Paul Garner and Ray Strom joined principal investigator John Whitmore to explore the Coconino Sandstone, a 300 to 400-foot thick layer of white sandstone near the top of the Grand Canyon. The conventional explanation for this geologic feature is that it was laid down by wind currents, similar to sand dunes in deserts today. Dr. Whitmore and his colleagues are currently examining evidence—such as cross-bedding and other features in the rock layer—that lend credence to the young-earth theory that it was actually laid down by water near the end of the Genesis Flood.

On a side note, Dr. Whitmore, who earned his M.S. in Geology from the ICR Graduate School, was recently honored with the Faculty Teaching Effectiveness Award by Cedarville University, where he is Associate Professor of Geology. Congratulations, Dr. Whitmore.

Tuff Beds in the Tonto Group Project. The tuff beds in the Grand Canyon are proving to be fruitful ground for Bill Hoesch, a research geologist with ICR and another alumnus of the ICR Graduate School. In the spring and summer of 2007, Mr. Hoesch collected evidence from both inside and outside Grand Canyon Park in an effort to ascertain whether the beds were formed by ash from volcanic eruptions that settled through the turbulent waters of the Flood, thereby leaving a recognizable time marker. If an early Flood type-

section can be established for the Grand Canyon, it will seriously challenge evolution's geologic timescale.

Overthrust Reinterpretation Project. After 100 years of study, the origin and emplacement mechanism of the Heart Mountain Detachment Fault and the nearby South Fork Fault in northwest Wyoming remain a mystery—one that lead investigator Tim Clarey and John Baumgardner have joined forces to solve. The most puzzling question is how 50 large carbonate blocks were moved a distance of more than 30 miles downhill along a slope of less than two degrees. The Genesis Flood and the following tectonic activity may well provide the explanation. To that end, this summer Tim purchased a structural analysis computing program for processing the field data. We look forward to their deductions.

Flood Narrative in Genesis Project. Steven Boyd, David Fouts, and project head John Baldwin have begun a comprehensive study of the relevance of Genesis 5:28-9:29 to the geological history of the earth. Their premise is that an understanding of the geology of the Flood must be derived from the Flood narrative in the biblical Hebrew text, since the text imposes constraints on the geological investigation. Some of the issues under consideration are the chronology of the Flood, its totality, its destructive capacity, and its effectiveness in carrying out God's purposes.

The work of *The Genesis Flood* continues. With all the advancements in science and research, this is an exciting time to be a biblical creationist. ●





Come learn from
ICR speakers at

GENESIS PRESENTATIONS

- **Aug. 4**
Santa Ana, CA (Gish) 714.425.9474
- **Aug. 18-19**
Aliso Viejo, CA (H. Morris III)
949.540.0699
- **Aug. 25-26**
Lake Stevens, WA (Sherwin) 206.465.1635
- **Aug. 29**
Montgomery, AL. (J. Morris) 334.262.3892
- **Sept. 2-4**
Winfield, KS (J. Morris) 620.221.4700
- **Sept. 8-9**
Lake Isabella, CA (Sherwin) 760.379.4296
- **Sept. 9**
San Clemente, CA (Rajca) 949.940.2600
- **Sept. 21-30**
Bad Axe, MI (Sherwin) 989.269.7519
- **Sept. 23**
Casper, WY (J. Morris) 307.237.1454

To schedule a presentation in your area,
call ICR Events at 619.448.0900.

www.icr.org/events

Attend a creation presentation on our **Loop Tours** with Jim Gardner

A "loop tour" is a string of creation presentations through a specific region of the country. ICR speakers are available to speak at churches, schools, and other venues. We look forward to bringing the wonderful message of creation to your community soon.

*Please contact the locations
above for further information
and directions.*

North Dakota Loop Tour September 14-23, 2007

Sept. 14 Bismarck 701-223-3330
Sept. 15 Dickinson/Beulah
701.225.6252
Sept. 16 Williston 701.572.9021
Sept. 18 Maddock 701-438-2453
Sept. 21 Fargo 701.232.5869
Sept. 23 Jamestown/Bismarck
701.952.1777

Georgia Loop Tour November 17-19, 2007

Nov. 17 Dalton 706.226.4936
Nov. 18 Douglasville 770.827.5342



ICR Speaker

UP CLOSE & PERSONAL

Frank Sherwin

M.A. Zoology

FRANK SHERWIN responded to the Gospel while aboard an aircraft carrier during the Vietnam War. A year after coming to Christ, Frank read some ICR literature by Dr. Duane Gish that confirmed his suspicion of the unscientific nature of Darwinism. After the Navy he obtained an undergraduate degree in biology and a graduate degree in zoology. Through these years of study (including a graduate-level course in evolution), Frank was taught that all "adaptations" (design) in the living world were due to random genetic mistakes and natural selection. Such explanations did not account for the enormous sophistication seen in photosynthesis or the precise anatomy of cellular structures. With each class, Frank became more convinced that such design clearly revealed the Designer (Romans 1:20). In 1996, Frank was invited to join the staff of ICR, where he teaches about the mysteries and wonders of God's living creation.

Popular lectures include:

- Creation, Evolutionism, and the Bible
- Scientific Evidence for Creation: Design in Nature
- Creation Evangelism

To book this speaker, call ICR Events at 619.448.0900.

DENVER!

THOUSANDS... NOT BILLIONS

A Young-Earth Conference Coming to the Greater Denver Area

Saturday, September 15, 2007

Colorado Community Church
3651 S. Colorado Blvd.
Englewood, CO 80113

Hear experts in science reveal groundbreaking evidence that demonstrates the accuracy of Genesis.

COST

Individuals: \$25

Students or Senior Citizens: \$20

Includes box lunch

Seating is limited.

SPEAKERS

Gary Parker
Ed.D. in Biology/Geology

D. Russell Humphreys
Ph.D. in Physics

Donald B. DeYoung
Ph.D. in Physics

John R. Baumgardner
Ph.D. in Geophysics

Register online at www.icr.org/conference or call 800.743.6374.

Four Months Left Before the IRA Window Closes



On August 17, 2006, President Bush signed into law the Pension Protection Act of 2006 (PPA 2006), which allows individuals who are 70½ years or older to make a direct charitable contribution of up to \$100,000 from their IRA without having to declare it as income—but only until January 1, 2008. For those who qualify, this is an excellent opportunity to practice good stewardship and support those tax-exempt organizations that God has laid on your heart. For further information on the PPA 2006 IRA rollover provision, please contact your financial advisor, or call ICR's Stewardship Services at 800.337.0375.

