Creation Matters

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Creation Outreach — Public Exhibits

by John and Gerry Meyer

Are you looking for a way to increase your creationist outreach and influence in your community? Why not consider the use of creation displays and book tables at any large gathering of people where exhibitors are allowed? Perhaps the following discussion will give you some ideas and insights into this effective outreach.

Working with a Purpose

A creationist display or exhibit at a large gathering can be a key activity in challenging the evolutionary basis for a secular worldview in our culture. This may occur at one or more levels:

1 Creating awareness and image for your organization.

2 Building awareness of the existence of creationists and the creationist position.

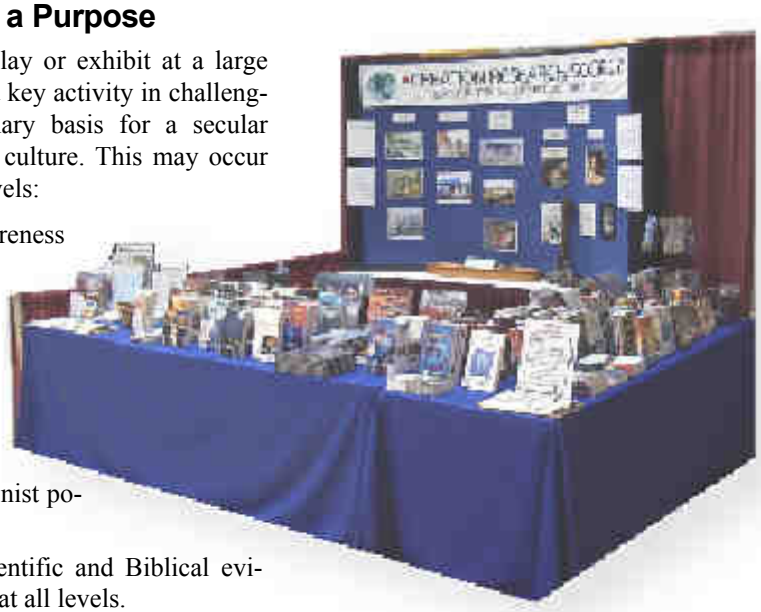
3 Presenting scientific and Biblical evidence to folks at all levels.

4 Encouraging Christian parents, teachers, and other leaders to understand the importance of the creationist message.

5 Advertising future meetings, upcoming events, or special field trips.

6 Selling books and videos, and giving away promotional materials and short creationist-oriented brochures.

7 Creation evangelism.



CRS display at a large Christian conference

Choosing the Event

Events you may want to consider would include county, regional or state fairs, church conferences, educators' conferences, etc. We prefer the county fairs because they attract people in large numbers. They are only a few days in length, and booth space is reasonably inexpensive.

When ministering to conservative

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Understanding the Physical Nature of Stars

by Ron Samec, Ph.D.

Most people have read about stars and believe them to be suns like our own. Some are giant suns, many times larger and more massive than our sun, while many are small objects, dwarfed by our own sun. Masses of stars range upward to about 80 times that of our sun, and down to about 0.08 times that of the sun's mass.

The latter figure is the point reached by stars that are too cool to carry on nuclear reactions, so they are called 'brown dwarfs' (failed stars). Many have cool, red surfaces with temperatures of 3-4000 K, while a few are very hot with surface temperatures upwards to 50,000 K.

But how do we know this? How do we know that those twinkling, tiny lights in the heavens are raging, burning masses of gas with nuclear processes going on in the cores, and with chromospheres and flares similar to those of our sun?

The answer is that God has made most stars members of binary systems. Informed estimates of the number of stars in binary systems range from 60 to 90%. Some are mutually close and are called interacting binaries. Others are well separated and are called detached binaries.

Kepler's famous second law, $P^2 = Ka^3$ relates the period of orbit "P" squared, to the size of the orbit (the semi-major axis) "a" cubed. The equation tells us that the square of the orbital

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Book Review

Review of "Creation Club Idea Book – Experiencing Nature with Children of All Ages . . . "

by John Meyer, Ph.D.

Creation Club Idea Book — Experiencing Nature with Children of All Ages at Home, School, Camp or Church

by Constance H. Crossman

WORDWINGS, 130 Dawn Meadow Lane, Pittsford, VT 05763

2003. 152 pages, $10.00 (spiral bound)

This spiral-bound book, with nine well-written chapters, meets an important need in the creationist community. While many children's books exist in this niche, few provide a series of detailed lessons on Biblical creation for the non-specialist. Each of the nine lessons is structured with:

- **Introduction** – this section provides background for the leader.
- **Creation Activities** – provides great ideas for communicating facts in an interesting way.
- **Caretaker Projects** – designed to provide personal stewardship of God's great creation.
- **Crafts** – provide a solidification of the material presented.
- **Games** – drive home the creation point from another angle.
- **Bible Stories** – provide integration with God's Word.

The author notes,

> This book is written for all those who love to explore the world outdoors. It is designed to encourage curiosity about how and why God created things as He did and to inspire us to worship Him. (pg. 6)

She continues,

> Why emphasize creation? The truth of Genesis is foundational to what we believe about God and how we see ourselves as created and loved by God and accountable to Him. Children are rarely exposed to any information supporting the creationist model although secular scientists and even avowed evolutionists regularly question and debate their own 'conclusions.' On the other hand, excellent new materials are being published on various aspects of the creation/evolution controversy. It is the responsibility of every Christian to make age appropriate books and videos available to children. (pg. 6)

This innovative book provides a wealth of ideas and formats for working with kids in creation evangelism and teaching. It is well illustrated with black-and-white pictures and diagrams. It will be a real help to the busy children's workers who is struggling for ideas on how to present Biblical creation in a valid setting of natural history.

Both scientifically sound and Biblically accurate, this work provides a valuable resource in reaching kids for Christ and in providing them with alternatives to secular evolutionism and various old-earth teachings. It is highly recommended to all who love to reach and teach children with a Biblical worldview.