Board Approves Relocation to Dallas

HENRY M. MORRIS III, D.M.I.N.

Chief Executive Officer

Twice each year ICR's board of directors meets to discuss many of the broad issues that ultimately impact the growth of ICR and its influence around the world. The leadership of these godly and capable men is a vital component in how we carry out our mission for the Lord on a daily basis. Their prayers, support, and counsel are welcome and honoring to our Creator.

On June 23 the board assembled at the new Henry M. Morris Center in Dallas for the first time since the offices were opened last year. The four-acre campus with its three large buildings rests on the corner of two major surface arteries, just 15 minutes from DFW International Airport, and directly across from a park and golf course. It is a beautiful setting that allows an important visibility to neighboring businesses and residents.

Several key issues were under consideration in this year's meeting, including the relocation of the ICR headquarters to the new Dallas campus, as outlined in our strategic plan. For over 35 years, ICR has been blessed by our Lord to be known as the premiere creation science institute around the world, influencing and assisting in the launch of many other significant creation-based ministries that honor the Creator and His Word.

ICR's scientific staff is widely recognized by friends and opponents alike as unequalled in their credentials and research initiatives, attracting participants in such major projects as RATE. New research teams are now forming under the leadership of ICR scientists to examine the human genome, tectonic formation of mountain ranges, and other significant issues related to



the study of origins and the global flood, all within the framework of biblical integrity and authority.

And yet, in order to expand ICR's efforts in research, education, and dissemination, we recognize the need to recruit and train the next generation of creation scientists who will develop the mission for generations to come. To accomplish that vital objective, and to fulfill the international ministry opportunities the Lord has opened for

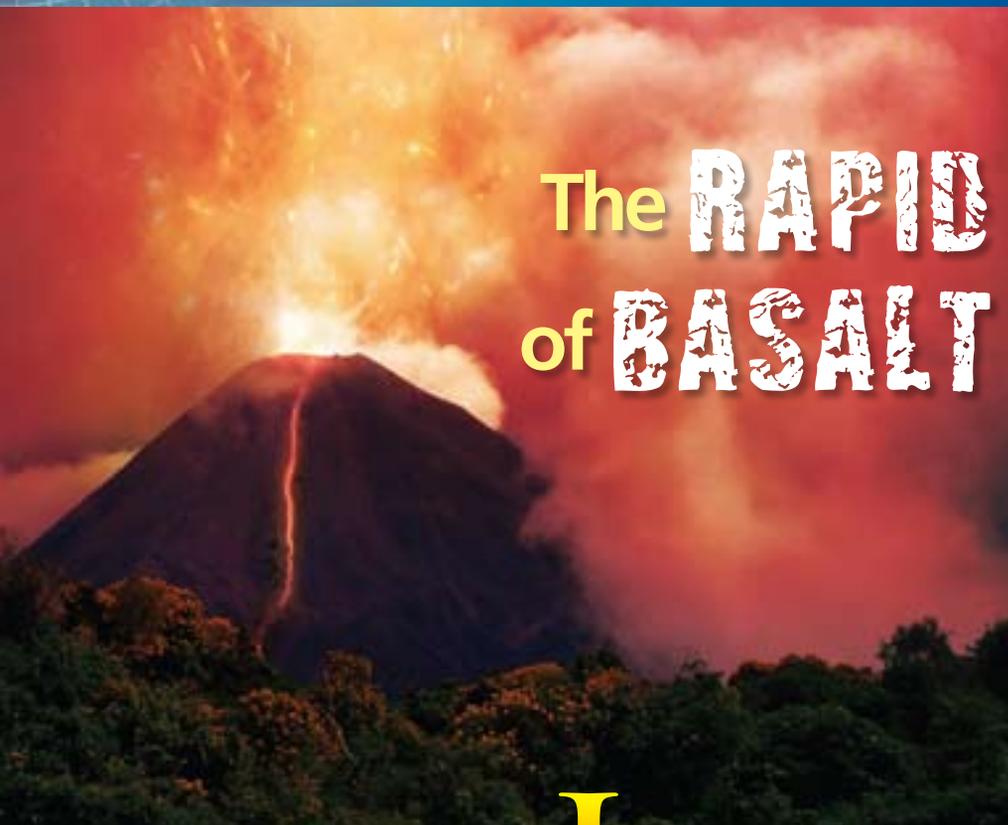


us, the board of directors authorized the relocation of ICR to the new Dallas campus, with most of the operations to be in place by the end of this year. The wisdom of the board to remove the burden of the rising costs of living and working in southern California will allow ICR to reallocate funds—your gifts to us—for projects that will expand the mission and message of biblical creation science as our founder set forth in 1970 when ICR was born.

The Museum of Creation and Earth History will remain in Santee for the foreseeable future. Some researchers will also stay while laboratory and support personnel are relocated. All new science and professional staff will be recruited and located at the new Dallas campus.

The Graduate School will also relocate to Texas, as much of the new educational emphasis is now online, with a new M.S. degree program in Science Education already underway. ICR's online Creationist Worldview study program, launched in January 2007, continues to add new students each month. The new facilities in Dallas will also expand the life sciences laboratories to facilitate the GENE project, housing two electron microscopes, computer labs, large classrooms, as well as additional offices for new faculty.

Acts & Facts readers and other friends of ICR will be kept abreast of the relocation process over the next few months as we progress with anticipation and confidence, expecting God's blessing in and through His ministry. Thank you for blessing us each and every year with your prayers and financial support. You remain a vital ministry partner as we share our co-labor in His kingdom. ●



The RAPID ASCENT of BASALT MAGMAS

ANDREW A. SNELLING, PH.D.
Former Professor of Geology at ICR Graduate School

It is now well established that the earth's upper mantle is the source of the basalt magmas erupted by many volcanoes as lava flows¹—for example, Kilauea Volcano, Hawaii. The earth's crust is predominantly of a granitic composition, whereas the mantle is closer to a basaltic composition. Pieces of mantle rock are often brought to the earth's surface in basalt lava flows. Other evidence also confirms that the basalt magmas are generated by partial melting of the upper mantle rock.