John Meyer, who is the retired Director of the Van Andel Creation Research Center, can be reached by email at jmgminaz@commspeed.net.

This book may be ordered at: http://users.adelphia.net/~vtpanther/myweb/Creation/ccib.htm

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Log Cabins and Laboratories: The Long-Lasting Effects of Compromise

by Stephen Hill

Editor's note: Mr. Hill, age 14, was the 2004 junior division winner in the essay contest sponsored by the Midwest Creation Fellowship.

The name Abraham Lincoln brings to mind log cabins, the Oval Office, and a homely, bearded face. The name Charles Darwin brings to mind evolutionary charts, the geological column, and *The Origin of Species*. Though many don't think of the two as contemporaries, the two men share a birthday on February 12, 1809.

These men compromised scientific and some say Constitutional principles to have a tremendous impact on future generations. Darwin, a former Christian, compromised both his Christianity and his scientific knowledge to publish *The Origin of Species*. As a politician, Lincoln made many necessary compromises. Although an effective President must give in sometimes, the effective scientist cannot.

The son of a medical doctor, Darwin dreamed of becoming a famous scientist, though his schoolwork didn't reflect his lofty ambitions. Because Darwin wasn't sure of a career, Dr. Darwin sent his son to Edinburgh to study medicine. Ironically, the graphic surgery of the day proved too bloody for him, so the son transferred to Christ's College to study theology.

Darwin's degree in Theology, Euclid, and the Classics offers no clue to his later occupation. At this time, Darwin did not, as he said, "in the least doubt the strict and literal truth of every word of the Bible." Tragically for Darwin, he would be a compromised Christian in a matter of years. While Darwin was studying Latin and theology, his uneducated counterpart was moving to Indiana and studying the art of rail-splitting. The two men, separated by an ocean, were developing in completely different ways.

In 1831, the twenty-two-year-old Darwin embarked on the *H.M.S. Beagle* as a naturalist. Amid the creaks of rigging and the crashes of waves, Darwin's Christianity eroded as fast as he gathered data. When Darwin would quote Scripture during a discussion, the officers would laugh and deride the Bible and its authority. These taunts, combined with his findings that seemed to support macroevolution, most likely caused his conversion to atheism.

Several years after leaving the *Beagle*, he stated, "…the Old Testament…was no more to be trusted than the beliefs of any barbarian." This from a man who, at one point, did not doubt the strict and literal truth of the Bible. Lincoln's Christianity apparently withstood taking a flatboat of produce down to New Orleans in 1828. The future president had not yet compromised.

The very idea of macroevolution demands first the compromise of sacred and secular laws. While we can excuse the nineteenth-century scientist for thinking about a "simple" cell, we cannot excuse Darwin for ignoring Romans 1:20: "For since the creation of the world God's invisible qualities…have been clearly seen, being understood from what has been made, so that men are without excuse." John 1:3 also convicts the macroevolutionist: "Through Him all things were made; without Him nothing was made that has been made."

As a naturalist, Darwin could see God's invisible qualities better than most. He knew a First Mover is essential to Creation, and yet he ignored Romans 1:20 and John 1:3. Lincoln's reaction to Darwin's work is not readily apparent. Did he denounce it, agree with it, or ignore it? At this time, the President was dealing with compromise himself: some say Lincoln compromised the Constitution to keep the Union together.

The compromises Darwin made in the 1830's affected more than just his contemporaries. They affected the scientific mindset, the educators' mindset, the intellectual mindset, and the average Joe's mindset up until the present day. With *The Origin of Species*, the scientific community now had an answer to the Bible-thumpers. They supposedly knew where man came from: the primordial soup, not from the dust of the earth. The idea of an intelligent Designer was ludicrous, they claimed. Some say their motives for accepting were not so much scientific as spiritual: without a Creator, we have no accountability, so we can do whatever we please. The intellectuals accepted Darwin's theory most likely for the same reasons. They, along with most of the

population, preferred a world in which Biblical rules mean nothing. There will be no Judgment Day, no reckoning of accounts, no Book of Life.

But why did Darwin's teaching of macroevolution creep into public education? Why were the scientists and educators not content to keep their little loophole to themselves? The same reason all humans want everyone else to agree with them, reasonably or not. So macroevolution became entrenched in the schools in the first half of the twentieth century. As a result, the average American might have his doubts about macroevolution, but agrees that "all those scientists must know what they're talking about."

Contrary to popular opinion, the Discovery Channel and Bill Nye the Science Guy don't know everything. They don't mention that the beginning of the world falls outside of empirical science, which works on observations and conclusions. The paleontologist resembles Sherlock Holmes more than he does Superman. No one can document what exactly happened when God called the universe into being.

Darwin didn't compromise everything, though. His writings seem to indicate that he published *The Origin of Species* because he felt he had to, not because he wanted to get God out of science. He also documented many objections to his theory in the book that proclaimed it. Entire chapters are devoted to "The Imperfections of the Geological Record," and "Objections to the Theory." These are not the words of an anti-religion crusader. They are the words of a deluded man who maintained objectivity as best he could. Many former Christians harbor resentment or even hatred toward Christians. Darwin appeared to be an exception, in keeping with his objectivity.

Log cabins and laboratories, dusty streets and cobblestones, even slow drawls and precise, clipped accents are only superficial differences. Darwin and Lincoln shared more than a birthday; they shared a willingness to compromise. Darwin certainly compromised Christianity and science, while Lincoln might have compromised the Constitution. One tore things apart, while the other held a nation together.

But Darwin is the real tragedy. He failed to realize, as G. K. Chesterton puts it, "The tragedy of disbelieving in God is not that a person ends up believing in nothing; alas! it is much worse. He may end up believing in anything." Unfortunately for science, education, and Darwin himself, Darwin never learned that real scientists don't compromise.

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Kaku, Michio. *Hyperspace*. New York, NY: Anchor Books, 1995.

Wile, Dr. Jay L. and Marilyn F. Durnell. *Exploring Creation with Biology*. Chelsea, MI: Sheridan Books, Inc., 2000.

— CM —

Understanding Stars

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period (time to complete one full orbit) is proportional to the cube of the size of the orbit. Large orbits mean longer orbital periods.

In Newton's version of this law, K is proportional to the sum of the masses of the components of the binary. If the orbital size is determined (from Doppler shifts of spectral lines), and the temperature is found from spectroscopic or photometric color information, then a mass function [m sin(i), where "i" is the inclination] can be calculated directly. The inclination of the star's orbit is measured relative to the equatorial plane of the body it orbits.

As the stars orbit about their center of mass, if they are inclined enough to our line of sight to eclipse each other, then, atmospheric and relative component temperatures and luminosities can also be determined. In this case the inclination is known exactly. From this work a highly precise "solution" to the system is determined. A solution consists of a list of system parameters, including the individual stellar radii and masses. Such procedures have allowed us to determine the stellar limits shown above.

These data, along with spacecraft observations, have yielded other exciting results. Some stars are so close to each other that their atmospheres actually touch, and the stellar surfaces are stretched into teardrop shapes pointed toward each other. Their magnetic fields and the actual flows of gasses interact. Streams of hot gasses flow from one star to the other, creating disks and hot spots. Magnetic activity is greatly enhanced, since the stars are rotating at high speeds. Thus, dark spots, flares and chromospheric activity abound.

Those of us who are professionally engaged in this field of study regularly observe and analyze these stellar objects at national and private observatories. The excitement in the field has been heightened in the last few years with the discovery that some eclipses of the stars (called transits) are due to planets. This information, combined with spectroscopic Doppler shifts called radial velocities, has yielded the masses of these objects (suspected planets).

Indeed, some are truly planets rather than dwarf stars or brown dwarfs (see, for example, Konacki, et al., 2004). Also, we can find, using photometric (imaging) and spectroscopic data from the binary system, a precise distance to the object. Such data are being used to determine distances to nearby galaxies as a check on the cosmological distance scale.

How do we know what stars are? Because God has, indeed, created so many binaries in the heavens, how could we not know? All praise to His name!

Reference

Konacki, M., G. Torres, D.D. Sasselov, et al. 2004. The transiting extrasolar giant planet around the Star OGLE-TR-113. *Astrophysical Journal* 609:L37-L40

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Creation Outreach

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church groups you are often "preaching to the choir," although they may be totally unaware of your organization and ministry. With church groups that cover a broad spectrum of origins views, you may have a fascinating outreach. Even some relatively conservative church groups will have their share of vocal and aggressive theistic evolutionists and old earth creationists. Just be sure your volunteers have a reasonable grasp of Biblical origins and can articulate it well.

Choosing the Location

As in real estate, the value of your display in the exhibit hall depends upon "location, location, location"! A dark and out-of-the-way corner in an exhibit hall may produce only a fraction of the number of contacts you will have if you are located next to a major entry, a center aisle, a food concession, or even a drinking fountain. An advantage of registering early is that you usually have a better choice of location.

In addition, the cost of the booth will often limit the gatherings at which you have an exhibit. We have seen costs as little as $20 for a one-day exhibit with limited participants, to nearly $5,000 for a large, internationally-known Christian group with many thousands of attendees. In contrast, the reasonably low cost involved for county fairs, for the relatively high number of people who can be reached, is one of the reasons we are partial to this venue. In addition, since it is a relaxed atmosphere, people are usually on their best behavior.

Choosing the Materials

At many events, popular-level materials will likely represent most of the items on the book table. Freebies may make up a significant part of the display. For example, we often give out the article, "Why 600 Scientists Reject the Theory of Evolution," a full-color brochure about the CRS, and the March/April 2003 reprint from *Creation Matters*, "Comparing Creation and Evolution."

Start small and close to home, to keep the expenses down. You're unlikely, in many instances, to sell enough books and videos to meet expenses, especially if a long drive is necessary and several nights in a motel are required. This is an outreach, a ministry; it may cost more than it brings in. No organization can long be involved in too many activities that are money losers, so the decision to enter a display at conventions and fairs is not to be taken lightly.

Most publishers will give a significant discount to quantity orders designed for resale. Not all publishers are generous in such discounts and, unfortunately, you may have to limit your orders to those publishers who give the best prices. A wise old teacher once told a class, "If you don't succeed financially, you will not succeed." One wag put it this way: "If your outgo exceeds your income, then your upkeep is your downfall!" Not all outreach ministries turn a profit.

Following the Rules

Most events will have a set of rules about set-up and take-down times, about the hours the booth is expected to remain open, about the use of music and PA systems, etc. If you want to use that venue again, and if you want to keep a good testimony before the public, follow these rules to the letter! Most event officials will have had far more experience than you with regard to booth operation, and the rules they ask you to follow are usually mentioned for a very good reason.

Reaching the People

You will only have a few seconds to capture the attention of those passing by — and most will not pass your way a second time. Thus, the appearance of the display is of great importance. The time and effort needed to develop an eye-catching display is significant, and not all people have a talent for doing this.

Commercial display backgrounds are available with beautiful textures, folding supports, lights, and attractive fabrics. Signs and pictures attached to these can be very effective. Unfortunately, commercial displays can also be very expensive. If the display will be used many times and needs to be shipped often, such expenditure is justified.

The display background we use for the CRS and the Van Andel Creation Research Center cost about $2,000, and can be folded down to the size of a golf bag in a few minutes. This makes it easy to ship all over the country in the plastic case provided. Furthermore, the frame and fabric background can be assembled in just a few minutes, providing a beautiful, well-lighted, professional-looking unit.

At many conferences we have had people tell us that our display was the best they had seen. The high intensity lights used to illuminate our background make it stand out, even when viewed from a considerable distance.

Most small, local creationist groups will not be able to afford such a display, especially if it is to be used only occasionally. Nearly any creation group of reasonable size will have a talented artist or decorator in their midst. With pictures and graphic arts so easily available today on computers, a person adept at computer work can often come up with some really great graphics and signs for your display.