However, the ascent rate of the gas-rich, explosively erupted kimberlite magmas that host diamonds has previously been determined as four meters per second (about 787 feet per minute or nine miles per hour)!² Such a rapid ascent rate is crucial to survival of the diamonds carried by these unusual magmas from 200–400 kilometers (125–250 miles) down in the mantle up to the earth's surface. A slower ascent rate would result in the diamonds turning to graphite. To put this ascent rate into perspective, it only takes between 12 and 30 hours for the diamond-carrying kimberlite magma to travel from 200–400 kilometers depth in the mantle up to erupt at the earth's surface (Figure 1).

Small amounts of water have been found dissolved as hydrogen and hydroxyl ions (the dissociated components of water) in the minerals within fragments of mantle rocks (xenoliths) brought to the earth's surface in basalt magmas.³ Even those small amounts have major effects on physical and chemical processes in the mantle, also being critical to plate tectonics.⁴ Furthermore, experimental studies have shown that this water dissolved in mantle minerals would likely be partially lost during transport to the earth's surface, being partitioned into the ascending magma.⁵ Consequently, measuring the water still dissolved in such minerals within xenoliths in erupted basalts could provide clues to quantifying magma ascent rates prior to eruption.

Explosive Eruptions and Mantle Water

Where such volcanic eruptions occur on the continents, the basalt magmas typically have to ascend some 60–80 kilometers (35–50 miles) from the upper mantle to the surface. Furthermore, the mechanisms by which magmas ascend and the rates of magma ascent are known to play a critical role in the dynamics of volcanic eruptions, but these phenomena have until now been poorly constrained. Critics of catastrophic Flood geology have thus used the presumed long, slow ascent of basalt magmas, and their uniformitarian extrapolation back into the past of the small volumes of basalt magmas delivered to the earth's surface today, to insist that many millions of years of eruptions would have been needed to produce the basalt lavas found in the geologic record.

Patagonian Basalt Study

Such a study has now been undertaken.⁶ Olivine crystals were separated from garnet-bearing mantle xenoliths within the Quaternary (post-Flood) alkali olivine basalt flows of Pali-Aike, Chile,⁷ for Fourier Transform Infrared (FTIR) spectroscopic analyses. The compositions

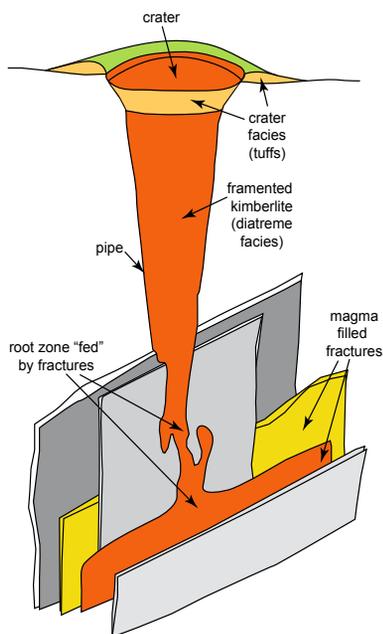


Figure 1. An idealized kimberlite magma system erupting explosively through a pipe from cracks in the earth's crust up to the earth's surface.

at the centers of the mineral crystals in these xenoliths indicate that these pieces of mantle rock were originally under temperature and pressure conditions corresponding to a depth of 60–80 kilometers.⁸ Furthermore, there is no geophysical evidence below these lava flows of a magma chamber in which the xenoliths could have been stored for an extended period and become equilibrated with their host magma during transport from the mantle to the earth's surface.

The alkali basalts hosting the mantle xenoliths erupted at a temperature estimated to have been between 1200°C and 1290°C.⁹ Furthermore, FTIR measurements of the visible clinopyroxene crystals (phenocrysts) in the basalts show no evidence of hydroxyl (OH) incorporated in them. This, together with the absence of amphibole, indicates that the basalts were undersaturated in water, making the basaltic magma which transported the mantle xenoliths an effective “sink” (or potential receiver) for hydrogen. An environment thus existed in which the mantle xenoliths could have become progressively dehydrated during magma ascent, and in proportion to the rate of ascent.

Profiles of FTIR measurements across individual grains in the mantle xenoliths revealed that the water distribution in the pyroxene grains was homogeneous, in contrast to the olivine grains where their rims were hydroxyl depleted.¹⁰ In total, thirty olivine grains were studied, and all olivine grains larger than 0.8 mm across had hydroxyl-depleted rims. Additionally, profile measurements were repeated on two of the olivine grains while crystallographically oriented, because it is known that hydrogen diffusion in olivine is related to its crystal structure. These measurements confirmed that the rims of the olivine grains in the mantle xenoliths were hy-

droxyl-depleted. This indicates that this olivine was dehydrating in the water-undersaturated host basalt magma as the mantle xenoliths were engulfed by it and transported up from 60–80 kilometers depth to the earth's surface.

Calculating a Rapid Ascent Rate

Using experimentally-determined diffusion coefficients for hydration of olivine,¹¹ water diffusion profiles were calculated for all three crystallographic axes of an olivine grain at a temperature of 1245±45°C for various durations, with an initial water content of ~312 weight parts per million (wt ppm) and a final water content of 0 wt ppm at its rim. Thus it was possible to approximate the ascent rate of the mantle xenoliths and, by extension, their host basalt. The calculated ascent rates ranged from 1.9 hours at 1290°C to 3.4 hours at 1245°C and 6.3 hours at 1200°C. Furthermore, FTIR analyses across cracks in the olivine grains did not exhibit any perturbations of the hydrogen profiles, so hydrogen diffusion from the grain rims occurred predominantly prior to the cracking of the grains near the earth's surface or after the eruption of the host basalt. Therefore, these mantle xenoliths must have reached the earth's surface in a matter of only several hours.

Assuming a depth of origin for the xenoliths of 60–80 kilometers, the corresponding ascent rate is 6±3 meters per second (13.5±6.5 miles per hour). Because these xenoliths are denser than the host magma, this estimate gives a minimum ascent rate for the host alkali basalt magma. That equates to this basalt magma only taking between two and eight hours to travel from the upper mantle to erupt at the earth's surface. Such a rapid ascent to the earth's surface is consistent with the freshness of these xenoliths

and is similar to the ascent rate of four meters per second determined for volatile-rich kimberlite magmas containing diamonds.