For example, the South Kewaunee Creation Association uses a display board similar to those used for science fair projects. These are available at most office supply stores, often for less than $15.00. With a bit of creative artwork they can be made very attractive.

Whatever size display you choose, and regardless of the artwork, we consider illumination with bright lights to be very essential for any eye-catching display. Most exhibit areas will have electricity (but you may have to pay extra for this), and you will be competing for attention with professionally lighted booths! Let your light shine!

Besides free literature for mass distribution, most of the area of the display table will be occupied by books, tapes, and videos. Allow some room for a few fossils or other items that will generate curiosity as folks pass by. A model of the Ark has been a popular attraction for our displays. We have successfully used a mastodon vertebra obtained from a gold mine north of Fairbanks, AK. If folks pause to glance at our table, we often ask if they would care to guess what that item is. With a little creativity this can quickly lead into a discussion of the creationist position, of catastrophic floods, and of the general subject of earth history and our place in it.

There are many other possibilities for developing an attention-getting display. Spend some time in any large exhibit hall and you will come away with your brain full of possible ideas.

Handling Difficult People

In general, you will likely find non-creationists who, though politely indifferent, are nevertheless curious about your exhibit. A tiny percentage will be openly antagonistic, verbally abusive, or argumentative. A display area at a major gathering is not the time or the place for confrontations. Such scoffers should be politely thanked for their interest in the issue of origins and then ignored. You can simply turn away to other folks or to other matters.

If your booth becomes a venue for heated discussions, confrontations, loud talk, etc., you will likely not be allowed to continue — or you will not be allowed to return next year! Some exhibit officials are very sensitive to these issues, and the reputation of you, your organization, and the creationist position is at stake here.

On the other hand, you will be surprised at how many strangers will stop by, give you an encouraging word, and thank you for your work. At times like this, you know you are having a significant impact, not only on unbelievers, but also in encouraging other creationists.

Choosing the Workers

As with any public ministry, not everyone is equally suited for it. A quiet introvert may have a great personality for writing or for volunteering behind the scenes, but he or she may not be the best person to put into a display booth in what could become a hostile environment. On the other hand, an individual with an abrupt or abrasive personality can easily do more harm than good in a public setting.

Workers should be familiar with your organization, with the materials on the table, and with the general creationist position. It helps if they have some skill in public presentations and have given some thought to dealing with argumentative and difficult people.

Manning a table or display and doing it correctly is much harder work than you may imagine. If you stand at your table with a smile on your face, with an alert mind, and with aching feet for more than two or three hours, you will be exhausted. Add to this the very real spiritual battle and the emotionally draining discussions in which you may be involved, and you will begin to understand that such an undertaking is not trivial.

At our first display table at the International Conference on Creation, one of us was frowning while deep in thought about something. A lady came by and asked, "Do you know the Lord? You sure have a sour look on your face!" I was a bit jarred by this observation, but I told her that I was just born that homely. The point, however, was well taken! A plastered-on smile will never do; but if you look bored (even if you really are!) or "sour," you will not be effectively working the booth.

Being Accessible

If at all possible, it is usually best to have two people at the booth. One may be seated,

Dr. Kevin Anderson, Director of the Van Andel Creation Research Center, discusses the contents of various books with Christian conference attendees.

but one should always be alert, taking up a post close to the table. If only one person is available for a given shift, let that person use a well-padded stool located near the table.

Limit chatter with your own staff or with those of adjacent booths. Perhaps the only exception to this is when the crowd thins out during major events in the arena or grandstand. In this type of environment many folks will come by at the end of a major event, but during the event the hallways may be essentially empty.

Pleasing Appearance

Personal appearance counts! A suit and tie may not be necessary, but dress at least as well as the average person you want to attract. If participants at your booth can all wear similar shirts or jackets with your logo or organization's name, it lends a great deal of credibility and continuity to what you are doing. We have used knit shirts of the same color and style with a CRS logo imprinted on them.

When shopping, you may find that such customized apparel is hardly more expensive than a similar item at a standard retail outlet. The added expense in most instances is well worth the cost. In the area of public relations, a professional and sharp image is much more important than we may realize. Someone once said that perception was ninety per cent of reality.

Promotional Items

Promotional items are not always just books, brochures, etc. They may be something as simple as your organization's name printed on a ruler, a pen, or some other give-away item. Promotional catalogs are full of thousands of items that can be inexpensively imprinted and given away. The idea here is to have an item that is sufficiently unique or clever that the recipient will keep it! Such items keep the name of your organization continually in front of people. Studies have demonstrated that it often takes at least a dozen or more exposures before name recognition becomes reality!

Equipping the Booth

Most displays will be allotted an area about ten feet long and about eight feet deep. We often use two tables. One long table is placed at the back of the booth, and the display sign rests on it. The front table is a bit shorter, with just enough room for volunteers to enter the area between the tables.

Depending on the venue, it is a good idea to include a small fan, a padded stool, a calculator, and a money box with adequate change; your name/business cards for those who want to communicate later, a signup sheet for your mailing list, and extra pens with your organization's name as freebies; spare bulbs for the lights, extension cords, and duct tape to hold them down; an inventory of books, videos, and brochures; your Bible or a New Testament; a list of the telephone numbers of your volunteers and when they are to participate; a cell phone, extra tape, a stapler, staples, Velcro, and scissors; a small two-wheeled cart to move

boxes; and a small assortment of general office supplies, like name labels for volunteers, or pre-printed return labels for boxes if you are traveling by air.

Murphy's law is true: "If anything can go wrong, it will, and usually at the worst possible moment." A quick call on your cell phone for additional help, for prayer, for a forgotten item, to replenish a given book, or just to keep the leaders advised of how things are going, can be a great help.

Additional Hints

Use light plastic tables. Hauling books, tables, and displays into an exhibit hall may be more exhausting and time consuming than you anticipate. Cover the table with a plastic cover and place a plastic skirt around the front and sides. Such items are available at stores that carry supplies for parties and events. The skirt not only dress up the display, but it allows boxes, personal items, etc., to be stored out of view of the public.

It takes less time to sell items in round dollar figures, rather than the old "$9.98" approach. Although you will sell more items if you are set up to take credit cards, the cost and paper work to establish a retail account with a credit card company is not trivial.

Keep your display area neat and clean. People tend to thumb through books and other display items, leaving them in disarray, so these items need to be periodically straightened. Also, clearly mark the prices on all sale items.

Be sure to notify everyone on your mailing list to look for you at your booth. Outreach tends to be catching, and an encouragement to others in your group. In addition, if you have friends pausing for a brief chat, folks will notice that something is going on at your display. People tend to stop by in groups. Apparently, groups of people attract people — and when no one is at your table, it takes a brave soul to walk up and ask questions of a stranger!

Conclusion

Working a booth at a fair or convention hall isn't easy, but it can be very rewarding. With the right approach, an attractive display, and well-written materials, you may have an impact that far exceeds your expectations! If you look at it as an adventure in creation evangelism, you will not be disappointed!

Dr. John Meyer is the retired director of the Van Andel Creation Research Center. His wife, Gerry, served as secretary during John's tenure at the Center.

— CM —

Speaking of Science

Commentaries on recent news from science

Editor's note: All S.O.S. (Speaking of Science) items in this issue are kindly provided by David Coppedge. Opinions expressed therein are his own. Emphasis added in all quotes. Additional commentaries and reviews of news items by David, complete with hyperlinks, can be seen at: www.creationsafaris.com/crevnews.htm.

Teachers Becoming Reluctant to Teach Evolution

Cornelia Dean in the New York Times worries that, to stay out of trouble, more and more biology teachers are avoiding the discussion of evolution.

Dean quotes someone who claims "the practice of avoiding the topic was widespread, particularly in districts where many people adhere to fundamentalist faiths." But why would teachers fear discussing it because of that? It's open season on "fundamentalist" faiths. Most teachers have no problem with attributing everything bad in the world to Christianity. Maybe the students from those districts are better at asking the hard questions that give Darwin Party biology teachers stomachaches.

Most creationists support the teaching of evolution, as long as the problems and controversies are taught instead of one-sided indoctrination. Teaching evolution can be a valuable lesson on how smart people can believe dumb things. So don't avoid it; let's open the Darwin Hall of Shame and talk about Piltdown man, "pigtooth" man, peppered moths, doctored drawings of embryos, *National Geographic* misinfomercials, and all the rest. Students need a little humor to break up the day. Evolution teaching can be fun!

Sweeping such an important controversy under the rug is not a healthy educational policy. Like it or not, evolution has had a major influence on the world for 140 years. Today, the subject is in a state of major ferment and reconsideration. The teacher doesn't have to take sides. Many bright young people will actually wake up to science if evolution is taught as a controversial subject: that is, if they get a chance to exercise critical thinking about the evidence for and against it, and can debate the issues in class openly without ridicule, rather than hearing a borrrrrring one-sided sales pitch. It's only those teachers who are on a mission to indoctrinate blank slates into the Cult of Charlie that have anything to fear.

Dean, C. 2005. Evolution takes a back seat in U.S. classes. *The NY Times on the Web,* February 1, 2005.

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Age Estimate for Oldest Glacier Revised

Deposits from Antarctic glacial ice thought to be 8.1 million years old have been re-dated at not more than 310,000 years old, and maybe as little as 43,000, reports a team writing in the Feb. issue of *Geology*. These researchers analyzed cosmogenic helium-3 and calculated the rate of sublimation of the ice to arrive at the new age estimate for glacial till (leftover rock debris from glacial melt or ice evaporation). They say,

> Such **rapid recent growth** of the till **contradicts previous interpretations** that it is older than 8.1 Ma at an adjacent site, where it encloses volcanic ash of this age. . . We question whether the ash provides a valid age constraint for the ice.

Earlier geologists had dated the ash fall as a time constraint on the glacial till, but this team says it may accumulate much more rapidly than assumed. "Our results show that the ash may not be a reliable stratigraphic indicator."

This team may not have the last word, either. Readers should learn from this story that even among secular geologists, interpretations can contradict one another by orders of magnitude. This is not just a story about dating methods, but also feeds into the debate about global warming. Their paper begins, "The recent history of East Antarctica is **key** to **understanding** the response of large ice sheets to climate forcing."

Beware political decisions based on advice from geologists who read present data and weave stories about things that happened millions of years ago, as if it will help forecast future events. Considering revisions this large, politicians might be better off forecasting climate from analysis of layers in a calf's liver.

Ng, F., B. Hallet, R.S. Sletten, and J.O. Stone. 2005. Fast-growing till over ancient ice in Beacon Valley, Antarctica. *Geology* 33(2):121-124.

Daffy Duck Found in Dino Park

A fossil duck from the Cretaceous has been discovered, indicating that the branch of birds including waterfowl already coexisted with the dinosaurs. A press release from NC State explains the significance of the paper published in *Nature* this week. Dr. Julia Clarke and colleagues say this means that "at least duck, chicken and ratite bird relatives were coexistent with non-avian dinosaurs."

Wow, those early birds must have evolved from dinosaurs pretty fast. This seems to require a dramatically-accelerated rate of lucky mutations per year.

Clarke, J.A., C.P. Tambussi, J.I. Noriega, G.M. Erickson, R.A. Ketcham. 2005. Definitive fossil evidence for the extant avian radiation in the Cretaceous. *Nature* 433:305-308.

Kulikowski, M. 2005. Relatives of Living Ducks and Chickens Existed Alongside Dinosaurs More Than 65 Million Years Ago. *NC State Univ. News Services*, Jan. 19, 2005.