Conclusions

Any claim that the eruptions of basalt lava flows are a timescale problem for the Genesis Flood on a young earth can now be easily dismissed. If it only takes basalt magmas between two and eight hours to travel from their upper mantle sources to erupt through volcanoes at the earth's surface, then many basalt volcanic eruptions could have easily occurred during the Flood year. Furthermore, the volume and scale of the basalt lavas found in the geologic record, such as the so-called flood basalts of the Deccan and Siberian Traps,¹² testify to the global catastrophism operating in the Flood year, in contrast to today's occasional, small, and relatively insignificant basalt eruptions.

The bigger question is how so much of the upper mantle rock partially melted quickly enough to generate those enormous volumes of flood basalts. However, during the Flood year the pre-Flood ocean floor ruptured into plates that sank into the mantle via thermal runaway subduction, the resulting mantle-wide convective flow generating huge mantle plumes and rapid melting of enormous volumes of upper mantle rock beneath the mid-ocean rift zones.¹³ Thus catastrophic plate tectonics during the Flood is the only viable explanation for the many basalt flows found in the earth's rock record. And this new experimental evidence confirms the rapid ascent and eruption of basalt lavas, consistent with the Biblical framework of earth history. ●

References

1. Hall, A. 1996. *Igneous petrology*, 2nd ed. Harlow, England: Addison Wesley Longman Ltd.
2. Kelley, S. P., and J.-A. Wartho. 2000. Rapid kimberlite ascent and significance of Ar-Ar ages in xenolith phlogopites. *Science* 289:609–611.
3. Bell, D. et al. 2003. Hydroxide in olivine: A quantitative determination of the absolute amount and calibration of the IR spectrum. *Journal of Geophysical Research* 108 doi: 10.1029/2001JB000679.
4. Hirth, G., and D. L. Kohlstedt. 1996. Water in the oceanic upper mantle: implications for rheology, melt extraction and the evolution of the lithosphere. *Earth and Planetary Science Letters* 144:93–108. Regenauer-Lieb, K., et al. 2001. The initiation of subduction: Criticality by addition of water? *Science* 294:578–580.
5. Ingrin, J., and H. Skogby. 2000. Hydrogen in nominally anhydrous upper-mantle minerals: Concentration levels and implications. *European Journal of Mineralogy* 12:543–570.
6. Demouchy, S. et al. 2006. Rapid magma ascent recorded by water diffusion profiles in mantle olivine. *Geology* 34:429–432.
7. Skewes, M. A., and C. R. Stern. 1979. Petrology and geochemistry of alkali basalts and ultramafic inclusions from the Pali-Aike Volcanic Field in southern Chile and the origin of the Patagonian Plateau lavas. *Journal of Volcanology and Geothermal Research* 6:3–25.
8. Stern, C. R. et al. 1999. Evidence from mantle xenoliths for relatively thin (<100 km) continental lithosphere below the Phanerozoic crust of southernmost South America. *Lithos* 48:217–235.
9. D'Orazio, M. et al. 2000. The Pali-Aike Volcanic Field, Patagonia: Slab-window magmatism near the tip of South America. *Tectonophysics* 321:407–427.
10. Demouchy et al., ref. 6.
11. Kohlstedt, D. L., and S. J. Mackwell. 1999. Solubility and diffusion of “water” in silicate minerals. In *Microscopic properties and processes in minerals*, ed. K. Wright and R. Catlow, 539–559. Dordrecht, The Netherlands: Kluwer Academic Publishers.
12. Jerram, D. A., and M. Widdowson. 2005. The anatomy of continental flood basalt provinces: Geological constraints on the processes and products of flood volcanism. *Lithos* 79:385–405.
13. Austin, S. A., J. R. Baumgardner, D. R. Humphreys, A. A. Snelling, L. Vardiman, and K. P. Wise. 1994. Catastrophic plate tectonics, In *Proceedings of the Third International Conference on Creationism*, ed. R. E. Walsh, 609–621. Pittsburgh, PA: Creation Science Fellowship.

Who's *Building* Noah's Ark *This Time?*



J O H N D . M O R R I S , P H . D .
President of the Institute for Creation Research

Over the years several individuals and various groups have attempted to reconstruct Noah's Ark, either at full or partial scale. Most efforts were halted in the planning stage or in the fund-raising stage, but some have actually been completed. Some were proposed as creation museums or evangelistic tools, while others were for-profit tourist attractions.

Most recently a stylized scale model of Noah's Ark was completed by an unlikely group and in a most unlikely location. The environmental advocacy group Greenpeace constructed a 33 by 13 foot model on Mount Ararat in eastern Turkey, at an altitude of over 8,000 feet! Its purpose was a new one, to "highlight dangers of global warming."

At the unveiling ceremony the group exclaimed, "We call on you to urgently cooperate globally to avert this catastrophic climate change.... This requires immediate implementa-

tion of a radical program to halt the rise of greenhouse gas emissions." All from Mount Ararat, site of a previous preservation of humanity in time of global catastrophe.

As previously reported in *Acts & Facts*, I do not agree with the conclusions of global warming advocates, nor with their anti-Western agenda. I

Our earth, created by a wise and forward-thinking Creator, operates in marvelous balance.

especially disassociate myself from the blasphemous use of a profound Scriptural truth to promote a scientific and political lie.

Our earth, created by a wise and forward-thinking Creator, operates in marvelous balance. Numerous feedback mechanisms keep one factor, such as a cyclic build-up of carbon dioxide, from overwhelming the rest. Other factors adjust to bring it all back in line, thus keeping the earth

habitable by man—God's image. God designed earth to continue, in all circumstances. If earth could survive the Flood, it can survive anything!

Adam and his descendants were placed on Earth to act as God's stewards, caring for the planet, wisely using it for man's good and God's glory. Christian-creationists rightly exhibit care

for the environment, not abusing His creation for selfish ends.

However, we must not worship the creation over the Creator. Nor can we prefer earth over the

image of God placed in stewardship over it. Just as the earth functions in God-ordained balance, so we must seek balance in our thinking.

My 13 trips to Mount Ararat attempting to locate the remains of the real Noah's Ark have been unsuccessful. Now at least we know we can find its smaller counterpart. ●

Revealing Purpose in “Junk” DNA

FRANK SHERWIN, M.A.
Science Editor

Chromosomes are compact linear entities in the nucleus of the cell. They are composed mainly of DNA, some RNA, and proteins called histones. People have been created with 23 matched pairs (46 total) of chromosomes. Years ago, scientists discovered that only about three percent of the human genome (the complete set of DNA inherited from the father and mother) is comprised of genes—about 35,000 of them. The remaining 97 percent was given the unscientific title of “junk” because secular biologists felt that over evolutionary time the DNA had lost its function. This use-



less DNA was the foundation for the secular argument that the genome was not designed.

Creation scientists countered—as they did with other alleged vestigial organs and tissues—that just because we don’t know the function at the present, that doesn’t mean the DNA doesn’t have some important function. One need only look at the tonsils and appendix that were once taught by Darwinists to be vestigial but are now known, thanks to good scientific research, to serve important functions in the human body.

Sadly, the title “junk DNA” stuck, and hundreds of thousands of biology students and laymen were taught—incorrectly—that the trillions of cells in our body had mostly vestigial or useless genetic material (DNA) that served no function. Today, it is more correct to say that some sections of DNA are non-coding, but are not junk and have an important function.

For example, it has been discovered that some of the formally “useless” DNA actually controls embryos. An article in *Developmental Cell* magazine¹ by Barbara Knowles and others examines the surprisingly high level of DNA called transposable elements (TEs) in the maternal transcriptome in mouse eggs and initial cleavage embryos. TEs or “jumping genes” are a number of types of DNA pieces found in virtually all life forms. They function as promoters (specific areas of a DNA molecule containing sequences required for critical function) for a number of RNA molecules. This scientific research counters the evolutionary assumption that many repetitive TEs in the human genome are useless. “I think a lot of ‘junk DNA’ has a function, and in a weird way it’s controlling gene expression,” stated Dr. Knowles.

Cells also contain introns, non-coding sections of DNA that are spliced out of the messenger RNA (mRNA) strand before it leaves the nucleus of a cell to become translated in the cytoplasm. This splicing technique is quite complicated and requires enzymes and energy. Such a complex performance led many to suspect that introns have a control function.²

Creationists continue to state that God doesn’t make junk. Instead, we have been “fearfully and wonderfully made” (Psalm 137). ●

Footnotes

1. Hardman, H. 2004. [PSA for Peaston, et al., in *Developmental Cell*, 2004 7:597606] “Junk” DNA may be very valuable to embryos. http://www.eurekalert.org/pub_releases/2004-10/cp-dm100604.php

2. Sterner D. A., Carlo T., Berget S. M. 1996. Architectural limits on split genes. *Proc. Natl. Acad. Sci. U S A* 93: 15081–15085.



Lagerstätten!

WILLIAM A. HOESCH, M.S.
Research Assistant in Geology

Lagerstätten is a word creationists should be familiar with. German for “place, of storage [or] resting place” it refers to a sedimentary deposit extraordinarily rich in the diversity or quality of preservation of its fossils. Paleontologists distinguish two kinds. *Concentration* lagerstätten are deposits with a peculiar abundance of broken-up hard parts, such as a bone bed. These are interesting, but it is the second variety—called *conservation* lagerstätten—that we would like to focus on. These include some of the world’s most extraordinary fossil deposits, and it is the exceptional quality of preservation of the fossilized organisms, especially their soft parts, that sets them apart.

Workers at fish markets are in the best position to appreciate the significance of lagerstätten. Without salt or refrigeration, decay sets in very quickly on a dead fish. Modern varieties of the small, herring-like fossilized fish from Wyoming’s Green River Formation, for example, rot in a period of days or weeks.¹ Yet somehow they got pickled by the billions in this world-famous lagerstätten. Either they were rapidly buried in mud or else they got exposed to some unusual

oxygen-deprived and/or saline environment soon after death, in order for these fossil fish to be preserved. Not months, nor years, nor millennia, but days! The following are a few other favorite examples.

Preserved in northeast Brazil’s Santana Formation are not just the bones of fossil fish, but the mummified remains of gills, muscles, and stomachs.² Gills are normally infested with bacte-

In New York state’s Niagra Gorge are found whole crinoids that were buried to death.

ria 4-5 hours after a fish’s death. “What is clear,” reports D. M. Martill, “. . . is that the phosphatization [fossilization] took place moments after the fish had died and was completed within only a few (probably less than 5) hours.” In this case, “instantaneous fossilization” is suspected by Martill to have been the very cause of death!

Crinoids, which are marine animals of the echinoderm or starfish family, comprise famous

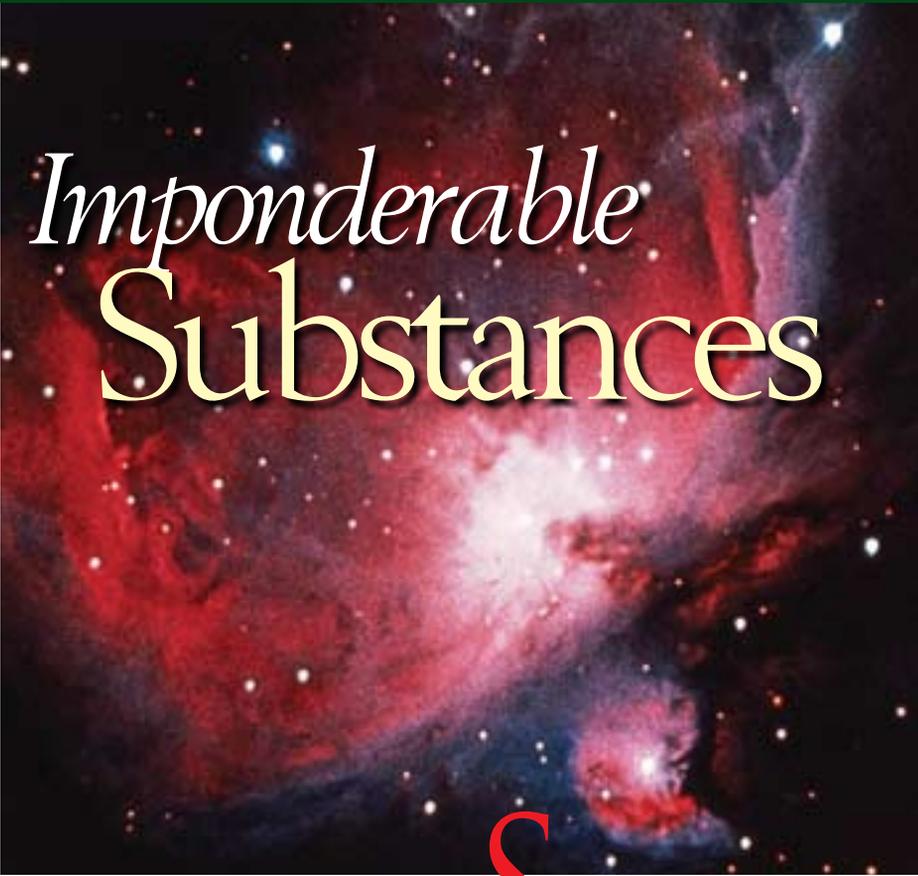
lagerstätten in both England and the United States. In the walls of New York state’s Niagra Gorge (downriver from the Falls) are found whole crinoids that were “buried to death” in lime muds.³