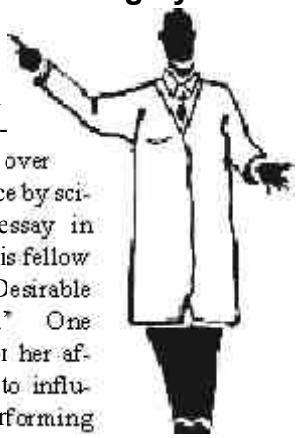
Are Humans Still Evolving?

Science Now asks the question, "are humans still evolving?" Comparisons of genes and chromosomes between different people groups from Asia, Europe and Africa are challenging the view that there is one human genome. Some long stretches of DNA are inverted in some groups, and women so affected seem to have more children on average, even though the section isn't related to fertility. Oxford statistician Peter Donnelly says of these surprising findings, "This could be the tip of several icebergs."

So "*The* Human Genome" may be a myth. Perhaps DNA storage is more dynamic than we expected. The story does not establish any connection to evolution by natural selection, except by assuming evolution and its commonly-accepted time scale. Notice this non-sequitur: at the end, Donnelly says, "If such inversions are common, then there isn't just one version of the human genome... this shows natural selection is still acting on us." Come again? We're here, we have differences, therefore we evolved? Get a grip, Pete!

Bohannon, J. 2005. Are humans still evolving? *Science Now*, January 18, 2005. http://sciencenow.sciencemag.org/

Scientist Preaches Integrity to Fellow Scientists



Patrick Bateson (U. of Cambridge), concerned over reports of malpractice by scientists, wrote an essay in *Science* to remind his fellow researchers about "Desirable Scientific Conduct." One mustn't allow his or her affiliations or biases to influence results. Performing tainted research feeds the postmodern conception that science is a cultural construct, for one thing, and can overlook important leads.

"Treasure your exceptions!" he says, providing a couple of examples of insights overlooked because of bias. "The data point lying under the researcher's thumb might be the most interesting result of the whole study." He refers to an actual incident where a Nobel Prize winner placed his thumb on a slide to cover a data point that was off the line.

Bateson's advice comes down to good old-fashioned values: "Desirable modes of scientific conduct require considerable self-awareness as well as a reaffirmation of the old virtues of honesty, scepticism, and integrity."

Bateson quotes someone who thought the results of Gregor Mendel were too good to be true, but for research done with the integrity and care he exercised, maybe it was too good for the typical Darwin Party scientist who trades in myths and stories. It's hard to know if Mendel was careless with exceptions or not; one thing is for sure, his laws of genetics have stood the test of time.

Good advice, but can one get "old virtues" out of Darwinism? Did honesty evolve? Does integrity correlate with fitness? We know who followed the values that sprang from Darwinism. Science gained nothing ethical from the Darwinian

revolution and the totalitarian regime that followed. On the contrary, Darwinism liberated scientists to maintain their philosophy in spite of the evidence. It allowed them to cover up the data of design with the thumb of imagination. Most of their data are exceptions (Cambrian explosion, complexity of the cell, inadequacy of natural selection), such that their thumb covers the whole slide. Even the thumb is an exception. Scientific integrity would mean abandoning Darwinism; it's amazing *Science* would print such a sermon.

The scientific method is essentially codified integrity. The study of any natural phenomenon presupposes a love of the truth, a desire to avoid bias and carelessness, and a commitment to follow the evidence where it leads. Honesty, skepticism, and integrity are just as necessary for any intellectual endeavor, whether history, theology, research, journalism, leadership, and dealings with oneself and others. These values derive from the Bible, not *The Origin of Species*. Bateson should reference his sources.

Bateson, P. 2005. Desirable scientific conduct. *Science* 307:645.

Survival of the Fittest – or the Luckiest?

Evolutionists assume that bacteria spread because they evolve resistance to antibiotics and become more fit to survive. That's apparently not true, says a story in EurekAlert: the spread of bacteria appears to be due to chance alone. Here are two quotes from the article by team members explaining the finding:

> Dr. Christophe Fraser, from Imperial College London, a Royal Society University Research Fellow and one of the authors, says: "Microbiologists have **assumed for some time** that some disease strains spread more **successfully** than others. In fact **we found that the variation in the communities we studied could be explained by chance.** This was **surprising**, especially considering all the **potential advantages** one pathogen can have over another, such as antibiotic resistance and differences in host immunity."
>
> Dr. Bill Hanage, from Imperial College London, and also one of the authors, says: "When we look at a sample and see that some strains are much more common than others, **it's tempting to think that there must be something special about them**. In fact, **they could just be the lucky ones**, and that's what it looks like here. Most of the variation in the spread of these pathogens can be explained **by chance alone.**"

The team studied three pathogenic bacteria and followed the social patterns of the humans they infected. There was no clear association between success at spreading and fitness for spreading.

A related commentary by Dan Ferber in *Science* had another surprise about bacteria: they are not immortal. Reproducing strains in a culture apparently show their age. What does this mean? For one thing, the results "make it unlikely that natural selection produced an immortal organism." For another, "It's one of those exciting results that makes you take a fresh look at what you think you know." One observer is not sure the populations that stopped growing were aging; maybe they were taking a break for repairs. But another said the new findings "put the onus of proof on anyone who claims that cells can be immortal."

Would survival of the luckiest generate all the richness and complexity of the living world? This seems to be a very non-Darwinian way of looking at biology. It also seems to undermine one of the key evidences of evolution in the Darwin Party's debate arsenal: the evolution of antibiotic resistance in bacteria.

The second story reminds us that if biologists are still surprised by things happening, right under their noses, that have been studied for over a century, how can we trust their confidence about things that supposedly happened millions of years ago?

Ferber, D. 2005. Immortality dies as bacteria show their age. *Science* 307:656.

Stephenson, T. 2005. Bacterial spread all down to chance: Some strains 'just the lucky ones.' *EurekAlert*. www.eurekalert.org/

Watch for Falling Ants

Did you know some ants are gliders? When Stephen Yanoviak (U. of Texas) was studying insects in the rainforest canopy in Peru, he was struck by the fact that ants kept landing on his arm. This launched his team's investigation into gliding ants. Taking video cameras into the jungle, it was possible to document the ants' unique mode of locomotion.