What makes experts Taylor and Brett (1996) so confident? Crinoids, or “sea lilies,” are composed of hard plates held together by extremely delicate soft tissue. Ordinarily, death of the organism results in quick disintegration of its plates; but here, whole organisms are preserved. Rapid burial in mud is required.

Are lagerstätten anomalies of the fossil record, or are they telling us something that is basic to its very character? They are certainly more common than what most geologists would have thought possible only a few decades ago. Flood geologists from former generations might have explained it by going back to Genesis. ●

Footnotes

1. Whitmore, J.H., Experimental fish taphonomy with a comparison to fossil fishes, Ph.D. dissertation, Loma Linda University, Loma Linda, CA, 2003.
2. Martill, D.M., 1989, The Medusa effect: instantaneous fossilization: *Geology Today* 5(6): 201–205.
3. Taylor, W.L. & Brett, C.E., 1996, Taphonomy and paleoecology of echinoderm Lagerstätten from the Silurian (Wenlockian) Rochester Shale: *Palaos* 11:118–140.



Imponderable Substances

DAVID F. COPPEDGE

Jet Propulsion Laboratory, NASA

Science and pseudoscience: how clear is the distinction? We need to look at history to understand the present. Scientists typically admire magician James Randi, who makes a living out of debunking pseudoscientific claims. He has been very clever at exposing charlatans who appeal to occult forces to explain “paranormal” phenomena. Real science only appeals to what is observable, testable, and repeatable—that’s the ideal. Yet in the history of science, occult (Latin *occultus*, “secret”) forces have frequently been employed. Two of the most notorious are widely accepted today.

The term “occult force” need not mean something demonic. It is something not yet understood: an “imponderable” substance. It can serve as a placeholder for an unknown cause of observed effects. Electricity and magnetism were named long before they were understood. And what could be more real than gravity? Yet even that has been suspect. Newton conceived of a universal force and made powerful use of it in his equations, but he “feigned no hypothesis” to explain what it was. The Cartesians criticized him for proposing a force without a mechanical explanation, ridiculing his occult force that acted mysteriously at a distance.

An occult force may produce measurable,

predictable effects. Sooner or later, the proposed cause must achieve a scientific consensus. The history of science is replete with imponderable substances that were widely accepted at the time. Some lost out: caloric, phlogiston, animal magnetism. Others became accepted: gravity, electromagnetism, the strong and weak nuclear forces.

We tend to think of the accepted imponderables as real, and the losers as pseudoscientific. Yet the distinctions are not always clear. Is there a luminiferous ether that acts as a medium for light waves? Are quarks real? What about the strings in string theory, or alternate dimensions? Eminent scientists and philosophers have defended imponderables purely on their utility, while dismissing any claims to their real existence.

Today, most cosmologists claim that 96% of the universe consists of two imponderable substances: dark matter and dark energy. No one has a clue what these are. This huge appeal to occult forces is making many uncomfortable. Richard Panek, in a March 11, 2007 *New York Times* article, quipped, “You get to invoke the tooth fairy only once,’ meaning dark matter, ‘but now we have to invoke the tooth fairy twice,’ meaning dark energy.” In an April 11, 2007 article in *Nature*, Jenny Hogan described the mood at a recent cosmology conference; one astronomer said, “There is a sense of desperation.... The standard model is horribly ugly, but the data support it.” Dark energy was called “a profound problem from the viewpoint of fundamental physics.”

It remains to be seen if cosmologists will be able to establish the existence of dark matter and dark energy to everyone’s satisfaction. But it becomes difficult to defend against charges of pseudoscience when the bulk of your model depends on imponderable substances. If they only serve to shield a model from being falsified, appeals to dark things seem occult in more than one sense. ●

(The author’s views are his own.)



MEETING HIGHLIGHTS

Encinitas, California

On Sunday, June 3, ICR zoologist and Science Editor Frank Sherwin spoke to the congregation at Coastal Christian Center, where Pastor David Sasse was teaching on biblical worldview issues. Frank addressed five major Scriptural topics—Creation, Corruption, Curse, Catastrophe, and Christ—that dealt with the six literal 24-hour days in the Genesis narrative and the various evidences for a “clearly seen” creation (Romans 1:20), even in a fallen world. One attendee responded: “It is a relief knowing [creation scientists] are fighting the good fight.”



LETTERS TO THE EDITOR

Washington State

We appreciate ICR’s integrity in handling God’s Word and the research that supports true science and reveals the glory of the Creator through His handiwork. May the Lord continue to bless your ministry.

Days of Praise reader in Nebraska

I really enjoy using the *Days of Praise* for my devotional times. There have been many times when the Scriptures and the devotionals were just what I needed. . . . God will continue to use the ministry for His honor and glory.

Alabama

Your work is tremendously important, especially in this day and time. I know this to be true since ICR played a significant role in my own salvation many years ago. Thank you!

RadioLog

This month on
“Science, Scripture,
& Salvation”

WEEKEND OF AUG. 4

History of Geology

It’s no secret that evolutionary “old age” assumptions about the earth dominate the scientific field and the classroom. But there was a time in history when this wasn’t the case! What caused such a dramatic change? To hear the answer to this question, tune in!

WEEKEND OF AUG. 11

The Uneven Playing Field of the Origins Debate

The origins debate between evolutionists and creationists has been going on for decades. But what happens when arguments turn from scientific evidence into belittlement and personal insults? To find out, join us!

WEEKEND OF AUG. 18

All That Glitters

“There’s gold in them thar hills!” The gold rushes of the 1800s and 1900s were exciting times in history. But even more exciting than the discovery of gold was the event that made it available to greedy prospectors. What was this epic occurrence? Tune in to learn more!

WEEKEND OF AUG. 25

There’s No Place Like Home

The search for life beyond our earthly realm has been going on for decades. Are there other “earths” out there with life forms on them? Or is our planet unique, and life contained only within its borders? Listen in to this interesting discussion!



To find out where you can hear ICR broadcasts, please email radio@icr.org with your name and address. We will gladly send you a radio station listing for your state. If our programs are not aired in your area, we would be happy to send you a free demo packet to take to your local station.

Stewardship, Service & Sacrifice

HENRY M. MORRIS III, D.MIN.
Chief Executive Officer

“Stewardship,” as it is applied to our finances, is taught in most churches to all congregants at nearly every age. Unfortunately, too often the practice of stewardship begins and ends with the monetary gift.

From a biblical perspective, stewardship is expected in all aspects of our lives!

Jesus was always and in every way “about His Father’s business.” He preached the gospel, He healed the wounded and brokenhearted, He freed the captives and gave sight to the blind (Luke 4:18). Should we do less? *“As every man hath received the gift, even so minister the same one to another, as good stewards of the manifold grace of God”* (1 Peter 4:10).

“Service” is just as frequently couched only in terms of “church” or “charity” work. Often, only the “full-time” ministry is considered *real service* to the Lord, with all other vocations cast in the light of “secular” employment. But the Bible teaches that we are to *“do all to the glory of God”* (1 Corinthians 10:31).

The Genesis mandates (Genesis 1:28 and 9:1-7) are the foundational delegation of authority for all legitimate “service” to God as “stewards” of earth’s inhabitants, resources, and social order. *“Moreover it is required in stewards, that a man be found faithful”* (1 Corinthians 4:2).

“Sacrifice” of our personal wants and desires in favor of our Father’s instructions is also

“Why did you seek Me? Did you not know that I must be about My Father’s business?”

LUKE 2:49

expected of every man, woman, and child who desires to please God. Neither is any ministry exempt. Wise stewardship of every resource is commanded. *“But what things were gain to me, those I counted loss for Christ. Yea doubtless, and I count all things but loss for the excellency of the knowledge of Christ Jesus my Lord: for whom I have suffered the loss of all things”* (Philippians 3:7-8).

ICR has long encouraged this “creationist” perspective. Please consider co-laboring with us in our efforts to motivate leaders to teach “total stewardship” among God’s people.

“O magnify the Lord with me, and let us exalt his name together” (Psalm 34:3). ●

SIGN UP TODAY!

ICR's Yellowstone Tour
SEPTEMBER 7-15, 2007

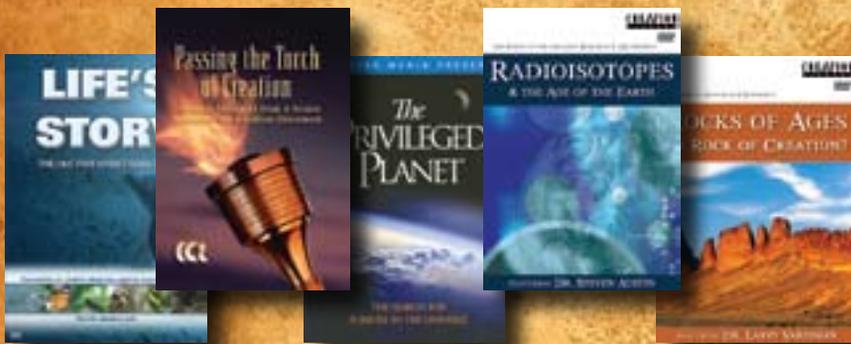
Christian fellowship, uplifting devotionals,
eye-opening studies in science!

Post Card

Let ICR scientists guide you through two of our most beautiful national parks and two national monuments!

Call, write, or visit our website:
619.448.0900 ext. 6034
ICR Yellowstone Tour
P. O. Box 2667
El Cajon, CA 92021
www.icr.org/tours