The researchers found that the bugs could rotate around and change direction in midair, even when falling like a rock. Most of the time (about 85%) the ants landed back on the tree trunk, able to crawl back up to home. They published their work on "directed aerial descent" in *Nature*, unsure whether the ants were escaping predators or just having fun. They wrote,

> This is the first study to document the mechanics and ecological relevance of this form of locomotion in the Earth's most diverse lineage, the insects.

A UC Berkeley press release tells more about the study, with photographs of the ants and interviews with the research team. How the ants turn around in midair and control their landings is still unknown, but like many insects, they have sticky feet that enable them to cling to many surfaces. "It's an amazing discovery," said Robert Dudley, of the team. So ants join certain species of squirrels, lizards, frogs and even some snakes (and humans) as gliding champions – this time, in the ultralight class.

It seems unlikely that ants would lose their wings through evolution, then re-evolve this behavior as a poor substitute. Surely the power of natural selection would have favored wings' evolving again to let the ants fly back home rather than forcing them to walk straight up against gravity. Why select lucky mutations for controlled descent when wings were so easy to evolve? It must have been a piece of cake if they showed up in reptiles, mammals, birds and insects.

Didn't these ants have Haeckel's recapitulation memory for how to evolve wings all over again? After all, walking sticks did, we are told. "Ah, young disciples," Exalted

... continued on p. 11

Enter the

2005 Midwest Creation Fellowship

Writing Contest

For Junior High and Senior High Students

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- **$20 Book certificates for 4th and 5th Places**

Junior High Level (Ages 11-14*)

- **$100 First Place †**
- **$50 Second Place**
- **$25 Third Place**
- **$20 Book certificates for 4th and 5th Places**

*Age on April 30, 2005 — Those who are 14 have the option of competing on either level.

†Each first-place winner will receive a 1-year student membership in the Creation Research Society (CRS).

Rules:

1. Entries will be accepted beginning January 1, 2005, and must be received by April 30, 2005. Mail entries to:
   MCF Contest, P.O. Box 952, Wheaton, IL 60189

2. Paper should be typewritten and double-spaced, not to exceed 1500 words for the Junior High level or 2500 words for the High School level. Give references to sources used. (Footnotes, endnotes, and title page do not count towards the word limit.)

3. Entries will include the author's name, age, home address, phone number, email address, school. Specify Junior High or Senior High Level.

4. Essays will be judged on:
   - Biblical and scientific merit of the paper
   - Ability to communicate ideas
   - Creativity shown in the presentation
   - Technical ability (writing skills, grammar, etc.)
   - Meeting all stated rules of the contest

5. All entries become the property of MCF and will not be returned. Prize-winning entries may be reproduced and distributed by MCF. Winners may be invited to present their papers at an MCF meeting, and may be considered for publication in the CRS newsletter *Creation Matters*.

Purpose:

MCF is sponsoring this, our 7th annual contest, to encourage the development of skills in research, analysis, and logical reasoning, through preparing an effective presentation of a thesis in a creation-oriented paper.

Theme:

The author may select any topic that fits one of the following two themes. *Sample topics are listed for each theme, but the author is not limited to those shown.* It is recommended, but not required, that the author examine both sides of the chosen theme.

A. The Problem of Time

Sample topics inspired by this theme:

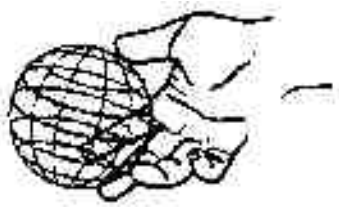
- Starlight and Time
- Strata and Fossil Dating
- Problems with Dating Methods

B. Social Implications of Creation / Evolution

Sample topics inspired by this theme:

- Creation / Evolution and Racism
- Creation / Evolution and Warfare
- Creation / Evolution and Eugenics

Midwest Creation Fellowship



Through Him all things were made; without Him nothing was made that has been made. — John 1:3

www.midwestcreationfellowship.org

Speaking of Science

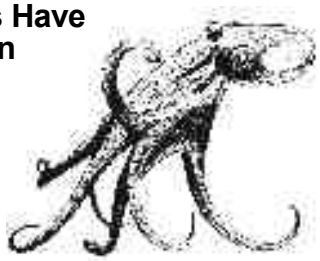
...continued from page 9

Master Charlie gently scolds, "One must not presume on the path Mother Nature will take. A bumbling tinkerer is She." So in her toyshop, she apparently forgot how to produce rubber-band airplanes, and decided to make miniature Buzz Lightyears, who mastered the art of "falling with style."

Sanders, R. 2005. Discovery of gliding ants shows wingless flight has arisen throughout the animal kingdom. *UC Berkeley News*, February 9, 2005. http://newscenter.berkeley.edu/

Yanoviak, S.P., R. Dudley, and M. Kaspari. 2005. Directed aerial descent in canopy ants. *Nature* 433:624-626.

Octopus Arms Have Optimal Design



The tentacles of an octopus are soft and flexible, whereas bony creatures like us have joints that, while good for moving objects around, limit our freedom of movement. Wouldn't it be cool to have both? An international team of neurobiologists, publishing in *Nature*, watched an octopus snare its food, using the flexibility of its tentacles, as expected. But then they noticed, when it needed to transfer its prey from one place to another, it employed a "vertebrate-like strategy, temporarily reconfiguring its arm into a stiffened, articulated, quasi-jointed structure."

This gave them an idea. Maybe the octopus has hit on something. While the flexible arm provides a benefit for snaring objects, "an articulated limb may provide an **optimal solution for achieving precise, point-to-point movements**," they wrote (emphasis added in all quotes). *National Geographic News* adds, "scientists studying octopus arms conclude that they may represent the **optimal design for robotic arms**."