DVDs TO ENHANCE THE DISCOVERY PROCESS

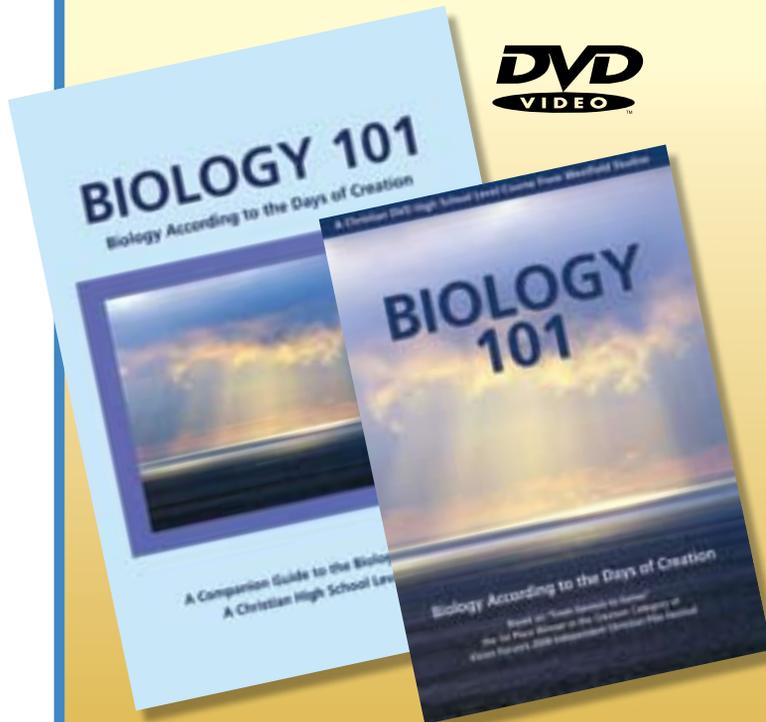


DVD Titles	Retail	ICR price
The Case for a Creator	\$19.95	\$15.00
Darwin's Deadly Legacy	24.95	19.00
Faithful Messenger	29.95	20.00
The Fire Below Us	29.95	23.00
Geological Perspective/The Deluge	14.95	10.00
A Geologist Looks at Noah's Flood/ The Search for Noah's Ark	14.95	10.00
Grand Canyon	19.95	15.00
Icons of Evolution	19.95	15.00
Journey Through Creation	19.95	15.00
Life's Story II	19.95	15.00
Passing the Torch	39.00	30.00
Privileged Planet	19.95	15.00
Radioisotopes and the Age of the Earth	12.95	10.00
Rock of Ages or Rock of Creation?	12.95	10.00
Starlight and Time	19.95	15.00
Unlocking the Mystery of Life	19.95	15.00
Walk Through History	14.95	10.00
War of the Worldviews/ Two Worldviews Collide	14.95	10.00
Children's DVDs		
Marty's Grand Adventure	19.95	10.00
Marty I & II	24.95	15.00

Credit card orders: 800.628.7640
www.icr.org/store

Prices good through August 31, 2007

Biology according to the days of Creation



Biology 101

(2006, approx. 300 min.)

Biology 101 is a comprehensive overview of the world of biology from a biblical perspective. This 4-disc DVD curriculum is a visually-rich experience designed specifically for ages 15 and up, presenting the study of biology within the context of the Genesis account of creation. Nine individual segments provide a thoroughly biblical framework. Explore plants, aquatic creatures, birds, land animals, mankind, and genetics. A 114-page study guide is included.

“Biology 101 is scientifically accurate, presented with awe, insight, and humor, and is indispensable for Christian students. Highly recommended!”

Frank Sherwin, M.A.

Institute for Creation Research

Retail: \$69.95

Now available for just \$55.00

800.628.7640

ORDER FORM

Special prices apply through August 31, 2007

Qty.	Title	Price	Total
1	A Second Look FREE with any order! (\$9.95 value)		FREE
Add cost of materials		Subtotal	\$
Sales tax (CA only, 7.25%; San Diego County, 7.75%)		Tax	\$
General shipping/handling: 20% of subtotal (\$5 min., \$10 max.)*		Shipping	\$
Priority mail (suggested for AK/HI): \$5 additional		Priority Mail	\$
Foreign: 20% of subtotal (\$5 min., no max.) U.S. funds only**		Foreign Shipping	\$
		Total	\$

Name _____

Address _____
Apt./Suite/Space/Lot

City/State/Zip _____

Phone (_____) _____

Check enclosed payable to ICR.

Please bill my credit card. (Circle)



For faster service, call in your credit card order.

Credit card orders: Monday–Friday 8:00 a.m.–4:00 p.m. Pacific time

Credit Card # _____

Exp. Date: _____ Signature _____



Return to:

Institute for Creation Research
P. O. Box 2667, El Cajon, CA 92021-0667

800.628.7640

* We use UPS because shipments are trackable.

Allow 2-4 weeks for delivery. Provide street address for UPS.

** Foreign orders are shipped surface unless airmail is requested and paid for.

Visit our online store at www.icr.org/store

Challenge Your Mind. Impact Your World.

*Earn the M.S. degree in Science Education with one of
4 new minors in ICR's online Distance Education program.*

Founded by Dr. Henry Morris, ICR Graduate School has offered quality graduate education for over 25 years, establishing itself as the premiere graduate institution in the disciplines of creation science.

Explore the sciences through the framework of biblical authority, guided by leading faculty who combine their extensive experience in graduate education and field research to offer a comprehensive program in creation science.

Both an education and research institution, ICRGS conducts ongoing scientific investigations in creation science, such as:

- Radioisotopes and the Age of the Earth (RATE)
- Genomic Evaluation—New Evidence (GENE)
- Flood Activated Sedimentation and Tectonics (FAST)

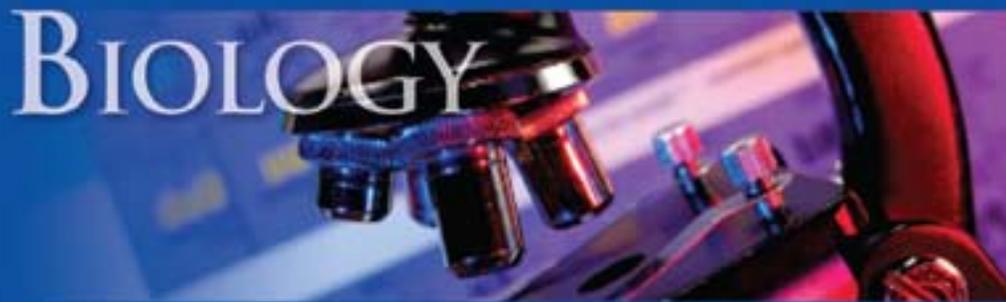
"ICR exists not just to bring *scientists* to Christ, but to win *science* back for Christ."

— Dr. Henry M. Morris

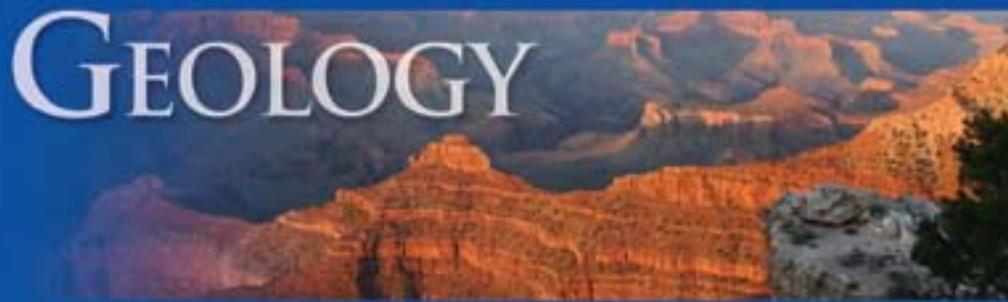
**Advanced Degrees
Distance Education
Creationist Worldview**

Apply today.

Admissions
ICR Graduate School
10946 Woodside Avenue North
Santee, CA 92071



BIOLOGY



GEOLOGY



ASTRO/GEOPHYSICS



GENERAL SCIENCE