Maybe the next-generation robotic arm on the Space Shuttle will resemble something from the ocean depths. One researcher remarked that a stiff arm would be likely to push a floating object away, but "an arm you could use to gently wrap around an object and retrieve it, that would be useful." How to build such a device is the challenge.

Copying animal designs – biomimetics – is one of the hottest topics in engineering, for good reason. Here is a creature that has the capabilities of a comic book superhero. Sadly, both articles attribute this feat to evolution: "octopuses have evolved the optimal design," says *National Geographic*, and the neurobiologists say in a wordier way,

> Fetching **seems** to be an example of **evolutionary selection** of **solutions** that are similar even though they are based on quite different mechanisms – on morphology in arthropod and vertebrate limbs, and on stereotypical **motor control** in the octopus. This **functional convergence** [sic] **suggests** that a kinematically constrained, articulated limb with two segments of almost equal length is the **optimal design** for **accurately** moving an object from one point to another.

This illustrates again how many countless times the scientific community and news outlets merely *assume* evolution is capable of any miracle needed, without needing to tell us how the blind forces of nature could ever produce engineering design that humbles our best robotics experts.

The new film *Incredible Creatures that Defy Evolution III* * has startling footage of a similar marine creature, the cuttlefish, with some other fantastic capabilities.

Mayell, H. 2005. Octopus Arms May Point Way to New Robot Designs. *National Geographic News*, February 9, 2005. www.nationalgeographic.com/

Sumbre, G., G. Fiorito, T. Flash, and B. Hochner. 2005. Neurobiology: Motor control of flexible octopus arms. *Nature* 433:595-596.

* Available at www.CRSbooks.org.

— CM —

Creation Calendar

Note: Items in "Creation Calendar" are for information only; the listing of an event does not necessarily imply endorsement by the Creation Research Society.

March 16 [6:00 pm]
Mark Armitage, MS, will present *Helium Retention in Deep Core Zircons*
Microscopy Society of Southern California, Santa Monica, CA
Contact: Jim Solliday (714)775-1575, jlsolliday@adelphia.net
NEW!

April 30 [**Deadline**]
Jr. / Sr. High Creation Writing Contest
Midwest Creation Fellowship
www.midwestcreationfellowship.org/html/essay2005.html
Contact: MCF, P.O. Box 952, Wheaton, IL (847)244-4373

June 2 - 4
Annual Meeting of Board of Directors
Creation Research Society
Bozeman, MT

June 15 - 17
A Grander View of Life
Baraminology Study Group, Moscow, ID
Abstracts due 28 February 2005
Registration discount prior to 30 April 2005
www.bryancore.org/bsg/grander05/
Contact: Todd Wood, info@bryancore.org

July 3 - July 8
Twin Peaks Family Science Adventure
Fun-filled vacation for families, near Collbran, CO
Sponsored by Alpha Omega Institute, Grand Junction, CO
Contact: (970)523-9943, www.discovercreation.org
NEW!

July 17 - 22
Creation Mega-Conference
Co-sponsored by Answers in Genesis, Liberty Univ., Creation Research Society, and others
www.creationmegaconference.com
Contact: (800)350-3232, ext. 445

July 31 - August 5, August 7 - 12
Redcloud Family Mountain Adventure
Fun-filled vacation for families, near Lake City, CO
Sponsored by Alpha Omega Institute, Grand Junction, CO
Contact: (970)523-9943, www.discovercreation.org
NEW!

What Are Creationists Thinking about ...?

As new scientific discoveries make the headlines, have you ever wondered how your fellow creationists are reacting? Have you ever thought of a "crazy" new idea about origins and wanted to bounce it off another creationist?

Now you can keep in contact daily with creationists from all around the world. The Creation Research Society sponsors **CRSnet**, an online community of CRS members who have e-mail access to the Internet. Not only do participants discuss the latest scientific findings related to origins, but they also receive news about the CRS — its research, publications, and activities — and other creation-related news.

For more information, send an e-mail message to Glen Wolfrom at contact@creationresearch.org.
Participation is limited to CRS members in good standing.

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January / February 2005
Vol. 10 No. 1

All by Design

by Jonathan C. O'Quinn, D.P.M., M.S.

According to the Second Law of Thermodynamics, spontaneous processes increase the entropy, or randomness and disorganization, of a functioning system. Evolutionists claim that evolution is an unguided, spontaneous process. Biological phenomena such as fragrance production by flowers, however, demonstrate an astonishing degree of order.

The fragrance produced by snapdragons and petunias is largely due to a compound called methyl benzoate, which the plants synthesize from benzoic acid and S-adenosyl-L-methionine (SAM). This scent serves to attract insect pollinators to the flowers. After pollen tubes reach the ovary of a pollinated flower, a series of chemical signals causes the methyl benzoate production to decrease by up to 75%.

In petunias, pollination triggers production of ethylene, which reduces, or down-regulates, the activity of the gene that codes for methyl benzoate. In snapdragons, pollination triggers a direct decrease in the activity of the enzyme that synthesizes methyl benzoate. Pollination in the snapdragon also reduces methyl benzoate production by its effect on the ratio of SAM to S-adenosyl-L-homocysteine, as well as by production of ethylene, which decreases activity of the methyl benzoate gene, as in petunias.

Fragrance regulation in petunias and snapdragons is a highly complex chemical system that is anything but random or disorganized. Not only does it provide the plants with an efficient way to conserve energy that would otherwise be wasted on post-pollination fragrance production, it points to an intelligent Designer who makes no mistakes.

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2. Murfitt, L.M., N. Kolosova, C.J. Mann, and N. Dudareva. 2000. Purification and characterization of S-adenosyl--methionine:benzoic acid carboxyl methyltransferase, the enzyme responsible for riosynthesis of the volatile ester methyl benzoate in flowers of *Antirrhinum majus*. *Arch Biochem Biophys*. 382(1):145-151.
3. Mirsky, S. 2004. Aroma therapy. *Scientific American*. 290(2):26.
4. www.second-law-of-thermodynamics.com/ (accessed 22 January 2005)